

PEOPLE WHO BUILD

ENVIRONMENTAL

MANAGEMENT PLAN

PROJECT NAME

GRIFFITH BASE HOSPITAL
REDEVELOPMENT

PROJECT NO.

CLIENT – HI21266



1 DOCUMENT PROPERTIES

Plan Title	Environmental Management Plan
Document Owner	Project Manager

Plan Control and Amendment

The current approved master version of this Management Plan is available electronically for all project personnel to access. The date and latest revision of the master document is stated in the footer below. For clarity, the footer must not be amended by the user or document owner – this ensures traceability to the relevant master revision.

Downloaded Management Plans are deemed uncontrolled and it is the responsibility of the user to ensure they are using the latest master revision.

The document owner is responsible for maintenance, review, updates, approval and distribution of this Management Plan. All changes to this Management Plan are to be recorded by the Document Owner in the Version History Table below. The first Version issued will be recorded as V1.

Version History				
Revision	Date	Description / Updates	Prepared by	Reviewed by
V0	20/09/2021	Tender Plan	Josh Innes	
V1	01/02/2022	Construction Plan	Josh Innes	
V2	09/08/2022	Updated Construction Plan	Josh Innes	Doug Miles
V3	31/10/2022	Updated to include DPIE comments	Josh Innes	Doug Miles

SSDA Condition – B16 - CEMP		
Item no.	Description	Page No.
a (i)	Hours of work	7
a (ii)	24-hour contact details of site manager	7
a (iii)	Management of dust and odour to protect the amenity of the neighbourhood	27
a (iv)	Stormwater control and discharge	29, 47
a (v)	Measures to ensure that sediment control and other materials are not tracked onto the roadway by vehicles leaving site	32
a (vi)	Groundwater management plan including measures to prevent ground water contamination	30

a (vii)	External lighting in compliance with AS 4282-2019 Control of the obstructive effects of outdoor lighting	33
b	An unexpected finds protocol for contamination and associated communication procedure to ensure that potentially contaminated material is appropriately managed	34
c	An unexpected finds protocol for Aboriginal and non-Aboriginal heritage and associated communications procedure	36

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3 ADCO PROJECT PERSONNEL CONSULTATION AND SIGN OFF

We, the undersigned, confirm that we have been consulted on the contents of this document, read and understood the contents of this document, and agree to implement the requirements of this Plan on this project site.

Name	Position	Signature	Date

4 INTRODUCTION / PURPOSE

This Environmental Management Plan (EMP) has been prepared to detail the processes and measures that will be implemented by ADCO to manage the safety requirements for the project.

Our HSE (Health, Safety and Environmental) Management System, documents the manner in which construction-related activities are required to be completed on the ADCO project sites. This Management Plan provides information on how workplace health and safety will be managed on this project to provide a safe, injury and incident free workplace for workers and the general community. It establishes clear objectives and targets and provides mechanisms to regularly measure performance through inspections, observations and audits appropriate to the level of risk.

System documents which are referenced in this Plan or any associated Plan or Risk Register can be sourced by accessing the ADCO Hub (ADCO personnel only). Additional information can be obtained from the HSE Manager.

ADCO project personnel will be inducted into the requirements of this Plan and any associated Plan or Risk Register by the Project Manager. Evidence of induction and discussion will be recorded within section ADCO Project Personnel Consultation and Sign off.

This document will be reviewed on a periodic basis, not exceeding 6-monthly, to ensure its compliance to legislative and operational requirements. Review and updates to this plan will initiate a change to the plan revision number and be recorded in the "Version History" section of the document. Superseded Plans will be marked as such and will be located within the Management Plan Folder located in the Site Office or electronically. Amendments to the Plan are noted in the "Document Properties section.

This Plan and any associated Plan or Risk Register (including any future revisions) will be supplied to subcontractors for review through the Aconex portal or another approved format.

Copies of this and superseded Project Management Plans and associated Risk Registers will also be maintained (archived) by ADCO for a period of at least 24 months following an update completion.

5 PRINCIPAL CONTRACTORS DETAILS

Name	State Address		ABN
ADCO Constructions Pty Ltd	Address	L2 7-9 West Street	46 001 044 391
	Suburb	North Sydney, 2060	
	State	NSW	
	Phone	02 8437 5000	

6 PROJECT INFORMATION

Project Description	Griffith Base Hospital Redevelopment
Project Address	1 Noorebar Avenue, Griffith NSW 2680
Site Manager Contact Details (24 hour)	Mark Robinson 1800 232 628

7 SITE REQUIREMENTS

WORK HOURS

Monday – Friday	7:00am – 6:00pm
Saturday	No Work
Sunday	No Work
By Exception	The Site Manager's approval following Griffith City Council and Griffith Base Hospital's approval is required for work outside of the normal construction hours listed above. No person is permitted to work on site alone or without at least one member of the ADCO site management team in attendance.

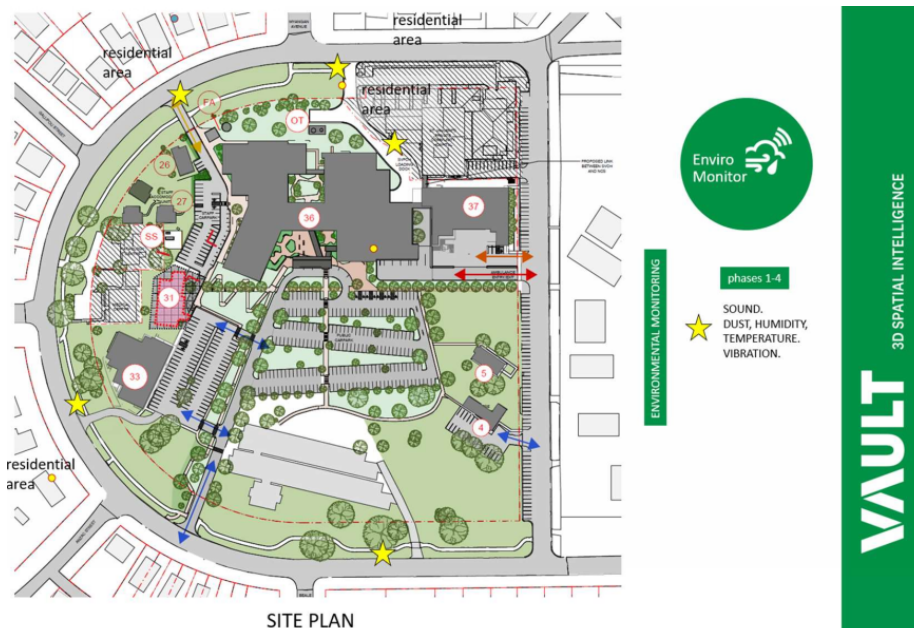
SPECIFIC ENVIRONMENTAL MANAGEMENT – NOISE, DUST, VIBRATION

ADCO will partner with 'asBuilt' and deploy small IoT (Internet of Things) sensors onto site to monitor and record the noise, dust and vibration levels. These sensors will connect to our private LoRaWAN network, which in turn streams the data to asBuilt Vault data platform to continuously report on the site conditions.

'asBuilt' Vault is a simple to use platform that aggregates the data feeds that we collect from the environmental sensors. Once installed and connected, we will be able to remotely interact with project specific dashboards presenting easy to understand graphs and trends, and live feeds through a simple browser interface.



Example image of asBuilt Vault dashboard with models and sensor data.



Locations of environmental sensors to be installed around site

An aerial map of Griffith Base Hospital and its surrounding area. The hospital is highlighted in a large blue circle in the center. To the north of the hospital is a smaller blue area labeled 'ST VINCENT'S PRIVATE COMMUNITY HOSPITAL'. To the east of the hospital is a green area labeled 'ST PATRICK'S CATHOLIC PRIMARY SCHOOL' and a grey area labeled 'NORTH GRIFFITH PRIMARY SCHOOL'. The map shows various streets including Gallipoli St, Bent St, Korrin St, Animo Ave, Warran Ave, Kodringal Ave, Faint St, Anzac St, Banya Ln, Boyle St, Kindergarten Ln, Moorebar Ave, and Cutler Ave. The surrounding area is densely populated with residential houses and some commercial buildings.



SITE ESTABLISHMENT



8 LEADERSHIP

8.1 ENVIRONMENTAL POLICY

ENVIRONMENTAL MANAGEMENT POLICY



Our Commitment

ADCO is committed to protecting the natural environment by adopting and implementing responsible environmental management practices in all our business undertakings.

We recognise our social and legal duty to design, plan and manage our activities, products and services in a manner that protects and enhances the environment and communities in which we work.

This policy sets out our commitment to positive environmental engagement throughout our business.

Our strategies to support positive environmental outcomes include:

- implementing and maintaining a Management System (MS) compliant with ISO 14001;
- complying with legal and other requirements, including applicable legislation, standards, and other compliance obligations;
- setting objectives and measurable targets to promote continual improvement which makes a positive contribution to the environment, protects biodiversity and prevents pollution;
- identifying and implementing project specific strategies and controls to prevent pollution, protect significant environments and reduce demands on natural and material resources;
- eliminating or minimising environmental aspects and impacts associated with our business undertakings and activities, including on the communities in which we operate;
- integrating risk management and compliance requirements into core upstream design and planning, including procurement of goods and services, to eliminate or minimise downstream environmental aspects and impacts;
- identifying opportunities to enhance environmental and ecologically sustainable development practices; and
- promoting and encouraging the adoption of environmental management and protection within our broader policy and framework of Environmental Social Governance through engagement with employees, clients,

subcontractors, suppliers and other key stakeholders or interested parties.

Our success relies upon:

- providing clarity, consistency and predictability across our workforce with defined roles, responsibilities and accountabilities for environmental management and protection;
- understanding the needs and expectations of each community in which we operate and other interested parties through partnerships and participation in consultative forums;
- training and developing employees and providing information to suppliers and subcontractors to inform their responsibility to participate in environmental management and protection programs;
- reviewing incidents and the effectiveness of corrective and preventative actions and sharing outcomes to prevent future recurrence;
- reviewing resources to enable pro-active environmental management and continual improvement;
- engaging our senior leadership in determining the effectiveness of the MS and its application; and
- promoting environmental management by communicating our policy to all employees, suppliers, subcontractors and other interested parties and making it available to the public.

All employees, contractors, temporary staff, and visitors must comply with all information and instructions provided by ADCO regarding this policy our environmental commitments.

Our Contact

If you have any queries about this policy, please contact our State Manager.

