



Environmental Management & Sustainability Plan (EMP)

RNA Research and Pilot Manufacturing Facility

REVISION C

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Hindmarsh would like to acknowledge the Traditional Custodians of the Land on which we live and work and pay our respects to their Elders past and present.

1. Document Control – Revision History

1.1. Revision Status

Approved revisions to this document may be independently issued.

Date Issued	Revision	Details	Section	Page
05/07/24	Rev A	Plan creation	All	All
18/08/24	Rev B	Updated client requirement	All	All
03/10/24	Rev C	Updated EMP	All	All
13/11/24	Rev D	Updated to refer to other sub-plans	Section 15.8	24

In addition to the above milestone reviews, reviews shall be prompted through Compass > SQE Planning Documents whereby documents are reviewed and confirmed without change and re-loaded to Compass, or reviewed, amended and uploaded accordingly so that the document reflects the project needs.

1.2. Project Specifics

Company Name:	Hindmarsh Construction Australia Pty Ltd		
ABN	15 126 578 176		
Project:	RNA Research and Pilot Manufacturing Facility		
Project No:	2056		
Address:	Cnr of Culloden Rd & Gymnasium Rd Macquarie Park		
Client:	Health Infrastructure NSW		
Contract:	GC21		
Scope of Work / Project Description:	The RNA Research and Pilot Manufacturing Facility will be a Good Manufacturing Practice (GMP) Facility that will manufacture potential RNA therapeutics for Phase 1 to 3 clinical trials using pidan and mRNA processes. The facility includes: - Workspaces - Plantrooms - Storerooms - Laboratory Areas - pDNA Suite - Process Development (PD) Laboratory		
Anticipated Start and Duration:	1 st March 2024 (Design) and 21 months		
Subcontractors	Refer Aconex		

Condition B14: Prior to the commencement of any construction, the Applicant must submit a Construction Environmental Management Plan (CEMP) to the Certifier and publish a copy of the CEMP on the Applicant's website in accordance with condition A24. The CEMP must include, but not be limited to, the following:

(a)	Details	s of:			
	(i)	hours of work;	Section 3.2		
	(ii)	24-hour contact details of site manager;	Section 3.2		
	(iii) neight	management of dust and odour to protect the amenity of the pourhood;	Section 11.1		
	(iv)	stormwater control and discharge;	<u>Section 15.10</u>		
	(v) not tra	measures to ensure that sediment and other materials are acked onto the roadway by vehicles leaving the site;	<u>Section 15.10</u>		
	(vi) the ob	external lighting in compliance with AS 4282-2019 Control of otrusive effects of outdoor lighting;	Section 15.9		
	(b) An unexpected finds protocol for contamination and associated communications procedure to ensure that potentially contaminated material is appropriately managed;				
(c)					
(d) condit	(d) Construction Traffic and Pedestrian Management Sub-Plan (see Section 15.8 condition B15);				
(e)	(e) Construction Noise and Vibration Management Sub-Plan (see condition B16); and				
(f)	Constr	ruction Waste Management Sub-Plan (see condition B17).	Section 15.8		

1.3. Approval for Implementation

This revision of the <u>Environmental Management and Sustainability Plan (EMP)</u> has been reviewed by the Project Manager, it complies with environmental aspects of Compass, contractual obligations and statutory requirements 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 <u>Acknowledgement Register</u>.

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 nonconformances 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;

- Construction Management Plan (CMP)
- Emergency Management Plan (EMP)
- Safety Management Plan (SMP)
- <u>Temporary Traffic Management Plan (TTMP)</u>
- Quality Management Plan (QMP)
- Air Quality Management Plan (AQMP)

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 including improving water and energy efficiency
- Reuse of resources
- Use and support of recyclable resources
- Elimination of toxic substance / material use
- Use of renewable and responsibly sourced building products
- Focus on quality outcomes to prevent re-work

2.2. Environmental Management System

Hindmarsh operates an Environmental Management System as per the requirements of AS14001:2004 The system has been independently certified as meeting the requirements of both. Please refer to the <u>Compass Manual</u> for further information regarding the Hindmarsh Management System. Documents, procedures, and forms supporting this EMP have been referenced accordingly throughout this plan. Compass documents detailed within this plan are identifiable by title and are formatted in <u>italics and underlined</u>.

