Environmental Management & Sustainability Plan (EMP)

THE SUTHERLAND HOSPITAL OPERATING THEATRE COMPLEX (TSHOTC)- Rev 02

Construction
Development
Retirement
Capital

HINDMARSH
Leadership at work

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1. Document Control – Revision History

1.1 REVISION STATUS

Approved revisions to this document may be independently issued.

Date Issued	Revision	Details	Section	Page
20/9/21	Draft	Draft EMP	All	All
6/10/21	Rev 01	Issued for implementation	All	All
14/10/21	Rev 02	Client Amendments	All	All

1.2 PROJECT SPECIFICS

Company Name:	Hindmarsh Construction Australia Pty Ltd
ABN:	15 126 578 176
Project:	The Sutherland Hospital Operating Theatre Complex
Project No:	2041
Location:	106 Kareena Road, Caringbah, NSW, 2229
Client:	Health Infrastructure, NSW Government
Contract:	GC21
Work Description	Milestone 1: New Build works including 6 new operating theatres, CSSD, plant room and MRI. Refurbishment works to L2. Milestone 2: Refurbishment of L3 (existing theatre area): Refurbishment works to L3 Perioperative Services Suite including Operating Theatres, Recovery Areas, Office Spaces and Staff Amenities

1.3 APPROVAL FOR IMPLEMENTATION

This revision of the Environmental Management and Sustainability Plan (EMP) has been reviewed by the Project Manager, it complies with environmental aspects of Compass and contractual obligations and is authorised for use. Draft versions of this document, although approved, are issued for comment \ feedback and should not be considered as finalised until a revision number \ letter is assigned.

1.4 EMP INDUCTION

Every Project Hindmarsh employee receives induction training into the purpose and use of this EMP. Each acknowledges that they fully understand this EMP's requirements and their roles \ responsibilities associated with it. This acknowledgement is recorded via the *Acknowledgement Register*

Key elements of this EMP may be extracted for inclusion in the project specific site induction training which is given to all employees, subcontractors and site workers prior to commencing works on site.

2. Purpose and Scope of EMP

Hindmarsh operates a fully integrated Business Management System, known as Compass which incorporates our Safety, Quality and Environment business systems.

This EMP describes the environmental strategy, methods, controls, and requirements to be implemented during the execution of the project. The purpose of this EMP is to:

- Ensure company environmental objectives and targets are achieved
- Identify the environmental issues (impacts and aspects) for this project;
- Establish, communicate and implement controls to reduce any adverse impacts on the environment which may arise from project's activities, products and services;
- Identify controls which will be implemented to mitigate high risk environmental impacts, which may eventuate during construction.
- Ensure Hindmarsh, its suppliers and subcontractors comply with all relevant environmental legislation, any applicable licenses, approvals, permits and regulatory requirements;
- Ensure works are managed to reduce adverse impacts on the environment;
- Action any outcomes from environmental incidents or accidents, project audits or other identified non-conformances and to continually improve the Environmental Management System elements within Compass; and
- Establish project-specific objectives and targets (where appropriate) and identify strategies and evidence in support of their achievements.

This EMP is intended to stand alone as the master document for the management of all site environmental activities. It should, however, be read in conjunction with other management plans, referenced appendices and documents, including;

- Project Management Plan (PMP)
- Emergency Management Plan (EMMP)
- Safety Management Plan (SMP)
- Temporary Traffic Management Plan (TTMP)
- Quality Management Plan (QMP)

2.1 SUSTAINABILITY

Responsible Environmental Management extends far beyond that of simple mitigation measures. Sustainability embraces environmental, social and economic accountability. Hindmarsh seeks, with its project partners, to reduce those negative impacts and maximise benefits related to all three areas across the entire project life cycle. Fundamentally, our environmental strategy and EMP requires every project to consider:

- A reduced resource consumption
- reuse of resources
- use and support of recyclable resources
- protection of the natural environment
- elimination of toxic substance \ material use
- focus on quality

2.2 ENVIRONMENTAL MANAGEMENT SYSTEM

Hindmarsh operates an Environmental Management System as per the requirements of AS14001:2004 and the NSW Government Environmental Management System Guidelines Edition 2. The system has been independently certified as meeting the requirements of both. Please refer to the *Compass Manual* for further information regarding the Hindmarsh Management System.

2.3 REFERENCED PROCEDURES AND DOCUMENTS

Documents, procedures, and forms supporting this EMP have been referenced accordingly throughout this plan. Please refer to the *Environmental Management and Sustainability Process Map* for instruction and guidance information relating to these documents. Compass documents detailed within this plan are identifiable by title and are formatted in *italics and underlined.*

- Reference also is made to the Waste Management Plan (Included in Annexure C)
- JK Environments report Date: 8 February 2021 Ref: E33141PArpt-RAP.
- Pre demolition and Hazmat report by Coffey dated 19/6/20

3. Project Information

3.1 DESCRIPTION (SCOPE)

The Sutherland Hospital Operating Theatres Project will be delivered as a combination of new build and refurbishment in a 'live' hospital environment. The key components include:

- The operating theatres will increase from 5 to 8 as well as the endoscopy suits
- increasing from 1 to 2, resulting in a total of 10 spaces with associated clinic rooms.
- Supporting spaces including recovery, day surgery, storage, staff amenities and
- other clinical and non-clinical support spaces.
- A new Central Sterile Supply Department (CSSD) will be built immediately above the
- operating theatres.
- A new MRI space will be built immediately below the operating theatres.

4. Environmental and Sustainability Strategy, Policy, Objectives and Targets

4.1 STRATEGY

This EMP is implemented in support of the Hindmarsh *Environmental and Sustainability Strategic Framework*, this strategy is to be communicated and made available to all workers at all times.

4.2 POLICY

The Hindmarsh Environmental and Sustainability Policy and the PPE Policy are to be communicated and made available to all workers at all times. At time of site induction workers are briefed on the Policy and its intent. A PPE Requirements document is also available.

4.3 COMPANY OBJECTIVES AND TARGETS

Current company environmental and sustainability objectives and targets are detailed within the *Environmental and Sustainability Strategic Framework*.

Hindmarsh objectives and targets established at company and project level are managed and maintained in accordance with *Company & Project Objectives & Targets – Maintenance, Management & Monitor* procedure.

4.4 PROJECT OBJECTIVES AND TARGETS

PROJECT OBJECTIVES AND TARGETS ARE SET – COMPLETE THE FOLLOWING

The following are project specific objectives and targets:

Objective:	Target:	Monitored by:	Reported via:	Frequency of Report:
Recycle waste	90% of waste recycled	Site Engineer	Status Report – Project Objectives and Targets.	Monthly

5. Resource Management

General information detailing overall resource management is detailed within the current Project Management Plan (PMP) for this project, Section: Resource Management. The following sections provide details regarding environmental and sustainability specific considerations related to resource management.

5.1 RESPONSIBILITY AND AUTHORITY

It is the responsibility of Hindmarsh project staff to ensure that the Environmental Management Plan (EMP) is complied with, and objectives and targets are met. To facilitate effective environmental management, specific responsibilities for implementing and supporting this EMP have been assigned.

Please refer to the PMP Appendix C - *Roles and Responsibility Matrix*, for the project specific allocations.

5.2 ENVIRONMENTAL TRAINING REQUIREMENTS

Hindmarsh* ensures specific environmental and sustainability training requirements are identified in consultation with each project team member. This is completed as per the *Training and Development Procedure – Project,* any training needs identified are captured via the *Training ID \ Requirements Register.*

The following additional forms shall be used as appropriate:

- Training Approval Form
- Training Evaluation Form

Hindmarsh employees provide evidence of training completion to the Human Resource Department (only required for nominated courses \ competencies), such evidence may also be filed electronically or via hardcopy on site for reference purposes. Environmental training requirements are continually revisited throughout the life of the project, particularly where there has been a change in project resources, where a skill gap has been identified, or as required by the Project Manager (PM).

Refer to the *Learning and Development Overview* document for further information regarding the relationship between company and project training processes.

5.2.1 Unforeseen Training Requirements

Where unforeseen training requirements have been identified by either: Risk Assessment, Training Review or other means, arrangements will be made to ensure the employee involved is appropriately trained. Any such training need identified is captured via the

6. Compliance

6.1 LEGISLATIVE \ REGULATORY

The Legal Register is a list of relevant legislative and regulatory requirements applicable to general Hindmarsh construction operations. The project team has reviewed this document and has identified relevant legislative and regulatory requirements applicable to project specific operations. The project specific Legal Register is available upon request and has been completed as per the *Legal Requirements* procedure.

Legislative and or regulatory information may also be included in relevant *Environmental Impact Guides (EIGs)* and in the site-specific induction training provided to all employees and site workers prior to their commencement of works on site.