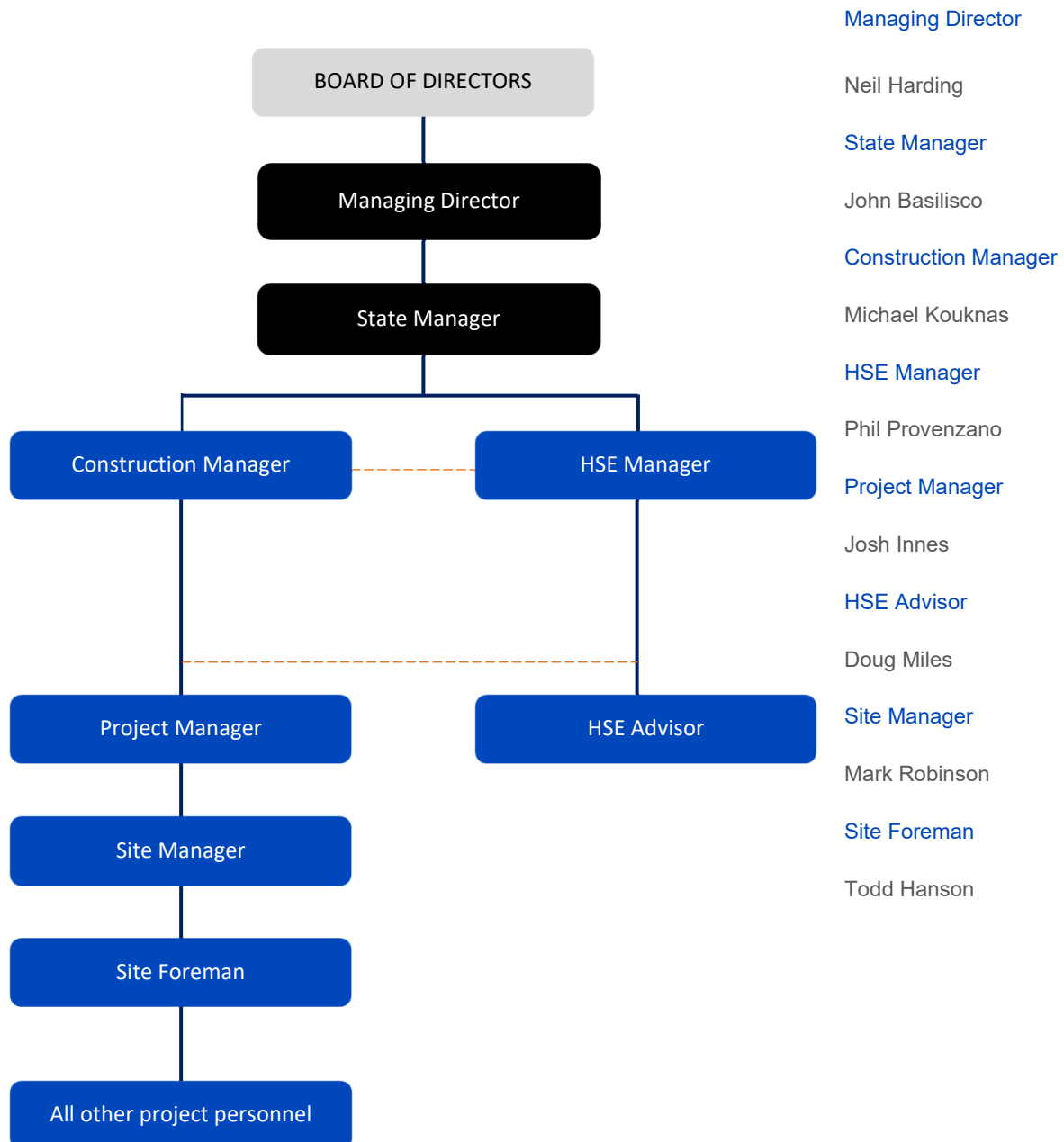


NEIL HARDING
CHIEF EXECUTIVE OFFICER

DOCUMENT TITLE	ENVIRONMENTAL MANAGEMENT POLICY	DOCUMENT CREATED	26 FEBRUARY 2018
REVISION	2	DATE OF THIS REVISION	6 APRIL 2022
		PAGE	1 of 1

8.2 PROJECT MANAGEMENT STRUCTURE

ADCO will provide a suitable and competent project team and associated subcontractors to effectively communicate and implement the requirements of the HSE management system.



8.3 ROLES AND RESPONSIBILITIES

Managing Director	<p>Provide commitment, leadership and direction in the development, implementation and management of the Corporate Management Systems, including but not limited to:</p> <ul style="list-style-type: none"> / Development of a corporate strategic plan incorporating safety, environment, quality and health management risks and controls. / An assessment of the effectiveness of the Corporate Management Systems. (e.g. review of incidents and non-conformances to identify non-conformance trends and areas of improvement to the Corporate Management Systems.) / Full management obligations including continual improvement of the Corporate Safety, Environment and Quality Management Systems. / Ensure that appropriate resources are allocated to ensure compliance legislative requirements and the requirements of the Corporate Management Systems. / Ensure that resources are competent to deliver the requirements of the Corporate Management Systems.
State Manager	<p>Ensure that:</p> <ul style="list-style-type: none"> / Corporate Management Systems are implemented at all levels in the State. / Appropriate resources are allocated to project teams to ensure compliance legislative requirements and the requirements of the Corporate Management Systems. / Project operations are in compliance with applicable state or federal legislation. / A review of the safety, environment, quality and health management performance of the State is completed regularly to identify non-conformances, trends and areas of improvement.
Construction Manager	<p>Ensure that:</p> <ul style="list-style-type: none"> / Corporate Management Systems are implemented on projects within the State. / HSE requirements have been identified and accounted for during project tender processes. / Project operations are in compliance with applicable state or federal legislation. / Appropriate resources are allocated to project teams to ensure compliance legislative requirements and the requirements of the Corporate Management Systems. / Project team personnel have received training to fulfil their duties and responsibilities with the Corporate Management Systems. / A review of the safety, environment, quality and health management performance of the State is completed regularly to identify non-conformances, trends and areas of improvement.
Health, Safety & Environment (HSE) Manager	<p>Ensure that:</p> <ul style="list-style-type: none"> / Legislative requirements for HSE management are implemented and maintained on project sites. / The requirements of the Corporate HSE Management System are implemented on project sites. / Where required, project HSE requirements and risks are identified during project tender and/or trade tender processes and incorporated into project management plans.

Project Manager	<ul style="list-style-type: none"> / Reviews of HSE performance are completed on all projects to ensure compliance with legislative and corporate requirements. <p>Ensure that:</p> <ul style="list-style-type: none"> / HSE requirements are identified and assessed during trade tender evaluations. / In conjunction with the HSE Manager, project management plans are developed and implemented on projects. / Resources are allocated to implement and maintain the HSE requirements on the project. / ADCO project personnel have received training to fulfil their HSE responsibilities. / Project personnel are aware of current HSE legislation and their obligations. / HSE performance on the project is reviewed and non-compliant activities by employees and subcontractors are addressed.
Site Manager	<p>Ensure that:</p> <ul style="list-style-type: none"> / Legislative requirements for HSE management are implemented and maintained on the project site. / The requirements of project HSE Management Plans are implemented and managed on the project. / The requirements of the Corporate Management Systems are implemented and managed on the project. / Any issues which may arise over HSE requirements (legislative or Corporate) are managed on site. / Employees and subcontractors complete their work in compliance with legislative and Corporate Management System requirements. / Open lines of communication and consultation are maintained with the HSE Advisor and other parties (i.e. subcontractors, employee representatives) to ensure that the site operates in a safe manner and in compliance with regulatory and corporate requirements. / HSE performance on the project is reviewed and non-compliant activities by employees and subcontractors are addressed.
HSE Advisor	<p>Ensure that:</p> <ul style="list-style-type: none"> / Legislative requirements for HSE management are implemented and maintained on project sites. / The requirements of the Corporate Management Systems are implemented on project sites. / HSE performance on the project is reviewed and non-compliant activities by employees and subcontractors are addressed.
Health and Safety Representative (HSR)	<p>In general:</p> <ul style="list-style-type: none"> / Participate in risk and hazard identification and control. / Participate in incident investigations and management. / Participate in workplace inspections (e.g. with the Committee, with the project team). / Participate in project consultative forums. (e.g. HSE Committee) / Consult with and represent workers (i.e. work group) in health and safety issues.

All Other Project Personnel

All personnel are responsible for actively promoting and complying with Safety, Health and Environmental Management requirements as determined / advised / required by ADCO. Activities that all personnel are required to participate in include, but are not limited to:

- / Attend pre-start meetings.
- / Conduct pre-start tasks analysis.
- / Adhere to all permit requirements.
- / Report all hazards, near misses and incidents (including injuries).
- / Immediately stop any “at risk behaviour” identified during daily work activities.
- / Attend safety presentations and toolbox meetings.
- / Assist in achieving project HSE objectives and targets.

9 PLANNING

9.1 MANAGEMENT SYSTEM

ADCO's Management System comprises, without limitation:

- / Policies
- / Procedures and Protocols
- / Project Management Plans
- / Supporting documentation
- / Forms and Checklists
- / Guidance documents
- / Reports and Reviews
- / Information systems

The Management System includes the disciplines of Quality, Safety and Environmental management which meet the requirements of:

- / AS/NZS ISO 9001 (Quality Management Systems)
- / ISO 45001 (Occupational Health and Safety Management System)
- / AS/NZS ISO 14001 (Environmental Management Systems).

All personnel working with or for ADCO are required to incorporate the requirements of our Management System into their operational activities.

9.2 RISK MANAGEMENT

Risk management is a proactive process that helps ADCO respond to change and facilitate continuous improvement throughout our business. The core to effective risk management is having a comprehensive understanding of the risks associated with the project works.

The identification of environmental risks (aspects and impacts) will consider:

- / Situations / events that have the potential to give rise to injury or illness.
- / The nature of potential injury or illness relevant to the activity, product or service.
- / Past incidents, audit reports, etc.

The identification process will consider but not be limited to:

- / The way work is arranged, managed, completed.
- / The fabrication, installation and commissioning and handling and disposal (of materials, plant and equipment).
- / The purchasing of goods and services.
- / The inspection, maintenance, testing, repair and replacement of plant and equipment.

9.3 SAFETY IN DESIGN

Where ADCO does not have responsibility for the design of a building / component, a review of the buildability of the design will be completed any/all of the following: Design Manager, HSE Manager Project Manager, Estimator, Consultants, etc.

Where ADCO is able to influence design, a specific Safety in Design (SiD) process in accordance with the *Risk Management Procedure* will be carried out to ensure control of the design in regard to legislative requirements and to maximise the benefits of the design review process. The design review process will consider (where appropriate) the Hierarchy of Controls and look to eliminate risks at the design phase of the project. Safety hazards associated with design must be identified and managed with the aim to achieve successful identification of safety issues and other risks relevant to the design and the determination of measures to ensure fit for purpose and safe-operability requirements are achieved

SiD risk workshops involving the designers will evaluate the projects constructability and will be incorporated into the project risk register to ensure the identified risks and controls are in place for the project works.

9.4 PROJECT DOCUMENTATION

Prior to commencement of the project, the Project Manager and HSE Manager are required to develop the Project Management Plan, Risk Registers and any other supporting Plans. An assessment of project operating conditions will be made by completing the Project Review (Part A) – Commencement form. Information within the Risk Register will be supplied to subcontractors for trade pricing and development of their SWMS.

9.5 ASPECT AND IMPACT IDENTIFICATION AND REPORTING

ADCO encourages all site personnel to identify, report and action (where practicable and within their capacity to fix) hazards on the site whether within their work area or in any other accessed area. Risks or hazards, which cannot be actioned by the identifying person, must be reported to the Site Manager or HSE Advisor. The methods for reporting risks and hazards, include:

- / Verbal notification.
- / Advice at any of the consultative forums (e.g. pre-start meeting, committee meeting, subcontractor meeting).
- / Completion of the Issues Notification form.

Where a Site Manager or HSE Advisor is notified of a risk or hazard the following must occur:

- / The risk or hazard must be reviewed.
- / The risk or hazard should be assessed, and appropriate controls developed according to the principles of the hierarchy of controls.

Risk and hazards will be identified by the ADCO project team through performance evaluation activities.

9.6 LEGAL AND OTHER REQUIREMENTS

Legislation

ADCO's Management System has been developed taking into account Legislative, Australian Standards, Codes of Practice and Federal Safety Commission requirements. Legislation, Codes of Practice and Standards which are applicable to the project are identified in the project Risk Register. Access to current Legislation, Codes of Practice and Standards is available to all project personnel. Subcontract workers should liaise with the Site Manager or HSE Advisor for access through IT Forums.

Site Rules

Site Rules are applicable to all workers on this project and are:

- / Issued during the Workers Registration
- / Discussed during the Site Induction.

- / Discussed during the Visitor Induction.
- / Posted on site noticeboards – for review while on site.
- / Re-iterated as required during project consultative forums.

The objectives of the Site Rules are to:

- / Meet legislative requirement for OHS and environmental management.
- / Define ADCO's minimum operational standards.
- / Prevent harm to people and the environment.
- / Provide a safe working environment.

Conduct on Site

All persons entering the site are required to:

- / Wear clothing such as shirts, shorts, trousers, etc. in a neat and tidy condition at all times. (No singlets, sleeveless shirts or inappropriate shorts permitted).
- / Comply with site rules and procedures
- / Observe restraint in the use of inappropriate language.
- / Not use amenities except those expressly provided for construction personnel.
- / Not bully or victimise any worker or management personnel.
- / Not use amenities except those expressly provided for construction personnel.
- / Report hazards and incidents immediately.
- / Ensure that work area/s are kept fenced to not permit public access.
- / Wear identification at all times. (e.g. Site Induction sticker)
- / Wear the mandatory signed PPE at all times.
- / Feel free to discuss any issues troubling you with our HSE Advisor or Site Manager (confidentiality will apply).