2.2.1. 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. To ensure these documents / records are appropriately controlled this project will utilise, either or both, Aconex and or the Site Server Electronic Filing System.

2.3 Client / Project Specific Documents

The following project specific environmental \ sustainability related documents have been referred to in the preparation of this EMP:

T&T / HI Reference Document	Aconex Doc Reference
Geo Tech Report	Douglas Partners DPS-ENV-GEO-RPT-001
Detailed Site Investigation	HI-APX-FF-DSI-RPT-001
Preliminary Hazard Analysis	HI-APX-GG-HZ-RPT-001
Social Impact Assessment	HI-APX-X-SIA-RPT-001
Environmental Impact Statement_RNA Pilot Research and Manufacturing	HI-EIS-RPT-001
EIS Summary	HI-EIS-Summary-001

3. Project Information

3.1. Description (Scope)

The RNA Research and Pilot Manufacturing Facility will be a Good Manufacturing Practice (GMP) Facility that will manufacture potential RNA therapeutics for Phase 1 to 3 clinical trials using pidan and mRNA processes. The facility includes:

- Workspaces
- End of Trip Facilities
- Plantrooms

- Storerooms
- Laboratory Areas
- pDNA Suite
- Process Development (PD) Laboratory

3.2. Contact Details

Throughout the project, Working Hours will be as per the SSDA Condition C4:

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

Contact details for the project team will be:

- Site Manager – Cheyne Spence – 0439 457 750

4. Strategy, Policy, Objectives and Targets

4.1. Strategy

This EMP is implemented in support of the Hindmarsh <u>SQE Strategic Framework</u>. This strategy is to be communicated and made available to all workers at all times.

4.2. Policy

The Hindmarsh <u>Environmental and Sustainability Policy</u> 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.

4.3. Company Objectives and Targets

Current company environmental and sustainability objectives and targets are detailed within the <u>SQE Strategic Framework</u>.

The following are project specific objectives and targets:

Green Star Description	on	Targets/ Requirement
Green Star Buildings v1 5-star	5 star	

Reduced waste to landfill	 during demolition and construction by at least 90% during building operation by provision of storage areas for recycling streams (paper and cardboard, glass, plastic) as well as at least one other stream such as e-waste, batteries, etc.
Conservation of Biological Diversity and Ecological Integrity	 The proposed project site is an existing carpark and vegetation. The biodiversity of the site will be respected and conserved without major disruption to the site – refer to the design by 360 Landscape Architects. Light pollution to the night sky will be minimised through selection of appropriate fixtures that restrict upward light output ratio
Improved Valuation, Pricing and Incentive Mechanisms	- The project will prioritise cost effectiveness for all sustainability initiatives to achieve the best outcome.
minimises greenhouse gas	- Demonstrate how the development minimises greenhouse gas emissions (reflecting the Government's goal of net zero emissions by 2050 with a 50% reduction in emissions by 2030) and consumption of energy, water (including water sensitive urban design WSUD) and material resources.
Materials and Circular Economy	 Recycling waste streams (paper and cardboard, glass, plastic) as well as at least one other stream such as e-waste, batteries, etc. At least 90% of construction and demolition waste to be diverted from landfill Use locally sourced materials
Greenhouse Gas Emissions and Energy	 On-site renewable energy – maximising roof space for solar PV panels Fully electric building services to eliminate fossil fueluse on site (aside from emergency generation which will have a transition plan) and allowing procurement of renewable energy to eliminate associated electricity emissions Selection of cooling equipment with low-GWP refrigerant, with associated GHG emissions to be offset Upfront carbon reduction of at least 20% compared to a standard practice build, through low impact materials such as concrete with Portland cement replacement by fly ash Sustainable transport plan to promote active and low-emission commuting, including end-of-trip facilities and provision for EV chargers

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 <u>Training and Development Procedure – Project</u>, any training needs identified are captured via the <u>Training ID</u> \ 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 <u>Learning and Development Overview</u> 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 <u>Training ID \</u>
Requirements Register.

6. Compliance

6.1. Legislative Requirements

The <u>Legal Register</u> 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 <u>Legal Register</u> is available upon request and has been completed as per the <u>Legal Requirements</u> procedure.

