AW EDWARDS

Darlington Public School – Stage 1 & 2, Construction Phase

Project Management Plan

647-AWE-WHS-001

Original Version Author:	Mark Whitmore (Site Manager)
Current Revision Author:	Elligah Hammond (Q & E Coordinator)
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Prepared By:

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MANAGEMENT PLAN AUTHORISATION

POSITION	NAME	SIGNATURE	DATE
Project Director	Justin Smith		23/12/2020
Project Manager	Glen Burley		23/12/2020

Document History		
Revision Date	**Author**	**Reason for Change**
B – 23/12/2020	Daniel Lorenzetto	Response to MACE review
C – 28/01/2021	Tim Stootman	Minor amendment for construction issue
D – 18/02/2021	Tim Stootman	In response to Client initiated audit, updated monthly reporting and Client notification requirements
E – 25/02/2021	Tim Stootman	In response to Client feedback. Additional amendments made in response to environmental management feedback from the Clients Representative
F – 16/08/2021	Jonathan G Breen	Covid -19 Addition to WHSMP
G – 13/09/2021	Elijah Hammond	Update to distribution list & reference to procedures.

Distribution	
Name	**Organisation**
Glen Burley	A W Edwards Pty Limited
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CONTENTS

1 Introduction

1.1 PROJECT OUTLINE

The scope of work, description of project, location of works and a description of site and surrounds and any environmental issues is attached in Appendix 1 - Project Scope (SE9301).

1.2 CONSTRUCTION HOURS

Construction, including the delivery of materials to and from the site, may only be carried out between the following hours:

- between 7am and 6pm, Mondays to Fridays inclusive; and
- between 8am and 1pm, Saturdays.
- No work may be carried out on Sundays or public holidays.:

Notwithstanding the above, provided noise levels do not exceed the existing background noise level plus 5dB, works may also be undertaken during the following hours:

- between 6pm and 7pm, Mondays to Fridays inclusive; and
- between 1pm and 4pm, Saturdays.

1.3 PROJECT MANAGEMENT PLAN

This Project Management Plan describes the strategy, methods, controls and requirements for the execution of the project. It stands alone as the master document for site activities and refers to company procedures, and has been prepared in accordance with;

- ISO 9001 – 2015 Quality Management Systems
- ISO 45001 – 2018 Occupational Health and Safety Management Systems
- ISO 14001 – 2015 Environmental Management Systems
- NSW Government Quality Management Guidelines (construction procurement) - Edition 4, Dec 2019
- NSW Government Work Health & Safety Management Guidelines (construction procurement) - Edition 6, Dec 2019
- NSW Government Environmental Management Guidelines (construction procurement) - Edition 4, Dec 2019
- NSW Government Environmental Management Plan Guideline (for Infrastructure Projects) - April 2020
- State Significant Development - SSD9914 – Darlington Public School, Consent Conditions B11, B12 (a-g)

In addition to any other requirements of the Contract, A W Edwards is committed to achieving the highest standards of WHS in all aspects of the works under contract and will comply with the Principal's project requirements.

The Project Management Plan defines how the project will be run. It complements the Integrated Management System and, in some cases, may override it.

The purpose of this Project Management Plan is to:

- Identify the environmental issues (aspects and impacts) and safety risks for this project,
- Establish, communicate and implement safety, environmental operational controls to reduce any adverse impacts on the environment from the company's activities, products, services and safety risks to workers and the public,
- Ensure compliance by A W Edwards with its suppliers, subcontractors and with all relevant environmental and safety legislation, any applicable licence, approval and permit and regulatory requirements,

- Ensure that works are managed to reduce adverse impacts on the environment and harm to workers and to the public; and
- Action any outcomes from incidents or accidents, project audits or other identified non-conformances and to continually improve the Integrated Management System.

A copy of the plan and any revisions shall be made available to all staff, anyone engaged to do construction work at the site, anyone who is about to start work at the site, members of the WHS Committee or the Health & Safety Representative.

All personnel, prior to starting work on the site shall be made aware of the plan and of any revisions.

Staff and Subcontractors shall conform to the requirements of this Project Management Plan.

The Project Manager shall amend this plan, if there are changes to the information contained therein and ensure that each relevant person affected by the amendment is advised of the details of the amendment; or given a copy of the amendment.

Implementation of this plan shall be monitored via the internal audit process, site inspections and at project Team Meetings.

The Project Management Plan shall be reviewed at the project Team Meeting and following any significant incidents or significant changes to the project scope or methodology.

A copy of the plan and or any revisions to the plan shall be retained for the duration of the project.

1.3.1 Project Management Plan Review

A W Edwards shall review and as necessary revise this Project management plan to ensure that it remains up to date.

This management plan will be reviewed each 6 months.

A W Edwards shall so far as is reasonably practicable, ensure that all personnel carrying out construction work in connection with the project are made aware of any revision to the Project Management Plan.

This shall be done through Electronic correspondence (eg. Aconex), Toolbox Talks, or posting information on the site noticeboards.

2 Integrated Management System

2.1 POLICIES

Copies of the current A W Edwards' Company Policies are attached to this Project Management Plan, Appendix 2.

A copy of these Policies shall be displayed on the site notice board for all site workers.

2.2 RESPONSIBILITIES

2.2.1 Project Organisational Chart & Contact Details

The Project Organisation Chart and Contact Details (SE9302) is included in Appendix 3 attached to this Project Management Plan.

2.2.2 Responsibilities & Accountability

The roles and responsibilities of A W Edwards senior management personnel on this project are detailed in the following subsections.

A W Edwards' define project senior management as the Project Directors, Regional Managers, Project Managers, Construction Managers, Site Manager, WHS Manager and QE Manager.

The following senior management team members acknowledge the roles, responsibilities and accountabilities in the following subsections.

Role	Name	Qualifications/Training	Signature	Date
Project Director	Justin Smith	Bach. Construction Mgmt. WHS Due Diligence		23/12/2020
Senior Project Manager	Glen Burley	Bach Construction Mgmt. WHS Due Diligence		23/12/2020
Site Manager	Mark Whitmore	Cert Carpentry/Joinery Cert Clerk of Works Construction Supervision Cert IV Frontline Mgmt. Cert IV OHS		23/12/2020
Group WHSE Manager, Executive Director	Kenny Smith	Diploma Management Diploma OHS Cert IV Enviro Mgmt. WHS Due Diligence		23/12/2020
WHS Manager	Amy Neal	Cert IV OHS Cert IV Training Assess't WHS Due Diligence		23/12/2020
QE Manager	Tim Stootman	Diploma Management Diploma WHS Diploma Enviro. Mgmt. WHS Due Diligence		23/12/2020

During their project orientation, any remaining team members (ie. Project Coordinators, Contracts Manager, Contracts Administrators, Design Managers, WHSE Coordinators) are inducted to the roles and responsibilities outlined in this management plan.

2.2.3 Emergency Contacts

The Emergency contacts are included in Appendix 16 – Emergency Management Plan, attached to this Project Management Plan.

The A W Edwards 24 Hour Emergency Contact is the Site Manager (Mark Whitmore 0413 735 456) and is included on the mandatory site signage at the entry to the project.

2.2.4 Project Team Responsibilities

A W Edwards Project Team is defined as all A W Edwards Project and Site Management personnel for the project; ie. Project Director, Project Manager, Project Coordinators (Service Coordinators and Trade Coordinators), Site Manager, Foremen, WHSE Coordinator, Design Manager, Contracts Manager, Contracts Administrators.

Responsibility	CEO	Project Director	Project Manager	Project Coordinator	Contracts Manager / Admin.	Design Manager	Construction Manager	Site Manager	Group WHSE Manager	WHS Manager	QE Manager	WHSE Coordinator
Accident investigation		X	X					X		X		X
Actioning safety & environmental notices from external parties			X					X				
Allocating adequate resources to Quality Management, WHS Matters and Environmental Controls	X	X										
Approving the Project Management Plan			X									
Approving the Project Risk Assessment		X	X									
Calibration of equipment								X				
Completing Inspection & Test Plans/Checklists			X	X								
Completing Nonconformance Reports		X	X	X				X	X	X	X	X
Communicating requirements; including legislation/ regulations, and approval/permit/licence and contract conditions			X	X				X				
Consultation								X				X
Defect Management			X	X				X				
Electrical equipment								X				
Emergency drills								X				
Emergency Management Plan			X					X				
Engaging and managing subcontractors			X		X			X				
Ensuring that Policies, (applicable) Management Systems and Plans are communicated to workers								X				
Ensuring WHS Consultation is working			X									
Exposure monitoring								X				X
Hazardous chemicals								X				
Health surveillance								X				X

Responsibility	CEO	Project Director	Project Manager	Project Coordinator	Contracts Manager / Admin.	Design Manager	Construction Manager	Site Manager	Group WHSE Manager	WHS Manager	QE Manager	WHSE Coordinator
Identify and inspect emergency equipment								X				X
Identifying In-slab services								X				
Identifying underground and above ground services				X				X				
Induction of workers								X				X
Injury Management of workers												X
Isolation of services								X				
Issuing Permits								X				X
Issuing the Project Management Plan & Risk Assessment to subcontractor					X							
Managing compliance with WHS legislation, regulations, standards and codes			X					X	X	X		X
Managing environmental issues on site								X				X
Managing first aid								X				
Managing plant on site								X				
Managing Project Records								X				
Management Representative (Quality)								X				
Management Representative (WHS)												X
Management Representative (Environmental) - Environmental Champion												X
Communicate and consult with any Environmental Representative (ER) appointed by the Client, as required by the contract												X
Managing return to work												X
Monitoring SMWS												X
Overall WHS Responsibility for A W Edwards	X											
Planning and implementing training and induction procedures							X	X		X	X	X
Plant								X				
Preparing Inspection & Test Plans/Checklists				X								
Preparing Project Management Plan			X									X
Preparing SWMS												X
Project audits											X	
Project programme			X									
Project Risk Register			X					X				X

Responsibility	CEO	Project Director	Project Manager	Project Coordinator	Contracts Manager / Admin.	Design Manager	Construction Manager	Site Manager	Group WHSE Manager	WHS Manager	QE Manager	WHSE Coordinator
Project WHS Responsibility			X									
Purchasing			X		X							
Receipt of Goods on Site					X			X				
Reporting accidents, incidents & near misses			X	X	X			X	X	X		X
Reporting to statutory authority									X			
Requests for Information			X	X				X				
Reviewing and improving Project Management Plan			X								X	
Reviewing SWMS				X				X				X
Safety Alerts									X	X		
Safety in Design (processes)						X						
Site establishment								X				
Site Meetings				X								
Site Rules								X				X
Testing water quality (sediment ponds) or observing water testing											X	X
Variations				X	X							
Work Site Inspection (Quality)				X				X			X	
Work Site Inspection (WHS)								X		X		X
Work Site Inspection (Environmental)								X			X	X

2.2.5 Subcontractors

Subcontractors shall abide by all Site Safety Rules and Procedures and applicable Commonwealth, State and Local Safety Rules and Regulations in order to prevent injury to persons or damage to property.

In addition, subcontractors shall:

- Ensure job/machine/task specific operating procedures and safety processes are in place and control measures are fully implemented,
- Ensure they are trained in those specific job/machine/task procedures and process. Including any WHS training required,
- All visitors must sign in and out of the Sign in register (SE6209).
- All workers must sign in on the Daily prestart (SE6215) or swipe on
- Perform all work in a safe manner,
- Provide use and maintain appropriate safety equipment to perform specific job functions (PPE, etc.),

- Report all incidents and injuries, regardless of severity, immediately to the Project Manager or Project Coordinator,
- Provide all relevant Certificates of Currencies,
- Comply with A W Edwards' instructions regarding WHS and follow all instructions issued by Senior Management; and
- Provide competent supervision of work practices by employees and provide names of Supervisors to A W Edwards.

2.2.6 Employees (On Site Staff & Personnel)

Every A W Edward's employee has a responsibility to themselves, their families, fellow workers, the company and the general community to demonstrate a personal commitment to health and safety in their workplace, as required by the WHS Act 2011, and WHS Regulation 2017.

Personal commitment is demonstrated by:

- Knowing and observing the site rules;
- Observing all safety signs and risk management procedures;
- Using and maintaining your personal protective equipment (PPE);
- Using safe work practices;
- Seeking first aid treatment for injuries, however small;
- Reporting promptly any breaches of site rules or potential hazards you see; and
- Knowing what to do in an emergency

No A W Edward's employee shall intentionally or recklessly interfere with or misuse anything provided at the workplace in the interest of health and safety as required by the WHS Act 2011 and Regulation 2017.

2.2.7 Visitors

Visitors should be made aware by the site inducted person accompanying them:

- The relevant site rules,
- Emergency procedures,
- Have the required and appropriate PPE for the site; and
- Be accompanied at all times by site personnel.

Visitors must sign in and out of the Sign in register (SE6209).

2.3 COMMUNICATION

2.3.1 Project Meetings

Project meetings shall be held in accordance with the Appendix 4 - Project Meeting Matrix (SE9303).

2.4 TRAINING

At the commencement of employment with A W Edwards Pty Limited, all new employees are to be assessed by the Human Resources Manager, or direct supervisor, for current skills levels and qualifications. An HR5101 Individual Training Plan is to be completed noting any skills development needs identified along with the proposed action to be taken to address those needs. The completed HR5101 Individual Training Plan is to be retained by the HR Manager.

In the case of both an Individual Training Plan and specific Project Training program, consideration should be given to prioritising an individual's or project's training needs on the basis of:

- Current legislation,
- Those skills required for particular roles/positions, and
- Specific project requirements.

On this project, the Project Manager is responsible for identifying the mix of skills required of the Project Team, and the Site Manager is responsible for ensuring the competency of personnel assigned to do the work on the project.

Company qualifications, skills and training information is held in a database controlled by the HR Manager.

2.5 DOCUMENT CONTROL

2.5.1 Documentation issued by A W Edwards Pty Limited

The Project Manager shall be responsible for the approval, control and issue of the Project Management Plan.

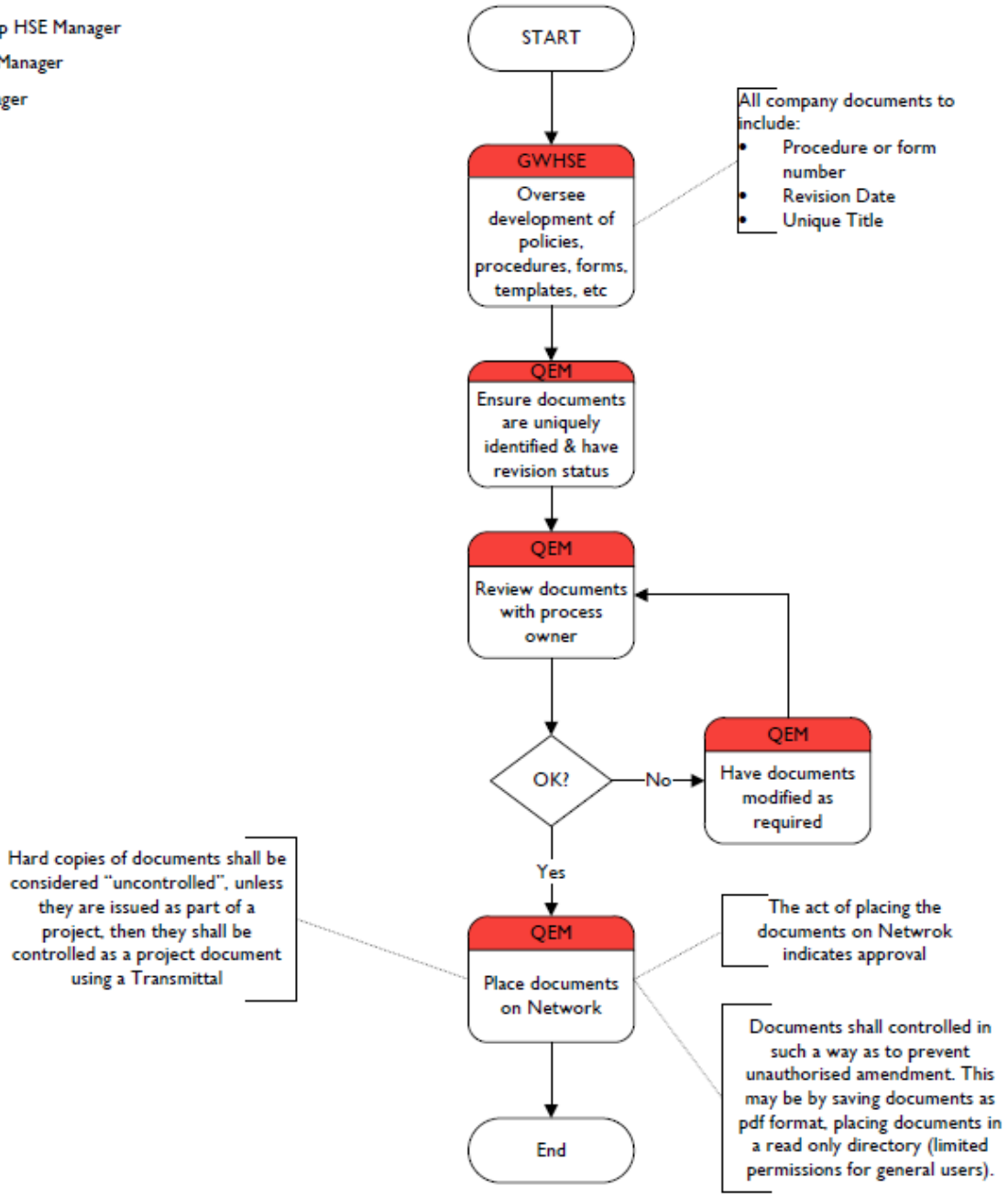
'Controlled documents' shall be controlled via Project Management Software or a Transmittal (PA3303). Controlled documents include:

- Drawings,
- Program,
- Specifications,
- Shop drawings,
- Inspection and Test Plans,
- Other head contract controlled issued documents.

A Document Transmittal via Project Management Software or a Transmittal (PA3303) shall be used when documents are distributed.

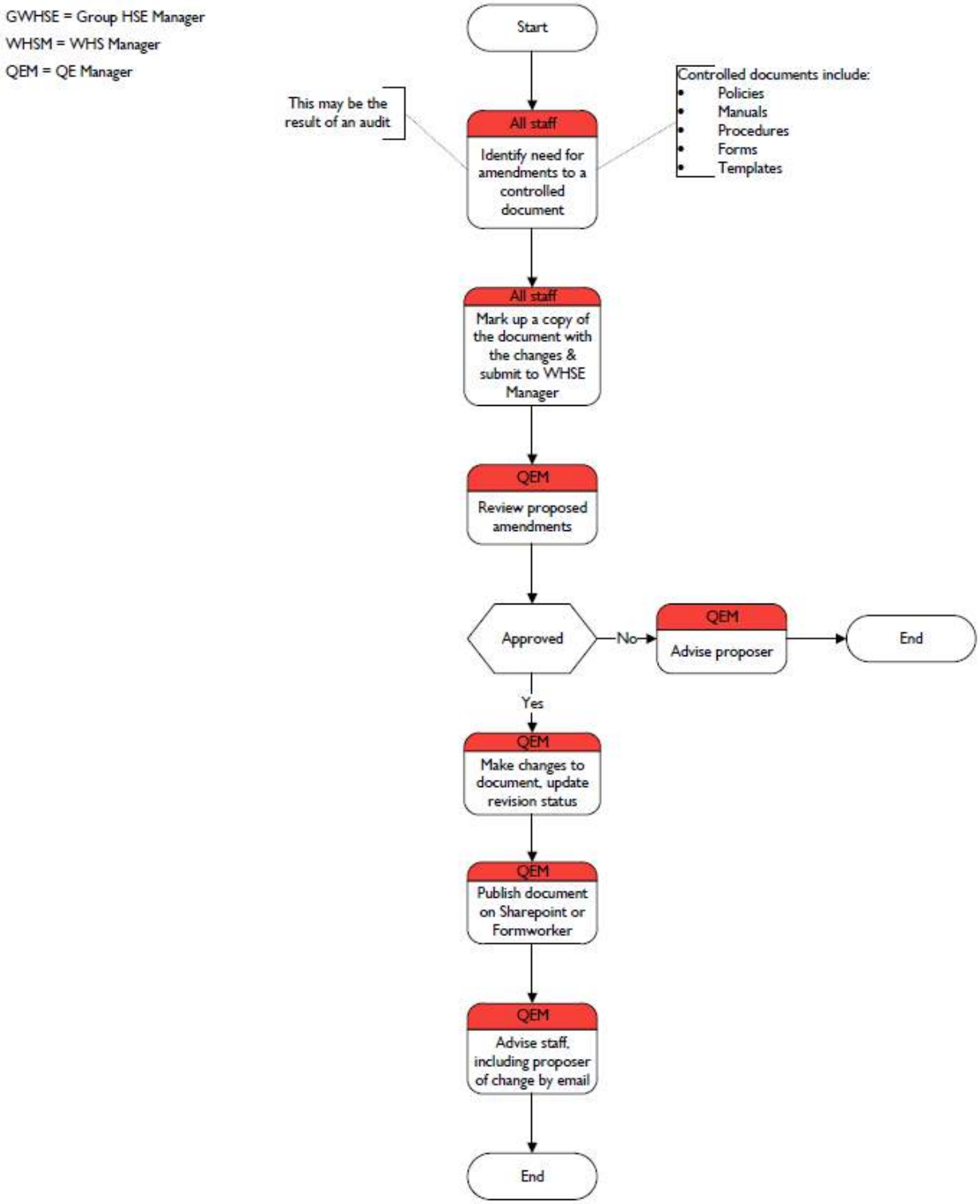
2.5.2 Document Creation

GWHSE = Group HSE Manager
WHSM = WHS Manager
QEM = QE Manager



2.5.3 Document Change

Where changes to forms and system documents are required, the QE Manager is to be advised in writing. Correspondence to the Group WHSE Manager needs to address the specific issue requiring amendment proposed. The proposed changes will be discussed between the initiator, the Group HSE Manager and the CEO and if agreed the required changes will be made.



2.5.4 Distribution of Documentation

New or revised documents will be distributed to Project Team members (and further as required) and superseded documents removed and/or destroyed. Documents are to be distributed by hand, the internal mail system, or electronically (company email or project communication system).

Electronic copies of Superseded documents may or may not be retained by the Group WHSE Manager.

2.5.5 Incoming Project Correspondence.

The Contracts Administrator shall be responsible for control of incoming correspondence.

The Contracts Administrator shall control amendments to the specification and shall ensure that variations are received in writing, filed and the appropriate personnel advised.

For all incoming documents (excluding Subcontractor and Supplier invoices only), the following information, as a minimum, is to be tracked for the documents or correspondence:

- Date of receipt of the documents or correspondence (email or electronic transmittal date).
- Name of the initial recipient of the documents or correspondence (from email or electronic transmittal).
- The distribution list - ie. who needs to see and action the documents or correspondence.
- The required action(s) as a result of having received the documents or correspondence – eg.
  - issue to Subcontractor(s);
  - raise Variation Notification;
  - notify of potential Extension of Time Claim;
  - generate a Request For Information if documents are not clear or complete;
  - mark-up drawings or specification.
- The actual actions implemented as a result of having received the documents or correspondence – eg.
  - "Site Instruction No. 25 issued to Bricklayer";
  - "Contract Variation Notification No. 60 issued to Project Manager";
  - "Copy to Electrical and Mechanical Subcontractors issued via Memo No. 77" etc;
  - "Drawings and Specification marked-up".
- Where the original document is to be filed.

2.6 RECORD CONTROL

All electronic project records (Quality, WHS or Environmental) shall be filed on the project server to be easily retrievable. Additional copies may also me maintained on the project communication and document database (eg. Aconex, Procore).

All records will be clearly identified in accordance with project document control procedures.

2.6.1 Archiving

At the conclusion of a project all hardcopies of Safety and Environment records are to be reviewed, scanned to the project server (if not already on the project server) and placed into storage boxes. The boxes are then to be sent to A W Edwards yard, at Seven Hills for storage.

Storage duration for all Safety related documentation shall be indefinitely.

All storage boxes are to have the following information clearly displayed on them;

- Project / Project Number
- Project Directors / Managers Name
- Box Number
- Dated from: / to:
- Destroy on:

Folders, archive boxes and the like, which hold WHS records, shall be labelled with their contents (or carry other identifiers).

Record (hard and soft copy) minimum retention periods and access restrictions are defined below.

Record Type	Example of Records	Minimum Retention Period	Access Restricted to	Filing
WHS & Environmental Records	- Induction and training records - Skills, competency and license register - Hazard identification, risk assessments and associated safe working procedures - Reports of incidents and illness/injury - Illness/injury and incident investigation reports - Illness/injury statistics, such as lost time frequency rates and duration rates - Maintenance, testing, servicing and repair of plant and equipment - Use of hazardous substances and associated monitoring - Inspection and test reports - Qualifications held by individuals - Internal review reports - WHS design reviews - Minutes of WHS meetings - WHS audit reports - Employee injury management records - Evidence of actions taken as a result of WHS meetings - Corrective action records - Work safety records generally	7 years	Nil restriction	Projects files, Server
Quality Records	- Management Plans (eg. Design Management Plan) - Inspection Test Plans - Quality Checklists (completed) - Verification and certification records		Nil restriction	Project Files, Server
Health Monitoring	- Health monitoring records	30 years	HR Manager, Group WHSE Manager, applicable Worker (only)	Server

Should Records be required during construction (for review, report, investigation or other purpose), they will be accessible (by A W Edwards Project Team members) from the project server.

Should the Record(s) be required post project completion, a request will need to be lodged with the Group WHSE Manager and IT Manager.

2.7 LEGAL AND OTHER REQUIREMENTS

2.7.1 Project Legal Register

Legislation, Codes of Practice, Australian Standards and other requirements that apply to this project are identified in the Legal & Other Requirements Register (SE4130) attached in Appendix 5.

The Group WHSE Manager monitors changes to legislation and other requirements and advises the Project Manager, WHSE Coordinator via emails or bulletins of these changes.

The WHSE Coordinator shall review project plans, risk assessments, SWMS, etc. to determine if changes are required. Where changes are required, the WHSE Coordinator shall ensure changes are made and that the relevant documents are re-issued, and personnel retrained as appropriate.

The WHSE Coordinator shall ensure that copies of applicable legislation, codes of practice, Australian Standards, etc. are available upon request. Access to legislation, codes of practice, Australian Standards, etc. shall normally be via the internet.

- The Site Manager shall ensure that workers are advised at induction how to access copies of legislation, codes of practice and standards are available upon request.
- Access to legislation, codes of practice and guides are available via the statutory authority web sites or via copies held on the A W Edwards network.

Australian Standards – A W Edwards subscribes to SAI Global. Access to Standards is via the company network. If a Standard is not available, then a request shall be made to the WHSE Coordinator who will organise for it to be purchased. Purchased Standards are made available via the company network.

2.7.2 Licences & Approvals

Environmental licences and approvals required for the project are described in Project Scope (SE9301) in Appendix 1.

Where Development Consents, permits or approvals relate specifically to the project, these issues will also be deemed as 'significant' and will be included in the Project Risk Register (SE4131).

2.7.3 Changes to Legislation Codes, etc.

All relevant changes to WHS legislation, Codes of Practice and Australian Standards shall be assessed by the Group WHSE Manager, QE Manager and/or WHS Manager and recorded on the Compliance Change Advice (CM1001), refer to Compliance Requirements procedure (AWE-005).

The Compliance Change Advice (CM1001) shall be forwarded to the Site Manager/WHSE Coordinator for actioning.

The Site Manager/WHSE Coordinator shall assess the impact of the change on the Project Management Plan, Project Risk Assessment, SWMS, work practices, training requirements and Subcontractor documentation. The required changes shall be implemented.

The Site Manager/WHSE Coordinator shall communicate to the workgroup the changes to any WHS legislation, Codes of Practice and Australian Standards via a Toolbox Talk.

The Compliance Change Advice (CM1001) shall be completed by the Site Manager/WHSE Coordinator. A copy of the completed form shall be returned to the QE Manager by the due date.

2.8 PROJECT/SITE AUDITS – QA, WHS, ENVIRONMENTAL, PROCEDURES

Project audits shall be scheduled by the QE Manager and form part of the company's audit schedule.

Refer to Audit Procedure (AWE-011).

As scheduled by the QE Manager, and as required by contract or other requirement; the audits, and their respective audit reports shall specify which of the requirements they address, eg. ISO9001, ISO14001, ISO45001, OFSC and/or A W Edwards' Management System.

The aim of the audits is to not only verify compliance with this Project Management Plan but, to also identify improvements to this plan and the Management System as a whole.

A summary of results of site WHS audits, where requested, will be provided to the Clients representative.

2.8.1 Audit Schedule

Internal Audits will be conducted on the following basis.

a. Projects with a 'construction' period of 1-6 months will complete the Monthly Site Safety & Environmental Audit/Checklist SE8201. This will be self-Audit by the PM/SM. A risk assessment will determine whether the project will be deemed as a high-risk project. If deemed high-risk, it will have a formal internal audit carried out on it.

b. Projects with a 'construction' period of 6-9 months will need to complete requirements as stated in a. above, plus will have a formal internal audit carried out on them. The Group WHSE Manager, WHS Manager, QE Manager or external auditor will complete this audit.

c. Projects with a 'construction' period of 9-12 months will need to complete requirements as stated in a. above, plus will have 2 formal internal audits carried out on them. The Group WHSE Manager, WHS Manager, QE Manager or external auditor will complete this audit.

d. Projects with a 'construction' period of more than 12 months will need to complete requirements as stated in a. above, however will have at least 2 audits per annum.

For this Project, the audit schedule shall be as follows:

- There shall be a minimum of two formal (and documented) internal audits per year, during the course of the project;
- The Site Manager shall complete the monthly Site Safety & Environmental Audit/Checklists;
- The WHS Manager and QE Manager shall conduct regular on-site Inspections of the site for the duration of the project;
- Senior Management shall complete Observation & Consultation Sheets when they attend site; and
- The Site Manager and WHSE Coordinator shall complete Hazard & Observation Sheets, with one completed each day as a minimum.

Internal audits will be conducted by the Group WHSE Manager, WHS Manager, QE Manager or external auditor, who are have either undertaken formal auditor training or are an accredited WHS auditor.

2.9 PREVENTATIVE / CORRECTIVE ACTION

To establish and maintain a system for assuring that conditions related to A W Edwards activities on this project that require preventive or corrective action are promptly identified, documented and resolved.

2.10 NON-CONFORMANCES & BREACH NOTICES

2.10.1 Reported By A W Edwards

The WHS & QE team, Executive Directors, Project Directors, Project Manager or Site Manager have the authority to stop, reject or quarantine any unsafe work areas, work methods, materials, plant and equipment or works that do not meet required quality standards.

Non-Conformances including non-conformance with procedures, non-conformances with standards, and non-conformance with legislation shall be recorded on defects lists, defects register (or electronic defect management software), Hazard and Observation Sheet (SE6301), Audit Reports, external reports or certification records, Corrective Action Request (SE4601) and High-Risk Construction Work SWMS Review (SE4803). Injuries or near misses shall be handled in accordance with the Incident Reporting procedure (AWE-014).

A Corrective Action Request (SE4601) also on Hammertech file Issues, shall be issued for all observed breaches of project procedures, SWMS, WHS or environmental legislative requirements, the requirements of A W Edwards' Project Management Plan or repeat issues/offences.

The relevant A W Edwards Project Team member preparing the Corrective Action Request record will identify the root cause of the non-conformance/breach, and communicate such in the Corrective Action request, ensuring that the corrective actions are applicable to and respond to the root causes.

Non-Conformances will be brought to the attention of the Project Manager/Site Manager who will ensure that the issue is investigated, and corrective action taken. Records of any action taken will be maintained. This includes emails, minutes of meetings, memos, etc.

A copy of the Corrective Action Request will be forwarded to the relevant party who will implement appropriate corrective action.

An additional copy will be forwarded to the QE Manager each month with the monthly reports for consolidation on the Corrective Action Register.

Each corrective action request is followed up by the relevant A W Edwards Project Team Member and recorded on part 3 of Corrective Action Request (SE4601) also on Hammertech.

Non-Conforming product or materials will be quarantined and either returned to the supplier or disposed of.

Corrective Action Request reports shall be reviewed at the Project Team meetings.

2.10.2 Notices by Other Parties

The Site Manager shall ensure that all safety and environmental notices or concerns raised by other parties, e.g. statutory authorities (eg. SafeWork NSW), Unions, Client's Representative, Consultants, Neighbours, Councils, Office of Environment Protection Authority, etc. are immediately forwarded to the Project Manager and Group WHSE Manager.

For immediate safety or environmental concerns, the Site Manager shall take appropriate action to eliminate the hazard.

Information pertaining to the close out of any notices or corrective actions issued by other parties, or in responding to any observations made by other parties are communicated internally, by the Project Manager and Construction Manager or Site Manager with the Group WHSE Manager; and then back to/with the issuer of the notice or observation (eg. SafeWork NSW or Client representatives).

2.10.3 Corrective Action Register

A Corrective Action Register will be maintained for the project, by the WHSE Coordinator.

Corrective or Preventative Actions from this register are reported each month to the QE Manager, for inclusion in the WHS&QE report to the A W Edwards Operations Meeting.

2.11 MANAGEMENT REVIEW

The Integrated Management System including this Project Management Plan, Company Policies, Corporate (and project level) Objectives and Targets, Corporate Risk Register, Corrective Actions, etc. shall be reviewed in accordance with the Company Meetings procedure (AWE-003).

2.12 OTHER PROJECT REQUIREMENTS

Successful execution of this Project Management Plan will be governed by the following requirements:

- Authority consent conditions;
- Licences and Permits;
- Legislation, Standards and Codes;
- Programmes;

- Agreements;
- Documentation; and
- Reports

In particular the following key requirements are fundamental to the success of the Project Management Plan delivery:

- Cooperation with subcontractors within A W Edwards controlled areas
- Training of the workforce in the application of the A W Edwards Management system
- Continual monitoring of the system through inspection and audit

2.13 INSURANCES

The Project Manager is responsible for verifying that insurances, including Worker's Compensation Insurance covers all personnel working on site.

2.14 REFERENCES

The legal documents and references relevant to the detailed development, administration and implementation of this Management Plan are listed in the Legal & Other Requirements Register (SE4130) attached in Appendix 5.

3 Quality Management System

3.1 OBJECTIVES & TARGETS

Objectives	Targets
To provide our Client with a completed product that meets or exceeds their expectations, and conforms to agreed requirements of design or specification	The project handed over to the Client is major defect free, 'habitable' and fit for purpose
Priority issue relating to quality or customer satisfaction – an issue is considered 'priority' if it has direct consequences on the finished product in terms of its quality, its completion, its period cost	Nil priority issues on the project
Client Non-Conformance Records (NCRs)	Nil NCR's received
Quality Management items within Contractor Performance Reports	Achieve Good or Superior ratings for criteria listed
TopSite – to make our sites emblems of our operational performance	The project meets the eligibility criteria, are in the process of submitting application for, or have attained TopSite status (eligible sites are >6 months duration and >€3M)
Number of (quality) systems audits conducted - Internal	1 each quarter
Number of (quality) systems audits conducted - External	3 for the duration of the Project

3.2 CONTRACT REQUIREMENTS

The Head Contract shall be managed in accordance with the Head Contract Administration Procedure (AWE-025).

A W Edwards Project Manager is responsible for preparing a schedule that outlines the contract requirements providing for how the Project Team will meet each requirement, eg. Deliverables Schedule or Register, Requirements Analysis, Allocation & Traceability Matrix (RAATM).

3.3 CUSTOMER FOCUS AND CUSTOMER SATISFACTION

Customer requirements and needs are identified in accordance with Bid management & project selection Procedure AWE-018.

Customer Satisfaction and feedback shall be sought and measured in accordance with the Customer Satisfaction/ Feedback Procedure AWE-017.

3.4 PROGRAMME

The contract and target construction programme are developed and maintained by the Project Manager.

A copy of the contract programme is issued to the client as required.

A copy of the target construction programme is issued to the Project Coordinator and Subcontractors as required.

Project Coordinator to provide fortnightly programme as required.

3.5 PRINCIPAL CERTIFYING AUTHORITY

The Project Manager shall contact the Principal Certifying Authority as soon as possible after the project has been awarded.

The Project Manager and or Project Coordinator shall determine with the Principal Certifying Authority mandatory inspections and timing.

These inspection points shall be included in the Inspection and Test Plans (PA7101).

A copy of the Building Approval and the approved plans shall be kept on site.

3.6 INFRASTRUCTURE AND FACILITIES

Infrastructures are the stock of the basic facilities and equipment needed for realising the project. Infrastructure provide the suitable conditions and accessories to perform the appropriate tasks and activities of the personnel managing and building this project, and assist in achieving the desired conformity of product.

The Project Manager, Construction Manager and Site Manager determine the quantity and size of the site office(s), site facilities (lunch sheds, ablution blocks, changerooms), meeting rooms, break out areas, etc.

In determining the above the following factors are used to the dimensions and features of the infrastructure for the project;

- industry guidance and standards (eg. Codes of Practice for Workplace Facilities, and Construction Work),
- previous project experience,
- programmed project duration,
- foreseeable risk (WHS and environmental),
- estimated peak workforce,
- number of site and project team management personnel, and
- project complexity

3.7 DESIGN

Design shall be managed in accordance with the Design Procedure (AWE-020).

3.8 INSPECTION METHODOLOGY

3.8.1 Dilapidation Report

The building/site shall be inspected at project start up and a dilapidation report produced by the Project Manager/Site Manager. A copy of the report shall be forwarded to the client.

The dilapidation report should include all structures in or adjacent to the project, for example, existing roads, adjacent buildings to the site, etc.

3.8.2 Identification and Traceability

The Project Team will implement material or equipment control procedures, as required by the contract, to ensure that each different type of material or equipment (or component), including client supplied items remain identifiable.

Unless otherwise required by contract, legislation or standard, these procedures will be incorporated into the Inspection Test Plan and quality-based checklist(s) process for and with each subcontractor engaged on the project.

Where codes, standards or regulations require the traceability of materials (eg. for welds, or non-destructive testing, etc) subcontractors and supplier must provide to A W Edwards evidence that identify such requirements and the implemented controls that will ensure they are satisfied.

3.8.3 Inspection and Test Plans (ITPs)

The Project Coordinator shall review the project specifications, drawings and contract to determine the key control points, the level of control required and the risk to the company.

ITPs shall be developed by the Project Coordinator or nominee using the Inspection and Test Plan form (PA7101). The ITP should identify witness points, hold points, samples or prototypes, tests, submissions, calibration records, etc. ITPs should only include those items or processes that require control.

ITPs should allow for WHS and Environmental risks involved & take into account:

- The timing and nature of high-risk work,
- Identified work site hazards including risks & controls,
- The likelihood of unforeseen hazards or risks emerging between inspections,
- Instructions provided by designers, manufacturers or suppliers of product or equipment; and
- Any regulatory requirements.

ITPs shall be reviewed and approved by the Project Manager.

3.8.4 Subcontractor Inspection & Test Plans (ITPs)

Subcontractors shall submit their ITPs to the Project Coordinator for review to ensure they are adequate and identify witness and hold points.

ITPs submitted by Subcontractors should reflect the project and identify critical control points including control of WHS risks.

The Project Coordinator shall advise the Subcontractor of any changes that are required.

Once ITPs meet requirements, the Project Coordinator shall approve them for use.

The Project Coordinator shall verify that the Subcontractor has completed ITPs correctly during the project and that supporting documentation is available.

3.9 REQUESTS FOR INFORMATION

3.9.1 Submitting Requests for Information (RFI)

RFIs shall be raised whenever a response is required from a consultant, the client, or the client's representative that requires tracking.

RFIs can be raised using Project Management Software or a RFI form (PA4306) by the Project Team.

RFIs shall be distributed to the relevant parties.

All RFI's distributed are to be recorded in the RFI Register (PA4308).

Outstanding RFIs shall be followed up by the Project Manager/Contracts Administrator/Project Coordinator.

Refer Head Contract administration procedure (AWE-025).

3.9.2 Receiving Requests for Information (RFI)

Subcontractors may submit a RFI requesting information. These should be answered by the person they are addressed to; the Project Manager or Project Coordinator.

The RFI should be answered promptly. The RFI and answer shall be filed in the appropriate Subcontractor file.

3.10 VARIATIONS

3.10.1 By Subcontractors

Variations submitted by Subcontractors shall be assessed by the Project Manager/Contract Administrator

Refer to the Subcontract Administration Procedure (AWE-024).

3.10.2 By A W Edwards

The Project Manager/Contract Administrator shall identify variations against the Head Contract.

Variations shall be forwarded to the client for approval.

Refer to the Head Contract Administration Procedure (AWE-025).

3.10.3 By Client

Variations initiated by the client are passed to the Project Manager/Contract Administrator for pricing.

Variations shall be forwarded to the client for approval.

Refer to the Head Contract Administration Procedure (AWE-025).

3.11 BACKCHARGES

All back charges shall be recorded on the Backcharge Notification (PA9404) the by the Contract Administrator. The form shall be issued to the subcontractor.

The Contract Administrator shall advise the Project Manager of any back charges.

3.12 EXTENSIONS OF TIME

The Contract Administrator/Project Manager shall identify delays.

Where the contract provides for extensions of time, the Contract Administrator shall prepare the claim and submit it in accordance with the contract.

Refer to the Head Contract Administration procedure (AWE-025).

3.13 REPORTING

Refer to the Reporting procedure (AWE-010).

3.14 SITE DIARY/DAILY SITE REPORT

The Site Manager is responsible for recording events and activities on site in the Daily Site Report (PA4402), or using the electronic access control/database.

The diary is intended to be a record of all activities, events and occurrences on-site.

3.15 SITE INCIDENTS

All site incidents such as involving police, accidents, vandalism shall be recorded in the Daily Site Report (PA4402), or using the electronic access control/database by the Site Manager.

3.16 PROCUREMENT AND PURCHASING

All procurement of Subcontractors, suppliers and consultants shall be carried out in accordance with the Procurement procedure (AWE-021) and Subcontractor Assessment Procedure (AWE-023). These procedures outline;

- how service providers' ability is evaluated, selected subcontractors and recording the results of the evaluation, including selection/evaluation criteria
- how the subcontract requirements will be confirmed and specified in tender documents, subcontracts and purchase orders
- the method and results of evaluation of supplier or other service provider ability to perform and performance (when applicable)?

3.17 RECEIPT OF GOODS ON SITE

The Site Manager shall be responsible for accepting deliveries to site.

Prior to accepting the goods, they shall be compared against the supplier's Delivery Docket and the Purchase Order.

If goods do not meet requirements, the receiver shall record the discrepancies/issues (e.g. incorrect goods, incorrect quantity, damaged or faulty goods, etc.) on the Delivery Docket. Any issues should be followed up with the supplier and resolved/appropriate action taken.

Non-conforming goods shall be segregated from conforming goods and identified that they have been quarantined/put on hold.

If goods meet requirements, the Delivery Docket shall be signed, clear name printed and dated.

The marked up/signed Delivery Docket shall be forwarded to Accounts by the Contract Administrator.

Accounts shall reconcile the purchase order, delivery docket and invoice and pass them to the Contract Administrator for approval.

3.18 CLIENT SUPPLIED PRODUCT & SERVICES

Product supplied by the client shall be identified as such.

Client supplied product shall be subject to the same levels of inspection, risk assessment, etc. as purchased product or services.

3.19 STORAGE OF MATERIALS AND EQUIPMENT

The Site Manager shall be responsible for ensuring that all materials and equipment stored on site are stored in a suitable and safe manner, and to preserve the material/equipment/component during construction works.

Storage of materials and equipment shall be done in such a manner to ensure:

- Security,
- Protection from damage or deterioration;
- Maintenance of conformity to requirements; and
- It is adequately identified.

Damaged or non-conforming goods shall be quarantined and identified as such.

3.20 CALIBRATION - MEASURING AND TEST EQUIPMENT

3.20.1 A W Edwards

Project Coordinators shall ensure that all inspection, measuring and test equipment owned by A W Edwards is calibrated and maintained in good working order to ensure reliable performance and accurate results.

Refer to the Calibration Procedure (AWE-028).

If an item of equipment is knocked or dropped, or if out-of-calibration is suspected, the user will immediately check its calibration (where possible) by comparing measurement against a similar item. Alternatively, the user will promptly tag the item "Out of Service" and arrange for it to be inspected and recalibrated.

3.20.2 Subcontractors

The Project Team shall determine which Subcontractor equipment shall be checked for calibration.

Calibration requirements shall be added to the Subcontractor's scope of works.

3.21 DEFECT LIST

A Defect List shall be developed by the Project Team and maintained throughout the duration of the project as required. Defects shall be entered into the Defects Register. Defects identified by the client shall be added to the list. Relevant Defects Lists shall be sent to the client for their information.

Defects shall be sorted by trade/applicable Subcontractor and then distributed to the relevant Subcontractors.

The Subcontractors shall be responsible for actioning each item on the Defects Register. Once completed the Subcontractor should sign off the Defects Register.

The Project Coordinator is responsible for verifying/closing off (sign off) the Defects Register.

Once all defects have been closed off, a copy of the completed Defects Register shall be forwarded to the client for verification/sign off.

Any issues/defects raised by the client should be rectified.

3.22 PRACTICAL COMPLETION

As trades are progressively completed, final inspection will occur. Maintenance manuals and as built drawings will be compiled progressively.

The Project Manager shall apply to the client for Practical Completion.

4 Work Health & Safety

4.1 WHS MANAGEMENT PLAN

The project team shall manage the project in accordance with the legislation, applicable Australian Standards and Codes of Practice.

Staff and subcontractors shall conform to the requirements of this WHS Management Plan.

4.2 CONTROLS RELEVANT TO PROJECT SCOPE

The controls relevant to the project scope are defined in Project Risk Register (SE4131)

4.3 COMMITMENT

4.3.1 Management Responsibilities

Management Responsibility applies to all facets of the business from its 'day-to-day' operation, to that of undertaking of projects.

Management responsibility is to provide the realisation and the means in which leadership is enacted within

A W Edwards and the overall enhancement of its operations. This is to provide leadership with administration controls to measure and monitor projects ensuring customer focus and satisfaction

4.3.2 Senior Management Commitment

Roles and responsibilities of Senior Management Personnel are detailed in Section 2.3.1 of this Project Management Plan

Senior Management (as defined in s2.2.1) and may include Executive Directors are committed to continual WHS improvement on our projects.

Individuals from the senior management team shall undertake site visits at monthly intervals, making positive observations, recognising positive behaviours, and addressing unsafe conditions or behaviours where and when they are identified. Additionally, Senior Management personnel may participate in site consultation arrangements, engaging with workers regarding safe work practices and processes, eg. during site walks, prestarts, subcontractor meetings and toolbox meetings.

Records of site involvement by senior management shall be recorded on the Senior Management Consultation & Observation Sheet (SE6308).

The form shall be forwarded to the Project Manager/Project Coordinator for actioning as required and for filing in the project records.

4.4 OBJECTIVES & TARGETS

A W Edwards' objective is to have zero High Potential Incidents on the project.

OBJECTIVES	TARGETS
Personnel Incidents	
Reduce the number of First Aid Treatments	< 1 per month
Reduce the number of Medical Treatments Injuries	< 1 per month
Reduce the number of Restricted Duties Injuries	0 per month
Reduce the number of Lost Time Injuries (LTIs)	0 LTIs in a 12 months period
Reduce the number of days Lost per LTI	< 5 days per month
Safety Statistics	
Reduce the LTI Frequency Rate	0
Reduce the Average Time Lost Rate	0 days / month
Reduce the MTI Frequency Rate	0
Incident Rate	< 2.00

OBJECTIVES	TARGETS
Number of fatigue breaches	0 per month
Number of non-negative alcohol and drug tests	0 per month
General Incidents	
Reduce the number of High Potential Accidents (HPA's)	0 per month
Reduce the Total number of Reportable Incident	0 per month
Number of Injuries to non-workers (incl. Public)	0 per month
Lead Indicators	
Number of Hazard Observations (Safety inspections)	Min. 10 per month
Number of Senior Management Observations	Min. 1 per month
Number of Project Safety Alerts generated and communicated	Min. 1 per month
Number of Toolbox Talks conducted	
Number of Safety Systems Audits Conducted - Internal	1 per month (S&E Audits)
Number of Safety Systems Audits Conducted - External	1 per month
Investigations & Outcomes	
Number of SafeWork NSW Infringement Notices	0 per month
Number of SafeWork NSW Improvement or Prohibition Notices	0 per month

* Table notes Source: AS1885.1

A Medical Treatment Injury (MTI) is defined as an injury, which results in a journey to a medical facility where a medical practitioner provides treatment.

A lost time injury/disease (LTI) is defined as an occupational injury where the injured person is not able to work for at least one full day/shift at any time after the day the injury occurred.

The formula for lost time injury frequency rate is: no. of occurrences in the period/no. of hours worked in the period (x 1,000,000).

The Incidence rate is the number of occurrences of injury/disease for each one hundred workers employed. The formula for lost time injury incidence rate is: no. of occurrences in the period/no. of workers in the period (x 100).

4.5 WHS REPORTING

Project WHS performance data shall be reported on each month by the Site Manager (Monthly Site Performance Report (SE8101)). This information includes:

- Total hours worked for all persons on the site,
- Number of hours lost due to injury,
- Number of lost time injuries,
- Number of medical treatment injuries,
- Number of first aid treatments,
- Near misses/near hits,
- All Non-conformances for WHS and Environmental,
- Statutory Authority Notices.

The Group WHSE Manager provides each Project Manager a summary of WHS statistics in the form of the Company WHS Performance Report (SE8402) for the company, at each Operations Meeting (conducted each 6 weeks).

At the Project Team Meeting that succeeds each Operations Meeting, the Project Manager shall present the Summary of the WHS performance information to the project team. The summary report shall be considered by the Project Team when conducting risk assessments and determining required controls.

Refer to WHSE Reporting procedure AWE-008.

4.5.1 Monthly Client WHS Reporting

The Project Team will submit, unless otherwise instructed, prior to the 5th of each month, an WHS Management Monthly Report, detailing Inspection, testing and servicing activities, Internal reviews and Incident management and corrective action, and including the information listed below, as evidence of the implementation of the WHS Management Plan during the previous month.

As a minimum, the WHS Management Monthly Report will include the following information:

A. Contract Details

- Contract
- Contractor
- Contractor's representative
- Signature and Date
- Period Covered

B. Implementation of Inspection, testing and servicing procedures (based on WHSMS Guidelines element 7). Summary of WHS inspections and tests carried out for:

- plant and equipment
- incoming products
- work site conditions
- adherence to and completeness of Risk Assessments, Safe Work Method Statements and Site Safety Rules
- work site access and exits
- personal protective equipment

C. Implementation of proactive WHS initiatives

- information in regards to ongoing and new WHS strategies and initiatives introduced at the project

D. Implementation of Incident management and corrective action procedures (based on WHSMS Guidelines element 8). Details of:

- any WHS incidents or WHS issues, including non-compliance with WHS processes and procedures and near misses
- implementation of incident management
- implementation of corrective action
- WHS statistics for entire the Contract including:

	This Month	Total Cumulative
Number of Hours Worked		
Number of First Aid Injuries		
Number of Lost Time Injuries (LTI)		
Number of Medical Treatment Injuries (MTI)		
Number of Hours Lost Due to Injury		
Lost Time Injury Frequency Rate (LTIFR)		
Total Recordable Injury Frequency Rate TRIFR		
Number of Notifiable Incidents Reported to SafeWork NSW		
Site WHS Inspections Completed with Senior Management Involvement		

	This Month	Total Cumulative
Number of Hazards Reported		
Independent Site Safety Audits Completed		
SWMS Task Observations Completed		
Number of Safe Act Observations		
Number of Take 5 conducted		

E. Implementation of Internal Reviews (based on WHSMS Guidelines element 11). Details of internal reviews, including audits and inspections, undertaken to verify that on-site WHS processes and practices conform with the WHS Management Plan including:

- System element(s) and activities audited and/or reviewed
- Non-conformance(s), improvement(s) identified and corrective action(s) taken
- Details of auditors and reviewers and dates and durations of audits and reviews
- Copies of third party audit reports and details of the Contractor's responses to the reports.

F. Schools Infrastructure NSW Key Performance Indicators

- Report 100% of incidents on the day they occur to SINSW
- Close our 100% corrective actions identified on Safety Assurance Activities by assigned due dates
- Submit the WHS Statistical Report by the 5th of each month

4.6 THE SITE

4.6.1 Site Establishment

The Project Manager and Site Manager shall ensure that the site is established in accordance with WHS Legislation and Codes of Practice prior to commencement of work.

The Site Manager and the WHSE Coordinator shall complete a Project Risk Assessment using the Project Risk Register (SE4131). The Project Risk Register shall be included in Appendix 6

A copy of the Project Risk Register (SE4131) shall be forwarded to Subcontractors prior to their starting on site.

The Site Manager shall request a copy of the any Asbestos Registers/Hazmat Report relating to the site from the client prior to the start of work.

4.6.2 Site Security

4.6.2.1 Security Arrangements

The Project Team will continually review the requirements for site security and implement appropriate security measures for the site during normal site hours and for outside of the site hours.

4.6.2.2 Perimeter Protection

Perimeter protection where required shall be installed in accordance with legislative requirements. The perimeter fencing, and any incorporated overhead protective structure will be inspected at least monthly or more frequently if required by legislation and if required by local council or if damage has occurred or as a result of a risk assessment which indicates additional inspections are required.

4.6.3 Additional Site Information

4.6.3.1 Smoking

All site offices, lunch, change rooms and ablution blocks are to be non-smoking areas.

Other parts of the site will be deemed as non-smoking areas due to the nature of the work being carried out or as determined by the A W Edwards site management.

4.6.3.2 Drinking Water

Drinking water is available in the amenities area and other locations throughout the site.

4.6.4 Signage

4.6.4.1 General

Signage will be displayed as required by legislation and for any work activity where signage is noted in safe work method statement and/or as directed by A W Edwards.

4.6.4.2 Mandatory Signage

The following must be displayed at the entry point to the site:

- Name and contact telephone number for after hour and emergency purposes;
- Signage advising that all personnel must attend the site-specific safety Induction prior to commencing works on site; and
- Signage indicating what personal protective equipment and/or clothing is mandatory on site.

4.6.4.3 General Signage

The following signage is to be displayed where necessary:

- Access/exit signage,
- Formwork stripping in progress,
- Scaffold incomplete do not use,
- Lasers in use,
- Explosive power tools in use,
- Nailing tool in use, and
- Post-tensioning system is in use.

4.6.5 Notices

The following shall be displayed in prominent locations on site, e.g. Site notice boards, lunchrooms, induction area or otherwise made available to workers:

- A W Edwards' Policies,
- Site Rules,
- Right of Entry,
- Emergency Management Plan Summary,
- Consultation Arrangements,
- Safety Alerts,
- Summary of Workplace Return to Work Procedures,
- SafeWork posters where required by state legislation

4.6.6 Amenities

Site amenities are to be kept clean and tidy. Amenities shall be inspected on an ongoing basis during the site inspections Hazard and Observation Sheet (SE6301).

4.6.7 Adjacent Areas

The Project Manager/Site Manager shall determine the risk to and from persons/property in adjacent areas and document these in the Project Risk Register (SE4131).

Suitable controls shall be put in place to prevent potential accidents or injuries.

4.6.8 Site Rules

The WHSE Coordinator shall prepare Site Induction Rules (SE6101) for the conduct of all personnel in and around the site.

The WHSE Coordinator shall ensure that a copy of the Site Rules is displayed on the site notice board, maintained up-to-date in the site induction, and made available to workers.

Compliance with site rules shall be monitored informally during daily activities (Site Manager, Foremen, WHSE Coordinator) and formally during Hazard Observations, Senior Management Observations and audits.

4.6.9 Site Attendance Record/Daily Pre-Start.

The Site Manager shall ensure that all workers record their attendance and departure in the Daily Prestart (SE6215) or via the site access/security system.

The Project Team shall update the project white boards with the daily risk profile

Subcontractors shall review the daily risk profile prior, hold a pre-start toolbox to discuss the daily hazard profile, identify the SWMS applicable to the day's work and sign the Daily Prestart (SE6215).

On leaving the site subcontractor workers shall sign out of the site on the Daily Prestart (SE6215) or via the site access/security system.

4.6.10 Covid -19

The project team and subcontractors shall conform to the requirements of the COVID – 19 Management Plan and the controls that are defined in the Covid – 19 Risk Control Measures

4.7 (SAFETY IN) DESIGN

4.7.1 Competency of Designers

The Design Manager shall verify the competencies of the design team. Copies of designer competencies shall be retained in personnel files or in the project files for contracted designers.

4.7.2 Communication with Client and Stakeholders

The Project Team will communicate and interact with a wide range of project participants, including the following:

- School Infrastructure NSW (SINSW)
- SINSW Consultants (Peer Review)
- Darlington Public School District
- Executive User Group and other project governance committees as required.
- Planning and Development Committee
- Project Planning Team inclusive of all design consultants
- Project Working Groups
- Project User Groups
- Direct Employees / Staff
- Project Manager – MACE

- Authorities – City of Sydney Council, Utilities, etc.
- Subcontractors and Suppliers.

Clear communication protocols will be agreed and documented at the beginning of the Design Finalisation process. A project start-up meeting will be scheduled during the first two weeks of the Project Implementation phase to undertake and implement this step. These protocols along with accurate record keeping are of critical importance in relation to:

- Agreed design departures from the Principal's project requirements
- Project user group validation sessions and engineering working group meetings
- Verification of fixtures, fittings and equipment selections
- Risk management processes and procedures
- Responsibilities for authority compliance
- Alignment and achievement of project delivery dates for the preparation of various documents, reports, programs, etc.

Further detail regarding communication and consultations relating to the design, any design issues, and specific risk controls are outlined in the following three sections, and in the Design Management Plan, with outputs of these consultations recorded in meeting minutes and in the Design Risk Assessment.

4.7.3 Design & Construct

The Design Manager will ensure design related hazards are identified, subjected to a risk assessment and managed from the concept design stage. This is to include all SINSW Educational Facilities Standards and Guidelines (EFSG). A W Edwards will comply with the EFSG Requirements to ensure the responsible management, planning, design, construction and maintenance of the new Darlington Public School is maintained. A detailed review of the school types with content on educational principles, accommodation recommendations, design intent on rooms and spaces, relationships between accommodation components and associated technical data will be undertaken along with incorporating all Technical Design and Specification Guides. These considerations and minimum standards will be adopted by A W Edwards and al subcontractors.

The Design Manager shall request from the client (if not already provided) a copy of any known hazards or risks associated with the property.

Where the design has been partially completed by another party, the Design Manager shall request the safety in design risk assessment from the client and or designers.

The design risk assessment where provided by the client/designer shall be reviewed for adequacy by the Design Manager/Project Manager. Design risks shall be transferred to the Design Risk Assessment (PA5101) where the design risk has not been eliminated.

The following should be considered during the safety in design process:

- Siting of structure
  - Proximity to adjacent property or nearby roads
  - Surrounding land use
  - Clearances required for construction equipment and techniques demolition of existing assets
  - Proximity to underground or overhead services – especially electric lines
  - Exposure of workers to adjacent traffic or other hazards
  - Site conditions – including foundations, and construction over other assets or over water
  - Safety of the public
- High consequence hazards

  - The storage and handling of dangerous goods, or work with high energy hazards (for example, pressure) and health hazards such as biological materials.
- Systems of work (involving the interaction of persons with the structure)
  - Rapid construction techniques, ie prefabrication versus in situ construction
  - Materials to be used in construction
  - Staging and coordination with other works
  - Inadequate pedestrian or vehicle separation
  - Restricted access for building and plant maintenance
  - Hazardous manual tasks
  - Working at height
  - Exposure to occupational violence.
- Environmental conditions
- Impact of adverse natural events such as cyclones, floods and earthquakes, inadequate ventilation or lighting, high background noise levels and welfare facilities that do not meet workplace needs.
- Incident mitigation – impact of the structure on access/egress, assembly areas, inadequate emergency services access, etc.

The design team shall review the design pre-construction to identify design related buildability hazards. Details of the design team undertaking the review and documents reviewed, including design risk assessments requested above, shall be recorded on the Design Risk Assessment (PA5101).

Where required by contract, an Independent Safety Assessment (ISA) shall be undertaken.

Where possible modifications shall be made to the design to eliminate or minimise those risks.

For risks that cannot be eliminated (designed out), an attempt to mitigate them at "source" shall be taken rather than relying on protective measure to be undertaken onsite during construction (mitigation by substitution, modification, isolation, engineering controls, personal protective equipment). Control measures shall be determined in accordance with the 'hierarchy of controls'.

Refer to the Design procedure AWE-020.

4.7.4 Design Finalisation

The design verification process will ensure that all brief requirements, design directions and approved client instructions are incorporated into the documents to enable the construction of the project. This process commences immediately upon award of the contract and continues throughout all stages of the project.

The first step in the design verification process will require confirmation of the required scope of works as at contract award. This is normally ascertained from the following;

- The original contract documents as issued at Tender
- Tender Addendum documents issued
- Tender SINSW Educational Facilities Standards and Guidelines (EFSG).

The management of the database system, by the Contractor, will enable co-ordination with the current model. This will ensure that discrepancies are discovered and rectified. The use of the database system also allows for the logging and tracking of each design change during the design finalisation process.

The Design Finalisation Verification phase will also ensure that project specific and statutory requirements are incorporated in the development of the final design documents. These will cover;

- Proposed fire engineering solutions

- Changes required to comply with the conditions of approval
- Code and Standard compliance
- Development and coordination of the services design.

User validation process will focus on resolution of any outstanding room or area, and final approval of current room layouts and associated schedules where required.

Final design documentation is dependent on a thorough and diligent approach to the incorporation of all relevant design inputs. This will be achieved through a regular checking and coordination process undertaken by the design team.

A W Edwards' Design Managers and Services Design Coordinators will assess the documentation produced by the design team to validate content against the inputs and requirements of the design process. A series of actions will be observed including;

- Checking the developing construction documentation is consistent, co-ordinated and meets the requirements of the Principal's Project Requirements and guidelines
- Keeping accurate records of the various briefings and meetings (along with decisions made) with all relevant parties. The Clients designer or other nominated design consultant will chair and document all Project User Group (PUG) meetings
- Maintaining a register of "Contractor's Proposals" for review at the Design Status Meetings
- Maintaining the database with any change requests made to the Project Brief by a Project User Group
- Ensuring the design meets relevant legislative requirements
- Identifying and assessing WHS risks for the project, with the aim to achieve:
  - reasonable and safe constructability;
  - safety with use;
  - longevity of 'product';
  - reduced, simplified and safe maintenance; and
  - safe disposal.

To assist with validation of design content the Design Inputs, Outputs and Review Matrix, nominates points in the design process where design review and validation is required to be undertaken, along with the assignment of responsible personnel. In alignment with the overall design management process, each discipline designer will be required to implement their own internal quality assurance systems to verify compliance. AWE will provide monthly design validation statements to the Principal as required by the contract.

Our process also covers the management of external specialist consultants engaged directly by the Client.

4.7.5 Changes to Design

All changes to design shall be assessed to determine if there is a risk to safety. Details of the Design Change shall be recorded on the Design Change Action Sheet (PA5801). A record of the risk assessment shall be recorded on the Design Change Action Sheet (PA5801).

Identified safety risks shall be added to the Design Risk Assessment (PA5101) in the manner described above.

4.7.6 Communication of Design Risks

Where a risk has been identified during the safety in design process and is not able to be eliminated, then the item with residual risk shall be communicated to the party affected by that risk.

The means of communicating risks shall be identified on the Design Risk Assessment (PA5101).

Construction risks unable to be eliminated shall be transferred to the Project Risk Register (SE4131) together with marked up drawings, tool box talks, site Instructions, etc. as appropriate.

Safety risks that remain after construction shall be communicated to the users of the building by inclusion in the handover documentation/manuals.

4.8 HAZARD IDENTIFICATION & RISK ASSESSMENT AND CONTROL (HIRAC)

4.8.1 Risk Assessment - Project

An assessment will be undertaken to evaluate the potential health and safety risks to the client, the public and all persons working on, delivering to or visiting the building site. The measures necessary to control these risks will be determined.

The risk assessment shall be undertaken by personnel trained in the use of the company's HIRAC methodology and tools.

The Site Manager and WHSE Coordinator shall ensure that site safety risks are assessed prior to commencement of work on site, before using materials or installing, erecting, commissioning or altering plant or equipment, before changes to work practices are introduced or when new or additional information becomes available or when hazards are apparent. Project Risk Register (SE4131) attached to Appendix 6

The Site Manager and WHSE Coordinator shall take into consideration the accident and incident data in the Company WHS Performance Report (SE8402) and Safety Alerts issued by the Group WHSE Manager or WHS Manager whilst carrying out the Project Risk Register (SE4131). Based on the accident/incident data additional controls or changes to site rules may be required.

The assessment will include:

- The identification of hazardous chemicals in the workplace,
- Purchased goods and services, plant and equipment (supply, inspection, maintenance, commissioning, isolation),
- Labour hire arrangements,
- The nature of the hazard with regards to health and safety,
- Practical means to control the hazards,
- Whether medical advice is necessary,
- Consultation with relevant site personnel on risks and hazard controls,
- Safety induction and training required for employees,
- Degree of onsite supervision to be provided; and
- Requirements of Legislation, Australian Standards and Codes of Practice.

Hazards shall be assessed having regard to:

- The likelihood and consequence of injury, illness or incident occurring,
- Available information on the hazard including any records of incidents, illness and disease; and
- The potential for emergency situation.

Control measures shall be determined in accordance with the "hierarchy of controls".

Risks with higher rating shall be given priority over lower rating risks.

Where the residual risk is still extreme or high the following shall apply:

Residual Risk Rating	Action taken based on residual risk
Extreme	No work allowed until the residual risk has been reduced. This may be by re-engineering or by using alternate construction methodologies.
Very High	HRCW SWMS must be provided for activity that addresses all required controls. A Work Practice Review (SE4805) must be held prior to start of activity to review hazards and controls. Controls must be reviewed and approved by the Project Manager/Project Coordinator on the Project Risk Register (SE4131).

The Risk Assessment shall be reviewed and approved by the Project Manager and Project Director.

A copy of the Project Risk Register (SE4131) shall be forwarded to all Subcontractors, so they can prepare their respective Safe Work Method Statements (SWMS) accordingly.

Personnel working on the site shall be advised of the risks via toolbox meetings, site induction or by training in their SWMS.

The implementation of controls identified in the Project Risk Register (SE4131) controls shall be verified and the effectiveness of controls assessed via Site Inspections (completion of Hazard and Observation Sheet (SE6301) or on Hammertech, Inspections) and internal audits.

The Site Manager and WHSE Coordinator shall periodically conduct further risk assessments during the course of the project. The Project Risk Register (SE4131) shall be updated as and when risks are identified. Refer to the Risk Management Projects procedure (AWE-022).

The Project Risk Register (SE4131) shall be forwarded/made available to subcontractors following any amendments. Previous versions of the Project Risk Register shall be filed by the WHSE Coordinator.

Where required Subcontractors shall include newly identified risks in their SMWS and re-submit them to the WHSE Coordinator for re-assessment and review.

4.8.2 Third Parties, Live & Neighbouring Sites

Where A W Edwards is required to provide services within or near a client's or other entity's workplace, the Project Manager shall meet/communicate with the client or other entity regarding hazards that impact on the client/other entity or hazards from the client/other entity processes that impact on A W Edwards activities.

Discussion will be held with the client to identify any HIRAC processes that impact on any of the parties. The results of these discussion shall be documented on the Interface & Impact Register (SE4136) and transferred to the Project Risk Register (SE4131)

Information provided by statutory authorities and 3rd party asset owners regarding risks associated with working in their jurisdiction shall be incorporated in the Project Risk Register (SE4131).

On-going meetings may be held to monitor the hazards and the effectiveness of the controls at either the request of the client/other entity or if initiated by the Project Manager/Project Coordinator.

4.8.3 Hazard Identification

Any hazards reported by site personnel shall be reported to the Project Coordinator/Site Supervisor who shall take the appropriate action.

Hazards identified, actions taken and close outs, shall be recorded on the Hazard Observation Sheet (SE6301) or on Hammertech Inspections .

In responding to any incident on or adjacent to the project, the Site Manager (as Incident Controller), or a nominated Project Team member will conduct informal hazard identification and assessment for any and all incident responses. Any control measures applicable to the response (eg. establishing exclusion zones, engaging specialist response personnel, employing specialist response equipment, etc) will implemented in accordance with the Emergency Action Plans (see Emergency Management Plan, attached in the appendices), immediately, and as required by the Site Manager or nominated Project Team member.

4.8.4 Hazard Reporting

All employees and workers have a responsibility to report any hazards that they identify on site. If the worker is unable to personally eliminate the hazard, they must notify their supervisor. The procedure for Hazard identification and risk management is outlined in 4.8.5 Section of this plan

4.8.4.1 Hazard Recording

All hazardous work practices/processes, or procedures involving a risk to health or safety should be recorded on the *Safe Work Method Statement (SWMS) SE6201*. All chemicals, Hazardous Chemicals and dangerous goods should be recorded in the *Hazardous Chemicals Register & Risk Assessment (refer SE6205).*

4.8.5 Risk Matrix

All risks for an activity or task shall be risk rated using the Risk Matrix.

		LIKELIHOOD				
		Almost Certain	Likely	Possible	Unlikely	Rare
CONSEQUENCE	Catastrophic	Extreme	Extreme	Very High	High	High
	Major	Extreme	Very High	High	High	Medium
	Moderate	Very High	High	High	Medium	Low
	Minor	Medium	Medium	Medium	Low	Low
	Insignificant	Medium	Low	Low	Low	Low

CONSEQUENCE
Catastrophic: The hazard has the potential to: • Permanently disable or kill • Cause severe damage to the structure • Have significant impact on the surrounding population and environment
Major: The hazard has the potential to: • Temporarily disable or very serious injury • Cause major damage to the structure • Serious breach of the site boundary and pollution of the local environment
Moderate: The hazard has the potential to: • Temporarily disable or serious injury • Cause moderate damage to the structure • Breach the site boundary and minor pollution to the local environment
Minor: The hazard has the potential to: • Moderate injury • Cause minor damage to the structure • Be contained within the site boundary
Insignificant: The hazard has the potential to: • Cause minor injury (first aid) • Insignificant impact contained within the site boundary

LIKELIHOOD	
Almost Certain 75% - 100%	Expected to occur in most circumstances
Likely 60% - 75%	Will probably occur in most circumstances
Possible 40% - 60%	Might occur at some time in the future
Unlikely 20% - 40%	Could occur but doubtful
Rare 0% - 20%	May occur but only in exceptional circumstances.

4.8.6 Hierarchy of Controls

Control measures for identified hazards and risks shall be determined in accordance with the "hierarchy of controls".

- ELIMINATION, can the risk or hazard be totally eliminated?
- SUBSTITUTION, can the risk or hazard be replaced with a less hazardous method, material or system?
- ISOLATION, can the hazard or risk be distanced from persons or can it be enclosed to prevent entry/access?
- ENGINEERING CONTROLS, can the hazard or risk be guarded or made safe by engineering methods?
- ADMINISTRATIVE CONTROLS, can training, increased supervision, rotation or signage assist?
- PPE EQUIPMENT, can PPE protect the worker from the hazard or risk?

Based on the Project Teams' skillset, internal and external advice, previous incident reports/investigations, corrective/preventative actions, non-conformances, site investigations, training and experience, the most effective control measures will be selected for implementation on the project and shall be the highest possibly viable control measure under the "hierarchy of controls" for that hazard/risk.

Where possible, risks shall be designed out (elimination). For risks that cannot be avoided, an attempt to mitigate them at "source" shall be taken rather than relying on protective measure to be undertaken onsite during construction (mitigation by substitution, modification, isolation, engineering controls, personal protective equipment).

4.8.7 High Risk Workshop

High risk workshops should be carried out for "high risk" activities such as:

- Tower crane erection and dismantle
- Tower boom erection and dismantle
- Demolition of structures attached to occupied buildings (eg. awnings, walkways)
- Internal demolition in buildings still occupied
- Large unconventional crane lifts
- Large or complex services works (that typically involve some area of isolation or shutdown)
- Commissioning and black start
- Any other 'high risk' activity that may have a significant impact on the operation of the clients undertaking

Note: High Risk Workshops shall be conducted for each activity as determined by the Project Manager and Site Manager or Construction Manager and as recorded/documented in the Project Risk Register (SE4131).

High risk workshops typically include the client, client representatives, subcontractors involved and other stakeholders where applicable

The workshops are typically presented using MS PowerPoint, and the meeting is recorded on a Record of Training Consultation (SE6105).

4.8.8 High Risk Construction Work Safe Work Method Statement (HRCW) SWMS

4.8.8.1 General

The Project Manager shall ensure that SWMS are produced for all high-risk construction work performed on the site by Subcontractors and A W Edwards personnel prior to start of work on site.

High risk construction work:

a. Involves a risk of a person falling more than 2 metres,
b. Is carried out on a telecommunication tower,
c. Involves demolition of an element of a structure that is load bearing or otherwise related to the physical integrity of the structure,
d. Involves, or is likely to involve, the disturbance of asbestos,
e. Involves structural alterations or repairs that require temporary support to prevent collapse,
f. Is carried out in or near a confined space,
g. Is carried out in or near:
   - A shaft or trench with an excavated depth greater than 1.5 metres, or
   - A tunnel,
h. Involves the use of explosives,
i. Is carried out on or near pressurised gas distribution mains or piping,
j. Is carried out on or near chemical, fuel or refrigerant lines,
k. Is carried out on or near energised electrical installations or services Is carried out in an area that may have a contaminated or flammable atmosphere,
l. Is carried out in an area that may have a contaminated or flammable atmosphere,
m. Involves tilt-up or precast concrete,
n. Is carried out on, in or adjacent to a road, railway, shipping lane or other traffic corridor that is in use by traffic other than pedestrians,
o. Is carried out in an area at a workplace in which there is any movement of powered mobile plant,
p. Is carried out in an area in which there are artificial extremes of temperature,
q. Is carried out in or near water or other liquid that involves a risk of drowning, or
r. Involves diving work

The high-risk construction work safe work method statement must:

- Identify the work that is high risk construction work
- Specify hazards relating to the high-risk construction work and risks to health and safety associated with those hazards
- Describe the measures to be implemented to control the risks
- Describe how the control measures are to be implemented, monitored and reviewed.

The high-risk safe construction work safe work method statement must be prepared taking into account all relevant matters, including:

- Circumstances at the workplace that may affect the way in which the high-risk construction work is carried out
- The WHS Management Plan that has been prepared for the workplace
- Be set out and expressed in a way that is readily accessible and understandable to persons who use it.

SWMS shall be forwarded to the A W Edwards representative 7 days prior to work on the trade commencing, if required by contract.

The Project Manager/Project Coordinator shall ensure that all SWMS prepared by A W Edwards or Subcontractors are checked to ensure they reflect the requirements of current Legislation, Australian Standards and other

requirements relevant to health and safety using the SWMS Review Checklist (SE4801). A new SWMS review form shall be used for each revision.

The Site Manager, Project Coordinator, or WHSE Coordinator shall verify that Subcontractor SWMS address site risks identified on the Project Risk Register (SE4131).

A Project Team member shall sign off on the SWMS Review Checklist (SE4801) after reviewing the SWMS.

SWMS must be reviewed (and revised if necessary) whenever high-risk construction work changes or if there is reason to believe that risk control measures are not adequate or change in the way. All persons affected by the amendment must be advised of the change and retrained (Toolbox Talk Minutes).

SWMS for high risk construction work must be reviewed at least 12 months after it was prepared and thereafter at intervals of not more than 1 year whilst the SWMS is required.

Current SWMS' for the high-risk construction activity must be readily available for inspection while the activity is being performed.

4.8.8.2 A W Edwards SWMS

HRCW Safe Work method Statement (SE6201) shall be developed by the Project Coordinator or WHSE Coordinator for all high-risk construction work carried out by A W Edwards workers or labour hire supervised by A W Edwards on site.

HRCW Safe Work method Statement (SE6201) shall be developed in consultation with workers. A record of who was consulted in the development of the SWMS must be recorded on the SWMS.

The Project Coordinator or WHSE Coordinator shall ensure that all workers are trained in their SWMS before commencing work.

4.8.8.3 Monitoring SWMS Compliance

A member of the Project Team shall monitor worker compliance with High Risk Construction Work SWMS by carrying out task observations each week, using the HRCW SWMS On-Site Review (SE4803). Additionally, informal observations will be undertaken during daily activities (Site Manager, Foremen, Project Coordinators, and WHSE Coordinator) as well as during Hazard Observation inspections.