6.2 MONITORING \ CHANGES TO: ACTS, REGULATIONS, CODE OF PRACTICE AND AUSTRALIAN STANDARDS (SUBSCRIPTION)

Hindmarsh is notified of SQE legislative and regulatory change via a subscription service called LAWLEX - http:\\www.lawlex.com.au Where relative legislative change is to occur the National SQE Manager informs State SQE Manager who are then required to review changes and forward recommendations (this may be Document Change Request, email, hardcopy or other) to the SQE Systems Manager for Hindmarsh Management System (Compass) coordination.

For more detailed information please refer to *Legal Requirements* procedure**.**

6.3 ACCESS TO AND COMMUNICATION OF LEGAL REQUIREMENTS / AUSTRALIAN STANDARDS

Hindmarsh employees, suppliers and subcontractors have access to legislation and regulatory documents via the internet. Where a project receives a request for an applicable legislative \ regulatory document which is not available via the internet, then the request is to be forwarded to one of the following who will arrange for a copy of the required document to be made available to the requestor.

- National SQE Manager
- State SQE Manager

6.3.1 Australian Standards

Hindmarsh subscribes to “Building and Construction” related Australian Standards. Refer to the *Australian Standards Online Select Access* document for further information regarding access instructions and credentials required for login.

7. Risk Management

7.1 INTRODUCTION

Project risk management is completed as directed within the *Risk Assessment procedure in Compass,* and as detailed within PMP. The *Risk Assessment – Quick Reference Card* provides a summary of the risk assessment process, including consequence and likelihood tables.

7.2 ENVIRONMENTAL ASPECTS AND IMPACTS

The project specific Environmental Risk and Opportunity Profile takes into account identified hazards (aspects) and impacts which are relevant to the project. The Project team has reviewed all available information (i.e. risk assessments, consultant reports, advice, papers, scope of works etc) to ensure the Environmental Risk and Opportunity Profile accommodates all known issues.

Hindmarsh ensures environmental aspects and impacts are continually reviewed, risks assessed and that monitoring requirements remain relevant and current.

Key environmental aspects and risks are communicated to Hindmarsh employees and subcontractors based on level risk, controls implemented and or as deemed appropriate by project requirements.

Please refer to the project specific *Environmental Risk and Opportunity Profile*.

7.3 ENVIRONMENTAL IMPACT GUIDES – EIG'S

Hindmarsh has developed a number of standard *Environmental Impact Guides (EIGs)*, these are documented procedures targeting high risk and \ or common environmental aspects and impacts which arise from general construction activities. EIGs provide the project team with general guidance regarding the management of each respective environmental impact, describes the processes involved, the permits or licenses required, the control measures to be implemented, the monitoring and reporting requirements and any emergency response measures to be implemented.

These documents are available upon request and are communicated to workers as required. A number of these EIGs are available via Compass these include:

- *EIG001-Soil Erosion, Sediment, Surface Run Off (Appendix. C)*
- *EIG002-Disturbance Flora Fauna*
- *EIG003-Disturbance Aqua Flora Fauna*
- *EIG004- Noise Emissions (Appendix. D)*
- *EIG005- Atmospheric Emissions*
- *EIG006- Vibration (Appendix. E)*
- *EIG007- Storage, Maintenance, Refuel*
- *EIG008- Storage, Handling or Hazardous \ Dangerous Substances \ Materials*
- *EIG009- Social Impact*
- *EIG010-Presence of Infectious Plant, Disease or Weeds*
- *EIG011- Solid and \ or Liquid Waste, Recycling*
- *EIG012- Heritage \ Culture Management \ Disturbance*
- *EIG013- Land Contamination*
- *EIG014- Visual Amenity*
- *EIG016-Acid Sulphate Soils*
- *EIG017-Ballast*

- *EIG018- PCB Management*
- *EIG019- Energy and or Water Consumption*

Note: EIGs relevant to this project are detailed within the *Environmental Risk and Opportunity Profile*

7.3.1 Monitoring and Review of Environmental Impact Guides

EIG effectiveness and currency is monitored throughout the life of the project. The project team accomplishes this by identifying an active EIG (or several) and attaching it to the *Weekly \ Daily Environmental and Sustainability Check Sheet.* During completion of the check sheet the EIG content is also checked for efficiency and currency. The EIG is marked accordingly and amendments made and or controls altered as required. The EIG sheet under review accompanies the completed check sheet and filed (electronic or hardcopy) as evidence of review.

7.4 DESIGN AND REVIEW CHANGES

The *Design Involvement Management Risk* procedure ensures that where Hindmarsh is involved in the design, or has input into design, a process exists for ensuring effective participation and management. In support of this procedure a *Design Change Authority Form* is completed, upon which any environmental aspects or impacts will be considered. This system ensures all related documents, forms and or risk and opportunity profiles are also updated accordingly.

Design changes may be tracked via the *Design Change Register*, Aconex or similar system.

Safety in design documentation may also be reviewed to ensure environmental considerations are addressed appropriately. Please refer to the *Safety in Design* procedure and *Safety in Design Risk and Opportunity Profile* where available.

8. Hazard Reporting

Hindmarsh employees, subcontractors, those working on site, as well as those visiting have a duty to report any hazard observed on site. If a hazard is suspected or identified, report the matter with urgency to a Hindmarsh Management representative who shall be responsible for recording this in the OnSite CAR Module..

Hazard information may be communicated via site induction, safe work method statement review, and \ or safety meetings (e.g. Pre-Start and Toolbox) held on site.

Where a Corrective Action has been submitted reporting a hazard, Hindmarsh shall investigate and take necessary corrective action to address the issue raised to remove the hazard and \ or prevent a reoccurrence.

9. Emergency \ Incident Management

Please refer to the Projects *Emergency Management Plan (EMMP)* for information regarding emergency preparedness and response. The project-specific Emergency Management Plan (EMMP) ensures Hindmarsh controls, and assesses Emergency preparedness elements as required for the project.

9.1 INCIDENT MANAGEMENT

Refer to the *Injury, Illness and Incident Management and Reporting* flow chart for detailed guidance regarding the management and reporting of injuries, illness and incidents.

Procedures and processes referenced within the above-mentioned document address the following:

- Detailed definitions (SQE Definitions)
- Actions to be taken in the event of an injury, illness or incident (*Injury, Illness and Incident Response*)
- Additional reporting responsibilities and obligations associated with higher level injuries \ incidents (*Incident Actions \ External Notifications)*
- Incident Reporting responsibilities and expectations (*Incident Reporting Flowchart*)
- Site and or National investigation requirements
- Corrective and Preventive Action
- Analysis of data \ findings (including Objectives \ Targets status)

A *Crisis Management and Recovery Plan* supports the injury, illness and incident management process.

9.1.1 Significant SQE Incident Alerts

Hindmarsh communicates lessons learnt information, from both internal and external events, via Significant SQE Incident Alerts. Refer to the *Safety Management and Sustainability Process Map* for a list of those available.

10. Communication \ Consultation

10.1 INTRODUCTION

With many interested parties involved in the project it is critical that communication and consultation occurs efficiently and effectively between all.

With regards to environmental issues consultation and communication generally occurs when the following matters arise:

- An employer or employees identifies a hazard
- assessing any aspect \ impact (risk)
- deciding on measures to control risks
- implementing controls
- reviewing the effectiveness of controls
- reviewing and developing policies
- investigating incidents \ complaints
- changing work practices and procedures
- introducing new substances to the workplace
- changes to current health and safety Acts, Regulations, Australian Standards, Codes of Practice and other relevant environmental requirements

10.2 MEETINGS \ REPRESENTATIVE \ OTHER AGREED ARRANGEMENTS

In discussion with site workers (Hindmarsh employees and Subcontractors), the following arrangements have been made with regards to communication and consultation regarding environmental matters:

Determine (preferably by obtaining agreement from workers onsite to which of the above-mentioned forums is most acceptable) communication and consultation arrangements. Arrangements may include one or more of the following:

- The formulation of an Environmental Meeting (Hindmarsh Internal \ Contractor)
- Inclusion of environmental issues in other meetings \ forums
- Other agreed arrangements, e.g. (detail what the specifics are)
    - Environmental Meeting
    - Daily Prestart Meetings
    - Toolbox Meetings
    - Site Induction
    - Weekly Subcontractor \ Supervisor meetings
    - Hazard Identification \ Reporting and Communication
    - JSA \ SWMS Submission and Review

Once determined or agreed arrangements are to be summarized here and communicated to all workers on site. Supporting posters \ flow charts may be posted to assist with communication.