10 SUPPORT

10.1 TRAINING AND COMPETENCY

10.1.1 Training Needs Analysis

ADCO has undertaken a Training Need Analysis that identifies relevant training and competencies to undertake work activities. ADCO will communicate training and competency expectations throughout the procurement process to ensure the required skill levels of workers is understood and established.

ADCO will maintain a project induction / training register through its online HSE Management System HammerTech which will capture worker licences and competencies required to carry out works on the project.

Course / Competency Description	Position	Date to be completed by	Provider
Project Specific Induction	All workers	Prior to commencement onsite	Site Manager / Site Supervisor / HSE Advisor.
Toolbox Talk - Environmental Awareness	All workers	As required	Site Manager / Site Supervisor / HSE Advisor.

10.1.2 Project Specific Induction

Training and instruction are key requirements to ensuring that workers can perform their duties and tasks without risk to their health and safety or the health and safety of any other persons.

Project Induction

The ADCO induction process is a prescribed method of ensuring that workers are provided with information on:

- / Environmental Management Plan – purpose and objectives
- / Legal requirements
- / Environmental Responsibilities
- / Vegetation and fauna management requirements.
- / Environmental monitoring and data reporting requirements.
- / ASS, groundwater, dewatering and contaminated land management requirements.
- / Aboriginal heritage and Aboriginal heritage management requirements.
- / Hazardous Materials and hydrocarbon management requirements.
- / Waste management requirements.
- / Weed and hygiene requirements.
- / Inspection and audit requirements
- / Environmental emergency / spill response and incident management and reporting.
- / Unexpected finds management.
- / Sensitive areas including local residents, sites known of contamination, flora and fauna.

All persons who are attending the site for the purpose of completing construction activities must attend and complete the site induction (including the supply of skills competency evidence) before commencing any work activity on the site.

The project induction consists of an ADCO animated video with voice over which details the ADCO requirements for carrying out works on the project. Following the ADCO induction a project specific induction consisting of a PowerPoint presentation with voice over will be delivered by the ADCO Site Manager or HSE Advisor will incorporate project specific requirements.

Visitors

Visitors will not be site inducted and will be required to:

- / Report to the Site Office on entry and at exit from the site.
- / Sign in to and out of the Register – Visitors.
- / Be accompanied and remain within two metres of a site inducted person at all times.
- / Wear mandatory PPE as signposted.
- / Wear footwear and clothing appropriate to a construction site.

Records

Induction information, including supporting documentation, will be maintained on site in a restricted storage facility, by the Site Manager and/or HSE Advisor or online HSE Management system.

Site induction information will be archived for a period of at least seven (7) years after completion of the project.

10.1.3 Training

ADCO Personnel

Training and competency requirements for ADCO personnel (mandatory and recommended) are noted in:

- / Position Descriptions
- / ADCO National Training Matrix

State Managers, Construction Manager and Project Managers must ensure that project personnel are trained and competent in accordance with the requirements noted in these documents. Information related to completed training will be maintained on and filed with the National Skills Register.

Subcontractors

Subcontractors are required to ensure that their personnel are in possession of the required licenses / competencies and have undergone training/ instruction to complete work activities in a safe manner.

The required licence / competency to undertake work is to be in accordance with applicable *Risk Management* or *Operational Management Procedure*.

Evidence of mandatory work activity competency (e.g. high-risk work license, certificates of competency, etc.) must be provided to ADCO at the time of site induction. Evidence supplied to and approved by ADCO will be included with the worker's induction records.

10.2 COMMUNICATION AND CONSULTATION

Pre Start Meetings

A daily Pre Start Meeting to identify and discuss safety issues / hazards / controls relative to daily work activities will be held by the Site Manager. Subcontract personnel (i.e. Supervisors) are required to attend the briefings prior to commencing their work activities and conduct pre-work briefings with their respective crews.

Issues to be discussed at the meeting, include but are not limited to:

- / The tasks being completed by each trade during the shift.
- / Risk and hazard management requirements including the requirement for any Permits.
- / Incidents, accidents and near misses from any previous shifts.
- / Health and safety issues raised by the workforce.
- / Opportunities for worker input.

Details of the meetings (attendees, topics discussed, concerns arising, proposed actions) will be recorded on the Pre-Start Meeting form.

Toolbox Talks

On a fortnightly or at the initiation of ADCO (e.g. following an incident), or at the request of workers, topic-based Toolbox Meetings will be held on the project. The objectives of toolbox meetings are to:

- / Review the environmental performance in the work areas.
- / Discuss any topical or promotional environmental items, bulletins or alerts.
- / Discuss environmental aspects of work planned for the next week.
- / Discuss any proposed changes to work procedures.
- / Provide additional instruction to workers on quality, work health and safety and environment issues.
- / Allow workers to raise issues.

Details of the discussion topic will be recorded on the Toolbox form. Toolbox Meeting Minutes will be displayed on Site Notice Boards for project personnel to review.

HS Committee Meetings

At the initiation of ADCO or at the request of workers, a Health and Safety Committee (HSC) may be established on the project. All subcontract companies are required to ensure that a representative (elected or nominated) participates if requested by ADCO.

Details of the meetings (attendees, topics discussed, concerns arising, proposed actions) will be recorded on the HSE Meeting form. Copies of the meeting minutes will be issued to all committee members and placed on the site noticeboard for general site review.

Other Meetings

Other forums which may be used for the discussion of safety, health and environmental management issues include, but are not limited to:

- / Subcontractor coordination and management meetings.
- / Client meetings.
- / Stakeholder Meetings.

Details of the meetings (attendees, topics discussed, concerns arising, proposed actions) will be recorded on an applicable form and as required distributed to other parties.

Notification

Details of the dates and times of consultative forums will be advised to site workers at/on:

- / Site Induction
- / Pre Start Meetings
- / Site Notice Boards

Notices – Alerts, Lessons Learnt and Bulletins.

Notices will serve as a reminder to workers of the messages that have already been delivered via project consultative forums. They will not serve as the primary method of work health and safety communication. Work health and safety notices will be posted on Site Notice Boards, located external to site offices and within amenity areas or other highly frequented areas and can include information such as:

- / Company Environmental policies
- / Cultural heritage
- / Protected flora and fauna
- / Restricted Areas / Site Sensitivity Maps
- / Site Traffic Movement Plan

Notice Boards will be updated and maintained by the Site Manager and HSE Advisor.

Communication and Consultation across languages

In accordance with procedure *Consultation and Communication* ADCO has a process in place to ensure that communication and consultation occurs with all workers, including those with limited English. This includes:

- / Assessing the language profile of the workforce.
- / Delivery of project inductions.
- / Subcontractors responsible for communicating and consulting with workers with limited English that includes use of translators and interpreters, diagrams and drawings, health and safety signage and allocation of resources for training, interpreters or translation of health and safety information.

11 DELIVERY

11.1 PROCUREMENT AND CONTRACT MANAGEMENT

11.1.1 Environmental in Procurement

Procurement Process

Prior to commencing any construction works and during the Procurement Process, ADCO will identify and list subcontractors / suppliers with capability to carry out the works. The suitability of subcontractors and suppliers (new and existing) will be assessed against:

- / Their company profile, expertise and previous history;
- / Internal recommendations of capability and reputation;
- / Location and proximity to the project site;
- / Their commercial and financial viability;
- / Their compliance to regulatory / legislative requirements;
- / Western Australian industry participation;
- / Compliance with requirements to issue a full, fair and reasonable opportunity on the supply requirements for the project;
- / New and retained apprentices and trainees;
- / Construction methodology;
- / Proposed personnel;
- / Project resourcing;
- / Adherence to ADCO management plans;
- / Quality management;
- / Ability to meet project timeframes;
- / Cost of money for payment terms;
- / Occupational health and safety; and
- / Risk profile.

ADCO's HSE standards are required to be adopted and maintained throughout the life of the project. Prior to work on site, subcontractors require a briefing to ensure that all work health and safety precautions are in place and to review:

- / How compliance with the Safety Management System will be achieved including site specific requirements.
- / How they intend to comply with ADCO's systems.
- / Documentation outlining their safe methods of work.
- / Establishing performance monitoring, supervision and incident reporting protocols, and procedures.

ADCO and Subcontractors procuring plant, equipment and items to be used throughout project delivery are to review and inspect all items to ensure that no additional hazards / risks are unknowingly introduced on the project.

When materials are supplied to the Project, the project team member responsible for the procurement is to ensure all work health and safety information has been included and is distributed to the workers identified as needing to understand the requirements.

Products and Materials

Products and materials are subject to verification by the Site Manager at the time of purchase and/or at delivery to ensure conformance to contract requirements.

Goods delivered to the site, may be subject to a receiving inspection by ADCO or the subcontractor representative who takes delivery. Should it be required within the Inspection and Test Plan (ITP), evidence of review and acceptance (i.e. manufacturing certificates, standards verification, origin of supply, etc.) will be held in the project site

office for the duration of the project. At project completion, such documentation will be collated with “As Built” documentation or archived.

The Site Manager will be responsible for reviewing any Inspection and Test documentation required from and/or generated by the subcontractor in verification that their products and materials meet the requirements of the contract. Subcontractors must ensure goods are stored in designated areas and in accordance with the manufacturer's requirements.

Non-conforming products will be labelled and segregated from conforming products and will be subject to the Non-conformance management process.

11.1.2 Subcontractor Management

Safe Work Method Statements

Prior to the commencement of ALL work activities including High Risk Works (as defined in the OSH legislative requirements) must provide Safe Work Method Statements (SWMS) to ADCO for review and acceptance.

The review and acceptance process is managed by the Site Manager and HSE Advisor. The Safe Work Method Statement Review Record form details the minimum requirements that must be detailed within SWMS documentation.

SWMS classified as High Risk under legislative requirements will reviewed utilising the Safe Work Method Statement Review Record – High Risk. Work activities that are not ‘High Risk’ as defined by legislation will be reviewed utilising the Safe Work Method Statement Review Record – ‘Low Risk’. Documents such as Procedures or Instructions are acceptable for Low Risk work activities.

- / A description of the work activity.
- / Details of Plant or substances to be used to complete the work activity.
- / Risks and controls measures for the work activity.
- / Environmental mitigation strategies for the work activity.
- / Emergency management procedures for high risk activities.
- / Details of who is responsible for managing the work activity and the controls.
- / Evidence that workers have been consulted in the production of the SWMS and provided instruction and training.

Works cannot commence until SWMS documentation has been accepted for use.

Plant and Equipment

Subcontractors are required to maintain Inspection and Test Records and Plant Registers for all plant and equipment procured by them (or under their control) to meet legislative or standard requirements. A competent person is to maintain documented daily inspections (or as per manufacturers’ requirements) of the plant.

Copies of all plant documentation will be maintained on the online HSE Management System – HammerTech. The Equipment Register will provide prompts when plant and equipment is scheduled service or inspection.

Monitoring

The monitoring of subcontractor site activity compliance to accepted SWMS will be:

- / Managed by the Site Manager and HSE Advisor through regular visual inspections.
- / Documented on the Weekly Site Inspection Form.

Non Compliance

Where a non-compliance (to accepted work methods) is observed, the Site Manager or HSE Advisor will do any/all of the following:

- / Stop the work activity.
- / Cancel / suspended any active ATW Permit.
- / Issue a non-compliance notice through Aconex or online HSE Management System.
- / Issue a verbal instruction.
- / Non-compliances will be listed in the Register – Non-Compliance or through Aconex.

Where a worker does not comply with a risk or behaviour control requirement, disciplinary action through the ADCO non-conformance system will be initiated. Dependent on the severity of the non-compliance, workers are subject to a tiered warning system and may receive up to 3 warnings for engaging in the same non-compliant activity.

Written warnings in the form of an Improvement Notice are issued to a company, when an individual of that company has engaged in a non-compliant activity.

ADCO reserves the right to deny a person access to site - irrespective of the number of warnings required / issued - if the non-compliance could / has resulted in a dangerous occurrence. This determination will be made in consultation with Construction Manager, Project Manager, Site Manager and HSE Manager.

Non-conformances identified through visual inspections, site inspections or task observations are documented within Register – Non- Conformances and is accessible to the ADCO project team.