If high risk construction work is not carried out in accordance with the safe work method statement for the work, an A W Edwards Project Team member must stop the work immediately or as soon as it is safe to do so. Work may only be resumed in accordance with the high-risk SWMS.

Corrective Action Request (SE4601), shall be raised for all identified breaches and forwarded to the relevant contactor.

4.8.9 Review of HIRAC Process

The Project Risk Register shall be reviewed at least every month at the Project Team Meeting and consider the below prompts:

- Any changes that have been made to the way the construction work is done (e.g. a new system of work is introduced, or the place where the work is to be done is changed);
- If new information about the hazards involved in the construction work becomes available to the employer (e.g. Statutory Authority issues an alert on a particular hazard);
- If for any other reason the risk control measures are not adequately controlling health and safety risks (e.g. if there have been injuries or illnesses connected with the work);
- After receiving a request from a Health and Safety Representative/WHS Committee Member; or
- Receipt of Compliance Change Advice (CM1001).

Where required changes shall be made to improve the HIRAC process

Updated documents shall be re-issued, or workers trained or involved in a toolbox meeting as required.

4.9 PROCUREMENT

4.9.1 Subcontractors

4.9.1.1 Subcontractor Requirements

Subcontractors may not commence work on site unless they have provided A W Edwards:

- Written HRCW Safe Work Method Statements (SWMS) addressing HRCW associated with their scope of works that meet the requirements of the SWMS Review Checklist (SE4801),
- Evidence that their workers have been trained in the applicable SWMS,
- Evidence that their employees have undertaken industry WHS induction training
- Details of any hazardous chemicals they are bringing on site including Safety Data Sheets including relevant training,
- A Risk Assessment for each item of mobile plant brought onto site, copies of the most current service records, up to date Log Books and a completed Mobile Plant Worthiness Checklist (SE6207) for each item of plant brought onto site,
- Details and copies of any competencies required to perform tasks or operate plant and equipment; and
- Evidence of current Workers Compensation and Public Liability.

All Subcontractors must attend A W Edwards' site induction and sign in/out of the Daily Pre-Start (SE6205). Or its equivalent site access system or security swipe in system.

All subcontractors are to be given a copy of the Project Risk Register (SE4131) and Project Management Plan to reference in their paperwork and to ensure that all project risks have been addressed.

4.9.1.2 Sub-contractor Risk Assessment

All subcontractors working for A W Edwards will be assessed for their performance prior to commencing works. This assessment will be completed on the Project Risk Register (SE4131).

Subcontractor shall be rated using the Post-Contract Assessment Summary (PA12802). All new subcontractors that are undertaking HRCW shall be rated high risk (H)

If a subcontractor is deemed to have an overall rating of HIGH, then the subcontractor shall hold a Work Practice Review (SE4805) addressing the risks and controls associated with the work.

Subcontractors project WHS performance shall be reviewed at the completion of the project by the Project Team and reported via the Subcontractor Post-Contract Assessment Individual (PA12801)

4.9.2 Labour Hire

4.9.2.1 Supervised by A W Edwards

Labour hire supervised by A W Edwards shall be treated in the same manner as an A W Edwards labourer.

4.9.2.2 Not Supervised by A W Edwards

Labour hire not under A W Edwards supervision shall be treated in the same manner as any other subcontractor working on site.

4.9.3 Purchasing

All plant, equipment, hazardous chemicals/materials, personal protective clothing & equipment (PPE) will be purchased from reputable suppliers that can demonstrate that their product(s) comply with relevant legislation, Australian Standards and any A W Edwards requirements.

The Project Team will review past performance (documentary and on-site experience) for suppliers engaged on other A W Edwards projects, particularly in establishing their ability to comply with A W Edwards WHS requirements for the provision of plant, materials and services.

Risks associated with the purchased item are documented on one of the following:

- Plant – Plant Risk Assessment (SE4132) or equivalent,
- Chemicals – Hazardous Chemicals Register & Risk Assessment (SE6205),
- Construction materials – Project Risk Register (SE4131),
- Subcontractors – Project Risk Register (SE4131),
- Hired plant – Plant Risk Assessment (SE4132) or equivalent; and
- Labour hire – Project Risk Register (SE4131) and SWMS.

WHS controls for the identified hazards/risk are to be documented in SWMS and/or in the Project Risk Register (SE4131).

All substances must be supplied with a Safety Data Sheet (SDS), in correctly labelled sealed containers and with any other relevant information.

Those in control of purchasing are to advise suppliers of site delivery and site WHS requirements including any induction requirements of their employees.

All plant and equipment, hazardous chemicals/materials and PPE are to be supplied with safe working/use instructions and any safety manual clearly detailing all safety hazards, the safety controls for these hazards and any relevant training that is required for their use. Where required the supplier will provide training in the safe use, operation and maintenance of the plant, equipment, hazardous substance/material or PPE as agreed with A W Edwards.

All mobile plant will require the completion and submission of a Mobile Plant Worthiness Checklist (in accordance with Section 3.7.10 of this plan) prior to the plant being operated on the project.

4.9.4 Client Supplied Plant, Equipment and Materials

Any plant, equipment, and/or materials supplied by the Client for use on the project will verified as meeting WHS requirements, through the following means;

1. A W Edwards Project Team will request that the Client validate and certify, with their users, that the selected plant/equipment/material meets their requirements,
2. Prior to installation, A W Edwards will request certification from the Client's supplier, that the plant/equipment/material is manufactured in accordance with the relevant Australian Standards for the item,
3. A W Edwards Project Team will coordinate the installation of the plant/equipment/material and as applicable connection to services in conjunction with the plant/equipment/material manufacturer or supplier to ensure that the installation is in accordance with their documented requirements, and
4. Following the installation of the plant/equipment/material, and prior to handover, the plant/equipment/material is subject to a commissioning process which includes validation of compliance with the specified product.

4.10 TRAINING & COMPETENCY

4.10.1 Overview

Training and Inductions for employees engaged on site (direct and subcontract) will be in accordance with legislative and A W Edwards' requirements. Where required, the Project Manager or nominee will conduct an assessment of any external training provider chosen to deliver training to ensure they have the appropriate qualifications.

4.10.2 Company Training Records

All WHS training attended and completed by A W Edwards personnel is to be recorded in the company training records. Copies of training documentation (certificates, statements of attainment and induction record forms) shall be held in the personnel files.

4.10.3 Site Specific Inductions

All personnel working on site will be required to attend the site-specific induction prior to commencing work on site, work activity induction, Asbestos Awareness (for projects in the ACT) and also need to have completed the Industry General Induction. This is to include all consultants, engineers and subcontractor management who visit the site more than once during the course of their works.

The Site Manager will nominate a person(s) to conduct the site-specific induction. The nominated person(s) is/are to be experienced in the Work Health and Safety requirements associated with the Building and Construction Industry. All attendees will be required to provide photographic proof of identity and evidence that they have completed the Industry General Induction requirements. Should a worker not be able to provide the necessary evidence noted, they will not be able to commence work on the project, and their induction will be postponed until such time that the necessary documents or certificates can be provided to the satisfaction of the Site Manager.

Site inductions shall address as a minimum:

- Site amenities
- Site rules
- First aid
- Consultation arrangements
- Dispute resolution
- Emergency procedures
- Incident reporting
- Use of permits
- Freedom of association

Competency certificates, licences and other training qualification(s) required to perform any task or operate plant/equipment on the site are to be maintained with the Site Induction Record (SE6103).

Where it is not possible to obtain copies of the required certification the person conducting the inductions is to sight the documentation and make note on the individual's induction form that documentation has been sighted and record the required details.

If a person being inducted is from a non-English speaking background and has a difficulty understanding English, their employer is to provide a translator to interpret the induction content to the person being inducted. The name of the interpreter must be recorded on the Site Induction Record (SE6103)

A summary of workers inducted on site shall be recorded in the Induction Register (SE6104) or equivalent

4.10.4 Visitor Induction

All visitors to the site shall undergo a visitors site induction.

The visitors site induction shall address as a minimum:

- Site amenities
- Site rules
- First aid
- Emergency procedures

- Incident reporting

Visitor site inductions shall be recorded on the Visitor Induction (SE6106). Visitors shall be escorted by an inducted person at all times whilst on site

4.10.5 Work Activity Training

All employees will be required to undertake work activity induction prior to commencing work on site.

The work activity induction will include but not necessarily be limited to a review of the Safe Work Method Statements (SWMS) covering the tasks/activities they are to be undertaking on the site. Each worker will be required to sign as acknowledgment that they have read, understood and will work in accordance with the documented procedures.

The work activity induction may be in a form of toolbox talks, development and/or review of a SWMS or training provided by a company, individual or a combination of the systems noted.

Each employer is responsible for providing training and all costs associated with the training for their employees and where required, for any secondary subcontractor(s) they may engage.

4.10.6 Competencies/Qualification/Trained

A W Edwards will ensure that the following tasks are undertaken by workers who have been assessed as being competent:

- The project hazard identification, risk assessment and risk control (HIRAC) process, when using the Company's HIRAC methodology;
- The assessment of the suitability, location and accessibility of emergency equipment;
- The assessment the first aid requirements for the Project and the first aid system in place are appropriate to the worksite and organisational risks.
- The completion of Incident/Accident Investigations and identifying Corrective Actions;

A W Edwards has deemed any of its workers who have completed as a minimum a Certificate IV in Work Health & Safety (which has incorporated the A W Edwards Management System, and its specific forms & procedures as part of the training) as competent to undertake the above tasks.

Competencies/licences required for various plant/activities is listed in the table below:

Area/Category	Description	Licence/Certificate/Competency
Anchor points	Install anchor points for fall arrest, fall restraint	Trained in manufacturers system, RB, RI or RA
	Design	Engineer
Asbestos	Remove non-friable asbestos	CPCCDE3014A
	Remove friable asbestos	CPCCDE3015A
	Supervise asbestos removal – non-friable	CPCCBC4051A + CPCCDE3014A
	Supervise asbestos removal – friable	CPCCBC4051A + CPCCDE3014A + CPCCDE3015A
	Workers carrying out asbestos-related work (non-removal)	Trained in identifying asbestos and safe handling (awareness)
	Assess asbestos	Asbestos Assessor
Air quality Monitoring	Carry out air quality monitoring	Qualified Hygienist, Asbestos Assessor
Concrete Pump	Concrete placing booms	PB - HRW License
Cranes	Bridge and gantry cranes	CB - HRW License
	Derrick crane	CD - HRW License
	Non slewing mobile cranes greater than three tonnes capacity	CN - HRW License
	Portal boom crane	CP - HRW License
	Slewing mobile cranes	C2, C6, C1, C0 - HRW Licenses as applicable to crane capacity

Area/Category	Description	Licence/Certificate/Competency
	Vehicle loading crane	CV - HRW License
	Dual lifts	RA - HRW License
Directional drilling	Conduct horizontal directional drilling	RIINHB323A or RIINHB323D
Dogging	Dogging	DG - HRW License
EWP	Boom-type elevating work platform	WP - HRW License
	Scissor Lift and Boom lift less 11 m	EWPA Yellow Card
Electrical - NSW	Electrical work: – Install support and mechanical protection – Install cabling – terminate cables exceeding extra-low voltage (NSW lights and power only – Install apparatus and equipment – Any physical work of installing, repairing, altering, removing	Any competent person with appropriate training under supervision of an Electrical Supervisor
	Electrical work: – Electrical testing – Fault finding – Energising and commissioning – Disconnect and reconnect fixed wired appliances and electrical equipment – Verification of de-energised – Strip out or remove old cabling from an existing installation – Terminate cabling in a control panel or switchboard	Licenced electrician
	Electrical supervisor	Qualified supervisor certificate or Endorsed Contractor Licence ('contractor licence endorsed with (Q)')
	Electrical Contractor (company or individual must hold contractor's licence)	Electrical Contractor's Licence
Electrical - ACT	Electrical wiring work, other than interval metering work, without supervision, Supervision of electrical wiring work, other than interval metering work	Electrical contractor
	Electrical wiring work, other than interval metering work, without supervision, Supervision of electrical wiring work, other than interval metering work	Unrestricted
	Electrical wiring work under supervision, incidental electrical work	Electrotechnology systems permit
	Assembly and servicing incidental to electrical wiring work in relation to electrical fitting, disconnection and reconnection work	Electrotechnology systems assembly and servicing electrical fitting
	Electrical wiring work in relation to mechanical fitting disconnection and reconnection work	Electrotechnology systems mechanical fitting
	Electrical wiring work in relation to plumbing and gas fitting disconnection and reconnection work	Electrotechnology systems plumbing and gas fitting
	Electrical wiring work in relation to refrigeration and air conditioning disconnection and reconnection work	Electrotechnology systems refrigeration and air conditioning
	Electrical wiring work in relation to disconnection and reconnection of type B gas appliances	Electrotechnology systems type B gas appliances
Fall Arrest/Restraint	Use of fall arrest/fall restraint	WP - HRW License (when working from a boom type EWP), Work Safely at Heights training (RIIWHS204D or equivalent),

Area/Category	Description	Licence/Certificate/Competency
		RB, RI, RA, SB, SI, SA - HRW License(s)
Formwork	Installation of formwork	Form worker (CPC31511 or BCG30798) + trained in manufacturers system if propriety formwork system
	Installation of edge protection	BCG30798, CPC30211 or CPC32011
	Inspection of formwork/propping	Engineer
Flow Isolation/Flow Management (Sydney Water)	Request isolation, trial, valve open/close and disinfection – Sydney Water	FIFM Accreditation
Ground/slab conditions	Verify ground/slab able to support intended load	Engineer with relevant experience
Hoist	Operate Materials platform hoist	HM - HRW License
	Operate Personnel and material hoists	HP - HRW License
	Install hoist - hoists (including mast climbing hoists)	RB, RI, RA - HRW License
	Install hoist - hoists with jibs and self climbing hoists	RI, RA - HRW License
Loading Platform	Install cantilevered crane loading platforms	RB, RI, RA - HRW License
Load Shifting	Front end loader	Statement of Attainment for corresponding National Unit of Competency, or Assessment record from an RTO aligning with the corresponding National Unit
	Front end loader/backhoe	Statement of Attainment for corresponding National Unit of Competency, or
	Roller.	Assessment record from an RTO aligning with the corresponding National Unit
	Front end loader of the skid steer type	Statement of Attainment for corresponding National Unit of Competency, or
	Excavator.	Assessment record from an RTO aligning with the corresponding National Unit
	Telescopic Handler < 3 tonne	THA (EWPA) Gold Card
	Telescopic Handler > 3 tonne	CN - HRW License
	Reach Stacker >3 tonnes	RS, C0, C1, C2, C6 - HRW License
Perimeter screens/shutters	Install screens shutters	RB, RI, RA - HRW License
Piling Rig	Conduct pile driving operations	RIICFW304A, RIICFW304D
Plumbing		Contractor's licence, supervisors' certificate, tradesman
Precast panels	Installation	RB, RI, RA - HRW License
Precast panel propping	Installation	Formworker, RB, RI or RA - HRW License
	Inspection	Engineer
Rigging	Basic rigging	RB, RI, RA - HRW License
	Intermediate rigging	RI, RA - HRW License
	Advanced rigging	RA - HRW License
Refrigeration/air conditioning work	Air-conditioning and/or refrigeration work	Supervisor License or Contractors license for air-conditioning or refrigeration work
Safety nets/Static Lines	Install safety nets/static lines	RB - HRW License
Scaffolding	Basic scaffolding – – modular or prefabricated scaffolds – cantilevered materials hoists with a maximum working load of 500 kg – ropes and gin wheels – safety nets and static lines, and – bracket scaffolds (tank and formwork)	SB - HRW License

Area/Category	Description	Licence/Certificate/Competency
	Intermediate scaffolding – – cantilevered crane loading platforms – cantilevered and spurred scaffolds – barrow ramps and sloping platforms – perimeter safety screens and shutters – mast climbers – tube and coupler scaffolds (including tube and coupler covered ways and gantries)	SI - HRW License
	Advanced scaffolding – – cantilevered hoists – hung scaffolds, including scaffolds hanging from tubes, wire ropes or chains – suspended scaffolds	SA - HRW License
	Suspended or fabricated hung scaffolds	RA, SA - HRW License
Scaffold plan	Design & approval of scaffold plans	Structural engineer, scaffolder
Structural support	Inspection structural supports	Engineer
Telehandler	Operate telehandler – forks attached	THA (EWPA) Gold Card
	Attachments to lift people 11m or over	WP – HRW License & THA (EWPA) Gold Card
	Jib hook max 3t	THA (EWPA) Gold Card
	Jib hook >3t	CN - HRW License
	Slewing	C2, C6, C1, C0 - HRW Licenses as applicable to crane capacity
Temporary Support Structures (not covered elsewhere)	Installation	Training in manufacturers system, or Scaffolder, or CPC30211, CPC32011, CPC31511 or BCG30798 (timber systems)
Traffic Control – NSW & ACT	Control traffic with a Stop/Slow bat	Traffic Control
	Set up and work with Traffic Control Guidance Schemes/Traffic Control Plans at a work site	Implement Traffic Control Plans
	Design new traffic management plans and TCGS/TCP's for road works, produce major upgrades of standard plans and/or inspect traffic control plans on road construction sites	Prepare a Work Zone Traffic Management Plan
Work at heights	Any work involving work at heights (except scaffolding, rigging, dogging, use of EWP)	RIIOHS204D - Work safely at heights

For operators of mobile plant, as a minimum competency level, A W Edwards accepts current holders of (nationally recognised) High Risk Work (HRW) License for the corresponding license classes. As noted in the table above, for operators of mobile plant that does not align to the HRW License classes, operators must have undertaken the corresponding National Unit of Competency delivered by a Registered Training Organisation (RTO), or have been assessed by an RTO and issued with a certificate verifying their competence (eg. 'VoC' or Statement of Attainment issued by an RTO).

Evidence of competency shall be provided at induction. Copies shall be maintained with the induction record.

4.10.7 Refresher Training

The Project Team is responsible for ensuring that all staff participate in the necessary training to enable them to undertake their work safely and to comply under the Work Health and Safety legislation, regulations, standards and codes. Specifically, the Site Manager and WHS Manager are responsible for ensuring that WHS training is conducted, including site induction training, work activity (or task) induction/training and refresher training.

Unless otherwise stated by legislation, license expiry or other vocational training requirements (eg. Apply First Aid), the need for refresher training is determined based on individual needs (eg. reintroduction to the workforce or task after a period of absence), and changes to the workplace (eg. new processes, location, or equipment).

4.10.8 Other Training

Other specific training will be provided, as necessary, to conform with WHS requirements, following consultation with workers, for the development of WHS skills and knowledge of the A W Edwards personnel and its Subcontractors

4.11 COMMUNICATION & CONSULTATION ARRANGEMENTS

A W Edwards is committed to ensuring the health and safety of all our employees, subcontractors and visitors to this site. This commitment is embodied in our accredited Safety and Environment System, which aims to proactively approach WHS&E issues and prevent needless and costly injury and illness. A W Edwards will adopt a consultative process on site when implementing our management system, as we believe it necessary to have all parties committed to the process of ensuring the health and safety of site personnel.

4.11.1 Consultation

Consultation requires:

- The sharing of relevant information about WHS and welfare with employees,
- That employees be given the opportunity to express their views and to contribute in a timely fashion to the resolution of WHS and welfare issues at their place of work,
- That the views of employees are valued and taken into account.

The sharing of relevant WHS information with employees and service providers should include providing information about:

- Work processes and procedures,
- WHS consultative arrangements,
- WHS policies and procedures, including risk assessments and control measures,
- Changes to premises, work environment, plant, equipment, systems of work or substances used for work,
- Incidents, illnesses or injuries (in a way that protects the confidentiality of personal information); and
- Reporting procedures.

Staff and workers shall be consulted:

- When changes that may affect health, safety or welfare are proposed to the:
- Premises where persons work,
- Systems or methods of work,
- Plant used for work, or
- Substances used for work.
- When risks to health and safety arising from work are assessed or when the assessment of those risks is reviewed,
- When decisions are made about the measures to be taken to eliminate or control risks,
- When introducing or altering the procedures for monitoring risks (including health surveillance procedures); and
- When decisions are made about the adequacy of facilities for the welfare of employees.

All meetings, or informal discussions on the project (ie. on the job daily communication between site managers, workers and subcontractors/service providers), whether with site staff, subcontractors and their workers, the client

or their representatives; WHS items and matters should always be discussed, and an opportunity provided to exchange information that could impact the site and its workers.

4.11.2 Health and Safety Representatives

A worker may request the election of a health and safety representative (HSR) to represent them on work health and safety matters. If a worker makes this request, work groups must be established to facilitate the election.

Management and workers shall negotiate and agree on the formation of work groups including:

- The number of health and safety representatives and deputy health and safety representatives (if any) to be elected,
- The workplace or workplaces to which the work groups will apply; and
- The businesses or undertakings to which the work groups will apply.

Negotiations should commence with the workers within 14 days after a worker makes the request and may involve a worker's representative (such as a union official) if requested.

Workers shall be notified of outcome of the negotiations and of any work groups determined by agreement as soon as practicable after negotiations are complete.

Health & Safety Representatives shall be elected by members of the Work Group unless the number of nominations equals the number of vacancies. The Project Manager shall facilitate the election if requested to do so by the Work Group.

Health & Safety Representatives shall hold their position for 3 years unless they leave employment, are removed from office by the members of the work group or are disqualified from holding the position as per the legislative requirements.

Health & Safety Representatives are:

- To represent the workers in the work group in matters relating to work health and safety,
- To monitor the measures taken by the person conducting the relevant business or undertaking or that person's representative in compliance with the WHS Act in relation to workers in the work group,
- To investigate complaints from members of the work group relating to work health and safety; and
- To inquire into anything that appears to be a risk to the health or safety of workers in the work group, arising from the conduct of the business or undertaking.

Training shall be provided to the Health & Safety Representative within 3 months of the request, by the Health & Safety Representative or Workgroup.

A health and safety representative is not entitled to have access to any personal or medical information concerning a worker without the worker's consent unless the information is in a form that:

- Does not identify the worker; and
- Could not reasonably be expected to lead to the identification of the worker.

Workers are encouraged to communicate with an elected HSR regarding hazard reporting or any concerns they may have on WHS issues. These issues will be promptly addressed and resolved via this consultative process

4.11.3 Health & Safety Committee

A Health and Safety Committee must be established within two months after being requested to do so by 5 or more workers or by a health and safety representative at the workplace.

If agreement about the Health and Safety Committee cannot be reached in a reasonable time, either party can ask the regulator to appoint an inspector to decide on the make-up of the health and safety committee, or whether it should be established at all.

Where there are Health & Safety Representatives, they shall form part of the Committee. Nominations shall be held for the remaining positions. If there are more nominations than positions, then an election shall be held. Election results shall be published.

At least half of the members of the committee must be workers who are not nominated by management.

Health and Safety Committees must meet at least every 3 months. Meetings shall be recorded in the Site WHS Committee Meeting Minutes and the minutes published normally by placement on the Site Notice Board.

The first meeting of the Health & Safety Committee should establish the constitution for that committee. The Constitution should be posted on the worksite notice board.

The functions of a Health and Safety Committee are:

- To facilitate co-operation between the person conducting a business or undertaking and workers in instigating, developing and carrying out measures designed to ensure the workers' health and safety at work,
- To assist in developing standards, rules and procedures relating to health and safety that are to be followed or complied with at the workplace; and
- Any other functions prescribed by the regulations or agreed between the person conducting the business or undertaking and the committee.

The first meeting of the Health & Safety Committee shall provide training to members on their role and responsibilities, using the committee constitution.

4.11.4 Other Agreed Arrangements

Any other arrangements for consultation may be established to suit workers and workplace situations, including agreed consultation procedures, as long as those arrangements are consistent with the requirements of the WHS Act.

Other agreed arrangements should be determined by the workers at a meeting. The meeting shall be minuted and the minutes published normally via the site Notice Board.

The method(s) of consultation shall be documented on a Consultation Statement (SE6107) and published normally via a Site Notice Board.

4.11.5 Site Consultation Arrangements

The WHSE Coordinator (or in absence of the WHSE Coordinator, the Site Manager) shall act as the site safety representative until such time as there are sufficient Subcontractors on site to establish a Safety Committee or forum.

The WHSE Coordinator shall hold a Toolbox Meeting with Subcontractors on site shortly after work has commenced to establish the workplace consultation arrangements.

The Toolbox meeting shall be used to establish consultative arrangements for the site.

Consultative arrangements may include:

- A Health & Safety Representative,
- A WHS Committee; and
- Or any other agreed arrangements in accordance with the legislation.

Workers shall be consulted through a Toolbox Talk:

- During the assessment and control of risks and any review,
- When introducing or altering risk review procedures,
- When deciding about welfare facilities; and
- When changes are proposed to work premises, systems of work, plant or substances.

The WHSE Coordinator shall provide workers via the consultative arrangements with pertinent details on accidents, incidents, hazards, results of site inspection and audit and information on any inspections by statutory authorities.

NOTE: For staff with communication difficulties and non-English speaking backgrounds assistance will be provided (e.g. a translator) when required by the employer.

The Consultation Statement (SE6107) shall be posted on the Site Notice Board.

Consultation training shall be provided in accordance with legislative requirements.

4.11.6 Toolbox Meetings

Site Supervisor Toolbox Talks (ie. a toolbox talk with the onsite supervisors of our subcontractors) are undertaken on a monthly basis to communicate upcoming works, any potential impacts associated with the works, and changes to legislation or site rules. This consultative forum is also intended to get feedback and input from subcontractors supervisors on site WHS matters.

A W Edwards will hold a weekly Toolbox Talks that includes a minimum of two workers on site to address safety & environmental hazards in and around the site, safe work practices, coordination and responsibilities.

Toolbox meetings may be used as a forum to provide training to site personnel.

The Project Manager shall ensure that there are suitable provisions in the Subcontract Conditions for such meetings to occur as and when required.

The Toolbox meeting will address any of the following that have arisen that week:

- WHS incidents,
- Corrective Actions,
- Identification of Hazards,
- Outcomes from internal inspections and audits,
- Outcomes from external inspections and audits from regulatory bodies,
- When introducing or altering risk review procedures; and
- When changes are proposed to work premises, systems of work, plant or substances.

Toolbox meetings shall be minuted in the Record of Training and Consultation (SE6108).

A copy of minutes shall be posted on the Site Notice Board.

4.11.7 Review of Consultation

The workers and personnel of the Project have agreed to review this consultative process (when required) and can (through a majority vote) at any time choose to change these agreed consultative arrangements.

4.11.8 Communication

The WHSE Coordinator shall ensure that all safety and environmental notices or concerns raised by other parties e.g. statutory authorities, Unions, Client's representative, Consultants, Neighbours, Councils, EPA etc. are immediately forwarded to the Project Manager and WHS Manager.

WHS information received from third parties shall be reviewed and incorporated into A W Edwards safety system as applicable.

4.11.9 Safety Alerts

WHS Manager/Group WHSE Manager will issue safety alerts to relevant sites and workers. These will become available as required.

All safety alerts and guidelines should to be read and understood by each person and if not understood they may request further training in this area, if it is warranted.

All safety alerts are to be kept on file.

4.11.10 Subcontractors

Subcontractor involvement in WHS Inspections / audits is seen as a critical aspect of the communication & consultation process on-site. All Subcontractors are expected to be proactive in identifying and addressing specific WHS issues concerning each individual trade. A W Edwards as part of the consultation process will expect that a sample of subcontractors will be expected (when nominated) to attend Health & Safety Committee meetings at the discretion of the Health & Safety Committee.

All Subcontractors are responsible for communicating specific health and safety issues that arise in relation to their employees. Employees of Subcontractors should raise WHS concerns directly with their supervisor or their HSR.

Where any Subcontractor cannot resolve the WHS issue onsite, it has been agreed that they will refer it to the Site HSR for review and resolution.

4.11.11 Communication with Client

A W Edwards shall have regular meetings with the Client to communicate, consult and update the Client on current Safety & Environmental Issues. During these meetings, A W Edwards shall inform the Client of any potential hazards that have been identified, that may have an impact on their day-to-day running, and the Controls that are in place to minimise the likelihood of an incident occurring. These hazards shall be identified and documented within the Project Risk Assessment SE4131.

Further to this, the A W Edwards Project Manager has completed PA2601 - Project Commencement Checklist in consultation with the client, seeking information regarding any potential hazards that may be caused by their daily activities and may have an impact on Project, and information with respect to events, emergency response, access, out-of-hours contacts, etc.

Where a Hazard has been identified by the Client, or where the activities of the Client may impact the project, or any other requirements which are pertinent to the project (eg. preparation of 'Disruption Notices'),

A W Edwards shall identify these hazards or requirements in the Project Risk Assessment which is communicated to subcontractors via Aconex, and to workers via a Tool-Box Talk.

A W Edwards facilitates High Risk Workshops for activities that have a perceived higher risk to client operations, and the project. Client representatives, the Clients project management personnel, and subcontractors relevant to the activity participate in these High Risk Workshops. The focus of these workshops is to review the identified hazards and risks for a particular activity, with discussion focusing on developing control measures to eliminate or if not reasonably practicable, to minimise the identified risks.

A W Edwards shall continue to monitor the Project for potential hazards, based on the information it has received from the Client, the development of the Project, and during the regular review of the Project Risk Assessment.

4.11.12 Communication with Neighbouring Sites

A W Edwards shall identify Project specific hazards that have the potential to impact on the Neighbouring Sites workplace. These risks have been recorded in the Project Risk Assessment.

Mitigating and control measures are communicated with the relevant neighbours that could be affected by the activities/risks. Subject to the nature of the risks, the communications may take the form of hand delivered flyers or information sheets, meetings or workshops.

4.11.13 WHS Dispute Resolution Procedure

Any dispute in relation to Work Health and Safety will be resolved in accordance with the relevant legislation applicable to the State where the dispute has been raised.

Where a safety problem arises, the matter shall be brought to the attention of the Supervisor in charge of the area or task. The Supervisor will, where possible, organise to have the matter rectified immediately. Where required the Project Team will arrange for all employees affected by the safety problem to be relocated until the necessary rectification work is complete.

Should a dispute arise over a safety issue, an immediate inspection will be undertaken of the disputed area by the Safety Representative and the Site Manager. Where the dispute involves a subcontractor, their Project Manager, Project Coordinator (or equivalent role) and safety representative (where nominated) will also be present.

If the matter cannot be resolved the matter shall be referred to the Project Manager for resolution.

Should the matter remain unresolved, the matter shall be referred to the WHS Manager, Group WHSE Manager or Project Director for resolution.

Where there remain any disagreements in relation to resolving the dispute the matter may be determined by an Inspector from the local Statutory Authority.

The Dispute Resolution procedure shall be communicated to workers at induction.

4.12 INSPECTION, MEASURING & TEST EQUIPMENT

Subcontractors providing environmental & health monitoring services shall provide A W Edwards with a copy of the current calibration certificates for any inspection and monitoring equipment used.

Inspection and monitoring equipment (IM&T) shall be identified, calibrated and maintained in accordance with the manufacturers' requirements, relevant legislation and Australian Standards

The Site Manager/WHSE Coordinator shall ensure that equipment listed on the register is in a state of calibration. Equipment out of calibration shall be removed from service

When not in use, inspection, monitoring and testing equipment shall be stored so as to prevent damage.

4.13 INSPECTION, TESTING AND SERVICING

Workplace Inspections and testing (the work site and its environment, work conditions, work methods access/exit, hazards and implementation of control measures) will be conducted in accordance with this management plan.

Other than those specified below, inspection, test and servicing records are readily available at the site office and will be kept/maintained in accordance with the legislative requirements.

Inspections, testing and servicing of plant and equipment for the project will be conducted in accordance with Section 4.13.2 of this management plan.

Section 4.13.2 of this management plan includes a plant & equipment inspection schedule and identifies what items of equipment need to be tested, the relevant legislation and/or standards that apply to that equipment, and the frequency of testing. The frequency for testing will be determined by:

- The level of risk;
- Relevant legislation, Australian Standards, Codes of Practice;
- Manufacturer's recommendation (as per operating manual or other material provided by the supplier and/or manufacturer)

Examples of specific categories of plant and equipment to be included in Inspection, Test and Servicing Schedule:

Emergency management equipment (list not exhaustive):

- Fire extinguishers,
- Emergency lighting,
- Evacuation warning devices,
- Spillage containment materials,
- and first aid kits.

Details of onsite inspections of emergency equipment shall be recorded on the Hazard & Observation Sheet SE6301.

Plant and equipment associated with the construction works should be inspected, tested, and serviced/ maintained at regular intervals. Examples of such plant and equipment include (list not exhaustive);

- Boilers / Pressure vessels,
- Powered mobile plant eg. excavators, site dumpers, skid steer loaders
- Lifting equipment eg. cranes, hoists, forklifts
- Lifting gear eg. slings, shackles, attachment points and chains

Certain types of plant and equipment as well as designs for certain types of plant and equipment need to be registered with SafeWork NSW. Where registrable plant and/or registerable designs are required, details should be included on Plant and Equipment Schedule.

Electrical equipment and installations - inspection and tests are carried out to confirm compliance to electrical work standards and safety requirements. Electrical Testing and Tagging monthly documents shall be stored on Hammertech Darlington Public School

4.13.1 Site Inspections

The Project Team is to perform workplace safety inspection (minimum weekly) and record findings on the Hazard and Observation Sheet (SE6301) or through Hammertech. The inspection will review materials use, hazardous substance use and storage, plant and equipment, environmental controls and work practices. The inspection is to be performed during work hours, to monitor the works being performed and the conditions of a working site.

Subcontractor representatives shall be included in the site inspection.

Where a WHS hazard has been identified the area shall be made safe. Details of rectification actions shall be recorded on the form.

Where a non-conformance to the Project Management Plan or legislative requirements have been identified a Corrective Action Request (SE4601) or through Hammertech shall be issued.

The Project Team is responsible for initiating any actions required by the issuing of a non-conformance report and for the acknowledgement that the non-conformance has been addressed and closed out.

4.13.2 Plant & Equipment Inspections

The Plant & Equipment Inspection Schedule defines inspection requirements for various plant and equipment.

Item	Inspection	Australian Standard	Inspection/Records/Other required
Anchor/attachment points (fall arrest//restraint)	Height Safety Inspector - MEM15004B, RB, RI, RA or Engineer	AS/NZS 1891.4, AS1891.2	Yearly
Concrete Line Pump	Operator (daily), Mechanic Engineer with relevant experience	AS 2550.15 COP	Daily, Monthly, Yearly, 6 yearly
Concrete Boom Pump	Operator (daily), Mechanic Engineer with relevant experience	AS 2550.15 COP	Daily, Monthly, Yearly, 6 yearly
Construction wiring	Licensed Electrician	AS3012	Upon installation, then every 6 months
Crane- mobile Crane – mobile >10t	Operator (daily), Mechanic Engineer with relevant experience	AS 2550 AS 1418	Daily Monthly, Independent yearly, independent 10 yearly (5 yearly there after)

Item	Inspection	Australian Standard	Inspection/Records/Other required
Crane - Tower	Operator (daily), Mechanic Engineer with relevant experience	AS 2550 AS 1418	Daily Quarterly (service), Independent yearly Crack testing slew ring bolts 5 yearly Independent 10 yearly (5 yearly there after) Independent inspection of tower crane at least once in the duration of the project
Elevated work platforms Excluding boom lift	Operator (daily), Manufacturer, engineering tradesperson engineer with relevant experience	AS 2550.10	Daily, 3 monthly, yearly, 10 yearly
Elevated work platforms Boom lift	Operator (daily), Manufacturer, engineering tradesperson engineer with relevant experience	AS 2550.10	Daily, 3 monthly, yearly, 10 yearly
Electrical Equipment	Licensed Electrician / Competent Person (UEENEEP026)	AS 3000 AS 3012	3 monthly, 3 monthly RCD calibrations. Independent inspection at least once in the duration of the project
Fire Extinguishers	Competent Person (CPPFES2021A)	AS 1851	Regular inspection, 6 monthly test (if not disposable)
Forklift truck	Operator (daily), manufacturer, engineering tradesperson engineer with relevant experience	AS 2359.2	Regular inspection & maintenance as per manufacturer
Formwork	Engineer with relevant experience	AS 3610	Engineers Certificate prior to a pour
Lifting gear – alloy chains	Licensed crane operator, dogman or rigger	AS3775.1	01 - 05 lift cycles per week - 12 monthly 06 - 25 lift cycles per week - 6 monthly 26 - 200 lift cycles per week - 3 monthly 201 plus lift cycles per week - monthly
Lifting gear – round & flat slings	Licensed crane operator, dogman or rigger	AS4497.1, AS1353.1	3 monthly, yearly
Lifting gear – lifting devices	Licensed crane operator, dogman or rigger	AS4991	12 monthly
Men and Materials Hoist	Operator Licensed crane operator, dogman or rigger	AS 2550.7 AS 1418	Daily, 3 monthly, yearly 10 yearly, Independent inspection at least once in the duration of the project;
Mobile & Static Plant	Operator Mechanic	COP	Daily, pre-start Regular inspection to manufacturers specification.
Rope Access	Height Safety Operator (before use), Height Safety Supervisor, Height Safety Equipment Inspector	AS 4488	Visual inspection before use, 6 monthly by competent persons

Item	Inspection	Australian Standard	Inspection/Records/Other required
Safety Harness, lanyards	Height Safety Operator (before use), Height Safety Supervisor, Height Safety Equipment Inspector	1891.4	Visual inspection before use by a competent person, 6 monthly by height safety equipment inspector, Permit required for use;
Safety Lines/fall arrest devices (installation)	Height Safety Operator (before use), Height Safety Supervisor, Height Safety Equipment Inspector	1891.4	Inspection before use by a competent person, 6 monthly inspection, 12 monthly full inspection / service by a height safety equipment inspector.
Scaffolding	Scaffolder (Si, SA), structural engineer	AS 1576 AS 4576	Handover Certification, monthly inspection, Scaftag or similar; Independent inspection at least once in the duration of the project (engineered design)
Tele-Handler <3t	Operator (daily), Manufacturer, engineering tradesperson engineer with relevant experience	AS 2550.19	Daily, weekly, 3 monthly, yearly, 10 yearly
Tele-Handler >3t	Operator (daily), Manufacturer, engineering tradesperson engineer with relevant experience	AS 2550.19	Daily, weekly, 3 monthly, yearly, 10 yearly

4.13.3 Stop & Go Procedure

Further to Section 3.5.5.3 Monitoring SWMS Compliance of this plan, and in supporting A W Edwards Leadership in Health and Safety program, A W Edwards Stop & Go Procedure charges each and every project team member with the following;
"Anyone whom believes that work or activities cannot or is not done safely or it fails to meet our standards or is a direct threat for the environment, is obliged to report this to his supervisor immediately. Work should be stopped immediately if there is a direct threat for Health, Safety or the Environment."
For 'Major Risks', the below procedure is followed;

1. MAJOR RISK FINDING: The Project Director, WHS Manager, or WHSE Coordinator detects a risk that he considers major. He immediately asks the on-site persons involved to rectify the non-conformity. He also contacts his Group WHSE Manager as soon as possible to validate the risk including the immediate corrective actions required.\
2. STOP: When/If the risk cannot be rectified immediately, the Group WHSE Manager issues a Stop Work Order and sends it to the Project Director, Project Manager and Site Manager of the site, immediately.
3. DEBRIEF: The purpose is to determine the corrective actions which, beyond the immediate suppression/removal of the risk, is to prevent future recurrence. The Project Director organises, within his teams, a review on:
   - elements that led to the emergence of the risk
   - additional corrective/preventative actions to be implemented on the project in order to eliminate the risk for good.
4. GO: The Project Director and the Group WHSE Manager verify that all immediate and additional corrective actions required have been implemented. They then give their approval to resume work.

In all cases, and during task stoppage, the Group WHSE Manager and his teams spearhead ideas, advice and provide support to the project team in order to limit the duration and consequences of the stop work order, while at the same time ensuring the effectiveness of the corrective actions.

4.13.4 Inspections by SafeWork NSW

Visits by SafeWork NSW inspectors to construction sites and other workplaces could be in response to an incident, complaint or request for advice, or as part of a targeted injury prevention program.

During these visits, inspectors may:

- provide information and advice on the requirements of WHS or workers compensation law
- explain the range of SafeWork NSW products and services available to a business
- provide practical advice on how to eliminate or reduce the risk of injury and illness
- investigate and/or verify compliance with legislative obligations
- issue notices or other instructions to secure compliance with legislation.

While the inspector will always aim to educate and provide advice, there are circumstances when they may:

- issue an Improvement Notice directing a person or organisation to undertake corrective action for an identified risk
- issue a Prohibition Notice directing the cessation of any activity that creates an immediate risk to the health or safety of workers or visitors to the workplace
- issue an Employers Improvement Notice directing a person or organisation to undertake corrective action in relation to a worker's compensation or return to work matter
- issue a Direction under Explosives legislation where a related risk is identified
- issue a Penalty Notice (an on-the-spot fine) for an identified breach of the legislation
- initiate and conduct investigations to identify causes of incidents, injuries and illnesses. An Investigation Notice may be issued to secure an incident scene, seize evidence, provide documents and/or answer questions in writing.

Inspections by a SafeWork NSW Inspector may be conducted in the company of a worker, manager or Health and Safety Representative (HSR – where they have been elected). The inspector may talk to a range of people, gathering as much information as possible about the workplace in order to provide relevant advice and take the most appropriate action to reduce the potential for harm.

SafeWork NSW inspectors will identify themselves when visiting a workplace and can produce formal identification on request.

SafeWork NSW Inspectors have certain powers to secure work health and safety outcomes when visiting a workplace. They may:

- enter any premises they have reason to believe is a place of work
- conduct interviews and make inquiries, in private if necessary
- take photographs, recordings, measurements and samples
- gather, examine and copy documents
- secure or seize evidence.

To assist an inspector (as far as is reasonably practicable in the circumstances), A W Edwards Project Team members will:

- be honest, courteous and provide information as requested,
- provide necessary access to the workplace
- provide reasonable help to assist the inspector in their work

- not conceal the existence of a location, person, plant, substance or thing.

In carrying out their duties, SafeWork NSW Inspectors may request the assistance of other technical or scientific experts or request the assistance of NSW Police Officers if required.

As soon as is practicable following any inspection conducted by SafeWork NSW on the project, A W Edwards Project Manager will advise the Clients Representative of the visit, outlining any findings, including if any notices were issued.

Further, and in aligning with Corrective Action protocols outlined in the following sections, A W Edwards Project Manager will provide to the Clients Representative, correspondence that outlines the action plan in responding to any observations or notices issued by SafeWork NSW.

4.13.5 Persons Carrying Out Workplace Inspection, Testing and Servicing

Personnel conducting inspection and testing are to be suitably skilled, qualified and/or trained so that they are competent to complete the inspection and testing requirements. In most cases these competencies will be outlined in legislation, Codes of Practice or Australian Standards. A list of expected qualification, training and competencies is included in section 3.6.6 of this management plan.

4.13.6 Maintain Records

A record is kept based on the Plant and Equipment schedule, including the necessary inspection report(s)/ records, which includes relevant details of inspections, testing, maintenance, repair and/or alteration of plant and equipment.

Records of health and safety inspections, testing & monitoring, including recommendations for corrective action, are produced and forwarded to senior management and employee representative(s) as appropriate. Refer to Darlington Public School Hammertech system Equipment & Inspections

4.14 ELECTRICAL

4.14.1 Electrical Work

The following work must only be undertaken by a licenced electrician:

- Electrical testing
- Fault finding
- Energising and commissioning
- Disconnect and reconnect fixed wired appliances and electrical equipment
- Verification of de-energised
- Strip out or remove old cabling from an existing installation
- Terminate cabling in a control panel or switchboard

The following work can be undertaken by any competent person with appropriate training eg apprentice

- Working as a team under the direct supervision of a licenced electrician to install electrical equipment
- Install support and mechanical protection
- Install cabling
- terminate cables exceeding extra-low voltage (NSW lights and power only) (Not allowed in the ACT)
- Install apparatus and equipment
- Any physical work of installing, repairing, altering, removing

4.14.2 Electrical Isolation

An Isolation of Services (SE6223) shall be completed for all electrical isolations. If the work area cannot be FULLY isolated the Electrical Survey (SE6229) MUST be used.

The Site Manager must visually check that tags, lockouts, etc. have been applied as required.

An appropriate means of isolation must used so that supply cannot be inadvertently re-energised while the work is carried out.

All circuit breakers, switches and combined fuse switch units shall be locked off to secure the isolation.

A tagging system shall be used at the point(s) of isolation for general information.

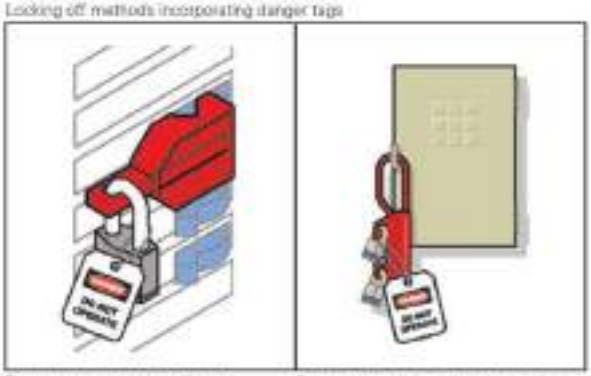
Example of a danger tag and out of service tag

Tags shall be dated and signed by all personnel involved in the work or, where appropriate, by the supervisor in charge of the work party.

Tags shall only be removed by the signatories or with the permission of all the signatories to the tags or, if this is not possible, by the signatories' immediate supervisor

The isolation shall be secured by locking off and tagging the electrical equipment

Locking off methods incorporating danger tags



Danger tagged locking off hasp

Danger tagged circuit breaker locking off devices

Isolation points shall be fitted with control mechanisms that prevent the electrical equipment from being inadvertently re-energised. The control mechanism should require a deliberate action to engage or disengage the device. It should be able to withstand conditions that could lead to the isolation failing, for example vibration. This may include switches with a built-in lock and lock-outs for switches, circuit breakers, fuses and safety lock-out jaws (sometimes called 'hasps').

All circuit breakers, switches and combined fuse switch units shall be locked off to secure the isolation.

If more than one person is working on the same de-energised electrical installation, individuals shall ensure their own personal lock is applied to the isolation point.

The point of isolation shall be under the control of the worker who is carrying out the work on the isolated conductors.

Testing must be carried out to confirm the relevant circuits have been de-energised and the status of any other relevant conductors in the work area.

No-one should operate an isolator or knowingly use equipment where the isolator has a control mechanism attached.

4.14.3 Re-energising Circuits

Prior to re-engerising circuits:

- All conductors have been appropriately terminated
- Test have been carried out on any new, altered or repaired electrical equipment: - insulation resistance, earth continuity, polarity, correct connection and function testing
- Safeguards, including temporary bonds and short-circuiting devices have been removed
- The Site Manager and all workers working on the electrical equipment and other affected workers at the workplace shall be notified that electricity is about to be restored
- Removing any locks or other control mechanisms, tags, notices and safety signs, and – carry out a visual inspection to ensure that all tools, surplus material and waste have been removed from the workplace.

When electricity is restored tests must be carried out to confirm that polarity is correct, actives are switched and, where applicable, phase sequences are correct before electrical equipment is used.

4.14.4 Working on or Near Live Electrical Equipment

In some cases, it may not be possible to de-energise all services in a work area. If this is the case, the Site Manager shall ensure that identify those services that are still energised or potentially energised are clearly identified.

All persons working in the energised area shall be advised that the work area is potential energised at induction or via a toolbox talk.

Where work is being carried out in energised switchboard/distribution boards or other equipment that is energised a low voltage rescue kit shall be kept in the vicinity of the work.

Subcontractor SWMS shall address the risks associated with working in an energised environment.

Under no circumstances shall any live work be carried out.

4.14.5 Construction Wiring

Construction wiring must be:

- Supplied from an electricity distributor's main or generator
- Supplied from an existing switchboard in the permanent installation of the premises

Construction wiring must:

- Not be tied, bundled, or grouped with permanent wiring,
- Not be fixed to free standing fences that have no fixed posts (or equivalent means of support),
- Be protected against mechanical damage (medium or heavy duty or corrugated conduit of insulating material, armoured cable, flexible electrical hose),
- Be marked and be readily distinguishable from permanent wiring by using iridescent yellow tape spaced at intervals not exceeding five metres and marked with the words 'construction wiring,
- Be positioned to avoid crossing roadways or access ways where cranes, high loads or heavy machinery may travel. If this is not possible, an effective means to minimize the risk of vehicular contact with the overhead wiring system must be provided (such as insulated flagged catenary wires six metres on either side of the overhead wiring and 0.6 metres below the lowest point of the overhead electrical cable). Please note, all construction wiring, including overhead type, must be insulated.

Electrical equipment installed for use during constructions works shall be inspected and certified as correctly installed by the electrician in accordance with relevant legislation, codes of practice and Australian standards prior to use.

4.14.6 Switchboards

Switchboards:

- Must be installed in accordance with AS/NZS 3000 Wiring rules,

- Must be readily accessible and must be protected from damage during the construction or demolition work,
- Must be mounted on a pole, post, wall, floor or other structure of stable and free-standing design that takes into account any external forces that may be exerted on the switchboard,
- Must be marked with the source of the supply and where it originates from,
- For multi-level buildings, be positioned in a manner that eliminates the need for flexible cords or cables to be run between floor levels,
- Energized (live) parts must be effectively protected at all times against contact by workers.
- An insulated or covered tie bar must be provided for anchorage of flexible cords to prevent strain on the plugs and socket outlets,
- Switchboard doors must not be of the removable type (unless with a tool) and be fitted with a locking facility (for locking overnight or when not in use). They must also be fitted with means for retaining the door in the open position,
- Switchboards must have a cut out (not sharp to prevent cables being cut, i.e. by providing brushing or plastic hose around it) in the bottom plate to allow safe entry of electrical leads with the door closed. A label must be fixed to the switchboard stating 'KEEP CLOSED – RUN ALL LEADS THROUGH BOTTOM',
- Switchboards must be marked with an electric shock symbol and a danger sign (as per below) warning workers of the presence of energized or live parts within the switchboard.
- The switchboard must be provided with a means to prevent electrical equipment from being inadvertently energized while undertaking work on electrical installations (provision for fitting a padlock or located within a lockable space or enclosure),
- Main switchboard isolating switches must be marked 'MAIN SWITCH' and the distribution board isolating switches must be marked 'DISTRIBUTION BOARD ISOLATING SWITCH

4.14.7 RCDs

RCD protection must be provided for all construction wiring and portable generators.

Where base building power is used the Project Team shall verify that power is RCD protected, or where it is not RCD protect enforce the use of portable RCD protection on all electrical equipment.

4.14.8 Inspection and testing

All construction wiring, switchboards and transportable structures must be inspected and tested by a licensed electrical worker (electrician) following the initial installation and in a period not exceeding six months.

For new equipment, prior to the initial introduction it must be inspected for obvious damage before being placed into service.

All other electrical equipment including power tools, flexible cords, cord extension sets (extension leads) and portable socket outlet assemblies and portable RCDs must be tested and inspected according to the methods in AS/NZS 3760 and in a period not exceeding three months. Inspection and testing can be carried out by a competent person (trained in use of RCD testers and Portable Appliance Testers PAT) or a licensed electrician.

Electrical equipment and power tools inspections shall be recorded on the Electrical Equipment Register (SE6208), or on similar registers provided by the person doing the inspections and kept on site.

Electrical switchboard and distribution boards inspections shall be recorded on the Electrical Equipment Register (SE6208) or on similar registers provided by the person doing the inspections and kept on site.

Compliant equipment and equipment new to service must be fitted with a durable non-metallic tag that clearly states the date it was inspected and the next date of inspection. It should also include the name of the person that performed the verification and the standard it was tested to (AS/NZS 3760). Colour coded tags for each period are optional.

Non-compliant equipment must be withdrawn from service immediately and labelled with suitable warning against further use. If sent for repairs, it must be re-tested once returned to site.

The Project Coordinator shall inspect electrical equipment weekly during site inspections Hazard and Observation Sheet (SE6301).

Records of inspection and tests must be kept for the duration of the Project.

4.14.9 Electrical Inspection and Testing Requirements

Equipment class	Testing intervals
Construction wiring, including switchboards	Inspected and tested at time of installation, then re-inspected every 6 months (AS3012)
Upon completing any safety and compliance test, on an electrical installation	Certificate Compliance Electrical Work, (ACT Certificate of Electrical Safety)
Re-locatable structures, fixed and transportable equipment	6 months
Portable equipment and flexible electrical cords (extension leads)	3 months
Equipment in amenities and site offices	3 months
Portable RCDs – push button test	Before each use of equipment
Portable RCDs – operating time	3 months
Fixed RCDs – push button test	1 month
Fixed RCDs – operating time	12 months
Hire equipment	Upon introduction to service, then in accordance with the testing intervals appropriate to the equipment class

Where appropriate the results and outcomes are recorded on the Certificate of Compliance of Electrical Work (CCEW) by the responsible licensed electrician, with copies provided to the project team. The CCEW certificate is a confirmation that the installation has been checked and tested and is safe for connection to the electricity supply. To achieve this, a qualified electrician carries out the following checks and tests, as appropriate:

- Visual Inspection - is carried out whilst referring to a plan (to ensure a systematic check to pick up any omissions and to verify that the work complies with the requirements of the applicable standards).
- Earth Resistance and Continuity Tests - this test includes the main earthing conductor, protective earth conductor and bonding conductor.
- Insulation Resistance Test - This test is necessary to ensure that the insulation resistance between live parts/conductors and earth is adequate.
- Polarity Test - Is used to ensure correct connection of active, neutral and earthing conductors.
- Correct circuit connections - This test checks earthing conductors do not carry current during normal operation and no short circuit exists.
- Fault Loop Impedance - Measures the fault loop impedance of each circuit to verify the protective device will operate.
- Verification of RCD (residual current device) operation - Testing of RCDs is carried out to ensure that the RCD operates.
- Testing and tagging - of electrical apparatus

4.14.10 Extensions Cords

Flexible extension cords should be run on hangers or stands to provide a safe route through the work area and passageways and to provide sufficient height clearance for personnel and vehicles. Greater clearances must apply in areas where motor vehicles operate. This need not apply within a horizontal distance of the immediate work area where the power is to be used.

Maximum length of extension cords is:

Current rating (A)	Conductor area (mm²)	Maximum length (metres)
10	1.0	25
	1.5	35
15/16	1.5	25
	2.5	40
20	2.5	30

4.14.11 Portable socket outlet assemblies

Double adaptors, three pin plugs ('piggyback') adaptors, domestic type power boards and similar fittings are not permitted for construction work and must not be used.

4.15 FALL PREVENTION/ WORK AT HEIGHTS

4.15.1 General

The Project Manager/Site Manager/Project Coordinator shall put controls in place in the workplace to manage the risk of a fall that is reasonably likely to cause injury to the worker or other person, including:

- Ensuring, so far as is reasonably practicable, that any work involving the risk of a fall is carried out on the ground or on a solid construction,
- Providing safe means of access to and exit from the workplace; and
- Minimising the risk of falls so far as is reasonably practicable by providing a fall prevention device, work positioning system or a fall arrest system.

Circumstances in which the worker or other person could fall includes:

- In or on plant or a structure that is at an elevated level,
- In or on plant that is being used to gain access to an elevated level,
- In the vicinity of an opening through which a person could fall,
- In the vicinity of an edge over which a person could fall,
- On or in the vicinity of a surface through which a person could fall; and
- On or near the vicinity of a slippery, sloping or unstable surface.

The risk of falls from height, including the management of excavations, open edges or penetrations, shall be identified and controlled via the Project Risk Register (SE4131)

Edge protection, including appropriately fixed covers and guards on openings and penetrations shall be installed

Excavations must be provided with barriers and warning signs to prevent workers and others from accidentally falling into holes or down a slope.

All excavations must be covered or secured with fencing if the work site is unattended.

Work shall be undertaken from a solid platform wherever possible

Harnesses must be worn in situations where edge protection cannot be provided and there is a risk of falling more than 2 metres.

Edge protection shall be inspected during Hazard and Observation Sheet (SE6301)

4.15.2 Fall Protection Systems

Fall prevention systems shall be verified after installation that they have been installed in accordance with the manufacturer's instructions and relevant legislation/codes of practice. The Fall Prevention Systems/Structures Certification (SE9305) shall be used where a certificate verifying the installation conforms is not provided eg scaffold Handover Certificate.

Fall prevention systems shall be inspected during site inspections Hazard and Observation Sheet (SE6301) and in accordance with relevant legislation, codes of practice and Australian standards

4.15.3 Fall Arrest/Fall Restraint

A Permit to Work - Use of Harness (SE6220) must be completed prior to commencing any work at heights using a harness (fall restraint or fall arrest). All fall arrest devices shall be inspected and maintained by a competent person.

Attachment points shall be designed by an engineer.

Attachment points shall be installed by a trained person

Attachment points shall be certified by a qualified person before use.

Persons working in fall restraint/arrest mode must have undergone required formal training.

A restraint technique is suitable for use where:

- The user can maintain secure footing without having to tension the restraint line and without the aid of any other hand hold or lateral support,
- When deciding whether secure footing can be maintained, consider:
- The slope of the surface,
- The supporting material type,
- The surface texture of the surface and whether it is likely to be wet, oily or otherwise slippery,
- The horizontal lifelines are fitted with an industrial shock absorber when required; and
- The restraint system conforms with AS/NZS 1891 Industrial Fall-Arrest Systems and Devices Series.

Restraint techniques should only be used if it is not reasonably practicable to prevent falls by providing a physical barrier (for example, a guard rail). This is because restraint techniques require a high level of user skill to operate safely and also greater supervision.

Fall restraint system should be installed by a competent person in accordance with the manufacturer's instructions. Restraint anchorage should be designed for fall-arrest loading.

An individual fall-arrest system should be used instead of restraint techniques if any of the following situations apply:

- The user can reach a position where a fall is possible,
- The user has a restraint line that can be adjusted in length so that a free fall position can be reached,
- There is a danger the user may fall through the surface, for example fragile roofing material; and
- The slope is over 15 degrees.

A fall-arrest system is intended to safely stop a worker falling an uncontrolled distance and reduce the impact of the fall. This system must only be used if it is not reasonably practicable to use higher level controls or if higher level controls might not be fully effective in preventing a fall on their own.

All equipment used for fall-arrest must be designed, manufactured, selected and used in compliance with the AS1891 series of standards.

Key safety considerations in using fall arrest systems are:

- The correct selection, installation and use of the equipment,
- That the equipment and anchorages are designed, manufactured and installed to be capable of withstanding the force applied to them as a result of a person's fall,
- That the system is designed and installed so that the person travels the shortest possible distance before having the fall stopped,
- That workers using a fall-arrest system wear adequate head protection to protect them in the event of a fall; and

- That if the equipment has been used to arrest a fall it is not used again until it has been inspected and certified by a competent person as safe to use.

If a fall arrest device is to be used by persons working at heights, the use of such devices must be noted in the relevant SWMS. Persons using these devices must have received instruction and training in the correct use of those devices.

Provision must be made for the rescue of a person whose fall has been arrested by a fall arrest device. This must be included in the safe work method statement.

Persons using fall arrest systems CANNOT work alone.

Refer to the Managing Falls in the Workplace Code of Practice.

4.15.4 Penetrations

Penetrations that potentially impact on the stability/strength of the slab shall be approved by an engineer.

All penetrations are to be provided with a fall protection cover of sufficient strength to withstand the traffic in the area.

As part of the weekly site inspections, the Project Coordinator shall check penetrations to ensure that they are correctly covered on site.

Signs are to be displayed to warn persons of any penetration below a cover.

4.15.5 Falling Objects

The Project Risk Register (SE4131) must address the potential of falling objects causing harm to persons below. Control measures include:

- Screens; or
- Perimeter scaffold with mesh and shade cloth; or
- Objects that could fall are tethered using lanyards or rope or otherwise secured; or
- Exclusion Zones.

Hoardings, protective structures, catch decks and exclusion zones shall be installed to prevent falling objects from striking workers or the public.

4.15.6 Working at Heights

4.15.6.1 General

The following hierarchy of controls should be applied when working at heights is required:

- Level 1: Undertake the work on the ground or on a solid construction
- Level 2: Undertake the work using a passive fall protection device
- Level 3: Undertake the work using a work positioning system
- Level 4: Undertake the work using a fall injury prevention system
- Level 5: Implement administrative controls

A means of safe access/egress shall be provided.

4.15.6.2 Level 1: Undertake the work on the ground or on a solid construction

This level aims to eliminate the hazard.

A "solid construction" must have:

- Structural strength to support people and materials. Examples include a platform or scaffold
- A non-slip surface free from trip hazards and at a readily negotiable gradient

- Edge and void protection (provided by a guardrail, for example) and;
- Safe access and egress, that could be provided by a ladder or stairway

4.15.6.3 Level 2: Undertake the work using a passive fall protection device

"Passive fall protection device" includes height safety products that once installed, don't need to be altered. Examples: fixed or mobile scaffolds, guard rails, scissor lifts, cherry pickers and roof safety mesh.

4.15.6.4 Level 3: Undertake the work using a work positioning system

If eliminating the risk is not practicable (level 1) and neither are the level 2 controls, consider the category of safeguards referred to as "work positioning systems"

These typically include industrial rope access systems and travel restraint systems. They prevent workers falling over an unprotected edge and are normally harnesses attached by lanyards to roof anchors or static lines, or harnesses with ropes and friction devices.

Because their effectiveness depends entirely on the skills of their users and how well the equipment is maintained, both users and their supervisors should undertake competency-based training before implementing level 3 safeguards.

4.15.6.5 Level 4: Undertake the work using a fall injury prevention system

Fall injury prevention systems minimise the distance of the fall.

Examples include safety nets, catch platforms and individual fall arrest systems (IFAS). All must be installed by people with specialist technical skills and workers using IFAS must also be trained.

Workers using IFAS should never work alone and an emergency plan needs to be put in place to allow rescue.

4.15.6.6 Level 5: Implement administrative controls

The last resort for working safely at height encompasses procedures, or "administrative controls".

NOTE: The correct use of ladders is documented under "ladders" in this plan.

4.15.6.7 Working at Heights - Access and Egress from a Structure

Safe access and egress shall be provided for all work at heights.

4.16 PLANT & EQUIPMENT

4.16.1 Common Plant

Where common plant/equipment, e.g. perimeter railing, hoarding, etc., is provided the Site Manager shall ensure that plant/equipment is safe for use and is maintained.

Common Plant shall be inspected at least weekly by the project team. Any issues shall be noted on the Hazard and Observation Sheet (SE6301).

Unsafe and/or unserviceable plant and equipment shall be removed from service until it has been made safe.

4.16.2 Concrete Placing Boom

The erection and dismantling of concrete placing booms shall be carried out in accordance with the manufacturer's instructions unless otherwise specified by an engineer.

Pipelines shall be installed in accordance with AS 2550.15, ensuring that:

- The pipeline can withstand the rated maximum concrete pressure of the pump during normal operations
- Unnecessary bends are avoided
- Each section of pipeline is adequately supported and secured to the building to avoid extra load on the pipe clamps

- when changing from horizontal to vertical, the pipeline is fixed to stop movement of the bend or the vertical and horizontal lines which may cause the 90° bend to snap off at the clamps
- The pipeline is not secured to cranes or hoist towers, scaffolding or formwork (unless these are designed for this purpose)
- All metal pipes and pipeline components are identified and inspected before installation
- The designed pressure of the pipeline is compatible with the rated maximum concrete pressure of all pumps to be used on the pipeline during normal operations

4.16.3 Containment Netting/Scaffolding Mesh

Containment netting shall be made from low fire hazard material or incorporates fire retardant substances

Information must be requested from the supplier regarding fire hazard properties, including results of ignitability, flame propagation, flammability, or smoke release testing and analysis, fire retardation substances

Hot work undertaken in proximity of the containment netting shall not be undertaken unless a Permit – Hot Works Permit (SE6213) has been issued and appropriate shielding has been installed.

Uncontrolled or unauthorised access to the containment netting is to be eliminated or minimised by the use of fence panels, hoardings etc

All site personnel and contractors shall be informed of the fire hazards associated with containment netting during induction process.

4.16.4 Fall Restraint Equipment

All fall restraint equipment (Harnesses) shall be registered on the Permit to Work - Use of Harness (SE6220) by the Site Manager/WHSE Coordinator.

The permit shall be used by the Site Manager/WHSE Coordinator to ensure that fall restraint equipment is inspected at least every 6 months by a competent person.

4.16.5 Grinders/Cutting Discs

The use of grinders/cutting discs is generally prohibited on site.

Approval may be granted for the use of 9" grinders at the discretion of A W Edwards site management personnel.

All efforts must be made to identify an alternative cutting method (e.g. electric shearers, rebar cutters, oxy acetylene, etc.) to ensure the safety of workers involved in the task and working adjacent to the task.

Any subcontractor wishing to use 9" grinders/cutting discs must provide a completed Permit – Use of Cutting Discs (SE6227) with adequate support documentation to A W Edwards site management personnel for approval; that clearly demonstrates that each of the workers involved in the task has been trained and are competent in the use of the equipment.

The Permit must be available at the specific work area and be returned on completion of work.

4.16.6 Lasers

No unclassified laser is to be used on site.

Lasers stronger than Class 3A are not to be used on site.

Lasers are not to be located at eye height.

Laser warning signs are to be placed at approaches to work areas for all lasers with the exception of Class 1 lasers.

4.16.7 Ladders

4.16.7.1 General

All ladders are generally prohibited for 'work'. Ladders for access are permitted. Ladders for 'work' are only permitted by exception (with a Ladder Permit (SE6221) completed prior).

4.16.7.2 Selecting Ladders

Ladders must be selected to suit the task to be undertaken. The duration of the task, the physical surroundings of where the task is to be undertaken and the prevailing weather conditions should be considered.

Ladders should have a load rating of at least 120 kg and be manufactured for industrial use.

Ladders must be the correct height for the task to avoid reaching or stretching

If ladders are to be used for electrical work, these must be non-conductive e.g. fibreglass.

4.16.7.3 Positioning Ladders

Any ladder used at a workplace must be set up on a solid and stable surface and set up so as to prevent the ladder from slipping.

Stepladders must be used in the fully opened position

4.16.7.4 Safe Use of Ladders

Ladders must be checked before use for faults, such as broken rungs, stiles and footing.

Damaged ladders must be removed from service

Only light duty work is undertaken while on the ladder, where three points of contact can be maintained, and tools can be operated safely with one hand.

Slip resistant shoes should be worn by workers using ladders

Ladders should not be used in very wet or windy conditions or next to traffic areas, unless the working area is barricaded.

Only one person is allowed on a ladder at a time.

Except where additional and appropriate fall protection equipment is used in conjunction with the ladder, it is not safe to:

- Use a stepladder or platform near the edge of an open floor, penetration or beside any railing
- Over-reach (the centre of the torso should be within the ladder stiles throughout the work)
- Use any power or hand tool requiring two hands to operate, such as concrete cutting saws and circular saws
- Use tools that require a high degree of leverage force which, if released, may cause the user to over-balance or fall from the ladder, such as pinch bars
- Face away from the ladder when going up or down, or when working from it
- Stand on a rung closer than 900 mm to the top of a single or extension ladder
- Stand higher than the second tread below the top plate of any stepladder (with the exception of three-rung step ladders).

4.16.7.5 Single or Extension Ladders.

Single or extension ladders may only be used to:

- Gain access
- Carry out permitted work that is where the material or equipment being carried does not restrict movement or cause loss of balance; the trunk of the body remains centred on the ladder; and equipment can be used with one hand (unless a control to prevent a fall is used).

The ladder must have a load rating of not less than 120kg (rating plate must be clearly visible) and be:

- Secured against movement at or near its top or bottom, for example, by tying or clamping or held by a second person
- Manufactured for industrial use
- Used only for the designed purpose
- Not more than 1 metres for a single ladder
- Not more than 9.2 metres for an extension ladder used for electrical work or 7.5 metres for other work
- On a firm and stable surface
- Erected at an angle between 70° and 80°
- Extended at least 1 metre above a surface being accessed.

4.16.8 Lifting Equipment

4.16.8.1 Chains and Slings

Lifting equipment shall be formally inspected and tagged by an accredited company prior to introduction to service

All lifting equipment will be visually inspected prior to use.

All lifting equipment will be formally inspected by a competent person (Rigger/Dogger) every 3 months or more frequently if so determined during the risk assessment process.

Chains and/or slings must be inspected every 12 months by an accredited company. Wire Rope and related components will be formally inspected 12 monthly by an accredited company.

A Lifting Gear Register shall be provided by all subcontractors using lifting equipment on site.

4.16.8.2 Man/Work Box

Work boxes must be design registered with the regulator. Crane-lifted work boxes should:

- Have the working load limit, tare mass and design registration number clearly marked
- Have sides not less than 1 metre high
- Have fall-arrest anchorage points
- Be correctly tagged
- Have lifting slings supplied to be attached to the lifting points by hammerlocks or moused shackles
- Have a safety factor for each suspension sling of at least eight for chains and 10 for wire rope
- Where provided, a door is to be inward opening only and self-closing with a latch to prevent unintentional opening, and
- First aid boxes may be provided with outward opening doors for ease of access, but doors are to be self-closing with automatic latches.

If a crane is to lift a work box, the crane should:

- Where practicable, be equipped with a secondary back-up system that will prevent the load from falling if the primary lifting device fails
- Have a minimum rated capacity of at least twice the total load of the workbox and its contents at the maximum radius for the task to be performed and not less than 1000kg
- Be fitted with an upper hoist limit—anti-two block—that stops operation of the hoist, luff and telescope functions of the crane or be designed so two-blocking cannot damage part of the crane or lifting gear, and
- Have levers and foot pedals fitted with a constant pressure system so crane motion stops immediately after the operator removes pressure from the controls.

To ensure safety:

- The work box must be securely attached to the crane
- Full body fall-arrest harnesses must be worn at all times
- Harnesses must be attached to fall-arrest anchorage points in the work box or to the main sling ring above the heads of the workers
- Directions to the crane operator should only be provided from the workbox by a person holding a dogging or rigging licence
- The crane must not travel while suspending a work box
- Workers must remain substantially inside the work box while it is lifted or suspended, and
- Emergency retrieval arrangements must be put in place before the lift so workers can safely exit the work box in the event of crane failure.

4.16.9 Hoists

Prior to installation an engineer's report is required stating that the building has the bearing capacity to support the mass of the hoist, and that the ties to the building have adequate load capacity.

The assembly of a hoist is to be done by an intermediate or advanced rigger with adequate experience and training in the assembly of builders' hoists. The manufacturer's manual must be kept on site.

After the assembly the hoist must be commissioned by a competent person. After the hoist is commissioned, the competent person must provide a copy of the commissioning certificate to the Site Manager/Project Coordinator. The certificate should address items including:

- Load test
- Drop test (over speed test)
- Correct functioning of all limiting and safety devices.

Where a hoist is installed for longer than twelve months, it must undergo an annual inspection.

Where the hoist is over ten years old it requires a major inspection, with a follow up every five years.

Only certified personnel are to operate hoists on site.

Certified personnel are to undertake a pre-start inspection of the hoist prior to any operation.

4.16.10 Mobile Plant

4.16.10.1 Risk Management

The Site Manager/Project Coordinator/WHSE Coordinator shall assess the risk for mobile plant Project Risk Register (SE4131).

Where required by Local statutory requirements or the Project Risk Register (SE4131), a Traffic Management Plan shall be developed (Separate plans may be required for traffic movements external to the site and internally on the site).

4.16.10.2 Plant Site Entry

All Plant shall be logged on the Plant ID Register (SE6307).

A Mobile Plant Worthiness Checklist (SE6207) shall be completed by the owner/hirer for all mobile plant brought onto site and prior to being commissioned for use e.g. mobile cranes, concrete pumps, load shifting plant, etc. and provided to the Project Coordinator.

The Project Coordinator shall review the Mobile Plant Worthiness Checklist (SE6207) and ensure that the following is provided for all incoming plant and equipment and the details therein are current:

- Plant Risk Assessment shall be provided by the plant supplier. If not provided by supplier, the Plant Risk Assessment (SE4132) is to be used. Plant Risk Assessment is to be signed by the operator or the relevant risks and controls incorporated in the relevant SWMS
- Registration records as required,
- Maintenance records (at least last service record),
- Inspection records as required,
- Plant specific logbooks, and
- Operating instructions have been provided.

Evidence must be provided by the plant owner/operator that the operator has been briefed in the operator controls identified in the plan risk assessment. This shall normally be via operator signature on the Plant Risk Assessment.

The Project Coordinator shall sign off on the Mobile Plant Worthiness Checklist (SE6207) and issue a Plant Induction Sticker to be affixed to the item of plant

The **Plant Induction sticker** shall have the following information:

- Project Name
- Plant Induction number
- Plant type
- Plant number
- Registration number
- Contractor
- Date arrived on-site

Plant that does not comply with the requirements of the Mobile Plant Worthiness Checklist (SE6207) shall be either not allowed on site or tagged 'Out of Use': or similar until the requirements stated on the Mobile Plant Worthiness Checklist (SE6207) have been met.

4.16.10.3 Plant Operator Competency

Mobile plant operator competencies shall be verified at induction. See section 3.6.6 of this plan for a table outlining license and competency expectations for the project.

4.16.10.4 Maintenance

The Project Coordinator shall ensure that all plant and equipment, including materials handling devices are regularly inspected and maintained to the manufacturer's specification, relevant Australian Standard or Code of Practice, and that maintenance records are kept up to date.

Date of last service/next service of plant shall be recorded in the Plant ID Register (SE6307)

Plant maintenance requirements shall be checked during site inspection.

Unsafe and/or unserviceable plant and equipment shall be removed from service.

Any plant that is either unsafe or does not meet the A W Edwards' requirements shall have a Plant "Do Not Operate" sticker/tag placed on it. Only the Project Coordinator or Project Manager may remove this sticker.

4.16.10.5 Elevated Work Platforms

Work from EWP's (boom length greater than 11m) is a prescribed occupation and as such, must only be undertaken by an appropriately experienced and qualified operator.

Any person in the basket (Scissor Lifts are classified as a platform) of an EWP shall be attached to the anchorage point by means of a full safety harness and lanyard. All operators are to be appropriately trained in the use of safety harnesses and lanyards and these items are to meet the specifications of AS1891.

The manufacturers load limit on the boom or bucket must not be exceeded.

Logbooks are to be maintained and be kept on each EWP and available for inspection. These shall be checked at during site inspections.

Shock loads caused by sudden movement of the bucket or by impact with structures are to be avoided at all times.

EWP's must not be used as a crane.

Work zones are to be barricaded/bunted off to highlight exclusion zones for workers and moving plant below.

Subcontractors must ensure that the Safe Work Method Statements (SWMS's) provided for High Risk Construction Work (HRCW), that involve the operation of Scissor (or similar) type EWPs, must clearly outline the risks and control measures for the operation of the plant and for working in an area near powered mobile plant, including, but not limited to controls to be implemented by operators to safely traverse doorways.

Additional guidance for the safe operation of EWP's, including a procedure to walk a scissor lift through a doorway, is available from the Elevated Work Platform Association of Australia (EWPA).

4.16.10.6 Mobile Cranes

The Site Manager shall ensure that the following is provided prior to use of a mobile crane on site:

- Mobile Crane Plant Registration,
- List of workers undertaking prescribed work involving the mobile crane (Rigger, Dogger, Crane Operator),
- Full details of the erection procedure (if applicable),
- Procedures for operation of the mobile crane. This is to include:
  - Isolation and demarcation of site areas where required,
  - Load Rating Charts and calculations – identifying the various crane configurations/operating radii and the designated safe working limits,
  - For each configuration (these are to be displayed permanently in the crane cabin or operating position,
  - Wind considerations,
  - Travelling with loads considerations; and
  - Operation in the vicinity of overhead hazards and powerlines.
- Full details of all inspections, repairs and maintenance are to be supplied.

A Lift Study shall be provided for the following:

- The crane is required to lift more than 75% of the rated capacity
- Sites with multiple cranes,
- Tilt-up panel jobs,
- Multiple crane lifts, where more than one crane is used to lift a load at any one time,
- Lifting of workboxes with persons in the boxes,
- Installation of bridge beams during bridge installation work,
- Working near live overhead powerlines,
- Lifting large pressure vessels or tanks,
- The use of mobile cranes on barges,
- Erection of tower cranes, and

- Heavy lifts where the load is 50 tonnes or more.

The Lift Study shall address as applicable;

- The weights, dimensions and lift radii of the heaviest and largest loads to be lifted,
- The maximum lift height and radius, and the weight of the loads to be handled at these points,
- The number and frequency of lifts to be made,
- The type of lifting to be done (e.g. precise placement of loads),
- The type of carrier required—this depends on ground conditions and machine capacity in its various operating quadrants,
- Whether loads are to be walked or carried,
- Whether loads are to be suspended for lengthy periods of time,
- The workplace conditions, including the ground on which the crane is to be set up, access roads and ramps it must travel on, space for erection, and any obstacles that may impede access or operation including overhead services,
- Interaction with other cranes on site,
- Multiple crane lifts.