10.3 KEY STAKEHOLDER, COMMUNITY AND AUTHORITIES COMMUNICATIONS \ CONSULTATION

Hindmarsh seeks to ensure stakeholders; the local Community and authorities are satisfied by the manner in which construction activities and tasks are managed. To facilitate this Hindmarsh will:

Detail here how stakeholder, community and authority communication \ consultation is to occur.

AS AN EXAMPLE:

Hindmarsh has created two Information Packages to assist with the consultation process:

- Consultation Package 1 includes the following:
    - Details of the 24 Hours contact number for questions, concerns and complaints.
    - Information sheet regarding complaints escalation process
    - Information sheets providing details of the construction planned and duration of predicted construction noise and vibration.
    - Letterbox drops detailing the proposed work, the location of work, the days and dates of the work and the hours involved and the contact number of the Project Manager.
    - Advice to Council and local Police to support current complaints managements
    - Construction Animations – detailing traffic movement, specific construction activities and other points of interest for Key Stakeholders and the community.
- Consultation Package 2 – High Noise \ Night Works – includes the following:
    - Consultation Package 1 plus;
    - Direct contact with potentially affected land users (residents, childcare centre, businesses and client) to provide information in a letterform outlining the proposed work, the location of the work, the day(s) and date(s) of the work and the hours

involved. This contact shall be made at least two days before proposed commencement of the work.

Both packages include reference to relevant vibration events in addition to the information relating to noise impacts. The 24 hours contact number will be addressed to a project resource which has the ability to take action in support of complaint received. The contact details of the current Site Manager (SM) and Project Manager (PM) are also published within Consultation Packages and may be contacted any time.

10.3.1 Authorities

Hindmarsh acknowledges at times it will be necessary to communicate, and or consult, with public authorities regarding emergency planning and other relevant environmental issues.

10.4 COMMUNICATION SUMMARY

Communication with internal and external stakeholders regarding environmental issues will be in accordance with the following table:

Notifications

Subject	Action	Recipient	Frequency
Environmental incident	Project Manager	CLIENT	As per client requirements
Pollution \ Environmental non-compliance	Project Manager	CLIENT	As per client requirements
Public complaints	Project Manager	State Manager Construction \ CLIENT	48 hours and as per client requirements
Complaint response	Project Manager	State Manager Construction \ CLIENT	48 hours and as per client requirements
Extended working hours	Project Manager	CLIENT	and as per client requirements
Discovery of threatened fauna	Project Manager	State Manager Construction	48 hours
Discovery of archaeological material incl heritage items	Project Manager	State Manager Construction \ CLIENT	48 hours and as per client requirements
Discovery of skeletal material	Project Manager	State Manager Construction \ CLIENT	24 hours and as per client requirements
Consultation Package 1	Project Manager	Key Stakeholders	As Required \ as per programme
Consultation Package 2	Project Manager	Key Stakeholders	As Required \ as per programme
High Noise \ Night Works (note these events are not planned to occur)	Project Manager	ALL	2 Days prior to works commencing

General

Subject	Action	Recipient	Frequency
EMP	Project Manager	Internal	Quarterly
Environmental CAR	Team	Project Manager	As stipulated within ARN
Audit	National SQE Manager	Project Manager	Notify 5 days prior

Environmental performance	National SQE Manager	State Manager Construction	As scheduled via Internal Audit

Meetings

Type	Chair	Attendees	Frequency
Key Stakeholder Meeting	Project Manager	TBA	Weekly to Fortnightly
Toolbox Meetings	Site Manager	As Required	Weekly
Daily Prestart Meetings	Subcontractor Reps	As Required	As Required

11. Induction and Visitor Management

Site Induction is undertaken by all workers (this includes Hindmarsh employees, all subcontractors and any employees working for subcontractors), prior to work commencing on site. Induction consists of the worker completing a *Site-Specific Induction* and by being made aware of the *Site Safety Rules*. The worker acknowledges acceptance and understanding of the induction process by signing the *Site-Specific Induction* form. During induction copies of all appropriate licensing, certification and qualification will be collected by Hindmarsh and retained with the worker's induction record. A nominated Hindmarsh employee* will be responsible for maintaining these records.

It will be a condition of entry, of the project, that each individual worker has a valid White Card/Blue card as issued by a recognised safety training authority.

11.1 VISITOR INDUCTION

A visitor's induction is undertaken by all visitors, prior to site access. Visitor induction consists of the visitor reading and understanding the project's *Safety Guidelines for Visitors Pamphlet*, *Site Safety Rules*, and *Emergency Management Plan (EMP) - Visitor Information*. Visitors to site are to acknowledge understanding of the Visitor Induction by the signing of the *Acknowledgement Register*.

Those who visit site for a one-off short duration visit to carryout non-intrusive work such as – external auditors, delivery drivers may visit site without undertaking the Visitor Induction however these visitors must be accompanied at all times (if on site) and or must follow Hindmarsh representative's instructions.

Hindmarsh* is responsible for maintaining the induction register \s.

12. Checking

(MONITORING, MEASUREMENT, NONCONFORMITY, CORRECTIVE ACTION, PREVENTIVE ACTION, INTERNAL AUDIT, INSPECTION (EVALUATION OF COMPLIANCE))

12.1 MONITORING AND MEASUREMENT

Monitoring requirements for the project will be identified within the project specific *Environment Risk and Opportunity Profile)*. Where monitoring has been identified data collected may be analysed and may result in corrective and or preventive action. All Hindmarsh owned measuring equipment must be registered on the *Equipment Calibration Register* and all associated calibration records maintained. Hindmarsh may outsource environmental monitoring to external consultants as required. Calibration records for non-Hindmarsh owned equipment will be requested.

The following should be noted regarding possible noise \ vibration \ dust monitoring regimes:

- Monitoring may be undertaken in response to complaints where this is considered an appropriate response
- Monitoring that is to occur will be undertaken by personnel suitable qualified and experienced in undertaking acoustic measurements
- Monitoring may occur for plant and equipment which is perceived as 'excessively noisy' to determine the need for rectification or replacement
- If night works are required: Night works construction noise levels, if approved by EPA, may be monitored at the start of the activity, and at a location equivalent to the most affected noise sensitive land user to confirm operation in accordance with EPA requirements.

12.2 NONCONFORMITY, CORRECTIVE AND PREVENTIVE ACTION

Any environmental nonconformity observed will be rectified via the Corrective Action process. Where nonconformity creates a hazard, this will result in either:

- a record being made within an "Uncontrolled Hazard Booklet",
- a *Corrective Action Required* form being raised and issued, or
- the completion of an *Incident Report*.

Where a hazard has not been created by the nonconformity a Corrective Action Required form will be issued if immediate action is not taken to rectify.

Where a Corrective Action Required form is issued and it is not addressed in a timely manner or there is a subsequent re-occurrence of the non-conformance the *Corrective Action and Escalation Process* will commence.

Please refer to the *Corrective Action* procedure and *Uncontrolled Hazard \ Hazard Reporting - Management* flowchart for further information.

During project delivery Hindmarsh anticipates and encourages continual improvement in all areas of business. Continual improvement opportunities may arise from inspections, testing, auditing, incidents and or observations. Hindmarsh promotes and support the issue of corrective actions, as required, to support continual improvement requirements. Please refer to the *Preventive Action* procedures for further information.

12.3 AUDITING

Hindmarsh actively monitors performance and seeks potential improvement opportunities by completing internal audits. Please refer to *Audits Management* procedure for detailed information regarding the internal audit function and requirements, including:

- Audit Notification
- Internal Auditor Notes (audit opening \ closing meeting)
- Internal Auditor Notes (audit)
- Internal Audit Report

12.4 INSPECTION (EVALUATION OF COMPLIANCE)

The Weekly *Environmental and Sustainability Check Sheet*, is completed by the project team to evaluate compliance. The weekly or daily check sheet is customised to reflect specific project requirements. Where applicable, the environmental controls listed within *Environmental Risk and Opportunity Profile* may also be included within the check sheet.

It is preferred that only persons who have completed environmental awareness training or environmental management training complete the check sheet, however at times it is accepted it may be completed by a resource who has not completed such training but whom has environmental experience.

Hindmarsh management also inspect the site to ensure that the environmental impacts resulting from construction work are being adequately mitigated and environment controls have been implemented, are being met and maintained. Refer *Senior Manager's Visit (SMV)* and *Management, Project Inspections* documents.

13. Reporting

Detail all contractual and required project reporting requirements here. This should cover all areas including internal and external reporting requirements.