Legislative and or regulatory information may also be included in relevant <u>Environmental Impact Guides (EIGs)</u> 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 of Legislative Requirements

Monitoring of Acts, Regulations, Codes of Practice and Australian standards will be managed by 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 <u>Legal Requirements</u> procedure.

6.3. Access to Documents

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
- SQE Administration Manager

Hindmarsh subscribes to "Building and Construction" related Australian Standards. Refer to the <u>Australian Standards Online</u> <u>Select Access</u> document for further information regarding access instructions and credentials required for login.

6.4. Responsibility and Authority

It is the responsibility of Hindmarsh project staff to ensure that the <u>Environmental Management and Sustainability Plan</u> (<u>EMP</u>) 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 *Roles and Responsibility Matrix*, for the project specific allocations.

7. Risk Management

Project risk management is completed as directed within the *Risk Management* procedure in Compass.

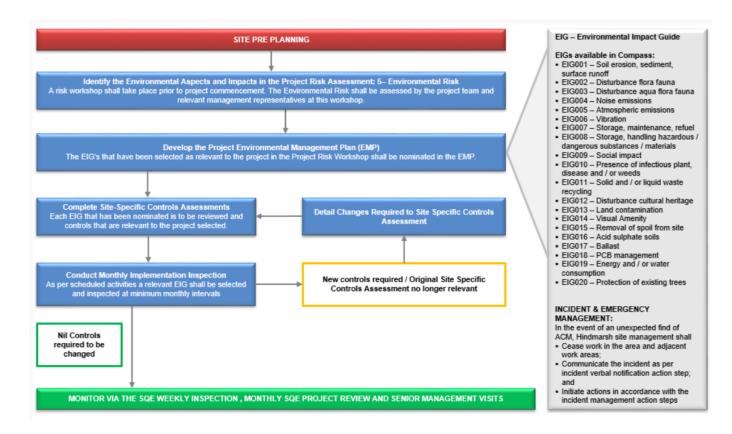
The <u>Project Risk Assessment</u> takes into account identified hazards (aspects) and impacts which are relevant to the project. The Project team has reviewed all available information (i.e., risk assessments, consultant reports, advice, papers, scope of works etc) to ensure the Project Risk Assessment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

Hindmarsh ensures environmental aspects and impacts are continually reviewed, risks assessed and that monitoring requirements remain relevant and current as demonstrated in the below flowchart.

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.

Key Environmental aspects and risks applicable to this project include:

- Demolition of heritage assets
- Impacts to native fauna through plant, equipment, noise and vibration.
- Spills of pollutants
- Generation of traffic and noise



7.1. Environmental Impact Guides – EIG's

Hindmarsh has developed a number of standard <u>Environmental Impact Guides (EIGs)</u>, 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. Where an EIG has been selected in the <u>Project Risk Assessment</u> a Site-Specific Controls Assessment shall be conducted on the EIG to ensure it addresses project specific circumstances and requirements. These shall then be implemented on the project.

EIG's relevant to this project include:

EIG001- Soil Erosion, Sediment, Surface Run Off

EIG002- Disturbance Flora Fauna

EIG004- Noise Emissions

EIG005- Atmospheric Emissions

EIG006- Vibration

EIG008- Storage, Handling or Hazardous / Dangerous Substances / Materials

EIG009- Social Impact

EIG011- Solid and / or Liquid Waste, Recycling

EIG012- Heritage / Culture Management / Disturbance

EIG013- Land Contamination

EIG014- Visual Amenity

EIF015- Removal of Spoil from site

EIG019- Energy and or Water Consumption

EIG020- Protection of Existing Trees

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.

1.1 Unexpected Finds Protocol – Hazardous Material

Should any asbestos or hazardous materials be identified on site, the procedure will be managed in accordance with the NSW WHS Reg and appropriate remediation strategy should developed as per the hierarchy of controls e.g. removal, in accordance with must be handled, managed, and disposed of according to the applicable legislation and guidance provided below and SafeWork NSW Regulations, EPA waste protocols and NSW Health

Documentation. Appropriate contractors must be engaged to develop and review this strategy.

As per the JBS&G Detailed Site Investigation report, there has been no identified contamination of hazardous material on the site.