Archiving

Subcontractor supplied documentation will be archived by ADCO for a period no less than seven (7) years after project completion. Duration of archiving may be extended if the Safe Work Method Statement is applicable to an incident or in relation to use of hazardous substances etc.

11.3 SYSTEMS OF WORK

11.3.1 Waste management

Waste sources

Identified sources of waste generated from project delivery include:

- / Metal.
- / Concrete / sand.
- / Wood.
- / Plasterboard.
- / Excavated Material (if soil has been classified as contaminated)
- / Organic.
- / Glass
- / Plastic
- / Paper and cardboard
- / Polystyrene

Waste Management

A form of waste minimisation, recycling and reuse program is established and promoted throughout the project period. Where waste minimisation is a requirement of project compliance (e.g. green star), waste strategies are included in the site induction program.

Waste categories on the project will consist of solid waste, liquid waste, food waste and contaminated waste (if applicable). Waste management of the project will consist of single

stream or co-mingled bins to collect waste material. All waste (excluding hazardous waste) will be transported to an offsite facility for disposal. The project will manage waste by:

- / Designating waste storage areas.
- / Recycling waste products wherever possible.
- / Waste storage areas will be located in accessible areas for both vehicles and personnel to allow for easy access for collection and transport.
- / Waste bins will be maintained in good condition to prevent leaks and spills.
- / Defective containers will not be used for waste storage or transport.
- / Hazardous waste (e.g. asbestos) will be contained and separated from other waste categories. Hazardous waste will be disposed of at an approved waste disposal facility and evidence of disposal i.e. waste disposal dockets obtained.
- / Establishment of a designated concrete wash out area. Where practicable excess concrete will be recycled onsite for use e.g. access and egress routes or stabilise fill material.
- / If applicable – Material contaminated by spills i.e. fuel, oil, lubricants etc. will be stored in sealed containers and disposed of at an approved facility.
- / Actively encouraging Contractors and Suppliers to use non-toxic or recycled products and recycled packaging.
- / Encouraging Contractors and Suppliers to reduce the amount of packaging materials brought on to site.
- / Ensuring that all persons working on our projects are made aware of their responsibility for achieving a green working environment.
- / Any contaminated soil on the project will be classified prior to removal and transport directly to an approved disposal facility.

Food Waste

- / Food waste will be managed to prevent birds and vermin accessing the waste.
- / Lidded food waste bins will be located in the site amenities areas i.e. offices / lunchrooms.
- / Designated food waste bins will be emptied on a daily basis.
- / Food waste bins are to be kept covered
- / Food waste will be contained in bags which will be secured / tied when emptied
- / Work areas are to be kept free of rubbish and other debris at all times.
- / No food waste to be deposited directly into external construction waste skips.
- / Active rodent control established on the site i.e. baits around site perimeter.

Housekeeping

The Site Manager will ensure that Site Amenities i.e. crib rooms and toilet blocks are maintained in a clean and tidy condition at all times. All waste bins shall be covered and sealed and all organic waste shall be removed from site on a regular basis.

Each Subcontractor must maintain a clean and tidy workspace. If after a formal warning, any Subcontractor who does not maintain their workspace in a clean and tidy manner and properly dispose of its waste, the Project Manager will arrange for the workspace to be cleaned and waste segregated to be properly disposed of with the associated costs back-charged to the non-compliant Subcontractor.

The Project Manager will ensure that an adequate number of waste bins have been provided and are located as close to areas of work as practicable for the material to be removed from the site by the subcontractor's waste removal contractor. All bins shall be covered by lids where available to prevent material from being dislodged during transport of storage.

Trucks and vehicles delivering goods, materials, plant, equipment, etc. must so far as practicable not traverse mud, dirt, stones or other materials to external areas of the site so as not to cause injury, nuisance or damage to the surrounding environment. Should surrounding roads, footpaths, watercourse and verges be soiled with dust, sand, grit, litter, debris, mud and the like caused by site activities, the Project Manager will undertake to have them cleaned immediately.

The site must be maintained in a clean and tidy condition at all times. A formal housekeeping inspection will be completed on a weekly basis by the project team utilising the Weekly Site Inspection form.

Waste Removal and Disposal

Removal and recycling of waste will be provided by a licenced waste removalist. Trucks removing material from site will have the loads securely covered to prevent spillage. Drivers are required to ensure that no materials are tracked onto the road.

Should surrounding roads, footpaths and verges be soiled with dust, sand, grit, litter, debris, mud and the like caused by site activities, the Project Manager will undertake to have them cleaned immediately e.g. road sweeper.

The transport of all materials from the site will comply with the requirements of the EPA, Local Councils, Road Transport Authorities (RTA) and other relevant authorities. Waste removed from site will be disposed of at an appropriately licenced waste disposal facility. On a monthly basis a Waste Management Report will be provided to ADCO which will detail quantities of waste that are recycled, reused or go to landfill.

11.3.2 Substance Management

Substance Use

ADCO will have appropriate measures in place to use and store hazardous substances / dangerous goods to prevent accidental or intentional release to the natural environment leading to environmental harm, including impacts to air and water. The following management protocols will be implemented and monitored for implementation on a daily basis:

- / Maintaining a limit of 250 litres of each substance on site at any one time. Note: Any requirement to use or store more than this quantity, requires an ATW Permit issued.
- / Subcontractors providing a site-specific SWMS detailing the work activities, risks and control measures. (No work will proceed until ADCO Constructions has accepted the SWMS).
- / Current SDS for each substance will be available for reference. SDSs are to be Australian and issued within the previous 5 years. SDS information will be located in the Site Office.
- / Current Register for such substances as used on the site. (The Register detailing the nature, quantity and location of all hazardous material must be maintained and regularly updated).
- / Ensuring that the substances and their containers are correctly labelled and contained.
- / Erection of appropriate warning/emergency panel signage to warn of the location of the substance.
- / Ensuring that the substances are safe from use or access by other parties.

- / Completing regular inspections of vehicles, containers, bunding and equipment to check for any leaks or spills.
- / Providing appropriate fire suppression equipment.
- / Providing details for ensuring that at the completion of the works, all residual stocks of substances are guaranteed to be removed from the construction area.

Substance Storage

Substances must be stored in accordance with Procedures - Substance Management. To ensure the protection of human health and the environment the following is to be implemented:

- / Storing the substances in a manner which complies with the Code (and with AS 1940, AS 4332 and any other applicable legislation or standards)
- / Storage units are only to be used outdoors.
- / Storage units are not to be located where they could hinder escape from a building in the event of a fire or other emergency;
- / Storage units are to be separated from boundaries and other buildings and infrastructure by the distances required by the relevant Australian Standard.
- / Storage units must be adequately secured against high wind conditions.
- / Storage units are to be positioned, or otherwise protected (e.g. with bollards) so that they are protected from vehicle impact.
- / If two or more storage units are positioned together, they can only be treated as individual stores if they are separated by the distance required by the relevant Australian Standards.
- / If two or more storage units are positioned together, they must not be positioned so that there is any restriction of ventilation through any of the installed vents.
- / The area around storage units is to be kept clear of combustible materials (e.g. timber pallets), vegetation and refuse for a distance of at least 3 metres.
- / Storage units are to be located at least 3 metres away from heat sources. Refer also to separation distance requirements outlined above.
- / Storage units for flammable and oxidizing materials are to be kept away from ignition sources. This includes electrical installations (such as power-points, light-switches and light-fittings), traffic routes, carparks, and work areas where ignition sources may be present (e.g. areas where welding or grinding may take place).
- / For gas cylinders in storage units, separate incompatible gas cylinders by at least 3 metres.
- / Bunds to be of sufficient size and capacity to accommodate substances stored in the event of a spill.
- / "DANGER" signage to be placed in visible positions to warn of dangers (flammable substances).
- / Fire suppression equipment to be located with the substances.
- / Incompatible goods are not to be stored in the same cabinet. Specific information for individual products can be found on the product Safety Data Sheet (SDS).

Spill management

Substances (chemicals and / or hydrocarbons) that leak into environment can lead to environmental and/or human harm. Equipment failure, poor operation or accidents can all give rise to the potential spills. Any spillage has the ability to impact soil, water, flora or fauna in an adverse manner.

To mitigate and control any unplanned event or spill, emergency spill kits will be strategically placed around the project and clearly defined on the Emergency Plan. Any

spill, irrespective of size, must be reported to the ADCO project team who will investigate and implement appropriate risk treatments.

In the event of hydrocarbon contamination as a result of project activities, the affected area will be contained and cleaned up.

11.3.3 Dust/ Odour Management

General

ADCO will prevent any nuisance occurring through the discharge of dust, dirt, water, fumes and the like on to persons or property. Strategies to be implemented to prevent dust and odour generation and potential nuisance includes but is not limited to:

- / Restrict vehicle movements to designated routes.
- / Apply water sprays to earthwork and demolition locations as required during periods of dry weather, strong winds or dust generating activities.
- / Use shade cloth around work areas where practicable.
- / In the event that excavated materials will be stockpiled, onsite stockpile management practices will be carried out. These include water sprays and locating stockpiles away from public and residential properties as much as is reasonably practicable.
- / Minimise dust generating construction activities during periods of high winds or adverse weather.
- / Cease relevant construction activities should they be found to be generating excessive dust until effective control measures are implemented.
- / As required, implement regular sweeping (including road sweeping) and cleaning activities.
- / Monitor and manage the incidence of dust deposition from construction activities and construction vehicles.
- / Daily and Weekly visual monitoring of dust and dust management controls will be carried out by the Site team..
- / Ensure that subcontract personnel adopt work methods to include dust minimisation practices.
- / Implement corrective action in response to diminished air quality as a consequence of construction activities or vehicles.
- / Restrict construction traffic to designated / sign posted traffic routes.
- / No burning off will occur on the site.
- / Site amenities areas will have nil dust generating activities that will require additional dust management strategies in place.
- / Ensure plant is regularly maintained for management of vehicle fumes/ odours to the surrounding areas
- / Re-fuelling of plant to be in open space away from site boundary to manage fumes/ odour to surrounding areas

Monitoring and recording

Where dust and odour management controls are identified as being inadequate ADCO will investigate and identify the root cause and cease the dust generation activity until suitable controls have been implemented.

11.3.4 Construction Noise and Vibration Management

Management

ADCO will comply with AS/NZS 2436 Guide to Noise Control on Construction, Maintenance and Demolition Sites. Works will be carried out during the approved working hours only and

all noise generated through plant will be assessed through the plant mobilisation and induction process.

To ensure that plant and equipment used throughout construction is the quietest reasonably available ADCO will:

- / Ensure that Plant is inspected at first entry to site and then at regular intervals. Refer to Procedure: Operating Plant (mobile plant).
- / Where practicable, position Plant / equipment (e.g. start-up, parking, refuelling, generators) away from noise-sensitive areas.
- / Where practicable, avoid simultaneous operation of noisy Plant /or equipment.
- / Ensure that Plant / equipment is serviced as per the manufacturer's instruction and maintained in good working order.
- / Ensure that Plant / equipment is switched off when not in use.
- / Where practicable, select alternative Plant or equipment to complete the activity.

The ADCO Project team will ensure compliance to noise and vibration management controls through:

- / Communicate noise generating activities with key stakeholders.
- / Carrying out works within approved Construction Hours.
- / Regular inspections (documented in the Weekly Site Inspection) and completion of corrective actions where required.
- / Inclusion of noise and vibration awareness and control requirements through consultative forums.
- / The use of the daily Pre-Start Meeting to discuss awareness, control compliance and requirements.
- / Ensuring, so far as is practicable, that personnel involved in or working near noise generating activities on the construction site, wear PPE applicable to the activity.
- / Ensuring, that signage advising of the hazard/s are posted in visible locations around the work activity area.
- / Where construction activities may result in noise / vibration impacts Facility, notification will be provided to the affected parties.
- / The location of the works within the site will be considered and appropriate and suitable equipment will be selected based on the proximity to adjacent properties.

Monitoring and recording

Should a complaint be received regarding noise / vibration ADCO will investigate and identify the root cause and cease the noise / vibration generating activity. In the event that Noise / Vibration monitoring is deemed necessary monitoring will be carried out by a suitably qualified person.