13.1 WEEKLY REPORTING REQUIREMENTS

- Weekly SQE Report
- Weekly Environment & Sustainability Check Sheet or Daily Environmental & Sustainability Check Sheet
  - Results of the Environmental & Sustainability Weekly or Daily Check Sheet are to be reported to the Project Manager
  - The report is to be co-signed by the Project Manager
- [Detail other weekly project reporting requirements]

13.2 MONTHLY REPORTING REQUIREMENTS

- *Monthly Internal Project Report*
- *OnSite Database (Intranet*
  - Earthworks
  - Piling
  - Structure
  - Facade
  - Glazing
  - Mechanical
  - Post Tensioning
  - Concrete (insitu and or precast)

13.3 CLIENT & EXTERNAL REPORTING REQUIREMENTS

- Monthly Client Report
- [Detail other monthly project reporting requirements]

13.4 REGULATORY REPORTING REQUIREMENTS – NSW ENVIRONMENT PROTECTION AUTHORITY

A primary EPA objective is to protect, restore and enhance the quality of the environment in NSW. To help achieve this objective, the EPA assists the responsible party in efforts to mitigate the impact of pollution incidents on the environment and surrounding community. An Environmental Incident includes:

Pollution incidents may occur due to a broad range of causes. The severity of the incident depends on factors including;

- the nature and amount of the materials exposed to the environment
- the level of sensitivity of the local environment
- variables such as the time of day, weather conditions and community activities

Examples of incidents that may result in environmental harm include;

- an unauthorized release of chemicals to the air from a factory stack
- a milk tanker rollover into a creek
- a sewerage system overflow

- a factory fire
- illegal dumping of waste.

EPA State Name: NSW Environment Protection Authority - NSW EPA.
Telephone: 131 555
Email: info@epa.nsw.gov.au

In the event of a reportable environmental incident the Project Manager (PM) must refer to the *Injury, Illness and Incident Management and Reporting* flow chart for detailed guidance regarding the management and reporting of environmental incidents.

14. Document and Record Management

Environmental project records are controlled in accordance with the Project Management Plan Section:

Document and Record Management. The minimum records maintained include the following:

Category	Record	Responsible	Retention Timeframe
General Requirement	Environmental Management Plan (all versions), Including: • Performance Targets and Measurements • Contact and Service Provider Information *Site Diary – Site Manager \ Foreman* *Site Diary – SQE (*where required) Inspection Records Training Records – Including Qualifications held by individuals All formal correspondence with stakeholders Meeting Minutes Complaint records Audit reports (including internal review reports) Weekly Environmental & Sustainability Checksheets Induction Records	Project Manager Site Manager Project Manager HR Manager Project Manager Project Manager Project Manager Project Manager Environmental Coordinator	Permanent Permanent Permanent Permanent Permanent Permanent Permanent Permanent Permanent
Legislative \ Regulatory	Identified Legislative Regulatory Register	Project Manager	Permanent
Approvals Permits and Licenses	Any Approvals Permits and Licenses	Project Manager	Permanent
External Review Reports	Not Applicable		
Construction Waste management	Waste tracking dockets Waste disposal receipts	Site Manager Site Manager	Permanent Permanent
Land Contamination	Not Applicable		
Hazardous Substance	Copies of MSDS's	Site Manager	Permanent
Corrective Action Request	Copies of issued corrective action \ Action Required Notifications Log of corrective actions	Project Manager Project Manager Project Manager	Permanent Permanent Permanent
Incident reporting	Environmental incident reports Incident Investigation Reports	Project Manager Project Manager	Permanent Permanent
Performance Analysis \ Evaluation Reports	Where available	Project Manager	Permanent

Additional information regarding document and record control is available, refer: *Control of Documents* and *Control of Records*.

Each subcontractor is selected on the basis of their ability to meet all specified requirements including Quality, Environment and Health and Safety. The following are examples of environmental documents which may be required from subcontractors:

- Tool box talks and attendance registers
- Environmental Risk Assessment
- Project Risk Assessments

- Job Safety Analysis (JSA)
- Material Safety Data Sheets (MSDS)
- SQE information such as logbook, tests records etc of all plant and equipment on site
- Competency Certificates and training records

Applicable subcontractors may also be required to submit a site-specific Quality, Environmental and \ or Health and Safety Plan as determined by the contract requirements and / or risks.

14.1 CUSTOMISED COMPASS TEMPLATES

During the life of the project a number of Compass templates will be customised, and in some cases continually revised to address project specific requirements: for example, Risk Profile templates. In order to ensure these documents \ records are appropriately controlled this project will utilise, either or both, Aconex and or the Site Server Electronic Filing System. Where such documents are controlled via the Site Server Electronic Filing System, the *Compass to Project Controlled Document Register* shall be completed and maintained accordingly.

15. Subcontractor Management

All subcontractors are to ensure they make appropriate environmental inclusions in their SWMS \ JSEAs and abide by all statutory requirement mentioned in this EMP.

Hindmarsh* is to ensure SWMS are reviewed as per *SWMS Review,* and to ensure legislative \ regulatory requirements are meet as per Legal Register. Risk Profiles completed are also to be used during the review of SWMS to ensure all known risks have been addressed and adequately controlled.

Monthly subcontractor spot audit may be undertaken to ensure each Subcontractor complies with all requirements (Contract, Statutory etc)

16. Project Environmental Sustainability Information & Particulars

16.1 EXISTING ENVIRONMENTAL CONDITIONS OF SITE

This section of the plan identifies Key Site Features including:

- Ecological context – To encourage and recognise the reuse of land that has previously been developed.
- Outline previous use of site including outline of ecological value.
    - Description for surrounding area
    - Existing site plan
    - Images of significant environmental features- through initial site visits
    - List of specific sensitivities
    - Remediation Plans which may have been completed.

16.2 DILAPIDATION REPORT

A Environmental Impact Statement (EIS) has been prepared for Health Infrastructure (HI) to assess the environmental impacts of the proposed expansion of the Emergency Department at The Sutherland Hospital Operating Theatre Complex.

The objectives of this EIS are to:

- Satisfy the requirements of relevant NSW environmental legislation, in particular the requirements of the Environmental Planning and Assessment Act 1979; and
- Identify, assess and mitigate any environmental impacts hat are likely as a result of the development, during construction and/or its operation.

16.3 HERITAGE \ CULTURAL CONSIDERATIONS

Heritage \ cultural considerations have been captured in the Environmental Impact Statement (EIS). Refer to Aconex, reference RPT-000054, revision E.

16.4 GEOTECHNICAL AND CONTAMINATION REPORT

A Geotechnical and Contamination report has been undertaken by JK Environments and JK Geotechnics.

16.5 CONTAMINATION \ REMEDIATION REPORT

A Contamination report has been undertaken and is in the Remediation Action Plan (RAP Report) by JK Environments and Environmental Impact Statement (EIS).

16.6 ADDITIONAL REPORTS

Environmental Impact Statement (EIS) includes additional reports such as:

- Noise and Vibration
- Traffic and parking
- Arborist Report
- Air Quality and energy

16.7 PROJECT SPECIFIC SUSTAINABILITY INITIATIVES

Detail here any additional project specific sustainability initiatives which have not already been addressed within this EMP. Consider:

- Construction and Building Management. Refer to section 3.6: Construction Activities from the Review of Environmental Factors (REF) report and Environmental Impact Statement (EIS).
- Relocation of vegetation \ tree originally marked for removal

The proposed development involves the removal of 15 trees and the retention of 4 trees adjacent to the proposed extension. The 11 trees requiring removal are 7 x Washingtonia robusta (Washingtonia Palm) ranging from 3.5 – 8.0 meters in height, and 4 x Eucalyptus sideroxylon (Red Ironbark) ranging from 3.5 – 9.0 meters in height. All these trees appeared in good health with normal vigour at the time of the site inspection.

The Red Ironbark 3 x Washingtonia Palms to be retained will require tree protection measures put in place prior to commencement of construction. The Red Ironbark has a Diameter at Breast Height (DBH) of 0.48 meters requiring a Tree Protection Zone (TPZ) of 5.7 meters, and a Diameter at Base (DAB) of 0.64 meters equating to a Structural Root Zone (SRZ) of 2.7 meters (as per AS 4970-2009 Protection of Trees on Development Sites).

Tree Protection fencing should be installed at 5.7 meters or as far as reasonably practical to allow for construction and access, with incursions and adjustments to be approved by the site Arborist. Activities required within the TPZ should be approved and supervised by the site Arborist.