1.2 Unexpected Finds Protocol – Heritage Items

An 'unexpected heritage finds' can be defined as any unanticipated archaeological discovery that has not been

identified during a previous assessment or is not covered by an existing permit under relevant legislation such as the NPW Act or Heritage Act. The find may have potential cultural heritage value, which may require some type of

statutory cultural heritage permit or notification if any interference of the heritage item is proposed or anticipated. In the event that an unexpected find is encountered, refer to Appendix C. extract from DGN Unexpected Finds Protocol Heritage Items

9. Emergency \ Incident Management

Please refer to the Projects <u>Emergency Management Plan (EMMP)</u> for information regarding emergency preparedness and response. The project-specific EMMP ensures Hindmarsh controls are in place, and assesses Emergency preparedness elements as required for the project.

The EMMP details when Environmental Emergency Drills will be conducted. This schedule must be completed and included within the EMP. Emergency Drill reports must be completed on the correct template.

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.

Incidents occurring to the environment, flora or fauna shall be reported, investigated and corrective actions managed in accordance with the <u>Incident Management Procedure</u> and contract requirements. Contract Representative shall be responsible for ensuring incidents involving employees, contractors and visitors are reported, investigated and corrective actions assigned and completed to the relevant authorities.

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.

In the event of a Dangerous Incident, ensure site preservation and that the site where the notifiable incident has occurred is not disturbed until an inspector arrives at the site other than for the reasons set out in the WHS Legislation.

9.2. Incident Notification Guidelines

Notification Authority	Contact Method	Timing	Responsible party
Worksafe NSW	Via phone 13 10 50	Immediately on becoming aware that a notifiable incident has occurred arising out of works.	State SQE Manager
	Written – <u>Via online Notification of</u> <u>Incident form</u>	Within 48 hours	State SQE Manager
Comcare (Notifiable Incidents)	Via phone 1300 366 976	Immediately on becoming aware that a notifiable incident has occurred arising out of works.	State SQE Manager
	Written – <u>Via AE527 provided to</u> Contract Administrator	Via Sentinel within 48 hours	Contract Administrator
OFCS	Via phone 1800 652 500	Immediately on becoming aware that a notifiable incident has occurred arising out of works.	National SQE Manager
	Written - submitted and managed through <u>FSC Online</u> .	Fatalities - within 48 hours All other types – within 2 weeks	National SQE Manager

Environment Protection Authority	EPA State Name: NSW EPA Telephone: 131 555 Email: info@epa.nsw.gov.au	Immediately on becoming National SQE aware of an activity that could cause harm to human health or the environment through emissions to air, land and water.
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The <u>Serious SQE Incident Alert</u> may be used to communicate lessons learned for continual improvement opportunities. A <u>Serious SQE Incident Alert</u> may be issued within Hindmarsh to communicate lessons learned and actions required arising from:

- Notifiable Incidents;
- Dangerous Incidents / Occurrences; or
- Critical Incidents where the <u>Crisis Management and Recovery Plan</u> has been enacted.

An <u>SQE Alert</u> may also be issued for relevant regulatory/industry alerts, or where directed via National SQE meetings to address relevant issues of recurring incidents

Record Keeping requirements for incidents shall adhere to legislative and client requirements in Sentinel and Onsite Hindmarsh System.

10. Communication \ Consultation

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 hazards
- 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

10.1. Consultation Requirements

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

Arrangements may include one or more of the following:

- Environmental Clearance Certificate
- Notice of Disruption Process
- Daily Prestart Meetings

- Toolbox Meetings
- Site Induction
- Weekly Subcontractor / Supervisor meetings
- Hazard Identification / Reporting and Communication
- SWMS Submission and Review
- Hazardous Substance Risk Assessment

10.2. Key Stakeholder 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:

Hindmarsh will through consultation with the client assist in the client providing communication to community and stakeholders through a consultation package that will be provided by the client. Within this consultation package, the following will be provided:

- 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 (as required) 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.

The package will also make reference to the project website where associated plans and reports will be uploaded including management plans, complaints register, SSDA documentation, etc. 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 and will also be located on the sign boards as gates around the site.