11.3.5 Stockpile Management

Management

To prevent contamination of nearby watercourses and potential dust emissions which degrade air quality, ADCO will implement the following control measures:

- / Stockpiles will be located as far away from residential buildings as is practical.
- / Topsoil stockpiles to be located on flat areas, clear of drainage lines and at significant distance away from waterways, roads, and slopes of greater than 10%.
- / Stockpiles to be located at least 3 metres from tree drip lines.
- / Stockpiled materials not to be placed inside vegetation protection areas or within 5 metres of retained trees.

- / Stockpiled materials not to be placed within 5 metres of waterways or stormwater inlets.
- / Clean topsoil and friable subsoil to be stockpiled separately and re-spread in areas to be revegetated
- / Weed infested topsoil to be stockpiled separately and removed from site or re-spread in a manner which mitigates the spread or re-introduction of weeds.
- / Install bunding/silt fencing around stockpiles to prevent against water runoff.
- / Dampen stockpiles by means of water sprays to management dust emissions.
- / Where practicable, vegetate stockpiles to improve soil stability.
- / In the event that stockpiles are to remain for extended periods of time (>12 months) hydro mulch or similar may be required to ensure stabilisation.
- / Limit the height and volume of stockpiles so that control measures can be implemented.
- / Stockpiles and control measures to be monitored regularly and immediately rectified as required.

11.3.6 Sediment Control and Onsite Water Management

Management

- / Surface water management will be considered into the staging of the construction works program. Regular inspections of stormwater and surface water controls will be undertaken, and issue identification and corrective actions recorded on the online HSE Management System.
- / The risk of erosion and sedimentation is a direct consequence of exposure of soil to rainfall and stormwater runoff. Sedimentation involves the deposition of eroded material into surrounding areas. Refer to Appendix A for Sediment and erosion plan
- / To control the risk of erosion or sediment impacting on the natural environment, ADCO will:
- / Install erosion and sediment control devices to mitigate and manage the impact of excess soils on nearby roads, surface water quality, air quality, fauna and flora.
- / Erosion and sedimentation controls to be monitored on a weekly basis or immediately following a rainfall event.
- / Ensure that the handling and placement of excavated material is in accordance with WMS, Client instructions, EPA requirements etc.
- / Complete daily inspections of stockpiles, excavated areas and control methods for erosion and sediment management.
- / Residue to be disposed of in an appropriate manner.
- / All drainage inlets near or within the site must be protected against silt infiltration and soil run off with the use of silt traps, sandbags and/or geo-fabric protection.
- / ADCO Constructions will ensure that all drains and gutters leading to the storm water system within the Site have sediment control measures installed to prevent sediment entering into the drainage system and waterways.
- /
- / Stormwater Discharge
- / To discharge water off a project site it may also be required to hold:
- / / An approval or written agreement from the local council or authority; or
- / / A licence or written acknowledgement from the relevant State environment protection authority; or
- / / An approval or written agreement from a Commonwealth client or environmental representative; or

- / / A trade waste agreement/permit from the applicable water/sewer authority.
- / Determining Acceptable Water Quality Discharge Limits
- / Site specific water quality discharge limits must be determined based on an assessment of the receiving environment and/or waterway.
- / As a minimum, the assessment must consider:
 - / Location and existing uses of the receiving environment e.g., proximity to a waterway, recreational uses, water supply.
 - / Relevant characteristics of the catchment e.g., natural, or disturbed, rural, or urban.
 - / Water quality of any aquatic receiving environment considering variations associated with tides, rainfall, seasonal or other potential influences (where it is practical to assess this). This may require a program of investigations to determine the existing water quality and observed variations.
 - / Habitat values of the receiving environment and surrounding area e.g., sensitive habitat or protected species,
 - / marine park, natural vegetation, wetland.
 - / Quantity of water expected to be treated and discharged under varying environmental conditions and construction timeframes. Method of detention and treatment proposed, and the areas or facilities available.
 - / Risk of pollution and/or environmental harm (aquatic and terrestrial).
 - / In determining appropriate discharge criteria, relevant Australian/New Zealand, State and Local water quality guidelines, codes and legislation must be considered.

Discharge criteria must be identified for a range of water quality parameters including:

- / Hydrogen Potentials (pH) in the range of 6.5 to 8.5.
- / Nephelometric Turbidity Units (NTU) (correlated to TSS – to facilitate on site ‘indicator’ testing) - typically limits range between 80-100.
- / Oil and grease (no visible sheen observed)

Dewatering activities must be consistently supervised and visual checks of the discharge point at the receiving waterbody must be undertaken at regular intervals where this is feasible and practical.

Entering Site

- / Identify vulnerable locations on site and install control devices as far as practicable to halt or alter course of water.
- / Inspections prior to a major weather event.

Exiting Site

- / Identify vulnerable drains, low points and stormwater runoff points.
- / Install control devices (i.e. silt fencing, bunding, diversion devices, sandbags, etc).
- / Daily inspections and maintenance of control

Ground Water Management

As per Geotechnical report developed by JK Geotechnics, dated 15 November, ground water is unlikely to be encountered during excavation. Therefore, a site-specific ground water management plan is not required for this site

If groundwater is found unexpectedly, the following will be undertaken

- / All groundwater captured on a site must be assessed before being discharged off-site, to prevent
- / downstream environment damage (pollution) and to avoid breaches of environmental protection legislation, which must be identified specific to the locality of the project site.
- / This means that before commencing any dewatering from a project site, an assessment, including the following considerations, must be completed:
 - / 1. Identify the contaminants of potential concern for the site and proposed dewatering activities.
 - / 2. Undertake a robust assessment of the environmental conditions of receiving environments (aquatic and/or terrestrial); i.e., test the quality of the receiving waters downstream of the project site, e.g.; creek, river, harbour, estuary.
 - / 3. Complete a risk assessment.
 - / 4. Identify discharge water quality criteria appropriate to the receiving environment (water or land), considering relevant environmental legislation or any local government or other authority discharge criteria.
 - / 5. Document dewatering, testing and treatment methods, products, dosing regimes, procedures, and responsibilities.
 - / 6. Develop, communicate, and follow site specific documentation processes e.g., checklist / register. The above process must be managed by ADCO in conjunction with the relevant Subcontractor or Service Provider, a suitably qualified consultant and in consultation with the relevant environmental or approval authority. Subcontractor developed dewatering proposals or plans that defer to 'industry standards' to set 'generic' non site-specific water quality discharge criteria, cannot be accepted or implemented.

11.3.7 Materials Storage

General

Construction material required to carry out project works will be stored within designated storage areas within the site compound. The capacity of bunds and containment areas will be maintained at all times. Where necessary bunds will be pumped out after rain events, water tested and disposed of appropriately.

Prior to any delivery of materials, mobile plant or tools, subcontractors to consult with ADCO Site Management on the following:

- / Permissible items permitted on site including DG/Hazardous Substances.
- / Storage areas for trades / materials / substances / Plant.
- / Permits or pre- entry inspections including documentation (e.g. Safety Data Sheets, Validation Certificates etc.) required for Plant, tools or substances.
- / Hazardous substances and flammable goods to be stored in an approved lockable storage cage. Subcontractors to provide their own lockable cages.
- / Pre- delivery inspections to ensure that materials are in accordance with SHE requirements.

- / Use of bunds and containment areas.
- / Items found not to be conforming are to be secured and removed from site.
- / Capacity of bunds and containment areas will be maintained. Where necessary bunds will be pumped out after rain events and disposed of appropriately.

11.3.8 Foreign Object Damage

Site Compound

To manage the potential of Foreign Object Damage (FOD) within the site compound, ADCO will:

- / Area to be contained within perimeter fencing.
- / Appropriate storage containers based on the nature of the product being stored will be provided and located in a designated area.
- / Containers must be closed except for when personnel are accessing or working within the container.
- / Items within containers must be secured.
- / Waste must be placed into supplied receptacles fitted with lids.
- / Waste lids are to be closed at all times.
- / Material or equipment stored external to site sheds or containers must not have any fittings, fixtures or wrapping which could come loose and cause a hazard.

Work Areas

To manage the potential of Foreign Object Damage (FOD) within project work areas, ADCO will:

- / Material or equipment transported to the work area must be secured to ensure that no fittings, fixtures or wrapping could come loose and cause a hazard during transportation
- / Work areas are to be maintained with a high standard of housekeeping at all times and must be free of loose material, packaging, debris etc. at the close of each shift.

11.3.9 Plant Movements

General

To ensure that no fuel, lubricant, mud, dirt, stones or other materials is spilled, or other materials is spilled or deposited onto roads or footpaths resulting in damage, loss, injury or nuisance ADCO will:

- / Install control measures (i.e. water spraying, rumble grids, road sweepers) which limit the opportunity for dust, noise or spillage to occur.
- / A truck wheel wash to be in place to ensure mud is not tacked onto the surrounding roads
- / Limit site speed Limits.
- / Loads to be covered prior to leaving the site.
- / Daily inspections of control measures to be conducted and immediately rectified as required.
- / Work activity requirements to be included in the Site Induction.

Traffic Management / Movement

- / Comply with any approved Traffic Management Plan for external site traffic management.
- / Where practicable, co-ordinate deliveries and site activities with out of peak traffic hours.
- / Monitor traffic flows and implement corrective actions in response to traffic impacts as a consequence of construction activities.
- / Daily inspections of control measures to be conducted and immediately rectified as required.

Roads and Footpaths

- / Work activity requirements to be included in the Site Induction.
- / If required under planning, inform local community about the timing and scale of construction traffic impacts.
- / Protect footpaths, kerbs and roads from damage through (e.g.) use of metal plates, restriction of heavy vehicles, prohibition for storing equipment or material on roads and footpaths etc.
- / Daily inspections of control measures to be conducted and immediately rectified as required.
- / Work activity requirements to be included in the Site Induction.
- / Should surrounding roads, footpaths, watercourse and verges be soiled with dust, sand, grit, litter, debris, mud and the like caused by site activities, the Project Manager will undertake to have them cleaned immediately.

11.3.10 Refuelling

Management

The following management protocols will be implemented:

- / There will be limited storage of fuels onsite.
- / Refuelling is to occur in designated refuelling areas with preference for refuelling to be carried out by mobile fuel vehicles / trailers.
- / Fuels, oils and chemicals are to be stored in accordance with the relevant Standards and all appropriate measures taken to ensure that environmental performance is being fulfilled
- / Regular inspections of vehicles, containers and equipment to be completed to check for any leaks or spills.
- / Ensure that appropriate storage facilities and fire suppression, spill management is used.
- / Ensure that containers are correctly labelled and that minimal quantities are stored on site.
- / Where possible, request substitution of substance with less harmful substances.
- / Major servicing of machinery to be completed off site.
- / Hoses to be fitted with a stop valve
- / Spill response kit to be readily available during refuelling activities.

11.3.11 Heat

Management

Throughout project delivery ADCO will ensure that workers are aware and have the required controls to mitigate the risk associated with long periods of heat and direct sunlight impacting on workers. Controls include but are not limited to:

- / Enforcing frequent breaks including weekly toolbox talks.
- / Use of SPF 50 sunblock and reapplication at frequent periods.
- / Site PPE Standards.
- / Increase fluid intake & additional water bubblers located throughout site.
- / Scheduling most strenuous works to occur at cooler times of the day.
- / Substituting physical activities to machine where applicable to reduce physical demands.
- / Measure daily temperature and humidity and display on site notice boards.

11.3.12 Light

Management

Prior to works commencing onsite ADCO will identify sensitive areas that may be impacted by lighting. This includes stakeholder operations, surrounding residents and fauna. Lighting plants will be sited so as not to shine towards residential properties. All

lighting will be put on Photo Electronic cells and faced away from properties, roadways and sensitive areas to ensure compliance with AS 4282-2019.

11.3.13 Flora and Fauna

Management ADCO will not remove, damage or destroy, or cause to be removed, any trees or shrubs at the Site without written approval of the Client / Superintendent. Prior to works commencing onsite ADCO will identify flora and fauna that may be impacted by construction activities. Flora and fauna management controls will be communicated to project personnel through the following consultative forums:

- / Subcontractor procurement meetings
- / Project Specific Site Induction
- / Daily debrief meetings
- / Toolbox Meetings
- / Site Notice boards and alerts.