16.8 ENVIRONMENTAL MANAGEMENT SUB-PLANS

This section of the plan is to identify whether there are any sub-plans applicable to this document. This will include (the emergency management plan must be referenced here):

- Emergency Management Plan
- Waste Management Plan, PLN-000006, revision A

16.9 SITE SETUP – ACCOMMODATION AND AMENITIES MANAGEMENT

Detail within this section specific details regarding accommodation \ amenities management. Completing a site layout is encouraged and should be referenced within this section. Also consider:

- Type of site sheds to be used
- Energy efficiency of amenities
- Indoor environmental quality (e.g. shade site sheds to lower air conditioner use)
- Water efficiency
- Transport (e.g. provide bike racks for employee \ subcontractor use)

16.10 STORMWATER/RAINWATER

N/a

16.11 WASTE MANAGEMENT

Site Clearance, excavation, and demolition:

Hindmarsh will engage a licensed demolition contractor to provide services to separate and remove demolition waste into such categories for recycling purposes where possible:

- Soils, grasses
- Trees and Mulch
- Masonry (concrete and brick)
- Metals (steel, Copper, aluminium)
- Plasterboard
- Timber
- Glass
- Paper and cardboard
- Rock

All materials will be taken to licensed recycling facilities. The demolition contractor will provide evidence of recycling by way of monthly reports demonstrating type of material, facility take to, weights, recycling percentages, tip dockets etc.

Hazmat Waste:

All Hazardous waste and materials being removed from site will be handled and disposed of within the EPA guidelines, Hygienists reports, Environmental reports etc.
No Hazardous materials will be touched, removed or handled with out Stakeholder consent and approved notification.

Site Remediation (Existing In ground Waste):

Prior to any in-ground material going offsite a qualified Environmental consultant or equivalent will be engaged to carry out the Gap analysis, waste classification and site clearance reports in line with JK Environments report Date: 8 February 2021 Ref: E33141PArpt-RAP.
All material removed from site will be taken to a licensed facilities accordingly.
All waste types and quantities will be recorded and submitted with the monthly reports. The earthworks contractor will provide evidence to Hindmarsh in way of tip docks, truck rego's, type of material, facility take to, weights, recycling percentages, EPA permits, Safework permits etc.

Construction Waste:

Through out the construction phase Hindmarsh will engage a waste contractor such as Just Skips or Equivalent to provide waste bins for the collection and separation of waste on site bins expected to be onsite include:

- 3m3 food waste bin (collected weekly)
- 660L cardboard and paper recycling bin (collected fortnightly)
- Concrete slurry bin for the collection of concrete pump excess concrete
- 1.5m3 general site waste bins
- 660L general site waste bins
- 240L general site waste bins

All the site general site waste bins will be used to collect all site waste from the building area. These smaller site bins will then be tipped into the appropriate large site bins ready for truck collection and transportation to a recycling facility. Our contracted waste collection contractor will be contracted to ensure a minimum of 90% of all waste is recycled. It is anticipated that our construction waste will be taken to:
KLF Camelia - being a Green star certified waste recycling facility
The facility will separate our waste into such categories:

- Metals
- Cardboard
- Timber
- Concrete
- Plasterboard
- Soils
- Plastics
- Landfill

Every month the facility will provide a log and waste recycling report on all the materials delivered from our site to the facility.
No waste will be conveyed to or deposited at any place that cannot lawfully be used as a waste facility for that waste.

Monitoring

Hindmarsh will continually monitor and record all volumes of waste, methods, and locations of disposal.
A progress report will be issued every 2 months, with a summary report being issued before completion.

Our summary report will address the following EPA checklists.

3. Management of waste on construction and demolition projects

3.1. Tools available to assess compliance

The EPA strongly recommends that procurement officers and project managers ensure their contractors meet contractual obligations for the lawful transport of waste and its disposal off site.

While procurement officers and project managers must rely on their own inquiries, the checklists in the tables that follow highlight some factors that may help in assessing whether contractual obligations have been met when transporting common types of waste to another place for re-use, processing or disposal. The checklists are not exhaustive.

The checklists also provide suggested examples of the types of information that contractors provide as evidence of lawful transport or disposal. The EPA recommends procurement officers and project managers make further inquiries if principal contractors and subcontractors cannot provide such evidence.

Table 1 Building and demolition waste (B&D waste)

No.	Checklist	Requirement	Evidence	Note
1	Is any of the waste B&D waste?	If yes: • classify waste onsite using the EPA Waste Classification Guidelines • if the waste is subject to an RRO and RRE, all conditions of the RRO and RRE must be complied with.	• waste classification report • any records including sampling results • records required by RRO including sampling results and copies of the statements of compliance	
2	Will the B&D waste be transported offsite?	If yes: • waste tracking requirements apply if waste is generated in the metropolitan levy area (MLA) and transported outside NSW • loads must be covered during transport	• records detailing where material was transported to • transport records (e.g. GPS trackers)	

No.	Checklist	Requirement	Evidence	Note
3	Will the B&D waste be sent for recycling/re-use/processing?	If yes: • receival facility must have planning approval and may require an EPL for those waste types	• copy of receival facility's EPL (available on public register), if required. • if no EPL, records showing the facility can receive the waste lawfully e.g. copy of the receival facility's development consent • weighbridge receipts • invoicing and payment receipts from receival facility.	It's recommended that you pay receival facility costs directly to the facility.
4	Will the B&D waste be sent for disposal?	If yes: • disposal facility must have planning approval and may require an EPL to dispose of those waste types.	• copy of disposal facility's EPL (available on public register), if required. • if there is no EPL, evidence demonstrating the disposal facility can receive and dispose of the waste lawfully e.g. copy of the disposal facility's development consent • weighbridge receipts • invoicing and payment receipts from disposal facility.	It's recommended that you pay receival facility costs, including the waste levy, directly to the facility.

Table 2 Asbestos waste (including asbestos-contaminated soils)

No.	Checklist	Requirement	Evidence	Note
1	Is any of the waste asbestos waste?	If yes: • classify waste onsite using the EPA Waste Classification Guidelines • SafeWork NSW may require written notification of asbestos removal work by a licensed asbestos removalist • you may need a clearance certificate under work, health and safety laws to verify that the site is safe for normal use and can be re-occupied.	• waste classification report • any records including sampling results • records of site checks • asbestos audit • copy of SafeWork NSW notification, if required • copy of asbestos removalist's licence • clearance certificate	'Asbestos waste' is any waste that contains asbestos, including asbestos-contaminated soil.
2	Will the asbestos waste be transported offsite?	If yes: • asbestos sheets must be wrapped • friable asbestos must be in a sealed container • soils contaminated with asbestos waste must be wetted down and covered • loads must be covered during transport • if asbestos waste is >100kg or 10 square metres and being transported in NSW, the consignment must be tracked in WasteLocate • the transporter must use a smart phone or tablet that connects to the internet to record on-road details in WasteLocate • waste tracking requirements apply if asbestos waste > 10 tonnes is transported outside NSW.	• WasteLocate consignment number (audit consignments) or consignment authorisation • transport records (e.g. GPS tracker)	

No.	Checklist	Requirement	Evidence	Note
3	Will the asbestos waste be sent for storage?	If yes: • the receival facility must have planning approval and may require an EPL to store asbestos waste. • the receival facility must have a QR plate to scan for WasteLocate consignment.	• copy of receival facility's EPL (available on public register), if required • if there is no EPL, evidence demonstrating the receival facility can receive and store asbestos waste e.g. a copy of the receival facility's development consent • weighbridge receipts • invoicing and payment receipts from receival facility • WasteLocate consignment number (audit consignments)	It's recommended that you pay receival facility costs directly to the facility.
4	Will the asbestos waste be sent for disposal?	If yes: • the disposal facility must have planning approval and an EPL to dispose of asbestos waste. • the disposal facility must have a QR plate to scan for WasteLocate consignment.	• copy of disposal facility's EPL (available on public register). • weighbridge receipts • invoicing and payment receipts from disposal facility • WasteLocate consignment number (audit consignments)	It's recommended that you pay disposal facility costs, including the waste levy, directly to the facility.

Table 3 Virgin excavated natural material (VENM)

No.	Checklist	Requirement	Evidence	Note
1	Is any of the waste VENM?	If yes: • classify waste onsite using the EPA Waste Classification Guidelines.	• waste classification report • sampling results (if available) • geo-tech report (if available)	
2	Will the VENM be transported offsite?	If yes: • waste tracking requirements apply if waste >10 tonnes generated in the MLA is transported outside NSW • loads must be covered during transport.	• records detailing where material was transported to • transport records (e.g. GPS trackers)	
3	Will the VENM be sent for reuse or processing?	If yes: • receival facility must have planning approval and may require an EPL to lawfully reuse or process VENM.	• copy of receival facility's EPL (available on public register), if required • if there is no EPL, evidence demonstrating the facility can re-use or process VENM lawfully e.g. a copy of the receival facility's development consent • statutory declaration from owner of receival facility • weighbridge receipts, if applicable • invoicing and payment receipts from receival facility, if applicable	It's recommended that you pay receival facility costs directly to the facility, if applicable.
4	Will the VENM be sent offsite for disposal?	If yes: • disposal facility must have planning approval and may require an EPL to dispose of VENM.	• copy of disposal facility's EPL (available on public register), if required • if there is no EPL, evidence demonstrating the disposal facility can dispose of VENM lawfully e.g. a copy of the disposal facility's development consent • weighbridge receipts • invoicing and payment receipts from disposal facility	It's recommended that you pay disposal facility costs, including the waste levy, directly to the facility.

Table 4 Excavated natural material (ENM)

No.	Checklist	Requirement	Evidence	Note
1	Is any of the waste ENM?	If yes: • classify waste onsite using the EPA Waste Classification Guidelines • the waste is subject to an RRO and RRE. All conditions of the RRO and RRE must be complied with.	• waste classification report • sampling results • records required by RRO including sampling results and copies of the statements of compliance • geo-tech report (if available)	
2	Will the ENM be transported offsite?	If yes: • waste tracking requirements apply if waste >10 tonnes generated in the MLA is transported outside NSW • loads must be covered during transport.	• records detailing where ENM was transported to • transport records (e.g. GPS trackers)	
3	Will the ENM be sent for reuse?	If yes: • receival facility must have planning approval to re-use the waste.	• statutory declaration from owner of receival facility • evidence demonstrating the facility can re-use ENM lawfully e.g. a copy of the receival facility's development consent • invoicing and payment receipts from receival facility, if applicable	It's recommended that you pay receival facility costs directly to the facility, if applicable.

Table 5 Excavated material (other than VENM, ENM or asbestos-contaminated soil)

No.	Checklist	Requirement	Evidence	Note
1	Is any of the waste excavated material (other than VENM, ENM and asbestos-contaminated soil)?	If yes: • classify waste onsite using the EPA Waste Classification Guidelines • if the waste is subject to an RRO and RRE, all conditions of the RRO and RRE must be complied with.	• waste classification report • sampling results • records required by RRO including sampling results and copies of the statements of compliance • geo-tech report (if available) • immobilisation approvals	Prior to disposal, hazardous waste must be treated to lower its waste classification, either onsite or off-site at a licensed hazardous-waste processing facility. Treatment may include immobilisation under an immobilisation approval.

2	Will excavated material (other than VENM, ENM and asbestos contaminated soil) be transported offsite?	If yes:
		• waste tracking requirements apply if:
		  ○ waste >10 tonnes generated in the MLA is transported outside NSW, or
		  ○ waste is of a type described in Schedule 1 of the *Protection of the Environment Operations (Waste) Regulation 2014*
		• loads must be covered during transport.
			• consignment authorisations and waste transport certificates, if required
			• records detailing where material was transported to
			• transport records (e.g. GPS trackers)	

3	Will excavated material (other than VENM, ENM and asbestos-contaminated soil) be sent for re-use or processing?	If yes: • receival facility must have planning approval and may require an EPL to re-use or process those waste types	• copy of receival facility's EPL (available on public register), if required • if there is no EPL, evidence demonstrating the facility can re-use or process the waste lawfully e.g. a copy of the receival facility's development consent • weighbridge receipts • invoicing and payment receipts from receival facility • statutory declaration from owner of receival facility	It's recommended that you pay receival facility costs directly to the facility.

No.	Checklist	Requirement	Evidence	Note
4	Will excavated material (other than VENM, ENM and asbestos-contaminated soil) be sent for disposal?	If yes: • disposal facility must have planning approval and may require an EPL to dispose of those waste types.	• copy of disposal facility's EPL (available on public register), if required • if there is no EPL, evidence demonstrating the disposal facility can dispose of the waste lawfully e.g. a copy of the disposal facility's development consent • weighbridge receipts • invoicing and payment receipts from disposal facility	It's recommended that you pay disposal facility costs, including the waste levy, directly to the facility.

APPENDIX A – ENVIRONMENTAL CHECKLIST (Site Specific)

This document is to be amended to suit Project Requirements based on risk assessment and relevance. The items below shall also reflect current conditions, activities, controls and aspects on site.

Project:	The Sutherland Hospital Operating Theatre Complex	**Project No:**	2041
Inspection Conducted by:		Date Inspection competed:	

Yes = Item checked & compliant **No** = Item checked & non compliant with corrective action required **NA** = Not Applicable

Item	Comment	Yes/ No/NA
Environmental Impact Guide (EIG)		
1. Refer attached current EIG which was reviewed for compliance during this inspection.		
General		
1. Are the contractors aware of and implementing their environmental obligations?		
2. Have SWMS \ JSA's been reviewed to ensure environmental controls are in place?		
3. Silt and other materials are removed from around erosion control structures?		
Traffic Management and Site Access		
1. Is safe and clear access maintained to ED drop & reception?		
2. Is safe and clear access maintained to Medical Imaging from ED?		
3. Is safe and clear access maintained to Ambulance bay & operating unit?		
4. Full functionality of Emergency Department has been maintained?		
5. All possible measures have been taken to minimise disruption to parking.		
6. Is the traffic management plan being considered during construction?		
7. Is access to the site restricted to authorised personnel only/ are all gates locked and automatic closers in place?		
8. Are site boundaries fenced \ protected effectively?		
9. Is the hoarding in a satisfactory condition?		
10. Public Roads are kept clear and clean of mud and debris?		
11. Is safe Access to ED Drop Off & Reception maintained?		
Flora and Fauna		
1. Are construction activities being maintained within the defined areas?		

2. Has any existing 'protected' vegetation been damaged?		
3. Are required Tree Protection Zones adequately in place?		
Air Emissions / Dust		
1. Are dust monitors established and in working order?		
2. Are nominated dust suppression devices in place in accordance with the Infection Control Risk Assessment?		
3. Are required hoardings in place in accordance with IC Management Plan?		
4. Are hoardings and necessary IC control measures signed off prior to works commencing?		
5. Are sticky mats installed if required?		
6. Are sticky mats & walk off mats in good working order?		
7. Are doors & door closers working adequately between construction zone & hospital?		
8. Dust suppression equipment \ processes are working effectively?		
9. Are floors swept / mopped regularly and adequately?		
10. Is negative pressure HVAC equipment in place?		
11. Are noxious dusts or fumes escaping from the site?		
12. Is overspray excessive and falling into neighbouring areas?		
13. Have plant and equipment maintenance documentation been reviewed?		
14. Plant maintenance schedules have been sighted and are being adhered to?		
15. Spoil trucks are covered after being loaded and tailgates are effectively sealed prior to leaving site?		
16. Materials are not being burnt on site?		
Noise Emissions		
1. Are noise limits (regulatory \ contract) being adhered to?		
2. Is noise suppression equipment functioning correctly?		

Item	Comment	Yes/No/NA
Waste Minimisation		
1. Have adequate rubbish and recycling bins been provided?		
2. Do rubbish bins need emptying?		
3. Are rubbish bins covered or other to prevent wind scattering rubbish?		
4. Is the work area clean/tidy?		
5. Are stockpiles presenting a negative environmental impact?		
Dangerous \ Hazardous Materials		
1. Are daily machinery safety inspection lists reporting any fuel/oil leaks/excess noise, vibration or emissions?		
2. Are emergency services phone numbers clearly displayed?		
3. Are emergency oil spill kits in serviceable condition and readily accessible?		
4. Are hazardous materials being stored appropriately (refer SDS)		
5. Are technical data sheets for dangerous goods readily available on-site?		
Additional Items from Project Risk Assessment		
1. Is appropriate signage in place?		
2. Are the required disruption notices in place for works being undertaken?		
3. Is spill kit available for use in emergency in close proximity to the works? Is spill kit adequately stocked and ready for use?		

Signatures:

Conducted by:		**Name:**		**Date:**	
Site Manager:		**Name:**		**Date:**	
Project Manager:		**Name:**		**Date:**	

Comments from PM & SM, please return to person conducting checklist if further action is required:

APPENDIX B – ENVIRONMENTAL AND SUSTAINABLITY POLICY

HINDMARSH
Leadership at work

Environment and Sustainability Policy

Hindmarsh operates with full appreciation and awareness that environmental protection and sustainability are principle to our ongoing success. Operations in terms of both construction and completion are compassionate to the environment, the local community and aim to support the ongoing sustainability of the environment.

Hindmarsh seeks to meet its own environmental needs and the needs and expectations of clients, stakeholders, employees and the community by:

- Setting and continually reviewing measureable environmental objectives and targets. Backed by ongoing monitoring, reporting and analysis supporting continual improvement. Complimented by ongoing feedback at all levels.
- Prevent pollution and unnecessary resource consumption by setting targets and maintaining systems and processes which facilitate the more efficient use of energy and material resources and improved waste management, waste avoidance, re-use and recycling.
- Seek to minimise construction related aspects and impacts including noise, vibration, groundwater, air quality, land contamination, amenity and heritage.
- Promote a shared sense of ownership and responsibility for optimal environmental performance from board through to employees and contractors whilst developing a culture of environmental respect and appreciation.
- Encourage and support environmental awareness through ongoing training and development of competencies particular to specific environmental impacts related to individual activities.
- Comply with all legal requirements including environmental Legislation, Regulations, Codes of Practice, Applicable Australian and other standards specific to Hindmarsh.
- Implement and maintain the Hindmarsh Management System and its Environmental elements to ensure all potential aspects and impacts are identified, evaluated and suitably eliminated or controlled.
- Foster and support continuous improvement at all levels including the identification of key environmental initiatives.

Compliance with this policy will be monitored, audited and continually reviewed so as to remain effective and aligned with all of our operations.

Rowan Hindmarsh
Chief Executive Officer

WARNING – Uncontrolled when printed! Refer to COMPASS for the latest version.

Authorised by: CEO
Maintained by: SQE
Last Revision Date: 16 January 2020

Next Review Date: January 2023
Current Version: 3.0
Page 1 of 1

APPENDIX C. EIG001 SOIL EROSION SEDIMENT SURFACE RUNOFF

Project Name:	**The Sutherland Hospital Operating Theatre Complex**		
Revision:	**1**	**Date of Last Revision:**	**14/10/21**
Reviewed by:			

1. PROCESS SUMMARY

To minimise the potential for erosion of the site and sedimentation in the adjoining properties, waterways, dams and drains.

2. OBJECTIVES

- No sedimentation of the adjoining properties, waterways, dams and drains.
- Minimal erosion on site;

3. DEFINITIONS

Not Applicable

4. RESPONSIBILITIES

Owner	Responsibility
Environmental Role	Is responsible for the construction and maintenance of the erosion and sediment control works. Is responsible (directly or indirectly) for cleaning and repairing erosion and sediment control works, and notifying the Project Manager of any failures.

5. PROCESS DESCRIPTION

5.1 Permits and Licenses

Not Applicable

5.2 Control Measures

The following control measures are to be fully operational and provide effective erosion control prior to disturbing adjacent ground and commencement of adjacent excavation.

Control or divert surface drainage entering the construction site	**Cross Box for Measures Relevant to Project**
Nominated resource to regularly assess the need for temporary run off control.	☐
Divert surface drainage by the installation of bunds, v-drains, swales and diversion channels.	☐
Install cut-off drains where long cut/fill battered slopes occur to control water run-off speed and erosion.	☐
Prevent sediment laden run-off entering adjoining areas, watercourses, drains and dams	☐
Construct silt traps (silt fences, straw bales) as necessary.	☐
Straw bales to be secured by two steel droppers.	☐
Ensure drain entry points are protected by silt socks or sand bags.	☐
Ensure silt traps are located at toe of stockpile batters.	☐
Protect exposed embankments using silt traps.	☐
Protect batter slopes with mulch, plant grass or plants.	☐
Seal off work areas prior to completing work each day by rolling and grading to ensure areas are free draining.	☐
Maintain minimum capacity of silt fences of 50% by regular removal of accumulated debris.	☐
Place material stockpiles clear of watercourses and storm water drain inlets and above normal highwater level of watercourses.	☐
Do not wash out trucks etc., within 20m of drainage system or natural watercourses.	☐

Prevent soil loss from disturbed areas through wind and water erosion	Cross Box for Measures Relevant to Project
Stage the works to minimise the amount of exposed areas.	☐
Strip topsoil immediately after clearing.	☐
Use stripped topsoil to rehabilitate other areas if possible.	☐
As a priority protect exposed embankments using silt fences and straw bales.	☐
Regularly water exposed surfaces where wind erosion may occur.	☐
Rehabilitate cleared areas ASAP.	☐
Grass exposed surfaces if exposed for an extended time.	☐

Prevent soil loss from stockpiles through wind and water erosion	Cross Box for Measures Relevant to Project
Regularly water exposed surfaces of stockpiles where wind erosion may occur.	☐
Construct swales around stockpiles as necessary.	☐
Stockpile materials away from drainage lines and cleared areas.	☐

Minimise damage and erosion by site traffic	Cross Box for Measures Relevant to Project
Plan and establish access and haul roads with agreement local authorities and client.	☐
Existing tracks or final road alignment to be used whenever possible.	☐
Avoid construction of parallel and multiple tracks.	☐
Restrict vehicular movement over cleared areas.	☐
Adequate signage to be in place to ensure safe movement of vehicles and to discourage access away from haul roads.	☐
Maintain water quality.	☐
Test surface water quality to ensure discharge offsite to waterways complies with contract and regulatory requirements.	☐
Check weather forecast prior to priming, sealing and painting activities and ensure bonding or other controls are in place to limit contamination of waterways.	☐

5.3 Monitoring

- Inspect the erosion and sediment control devices weekly and before and after a significant storm event.
- Observe the erosion and sediment control devices daily to ensure correct functioning and placement and that available capacity is adequate.
- Observe any signs of erosion or sedimentation after every significant storm event and once per week at other times.
- If applicable inspect adjacent properties, waterways, dams, drains for the presence of silt, contaminates, litter, erosion.
- Undertake water sampling if required by the contract or by regulator.

5.4 Emergency Response

Please refer to the project's *Emergency Management Plan (EMP)* for information regarding emergency preparedness and response. The project-specific Emergency Management Plan ensures Hindmarsh controls, and assesses Emergency preparedness elements as required for the project.

Specific to this EIG, in the event of any significant failure of the erosion and sediment control devices:

- The Environmental Role is to reinstate the erosion and sediment control works as soon as practical.
- If failure constitutes a threat to the environment and or an adjoining waterway, the Site Manager is to follow incident reporting procedures as detailed within 5.5

5.5 Incident Reporting

Refer to the *Injury, Illness and Incident Management and Reporting* flow chart for detailed guidance regarding the management and reporting of injuries, illness and incidents.

Procedures and processes referenced within the above mentioned document address the following:

- Detailed definitions
- Reporting responsibilities and obligations (both internal and external)
- Incident Reporting responsibilities and expectations
- Site and or National Investigation requirements
- Corrective and Preventive Action
- Analysis of data \ findings (including Objectives \ Targets status)

6. RECORDS

Keep written record showing:

- *Weekly Environmental & Sustainability Checksheet*

7. REFERENCES

Internal References	Compass Ref No.
Environmental Management Plan	C-PRE-M005
Environmental Risk and Opportunity Profile	C-PRE-F016

External References

Document Title	Section	Date \ Revision
Refer to ENV Risk Profile for external resource references		

APPENDIX D. EIG004 NOISE EMISSIONS

Project Name:	**The Sutherland Hospital Operating Theatre Complex**		
Revision:	**1**	**Date of Last Revision:**	**14/10/21**
Reviewed by:			

1. PROCESS SUMMARY

To limit the level of noise generated by the construction works so that it does not cause an environmental nuisance to nearby residents and the general public. The following contains advice on managing and monitoring noise levels associated with site works.

2. OBJECTIVES

To provide monitoring information and advice to ensure that noise levels experienced on site and surrounding the site can be adequately managed. Specifically:

- To minimize \ avoid adverse noise impacts associated with the day to day operations of plant, machinery and task through construction methods and management measures.
- Comply with relevant EPA requirements
- Comply with local or site specific requirements.

Target:

- To monitor noise prior to start at pre-selected locations so that background noise levels can be established and compared against throughout the project life.
- Monitor noise levels generated from plant and equipment and construction activities.
- Maintain noise levels below the accepted rise from the original readings (at surrounding locations).
- Noise complaints that are received from neighbouring facilities are dealt with in an appropriate and timely manner.
- To minimise the occurrence of noise complaints associated with the site works from adjacent occupied areas, facilities and neighbours.

3. DEFINITIONS

Not Applicable

4. RESPONSIBILITIES

Owner	Responsibility
Environmental Role	The Environmental Role (or delegated resource) is responsible for the continual monitoring of noise levels on the site.

5. PROCESS DESCRIPTION

5.1 Permits and Licenses

Where construction activities require permits these must be obtained prior to works commencing – e.g. working outside of hours as stated by local Environmental Protection Authority.

5.2 Impacts

Excessive noise levels can result in a serious nuisance, hearing damage (noise induced hearing loss and tinnitus etc) and loss of usability of site areas and surrounding facilities.

5.3 Noise Generating Activities

	Cross Box for Measures Relevant to Project
Movement and reversing alarms of construction equipment, plant trucks, site vehicles;	☐
Materials equipment loading and unloading;	☐
Use of equipment such as concrete cutter, circular saws, nail guns, jack hammer, hand tools, generators , compressors;	☐

Mobile plant such as Concrete pumps, Agitators, Vibrators, crane operations;	☐

5.4 Control Measures

	Cross Box for Measures Relevant to Project
Complete Noise Study. Including establishment of 'normal' noise levels at the site prior to construction commencing.	☐
Working hours to be in accordance with contractual and legislative limitations.	☐
Execute noise generating tasks within the project central area rather than along perimeters, i.e. do not drop rubbish into bins and or loads into trucks from excessive heights or without due care.	☐
Coordinate site works to maximise the use of existing site features as sound barriers where possible.	☐
Install temporary or project life hoardings along sensitive areas such as solid panels in preference to mesh panels.	☐
Install temporary, mobile sound barriers or enclosures around noisy tasks, activities and or plant such as brick saws. Possible use of 6mm plywood on timber framing with no gaps at joints or corners. The inside of enclosure lined with sound absorption material (e.g. perforated foil faced fiberglass). These enclosures may be moved as required to achieve maximum benefit for the nearest affected premises, building and or user.	☐
Induction training will address noise awareness, noise sensitive areas and the need to make as little noise as possible, such as avoiding shouting and whistling.	☐
All site personnel must adhere to site safety rules in relation to hearing PPE when operating or in the vicinity of noise generating plant or equipment when other hierarchy of controls has been eliminated.	☐
Care shall be taken not to drop materials ensuring no peak noise events occur, including materials from a height into a truck or skip.	☐
Traffic controllers will prevent queuing, idling or reversing near noise sensitive receivers.	☐
No music radios or music generating devices are permitted on site	☐
Plant and Equipment Controls	☐
Vehicle warning devices such as horns are only to be used in case of emergency or where there is imminent threat of danger.	☐
All plant and equipment to be regularly serviced in accordance with manufacturers' specification.	☐
Eliminate noisy work practices, shut down plant and do not leave it idling unnecessarily, substitute for something that does not generate as much noise.	☐
Generators and or other noisy plant are to be situated to minimise noise disturbance to local residents and the general public.	☐
Noisy equipment to be removed from site.	☐
Trucks and plant to follow approved, designated transport routes.	☐
Ensure silencers and enclosures are intact, rotating elements of plant and equipment is balanced, loose bolts are tightened, and frictional noise is reduced through lubrication and cutting noise reduced by maintained sharp equipment.	☐
Use only necessary power to complete the task at hand. The correct tool, plant and or equipment for the activity.	☐
Ensure equipment is fitted with adequately maintained silencers \ mufflers which meet the design specifications.	☐
Plant known to emit noise strongly in one direction shall be orientated so that the noise is directed away from noise sensitive areas where practicable.	☐
Trucks to be loaded within legal limits for travel on public roads.	☐
Where possible plant and equipment to be selected with lowest noise rating or to have silencing and noise suppression equipment fitted.	☐
Other	☐
Use of BBS-TEK Backalarm or similar system	☐
Acoustically enclose generators and compressors where possible	☐
Off site access is to be located as far away as possible from noise sensitive receivers	☐

5.5 Monitoring

General

Observation of noise levels from equipment, vehicles and operation during working hours

Monitoring Devices

To be determined as soon as possible prior to site works commencing.

Noise Monitoring Location Plan:

To be completed as soon as possible prior to site works commencing.

5.6 Emergency Response

- Cease noisy work and consider alternative methods.
- Repair or service noisy equipment.
  The above tasks may be included within the *Emergency Management Plan*, This document may be attached to the *Emergency Management Plan*.

5.7 Incident Reporting

Refer to the *Injury, Illness and Incident Management and Reporting* flow chart for detailed guidance regarding the management and reporting of injuries, illness and incidents.

Procedures and processes referenced within the above mentioned document address the following:

- Detailed definitions
- Reporting responsibilities and obligations (both internal and external)
- Incident Reporting responsibilities and expectations
- Site and or National Investigation requirements
- Corrective and Preventive Action
- Analysis of data \ findings (including Objectives \ Targets status)

5.8 Training

- All Hindmarsh Site Staff to be inducted into the *Environmental Management Plan*.
- Relevant Personnel to complete Manger / Supervisor Training in Noise Management this may include a basic grasp of noise terminology, methods of noise measurement, knowledge of current Acts and Regulations OHS&E.
- All site contractors to be inducted into the site specific induction.

6. RECORDS \ REPORTING (as required)

- *Weekly SQE Inspection,*
- *Weekly Environmental & Sustainability checklist*,

In the event of a complaint record the following via the Action Required Notification:

- A complaint or the recording of successive excessive noise levels above the determined surrounding levels may result in the following corrective actions being implemented
- Address complaint and respond with and implement proposed mitigation measures
- Retraining , removal, re induction, review
- Monitor updated control measures for effectiveness

7. REFERENCES

Internal References	**Compass Ref No.**
Environmental Management Plan	C-PRE-M005
Environmental Risk and Opportunity Profile	C-PRE-F016
Equipment Calibration Register	C-PRE-F007
Weekly Environmental & Sustainability Check sheet	C-CON-F019
Environmental Noise Monitoring Report	C-CON-F030
Emergency Management Plan	C-PRE-M004

External References		
Document Title	**Section**	**Date \ Revision**
Refer to ENV Risk Profile for external resource references		

APPENDIX E. EIG006 VIBRATIONS

Project Name:	**The Sutherland Hospital Operating Theatre Complex**		
Revision:	**1**	**Date of Last Revision:**	**14/10/21**
Reviewed by:			

8. PROCESS SUMMARY

The limit of level of vibration generated by the construction of the works so that it does not cause an environmental nuisance to site workers and adjoining property owners.

9. OBJECTIVES

No structural, stakeholder effects on adjoining or nearby buildings \ occupiers or structures caused by site works or laden trucks on public roads.

10. DEFINITIONS

Not Applicable

11. RESPONSIBILITIES

Owner	Responsibility
Environmental Role	The Environmental Role (or delegated resource) is responsible for the continual monitoring of vibration on site

12. PROCESS DESCRIPTION

12.1 Permits and Licenses

Not Applicable

12.2 Control Measures

	Cross Box for Measures Relevant to Project
Review the contract and/or construction activities to determine the need for vibration monitoring.	☐
For all immediate structures and features complete dilapidation surveys of buildings, roads, footpaths.	☐
Schedule the use of vibration causing equipment, such as jackhammers, at the least sensitive time of day.	☐
Programme operations so that vibration causing activities do not occur simultaneously.	☐
Adhere to normal hours of operation	☐
Prior warning to be provided where sensitive locations are expected to be affected by vibration levels in excess of nominated levels (AS2670.2). Including how long the vibration is expected to last.	☐
Plan transportation routes in consultation with the council.	☐
Seek as much distance as possible between plant or equipment and sensitive areas \ receivers.	☐
Plant and Equipment Controls	☐
Ensure all equipment and plant is well maintained.	☐
Isolate equipment causing vibration on resilient mounts, where possible and within manufacturers specifications.	☐
Use plant that can achieve similar outcome with less vibration, or modification of existing equipment (in keeping with manufacturers specifications) to reduce vibration power levels	☐
Ensure trucks remain on designated routes.	☐
Balance variable speed plant and operate at speeds that do not produce resonances (excessive felt vibration in the ground or in the equipment, compared to other speeds)	☐
Operate vibrating plant at a maximum practical distance to sensitive locations	☐

12.3 Monitoring

- Vibration monitoring as required.
- Observation of vibration levels during construction works.
- Observation of vehicle and truck movement \ activity.

12.4 Emergency Response

- Cease any work causing atmospheric pollution.
- Review implementation and adequacy of control methods.
- Modify as necessary.

The above tasks are to be included within the *Emergency Management Plan*. This document may be attached to the *Emergency Management Plan*.

12.5 Incident Reporting

Refer to the *Injury, Illness and Incident Management and Reporting* flow chart for detailed guidance regarding the management and reporting of injuries, illness and incidents.

Procedures and processes referenced within the above mentioned document address the following:

- Detailed definitions
- Reporting responsibilities and obligations (both internal and external)
- Incident Reporting responsibilities and expectations
- Site and or National Investigation requirements
- Corrective and Preventive Action
- Analysis of data \ findings (including Objectives \ Targets status)

13. RECORDS

Keep written record showing:

- *Weekly Environmental & Sustainability Check sheet*

In the event of a complaint record the following via the Action Required Notification:

- A complaint or the recording of successive excessive noise levels above the determined surrounding levels may result in the following corrective actions being implemented
- Address complaint and respond with and implement proposed mitigation measures
- Retraining , removal, re induction, review
- Monitor updated control measures for effectiveness

14. REFERENCES

Internal References	**Compass Ref No.**
Environmental Management Plan	C-PRE-M005
Environmental Risk and Opportunity Profile	C-PRE-F016

External References		
Document Title	**Section**	**Date \ Revision**
Refer to ENV Risk Profile for external resource references		