The Project Team in conjunction with the crane operator shall consider the following when siting the crane:

- Overhead powerlines and other services
- Nearby structures
- Ground stability:
  - The presence of water, including when it is mixed with the soil as mud, and where it is present under the surface (e.g. Underground springs or streams)
  - The type of ground (e.g. Clay, sand, rock or a mixture of these)
  - Backfilled ground that was previously an excavation or trench
  - Cavities or penetrations in the ground that have been covered but still exist
  - Continued operation of the crane in one location.
- Other cranes or high obstructions, including those on adjacent workplaces (e.g. concrete placement booms)
- Other mobile equipment moving within the crane working area
- The vicinity of aerodromes and aircraft flight paths for 'high' cranes

All components of the crane are to be inspected by a competent person on the ground prior to erection.

All crane attachments/lifting gear is to be tested and tagged and in a serviceable condition for use on site.

All lifting gear shall be tagged, and all relevant information listed (e.g. relevant information for a chain sling includes grade of chain, SWL, manufacturer, chain size and Australian Standard marking)

- All lifting hooks shall be provided with operable safety latches
- Where shackles used as terminal fittings they are prevented from unscrewing (e.g. mousing or similar)
- All lifting eyes and inserts shall be compatible and the same proprietary brand
- Lifting slings shall be checked to verify that they are not damaged (e.g. excessive wear, damaged strands, cracks, deformation or severe corrosion) before use
- Slings shall be appropriate for loads being lifted, including adequate capacity and protection from sharp edges.
- Where synthetic slings are used, protective sleeves and corner pieces should be used for all loads.

- All lifting gear should be tagged to identify the date of the lifting gear's last inspection.

Crane-lifted loads should be slung and secured so that the load (or any part of it) cannot fall. To ensure the safe lifting of loads, the following should occur:

- Material boxes
  - The tare mass and SWL should be clearly marked on all material boxes.
  - Material boxes should be appropriate for the material being lifted and be engineer-designed and certified.
  - Four chains (one in each corner) should be attached to material boxes during lifting.
  - Specifically, designed material boxes should be used to lift smaller components. Boxes should have enclosed sides or robust mesh, with openings less than the minimum size of materials being lifted.
  - Material boxes should be inspected and maintained, and inspection records kept.
  - Loads within material boxes should be secured against movement, and
  - Materials should not be stacked higher than the side of the material box unless they are adequately secured, but at no time should the material box become top heavy.
- General lifting
  - Formwork frames should be either tied together or lifting slings should be wrapped around the load.
  - Loads of joists or bearers should be strapped together before lifting.
  - Timber sheeting should be strapped together and lifted in a flat position.
  - Tag lines should be used as required to control loads.
  - All loads should be supported where possible with dunnage, with the load uniformly distributed over the supporting surface
  - Basket hitches should not be used wherever persons may be located near a lifted load, unless the sling is positively restrained from sliding along the load.

4.16.11 Tower Crane

The Site Manager shall ensure that the following is provided prior to the erection of a tower crane on site:

- Tower crane design registration
- Certification of the base design by an engineer and the inspection requirements prior to pouring
- List of workers undertaking prescribed work involving the tower crane (Rigger, Dogger, Crane Operator)
- Pre-operational and erection Safe Work Methods/Procedures/Checks
- Full details of the erection procedure
- Procedures for operation of the tower crane. This is to include:
  - Load Rating Charts and calculations – identifying the various crane configurations/operating radii and the designated safe working limits for each configuration,
  - Complete details of the communication system are to be supplied,
  - Lightning protection,
  - Load testing,
  - Necessary equipment,
  - Guarding requirements, and

- Emergency procedures
- Full details of all inspections, repairs and maintenance are to be supplied in a logbook.
- Procedure for dismantling of the tower crane

The subcontractor/crane operator must provide details including a checklist which covers the following items and certifies the item meets required safety standards:

- Tower bolts
- Tower to building ties, bracing and bolting
- Access ladders, platforms and guardrails
- The cleanliness of towers and crane generally
- The condition of ropes and sheaves
- Checking of limits and safety devices
- A correct load radii indicator
- A hook height indicator
- A load weight indicator
- A wind speed indicator
- An audible warning device
- A letter of acceptance for the crane installation and tower to building ties where applicable
- The completion of log sheets
- The operation of load limiting device

The Tower Crane Erection Checklist (SE6228) shall be used when a tower crane is to be installed on site

Cranes shall be erected and inspected in accordance with AS 2550.1:1993 – Cranes Safe Use, General Requirements and AS 2550.4:1994 – Tower Cranes.

The area around the crane is to be suitably barricaded off during erection. This includes a minimum distance of 20m or 12m if personnel are only climbing the tower.

All components of the crane are to be inspected by a competent person on the ground prior to erection.

All components are to be clearly marked with their description and mass.

The tower crane must be operated by a competent person.

Regular inspections are to be undertaken to ensure safe work practices are being correctly undertaken. These include:

- Daily Inspections – Crane Operator
- Weekly Inspections – Rigger

Where any part of a crane or ancillary equipment becomes worn or unserviceable or may constitute a hazard before the next inspection then this item shall be replaced/repaired in accordance with the manufacturer's recommendations.

4.17 SAFE WORK PRACTICES

4.17.1 Asbestos

4.17.1.1 Unexpected Finds

The following procedure is to be adhered to when Asbestos or Asbestos Containing Material (or other potential contamination) is found at the worksite:

- The Person who locates or observes the material is to cease work immediately and cordon off the work area.
- They will notify/contact the Site Manager.
- For excavations, the surface of the excavation will be kept damp and signs erected advising all personnel to "Keep Out".

See Unexpected (Contaminants) Finds Protocol Flowchart attached as the appendix 10.

4.17.1.2 Asbestos Removal

The Project Manager/Site Manager shall review buildings Asbestos Registers/Hazmat Report to identify locations of asbestos in the building or where registers are not available determine if asbestos is present before carrying out work.

The Site Manager shall ensure that SafeWork NSW/ACT Worksafe is notified 5 working days prior to the removal of friable asbestos or more than 10sq metres of bonded asbestos. Work cannot commence until response has been received from SafeWork NSW/ACT Worksafe.

The client and other affected parties shall be informed of Asbestos Removal.

The Asbestos Register/Asbestos Management Plan/Hazmat Report shall be made available to all workers on site.

An Asbestos Removal Control Plan shall be developed for any licensed asbestos removal work. The asbestos removal control plan must include:

- Details of how the asbestos removal will be carried out, including the method to be used and the tools, equipment and personal protective equipment to be used
- Details of the asbestos to be removed, including location, type and condition of the asbestos

High Risk Construction Work SWMS shall be provided for the removal of asbestos.

All asbestos removal work is to be carried out in accordance with legislative requirements and the Safe Removal of Asbestos Code of Practice. These requirements must be reflected in the Safe Work Method Statement/Asbestos Removal Plan submitted.

The contractor/workers carrying out licensed asbestos removal work must hold a certification that is relevant to the class of licensed asbestos removal work they will be carrying out.

Asbestos Work Activity	Requires licensed asbestos removalist?	Training and Competency for Workers	Training and Competency for Supervisors
Removal of non-friable asbestos	Yes, minimum Class B license for all quantities	CPCCDE3014A - Remove Non-Friable Asbestos Training	CPCCDE4051A - Supervise asbestos removal + CPCCDE3014A - Remove Non-Friable Asbestos Training
Non friable Low impact activities	Yes NSW -minimum Class B license for >10 m2 ACT - Class B licence for all asbestos removal	CPCCDE3014A - Remove Non-Friable Asbestos Training	CPCCDE4051A - Supervise asbestos removal + CPCCDE3014A - Remove Non-Friable Asbestos Training
On-premise, or make safe activities (i.e. those workers likely to come into contact with ACM)	No	Asbestos Awareness	Asbestos Awareness
All friable ACM activities	Yes, Class A license for all quantities	CPCCDE3014A - Remove Non-Friable Asbestos Training CPCCDE3015A Remove friable asbestos	CPCCDE4051A - Supervise asbestos removal + CPCCDE3014A - Remove Non-Friable Asbestos Training + CPCCDE3015A Remove friable asbestos

The Site Manager shall arrange for third party air monitoring and sampling to be carried out to ensure minimum health and safety standards for the duration of any asbestos removal work. The results for air control monitoring shall be made available to:

- Workers at the workplace
- Health and safety representatives for the workplace
- PCBUs at the workplace, and
- Other people at the workplace

The Site Manager shall ensure:

- Signs indicating where the asbestos removal work is being carried out and barricades are erected to delineate the asbestos area
- Only workers involved in asbestos removal and have undergone the required training are allowed in the area where asbestos removal is taking place
- All workers involved in asbestos removal are undergoing health surveillance
- A decontamination unit is established on site

When large scale friable asbestos removal work is being undertaken, the asbestos removal work areas should be enclosed and under 'negative pressure' with the use of negative air pressure units. (Refer to How to Safety Remove Asbestos Code of Practice)

All tools and equipment shall be decontaminated following the work. Overalls, gloves and contaminated clothing shall be disposed of in the same manner as other asbestos waste

A clearance certificate is to be obtained by the Site Manager on completion of any asbestos removal work.

The removal of less than 10 square metres of non-friable asbestos containing material (ACM), or removal of asbestos-contaminated dust or debris (ACD) associated with that work, does not require an Asbestos Removal Control Plan, however a SWMS is required and must be documented. Asbestos-related work means work

involving asbestos other than asbestos removal work, for example, drilling into ACM. Asbestos-related work that is also high-risk construction work (i.e. construction work that involves the disturbance of asbestos) requires a documented safe work method statement

4.17.1.3 Disposal of Asbestos

Asbestos containing material must be bagged in 200-micron plastic bags. Bags must be wrapped in black builder's plastic and labelled with a sticker stating site, date of removal, number of bags.

Asbestos waste must be transported and disposed of in accordance with the Environment Protection Authority (EPA) requirements.

Asbestos waste must only be disposed of at a site licensed by the EPA and it must never be disposed of in the general waste system.

The Site Manager shall ensure that all dumping receipts for asbestos products are obtained from the Asbestos Contractor.

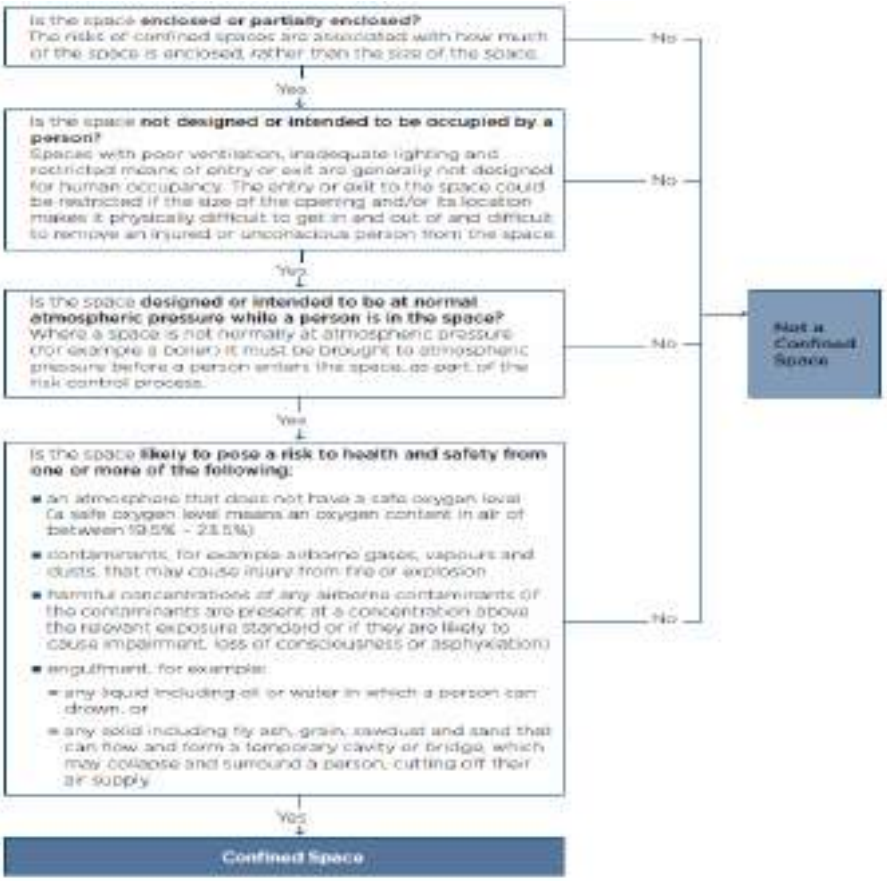
4.17.2 Confined Spaces

4.17.2.1 Definition

A confined space is an enclosed or partially enclosed space that:

- Is not designed or intended primarily to be occupied by a person; and
- Is, or is designed or intended to be, at normal atmospheric pressure while any person is in the space; and
- Is or is likely to be a risk to health and safety from:
- An atmosphere that does not have a safe oxygen level; or
- Contaminants, including airborne gases, vapours and dusts, that may cause injury from fire or explosion; or
- Harmful concentrations of any airborne contaminants; or
- Engulfment.

4.17.2.2 Identifying confined spaces



4.17.2.3 Issue of Permit to Work and Entry Permits

No workers may enter a confined space to carry out work unless a Confined Space Entry Permit (SE6211) has been issued for the work.

The Confined Space Entry Permit (SE6211) must be completed by the Project Coordinator /Competent Person and:

- Specify the confined space to which the permit relates,
- Record the names of persons permitted to enter the confined space and the period of time that the work will be carried out,
- Set out risk control measures based on the risk assessment; and
- Contain space for an acknowledgement that work in the confined space has been completed and all persons have left the space.

Note – Evidence of a Confined Space Entry Certificate (training record) must be provided prior to issue of the permit for all workers entering the confined space or acting as the Authorised person or Observer.

The Confined Space Entry Permit (SE6211) shall be displayed at the entrance to the confined space for the duration of the works.

The Confined Space Entry Permit (SE6211) must be issued for each entry into the confined space. Each permit only applies to one confined space and allows one or more workers to enter that space.

4.17.2.4 Isolation of the Confined Space

Prior to any person(s) entering a confined space, the Authorised Person and/or the Observer shall ensure that the confined space is isolated from contaminants or the movements of equipment which might harm person(s) working

in the confined space. Also, energy sources that may impact on the confined space must be shut down. These may include electrical, mechanical, pneumatic, hydraulic, chemical, thermal, and kinetic energies. It may also include pressurised liquids and gases, sludge and liquids, and gases and fumes.

Locks, tags, or other protective measures may be used to achieve this and shall only be removed after the Authorised Person and/or the Observer have ensured that work has been suspended or completed and that all persons have vacated the confined space.

4.17.2.5 Stand-By Person

A competent (has undergone Confined Space Training) Stand-By Person will be stationed in close proximity to the entry of the confined space.

The competent Stand-By Person will maintain communication with the persons inside, and be able to raise the alarm, or initiate emergency response procedures, and be resourced and trained in undertaking a rescue; rescue procedures are to be outlined in SWMS.

4.17.3 Coring/Penetrations

Prior to penetration any concrete slab, a Coring Permit (SE6225) shall be issued by the Site Manager

All in slab services and stressing cables shall be identified.

Inspection results shall be provided to building owner/engineer for final sign off before commencing coring/penetrations.

Coring/penetrations that potentially impact on the stability/strength of the slab shall be approved by an engineer.

All penetrations other than stairwells are to be provided with a fall protection cover of sufficient strength to withstand the traffic in the area.

As part of the site inspections, the Site Manager/WHSE Coordinator shall check penetrations to ensure that they are correctly covered on site.

Signs are to be displayed to warn persons of any penetration below a cover.

All stairwells not to be used for access, are to be barricaded and signed to prevent any unauthorised entry.

4.17.4 Demolition

4.17.4.1 Planning

Demolition work must be carried out in accordance with AS/NZS 2601 and the Demolition Code of Practice.

The risk associated with demolition shall be identified in the Project Risk Register (SE4131) and controlled in accordance with the hierarchy of controls. Potential hazards include:

- Unplanned structure collapse
- Falls from one level to another
- Falling objects
- The location of above ground and underground essential services including the Supply of gas, water, sewerage, telecommunications, electricity, chemicals, fuel and refrigerant in pipes or lines
- Exposure to asbestos
- Exposure to hazardous chemicals—these may be present in demolished material or in the ground where demolition work is to be carried out, such as contaminated sites
- Hazardous noise from plant and explosives used in demolition work,
- The proximity of the building or structure being demolished to other buildings or structures.

The regulator must be informed by the Project Manager/Site Manager at least five days before the work commences of:

- Demolition of a structure, or a part of a structure that is load bearing or otherwise related to the physical integrity of the structure, that is at least 6 metres in height
- Demolition work involving load shifting machinery on a suspended floor
- Demolition work involving explosives.

Before the commencement of any stripping or demolition work, the demolition subcontractor shall submit a Demolition Work Plan in accordance with legislation, Demolition code of practice and Australian standards. No 'Structural' stripping or demolition activity shall be commenced until the work plan has been reviewed by the Site Manager.

The Demolition Work Plan shall address building structure, adjacent building structures, materials and demolition sequence

Design plans (as-builds) shall be requested from the client by the Project Manager

A Dilapidation Report shall be carried out for neighbouring buildings.

Before the commencement of any stripping or demolition work, an initial investigation of the structure and the site shall be carried out.

The Project Manager/Site Manager shall request the Asbestos Register/Hazmat Report for the structure from the client/site owner.

A qualified person shall determine the presence of hazardous chemicals or conditions in the structure, and all parts of the site, which may be hazardous to the health of the site personnel or the public if disturbed by the stripping or demolition. The nature and location of each hazard shall be recorded and both the record and proposed method on controlling the hazards shall be recorded in a hazardous materials management plan (eg Asbestos Removal Plan). A copy of the hazardous materials management plan shall be submitted to the Project Manage/Site Manager prior to the start of work by the subcontractor.

Risks, hazards and controls identified in the Demolition Plan and hazardous chemicals management plan must be included in the Subcontractors Safe Work Method Statements.

Prior to the start of work the Site Manager shall ensure:

- All services have been identified and documented.
- All services have been disconnect/isolated or made safe by a qualified person;
- Power is disconnected before starting demolition;
- A SafeWork NSW permit has been issued and that all state legislative requirements have been confirmed and are met;
- The demolition contractor is a registered building practitioner licensed to carry out demolition work;
- Hazardous materials have been identified and relevant controls implemented
- That safe systems of work are in place and that persons cannot be harmed by falling objects.

The Site Manager shall confirm isolation services - Isolation of Services (SE6223)/Electrical Survey (SE6229)

4.17.4.2 Work Zone

Exclusion zones shall be established to prevent unauthorised workers entering work areas and prevent workers/public being hit by falling objects

4.17.4.3 Public Protection

Hoardings, noise barriers, catch decks, water sprays, containment mesh, scaffolding, overhead structures shall be used to protect public in accordance with the Project Risk Register (SE4131) and the Demolition Work Plan

4.17.4.4 Fall Protection

The risk of falls from height associated with the demolition sequence and activities, including the management of open edges or penetrations within the building structure, shall be identified and controlled via the Project Risk Register (SE4131) and the Demolition Work Plan.

Edge protection, including appropriately fixed covers and guards on openings and penetrations shall be installed.

Edge protection shall be inspected during site inspections.

Work shall be undertaken from scaffolds and EWPs wherever possible

Harnesses must be worn in situations where edge protection cannot be provided and there is a risk of falling more 2 or more metres.

4.17.4.5 Falling Objects

The risk of falling objects shall be addressed in the Project Risk Register (SE4131) and the Demolition Work Plan.

Hoardings, protective structures, catch decks and exclusion zones shall be installed to prevent falling objects from striking workers or the public.

4.17.4.6 Removal of Debris

Debris should be progressively removed to prevent build up that could affect the integrity of a suspended floor of the building or structure; affect workplace entry and exit; become a fire hazard; or cause a health and safety hazard.

Demolished materials should not be allowed to fall freely unless they are confined within a chute or similar enclosure, shaft and/or exclusion zone.

Where lift shafts and/or debris drop zones are used in multi-storey buildings, the following should apply:

- Each opening should be protected by an adequate vehicle buffer during the removal of debris by mobile plant and guarded by suitable barriers at all other times. Vehicle buffers should be high enough to prevent the mobile plant from riding over them and solid enough to stop the fully loaded mobile plant.
- All levels below the working level, access to the area through or onto which material is falling should be prevented, either by sealing off the opening with guarding from floor to ceiling, or by erecting signs and barricades to prevent persons from coming near the openings.

4.17.4.7 Structural Collapse

The Site Manager or Project Manager shall inform the police immediately if:

- The building concerned (including an un-demolished part of the building) becomes unstable; and
- There is a danger that the building could collapse and injure any person who is in any place not under the control of the person who is carrying out that work, either directly or by his or her employees or agents.

4.17.5 Excavation

4.17.5.1 General

Prior to any excavation being undertaken, a Permit to Break Ground (SE6219) must be completed by the Project Coordinator.

All excavation work is conducted in accordance with the Code of Practice – Excavation

Where drawings show services within 2 (two) metres of the proposed excavation/penetration, the actual location of those services must be confirmed by either a locating device or by hand excavation. Where required the asset owner shall be contacted prior to works commencing.

Risks associated with neighbouring structures/associated areas and the relevant controls shall be documented on the Permit to Break Ground (SE6219). An engineer's report should be sought where there is the potential for structural collapse

Safe access must be provided at all times. Where a ladder is used, it must be sufficient to extend 1 (one) metre past the landing place and be secured at the top and bottom to prevent slipping.

Barricades/handrails of at least 900mm high must be erected round excavations greater than 1m deep.

Trenches and excavations are not to be left exposed if unattended. Para webbing and/or barricading must be erected at a minimum of 1m from the edge (2m where possible) and warning signs posted to protect persons from falling into trench or excavation.

All excavations must be covered or secured with fencing if the work site is unattended.

Where there is a risk of workers coming into contact with contaminated soil, adequate control measures must be put in place. As a minimum, those who may come into contact with the contaminated soil must wear personal protective equipment; and

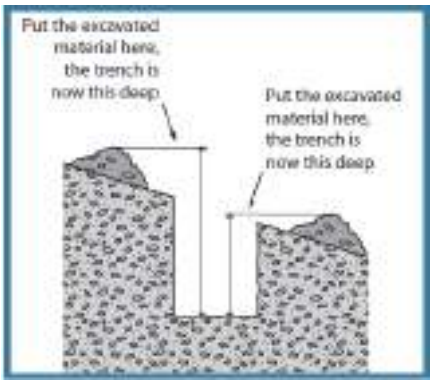
All spoil removed off site must be carried out by a reputable contractor and comply with OEH/EPA guidelines.

Excavations over 1.5m shall be monitored by a competent person. Records of monitoring/inspections shall be recorded on the Permit to Break Ground (SE6219).

4.17.5.2 Preventing Ground Collapse

All trenches and deep excavations, deeper than 1.5 metres, must be properly benched, battered or shored, or a combination each to prevent the edges from falling back into the trench or excavation unless a Geotechnical engineer has determined (in writing) that there is no risk of collapse

No persons are to work inside an excavation greater than 1.5m deep that is not shored or battered.



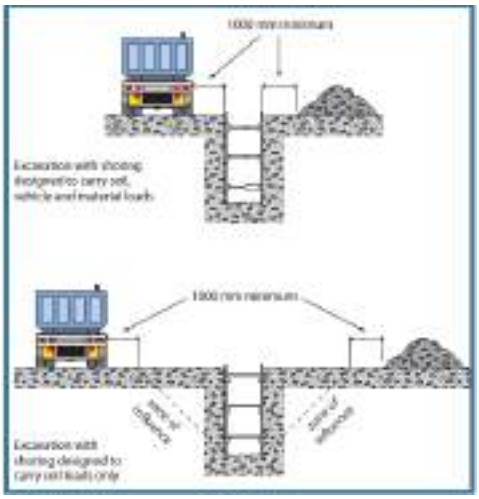
Benching or battering the walls of the excavation must not exceed an angle of 45 degrees unless designed and documented by a geotechnical engineer

Where the ground is not self-supporting and benching and battering is not practical, shoring should be used. Shoring system must be designed by a qualified engineer and detailed on current drawings or plans.

Shoring or documented systems (eg walls exceeding 45 degrees repose) must be installed by a competent person and verified by a competent person that the system used has been installed in accordance with the current drawings/plans. Details of installation and verifications shall be noted on the Permit to Break Ground (SE6219)

Where changes to the installed system or design are made, they must be signed off by a qualified engineer. A New Permit to Break Ground (SE6219) should be used to record implementation of changes to the installed system.

Mechanical plant, vehicles, storage of materials (including excavated material) or any other heavy loads should not be located in the 'zone of influence' of an excavation. Any ground support system installed shall be designed by a competent person, for example, a geotechnical engineer, to carry such loads. eg.:



4.17.6 Services – Inground/Overhead

4.17.6.1 Liaise with Asset Owners

The Project Manager shall consult with the relevant authority regarding approach distances and appropriate control measures implemented to prevent any part of the plant or any load carried on it from coming too close or contacting services.

4.17.6.2 Underground Services

The Site Manager shall ensure that all underground services (e.g. gas, electricity, water, sewer, and telecommunications) are identified and the locations clearly marked. (Refer DBYD and drawings provided by assets owners).

The Site Manager is responsible for ensuring that workers are aware of the location of the services noted above at induction and by personal communication.

The Site Manager shall conduct a survey of the site to locate and mark the position of all underground services

The survey shall be conducted in a methodical manner with the area involved being divided into grids to ensure that the entire area is covered. Wherever possible the area should be "pot-holed" to confirm the location and the type of service located.

Once the services have been located and their position marked on site. This information shall be transferred onto the working drawings.

The Permit to Break Ground (SE6219) will be completed using the information obtained from the identification of services.

If contact with an existing service poses a risk to the health and safety to any person on or adjacent to the site, the Project Coordinator shall ensure that the existing service is removed or disconnected, or otherwise isolated from the work to be carried out, so that contact with the service will be prevented

4.17.6.3 Approach Distance Underground Services

ASSET/SERVICE	CLEARANCES	CONTROLS	TYPICAL DEPTH
Low and Medium Pressure services and Low Pressure Mains	N/A [A] 300 mm [B]	Pothole to confirm location of service. The position of the asset will not appear on the maps.	300 – 450 mm
Medium Pressure mains **(Note: >75mm – It is mandatory to have Asset Owner on standby)**	N/A [A], 300 mm [B]	Pothole to confirm location of Asset. Only one individual at a time should be excavating if hand excavation is being undertaken in a confined space. Another should act as an observer and be able to operate any breathing, escape or fire equipment required. The elimination of an ignition source in the event of an escape. Excavation below underground assets should not be undertaken within a distance of 300 mm below the asset located at the lowest level. **Must contact the Asset Owner for specific conditions.**	450 – 750 mm
High Pressure services, mains and pipelines **(Note: All Steel Mains - It is mandatory to have Asset Owner on standby)**	300 mm with hand tools and supervision from Network Authority [A], 1000mm [B]	Powered excavation within 300 – 1000 mm is only permitted under supervision and with a **Permit to Work from Asset Owner**. Also see Controls for medium pressure mains immediately above	750 – 1200 mm
Low Voltage Electricity cables – voltages less than or equal to 1000V (1kV)	Close proximity with use of hand tools [A], 300 mm [B]	**Must contact asset owner for specific conditions**	450 – 750 mm
Electricity conductors from 11,000V (11kV) up to 33,000V (33kV)	Close proximity with use of hand tools [A], 600 mm [B]	**Must contact the Asset Owner for specific conditions.**	900mm
Underground sub-transmission cables 33,000V up to 132,000V (132kV)	Must contact asset owner	**Must be carried out under the supervision of the asset owner**	900mm
High Voltage Electricity cables – voltages from 1000V (1kV) up to 33kV	Close proximity with use of hand tools	**Must contact asset owner for specific conditions**	600 – 1000 mm
Extra High Voltage Electricity Transmission cables – voltages above (132kV) and 330,000V (330kV)	Must contact asset owner	**Work must be carried out under the supervision of the asset owner**	800 – 1200 mm

4.17.6.4 Overhead Utilities

The Site Manager shall identify all above ground and overhead during the work planning stage. This includes power lines and other utilities suspended on bridges and other similar structures.

The Site Manager shall clearly mark the position of power lines, transformers and distribution boxes on all original plans and drawings and make sure positions of services are clearly highlighted on work site copies.

The Project Manager/Project Coordinator shall consult with the owner of the service about their requirements for preventing damage to property and preventing injury.

The Work Near Overhead Power Lines Permit (SE6224) shall be completed by the Project Coordinator prior to commencement of any works under or near overhead services. The assessment shall include Overhead Electrical

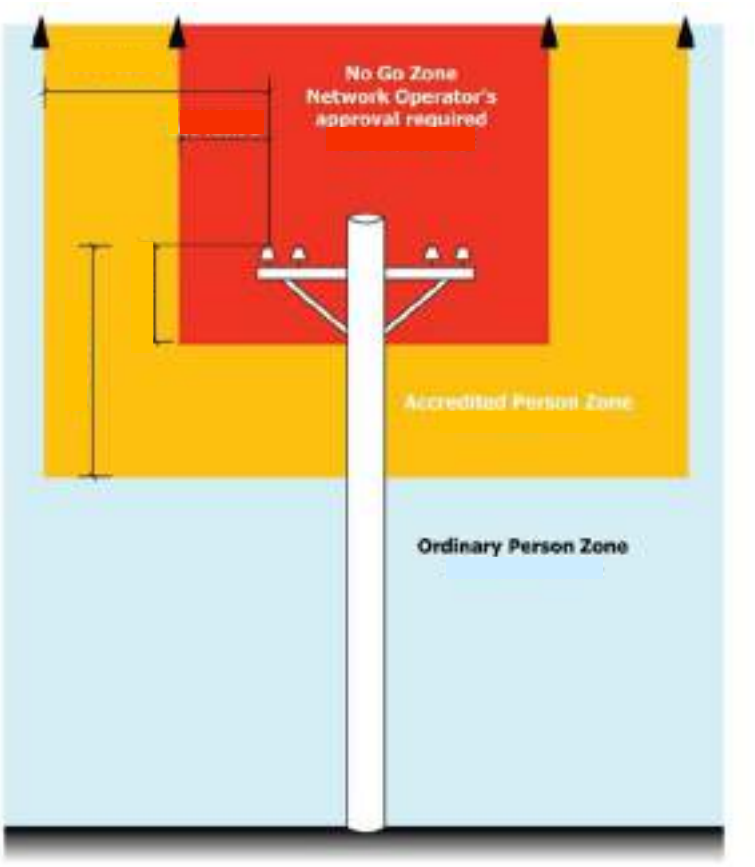
Services to be worked under, the asset owners, any additional controls ie; tiger tails, relocation, de-energisation, bunting etc. to be organised and management of adjacent services

The Site Supervisor shall verify the position of all services before work begins and ensure that all required warning signs and devices are in place.

Only "Accredited Persons" or "Safety Observers" shall determine the voltage, height of the services or act as a spotter

The no go zone is the area around an overhead service into which no part of a person or material or cranes or vehicles or items of mobile plant may encroach without the approval of the asset owner and a Risk Assessment

4.17.6.5 Approach distances Over Head Services



Approach distances and work zones near overhead power lines

Approach distances for work performed by Ordinary Persons	
Nominal phase to phase AC voltage (volts)	Approach distance(m)
Up to and including 132,000	3.0
Above 132,000 up to and including 330,000	6.0
Above 330,000	8.0
Nominal pole to earth DC voltage (volts)	
Up to and including +/- 1500 Volts	3.0

Approach distances for work performed by Accredited Persons, with a Safety Observer	
Nominal phase to phase AC voltage (volts)	Approach distance(m)
Insulated low voltage cables up to 1000, including LV ABC	0.5
Un-insulated low voltage conductors up to 100	1.0
Above 1000 up to and including 33,000	1.2
Above 33,000 up to and including 66,000	1.4
Above 66,000 up to and including 132,000	1.8
Above 132,000 up to and including 220,000	2.4
330,000	3.7
500,000	4.6
Nominal pole to earth DC voltage (volts)	
Up to +/- 1,500	1.0

Approach Distances for Vehicles	
Nominal phase to phase AC voltage (volts)	Approach distance (m)
Low voltage conductors up to 1000	**0.6**
Above LV, up to and including 33,000	**0.9**
Above 33,000 up to and including 132,000	**2.1**
Above 132,000 up to and including 220,000	**2.9**
330,000	**3.4**
500,000	**4.4**
Nominal pole to earth DC voltage (volts)	Approach distance(m)
Up to and including +/- 1500 Volts	**0.9**

4.17.7 Hazardous Chemicals (Brought onto Site)

The Project Coordinator shall ensure that all hazardous chemicals are identified, and that the manufacturers label is legible prior to being used or stored on site.

Hazardous chemicals, including all those used by Subcontractors on site, shall be recorded on the Hazardous Chemicals Register & Risk Assessment (SE6205). The Register shall be updated as new substances are introduced to site or as recorded substances are no longer on site.

All substances that are "hazardous" shall undergo a risk assessment. The risk matrix in the section "Risk Assessment" shall be used. The Project Coordinator shall record the risk rating on the Hazardous Chemicals Register & Risk Assessment (SE6205).

Safety Data Sheets (SDS) for each hazardous substance shall be located in the First Aid Room or adjacent to the First Aid Kit.

A current copy of the Hazardous Chemicals Register & Risk Assessment (SE6205) shall be placed with the SDS, and the location described at site induction.

4.17.8 Hazardous chemicals (Existing on Site)

Prior to any excavation, demolition or refurbishment works commencing on site a hazardous substance survey will be undertaken by a qualified person. This will include, but not be limited to, an assessment of any contaminated soil and/or the presence of any material containing asbestos, lead, synthetic mineral fibres (SMF), Polychlorinated Biphenyl (PCBs), etc.

All identified hazardous material(s) will be removed in accordance with the legislative requirements. Copies of all receipts from the removal and dumping of the hazardous materials will be provided to A W Edwards by the Subcontractor engaged to carry out the works for its records.

If any suspect material is located that has not been previously identified and recorded in the hazardous substance/material survey, work shall cease in the immediate location until the materials can be removed/made safe by a licensed contractor.

At the completion of the removal of all the hazardous materials A W Edwards will be provided with a clearance certificate by the Subcontractor engaging the services of the consultant monitoring the removal works.

4.17.9 Hot Works

4.17.9.1 General

Hot works include all work involving oxy/acetylene, welding/brazing and cutting, electric welding and cutting, grinding and any other works that involve the use of a naked flame or other heat source in a hazardous environment.

A Hot Works Permit (SE6213) must be issued for all hot works by the Site Manager.

Consideration shall be given to:

- Work to be carried out in a restricted or cramped space,
- Hazardous chemicals present that cannot be moved to another location,
- Combustible materials present that cannot be moved to another location; and
- Other work groups working in the same work area.

The Hot Works Permit (SE6213) is valid only for the time specified, and the work specified on the permit. If the work continues past the allotted time 'maximum 7 days', a new permit must be issued to complete the job.

A copy of the hot work permit shall be kept in the Site Office and with the Permit Holder and both copies must be signed off by the Subcontractor at the end of works each day.

4.17.9.2 Hot Work Area

The area within a radius of 15 metres from the point where the hot work is to take place, including the space above and below, should be made safe by various techniques, preparation and testing to ensure that any risk of fire or explosion resulting from the hot work is eliminated. Where combustible materials cannot be moved to the recommended safe distance, they should be covered with non-combustible material or wetted down to prevent ignition.

Where there is insufficient natural draft to adequately ventilate the work area, a fan with adequate capacity to ventilate the area shall be used. Care should be taken to ensure that fumes and sparks generated by the hot work are not blown into areas where other persons are working.

4.17.9.3 Fire Watch/Prevention

A suitable fire extinguisher shall be located with each oxy/acetylene, LPG/acetylene and electric welding machine.

Suitable fire extinguishing equipment must be within 10 metres of an area where hot work is taking place.

4.17.9.4 Completion of the Hot Work

At the completion of the hot work, the operator shall inspect the work area to ensure that the completed work and any slag or sparks have cooled sufficiently so that a fire or explosion cannot occur.

4.17.9.5 Hot Work in Confined Spaces

Where hot work is to take place in a confined space a Confined Space Entry Permit (SE6211) must be issued out prior to hot works being carried out. The work must be carried out by a trained and competent person.

4.17.10 Lead Paint Removal

Potential lead paint shall be assessed via a Hazardous Materials Survey and Risk Assessment conducted by a qualified person.

SafeWork NSW/Worksafe ACT must be notified when lead risk work is undertaken.

All workers involved in lead risk work must undergo health monitoring.

Workers involved in lead risk works must have received training in risk related to lead.

Air quality monitoring is required whilst lead paint is being removed.

Decontamination facilities shall be provided for workers on site.

All workers shall be provided information regarding lead prior to start of work. This shall normally be done via a toolbox talk.

An exclusion zone shall be established around work to prevent access by other works or the public.

Lead paint shall be removed using one of the following methods:

- Wet scraping
- Chemical stripping
- Wet hand sanding
- Low temperature heat process
- Sander with a HEPA vacuum attachment

Workers must wear a half face respirator with P2 particulate filter during removal and clean up and disposable coveralls

Lead contamination caused by the removal process is confined to the removal area, by use of plastic sheeting. A plastic drop sheet shall be used to collect lead paint scrapings and dust.

Work areas must be cleaned up at the end of each day.

Workers shall not eat or drink whilst in the contaminated work area.

Lead-containing debris shall be collected into heavy duty plastic bags and disposed of at a licenced facility.

4.17.11 Materials Handling

The use of mechanical equipment to move and store materials can increase the risk of injury to employees.

Before operating such mechanical equipment to assist in materials handling activities, and typically conducted prior to commencing works on the project, an assessment of materials handling risks is undertaken as part of the preparation, maintenance and review of the Project Risk Register (see Section 3.5.1 Risk Assessment – Project).

During work activities, A W Edwards Project Team members will;

- inspecting the site;
- reviewing project activities and staging to identify high-risk tasks, such as work with mobile plant (eg. forklifts or telehandlers) or carrying of heavy materials/equipment (eg. using tower cranes and/or mobile cranes);
- observing workers performing their jobs;
- reading any prior safety alerts, incident reports, and regulator advice to understand what incidents are occurring in the industry; and
- arrange safety audits.

Before operating mechanical equipment to handle materials, thought will be given to:

- the most appropriate mechanical equipment to assist with materials handling
- the load rated capacity (maximum weight) of the selected mechanical equipment to avoid overloading
- traffic management and the need to ensure provisions are made to guarantee pedestrian safety for a traffic management plan.

If the mechanical handling is assessed as medium or high level of risk, the HRCW SWMS should also identify risk controls including isolation or exclusion zones, and communications. Further consideration shall be made to management of traffic and construction vehicles to ensure (public and construction) pedestrian safety.

4.17.12 Manual Handling

Manual handling must be conducted in accordance with the Code of Practice for Hazardous Manual Tasks.

Manual handling tasks are controlled by the risk management processes

Employees and Subcontractors are to be encouraged to take sufficient time to assess risks before they perform manual handling tasks. Where possible, and after completion of training in the use of equipment, mechanical aids should be used for manual handling. Examples of manual handling tasks / risks include:

- Heavy / awkward materials, plasterboard sheet, products, packages, cement bags,
- Moving plant, equipment and scaffolding,
- Using wheelbarrows and trolleys to transport materials; and
- Reaching and stretching tasks.

4.17.13 Medium Density Fibreboard (MDF)

All equipment used to cut or drill MDF must be fitted with vacuum dust extraction.

Safety glasses and a P2 mask must be worn during cutting and exposure to MDF dust

MDF Dust to be double bagged and disposed of in skip

MDF to be stored in a shaded area and away from heat to inhibit any release of any Formaldehyde vapour.

The plastic packaging on the MDF should be maintained during storage on site.

4.17.14 Noise

Hearing protection must be worn by all workers when working near plant and equipment with a noise level higher than 85dBA.

Personal hearing protectors should be inspected prior to use to ensure:

- Ear-muff seals are undamaged
- The tension of headbands is not reduced
- There are no unofficial modifications
- Compressible earplugs are soft, pliable and clean.
- If disposable earplugs are used, they should only be worn once.

4.17.15 Personal Protective Equipment (PPE)

All workers on site must wear the following PPE:

- Safety boots
- High vis clothing
- Safety glasses
- Hearing protection
- Hard hats with chin strap
- Gloves

Additional PPE shall be worn appropriate to the task, including:

- Sunscreen
- Hearing protection
- Dust masks, respirators

- Welding shields
- Other items as deemed appropriate

4.17.16 Pressurised Gas, Chemical, Fuel or Refrigerant Lines

Risks and controls for pressurised gas, chemical, fuel and refrigerant lines shall be identified via the Project Risk Register (SE4131)

HRCW SWMS must be supplied for all work that involves pressurised gas, chemical, fuel and refrigerant lines. This includes activities that may damage these lines such as excavating near the lines, demolition works or cutting and drilling next to the lines.

Prior to work being undertaken on lines containing gasses or liquids the Isolation of Services (SE6223) must be completed. All lines must be de-energised and emptied prior to any work being undertaken on the lines. Only trained persons shall undertake gas, fuel or refrigeration isolations.

Emergency procedures shall be documented in the Emergency Plan. All workers working shall be advised on the emergency procedures at induction

4.17.17 Tilt Up or Precast Concrete

Prior to lifting any tilt-up or precast element, the Project Manager must have received the following:

- Design Plan prepared and certified by an engineer for the design and construction of panels, including individual identifiers for each panel, lifting points, panel placement, erection requirements, panel placement, bracing and anchorage,
- The project design engineer's certificate of compliance,
- The manufacturer's certificate of compliance; and
- The component schedules.

The Birthing Certificate must be provided by the Precast Supplier and must include the following information:

- Project name and address,
- Element designation,
- Element mass,
- Concrete strength required at the time of erection for the element and, where applicable, the bracing footing,
- Type, capacity and length of the lifting inserts; and
- A diagram of the rigging system(s) between crane and precast element for both rotation and erection.

The information required for the component schedule may be included as part of the shop drawings or layout drawings. The shop drawings may be used to form the component schedule.

Elements must not be lifted or erected before attaining the minimum concrete strength on the shop drawings for lifting or erection.

Elements must not be erected on site within three (3) days of casting unless the concrete in the specific elements has been tested to confirm that the design strength for erection has been attained. Test results must be available on site prior to erecting the element.

The Site Manager must provide the precast installer with verification that the concrete in brace footings has attained its required strength before elements are erected

The supervising engineer must inspect and assess the following procedures:

- Initial casting of tilt up or precast panels for compliance with shop drawings,
- Initial lifting of tilt up or precast panels; and

- Subsequent casting and lifting of panels at random intervals.

Slinging and lifting of precast and tilt up units are to be under the control of a crane site at all times and personnel are to be clear of all lifting operations.

Certification of all proposed lifting points is to be supplied by an engineer.

All bracing must be installed 90 degrees +/- 5 degrees to plane of panel.

All bracing must be installed at least 600mm above the panel centre of gravity.

No part of the bracing support system is to be removed until the panel has been permanently anchored and inspected by the tilt up contractor.

After winds of 7m/s (25km/h) or more have been experienced at the job site, the Tilt up Contractor must check the tightness of the bolts that secure the wall and footplates to the concrete.

4.17.18 Traffic Management

Traffic Management Plans shall be developed as required by legislative, council, contract requirements or if need is identified via the project risk assessment.

The Site Manager shall engage competent persons to prepare a Traffic Management Plan for the safe movement of mobile plant and personnel in and around the site:

- Public traffic,
- Pedestrians,
- Site personnel,
- Site traffic,
- Construction machinery; and
- Site parking.

Traffic management shall be as per the Traffic Management Plan.

The Traffic Controllers shall verify that the traffic controls have been implemented in accordance with the plan during daily traffic control site inspection

Traffic Controllers shall be qualified.

4.18 EXPOSURE MONITORING AND HEALTH SURVEILLANCE

4.18.1 Exposure Monitoring

Site specific hazards that may require exposure monitoring shall be identified via the Project Risk Register (SE4131). These include:

- Noise
- Asbestos
- Contaminated Ground
- Lead Paint
- Hazardous Chemicals (other than lead/asbestos)
- Extreme environmental conditions
- PCB's products
- Silica

All health surveillance and monitoring undertaken, as identified and required by each project, will be in line with the legislative requirements.

The risk assessment determining the potential need for exposure monitoring shall be undertaken by a competent person.

Geo-tech reports and other site environmental reports shall be reviewed to ascertain whether or not hazardous materials are contained within the work environment prior to works commencing by the Project Manager.

If potential exposure monitoring requirements have been identified in the Project Risk Register (SE4131), a detailed assessment shall be undertaken by an industrial hygienist or asbestos assessor to determine the need for exposure monitoring.

Copies of all exposure surveillance results will be provided to A W Edwards by the hygienist conducting environmental/health monitoring. Monitoring results shall be made available to the relevant Subcontractors and workers by the Project Manager.

Exposure surveillance results shall be included in toolbox talks Record of Training and Consultation (SE6108) and/or posted on the site notice board.

4.18.2 Health Surveillance

Health monitoring shall be undertaken if workers are required to carry out work involving:

- Hazardous chemicals,
- Lead,
- Asbestos; and
- Noise.

The Project Risk Register (SE4131) shall be used identify and record health monitoring requirements on the project. The risk assessment shall be undertaken by a competent person.

If potential health monitoring requirements have been identified in the Project Risk Register (SE4131), a detailed assessment shall be undertaken by an industrial hygienist or asbestos assessor

The Project Manager must give information about the health monitoring requirements to:

- A person who is likely to be engaged to carry out work using, handling, generating or storing a hazardous chemical, and
- A worker for the business or undertaking, before the worker commences work using, handling, generating or storing a hazardous chemical.

Health monitoring must be supervised by registered medical practitioner with experience in health monitoring.

The WHSE Coordinator must provide the following information to the registered medical practitioner carrying out or supervising the health monitoring:

- The name and address of the person conducting the business or undertaking,
- The name and date of birth of the worker,
- The work that the worker is, or will be, carrying out that has triggered the requirement for health monitoring; and
- If the worker has started that work—how long the worker has been carrying out that work.

The WHSE Coordinator must take all reasonable steps to obtain a health monitoring report from the registered medical practitioner who carried out or supervised the monitoring as soon as practicable after the monitoring is carried out in relation to a worker.

The WHSE Coordinator must give a copy of the health monitoring report to the worker as soon as practicable after the person receive the report.

A copy of the health monitoring report must be provided to relevant statutory authority as soon as practicable after obtaining the report if the report contains:

- Any advice that test results indicate that the worker may have contracted a disease, injury or illness as a result of carrying out the work using, handling, generating or storing hazardous chemicals that triggered the requirement for health monitoring; or
- Any recommendation that the person conducting the business or undertaking take remedial measures, including whether the worker can continue to carry out the work using, handling, generating or storing hazardous chemicals that triggered the requirement for health monitoring.

Health monitoring records must be kept as confidential records and kept for at least 30 years after the record is made.

Health monitoring report and results of a worker must not be disclosed to another person without the worker's written consent.

4.18.3 Asbestos

Health monitoring is required for workers:

- Carrying out licensed asbestos removal work at a workplace and is at risk of exposure to asbestos when carrying out the work, or
- Is carrying out other ongoing asbestos removal work or asbestos-related work and is at risk of exposure to asbestos when carrying out the work.

Health monitoring must be carried out under the supervision of a registered medical practitioner with experience in health monitoring

The Site Manager/WHSE Coordinator shall verify that asbestos removal contractors are providing health surveillance for workers.

4.19 HOT & COLD WORKING ENVIRONMENTS

4.19.1 Hot Working Environments

A W Edwards will ensure that adequate ventilation and air movement is provided in indoor environments that may become hot, and employees who work outdoors are not exposed to temperature extremes.

Appropriate work and rest regimes relative to the physical fitness, general health, medication taken, and body weight of each employee exposed to heat are implemented.

The following procedures will be implemented for control of risks identified during hot weather:

- Consultation will be held with employees and sub-contractors during hot weather regarding the steps to be taken,
- Adequate supply of clean drinking water will be provided for all employees,
- Amenities including crib sheds shall be air-conditioned,
- Work area will be ventilated where possible to provide a flow of cool (or cooled) air; and
- Hat brims are recommended for all workers.

4.19.2 Cold Working Environments

A W Edwards will ensure that workers exposed to cold have adequate access to heated or sheltered areas and warm clothing or other personal protective equipment.

The following procedures will be implemented for control of risks identified during cold weather:

- Consultation will be held with employees and Subcontractors during cold weather regarding the steps to be taken,

- Employees will be made aware of the risks involved with overexposure to cold conditions, including wind chill factors, e.g. if the temperature is 12° and a strong wind is blowing, the wind-chill factor will reduce the temperature to much lower than 12°. Wind-chill factors contribute to windburn to face and skin,
- Adequate supply of clean drinking water will be provided for all employees; and
- Amenities including crib sheds shall be heated for warmth.

4.20 TEMPORARY SUPPORT STRUCTURES/STRUCTURAL ALTERATIONS

4.20.1 Risk Assessment

The risks associated with structural alterations, structural support systems and temporary structures shall be identified, assessed and controlled in accordance with the hierarchy of control during the project risk assessment process - Project Risk Register (SE4131).

4.20.2 Building Structures/Materials/Foundations

Building structures/materials/foundations shall be assessed by a Structural or Geotechnical Engineer prior to any alterations to a structure or the construction of a temporary support structures.

Expected loads shall be communicated shall by the Site Manager to the Structural or Geotechnical Engineer.

The engineer's report shall be provided to all subcontractors who are are altering or constructing temporary support structures.

4.20.3 Formwork

4.20.3.1 Installing Formwork

Formwork documentation is to be provided prior to work being undertaken and this is to be reviewed against the AS/NZS 3610. Formwork is to be designed by a qualified formwork engineer.

The following documentation must be available for inspection on site:

- Certification of the maximum loads from stacked materials that the formwork assembly can withstand,
- Specifications for the concrete and when formwork can be removed,
- Back-propping details (plans and elevations including tying in); and
- Drawings for the formwork design. The drawings must be signed by a professional engineer or formwork designer or be accompanied by a certification letter that lists the drawing numbers and drawing revision numbers.

The base on which formwork is placed must be adequate to support the weight of the formwork and concrete and any additional live loads such as pumps, workers, mixers, pouring of concrete and so on.

Formwork must comply with AS/NZS 3610. Single props must be secured to prevent accidental dislodgement. See AS/NZS 3610 for details of compliance.

Components of formwork equipment should not be mixed as they may be unsafe and lead to collapse of the formwork (e.g. mixing pins and braces).

All formwork materials such as joists, bearers, plywood, support frames, jacks and U heads must comply with the specification and relevant codes and standards and used in accordance with manufacturer's specification.

The formwork for a suspended slab or beam must be inspected and certified in writing for compliance with AS/NZS 3610 by the formwork engineer prior to pouring concrete.

Suitable and safe access must be provided to and from the construction site including each area of work. This should include planning the position of frames to ensure safe access such as persons walking between frames.

All workers involved in erecting formwork shall be trained in the formwork system used.

Unauthorised persons shall be prevented from entering the work area. This should include physical barriers and hazard warning signs clearly displayed around formwork activities to warn other persons/trades on site.

The formwork subcontractor shall install formwork using an erection sequence that either eliminates or minimises risks associated with falls and falling objects (as far as is reasonably practicable). This includes;

- Using a table form system (eg Peri Skydeck, Faresin Alufort systems), erected from the level below
- Conventional formwork (frames, bearers and joists) erected from below
- Conventional formwork erected in parallel with the table form systems

Edge protection system shall be erected in accordance with manufacturers' instructions, codes of practice, Australian standards or design. The following rules apply for the correct installation:

- Maximum span between the handrail posts does not exceed manufacture's/engineer's advice,
- Timber rails must not be overlapped. If required, install two posts adjacent to each other and butt the timber rails together,
- Both mid-rail and handrail must be installed for each edge protection span; and
- Kickboards shall be installed.

The handrail system will be installed from below (where possible), otherwise installation will be undertaken alternative access systems eg man box, EWP, using fall restraint/arrest, etc.

4.20.3.2 Penetrations

Prior to cutting large penetrations where a risk of falling may exist, a fall protection system shall be installed e.g. catch decks, scaffold, edge protection etc.

Service penetrations shall be formed up with a 25 x 25 mesh to be cast into the concrete slab. Once the concrete slab has been poured and prior to the formwork being stripped from the underside, the timbers are to be removed from the top of the service penetration (above the mesh) and a plywood panel, with chamfered edges is fixed to the concrete and labelled with "Peno Cover - do not alter

4.20.3.3 Formwork Deck Handover

A 'formworker only' zone shall be clearly marked by signs and a 'proximity barrier' (crowd control fencing panels secured with timber and nails to the formwork deck – and must be a minimum of 2m from any formwork edge).

Prior to any personnel (other than formworkers) accessing a newly constructed formwork deck, the formworkers' supervisor will conduct an inspection the deck to establish that all control measures have been completed.

The supervisor will complete a Formwork Deck Handover (SE6226) and submit to A W Edwards site management personnel. A W Edwards Structures Foreman (in consultation with the Site Manager, Structures Coordinator and WHSE Coordinator) will review the completed handover form during an inspection of the new formwork deck. Acceptance/handover of the deck will only be granted on confirmation that the control measures have been completed.

A W Edwards will issue a copy of the completed Formwork Deck Handover (SE6226) to each supervisor of subcontractors needing to access the deck, to be communicated with their workers at the following mornings' prestart or at a toolbox talk (if it occurs during the day/shift).

4.20.3.4 Stripping Formwork

An engineer will be required to have input into the stripping methodology to ensure the concrete elements will not fail. Details must be provided on the structural engineering drawings as required by AS/NZS 3600 Concrete Structures.

Stripping of formwork must be undertaken in accordance with AS 3610 or when certified by the formwork and structural engineers.

Formwork must be dismantled in a safe manner that is controlled and planned in accordance with AS 3610. It should generally be a reverse of the erection procedure and follow the safe work method statement and any site-specific instructions. Drop stripping is an unsafe practice and must not be carried out. Partially erected or dismantled formwork should be secured against overturning during high winds.

Exclusion zone – Only persons involved in the stripping operation should be permitted in the area to be stripped. Stripping areas should be cordoned off and signs should be displayed. The signs should require persons to keep out of the area (e.g. 'Danger – Formwork stripping in progress – authorised persons only').

4.20.4 Scaffold

4.20.4.1 Mobile Scaffolds

Mobile scaffold where a person or object could fall 4 metres must be erected, altered and dismantled by a licensed scaffolder.

Prior to using a mobile scaffold where a person or object could fall 4 metres, the Site Manager/WHSE Coordinator must receive written confirmation from a competent person, who has inspected the scaffold, that construction of the scaffold has been completed in accordance with Australian Standards, manufacturer's instructions, legislation and codes of practice.

For mobile scaffold where an engineer's inspection report or inspection is not provided, the Fall Prevention Systems/Structures Certification (SE9305) shall be used to verify that the mobile scaffold has been installed correctly.

A mobile scaffold must only be used on a hard, flat and level surface to avoid instability. If adjustable castors are used, the maximum gradient on the supporting surface is not to exceed 5°.

Access is to be by way of a ladder(s) within the scaffold.

Decking planks are to be cleated or otherwise secured to prevent displacement.

Castors are to be marked with the safe working load (which is not to be exceeded) and be fitted with an effective wheel lock to prevent rotation of the wheel and any movement of the scaffold when in use.

The height of the mobile scaffold must not exceed three times the smallest base dimension.

A mobile scaffold is not to be moved while any person is within or on the scaffold.

4.20.4.2 Fixed Scaffold

A scaffold plan developed by a qualified person (Engineer) shall be provided for the following:

- Scaffolding > 20m in height
- Suspended Scaffolds
- Perimeter Catch Scaffold or Fan Scaffold
- Hung Scaffold
- Spur Scaffold
- Loading Platforms built from scaffolding components where intended to support loads above the duty rating load for the scaffold
- Scaffold designed as an overhead protection for public / workers safety (normally >10kpa
- Cantilever Scaffold
- Any non-standard scaffold assembly significantly outside the configuration specified by the manufacturer
- Scaffold support by another structure

The need for a scaffold plan for other scaffold (not listed above) shall be documented in the Project Risk Register (SE4131)

Designed scaffold shall be inspected and certified by a Structural Engineer.

The Project Coordinator shall ensure that all scaffolding is erected by a competent person.

The Subcontractor shall ensure that the scaffolding is erected to the requirements of AS/NZS 1576 Scaffolding General Requirements, AS/NZS 4576 Guidelines for Scaffolding, document design (where applicable), relevant legislation and codes of practice.

No work is carried out from the scaffold, unless written confirmation has been obtained that the scaffold, or its relevant portion, is complete.

All scaffolding person or object could fall 4 metres shall be inspected by a competent ticketed person at intervals not exceeding 30 days, following an occurrence that could have affected the stability or adequacy of the scaffold, such as severe storm conditions or an earthquake and immediately after any modification or alteration prior to use.

Inspection records should include:

- The individual identification number or mark of the scaffold,
- Any relevant design or specification reference,
- The location of the scaffold,
- The purpose for which the scaffold is provided,
- The load rating of the scaffold,
- The date and time of each inspection,
- Comments on each inspection,
- The name and signature of the person conducting the inspection.

Scaffold shall be inspected by the Project Coordinator during Hazard and Observation Sheet (SE6301).

All scaffold both mobile and fixed coming to site must have the appropriate commissioning certification as part of the setup process. This must also include an in-date handover certificate to ensure that setup is compliant.

Handover certificates, records of inspection and repairs and maintenance details shall be filed in site records.

Changes to the installed design shall be inspected and signed off by a qualified person (Engineer or scaffolder).

4.20.4.3 Erection of Scaffold

Scaffolding is erected and dismantled 'sequentially' to control the risk of falls for scaffolders.

Scaffold components are compatible with each other.

Workers other than scaffolders are prevented from accessing incomplete scaffolds (eg by using warning signs and barriers).

Scaffolders build temporary work platforms with edge protection when erecting scaffold ("1 meter rule") or use fall arrest during erection of scaffold

Exclusion zones are maintained during scaffold erection and dismantling activities.

Compliance with No Go Zone (NGZ) requirements where scaffolding is erected, dismantled or in use near overhead power lines. This includes compliance with 'Permit to Work' requirements issued by the power distribution company (eg hoarding boards or shade mesh to be secured to the scaffold as a barrier).

Engineering approval is obtained where shade mesh or hoarding is affixed to scaffolding.

4.20.4.4 Scaffolding Safety

Safe and clear access and egress must be provided to all working platforms (eg clear access to a ladder or stairs).

Scaffolding must be protected from impact by mobile plant and vehicle traffic.

Scaffolding must be isolated from unauthorised users and the public.

Toe boards or kick boards and mesh installed to prevent objects from falling.

Damaged planks and components shall be removed or replaced by the scaffold supplier or a licensed scaffolder.

Scaffolding shall only be used for the purpose for which it was designed.

4.20.4.5 Dismantling of scaffold

The scaffold platform must be accessed from a ladder or stair access – scaffolders must not climb standards, ledgers and transoms

Scaffold bays must not be overloaded– progressively remove scaffolding equipment from platforms and stack it neatly on the ground

Loose materials must not be left on platforms

Materials or scaffolding equipment must not be thrown down

Chain wire mesh and shade cloth must be removed while working from a fully planked platform

A guardrail (edge protection) must be in place when removing and passing mesh panels down

Work must be undertaken from a fully planked platform below when dismantling hop-up brackets, tie bars and planks

Un-sheeted scaffold must not be allowed to free stand more than 4 m or a sheeted scaffold more than 2 m above the highest tie remaining in place

4.20.5 Other Temporary Support Structures

Temporary support structures eg propping, bracing etc shall be designed by a qualified engineer.

The drawings must be signed by a professional engineer or formwork designer or be accompanied by a certification letter that lists the drawing numbers and drawing revision numbers.

Temporary support structures shall be inspected by an engineer after installation to verify they are in accordance with the design, and as applicable design, manufacturers requirements, relevant legislation, codes of practice and Australian Standards.

For temporary support structures where an engineer's inspection report or inspection is not provided, the Fall Prevention Systems/Structures Certification (SE9305) shall be used to verify that the temporary support structure has been installed in accordance with the design, legislation, Australian standards, codes of practice or manufactures instructions.

Temporary support structures shall be inspected during the weekly site inspections Hazard and Observation Sheet (SE6301)

4.21 EMERGENCY PREPAREDNESS

4.21.1 Site Emergency Plan

The Site Manager shall ensure that an Emergency Management Plan for the evacuation of site personnel from the site in the case of an emergency is prepared.

The Emergency Management Plan shall address any emergency scenarios identified in the Project Risk Register (SE4131).

The Site Manager shall nominate a person to be the Emergency Response Coordinator and another person to be the Deputy Coordinator. Site Supervisors shall act as the designated emergency controller on each work area (if separate to the main work site).

Emergency Response personnel shall be inducted into the Emergency Management Plan. Following induction designated emergency personnel shall sign the Emergency Management Plan.

All emergency personnel are required to be trained and deemed competent in the emergency response and in assessing the suitability, accessibility and location of emergency equipment

The Emergency Management Plan shall include as applicable:

- Location of site attendance book;
- Emergency phone numbers;
- Emergency Exits;
- Location of muster stations and Evacuation Assembly Areas;
- Emergency procedures; and
- Emergency sirens, etc.

The Emergency Management Plan is included in Appendix 16.

The Site Manager/WHSE Coordinator shall ensure that all workers and visitors to the site are briefed in the project/site emergency procedures at induction.

A copy of the Emergency Evacuation Plan shall be displayed on the Site Notice Board and a copy made available at each work site.

The emergency plan shall be reviewed at the Project Team Meetings and following any emergency, critical incident and emergency drill.

4.21.2 Emergency Drills

An emergency scenario drill shall be conducted once every three months with details recorded. Drills shall include an emergency scenario which is relevant to site activities on the day of the drill. The Project Coordinator/WHSE Coordinator shall record details of the drill and any lessons learnt on Emergency Drill Evaluation (SE6217)

The emergency scenarios to be used during emergency drills shall be determined at Team Meetings

Following an emergency/critical incident, the incident shall be reviewed, and lessons learnt documented on the Emergency Drill Evaluation (SE6217).

The Project Manager shall also review the outcomes of the drill, emergencies at Project Team Meetings.

Lessons learnt shall be communicated to workers on site via a toolbox talk and recorded on the Record of Training and Consultation (SE6108).

4.21.3 Emergency Equipment

The Project Team/First Aider (Competent Person) shall identify required emergency equipment using the Project Risk Register (SE4131)

Where task specific emergency equipment is required the competent person shall determine the emergency equipment required and the Competencies required:

- Confined spaces – confined space training
- Electricity - electrician

Emergency equipment shall be inspected during site inspections.

First aid equipment shall be checked by the First Aider/WHSE Coordinator quarterly using the list of contents provided with the first aid kit(s).

Emergency equipment such as Fire Extinguishers etc. shall be tested and maintained at regular intervals in accordance with applicable legislation, standards, codes etc. and at least once every 6 months. Equipment shall be checked during site inspections.

The Fire Warden and Site First Aider are to have the appropriate Fire Warden training which outlines the requirements in relation to site emergency equipment.

4.22 FIRST AID

4.22.1 General

A Qualified Person, normally the Site First Aider, in conjunction with the Project Team shall conduct a First Aid Risk Assessment using the Project Risk Register (SE4131)

The Site Manager shall ensure that the site is staffed with appropriately qualified First Aid attendants and is provided with first aid facilities in accordance with the WHS Regulations, codes of practice and Australian standards.

The WHSE Coordinator shall ensure that First Aid Attendant's qualifications are renewed if they expire during the term of the project.

The Site Manager shall ensure that first aid facilities are maintained in accordance with the WHS Regulations and the First Aid Risk Assessment.

First aid kits shall be inspected monthly to ensure kits are fully stocked and the contents have not passed their use by date.

The Site Manager shall ensure that the location of first aid kits, rooms and the names of First Aid Attendants are conveyed to all persons on site and notices to this effect are displayed prominently.

4.22.2 First Aid Procedure

All injuries, first aid treatments no matter how minor must be reported to the designated First Aid Attendant who will provide the necessary treatment and enter the details of the incident shall be recorded on a First Aid & Register of Injuries (SE6204).

In the event of an injury the injured person shall make his/her way to the first aid facility for treatment and to report the injury. In all cases the injured person shall report the injury to their direct supervisor and to the Project Coordinator.

The First Aid Attendant will at all times remain in charge of the casualty until at such time as professional medical assistance has arrived. It is the First Aid Attendants responsibility to decide whether outside assistance is required. The First Aid Attendant may designate somebody else to call the emergency services; this should be done without question.

The sites designated First Aid Attendant may override the decisions of other first aiders except when the other first aider holds a higher certificate, ie. Occupational First Aid.

4.23 INCIDENTS

4.23.1 Incident Investigation & Reporting

The Site Manager/WHSE Coordinator shall ensure that all incidents and illnesses occurring in or around the site, involving A W Edwards personnel, subcontractors, visitors or passers-by, are reported. Any

Workers and visitors shall be informed of the need to report accidents and incidents via site inductions and via the site rules

The WHS manager shall be immediately advised by phone or text message of any incident or near miss event.

Emergency services (Police, Fire, and Ambulance) should also be contacted as a result of a serious incident.

Details of the incident shall be recorded on First Aid & Register of Injuries (SE6204) by the Site First Aider.

An Investigation Report (SE5101) shall be completed by the Site Manager for all incidents that result in or potentially could result in medical treatment, lost time or death.

The Investigation Report (SE5101) shall be reviewed by the WHS Manager and/or Group WHSE Manager. The WHS Manager and/or Group WHSE Manager shall carry out a further investigation if required. The site WHS Committee shall be consulted as required. The WHS Manager and Group WHSE Manager are responsible for ensuring that the Investigation Report (SE5101) is closed our once satisfied that actions taken adequately address the root cause and all preventive actions have been closed out.

Investigations shall be carried out by person's competent in incident investigation.

The Investigation Report (SE5101) shall include as applicable:

- The nature of the injury/incident,
- Treatment administered
- Witness statements,
- Influencing factors,
- Photographs etc. as required.
- Root cause
- Preventive action and person responsible for carrying it out

If changes are required to risk assessments, procedures, SWMS, site rules, etc., the requirements for such changes shall be nominated on the Investigation Report (SE5101)

Refer to the Incident Reporting procedure AWE-014

In the event of an incident occurring, the following chart outlines what procedures may be required to be addressed.

Level	Health & Safety	Environmental	Miscellaneous Incidents	Action Required
INSIGNIFICANT	▪ No LTI ▪ Damage to contractor plant/property <$10K	Insignificant impact (eg. Contained spill 5 ltrs)	Any minor issue/incident that may at some point attract the attention of the media, a local MP, or the broader community -including but not limited to industrial, community impact, legal, and commercial issues.	▪ Notification to WHS Manager within 24hrs. *(Where an A W Edwards/ Rintoul/MBA employee has received an injury, the First Aid report must be completed and sent to the WHS Manager within 2hrs of the incident)* ▪ A W Edwards first aid register to be completed and maintained. ▪ Ensure all incidents are documented within the Site Diary ▪ All enquiries, either by the media or public or any other authority, are to be referred to an Executive Director.
MODERATE / MINOR	▪ LTI ▪ Damage to contractor plant/property between $10K - $50K ▪ Any incident reportable to SafeWork NSW ▪ Any damage to any external party's property of $10K or less.	Minor short term impact (eg. Contained spill 10 ltrs) Minor long term / Moderate short term impact (eg. Contained spill 20 ltrs)	Any issue/incident that is likely to attract the attention of the media, a local MP, or the broader community - including but not limited to industrial, community impact, legal, and commercial issues.	▪ Verbal notification to Group WHSE Manager & Project director within 1hr ▪ WHS Manager or QE Manager to make appropriate notification to SafeWork NSW or EPA (or other consent body) ▪ Project Director to notify Insurance Company & Legal Representation ▪ Written incident investigation report (close out) within 5days. ▪ All enquiries, either by the media or public or any other authority, are to

Level	Health & Safety	Environmental	Miscellaneous Incidents	Action Required
	▪ Any physical injury (Class III) to a member of the public.			be referred to the Senior Project Manager. ▪ Where assessed, the Emergency Response & Incident Plan to be implemented.
CATASTROPHIC / MAJOR	▪ Actual or likely death or permanent disablement ▪ Damage or potential damage to contractor plant or property in excess of $50K. ▪ Any damage to any external party's property of > $10K ▪ Any physical injury (Class II or I) to any member of the public. ▪ Incidents reportable to SafeWork NSW.	Moderate long term / Major short term impact (eg. Contained spill 50 ltrs) Major long term impact (eg. Uncontained spill – into nearby creek/river/ waterway)	Any issue/incident that has attracted or will imminently attract the attention of the media, a local MP, or the broader community - including but not limited to industrial, community impact, legal, and commercial issues.	▪ Verbal notification to Group WHSE Manager & Director in Charge within 1hr ▪ WHS Manager or QE Manager to make appropriate notification to SafeWork NSW or EPA(or other consent body) ▪ Project Director to notify Insurance Company & Legal Representation ▪ Secure the scene of the incident pending any possible investigation by SafeWork NSW or EPA(or other consent body) ▪ Written incident investigation report (close out) within 5days. ▪ All enquiries, either by the media or public or any other authority, are to be referred to the Senior Project Manager ▪ Where assessed, the Emergency Response & Incident Plan to be implemented.

4.23.2 Control of Work Area Following an Incident

Activities associated with the immediate investigation should not alter the accident scene unless this is done in the course of a rescue or the giving of aid or treatment to the injured worker.

All work should stop on the particular process or in the particular area of the incident until approval to resume work is given by the Site Manager or, if the Local Statutory Authority Inspector has issued any Prohibition or Improvement Notice, until after the matters referred to in the notice have been attended to and the Inspector is satisfied that the notice has been complied with.

If work ceases due to a serious WHS incident and/or as a result of a Prohibition Notice being issued by the Local Statutory Authority Inspector, all those engaged in the particular task should be re-inducted or re-instructed in relation to the system of work pertaining to the activity involved in the incident and/or Prohibition Notice prior to the recommencement of work.

4.23.3 Prohibition, Improvement Notice, or Confirmation of Advice Record

If an Inspector issues a Prohibition, Improvement Notice, or Confirmation of Advice Record, such notices must be compiled with to the letter. Clear copies of any notice issued are to be forwarded to the Group WHSE Manager within 24 hours of their issue.

Once steps have been taken to comply with the notice, the Inspector should be contacted and asked to visit to satisfy him/herself that the steps referred to in the notice have been satisfactorily addressed.

A W Edwards personnel are obliged by law to provide assistance to the Inspector. However, no formal interview should take place with the Inspector until A W Edwards personnel have obtained legal advice from the Company or its legal advisors. In the event of a formal interview, A W Edwards lawyers may be present.

Frequently, the cause(s) of a particular incident may not become evident for many months or until after a detailed investigation. Care should therefore be taken in conversations with any person regarding possible reasons for the incident as obviously such speculation may be incorrect. A W Edwards personnel have an obligation to assist the Inspector and truthfully answer any questions; this is not assisted by speculating as to possible causes.

4.23.4 Subcontractors' Investigations

Subcontractors are defined as employers by legislation and as such are required to carry out their own investigations following any safety related incidents.

The Subcontractor is also to notify the Local Statutory Authority and their insurers where required. The Subcontractor is to provide A W Edwards with details of any notification provided by and/or to Local Statutory Authority in relation to such incidents and a copy of their internal report into the incident.

4.23.5 Notifiable Incidents

The Group WHSE Manager/WHS Manager shall notify the regulatory authority (SafeWork NSW 13 10 50) immediately after becoming aware that a notifiable incident has occurred.

All incidents that may result in a worker's compensation claim being lodged shall be notified to the company's insurer within 48 hours. In the event of a Subcontractor incident in this category, the Group WHSE Manager shall request a copy of the Subcontractor's notification form as proof of notification.

In accordance with WHS Legislation, incidents that require notification are:

- The death of a person;
- A serious injury or illness of a person; and
- A dangerous incident.

Serious injury or illness of a person means an injury or illness requiring the person to have:

- Immediate treatment as an in-patient in a hospital; or
- Immediate treatment for:
- The amputation of any part of his or her body; or
- A serious head injury; or
- A serious eye injury; or
- A serious burn; or
- The separation of his or her skin from an underlying tissue (such as degloving or scalping); or
- A spinal injury; or
- The loss of a bodily function; or
- Serious lacerations; or
- Medical treatment within 48 hours of exposure to a substance.

A *dangerous incident* means an incident in relation to a workplace that exposes a worker or any other person to a serious risk to a person's health or safety emanating from an immediate or imminent exposure to:

- An uncontrolled escape, spillage or leakage of a substance; or
- An uncontrolled implosion, explosion or fire; or
- An uncontrolled escape of gas or steam; or
- An uncontrolled escape of a pressurised substance; or
- Electric shock; or
- The fall or release from a height of any plant, substance or thing; or

- The collapse, overturning, failure or malfunction of, or damage to, any plant that is required to be authorised for use in accordance with the regulations; or
- The collapse or partial collapse of a structure; or
- The collapse or failure of an excavation or of any shoring supporting an excavation; or
- The inrush of water, mud or gas in workings, in an underground excavation or tunnel; or
- The interruption of the main system of ventilation in an underground excavation or tunnel.

4.23.5.1 OFSC Reportable

OFSC Incident Report shall be completed for the following where A W Edwards is the principal contractor:

- All fatalities irrespective of the project value (notify immediately to 1800 652 500 and provide report within 48 hours).
- Any incidents resulting in an LTI and RWIs (Restricted Work Injuries) where the project value is $3 million or more (provide report within 48 hours if a Notifiable Incident, otherwise provide report within 3 weeks).
- Any MTI (may include RWIs) or dangerous occurrence on a Scheme Project (provide report 48 hours if a Notifiable Incident, otherwise provide report within 3 weeks)

4.23.6 Site Specific Incident Notification Requirements

4.23.6.1 Construction Site Boundaries

Should an incident occur that has the potential to compromise the perimeter protections implemented on the project, A W Edwards Project Manager will send a text message to the Projects Principal's Authorised Person advising of the incident.

Within 1 Hour of being made aware of such an incident, A W Edwards will issue an Aconex to the Principal's Authorised Person briefly outlining A W Edwards response actions.

If the A W Edwards Project Director is unable to provide the notifications, then the Site Manager, Project Manager, or WHS Manager (in this cascading order) will provide this notification.

4.23.6.2 Principal Authorised Person (PAP) Incident Notification

Notify as per the diagram over the page, for any notifiable incident (see *s4.23.5 Notifiable Incidents* of this Management Plan) and any incident requiring medical treatment (MTI) or involving lost time (LTI), or incidents with potential impacts to SINSW business or reputation.

Further to section 4.23.1, A W Edwards will undertake a preliminary investigation of all classification 3 and 4 incidents (see diagram on the next page) within 5 Business Days of the Incident, unless otherwise agreed by the Principal's Representative. Investigations for classification 0, 1 and 2 incidents must be completed within 10 Business Days of the Incident.

Client notification contact detail:

Carl Alderson	Project Director	MACE Australia		Carl.Alderson@macegroup.com
(PAP) Josh Malin	Senior Project Manager	MACE Australia		Josh.Malin@macegroup.com
Daniel Iuliano	Project Manager	MACE Australia	0401 767 377	Daniel.Iuliano@macegroup.com
Gordon Barlow	Assistant Project Manager	MACE Australia	0423 119 657	Gordon.Barlow@macegroup.com

4.23.7 Project Specific Notification Requirements

4.23.7.1 SSD Condition A24

The Planning Secretary must be notified through the major projects portal immediately after the Applicant becomes aware of an incident. The notification must identify the development (including the development application number and the name of the development if it has one), and set out the location and nature of the incident.

4.23.7.2 SSD Condition A25

Subsequent notification must be given and reports submitted in accordance with the requirements set out in Appendix 1.

4.23.7.3 SSD Condition A26

The Planning Secretary must be notified through the major projects portal within seven days after the Applicant becomes aware of any non-compliance. The Certifier must also notify the Planning Secretary through the major projects portal within seven days after they identify any non-compliance

4.23.7.4 SSD Condition A27

The notification must identify the development and the application number for it, set out the condition of consent that the development is non-compliant with, the way in which it does not comply and the reasons for the non-compliance (if known) and what actions have been, or will be, undertaken to address the non-compliance. A non-compliance which has been notified as an incident does not need to also be notified as a non-compliance.

4.23.7.5 SSD Condition A28

A non-compliance which has been notified as an incident does not need to also be notified as a non-compliance.

Client Incident Notification Protocol

Classification	4 – Critical Incident	3 – Emergency	2 – Medical Incident	1 – Incident	0 – Near Miss
Description	A critical incident is an actual or potential untoward event which cause major disruption to SINSW or DoE, and have critical impact on its operations and performance, reputation and stakeholder relations or even viability. A critical incident may be physical in nature, e.g. resulting from an escalating operational, safety or environmental emergency. Critical incidents are characterised by the severity of impact in the context in which they occur, and by the need for urgent strategic management by SINSW.	A major event at a Project site that requires a coordinated response to preserve life, property and the environment. For SINSW it includes sites where there may be construction failure, serious safety oversights, fire, explosions, spills, gas leaks, road accidents, natural disasters, civil disturbances (riots or bomb threats) or regulated notifiable events[1]. Such events would be managed by an Emergency Management Team formed at the Principal Contractor's discretion and per contractual requirements.	A medical incident is where medical treatment (not first aid) is required. It may cause short term disruption or be reported to a regulator or other legislative body.	Any occurrence that causes minor harm to an individual or short-term disruption in the workplace but which can be dealt with by available resources – whether or not the Emergency Services are called (e.g. slips, trips or falls). These events would be dealt with by a Principal Contractor and reviewed by SINSW.	An unplanned event that did not result in injury, illness or damage – but had the potential to do so. A Near Miss requires a secondary classification based on the potential maximum reasonable outcome from the incident. Investigation process should occur based on the secondary classification for a near miss.
Principal Contractor Reporting HSD Notification	To: SINSW Principal Representative Verbal - Immediate Report - < 2 hours	To: SINSW Principal Representative Verbal - Immediate Report - < 2 hours	To: SINSW Principal Representative Verbal - Immediate Report – End of Days	To: SINSW Principal Representative Verbal - Immediate Report – End of Days	To: SINSW Principal Representative Verbal - Immediate Report – Dependant on the secondary classification of incident

4.23.8 Lessons Learnt

Following a WHS incident and on receipt of the Investigation Report, the WHS Manager may where necessary notify other sites advising of the incident and giving advice of what action is to be taken by all sites, and reporting on the effectiveness of the corrective actions.

At the completion of any investigation into a WHS incident a summary of the findings will be disseminated as required.

4.23.9 Trauma & Grief Counselling

If the incident involves serious injury, a fatality, or where deemed necessary, trauma/grief counsellors will be engaged to provide care and assistance as required.

4.24 CRITICAL INCIDENTS

The Emergency Management Plan shall address the management of critical incidents.

Following any critical incident, the critical incident response shall be reviewed by the Emergency Response Controller and Directors and/or Group WHSE Manager using Critical Incident Review (SE9306).

The critical incident response shall also be reviewed at the succeeding Team Meeting.

4.25 WORKERS COMPENSATION & REHABILITATION

4.25.1 Overview

A W Edwards employees will be advised of the requirements to complete workers compensation forms and of the Company's rehabilitation policy at the Company Induction.

4.25.2 Medical Referral

If a A W Edwards employee is referred for treatment off site, the First Aider will advise the employee that Workers Compensation forms are to be completed even if time has not been lost.

The First Aider will also advise the Project Coordinator or nominee of any person that is to be referred to a medical facility following any reported injury and/or illness associated with works carried out on the site.

Where the sick/injured person is an employee of A W Edwards, the treating first aider will arrange for the person to complete the required Workers Compensation forms on their return from the medical facility. The completed workers compensation forms are to be given to the WHSE Coordinator for review before being forwarded to the HR Manager. If A W Edwards personnel are unable to return to work, the HR Manager will arrange for workers compensation claim forms to be forwarded to their home address.

4.25.3 Returning to work

Where any person (direct or Subcontract) has been referred to an off-site medical facility the sick/injured person must obtain an iCare medical certificate from the treating medical practitioner.

The medical certificate is to state if the sick/injured person is fit to return to work on normal pre-injury/illness duties, alternate duties or if they are not fit to return to work. If the medical practitioner nominates alternative duties a Return to Work Program is to be provided in accordance with the employer's rehabilitation procedures. Prior to the return to work on normal pre-injury duties a medical clearance in the form of an iCare medical certificate must be provided.

4.25.4 Workers Compensation Records

The WHSE Coordinator is responsible for ensuring that the early injury/illness notification (within 48 hours) is completed and forwarded to the workers compensation provider and to the Return to Work Coordinator, together with the employer and employee workers compensation forms in the required time frame. If claims for workers compensation are not made in a timely manner, significant problems can develop which may lead to unnecessary work and delays settling claims.

4.25.5 Medical Costs

All accounts relating to the treatment of any work-related injury/illness are to be forwarded to the HR Manager as soon as possible after receipt.

4.25.6 Rehabilitation

The rehabilitation of any A W Edwards employee will be in accordance with the Company's return to work procedure.

The Return to Work Coordinator is responsible for liaising with the company's workers compensation provider and the rehabilitation provider in the management of any particular 'Workers Injury Management Plan'. The plan will be developed and implemented in consultation with the sick/injured A W Edwards employee and medical advisers.

A W Edwards will also work with our subcontractors and service providers in supporting their implementation of injury management and return to work plans, as required on the project.

5 Environmental Management

5.1 CONSTRUCTION ENVIRONMENTAL MANAGEMENT PLAN (CEMP)

The project team shall manage the project in accordance with the various environmental Acts and Regulations and applicable Australian Standards.

The CEMP has been prepared to address the requirements of the Project approval documents (State Significant Development - SSD9914 – Darlington Public School, Consent Conditions B11, B12 (a-g)) and other requirements, including existing site conditions and hours of work, as detailed in Appendix 1 - Project Scope (SE9301)

The scope of the CEMP is to:

- Determine and assess the environmental risks associated with the works;
- Provide appropriate management and control of identified risks and opportunities, including monitoring programs and working procedures; and
- Provide sufficient resources and training to ensure that the objectives of the CEMP are met;
- Describe procedures for the management of
  - incidents,
  - non-conformances/non-compliances handling,
  - communication protocols;
- Manage sustainability matters; and
- Describe record keeping processes

The Environmental Policy and Environmental Sustainability Policy are included in Appendix 2 describe A W Edwards' commitment to continual improvement in environmental performance and compliance with applicable legal requirements.

These policies will be displayed at the project office, and communicated to staff, sub-contractors and other interested parties via inductions and ongoing awareness programs

5.2 SITE LOCATION PLAN

Site Location Plans have been prepared to accurately reflect the project as described in the approved EIA and consent and is located in Appendix 9a (stage 1) and 9b (stage 2).

5.3 OBJECTIVES & TARGETS

A W Edwards' objective is to review legislative, regulatory and contractual requirements and provide a framework to ensure that all environmental requirements are met, including:

- Meeting Client and Stakeholder requirements;
- Achieving environmental targets and key performance indicators for the project; and
- Compliance with legislation, ministerial and authority requirements.

The key environmental targets for the project are:

Objective	Target
To minimise waste going to landfill	> 80% of construction waste generated during site preparation and building works is diverted from landfill and either recovered, recycled or reused
Reduce the number of pollution incidents (ie. notifiable environmental incidents)	Nil (reportable) pollution incidents
Number of EPA/Local Council Clean Up Notices	Nil clean up notices

Number of EPA/Local Council Infringement Notices	Nil infringement/penalty notices
To successfully manage/ eliminate/minimise environmental disturbances on our projects, eg. noise, vibration, dust, odours	Nil community complaints
Compliance with monitoring and inspection regime	One inspection (of environmental risks and controls) completed each day; included in the Hazard Observation inspection
Number of (environmental) systems audits conducted - Internal	1 each quarter
Number of (environmental) systems audits conducted - External	3 for the duration of the Project

Performance against environmental targets shall be reported monthly by the Project Manager in the form of Monthly Project Managers Report (PA11301).

5.4 KEY ENVIRONMENTAL ISSUES

The key environmental issues on the project are described in the Project Risk Register (SE4131) (Appendix 6).

5.5 ROLES AND RESPONSIBILITIES

Project specific roles and responsibilities are outlined in Section 2.2 of the management plan.

5.6 SUPPLEMENTARY MANAGEMENT PLANS & DOCUMENTS

Supplementary environmental related management plans and other management related documents may be developed by the project team, or by specialist environmental consultants as required by contract conditions or as a result of the risk assessment to provide direction on the management of specific environmental aspects.

Supplementary environmental plans that apply to the project are listed in the Project Risk Register (SE4131) (Appendix 6).

5.7 SERVICE PROVIDERS (SUBCONTRACTORS & SUPPLIERS)

A W Edwards Project Team will:

- Include environmental management requirements and conditions, consistent with the head contract in the planning, selection and management of Subcontractors;
- Ensure Subcontractors are advised in writing of the relevant Planning Approval conditions or requirements and, any other applicable Authority requirements prior to commencing any work;
- Undertake a review of Subcontractors' documentation to verify compliance with the requirements of the subcontractor's activities and ensure that the documentation aligns with this CEMP(s); and
- Undertake appropriate monitoring of each Subcontractor's environmental protection measures to ensure that the specified environmental protection requirements are effectively implemented and maintained

5.7.1 Engagement

Subcontractors shall also be made aware of their responsibilities under the terms of the applicable environmental legislation, by being provided a copy of this Project Management Plan and/or the Project Risk Register (SE4131) and by via the information provided in site induction.

Subcontractors and suppliers shall meet the environmental management requirements specified in this plan and the Project Risk Register (SE4131).

The Project Manager will determine if Subcontractors will be requested to submit Inspection and Test Plans (ITP) or additional Environmental Control Procedures (ie. details of how they manage any environmental aspects and impacts) associated with their activities. The requirements to submit environmental control measures will be detailed in the Subcontract or on the Purchase Order.

Consideration of normal and abnormal operations, along with emergency scenarios will be included in ITPs and/or Emergency Management Plan as required.

5.7.2 Monitoring Subcontractor Environmental Performance

Subcontractor performance shall be monitored via audits and during site inspections – Hazard and Observation Sheet (SE6301).

Should environmental issues be identified by the Site Manager/WHSE Coordinator, the environmental issues shall be recorded on the Hazard and Observation Sheet (SE6301). The Site Manager/WHSE Coordinator shall manage the close out of the identified issues.

Audits will be organised by the Group WHSE Manager.

5.8 ENVIRONMENTAL IMPACT ASSESSMENT

The Project Manager shall ensure that the environmental impact assessment (EIA) undertakings, consent conditions and pollution control approvals, as identified in the:

- Statement of Environmental Effects
- Review of Environmental Factors (REF)
- Development consent conditions (under the Environmental Planning and Assessment Act)
- Authority licence and permit conditions (where applicable) for contract work,

and any applicable approvals, licences or permits are accessible on site and ensure that all works are consistent with the scope of works in the EIA.

5.9 RISK MANAGEMENT – IMPACTS & ASPECTS

Potential environmental impacts and aspects associated with the project (including risks and opportunities) shall be identified prior to the start of the project, by the Project Manager during the project risk review and via a review of council or planner requisites, legislative or statutory authority requirements, any formal Environmental Impact Assessment or Review of Environmental Factors, and/or contract requirements. Identified environmental aspects and impacts, and controls will be recorded in the Project Risk Register (SE4131) – Appendix 6.

Where required or applicable to the works, the Project Manager will engage specialist environmental consultants to carry out a survey of the site to confirm constraints and to provide recommendations on how environmental aspects shall be managed.

The Project Risk Register (SE4131) will be provided to Subcontractors and suppliers as part of the Subcontract and Supply Contracts.

Where risks are identified as extreme or high in the matrix, the impacts associated with A W Edwards activities, products and services will be deemed as significant and require operational controls that shall be described on the Project Risk Register (SE4131).

Significant aspects may impact on the environment positively (e.g. recycling) or negatively (e.g. pollution).

5.10 HOLD POINTS

Hold points beyond which approval is required to proceed with a certain activity are summarised in the table below.

HOLD POINT	RELEASE OF HOLD POINT	BY WHOM
Prior to Vegetation Clearing / Ground Disturbance	▪ Pre-clearing inspection ▪ Erosion and sediment control plan	▪ Qualified Ecologist ▪ A W Edwards

HOLD POINT	RELEASE OF HOLD POINT	BY WHOM
Discharge of water	▪ Water tested to verify compliance and approval to discharge ▪ Construction Groundwater Management Plan ▪ Construction Soil and water Management Procedure	▪ A W Edwards
Out of hours works	▪ Construction Noise and Vibration Management Plan ▪ Out of hour works approval	▪ A W Edwards
Use of local roads by heavy vehicles	▪ Road dilapidation report	▪ A W Edwards ▪ Transport engineer/ consultant
Construction identified as affecting buildings	▪ Building condition survey	▪ Construction surveyor

5.11 ENVIRONMENTAL CONTROLS

The Project Risk Register (SE4131) describes operational controls, Environmental Management Measures and identifies the Environmental Control Procedures applicable to the project.

The Site Manager will ensure that environmental controls are inspected in accordance with these plans - Hazard and Observation Sheet (SE6301).

Information on hazardous materials, including each material's potential impact on the environment and measures to be taken in the event of accidental release will be managed using information in the Hazardous Chemicals Register & Risk Assessment (SE6205) and Safety Data Sheets.

The following subsections provide information to support the management measures identified in the Project Risk Register.

5.11.1 Environmental Control Map (ECM)

A W Edwards has developed and will implement and maintain an ECM(s) for this project.

An ECM is a document prepared to assist in the planning and delivery of construction works. The individual ECM(s) will be specific to the site, work area and/or work activity, and will identify the location of physical environmental protection measures and controls to minimise the impact of construction activities on the environment and community in and adjoining the site, specific work area or work activity.

The ECM is prepared as a map, suitably enlarged for mounting on the notice board, and the content of such is communicated to all workers during the site induction.

The Project Team will conduct regular reviews of the ECM to ensure that it incorporates current works progression and any changing site characteristics. Any amendments to the ECM will be communicated to subcontractors using the site communications system, email or handed to the nominated supervisor as a hardcopy.

5.11.2 Contaminated Site

Projects undertaken on contaminated sites will undergo a Contaminated Site Assessment (CSA). CSA reports shall be provided as part of planning approvals process of a proposed development. The CSA and associated approvals shall be reviewed by the Project Manager. All relevant CSA reports, documents and relevant approvals will be obtained and reviewed prior to site activities commencing. Operational controls will include any specific procedures described in the report or approvals.

Where required, ITPs and/or SWMS will be developed to address requirements of CSAs and to ensure verification of the works being completed as described.

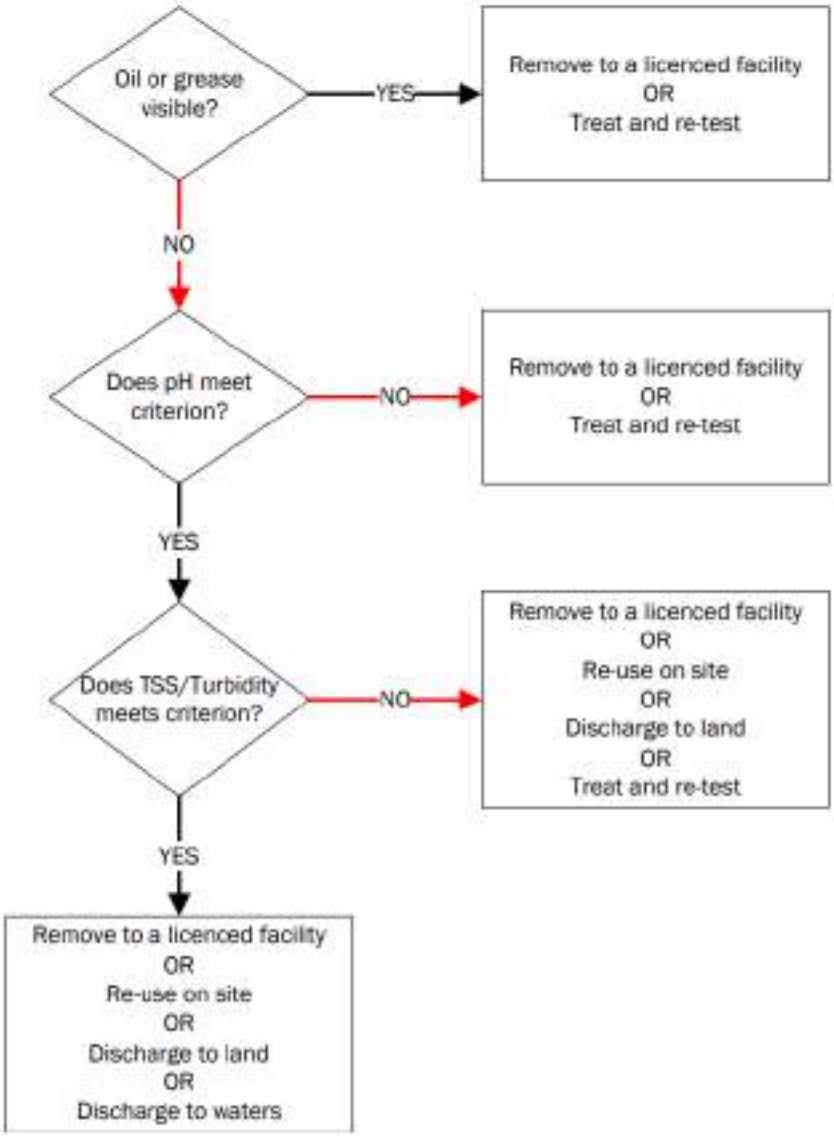
The Site Manager will also ensure that the site workforce is made aware of potential contamination issues associated with the contaminated site development. Advice shall be provided should problems be identified.

The Site Manager will maintain spoil disposal records

5.11.3 Dewatering and Discharge Process

Water runoff/stormwater on site is collected and/or prevented from running off to adjacent areas.

Collected water shall be tested prior to discharge. See flowchart for test and discharge process below.



Tests shall be conducted on samples of water prior to any discharge to the stormwater system. During pumping operations further tests are to be completed at 30min intervals. Water test results shall be recorded in the Water Testing Register (SE9401)

Water shall be treated (as necessary) to achieve the required pH and turbidity levels. Where required stormwater collected shall be flocculated to settle suspended particles (typically clays and fine silts).

From the ANZECC & ARMCANZ Water Quality Guidelines, the following acceptance criteria for the discharge of water into any water body or stormwater system is:

pH	Turbidity (NTU)
6.5 – 8.0	6 - 50

A W Edwards will engage a suitably qualified hygienist/specialist to undertake water testing (at or in adjacent natural water courses or stormwater systems) to calculate acceptance criteria, in addition to establishing a correlation between Total Suspended Solids (TSS – mg/L) and Turbidity (NTU).

Once the pH and Turbidity levels are within the accepted limits, the Site Manager shall apply for a permit (from Sydney Water and/or Local Council), and where required by the contract, from the Client, before discharging water into the stormwater system.

Testing equipment is to be stored and calibrated in accordance with the manufacturer's recommendations.

Should local waterways have sustained damage as a result of the release, A W Edwards will rehabilitate the area

After a significant rain event, the WHSE Coordinator or other Project Team member will conduct a site inspection and record any areas requiring dewatering on a Hazard and Observation Sheet (SE6301) and follow the above noted process for testing prior to dewatering/discharge.

5.11.4 Erosion and Sediment Control

The Site Manager shall ensure that an Environmental Control Map (ECM) including sediment and erosion controls shall be developed in accordance with *The Blue Book - Managing Urban Stormwater: Soils and Construction Guidelines*.

Materials shall be stockpiled be located away from key drainage lines and water ways to prevent potential contamination.

Site rehabilitation of disturbed areas will be undertaken progressively as activities are completed during construction.

Adequate drainage measures shall be provided to control entry of groundwater and prevent ingress of surface water runoff to open excavation trenches.

Sediment control measures shall be inspected during site inspections and cleaned or repaired as necessary.

Erosion and sediment control measures to remain in place until disturbed areas have been stabilised.

5.11.5 Dust and Air Management

A W Edwards shall take all reasonable steps to minimise dust and air pollution arising from the Project's activities.

The control measures to be implemented to maintain the ambient air quality are;

- Excavated areas shall be wet down using water spray.
- All asbestos impacted soils shall be wetted (but not flooded) prior to and during excavation and movement of soils
- Vehicles leaving site must use the designated site access routes
- Ensuring that all loads entering or leaving the site are covered
- Vehicle wash down areas shall be established to ensure all mud and soil from construction vehicles is not carried onto public roads
- Excessive use of vehicles and powered construction equipment to be avoided
- Equipment to have dust suppressors fitted
- Shade cloth or hoarding shall be erected around the perimeter of the project.
- Any machines or plant that is producing excessive visual exhaust shall be repaired or removed from site.
- Plant or machinery should not be left idling. If not in use vehicles and equipment are to be turned off.

- Stockpiles shall be maintained and contained to minimise dust.
- Trucks transporting spoil and other waste materials from site must be covered.
- Work shall be minimised during high wind periods.
- Machinery shall be maintained in accordance with manufacturer's specifications in order to meet the requirements of the *Protection of the Environment Operations Act 1997* and associated regulations.
- Plant and equipment must be regularly inspected to ascertain that fitted emission controls are operating efficiently.
- Debris and waste shall be cleaned from the works area as soon as practical to ensure light-weight material is not dispersed by wind gusts.
- Monitoring for air quality management controls as part of environment and sustainability inspections, particularly during high risk activities

5.11.6 Light Spill

Artificial lighting is required for the construction activities, safety, site administration/accommodation and security during the construction phase. Sensitive receivers of light spill from construction activities are identified in the Project Risk Register (SE4131).

A W Edwards will take all reasonable steps to minimise light pollution arising from the Project's activities. The mitigation measures include but are not limited to:

- External lighting in compliance with AS 4282-2019 Control of the obtrusive effects of outdoor lighting
- Stationary security lighting maintained at low levels
- Out-of-hours work task lighting will be directed away from sensitive receivers
- Construction traffic will be advised to avoid directing light towards sensitive receivers
- Construction lighting inspections conducted throughout construction phase to identify and provide an opportunity to correct any non-conformances
- Lighting spill complaints shall be managed in accordance with contract conditions and Community Liaison Management Plan (where one exists)

5.11.7 Landforms, Geology and Soils Management

The proposal has the potential to impact negatively on the surrounding environment due to excavations that may lead to erosion and sediment transfer off site. Minor excavations are required for footings and for service connections to the new temporary training facility.

Possible control measures to be implemented include;

- Develop and implement an erosion and sediment control plan
- Appropriate stockpiling of materials at least 5m away from drainage lines, water ways and drains
- Spill kits and a temporary refuelling bund should be installed and used on site
- Dispose of excavated material in accordance with EPA's waste classification guidelines
- Avoid excavation during heavy periods of rain (where possible)
- Site rehabilitation of disturbed areas will be undertaken progressively as activities are completed during construction.
- Adequate drainage measures should be provided to control entry of groundwater and prevent ingress of surface water runoff to open excavation trenches.

See Waste and Spoil Management Flowcharts attached in Appendix 12.

5.11.8 Flora and Fauna

The removal and retention of tress will be carried out in accordance with the Arboriculture Impact Assessment prepared.

If any fauna species is identified on site the Wildlife Information, Rescue and Education Service (WIRES) should be contacted in order to relocate it offsite to a suitable habitat area.

Tree protection zones shall be established and maintained where required. Tree protection zones shall be established to protect flora

Noxious weeds should be managed in accordance with the requirements of the Noxious Weeds Act 1993, including disposal off-site in sealed bags to a licenced waste disposal facility.

All areas disturbed shall be immediately stabilised and reinstated as soon as practicable.

Construction works must be stopped if any previously undiscovered threatened species or communities are discovered during works. An assessment of the impact and any required approvals must be obtained. Works must not recommence until the client's representative has provided written approval to do so.

5.11.9 Bushfire

Bush fire hazards and risk issues associated with a bush fire control measures will include:

- Constant monitoring of the rural fire brigade website and fire location maps
- Monitoring of bush fires in the surrounding areas and local alerts
- During total fire ban days, no external hot works will be conducted

Potential risk of bush fire in the construction area and surrounding area are low risk. In the event of a bush fire close to the construction area the site will be evacuated in accordance with the Emergency Management Plan.

5.11.10 Heritage

In the event an unexpected historic relic or object of non-aboriginal heritage is identified during construction, work in the immediate vicinity of the find is to stop and the project Heritage Consultant, or NSW Heritage Office contacted.

Refer Unexpected Heritage Finds process chart in Appendix 11.

The client may direct that an archaeologist is engaged to determine the significance of the find, and if required, determine the notification, consultation, and approval requirements. Works must not recommence until written approval has provided to do so.

If suspected Aboriginal material has been uncovered as a results of development activities within the Project Area:

- Work in the surrounding area is to stop immediately
- A temporary fence is to be erected around the site, with a buffer zone of at least 10 metres around the known edge of the site
- An appropriately qualified archaeologist consultant is to be engaged to identify the material
- If the material is found to be of Aboriginal origin, the Aboriginal community is to be consulted in a manner as outlined in the OEH guidelines: Aboriginal Cultural Heritage Consultation Requirements for Proponents (2010)

Should Human Remains be located at any stage during construction works within the Project area, all works must halt within the immediate area to prevent any further impacts to the remains. The site should be cordoned off and the remains themselves should be left untouched. The nearest police station, the relevant Local Aboriginal Land Council and the Heritage Regional Office are all to be notified as soon as possible.

If Aboriginal cultural materials are uncovered as a result of development activities within the project area, they are to be registered as 'sites' in the Aboriginal Heritage Information Management Systems (AHIMS) managed by the

Heritage Office. Any management outcomes for the site will be included in the information provided to the AHIMS.

All effort must be taken to avoid any impacts on Aboriginal Cultural Heritage values at all stages during the development works. If impacts are unavoidable, mitigation measures should be negotiated with Heritage Office and the Aboriginal community.

5.11.11 Construction Noise and Vibration

In the event that any impacts are predicted to exceed the noise or vibration requirements, A W Edwards shall implement mitigation measures.

Control measures to be implemented to manage the noise and vibration during construction are;

- Noise monitoring of the sensitive receivers will be undertaken during construction, where noise levels are predicted to be exceeded.
- Training and toolbox talks on site focusing on noise management so the workers understand the importance of noise and the potential impact on nearby receivers.
- Radios and stereo players are prohibited from use outdoors.
- Truck drivers to be informed of designated vehicle routes, parking locations, acceptable delivery hours or other relevant practices (for example, minimising the use of engine brakes, and no extended periods of engine idling).
- Where Pneumatic equipment is to be used, select super silenced compressors, silenced jackhammers and damped bits.
- Regular inspection and maintenance of equipment to ensure it is in good working order.
- Locate site vehicle entrances away from sensitive land uses where possible.
- Noisy plant items must be positioned any as far as practical from residential receivers.
- Slab demolition methods to include shear, pulveriser and ripper attachments fitted to excavators to progressively demolish slab panels for later removal
- Avoiding hydraulic. Pneumatic hammering whenever possible
- Use of lower vibration construction methods
- High noise generating activities near sensitive receivers is not to be carried out for more than 3 hours at a time, with a minimum respite period of one hour between sessions.
- For activities where acoustic controls and management techniques still cannot guarantee compliant noise levels, implement a notification process whereby nearby developments is made aware of the time and duration of noise intensive construction processes.

The Site Manager shall periodically check the site and nearby residences and other sensitive land uses for noise problems so that solutions can be quickly applied

As a guide, safe working distances for typical items of vibration intensive plant are listed in table below. The safe working distances are quoted for both "cosmetic" damage and human comfort. The safe working distances must be complied with at all times, unless otherwise approved by the relevant authority. The safe working distances presented in Table 1 are indicative only and will vary depending on the particular item of plant and local geotechnical conditions. They apply to cosmetic damage of typical buildings under typical geotechnical conditions.

Table: Recommended Safe Working Distances for Intensive Activities

Plant Item	Rating/Description	Safe Working Distance	
		Cosmetic Damage (BS 7385)	Human Response (BS 6472)
Vibratory Roller	< 50 kN (Typically 1-2 tonnes)	5 m	15 m to 20 m
	< 100 kN (Typically 2-4 tonnes)	6 m	20 m
	< 200 kN (Typically 4-6 tonnes)	12 m	40 m
	< 300 kN (Typically 7-13 tonnes)	15 m	100 m
	> 300 kN (Typically 13-16 tonnes)	20 m	100 m
	> 300 kN (> 18 tonnes)	25 m	100 m
Small Hydraulic Hammer	(300 kg - 5 to 12t excavator)	2m	7m
Medium Hydraulic Hammer	(900 kg – 12 to 18t excavator)	7m	23m
Large Hydraulic Hammer	(1600 kg – 18 to 34t excavator)	22m	73m
Vibratory Pile Driver	Sheet piles	2 m to 20 m	20 m
Pile Boring	≤ 800 mm	2 m (nominal)	N/A
Jackhammer	Hand held	1 m (nominal)	Avoid contact with structure

Note: More stringent conditions may apply to heritage or other sensitive structures

5.11.12 Storage and Use of Hazardous Materials

Construction hazard and risk issues associated with the use and storage of hazardous materials will be addressed in the Project Risk Register (SE4131) and reviewed to ensure that they are consistent with Australian standards. These measures will include:

- Hazardous chemicals will be stored on/in a secured bund that will capture 110% of the volume of substances
- Refuelling will be conducted in an area located in close proximity to spill kit (and as marked on the ECM) and/or refuelling will be conducted on portable catchment trays (applicable to the vehicle/plant and refuelling operation);
- Refuelling areas will not be located near any drains or stormwater systems;
- Spill kits - appropriate for the type and volume of hazardous materials stored or in use, to be readily available and accessible to construction workers. Kits to be kept at hazardous materials storage locations, in site compounds and on specific construction vehicles. Where a spill to a watercourse is identified as a risk, spill kits to be kept in close proximity to potential discharge points;
- Training in the use of spill kits to be given to all personnel involved in the storage, distribution or use of hazardous materials; and
- All hazardous materials spills and leaks to be reported (in accordance with the contract) to the Clients Representative and actions to be immediately taken to remedy spills and leaks.

5.11.13 Traffic Management

A traffic management plan shall be developed in consultation with the relevant authorities and implemented on the project. The Traffic Management Plan shall limit the impact on the surrounding community by limiting plant and machinery movements to outside peak traffic times.

Construction vehicles, materials and equipment should be scheduled for deliveries to minimise coinciding with the road network peak periods.

Traffic management and signage shall be established at the site entrance and exit to minimise risks to workers, motorists, cyclists and pedestrians.

All pavement and road surfaces damaged during construction will be restored when work is finished.

- Existing traffic access and arrangements will be maintained during construction as much as practicable
- Contractors will be encouraged (during the site induction process) to use public transport.

5.11.14 Unexpected (Contamination) Finds Procedure

Where potential ACM or other contamination is observed during works, workers are directed to cease work in the immediate area and contact the A W Edwards site manager/foreman.

See Unexpected Finds Protocol flow chart attached in Appendix 10 to this plan.

The Site Manager shall view and photograph the area where the contamination is detected.

5.11.14.1 For suspected asbestos contamination

If one off pieces of bonded ACM is present in an isolated area, the Site Manager may direct safe removal of contamination as follows;

- A W Edwards' workers to wear the following Personal Protective Equipment (PPE):
  - Disposable half-face particulate respirator (P1/P2 rated); &
  - Disposable nitrile/latex gloves.
- ACM bonded fragments should be carefully picked up and placed in heavy duty polythene bags. These bags should be labelled. Bags marked for asbestos waste should not be used for any other purpose.
- Ensure used gloves and respirators are placed in the waste bag.
- Bags should be twisted tightly, folded over and the neck secured in the folded position with adhesive tape, or any other effective method.
- The waste bags should be placed in the designated asbestos waste bin. The bin is to be lined with 200µm or thicker builders' plastic. The bin is permitted to remain on site for no longer than six (6) weeks at any one time.
- Prior to removal, the plastic lining the bin is to be folded over the top of the contents and taped using duct tape or equivalent. The bin to be photographed prior to leaving the site. The contents of the bin are to be disposed of by licensed asbestos removal contractors appropriately. Ensure waste disposal documents are received.

If more than seven pieces of non-friable (aka. bonded) ACM in an isolated area, or suspected friable material is present, the Site Manager shall contact Occupational Hygienist/Environmental Consultant/Licensed Asbestos Assessor to assess the area.

5.11.14.2 For all other suspected contamination

An investigation must be undertaken, and report prepared to determine the nature, extent and degree of any contamination. The level of reporting must be appropriate for the suspected/identified contamination in accordance with legislative requirements, SafeWork NSW advice, and EPA (Guidelines for Consultants Reporting on Contaminated Sites).

A W Edwards shall notify the client and workers of the find while the potential contaminant is investigated.

The Occupational Hygienist/Environmental Consultant/Licensed Asbestos Assessor shall assess the area in accordance with SEPP55 and if required prepare a Remediation Action Plan (RAP) which details the necessary remedial work or management required to render the site suitable to continue works.

Following completed remedial works, A W Edwards shall issue a Site Remediation and Validation Report (SRVR) which documents the completeness of the remedial works to the Client and the EPA (if required).

Any contaminated material or hazardous substance that is removed from site shall be classified first and then stored, transported and disposed of in accordance with EPA requirements at an EPA licensed waste facility

5.11.14.3 Notification of Contamination

If a previously unidentified contamination is discovered within the site, the Project Manager shall provide notification to the Client's nominated representative and will determine whether there is a Duty to Report under relevant legislation.

If required, the Clients Representative shall notify the EPA in accordance with the EPA's Guidelines on the Duty to Report Contamination under the *Contaminated Land Management Act 1997 (2009)*.

5.11.15 Waste Management Reduction and Purchasing

5.11.15.1 General

Waste created during the works will be managed in accordance with the Project Approval, A W Edwards Waste Management Plan (Appendix 17) and applicable legislation.

Measures implemented shall include:

- Management of wastes during construction in accordance with the NSW Government's Waste Reduction and Purchasing Policy (WRAPP);
- Preparation of a site specific Waste Management Plan – which addresses the management of waste in accordance with the waste hierarchy, established under the Waste Avoidance and Resource Recovery Act 2001, classification of waste in accordance with the Waste Classification Guidelines (DECCW 2009) and treatment, transport and disposal in accordance with EPA guidelines,
- Application of the waste minimisation hierarchy principles of avoid/reduce/re- use/recycle/dispose,
- Disposal of any waste material that is unable to be re-used, re-processed or recycled at a facility approved to receive that type of waste,
- Procedures for classifying waste in accordance with EPA's Waste Classification Guidelines,
- Procedures for the recovery of resources from waste where this is beneficial and does not harm the environment or human health, in accordance with the 'resource recovery exemptions' under clause 51 of the Protection of the Environment Operations (Waste) Regulation 2005,
- Installation of segregated bins for recyclable materials and provision for material to be reused or recycled wherever possible,
- The disposal of chemical, fuel and lubricant containers and solid and liquid wastes in accordance with applicable EPA guidelines; and
- Reporting to the Principal's Representative on the amount of material generated, and the amount recycled as part of the Project.

5.11.15.2 Waste Identification and Minimisation

The Project team areas shall identify waste streams in order to minimise waste

Waste minimisation strategies include:

- Staging of activities and the purchase of cut-to-length and prefabricated products where practicable,
- Separate waste streams – excavation, demolition, construction waste
- Separate storage locations and/or destinations for all waste streams
- Liaise with suppliers to minimise packaging and product damage.

5.11.15.3 Disposal

Non-recyclable waste materials shall be managed in the following manner:

- Disposal of at appropriately licensed waste disposal facilities,

- Provision of waste collection facilities
- Disposal of chemical, fuel and lubricant containers, solid and liquid wastes in accordance with EPA guidelines
- Concrete wash out (concrete trucks, concrete pump and other associated equipment) shall be done in accordance with guide\lines nominated in the contract (eg. TfNSW Concrete Washout Guidelines).
- All washout activities will be undertaken in a location identified in the current ECM, using a onsite concrete wash up tray (supplied by AW Edwards). This tray will be located beside the concrete pump when concrete pumping is undertaken. All wash up to be collected in the tray. All operators of concrete trucks and pumping equipment are advised that all wash-up to be undertaken on site utilising the concrete wash-up trays
- Regular waste separation reports will be provided to the nominated A W Edwards Project Team member from the project waste removal contractor

5.11.15.4 Recycling Strategy

Recyclable materials include:

- Spoil,
- Concrete,
- Vegetation,
- Timber,
- Bricks,
- Metal/glass,
- Cardboard Packaging/paper.

Materials that can be re-used on-site should be clearly identified and placed in designated areas Where material cannot be re-used on-site, a collection service for the recyclable materials shall be established

Signs shall be erected within the construction areas to encourage employees to reduce, re-use, and recycle.

Strategies for recycling materials are as follows:

- Spoil: Any spoil will be disposed of or reused where applicable. A suitable location for temporary storage with appropriate sediment control measures will be sought which is away from waterways and any environmentally sensitive areas, and haulage organized.
- Concrete: Waste concrete shall be disposed of at an appropriately licensed facility where separation and recycling can take place. Surplus concrete and concrete washings shall be transported to an appropriate recycling facility.
- Vegetation: Vegetation shall be reused where possible, either by mulching or composting. Any weed waste generated during works shall be disposed of to landfill.
  - Timber: The following procedures shall occur regarding timber wastes:
  - Pallets and other packaging shall be returned to the supplier for reuse where possible,
  - Where practical, wood off-cuts and waste shall be reused,
- Timber products that are not suitable for reuse, but that may be suitable for recycling, shall be stored in a designated area, and removed to an appropriate recycling facility as required.
- Bricks: Where possible, bricks shall be reused on site. Where a large number of bricks are generated from demolition works, they shall be stored in a designated area and removed to an appropriate facility as required.
- Metal/Glass: The following procedures shall occur regarding metal and glass wastes:
  - Drums and other metallic packaging shall be returned to the supplier for reuse where possible,

- Reinforcing steel shall be sold to scrap metal merchants for recycling,
- Metal unsuitable for reuse shall be stored in a designated area and removed to an appropriate facility as required,
- Glass items shall be placed in appropriate recycling bins.

- Cardboard/paper – cardboard and paper wastes shall be placed in appropriate recycling bins. Should quantities exceed bin capacities, the materials shall be placed in a designated area and removed to an appropriate facility as required.

5.11.16 Spoil/Stockpile Management

Spoil shall be stockpiled on site at a maximum of 2m high, where haulage cannot be immediately arranged, and a suitable location sought in accordance with the Erosion and Sediment Control Plan.

All stockpiles will be covered and, where possible, positioned away from waterways and other environmentally sensitive areas. Contaminated material stockpiles will be bunded and (where safe to do so) covered.

Any contaminated stockpiles will be clearly separated from non-contaminated material, with each location being well signposted to prevent inadvertent mixing.

100% of clean spoil will be beneficially reused onsite or locally in accordance with contract requirements.

See Waste and Spoil Management Flowcharts attached in Appendix 12.

Prior to any spoil disposal, the material shall be classified, as per the NSW EPA Guidelines. Spoil will then be disposed appropriately, dependent on the classification. Details of the waste classification shall be passed on to any party reusing the spoil material.

A W Edwards will ensure that all loads entering or leaving the site are covered and that adequate truck and equipment washing facilities are in place. Works will cease in excessive winds, or until sufficient dust suppression can be conducted during the works.

Where vegetation/flora has been marked/determined for removal, vegetation will be maintained as long as possible prior to clearing. Where possible, re-planting/vegetating will occur as soon as possible after or, during works.

5.11.17 Water Quality and Hydrology

Erosion and sediment controls in accordance shall be installed in accordance with the Environmental Control Map (Appendix 14)

All chemicals and oils will be stored in accordance with the manufacturer's specification and Safety Data Sheet, within a bunded area that is protected from rain.

The effectiveness of erosion and sediment controls shall be regularly reviewed and inspected during site inspections (Hazard and Observation Sheet SE6301)

Erosion and sediment controls are only to be removed once the area they are protecting has been stabilised.

Plant and equipment shall be regularly inspected to check for oil leaks

The refuelling of vehicles or machinery is to occur within the hardstand area to prevent the escape of spilled substances to the surrounding environment. Spill kits will be maintained with mobile plant.

5.11.18 Weed Management

Construction activities can have the potential to spread weeds into sensitive areas. However, weeds should be controlled on all sites to ensure construction activities have as minimal impact on the area as possible.

Unless instructed by the contract, or by report provided by the Client, due to any presence of weeds listed as 'priority weeds' under the Biosecurity Act and WoNS within the Proposal Area, all vegetation removed from the site must not be reused as mulch within the work site or off site.

During pre-clearance surveys, 'priority weeds' should be demarcated in order for these to be disposed of separately from any native material. All groundcover should be disposed of in a manner that will prevent spread.

Weed control can be minimised by ensuring the following actions are maintained:

- Ensure plant and equipment brought to the site are not covered in dirt or vegetation,
- Ensure all loads leaving the site are covered,
- Minimise vehicle parking on the site,
- Check/verify imported fill to minimise risks that it may contain noxious weeds,
- Report any suspect weeds to the site management team,
- Be aware of what noxious weeds are on site and in the area- location of noxious weeds will be included in site ECMs, and
- Check all plant/machinery, vehicles and footwear are free of mud, soil and vegetative material before moving through a 'weed free' area, and before leaving the site

5.12 MONITORING

Environmental controls shall be monitored following implementation to ensure that:

- Environmental operational controls are being effectively applied,
- Project specific environmental monitoring targets specified in the Development Consent or other planning permits for air, water and noise are met,
- Unpredicted impacts are identified (as far as is reasonably practicable), and remedial action is taken; and
- The project objectives are being met.

The Project Coordinator and/or WHSE Coordinator is to conduct planned inspections of areas under their control daily using the Hazard and Observation Sheet (SE6301).

Where an environmental risk has been identified, the area shall be made environmentally 'safe' with control measures re-established, repaired, replaced, or newly implemented. Details of any preventative, corrective/ rectification actions shall be recorded on the Hazard and Observation Sheet (SE6301).

Where a non-conformance to the Environmental Management Plan or legislative requirements has been identified by a Project Team member, a non-conformance report in the form of a Corrective Action Request (SE4601) shall be issued.

The Site Manager is responsible for initiating any actions required by the issuing of a non-conformance report and for the acknowledgement that the non-conformance has been addressed and closed out.

For audit, corrective/preventative actions, and non-conformance procedures, see the following sections of this Management Plan;

- s2.8 Project/Site Audits – Quality, WHS, Environmental, Procedures
- s2.8.1 Audit Schedule
- s2.9 Preventative / Corrective Action
- s2.10 Non-Conformances & Breach Notices

5.13 COMMUNICATION

5.13.1 Site Induction

Prior to the commencement of project activities, all site personnel (including Subcontractors) will attend site induction (Refer to Training under WHS).

Site Induction shall include an outline of the requirements of this CEMP, the ECM and the responsibilities and accountabilities of site personnel.

The project environmental site rules will be included in the induction session.

Records will be kept verifying who has attended this induction training.

5.13.2 Visitors Induction

All visitors to site become the responsibility of an A W Edwards Project Team member in relation to safety and the environment. Visitors shall undertake a visitor's induction prior to entry to any site, and will be accompanied by an A W Edwards Site Inducted person at all times.

5.13.3 Consultation

Toolbox/WHS Committee Meetings (Refer consultation process under WHS) shall be used to address site environmental issues in and around the site, work practices, coordination and responsibilities.

Meetings shall be minuted and the minutes posted on the site notice board.

5.13.4 Community Consultation

Community consultation shall be undertaken in accordance with School Infrastructure NSW Community Communication Strategy (December 2020) and all amendments thereto.

The Community Communication Strategy (CCS) has been attached as Appendix 18.

5.13.5 Community Complaints

Similarly, any and all community complaints shall be managed in accordance with School Infrastructure NSW Community Communication Strategy (December 2020) and all amendments thereto.

5.13.6 Communication from 3rd Parties

The Site Manager shall ensure that all environmental notices or concerns raised by other parties e.g. Client's representative, Consultants, Neighbours, Councils, Office of Environment & Heritage/EPA etc that are brought to A W Edwards notice are immediately forwarded to the Project Manager.

All issues concerning Subcontractor Performance shall be forwarded to the Subcontractor by the Site Manager. The Site Manager shall manage the close out of these issues.

Environmental information received from 3rd parties shall be reviewed and incorporated into A W Edwards' environmental management system as applicable.

5.13.7 Communication to Client

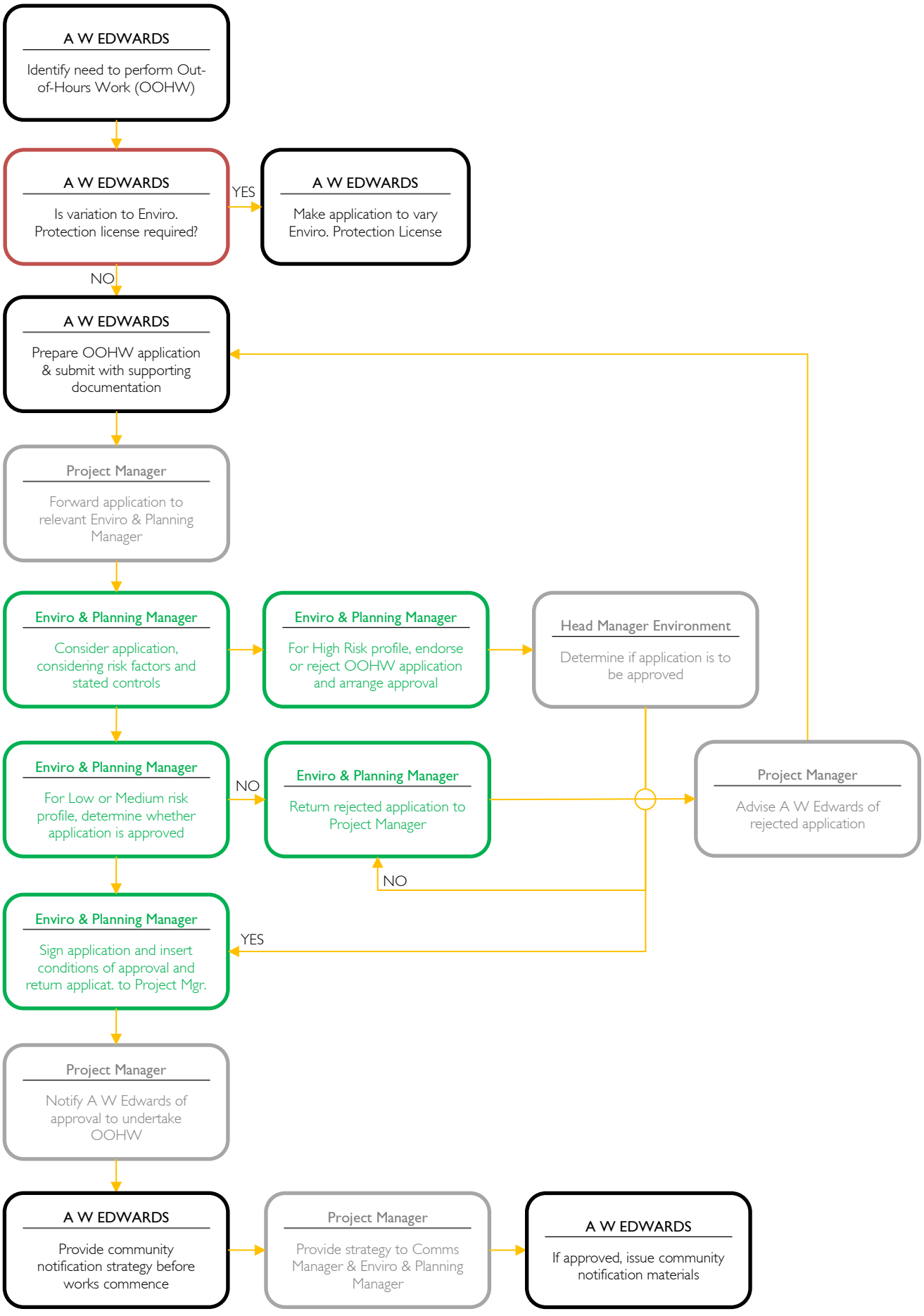
The Project Manager shall report on environmental performance to the client/client's representative on a monthly basis. This may be via PCG meetings.

5.13.8 Out-of-Hours Work Activities

A W Edwards Project Team have identified activities that will likely be undertaken outside of the normal construction hours. These are recorded in the Project Risk Register (SE4131).

These activities will be assessed with the potential to finish outside normal working hours and approvals will be requested prior to the activities taking place.

The following process will be followed should Client approval be required.


A W EDWARDS
Identify need to perform Out-of-Hours Work (OOHW)
A W EDWARDS
Is variation to Enviro. Protection license required?
YES
A W EDWARDS
Make application to vary Enviro. Protection License
NO
A W EDWARDS
Prepare OOHW application & submit with supporting documentation
Project Manager
Forward application to relevant Enviro & Planning Manager
Enviro & Planning Manager
Consider application, considering risk factors and stated controls
Enviro & Planning Manager
For High Risk profile, endorse or reject OOHW application and arrange approval
Head Manager Environment
Determine if application is to be approved
Enviro & Planning Manager
For Low or Medium risk profile, determine whether application is approved
NO
Enviro & Planning Manager
Return rejected application to Project Manager
Project Manager
Advise A W Edwards of rejected application
NO
Enviro & Planning Manager
Sign application and insert conditions of approval and return applicat. to Project Mgr.
YES
Project Manager
Notify A W Edwards of approval to undertake OOHW
A W EDWARDS
Provide community notification strategy before works commence
Project Manager
Provide strategy to Comms Manager & Enviro & Planning Manager
A W EDWARDS
If approved, issue community notification materials

5.13.8.1 Unexpected out-of-hours work

In the event that the scheduled works are identified as having the potential to finish outside of normal construction work hours, the Project Manager will make contact with the Client Appointed Contact, and/or the Community Liaison Officer/Manager (where they exist), to advise of the estimated completion time, with explained reason for the extended completion time.

5.14 EMERGENCY PLANNING & RESPONSE

Refer to the Emergency Management Plan, including (but not limited to) critic environmental incident response.

Emergency equipment exit signs, paths of travel, spill kits and alarm systems shall be inspected during site inspections - Hazard and Observation Sheet (SE6301).

Emergency equipment such as Fire Extinguishers, etc. shall be tested and maintained at regular intervals in accordance with applicable legislation, standards, codes etc.

5.15 INCIDENT INVESTIGATION & REPORTING

The Site Manager shall ensure that all environmental incidents occurring in or around the site, involving A W Edwards' personnel, subcontractors, visitors or passers-by, are investigated and reported.

The Project Manager shall notify, to the nominated Client's representative, in accordance with the contract, any environmental (pollution) incident.

All environmental incidents shall be recorded by the Site Manager using the Incident Investigation (SE5101), and shall be completed for all significant environmental incidents. The original must be forwarded to the Project Manager and a copy forwarded to the Group WHSE Manager.

In the event of a legislative breach, the Project Manager shall advise the Group WHSE Manager immediately.

The emergency services (Police, Fire, and Ambulance) may also be contacted as a result of a serious environmental incident on a project, in accordance with the details contained in the emergency procedures guidelines established for the project.

5.16 DUTY TO NOTIFY OF POLLUTION INCIDENT

5.16.1 NSW

The Project Manager shall notify the Office of Environmental & Heritage of any pollution incident causing or threatening material harm to the environment.

Pollution incident means an incident or set of circumstances during or as a consequence of which there is or is likely to be a leak, spill or other escape or deposit of a substance, as a result of which pollution has occurred, is occurring or is likely to occur. It includes an incident or set of circumstances in which a substance has been placed or disposed of on premises, but it does not include an incident or set of circumstances involving only the emission of any noise

Harm to the environment is material if:

- It involves actual or potential harm to the health or safety of human beings or to ecosystems that is not trivial, or
- It results in actual or potential loss or property damage of an amount, or amounts in aggregate, exceeding $10,000 (or such other amount as is prescribed by the regulations), and (loss includes the reasonable costs and expenses that would be incurred in taking all reasonable and practicable measures to prevent, mitigate or make good harm to the environment.
- For the purposes of this part, it does not matter that harm to the environment is caused only in the premises where the pollution incident occurs

5.17 ENVIRONMENTAL REPORTING

Project environmental performance data shall be reported each month by the Site Manager Monthly Site Performance Report (SE8101). This information includes:

- General Project status
- Environmental KPI's – inspections, audits, NCR's, Incidents
- Project milestones
- Key issues for management attention
- Work completed
- Work planned

This information is provided to the WHS Manager and QE Manager for including in the Operations Meeting WHS & QE Report. Refer to WHSE Reporting procedure AWE-008.

Note: any external reports or complaints are received, processed, managed, responded to and recorded in accordance with the Community Liaison Management Plan (or equivalent plan).

6 Appendices

Number	Title
6.1	Project Scope (SE9301)
6.2	A W Edwards Policies ▪ Quality Management ▪ Work Health & Safety ▪ Injury Management ▪ Fitness for Work (Drug & Alcohol) ▪ Fatigue Management ▪ Environmental ▪ Environmental Sustainability
6.3	Project Organisation Chart and Contact Details (SE9302)
6.4	Project Meeting Matrix (SE9303)
6.5	Legal & Other Requirements Register (SE4130)
6.6	Project Risk Register (SE4131)
6.7	Management Plan Hierarchy
6.8	Forms and Templates List
6.9	Self-Verification Checklist - Consent Conditions (eg. REF)
6.10	Unexpected (Contaminants) Finds Protocol Flowchart
6.11	Unexpected Heritage Finds Protocol Flowchart
6.12	Waste and Spoil Management Process Flowcharts
6.13	Environmental Incident Response Flowchart
6.14	Environmental Control Map (ECM)
6.15	Erosion and Sediment Control Plan
6.16	Emergency Management Plan
6.17	Waste Management Plan

6.1 Project Scope (SE9301)

Date:	11/02/2021
Project:	Darlington Public School Redevelopment
Site Address:	25-1 Golden Grove Street, Darlington NSW 2008

Type of Construction Work

Redevelopment of the existing Darlington Public School

Description of Works including Brief Scope of Works.

Early Works:

- Temporary OSHC relocation
- Temporary Preschool Works
- Demolition of Block C
- Works on the Upper Games Court

Stage 1:

- Construction of the new Stage 1 portion of the school
- Transitional works to complete and link the completed Early Works Upper Games Court with stage 1 external works
- Relocate of the school and preschool to the new facilities

Stage 2:

- Demolition of Block A and Block B
- Construction of the new Stage 2 portion of the school
- Transitional works to complete and link Stage 1 and Stage 2
- Convert any temporary fit outs to their final configuration

Location of Works

Darlington Public School – Address: 25-1 Golden Grove Street, Darlington NSW 2008

Description of Site and Surrounds

Darlington Public School was established in about 1878 and can currently accommodate up to 230 students with 219 enrolled as of 2019. Darlington PS is located on a site (across two (2) unconsolidated lots) which are both owned by the NSW Department of Education. The existing facilities are more than 40 years old with no heritage buildings identified. However, a heritage item and conservation area are adjacent to the school and have been considered as part of the development.

Construction Hours

Construction, including the delivery of materials to and from the site, may only be carried out between the following hours:

- between 7am and 6pm, Mondays to Fridays inclusive; and
- between 8am and 1pm, Saturdays.
- No work may be carried out on Sundays or public holidays.:

Notwithstanding the above, provided noise levels do not exceed the existing background noise level plus 5dB, works may also be undertaken during the following hours:

- between 6pm and 7pm, Mondays to Fridays inclusive; and
- between 1pm and 4pm, Saturdays.

Key Environmental Issues

- Noise and Vibration
- Dust
- Contamination & Asbestos
- Erosion and Sediment Control
- Traffic Management

Contractual Environmental Targets

- Biodiversity Offset Credit Retirement

Licences & Approvals Required to do the Work

This Project Management Plan has been prepared in accordance with legislative requirements, the Consent State Significant Development SSD9914 – Darlington Public School, and the Consent Conditions B11, B12 (a-g).

Site accommodation, compliant with SafeWork NSW requirements, will be established for site offices, lunch sheds, change sheds and ablutions within the construction site. This accommodation will service all phases of the construction and may require adjustment during the phases of construction to allow safe and effective access for workers and construction.

All visitors to the site will be inducted by the Site Manager, or person appointed by the Site Manager. The induction process will include site safety, evacuation and emergency procedures and environmental management.

All A W Edwards employees, subcontractors and their workers, working on the site are required to complete a Prohibited Employment Declaration, or have a Working with Children Check (WCC) prior to commencing any works on site.

Key Stakeholders

Agency/Company	Contact	Phone/Fax/Email
School Infrastructure NSW	Robert Crestani (Snr Proj. Dir.) Karissa Kendall (Proj. Director) Jacqueline Sellen (A. Proj. Dir.)	
Darlington Public School	Michelle McCormack (Principal)	
MACE Australia	Carl Alderson (Proj. Director) Josh Malin (Snr PM - PAP) Daniel Iuliano (PM) Gordon Barlow	 Josh.Malin@macegroup.com 0401 767 377 Daniel.Iuliano@macegroup.com 0423 119 657 Gordon.Barlow@macegroup.com
FJMT Architects	Elizabeth Carpenter Brooke Matthews	
Meinhardt Bonacci (Civil and Structural Engineers)	Jason Bomans	02 8247 8400 Jason.Bomans@meinhardt-bonacci.com

6.2 A W Edwards Policies

AW EDWARDS

QUALITY MANAGEMENT POLICY

A W Edwards Pty Limited has resolved to achieve the goal of providing Quality Management to the operations of the company.

The A W Edwards Pty Limited group was founded in 1921 and has established a long and proud record of providing quality service, management, advice, workmanship and product. The tradition of "getting it right the first time" has always been encompassed within the company policies and objectives.

The objective of the company is to provide our Clients with a completed product that meets or exceeds their expectations, and conforms to agreed requirements of the design or specification.

The AWE Executive Committee realise that, notwithstanding the level of involvement and supervision provided by a Client, the ultimate requirement for achieving specified quality and assurance of compliance to the Client lies within the responsibility of the company.

Our Management System enhances the aims of the company's processes and will assist in achieving time and cost objectives and provide assurance to specifications and standards.

To achieve these objectives, the Executive Committee are committed to: -

- Implementing the requirements of the Management System and complying with the requirements of ISO 9001:2015
- Ensuring the involvement and dedication of all employees, supported by training and motivation in the consistent implementation and application of the Management System.
- The application of the Management System requirements to management functions, work methods, procedures and specific client requirement, and
- Regular reviews of the Management System to monitor and evaluate the application to ensure these objectives are achieved.
- Continually improve the effectiveness of the Management System

A W Edwards Pty Limited is committed to ensure that the Management System will provide staff and Clients of the Company, confidence that we will continue to provide quality goods, service or product achieved in a planned and systematic manner, meeting expectation, and as a requisite to our long term success.

GREG D'ARCY
Chief Executive Officer
A W Edwards Pty Limited

01/07/2020

IMAGE: THE CONCOURSE AT CHATSWOOD

AW EDWARDS

WORK HEALTH & SAFETY POLICY

Our Vision

Within our company, people are engaged on Health & Safety matters, feeling empowered to intervene and contribute their views transparently at all levels, because they are listened to, respected and involved.

Operational safety-excellence comes from the highly detailed planning and preparation of working activities, where the elimination of Health & Safety risks is an absolute priority.

A W Edwards are committed to the establishment of measurable objectives & targets to ensure continued improvement aimed at the elimination of work-related injury and illness.

Our Policy

A W Edwards is committed to:

- providing safe and healthy working conditions for the prevention of work-related injury or ill health
- complying with our legal and other requirements
- eliminating hazards and reducing WHS risks
- consultation and participation of workers and, where they exit, workers' representatives
- ensuring that all appropriate resources will be made available towards meeting the above
- continual improvement of the WHS Management System

Health & Safety Is Our Way Of Life!

Our people go 'above & beyond' to set standards to ensure that their workplace is safe in a well maintained environment and that all personnel have the correct competencies to perform their work. All of us are safety leaders, united in the care and wellbeing of others, and committed to sharing safety lessons that contribute to our safety culture. 'SAFE PRODUCTION is our No. 1 priority. We share this vision with our stakeholders and partners, working together to achieve our Zero High Potential Accidents vision'.

Our Safety Program

To achieve this, a program of activities relating to health and safety in the workplace has been introduced.

The program will include the following:

- Health, safety and welfare awareness education and training
- Continued role out of our safety leadership and culture program
- Workplace design and safe process methodologies
- Hazard Identification, Risk Assessment and Control applied to all that we do
- Provision of personal protective equipment (PPE), mandatory and specific for the task
- Regular workplace inspection and audit
- Addressing poor performance
- Observing good behaviours
- Establishing specific emergency procedures for our workplaces
- Reporting and recording accidents, illnesses and dangerous occurrences
- Promotion of workplace health and safety

GREG D'ARCY
Chief Executive Officer
A W Edwards Pty Limited

01/07/2020

IMAGE: MA NOBLE, DON BRADMAN & DALLY MESSENGER STANDS

AW EDWARDS

INJURY MANAGEMENT POLICY

A W Edwards is committed to preventing injury and illness through providing a safe and healthy working environment for its employees, it's subcontractors and their employees.

A W Edwards is committed to ensuring that any employee who suffers an occupational injury or illness receives early medical diagnosis and treatment.

A W Edwards is committed to providing all necessary resources for the establishment of an integrated injury management program for all employees, and to ensure that any sick or injured employee enters the occupational injury management process as soon as possible in a manner consistent with medical judgement.

A W Edwards shall cooperate in any on-site reporting procedures that form an integral part of an approved injury management program implemented by any Client for whom A W Edwards is carrying out work.

A W Edwards is committed to ensuring that participation in an injury management program will not, of itself, prejudice an injured or ill employee and expects all employees to cooperate with our injury management efforts.

A W Edwards is committed to the creation of a workplace climate that supports workplace-based injury management and to ensuring that a safe return to work as soon as possible by an injured or ill employee is a normal practice expectation.

When a return to work is not possible, A W Edwards is committed to ensuring that various agencies assist the injured or ill employee return to a meaningful role in the community.

A W Edwards is committed to consulting with employees and their unions to ensure that the Injury Management program operates effectively.

GREG D'ARCY
Chief Executive Officer
A W Edwards Pty Limited

01/07/2020

IMAGE: THE CONCOURSE AT CHATSWOOD

AW EDWARDS

FITNESS FOR WORK (DRUG & ALCOHOL) POLICY

A W Edwards recognises that any person on site who is not in a fit state to work safely, poses a risk not only to themselves but all other people.

Workers may not be in a fit state if they are:

- Impacted by illness or injury;
- Fatigued; or
- Affected by alcohol and/or drugs.

In line with the Company's Work, Health & Safety Policy, A W Edwards is committed to providing a workplace free of the hazard posed by people who may be unable to work safely.

To meet this commitment, A W Edwards will:

- Ensure it is a Contractual condition of employment for all employees be 'fit for work' and in a condition to carry out their normal duties.
- Ensure, through the terms of the subcontract, that subcontractors and their employees and others are "fit for work" as a condition of their engagement
- Raise worker awareness during their induction to A W Edwards's zero tolerance approach to drugs and alcohol on site, the risks associated with fatigue and the requirement to report all injuries and illness.
- Ensure that responsible shift lengths are implemented to prevent fatigue related issues.
- Use any number of objective medical testing methods to detect the presence of drugs or alcohol in a worker's system, during which, the following substances are tested for:
  - Alcohol;
  - Opiates;
  - THC;
  - Cocaine;
  - Benzodiazepines;
  - Amphetamine; and
  - Methamphetamine.
- Implement the detection methods(s) on the project in accordance with the relevant Australian Standards these may include, but are not limited to:
  - Breathalysers
  - Mouth swabs; and/or
  - Urine samples
- Ensure any person who returns a positive result for any of the substances listed above will be deemed not to be fit for work (in respect of each substance listed above, subject to testing detectable levels, there is a zero-level tolerance).
- Require that any person who tests positive as a result of a prescription or over-the counter medication, whether or not they have declared medication, or the detected amount is consistent with the prescribed or recommended dosage, will be deemed not fit for work, they will be prevented from returning to work, until they can prove they are fit to work. This can be achieved by attaining a clearance from a medical practitioner in the form of a medical certificate.

AW EDWARDS

FITNESS FOR WORK (DRUG & ALCOHOL) POLICY

- Require that any person who returns a positive result will be prevented from performing work until they can prove they are fit to return to work, and other processes that will apply in the event of a positive result or deemed positive result (i.e. a failure to submit to a test). This will be achieved by the immediate surrender of the worker's Project access card.

A W Edwards will require, as a minimum that, frequent and periodic testing (at least once per month) of the workforce (both construction workers and site office workers) will be as follows:

- Where there are less than 30 workers on site – at least 10% of the work force;
- Where there are 30 to 100 workers on site – a minimum of 5 workers per month; and
- Where there are greater than 100 workers on site – a minimum of 10 workers per month.

The procedure for the selection of personnel to be tested (including staged selection across a worksite or random selection for testing if the entire workforce is not to be tested in a testing round) will be completed using a mobile application that produces random induction numbers to identify those required to submit to a test.

In addition to all other testing, A W Edwards will require targeted testing;

- For all workers undertaking defined high-risk work activities, and
- For cause, where a person's behaviour on-site is suspected of being affected by drugs and alcohol or they have been involved in an incident on-site

A W Edwards has identified the following high-risk construction work activities as tasks that will require additional testing prior to commencement:

- Working in the rail corridor

In addition to all other testing, A W Edwards will provide access to, and encourage, voluntary testing by workers prior to commencement on-site where they may be concerned that they are affected by drugs and alcohol.

Any worker(s) who attends for work affected by drugs or alcohol will be counselled and assisted as outlined in A W Edwards Human Resources Procedures Manual, Chapter 3. This counselling will not be exempt from any other disciplinary process that might apply.

NOTE: Failure to submit to a drug and alcohol test will be deemed to be a positive result.

GREG D'ARCY
Chief Executive Officer
A W Edwards Pty Limited

01/07/2020

AW EDWARDS

FATIGUE MANAGEMENT PLAN

A W Edwards is committed to implementing a fatigue management program for all employees and Subcontractors that is in accordance with WHS Legislation and regulatory guidance. A W Edwards will apply the following fatigue, medical and health minimisation controls within its fatigue management program that::

- Restricts workers to no more than 12 hours worked at a time not including travel time to and from work, unless there is a declared Incident in which case work can be performed up to a maximum of 16 hours at a time, as long as workers are not required to drive a motor vehicle or operate heavy plant or equipment after the 12th hour;
- Restricts workers that have worked more than 12 hours from driving after finishing work;
- Includes periods of 11 hours rest away from work;
- Restricts the maximum number of work days to 12 work days in 14 consecutive days;
- Minimises to five consecutive occasions where eight (8) hours are worked at night (i.e. after normal office hours) or four (4) consecutive occasions where 10 hours are worked at night or three (3) consecutive occasions where 12 hours are worked at night without a 48 hour rest break;
- Ensures employees receive a minimum of 48 consecutive hours free of work in a 14-day period;
- Has the capacity to replace or relieve workers where unplanned or unavoidable extended hours have created a risk to employee health and safety;

Where it has been identified that a worker is suffering from fatigue, A W Edwards will:

- Inform such persons that they are subject to medicals and health assessments in accordance with A W Edwards Management System;
- Inform such persons that additional medical and health assessments may be required to be undertaken where they are involved in a safety accident or where there is reasonable cause for concern that person may be unable to perform work safely (such as upon return from an injury).

GREG D'ARCY
Chief Executive Officer
A W Edwards Pty Limited

01/07/2020

IMAGE: USYD WOMEN'S COLLEGE LANGELY PRECINCT

AW EDWARDS

ENVIRONMENTAL POLICY

The diverse range of construction projects undertaken by A W Edwards since it was founded in 1921, has enabled the company to develop a comprehensive understanding of how it's activities can potentially impact on the environment.

As a responsible corporate entity A W Edwards has had considerable success in eliminating or minimising their environmental impacts while continuing to meet the expectations of its Clients. This has been possible by balancing commercial objectives with protection of the environment.

We have developed this policy to serve as a statement of our commitment to continue to protect the environment while conducting our activities.

To carry out this commitment, we will -

- As a minimum, ensure that our operations and our discharges to air, water and land comply with all regulatory requirements, guidelines and Codes of Practice,
- Continuously improve our environmental management system to enhance environmental performance where there is an opportunity to do so,
- Implement a structured management system to provide a framework to successfully develop, implement and monitor our environmental management programs,
- Ensure environmental protection is considered during the planning and design stage of new construction projects,
- Ensure appropriate pollution and waste management controls are implemented as a construction site is being established to effectively avoid or minimise pollution, and
- Regularly monitor the effectiveness of pollution controls throughout the entire construction period.
- Ensure our employees whose activities can potentially impact on the environment understand their responsibilities, and are capable of conducting their activities consistent with corporate environmental expectations,
- Expect our contractors and suppliers to meet the same environmental standards we have set for ourselves,
- Conduct open, honest and responsive communications with the community and government groups regarding our environmental management practices.

GREG D'ARCY
Chief Executive Officer
A W Edwards Pty Limited

01/07/2020

IMAGE: MACQUARIE UNIVERSITY BUILDING C3C (LIBRARY)

AW EDWARDS

ENVIRONMENTAL SUSTAINABILITY POLICY

A W Edwards Pty Limited is committed to excellence, quality and leadership in all of its activities. This includes the implementation of a sustainable approach and commitment to the concept of maintaining a sustainable environment.

A W Edwards demonstrates this commitment to environmental responsibility by:

- Complying with all relevant environmental legislation;
- Setting and communicating meaningful environmental objectives and targets for all aspects of A W Edwards activities, so as to continue to reduce natural resource use, and minimise adverse environmental impacts;
- Incorporating environmental sustainability principles, awareness and understanding into all areas of its work;
- Integrating principles of ecologically sustainable development into all activities;
- Membership and support of key environmental organisations including the Green Building Council of Australia (GBCA);
- Educating A W Edwards staff so that they are qualified to oversee the implementation of effective environmentally sensitive initiatives, both in the design of projects and in construction processes; and
- Managing all its construction activities so as to minimise waste, minimise pollution, and optimise the protection of soil, air and water quality.

The following principles underpin the A W Edwards Sustainability Policy in undertaking our commitment towards environmentally sustainable work sites:

- Incorporating sustainability principles into A W Edwards projects where required;
- Identifying alternative and sustainable courses of action to minimise the environmental impact of A W Edwards activities;
- Creating and promoting an environmentally sustainable and responsible culture across the company;
- Identify opportunities for incorporation of sustainability principles into project procurement and
- Committing to continuous improvement of environment performance

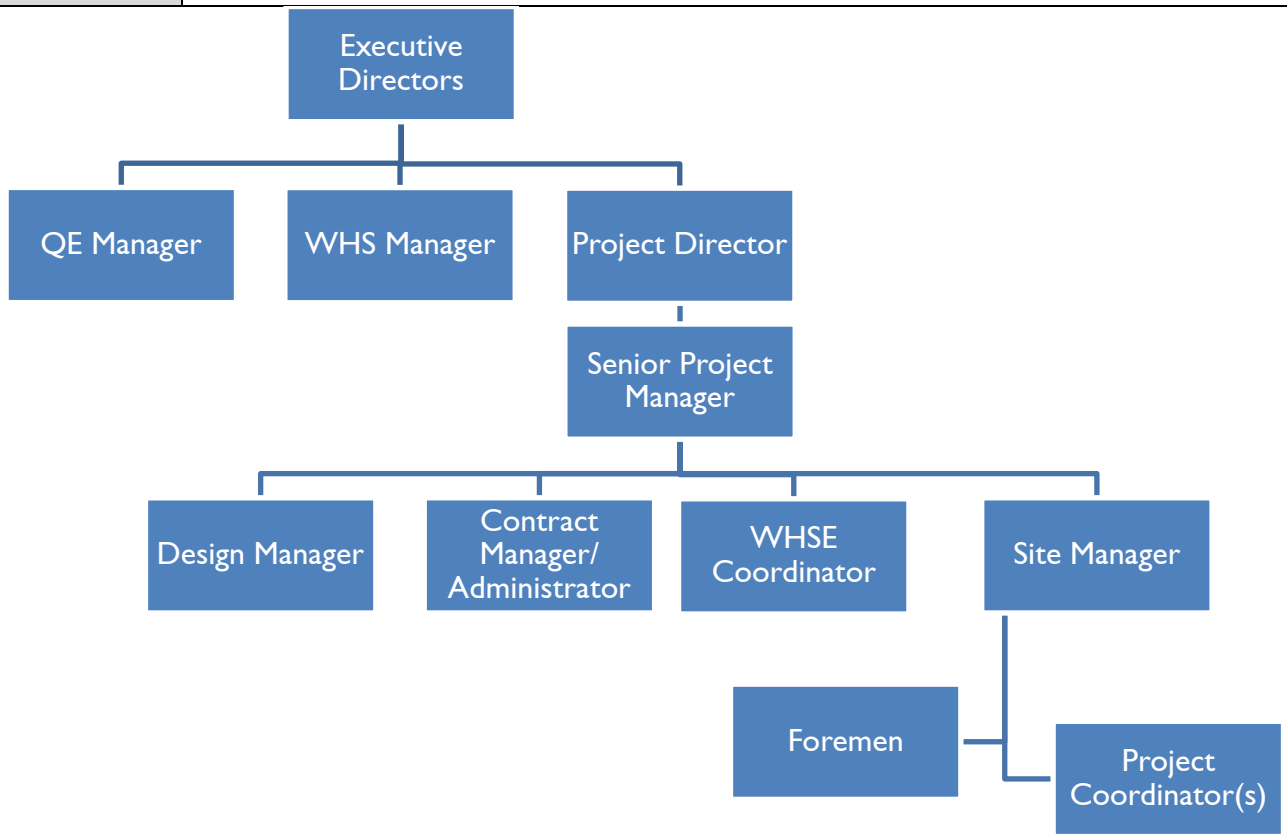
GREG D'ARCY
Chief Executive Officer
A W Edwards Pty Limited

01/07/2020

IMAGE: SYDNEY TRAINS ENGINEERING & MAINTENANCE HUB

6.3 Project Organisation Chart and Contact Details (SE9302)

Date:	28/01/2021
Project:	Darlington Public School Redevelopment
Site Address:	25-1 Golden Grove Street, Darlington NSW 2008



Key Personnel & Contact Details

Name	Company	Title	Phone Number
Justin Smith	A W Edwards	Project Director	0413 735 625
Glen Burley	A W Edwards	Senior Project Manager	0424 989 350
Mark Whitmore	A W Edwards	Site Manager	0413 735 456
Dino Di Paolo	A W Edwards	Design Manager	0415 512 597
Tim Stootman	A W Edwards	QE Manager	0429 219 310
Amy Neal	A W Edwards	WHS Manager	0402 262 651
Jonathan G Breen	A W Edwards	WHSE Coordinator	0416 740 255
Riley Barns	A W Edwards	Project Manager	0403 246 998
Brendon Garrett	A W Edwards	Foreman	0411 029 914

6.4 Project Meeting Matrix (SE9303)

AW EDWARDS

Project Meeting Matrix

Date 30/11/2020

Project Darling Public School Redevelopment

Site Address 25-1 Golden Grove Street, Darlington NSW 2008

Name	Applies Y/N	Frequency	Attendees	Description/Agenda	Minutes
Project Meetings / Site Co-ordination Meetings	Y	Weekly/ Fortnightly	A W Edwards MACE DoE SINSW	▪ General Information ▪ WHS&E ▪ Environment ▪ Workplace Relations ▪ Other or standard Agenda items to be agreed and finalised with PAP at first meeting ▪ General Business Note: AWE to prepare and issue minutes with 48 hours of this site meeting to the Principals Authorised Person (PAP) for its review and comment. (The Principal must provide its comments to AWE within 5 business days of receiving the minutes, after which AWE will issue the minutes in final. If the PAP does not provide its comments within this timeframe, the minutes as issued by AWE will be final)	A W Edwards Project Mgr
Project Team Meeting	Y	Monthly	Project Team	Project training requirements & effectiveness of training ▪ Non-conformances ▪ Sub-contractor's performance – safety, environmental, quality ▪ Accidents/incidents ▪ Audit and site inspection results ▪ Emergencies/emergency drills Based on this data review the effectiveness of: ▪ Site Safety Plan (Min 3 monthly) ▪ Site Safety Rules ▪ Review of project hazard identification, risk assessment and controls (HIRAC) process including the Project Risk Assessment ▪ Emergency Management Plan	By Project Manager

Name	Applies Y/N	Frequency	Attendees	Description/Agenda	Minutes
Site Meetings	Y	Weekly	Project Manager Foreman Consultants Client	▪ Previous Minutes ▪ Agenda agreed at first meeting and confirmed at or prior to each subsequent meeting ▪ General Business/New Items	Project Manager
Subcontractor Meetings	Y	Weekly	Project Manager Foreman Subcontractors	▪ Where they exist, previous minutes ▪ WHS&E ▪ Environment ▪ Workplace Relations ▪ Agenda distributed prior to each meeting ▪ General Business	Project Manager
Design Management Meetings	Y	As required	FJMT A W Edwards MACE DoE/SINSW	▪ Agenda as communicated by FJMT Architects Note: A W Edwards must ensure that the Architect (or HDC) provides at least 1 week's notification of all Design Management Meetings to the Principals Authorised Person and the Principal's Authorised Person must be allowed to attend at their own discretion.	FJMT Architects
Stakeholder Consultation Meetings	Y	As required	FJMT A W Edwards MACE DoE/SINSW	▪ Agenda as communicated by FJMT Architects The purpose of Stakeholder Meetings is to establish the functional and performance requirements necessary to finalise and maintain the Design Documentation. Note: The Architect (or HDC) must establish a detailed schedule of Stakeholder Consultation Meetings within two weeks of engagement and maintain and update the schedule throughout the Project.	FJMT Architects

6.5 Legal & Other Requirements Register (SE4130)

Project Name	Darlington Public School Redevelopment
Reviewed By	Tim Stootman
Review Date	28/01/2021

NSW WHS Legislation

Title	Applies (✓)
NSW Work Health and Safety Act 2011	✓
NSW Work Health and Safety Regulation 2017	✓
Electricity Supply Act 1995	
Electricity Supply (Safety and Network Management) Regulation 2014	

ACT WHS Legislation

Title	
Work Health and Safety Act 2011	
Work Health and Safety Regulation 2011	
Scaffolding and Lifts Act 1912	
Dangerous Substances Act 2004	
Construction Occupations (Licensing) Act 2004	
Construction Occupations (Licensing) Regulation 2004	
Electricity Safety Act 1971	
Electricity Safety Regulation 2004	
Environment Protection Act 1997	
Environment Protection Regulation 2005	
Gas Safety Act 2000	
Gas Safety Regulation 2001	

Comcare (Commonwealth) WHS Legislation

Title	Applies (✓)
Work Health and Safety Act 2011	
Work Health and Safety (Transitional and Consequential Provisions) Act 2011	
Work Health and Safety Regulation 2011	
Environment Protection and Biodiversity Conservation Act 1999	
Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act)	

SafeWork NSW – WHS Codes of Practice

Title	Version	Applies (✓)
Abrasive blasting	August 2019	
Confined spaces	August 2019	✓
Construction work	August 2019	✓
Demolition work	August 2019	✓
Excavation work	January 2020	✓

Title	Version	Applies (✓)
First aid in the workplace	January 2020	✓
Formwork	June 2020	✓
Hazardous manual tasks	August 2019	✓
How to manage and control asbestos in the workplace	August 2019	✓
How to manage work health and safety risks	August 2019	✓
How to safely remove asbestos	August 2019	✓
Labelling of workplace hazardous chemicals	August 2019	✓
Managing electrical risks at the workplace	August 2019	✓
Managing noise and preventing hearing loss at work	August 2019	✓
Managing risks of hazardous chemicals in the workplace	August 2019	✓
Managing the risk of falls at workplaces	August 2019	✓
Managing the risks of plant in the workplace	August 2019	✓
Managing the work environment and facilities	August 2019	✓
Preparation of safety data sheets for hazardous chemicals	August 2019	
Preventing falls in housing construction	August 2019	
Safe design of structures	August 2019	✓
Spray painting and powder coating	August 2019	✓
Welding processes	August 2019	✓
Work health and safety consultation, coordination and cooperation	August 2019	✓

SafeWork NSW – OHS Codes of Practice (pre-WHS, but still current)

Title	Version	Applies (✓)
Amenity tree industry	1998	
Control of work-related exposure to hepatitis and HIV (blood-borne) viruses	1995	
Cutting and drilling concrete and other masonry Products	1996	✓
Moving plant on construction sites	2004	✓
Overhead protective structures	1994	✓
Safe handling of timber preservatives and treated timber	1993	
Safe use of synthetic mineral fibres	1993	
Safe work on roofs part 1 commercial industrial	2009	✓
Technical guidance	2001	✓
Tunnels under construction	2006	✓
Work near overhead power lines	2006	✓

WorkSafe ACT Codes of Practice

Title	Version	Applies (✓)
How to manage work health and safety risks	December 2011	
Work health and safety consultation, cooperation and coordination	December 2011	
Managing the work environment and facilities	December 2011	
Managing noise and preventing hearing loss at work	December 2011	

Hazardous manual tasks	December 2011	
Confined spaces	December 2011	
Managing the risk of falls at workplaces	June 2015	
Preventing and responding to bullying	May 2012	
Formwork	December 2011	
Construction work	March 2014	
Demolition work	June 2015	
Excavation work	June 2015	
First aid in the workplace	June 2015	
Managing electrical risks at the workplace	June 2015	
Managing risks of plant in the workplace	August 2012	
Preventing falls in housing construction	August 2012	
Safe design of structures	August 2012	
Welding processes	August 2012	
How to safely remove asbestos	December 2014	
How to manage and control asbestos in the workplace	December 2014	

Comcare (Commonwealth) Codes of Practice

Title	Version	Applies (✓)
Abrasive blasting	2015	
Confined spaces	2015	
Construction work	2015	
Demolition work	2015	
Excavation work	2015	
First aid in the workplace	2015	
Hazardous manual tasks	2015	
How to manage and control asbestos in the workplace	2015	
How to manage work health and safety risks	2015	
How to safely remove asbestos	2015	
Labelling of workplace hazardous chemicals	2015	
Managing electrical risks in the workplace	2015	
Managing noise and preventing hearing loss at work	2015	
Managing risks of hazardous chemicals in the workplace	2015	
Managing risks of plant in the workplace	2015	
Managing the risk of falls in the workplace	2015	
Managing the work environment and facilities	2015	
Preparation of safety data sheets	2015	
Safe design of structures	2015	
Spray painting and powder coating	2015	
Welding processes	2015	
Work health and safety consultation, cooperation and coordination	2015	

National Codes of Practice

Other documents that may be relevant to the Project include, but may not be limited to:

Title	Version	Applies (✓)
National Model Regulation for the Control of Scheduled Carcinogenic Substances	December 1994	
National Exposure Standards for Atmospheric Contaminants in the Occupational Environment (Amendment April 1998)	April 1998	
National Standard for Construction Work	December 2004	✓
National Standard for Licensing Persons Performing High Risk Work	December 2005	✓
National Standard for Manual Tasks	July 2007	✓
National Standard for Occupational Noise	December 1999	✓
National Standard for Plant	December 1993	✓
National Standard for the Control of Inorganic Lead at Work	September 1994	
National Standards for Storage and Handling of Workplace Dangerous Goods	February 2001	✓
Workplace Injury and Disease Recording Standard in the Workplace	December 1989	✓

Australian/ New Zealand Standards

Title	Version	Applies (✓)
AS 1216-2006: Class labels for dangerous goods	2006	
AS 1221:1997 Fire Hose Reels	1997	
AS 1319-1994: Safety signs for the occupational environment	1994	✓
AS 1345 1 – 1995 Identification of the Contents of Pipes, Conduits and Ducts	1995	✓
AS 1418.1 – 2002 Cranes, hoists and winches – General requirements	2002	✓
AS 1418.13-1996 - Cranes (including hoists and winches) - Building maintenance units	1996	
AS 1418.15-1994 - Cranes (including hoists and winches) - Concrete placing equipment	1994	✓
AS 1418.17-1996 (R2016) - Cranes (including hoists and winches) - Design and construction of workboxes	1996	✓
AS 1418.19-2007 - Cranes, hoists and winches - Telescopic handlers	2007	✓
AS 1418.4-2004 - Cranes, hoists and winches - Tower cranes	2004	✓
AS 1418.5-2013 - Cranes, hoists and winches-Mobile cranes (EN 13000:2010, MOD)	2013	✓
AS 1418.7-1999 - Cranes (including hoists and winches) - Builders hoists and associated equipment	1999	✓
AS 1530.4-2014 Methods for fire tests on building materials, components and structures - Fire-Resistance tests of elements of building construction	2014	✓
AS 1636:1996 - Tractors – Roll-over protective structures – Criteria and tests	1996	
AS 1657 – 2013 Fixed Platforms, Walkways, Stairways and Ladders – Design, construction and installation	2013	✓
AS 1668.2 – 2012 - The use of ventilation and air conditioning in buildings – Mechanical ventilation in buildings	2012	
AS 1674: Safety in welding and allied processes set – 2007	2007	✓
AS 1735.1:2016 - Lifts, escalators and moving walks	2016	✓
AS 1742 Set-2014 Manual of uniform control traffic devices set	2017	✓
AS 1851-2005: Maintenance of fire protection systems and equipment (superseded)	2005	✓

Title	Version	Applies (✓)
AS 1885.1-1990 Measurement of occupational health and safety performance – Describing and reporting occupational injuries and disease (known as the National Standard for workplace injury and disease recording)	1990	✓
AS 1915-1992: Electrical equipment for explosive atmospheres – Battery-operated vehicles	1992	
AS 1940-2004: The storage and handling of flammable and combustible liquids	2004	✓
AS 2030.1 - 2009 Gas cylinders	2009	
AS 2118.1-2006, Automatic fire sprinkler systems – General requirements	2006	✓
AS 2118.4:2012 Automatic fire sprinkler systems – Sprinkler protection for accommodation buildings not exceeding four storeys in height	2012	✓
AS 2278.1-2008: Aerosol containers – Metal aerosol dispensers of capacity 50 ml to 1000 ml inclusive	2008	
AS 2294.1:1997 - Earth-moving machinery – Protective structures	1997	✓
AS 2359.1:2015 Powered Industrial Trucks – Powered Industrial Trucks	2015	✓
AS 2359.12-1996: Powered industrial trucks – Hazardous areas	1996	✓
AS 2380.1-1989 Electrical equipment for explosive atmospheres – Explosion-protection techniques – General requirements	1989	
AS 2397:2015 Safe use of lasers in the building and construction industry	2015	✓
AS 2419:2005 - Fire hydrant installations	2005	✓
AS 2436-2010: Guide to noise and vibration control on construction, demolition and maintenance sites	2010	✓
AS 2444-2001 - Portable fire extinguishers and fire blankets – Selection and location	2001	✓
AS 2473.1-2006 Valves for compressed gas cylinders – Specifications, type testing, and manufacturing tests and inspections	2006	
AS 2473.2-2007 Valves for compressed gas cylinders – Outlet connections (threaded) and stem (inlet) threads	2007	
AS 2550.11:2016 - Cranes, hoists and winches - Safe use - Vehicle-loading cranes	2016	✓
AS 2550.1-2011 - Cranes, hoists and winches - Safe use - General requirements	2011	
AS 2550.15-1994 - Cranes - Safe use - Concrete placing equipment	1994	✓
AS 2550.19-2007 - Cranes, hoists and winches - Safe use - Telescopic handlers	2007	✓
AS 2550.4-2004 - Cranes, hoists and winches - Safe use - Tower cranes	2004	✓
AS 2550.7-1996 - Cranes - Safe use - Builders' hoists and associated equipment	1996	✓
AS 2593-2004: Boilers – Safety management and supervision systems	2004	
AS 2601-2001 Demolition of structures	2001	
AS 2613-2005 Safety devices for gas cylinders	2005	✓
AS 2658-2008 LP Gas – Portable and mobile appliances	2008	
AS 2670.1-2001 (R2016) - Evaluation of human exposure to whole-body vibration	2001	✓
AS 2700-2011: Colour Standards for general purposes	2011	
AS 2865-2009 Confined spaces	2009	✓
AS 3600-2009: Concrete structures	2009	✓
AS 3640-2009 Workplace atmospheres – Method for sampling and gravimetric determination of inhalable dust	2009	
AS 3745-2010 Planning for emergencies in facilities	2010	✓
AS 3780-2008: The storage and handling of corrosive substances	2008	

Title	Version	Applies (✓)
AS 3786:2014 Smoke alarms using scattered light, transmitted light or ionization	2014	
AS 3850.1:2015 Prefabricated Concrete Elements – General requirements	2015	✓
AS 3850.2:2015 Prefabricated Concrete Elements – Building construction	2015	✓
AS 3873-2001: Pressure equipment – Operation and maintenance	2001	
AS 3961-2005: The storage and handling of liquefied natural gas	2005	
AS 4041-2006: Pressure piping	2006	✓
AS 4326-2008: The storage and handling of oxidizing agents	2008	
AS 4332-2004: The storage and handling of gases in cylinders	2004	
AS 4343-2014: Pressure equipment – Hazard levels	2014	
AS 4458-1997: Pressure equipment – Manufacture	1997	
AS 4586-2013 Slip resistance classification of new pedestrian surface materials	2013	
AS 4663:2013: Slip resistance measurement of existing pedestrian surfaces	2013	
AS 5062:2016 Fire protection for mobile and transportable equipment	2016	
AS 5577-2013 Electricity network safety management systems	2013	
AS IEC 61672.1-2004: Electro acoustics - Sound level meters - Specifications	2004	
AS IEC 61672.2-2004: Electro acoustics - Sound level meters - Pattern evaluation tests	2004	
AS ISO 16900.11:2015 Respiratory Protective Devices - Methods of Test and Test Equipment - Determination of Field of Vision	2015	
AS ISO 16900.2:2015 Respiratory Protective Devices - Methods of Test and Test Equipment - Determination of Breathing Resistance	2015	
AS ISO 16900.3:2015 Respiratory Protective Devices - Methods of Test and Test Equipment - Determination of Particle Filter Penetration	2015	
AS ISO 5349.1-2013 Mechanical vibration - Measurement and evaluation of human exposure to hand-transmitted vibration - General requirements	2013	
AS ISO 5349.2-2013 Mechanical vibration - Measurement and evaluation of human exposure to hand-transmitted vibration - Practical guidance for measurement at the workplace	2013	
AS/NZS 1200:2015 Pressure Equipment	2015	
AS/NZS 1269.1:2005: Occupational noise management - Measurement and assessment of noise emission and exposure	2005	✓
AS/NZS 1270:2002: Acoustics - Hearing protectors	2002	
AS/NZS 1337.1:2010: Personal eye protection - Eye and face protectors for occupational applications	2010	✓
AS/NZS 1338.1:2012 - Filters for eye protectors - Filters for protection against radiation generated in welding and allied operations	2012	
AS/NZS 1338.2:2012 - Filters for eye protectors - Filters for protection against ultraviolet radiation	2012	
AS/NZS 1418.10 - 2011 - Cranes, hoists and winches - Mobile elevating work platforms	2011	✓
AS/NZS 1576.1:2010 - Scaffolding - General requirements	2010	✓
AS/NZS 1576.2:2016 - Scaffolding - Couplers and accessories	2016	✓
AS/NZS 1576.3:2015 - Scaffolding - Prefabricated and tube-and-coupler scaffolding	2015	✓
AS/NZS 1576.4:2013 - Scaffolding - Suspended scaffolding	2013	✓
AS/NZS 1576.5:1995 - Scaffolding - Prefabricated split heads and trestles	1995	✓

Title	Version	Applies (✓)
AS/NZS 1576.6:2000 - Scaffolding - Metal tube-and-coupler scaffolding - Deemed to comply with AS/NZS 1576.3	2000	✓
AS/NZS 1577 Scaffold decking components	2009/2010	✓
AS/NZS 1596:2014 The storage and handling of LP Gas	2014	✓
AS/NZS 1680.0:2009 - (Set) Interior lighting	2009	
AS/NZS 1680.1:2006 Interior and workplace lighting - General principles and recommendations	2006	✓
AS/NZS 1715:2009 Selection, use and maintenance of respiratory protective equipment	2009	
AS/NZS 1768:2007 Lightning Protection	2007	
AS/NZS 1801:1997 Occupational protective helmets	1997	✓
AS/NZS 1826:2008 Electrical equipment for explosive gas atmospheres-Special protection- Type of protection 's'	2008	
AS/NZS 1850:2009 Portable fire extinguishers - Classification, rating and performance testing	2009	
AS/NZS 1873.1:2003 Powder-actuated (PA) hand-held fastening tools (withdrawn)	2003	
AS/NZS 1891.1:2007 Industrial fall-arrest systems - Harnesses and ancillary equipment	2007	✓
AS/NZS 1892:1:1996 Portable Ladders	1996	✓
AS/NZS 2053.1:2001 (R2016) Conduits and fittings for electrical installations	2001	✓
AS/NZS 2208:1996 Safety glazing materials in buildings	1996	
AS/NZS 2210.1:2010 Occupational protective footwear	2010	✓
AS/NZS 2293.1-2005 Emergency escape lighting and exit signs	2005	✓
AS/NZS 2399:1998: Acoustics - Specifications for personal sound exposure meters	1998	
AS/NZS 2604:2012 Sunscreen products - Evaluation and classification	2012	
AS/NZS 2802:2000 Electric cables - Reeling and trailing for mining and general use (other than underground coal mining)	2000	
AS/NZS 2906-2001: Fuel containers - Portable-Plastic and Metal	2001	✓
AS/NZS 3000:2018 Electrical installations (known as the Australian/New Zealand Wiring Rules)	2018	✓
AS/NZS 3001:2008 Electrical installations - Transportable structures and vehicles including their site suppliers	2008	✓
AS/NZS 3008.1.2009: Electrical installations - Selection of cables - Cables for alternating voltages up to and including 0.6/1kV - Typical Australian installation conditions	2009	✓
AS/NZS 3010:2005 Electrical installations - Generating sets	2005	✓
AS/NZS 3012:2010 Electrical installations - Construction and Demolition Sites	2010	✓
AS/NZS 3014:2003 Electrical installations - Electric fences	2003	
AS/NZS 3016:2002 Electrical installations - Electric security fences	2002	
AS/NZS 3017:2007 Electrical installations - Verification guidelines	2007	
AS/NZS 3190:2016 Approval and test specification - Residual current devices (current-operated earth-leakage devices)	2016	✓
AS/NZS 3610: Formwork for Concrete - Specifications	2018	✓
AS/NZS 3666.1:2011: Air-handling and water systems of buildings - Microbial control - Design, installation and commissioning	2011	
AS/NZS 3666.2:2011: Air-handling and water systems of buildings - Microbial control - Operation and maintenance	2011	

Title	Version	Applies (✓)
AS/NZS 3666.3:2011: Air-handling and water systems of buildings - Microbial control - Performance-based maintenance of cooling water systems	2011	
AS/NZS 3666.4:2011 Air-handling and water systems of buildings - Microbial control - Performance-based maintenance of air-handling systems (ducts and components)	2011	
AS/NZS 3820:2009 Essential safety requirements for electrical equipment	2009	✓
AS/NZS 3833-2007: The storage and handling of mixed classes of dangerous goods, in packages and intermediate bulk containers	2007	
AS/NZS 4431:1996: Guidelines for safe working on new lift installations in new constructions	1996	
AS/NZS 4452-1997: The storage and handling of toxic substances	1997	
AS/NZS 4501.1-2008: Occupational protective clothing - Guideline on the selection, use, car and maintenance of protective clothing	2008	
AS/NZS 4503.2:1997: Protective clothing - Protection against liquid chemicals - Test method: Determination of resistance to penetration by a jet of liquid (Jet test)	1997	
AS/NZS 4503.3:1997: Protective clothing - Protection against liquid chemicals - Test method: Determination of resistance to penetration by spray (Spray Test)	1997	
AS/NZS 4576:1995 Guidelines for scaffolding	1995	✓
AS/NZS 4801:2001: Occupational health and safety management systems - Specification with guidance for use	2001	✓
AS/NZS 4994.1:2009 - Temporary edge protection - General requirements	2009	
AS/NZS 5601 Set:2013 Gas Installations	2013	
AS/NZS 60079.0:2012 Explosive atmospheres - Equipment - General requirements	2012	
AS/NZS 60079.10.2:2016 Explosive Atmospheres - Classification of Areas - Explosive Dust Atmospheres	2016	
AS/NZS 60079.14:2009 Explosive atmospheres - Electrical installations design, selection and erection (IEC 60079-14, Ed. 4.0(2007) MOD)	2009	
AS/NZS 60079.18:2011 Explosive atmospheres- Equipment protection by encapsulation 'm'	2011	
AS/NZS 61241.0:2005 Electrical apparatus for use in the presence of combustible dust - General requirements	2005	
AS/NZS 61241.11:2006 Electrical apparatus for use in the presence of combustible dust - Protection by intrinsic safety ID	2006	
AS/NZS 61241.14:2005 Electrical apparatus for use in the presence of combustible dust - Selection and installation (IEC 61241-14, Ed. 1.0(2004) MOD)	2005	
AS/NZS 62013.1:2001 Cap lights for use in mines susceptible to firedamp-General requirements-Construction and testing in relation to the risk of explosion	2001	
AS/NZS IEC 60825.1:2011 Safety of laser products - Equipment classification and requirements	2011	
AS/NZS IEC 60825.14:2011 Safety of laser products - A user's guide	2011	
AS/NZS ISO 2801:2008 (R2016) Clothing for protection against heat and flame - General recommendations for selection, care and use of protective clothing	2008	
AS/NZS ISO 31000:2009 Risk management - Principles and guidelines	2009	
AS/NZS ISO 6529:2006 Protective clothing - Protection against chemicals - Determination of resistance of protective clothing materials to permeation by liquids and gases	2006	
AS/NZS ISO 9001:2016 Quality management systems - Requirements	2016	

Environmental Legislation

Title	Applies (✓)
Contaminated Land Management Act 1997	✓
Contaminated Land Management Regulation 2008	✓
Environmental Planning and Assessment Act 1979	✓
Environmental Planning and Assessment Regulation 2000	✓
Environmentally Hazardous Chemicals Act 1985	✓
Environmentally Hazardous Chemicals Regulation 2008	✓
Heritage Act 1977	✓
Heritage Regulation 2012	✓
Protection of the Environment Administration Regulation 2012	
Protection of the Environment Operations (Clean Air) Regulation 2010	✓
Protection of the Environment Operations (General) Regulation 2009	✓
Protection of the Environment Operations (Noise Control) Regulation 2017	✓
Protection of the Environment Operations (Waste) Regulation 2014	✓
Protection of the Environment Operations Act 1997	✓
Aboriginal and Torres Strait Islander Heritage Protection Act 1984	✓
Airports Act 1996	
Airports (Environment Protection) Regulation 1997	
Australian Radiation Protection and Nuclear Safety Act 1998	
Australian Radiation Protection and Nuclear Safety Regulation 1999	
Crown Lands Act 1989 NSW	
Energy Efficiency Opportunities Act 2006	
Energy Efficiency Opportunities Regulation 2006	
Environment Protection and Biodiversity Conservation Act 1999	
Environment Protection and Biodiversity Conservation Regulation 2000	
Forestry Act 1916	
Hazardous Waste (Regulation of Exports and Imports) Act 1989	
Heritage Act 1977 NSW	
Industrial Chemicals (Notification and Assessment) Act 1989	
Local Government Act 1993 NSW	✓
National Environment Protection Council Act 1994	✓
National Environment Protection (Air Toxics) Measure	✓
National Environment Protection (Ambient Air Quality) Measure	✓
National Environment Protection (Assessment of Site Contamination) Measure	✓
National Environment Protection (Diesel Vehicle Emissions) Measure	✓
National Environment Protection (Movement of Controlled Waste between States and Territories) Measure	
National Environment Protection (National Pollutant Inventory) Measure	
National Environment Protection (Used Packaging Materials) Measure	
National Environment Protection (Used Packaging Materials) Measure - Application Thresholds	
National Greenhouse and Energy Reporting Act 2007	

Title	Applies (✓)
National Greenhouse and Energy Reporting (Measurement) Determination 2008	
National Greenhouse and Energy Reporting Regulation 2008	
National Parks and Wildlife Act 1974	
Native Vegetation Act 2003 NSW	
Ozone Protection and Synthetic Greenhouse Gas Management Act 1989	
Ozone Protection and Synthetic Greenhouse Gas Management Regulation 1995	
Renewable Energy (Electricity) Act 2000	
Renewable Energy (Electricity) Regulation 2001	
Road Transport Reform (Dangerous Goods) Regulation 1997	
Telecommunications Act 1997	
Telecommunications Code of Practice 1997	
Threatened Species Conservation Act 1995 NSW	
Trade Practices Act 1974	
Waste Avoidance and Resource Recovery Act 2001 NSW	✓

Safe Work Australia Guidelines

Title	Version	Applies (✓)
Guide to Managing Risks of Exposure to Carcinogens in the Workplace	September 2016	✓
Guide for preventing and responding to workplace bullying	August 2016	✓
Worker Representation and Participation Guide	August 2016	✓
Cranes guidance material	August 2016	✓
Guide to managing risks tree trimming removal	July 2016	✓
High risk work licensing information sheets	December 2015	✓
Guide to identifying and handling low density asbestos fibre board (LDB)	October 2015	
Guidance for managing the risks of diesel exhaust	October 2015	✓
Workplace vibration guidance material	September 2015	✓
Workplace traffic management guidance material	July 2014	✓
Industrial lift trucks guidance material	July 2014	✓
Guidance material for the safe design, manufacture, import and supply of plant	July 2014	✓
Working in the vicinity of overhead and underground electric lines guidance material	July 2014	✓
Formwork & Falsework Guidance Material	July 2014	✓
Scaffolds and scaffolding work guidance material	July 2014	✓
Guide for managing risks from high pressure water jetting	December 2013	
Guide for tunnelling work	November 2013	✓
Guide on exposure to solar ultraviolet radiation (UVR)	August 2013	✓
Traffic management guides	July 2013	✓
Hazardous Chemicals Requiring Health Monitoring	March 2013	✓
Health Monitoring for Exposure to Hazardous Chemicals - Guide for persons conducting a business or undertaking	February 2013	✓
Guidance on the Classification of Hazardous Chemicals under the Work Health and Safety (WHS) Regulation	April 2012	✓

Other Requirements

Title	Applies (✓)
Development Consent	
State Significant Development (SSDA)	✓
State Significant Infrastructure (SSI)	
National Heavy Vehicle Law - Heavy Vehicle (Adoption of National Law) Act 2013	✓
National Heavy Vehicle Law - Heavy Vehicle (Adoption of National Law) Regulation 2013	✓
NSW Government WHS Management Guidelines (for construction procurement), Edition 6, December 2019	✓
NSW Government Environmental Management Systems & Auditing Guidelines Ed 3 - 2013	✓
NSW Government Code of Practice for Procurement 2013	✓
(Building Code) Code for the Tendering and Performance of Building Work 2016	✓
NSW Industrial Relations Guidelines: Building and Construction Procurement (the Guidelines) July 2013	✓
Fair Work Act 2009	✓
Fair Work Regulation 2009	✓
Freedom of Information Act 1982	✓
Privacy Act 1988	✓
Workers Compensation Act 1987	✓
Workplace Injury Management and Workers Compensation Act 1998 & Regulations	✓
Health monitoring for exposure to hazardous chemicals – Guide for PCBUs	✓
NSW Department of Housing's Managing Urban Stormwater (2004)	✓
ANZECC & ARMCANZ Water Quality Guidelines 2000	✓
Office of the Federal Safety Commissioner Auditing Guidelines	✓
Waste Classification Guidelines (EPA, 2014)	✓
TfNSW Water and Discharge Guideline	

6.6 Project Risk Register (SE4131)

Project WHS Risk Register
Project Summary

AW EDWARDS

Form SE4131

Revision	7(220406)
Project Name	Darlington Public School Redevelopment
Project Number	647
Project Description	Refurbishment and New Buildings

Risk Assessment Developed by:	**Title:**	**Date:**
Mark Whitmore	Site Manager	2/12/2020
Risk Assessment Reviewed and Approved by (Signed)	**Title**	**Date**
Glen Burley	Senior Project Manager	1/02/2021
Riley Barns	Project Manager	
Justin Smith	Project Director	

Portions of the Project (WHS) Management Plan Applicable to the Project	
	Applies Yes/no
Fall Prevention/ Work at Heights	Yes
General	Yes
Fall Protection Systems	Yes
Fall Arrest/Fall Restraint	Yes
Penetrations	Yes
Falling Objects	Yes
Working at Heights	Yes
Plant & Equipment	Yes
Common Plant	Yes
Containment Netting/Scaffolding Mesh	Yes
Electrical Equipment	Yes
Fall Restraint Equipment	Yes
Grinders/Cutting Discs	Yes
Lasers	Yes
Ladders	Yes
Lifting Equipment	Yes
Hoists	Yes
Mobile Plant	Yes
Safe Work Practices	Yes
Asbestos	Yes
Confined Spaces stage 2	Yes
Coring/Penetrations	Yes
Demolition	Yes
Electrical	Yes
Excavation	Yes
Hazardous Substances (Brought onto Site)	Yes
Hazardous Substances (Existing on Site)	Yes
Hot & Cold Working Environments	No
Hot Works	Yes
Lead Paint Removal	No
Manual Handling	Yes
MDF	Yes
Noise	Yes
PPE	Yes
Pressurised Gas, Chemical, Fuel or Refrigerant Lines	Yes
Tilt Up or Precast Concrete	No
Traffic Management	Yes
Services – Inground/Overhead	Yes
Liaise with Asset Owners	Yes
Underground Services	Yes
Approach Distance Underground Services	Yes
Overhead Utilities	Yes
Approach distances Over Head Services	Yes
Temporary Support Structures/Structural Alterations	Yes
Risk Assessment	Yes
Building Structures/Materials/Foundations	Yes
Formwork	Yes
Scaffold	Yes
Rope Access (Absailing)	Yes
Other Temporary Support Structures	Yes

Exposure Monitoring Required	**Yes/No**	**Provided by:**	**Comments**
Asbestos	Yes	Douglas Partners	air monitoring
Extreme environmental conditions	No		
Hazardous materials	No		
Lead	No		
Noise >85dba	No		
Vibration	No		
Silica	No		

Health Surveillance Required	**Yes/No**	**Provided by:**	**Comments**
Asbestos	Yes	Subconractor	Subcontractor TBC
Extreme environmental conditions	No		
Hazardous materials	No		
Lead	No		
Noise >85dba	No		
Silica	No		
Vibration	No		
Biological	No		

High Risk Workshops

Site Specific Requirements	**Details**
Deliveries	Golden Grove Street
Employee access	Golden Grove Street
Inductions by the client/site manager	Site Manager
Time restrictions/working hours	7.00am to 6.00pm Monday to Friday; 8.00am to 1.00pm Saturday
Client reporting requirements	Yes
Incident reporting requirements	Yes

Client/Neighbouring Site Requirements	**Details**
Disruption Notice requirements	As outlined in the Impact and Interface Management Plan

Local Council / Utilities Requirements or permits	**Yes/No**	**Comments**

HAZMAT	**Reviewed Yes/No**	**Comments**
Asbestos Register (Built before 2003)	Yes	Noel Arnold & Associates Report
HAZMAT Survey	Yes	Douglas Partners Report

Information Requested from Client	**Yes/No**	**Comments**
Floor and suspended slab loading	No	
As Built drawings, including location of services	Yes	

Surveys	**Yes/No**	**Comments**
Dial before you dig	Yes	
Slab scans	No	
Geotech	Yes	
Structural	No	

Permits Required	**Yes/No**	**Supplied by:**	**Comments**
SE6211 Confined Space Entry Permit	No	AWE	
SE6213 Hot Work Permit	Yes	AWE	
SE6218 Working at Height Permit	Yes	AWE	
SE6219 Permit to Break Ground	Yes	AWE	
SE6220 Permit to Work - Use of Harness	Yes	AWE	
SE6221 Ladder Permit	Yes	AWE	
SE6224 Work Near Overhead Services Permit	Yes	AWE	
SE6225 Coring Permit	Yes	AWE	
SE6226 Formwork Deck Handover	Yes	AWE	
SE6227 Permit - Use of Cutting Discs	Yes	AWE	
SE9401 Dewatering Permit	Yes	AWE	

Plans Required	**Yes/No**	**Supplied by:**	**Comments**
Scaffold Plan	Yes	Subcontractor	
Traffic Control Plan	Yes	Subcontractor	
Traffic Management Plan	Yes	AWE	
Lift Study	Yes	Subcontractor	
Demolition Plan	Yes	Subcontractor	Stage 2 to be provided

Project Risk Register

Emergency/First Aid Risk Assessment Emergency Equipment

AW EDWARDS

Site Specific Details			
Location of nearest Hospital:	Royal Prince Alfred Hospital - 50 Missenden Road, Camperdown.		
Location of nearest Medical Service:	University Health Service - 2 Bultlin Avenue, Darlington		
Time to Medical Service:	5 minutes		
Timely access to first aid (hours):	2 minutes		
Alarm/type of communication required:	Horn, Nurse Call		
Average number of workers on site (enter a single number e.g. 20)	30	**Expected number of workers at peak:**	60

Emergency Situations Applicable	Yes/No
Asbestos	Yes
Breach of Utility or Service	Yes
Chemical, Biological, Radiological, Bomb Threat	No
Contaminated Material	Yes
Crane Collapse	Yes
Electrical Shock	Yes
Electrical - Mobile plant in contact with power lines	Yes
Environmental Incident	Yes
Fire or Explosion	Yes
Medical Emergency	Yes
Needle Stick Injury	No
Plant Roll Over/Vehicle Accident	Yes
Retrieval of a Person - EWP or Suspended from a Harness	Yes
Structural Collapse	Yes
Trench Collapse	Yes

First Aid/Emergency Equipment Required Project							
Hazard/Equipment	**Applies**	**Equipment**					**Required**
Access to hospital > 1/2 hour	Yes	Defibrillator					Yes
Asbestos	Yes	Decontamination unit					Yes
Burns	Yes	Burns Kit in 1st Aid Kit					Yes
Chemical Spill	Yes	PPE –respirator, gloves, safety goggles, face mask (as per SDS)					Yes
		Spill kit					Yes
Communication	Yes	Nurse call					Yes
		Mobile phones					Yes
		Radio					Yes
Confined Space (STAGE 2)	Yes	Atmospheric monitoring equipment					Yes
		Tripod Davit Arm					Yes
		Ropes					Yes
		Ladder					Yes
		Respirator					No
		Emergency Lighting					Yes
		Communication equipment					Yes
Deep Excavation/ Trench >1.5m	Yes	Atmospheric monitoring equipment					No
		Excavating equipment					Yes
		Hand tools					Yes
		Pumps					Yes
		Respirator					No
		Shoring shields and propping equipment					No
		Ventilation equipment					No
Electric Shock	Yes	Low Voltage Rescue Kit (Provided by subcontractor)					No
Fall Arrest	Yes	EWP					Yes
		Man box (suspended from crane)					Yes
		Retrieval Kit/Davit arm					No
Fire Extinguishers	Yes	Type:	No.		Location:		
		Dry Powder	Yes	8	Location:	On Site	
		Water	No.	0	Location:		
			No.		Location:		
First Aid	Yes	Type A 1st Aid Kit					Yes
		2 First Aiders					Yes
		First Aid Room					Yes
Potential for eye injuries from hazardous chemicals	Yes	Eye Wash/Shower					Yes
Snake/insect bites	No	Snake bite kit					No
Warning Devices	Yes	Air horn					Yes
		Radios					Yes
		Siren					No
Working off EWP 11m or greater	No	2nd trained person to lower EWP					No
		2nd EWP					No
		Retrieval Kit					No

Risk Assessment Matrix

		LIKELIHOOD				
		Almost Certain	Likely	Possible	Unlikely	Rare
CONSEQUENCE	Catastrophic	Extreme	Extreme	Very High	High	High
	Major	Extreme	Very High	High	High	Medium
	Moderate	Very High	High	High	Medium	Low
	Minor	Medium	Medium	Medium	Low	Low
	Insignificant	Medium	Low	Low	Low	Low

CONSEQUENCE
Catastrophic: The hazard has the potential to: • Permanently disable or kill • Cause severe damage to the structure • Have significant impact on the surrounding population and environment
Major: The hazard has the potential to: • Temporarily disable or very serious injury • Cause major damage to the structure • Serious breach of the site boundary and pollution of the local environment
Moderate: The hazard has the potential to: • Temporarily disable or serious injury • Cause moderate damage to the structure • Breach the site boundary and minor pollution to the local environment
Minor: The hazard has the potential to: • Moderate injury • Cause minor damage to the structure • Be contained within the site boundary
Insignificant: The hazard has the potential to: • Cause minor injury (first aid) • Insignificant impact contained within the site boundary

LIKELIHOOD	
Almost Certain **75% - 100%**	Expected to occur in most circumstances
Likely **60% - 75%**	Will probably occur in most circumstances
Possible **40% - 60%**	Might occur at some time in the future
Unlikely **20% - 40%**	Could occur but doubtful
Rare **0% - 20%**	May occur but only in exceptional circumstances.

Residual Risk Rating	Action taken based on residual risk
Extreme	No work allowed until the residual risk has been reduced. This may be by re-engineering or by using alternate construction methodologies.
Very High	HRCW SWMS must be provided for activity that addresses all required controls. A Work Practice Review (SE4805) must be held prior to start of activity to review hazards and controls. Controls must be reviewed and approved by the Project Manager/Project Engineer on the Project Risk Register (SE4131).

Hierarchy of Controls

1. **ELIMINATION**, can the risk or hazard be totally eliminated?

2. **SUBSTITUTION**, can the risk or hazard be replaced with a less hazardous method, material or system?

3. **ISOLATION**, can the hazard or risk be distanced from persons or can it be enclosed to prevent entry/access?

4. **ENGINEERING CONTROLS**, can the hazard or risk be guarded or made safe by engineering methods?

5. **ADMINISTRATIVE CONTROLS**, can training, increased supervision, rotation or signage assist?

6. **PERSONAL PROTECTIVE EQUIPMENT**, can PPE protect the worker from the hazard or risk?

Project Risk Register

WHS Risk Assessment

Trade Package	High Risk Construction Work Applicable to the Works																
	Involves, or is likely to involve, the disturbance of asbestos	Involves structural alterations or repairs that require temporary support to prevent collapse,	Is carried out in or near a shaft or trench with an excavated depth greater than 1.5 metres	is carried out in or near a confined space	Involves a risk of a person falling more than 2 metres	Is carried out in or near a tunnel	Involves the use of explosives	Is carried out on or near pressurised gas distribution mains or piping	Is carried out on or near chemical, fuel or refrigerant lines	Is carried out on or near energised electrical installations or services	Is carried out in an area that may have a contaminated or flammable atmosphere	Involves tilt-up or precast concrete	Is carried out on, in or adjacent to a road, railway, shipping lane or other traffic corridor that is in use by traffic other than pedestrians	Is carried out in an area at a workplace in which there is any movement of powered mobile plant	Is carried out in an area in which there are artificial extremes of temperature	Is carried out in or near water or other liquid that involves a risk of drowning	involves diving work
Demolition																	
Civil																	
Formwork																	
Concrete Placement																	
Electrical																	
Hydraulic																	
Lift																	
Structural Steel																	
Roofing																	
Windows																	
Mechanical																	
Tree Removal																	
Wall and Ceiling Cladding																	
Scaffold																	
Landscaping																	
Post Tensioning																	
Hoarding																	
High Risk Construction Works SWMS must be developed that address the high risk construction nominated above for your trade package																	

SECTION	PROCESS/TASK	HAZARDS/RISKS	LIKELIHOOD	CONSEQUENCE	RISK LEVEL	CONTROL MEASURES	HIERACHY OF CONTROLS	LIKELIHOOD	CONSEQUENCE	RESIDUAL RISK	RESPONSIBILITY	ADDITIONAL CONTROLS REQUIRED
Adjacent/Neighbouring Sites	Neighbours, Adjacent sites	Interaction with members of the public, causing personal injury	4.Unlikely	4.Minor	Low	Ensure public safety through securing the boundary of the site with barriers, witches hats, bunting and gates All mandatory signage to be prominently displayed.	3.Isolate	4.Unlikely	4.Minor	Low	AWE	Nil
		Impact with construction processes causing personal injury, property damage	4.Unlikely	2.Major	High	- Maintain regular consultation with neighbours, adjacent sites in relation to protection of their staff, visitors and assets - External Hoardings and boundary fencing, with warning signage installed throughout the project - Regular boundary inspections conducted by site management personnel Notify neighbours, adjacent sites who may be impacted by major works prior to their commencement	3.Isolate	4.Unlikely	4.Minor	Low	AWE	Nil
		Interrupted movement of emergency vehicles access/egressing the school Golden Grove Street and	3.Possible	1.Catastrophic	Very High	Traffic Management Plan and Traffic Control Plan(s) prepared and implemented for the works Traffic Management Plan and Traffic Control Plan(s) regularly reviewed and update throughout the duration of the works TCPs communicated with contractors using a combination of toolbox talks and electronic documents transfer Ticketed traffic control personnel at site entry to manage traffic movements, construction vehicles, and pedestrian traffic In accordance with the Interface and Impact Management Plan, A W Edwards will maintaining access for students, staff and public, Ongoing consultation with SI regarding vehicular movements Disruption Request Notice (DRN) process implemented for any works that has the potential to impact the school operations	5.Admin	4.Unlikely	3.Moderate	Medium	AWE	Nil
		Damage or disruption to existing campus engineering services and systems	4.Unlikely	2.Major	High	In accordance with the Interface and Impact Management Plan, A W Edwards will; - Allocation of dedicated services team to manage the design, coordination, installation and commissioning of services to the project. - The services team to be an integral part of the Interface Management Team. - Early identification and long term planning of services impacts through the use of the Interface and Impacts Register (see IIMP). - Use of the DN procedure for all services interruptions and connections to services within the existing hospital. - Undertake early services dilapidation reports for any existing hospital area or services where new works are to take place	5.Admin	4.Unlikely	2.Major	High	AWE + Subcontractor (PCBU)	Nil
Site Establishment	Establish site specific WHS plan	Potential site risks not identified	2.Likely	1.Catastrophic	Extreme	Prepare site specific WHS Management Plan and update as required To be reviewed at Team Meetings	5.Admin	4.Unlikely	4.Minor	Low	AWE	Nil
	Boundary Fencing / Hoardings	Public protection	2.Likely	2.Major	Very High	Construction zone to be isolated from public and neighbours with physical barriers, bunting, witches hats Fencing: - Fence bases and bracing is installed per the manufacturers/ suppliers installation instructions. - Top connectors are installed per the manufacturers/ suppliers installation instructions. - Shade cloth is perforated to minimise wind load/resistance. A and B Class: - Installed in accordance with manufacturers/suppliers installation instructions and Australian Standards - Consult/obtain advice to utilise the concrete jersey barriers to support hoarding. - Brace the wall(s) in accordance with the engineer's requirements - Comply with CoP Protective Overhead Structures - Sign post allowable live load that can be applied to the hoarding(s) - Maintained free of protrusions (e.g. nails, screws, etc.) that could snag clothing or cause physical harm	3.Isolate	4.Unlikely	4.Minor	Low	AWE	Nil
	Communication	Emergency	1.Almost Certain	2.Major	Extreme	Mobile phones, radios in place to communicate in an emergency Emergency contact details to be displayed at the site gate, on the site noticeboard	5.Admin	3.Possible	4.Minor	Medium	AWE	Nil
	Consultation	Not complying with legislative requirements	1.Almost Certain	3.Moderate	Very High	Establish WHS Consultative process and document on Consultation Statement (projects) detailing consultation arrangements for the project Weekly safety walk with sub-contractors as part of the consultation process	5.Admin	4.Unlikely	4.Minor	Low	AWE + Subcontractor (PCBU)	Nil
	Deliveries	Delivery constraints	1.Almost Certain	2.Major	Extreme	- All deliveries to be reported to site office before being set down in designated area - conditions for delivery clearly communicated in subcontract documents and in the site induction	5.Admin	3.Possible	4.Minor	Medium	AWE + Subcontractor (PCBU)	Nil
	Emergency preparedness	Inadequate facilities or equipment	2.Likely	2.Major	Very High	First aid and amenity assessment conducted at the start and during all projects	5.Admin	4.Unlikely	4.Minor	Low	AWE	Nil
		Workers not aware of emergency response	1.Almost Certain	2.Major	Extreme	Emergency procedures are developed All workers to be inducted into the emergency procedures Emergency equipment to be tested at regular intervals and details recorded on Weekly Site Inspections Evacuation drills to be held within 3 months of the project commencement and then at least once every 6 months with details recorded in Emergency Drill Record	5.Admin	3.Possible	4.Minor	Medium	AWE + Subcontractor (PCBU)	Nil
	Flammable liquid storage	Fire / Explosion	2.Likely	1.Catastrophic	Extreme	Flammable material not to be stored on site where possible. All flammable liquids are to be identified and SDS provided for products being brought to site Fire extinguisher to be kept in close proximity to storage area All containers to be clearly labelled. No storage of flammable liquids in non-ventilated containers and lunch shed Store Oxygen and Acetylene cylinders separately, at least 3 metres apart Flashback arresters to be installed on all oxy/acetylene equipment and to be tested or replaced every 12months Restrain cylinders upright by the use of chain or other suitable means. Warning signage to be displayed prominently.	3.Isolate	4.Unlikely	4.Minor	Low	AWE + Subcontractor (PCBU)	Nil

SECTION	PROCESS/TASK	HAZARDS/RISKS	LIKELIHOOD	CONSEQUENCE	RISK LEVEL	CONTROL MEASURES	HIERACHY OF CONTROLS	LIKELIHOOD	CONSEQUENCE	RESIDUAL RISK	RESPONSIBILITY	ADDITIONAL CONTROLS REQUIRED
						Storage of flammable materials to be kept to a minimum.						
	Hours of work	Work Related Stress Fatigue	2.Likely	2.Major	Very High	- Comply with working hours detailed in the Site Induction and approved by DA/Client - Workers complying with AWE Fatigue Management Policy	5.Admin	3.Possible	4.Minor	Medium	AWE + Subcontractor (PCBU)	Nil
	Labour Hire	Poorly trained personnel	3.Possible	2.Major	High	Labour hire to be trained in applicable SWMS prior to start of work Labour hire to be supervised by Site Manager and Foremen Certificates of training to be supplied where required.	5.Admin	3.Possible	4.Minor	Medium	AWE + Subcontractor (PCBU)	Nil
	Public Protection	Unauthorised access	2.Likely	2.Major	Very High	Worksites to be separated from public by witches hats, bunting, barricades, fencing as appropriate Signage directing unauthorised persons to keep out Securing the boundary of the site with security fencing Where the risk has been identified, drop zones will be barricaded off within general public areas, and spotters engaged A W Edwards to maintain regular consultation with neighbouring sites in relation to the protection of their staff and assets A W Edwards to notify any neighbours who may be potentially impacted of all major works prior to their commencement	3.Isolate	4.Unlikely	4.Minor	Low	AWE	Nil
	Purchasing	Procurement of unsafe / unfit goods or materials	3.Possible	2.Major	High	Following but not limited to be completed and communicated prior to commencement on site: Products to be reviewed prior to purchase for suitability and risk rating Research to be initiated by purchaser to ensure safest product is selected Hazardous substances to be substituted with less hazardous materials All Hazardous materials that are purchased for use on site are to be evaluated and risk assessed All hazardous substances to have procedures documented for their safe use and control	5.Admin	4.Unlikely	3.Moderate	Medium	AWE + Subcontractor (PCBU)	Nil
	Roads. Footpaths and public areas	Injury to public	2.Likely	1.Catastrophic	Extreme	All works to be delineated by witches hats, bunting, barriers; Roads, footpaths and public areas are to be kept clean and free of obstacles Public will have right away in live environments, unless barricades or traffic controls are in place	3.Isolate	5. Rare	4.Minor	Low	AWE	Nil
	Signage	Communication	2.Likely	3.Moderate	High	Construction signage is to be at all entry points PPE signage Emergency facility and contacts will be signposted Directional signs and amenity HAZMAT signs in chemical and dangerous goods storage areas	5.Admin	4.Unlikely	4.Minor	Low	AWE	Nil
	Site security	Unauthorised entry	3.Possible	1.Catastrophic	Very High	Erect signage at entry points to site stating Perimeter security to site to be maintained and monitored during Weekly Site Inspection Adequate lighting to be installed on and around the site Sheds office to be locked and secure during the site's non -operating hours	3.Isolate	4.Unlikely	3.Moderate	Medium	AWE + Subcontractor (PCBU)	Nil
	Site specific induction	Personnel unaware of site specific requirements	2.Likely	3.Moderate	High	All personnel to work on site are to attend the site specific induction prior to commencing work on site Visual check to be made of individuals qualifications It is the responsibility of the Subcontractor to ensure all required documentation is completed prior to start All workers must have a valid construction industry Induction card	5.Admin	4.Unlikely	4.Minor	Low	AWE	Nil
	Stairs and Access	Slips, trips and falls	1.Almost Certain	1.Catastrophic	Extreme	Ramps and low risk access methods to be incorporated Designated access ways to be identified on the site plan Where Ladders are to be used they must be tied off at the top, footed at the bottom with a minimum 1m past platform Subcontractors to provide task lighting Materials are not to be stored in access ways / emergency egress paths etc.	2.Sub	3.Possible	4.Minor	Medium	AWE + Subcontractor (PCBU)	Nil
	SWMS	Subcontractors HRCW SWMS fails to meet the site specific requirements	1.Almost Certain	3.Moderate	Very High	All workers are to be inducted by their respective supervisor into their Site specific HRCW SWMS Site specific HRCW SWMS submitted or review prior to commencement of HRCW Provide subcontractors with WHS Management Plan Provide with subcontractors with Project Risk Assessment HRCW SWMS approved by Site Manager prior to the subcontractor commencing on site	5.Admin	4.Unlikely	4.Minor	Low	AWE + Subcontractor (PCBU)	Nil
		Workers not inducted into SWMS	3.Possible	2.Major	High	Employees are to be inducted by their respective supervisors into their task specific SWMS Subcontractors to have task specific HRCW SWMS for high risk construction work	5.Admin	4.Unlikely	4.Minor	Low	AWE + Subcontractor (PCBU)	Nil
		Workers not working in accordance with SWMS	2.Likely	1.Catastrophic	Extreme	Task of observations carried out by Site Manager/Foremen/WHS Team	5.Admin	3.Possible	3.Moderate	High	AWE + Subcontractor (PCBU)	Nil
	Traffic and pedestrian management	Increased traffic movement around construction zone	1.Almost Certain	1.Catastrophic	Extreme	Construction traffic to follow designated route via controlled site access points Works to be conducted within the specified hours of operation Construction traffic/no parking on or near site Site speed limits will apply, as per Traffic Control Plan(s), Traffic Management Plan or Vehicle Movement Plan(s) No unauthorised traffic to enter construction site Vehicle circulation route planned to minimise impacts on site operations Delivery map to be developed and distributed to subcontractors and suppliers Schedule deliveries and collections to avoid inconvenience to school drop off and pick up. No deliveries during school peak times.	3.Isolate	4.Unlikely	2.Major	High	AWE + Subcontractor (PCBU)	Nil
	Waste Management and removal	Materials Handling	1.Almost Certain	2.Major	Extreme	- Workers instructed to not stand in or climb bins - Workers to wear correct PPE (including gloves and glasses)	5.Admin	4.Unlikely	3.Moderate	Medium	AWE + Subcontractor (PCBU)	Nil
		Dust	1.Almost Certain	2.Major	Extreme	Wet down and cover bins during waste removal Cover bins during waste removal	3.Isolate	4.Unlikely	4.Minor	Low	AWE + Subcontractor (PCBU)	Nil

SECTION	PROCESS/TASK	HAZARDS/RISKS	LIKELIHOOD	CONSEQUENCE	RISK LEVEL	CONTROL MEASURES	HIERACHY OF CONTROLS	LIKELIHOOD	CONSEQUENCE	RESIDUAL RISK	RESPONSIBILITY	ADDITIONAL CONTROLS REQUIRED
Site Amenities/Facilities	Establishment of site amenities	Insufficient site amenities	2.Likely	3.Moderate	High	First aid and amenity assessment conducted at the start and during all projects	5.Admin	5. Rare	4.Minor	Low	AWE	Nil
						Routine amenities inspections during Weekly Site Inspections						
						Amenities to be cleaned regularly, and food waste disposed of daily						
						Change rooms should be provided if the type of work, location of work or the workers require clothes to be changed						
	First Aid	Insufficient First Aid Facilities	2.Likely	2.Major	Very High	First aid and amenity assessment conducted at the start and during all projects	5.Admin	4.Unlikely	3.Moderate	Medium	AWE	Nil
						First Aid Kit Type "A" to be on site < 100 workers and First Aid Room to be on site > 100 workers						
		Insufficient Trained first aid personnel on site	2.Likely	2.Major	Very High	Apply First Aider to be on site < 100 workers and Manage First Aid (Occupational First Aider) in the Workplace to be on site > 100 workers	5.Admin	4.Unlikely	3.Moderate	Medium	AWE	Nil
		Injuries not reported	1.Almost Certain	3.Moderate	Very High	All injuries to be reported to Site Manager	5.Admin	3.Possible	4.Minor	Medium	AWE + Subcontractor (PCBU)	Nil
						Notify LTI, MTI and serious incidents to senior management						
		Failure to notify Authorities	2.Likely	2.Major	Very High	Project Director to ensure SafeWork NSW notification	5.Admin	4.Unlikely	3.Moderate	Medium	AWE	Nil
	Visitors to site	Personal injury	2.Likely	2.Major	Very High	Adequate sign posting and signage to ensure visitors movements to site office.	5.Admin	4.Unlikely	4.Minor	Low	AWE	Nil
						Ensure the site access for visitors to Site office from main access is clear and safe from construction activities.						
						All visitors to report to site office						
						All visitors to be accompanied by a person that has completed the site specific induction for the duration of their visit						
						All visitors to have the appropriate PPE applicable to the site						
	Covid - 19	Sickness to oneself or to others	2.Likely	2.Major	Very High	Refer to the Covid-19 Risk Control Measures Refer to Covid Safe Plan	5.Admin	3.Possible	3.Moderate	High	AWE + Subcontractor (PCBU)	#N/A
General hazards	Biological	Syringes	3.Possible	1.Catastrophic	Very High	Competent workers to collect syringes using tongs and dispose in sharps containers	3.Isolate	5. Rare	3.Moderate	Low	AWE + Subcontractor (PCBU)	Nil
						Sharps container to be taken to contaminated material						
		Soiled first aid supplies	3.Possible	2.Major	High	Soiled bandages to be double bandages and disposed of in the amenities waste bins	5.Admin	4.Unlikely	3.Moderate	Medium	AWE	Nil
						Cleaners to wear gloves, masks, overalls and dispose of cloths and PPE						
	Construction Vehicle Site Access/Vehicle Movement	Vehicles/Mobile Equipment/ Machinery collision	1.Almost Certain	1.Catastrophic	Extreme	Traffic and Pedestrian Management Plan to be developed prior to commencement on site, highlighting vehicle and plant only areas, with pedestrian walk ways clearly identified	3.Isolate	4.Unlikely	4.Minor	Low	AWE + Subcontractor (PCBU)	Nil
						High visibility clothing to be worn by all site personnel during all works						
						Vehicle operators to be trained and have the appropriate ticket and or competency to operate						
						Loads on vehicles to comply with local Roads Traffic Authority legal weight limits						
						Vehicles to travel only on approved roadways, loads secured and covered						
						Plant/equipment not to be floated on/off site unless A W Edwards Management representative is present						
						Plant movements to be controlled by trained and competent traffic controller only						
						Spotters to be used in areas of compromised visibility i.e. reversing - Operator to request a spotter in poor visibility						
						Once deliveries come to site, authorised traffic controllers will manage where materials will be unloaded.						
						Warning alarms and flashing lights to be fitted to all machinery as directed by the manufacturers operating instructions and plant risk assessment						
						All machinery guards including ROPS to be in place and not tampered with						
						All personnel to remain in the line of site of the driver						
						Ground personnel to be trained and competent in the controls identified on HRCW SWMS						
						Communication between on ground workers and operators to be maintained at all times						
		Impact with pedestrians	1.Almost Certain	1.Catastrophic	Extreme	Pedestrians to have the right of way at all times	3.Isolate	4.Unlikely	3.Moderate	Medium	AWE + Subcontractor (PCBU)	Nil
						Traffic and Pedestrian Management Plan to be developed prior to commencement on site, highlighting vehicle and plant only areas, with pedestrian walk ways clearly identified						
						Pedestrian / worker access must be provided to site						
						Plant movements to be controlled by trained and competent traffic controller Spotters to be used in public and high pedestrian areas						
						Use times where pedestrian movements are minimal to load in/out plant and equipment						
	Demolition	Asbestos products Synthetic Mineral Fibres (SMF) Dusts and other contaminants.	3.Possible	2.Major	High	- All Demolition work to be carried out to the requirements of the SafeWork NSW Code of Practice – Demolition - refer to following sections for Dust, Asbestos, and SMF controls	3.Isolate	5. Rare	2.Major	Medium	AWE + Subcontractor (PCBU)	Nil
		Crushing, collapse	3.Possible	1.Catastrophic	Very High	- Demolition plan/sequence prepared for the works - Exclusion zones established and maintained for the duration of the works	3.Isolate	4.Unlikely	3.Moderate	Medium	AWE + Subcontractor (PCBU)	Nil
		Electric shock, electrocution	3.Possible	1.Catastrophic	Very High	- refer to following sections for electrical	3.Isolate	5. Rare	1.Catastrophic	High	AWE + Subcontractor (PCBU)	Nil
		Disruption to school operations	3.Possible	2.Major	High	- Demolition plan/sequence prepared for the works - Exclusion zones established and maintained for the duration of the works	3.Isolate	5. Rare	2.Major	Medium	AWE	Nil
	Drugs and alcohol	Intoxicated and aggressive behaviour	3.Possible	2.Major	High	Drug and alcohol policy to be in place, and communicated in subcontract documents, and during site induction	5.Admin	4.Unlikely	4.Minor	Low	AWE + Subcontractor (PCBU)	Nil
						Drug and alcohol free site						
	Dust	Dust	1.Almost Certain	2.Major	Extreme	Offsite cutting and prefabrication should be used as much as possible	1.Elim	4.Unlikely	4.Minor	Low	AWE + Subcontractor (PCBU)	Nil
						Erect cutting rooms or designated cutting areas to capture dust and with adequate ventilation						
						Use methods to suppress dust i.e. water spray, dust barriers						
						Regular clean ups to be completed on site						
						Equipment to be regularly cleaned no less than daily						
						Bins leaving site to be covered						
						Subcontractors to control the dust created during their tasks.						
	Fire protection	Fire due to work activity	2.Likely	1.Catastrophic	Extreme	Fire extinguishers to be available	3.Isolate	4.Unlikely	4.Minor	Low	AWE + Subcontractor (PCBU)	Nil
						Complete Permit - Hot Works						

SECTION	PROCESS/TASK	HAZARDS/RISKS	LIKELIHOOD	CONSEQUENCE	RISK LEVEL	CONTROL MEASURES	HIERACHY OF CONTROLS	LIKELIHOOD	CONSEQUENCE	RESIDUAL RISK	RESPONSIBILITY	ADDITIONAL CONTROLS REQUIRED
	General public, neighbours, workers, tenants	Security	1.Almost Certain	2.Major	Extreme	All boundary, hoardings and access points to be secure and sign posted	3.Isolate	4.Unlikely	4.Minor	Low	AWE	Nil
		Public injury	2.Likely	2.Major	Very High	Mandatory signage to be prominently displayed at all access/egress points including Contact details of Project Manager	3.Isolate	4.Unlikely	4.Minor	Low	AWE	Nil
		Unauthorised access	1.Almost Certain	2.Major	Extreme	Erect Construction unauthorised personnel to keep out at access points	3.Isolate	4.Unlikely	3.Moderate	Medium	AWE	Nil
						Maintain regular consultation with neighbours, adjacent sites						
						Schedule and barricade work areas to minimise impact on public/tenants						
	Hot and humid weather	Heat stroke	3.Possible	2.Major	High	Schedule external works to cooler times of the day	4.Eng	4.Unlikely	3.Moderate	Medium	AWE + Subcontractor (PCBU)	Nil
						Information/instruction provided at site induction						
						Clean, cooled drinking water points (bubblers/water bottle filling points) provided at amenities and at various points throughout the site						
		Sun exposure	1.Almost Certain	2.Major	Extreme	Workers to be sun smart (Hats, long sleave shirts, 30+ sun screen and sub glasses)	4.Eng	3.Possible	4.Minor	Medium	AWE + Subcontractor (PCBU)	Nil
						Ensure shelter and cool drinking water is available to workers						
						Air Conditioned site amenities						
						Consult with workers to determine when works should stop						
		Dehydration	2.Likely	2.Major	Very High	Clean, cooled drinking water points (bubblers/water bottle filling points) provided at amenities and at various points throughout the site	4.Eng	4.Unlikely	4.Minor	Low	AWE + Subcontractor (PCBU)	Nil
	Housekeeping	Slips, trips, falls and/or Property Damage	1.Almost Certain	2.Major	Extreme	Materials that have no packaging or waste material to be selected for installation on site	2.Sub	4.Unlikely	4.Minor	Low	AWE + Subcontractor (PCBU)	Nil
						Appropriate placement and number of waste facilities to be made available on site						
						Removal of material to be carried out regularly and coordinated by the Site Manager						
						All materials to be stacked and stored in a secure manner that will have minimal impact on other trades						
						Access ways to be kept clear and well lit. the lighting to be adequate to allow employees to work safely						
						Access paths adequate to allow persons who are not employees to move safely within the place of work and facilitates safe access to and egress from the place of work, including emergency exits						
						Regular Safety walks to highlight any problem areas and ensure responsible parties to remedy						
	Mobile phone use	Personal injury	2.Likely	1.Catastrophic	Extreme	No mobile phones are to be used when operating plant	5.Admin	3.Possible	3.Moderate	High	AWE + Subcontractor (PCBU)	Nil
						Persons at the workplace should never make or receive calls when working in the vicinity of operating plant						
						If phone needs to be answered or calls need to be made, check surroundings move to a safe area.						
						Persons using phone on site are to isolate themselves from moving plan						
						Persons using phone are not to walk / move around the site whilst using phone						
	Noise / vibration	Noise / vibration	1.Almost Certain	2.Major	Extreme	Works to be completed within DA conditional hours.	2.Sub	3.Possible	4.Minor	Medium	AWE + Subcontractor (PCBU)	Nil
						Exposure to whole body vibration in excess of exposure levels nominated for machinery or plant by the manufacturer Use tools and methods that create less noise and vibration where possible						
						Noise producing activities to be isolated where ever possible						
						Wear appropriate ear protection and take note of signage and restricted areas						
						Subcontractor to address the control of noise during their activities						
						Plant and equipment to be maintained i.e. exhausts						
	PPE selection, supply and use	Not meeting Australian standards, incorrect selection and/or incorrect use	2.Likely	2.Major	Very High	Work activities to be employed that eliminate the requirement for PPE where possible	1.Elim	4.Unlikely	4.Minor	Low	AWE + Subcontractor (PCBU)	Nil
						All PPE to comply with appropriate Australian Standard						
						PPE required to perform task safely as per site requirements						
						Engineering solutions to be employed where ever possible i.e. Guards on machinery, extraction vacuums etc.						
						Employees to be inducted into its application and correct use of PPE						
						Mandatory PPE requirements to be sign posted in common areas and at main entrance						
						All PPE to be inspected and maintained prior to use						
						Where required personnel required to use/wear PPE to be inducted into its correct use						
						PPE to be selected that do not limit or hinder the operator from performing the task safely						
						Subcontractors to ensure all employees are trained in the correct application and use of PPE						
						PPE use and application to be monitored during site safety walks						
	Wet weather	Slips and trips	1.Almost Certain	2.Major	Extreme	Consult with workers to determine when works should stop	4.Eng	3.Possible	4.Minor	Medium	AWE + Subcontractor (PCBU)	Nil
						Wet weather gear to be worn during dewatering (Gum boots, rain coats)						
						Work areas to be cleared of water, pumps squeegees and brooms may be used to assist - Do not dewater into stormwater drains						
		Flooding	1.Almost Certain	2.Major	Extreme	Stage works to minimise flooding	3.Isolate	4.Unlikely	2.Major	High	AWE + Subcontractor (PCBU)	Nil
						Install barriers, berms etc. to prevent water inrush						
						Program/schedule flood mitigation measures installation as soon as practicable in the project						
						Work areas are to be inspected for damage before recommencing works						
	Windy and storm conditions	Flying debris	1.Almost Certain	2.Major	Extreme	External works to stop during lightening, high wind and severe storms	3.Isolate	4.Unlikely	4.Minor	Low	AWE + Subcontractor (PCBU)	Nil
						Material to be secured in windy conditions						
						Work areas are to be inspected for damage before recommencing works						
						Perimeter scaffolding, fencing and hoarding to be designed to meet wind loads						
						Scaffolding, hoarding and fencing to be secured in windy conditions						
						Do not operate Cranes, EWP etc. in high wind conditions						
						Perimeter scaffold/ fencing to be installed by competent Contractors and meet wind loading requirements						

SECTION	PROCESS/TASK	HAZARDS/RISKS	LIKELIHOOD	CONSEQUENCE	RISK LEVEL	CONTROL MEASURES	HIERACHY OF CONTROLS	LIKELIHOOD	CONSEQUENCE	RESIDUAL RISK	RESPONSIBILITY	ADDITIONAL CONTROLS REQUIRED
Hazardous Tasks	Confined Space	Personal injury/ engulfment/entrapment	1.Almost Certain	1.Catastrophic	Extreme	No workers may enter a confined space to carry out work unless a Permit - Confined Spaces has been issued for the work	3.Isolate	4.Unlikely	2.Major	High	AWE + Subcontractor (PCBU)	Nil
						Ensure that the confined space is isolated from contaminants or the movements of equipment which might harm persons working in the confined space						
						Atmosphere/Gas monitoring must be undertaken before entry and during works						
						Mechanical ventilation to be provided						
						A competent (has undergone Confined Space Training) Stand-By Person must be stationed in close proximity to the entry of the confined space						
						All workers must have undergone confined space training						
		Unable to rescue workers in an emergency	2.Likely	1.Catastrophic	Extreme	Emergency response procedures must be developed for the confined space. Workers must be trained in the emergency procedures.	5.Admin	4.Unlikely	2.Major	High	AWE + Subcontractor (PCBU)	Nil
	Explosive power tools (EPT)	Unauthorised use	2.Likely	1.Catastrophic	Extreme	No explosive tools to be used under any circumstances	1.Elim	5. Rare	3.Moderate	Low	AWE + Subcontractor (PCBU)	Nil
						Other means of fixing to be used						
	Gas and powered nailing tools	Injury to operator or others	1.Almost Certain	3.Moderate	Very High	Work area is to be clear of trip obstacles	3.Isolate	4.Unlikely	4.Minor	Low	AWE + Subcontractor (PCBU)	Nil
						Areas to be isolated to operator only where applicable						
						Workers are not to climb ladders or other elevated areas with loaded tool.						
						Tool not to be used in restricted or confined areas						
						Tool is not to be used in active access routes						
						Gas powered nailing tools to be maintained in accordance with manufacturers / suppliers requirements						
						Face shield, eye protection and hearing protection to be worn						
						Signage to be erected that will warn workers to the dangers in the activity. All workers inside the exclusion zone are to wear appropriate eye and hearing protection and any other applicable PPE as noted in manufacturer's instructions						
	Hazardous substances (Use, handling and storage)	Personal injury/contamination	1.Almost Certain	2.Major	Extreme	Hazardous Substances to be substituted with less hazardous items where possible	3.Isolate	4.Unlikely	3.Moderate	Medium	AWE + Subcontractor (PCBU)	Nil
						All hazardous items to be isolated and signposted						
						PPE as per SDS or hazardous substance risk assessment to be worn						
		Spills/fire	1.Almost Certain	1.Catastrophic	Extreme	Hazardous substance use and storage to be kept to a minimum	3.Isolate	4.Unlikely	3.Moderate	Medium	AWE + Subcontractor (PCBU)	Nil
						All Hazardous Substances/Dangerous Goods are to be identified and relevant notification and SDS to be provided						
						When a Hazardous substance is used on site all workers must have completed and signed a Hazardous Substance Register						
		Personal contamination	1.Almost Certain	2.Major	Extreme	All Hazardous Substances/Dangerous Goods to be stored as per Local Statutory Authority requirements and AS1940. e.g. lockable cages, bunds with appropriate signage displayed	3.Isolate	4.Unlikely	3.Moderate	Medium	AWE + Subcontractor (PCBU)	Nil
						Designated storage area to be defined and shown on Site Map						
		Fire	2.Likely	2.Major	Very High	Fire extinguishers to be kept in close proximity to storage area	4.Eng	4.Unlikely	4.Minor	Low	AWE + Subcontractor (PCBU)	Nil
						Hazardous Chemicals used in accordance with SDS fire prevention controls						
		Dust	1.Almost Certain	2.Major	Extreme	Dust control measures to be put in place such as extraction units or vacuum units fitted to power tools	4.Eng	4.Unlikely	4.Minor	Low	AWE + Subcontractor (PCBU)	Nil
						Dust emitting processes must be isolated to prevent ingress to other work areas						
						Dust from Hazardous substances including MDF and wood dust must be double bagged and disposed of off site						
	Hot Works / Welding / Grinding	Fire, Explosion, Property Damage	1.Almost Certain	1.Catastrophic	Extreme	Hot works are be completed off site where possible	3.Isolate	4.Unlikely	3.Moderate	Medium	AWE + Subcontractor (PCBU)	Nil
						Hot works activities to be substituted with less hazardous methods						
						Isolate hot work activities from other trades and public						
						Permit- Hot Works to be completed prior to start of hot work						
						Keep flammable materials away from other workers/work activities						
						Maintain good housekeeping						
						Sparks / slag to be contained to the same level that task is being completed on.						
						Provide fire extinguishers/hose reels						
						Welding works to have screens erected						
						Work areas to be adequately ventilated						
						Spotter to be appointed						
						Fire watch" to be implemented up to 2 hours after hot works have completed.						
						Good ventilation to be maintained throughout the activity						
						PPE - safety glasses/face shield, gloves for welding, welding apron.						
	Lasers	Personal injury	1.Almost Certain	2.Major	Extreme	Lasers to be protected from sending a beam into unwanted areas by use of barriers where practicable	3.Isolate	3.Possible	4.Minor	Medium	AWE + Subcontractor (PCBU)	Nil
		Interference with other trades	1.Almost Certain	2.Major	Extreme	Laser to be correct type for construction use.	3.Isolate	3.Possible	4.Minor	Medium	AWE + Subcontractor (PCBU)	Nil
						Appropriate signage to be displayed where lasers are in use						
						Lasers to be used in isolation where ever possible						
	Manual Handing	Personal injury	1.Almost Certain	2.Major	Extreme	Manual handling to be eliminated in works procedures where possible	4.Eng	3.Possible	4.Minor	Medium	AWE + Subcontractor (PCBU)	Nil
						Use of mechanical aids available on site to be utilised i.e. site tower crane, hoist, and fork lift						
						Materials to be selected that negate the use of manual handling						
						Materials storage to be staged in a manner that reduces the amount of manual handling as possible						
						All employees to be formally trained in correct manual handling techniques. Evidence of which is to be made available by subcontractor upon request						
						Personnel conducting the manual handling task should be consulted to the method which would best suit them						
						Manual handling tasks to be completed in a manner that reduces the likelihood of repetitive strain						
						Lift within a persons capacity						
						Operators of manual handling tasks should be encouraged to take suitable breaks						

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	Materials Handling	Manual Handling	1.Almost Certain	2.Major	Extreme	Stage and coordinate works that will eliminate the use of materials handling	1.Elim	3.Possible	4.Minor	Medium	AWE + Subcontractor (PCBU)	Nil
						Reduce the amount and distance that material will need to be handled.						
						Options include, but not limited to – Forklift, pallet trolleys, Telehandler, Mobile Crane, Shute's and hoists						
						Reduce the amount and distance that material will need to be handled						
		Crush / collision with mechanical devices	1.Almost Certain	1.Catastrophic	Extreme	Isolate areas around movements	3.Isolate	3.Possible	4.Minor	Medium	AWE + Subcontractor (PCBU)	Nil
						Applicable tickets/licenses to be provided at induction						
						All loads to be secured						
		Use of loading platforms	2.Likely	1.Catastrophic	Extreme	Stage and coordinate works that will eliminate or minimise the frequency of the use of platforms	2.Sub	4.Unlikely	3.Moderate	Medium	AWE	Nil
	Cutting, grinding silica products and/or Cutting MDF	Exposure to MDF dust	1.Almost Certain	2.Major	Extreme	Consideration for silica content, or use of MDF during design review stages to eliminate, where possible. Communication with supply chain to identify and eliminate sources pre-delivery (where possible)	1.Elim	4.Unlikely	3.Moderate	Medium	AWE + Subcontractor (PCBU)	Nil
						Offsite cutting and prefabrication should be used as much as possible						
						Dedicated cutting room to be established on site (separate rooms for MDF or silica containing products)						
						Cutting room to be adequately sign posted						
						Cutting room to have doors/curtains closed whilst in use						
						Cutting room to be cleaned daily and as required						
						P2 mask to be worn during cutting and exposure to dust						
						Vacuums to be set up on cutting devices						
						Dust to be double bagged and disposed of in skip						
						MDF products to be stored in a shaded area to inhibit any release of any Formaldehyde vapour.						
Electrical Services	Electrical shutdowns and terminations of redundant cables	Electric shock, Electrocution	2.Likely	1.Catastrophic	Extreme	All Shutdowns will be carried out by a licensed and experienced electrician	3.Isolate	5. Rare	2.Major	Medium	Subcontractor (PCBU)	Nil
						Isolated circuits to be locked out with personal danger tags installed with the controlling parties Name, Date and Contact Number. Locks are only to be removed by controlling part/Tag issuer.						
						Personal danger tags to be installed and removed by the same qualified worker only, Do not remove other workers danger tags						
						Circuits are not to be isolated with zip ties, copper wire or similar tags that can be easily removed						
						All live cables shall be identified where they are temporary services using Temporary Construction tape						
						Cables are to be disconnected/cut at point of origin						
	Existing electrical services	Electric shock, Electrocution	1.Almost Certain	1.Catastrophic	Extreme	Ensure all circuits are protected by RCD	3.Isolate	5. Rare	2.Major	Medium	Subcontractor (PCBU)	Nil
						Have a spotter in place to monitor the distance between equipment and materials during works						
						Mechanically protect pipes and cables against damage if practicable						
						Ensure all existing service are identified and discussed in the pre start or toolbox meeting						
						Induct supervisors and operator in the location of services						
						All temporary lights and Temporary Switchboards to meet AS 3012						
						During site establishment the electrician will certify that all RCD's and ELBC's interfaced with the project meet AS:3000, where they do not meet AS:3000 the electrician will advise the Site Manager who will notify the client and issue instruction to replace						
						Temporary DB board installed to replace existing DB boards and to feed power to the site						
						All electrical cables are to be treated as live and no cables are to be removed or relocated by trades other than electrical services						
						Do not touch live services, if live services are in your way stop work and assess your method to eliminate working near cables.						
						Remove ceiling tiles set ceilings, scheduled for removal/demolition to be assessed by an electrician, through open tiles or access hatches cut in ceiling, prior to prevent damage or workers coming into contact with live electrical cables unable to be isolated.						
						Once ceiling tiles and set ceilings are removed the demolition crew is to stop work until the Electrical and service contractors have assessed isolated, terminated, removed redundant cables and services						
	Electrical Equipment	Electric shock, Electrocution	2.Likely	1.Catastrophic	Extreme	Substitute electrical power tools with battery operated tools where possible	3.Isolate	5. Rare	2.Major	Medium	AWE + Subcontractor (PCBU)	Nil
						All Electrical Equipment including tools and leads to be tagged monthly						
						All RCDs to be tested (1) one monthly via the tested buttng and ever (3) three months with trip tester, including Temporary electrical switchboards						
						Portable RCD units must be used when working of base building GPO's to ensure workers equipment is protected by a tested RCD and to prevent tripping the circuit that may cause disruption to other internal or external users e.g. life support systems.						
						Extension leads must be elevated, hung from insulated lead stands or tie hooks, not strung or zip tied on conductive materials						
						Leads must not cause trip hazards or obstruct access areas						
						Extension leads will not supply electricity to multiple levels unless lift shaft or incomplete formwork deck						
	Energising and commissioning	Electric shock, Electrocution	2.Likely	1.Catastrophic	Extreme	Works to be completed by or supervised by Licenced Electrician	5.Admin	4.Unlikely	1.Catastrophic	High	AWE + Subcontractor (PCBU)	Nil
						Commissioning plan prepared and reviewed prior to works commencing, and communicated with all relevant stakeholders and workers						
	In ground services In Slab Services	Electric shock, Electrocution	1.Almost Certain	1.Catastrophic	Extreme	Identify power supply and source – Ensure power disconnected by supplier authority or private network owner	3.Isolate	4.Unlikely	1.Catastrophic	High	AWE + Subcontractor (PCBU)	Nil
						Services search completed with Dial before you dig, slab scans, chasing and pot holing carried out as required						
						Contact asset owner to confirm utilities and asset owner requirements						
						Isolate services where possible, if not isolated signage and protect from mechanical damage						