ADCO will monitor compliance to fauna management through performance evaluation activities.

11.3.14 Dewatering

Management In the event that dewatering is required a dewatering management plan will be provided specific for the dewatering scope. ADCO will liaise closely with key stakeholders and obtain all required regulatory approvals required for the dewatering works. Dewatering works will not commence until all approvals have been obtained.

11.3.15 Seasonal Weather

Management In the event of an extreme weather event (such as a storm, heavy rainfall, high winds), ADCO will review the control measures identified within the EMP to ensure there is no environmental disturbance as a result of the weather event.

11.3.16 Unexcpected Finds

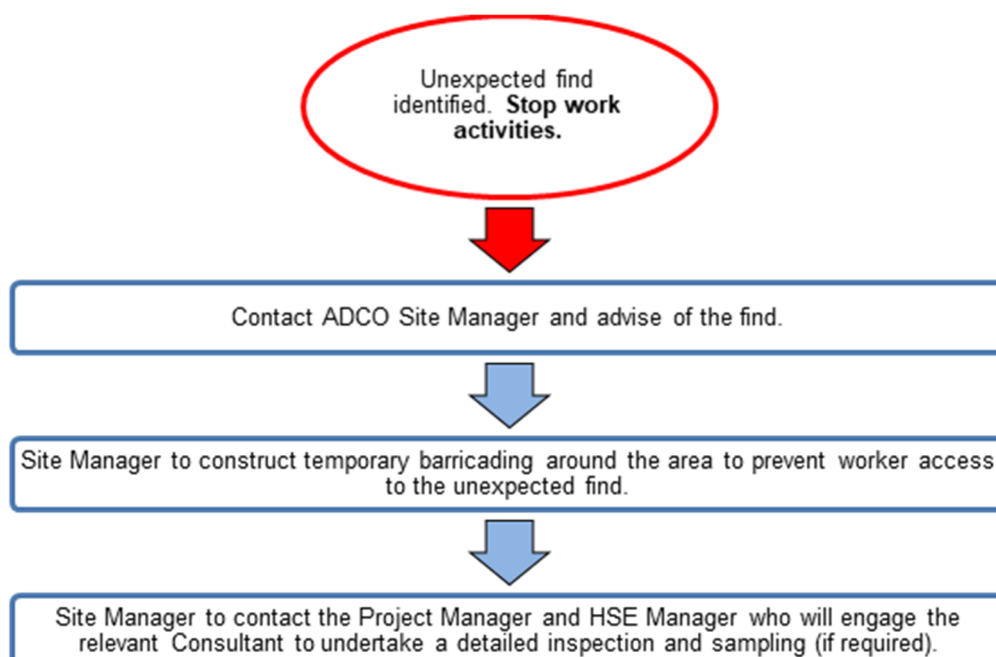
PROCEDURE IN THE EVENT OF AN UNEXPECTED FIND

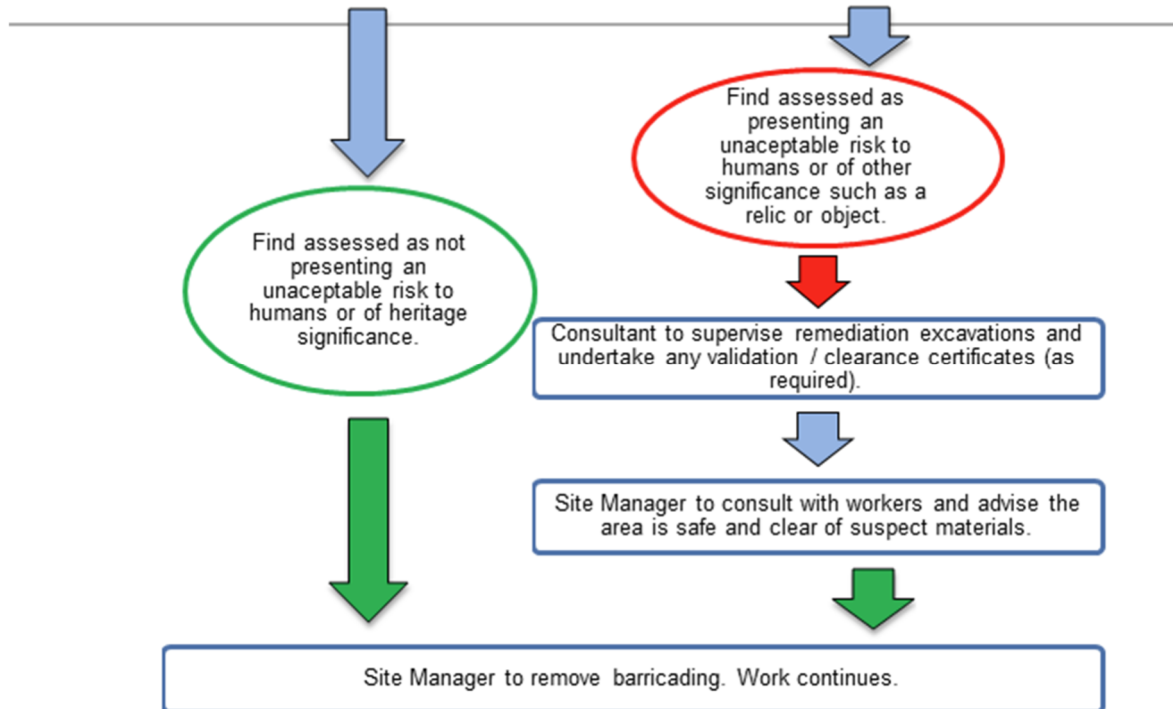
Should an unexpected find of potential contamination be encountered during the works, the following procedure (Steps 1 to 13) should be followed with reference to the Incident Response Flow Chart. It must additionally be ensured that implemented procedures are in accordance with the following:

1. Stop work in the potentially contaminated area as soon as it is safe to do so and move to a designated meeting point or safe area. Excavation will cease in the vicinity of the discovery.
2. Contact the ADCO Site Manager.
3. A suitable person must assess the potential risk to human health and the environment posed by the unexpected find and asses if evacuation or emergency services need to be contacted. A suitably experienced environmental consultant should undertake an assessment of any unexpected finds and determine any further actions required e.g. sampling and/or validation of material, potential for remediation and/or management.
4. Site Manager to delineate an exclusion quarantine zone around the area using fencing and or appropriate barriers and signage.
5. Project Manager or HSE Manager to arrange inspection by external Environmental / Heritage Consultant to assess the unexpected find and provide advice as follows:
 - Preliminary assessment of the find and need for immediate management controls (if any).
 - What further assessment and/or remediation works are required and how such works are to be undertaken in accordance with contaminated site regulations and guidelines.

- Preparation of a remedial action plan for large scale contamination or specification for smaller or minor volumes of material (if necessary).
 - Remediation works required (where applicable).
 - Validation works required following remediation works (if applicable).
6. Works are not to recommence in the affected area until appropriate advice has been obtained from the environmental consultant or suitably qualified person and they have provided clearance. Excavation will not recommence until the extent of the contamination has been assessed and, if necessary, a remedial action plan (RAP) has been prepared.
 7. Air monitoring requirements are to be advised by an Environmental Consultant.
 8. If it is deemed safe to do so, the environmental consultant will provide clearance for works to proceed in the affected area. If it is not considered to be safe, works must remain on hold until appropriate assessment, remediation and / or validation measures have been actioned.
 9. Excavated material from remedial activities will be separated from other materials and stockpiled for assessment. Sampling of the materials will be undertaken in accordance with the relevant guidelines or professional judgement where justification is applied. Samples will be analysed for a range of analytes as required for beneficial reuse or offsite disposal.
 10. For materials requiring offsite disposal, laboratory results will be assessed to determine the appropriate waste classification of the material in accordance with the NSW EPA Waste Classification Guidelines (2014). Depending on the classification, materials will be transported to an appropriate waste facility that is licensed to accept waste of the relevant classification or beneficially reused if appropriate.
 11. A waste tracking system recording the volume of material, waste classification / beneficial reuse status, removal documentation and truck and receiving landfill facility details must be recorded to ensure all waste is accounted for and disposed or appropriately in accordance with NSW EPA requirements.
 12. Any unexpected finds must be documented, and records of volumes and types of materials identified removed from the site must be kept on file.
 13. Keep a record of the unexpected find. The record must include exact location of the find. Documentation on the removal of any contaminated materials from the site must be kept on file
 - a. Volume of material removed,
 - b. The type (classification) of material,
 - c. Licensed facility that the material was disposed to,
 - d. Receipt documentation from the licensed facility confirming volume received.

INCIDENT RESPONSE FLOW CHART





11.3.17 Cultural Heritage

Management Where heritage management is a requirement of project compliance, work activities are completed with due consideration and protection. Cultural Heritage Management requirements will be included in the site induction and discussed through project consultative forums.

Unexpected Find An 'unexpected heritage find' is "any unanticipated archaeological discovery that has not been identified during a previous assessment or is not covered by an existing permit under relevant legislation".

The range of potential archaeological discoveries can include but are not limited to:

- / Aboriginal stone artefacts, shell middens, burial sites, engraved rock art, scarred trees.
- / Remains of infrastructure including buildings, footings, old kerbing and pavement, former road surfaces, timber and stone culverts, bridge footings and retaining walls.
- / Artefact scatters including clustering of broken and complete bottles, glass, ceramics, animal bones and clay pipes.
- / Human remains

When a "find" is identified in a work area:

1. All work in the find area must be stopped and the find must be reported to the Site Manager.

2. The Site Manager must establish a 'no-go zone' for at least 10 metres around the find. (e.g. fencing, solid barricades) where practical. No interference, including works, ground disturbance is allowed in the zone.
3. The Site Manager must notify the Project Manager.
4. If the find is human remains, authorities must be contacted immediately to report a death
5. If an object or relic is found, the Project Manager to contact a heritage Adviser and arrange for the Adviser to assess the find.
6. Subject to assessment, work may recommence at a set distance from the item. Existing protective barriers may need to be adjusted.
7. To recommence work in the find area, the Project Manager must obtain written clearance from the Adviser including any additional project/heritage approvals/determinations.
8. Where required, the Project Manager / State HSE Manager will be required to update the Project Risk Register to reflect the find and any additional conditions / controls.
9. The Site Manager or HSE Advisor will be required to incorporate any changes to the site induction.

12 INCIDENT MANAGEMENT

The management of incidents will occur in accordance with *Procedure – Incident Management*.

Reporting

The reporting of all incidents from work activities within and outside the work boundary is mandatory on ADCO project sites. Incidents to be reported includes:

- / Injuries regardless of severity
- / Near Miss Events
- / Environmental
- / General incidents e.g. property, equipment and service damage.

Workers are advised at the site induction that all incidents irrespective of type or severity must be reported to the Site Manager or HSE Advisor immediately upon occurrence.

In accordance with contract requirements, ADCO will notify nominated representatives of incidents within agreed time frames.

Investigation

Examples of environmental incidents include, but are not limited to the following events:

- / Unauthorised disturbance of vegetation;
- / Hydrocarbon or chemical spill;
- / Uncontrolled discharges into water bodies, creeks, stormwater drains etc;
- / Breach of licence or permit conditions; and
- / Unauthorised impacts to protected areas.

Incidents must be investigated by the Site Manager and HSE Advisor. The investigation is intended to:

- / Collate information / documentation associated with the incident.
- / Identify Contributing Factors and Root Causes
- / Identify job system and behavioural factors leading to the incident.
- / Identify non-conformances leading to the incident.
- / Identify corrective and preventative action to mitigate recurrence of the incident.

The extent to which additional positions (e.g. Project Manager, HSE Manager, Construction Manager or Head of Risk and Compliance) are involved in the investigation of an incident is dependent on the severity and complexity of the incident.

Corrective actions and preventative actions are noted in Incident Investigation reports and implemented according to the ADCO risk management time frame. Incident reports are completed within 7 days of occurrence. Incident reports are closed out within 28 days of occurrence.