10.3. Communication Summary

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

Notifications

Subject	Action	Recipient	Timeframe
Environmental incident	Project Manager	CLIENT	As per client requirements
Pollution \ Environmental non compliance	Project Manager	CLIENT	As per client requirements
Public complaints	HI C&E Team	State Manager Construction \ CLIENT	48 hours and as per client requirements
Complaint response	HI C&E Team	State Manager Construction \ CLIENT	48 hours and as per client requirements

Extended working hours	Project Manager	CLIENT	As per HI OOHW Protocol
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
High Noise \ Night Works (note these events are not planned to occur)	Project Manager	ALL	As per HI OOHW Protocol

General

Subject	Action	Recipient	Frequency	
EMP	Project Manager	Internal	Quarterly	
Environmental CAR	Project Team	Project Manager	As required	
Audit	National SQE Manager	Project Manager	Notify 5 days prior	
Environmental performance	National SQE Manager	State Manager Construction	As scheduled via Internal Audit	

Meetings

Туре	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. Control and Monitoring

11.1. Inspections

EIG effectiveness is monitored throughout the life of the project. Where an EIG has been selected in the project risk assessment and nominated Environmental Management Plan, Site-Specific Controls shall be added to the EIG to ensure it addresses project specific circumstances and requirements.

Monitoring of controls specified in the relevant EIGs shall be conducted via:

- Monthly <u>Environmental Impact Guide</u> Inspection
- Weekly SQE Inspection
- Monthly SQE Project Review
- Senior Managers Visits (SMV) Review

Hindmarsh may outsource auditing and inspections to external consultants where specific expertise is required.

Where monitoring has identified issues, this will result in a corrective action. CARs shall be documented and managed through OnSite > SQE > CARs with appropriate actions implemented to address the CAR in a timely manner and to prevent repeat incidents.

Where CARs are not addressed appropriately, in a timely manner or there is a subsequent recurrence of the nonconformance the CAR shall be elevated to SQE Manager for consultation and resolution.

Should potential improvement to Compass policies and procedures be proposed as a result of a CAR, these shall be communicated to the National SQE Manager to evaluate and manage.

11.2. Monitoring and Measurement

Monitoring requirements for the project will be identified within the project specific <u>Project Risk Assessment</u>. All Hindmarsh owned measuring equipment must be registered on the <u>Equipment Calibration Register</u> 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

Where monitoring has been identified, data collected may be analysed and may result in corrective and or preventive action. If night works are required and approved by the EPA, noise levels may be monitored at the start of the activity, and at a location equivalent to the most affected noise sensitive land user to confirm adherence with EPA requirements.

11.3. Inspection and Corrective action

At minimum 1 x EIG shall be inspected per month. Site teams shall select an EIG that is in use and is deemed as critical at that time due to on site activities occurring. If during the inspection it is found that controls that were not initially assessed as relevant to the project are assessed as necessary, a new Site-Specific Controls Assessment shall be completed. Where an inspected item Fails, a Hazard or CAR appropriate to level of risk shall be entered into Project Hub.

The Scheduled <u>SQE Activities Matrix</u> shall be used to confirm the above activity has been completed.

Monitoring of controls specified in the relevant EIGs shall be conducted via the <u>Weekly SQE Inspection</u>, <u>Monthly SQE Project</u> <u>Review</u> and <u>Senior Managers Visits (SMV) Review</u>

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

- A hazard record being made on onsite,
- a CAR raised on Onsite
- the completion of an Incident Report.

Where a Corrective Action Required form is issued and it is not addressed in a timely manner or there is a subsequent reoccurrence of the non conformance the <u>Corrective Action and Escalation Process</u> will commence.

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.

11.4. Auditing

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

Hindmarsh actively monitors performance and seeks potential improvement opportunities by completing internal audits. Internal audits shall be conducted by auditors (i.e., State SQE Managers) who are qualified auditors with training and qualifications obtained by a registered training organisation.

The audit scopes shall address Compass requirements, including Procedures and Management Plans, and EIGs. The <u>Internal SQE Audit</u> will be used at scheduled internal audits and rolling cross border audits. Audits shall be conducted in accordance with the Senior Management Inspection and Audit Schedule. This shall be reviewed at the Monthly National SQE Committee Meeting to consider project relevance and coordination of the monthly Cross Border Audit.

Where audits have identified issues, this will result in a corrective action. CARs shall be documented and managed through OnSite > SQE > CARs with appropriate actions implemented to address the CAR in a timely manner and to prevent repeat occurrence.

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

- A hazard record being made on onsite,
- a CAR raised on Onsite
- the completion of an <u>Accident Incident Report</u>.

Where a Corrective Action Required form is issued and it is not addressed in a timely manner or there is a subsequent reoccurrence of the non conformance the <u>Corrective Action and Escalation Process</u> will commence.

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.

12. Reporting

12.1. Weekly Reporting Requirements

Weekly SQE Inspection

12.2. Monthly Reporting Requirements

- Monthly SQE Project Review
- Monthly EIG

12.3. Client and External Reporting Requirements

Monthly PCG Report

13. Document and Record Management

Environmental project records are controlled and minimum records maintained include the following:

14. Subcontractor Management

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:

- Toolbox talks and attendance registers
- Environmental Risk Assessment
- Project Risk Assessments
- Safe Work Method Statements (SWMS)
- Material Safety Data Sheets (MSDS)
- Hazardous Material Registers
- 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.

All subcontractors are to ensure they make appropriate environmental inclusions in their SWMS and abide by all statutory requirement mentioned in this EMP. All contractors will be required to attend a site induction, which will contain elements of this EMP.

Hindmarsh is to ensure SWMS are reviewed as per <u>SWMS Review</u>, and to ensure legislative / regulatory requirements are meet as per <u>Legal Register</u>. The <u>SWMS Engagement</u> shall be used to monitor that works are undertaken in accordance with SWMS. Contractors will be actively involved and monitored in <u>Weekly SQE Inspections</u> and <u>EIG Inspections</u>.

15. Project Specific Environmental & Sustainability Particulars

15.1. Existing Environmental Conditions of Site

15.2. Dilapidation Report

Dilpaidation report completed and available on Aconex.

15.3. Heritage / Cultural Considerations

Refer Detailed Site Investigation HI-APX-FF-DSI-RPT-001

15.4. Geotechnical Report

Refer Douglas Partners geo tech report DPS-ENV-GEO-RPT-001

15.5. Contamination / Remediation Report

Refer Detailed Site Investigation HI-APX-FF-DSI-RPT-001

15.6. Additional Reports

Other additional reports include:

Refer Aconex for docs listed in 2.3.1

15.7. Project Specific Sustainability Initiative

Refer Aconex for docs listed in 2.3.1

15.8. Environmental Management Sub-Plans

- Emergency Management Plan
- Waste Management Plan,
- Construction Traffic and Pedestrian Management Plan
- Construction Noise and Vibration Management Plan

15.9. Site Set up

Refer to construction management plan for the layout of all site amenities including hoarding.

The project will be removing current light poles that service the carpark with only existing light poles to remain. As there is a Macquarie University preference to reduce the lighting in the carpark to suit the Observatory, the project will be installing lighting as per approved SSDA Drawings.

Further, the project will install temporary lighting for safety with automatic timers to ensure lights are turned off and no light pollution affects surrounding buildings.

15.10. Storm Water / Rain Water

Storm water is to include rainwater, surface water, ground water, subsoil water and artesian water.

1. Storm Water Quality

Refer to Appendix B that documents the stormwater controls to be implemented to improve the quality of stormwater run off. Storm Water Quantity

Refer to Appendix B for location of where stormwater controls will be implemented.

2. Rain Water Harvesting

As per the SSDA, temporary rainwater harvesting is not required during the construction phase.

15.11. Land Use and Ecology

Siltation devices as documented in Appendix B will be used to prevent stormwater/sediment run off entering outside of the site compound.

Cattle grates and irrigation lines will be installed at the driveway exit to ensure that there is no sediment entering into public space. The irrigation line has been requested by the engaged Arborist to ensure trees are sufficiently cared for. Please refer to the Arboricultural Report for further information.

15.12. Waste Management

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.

The Waste management plan is in line with the JBS&G Waste Management Plan rev.5 dated 21 Ju

Annexure A. Environmental and Sustainability Policy

Appendix A – Environmental and Sustainability Policy

Environment & Sustainability Policy

This policy applies to all Hindmarsh employees and contractors, including (without limitation) employees and contractors Hindmarsh Construction Australia Pty Ltd, HCA Queensland Pty Ltd, Hindmarsh Living Pty Ltd, Hindmarsh Corporate Pty Ltd and any other related entities at the date of this policy or at any other time.

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

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









HINDMARSH

Hindmarsh Environmental & Sustainability Pledge

We seek to meet our own environmental needs and the needs and expectations of clients, stakeholders, employees and the community by:

- Setting and continually reviewing measurable 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 seek to minimise construction related 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.
 - eliminated of continuous Foster and support continuous improvement at all levels including the identification of key environmental initiatives.

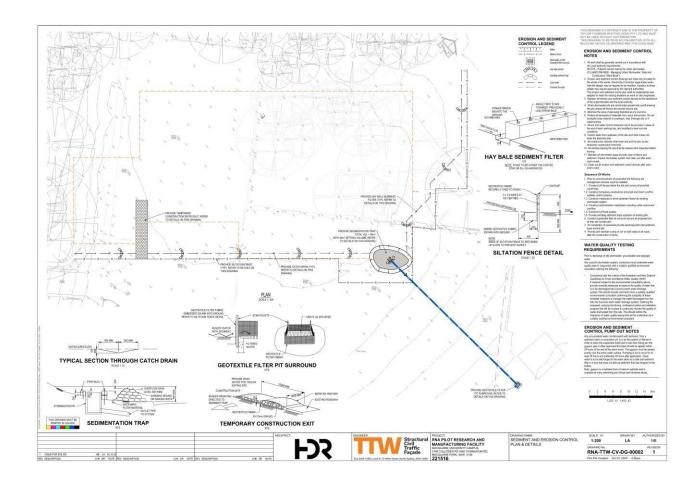
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Annexure B. Environmental Features and Controls Layout

Appendix B – Environmental Features and Controls Layout



Annexure C. Unexpected Finds ProtocolHeritage Items

Figure 1: Unexpected historical archaeology heritage finds flowchart

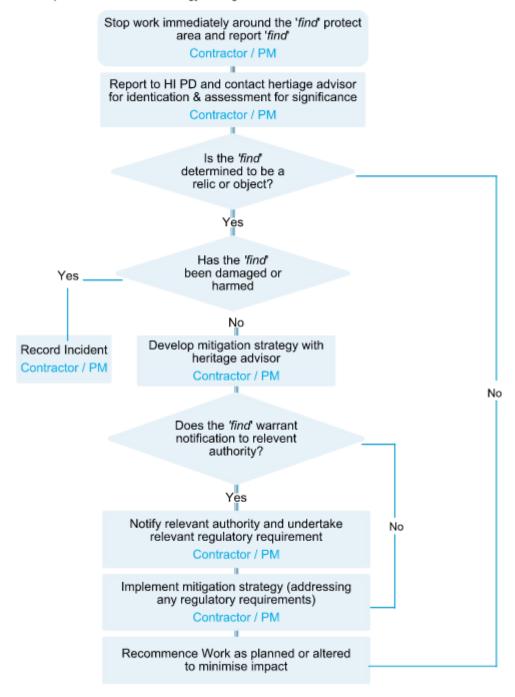
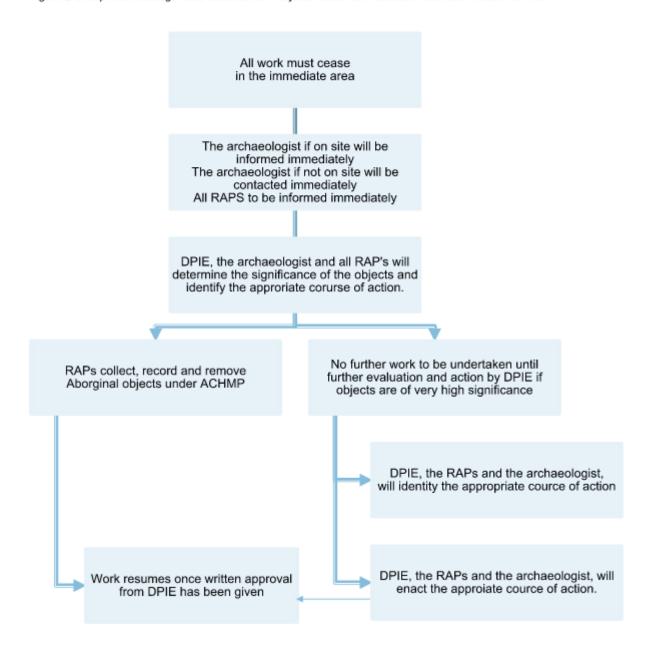


Figure 2 Unexpected heritage finds flowchart for 'Objects' under the National Parks and Wildlife Act 1977.





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