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						All temporary in ground HV to be concrete encased and signposted						
						Pot holing to be undertaken to confirm service location						
						Toothless buckets to be used, where risk of contact with services exist						
						AWE Permit to Break Ground completed and signed off before and digging or excavations						
						Subcontractor carrying out the work should allow for inaccuracies and the possibility of other unknown or hidden services						
						Spotter required where earthmoving machinery is used and whilst services are uncovered						
						Hand excavate and expose services that may be affected						
	Overhead power lines	Electric shock, Electrocution	4.Unlikely	1.Catastrophic	High	Request asset owner de-energise or relocate overhead services	3.Isolate	5. Rare	1.Catastrophic	High	AWE + Subcontractor (PCBU)	Nil
						Confirm asset owner and voltage						
						Tiger tails and visual warning to prevent access to no go zones						
						No go and zone of exclusion to be established in line with voltage						
						When working within no go zone select plant that cannot exceed, in any operation configuration the approach distance						
						Calculate approach distance, taking into account sag, swing and wind conditions						
						Trained safety observers to be appointed to each pieces of plant operating within the Accredited Person Zone / Approach zone						
						Spotters must not undertake any other tasks or function						
						Limiting devices to be used to prevent operating envelope entering the no go zones						
						Approve persons e.g. Level 1 electrical contractors, to install flag rope below overhead service for early warning of approach.						
						Site drawings displayed throughout the site to clearly identify overhead service locations						
Hazardous Materials	General HAZMAT requirements	Exposure	3.Possible	2.Major	High	Obtain HAZMAT register prior to project start	5.Admin	4.Unlikely	2.Major	High	AWE	Nil
		Contamination	3.Possible	2.Major	High	Review and verify HAZMAT to ensure accurate	4.Eng	5. Rare	2.Major	Medium	AWE + Subcontractor (PCBU)	Nil
						Conduct additional destructive testing to confirm suspected or assumed material						
						Communicate HAZMAT register to workers						
	Asbestos - Bonded Non Friable	Asbestosis and other asbestos related conditions	2.Likely	1.Catastrophic	Extreme	Sub-contractor to notify SafeWork of asbestos removal >10mtr2 and provide notification to principal contractor prior to commencement	3.Isolate	4.Unlikely	2.Major	High	AWE + Subcontractor (PCBU)	Nil
						Asbestos removal – any asbestos found is to be removed by a licensed subcontractor in accordance with legislation						
						Adopt wet removal techniques, spraying asbestos material with a PVA compound or water						
						Place all ACM in a 200 micron polyethylene bag marked asbestos and dispose as contaminated waste to licenced waste facility						
						Dockets to be collected for all asbestos from Waste Disposal Facility						
						Decontaminate all equipment and surfaces prior to completion						
						Clearance certificate to be issued by an independent hygienist from the Asbestos removal contractor						
						Prevent/limit the breakage of sheeting/material, Adopt Nail punching to detach non-friable asbestos sheeting where fixed by nail						
	Asbestos - Friable	Asbestosis and other asbestos related conditions	3.Possible	1.Catastrophic	Very High	Sub-contractor to notify SafeWork of asbestos removal and provide notification prior to commencement	3.Isolate	5. Rare	2.Major	Medium	AWE + Subcontractor (PCBU)	Nil
						Asbestos removal – any asbestos found is to be removed by a licensed subcontractor in accordance with legislation						
						Enclosure to be erected to contain asbestos fibres produced during removal process.						
						Enclosure to be smoke tested prior to removal.						
						Air monitoring of work area and adjacent public spaces						
						Adopt wet removal techniques (spraying asbestos material with a PVA compound						
						Asbestos Contaminated Material should not be wet down if there is an electrical hazard						
						Inspection of the adequacy and integrity of the encapsulation is to be carried out by the Occupational Hygienist.						
						Decontaminate all equipment and surfaces prior to completion						
						Clearance certificate to be issued by an independent hygienist from the Asbestos removal contractor						
	Synthetic Mineral Fibre's	Inhalation of fibres	2.Likely	2.Major	Very High	Remove during demolition, either stripping in situ or from plant at ground level, bag immediately	3.Isolate	4.Unlikely	2.Major	High	Subcontractor (PCBU)	Nil
						Removal method to avoid tearing, crushing or ripping						
						Wet down while removing to suppress fibres						
						Gloves, disposable overalls and dust mask to be worn						
						Double bagged prior to removal						
	Silica (Crystalline)	Inhalation of particles	2.Likely	2.Major	Very High	All products being brought onto site that contain silica are to be identified and the SDS provided for it. Controls for the SDS are to be included in the SWMS under High Risk Construction Work for *Contaminated Atmosphere* .	3.Isolate	4.Unlikely	2.Major	High	Subcontractor (PCBU)	Nil
						Respirable crystalline silica (silica dust) that must not be exceeded is 0.05 mg/m3 (eight-hour time weighted average). Air monitoring must be conducted if there is any uncertainty that the exposure standard is being exceeded or to find out if there is a risk to a worker's health.						
						No uncontrolled (e.g. dry cutting) dust (silica) producing works to be conducted on site						
						Use local exhaust extraction/ventilation systems to remove dust at the source and ensure such system(s) are correctly placed and operates at effective flow rates. - Use dust capture systems on tools to reduce dust exposure. - Ensure regular housekeeping (that avoids dust generation) in work areas to prevent the accumulation of dust.						
						Isolate workplace areas where dust is likely to be generated, from other workers, enclose processes, or isolate the hazard from anyone exposed to it.						
						Wet cutting to be utilised where possible - block cutting, core holing, concrete cutting.						
Structural alternations/ penetrations	Structural Steel Erection	Structural Collapse, falls - personal injury	1.Almost Certain	1.Catastrophic	Extreme	Safe methods of installation to prevent falls are to be established. Including the use of mobile cranes, scissor lifts, boom lifts	3.Isolate	4.Unlikely	2.Major	High	Subcontractor (PCBU)	Nil
						Area below to be barricaded off & warning signage displayed where required						

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						Ticketed Riggers to erect and install						
						Lifting plan to be developed						
						Loadings of concrete slabs to be approved prior to landing plant /equipment						
						Area below to be barricaded off & warning signage displayed where required						
	Temporary Propping and Formwork	Structural Collapse, falls - personal injury	1.Almost Certain	1.Catastrophic	Extreme	Engineer to design propping and form work details	4.Eng	4.Unlikely	2.Major	High	Subcontractor (PCBU)	Nil
						Propping to be installed as per Engineers design and certified by the engineer prior to works commencing						
						Temporary props to be sign posted and protected from damage Inc. restrict access to area						
						Form work, props and deck to be signed off by the engineer prior to concrete pour						
Earthworks	Excavation	Trench collapse , contact with underground service - electrocution, personal injury	1.Almost Certain	1.Catastrophic	Extreme	Determine ground conditions from Geotech report investigation	3.Isolate	4.Unlikely	3.Moderate	Medium	AWE + Subcontractor (PCBU)	Nil
						Service search including Dial before you dig						
						Traffic management to prevent access by plant and pedestrians to excavations						
						Install dust and noise suppression, watering, shade cloth on fence, sediment controls						
						Permit to Break Ground to be completed prior to commencement of works						
						Where drawings show services within 2 (two) metres of the proposed excavation/penetration, the actual location of those services must be confirmed by either a locating device, Non Destructive excavation or by hand excavation.						
						Safe ladder or stair access must be provided at all times						
						All trenches and deep excavations, deeper than 1.5 metres, to be benched, battered or shored, or a combination each to prevent the edges from falling back into the trench or excavation. In cases where the ground is unstable, advice from a geotechnical engineer may be required.						
						All shoring boxes must be constructed in accordance with manufactures requirements; - all workers to be competent in constructing shoring box, - shoring box to be signed off by subcontractor before use, - Shoring box to be checked as part of A W Edwards excavation permit.						
						No persons are to work inside an excavation that is not shored, benched or battered. Unless engineering advice indicates stability of excavation or an alternate control.						
						Trenches and excavations are not to be left exposed if unattended. Para webbing and/or barricading must be erected at a minimum of 1m from the edge (2m where possible) and warning signs posted to protect persons from falling into trench or excavation.						
						All excavations must be covered or secured with 1.8m high fencing if the work site is unattended.						
						Protection against contaminated environments - as a minimum, those who may come into contact with the contaminated soil must wear personal protective equipment.						
	Piling	Collapse. Unstable base or edge - too close to excavations.	2.Likely	2.Major	Very High	- Area below piling to be barricaded off when backfilling / compaction is taking place; - Competent plant operator be used at all times - Engineering consultant to provide sign-off of all sheet/bored pile installs. - Anchors to installed by competent workers - Adequate signage/barriers in the affected areas - Any underground service locations are identified and communicated with the piling crew prior to setup - Geotechnical consultant advice regarding the permissible ground loading in designated drilling zones has been provided to the piling crew [approval of 'piling platform']	3.Isolate	4.Unlikely	3.Moderate	Medium	AWE + Subcontractor (PCBU)	Nil
		Impact with piling rig	2.Likely	1.Catastrophic	Extreme	- Demarcation of walkways and high visibility garments to be worn when working near the piling rig - Qualified operators - copies of certificates of competency or permits to be presented at site induction - Plant inspection prior to use - Crew to monitor for subsidence under outriggers/tracks - Keep plant well back from the edges of excavations. - Ensure that the operator has been trained in the operation of the specific rig that has arrived on-site - Evidence that the piling crew have been trained in the use of the rig and its attachments - Ensure that the plant logbook is filled out prior to the crane commencing its operations for the day - All personal to be inducted on the traffic conditions into the site	3.Isolate	4.Unlikely	4.Minor	Low	AWE + Subcontractor (PCBU)	Nil
	Excavation within basements	Plant impacts of works - personal injury, fumes	2.Likely	1.Catastrophic	Extreme	All plant to be inducted via AWE Mobile Plant Worthiness Checklist	3.Isolate	4.Unlikely	3.Moderate	Medium	Subcontractor (PCBU)	Nil
						All operators to be trained and competent						
						Pre-starts to be carried out						
						Install extraction fans installed as per hygienist location plan						
						Air monitoring to be carried out during works						
						Gas and oxygen detection monitoring to be carried out during works						
						Catalytic convertors to be installed on all diesel machines						
Working at Heights	Access ladders	Falls - personal injury	2.Likely	1.Catastrophic	Extreme	Set the ladder at a slope of 4 in 1 – ladders must be angled one out and four up	4.Eng	4.Unlikely	4.Minor	Low	AWE + Subcontractor (PCBU)	Nil
						Ladders should extend at least one metre above the access level						
						Ladders should be firmly secured or tied off or held firmly by another person						
						The ties should be attached to the stiles of the ladder and not the rungs						
	Mobile scaffolds	Falls - personal injury	3.Possible	1.Catastrophic	Very High	A mobile scaffold shall only be used on a level and firm surface to avoid instability.	4.Eng	4.Unlikely	4.Minor	Low	AWE + Subcontractor (PCBU)	Nil
						Access shall be by way of a ladder/s within the scaffold.						
						Decking plants shall be cleated or otherwise secured to prevent displacement.						
						Castors shall be marked with the safe working load which is not to be exceeded, and shall be fitted with an effective wheel lock. The lock shall prevent rotation of the wheel and any movement of the scaffold when in use.						
						The height of the mobile scaffold shall not exceed three times the least base dimension						
						Mobile scaffolds >4mtrs to be erected by competent person						

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						All mobile scaffolds are to be erected as per manufactures instructions						
						Where the minimum base dimension is less than 1.2 meters the scaffold height should not exceed twice that dimension unless outrigger/stabilisers are used						
						No person is to "ride" or otherwise be on the scaffold while it is being moved / relocated						
	Platform Ladders, trestle ladders	Falls - personal injury	3.Possible	2.Major	High	No 'work' can be undertaken from a ladder (e.g. A-Frame, platform ladder, or other ladder). Ladders are not permitted on the project unless no other options are available, and a permit has been completed and approved prior to use. Other options include: scaffolds, mobile scaffolds, portable work platforms. Permit - Use of Ladders to be completed for use of any ladder, unless for access only	2.Sub	4.Unlikely	4.Minor	Low	AWE + Subcontractor (PCBU)	Nil
						Ladder must be rated as industrial, Domestic ladders are not permitted on site						
						The working distance from a void or edge must not be less than 1 1/2 the platform height e.g. 1.8m platform height = 2.7m distance from void or edge						
						Industrial trestle ladders less than 2 metres high with 450mm wide platforms may be used						
						Platform ladders should not be used for working at heights where the platform is more than 2mtrs above ground level						
						Platform ladders should be not used when Scaffold, Mobile scaffold and EWPs are suitable for the task						
						Platform Ladders should be adequately supported at the base						
						Use the correct ladder for the job						
						Work should take place from the Platform of the ladder, if this is not possible the size or type may be incorrect						
						Platform Ladders should not be used to support planks as a work platform						
						Metal ladders or wire reinforced ladders must not be used where electrical hazards exist						
						Do not place ladders in vehicle or pedestrian traffic areas						
						A Platform ladder should not be walked/jumped by the person standing on the ladder						
						Platform ladders should only be used in the fully open position						
						Ladders are to be in good working order and free from damage twisted, bent, kinked, crushed metal steps or damaged feet						
	Scaffold	Scaffold collapse, falls	3.Possible	1.Catastrophic	Very High	Erection & Dismantling is to be carried out as per SafeWork NSW Safety Standard - Erecting, Altering and Dismantling Scaffolding, Part 1 or Part 2.	3.Isolate	4.Unlikely	4.Minor	Low	AWE + Subcontractor (PCBU)	Nil
						Handover certificate to be issued by scaffolding contractor prior to scaffold being used, after each 30 day inspection or when scaffold is altered						
						Scaffold is to be categorised by the scaffolder; Light, Medium or Heavy Duty						
						Light Duty – up to 225 kg - painting, electrical work, many carpentry tasks and other light tasks.						
						Medium Duty – up to 450 kg per - general trades work like tiling and light steel framing						
						Heavy Duty – up to 675 kg - concrete block laying, bricklaying, concreting, demolition work and most other work tasks involving heavy loads or heavy impact forces						
						Special Duty – has a designated allowable load as designed						
						All scaffolds where item and/or object can fall 4m or more to be erected by licensed scaffolders. Scaffold to be installed as per reviewed drawings and modified and maintained in a safe manner						
						The location and tie systems shall not obstruct clear access along the full length of any working platform or access way						
						Drilled in anchors, whether expanding or chemical types that are subject to tensile loads shall only be used where it is not practicable to secure or tie the scaffold in any other way. An assessment of the material to which the drilled-in anchors are supplied shall confirm their suitability for the application						
						All platforms shall be capable of supporting their design loads						
						Platforms to be closely decked such that a gap between individual decking components in a bay is not greater than 10mm.						
						Steel fixing wire shall not be used to secure planks						
						Where materials are stored on a working platform, a clear and unobstructed access of not less than 450mm shall be maintained						
						The minimum unobstructed access of any working bay shall not be less than 450mm, regardless of the shape						
						Edge protection shall be provided at the open ends and sides of all platforms, landings and along temporary stairways from which a person or object could fall a distance exceeding 2m						
						Guard rails shall be set at a height of not less than 900mm above the platform and no greater than 100mm outside the edge of the platform						
						Toe boards shall not extend less than 150mm above the working platform surface						
						Platform width shall be comprised of one of the following: - 450mm for persons and handrails only (for edge protection only) - 675mm for persons and materials - 900mm min for emergency access						
						Trades utilising the scaffold to access their activity are not to alter any components of the scaffold, when alterations are required contact the Site Manager						
						Monthly inspections and sign off carried out by the scaffolder						
						Access openings and stairways shall be free of sharp edges and points that could cause injury						
						Incomplete scaffolds are to display appropriate signage and have measures erected or in place that will stop unauthorised use						
						Ladders to be inspected regularly for defects and clearly labelled for industrial use						
						Scaffold to be adequately tied or raked as per engineers design						
						Scaffold to be set on firm footing and protected from plant movements						
						Loading bays to be signposted with the engineered Safe Working Loads and is not to be exceeded						
						All erection, dismantle and alteration to scaffold must be in accordance with SafeWork NSW Safety Standard - Erecting, Altering and Dismantling Scaffolding, Part 1 or Part 2.						
						Where the potential to fall is 4 meters or more certified scaffolders are required to erect/alter or dismantle						

SECTION	PROCESS/TASK	HAZARDS/RISKS	LIKELIHOOD	CONSEQUENCE	RISK LEVEL	CONTROL MEASURES	HIERACHY OF CONTROLS	LIKELIHOOD	CONSEQUENCE	RESIDUAL RISK	RESPONSIBILITY	ADDITIONAL CONTROLS REQUIRED
						Where the minimum base dimension is less than 1.2 meters the scaffold height should not exceed twice that dimension unless outrigger/stabilisers are used Where the minimum base dimension is greater than 1.2 meters the scaffold should not exceed three times that dimension						
		Falling objects - personal injury	1.Almost Certain	2.Major	Extreme	"No go Zones" to be established around scaffold erection/dismantle/altering areas to be established, isolating the work area from other workers and public	3.Isolate	4.Unlikely	3.Moderate	Medium	AWE + Subcontractor (PCBU)	Nil
		Electrocution	3.Possible	1.Catastrophic	Very High	4 meter exclusion zones to be established from energised power supplies	3.Isolate	5. Rare	1.Catastrophic	High	Subcontractor (PCBU)	Nil
		Impact by mobile plant	2.Likely	1.Catastrophic	Extreme	Scaffold to be protected from plant movements/collision	4.Eng	4.Unlikely	3.Moderate	Medium	AWE + Subcontractor (PCBU)	Nil
	Working above others	Falls, falling objects - personal injury	1.Almost Certain	1.Catastrophic	Extreme	Areas below workers above must be cordoned off with barrier tape and appropriate signage Kick boards or equivalent to be erected along perimeter No loose materials to be used or created in areas of work that are above others Tools and material is not to be stored on top of work platforms Hard hats with chinstraps to be worn at all times. While working above others Access ways to be diverted away from workers above Hoarding to be erected where public is exposed to workers above No tools and materials are not to be stored on top of platform ladders Protective barriers or "Catch" decks to be erected Perimeter scaffolding to be erected. Mesh and shade cloth to be installed around perimeters. Installation of fencing to prevent objects falling Hand tools, equipment to be fitted with approved lanyards, if personnel working directly below, i.e. roof works Access ways to be diverted away from workers above. Hoarding to be erected where public is exposed to workers above.	3.Isolate	4.Unlikely	3.Moderate	Medium	AWE + Subcontractor (PCBU)	Nil
	Other Working at Height (note; also see EWP in 'plant' section below)	Falls, Falling objects - personal injury	1.Almost Certain	2.Major	Extreme	No work is to be done without edge protection where there is a risk of falling The working distance from a void or edge must not be less than one and a half times the platform height e.g. 1.8m platform height = 2.7m distance from void or edge. Guardrails or barricades not to be removed without Site Manager approval Fall arrest or fall restraint is not to be used without approval via AWE Harness permit. All mobile scaffolds are to be erected as per manufacturer's instructions. Mobile scaffolds must have wheels locked while in use. All height safety equipment, harnesses, lanyards, ropes, anchor points to be inspected prior to use and as per the test an inspection requirements detailed in applicable Australian Standards Fall restraint/arrest equipment i.e. safety harnesses are only to be used as a last resort, if required the use of Safety harness must be approved via AWE Harness Permit A documented rescue procedure, inclusive of training, is to be developed for persons using fall arrest. Handrails to be installed ASAP after concrete floor slab has been poured, prior to stripping formwork where possible but prior to the raising of the perimeter screens Penetrations over 150mm in diameter to have mesh cast in and covered in accordance with Industry Practice Column, beam penetrations in formwork to be covered and secured with F81 mesh or handrails Lift openings to be fully meshed, until such times as lockable lift gates are fitted Large mechanical penetrations to have temp handrail fitted, completed with mesh and kickboards Do not work over other trades where there is a risk of falling objects	3.Isolate	4.Unlikely	3.Moderate	Medium	Subcontractor (PCBU)	Nil
	Liftwell openings	Falls - serious injury/Death falling objects	1.Almost Certain	1.Catastrophic	Extreme	No work is to be done in liftwells or near liftwells without lift protection cages installed where there is a risk of falling All lift cages must be inspected on arrival to site and prior to installation All lift cages must be to the AS4431:2019, 3.3 Entrance protection for Liftwell Enclosures All Lift cages should be installed as soon as possible after level has been poured	3.Isolate	4.Unlikely	3.Moderate	Medium	AWE + Subcontractor (PCBU)	
	Rope Access	Falls - serious injury/Death falling objects	2.Likely	1.Catastrophic	High	Install a temporary lifeline or fall arrest point prior to moving into the fall potential situation in accordance with AS1891, ie where the works are to take place within 2m of an exposed edge. -Establish an exclusion zone directly below intended work area to prevent third party access. -Establish an exclusion zones around the rigging area at the top of the drop.	3.Isolate	3.Possible	2.Major	Medium	Subcontractor (PCBU)	
						No workers to go within 2m of an exposed edge without being harnessed & attached to anchorage. -Ensure all ropes are load shared between two independent anchors. -Ensure exclusion zone is clear before lowering ropes. -Ensure all ropes reach the ground or a suitable landing site.						
						All workers must attach to two independently anchored ropes before entering the fall area within 2m of the exposed edge. All tools & equipment must be attached to operator via lanyard						
Plant (Mobile & Static)	All Plant	Plant failure, accident	1.Almost Certain	1.Catastrophic	Extreme	Trained and competent operator Plant to be inducted to site via AWE Mobile Plant Worthiness Checklist Operate as per Operators manual No mobile phones to be used while operating mobile plant or equipment	5.Admin	4.Unlikely	4.Minor	Low	AWE + Subcontractor (PCBU)	Nil

SECTION	PROCESS/TASK	HAZARDS/RISKS	LIKELIHOOD	CONSEQUENCE	RISK LEVEL	CONTROL MEASURES	HIERACHY OF CONTROLS	LIKELIHOOD	CONSEQUENCE	RESIDUAL RISK	RESPONSIBILITY	ADDITIONAL CONTROLS REQUIRED
		Plant rollover or other incident associated with loading/unloading	2.Likely	1.Catastrophic	Extreme	For plant arriving at site on a low loader or on other vehicle; - plant inspected prior to loading/unloading - ramps are suitbale and rated for the plant to be loaded/unloaded - plant is secured in accordance with either manufacturers requireemnets and/or RMS load restraint guide						
						Information regarding service locations (including any overhead power lines) are provided to subcontractors						
						Truck driver induction delviered at or prior to entry to the project, including but not limited to, traffic control and any vehicle movement plans establkished for the project						
						Any mobile plant specific control measures to be outlined in the relavent SWMS provided by each subcontractor on the project for HRCW						
						Trained and competent operator						
						Plant to be inducted to site via AWE Mobile Plant Worthiness Checklist						
		Pedestrian traffic hit by plant	1.Almost Certain	1.Catastrophic	Extreme	Exclusion zones to be established to separate pedestrian traffic from mobile plant	3.Isolate	4.Unlikely	3.Moderate	Medium	AWE + Subcontractor (PCBU)	Nil
						Spotter to direct movement of plant in areas where vision is compromised						
						High visibility clothing to be worn by all site personnel during all works						
		Electrocution	3.Possible	1.Catastrophic	Very High	Do not to work in proximity of overhead power lines or overhead structures without a spotter	3.Isolate	4.Unlikely	2.Major	High	Subcontractor (PCBU)	Nil
		Structural collapse/plant collapse	3.Possible	1.Catastrophic	Very High	Ground conditions/slab loading to be verified before plant used/erected	4.Eng	4.Unlikely	3.Moderate	Medium	AWE + Subcontractor (PCBU)	Nil
	Concrete Pump	Impact with pedestrians/plant	1.Almost Certain	1.Catastrophic	Extreme	Exclusion zones to be erected and maintained around concrete placement boom and agitators	3.Isolate	4.Unlikely	3.Moderate	Medium	AWE + Subcontractor (PCBU)	Nil
						Spotters being required for backing up agitators to pump						
		Plant failure, accident	2.Likely	1.Catastrophic	Extreme	Plant to be inducted to site via AWE Mobile Plant Worthiness Checklist	3.Isolate	4.Unlikely	3.Moderate	Medium	AWE + Subcontractor (PCBU)	Nil
						Only trained / competent appropriately ticketed personnel to operate concrete boom pump						
						Grate not in place during operations						
						(for tower boom or static pump line) Concrete placement boom to be signed off by Engineer prior to erection / use						
						(for tower boom or static pump line) All safety clips/clamps have been installed on the pump line, and checked prior to each 'pour'						
						Exclusion zone established around concrete pump						
	Elevated work platforms EWP	Plant failure, accident	2.Likely	1.Catastrophic	Extreme	Certificate issued for a scissor lift type EWP is not acceptable for use of a boom type EWP under 11m or vice versa	4.Eng	4.Unlikely	3.Moderate	Medium	AWE + Subcontractor (PCBU)	Nil
						Close access rail before elevating EWP						
						Operator to check SWL/WLL of EWP prior to operation (including all people in the basket in the calculation)						
						Remain within EWP, do not stand or sit on handrails or mid rails						
						Never operate when wind speeds exceed 12.5m/sec.						
						Wheel stops to be installed on high level work areas						
						Control guards and overrides to be in place to prevent accidental operation or movement of EWP						
						Never use to push or pull other objects						
		Falls - personal injury	1.Almost Certain	1.Catastrophic	Extreme	Full Body Safety harness to be worn in Boom lifts	5.Admin	4.Unlikely	2.Major	High	AWE + Subcontractor (PCBU)	Nil
						Operator or other workers must not stand on hand/guard rails						
						Gates are secured (closed) prior to and during operation						
						Access to/from mobile plant whilst it is in motion or elevated is prohibited unless in the event of an emergency						
	Mobile Crane	Plant failure, accident	1.Almost Certain	1.Catastrophic	Extreme	Clear lines of communication to be maintained on site (radio)	4.Eng	4.Unlikely	2.Major	High	AWE + Subcontractor (PCBU)	Nil
						Operator to estimate/check/verify that the weight of any load does not exceed the SWL/WLL of the crane prior to operation						
						Operators of mobile plant to have appropriate certification issued by a statutory authority or training records						
						Ground conditions/slab loading to be verified before plant used/erected						
						Crane to be set up as per manufactures instructions						
		Falling objects	1.Almost Certain	1.Catastrophic	Extreme	Plant to be inducted to site via AWE Mobile Plant Worthiness Checklist	3.Isolate	4.Unlikely	3.Moderate	Medium	AWE + Subcontractor (PCBU)	Nil
						Exclusion zone established prior to lifting						
						Lifting gear to be inspected and certified and listed on register						
						Lifting plan to be developed and communicated to workers						
						All loads to be secured i.e. timber bundles strapped						
						All loads to be lifted by applicable lifting techniques						
Formwork	Formwork erection	Structural collapse	3.Possible	1.Catastrophic	Very High	The following documentation must be available for inspection on site: - Certification of the maximum loads on deck; - Specifications for the concrete and when formwork can be removed; - Back-propping details (plans and elevations including tying in); - Drawings for the formwork design certified professional engineer or formwork designer.	4.Eng	4.Unlikely	3.Moderate	Medium	Subcontractor (PCBU)	Nil
						Propping to be installed as per Engineers design and certified by the engineer prior to works commencing						
						Temporary props to be sign posted and protected from damage Inc. restrict access to area						
						Form work, props and deck to be signed if by the engineer prior to concrete pour						
						Unauthorised persons shall be prevented from entering the work area by physical barriers and hazard warning signs						
		Impact from mobile plant	1.Almost Certain	1.Catastrophic	Extreme	Mobile plant not involved to be excluded from areas of formwork and other temporary structures.	3.Isolate	4.Unlikely	3.Moderate	Medium	AWE + Subcontractor (PCBU)	Nil
		Fall from heights	1.Almost Certain	1.Catastrophic	Extreme	Frames, props and deck to be installed from below where possible	3.Isolate	4.Unlikely	3.Moderate	Medium	Subcontractor (PCBU)	Nil
						Deck to be installed to avoid gaps and multiple live edges						
						Workers to remain 1 metre from the live edge - Install ply with a leading edge						
						Handrail to be installed (from below) on live edge where possible						

SECTION	PROCESS/TASK	HAZARDS/RISKS	LIKELIHOOD	CONSEQUENCE	RISK LEVEL	CONTROL MEASURES	HIERACHY OF CONTROLS	LIKELIHOOD	CONSEQUENCE	RESIDUAL RISK	RESPONSIBILITY	ADDITIONAL CONTROLS REQUIRED
						Only trained and competent workers to be on the deck during construction						
	Formwork Hoist	Falls	2.Likely	1.Catastrophic	Extreme	- Qualified operators – copies of evidence of competency to be presented to project management personnel - Adjacent areas are protected by scaffold and edge protection - Daily Plant inspection is completed prior to use - Adequate signage/barriers in the affected areas. - Supervisor to check that all works are compliant with standards and manufacturers recommendations	3.Isolate	4.Unlikely	3.Moderate	Medium	Subcontractor (PCBU)	Nil
		Falling materials	2.Likely	2.Major	Very High	- Ensure loading/Landing area is clear of unauthorized personnel before lowering and landing load - Appropriate PPE including hard hat and protective footwear required at all times - Qualified operators – copies of evidence of competency to be presented to project management personnel - Daily plant inspection is completed prior to use - Adequate signage/barriers in the affected areas. - Supervisor to check that all works are compliant with standards and manufacturers recommendations	3.Isolate	4.Unlikely	4.Minor	Low	AWE + Subcontractor (PCBU)	Nil
		electrical	2.Likely	1.Catastrophic	Extreme	- Supervisor to check that all works are compliant with standards and manufacturers recommendations - Commissioning report is to be provided to the project management personnel - Certificate of electrical safety provided - Electrical Isolation switch is added to the system prior to commissioning	3.Isolate	4.Unlikely	2.Major	High	Subcontractor (PCBU)	Nil
	Formwork dismantle	Fall from height, falling objects	1.Almost Certain	1.Catastrophic	Extreme	Form worker to provide stripping sequence	4.Eng	4.Unlikely	3.Moderate	Medium	Subcontractor (PCBU)	Nil
						Work are to be isolated from other workers						
						Engineer to confirm concrete strength and approve stripping						
						No uncontrolled drop stripping is to place where supports are removed and formwork allowed to drop under its own weight or the formwork prised off. Where possible timbers should be handed down to slab level by mechanical means - Area below to be excluded, spotter in place, area below to be clear of equipment (extinguishers/nurse calls etc).						
		Electrocution	2.Likely	1.Catastrophic	Extreme	All temporary lights and power to be isolated and removed by electrician prior to strip	3.Isolate	4.Unlikely	4.Minor	Low	Subcontractor (PCBU)	Nil
Materials Movement	(crane) Gantry	Fall from heights	2.Likely	1.Catastrophic	Extreme	A HRCW SWMS needs to be submitted where there a risk of a person falling 2 meters or more	5.Admin	4.Unlikely	3.Moderate	Medium	Subcontractor (PCBU)	Nil
		Falling objects	2.Likely	2.Major	Very High	Provide adequate perimeter protection through kickboard or mesh netting	3.Isolate	4.Unlikely	3.Moderate	Medium	Subcontractor (PCBU)	Nil
						Dismantle from EWP while supported by mobile cranes,						
						Lifting plan to be developed and communicated to workers prior to commencement						
						Loadings of concrete slabs to be approved prior to landing plant /equipment						
						Lifting gear to be inspected and certified and listed on register						
						Area below to be barricaded off & warning signage displayed						
						Ticketed Riggers to erect and install						
	(Personnel) Hoist erection/dismantle	Hoist Failure, Falls	2.Likely	1.Catastrophic	Extreme	- Hoist to be erected in accordance with Australian Standard requirements - Check with consultant and confirm that adequate foundation slab is provided in accordance to the manufacturer's specification. - Position hoist tower units using crane. - DO NOT place feet, hands or fingers below base unit. - Ensure loading/Landing area is clear of unauthorized personnel before lowering and landing load. - Appropriate PPE including hard hat and protective footwear required at all times. - Riggers to wear safety harness attached to an appropriate load bearing anchor. Required at all times when exposed to potential falls of over 2m and when identified in the erection manual. - Anchor points are inspected prior to use. - Training in the use of harness/fall arrest system. - Fall arrest system is inspected prior to use. - High visibility garments are to be worn when working near cranes or forklifts. - Qualified operators – copies of certificates of competency or permits to be presented at site induction. - Daily plant inspection is completed prior to use. - Spotters to ensure all personnel are prevented from entering the exclusion zone below the work area. - Sets limits to highest completed floor. - Hoist installation checklist completed. - Handover, commissioning and report provided to the site team - Certificate of electrical safety provided. - Check for any missing or faulty fastenings between the mast sections, prior to dismantle. - Ensure that the top limit bracket is gradually relocated when each mast section is removed. - Use of spotter to watch position of the cage relative to the top of the mast to prevent possible over-run.	3.Isolate	4.Unlikely	4.Minor	Low	AWE	Nil
	(Personnel) Hoist operation	Hoist Failure, Falls	2.Likely	1.Catastrophic	Extreme	- Operator has completed training for and maintains a HRW License for personnel hoist (HP) - Operator trained by lift supplier/installer (Schindler Lifts) - Operator to conduct regular (daily) inspections of the builders lift prior to start each day - Lip cover installed by lift operator or other worker prior to crossing the edge of the lift car with pallet trolleys, scissor lifts, or other types of trolleys - Maximum load for the lift car is 2300kg (including operator, passengers, trolleys, etc) - Operator to confirm that any load (e.g. scissor lift, pallet trolley, etc) are centred in the lift car - In the event that the site emergency evacuation alarm/signal is activated whilst the lift is in transit, the operator is to stop the lift at the next available level. The operator and the occupants are to proceed to the site assembly point	4.Eng	4.Unlikely	3.Moderate	Medium	AWE	Nil
Lifting Materials	Lifting gear (failure of)	Falling objects, injuries, death	1.Almost Certain	1.Catastrophic	Extreme	Lifting gear is tagged (Synthetic slings every 3 months) (not more than 12 months for chains and steel rope dependant on duty cycle) and all relevant information listed (e.g. relevant information for a chain sling includes grade of chain, SWL, manufacturer, chain size and Australian Standard marking)	5.Admin	4.Unlikely	3.Moderate	Medium	Subcontractor (PCBU)	Nil
						Lifting hooks are provided with operable double action safety latches to prevent rollout						

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						Shackles are prevented from unscrewing						
						Slings are appropriate for loads being lifted, including adequate capacity and protection from sharp edges						
	General Lifting	Falling objects, injuries, death	2.Likely	1.Catastrophic	Extreme	Formwork frames should be either tied together or lifting slings should be wrapped around the load	3.Isolate	4.Unlikely	3.Moderate	Medium	AWE + Subcontractor (PCBU)	Nil
						Loads of joists or bearers should be strapped together before lifting.						
						Timber sheeting should be strapped together and lifted in a flat position						
						Sheets of plasterboard should be lifted in a specifically designed material box						
						Tag lines should be used as required to control loads						
						All loads should be supported where possible with dunnage, with the load uniformly distributed over the supporting surface						
						Basket hitches should not be used wherever persons may be located near a lifted load, unless the sling is positively restrained from sliding along the load						
						Lifting multiple loads at the same time (commonly known as high/low loads, Christmas tree) should be avoided due to the difficulty in ensuring the dogman is not underneath the loads						
		Tower crane fire	3.Possible	1.Catastrophic	Very High	- Procedure in place for evacuation of tower crane in a fire situation. - No unnecessary quantities of combustibles on machine deck - Fire Extinguishers in place per manufacturers/suppliers requirements - Regular service including checks that on fuel lines and hydraulic hoses are away from ignition sources. - Only use manufacture specified hoses for repairs - Report all malfunctions/leaks to both A W Edwards and hospital management and ensure repairs are completed in a timely manner and specifications. - Evacuate site and call emergency services if a fire is found.	3.Isolate	5. Rare	3.Moderate	Low	AWE + Subcontractor (PCBU)	Nil
		Contact with Structure and other cranes	2.Likely	1.Catastrophic	Extreme	- Tower crane jib installed at a higher elevation to the 2nd tower crane - Tower cranes to have lock on trolley to prevent lifting out of zone - Develop and implement Safe Work Procedure - Crane operator and dogman to have a dedicated communication line to each other - Competent/Licensed Dogmen to be used at all times - Prestarts and toolbox talks conducted for crane crews outlining lift zones, with marked up map for each crane to keep in cab	5.Admin	4.Unlikely	3.Moderate	Medium	AWE + Subcontractor (PCBU)	Nil
	'Large' lifts	Collapse, falling objects, injuries, death	1.Almost Certain	1.Catastrophic	Extreme	High Risk Workshop conducted, involving Crane contractor(s), AWE, consultant(s), and other stakeholders as appropriate	3.Isolate	4.Unlikely	2.Major	High	AWE + Subcontractor (PCBU)	Nil
						Exclusion zones established for the works, maintained and monitored for the duration of the works - these zones are appropriately barricaded off, signage installed (i.e. construction work in progress or similar displayed) and spotter employed to monitor and ensure the zone is secure.						
						Existing service location drawings checked, Dial-Before-You-Dig contacted and checked, and service search conducted						
						Geotechnical advice received regarding ground loading for mobile crane						
						Crane lift study prepared by and received from mobile crane provider						
						Spotter(s) must be present at all times						
						Tag lines should be used as required to control loads						
						Prestart and toolbox completed prior to the works						
						Site notice board outlines activities, notifying other workers of impacts to areas for this period						
						Lift sequence prepared by tower crane and rigging subcontractor, in consultation with AWE						
						Nominated safety 'drop zone' for the specific lifts being undertaken, this is to include areas that may be outside the site boundaries						
	Adjacent/ Neighbouring Site - Lifting loads across road ways and other public areas	Falling objects (injury to workers or public) Potential disruption to public roadways/ thoroughfares	1.Almost Certain	1.Catastrophic	Extreme	- A W Edwards tower crane to have lock on trolley to prevent lifting out of zone (for normal day-to-day operation) - Disturbance Notice prepared and approved prior to commencing works - Traffic control plans developed and implemented - Accredited Traffic Control personnel engaged and in place for the duration of the works - Lifting plans prepared and reviewed - Only the crane crew are to communicate with operator during lifts - The crane crew/dogmen to have final say on how loads are lifted - Coordinate with the crane crew (operator and dogmen) to review and assess current (daily) weather conditions to establish lifting routes/paths and load stability - Weather conditions reviewed prior to work, and during work conditions. Crane lifts to be postponed or to cease if the wind reaches of exceeds the maximum for the safe operation of the crane - Create an exclusion zone for essential persons to isolate pickup and landing areas	3.Isolate	4.Unlikely	3.Moderate	Medium	AWE + Subcontractor (PCBU)	Nil
	Material boxes	Falling objects, injuries, death	1.Almost Certain	1.Catastrophic	Extreme	The tare mass and SWL should be clearly marked on all material boxes	4.Eng	4.Unlikely	3.Moderate	Medium	Subcontractor (PCBU)	Nil
						Material boxes should be appropriate for the material being lifted, and be engineer designed and certified						
						Material boxes should be inspected and maintained, and inspection records kept						
						Four chains (one in each corner) should be attached to material boxes during lifting						
						Loads within material boxes should be secured against movement.						
						Materials should not be stacked higher than the side of the material box unless they are adequately secured, but at no time should the material box become top heavy						
Site Specific Risks	Precast (walls and stair elements)	Failure in the installation	1.Almost Certain	1.Catastrophic	Extreme	Preparation of a design plan that considers the following - Protection of workers under and around the precast panels - Prevention of persons falling from height - Unloading and slinging panels - Cranage requirements for erecting panels into position - Managing risks of panel failure - Managing risks of wind - Managing risks of falling objects	5.Admin	4.Unlikely	3.Moderate	Medium	AWE + Subcontractor (PCBU)	Nil

SECTION	PROCESS/TASK	HAZARDS/RISKS	LIKELIHOOD	CONSEQUENCE	RISK LEVEL	CONTROL MEASURES	HIERACHY OF CONTROLS	LIKELIHOOD	CONSEQUENCE	RESIDUAL RISK	RESPONSIBILITY	ADDITIONAL CONTROLS REQUIRED
		Structural collapse	1.Almost Certain	1.Catastrophic	Extreme	- All precast works to conform with the National Code of Practice for Precast, Tilt-Up and Concrete Elements in Building Construction - Engineering design prepared prior to the works - Installation in accordance with design plan, provided by structural consultant/precast panel subcontractor - Exclusion zone established below the working area and maintained during installation works - Agreed exclusion zone is to set up for each crane location - No lifting over occupied sheds. Engaged spotter to check and confirm with the operator prior to lift. - Check/verify dimensions and weight of pre-cast panels, prior to lift. - Weather to be monitored, crane crew to monitor for wind gusts. - Engineers inspection and certificate for lifting points	3.Isolate	4.Unlikely	3.Moderate	Medium	AWE + Subcontractor (PCBU)	Nil
		Insufficient propping or bracing of precast panels. Exceeding point loading limits of suspended slabs, etc. (Crushing, injury from flying fractured material)	1.Almost Certain	1.Catastrophic	Extreme	- All precast works to conform with the National Code of Practice for Precast, Tilt-Up and Concrete Elements in Building Construction - All panels to have bracing in accordance with the precast design/layout. - Braces to have the correct pin - Braces should be marked as compliant - All braces to be in place before unhooking from crane. - Materials to be distributed evenly over the suspended slab. - Engineering sign-off provided on bracing and bracing locations	4.Eng	4.Unlikely	3.Moderate	Medium	AWE + Subcontractor (PCBU)	Nil
	Tree Removal	Tree felling - falls - falling objects	2.Likely	2.Major	Very High	- Installation of fencing and barriers (exclusion zones) - Hand tools to be fitted with approved lanyards (fell zone area) - A safety 'drop zone' for the specific area being cleared must be nominated (where necessary, this must include areas that may be outside of the site boundaries) - Competent operators only to scale trees with powered equipment - Only competent workers to operate/work from EWP's - Loads are not to be lifted or slewed over the site boundary. - Appropriate task specific PPE to be worn at all times	3.Isolate	4.Unlikely	4.Minor	Low	AWE + Subcontractor (PCBU)	Nil

SECTION	PROCESS/TASK	HAZARDS/RISKS	LIKELIHOOD	CONSEQUENCE	RISK LEVEL	CONTROL MEASURES	HERACHY OF CONTROLS	LIKELIHOOD	CONSEQUENCE	RESIDUAL RISK	RESPONSIBILITY	ADDITIONAL CONTROLS REQUIRED

Project Risk Register
WHS Risk Assessment

AW EDWARDS

Form SE4131

Revision	7(220406)
Project Name	Darlington Public School Redevelopment
Project Number	647
Project Description	Refurbishment and New Buildings
Environmental Assessment / environmental approval for the project	

Risk Assessment Developed by:	Title	
Mark Whitmore	Site Manager	
Glen Burley	Senior Project Manager	
Justin Smith	Project Director	

Key Environmental Issues Relevant to Project	Yes/No
Acid sulphate soils	Yes
Asbestos	Yes
Community	Yes
Contaminated soils	Yes
Fauna	Yes
Flora	Yes
Heritage	Yes
Noise and Vibration	Yes
Soil erosion	Yes
Waste	Yes
Waste quality	Yes

Supplementary Plans Required	Yes/No	Supplied by:	Comments
Acid Sulphate Soils Management Plan	No	AWE	
Asbestos Management Plan	Yes	Subcontractor	
Dewatering Plan	Yes	Subcontractor	
Heritage Management plan	No	Client	
Noise Control Plan	Yes	AWE	
Sediment & Erosion Control Plan	Yes	Subcontractor	
Traffic Management Plan	Yes	AWE	
Waste Management Plan	Yes	AWE	

Licences/Approvals Required	Yes/No	Supplied by:	Comments
Demolition	Yes	Subcontractor	
Asbestos Movement	Yes	Subcontractor	

Work Activity	Aspect	Impact	Likelihood	Consequence	Risk Rating	Significance	Controls
Construction	SINSW	Resource use Air pollution Global warming	2.Likely	2.Major	Very High	Significant	Ensure purchased electrical products/whitegoods products comply with specification for CFCS & energy ratings Low solvent paints to be used as a priority Building to conform towards SINSW sustainability framework as requested by SEARS documents aligning with Green Star Rating Deliveries / transport from site effectively planned to limit inefficient transport, assist back loading etc
Demolition Excavation Construction	Air quality	Air pollution	1.Almost Certain	3.Moderate	Very High	Significant	Ensure that all vehicles and machinery are fitted with appropriate emission control equipment, maintained frequently and serviced to the manufacturers' specifications. Smoke from internal combustion engines should not be visible for more than ten seconds
Demolition Excavation Construction	Asbestos	Worker health Air contamination Contaminated waterways Contamination of land	2.Likely 2.Likely 2.Likely 2.Likely	2.Major 2.Major 2.Major 2.Major	Very High Very High Very High Very High	Significant Significant Significant Significant	A licence subcontractor must be used to demolish, remove, repair or disturb asbestos. Safework must be notified 5 days before Asbestos removal work is commenced by the licenced Asbestos Removalist A Safework asbestos licence is required to remove asbestos A nominated asbestos removal supervisor for asbestos removal work is present at the asbestos removal area whenever the removal work is being carried out All workers involved in the removal of asbestos must have been trained in Asbestos Removal An Asbestos Removal Control Plan must be provided by the Asbestos Removalist Asbestos warning signs must be installed Asbestos removal area should be barricade from other workers/public Asbestos removal methods should minimise release of asbestos fibres Asbestos waste must be contained and labelled in accordance with the GHS (Globally Harmonised System of Classification and Labelling of Chemicals) before the waste is removed from an asbestos-related work area Asbestos waste must be disposed of soon as practicable at a site authorised to accept asbestos waste Personal protective equipment used in asbestos-related work that is contaminated with asbestos must be sealed in a container, the exterior of the container decontaminated and labelled in accordance with the GHS to indicate the presence of asbestos before being removed Asbestos bags should be transported in a fully-enclosed compartment which is of sufficient strength to contain the load under normal conditions of transport, and which includes restraints capable of keeping the bags secured in place during transport. (The same approach be used when transporting such waste in other containers, such as drums, bins, similar containers or contaminated spoil) If drums, bins and similar containers are transported using a flatbed truck, each container must be independently secured to at least one side of the truck, using restraints which are capable of keeping the container secured in place under normal conditions of transport. The truck must display a warning that will alert other road users to the fact that the load includes dangerous goods.
Demolition Excavation Construction	Community	Community Concerns Noise Restricted access	1.Almost Certain 1.Almost Certain 2.Likely	2.Major 2.Major 2.Major	Extreme Extreme Very High	Significant Significant Significant	Provide information (e.g.. Signage, letterbox drops, disruption notices, client communications) to community on programmed works Provide contact name for inquires. Advice client of "noisy" work. If required in noise sensitive areas and/or in response to complaints, engage consultants to undertake monitoring at nominated receivers. Vehicles will not be permitted to queue outside the site or in residential areas unless a defined area is established which does not adversely impact on neighbours.
Demolition Construction	Concrete waste	Landfill Contamination of waterways	1.Almost Certain	3.Moderate	Very High	Significant	Construct concrete washout pit for washout, away from stormwater drains. Send back to batch plant where possible.

Work Activity	Aspect	Impact	Likelihood	Consequence	Risk Rating	Significance	Controls
		Contamination of land	3.Possible 3.Possible	2.Major 2.Major	High High		Concrete cuttings to be contained and wetvac to prevent runoff into stormwater drains. Send waste concrete from demolition activities to a concrete recycler instead of landfill
Demolition Excavation Construction	Contaminated material & wastes	Contamination of land	3.Possible	2.Major	High		Assay material uncovered on-site prior to disposal. If the wastes include putrescibles wastes, then also analyse leachate and landfill gases. Excavate material in a manner which avoids off-site environmental problems. Seal remaining contaminated material or wastes, where only part of the contaminated material has been excavated, to ensure that there is no off-site effect now or in the future. Transport odorous wastes in covered vehicles. Dispose of contaminated material in a landfill licensed to take the type of contaminated material or wastes uncovered
Demolition Excavation Construction	Dust Control	Air pollution Community	3.Possible	3.Moderate	High		Prevent the generation of dust in preference to applying dust suppression measures e.g. water cart/spraying. Ensure in the project schedule that the area of cleared land is minimised during the drier months of the year, when dust generation is at its greatest. Pave and water haul roads. The frequency of watering will be determined by weather conditions and the erosive ability of the soil. If additives in the water are used to increase its dust suppression properties, the chemical should have no adverse environmental impact on adjacent water bodies. Water areas other than haul roads, if they are a source of dust. Ensure that smooth surfaces are deep ripped and left rough and cloddy to reduce the wind velocity at the soil surface. Construct wind fences if this is appropriate for the site Cover materials and stockpiles. Place sweepings in a bag or cardboard box before putting it into a skip to prevent the dust from becoming airborne when the bin is emptied. Consideration made to misting/light water spray to suppress dust prior to tipping Where excavating into rock, keep the surface moist to minimise dust. Put up dust screens around the edges of the site.
Demolition Excavation Construction	Emergency Response to spills	Air pollution Contamination of land Contamination of waterways	3.Possible 3.Possible 3.Possible	2.Major 2.Major 2.Major	High High High		Spill kit available on site Make all staff aware of emergency telephone numbers to call in the case of a spill. If a spill occurs that threatens or harms the environment, you must tell the OEH/EPA or the local council as soon as you can after you became aware of it. For large-scale, hazardous spills call the Fire Brigade immediately on 000. If you cannot contain any spill of hazardous materials (regardless of its size) contact the Fire Brigade immediately. For small-scale spills, follow the MSDS for the spilled substance, use spill kit
Demolition Excavation Construction	Emergency Response - neighbours	Air pollution Contamination of land Contamination of waterways	3.Possible 3.Possible 3.Possible	2.Major 2.Major 2.Major	High High High		If neighbouring sites have potential for environmental emergencies e.g. chemical/fuel storage, request copy of neighbours emergency plan and incorporate into company emergency plan
Demolition Excavation Construction	Litter	Landfill Community Visual pollution	2.Likely 3.Possible 3.Possible	3.Moderate 3.Moderate 3.Moderate	High High High		Maintain a high quality of housekeeping and ensure that materials are not left where they can be washed or blown away to become litter. Provide bins for construction workers and staff at locations where they consume food. Conduct ongoing awareness with staff of the need to avoid littering
Demolition Excavation Construction	Management of stockpiles & batters	Contamination of soil Contamination of waterways Air contamination Community	2.Likely 3.Possible 4.Unlikely	2.Major 2.Major 2.Major	Very High High High	Significant	Minimise the number of stockpiles, and the area and the time stockpiles are exposed. Keep topsoil and under burden stockpiles separate. Locate stockpiles away from drainage lines, at least 10 metres away from natural waterways and where they will be least susceptible to wind erosion. Ensure that stockpiles and batters are designed with slopes no greater than 2:1 (horizontal/vertical). Stabilise stockpiles and batters that will remain bare for more than 28 days by covering with mulch or anchored fabrics or seeding with sterile grass.

Work Activity	Aspect	Impact	Likelihood	Consequence	Risk Rating	Significance	Controls
							Establish sediment controls around unstable stockpiles and batters. Suppress dust on stockpiles and batters, as circumstances demand
Demolition Excavation Construction	Noise & Vibration	Community Structural damage	4.Unlikely	2.Major	High		Earth-moving and other vehicles on the site to have appropriate mufflers fitted and maintained Enclose noisy equipment. Provide noise attenuation screens (e.g. Eco Barrier, Gawk Mats), where appropriate. Where an activity is likely to cause a noise nuisance to nearby residents, restrict operating hours to between 7 am and 6 pm weekdays and 7 am to 1 pm Saturday, except where, for practical reasons, the activity is unavoidable. E.g. emergency works, under permission from relevant authorities Noise should not be above background levels inside any adjacent residence between 10 pm and 7 am. Advise local residents when unavoidable out-of-hours work will occur. Schedule deliveries to the site so that disruption to local amenity and traffic are minimised. Minimise air vibrations.
Construction	Purchasing	Resource	1.Almost Certain	4.Minor	Medium		For design and construct jobs, refer to the design specification for Environmentally Sustainable Development (ESD) requirements and product choices. Buy local wherever possible to reduce impacts of transport on environment.
Demolition Excavation Construction	Refuelling	Contamination of land Contamination of waterways	3.Possible 3.Possible	2.Major 2.Major	High High		Storage of bulk fuels (>200L) on site is prohibited. All refuelling shall be undertaken by a mobile facility with appropriate spill control and containment control equipment.
Demolition Excavation Construction	Storing fuels & chemicals	Contamination of land Contamination of waterways	3.Possible 3.Possible	2.Major 2.Major	High High		Minimise fuels and chemicals stored onsite. Install bunds and take other precautions to reduce the risk of spills. Refer Safework Australia - Managing risks of hazardous chemicals in the workplace Code of Practice. AS 1940. The Storage and Handling of Flammable and Combustible Liquids Ponded water within bunds will not be discharged to stormwater.
Demolition Excavation Construction	Stormwater management	Contamination of land Contamination of waterways	3.Possible 3.Possible	2.Major 2.Major	High High		Install erosion and sediment control measures, if possible before construction commences. Identify drainage lines and install control measures to handle predicted stormwater and sediment loads generated in the mini-catchment. Design and install appropriate erosion and sediment run-off control measures appropriate to site conditions to handle a one-in-two-year storm event Leave as much vegetation as possible e.g. shrubs, tree, bushes, turf. Install temporary fences to define 'no go' areas in those areas that are not to be disturbed. Include the area under the canopy of trees so that tree roots will not be damaged by soil compaction. Divert run-off from upslope away from the site, but ensure that you do not flood your neighbours. For example, dig drainage channels (catch drains sized to accommodate the upslope catchment). Install sediment controls downslope of the site to catch sediment. Check the erosion and sediment controls every day and keep them in good condition. Leave or lay a kerbside turf strip (for example, the nature strip) to slow the speed of water flows and to trap sediment. Limit vehicle entry and exit to one point, and lay geotextile and blue metal to stabilise it for all-weather access. Clearly mark the access point and give an access map to all suppliers. Protect all drains with a gravel sausage made from geotextile filled with blue metal. Save the topsoil and stockpile it for use later in revegetation. Never place it around trees as this will kill them. Store all stockpiles and building materials behind sediment fences. Cover them with weighted plastic or similar to prevent erosion by wind.

Work Activity	Aspect	Impact	Likelihood	Consequence	Risk Rating	Significance	Controls
							Get council approval before placing stockpiles or other materials on the nature strip or footpath. Connect downpipes from the guttering to the stormwater drain as soon as the roof goes on. Build a dam below the area used for cutting tiles, concrete and bricks. Surround the wash-out area with a sediment fence that slows down the water flow. Site this area upslope of another sediment control. Fill in all trenches immediately after services have been laid. Spread the topsoil back when the work is finished and revegetate the site as soon as possible to control erosion. Remove the sediment and erosion controls only after natural erosion controls are reinstated e.g. landscaping, mulch, turf etc Sweep the road and footpath as required to ensure that these areas remain clean and do not pose a risk of contaminating water ways or entering storm water systems. Washing down (only) is unacceptable. Never place any materials in the gutter or on the road. You will be fined for this. Obtain advice for use of flocculants to settle sediment from water. Discharging site water to the storm water system is prohibited, unless a site water management system is provided to meet a ph 6.0-6.5 and low turbidity levels, under a Water Discharge Permit obtained from the authority by the Site Manager.
Construction	Trade waste	Water pollution	3.Possible	2.Major	High		If required, obtain trade waste licence for discharge or local council approval Liquid paints NOT to be poured down drains. Spread on waste cardboard or similar and leave to dry. Paint brushes to be rinsed and paint solids allowed to settle. Container of paint solids to be disposed to liquid waste facility.
Demolition Excavation Construction	Traffic	Community	1.Almost Certain	3.Moderate	Very High	Significant	Develop and implement traffic management plans. Submit to local council as required. Signage and notices regarding disruptions. Use crushed concrete, mulches etc along site access roads. Haulage routes and rules will be provided to subcontractors prior to commencing on site. All loads of soil, demolition wastes, general wastes etc are to be tarped
Demolition Excavation Construction	Tree Protection	Community Water Ways Natural Environment	1.Almost Certain	3.Moderate	Very High	Significant	AS4970-2009 Protection of Trees on Development Sites to be adhered to Install temporary fences to define 'no go' areas in those areas that are not to be disturbed. Include the area under the canopy of trees so that tree, Tree Protection Zone (TPZ), roots will not be damaged by soil compaction. A Project Arborist is to be consulted prior to site establishment where trees are to be retained. No works are permitted with in the Critical Root Zone, (CRZ) All construction works must take reasonable steps to prevent encroaching on the TPZ e.g. re-design, re-direct or reposition.
Demolition Excavation Construction	Waste	Contamination of land Contamination of waterways Landfill	2.Likely 3.Possible	2.Major 2.Major	Very High High	Significant	Reduce, reuse and then dispose Obtain construction materials, paints, lubricants and other liquids in reusable packaging or containers where possible Use noise barriers made from recycled materials where possible Use overburden to construct temporary noise barriers. Use sedimentary water, that has had time to settle, out of sediment dams for dust suppression and irrigating adjacent vegetated land Use hard construction wastes for recycled gravels and sands Send waste concrete from demolition activities to a concrete recycler instead of landfill

Project Risk Register

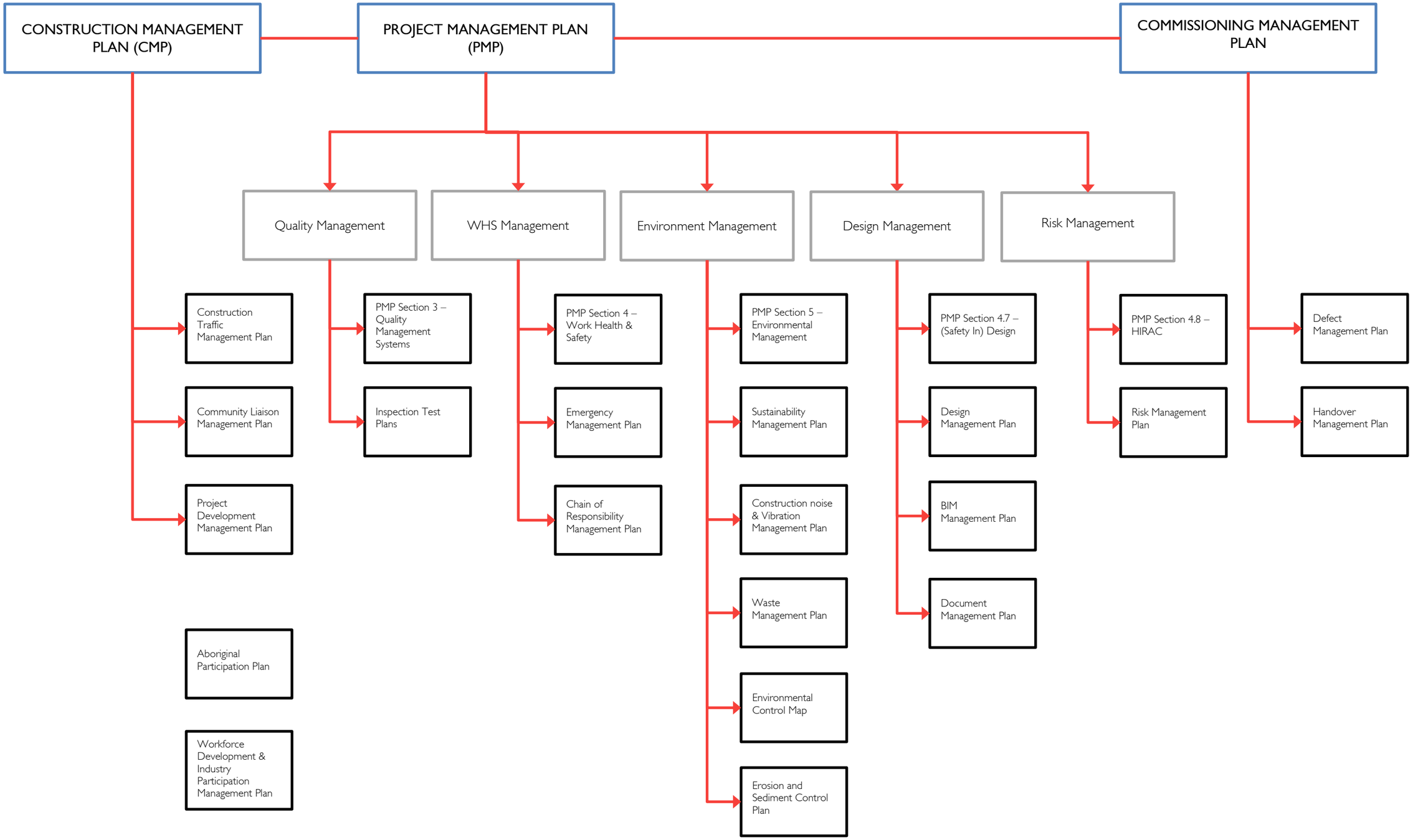
WHS Risk Assessment

Form SE4131

Work Activity	Aspect	Impact	Likelihood	Consequence	Risk Rating	Significance	Controls
							Segregate and recycle solid wastes generated by construction activities, offices and mess-rooms or engage contractor to recycle waste off site. Do not send soil to landfill until alternatives for beneficial reuse have been explored as per consultant's advice. Consideration should be given to chipping of the vegetation and reuse

6.7 Management Plan Hierarchy

MANAGEMENT PLAN HIERARCHY



6.8 Forms and Templates List

Forms and Templates List

Number	Name	Revision Date
CM1001	Compliance Change Advice	01/01/2012
PA-2601	Project Commencement Checklist	24/06/2015
PA-3303	Transmittal - Pre Printed	09/02/2016
PA-4306	Request for Information	08/05/2008
PA-4308	RFI Register	08/05/2008
PA-4402	Daily Site Report	08/05/2008
PA-5101	Design Risk Assessment	01/08/2015
PA-5801	Design Change Action Sheet	01/03/2017
PA-7101	Inspection Test Plan	01/03/2019
PA-9404	Backcharge Notification Form	08/05/2008
PA-11301	Monthly Project Managers Report	09/09/2015
PA-12801	Subcontractor Post-Contract Assessment Individual	10/01/2017
PA-12802	Subcontractor Post-Contract Assessment Summary	12/07/2016
SE4130	Legal Other Requirements Register	02/06/2020
SE4131	Project Risk Register	14/07/2020
SE4132	Plant Risk Assessment	05/09/2017
SE4135	Risk Assessment	16/08/2016
SE4136	Interface & Impact Register	20/11/2019
SE4601	Corrective Action Request	20/11/2019
SE4602	Corrective Action Register	14/07/2020
SE4801	SWMS Review Checklist	18/02/2019
SE4803	HRCW SWMS On-Site Review	01/04/2015
SE4804	Traffic Management Review	01/11/2014
SE4805	Work Practice Review	20/11/2019
SE5101	Acident Incident Report	01/04/2020
SE5102	Incident Register	14/07/2020
SE5201	Post Incident Review	01/10/2016
SE6101	Site Induction Rules	01/01/2015
SE6102	Site Layout	01/01/2015
SE6103	Site Induction Record	01/05/2018
SE6104	Induction Register	20/11/2019
SE6105	Record of Training & Consultation	01/01/2015
SE6106	Vistor Induction Form	20/12/2016
SE6107	Consultation Statement	01/07/2020
SE6201	HRCW Safe Work Method Statement	01/09/2017
SE6202	Safe Work Method Statement Non HRCW	07/12/2016
SE6203	PPE Issue Record	01/01/2015
SE6204	First Aid & Register of Injuries	04/04/2005
SE6205	Hazardous Chemicals Register & Risk Assessment	21/11/2019
SE6206	Waste Management Record	01/01/2015
SE6207	Mobile Plant Worthiness Checklist	21/11/2019
SE6208	Electrical Equipment Register	01/03/2015
SE6209	Site Visitors Logbook	01/07/2017
SE6210	On-site Daily Personnel Numbers	01/01/2015
SE6211	Confined Space Entry Permit	01/01/2015
SE6212	Work Permit	01/03/2015
SE6213	Hot Work Permit	01/03/2019
SE6215	Daily Pre Start	01/03/2015
SE6216	Site Emergency Drill Schedule	01/01/2015
SE6217	Emergency Drill Evaluation Form	01/11/2019
SE6218	Working at Height Permit	01/09/2017
SE6219	Permit to Break Ground	01/01/2020
SE6220	Permit to Work - Use of Harness	21/11/2019
SE6221	Ladder Permit	01/05/2015
SE6222	Traffic Control Plan	01/01/2015
SE6223	Isolation of Services	01/08/2015
SE6224	Work Near Overhead Services Permit	21/11/2019

Forms and Templates List

Number	Name	Revision Date
SE6225	Coring Permit	01/01/2015
SE6226	Formwork Deck Handover	27/10/2017
SE6227	Permit - Use of Cutting Discs	01/03/2017
SE6228	Tower Crane Erection Checklist	02/04/2020
SE6229	Electrical Survey	03/04/2020
SE6301	Hazard and Observation Sheet	01/11/2016
SE6307	Plant ID Register	20/03/2019
SE6308	Senior Management Consultation & Observation Sheet	01/08/2015
SE6309	Plant & Equipment Inspection Schedule	08/01/2012
SE7102	Health & Safety Consultation Meeting Minutes	27/06/2018
SE8101	Monthly Site Performance Report	01/11/2018
SE8102	Company WHS Performance Report	08/07/2020
SE8201	Monthly Site Safety & Environment Audit-Checklist	01/05/2018
SE9301	Project Scope	19/11/2019
SE9302	Project Organisation Chart and Contact Details	19/11/2019
SE9303	Project Meeting Matrix	19/11/2019
SE9304	Calibration Register	19/11/2019
SE9305	Fall Prevention Systems/Structures Certification	21/11/2019
SE9306	Critical Incident Review	21/11/2019
SE9401	Water Testing Register	01/11/2019

6.9 Site Location Plans (Stage 1 and Stage 2)

STAGE 1 - SITE LOCATION PLAN

Legend

- Sensitive Receivers
- Construction Traffic Route
- Stormwater Pit
- Site Boundary
- Site Complex
- Storage/ Laydown Area
- Tree Protection Zone

STAGE 2 - SITE LOCATION PLAN

Legend

- Sensitive Receivers
- Construction Traffic Route
- Stormwater Pit
- Site Boundary
- Site Complex
- Storage/ Laydown Area
- Tree Protection Zone

6.10 Unexpected (Contaminants) Finds Protocol Flowchart

UNEXPECTED FINDS PROTOCOL FLOWCHART

Potential ACM or other unidentified contamination is observed on site

Workers must immediately cease work in the area and contact AWE Site Foreman or Site Manager

Workers to establish exclusion measures to prevent unauthorised access (eg. barrier mesh with signage)

AWE Site Manager/Foreman to photograph the find in the area it was located (only if safe to do so), mark on a site plan the location it was found, and complete the Unexpected Finds Register

AWE Site Manager contacts AWE Project Manager, WHS Manager and QE Manager

AWE Project Manager to notify Client/Clients Representative

AWE Project Manager or QE Manager to notify local Council or EPA (if applicable)

AWE WHS Manager to notify SafeWork NSW (if applicable)

AWE WHSE Coordinator prepares incident report

AWE Site Manager delivers Toolbox Talk* to all workers on site regarding contamination, no access areas, and any further instructions/controls

If >7 pieces or >10m^2 of non-friable ACM, or suspected friable ACM, or other unidentified contaminant is present, AWE to contact/engage a Certified Occupational Hygienist (COH) or Licensed Asbestos Assessor (for suspected ACM)

Licensed Asbestos Assessor/COH inspects area and suspected material, and takes samples for laboratory testing

Licensed Asbestos Assessor/COH issues report advising test results (nature, extent and degree of any contamination), with removal or decontamination procedures and controls to avoid further disturbance or exposure

Licensed Asbestos Removalist or other specialised removal contractor (for non-ACM) engaged, in line with advice from the COH/Licensed Asbestos Assessor

ARCP/RAP prepared for works, and removal area established in line with test report and NSW Code of Practice

Removal works conducted in accordance with ARCP/RAP

Clearance inspection (and certificate provided) post removal works, and <u>prior</u> to recommencing construction/demolition works

If <7 pieces of non-friable ACM (and less than 10m^2), AWE Site Manager may direct safe removal of potential ACM, with the controls list below implemented:

- Trained asbestos removal workers only
- Disposable P2 half face respirator
- Disposable nitrile/latex gloves
- Potential ACM pieces are collected, taking care to avoid damage,
- Pieces are placed in 200µm bags labelled as asbestos waste
- Ensure used gloves and respirators are placed in a similarly labelled waste bag
- Bags should be twisted tightly, folded over and the neck secured in the folded position with adhesive tape
- Bags permitted to remain on site for no longer than six (6) weeks
- Bags disposed of at licensed facility with receipt provided

* <u>Note</u>: Methods of communication with workers and other persons in the area may vary pending status of COVID19 pandemic, NSW Health advice and government restrictions

6.11 Unexpected Heritage Finds Protocol Flowchart

HERITAGE UNEXPECTED FINDS PROTOCOL FLOWCHART

Potential heritage or other unidentified artefact is observed on site

Workers must immediately cease work in the area and contact AWE Site Foreman or Site Manager

Workers to establish exclusion measures to prevent unauthorised access and protect the 'find'

AWE Site Manager/Foreman to photograph the find in the area it was located (only if safe to do so), mark on a site plan the location it was found, and complete the Unexpected Finds Register

AWE Site Manager contacts AWE Project Manager, WHS Manager and QE Manager

AWE Project Manager to notify Client/Clients Representative

AWE Project Manager or QE Manager to notify heritage advisor or consultant

Has the heritage advisor or consultant determined the 'find' to be of significance?

Yes

Develop mitigation strategy with heritage advisor or consultant – mitigation strategy to consider if 'find' is damaged

Does the 'find' warrant notification to a relevant authority?

Yes

Notify relevant authority and undertake relevant regulatory requirements

No

No

Implement mitigation strategy (addressing any regulatory requirements)

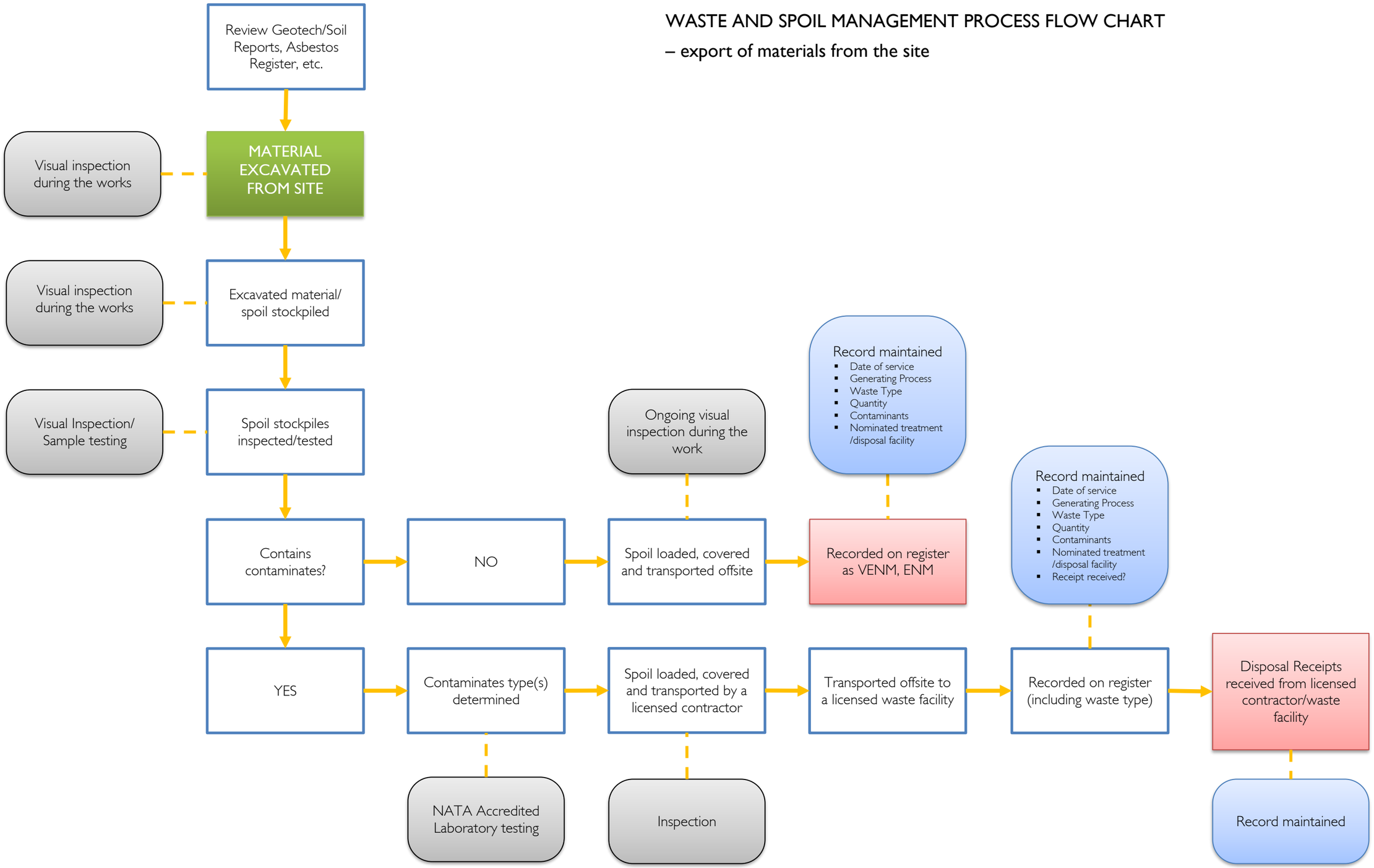
Recommence work as planned or altered to minimise impact

* Note: Methods of communication with workers and other persons in the area may vary pending status of COVID19 pandemic, NSW Health advice and government restrictions

6.12 Waste and Spoil Management Process Flowcharts

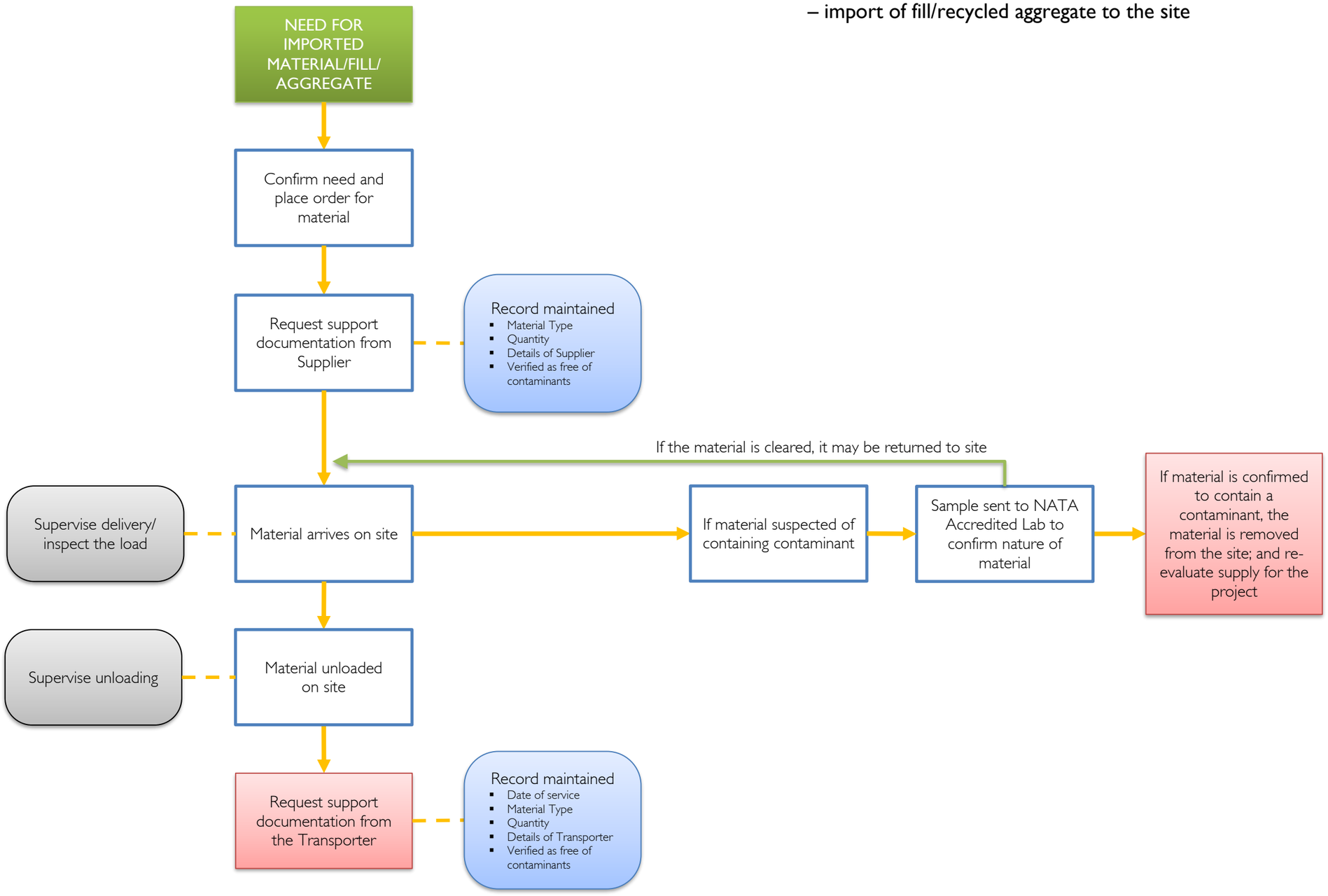
WASTE AND SPOIL MANAGEMENT PROCESS FLOW CHART

– export of materials from the site



WASTE AND SPOIL MANAGEMENT PROCESS FLOW CHART

– import of fill/recycled aggregate to the site



6.13 Environmental Incident Response Flowchart

AW EDWARDS

Environmental Incident Response Flow Chart

If there is an incident that causes concern for the health and safety of workers, the public and/or the environment

ENVIRONMENTAL INCIDENT

In the affected area:

STOP WORK !!!

Assess the situation:

- Identify the severity
- (If necessary) evacuate

Do not enter an area that could be unsafe for you

For **Class 1** incident contact

- Site Manager
- HSR
- Project Manager
- HSE Manager
- OEH/EPA

And:

- Emergency Services / 000
- Act on their instructions

For **Class 2 or 3** incident contact:

- Head Office
- Site Manager
- HSR
- Project Manager

Landslip

- Isolate (turn off) water mains that could discharge into the area;
- Obtain specialist advice BEFORE attempting to rescue people or equipment - zone of the landslip is likely to be unstable;
- Once the source is contained or the discharge has stopped, determine whether clean-up is likely to be required;
- The Site Manager in consultation with the Project Manager, determines the most suitable process for clean-up and disposal of materials.

Disturbance of Heritage items

- The method selected must be carefully considered in light of the scale & nature of the problem;
- The Site Manager, in consultation with the Project Manager, determines the most suitable corrective actions.
- Notify OEH if a heritage item is discovered the Project Manager to be notified firstly who will then notify OEH etc. appropriately

Release of Waste

- Cease activity causing the release of wastes off-site;
- The method selected must be carefully considered in light of the scale and type of problem;
- The Site Manager in consultation with the Project Manager, determines the most suitable process for cleaning up.

Odours and dust

- Apply odour / dust suppression agents (including water mists, soil, chemicals);
- Consider carefully which option to select in light of the scale and type of problem;
- The Site Manager in consultation with the Project Manager determines the most suitable corrective actions.

Spills / escape of polluted water

- Contain the spill - ensure that no further escape occurs, especially off-site;
- Determine whether clean-up is likely to be required - recover spilt material;
- The Site Manager, in consultation with the Project Manager, determines the most suitable process for clean-up and disposal of contaminated materials.

Incident Class

When assessing the risk involved with each incident, the following Classes shall be used:

Class 1

- People – Causes or has the potential to cause damage which permanently alters the future of the individual (fatality, quadriplegia, amputee, disabled or psychological disturbance).
- Environment – Causes or has the potential to cause permanent environmental damage and results in remediation costs of > $50,000.
- Plant / Equipment / Property – Causes or has the potential to cause damage to plant / equipment and / or property > $50,000.

Class 2

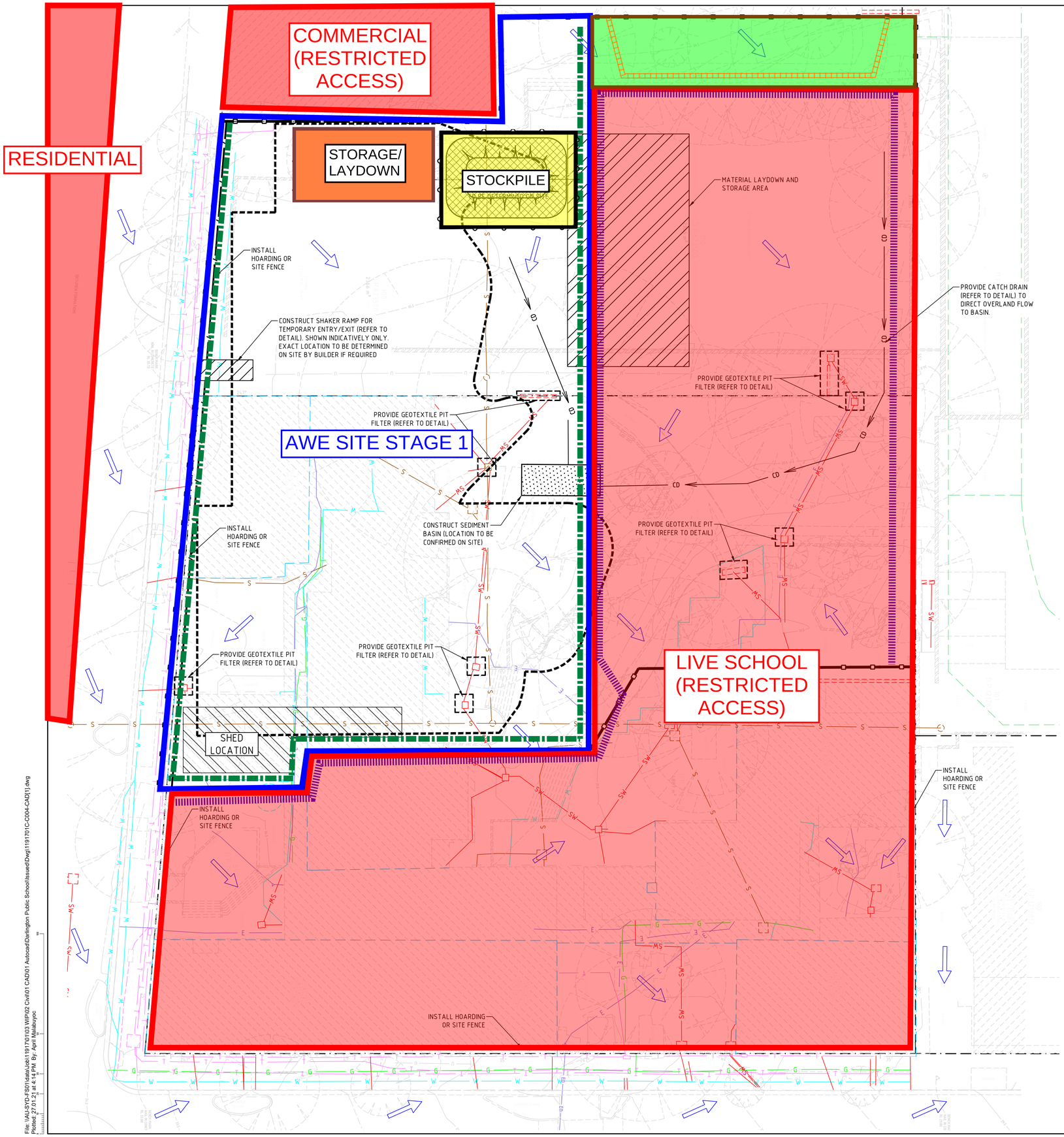
- People – Causes or has the potential to cause an injury or disease resulting in temporary disability or time lost from work of one or more complete days or shifts.
- Environment – Causes or has the potential to cause damage to the environment which can be rectified and results in remediation costs of > $10,000 and < $50,000.
- Plant / Equipment / Property – Causes or has the potential to cause damage to plant / equipment and / or property > $10,000 and < $50,000.

Class 3

- People – Causes or has the potential to cause an injury which inconveniences the individual such as minor cuts or sprains, but allows the person to continue to carry out normal duties.
- Environment – Causes or has the potential to cause damage to the environment which can be easily rectified and results in remediation costs of < $10,000.
- Plant / Equipment / Property – Causes or has the potential to cause damage to plant / equipment and / or property < $10,000.

6.14 Environmental Control Map (ECM)

THIS DRAWING MAY BE PREPARED IN COLOUR AND MAY BE INCOMPLETE IF COPIED



SOIL AND WATER MANAGEMENT LEGEND

- HOARDING OR SITE FENCE
- SEDIMENT FENCE
- CD — CATCH DRAIN
- TEMPORARY SHAKER RAMP FOR ENTRY/EXIT
- SEDIMENT BASIN (LOCATION TBC ON-SITE)
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- GEOTEXTILE PIT FILTER / FILTER SURROUND INSTALLED ON EXISTING PIT
- SANDBAGS INSTALLED ON EXISTING PIT
- OVERLAND FLOW

SURVEY LEGEND

- SITE BOUNDARY
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- 5.00 — EX SURFACE CONTOUR
- EX TREE
- Ex SW — EXISTING STORMWATER DRAINAGE LINE
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- Ex G — EXISTING GAS LINE
- Ex T — EXISTING TELECOMMUNICATIONS LINE
- Ex E — EXISTING ELECTRICAL LINE
- EXISTING UNKNOWN SERVICE
- Ex E — EXISTING SERVICE TO BE MADE REDUNDANT
- STAGE 1 AND EARLY WORKS EXTENT (INDICATIVE ONLY).

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1. IT HAS BEEN ASSUMED THAT HOARDINGS/SILT FENCING WILL BE PROVIDED TO THE STAGE BOUNDARY SUFFICIENT TO PREVENT SEDIMENT RUNOFF FROM LEAVING SITE (EXCEPT IN THE CASE OF ENTRY/EXIT LOCATIONS WHERE TEMPORARY CONSTRUCTION ENTRY/EXIT SEDIMENT TRAP ARE PROVIDED). IF THIS IS NOT THE CASE, PROVIDE SEDIMENT FENCE TO STANDARD DETAIL BELOW AS REQUIRED TO PREVENT SEDIMENT FROM LEAVING SITE, DIRECT RUNOFF TO SEDIMENT BASIN.
2. ALL SEDIMENT CONTROL MEASURES TO BE INSTALLED IN ACCORDANCE WITH LANDCOM MANAGING URBAN STORMWATER "BLUE BOOK".

SEDIMENT CONTROL CONDITIONS

1. SEDIMENT FENCES WILL BE INSTALLED AS SHOWN AND ELSEWHERE AT THE DISCRETION OF THE SITE MANAGER TO CONTAIN COARSER SEDIMENT FRACTIONS INCLUDING AGGREGATED FINES) AS NEAR AS POSSIBLE TO THEIR SOURCE.
2. SEDIMENT REMOVED FROM ANY TRAPPING DEVICE WILL BE RELOCATED WHERE FURTHER POLLUTION TO DOWNSLOPE LANDS & WATERWAYS CANNOT OCCUR.
3. STOCKPILES WILL BE PLACED WHERE SHOWN ON DRAWING OR ELSEWHERE AT THE DISCRETION OF THE SITE MANAGER AND NOT WITHIN 5m OF HAZARD AREAS INCLUDING LIKELY AREAS OF HIGH VELOCITY FLOWS SUCH AS WATERWAYS, PAVED AREAS & DRIVEWAYS.
4. WATER WILL BE PREVENTED FROM DIRECTLY ENTERING THE PERMANENT DRAINAGE SYSTEM WITH INLET FILTERS (SEE DETAILS) UNLESS IT IS SEDIMENT FREE.
5. TEMPORARY SEDIMENT TRAPS WILL BE RETAINED UNTIL AFTER THE LANDS THEY ARE PROTECTING ARE COMPLETELY REHABILITATED.
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THE SITE MANAGER WILL INSPECT THE SITE AT LEAST WEEKLY AND WILL:

1. ENSURE THAT DRAINS OPERATE PROPERLY & TO EFFECT ANY NECESSARY REPAIRS
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7. REMOVE TEMPORARY SOIL CONSERVATION STRUCTURES AS THE LAST ACTIVITY IN THE REHABILITATION PROGRAM.

AS PART OF THE STATUTORY 'DILIGENCE OF CARE' RESPONSIBILITIES, THE SITE MANAGER WILL KEEP A LOGBOOK MAKING ENTRIES AT LEAST WEEKLY, IMMEDIATELY BEFORE FORECAST RAIN AND AFTER RAINFALL.
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1. THE VOLUME & INTENSITY OF ANY RAINFALL EVENTS
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ECM LEGEND

- SENSITIVE RECEIVERS
- EROSION & SEDIMENT CONTROL
- NOISE MONITORING BOUNDARY
- STOCKPILE AREAS
- STORAGE & LAYDOWN AREAS
- ENVIRONMENTALLY SENSITIVE AREAS
- CLASS A HOARDING
- EXCLUSION FENCING FOR ENVIRONMENTALLY SENSITIVE AREAS

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ENVIRONMENTAL CONTROL MAP STAGE 1

AW EDWARDS

File: \\AU-SYD-FS01\data\Job\119\70\103 WIP\02 Civil\01 CAD\01 Autocad\Darlington Public School\Issued\Dwg\119170TC-C004-CAD[1].dwg
Plotted: 27.01.21 at 4:14 PM By: April Maliakoyoc

6.15 Erosion and Sediment Control Plan

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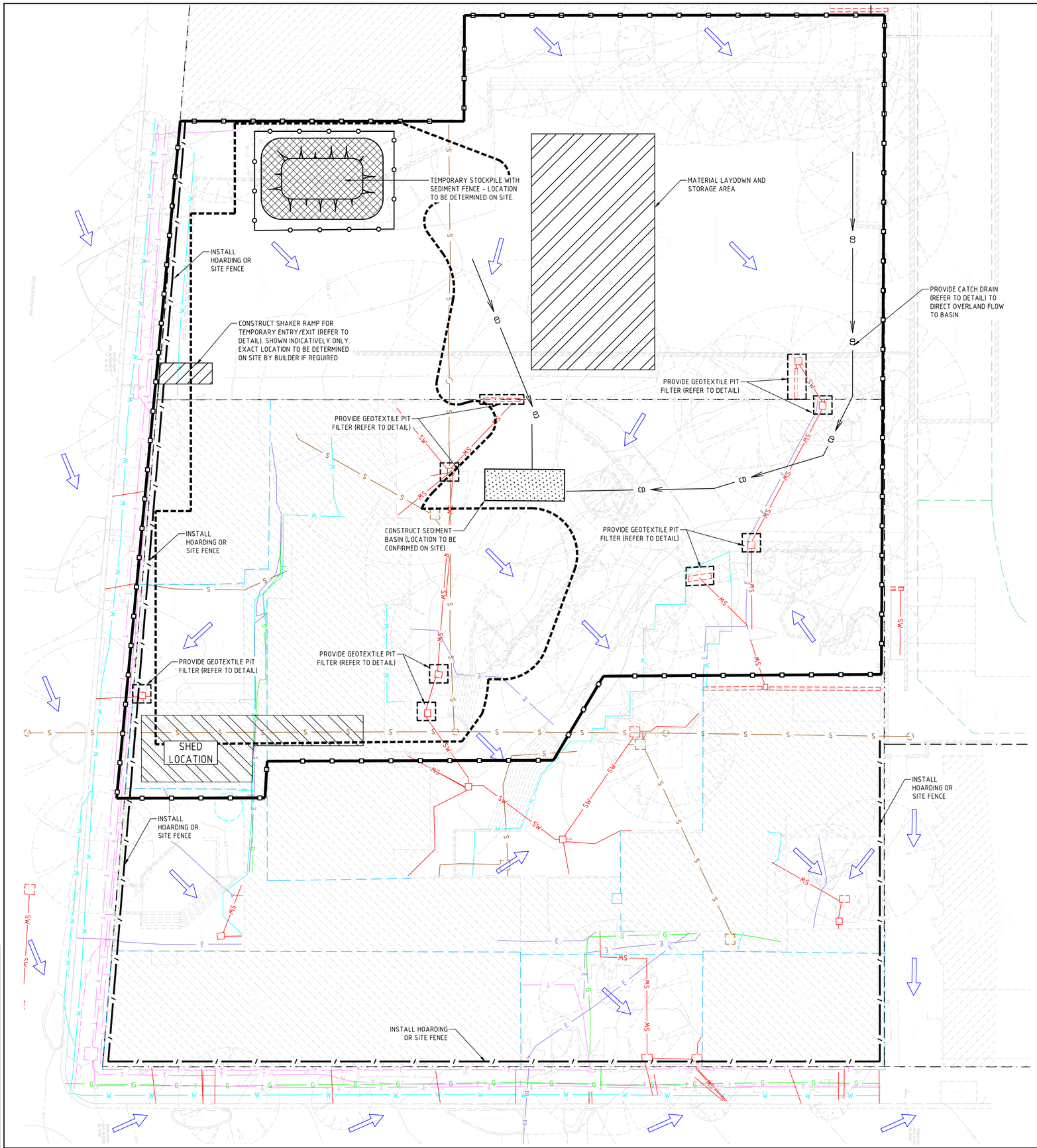

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SOIL AND WATER MANAGEMENT PLAN STAGE 1

FOR CONSTRUCTION

Designed	EW	Approved	Date
Drawn	JF		
Scale	1:200		
Date	FEB 2020		
Sheet	A1		

North

Project Ref	Drawing No	Rev
1191701C	C004	1

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Plotted: 27.01.21 at 4:14 PM By: Ajani Maliakoyoc

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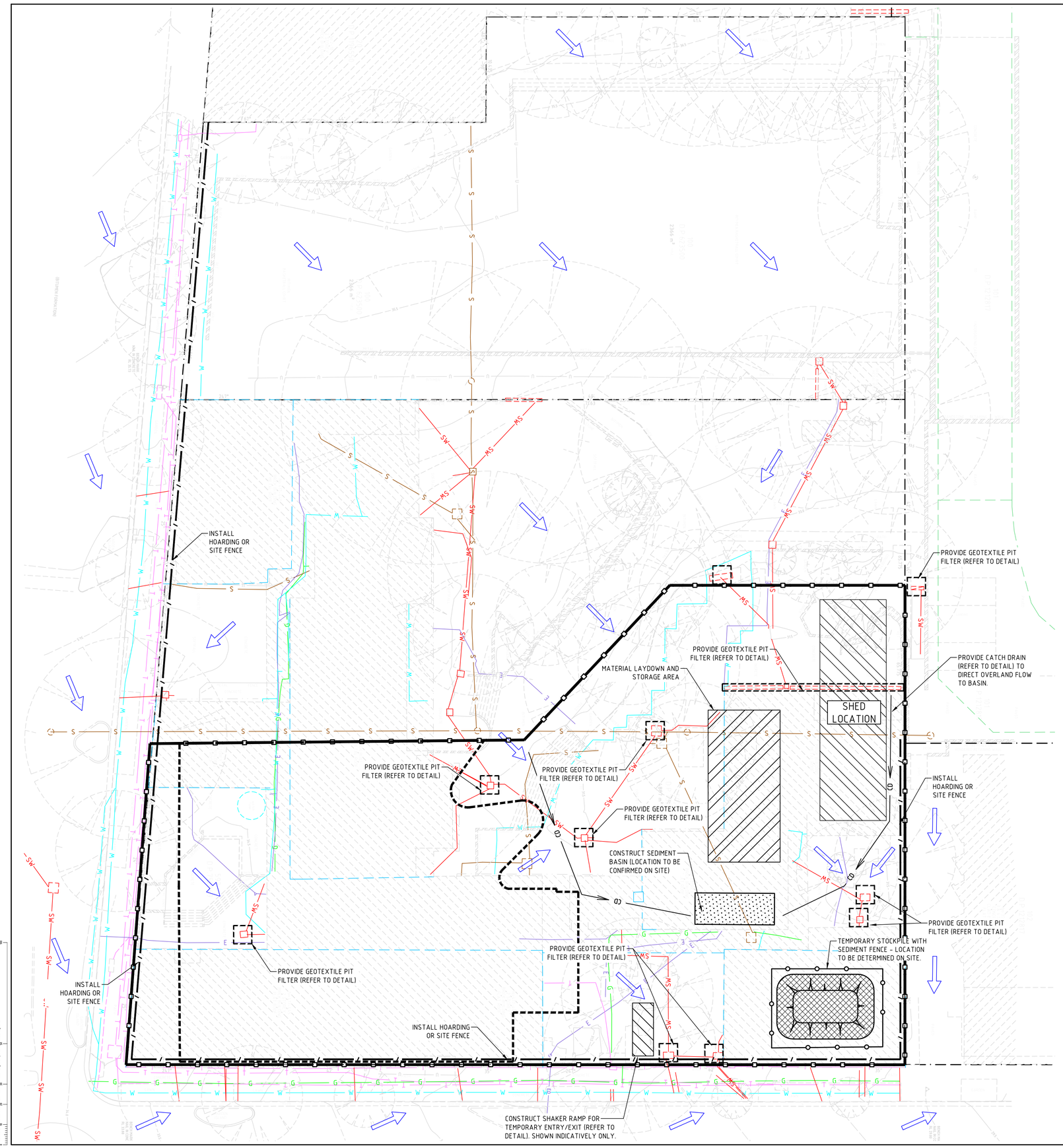

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SOIL AND WATER MANAGEMENT PLAN STAGE 2

TENDER ADDENDUM

Designed	EW
Drawn	JF
Scale	1:200
Date	FEB 2020
Sheet	A1
Approved	
Date	
North	
Project Ref	1191701C
Drawing No	C005
Rev	1

6.16 Emergency Management Plan

AW EDWARDS

Darlington Public School
Emergency Management Plan
9889-AWE-WHS-002

Prepared By:
A W EDWARDS PTY LIMITED
131 Sailors Bay Road
NORTHBRIDGE NSW 2360
T 9958 1474 F 9958 2779
www.awedwards.com.au

Date: 2 December 2020
Author: Mark Whitmore
Revision: 01
Status: Tender Issue

AUTHORISATION

Position:	Name	Signature	Date
Project Director:	Justin Smith		
Project Manager	Glen Burley		

EMERGENCY RESPONSE TEAM INDUCTED INTO EMP

Position:	Name	Signature	Date
Emergency Controller:	Mark Whitmore		
Deputy Emergency Controller	Riley Barns		

Document History		
Revision Date	Author	Reason for Change

Distribution	
Name	Organisation

CONTENTS

1 Purpose and Scope

The purpose of this plan is to clearly describe the actions and responsibilities required in the event of an emergency occurring on the project. This plan is applicable to all parts of this project and throughout all phases of works. It will be reviewed and, where applicable, updated after any major incident.

2 Definitions

Critical Incident:

- An event or point of decision which, if not handled in an appropriate and timely manner (or if not handled at all), may turn into a disaster or catastrophe significantly impacting on the operations of the project site and or company.

Critical Incident Management Team:

- (CIMT) Team appointed by the Chief Executive Officer (CEO) to deal with a specific crisis or event. Consists of an Emergency Response Controller & Deputy Emergency Response Controller.

Emergency Response Controller (ERC):

- The relevant Construction Manager or other person appointed by the CEO to deal with a specific crisis event or developing situation

Emergency:

- For the purpose of this plan, an emergency shall be defined as any serious event which requires a high-level response

Emergency Response Services:

- May, as appropriate, mean police, ambulance, fire brigades, state emergency services, hospital or other specialist groups.

Incident:

- An unplanned or undesirable event resulting in, or has the potential for, personal injury, loss of productivity, environmental damage or property damage. Work related incidents may involve a work injury and/or non-injury occurrence

Near Miss:

- Any unplanned event in the workplace that, although not resulting in injury or significant equipment, property and/or environmental damage, had the potential to do so.

Incident Class:

- Class 1:
  - People – Causes or has the potential to cause damage which permanently alters the future of the individual (fatality, quadriplegia, amputee, disabled or psychological disturbance).
  - Environment – Causes or has the potential to cause permanent environmental damage and results in remediation costs of > $50,000.
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3 Responsibilities

3.1 Chief Executive Officer

- Shall ensure the appointment of Critical Incident Management Team (CIMT), Emergency Response Controller (ERC) and Deputy Emergency Response Controller.
- Approval to comment to media.

3.2 Group WHSE Manager

- Assist in identifying potentially critical incident circumstances, assessing and controlling of critical incident risks effectively.
- Implementing, monitoring and maintaining risk control measure for critical or potentially critical incidents in their areas of responsibility.
- Consulting with employees on critical incident practices or any proposed changes
- Ensuring the well-being of employees following a critical incident.

3.3 Project Director

- Shall nominate an Emergency Response Controller and a deputy
- Ensure an Emergency Response Controller and the deputy are appropriately trained
- Ensure this plan is reviewed and updated to reflect changes in the workplace or opportunities for improvement.
- Provide high level decisions and instruction regarding personnel, property and/or the environment that are affected by the incident / emergency;
- Ensure that an appropriate level of resources is available;
- Report to senior management, in accordance with the severity and status of the emergency;
- In the event of an emergency, follow the instruction of Emergency Services or the Emergency Response Controller
- Liaise with the client with respect to community consultation and media management.
- Liaise with the statutory authority where applicable;
- Communicate events requiring response, notifications and reporting
- Respond to the requirements of Regulatory Authorities as required;
- Organise trauma counselling for critical incidents

3.4 Return to Work Coordinator

- Liaising with the company's workers compensation provider and the rehabilitation provider
- Management of 'Workers Injury Management Plan'.
- Critical Incident Management Team (CIMT)
- The need for appointing a CIMT is to be determined by the Chief Executive Officer.
- The CIMT may comprise of Site Management representatives and or the services of external specialist service providers.
- One person shall be appointed as the Emergency Response Controller (ERC) by the business to coordinate all activities being undertaken by the CIMT. This will normally be the Site Manager.
-

3.5 Emergency Response Controllers

- Implementation and activation of this plan.
- Coordinate & Initiate Critical Response Process in accordance with this plan
- Assume initial control of the scene of the emergency and the evacuation of staff to emergency assembly points as required.
- Activate the appropriate external emergency services, unless already completed by the Site Supervisor
- Assume the lead role in the event of an actual emergency; unless emergency services personnel take over the site as part of an Emergency Services Act.
- Activate and liaise with Emergency Services (depending upon the severity of the incident). Ensure they are aware of all relevant factors affecting the incident;
- Ensure that all pollution incident response equipment is available on the project;
- Ensure a Hazardous Substance register, including all SDS, is available and current;
- Ensure emergency response requirements are included and up to date in the project induction;
- Control the following actions as appropriate:
    - Movement within the site evacuation assembly area;
    - Ensure all head counts are conducted by Deputy Emergency Response Controller and any 'missing persons' are identified and subsequently accounted for;
    - Direct emergency services to the exact location of the emergency incident;
    - Provide up to date information as to the status of the incident to the emergency services.
- Ensure that all first aid facilities, kits and alike are readily available on the project and refurbishment, replenishment of emergency stocks or equipment.
- Coordinate all incidents in accordance with this plan;
- Respond to incidents as appropriate. Record all details;
- Identify both the incident classification and other relevant details;
- Notifies the facility manager if working in an occupied facility or station;
- Notify personnel that are affected to evacuate (as applicable);
- Maintain a clear phone line for incoming and outgoing emergency communications;
- Follow all directions from the Emergency Services Controller (as applicable).
- Initiate incident report on conclusion of emergency
- Give instruction on when it is safe / appropriate to resume normal operations.

3.6 Deputy Emergency Response Controllers

Assume control of the scene of the emergency and the evacuation of staff to emergency assembly points if the Emergency Response Controller is not available. Deputy Emergency Response Controllers shall:

- Assist in the Coordination and Initiation of Critical Response Process in accordance with this plan
- Assist the Emergency Response Controller in ensuring that all pollution incident response equipment is available on the project;
- Assist the Emergency Response Controller in ensuring a Hazardous Substance register, including all SDS, is available and current;
- Assist the Emergency Response Controller in ensuring that all first aid facilities, kits and alike are readily available on the project and refurbishment, replenishment of emergency stocks or equipment.
- Assist in Coordination all incidents in accordance with this plan;
- Respond to incidents as appropriate. Record all details;
- Take site attendance register to the emergency assembly point or relay the information to the emergency services on site
- Identify both the incident classification and other relevant details;
- Notify personnel that are affected to evacuate (as applicable);
- Follow all directions from the Emergency Services controller (as applicable).

3.7 First Aid Personnel

- Attend to any casualties in the affected area, providing it is safe to do so;
- Await instruction from the Emergency Response Controller (ERC) and respond to the requirements of first aid and treatment
- Maintain their Senior First Aid Accreditation (including CPR).
- Assist the Emergency Response Controller in ensuring that all first aid facilities and kit contents and restock as required.

3.8 WHSE Coordinator

- Provide assistance to the Project Director and Construction Manager in the establishment and training in this plan.
- Meet and direct emergency service vehicles at the site entry.
- Ensure all emergency equipment is maintained on the project.
- Ensure emergency response requirements are included and up to date in the project induction.
- Coordinate the requirements for carrying out mock emergency drills to test its effectiveness.
- Liaise with the SafeWork Authority where applicable.
- Communicate events requiring response, notifications and reporting.
- Ensure all environmental incident response requirements and equipment is maintained on the project.
- Respond to the requirements of Regulatory Authorities as required.
- Provide guidance and coordinate response to environmental incidents as required by the Project Director, such as:
    a. Meet Regulatory Authorities representatives at the designated location.
    b. Direct Regulatory Authorities to the exact location of the emergency incident.

c. Provide up-to-date information on the status of the incident to the Regulatory Authorities.

- Coordinate required responses and reporting.

3.9 All other Personnel

- Comply with any directions given by management or supervisors in the event of an emergency or critical incident
- Report any emergency to their immediate supervisor as soon as they become aware of the emergency
- Availing themselves of the support mechanisms (Employee Assistance Programme) in the event of exposure to critical incidents.

3.10 Visitors

- Comply with any reasonable directions given by PCBU in the event of an emergency
- Do not interfere with the management of any emergency unless requested by site supervision.
- Assemble at the designated assembly point.
- Do not leave assembly point unless directed to do so

4 Incident Response Priorities

In the event of an incident, the following priorities will be observed:

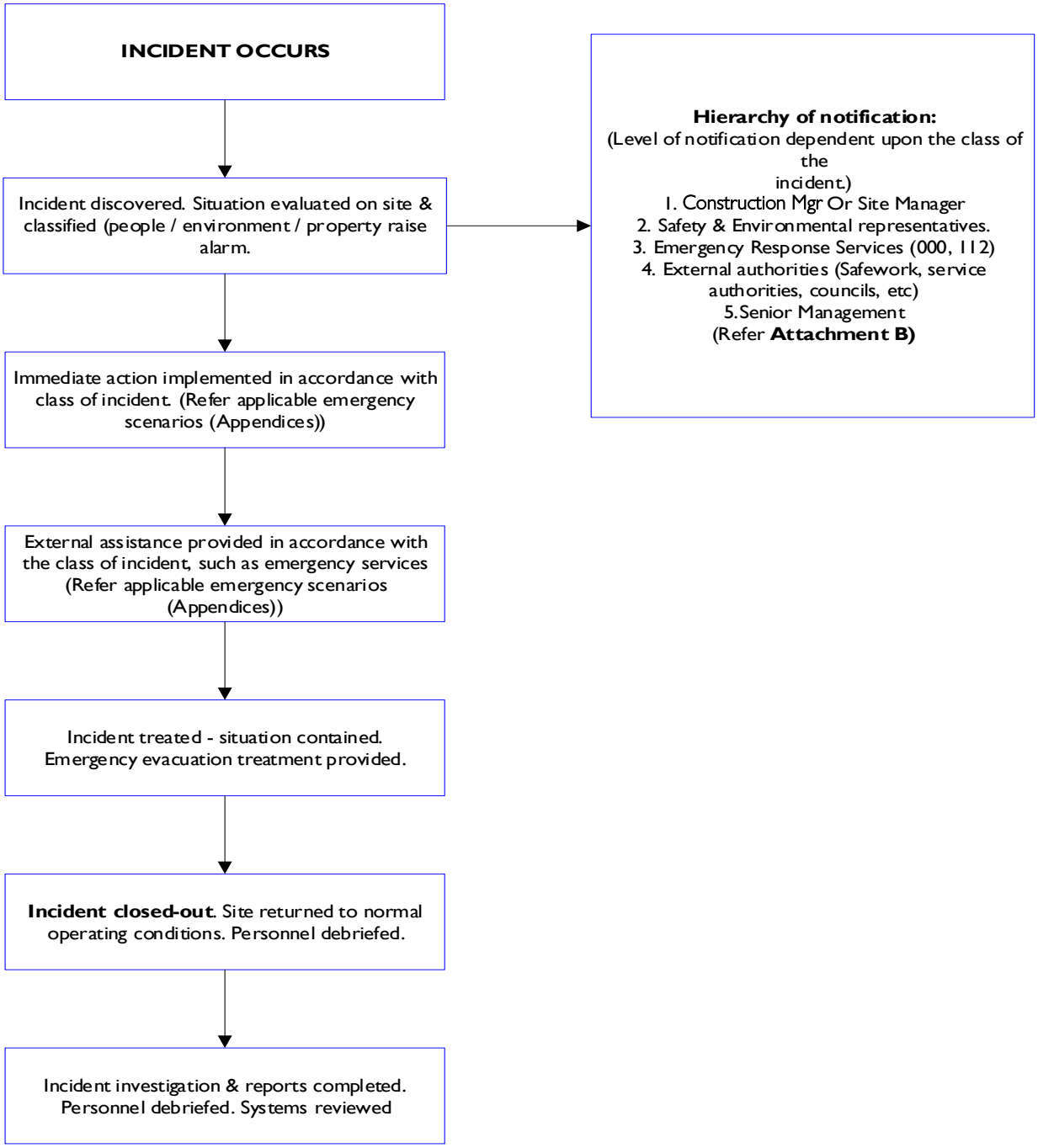
- Protect and rescue human life;
- Render affected areas safe; and
- Protect property, environment and information.

Follow this by: -

- Clearing of damage / affected area
- Restoration of disrupted services, including traffic operations
- Resumption of normal workplace conditions
- A debriefing with all of those involved
- A prompt investigation & review with lessons learnt / corrective actions
- Communicate lessons learnt / corrective actions with relevant personnel

Once an investigation has been carried out, implement training as learned from investigation.

5 Incident Response Process – Summary



6 Training

All site personnel, including subcontractors, will be instructed in the correct response to an incident, as part of the induction process.

Local Emergency Services – police, fire, ambulance, etc – will be contacted and invited to site for familiarisation purposes.

Evacuation and emergency response drills will be conducted. The first drill will be held within 1 month of commencement of construction works and 3 monthly thereafter throughout the life of the project.

Records of all training will be maintained in the project site file.

7 Incident Response Actions

A list of potential incidents – together with typical treatments applicable to each of these – is shown in Attachment A, Action Plans. This table provides a guide to assist project personnel to initiate appropriate action as well as a summary of ongoing actions.

Where applicable, personnel will be evacuated in accordance with Attachment H, Emergency Evacuation Flowchart.

Details of contact numbers are provided in Attachment B, and Attachment C provides a detailed process for contacting emergency services.

In addition to these notifications, the following reporting requirements will be observed:

If an actual or potential Class 1 event occurs, the Project Director will report verbally within 1 hour to the Chief Executive Officer and Group WHSE Manager and client and provide the following details:

- Why the incident occurred?
- What system of work was in place prior to the incident?
- What actions were taken prior to the event to train and direct employees?
- What actions have now been implemented to prevent any re-occurrence of the event?

The Project Director will ensure that any Class 2 incident that does / may affect the public and / or cause adverse publicity is reported to the Group WHSE Manager, Chief Executive Officer and client within 1 hour of the incident occurring.

Prior to commencing an investigation, any incident that has the potential to result in an infringement notice and / or legal proceedings must be reported to the Group WHSE Manager immediately.

8 Critical Incident Management

Immediately on notification of a serious safety or environmental incident that has the potential to develop into a crisis situation or is determined to be a crisis situation, the Project Director or their nominated management representative is to attend site and take charge of the situation and ensure the following, as applicable, have been addressed:

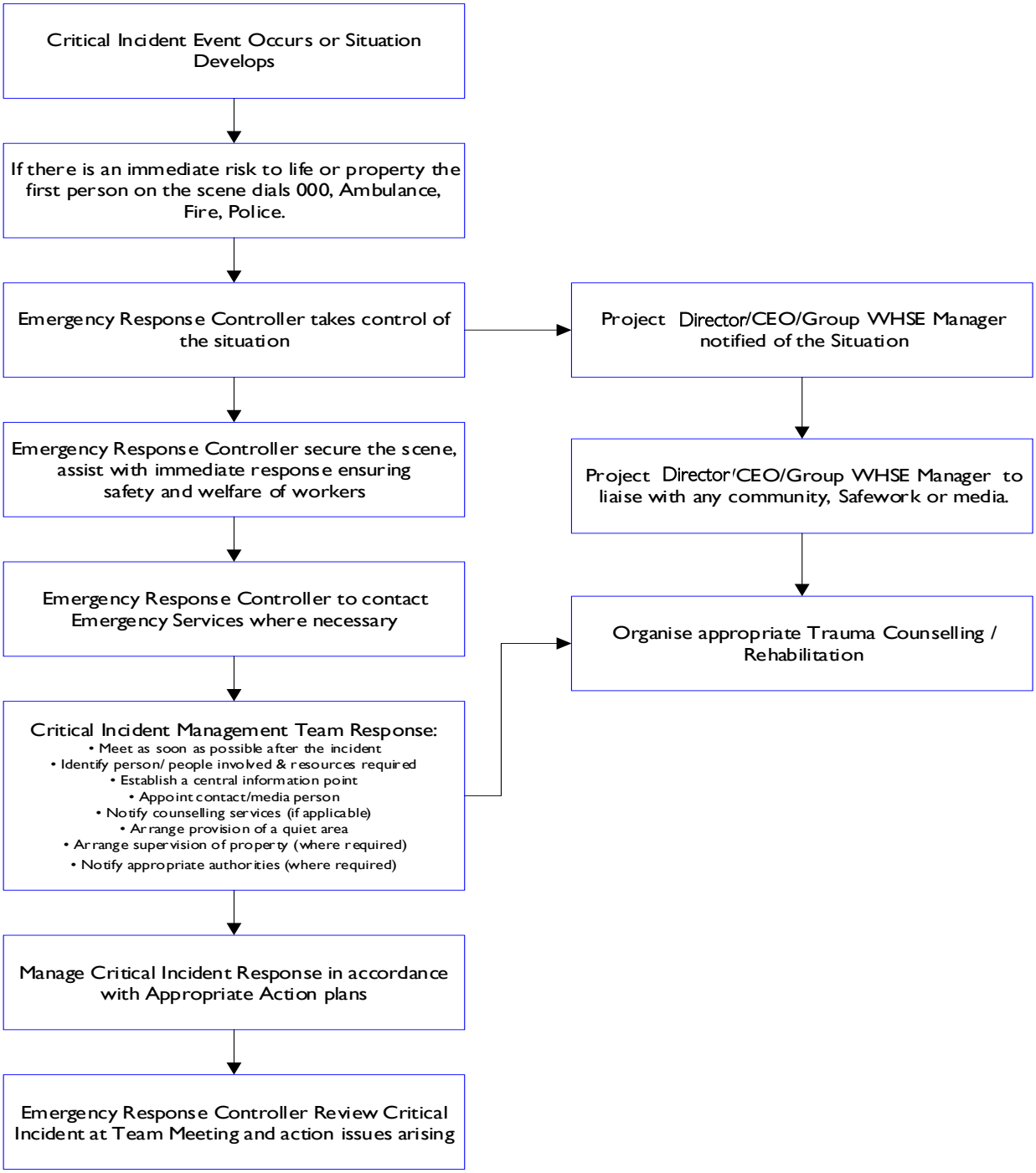
- Notify Chief Executive Officer, Group WHSE Manager and Insurance Brokers;
- General Counsel will ensure that where required privilege is maintained over documents generated following the incident such as reports, statements photographs etc., determine the need for external legal services and commission any reports by external consultants necessary in relation to the incident;
- No responses to the media are to be made without formal approval of the Chief Executive Officer and those nominated by the Chief Executive Officer

- Only those authorised in writing by the Chief Executive Officer are authorised to and speak and be quoted in the media.
- Ensure all employees at the site are advised that if they are approached by any representative of the media they are to take their name and details and refer to the Chief Executive Officer for action as a matter of urgency;
- Convene a meeting with the site team and provide direction to the site team in relation to actions to be taken;
- Ensure that any counselling has been arranged;
- Check that where any person(s) has been injured the required emergency services have attended the site;
- Where there has been an environmental incident ensure that a suitably qualified organisation has been engaged to deal with the incident;
- Ensure that any documentation in relation to the incident is compiled (seek guidance on this from General Counsel) photographs, SWMS etc.;
- Ensure that company management safety representatives have commenced an investigation; and/or engage the services of any external bodies to assist with the investigation and the compiling of statements etc., as required;
- Ensure that the site or location of the incident is secure from any unauthorised personnel/organisations etc.;
- Liaise with any external bodies i.e. statutory authority, emergency services etc.;
- Maintain contact with the Chief Executive Officer as required; and
- Ensure contact has been made with General Counsel;
- Develop a plan, in consultation with the company site team (and where necessary other parties) on how to get the site back up and running, list the actions and delegate the roles and responsibilities as required.

Following any critical incident, the critical incident response shall be reviewed by the Emergency Response Controller using Critical Incident Review (SE9306).

The critical incident response shall also be reviewed at the Project Team Meeting

9 Critical Incident Management Process – Summary



10 Trauma Counselling & Rehabilitation

10.1 Counsellors

Where counselling is required, the Project Director shall organise counselling services through the Employee Assistance Program. Counselling will be undertaken by appropriate qualified Counsellors. Depending upon the size of the site and closeness of the employees such counselling may be required on an on-going basis particularly in the case of a fatality. Individuals who are badly affected will be identified so they receive special attention.

AWE's Employee Assistance Program (offered through MEND Services) - This is a free, professional, confidential counselling service to help resolve personal or work-related issues that may be experienced by a worker or a member of the worker's family.

10.2 Support of Family of Injured or Deceased Employee

The family of the injured worker must be advised of the accident. Where an employee is deceased the Police will inform the next of kin. The task of advising a family member of an injured employee should preferably be performed by two people, one of whom is a senior company representative. They will be assisted by the Police and / or a Counsellor if necessary. The advice will be factual and appropriate counselling assistance be offered, particularly in the case of a fatality.

10.3 Support of Co-workers and Witnesses

Co-workers and witnesses to the accident will be supported and counselled, with trauma counselling being considered. Depending upon the condition of these personnel, they will be treated sympathetically and moved to another area in order to assist with their recovery. When appropriate, these persons shall be interviewed by investigators. Initially the witnesses will be supported in their distressed state particularly in accidents involving graphic injuries or death.

Managers, Supervisors or others who may feel responsible for a traumatic injury of fatality, and First Aiders who gave treatment may require special support. People affected will be debriefed before they leave the site and be provided with relevant contact details should they require assistance e.g. a Counsellor.

The workforce will be advised of the accident and as necessary trauma counselling will be provided.

10.4 Rehabilitation

The rehabilitation of any AWE employee will be in accordance with the Company's return to work program.

The Return to Work Coordinator is responsible for liaising with the company's workers compensation provider and the rehabilitation provider in the management of any particular 'Workers Injury Management Plan'. The plan will be developed in consultation with the sick/injured AWE employee and medical advisers.

11 Legal Advice

For traumatic or fatal accidents or other significant incidents the Chief Executive Officer shall be advised. They will organise legal advice where required.

12 Media

All statements to the media concerning any emergency at any AWE workplace shall be made only after consultation with the client and the Chief Executive Officer.

In the majority of cases involving serious injury or fatality the media may learn of the accident from the reports made to the authorities and then attend the site without notice. The Media will be treated courteously but should not be allowed free access to the site. All media enquiries and/or releases shall be referred to the Chief Executive Officer.

In case of a fatality, it is important that the name(s) of those involved are not broadcast until all next of kin have been notified.

13 Interaction with Client/Neighbours

Where AWE' site is within the confines for an existing facility and in the event of an Emergency or incident which involves not only the evacuation of the construction site but also includes the entire facility, the Emergency Response Controller shall liaise directly with the Client and follow the directions of the clients Emergency Response Controller.

All workers shall be inducted into the Clients Emergency Response Plan

A copy of the Clients Emergency Response Plan shall be kept in the Site office and all workers are to be made aware of the contents at the time of their induction.

Category 1 – Critical Incident Trigger: Incident involving fatality or severe injury or incident resulting in potential severe corporate reputational damage, or major impact to School operations	**Category 2 – Significant Incident Trigger: Incident involving major detrimental impact to project, including damage to civil structures, extreme weather impacts, and threats to life or property or major environmental impact, or significant impact to critical school operations**	**Category 3 – Minor Incident Trigger: incident involving impact on project delivery which may involve regulatory investigation e.g. injury resulting in hospitalisation, or minor environmental impact**	**Category 4 – Local incident Trigger: Routine incident on worksite, e.g. minor LTI not requiring hospitalisation.**
Step 1 – Immediate Contractor calls 000 Emergency	Step 1 – Immediate Contractor calls 000 Emergency	Step 1 – Immediate Contractor calls 000 Emergency	Step 1 – within 1 hour Contractor informs: Project Manager and Regulators/Authority (if reportable incident)
Step 2 – Immediate – Contractor calls the School Principal only if the incident causes disruption to the school's operations and places student/staff or public at risk.	Step 2 – Immediate – Contractor calls the School Principal only if the incident causes disruption to the school's operations and places student/staff or public at risk.	Step 2 – Immediate – Contractor calls the School Principal only if the incident causes disruption to the school's operations and places student/staff or public at risk.	Step 2 – within 1 hour Contractor informs: Project Manager (if reportable incident) otherwise within 8 hours of incident occurring
Step 3 – Immediate Contractor informs: Project Manager and Regulators/Authority	Step 3 – Immediate Contractor informs: Project Manager and Regulators/Authority	Step 3 – within 1 hour Contractor informs: Project Manager and Regulators/Authority	Step 3 – within 8 hours Project Manager informs: DoE Program Manager
Step 3 – Immediate Project Manager informs: DoE Program Manager	Step 2 – Immediate Project Manager informs: DoE Program Manager	Step 2 – within 1 hour Project Manager informs: DoE Program Manager	
Step 4 – Immediate Program Manager informs: DoE Senior Executives	Step 3 – Immediate Program Manager informs: DoE Senior Executives		

14 APPENDICES

A Action Plans

Asbestos - Uncontrolled release of asbestos fibres:			
Immediate Action	Notification	Treatment	Follow up
<u>Stop work</u> ▪ Prevent workers/public from entering area particularly downwind of asbestos. ▪ Enclose/isolate area containing asbestos ▪ Organise removal of asbestos (refer WHS Management Plan) ▪ Setup decontamination area ▪ Organise air monitoring ▪ Do not enter area until clearance given by hygienist	For Class 1 incident contact ▪ Head Office ▪ Site Manager ▪ WHSE Coordinator ▪ Project Director ▪ Construction Manager ▪ Group WHSE Manager ▪ Client And: ▪ Emergency Response ▪ Coordinator ▪ Emergency Services / 000 Act on their instructions For Class 2 or 3 incident contact: ▪ Head Office ▪ Site Manager ▪ WHSE Coordinator. ▪ Project Director ▪ Construction Manager	▪ Assuming there is no injury or harm to persons, initiate immediate investigation of materials to determine the level of risk & proposed further course of action. ▪ Provide asbestos information to persons potential exposed to asbestos and recommend health monitoring	▪ Debrief – identify the reason for the occurrence of the event & identify ways of preventing repeat incidents. Use a toolbox talk to follow up as soon as practicable. ▪ Record – document all details on form Incident Investigation Report (SE5101) ▪ Advise HSR

Breach of a Utility / Service

Immediate Action	Notification	Treatment	Follow up
Stop work. Assess the situation: ▪ Identify the severity ▪ (if necessary) evacuate ▪ Do not enter an area that could be unsafe for you, particularly in the case of connection with a power line. ▪ Contact the utility/service provider	For Class 1 incident contact ▪ Head Office ▪ Site Manager ▪ WHSE Coordinator ▪ Project Director ▪ Construction Manager ▪ Group WHSE Manager ▪ Client And: ▪ Emergency Response ▪ Coordinator ▪ Emergency Services / 000 Act on their instructions For Class 2 or 3 incident contact: ▪ Head Office ▪ Site Manager ▪ WHSE Coordinator. ▪ Project Director ▪ Construction Manager Where danger exists to the public or employees Act on emergency services instructions.	▪ Isolate the area to prevent harm to persons & minimise damage to property & the environment. This includes the local community plus traffic control. ▪ If possible and safe to do so, implement corrective action. ▪ Provide assistance to the Service Authorities as requested.	▪ Debrief – identify the reason for the occurrence of the event & identify ways of preventing repeat incidents. Use a toolbox talk to follow up as soon as practicable. ▪ Record – document all details on form Incident Investigation Report (SE5101) ▪ Advise HSR

Chemical, Biological or Radiological Emergency / Bomb Threat

Immediate Action	Notification	Treatment	Follow up
<u>Assess suspicious items.</u> Check for: ▪ Protruding wires or foil. ▪ Excessive security such as masking tape, string etc. ▪ Excessive weight. ▪ Handwritten or poorly typed address to senior personnel. ▪ Lopsided or uneven envelopes. ▪ Postage dispatch stamp from a city or state that does not match the return address. ▪ Title of person but no name shown. ▪ Foreign and / or unexpected mail. ▪ Call 000	For Class 1 incident contact ▪ Head Office ▪ Site Manager ▪ WHSE Coordinator ▪ Project Director ▪ Construction Manager ▪ Group WHSE Manager ▪ Client And: ▪ Emergency Response ▪ Coordinator ▪ Emergency Services / 000 Act on their instructions For Class 2 or 3 incident contact: ▪ Head Office ▪ Site Manager ▪ WHSE Coordinator. ▪ Project Director ▪ Construction Manager Where danger exists to the public or employees Act on emergency services instructions.	▪ Bomb Threat – follow the 'Bomb Threat Check List' - let the caller finish the message; - write down all information – keep replies short; - when the caller hangs up DO NOT HANG UP. Leave receiver off the hook; - on a different phone - & NOT A MOBILE – contact Police (000) - follow directions given by Police; - evacuate if necessary ▪ Chemical, Biological or Radiological (CBR) incident - staff in the affected area are to isolate the suspicious mail item; - do not touch their mouth or nose, isolate themselves from others in the building; - inform the Project Director/ Construction Manager/Project Coordinator/Emergency Response Controller - Call 000 - advise them of the nature of the incident & wait for their response; - if concerned about the spread of potential contaminant to other parts of the site / building, or if instructed to do so by 000 or the appropriate Emergency Service, initiate a site evacuation and close off the affected building / site to prevent any further entry.	▪ Debrief – identify the reason for the occurrence of the event & identify ways of preventing repeat incidents. Use a toolbox talk to follow up as soon as practicable. ▪ Record – document all details on form Incident Investigation Report (SE5101) ▪ Advise HSR

Contaminated Material

Immediate Action	Notification	Treatment	Follow up
<u>Assess the situation</u>: ▪ Identify the severity ▪ (if necessary) evacuate ▪ Do not enter an area that could be unsafe for you.	For Class 1 incident contact ▪ Head Office ▪ Site Manager ▪ WHSE Coordinator ▪ Project Director ▪ Construction Manager ▪ Group WHSE Manager ▪ Client And: ▪ Emergency Response ▪ Coordinator ▪ Emergency Services / 000 Act on their instructions For Class 2 or 3 incident contact: ▪ Head Office ▪ Site Manager ▪ WHSE Coordinator. ▪ Project Director ▪ Construction Manager Where danger exists to the public or employees Act on emergency services instructions.	▪ Assuming there is no injury or harm to persons, initiate immediate investigation of materials to determine the level of risk & proposed further course of action.	▪ Debrief – identify the reason for the occurrence of the event & identify ways of preventing repeat incidents. Use a toolbox talk to follow up as soon as practicable. ▪ Record – document all details on form Incident Investigation Report (SE5101) ▪ Advise HSR

Crane Collapse

Immediate Action	Notification	Treatment	Follow up
<u>Stop work</u> ▪ Assess the situation Identify the severity ▪ Evacuate area if necessary ▪ Isolate the area to prevent harm to persons & minimise damage to property & the environment. This includes the local community plus traffic control. ▪ Do not enter an area that could be unsafe for you ▪ Where possible prevent access to area; ▪ Do not enter an area that could be unsafe for you. ▪ Determine if anyone is trapped or unaccounted for; ▪ Contact the utility/service provider ▪ A nominated company representative will call Emergency Services 000 ▪ Where danger exists to the public or employees act on emergency services instructions ▪ Engage the services of suitably qualified engineers to prepare a report and rectification plan; ▪ Assuming there is no injury or harm to persons, initiate immediate investigation of materials to determine the level of risk & proposed further course of action in conjunction with engineers' reports; ▪ Check to see that all personnel are accounted for; ▪ Notify emergency services if all personnel are not accounted for.	For Class 1 incident contact ▪ Head Office ▪ Site Manager ▪ WHSE Coordinator ▪ Project Director ▪ Construction Manager ▪ Group WHSE Manager ▪ Client And: ▪ Emergency Response ▪ Coordinator ▪ Emergency Services / 000 Act on their instructions For Class 2 or 3 incident contact: ▪ Head Office ▪ Site Manager ▪ WHSE Coordinator. ▪ Project Director ▪ Construction Manager Where danger exists to the public or employees Act on emergency services instructions.	▪ Isolate the area to prevent harm to persons. This includes the local community plus traffic control. ▪ If possible and safe to do so, implement corrective action. ▪ Provide assistance to the Service Authorities as requested.	▪ Debrief – identify the reason for the occurrence of the event & identify ways of preventing repeat incidents. Use a toolbox talk to follow up as soon as practicable. ▪ Record – document all details on form Incident Investigation Report (SE5101) ▪ Advise HSR

Electric Shock

Immediate Action	Notification	Treatment	Follow up
Stop work. Emergency Response for Electric Shock ▪ Look first - do not touch! The victim may still be in contact with the electrical source and touching him or her may only pass the current through you. ▪ Turn off the source electricity. ▪ If you can't turn off the power, separate the victim from the power source using a dry object made of non-conducting material. Use a dry wood or plastic object to knock them loose. ▪ If the victim is outdoors and touching a high voltage power line - stay clear and dial 000 or your emergency number. If a power line is down, wait for the fire department or Power Company. If there are people in a vehicle with a downed wire across it, tell them not to move and to stay in the car. ▪ Act fast - speed is essential - delegate someone to call 000 or your emergency number. ▪ Keep the victim lying down and make sure you are both in a safe area. ▪ If the victim is not breathing, apply rescue breathing. If the victim is not breathing and has no pulse, begin CPR. ▪ Cover the victim with a blanket to maintain body heat and wait for emergency medical personnel to arrive. Emergency Response for Flame Burns ▪ If the victim's clothing is on fire - remind him/her to drop and roll or tackle the victim to smother the flames. ▪ Check the victim for shock and follow the steps previously discussed for treating shock. ▪ No signs of shock - begin treating the burned area. ▪ Delegate someone to call 000 or your emergency number. ▪ Cool the burn with running water continually until help arrives ▪ Don't remove burned clothing and don't apply any ointments or other medication. ▪ Remove constricting items from the victim, such as shoes, belts, jewellery and tight collars	For Class 1 incident contact ▪ Head Office ▪ Site Manager ▪ WHSE Coordinator ▪ Project Director ▪ Construction Manager ▪ Group WHSE Manager ▪ Client And: ▪ Emergency Response ▪ Coordinator ▪ Emergency Services / 000 Act on their instructions For Class 2 or 3 incident contact: ▪ Head Office ▪ Site Manager ▪ WHSE Coordinator. ▪ Project Director ▪ Construction Manager Where danger exists to the public or employees Act on emergency services instructions.	▪ Isolate the area to prevent harm to persons. This includes the local community plus traffic control. ▪ If possible and safe to do so, implement corrective action. ▪ Provide assistance to the Service Authorities as requested.	▪ Debrief – identify the reason for the occurrence of the event & identify ways of preventing repeat incidents. Use a toolbox talk to follow up as soon as practicable. ▪ Record – document all details on form Incident Investigation Report (SE5101) ▪ Advise HSR

Electric Shock			
Immediate Action	Notification	Treatment	Follow up
Emergency Response for Arc Burns ▪ Follow the same procedures for flame burns; these burns cover large areas of the body			

Electrical - Mobile Plant in contact with power lines

Immediate Action	Notification	Treatment	Follow up
▪ Stay in the vehicle. Don't risk being electrocuted by attempting to leave the vehicle. ▪ Advise anyone near the incident site to stay at least eight metres away from the vehicle or any fallen power lines. ▪ Contact the local electricity supply authority to switch the power off and call the emergency services – 000 – to report the life threatening situation ▪ If you're not going to create another hazard to yourself or others, make an attempt to break the vehicle's contact with the power line. ▪ If you must leave the vehicle because of a fire or other life threatening situation, jump clear to ensure that you don't have contact with the vehicle and the ground at the same time. When you jump clear, ensure that you land with your feet together and then continue to jump or shuffle with your feet together until you are at least eight metres clear of the vehicle, power lines or anything in contact with the vehicle or power lines. ▪ Untrained or unequipped persons should not attempt to rescue a person who has received an electric shock. ▪ If the vehicle is immobilised, ensure that the power supply has been switched off and the incident site has been made safe before giving assistance	For Class 1 incident contact ▪ Head Office ▪ Site Manager ▪ WHSE Coordinator ▪ Project Director ▪ Construction Manager ▪ Group WHSE Manager ▪ Client And: ▪ Emergency Response ▪ Coordinator ▪ Emergency Services / 000 Act on their instructions For Class 2 or 3 incident contact: ▪ Head Office ▪ Site Manager ▪ WHSE Coordinator. ▪ Project Director ▪ Construction Manager Where danger exists to the public or employees Act on emergency services instructions.	▪ Isolate the area to prevent harm to persons & minimise damage to property & the environment. This includes the local community plus traffic control. ▪ If possible and safe to do so, implement corrective action. ▪ Provide assistance to the Service Authorities as requested.	▪ Debrief – identify the reason for the occurrence of the event & identify ways of preventing repeat incidents. Use a toolbox talk to follow up as soon as practicable. ▪ Record – document all details on form Incident Investigation Report (SE5101) ▪ Advise HSR

Environmental Incident

Immediate Action	Notification	Treatment	Follow up
<u>Stop Work</u> ▪ Assess the situation: - Identify the severity - (if necessary) evacuate ▪ Do not enter an area that could be unsafe for you.	For Class 1 incident contact ▪ Head Office ▪ Site Manager ▪ WHSE Coordinator ▪ Project Director ▪ Construction Manager ▪ Group WHSE Manager ▪ Client And: ▪ Emergency Response ▪ Coordinator ▪ Emergency Services / 000 Act on their instructions For Class 2 or 3 incident contact: ▪ Head Office ▪ Site Manager ▪ WHSE Coordinator. ▪ Project Director ▪ Construction Manager Where danger exists to the public or employees Act on emergency services instructions.	▪ Spills / escape of polluted water: - contain the spill - ensure that no further escape occurs, especially off-site; - determine whether clean up is likely to be required - recover spilt material; - the Project Coordinator, in consultation with the Construction Manager/Project Coordinator, determines the most suitable process for clean up & disposal of contaminated materials. ▪ Odours and dust: - apply odour / dust suppression agents (including water mists, soil, chemicals); - consider carefully which option to select in light of the scale & type of problem; - the Project Coordinator in consultation with the Construction Manager/Project Coordinator determines the most suitable corrective actions. ▪ Landslip: - isolate (turn off) water mains that could discharge into the area; - obtain specialist advice BEFORE attempting to rescue people or equipment - zone of the landslip is likely to be unstable; - once the source is contained or the discharge has stopped, determine whether clean up is likely to be required; - the Project Coordinator in consultation with the Construction Manager/Project Coordinator, determines the most suitable process for clean up & disposal of materials. ▪ Flora / Fauna Kills, Injury or Disturbance (including Heritage items): - cease activity causing flora / fauna injury or disturbance; - the method selected must be carefully considered in light of the scale & nature of the problem; the Project Coordinator, in consultation with the Construction Manager/Project Coordinator, determines the most suitable corrective actions. - Notify OEH/EPA if an endangered / threatened flora species is affected or killed or a heritage item is discovered the Construction Manager/Project Coordinator to be notified firstly who will then notify OEH/EPA etc appropriately ▪ Release of Waste: - Cease activity causing the release of wastes off-site;	▪ Debrief – identify the reason for the occurrence of the event & identify ways of preventing repeat incidents. Use a toolbox talk to follow up as soon as practicable. ▪ Record – document all details on form Incident Investigation Report (SE5101) ▪ Advise HSR

Environmental Incident			
Immediate Action	Notification	Treatment	Follow up
		- the method selected must be carefully considered in light of the scale & type of problem; - The Project Coordinator in consultation with the Construction Manager/Project Coordinator, determines the most suitable process for clean up.	

Fire or Explosion

Immediate Action	Notification	Treatment	Follow up
▪ If **safe** to do so, attempt to extinguish the fire. ▪ If explosion, evacuate area immediately ▪ **If fire cannot be extinguished, call Emergency services 000 (or 112) and ask for Fire Brigade.**	**For Class 1 incident contact** ▪ Head Office ▪ Site Manager ▪ WHSE Coordinator ▪ Project Director ▪ Construction Manager ▪ Group WHSE Manager ▪ Client And: ▪ Emergency Response ▪ Coordinator ▪ Emergency Services / 000 Act on their instructions **For Class 2 or 3 incident contact:** ▪ Head Office ▪ Site Manager ▪ WHSE Coordinator. ▪ Project Director ▪ Construction Manager **Where danger exists to the public or employees Act on emergency services instructions.**	▪ Ensure all persons are evacuated & isolated from potential harm. This includes the local community plus traffic control. ▪ Where safe to do so, isolate property from further damage. ▪ If fire brigade has been called, ensure street environmental controls are in place (if safe to do so) in anticipation of large volumes of water being used to extinguish fire ▪ Provide assistance as directed.	▪ Debrief – identify the reason for the occurrence of the event & identify ways of preventing repeat incidents. Use a toolbox talk to follow up as soon as practicable. ▪ Record – document all details on form Incident Investigation Report (SE5101) ▪ Advise HSR

Medical Emergency

Immediate Action	Notification	Treatment	Follow up
Stop work. ▪ Assess the situation: - Identify the severity - (if necessary) evacuate **If the injured person cannot be moved to a medical centre, call Emergency Services 000 (or 112) & ask for an Ambulance. Act on their instructions** If emergency occurs within an asbestos "bubble". First aider to wear P2 respirator and disposal overalls and gloves. All clothing and equipment to be decontaminated on exit from bubble. Injured worker to be decontaminated if possible. Emergency services to be informed that worker is contaminated with asbestos.	**For Class 1 incident contact** ▪ Head Office ▪ Site Manager ▪ WHSE Coordinator ▪ Project Director ▪ Construction Manager ▪ Group WHSE Manager ▪ Client And: ▪ Emergency Response ▪ Coordinator ▪ Emergency Services / 000 Act on their instructions **For Class 2 or 3 incident contact:** ▪ Head Office ▪ Site Manager ▪ WHSE Coordinator. ▪ Project Director ▪ Construction Manager **Where danger exists to the public or employees Act on emergency services instructions.**	If the patient is unconscious: ▪ **Danger** – do not enter an area that could be unsafe for you. ▪ **Response** – Establish the patient's level of consciousness ▪ **Airway** ▪ **Breathing** ▪ **Circulation** If the patient is conscious: ▪ Check for bleeding and control with direct pressure. ▪ Do not move patient except where the location is not safe & secure. ▪ Monitor vital signs ▪ Provide First Aid to the level of your training. ▪ Contact the Project Coordinator or Construction Manager/Project Coordinator.	▪ Debrief – identify the reason for the occurrence of the event & identify ways of preventing repeat incidents. Use a toolbox talk to follow up as soon as practicable. ▪ Record – document all details on form Incident Investigation Report (SE5101) ▪ Advise HSR

Needle Stick Injury

Immediate Action	Notification	Treatment	Follow up
▪ Administer appropriate first aid for any bleeding or embedded object. ▪ Gain assistance from a first aid attendant as required. ▪ Wash the wound or skin sites thoroughly with soap and water or use a waterless cleanser or antiseptic if water is unavailable. Apply a waterproof dressing as necessary and apply pressure through the dressing if bleeding is still occurring. ▪ Do not squeeze or rub the injury site. ▪ Identify the source individual or the source of the sharp if possible and assess the risk status of the source individual.	For Class 1 incident contact ▪ Head Office ▪ Site Manager ▪ WHSE Coordinator ▪ Project Director ▪ Construction Manager ▪ Group WHSE Manager ▪ Client And: ▪ Emergency Response ▪ Coordinator ▪ Emergency Services / 000 Act on their instructions For Class 2 or 3 incident contact: ▪ Head Office ▪ Site Manager ▪ WHSE Coordinator. ▪ Project Director ▪ Construction Manager Where danger exists to the public or employees Act on emergency services instructions.	▪ Attend the Medical Centre or a general practitioner for assessment, advice and, if necessary, counselling. ▪ The medical practitioner will assess the level of risk to determine further medical management.	▪ Debrief – identify the reason for the occurrence of the event & identify ways of preventing repeat incidents. Use a toolbox talk to follow up as soon as practicable. ▪ Record – document all details on form Incident Investigation Report (SE5101) ▪ Advise HSR

Plant Rollover/ Vehicle Accident

Immediate Action	Notification	Treatment	Follow up
<u>Stop work.</u> ▪ Assess the situation: ▪ Identify the severity ▪ (if necessary) evacuate **If the injured person cannot be moved to a medical centre, call Emergency Services 000 (or 112) & ask for an Ambulance. Act on their instructions** ▪ Evacuate area if necessary ▪ Isolate the area to prevent harm to persons & minimise damage to property & the environment. This includes the local community plus traffic control. ▪ Do not enter an area that could be unsafe for you ▪ Where possible prevent access to area; ▪ Determine if anyone is trapped or unaccounted for; ▪ A nominated company representative will call Emergency Services 000 ▪ Where danger exists to the public or employees act on emergency services instructions	**For Class 1 incident contact** ▪ Head Office ▪ Site Manager ▪ WHSE Coordinator ▪ Project Director ▪ Construction Manager ▪ Group WHSE Manager ▪ Client And: ▪ Emergency Response ▪ Coordinator ▪ Emergency Services / 000 Act on their instructions **For Class 2 or 3 incident contact:** ▪ Head Office ▪ Site Manager ▪ WHSE Coordinator. ▪ Project Director ▪ Construction Manager **Where danger exists to the public or employees Act on emergency services instructions.**	▪ Isolate the area to prevent harm to persons. This includes the local community plus traffic control. ▪ If possible and safe to do so, implement corrective action. ▪ Provide assistance to the Service Authorities as requested.	▪ Debrief – identify the reason for the occurrence of the event & identify ways of preventing repeat incidents. Use a toolbox talk to follow up as soon as practicable. ▪ Record – document all details on form Incident Investigation Report (SE5101) ▪ Advise HSR

Retrieval of a Person - EWP or Suspended from a Harness

Immediate Action	Notification	Treatment	Follow up
EMERGENCY RESCUE PROCEDURE FOR WORK ON ELEVATED WORK PLATFORMS ▪ Assess the situation. **If required,** call Emergency Services. **Affect rescue if required:** ▪ If possible to do so, use the emergency decent device controls to carefully lower the platform (be aware that the ground controls will override the platform controls for emergency purposes). ▪ There are to be no persons underneath the platform, or in the direct drop vicinity of the EWP when using the emergency device. ▪ Where it is NOT possible to use the emergency decent device a second boom or scissor shall be used to retrieve the injured worker. **EMERGENCY RESCUE PROCEDURE FROM SUSPENDED SLAB/ROOF** ▪ Assess the situation. **If required,** call Emergency Services and notify location, incident type and likely retrieval requirements. ▪ Emergency controller go to worker on roof (if safe to do so) assess and manage ER until Emergency services arrive. **EMERGENCY RESCUE PROCEDURE SUSPENDED FROM A STRUCTURE** ▪ Assess the situation. **If required,** call Emergency Services and notify location, incident type and likely retrieval requirements. **Affect rescue if required;** ▪ Put on a rescue harness ▪ Ensure rescue equipment is positioned to give an unobstructed drop. ▪ Attach the rescue line to a sling holding the rescue container. ▪ Remove the descent device and attach to rescuer	**For Class 1 incident contact** ▪ Head Office ▪ Site Manager ▪ WHSE Coordinator ▪ Project Director ▪ Construction Manager ▪ Group WHSE Manager ▪ Client And: ▪ Emergency Response ▪ Coordinator ▪ Emergency Services / 000 Act on their instructions **For Class 2 or 3 incident contact:** ▪ Head Office ▪ Site Manager ▪ WHSE Coordinator. ▪ Project Director ▪ Construction Manager **Where danger exists to the public or employees Act on emergency services instructions.**	If the patient is unconscious: ▪ **Danger** – do not enter an area that could be unsafe for you. ▪ **Response** – Establish the patient's level of consciousness ▪ **Airway** ▪ **Breathing** ▪ **Circulation** If the patient is conscious: ▪ Check for bleeding and control with direct pressure. ▪ Do not move patient except where the location is not safe & secure. ▪ Monitor vital signs ▪ Provide First Aid to the level of your training.	▪ Debrief – identify the reason for the occurrence of the event & identify ways of preventing repeat incidents. Use a toolbox talk to follow up as soon as practicable. ▪ Record – document all details on form Incident Investigation Report (SE5101) ▪ Advise HSR

Retrieval of a Person - EWP or Suspended from a Harness

Immediate Action	Notification	Treatment	Follow up
▪ Disconnect your safety strap from the tower ▪ Lower yourself down to a position slightly above the victim ▪ Re-attach your safety strap ▪ Attach the descent device with the adjustable rescue strap to the victim ▪ Adjust the strap so that it is as short as possible ▪ Release or cut victim's safety strap ▪ Release your safety strap and lower yourself with the victim to the ground using the descent device. Use your feet to push clear of any obstructions. ▪ Carry out resuscitation and first aid as required **At no time shall a worker place his/her own safety at risk in order to perform these procedures.**			

Structural Collapse

Immediate Action	Notification	Treatment	Follow up
<u>Stop work</u> ▪ Assess the situation Identify the severity ▪ Evacuate area if necessary ▪ Isolate the area to prevent harm to persons & minimise damage to property & the environment. This includes the local community plus traffic control. ▪ Do not enter an area that could be unsafe for you ▪ Where possible prevent access to area; ▪ Do not enter an area that could be unsafe for you. ▪ Determine if anyone is trapped or unaccounted for; ▪ Contact the utility/service provider ▪ A nominated company representative will call Emergency Services 000 ▪ Where danger exists to the public or employees act on emergency services instructions ▪ Engage the services of suitably qualified engineers to prepare a report and rectification plan; ▪ Assuming there is no injury or harm to persons, initiate immediate investigation of materials to determine the level of risk & proposed further course of action in conjunction with engineers reports; ▪ Check to see that all personnel are accounted for; ▪ Notify emergency services if all personnel are not accounted for;	For Class 1 incident contact ▪ Head Office ▪ Site Manager ▪ WHSE Coordinator ▪ Project Director ▪ Construction Manager ▪ Group WHSE Manager ▪ Client And: ▪ Emergency Response ▪ Coordinator ▪ Emergency Services / 000 Act on their instructions For Class 2 or 3 incident contact: ▪ Head Office ▪ Site Manager ▪ WHSE Coordinator. ▪ Project Director ▪ Construction Manager Where danger exists to the public or employees Act on emergency services instructions.	▪ Isolate the area to prevent harm to persons. This includes the local community plus traffic control. ▪ If possible and safe to do so, implement corrective action. ▪ Provide assistance to the Service Authorities as requested.	▪ Debrief – identify the reason for the occurrence of the event & identify ways of preventing repeat incidents. Use a toolbox talk to follow up as soon as practicable. ▪ Record – document all details on form Incident Investigation Report (SE5101) ▪ Advise HSR

Trench Collapse:

Immediate Action	Notification	Treatment	Follow up
<u>Stop work.</u> ▪ Send someone immediately to telephone or radio for emergency services that may be needed. Ensure that the person sent to make the call is relatively calm, can communicate clearly and knows where the telephone is. ▪ Look for evidence of where the trapped person is e.g. tools, safety helmet etc. ▪ Try to locate what section of the collapsed excavation/trench the person is trapped in. ▪ Clear the area of all non-required personnel. ▪ Identify if any further collapse is likely. ▪ Establish and arrange for a person to monitor a safety zone. ▪ If possible, batter the sides of the excavation/trench in the collapsed area. ▪ Install shoring where possible to protect the trapped person and the rescuers. ▪ Carefully remove the collapsed soil with shovels. NEVER have anyone on top of the collapsed soil. They may be on top of the person trapped beneath the soil. ▪ If the excavation/trench is over 1.5 metres deep, rescuers SHALL wear safety harnesses with lifelines attached securing them to the surface. ▪ When the digging is close to the trapped person, continue excavation using hands. If shovels have to be used, extreme care must be taken not to cause any further injury to the person who is trapped. ▪ When the trapped person has been located, clear soil from around the head and chest areas. Check for breathing and a pulse. ▪ If breathing has stopped – commence expired air resuscitation (E.A.R.) and continue until emergency services have arrived and have taken over. ▪ After the trapped person has been freed, treated and stabilised by the emergency services personnel, make arrangements for the person to be	For **Death or medical emergency/ incident or potential**, contact ▪ Group WHSE Manager ▪ Project Director ▪ Construction Manager ▪ Chief Executive Officer ▪ Group WHSE Manager ▪ Client ▪ Emergency Response Controller ▪ Emergency Services / 000 Act on their instructions For **all other** incidents contact: ▪ WHS Manager ▪ Project Director ▪ Construction Manager ▪ Chief Executive Officer ▪ Group WHSE Manager ▪ Client **Where danger exists to the public or employees Act on emergency services instructions.**	▪ Isolate the area to prevent harm to persons. This includes the local community plus traffic control. ▪ If possible and safe to do so, implement corrective action. ▪ Provide assistance to the Service Authorities as requested.	▪ Debrief – identify the reason for the occurrence of the event & identify ways of preventing repeat incidents. Use a toolbox talk to follow up as soon as practicable. ▪ Record – document all details on form Incident Investigation Report (SE5101) ▪ Advise HSR

Trench Collapse:			
Immediate Action	Notification	Treatment	Follow up
removed from the excavation/trench in a safe manner, ensuring that no further collapse occurs during this operation			

Retrieval of a Person in water

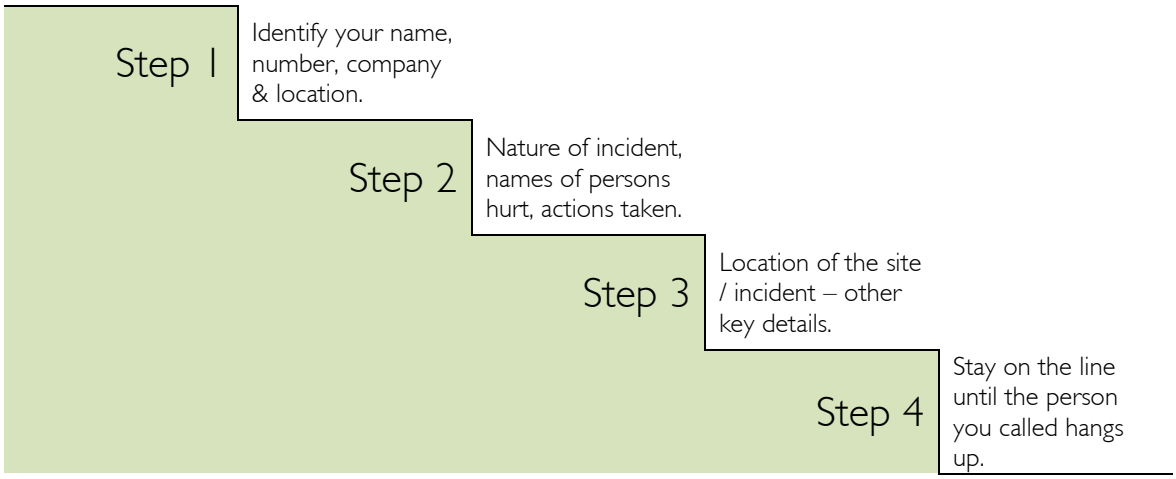
Immediate Action	Notification	Treatment	Follow up
EMERGENCY RESCUE PROCEDURE FOR PERSON FALL INTO WATER; ▪ Assess the situation - Do not enter the water after them or you may need to be rescued ▪ Is there something on hand which you could use to reach the person, such as a rope, length of timber if available emergency flotation device? ▪ Is there something you could throw to the person to aid their buoyancy, such as an Emergency Flotation Device or esky lid? ▪ If required, call Emergency Services and notify location, incident type and likely retrieval requirements. ▪ EMERGENCY RESCUE PROCEDURE FOR PERSON FALL INTO WATER FROM OVERHEAD STRUCTURE ▪ Follow emergency rescue procedure for retrieval of person overboard ▪ EMERGENCY RESCUE PROCEDURE FOR PERSON UNCONSCIOUS IN WATER ▪ Assess the situation. Call Emergency Services and notify location, incident type and likely retrieval requirements. Affect rescue if required: ▪ Only enter water if a strong swimmer ▪ Swim out to victim with Emergency Flotation Device to assist bring person back to shore ▪ At no time shall a worker place his/her own safety at risk in order to perform these procedures.	**For Class 1 incident contact** ▪ Head Office ▪ Site Manager ▪ WHSE Coordinator ▪ Project Director ▪ Construction Manager ▪ Group WHSE Manager ▪ Client And: ▪ Emergency Response ▪ Coordinator ▪ Emergency Services / 000 Act on their instructions **For Class 2 or 3 incident contact:** ▪ Head Office ▪ Site Manager ▪ WHSE Coordinator. ▪ Project Director ▪ Construction Manager **Where danger exists to the public or employees Act on emergency services instructions.**	If the patient is unconscious: ▪ Send for help ▪ Commence CPR if required o Airway o Breathing o Circulation ▪ Place in recovery position ▪ Check for bleeding and control with direct pressure. ▪ Monitor vital signs If the patient is conscious: ▪ Response – Establish the patient's level of consciousness ▪ Treat for potential Hypothermia ▪ Check for bleeding and control with direct pressure. ▪ Monitor vital signs ▪ Provide First Aid to the level of your training. ▪ Contact the Project Coordinator or Construction Manager.	▪ Debrief – identify the reason for the occurrence of the event & identify ways of preventing repeat incidents. Use a toolbox talk to follow up as soon as practicable. ▪ Record – document all details on form Incident Investigation Report (SE5101) ▪ Advise HSR

B Emergency Contact Details

EMERGENCY CONTACT DETAILS		
PROJECT:	Darlington Public School – Stage 1 & 2	
SITE ADDRESS:	Golden Grove St, CHIPPENDALE NSW 2008	
EMERGENCY PHONE NUMBERS		
Project Director	Justin Smith	0413 735 625
Project Manager	Glen Burley	0424 989 350
Group WHSE Manager	Kenny Smith	0434 182 847
WHS Manager	Amy Neal	0402 262 651
QE Manager	Tim Stootman	0429 219 310
WHSE Coordinator	Natalie Moore	0422 543 768
Site Manager (24hr contact)	Mark Whitmore	0413 735 456
Emergency Controller	Mark Whitmore	0413 735 456
First Aider	Mark Whitmore	0413 735 456
Deputy Emergency Controller	Riley Barns	0403 246 998

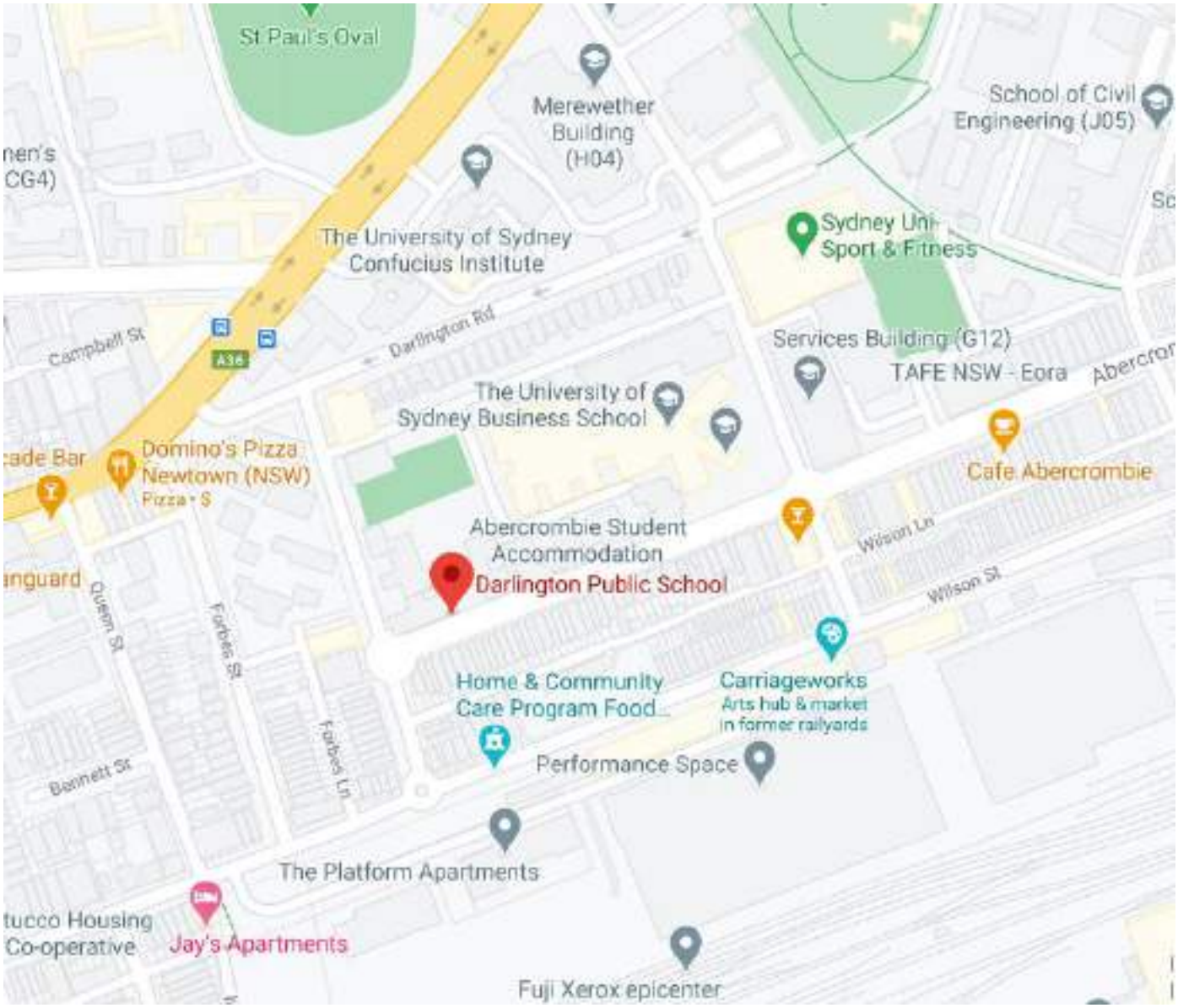
SafeWork NSW	24 Hours	13 10 50
Client Emergency Contact	Daniel Luliano	0401 767 377
Poisons Information Centre		13 11 26
Ambulance, Fire Station, Police	Emergency	000 or 112 from mobiles
HAZMAT		13 15 55
Medical Centre	Myhealth Medical Centre Broadway	8866 3111
Hospital	Royal Prince Alfred	9515 6111
EPA– Pollution Line		131 555
State Emergency Service		138 737
Telstra – Underground Services		1100
Telstra – Damaged Cables		13 22 03
Local Electricity Supply:		13 10 39
Gas Emergency		13 19 09
Police Services		000

C Emergency Telephone Instructions



- Keep calm – so you can help.
- Protect yourself from danger at all times.
- Call for First Aid assistance – First Aider or Supervisor will arrange for Ambulance if required.
- Direct someone to wait at site entrance to guide emergency vehicles.
- Maintain a diary of phone calls / details, events and times.

D Locality Plan



E Emergency Evacuation Procedures

EMERGENCY EVACUATION

Notice of an evacuation to all personnel on site will take place by the sounding of 3 blasts of an air horn. This will be initiated by a Management Representative. In the event an Evacuation from site, you must immediately:

- Stop your work activity, check to ensure that this action will not endanger others and that the workplace can be left in a safe condition.
- All equipment, machinery, etc must be switched off immediately the emergency is sounded and "Live" electrical equipment must be disconnected where possible.
- Ensure all equipment is properly shut off before closing any supply of water, gas or air.
- If safe to do so, remove all mobile equipment to the designated safe zone.
- Where practicable, road ways, walkways etc must be left clear of obstructions to permit access if needed.
- Cranes with suspended loads must, with the consideration of the safety of all persons (including themselves), bring the load to rest in the shortest operating time without exceeding the normal operating capacity of the crane.
- Switch off all forms of electric or internal combustion power supply.
- Management personnel located on the project at the time the alarm is sounded are required to assist in the quick and efficient removal of all personnel from the work site and must ensure all personnel are completely vacated prior to proceeding to the muster point(s).
- Requirements at the Muster Point:
    - All personnel shall immediately report to the Site Supervisor.
    - The Site Supervisor (or representative) shall account for all personnel under their control (including visitors) and report this immediately to the Project Director or Management representative together with the names of any personnel unaccounted for and their last known location.
    - All personnel are required to remain at the muster point for the duration of the emergency unless under further risk of harm or otherwise advised to leave by the Construction Manager.

Personnel must not return to work unless advised by Management as being safe to do so

F Site Plan

G Bomb Threat Checklist

BOMB THREAT CHECK LIST

PLACE THIS CARD UNDER YOUR PHONE

QUESTIONS TO ASK

- WHEN IS THE BOMB GOING TO EXPLODE?
- WHERE DID YOU PUT THE BOMB
- WHEN DID YOU PUT IT THERE?
- WHAT DOES THE BOMB LOOK LIKE?
- WHAT KIND OF BOMB IS IT?
- WHAT WILL MAKE THE BOMB EXPLODE?
- DID YOU PLACE THE BOMB?
- WHAT IS YOUR NAME?
- WHERE ARE YOU?
- WHAT IS YOUR ADDRESS?

EXACT WORDS

ACTION

Report call immediately to:	
Phone Number:	

CALLERS VOICE

Accent (specify):	
Any impediment (specify)"	
Voice (loud, soft, etc)	
Speech (fast, slow, etc)	
Diction (Clear, muffed)	
Manner (calm, emotional, etc)	
Did you recognise the voice?	
If so who do you think it was?	
Was the caller familiar with the area?	

REMEMBER KEEP CALM - DON'T HANG UP

THERE AT LANGUAGE

Well spoken:	
Incoherent:	
Irrational:	
Taped:	
Message read by callers:	
Abusive:	
Other:	

BACKGROUND NOISES

Street noises:	
House noises:	
Aircraft:	
Voices:	
Music:	
Machinery:	
Local Call:	
Long Distance:	
Other:	

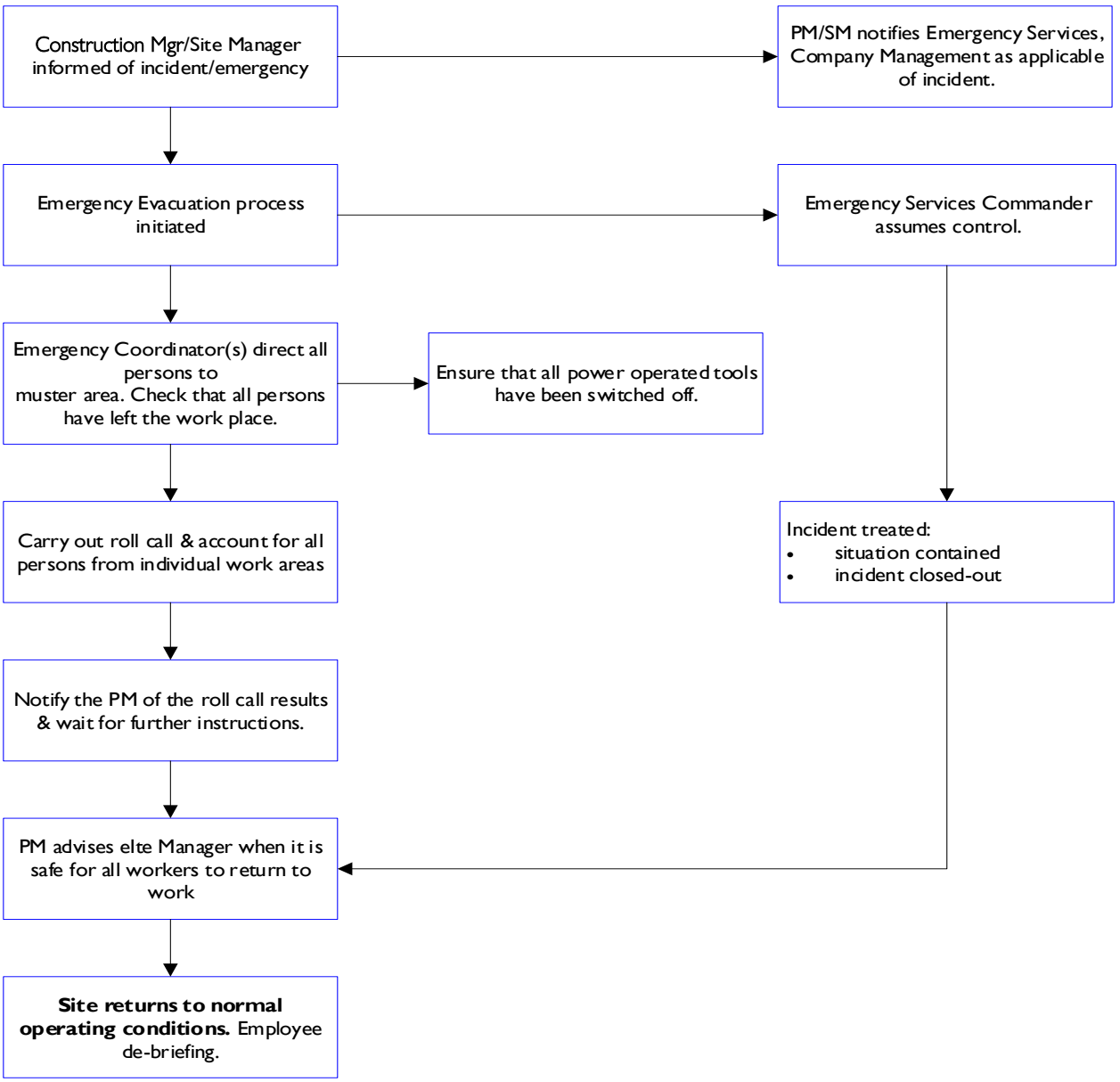
OTHER

Duration of call:	
Number called:	

RECIPIENT

Name Print:	
Telephone Number:	
Signature:	

H Emergency Evacuation Flowchart



6.17 Waste Management Plan

Darlington Public School Redevelopment

Waste Management Plan

647-AWE-WAS-001

Date: 02/12/2020
Author: T. Stootman
Revision: A
Status: For Approval

Prepared By:

A W EDWARDS PTY LIMITED

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Project No.	647
Project Name	Darlington Public School Redevelopment
Client	NSW Schools Infrastructure
Client Project Manager	MACE
Project Location	25-1 Golden Grove Street, DARLINGTON NSW 2008
Planning Instrument	
AWE Senior Project Manager	Glen Burley
Phone No.	02 9958 1474
Scope of Works	
Timing of the Works	
Authorised By:	Glen Burley

Revision Register:

REV	DATE	STATUS	AUTHOR	APPROVED BY	COMMENTS
A	2/12/2020	For Approval	Tim Stootman	Glen Burley	
	Date	Status			
	Date	Status			
	Date	Status			
	Date	Status			
	Date	Status			

Contents

1 INTRODUCTION

OBJECTIVES

This Waste Management Plan outlines how A W Edwards Pty Limited will manage the waste management on the Darlington Public School Redevelopment Project.

A W Edwards is committed to ensuring appropriate methods of waste minimisation, recycling and disposal and spoil management.

The objective of the Waste Management Plan is to:

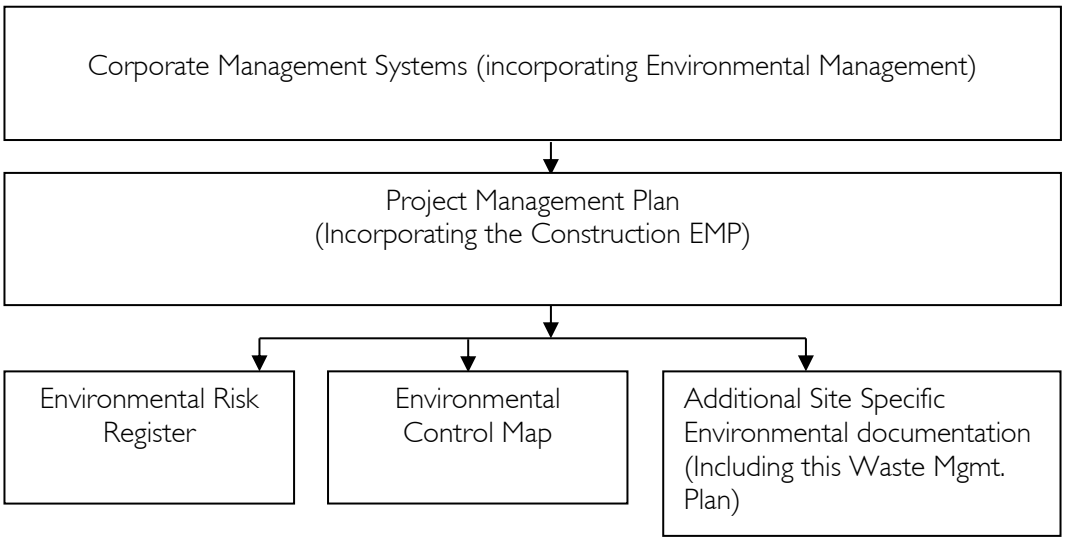
- Ensure that waste generation is avoided as a priority;
- Ensure that environmentally sensitive work practices are followed within waste minimisation programs;
- Ensure that, wherever practicable, waste materials are recycled/re-used;
- Ensure that the disposal of all liquid and non-liquid wastes is in accordance with the EPA regulations;
- Ensure that spoil from sites is managed appropriately to minimise environmental and health risks;
- Ensure that the air quality surrounding sites is appropriately managed;
- Ensure that all spoil is disposed of to prevent contamination of any lands.
- Ensure that biomedical, infectious or toxic wastes & storage of any chemicals/hazardous materials are correctly managed.

Over the past few years the environmental regulation body has undergone a number of name changes, including:

- Australian Government Environmental Protection Authority (EPA);
- NSW Environment Protection Authority (NSWEPA).

2 SCOPE

This Management Plan has been developed as part of the Project Management Plan. The relationship between environmental management documentation can be summarised in the flow chart below:



The scope of this Management Plan is to provide Project information regarding waste management, re-use and spoil management for the Darlington Public School Redevelopment Project.

Further information may be required at site, detailing specific site requirements and mitigation measures.

3 STATUTORY REQUIREMENTS

Documents and references relevant to the implementation of the Waste Management Plan include:

- Head Contract;
- Project Management Plan (and appendices);
- A W Edwards Construction Documentation;
- Legal and other requirements identified in the Legal and Other Requirements Register attached to the Project Management Plan

4 RISK ASSESSMENT

The risk assessment process, as detailed in the Project Management Plan, has been applied to the Project, in order to determine the sources and risks associated with waste and spoil production issues. Details of this risk assessment, including mitigation measures, have been included in Risk Management section of the Project Management Plan. Specific risks associated with each site are included in the Project Management Plan, Environmental Control Map(s) and associated Environmental Risk Register.

The risk assessment process will be reviewed for this aspect at the following times:

- Through internal and external site audits, and including comments from personnel and subcontractors on site;
- Following high monitoring results;

- Following a complaint;
- If new work processes that have not been previously addressed start on site;
- Should new requirements for the project or new legislation take effect.

5 MANAGEMENT AND MITIGATION

All construction areas shall identify waste streams, minimisation and shall dispose of non-recyclable waste materials in the following ways:

- Hazardous materials surveys to be completed.
- Materials to be removed prior to demolition
- Registers and waste disposal requirements as per SafeWork NSW, EPA and NSWEPA requirements for removal, storage, transport and disposal.
- General site wastes –use one bin system and sort in contractor's yard to produce quantities of material for recycling, reuse, disposal etc.
- Empty drums are to be taken off-site for disposal.
- Empty drums shall be crushed prior to recycling/disposal.
- Do not overfill skip bins. Provide plenty for use. Cover where potential for windblown litter.

6 RECYCLING STRATEGY

GOAL

In line with the *NSW Waste and Resource Recovery Strategy 2014 – 21 (NSW EPA 2014)*, A W Edwards have a minimum goal of 80 per cent of construction and demolition waste (by weight) is diverted from landfill, and either recycled or reused.

STRATEGY

All construction areas shall adhere to a recycling strategy where practicable in the following ways:

a. Where reasonably practicable, through project planning, actions will be taken to reduce the amount of waste generated, eg. package considerations, and good housekeeping and material storage practices (*Avoid and Reduce Waste*)
b. Items to be considered for inclusion, but are not limited to:
    - Spoil;
    - Concrete;
    - Timber;
    - Metal/glass;
c. Ascertain whether materials can be re-used on-site and provide a designated area for storing such materials (*Reuse Waste*);
d. If material cannot be re-used on-site establish a collection service for the recyclable materials (*Recycle Waste*);
e. Erect signs within the construction areas to encourage employees to reduce, re-use, and recycle.

Specific strategies for the above-identified materials may include but are not limited to;

- Spoil – where possible; any contaminated spoil will be disposed of as waste material. A suitable location for clean spoil will be sought, and haulage organised.
- Concrete – Waste concrete shall be disposed of at an appropriately licensed facility where separation and recycling can take place. Surplus concrete and concrete washings shall be transported to an appropriate recycling facility.
- Any weed waste generated during works shall be disposed of to landfill.
- Timber – The following procedures shall occur regarding timber wastes:
  - Pallets and other packaging shall be returned to the supplier for reuse where possible;
- Metal/Glass - The following procedures shall occur regarding metal and glass wastes:
  - Drums and other metallic packaging shall be returned to the supplier for reuse where possible;
  - Reinforcing steel shall be sold to scrap metal merchants for recycling;

7 MONITORING

In order to ensure that the recycling goal is met at all sites the following will be monitored:

- The amount of waste disposed of will be recorded;
- The amount of disposed waste that has been recycled or reused will be recorded;
- The percentage of waste recycled or reused will be determined in order to ensure that it complies with the recycling goal.

Where required, in order to ensure that there is no wastage of energy used on site, the following should be monitored:

- Energy consumption figures will be recorded/monitored;
- Spikes or overuse shall be identified, and the potential source identified;
- Specific monitoring of individual pieces of equipment or processes shall be considered if areas of high usage cannot be accurately determined.

8 RECORDS

Records for this Management Plan, as under the Project Management Plan, shall be maintained in accordance with detailed procedures in the A W Edwards Management System.

All documents requiring sign-off shall be forwarded to the Principal's Representative prior to the sign-off being required.

Particular documents required to be maintained in this Management Plan include, but are not limited to:

- Disposal receipts for all waste;
- Monthly waste and recycling reports provided by skip bin company engaged by A W Edwards for the project
- Correspondence with the Principal's Representative and other interested parties regarding waste management control;

- Records of any complaints.

Appendix A of this report provides the record keeping document for the construction phase of the project.

9 AUDITING

Auditing of this and associate management plans shall be conducted in accordance with the Project Management Plan.

10 NON-COMPLIANCE AND COMPLAINTS

The protocol for the handling, recording and reporting of soil and water related complaints will be in accordance with the Project Management Plan, and/or Community Communication Management Plan (where one exists).

Should it be found that the recycling goal is not met, reactive measures will be taken to modify demolition/construction operations to meet the goal. These measures shall include the following:

- An assessment shall be made of sources of waste production during the monitoring period that are likely to be contributing to the higher than acceptable levels
- Controls and/or operational modifications shall be determined that will decrease the levels of waste production from those specific sources, and lean towards recyclable materials. Should the activity have ceased once sampling results are obtained, measures shall be put in place to ensure that similar results are not obtained from the same process at different sites.
- Monitoring results following the reactive measures shall be checked to ensure that actions taken have reduced waste production. Should results still be above the acceptable limits an assessment shall be made as to the appropriateness of the process. If the process cannot be avoided, and further modifications cannot be implemented, the Principal's Representative shall be consulted to determine the most appropriate course of action.

11 SUBCONTRACTOR MANAGEMENT

Subcontractor management shall be conducted as per the relevant requirements of the A W Edwards Project Management Plan to ensure that the requirements of this procedure extend to subcontractor works.

Subcontractors will be audited at periodic intervals to ensure their compliance with A W Edwards' requirements. Auditing and inspections shall be random and based on the length of time subcontractors are situated on site. Audits may also be the result of observed non-compliance of the subcontractor to A W Edwards' requirements.

12 APPENDICES

APPENDIX A – WASTE MANAGEMENT RECORD

WASTE MANAGEMENT RECORD

SE6206

PROJECT: ____________________ SUBCONTRACTOR/WASTE PRODUCER: ____________________ CONTACT PERSON/DETAIL: ____________________

Date of service	Waste Generating Process	Type of Waste *	Qty (kg, cubic metres, or Litres)	Contaminant(s)	Transporter	Nominated Facility for Disposal/ Treatment/ Storage	Licencing Requirements	Monitoring/ Reporting Requirements	Receipt received (Y/N)

* L - Liquid CD - Construction/Demo H - Hazardous GS - General Solid O - Organic VENM ENM X - Other

6.18 SSD9914 – Darlington Public School Community Communication Strategy

December 2020

School Infrastructure NSW

Community Communication Strategy

Darlington Public School

Document Purpose

This Community Communication Strategy (CCS) has been developed to:

- Successfully consider and manage stakeholder and community expectations as integral to the successful delivery of the project.
- Outline interfaces with other disciplines, including safety, construction, design and environment, to ensure all activities are co-ordinated and drive best practice project outcomes.
- Inform affected stakeholders, such as the local community or road users about construction activities.
- Provide a delivery strategy which enables the open and proactive management of issues and communications.
- Highlight supporting procedures and tools to enable the team to deliver this plan effectively.
- Provide support for the broader communications objectives of School Infrastructure NSW (SINSW), including the promotion of the project and its benefits.

This Community Consultation Strategy (CCS) will be implemented through the design and construction phase of the project, and for 12 months following construction completion.

Plan review

The CCS will be revised regularly to address any changes in the project management process, comments and feedback by relevant stakeholders, and any changes identified as a result of continuous improvement undertakings. This will be done in close consultation with the SINSW Senior Project Director, appointed Project Management Company and/or Contractor and SINSW Community Engagement Manager.

Approval

The CCS is reviewed and approved by the SINSW Senior Project Director, in close consultation with Schools Operations and Performance, with final endorsement from the SINSW Community Engagement Senior Manager before being submitted to the Planning Secretary for approval.

Table 1: List of SSD requirements and where they are addressed

State Significant Developments B7**	The Community Communications Strategy addresses this in section
Identify people to be consulted during the design and construction phase	▪ Section 4 ▪ Section 5
Set out procedures and mechanisms for the regular distribution of accessible information about or relevant to the development	▪ Section 6 ▪ Section 7 ▪ Section 8.4
Provide for the formation of community-based forums, if required, that focus on key environmental management issues for the development	▪ Section 4
Set out procedures and mechanisms: ▪ Through which the community can discuss or provide feedback to the Applicant	▪ Section 4, PRG ▪ Section 6 ▪ Section 8.5
Set out procedures and mechanisms: ▪ Through which the Applicant will respond to enquiries or feedback from the community; and	▪ Section 8.5
Set out procedures and mechanisms: ▪ To resolve any issues and mediate any disputes that may arise in relation to	▪ Section 8.5

State Significant Developments B7**	The Community Communications Strategy addresses this in section
construction and operation of the development, including disputes regarding rectification or compensation	

1. Context

The NSW Government is investing $7 billion over the next four years, continuing its program to deliver more than 200 new and upgraded schools to support communities across NSW. This is the largest investment in public education infrastructure in the history of NSW.

We are redeveloping the primary school in Darlington to support the student community. The project will deliver:

- New teaching spaces
- A new hall
- A new library
- New administration and staff facilities
- A new canteen
- Covered outdoor learning areas (COLA)
- A preschool to support Early Childhood Education
- Bicycle and scooter parking for students and teachers
- A multipurpose sports court and outdoor play areas

The Darlington Public School project is classified as a state significant development, and has been assessed by the Department of Planning, Industry and Environment (DPIE). Consent was provided on 30 November 2020.

DPIE's web page on the project can be accessed here.

2. Community Engagement Objectives

SINSW's mission is to provide school infrastructure solutions by working collaboratively with all our stakeholders to create learning environments across NSW that serve our future needs and make us all proud.

This CCS has been developed to achieve the following community engagement objectives:

- Promote the benefits of the project
- Build key school community stakeholder relationships and maintain goodwill with impacted communities
- Manage community expectations and build trust by delivering on our commitments
- Provide timely information to impacted stakeholders, schools and broader communities
- Address and correct misinformation in the public domain
- Reduce the risk of project delays caused by negative third party intervention
- Leave a positive legacy in each community

3. Key Messages

Through each phase of the project, the key messages and means of engagement will be regularly reviewed, refined and updated. Information that is currently in the public domain is outlined below.

3.1 High level messaging

The NSW Government is investing $7 billion over the next four years, continuing its program to deliver more than 200 new and upgraded schools to support communities across NSW. This is the largest investment in public education infrastructure in the history of NSW.

3.1 Project messaging

3.1.1 Project status

The State Significant Development Application has been assessed by the Department of Planning, Industry & Environment and consent has been granted.

3.1.2 Project benefits

Darlington Public School is being upgraded to deliver new facilities and provide for growing student enrolments in the area. These new facilities will include:

- New teaching spaces

- A new hall
- A new and upgraded library
- New administration and staff facilities
- An upgraded canteen
- Covered outdoor learning areas (COLA)
- A preschool to support Early Childhood Education
- Bicycle and scooter parking for students and teachers
- A multipurpose sports court and outdoor play areas

3.1.3 High-quality learning environment

The project will provide flexible learning spaces that make use of the latest technology to enhance the learning experience for the next generation of students. Furthermore, the contemporary and sustainable facilities provide an outstanding working environment for school staff.

Flexible learning spaces are adaptable to accommodate small or large groups and facilitate students use of modern technology, while working independently and collaboratively.

3.1.4 Environmental benefits

The new school will be built in accordance with current sustainability principles. School Infrastructure NSW is committed to environmentally conscious construction and maintenance practices.

3.2 Construction phase

3.2.1 Safety

School Infrastructure NSW is committed to ensuring that work is completed safely and efficiently and with minimal impact to the local community. Prior to construction starting, any hazardous material is required to be removed from the site. This work will be carried out in accordance with regulatory requirements including the provisions of SafeWork NSW.

3.2.2 Traffic management

The construction contractor has developed a Traffic Management Plan to ensure that vehicle movements are managed with minimal disruption to the local community. All construction vehicles (excluding worker vehicles) are to be contained wholly within the site, except if located in an approved on-street work zone, and vehicles must enter the site before stopping.

3.2.3 Noise, vibration and dust

Any activity that could exceed approved construction noise management levels will be managed in strict accordance with the Protection of the Environment Operations Act 1997.

Mitigation measures will be in place to manage noise and dust levels, including hoarding to minimise the effects of noise and dust and hosing down as required to ensure the safety of the school and local community.

Construction works, including the delivery of materials to and from the site, will take place between 7:00am and 6:00pm Monday to Friday and between 8:00am and 1:00pm on Saturdays. No night work is scheduled for this project and no work will occur on Sundays or public holidays.

During the COVID-19 pandemic, in line with the NSW Environmental Planning and Assessment (COVID-19 Development – Construction Work Days) Order 2020, School Infrastructure NSW construction sites can operate on weekends and public holidays if required. This is to allow workers to abide by social distancing rules while on construction sites by distributing building work across the week.

These hours will continue while the EPA COVID-19 order is in place.

Rock breaking, rock hammering, sheet piling, pile driving and similar activities may only be carried out between the following hours:

(a) 9:00am to 12:00pm, Monday to Friday;

(b) 2:00pm to 5:00pm Monday to Friday; and

(c) 9:00am to 12:00pm, Saturday.

Activities may be undertaken outside of these hours if required:

(a) by the Police or a public authority for the delivery of vehicles, plant or materials; or

(b) in an emergency to avoid the loss of life, damage to property or to prevent environmental harm; or

(c) where the works are inaudible at the nearest sensitive receivers; or

(d) where a variation is approved in advance in writing by the Planning Secretary or his nominee if appropriate justification is provided for the works.

Notification of such activities must be given to affected residents before undertaking the activities or as soon as is practical afterwards.

3.2.4 Flora and fauna

School Infrastructure NSW is committed to ensuring construction work has a minimal impact upon flora and fauna.

School Infrastructure NSW will comply with all Development Consent Conditions relating to the protection of flora and fauna, and will comply with all relevant mitigation measures listed in the Environmental Impact Statement (EIS).

Prior to construction, a Construction Environmental Management Plan (CEMP) will be prepared to govern the completion of all construction works. The CEMP will detail measures to be taken for the protection and management of flora and fauna, will be prepared in accordance with relevant guidelines and performance indicators, and will be prepared to the satisfaction of the Department of Planning, Industry and Environment (DPIE).

Darlington Public School has a healthy tree population in terms of quantity of trees and tree health. All tree protection works will be carried out before the start of demolition or building work. A Tree Protection Zone (TPZ) and Structural Root Zone (SRZ) will be implemented to ensure the protection of trees on the site. In the event that any trees are damaged, a qualified Arborist will be contacted as soon as possible.

A Project Arborist will be be appointed to oversee the arboricultural related works for the project. The Project Arborist will be used for arboricultural certification services and also used as a point of contact should any questions arise during construction for this project.

Trees will not be trimmed or removed without appropriate statutory approval. A qualified and experienced arborist will complete all vegetation removal and trimming.

All trees on site that are not approved for removal will be protected in accordance with *AS 4970-2009 – Protection of Trees on Development Sites*.

3.2.5 Soil and water

School Infrastructure NSW is committed to the appropriate management of soil and water on the construction site.

School Infrastructure NSW will comply with all Development Consent Conditions relating to soil and water management, and will comply with all relevant mitigation measures listed in the Environmental Impact Statement (EIS).

Prior to construction, a Construction Environmental Management Plan (CEMP) will be prepared to govern the completion of all construction works. The CEMP will detail measures for the management of soil and water, will be prepared in accordance with relevant guidelines and performance indicators, and will be prepared to the satisfaction of the Department of Planning, Industry and Environment (DPIE).

A suitably qualified and experienced consultant will prepare a Construction Soil and Water Management Sub-Plan (CSWMSP), which will form part of the CEMP. The CSWMSP will:

- describe erosion and sediment control measures to be implemented during construction
- provide a plan of how construction works will be managed in wet-weather events
- detail flows from the site to surrounding area
- describe the measures to be taken to manage stormwater and flood flows for small and large sized events

Erosion and sediment controls will be installed and maintained in accordance with the “Blue Book” – *Managing Urban Stormwater: Soils and Construction (4th edition)*. These controls will be implemented prior to the commencement of any other site disturbance works.

For erosion and sediment control of the site, the following measures are provided to minimise the risk of sediments laden runoff being discharged from the site:

- A sediment fence/hoarding to be provided around the site.
- Catch drain (or diversion bund) diverting external catchment away from site.
- Temporary access to site with shaker pad.
- An indicative stockpile area with sediment fence around it during construction. The stockpile will be located out of water flow paths (and be protected by earth banks/drains as required).
- Geotextile inlet pit filters or sandbags to be placed around existing stormwater pits.
- Water cart to spray excavated surfaces to reduce dust pollution.
- All disturbed areas are to be stabilised within 14 working days of the completion of earthworks. All disturbed areas are to be protected so that the land is permanently stabilised within six months.
- Sediment removed from any sediment trapping device shall be relocated where further pollution to downslope lands and waterways cannot occur.
- Trapped sediment shall be removed immediately from areas subject to runoff or concentrated flow.
- Trapped sediment shall be removed where the capacity of sedimentation trapping devices fall below 60%.
- Revegetation schemes are to be adhered to and any grass coverings are kept healthy, including watering and mowing.

To protect the ecology of City of Sydney, the development will be required to satisfy the water quality requirements of City of Sydney Council. Sydney City Council DCP 2012 Section 3 outlines that any development greater than 1000m2 must undertake a stormwater quality assessment to demonstrate that the development will achieve the post development pollutant load standards. Proprietary water quality treatment products including Enviropods and stormfilter cartridges will be the main treatment measures to achieve Council's adopted pollutants reduction rates. Rainwater runoff from roof will be reticulated into the rainwater tank for landscape irrigation use. Rainwater re-use would also assist in meeting water quality requirements.

A major system is also required for the proposed development in the form of overland flow paths. The major overland flow system is designed to convey flows surcharged from the underground drainage system for storm events up to and including 100 year Average Recurral Interval (ARI). The overland flow is to be directed away from the buildings towards the public road kerb and gutter system on Abercrombie Street provided that there are no adverse impacts on the downstream properties.

Only approved soil and fill types will be used onsite. Accurate records will be kept on the volume and type of fill used onsite.

3.2.6 Contamination

Prior to construction, a Construction Environmental Management Plan (CEMP) will be prepared to govern the completion of all construction works. The CEMP will detail contamination management measures, will be prepared in accordance with relevant guidelines and performance indicators, and will be prepared to the satisfaction of the Department of Planning, Industry and Environment (DPIE).

The project site has been tested for contamination and is considered to be safe and suitable for the school upgrade.

We will implement the following mitigation measures as relevant:

- Hazardous building materials (HBM) will be managed in accordance with WHS act, WHS regulation and codes of practice/australian guidelines. A Hazmat Management Plan will be developed and HBM will be visually inspected on a regular basis. All HBM will be removed prior to significant disturbance and all removal will be undertaken in controlled conditions in line with EPA guidelines.
- Safe work method statements (SWMS) will be developed.
- An Asbestos Management Plan will be developed. Presence and location of asbestos containing materials (ACMs) will be identified and clearly labelled
- Tools that generate dust will not be used on asbestos and use of high pressure water sprays and compressed air on ACMs is prohibited.

- Removal of friable asbestos will only be undertaken by qualified professionals.
- Air monitoring will be required during ACM removal which is required to be disposed of at a licensed collection facility. Air monitoring samples to be analysed by NATA laboratory.

The CEMP will include protocols for the management of unexpected contamination discovered during the course of construction works.

3.2.7 Visual amenity

Prior to construction, a Construction Environmental Management Plan (CEMP) will be prepared to govern the completion of all construction works. The plan will detail measures to maintain visual amenity, will be prepared in accordance with relevant guidelines and performance indicators, and will be prepared to the satisfaction of the Department of Planning, Industry and Environment (DPIE).

The CEMP will include provisions for the management of outdoor lighting. The installation and operation of outdoor lighting will comply with both AS 4282-2019 – Control of the Obtrusive Effects of Outdoor Lighting and AS 1158.3.1-2005 – Lighting for Roads and Public Spaces – Part 3.1: Pedestrian Area (Category P) Lighting.

Visual amenity impacts will be limited during construction via the installation of appropriate site fencing and adherence to site housekeeping procedures.

In addition;

- Visual character and impact of the school has been improved via this development.
- There is a reduction in built form facing Abercrombie Street.
- More consistent elevation to Golden Grove Street.
- Removal of Abercrombie Street wall and repacement with wide pedestrian entry affords views into the centre of the site and retained vegetation.
- The work does not introduce any unsympathetic or visually prominent elements.
- The work will not impact the consistency of the scale and proportions, roof design and materials palette of the terrace rows.

Overall, the proposal does not result in major changes to composition such as introduction of a new focal point, drawing of the eye to a new feature of other measure.

3.2.8 Heritage

Prior to construction, a Construction Environmental Management Plan (CEMP) will be prepared to govern the completion of all construction works. The plan will detail measures to protect heritage matters, will be prepared in accordance with relevant guidelines and performance indicators, and will be prepared to the satisfaction of the Department of Planning, Industry and Environment (DPIE).

The CEMP will include unexpected finds protocols for objects of Aboriginal or Historic heritage.

In the event that relics of Aboriginal heritage are discovered, all works in the immediate vicinity will cease, and consultation will occur with a suitably qualified archaeologist, registered Aboriginal representatives and DPIE to determine an appropriate management strategy.

In the event that relics of historic heritage are discovered, all works in the immediate vicinity will cease, and consultation will occur with DPIE to determine an appropriate management strategy.

In addition;

- Construction methodology will be prepared to ensure against damage to heritage items.
- Photographic archival recording of the school, buildings, artwork and landscape will be undertaken.
- An Art Management Strategy will be prepared.
- An Interpretation Plan should be prepared with representatives of the school community and include stories of site geography.

3.2.9 Disruptive works

Construction work for Darlington Public School is underway. The following activities are planned for the upcoming weeks (*works will be outlined*). You can contact us directly using the details below to discuss any aspect of this work.

3.2.10 Get involved

We are committed to working together with our school communities and other stakeholders to deliver the best possible learning facilities for students. Your feedback is important to us. For more information contact us via the details below.

- Email: schoolinfrastructure@det.nsw.edu.au
- Website: schoolinfrastructure.nsw.gov.au
- Phone: 1300 482 651

3.3 Handover phase

3.3.1 Traffic and access

Construction work at Darlington Public School as been completed. We are now in a position to confirm access provisions for the new school, including pick-up and drop-off arrangements.

3.4 Official school opening

The upgrade to Darlington Public School was delivered today, with brand new facilities now open for the school.

Thank you for your patience during construction and we are thrilled to deliver this project for the school community.

4 Project Governance

4.1 Project Reference Group

The Department's engagement process strives to engage with key stakeholders from the school community. As part of this process, a Project Reference Group (PRG) is established early in the project with nominated representatives from the school community to ensure input from, and consultation with, impacted stakeholders.

The PRG provides key information from an operational, educational, change and logistics perspective into the planning, through the design and construction phases of the project.

The PRG will receive project briefings and key progress updates on project progress to support its responsibilities in assisting to communicate updates to school staff, parents and stakeholders in the wider local community.

The Project Reference Group will be conducted as two separate groups during the development and delivery of all projects:

(a) Project Reference Group – Planning

A nominated group (limited to 10) will participate in workshops to develop the Educational Principles and Education Rationale which will inform the Functional Design Brief. These workshops are chaired by the SINSW Senior Project Director (or delegate) and may be facilitated by an Education Consultant. This activity will inform the development of the building design.

(b) Project Reference Group – Delivery

The purpose of the group is to seek input and inform design processes and provide operational requirements and information to help minimise the impact of the project on school operations. These workshops are chaired by the Senior Project Director (or delegate) and may be facilitated by the appointed architectural consultant, as required. The PRG will provide key information from an operational and logistics perspective to assist project delivery.

Specifically to communications and engagement related matters, the PRG will also:

- Provide a forum for discussion and exchange of information relating to the planning and delivery of the project
- Identify local issues and concerns to assist the project team with the development of mitigation strategies – to manage and minimise construction and environmental impacts to the school community and local residents
- Provide feedback to the communications and community engagement team on key messages and communications and engagement strategies
- Provide advice on school engagement activities
- Assist to disseminate communications to the school community and other stakeholders.

As per all department led delivery projects, the PRG acts as a consultative forum and not a decision-making forum for the planning and delivery of this school infrastructure.

Figure 1: Project Reference Group (PRG)

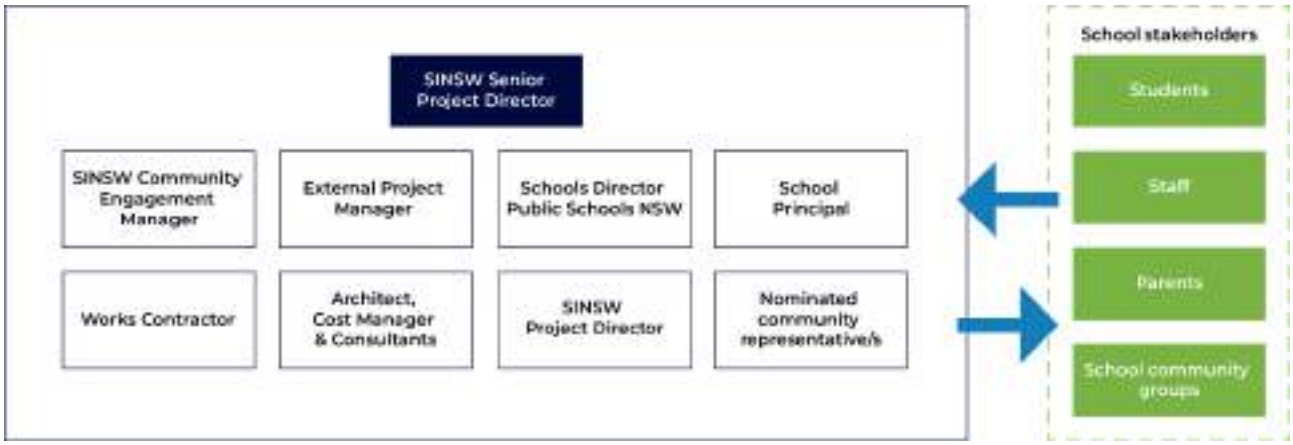
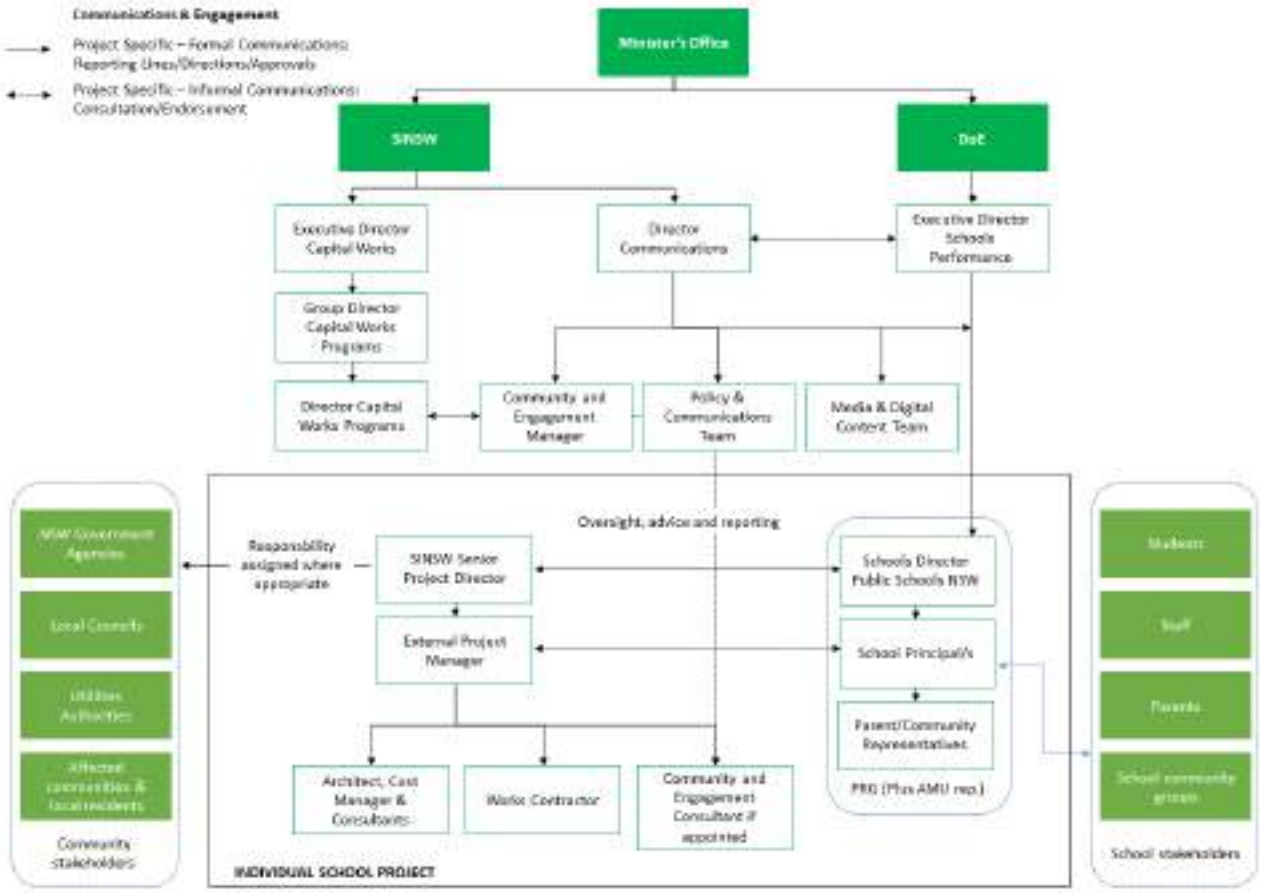


Figure 2 below maps how the department and SINSW will communicate both internally and externally.

Figure 2: SINSW Project Governance



5 Stakeholders

The stakeholder list below summarises who will be consulted during the design and construction phase via ongoing face to face meetings, communications collateral and digital engagement methods.

Table 2: Stakeholders

Stakeholders	Interest and involvement
Local Members of Parliament: ▪ Ms Jenny Leong, MP - Member for Newtown ▪ Hon Tanya Plibersek, MP – Member for Sydney, NSW	▪ Meeting the economic, social and environmental objectives of state and federal governments ▪ Delivering increased public education capacity on time ▪ Delivering infrastructure which meets expectations ▪ Addressing local issues such as traffic, congestion and public transport solutions
Government agencies and peak bodies: ▪ Transport for NSW ▪ Roads and Maritime Services NSW ▪ Fire and Rescue NSW ▪ NSW Department of Education ▪ NSW Department of Planning, Industry and Environment ▪ NSW Environmental Protection Authority ▪ NSW Rural Fire Service ▪ Sydney Water ▪ NSW Heritage Council ▪ NSW Office of Environment and Heritage ▪ NSW Department of Premier and Cabinet	▪ Traffic and congestion on the local road system ▪ Adequate public transport options and access ▪ Ensuring new infrastructure meets standard requirements for safety and fire evacuation ▪ Ensuring the development is compliant ▪ Ensuring the development does not impact heritage items ▪ Easing overcrowding in local schools
Local Council – City of Sydney Councillors ▪ General Manager Lord Mayor - Clover Moore ▪ Deputy Mayor Linda Scott ▪ CEO Monica Barone	▪ Schedule for construction and opening of school ▪ Plans for enrolled students during the operation of the temporary school ▪ Impacts to the local community including noise, congestion and traffic ▪ Shared use of community spaces ▪ Providing amenities to meet increase population density
School community ▪ Principal ▪ Teachers ▪ Staff ▪ Parents and carers ▪ Students	▪ Safe pedestrian and traffic access to the temporary school during construction ▪ Construction impacts and how these will be minimised ▪ Quality of infrastructure and resources upon project completion ▪ How to access the redeveloped school once completed

Stakeholders	Interest and involvement
Local community • Abercrombie Street • Darlington Lane • Golden Grove Street	▪ Noise and truck movements during construction: Abercrombie Street, Darlington Lane, Golden Grove Street ▪ Increased traffic and congestion on nearby streets ▪ Local traffic and pedestrian safety ▪ Changed traffic conditions during pick-up and drop-off ▪ Shared use of school facilities and amenities
Nearby public schools • Newtown North Public School • Glebe Public School • Australia Street Infants School • Erskinville Public School • Ultimo Public School • Newtown Public School • Alexandria Park Public School	▪ Impact on school resources ▪ Impact on current students ▪ Implications for teaching staff ▪ Possible impacts on enrolments ▪ Opportunities to view the new facilities
Adjoining affected landowners and businesses • University of Sydney • St Michael's Melkite Cathedral	▪ Noise and truck movements during construction ▪ Increased traffic and congestion on nearby streets ▪ Local traffic and pedestrian safety ▪ Changed traffic conditions during pick-up and drop-off ▪ Shared use of school facilities and amenities ▪ Environmental impacts during construction
Community groups • Local Aboriginal Land Council • Aboriginal community within the school and local area	▪ Preserve, protect and renew culture and heritage

6 Engagement Approach

From 30 March 2020, the way we communicate has changed to accommodate social distancing guidelines. Please see Appedix A for more details. This particularly refers to face to face communication channels such as door knocks, information booths/sessions, face to face meetings and briefings.

The key consideration in delivering successful outcomes for this project is to make it as easy as possible for anyone with an interest to find out what is going on. In practice, the communications approach across all levels of engagement will involve:

- Using uncomplicated language
- Taking an energetic approach to engagement
- Encouraging and educating whenever necessary
- Engaging broadly including with individuals and groups that fall into harder to reach categories
- Providing a range of opportunities and methods for engagement
- Being transparent
- Explaining the objectives and outcomes of planning and engagement processes.

In addition to engagement with Government Departments and Agencies and Council, two distinct streams of engagement will continue for the project as follows:

- School community for existing schools being upgraded, or surrounding schools for new schools, and
- Broader local community.

This allows:

- School-centric involvement from school communities (including students, parents/caregivers, teachers, admin staff) unencumbered by broader community issues, and
- Broad community involvement unencumbered by school community wants and needs. Broad community stakeholders include local residents, neighbours and local action groups.

6.1 General community input

Members of the general public impacted by the construction phase are able to enquire and complain about environmental impacts via the following channels:

- Information booths and information sessions held at the school or local community meeting place, and advertised at least 7 days before in local newspapers, on our website and via letterbox drops
- 1300 number that is published on all communications material, including project site signage
- School Infrastructure NSW email address that is published on all communications material, including project site signage

Refer to Section 8.5 of this document for detail on our enquiries and complaints process.

A number of tools and techniques will be used to keep stakeholders and the local community involved as summarised in table 3 below.

For reference, project high level milestones during the delivery phase include:

- Site establishment/early works
- Commencement of main works construction
- Term prior to project completion
- Project completion
- First day of school following project completion
- Official opening

Table 3: School Infrastructure NSW Communications Tools

Communications Tool	Description of Activity	Frequency
1300 community information line	The free call 1300 482 651 number is published on all communication materials and is manned by SINSW. All enquiries that are received are referred to the appointed C&E Manager and/or Senior Project Director as required and logged in our CRM. Once resolved, a summary of the conversation is updated in the CRM.	Throughout the life of the project and accessible for 12 months post completion
Advertising (print)	Advertising in local newspapers is undertaken with at least 7 days' notice of significant construction activities, major disruptions and opportunities to meet the project team or find out more at a face to face event.	At project milestones or periods of disruption
Call centre scripts	High level, project overview information provided to external organisations who may receive telephone calls enquiring about the project, most namely stakeholder councils.	Throughout the project when specific events occur or issues are raised by stakeholders
Community contact cards	These are business card size with all the SINSW contact information. The project team/ contractors are instructed to hand out contact cards to stakeholders and community members enquiring about the project. Cards are offered to school administration offices as appropriate. Directs all enquiries, comments and complaints through to our 1300 number and School Infrastruture NSW email address.	Throughout the life of the project and available 12 months post completion
CRM database	All projects are created in SINSW's Customer Relationship Management system – Darzin - at project inception. Interactions, decisions and feedback from stakeholders are captured, and monthly reports generated. Any enquiries and complaints are to be raised in the CRM and immediately notified to the Senior Project Director, Project Director and Community Engagement Manager.	Throughout the life of the project and updated for 12 months post completion
Display boards	A0 size full colour information boards to use at info sessions or to be permanently displayed in appropriate places (school admin office for example).	As required
Door knocks	Provide timely notification to nearby residents of upcoming construction works, changes to pedestrian movements, temporary bus stops, expected impacts and proposed mitigation. Provide written information of construction activity and contact details.	As required prior to periods of construction impacts
Face-to-face meetings/briefings	Activities include meeting, briefings and "walking the site" to engage directly with key stakeholders, directly impacted residents and business owners and the wider community.	As required

Communications Tool	Description of Activity	Frequency
FAQs	Set of internally approved answers provided in response to frequently asked questions. Used as part of relevant stakeholder and community communication tools. These are updated as required, and included on the website if appropriate.	Throughout the life of the project
Information booths	Information booths are held locally and staffed by a project team member to answer any questions, concerns or complaints on the project. Info booths are scheduled from the early stages of project delivery through to project completion. Information booths are to be held both at the school/ neighbouring school, as well for the broad community: ▪ School information booths are held at school locations at times that suit parents and caregivers, with frequency to be aligned with project milestones and as required. ▪ Community information booths are usually held at local shopping centres, community centres and places that are easily accessed by the community. They are held at convenient times, such as out of work hours on weekdays and Saturday's. Collateral to be provided include community contact cards, latest project notification or update, with internal FAQs prepared. All liaison to be summarised and loaded in the CRM. Notice of at least 7 days to be provided.	At project milestones and as required
Information sessions (drop in)	Information sessions are a bigger event than an info booth, held at a key milestone or contentious period. We have more information on the project available on display boards/ screens and an information pack handout – including project scope, planning approvals, any impacts on the school community or residents, project timeline, FAQs. Members from the project and communications team will be available to answer questions about the project. These events occur after school hours on a week day (from 3:00pm – 7:00pm to cover working parents). All liaison summarised and loaded on the CRM.	As required
Information pack	A 4 page A4 colour, fold out flyer that can include: ▪ Project scope ▪ Project update ▪ FAQs ▪ Contact information ▪ Project timeline	As required

Communications Tool	Description of Activity	Frequency
	To be distributed at info sessions or at other bigger events/ milestones in hard copy and also made available electronically.	
Media releases/events	Media releases are distributed upon media milestones. They promote major project milestones and activities and generate broader community awareness.	Media milestones: ▪ Project announcement ▪ Concept design completed ▪ Planning approval lodged ▪ Planning approval granted ▪ Construction contract tendered ▪ Construction contract awarded ▪ SOD turning opportunity ▪ Handover ▪ Official opening
Notifications	A4, single or double sided, printed in colour that can include FAQs if required Notifications are distributed under varying templates with different headings to suit different purposes: ▪ **Works notification** are used to communicate specific information/ impacts about a project to a more targeted section of the community. This template doesn't have an image so it can be more appropriately targeted for matters like hazardous material. ▪ **Project update** is used when communicating milestones and higher level information to the wider community i.e. project announcement, concept design/DA lodgement, construction award, completion. Always includes the project summary, information booths/ sessions if scheduled, progress summary and contact info.	As required according to the construction program. Distibuted via letterbox drop to local residents and via the school community at least 5-7 days prior to construction activities or other milestones throughout the life of the project. Specific timings indicated in table 5 – Section 8.
Photography, time-lapse photography and videography	Captures progress of construction works and chronicles particular construction activities. Images to be used in notifications, newsletters and report, on the website and Social Media channels, at information sessions and in presentations. Once the project is complete, SINSW will organise photography of external and internal spaces to be used for a range of communications purposes.	Project completion (actual photography and video of completed project) Prior to project completion - artist impressions, flythrough, site plans and contruction progress images are used

Communications Tool	Description of Activity	Frequency
Presentations	Details project information for presentations to stakeholder and community groups.	As required
Priority correspondence	Ministerial (and other) correspondence that is subject to strict response timeframes. Includes correspondence to the Premier, Minister, SINSW and other key stakeholders. SINSW is responsible for drafting responses as requested within the required timeframes.	As required
Project Reference Group	SINSW facilitated Project Reference Group sessions providing information on the design solution, construction activities, project timeframes, key issues and communication and engagement strategies.	Meets every month or as required More information on the PRG is detailed in Section 4
Project signage	A0 sized, durable aluminium signage has been installed at Darlington Public School. Provides high level information including project scope, project image and SINSW contact information. Fixed to external fencing/ entrances etc. that are visible and is updated if any damage occurs.	Throughout the life of the project and installed for 12 months post completion
Site visits	Demonstrate project works and progress and facilitate a maintained level of interest in the project. Includes media visits to promote the reporting of construction progress.	As required
School Infrastructure NSW email address	Provide stakeholders and the community an email address linking direct to the Community Engagement team. Email address (schoolinfrastructure@det.nsw.edu.au) is published on all communications materials.	Throughout the life of the project
School Infrastructure NSW website	A dedicated project page for Darlington Public School is located on the SINSW website.	Updated at least monthly and is live for at least 12 months post completion of the project
Welcome pack/ thank you pack	At project completion the following flyers are utilised: ▪ **Welcome pack** – project completion for school community - A 2 to 4 page A4 flyer which is provided to the school community on the first day/week they are returning to school when new facilities are opening, or attending a new school. Includes project overview, map outlining access to the school and key locations, FAQs, contact information. ▪ **Thank you pack** – A 2 to 4 page A4 flyer tailored to the local residents to thank them for their patience and support of the project.	Project completion only

7 Engagement Delivery Timeline

The following engagement delivery timeline maps tailored communications tools and activities by key milestone.

From 30 March 2020, the way we communicate has changed to accommodate social distancing guidelines. Please see Appendix A for more details. This particularly refers to face to face communication channels such as door knocks, information booths/sessions, face to face meetings and briefings.

Table 4: Engagement timeline

Project Phase / milestone	Target Audiences	Proposed communication tools / activities / purpose as per Table 3	Timing / implementation
Site establishment and early works	School community Local community and neighbours	Webpage update Media release (if required) Early works commencement notification	November 2020
Main Construction works, including but not limited to: ▪ Works commenced ▪ Key impact periods – noise, dust, traffic, vibration	School community Local community and neighbours	Sod turn Webpage update Media release (if required) Project Update / Information Pack Information Sessions (TBC) Works notifications	January 2020 to December 2022 (at key construction events as required, as per our notification process in Table 5)
Term prior to project completion	School Community Local community and neighbours	Webpage update Project Update / Information Pack Information Sessions (TBC)	October to December 2022
Handover and welcome to new school	School community	D1T1 Welcome Pack Welcome Teams Information Boards Media release (if required)	January 2023
Opening	School community Local community and neighbours	Official opening ceremony	January 2023
Post-opening	All	Website remains live Project signage remains installed 1300 phone and email still active, and CRM still maintained for complaints and enquiries.	January 2024 (at least 12 months post construction completion)

8 Protocols

8.1 Media engagement

SINSW manages all media relations activities, and is responsible for:

- Responding to all media enquiries and instigating all proactive media contact.
- Media interviews and delegation to SINSW media spokespeople who are authorised to speak to the media on behalf of the project
- Informing the Minister's Office and SINSW project team members and communications representatives of all media relations activities in advance and providing the opportunity to participate in events where possible.

8.2 Site visits

SINSW in partnership with Schools Operations and Performance organises and hosts guided project site tours and media briefings as required by the Minister's Office. The Project Team will ensure the required visitor site inductions are undertaken and that all required Personal Protective Equipment (PPE) is worn.

For media site visits and events, SINSW creates, or contributes to, the production of an event pack. This will include an event brief, media release, speaking notes and Q&As.

8.3 Social, online and digital media

SINSW initiates and maintains all social and online media channels. These channels can include Facebook, Twitter, LinkedIn and the website. The SINSW Online Content Team upload to the SINSW website.

8.4 Notification process

Notifications (titled works notifications or project updates as per Table 3) are SINSW's prescribed notification requirement and are the primary mechanism to inform the community and key stakeholders about the impact of school construction on the local area. Notifications provide advance warning of activities and planned disruptions, as per the notice periods in Table 5 below, allowing stakeholders and community members to plan for the impacts and make alternative arrangements where required. Notifications are distributed in person via door knocks, via letterbox drop, via the school and electronically via email.

The C&E Manager advises the project team of the relevant notification requirements and timeframes to be met. The team obtains the information necessary to meet these timeframes by:

- Having oversight of the project delivery program
- Visiting site as required
- Attending and participating in construction meetings, planning meetings, and Risk and Opportunity workshops.

Table 5: Notifications periods

Works activity	Minimum community notification period
Notification to communities following major incident	Same day
Emergency works/unforeseen events	Same day
Contamination management and notification	Within 48 hours
Upcoming works notification (minimum disruption)	5- 7 days
Invitation/notification of community event (e.g. info booth)	5 – 7 days
Notifications regarding traffic changes, parking impacts, road closures, major detours	10 – 14 days
Pedestrian route changes and other impacts	10 – 14 days

Works activity	Minimum community notification period
Notifications regarding operational changes for the school community (school drop-off points, entry and exit points)	10 - 14 days
Major construction impacts (out of hours/ significant noise/ demolition)	10 – 14 days
Major impacts to school community e.g. relocation to temporary school	6 months

8.5 Enquiries and complaints management

SINSW manages enquiries (*called interactions in our CRM, Darzin*), and complaints in a timely and responsive manner.

Prior to project delivery, a complaint could be related to lack of community consultation, design of the project, lack of project progress, etc.

During project delivery, a complaint is defined as in regards to construction impacts – *such as* – safety, dust, noise, traffic, congestion, loss of parking, contamination, loss of amenity, hours of work, property damage, property access, service disruption, conduct or behaviour of construction workers, other environmental impacts, unplanned or uncommunicated disruption to the school.

If a phone call, email or face- to- face complaint is received during construction, they must be logged in our CRM, actively managed, closed out and resolved by SINSW within 24-48 hours.

As per our planning approval conditions, a complaints register is updated monthly and is publicly available on the project's website page on the SINSW website.

If the complainant is not satisfied with SINSW response, and they approach SINSW for rectification, the process will involve a secondary review of their complaint as per the outlined process.

Complaints will be escalated when:

- An activity generates three complaints within a 24-hour period (separate complainants).
- Any construction site receives three different complaints within a 24-hour period.
- A single complainant reports three or more complaints within a three day period.
- A complainant threatens to escalate their issue to the media or government representative.
- The complaint was avoidable
- The complaint relates to a compliance matter.

Complaints will be first escalated to the Senior Manager, Community and Engagement or Director of Communications for SINSW as the designated complaints handling management representatives for our projects. Further escalation will be made to the Executive Director, Office of the Chief Executive to mediate if required.

If a complaint still cannot be resolved by SINSW to the satisfaction of the complainant, we will advise them to contact the NSW Ombudsman - https://www.ombo.nsw.gov.au/complaints.

The below table summarises timeframes for responding to enquiries and complaints, through each correspondence method:

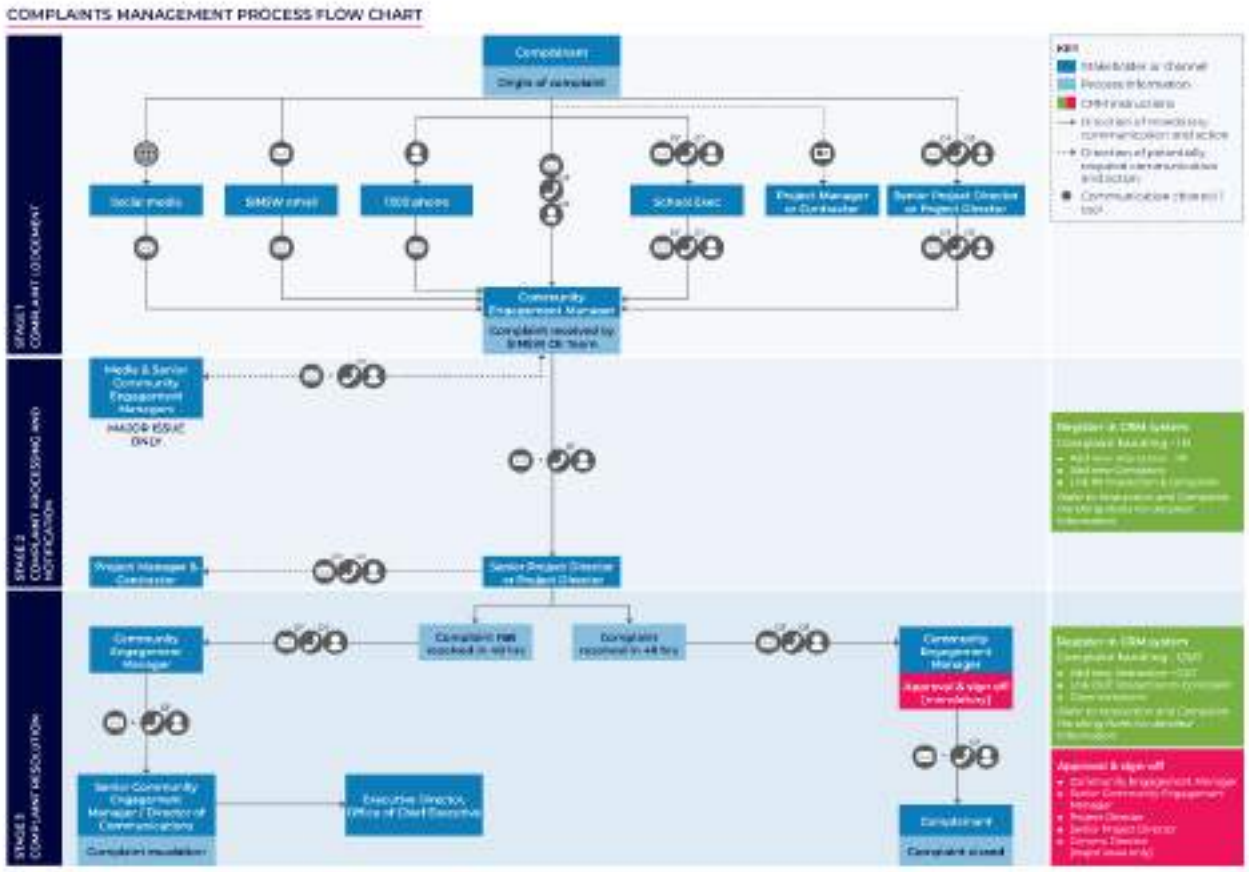
Table 6: Complaint and enquiry response time

Complaint	Acknowledgement times	Response times
Phone call during business hours	At time of call – and agree with caller estimated timeframe for resolution.	Complaint to be closed out within 48 hours. If not possible, continue contact, escalate as required and resolve within 7 business days.
Phone call after hours*	Within two (2) hours of receiving message upon returning to office.	Following acknowledgement, complaint to be closed out within 48 hours. If not possible, continue contact,

Complaint	Acknowledgement times	Response times
		escalate as required and resolve within 7 business days.
Email during business hours	At time of email (automatic response)	Complaint to be closed out within 48 hours. If not possible, continue contact, escalate internally as required and resolve within 7 business days.
Email outside of business hours	At time of email (automatic response)	Complaint to be closed out within 48 hours (once return to business hours). If not possible, continue contact, escalate internally as required and resolve within 7 business days.
Interaction/ Enquiry		
Phone call during business hours	At time of call – and agree with caller estimated timeframe for response.	Interaction to be logged and closed out within 7 business days.
Phone call after hours	Within two (2) hours of receiving message upon returning to office.	Interaction to be logged and closed out within 7 business days.
Email during business hours	At time of email (automatic response)	Interaction to be logged and closed out within 7 business days.
Email outside of business hours	At time of email (automatic response)	Interaction to be logged and closed out within 7 business days.
Letter	N/A	Interaction to be logged and closed out within 10 business days following receipt.

The below diagram outlines our internal process for managing complaints.

Figure 3 - Internal Complaints Process



8.5.1 Disputes involving compensation and rectification

School Infrastructure NSW is committed to working with the school and broader community to address concerns as they arise. Where disputes arise that involve compensation or rectification, the process for resolving community enquiries and complaints will be followed to investigate the dispute. Depending upon the results of the investigation, School Infrastructure NSW may seek legal advice before proceeding.

8.6 Incident management

An incident is an occurrence or set of circumstances that causes or threatens to cause material harm and which may or may not be or cause a non-compliance. Material harm is harm that:

(a) involves actual or potential harm to the health or safety of human beings or to the environment that is not trivial; *or*

(b) results in actual or potential loss or property damage of an amount, or amounts in aggregate, exceeding $10,000, (such loss includes the reasonable costs and expenses that would be incurred in taking all reasonable and practicable measures to prevent, mitigate or make good harm to the environment).

8.6.1 Roles and responsibilities following an incident

In the event of an incident, once emergency services are contacted, the incident must be immediately reported to the SINSW Senior Project Director who will inform:

- SINSW Executive Director
- SINSW C&E Manager
- SINSW Senior Manager, C&E
- SINSW Communications Director

SINSW Communications Director will:

- Lead and manage all communications with the Minister's office in the event of an incident, with assistance as required

- Direct all communications with media to the SINSW Media Manager in the first instance for management
- Notify all other key project stakeholders of an incident.

The school and local community will be notified within 24 hours in the event of an incident, as per our notification timelines in Table 5.

The SINSW Senior Project Director will issue a written incident notification to Department of Planning, Industry & Environment (DPIE) (compliance@planning.nsw.gov.au) and Local Council immediately following the incident to set out the location and nature of the incident.

This must be followed within seven days following the incident of a written notification to the Department of Planning, Industry and Environment (compliance@planning.nsw.gov.au) that:

(a) identifies the development and application number;

(b) provides details of the incident (date, time, location, a brief description of what occurred and why it is classified as an incident);

(c) identifies how the incident was detected;

(d) identifies when SINSW became aware of the incident;

(e) identify any actual or potential non-compliance with conditions of consent;

(f) describes what immediate steps were taken in relation to the incident;

(g) identifies further action(s) that will be taken in relation to the incident; and

(h) provides the contact information for further communication regarding the incident (the Senior Project Director).

Within 30 days of the date on which the incident occurred or as otherwise agreed to by the Planning Secretary, SINSW will provide the Planning Secretary and any relevant public authorities (as determined by the Planning Secretary) with a detailed report on the incident addressing all requirements below:

(a) a summary of the incident;

(b) outcomes of an incident investigation, including identification of the cause of the incident;

(c) details of the corrective and preventative actions that have been, or will be, implemented to address the incident and prevent recurrence; and

(d) details of any communication with other stakeholders regarding the incident.

8.7 Reporting process

Throughout the project, data will be recorded on participation levels both face to face and online, a record of engagement tools and activities carried out in addition to queries received and feedback against emerging themes.

Stakeholder and community sentiment will be evaluated throughout to ensure effectiveness of the engagement strategy and to inform future activities.

Reporting will include but not be limited to:

- Stakeholder engagement reporting – numbers of forums, participation levels and a summary of the outcomes Community sentiment reporting – outputs of all community engagement activities, including numbers in attendance at events, participation levels and feedback received against broad themes
- Online activity – through the project website and via social media
- Media monitoring – as part of the proactive media campaign
- Engagement risk register - to be updated regularly.

Appendix A – Changing the way we communicate – community engagement alternative methods

Below are proposed alternatives to our standard mandatory requirements for community engagement effective as of 30 March 2020. These alternatives are proposed to ensure we continue to comply with SSD and DA conditions and that our communities can remain informed about our projects while adhering to social distancing requirements and NSW Health advice.

Our engagement principles for this period should continue to ensure our communications are:

- Simple
- Streamlined
- Accessible.

Mandatory requirements and alternatives at a glance:

Items in **bold** have alternate delivery options.

SSD CONDITION	ALTERNATIVE
1300 community information line	No change
Advertising (print)	Promote online info session / generic single advert?
Call centre scripts	No change
Community contact cards	Contractors to hand out as required
CRM database	No change
Display boards	Digital version
Door knocks	No door knocks, use letterbox drop*
Face-to-face meetings/briefings	Phone call or teleconferencing
FAQs	No change
Information booths	No info booths: issue project update instead
Information sessions (drop in)	Digital version
Information pack	Digital version
Media releases/events	No change to media releases, no events to be held
Notifications	Distributed to school community via email from Principal

SSD CONDITION	ALTERNATIVE
	Distributed to near neighbours via letterbox drop*
Photography, time-lapse photography and videography	Source photography if health advice permits Use images and time-lapse from similar projects if unable to photograph site
Presentations	Digital version for PRGs/stakeholder meetings
Priority correspondence (RML)	No change
Project Reference Group	Skype meetings / teleconferencing
Project signage	No change if production and installation still possible; A4 print out delivered
Site visits	Site visits via phone/video/photography
School Infrastructure NSW email	No change
School Infrastructure NSW website	No change (may publish updates more frequently)
Welcome pack/ thank you pack	Welcome pack: Do not issue until school resumes Thank you pack: Issued when project is entirely complete

*alternative may change depending on distributor operations