Monitoring	The Project Manager, Site Manager and HSE Advisor are responsible for ensuring that actions (corrective / preventative) arising out of an incident investigation are implemented and monitored for compliance.
Notification to Regulator	Where an incident is notifiable under the WHS legislation of the state in which it occurred, notification to the regulator will be made by any of the following positions: HSE Manager, Construction Manager, State Manager or Head of Risk and Compliance.
Retaining Records	All injury records and investigation findings will be retained within the online HSE management system - HammerTech.

12.1 COMPLAINT MANAGEMENT

Complaints can be raised for issues such as, noise, dust, light, pollution, perceived environmental management issued and breaches of regulatory approvals. A person may register a complaint with ADCO directly through verbal or consultative forums. Information relating to complaints is documented on the *Complaints Form*. Complaints are registered on the Register - Project Complaints. Complaints must:

- / Be immediately reviewed and Investigated by the Project Manager, Site Manager and/or HSE Advisor.
- / Be actioned within 48 hours by the Project Manager, Site Manager and/or HSE Advisor. Actions to be noted on the form. This includes a response (email or verbal) to the person generating the complaint.

In general, the below recommended actions should be followed:

- / Respond to the complainant in an objective, polite and courteous manner.
- / Engage with the complainant to correctly understand the complaint.
- / Seek clarification and confirm the issues, relevant information, and outcomes sought (i.e. summarise the main points).
- / Clarify the application of any relevant legislation, policies or procedures.
- / Resolve the complaint and acknowledge the complainant.
- / If the complaint cannot be resolved within a reasonable time frame, advise the complainant about the complaints process and indicative response.
- / Take reasonable action to prevent similar complaints in the future

13 EMERGENCY MANAGEMENT

Refer to project Health and Safety Management Plan - Emergency Management which details the emergency management control required in the event of an environmental emergency.

14 MONITORING AND CONTINUAL IMPROVEMENT

Progress against project targets is monitored by the project team (Project Manager, Site Manager, HSE Advisor) through:

- / Regular daily visual inspections of work activities.
- / Completion of the Weekly Site Inspection report.
- / Close out of identified actions for non-conformances.
- / Internal / External Audits and Inspections.

Confirmation of achievement of project targets is reviewed through:

- / Project Control Reports
- / Project audits.
- / Other internal or external audits (e.g. client, FSC).
- / HammerTech reporting.
- / A reduction in incident and non-conformances across the project, State and nationally.

In the event that project targets are not being achieved by the project team, the Construction Manager and State HSE Manager will implement change to ensure project targets are met.

14.1 AUDITS

Project audits completed by the HSE Manager or nominated person are a formal a review of project compliance against select criteria of the HSE Management System. Projects are required to be audited against both national (internal procedures) and project criteria (site specific).

The level of compliance to the requirements of the HSE System is determined by the audit score achieved. Any corrective action (e.g. non-conformances) identified in the audit, must be addressed by the site team within a maximum of seven working days of receipt of the audit report. Corrective actions and supporting evidence must be attached to the Audit Report within the online HSE Management System.

Audits are to occur in accordance with the project [Audit Schedule](#) which will detail the applicable audits to be carried out on the project.

14.1.1 Audit Schedule

Audit / Inspection Type	Frequency / Time Frame	Participants
Internal HSE Audit	Twice throughout project delivery.	HSE Manager or nominated person (lead) / Construction Manager / Project Manager / HSE Advisor/ Site Manager
Third party system compliance audit i.e. Federal Safety Commission, BSi	As advised	Head of Risk and Compliance / HSE Manager / Construction Manager / Project Manager / HSE Advisor/ Site Manager

14.2 COMPLIANCE ACTIVITIES

14.2.1 Inspections

Performance monitoring will occur in accordance with *Procedure – Performance Management* which details ADCO's approach to monitoring work conditions and behaviour. ADCO will carry out daily and weekly workplace inspections to review and confirm compliance to approved work practices and controls.

Regular daily visual inspections of work activities and work areas will be completed by the Site Manager, HSE Advisor and Health and Safety Representative (if applicable). Formal inspections will be completed by the Project Manager, Site Manager, HSE Advisor using the *Weekly Site Inspection* form.

The inspection is required to reflect the level of compliance to:

- / High Risk Work Activities
- / Subcontractor Compliance
- / General site conditions.

Inspections completed will be prioritised based on the level of risk and all records of inspections will be retained within HammerTech. "Issues" will be recorded for compliant and non-compliant observations within HammerTech. "Issues" identify the observation description, actions required to rectify, subcontractor responsible and time frame for implementation.

14.2.2 Monitoring – Environmental Compliance Obligations

On-site inspections and monitoring will be carried out to ensure environmental controls achieve their objectives and to facilitate modification where necessary. The table below details the projects inspection and monitoring requirements to ensure environmental compliance obligations are achieved.

Aspect	Compliance Obligation	Responsibility	Frequency
Dust	Monitoring for visible dust Depositional and Directional dust gauges	HSE Advisor / Site Manager	Daily – visual As required
Noise	Monitoring of Sound Pressure Levels	Project Manager	As requested to monitor the impacts of work activities
Vibration	Monitoring of vibration levels.	Project Manager	As requested to monitor the impacts of work activities
Waste Management	Use of waste bins– inspect contents	HSE Advisor / Site Manager	Weekly
Waste Management - Recycling	Waste disposal – documentation provided by waste removalist detailing quantities and percentage waste recycled / diverted from landfill.	Project Manager	Monthly
Tree Protection Zone No-Go zones	Ensure areas are protected e.g. fenced and sign posted Ensure works are located outside fenced off areas Inspect protection for breaches. Inspect irrigation (if applicable)	HSE Advisor / Site Manager	Weekly

Aspect	Compliance Obligation	Responsibility	Frequency
Hazardous Substances and Dangerous Goods	Review the storage of Hazardous Substances and Dangerous Goods. / Presence and detail of Safety Data Sheets (SDS) / Suitability and effectiveness of storage and bunding / Location of spill kits	HSE Advisor / Site Manager	Weekly
Sediment Control and Onsite Water Management	Monitoring to ensure sediment laden water is managed properly and not discharged offsite.	HSE Advisor / Site Manager	Daily – visual
Sediment Control and Onsite Water Management	Establishment of erosion and sediment control devices.	HSE Advisor / Site Manager	Weekly / Following a rainfall event
Weeds	Monitor weed infestations to ensure noxious weed infestations found within the area are controlled.	HSE Advisor / Site Manager	Weekly
Onsite water Management	Monitoring of water prior to discharge offsite	HSE Advisor / Site Manager	As required
Testing of excavated soil	Suspected contaminated soil from where excavated or prior to reuse at a different location onsite.	Project Manager	As required

Note: As applicable Environmental monitoring may involve collecting and interpreting data to provide quantification of the effectiveness of the Environmental Management System. All equipment used for environmental monitoring will be calibrated as per manufacturer's requirements. Where laboratory testing is required, a NATA accredited laboratory will be used. Certificates, checklists and records of the calibration, NATA accredited and installation checklists are maintained to verify compliance with these requirements.

14.3 ENVIRONMENTAL PERFORMANCE MEASUREMENT

The Management System objectives are to assist ADCO in:

- / Achieving and maintaining compliance with the requirements ISO 9001, AS 4801 and ISO 14001 in each State in which ADCO operates;
- / Maintaining a practical, proactive and efficient management system to support quality, safety and environmental management strategies on each project;
- / Planning design and construction activities to minimise or eliminate quality, environmental and safety related risks;
- / Promoting a proactive attitude towards work practices required to support the strategic vision;
- / Supporting all persons involved with our business towards alignment with ADCO's strategies and to meet their accountabilities and responsibilities;
- / Ensuring that all works undertaken and products, materials and equipment provided are fit for purpose and safe for use;

- / Ensuring that non-conformances, defects and other issues and impacts are reported, corrected, analysed and corrective action implemented; and
- / Providing a framework for continual improvement in its business activities.

These objectives are targeted and measured through the following performance indicators:

- / Proactive reporting, investigation and closure of incidents and non-conformances;
- / Quality processes implemented and managed on all projects, supported by staff training;
- / Nil regulatory notices (i.e. improvements, infringements, prohibitions);
- / Auditing achieving a Gold/Silver rating compliance on > 85% of projects;
- / Nil incidents that adversely impact on the environment;
- / Other targets set in annual and 3 year business plans and strategies for Horizon 1, 2 and 3.

14.4 PROJECT ENVIRONMENTAL OBJECTIVES AND TARGETS

The below Environmental Objectives and Targets will be set and implemented for the project and reviewed periodically in line with the management plan review. Objectives will be achieved through:

- / Compliance with the requirements of this Health and Safety Management Plan
- / Implementation of controls identified within the Project Risk Register
- / All controls are implemented before commencing work to ensure all known risks are eliminated or controlled

14.4.1 Lead Indicators

Lead Indicator	Measurement	Validation	Target
Leadership Commitment	Environmental Management Plan - Environmental responsibilities described within Organisational Roles and Responsibilities	Approved Environmental Management Plan. Management Plan signed by ADCO project team.	Environmental Management Plan approved by all necessary parties within agreed timeframe Environmental Management Plan periodically reviewed, amended and re-issued as per agreed review frequency. 100% of Project team signed onto Management Plan.
Compliance with all standards, plans and audit schedules	Development of Audit Schedule Audits conducted as per schedule	Audit schedule Audit Reports Audit actions Non-conformance register	100% audits executed as per Audit Schedule 100% of audit Reports completed within agreed timeframes 100% of actions associated with non-conformances closed out within agreed time

Lead Indicator	Measurement	Validation	Target
Communication and Consultation	Daily Pre-Work briefings Toolbox Meetings HSE Committee Meetings	Attendance registers Meeting minutes Training support material	Daily Pre start meeting Toolbox Meetings at nominated frequency

14.4.2 Lag Indicators

Lag Indicator	Measurement	Validation	Target
Dust complaints lodged by stakeholders	Response time and time frame for implementation of correction actions.	Complaints received and actioned within Complaint form.	Immediately reviewed and Investigated Be actioned within 48 hours
Noise complaints lodged by stakeholders	Response time and time frame for implementation of correction actions.	Complaints received and actioned within Complaint form.	Immediately reviewed and Investigated Be actioned within 48 hours
Vibration complaints lodged by stakeholders	Response time and time frame for implementation of correction actions.	Complaints received and actioned within Complaint form.	Immediately reviewed and Investigated Be actioned within 48 hours
Lighting complaints lodged by stakeholders	Number of lighting complaints received	Complaints received and captured within Complaint form.	Immediately reviewed and Investigated Be actioned within 48 hours
Contamination of marine, groundwater and surface water systems	Number of Environmental Incidents	Incident data reported in Environmental reports.	Zero
Spills greater than 100 Litres	Number of Environmental Incidents	Incident data reported in Environmental reports.	Zero
Spills which require an emergency response	Number of Environmental Incidents	Incident data reported in Environmental reports.	Zero
Injury or death of any fauna caused by vehicles or excavations	Number of Environmental Incidents	Incident data reported in Environmental reports.	Zero
Disturbance of vegetation outside the	Number of Environmental Incidents	Incident data reported in Environmental reports.	Zero

Lag Indicator	Measurement	Validation	Target
construction area due to construction activities			
Off-site traffic leaving formed roads or approved tracks	Number of Environmental Incidents	Incident data reported in Environmental reports.	Zero
Invasive species introduced into construction area	Number of Environmental Incidents	Incident data reported in Environmental reports.	Zero
Reportable Environmental Incidents	Number of Environmental Incidents	Incident data reported in Environmental reports.	Zero
Major Environmental Incidents	Number of Environmental Incidents	Incident data reported in Environmental reports.	Zero
Environmental Near Misses	Number of Environmental Incidents	Incident data reported in Environmental reports.	Zero
Cultural heritage Incident	Number of Environmental Incidents	Incident data reported in Environmental reports.	Zero
Minor Environmental Incidents (<25)	Number of Environmental Incidents	Incident data reported in Environmental reports.	<2
Minor spills controlled, contained and cleaned up within 24 hours	Number of Environmental Incidents	Incident data reported in Environmental reports.	100%
Hazardous materials managed and disposed of appropriately	Weekly Site Inspection Issue identification	Minimum one per week.	100%

14.5 CORRECTION AND CORRECTIVE ACTION

Activities on the project that may result in actions includes but is not limited to:

- / Audits (Internal, External).
- / Daily Inspections.
- / Weekly Site Inspections.
- / High Risk Work Activity Inspections.
- / Subcontractor compliance monitoring inspections / task observations.
- / General site observations.
- / Hazard identifications / Issue Notification Form
- / Incident investigations.
- / Risk Assessments.
- / Alerts / Notices

Actions identified from observations are to be entered into HammerTech and tracked until they are closed out within the timeframe noted. Upon identification or notification, the HSE Advisor or Site Manager must review and assess the risk and develop appropriate controls according to the principles of the hierarchy of controls.

Actions that arise from an incident or dangerous occurrence must be reviewed by the Project Manager, Construction Manager and State HSE Manager and reviewed for effectiveness through site monitoring activities. Actions, including amendments and updates, to the Management System and Management System Documentation must be authorised by the Head of Risk and Compliance, the HSE Leadership Group or the Quality Leadership Group.

Actions that arise from an external audit by will be entered into HammerTech for tracking and close out.

The assessment of results obtained through monitoring activities, non-conformances, correcting poor performance, investigating the reasons for poor performance and addressing the potential likelihood of future poor performance will be conducted in accordance with *Procedure – Performance Management*.

Where a worker does not comply with a risk or behaviour control requirement, disciplinary action through the ADCO non-conformance system will be initiated. Dependent on the severity of the non-compliance, workers are subject to a tiered warning system and may receive up to 3 warnings for engaging in the same non-compliant activity. Written warnings in the form of an Improvement Notice are issued to a company, when an individual of that company has engaged in a non-compliant activity. ADCO reserves the right to deny a person access to site - irrespective of the number of warnings required / issued - if the non-compliance could / has resulted in a dangerous occurrence. This determination will be made in consultation with Construction Manager, Project Manager, Site Manager and HSE Manager.

14.6 MEASURING, RECORDING, MONITORING AND REPORTING

ADCO utilises a range of tools, systems and forums to measure, monitor, implement, report, and respond on its performance, objectives, targets and impacts. These include, without limitation:

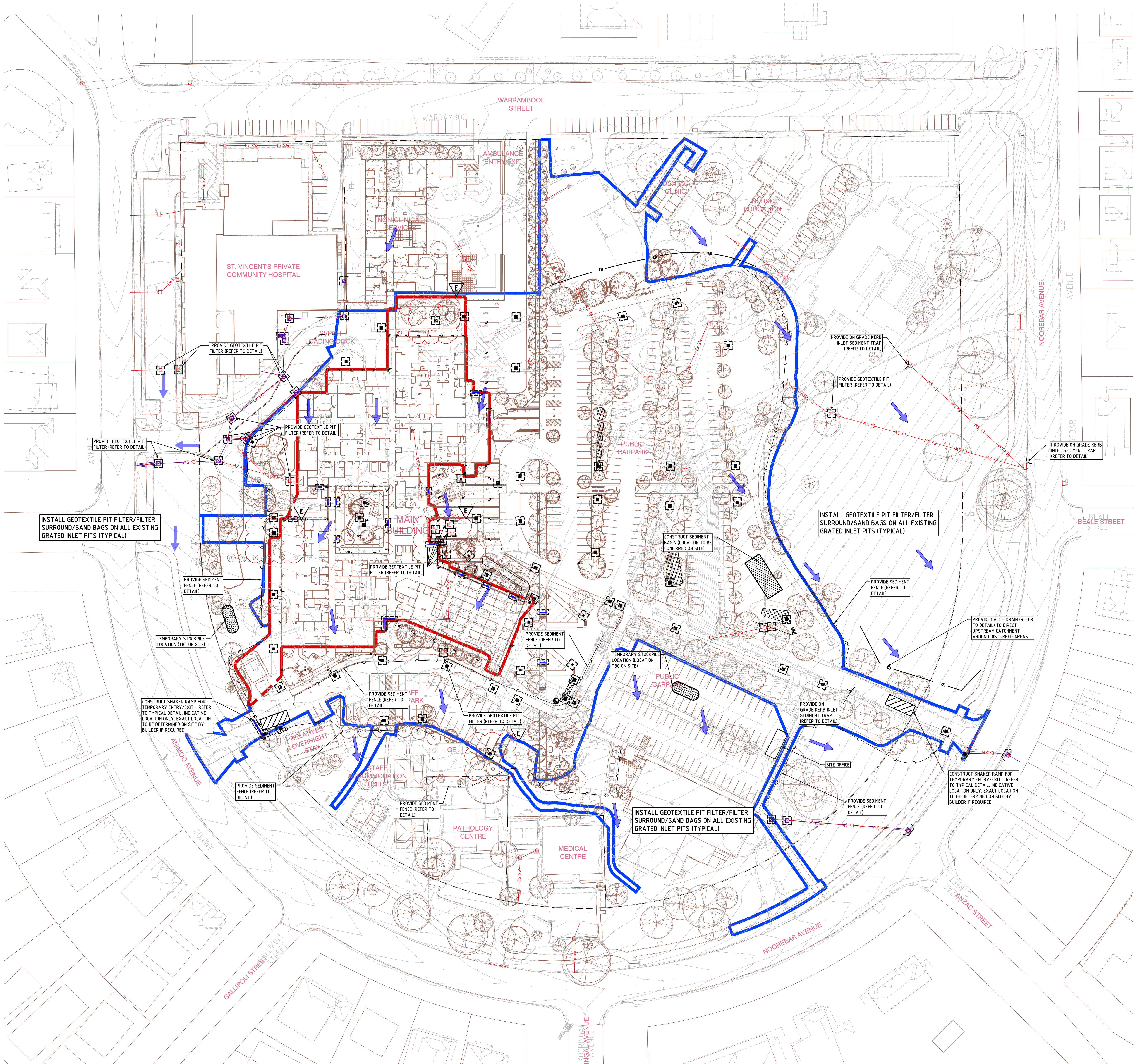
Tools / Systems

- / Hammertech, Aconex, Dropbox, Power BI and CRM

Meetings, Forums and Reports

- / Strategic Plans (Horizon 1, 2 and 3 Reports)
- / Board Meetings
- / State Management Meetings
- / Leadership Forum
- / HSE Leadership Group
- / Quality Leadership Group
- / Construction and Commercial Manager Forums
- / Operational Assurance Reports
- / Project Control Reports (project specific)
- / PCG Reports (project specific)

14.7 APPENDIX A – SEDIMENT AND EROSION CONTROL PLAN



SURVEY LEGEND

- SITE BOUNDARY
- EX SURFACE LEVEL
- EX SURFACE CONTOUR
- EX TREE
- EX SW — EXISTING STORMWATER DRAINAGE LINE

SOIL AND WATER MANAGEMENT LEGEND

- SEDIMENT FENCE
- CATCH DRAIN
- OVERLAND FLOW
- TEMPORARY SHAKER RAMP FOR ENTRY/EXIT
- SEDIMENT BASIN (LOCATION TBC ON-SITE)
- TEMPORARY STOCKPILE (LOCATION TBC ON-SITE)
- CC1 BOUNDARY
- CC5 BOUNDARY

SEDIMENT AND EROSION CONTROL NOTES

- 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.
- ALL SEDIMENT CONTROL MEASURES TO BE INSTALLED IN ACCORDANCE WITH LANDCOM MANAGING URBAN STORMWATER "BLUE BOOK".

SEDIMENT CONTROL CONDITIONS

- 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.
- SEDIMENT REMOVED FROM ANY TRAPPING DEVICE WILL BE RELOCATED WHERE FURTHER POLLUTION TO DOWNSLOPE LANDS & WATERWAYS CANNOT OCCUR.
- 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. STOCKPILES SHALL BE PROTECTED TO PREVENT DUST GENERATION IN ACCORDANCE WITH THE EPA GUIDELINES.
- WATER WILL BE PREVENTED FROM DIRECTLY ENTERING THE PERMANENT DRAINAGE SYSTEM WITH INLET FILTERS (SEE DETAILS) UNLESS IT IS SEDIMENT FREE.
- TEMPORARY SEDIMENT TRAPS WILL BE RETAINED UNTIL AFTER THE LANDS THEY ARE PROTECTING ARE COMPLETELY REHABILITATED.
- CONTRACTOR TO DESIGN/SIZE/CONSTRUCT TEMPORARY SEDIMENT BASIN (AS REQUIRED). WATER SHOULD BE ALLOWED TO SETTLE BEFORE DISCHARGE. CONTRACTOR MUST VERIFY THAT WATER QUALITY MEETS AUTHORITIES REQUIREMENTS PRIOR TO DISCHARGE. ACCUMULATED SEDIMENT SHOULD THEN BE REMOVED & DISPOSED OF IN ACCORDANCE WITH ENVIRONMENTAL MANAGEMENT PROCEDURES.

DATE PRINTED:

This drawing should be read in conjunction with all relevant contracts, specifications and drawings. Dimensions are in millimetres. Levels are metres. Do not scale off drawings. Use figured dimensions only. Check dimensions on site. Report discrepancies immediately.

NOTES

ISSUE	DATE	SUBJECT	BY
A	01.06.20	ISSUED FOR CROWN CERTIFICATE	JH
B	01.06.20	ISSUED FOR CONSTRUCTION	JH
C	01.06.20	ISSUED FOR CONSTRUCTION	JH
D	01.06.20	ISSUED FOR CONSTRUCTION	JH
E	01.06.20	ISSUED FOR CONSTRUCTION	JH

PROJECT MANAGER	CONSTRUCTION MANAGER
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PROJECT

GRIFFITH BASE HOSPITAL
REDEVELOPMENT - CC1

NOOREBAR AVE
GRIFFITH, NSW 2680

PHASE
FOR CONSTRUCTION

DRAWN	SCALE AT A0	ORIGIN DATE
	2:1	12/04/22

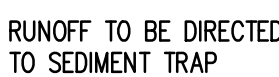
DESCRIPTION
SEDIMENT AND EROSION
CONTROL PLAN

PROJECT No	DRAWING No	REVISION
130565	ACR-CE-DWG-836-0005	E



ALTERNATIVE SEDIMENT FENCE NOTES

1. INSTALL THIS TYPE OF SEDIMENT FENCE WHEN USE OF SUPPORT POSTS IS NOT DESIRABLE OR NOT POSSIBLE. SUCH CONDITIONS MIGHT APPLY, FOR EXAMPLE, WHEN APPROVAL IS GRANTED FROM THE APPROPRIATE AUTHORITIES TO PLACE THESE FENCES IN HIGHLY SENSITIVE ESTUARINE AREAS.
2. USE BENT TRENCH MESH TO SUPPORT THE F82 WELDED MESH FACING AS SHOWN ON THE DRAWING ABOVE. ATTACH THE JUTE MESH TO THE WELDED MESH FACING USING UV-RESISTANT CABLE TIES.
3. STABILISE THE WHOLE STRUCTURE WITH SANDBAG OR ROCK ANCHORING OVER THE TRENCH MESH ON THE LEADING EDGE OF THE JUTE MESH. THE ANCHORING SHOULD BE SUFFICIENTLY LARGE TO ENSURE STABILITY OF THE STRUCTURE IN THE DESIGN STORM EVENT, USUALLY THE 10 YEAR EVENT.



TEMPORARY CONSTRUCTION VEHICLE
ENTRY/EXIT SEDIMENT TRAP



This drawing should be read in conjunction with all relevant contracts, specifications and drawings. Dimensions are in millimetres. Levels are metres. Do not scale off drawings. Use figured dimensions only. Check dimensions on Site. Report discrepancies immediately.

[illegible]

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**MECHANICAL & ELECTRICAL
& HYDRAULIC**

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CLIENT _____



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Nominated Architects:
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PROJECT

GRIFFITH BASE HOSPITAL REDEVELOPMENT

NOOREBAR AVE
GRIFFITH, NSW 2680

PHASE FOR CONSTRUCTION

DRAWN	SCALE AT A0	ORIGIN DATE
		12/04/22

DESCRIPTION

EROSION AND SEDIMENT CONTROL DETAILS

PROJECT No	DRAWING No	REVISION
130565	ACR-CE-DWG-B36-0007	C

DATE PRINTED: