Waterloo OSD Project

Southern Precinct

Construction Framework Environmental Management Plan

JH Document Number: WMQ-SITE-JHG-PM-MPL-0005
Revision: B

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1 Revisions and Distribution

1.1 Revisions

Draft issues of this document are identified as Revision A, B, C etc. Upon approval issue this will be changed to a sequential number commencing at Revision 0. Revision numbers will continue at Rev. 1, 2 etc.

Rev	Date	Prepared By	Reviewed By	Approved By	Remarks
A	18/11/2022	T. Rodrigues	S. Reynolds		Planning commented 07/02/2023
B	08/02/2023	B. Daley	E. Choo		Planning comments incorporated for their approval
1					
2					
3					
4					
5					

1.2 Distribution List

Client's Representative	Adam Sargeant
Project Manager	Eugene Choo
Project Site Manager	Ashley Marks
Project Environment Representative	Tristan Rodrigues
Project Personnel	John Holland staff, subcontractors, suppliers

The controlled master version of this document is available for distribution as appropriate and maintained on the document management system being used on the project. All circulated hard copies of this document are deemed to be uncontrolled.

Table of Contents

2 Glossary

Definitions and abbreviations to be applied to this Environmental Management Plan are listed in the following table.

Term/abbreviation	Definition
ACT	Accountable Culture Tool
ALARP	As Low As Reasonably Practicable
AMS	Activity Method Statement
AQMP	Air Quality Management Plan
AUD	Australian Dollar
CC	Construction Certificate
CCC	Community Consultive Committee
CCS	Community Construction Strategy
CEO	Chief Executive Officer
CFO	Chief Financial Officer
CNVMP	Construction Noise & Vibration Management Plan
CoA	Condition of Approval
COO	Chief Operating Officer
CEMP	Construction Environmental Management Plan
CFEMP	Construction Framework Environmental Management Plan
CPTMP	Construction Pedestrian & Traffic Management Plan
CRAW	Construction Risk Analysis Workshop
CSSI	Critical State Significant Infrastructure
CTMP	Construction Traffic Management Plan
CWMP	Construction Waste Management Plan
DECC	Department of Environment & Climate Change
DPE	Department of Planning and Environment
DPIE	Department of Planning, Industry & Environment
EGM	Executive General Manager
EIFR	Environmental Incident Frequency Rate
EIFY	Construction personnel and plant management software
EIS	Environmental Impact Statement
EMP	Environmental Management Plan
EMS	John Holland's Environmental Management System
EP&A Act	Environmental Planning & Assessment Act
EPA	Environmental Protection Authority
ESD	Environmental Sustainable Design
FRP	Form, Reinforce, Pour
GMR	Global Mandatory Requirement
HR	Human Resources

Term/abbreviation	Definition
HSE	Health, Safety & Environment
HSEQ	Health, Safety, Environment & Quality
HSES	Health, Safety, Environment & Security
ICNG	Interim Construction Noise Guideline
IMS	Integrated Management System
ISO	International Organisation for Standardisation
JH	John Holland
JV	Joint Venture
L&D	Learning & Development
LGA	Local Government Area
NGL	Non-Government Organisation
NML	Noise Management Level
NSW	New South Wales
OHS	Occupational Health & Safety
OSD	Over Station Development
PDCA	Plan-Do-Check-Act
PHMP	Principal Hazards Management Plan
POEO Act	Protection of Environment Operations Act
PPW	Project Pack Web
RAP	Reconciliation Action Plan
RBL	Rating Background Noise Level
RMS	Roads & Maritime Services
RVR	Remediation Validation Report
SDS	Safety Data Sheets
SEP	Site Environmental Plan
SFAIRP	So Far As Is Reasonably Practicable
SQE	Safety, Quality & Environment
SSD	State Specific Development
SVOC	Semi-Volatile Organic Compounds
TfNSW	Transport for New South Wales
TRA	Task Risk Assessment
TSE	Tunnel & Station Excavation
UFP	Unidentified Finds Protocol
VOC	Volatile Organic Compounds
WHS	Workplace Health & Safety
WHSR	Workplace Health & Safety Regulation
WLD	Waterloo Developer (John Holland Mirvac Joint Venture)
WMQ	Waterloo Metro Quarter

Term/abbreviation	Definition
WRA	Workplace Risk Assessment

3 Compliance Matrix

The following compliance matrix demonstrates the alignment of this John Holland Construction Environment Management Plan (CEMP) with the relevant conditions of the SSD 10437 (Southern Precinct), approved on 30 July 2021.

SSD Condition No.	Description	Reference
SSD 10437 C19	Prior to the commencement of any earthwork or construction, the Applicant shall:	
	(a) amend, or prepare an addendum to, the Construction Environmental Management Plan (CEMP) applicable to the CSSI approval (CSSI 7400) to apply to the development. The amended CEMP must be submitted for approval to the Planning Secretary and a copy provided to the Certifying Authority, or	N/A
	(b) prepare a Construction Framework Environmental Management Plan (CFEMP) for the development, independent of the CEMP approved with the CSSI station works. The CFEMP must be submitted for approval to the Planning Secretary and a copy provided to the Certifying Authority. The CFEMP must:	This document
	(i) describe the relevant stages and phases of construction including work program outlining relevant timeframes for each stage/phase;	Section 5.2.2
	(ii) describe all activities to be undertaken on the site during site establishment and construction of the development;	Section 6.2
	(iii) clearly outline the stages/phases of construction that require ongoing environmental management monitoring and reporting	
	(iv)detail statutory and other obligations that the Applicant is required to fulfil during site establishment and construction, including approvals, consultations and agreements required from authorities and other stakeholders, and key legislation and policies;	Appendix 2
	(v) include specific consideration of measures to address any requirements of the EPA during site establishment and construction;	Section 8
	(vi) describe the roles and responsibilities for all relevant employees involved in the site establishment and construction of the works;	Section 7.3
	(vii) detail how the environmental performance of the site preparation and construction works will be monitored, and what actions will be taken to address identified potential environmental impacts;	Section 11
	(viii) document and incorporate all sub environmental management plans (Sub-Plans), studies and monitoring programs required under this consent; and	Section 8
	(ix) include arrangements for community consultation and complaints handling procedures during construction.	Section 9.3
SSD 10437 C20	In the event of any inconsistency between the consent and the CFEMP, the consent shall prevail.	Note
SSD 10437 C21	The CFEMP and any associated Sub-Plans should be revised: (a) at each key stage of the works; (b) in response to future development consents; (c) in response to major changes in site conditions or work methods; and (d) in support of licence variations as necessary.	Section 12

4 Scope of the Construction Framework Environmental Management Plan

This Construction Framework Environmental Management Plan (CFEMP) specifies the requirements of the John Holland Environmental Management System (EMS) which is certified to ISO AS/NZS14001) that Waterloo Metro Quarter (the Project) will use to enhance its environmental performance. Consistent with John Hollands Environment Policy, the intended outcomes of this CFEMP include:

- enhancement of environmental performance on the Project;
- fulfilment of the Project's compliance obligations; and
- achievement of the Project's environmental objectives.

This CFEMP enables the Project to manage its environmental responsibilities in a systematic manner and contribute to the environmental pillar of sustainability. This CFEMP is applicable to the Project and applies to the environmental aspects of the Project's activities, products and services that the Project determines it can either control or influence considering a life cycle perspective.

The scope of the EMS on the Project includes all activities, products and services that John Holland have authority and ability to exercise control over, as defined in the Waterloo Integrated Station Development Metro Quarter Development Project Delivery Agreement.

John Holland have established, implemented, maintained and continually improved an ISO AS/NZS 14001 certified EMS since 1999. The EMS has applied to all John Holland projects since then, it is a proven and robust EMS. This CFEMP explains how the existing John Holland EMS will be applied on this Project. The basis for the John Holland EMS (and also this CFEMP) is the concept of Plan-Do-Check-Act (PDCA). The PDCA model provides an iterative process to achieve continual improvement. It can be briefly described as follows.

- **Plan**: establish environmental objectives and processes necessary to deliver results in accordance with the John Holland Environment Policy.
- **Do**: implement the processes as planned.
- **Check**: monitor and measure processes against the Environment Policy, including its commitments, environmental objectives and operating criteria, and report the results.
- **Act**: take actions to continually improve.

The CFEMP provides a 'roadmap' that links the relevant legislative and WL Developer (WLD) requirements to the projects EMS and describes the document structure that is used to manage and address environmental requirements on the project.

Figure 4-1 shows how the framework introduced in ISO AS/NZS 14001 is integrated into a PDCA model within the John Holland EMS (and this EMP).

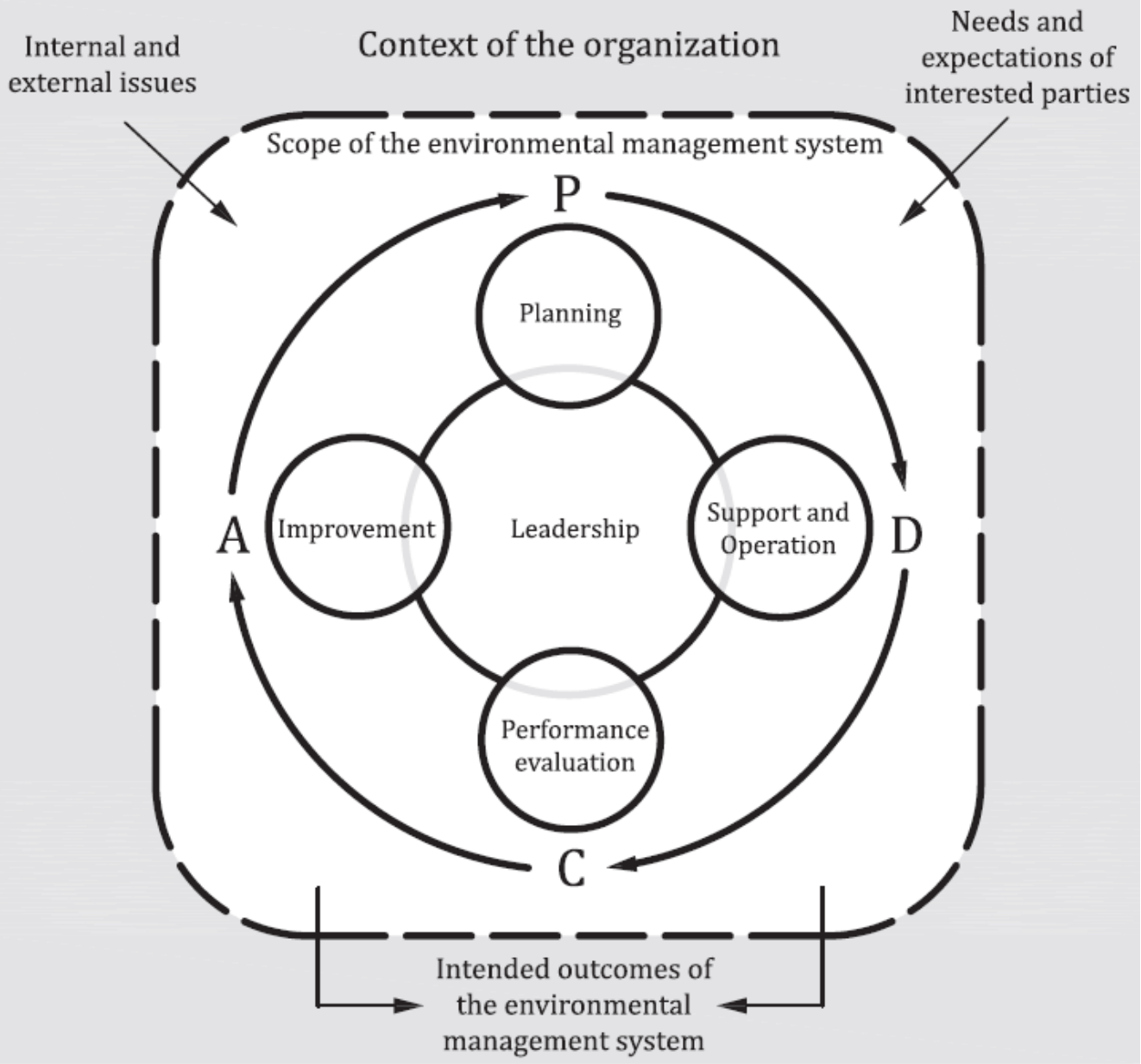


Figure 4-1: Overview of PDCA model utilised by John Holland

Required Project documentation	Responsibility	JH tools to be used by Project to manage documentation
CFEMP	Project Manager	Aconex
Signed contract, clearly defining the agreed Scope of Works	Project Manager	Aconex

4.1 Approach

John Holland is keenly aware of the significant and sensitive nature of the Project and the needs of relevant interested parties and stakeholders.

John Holland will assist in preparing information for WLD in the compliance reporting program to satisfy CoA A23 to A26.

4.2 Legislative and client requirements

The Waterloo Metro Quarter Project operates under four separate Development Approvals which have been approved by the Minister for Planning and Public Spaces. This CFEMP has been prepared to address the requirements of SSD 10437 (Southern Precinct), approved on 30 July 2021.

4.3 Needs and expectations of interested parties

The Project has determined the interested parties that are relevant to the EMS, the relevant needs and expectations of these interested parties, and which of these needs and expectations become its compliance obligations. An overview is provided in the table below. Key compliance obligations are recorded in the Project's Obligation Register.

Table 1: Overview of the Project specific interested parties, needs and expectations and compliance obligations

Interested Parties	Needs and Expectations	Compliance Obligation
Governments/Regulators	Laws, regulations, authorisations, etc	Yes – Regulatory
Client (WL Developer)	Contracts, agreements	Yes – Contractual
John Holland	Policy, GMRs & System requirements	Yes – Internal standards
Value Chain	Contracts, agreements	Variable – often voluntary
Industry Groups	Standards, principles, codes of practice etc	Variable – often voluntary
Community	Agreements, commitments	Variable – often voluntary
Employees	Contracts, agreements, commitments	Variable – often voluntary

5 Context of the Project

5.1 Project context

The Project Team have determined external and internal issues that are relevant to the project purpose and that affect its ability to achieve the intended outcomes of the EMS. An overview of the Project specific external and internal issues that are relevant is provided below:

- Environmental conditions related to climate, air quality, water quality, land use, existing contamination, natural resource availability, heritage and biodiversity
- External cultural, social, political, legal, regulatory, financial, technological, economic, natural and competitive circumstances

5.2 Project scope

The Waterloo Metro Quarter Over Station Development (OSD) comprises four separate buildings, a basement carpark and public domain works adjacent to the Waterloo Metro station. Separate SSD applications have been submitted concurrently for the design, construction and operation of each building in the precinct;

- Southern precinct SSD-10437,
- Basement Car Park SSD-10438,
- Central precinct SSD-10439, and
- Northern precinct-SSD-10440.

An overview of the Development is included in Figure 5-1 for context.

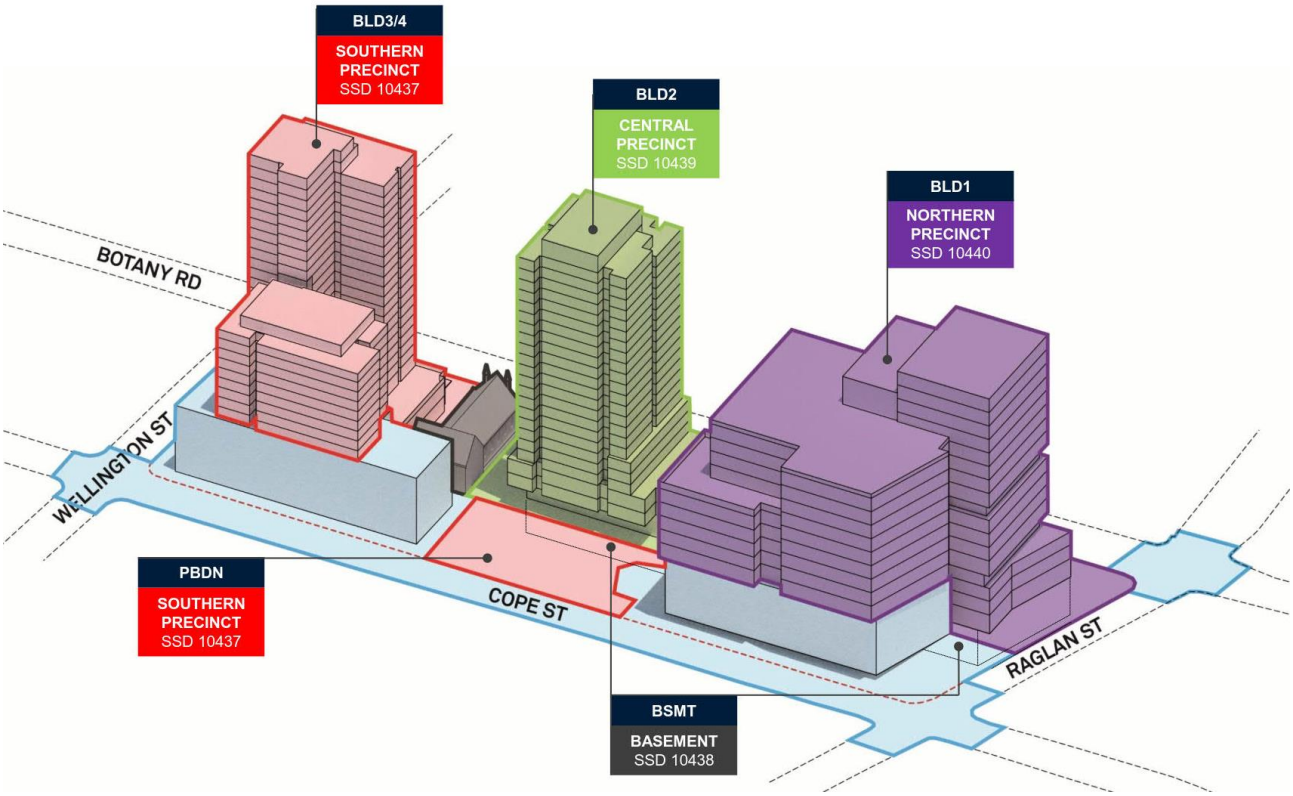


Figure 5-1: Waterloo Metro Quarter site, with sub-precincts identified

5.2.1 Southern Precinct

The Southern Precinct comprises:

- 25-storey residential building (Building 3) comprising student accommodation, to be delivered as a mixture of studio and twin apartments with capacity for 474 students
- 9 storey residential building (Building 4) above the southern station box to accommodate 70 social housing dwellings
- ground level retail tenancies including Makerspace and gymnasium lobby, and loading facilities
- level 1 and level 2 gymnasium and student accommodation communal facilities
- landscaping and private and communal open space at podium and roof top levels to support the residential accommodation
- new public open space including the delivery of the Cope Street Plaza, including vehicle access to the site via a shared way from Cope Street, expanded footpaths on Botany and Wellington Streets and public domain upgrades
- signage zone locations
- utilities and service provision
- stratum subdivision (staged).

The proposed construction schedule is provided in Table 2.

Table 2: Proposed Construction Schedule – Southern Precinct

CC No.	Proposed work	Works timeframe
Pre-CC	Tree Removal	Q1 2023
CC1	Building 3 Piling and Retaining Walls and Inground Services	Q2 2023 – Q3 2023
CC2	Building 3/4 Structure	Q2 2023 – Q3 2024
CC3	Building 3/4 Building Envelope (Façade)	Q3 2023 – Q3 2024
CC4	Building 3/4 Services and Finishes	Q4 2023 – Q1 2025
CC5	Public Domain	Q3 2024 – Q2 2025
CC6	Cope Street Plaza Landscaping	Q4 2024 – Q2 2025

5.3 The site

The site is located within the City of Sydney Local Government Area (LGA). The site is situated about 3.3 kilometres south of Sydney CBD and eight kilometres northeast of Sydney International Airport within the suburb of Waterloo.

The Waterloo Metro Quarter site comprises land to the west of Cope Street, east of Botany Road, south of Raglan Street and north of Wellington Street (refer to Figure 5-2). The heritage-listed Waterloo Congregational Church at 103–105 Botany Road is within this street block but does not form a part of the Waterloo Metro Quarter site boundaries.

Figure 5-2: Aerial image of the site

The Waterloo Metro Quarter site is a rectangular shaped allotment with an overall site area of approximately 1.287 hectares.

The Waterloo Metro Quarter site comprises the following allotment and legal description at the date of this report. Lot 190 in DP1257150.This CFEMP applies to the Southern Precinct (approximately 4,830sqm) of the Waterloo Metro Quarter site.

The boundaries of the overall site are identified at Figure 1, and the subject site of this CFEMP is identified at Figure 5-1 and Figure 5-3. The site is reasonably flat with a slight fall to the south.

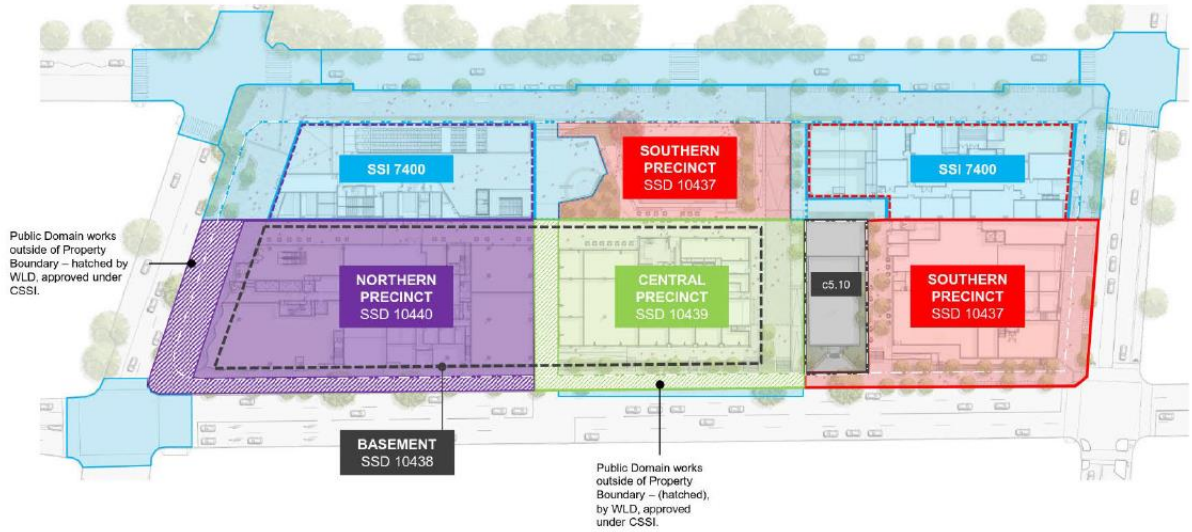


Figure 5-3: Waterloo Metro Quarter site, with sub-precincts identified

The site previously included three to five storey commercial, light industrial and shop top housing buildings. All previous structures have been demolished to facilitate construction of the new Sydney Metro Waterloo station. As such the existing site is predominately vacant and being used as a construction site. Construction of the Sydney metro is currently underway on site in accordance with Critical State Significant Infrastructure approval (CSSI 7400). The area surrounding the site consists of commercial premises to the north, light industrial and mixed use development to the south, residential development to the east and predominantly commercial and light industry uses to the west.

6 Construction Staging

The following sections provide a summary of the construction activities required to complete the buildings that are approved for the Southern Precinct.

6.1 Archaeology, Contamination and Remediation

6.1.1 Archaeology

Early investigations by AMBS Ecology and Heritage (AMBS) who were engaged by the Tunnel and Station Excavation (TSE) Sydney Metro Contractor to undertake archaeological investigation works for the Waterloo Station box (i.e. the adjacent site) identified the presence of archaeology findings. These findings were detailed in EIS Appendix H - Heritage Impact Statement.

Based on the findings identified by AMBS it is expected that low significance archaeology (European) will be present within the development footprint. An Archaeological Method Statement is not required for the Southern precinct, however an archaeological monitoring and findings procedure is being adopted, where an archaeologist will record any findings during the limited excavations. Refer Appendix 4. Archaeological monitoring and findings procedure.

Assessments of the area of the site for Building 3 demonstrate there are no previously identified impacts within this portion of the site that require management and / or remediation in order to make the site suitable for the proposed landuse. It is understood that only minor excavations are required in this portion during construction works. As such, subject to the appropriate disposal of any surplus materials appropriately classified, and the implementation of the unexpected finds protocol (UFP) (Appendix 5) during site development works, it is considered that this portion of the site will be suitable for the proposed use.

As required by C37, prior to commencement of any earthworks, a site auditor accredited under the Contaminated Land Management Act 1997 has been appointed. A site audit report and a site audit statement will be obtained from the site auditor to demonstrate the site is suitable for its approved land use.

6.2 SSD 10437 Southern Precinct Construction

The southern precinct includes the construction of Building 3 for the Student Accommodation Building and Building 4 for the Social Housing Building. In addition, construction of the public plaza (Cope Street) will be completed in accordance with this CFEMP. The following sections describe the construction process for these aspects.

6.2.1 Student Accommodation Building

The following construction activities will occur for the student accommodation building:

6.2.1.1 Early works

- Site preparation to modify hoardings, establish site facilities, tree removal and environmental controls

6.2.1.2 Excavation and shoring

- Commence foundation piles, including spoil removal and associated groundwater capture
- Partial demolition of existing concrete hardstand and partial demolition of the station’s temporary shoring wall inclusive of off-site disposal.
- Excavate and remediate zones for deep soil requirements under the supervision of an archaeologist and environmental consultant.

- Build retaining walls, and commence detailed excavation to form, reinforce, and pour concrete (FRP) pile caps, lift pits and crane base
- Entire Site: Import backfill material and lay/compact to underside of ground slab
- Detail excavation, FRP and backfill around remaining pile caps
- A tower crane will be established during this phase

6.2.1.3 Structure

- Form, reinforce and pour the ground slab
- Suspended Floor FRP construction consists of a total of 25 levels of which the first three are podium levels followed by 22 typical levels. The structure consists primarily of post tension reinforced concrete slabs which will be formed using table forms or similar. Based on the size of the typical floor footprint, each level will be poured in two pours generally on a 6-day cycle. Vertical structural elements are a combination of reinforced shear walls and columns
- Jump forms will be used for the building cores.
- A combination of both formwork screens and scaffold will be utilised for edge protection a through the varying construction stages. Scaffold will be utilised for the lower podium levels and some locations up to the roof, with screens being implemented on the typical floors.
- Access to levels will primarily be via hoist to two levels below the leading deck, and using the stairs in the central core to reach the leading deck.

6.2.1.4 Facade

- Façade for the building will be brickwork, cladding and curtain wall/windows, with works typically trailing the leading slab by four storeys. Roof level façade will be a steel plant screen.

6.2.1.5 Fitout

- Internal fitout works including lifts, electrical services, mechanical services, plumbing services, fire services, cementitious lightweight walls, plasterboard linings, painting, waterproofing, tiling, carpentry, joinery, cleaning.

6.2.1.6 External works

- Hard and soft landscape including concrete works, carpentry, metalwork, irrigation services, planting
- Façade cleaning prior to handover

6.2.2 Social Housing Building

The Social Housing building's first level is directly on top of the station box.

6.2.2.1 Early works

- Access to the station box roof will be via scaffold and hoist
- A tower crane will be installed on top of the station box on a grillage

6.2.2.2 Structure

- A low height suspended slab will be constructed to facilitate underfloor services (hydraulics etc) for the residential floor plate above. A permanent metal formwork solution is proposed to form this first suspended slab.
- Install scaffolding to cantilever over the Eastern edge (Cope Street) of the station box, and as edge protection surrounding the building. Formwork screens will be used as edge protection in some locations

- After completion of the founding slab works, typical floor construction will commence. There are a total of 9 storeys in the building. The structure consists of a lift core and central core box for stairs. Typical floor structure consists of post tensioned reinforced concrete flat slabs which will be formed using table forms or similar. Vertical structural elements are a combination of reinforced shear walls and columns

6.2.2.3 Façade

6.2.2.4 Façade for the building will primarily involve window walls and brickwork, with works typically trailing the leading slab by four storeysFitout

- The fitout works will commence after façade installation including lifts, electrical services, mechanical services, plumbing services, fire services, plasterboard linings, painting, waterproofing, tiling, carpentry, joinery, carpet, cleaning.

6.2.2.5 External works

- Hard and soft landscape including concrete works, carpentry, metalwork, irrigation services, planting

6.3 Material Handling

Tower Cranes will be utilised to service the Southern Precinct. Hoists as well as loading platforms will be used in combination with the tower cranes to ensure efficient delivery of material to the desired location. Concrete tower booms will be used where possible.

6.4 Temporary Works

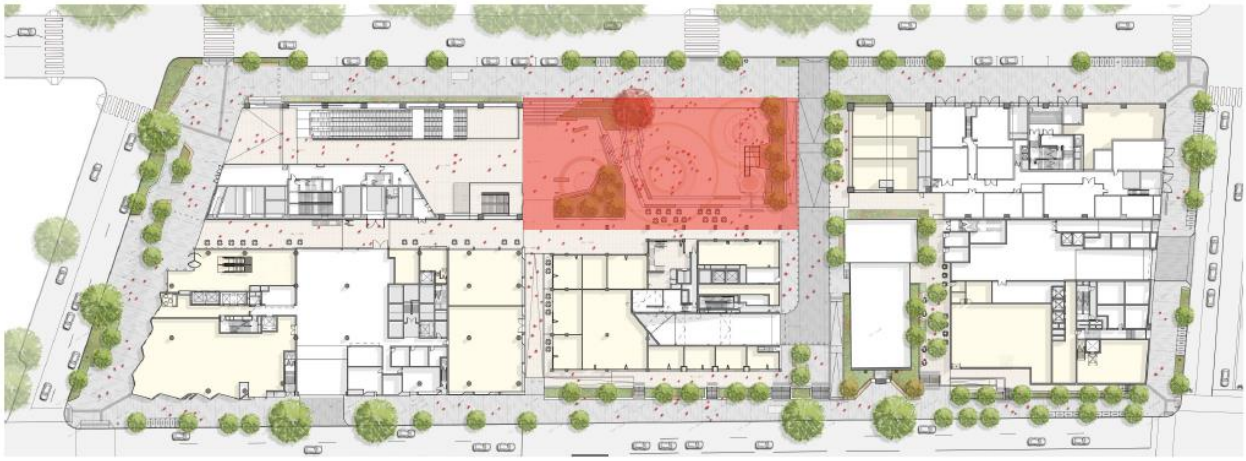
John Holland has procedures around temporary works design, independent sign-off and verification. These are employed to ensure their efficient and effective operation and to maintain the safety of workers and the general public.

6.5 Public Plaza (Cope Street)

Public Domain & Landscaping Works in Cope Street Plaza will commence following the tower cranes being demobilised towards the end of the building construction, refer to Figure 6-1 for the location of the Plaza. These works will be staged to allow for pedestrian access to be maintained around the station and, if necessary, will involve temporary pedestrian diversions throughout the site, to complete the public domain works between boundary line and kerb.

Works consist of some minor concrete works, hard and soft landscaping and services.

Figure 6-1: Public Plaza



7 Leadership

7.1 Leadership and commitment

EMS reference
Strategic and Business Planning JH-MPR-BUA-020

John Holland has an ongoing commitment to ensuring positive environmental outcomes by providing clear and strong leadership on environmental issues relevant to the project.

John Holland project management demonstrate leadership and commitment with respect to the EMS by:

- taking accountability for the effectiveness of the EMS on the Project;
- ensuring that the Environment Policy and environmental objectives are established and are compatible with the strategic direction and the context of the Project;
- ensuring the integration of EMS requirements into the Project's business processes;
- ensuring that the resources needed for the EMS are available on the Project;
- communicating the importance of effective environmental management and of conforming to the EMS requirements;
- ensuring that the EMS achieves its intended outcomes on the Project;
- directing and supporting Project personnel to contribute to the effectiveness of the EMS;
- promoting continual improvement;
- supporting other relevant management roles to demonstrate their leadership as it applies to their areas of responsibility.

7.2 Environment Policy

EMS reference
Environment Policy JHG-POL-GEN-002

John Holland top management have endorsed an appropriate John Holland Environment Policy. The project will operate in accordance to the John Holland Environment Policy. It provides a framework for setting objectives and includes a commitment to the protection of the environment, including prevention of pollution and other specific commitments relevant to the context of John Holland. The Environment Policy is maintained as documented information, communicated within the Project, and is available to all interested parties. A copy of the Environment Policy is always available on the internal JH IMS, external JH website, and in hard copy at the main Project office. Refer to Appendix 8 for the John Holland Environment Policy.

Required Project documentation	Responsibility	JH tools to be used by Group to manage documentation
Environment Policy	Chief Executive Officer	Integrated Management System (IMS)

7.3 Project roles, responsibilities and authorities

The Project management team ensure that the responsibilities and authorities for relevant roles are assigned and communicated within the Project. On the Project the following roles are critical to the effective implementation of the EMS.

EMS reference
Resource Planning JH-MPR-PPL-003
Project Launch JH-MPR-PMA-001
Planning and Programming JH-MPR-PMA-002

Role	Responsibilities and Authorities
Project Manager	• Overall responsibility and authority for ensuring that the EMS (as applied on the Project) conforms to the requirements of the John Holland EMS and ISO14001 • Overall responsibility and authority for reporting on the performance of the EMS (as applied on the Project) to top management • Managing the delivery of the works including overseeing planning approval and environmental management, including implementation of this CEMP • Authority to direct personnel and/or subcontractors to carry out actions to avoid or minimise unintended environmental impacts • Act as the Contractor's Representative.
Environment and Sustainability Manager	• Day to day responsibility and authority for ensuring that the EMS (as applied on the Project) conforms to the requirements of the John Holland EMS and ISO14001 • Day to day responsibility and authority for reporting on the performance of the EMS (as applied on the Project) to top management • Ensure correct and ongoing implementation of CFEMP • Liaise with project staff for ongoing monitoring and maintenance of environmental controls • Ensure reporting of incidents and practices that are non-conforming • Conduct and report regular inspections, monitoring and reporting • Ensure actions relating to environmental non-conformances, incidents and/or inspections are actioned and closed out in a timely manner • Actively participate in and facilitate SQE Risk Management workshops • Assist with updating of CFEMP as required Prepare Project monthly environmental reports Liaise with client environmental representative • Manage and track compliance with all environmental approvals, licences, and permits relating to the project • Liaise with ESD consultants and collate information as directed • Undertake necessary ESD audits, inspections as directed.
Commercial Manager	• Ensure relevant sustainability requirements are considered in procuring materials and services.
Engineering Manager	• Ensure relevant environmental and planning requirements are addressed in design development • Provide input to and review consistency of assessments on design changes.
Safety Manager	• Ensure environmental and planning requirements are addressed in relevant safety documents • Collaborative incident management and reporting in the event of safety incidents with a potential to cause environmental impact.
Quality Manager	• Oversee environmental and sustainability auditing
Stakeholder and Community Relations Manager	• Assist the Environment and Sustainability Manager in consulting regulatory agencies • Communicate sustainability initiatives and potential environmental impacts to the surrounding community • Work collaboratively with the Environment and Sustainability Manager to resolve environmental complaints.
Construction Manager and delegates	• Manage construction in relation to environmental management for the work activity in conjunction with the Environment and Sustainability Manager • Ensure compliance with this Plan, Sub Plans and Aspect Specific Management Plans and procedures.
Site superintendent	• Construction delivery in relation to environmental management and compliance in conjunction with the Environment and Sustainability Manager • Authority to direct personnel and/or subcontractors to carry out actions to avoid or minimise unintended environmental impacts.
All personnel	• Undertake site induction training, attend & sign onto relevant environment toolbox talks

Role	Responsibilities and Authorities
	• Report all environmental incidents to the environmental team and site supervisor • Conduct all works in accordance with the CFEMP, Sub Plans and Procedures

Table 3: Overview of critical roles.

Aspect	Consultant	Scope of works
Contamination assessment	• JBS&G	Preparation of a Remediation Action Plan and validation report to meet the requirements of the EPA Site auditor
EPA Accredited Auditor	• Ramboll Australia Pty Ltd	Auditing in accordance with the Contaminated Land Management Act 1997 and the Deed
Noise and vibration assessment	• Stantec	Assist with the preparation and implementation of the Construction Noise and Vibration Management Plan
Heritage/ Archaeology	• Urbis • AMBS ecology and heritage	Assist with the preparation of the Heritage Interpretation Plan and the implementation of the archaeological method statement.
Air quality	JBS&G	Assist with the preparation and implementation of the Air Quality Management Sub plan

Required Project documentation	Responsibility	JH tools to be used by Project to manage documentation
Organisation Chart(s)	HR Representative	Workbench or Aconex
Position Descriptions	HR Representative	SharePoint (John Holland Intranet)

7.4 WL Developer

WL Developer is the Proponent under the EP&A Act with ultimate responsibility to DPE for compliance with the Project Planning Approvals.

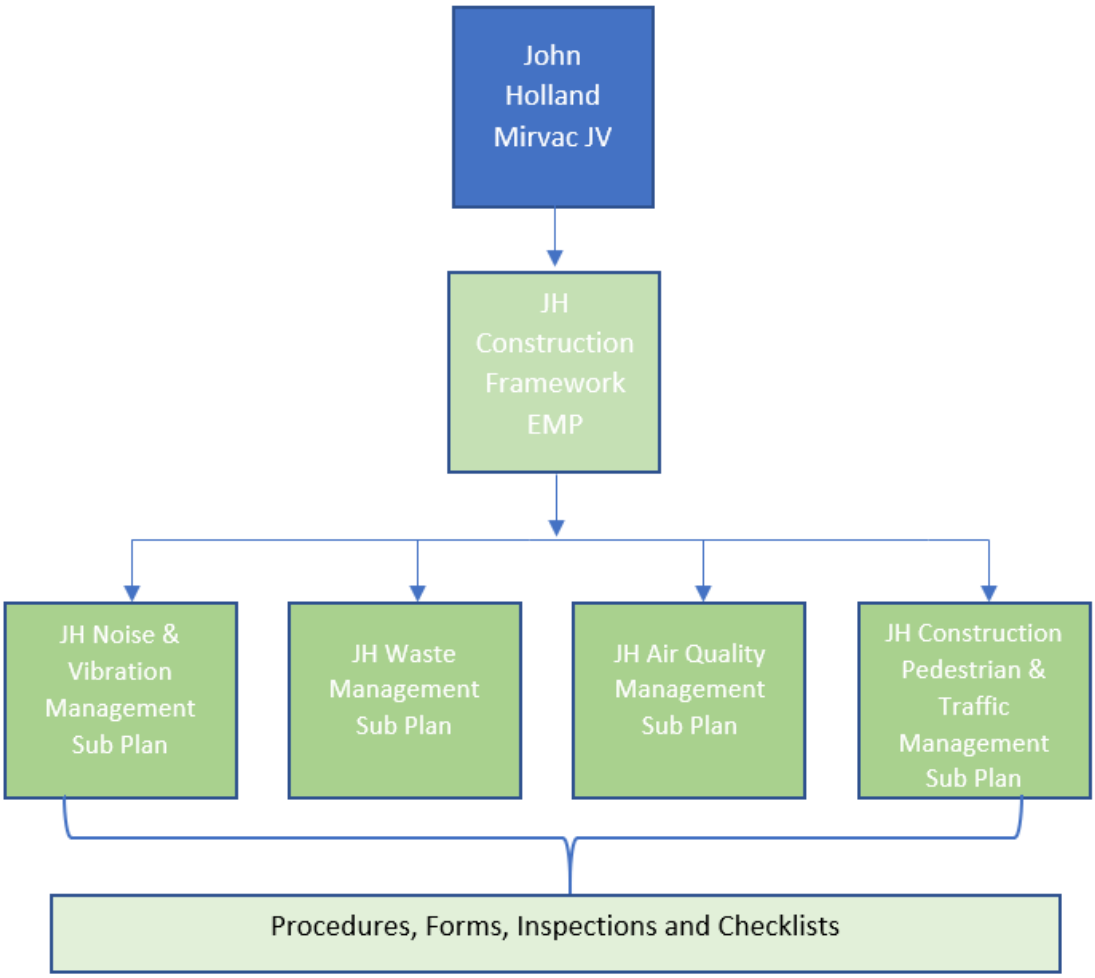
The WL Developer is a joint venture between John Holland and Mirvac and will deliver the Waterloo Metro Quarter (WMQ), including four buildings above and next to the station. Both companies will draw on expertise in major transport infrastructure and community-oriented design and development.

8 Planning

8.1 Construction Framework Environmental Management Plan and Sub Plans

This plan forms part of an integrated set of management documents. The set of management plans is detailed and relationship between plans is provided in Figure 8-1.

Figure 8-1: Environmental Management Plan Structure



8.2 Environmental aspects and impacts

EMS reference
Environment Management Manual JH-MAN-ENV-001
Environmental Planning JH-MPR-ENV-001
Managing SQE Risks JH-MPR-SQE-006

The JH Building Team have determined the environmental aspects of its activities, products and services that it can control and those that it can influence, and their associated environmental impacts, considering a life cycle perspective.

The Project have determined those aspects that have or can have a significant environmental impact i.e. significant environmental aspects, by using established criteria. An overview of the Project's specific aspects is provided in the Appendix 7. Comprehensive information on aspects and impacts is provided in the Workplace Risk Assessment.

Required Project documentation	Responsibility	JH tools to be used by Project to manage documentation
This CFEMP; in particular the Environmental Aspects Appendix 7	Project Environment Representative	Aconex
Workplace Risk Assessment	Project Manager	Project Pack Web

8.3 Environmental objectives

EMS reference
Environment Management Manual JH-MAN-ENV-001
Environmental Planning JH-MPR-ENV-001

The Project have established environmental objectives, taking into account the Projects significant environmental aspects and associated compliance obligations, and considering its risks and opportunities. The Project objectives are detailed in the Table 4.

Table 4 Project Objectives and Targets

Project Objectives	Target
Number of Class 1 & 2 Incidents	0
Environmental Incident Frequency Rate* (EIFR)	<6.07
Project specific targets arising from the contract	Green Star Design and As Built Rating: 5 Star (SSD10437)

*normalised against man hours worked, calculated on a rolling 12 month basis

Required Project documentation	Responsibility	JH tools to be used by Project to manage documentation
CFEMP, in particular the Objectives Table above	Environment & Sustainability Manager	Aconex

8.4 Compliance Obligations

EMS reference
Environment and Heritage Policy JHG-POL-GEN-002
Global Mandatory Requirements GMR 9 JHG-STD-WHS-009
Environment Management Manual JH-MAN-ENV-001
Environmental Planning JH-MPR-ENV-001
SSD 10437 Southern Precinct Conditions of Approval

The Project has determined the compliance obligations related to its environmental aspects, determined how these obligations apply, and taken these compliance obligations into account when establishing the EMS. Refer to Table 5 for details on the management requirements .

Table 5: Compliance obligations management

Required Project documentation	Responsibility	JH tools to be used by Project to manage documentation
Legal Register	Environment and Sustainability Manager	Envirolaw
Approvals & Licences Register (high level register including details of authorisations, contracts, agreements and commitments)	Environment and Sustainability Manager	Workbench Web with snap shot provided in Appendix 2.
Obligations Register	Environment and Sustainability Manager	Workbench
John Holland system requirements	Environment and Sustainability Manager	Integrated Management System (IMS)
Site Environmental Plan (SEP)	Environment and Sustainability Manager	Aconex
Community Communications Strategy	Stakeholder & Community Manager	Aconex
Construction Noise and Vibration Management Sub Plan	Environment and Sustainability Manager	Aconex
Construction Pedestrian and Traffic Management Plan	Construction Manager	Aconex
Air Quality Management Sub Plan	Environment and Sustainability Manager	Aconex
Construction Waste Management Sub Plan	Environment and Sustainability Manager	Aconex
Unexpected Finds Procedure	Environment and Sustainability Manager	Aconex

An Independent Audit programme prepared in accordance with the Independent Audit Post Approval Requirements (Department 2020) will be implemented by WLD.

Any condition of the SSD consents that requires the carrying out of monitoring or an environmental audit, whether directly or by way of a plan, strategy or programme, is taken to be a condition requiring monitoring or an environmental audit under Division 9.4 of Part 9 of the EP&A Act. This includes conditions in respect of incident notification, reporting and response, non-compliance notification and independent auditing.

Note: For the purposes of this requirement, as set out in the EP&A Act, “monitoring” is monitoring of the development to provide data on compliance with the consent or on the environmental impact of the development, and an “environmental audit” is a periodic or particular documented evaluation of the development to provide information on compliance with the consent or the environmental management or impact of the development.

9 Support

9.1 Resources

EMS reference
Resource Planning JH-MPR-PPL-003
Project Launch JH-MPR-PMA-001
Planning and Programming JH-MPR-PMA-002

The Project has determined and made provision for the resources needed for the establishment, implementation, maintenance and continual improvement of the EMS on the Project, refer to Table 6.

Table 6: Resource requirements summary

Required Project documentation	Responsibility	JH tools to be used by Project to manage documentation
Work Breakdown Structure	Commercial Representative	Project Pack
Schedule	Planning Representative	Produced using P6 Primavera, recorded in Aconex
Budget	Commercial Representative	Project Cost Reporting
Organisation Chart	HR Representative	Aconex
Position Descriptions	HR Representative	Performance Management and Development System
Sub consultant agreements	Commercial Representative	Workbench
Subcontractor agreements	Commercial Representative	Workbench
Supplier agreements	Commercial Representative	Workbench

9.2 Competence, Awareness and Training

EMS reference
Learning and Development JH-MPR-PPL-020
Employee Records JH-MPR-PPL-021
Verification of Competency JH-MPR-PAE-005
Counselling and Disciplinary JH-MPR-PPL-012
Internal Design Management JH-MPR-DES-001
Management of Design Consultants JH-MPR-DES-002
Letting of Consultant, Subcontract, Supply Packages JH-MPR-PMA-005
Administration of Consultant, Subcontract or Supply Packages JH-MPR-PMA-006
Performance Rating of Subcontractors JH-MPR-QUA-004
Site Induction JH-MPR-SQE-001
Health Safety Management & Consultation Arrangements JH-MPR-WHS-004

The Project will undertake the following to ensure the highest level of environmental competence, awareness and training is achieved:

a) determine the necessary competence of persons doing work under its control that affects its environmental performance and its ability to fulfil its compliance obligations;

b) ensure that these persons are competent on the basis of appropriate education, training or experience;
c) determine training needs associated with its environmental aspects and its environmental management system;
d) where applicable, taken actions to acquire the necessary competence, and evaluate the effectiveness of the actions taken

The Project shall ensure that persons doing work under the Projects control are aware of:

a) the Environment Policy;
b) the environmental requirements described in GMR 9
c) the significant environmental aspects and related actual or potential environmental impacts associated with their work;
d) their contribution to the effectiveness of the environmental management system, including the benefits of enhanced environmental performance
e) the implications of not conforming with the environmental management system requirements, including not fulfilling the organisation's compliance obligations.

Details of the Project competence, awareness and training are provided in Table 7

Table 7: Competence, awareness and training

Required Project documentation	Responsibility	JH tools to be used by Project to manage documentation
Training needs analysis	L&D Representative	My Place/Success Factors – for JH personnel Aconex – for external personnel
Education, training, experience, verification of competency records - for Individuals	HR Representative	My Place/Success Factors – for JH personnel Aconex – for external personnel
Internal Training programmes (if required)	L&D Representative	My Place/Success Factors
External Training programmes (if required)	L&D Representative	Aconex – Preferred Suppliers Panel
Counselling and Disciplinary records – for individuals	HR Representative	My Place/Success Factors – for JH personnel Project Pack – for external personnel
Subconsultant/subcontractor/supplier experience, certifications and ratings – for organisations (including for subcontractors)	Commercial Representative	Project Pack – Subcontract Management Pack
Subcontractor HSEQ Deliverables	Commercial Representative	Aconex
Project Online Induction	L&D Representative	e-learning Centre
Induction attendance records	HR Representative	My Place/Success Factors – for JH personnel EIFY – for external personnel
Project Orientation	Project Environment Representative	Aconex AND EIFY
Site Orientation attendance records	HR Representative	My Place/Success Factors – for JH personnel

Required Project documentation	Responsibility	JH tools to be used by Project to manage documentation
		EIFY – for external
Pre-start Meetings and attendance records	Supervisor(s)	EIFY AND Aconex
Toolbox Meetings and attendance records	Supervisor(s)	EIFY AND Aconex
HSEQ Alert briefing records	HSEQ Representative	Aconex

9.3 Communication

EMS reference
Community Relations JH-MPR-CCM-005
Corporate Communications JH-MPR-CCM-004

The Project has established the processes needed for internal and external communications relevant to the EMS, including:

- on what it will communicate;
- when to communicate;
- with whom to communicate;
- how to communicate;

When establishing its communication processes, the Project has

- taken into account its compliance obligations;
- ensured that environmental information communicated is consistent with information generated within the environmental management system, and is reliable.

The Project shall respond to relevant communications on its EMS. The Project shall retain documented information as evidence of its communications, as appropriate.

As required by the Project planning approvals, John Holland has developed a Community Communications Strategy to ensure stakeholders and the community are consulted and informed.

9.3.1 Internal communication

EMS reference
Community Relations JH-MPR-CCM-005
Performance Statistics – Safety, Quality & Environment JH-MPR-SQE-009

The Project will use the tools described in Table 8 to ensure the following:

- internally communicate information relevant to the EMS among the various levels and functions of the Project and John Holland, including suggested changes to the EMS, as appropriate;
- ensure its communication processes enable persons doing work under the Project's control to contribute to continual improvement.

Internal communication will include meetings. Meetings may include Pre-start Meetings, Toolbox Talks, Project Team Meetings, HSEQ Team Meetings, Client Meetings, Subcontractor Meetings, and HSEQ System Review Meetings. Meetings shall include appropriate environmental information and shall be minuted and recorded.

Environmental toolbox talks will be held as and when new activities are undertaken and risks arise.

Internal communication will also include written instruction, this may include drawings, specifications, method statements, risk assessments, contracts and sub-contracts.

Internal communication regarding the notification of events and associated SQE actions will be managed using John Holland reporting system (Soteria).

Internal communication of The Project's performance will also be undertaken via monthly environmental reporting using Project Pack and / or Soteria.

Table 8: Internal communication tools

Required Project documentation	Responsibility	JH tools to be used by Project to manage documentation
Communication records - general	All personnel	Aconex
Meeting minutes	All personnel	Aconex
Reports	All personnel	Aconex
Event/ Incident Notifications	HSEQ Representatives/ Project Manager	Soteria and/or Aconex

9.3.2 External communication and complaints

EMS reference
Community Relations JH-MPR-CCM-005
Corporate Communications JH-MPR-CCM-004

The Project will externally communicate information relevant to the EMS, as established by John Holland's communication processes and as required by its compliance obligations. Table 9 provides details of the project documentation and the communication tools.

External notification of events and incidents will be via The Project Manager (or delegate) as required.

All enquiries including complaints will be managed in accordance with the Community Communications Strategy. Verified complaints will be managed as per an event.

Table 9: External communication tools

Required Project documentation	Responsibility	JH tools to be used by Project to manage documentation
Communication records – client and regulators	Project Manager Environment & Sustainability Manager	Aconex
Communication records – design consultants	Design Representative	Aconex
Communication records – subcontractors and suppliers	Commercial Representative	Aconex
Communication records - community	Stakeholder and Community Manager	Aconex
Meeting minutes	Project Manager	Aconex
Reports	Project Manager	Aconex

Required Project documentation	Responsibility	JH tools to be used by Project to manage documentation
Media release	Stakeholder and Community Manager	Via John Holland External Affairs only
Community Communications Strategy	Stakeholder and Community Manager	Aconex

9.4 Documentation

EMS reference
Project Documentation Control Procedure JH-MPR-QUA-005

The John Holland EMS includes:
- documented information required by the Standard;
- documented information determined by John Holland as being necessary for the effectiveness of the EMS

When creating and updating documented information, the Project shall ensure appropriate:
- identification and description (e.g. a title, date, author, or reference number);
- format (e.g. language, software version, graphics) and media (e.g. paper, electronic);
- review and approval for suitability and adequacy

This CFEMP is a 'live' and 'working' document. The Environment and Sustainability Manager will conduct regular reviews of the CFEMP at intervals of not less than six months and ensure that the CFEMP is formally reviewed and updated at least annually, or earlier as change requirements dictate.

Documented information required by the EMS and by the Standard shall be controlled to ensure:
- it is available and suitable for use, where and when it is needed;
- it is adequately protected (e.g. from loss of confidentiality, improper use, or loss of integrity)

For the control of documented information, the Project shall address the following activities as applicable:
- distribution, access, retrieval and use;
- storage and preservation, including preservation of legibility;
- control of changes (e.g. version control);
- retention and disposition

Documented information of external origin determined by the Project to be necessary for the planning and operation of the EMS shall be identified, as appropriate, and controlled.

Table 10: EMS documentation

Required Project documentation	Responsibility	JH tools to be used by Project to manage documentation
Policy, Standards, Manuals, Procedures, Workflows	Various Owners (see documentation for details)	Integrated Management System
All other documentation referred to in this CFEMP	Project Manager	See relevant sections of this plan

10 Operation

10.1 Operational planning and control

Operational planning and controls processes are implemented by the Project in order to incorporate the actions identified in relation to risks and opportunities, and the achievement of environmental objectives, by establishing operating criteria and controls.

EMS reference
Managing SQE Risks JH-MPR-SQE-006
Global Mandatory Requirement 9 - Environmental Management JHG-STD-WHS-009
HSE Behavioural Framework
Internal Design Management JH-MPR-DES-001
Management of Design Consultants JH-MPR-DES-002
Letting of Consultant, Subcontract, Supply Packages JH-MPR-PMA-005
Administration of Consultant, Subcontract or Supply Packages JH-MPR-PMA-006
Inspection of Subcontracted Works JH-MPR-QUA-003
Hazardous Chemicals Management JH-MPR-SQE-011
Asbestos Procedure JH-MPR-WHS-024
Plant and Equipment JH-MPR-PAE-001
Environmental Planning JH-MPR-ENV-001

10.1.1 Managing SQE risks procedure

EMS reference
Managing SQE Risks Procedure JH-MPR-SQE-006

This procedure involves preparing a series of progressively more in-depth risk assessments and method statements, further information on key documents required by the procedure is provided below.

- Workplace Risk Assessment (WRA); (strategic risk assessment conducted on workplace and broken down into work components for the purpose of identifying system, training, legislative, and the identification of further detailed planning and risk assessment activities).
    - Also referred to as Construction Risk Analysis Workshop (CRAW), Risk Registers, and Principal Hazards Management Plan (PHMP).
    - Must be informed by Pre-Tender and Contract Award SQE Reviews.
    - Must engage relevant subject matter experts.
- Activity Method Statement (AMS); are operational planning risk assessments which aim to address the detailed hazard/risk control reduction strategies for workplace activities.
    - AMS includes the methodology for the conducting activities, resources, plant, equipment and materials necessary to do the work safely.
    - Requirements for an AMS will be identified in the WRA..
- Task Risk Assessment (TRA); team based planning risk assessments which aim to address hazard/risk control reduction at the task level.
    - TRAs are facilitated by the Supervisor, Leading Hand and/or Engineer and are primarily identified in the AMS.
    - Must be completed prior to work commencing

The WRA, AMSs and TRAs are pivotal to the management of all activities during delivery. They allow operational controls to be developed and implemented on a case by case basis for all the different workplaces, activities and tasks that are encountered in the contracting industry.

The WRA's, AMS's and TRA's are owned by Project Management, Project Engineers, Supervisory Staff and Workforce. Subject matter experts act as advisors during the preparation of these documents ensuring that information from the legislation, conditions of approval, contract, CFEMP and Sub Plans, and SEPs is suitably incorporated and acted upon. Implementation of the Managing SQE Risk Procedure by the Project allows the actions identified in relation to risks and opportunities, and the achievement of environmental objectives, to be incorporated and used to establish operating criteria and controls. Table 11 provides details of the SQE risk management documentation.

Table 11: SQE Risk Management

Required Project documentation	Responsibility	JH tools to be used by Project to manage documentation
Workplace Risk Assessment	Project Manager	Project Pack Web
Activity Method Statements	Project Engineer(s)	Project Pack Web
Task Risk Assessments	Supervisor(s)	Project Pack Web

10.1.2 Global mandatory requirements

EMS reference
Global Mandatory Requirement 9 - Environmental Management JHG-STD-WHS-009

When developing the operational controls to be included in the WRA, AMSs and TRAs the Global Mandatory Requirements (GMRs) must be incorporated, as applicable, on every project. The GMR's exist to protect the lives of the people we work with and the environment we work in. They are made of 10 key risks that would result in significant consequence if not appropriate managed and include a number of mandatory critical controls. The Environmental GMR is outlined below:

GMR 9 Environmental Management

I will protect the environment, prevent pollution, and minimise waste and resource use

Required Project documentation	Responsibility	JH tools to be used by Project to manage documentation
Workplace Risk Assessment	Project Manager	Project Pack Web
Activity Method Statements	Project Engineer(s)	Project Pack Web
Task Risk Assessments	Supervisor(s)	Project Pack Web

10.1.3 HSE behavioural framework

EMS reference
Managing Safety for Senior Leaders JH-MPR-WHS-020
Other references
JH HSE Behaviours Implementation Plan
Our HSE Behaviours Handout

John Holland's HSE Behaviours describe a set of everyday behaviours that are expected of all people working on behalf of The Project. The HSE Behavioural Framework encourages a culture that serves as an operational control.

At the Waterloo Over Station Development's buildings 3 and 4 and Cope Street Plaza the HSE behaviours will be implemented accordingly. The Project HSE Behaviours are outlined in a framework as shown in Figure 10-1 (excerpt from the "Our HSE Behaviours Handout").

Figure 10-1: Overview of HSE Behavioural Framework

The framework describes the behaviours that are expected of 'Everyone', 'Supervisors' and 'Managers'. Four themes (that are critical to any strong HSE culture) are displayed. These are 'Standards', 'Communication', 'Risk Management' and 'Involvement'. These are the key elements of our strong safety culture which supports our vision.

There are twelve sets of behaviours across each of the three employee groups and the four themes, all of which are interdependent. Each of the twelve sets of behaviours are supported by a set of positive and negative statements that provide practical guidance on what is expected.

The HSE Behaviours that will be implemented are based on the risk profile of the project, size and scope, in accordance with the Project's HSE Behaviours Implementation Plan.

An examples of the guidance that sits behind one of the behaviours is provided in Figure 10-2.

Figure 10-2: Example of specific HSE behaviours

The implementation of the HSE behaviours is documented as outlined in Table 12.

Table 12: HSE behaviours documentation

Required Project documentation	Responsibility	JH tools to be used by Project to manage documentation
Personal Action Plans	Senior Manager(s)	MyPlace
Induction Records	Project Management Team	EIFY
Toolbox Records	Supervisors	EIFY and Aconex

10.1.4 Outsourced processes

EMS reference
Management of Design Consultants JH-MPR-DES-002
Purchasing JH-MPR-PMA-004
Inspection of Subcontracted Works JH-MPR-QUA-003
Letting of Consultant, Subcontract, Supply Packages JH-MPR-PMA-005
Administration of Consultant, Subcontract or Supply Packages JH-MPR-PMA-006

The Project ensure that outsourced processes are controlled or influenced. Consistent with a life cycle perspective, the Project have:

- established controls, as appropriate, to ensure that its environmental requirement(s) is (are) addressed in the design and development process for the product or service, considering each life cycle stage;
- determined its environmental requirement(s) for the procurement of products and services, as appropriate;
- communicated its relevant environmental requirement(s) to external providers, including contractors;
- considered the need to provide information about potential significant environmental impacts associated with the transportation or delivery, use, end-of-life treatment and final disposal of its products and services

Required Project documentation	Responsibility	JH tools to be used by Project to manage documentation
Sub consultant, sub-contractor, supplier qualification records	Design/Commercial Representative	Aconex and Workbench

Required Project documentation	Responsibility	JH tools to be used by Project to manage documentation
Sub consultant, sub-contractor, supplier agreements	Design/Commercial Representative	Aconex and Workbench
Sub consultant, sub-contractor, supplier HSEQ deliverables	Design/Commercial Representative	Aconex and Workbench

10.1.5 Other operational controls

EMS reference
Hazardous Chemicals Management JH-MPR-SQE-011
Asbestos Procedure JH-MPR-WHS-024
Plant and Equipment JH-MPR-PAE-001

The Project have:

- established operating criteria for hazardous chemicals, asbestos and plant & equipment;
- implemented controls for hazardous chemicals, asbestos and plant & equipment

Required Project documentation	Responsibility	JH tools to be used by Project to manage documentation
Chemical Risk Assessment	Supervisor(s)	Chemwatch and/or EIFY
Safety Data Sheets	HSEQ Representative	Chemwatch and/or EIFY
Chemical Register	HSEQ Representative	Chemwatch and/or EIFY
Asbestos Assessment	Project Manager	Aconex and Workbench
Asbestos Register	HSEQ Representative	Aconex and Workbench
Asbestos Management Plan	HSEQ Representative	Aconex and Workbench
Plant and Equipment Register	Plant and Equipment Representative	EIFY
Plant Hazard Assessments	Plant and Equipment Representative	EIFY
Plant and Equipment Maintenance Records	Plant and Equipment Representative	EIFY
Pre-start Daily Checks	Plant and Equipment Operators	EIFY and Aconex
Plant Pre-acceptance Checklists	Plant and Equipment Representative	EIFY

10.2 Emergency preparedness and response

EMS reference
Emergency Evacuation and Response JH-MPR-PMA-008

The Project have established processes needed to prepare for and respond to potential emergency situations.

The Project will:

- prepare to respond by planning actions to prevent or mitigate adverse environmental impacts from emergency situations;

- respond to actual emergency situations;
- take action to prevent or mitigate the consequences of emergency situations, appropriate to the magnitude of the emergency and the potential environmental impact;
- periodically test the planned response actions, where practicable;
- periodically review and revise the process and planned response actions, in particular after the occurrence of emergency situations or tests;
- provide relevant information and training related to emergency preparedness and response, as appropriate, to relevant interested parties, including persons working under its control

The Project will maintain documented information, refer to Table 13, to the extent necessary to have confidence that the process is carried out as planned.

Table 13: Emergency preparedness and response

Required Project documentation	Responsibility	JH tools to be used by Project to manage documentation
Emergency Response Plan	Project Manager	Aconex and Workbench
Emergency Response Exercise Checklist/Records	HSEQ Representative	Aconex and Workbench

11 Performance evaluation

11.1 Monitoring, measurement, analysis, evaluation and reporting

To ensure excellent environmental outcomes John Holland has robust processes in place to measure and evaluate its environmental performance against criteria set out in this CFEMP.

EMS reference
Monitoring and Review JH-MPR-SQE-002
Inspection, Testing and Surveillance JH-MPR-SQE-004
Workplace Hazard Identification and Inspection JH-MPR-WHS-006
Performance Statistics – Safety, Quality and Environment JH-MPR-SQE-009
Inspection of Sub-contracted Works JH-MPR-QUA-003
Administration of Consultant, Subcontract, Supply Packages JH-MPR-PMA-006
Resource Use Reporting JH-MPR-ENV-002
Project Monthly Reporting and Reforecasting and Review JH-MPR-PMA-015
WHSR Planning JH-MPR-WHS-001

The Project will monitor, measure, analyse and evaluate its environmental performance.

The Project will determine:

- what needs to be monitored and measured;
- the methods for monitoring, measurement, analysis and evaluation, as applicable, to ensure valid results;
- the criteria against which the organisation will evaluate its environmental performance, and appropriate indicators;
- when the monitoring and measuring shall be performed;
- when the results from monitoring and measurement shall be analysed and evaluated

The Project will use the Monitoring and Review procedure (JH-MPR-SQE-002) to plan for monitoring activities in accordance with the risk profile on the project

The Project will:

- ensure that calibrated or verified monitoring and measurement equipment is used and maintained, as appropriate.
- will evaluate its environmental performance and the effectiveness of the EMS.
- communicate relevant environmental performance information both internally and externally, as identified in its communication processes and as required by its compliance obligations.
- retain appropriate documented information as evidence of the monitoring, measurement, analysis and evaluation results.

The Project will establish, implement and maintain the processes needed to evaluate fulfilment of its compliance obligations.

The Project will:

- determine the frequency that compliance will be evaluated;
- evaluate compliance and take action if needed;
- maintain knowledge and understanding of its compliance status
- retain documented information as evidence of the compliance evaluation results.

The documentation required to achieve the above requirements is provided in Table 14.

Table 14: Performance evaluation requirements

Required Project documentation	Responsibility	JH tools to be used by Project to manage documentation
Site Diary (daily)	Supervisor(s)	Project Pack Web
Weekly General Inspections	Workplace Manager	Soteria
High Risk Inspections	Workplace Manager	Soteria
Subcontractor HSEQ Deliverables (pre-mob and monthly thereafter)	Commercial Representative	EIFY and Aconex
GMR Self-Assessments (monthly)	Workplace Manager	Soteria
Resource usage (energy, water, etc) data (monthly)	Commercial Representative	Project Pack Web
Concrete and steel consumption data (monthly)	Quality Representative	Project Pack Web
Waste data (monthly)	Commercial Representative & Environment Representative	Project Pack Web
Approvals and Licences Register Status (monthly)	Project Environment Representative	Project Pack Web
Obligations Register Status (monthly)	Project Environment Representative	Project Pack Web
Internal Project Report (Monthly)	Project Manager	Aconex and Workbench
HSES Valuation (Monthly)	Project Manager	Soteria
Project Self-Assessment (Annual)	Project Environment Representative	Soteria
Actions arising	Project Environment Representative	Soteria

11.2 Internal audit

11.2.1 General

EMS reference
Monitoring and Review JH-MPR-SQE-002

John Holland will conduct internal HSE audits of the Project at planned intervals to provide information on whether the EMS conforms to:

- the organisation's own requirements for its EMS;
- the requirements of the International Standard;
- is effectively implemented and maintained

John Holland will establish, implement and maintain (an) internal audit programme(s) for the Project, including the frequency, methods, responsibilities, planning requirements and reporting of its internal audits.

John Holland will:

- define the audit criteria and scope for each audit;
- select auditors and conduct audits to ensure objectivity and the impartiality of the audit process;
- ensure that the results of the audits are reported to relevant management

John Holland will retain documented information as evidence of the implementation of the audit programme and the audit results, refer to Table 15.

Table 15: Audit documentation

Required Project documentation	Responsibility	JH tools to be used by Project to manage documentation
Audit Programme	Regional HSEQ Personnel	Soteria
Audit Reports	Regional HSEQ Personnel	Soteria
Actions Arising	Regional HSEQ Personnel	Soteria

11.3 Management review

EMS reference
Monitoring and Review JH-MPR-SQE-002
Independent Project Reviews JH-MPR-PMA-018
Project Monthly Reporting and Reforecasting and Review JH-MPR-PMA-015
WHSR Planning JH-MPR-WHS-001

John Holland management conduct yearly reviews of the John Holland EMS, to ensure its continuing suitability, adequacy and effectiveness. When the EMS review is complete an update of system improvements is communicated via the IMS to all employees.

The management review shall include consideration of:

- the status of actions from previous management reviews;
- changes in:
  - external and internal issues that are relevant to the environmental management system;
  - the needs and expectations of interested parties, including compliance obligations;
  - its significant environmental aspects;
  - risks and opportunities;
- the extent to which environmental objectives have been achieved;
- information on the organisation's environmental performance, including trends in:
  - nonconformities and corrective actions;
  - monitoring and measurement results;
  - fulfilment of its compliance obligations;
  - audit results;
- adequacy of resources;
- relevant communication(s) from interested parties, including complaints;
- opportunities for continual improvement

The outputs of the management review shall include:

- conclusions on the continuing suitability, adequacy and effectiveness of the EMS;
- decisions related to continual improvement opportunities;
- decisions related to any need for changes to the environmental management system, including resources;
- actions, if needed, when environmental objectives have not been achieved;

- opportunities to improve integration of the EMS with other business processes, if needed;
- any implications for the strategic direction of the organisation

Management reviews are conducted at project level through the internal project reports and/or HSEQ Valuations. The project shall retain documented information as evidence of the results of management reviews, refer to Table 16.

Table 16: Management review requirements

Required Project documentation	Responsibility	JH tools to be used by Project to manage documentation
Internal Project Report (Monthly)	Project Manager	Aconex and Workbench
Project Management Meeting minutes	Project Manager	Aconex and Workbench
HSEQ Valuation (Monthly)	Project Manager	Soteria
Actions Arising	Project Environment Representative	Soteria

12 Improvement

12.1 Incidents, non-conformity and corrective action

EMS reference
Non-conformance and Corrective Action JH-MPR-SQE-007
Incident and Event Management JH-MPR-SQE-010

When a nonconformity (including an incident, or a verified complaint) occurs, the Project shall:

- react to the nonconformity and, as applicable:
  - take action to control and correct it;
  - deal with the consequences, including mitigating adverse environmental impacts;
- evaluate the need for action to eliminate the causes of the nonconformity, in order that it does not recur or occur elsewhere, by:
  - reviewing the nonconformity;
  - determining the causes of the nonconformity;
  - determining if similar nonconformities exist, or could potentially occur;
- implement any action needed;
- review the effectiveness of any corrective action taken;
- make changes to the environmental management system, if necessary

Corrective actions shall be appropriate to the significance of the effects of the nonconformities encountered, including the environmental impact(s).

12.1.1 Compliance Reporting

The Project shall retain documented information as evidence of:

- the nature of the nonconformities and any subsequent actions taken;
- the results of any corrective action

Nonconformities will be documented internally using the resources outlined in Table 17 Nonconformity management.

Table 17 Nonconformity management

Required Project documentation	Responsibility	JH tools to be used by Project to manage documentation
Event and Incident Records	Project Environment Representative	Soteria
Non Conformance (system) Records	Project Environment Representative	Soteria
Actions Arising	Project Environment Representative	Soteria

12.1.2 Reporting Non-Compliances

The monitoring and reporting programme prepared in accordance with the Compliance Reporting Post Approval Requirements (Department 2020) will be implemented during the project. Compliance Reports of the project will be carried out in accordance with the Compliance Reporting Post Approval Requirements (Department 2020).

DPE must be notified in writing to compliance@planning.nsw.gov.au within seven days after John Holland becomes aware of any non-compliance with the SSD approvals. Notification to DPE will be completed by WLD as the Proponent.

The Certifying Authority must also notify DPIE in writing to compliance@planning.nsw.gov.au within seven days after they identify any non-compliance. The notification must identify the development and the application number for it, set out the condition of consent that the development is non-compliant with, the way in which it does not comply and the reasons for the non-compliance (if known) and what actions have been, or will be, undertaken to address the non-compliance.

A non-compliance which has been notified as an incident does not need to also be notified as a non-compliance.

12.1.3 Reporting Incidents

DPE must be notified in writing to compliance@planning.nsw.gov.au immediately after John Holland becomes aware of an incident. Notification to DPE will be completed by WLD as the Proponent. The notification must identify the development (including the development application number and the name of the development if it has one) and set out the location and nature of the incident. Subsequent notification must be given and reports submitted in accordance with the requirements set out in Appendix 6

12.2 Accountable Culture Tool (ACT)

EMS reference
Incident and Event Management JH-MPR-SQE-010
Counselling and Disciplinary Procedure JH-MPR-PPL-012

The Accountable Culture Tool (ACT) is designed for line managers to help them to understand, categorise and address appropriate actions of their staff, work force and subcontractors in a fair and just way.

The ACT is a step-by step decision making tool that provides managers with a structured process to address an event and the people involved in a constructive way and not simply react on the outcome. It also encourages the recognition of positive performance. The management of the ACT is outlined in Table 18.

Table 18: Accountable Culture Tool management

Required Project documentation	Responsibility	JH tools to be used by Project to manage documentation
Event Records	Project Environment Representative	Soteria
Reward and recognition records	HR Representative	Success Factors Aconex
Counselling and disciplinary records	HR Representative	Success Factors Aconex

12.3 Continual improvement

EMS reference
Monitoring and Review JH-MPR-SQE-002
Project Completion Procedure JH-MPR-PMA-016

The Project will continually improve the suitability, adequacy and effectiveness of the John Holland EMS to enhance environmental performance. This will be documented and managed using the tools outlined in Table 19.

Table 19: Continual improvement

Required Project documentation	Responsibility	JH tools to be used by Project to manage documentation
Actions Arising	Project Environment Representative	Soteria
Lessons Learned	Project Environment Representative	SharePoint – HSE Alerts and Lessons Learned & Workplace

Appendix 1 – Compliance Matrices

SSD 10437	Description	Reference
C1	The Department must be notified in writing of the dates of commencement of physical work at least 48 hours before those dates.	Section 9.3
C2	If the construction of the development is to be staged, the Department must be notified in writing at least 48 hours before the commencement of each stage, of the date of proposed commencement and the development to be carried out in that stage.	Section 9.3
C3	At least 48 hours before the commencement of construction until the completion of all works under this consent, or such other time as agreed by the Planning Secretary, the Applicant must: (a) make the following information and documents (as they are obtained or approved) publicly available on its website: (i) the documents referred to in condition A2 of this consent; (ii) all current statutory approvals for the development; (iii) all approved strategies, plans and programs required under the conditions of this consent; (iv) regular reporting on the environmental performance of the development in accordance with the reporting arrangements in any plans or programs approved under the conditions of this consent; (v) a comprehensive summary of the monitoring results of the development, reported in accordance with the specifications in any conditions of this consent, or any approved plans and programs; (vi) a summary of the current stage and progress of the development; (vii) contact details to enquire about the development or to make a complaint; (viii) a complaints register, updated monthly; (ix) audit reports prepared as part of any independent environmental audit of the development and the Applicant's response to the recommendations in any audit report; (x) any other matter required by the Planning Secretary; and (b) keep such information up to date, to the satisfaction of the Planning Secretary. (c) any other matter relating to compliance with the terms of this consent or requested by the Planning Secretary.	Waterloo Metro Quarter public website https://wisd.com.au/
C4	Prior to the commencement of works, the Applicant must submit to the satisfaction of the Certifier a Registered Surveyor's certificate detailing the setting out of the proposed building on the site, including the relationship of the set out building to property boundaries.	Note
C5	Prior to the commencement of works, the Applicant must: (a) consult with the relevant owner and provider of services that are likely to be affected by the development to make suitable arrangements for access to, diversion, protection and support of the affected infrastructure;	Construction Management Plan

SSD 10437	Description	Reference
	(b) prepare a dilapidation report identifying the condition of all public infrastructure in the vicinity of the site (including roads, gutters and footpaths); and submit a copy to the Certifier, Planning Secretary and Council; and (c) ensure all street trees directly outside the site not approved for removal are retained and protected in accordance with the Australian Standard 4970 Protection of Trees on Development Sites.	Construction Management Plan Flora and Fauna Management Procedure and Arborist Report Section 9.3
C6	Before the construction of any utility works associated with the development, the Applicant must obtain relevant approvals from service providers.	Note
C7	Prior to the commencement of above ground works written advice must be obtained from the electricity supply authority, an approved telecommunications carrier and an approved gas carrier (where relevant) stating that satisfactory arrangements have been made to ensure provisions of adequate services.	Construction Management Plan
C8	Prior to the commencement of any excavation on or near the site, the Applicant must submit to the satisfaction of the Certifier written confirmation from NSW Dial Before You Dig Service that proposed excavation will not conflict with any underground utility services.	Construction Management Plan
C9	Unless already carried out under CSSI 7400 for all relevant affected adjoining buildings, infrastructure and roads, the Applicant is to engage a suitably qualified person to prepare a Pre-Construction Dilapidation Report and submit the Report to the satisfaction of the Certifier. The Report is to detail the current structural condition of all adjoining buildings, infrastructure and roads (including the public domain site frontages, the footpath, kerb and gutter, driveway crossovers and laybacks, kerb ramps, road carriageway, street trees and plantings, parking restrictions and traffic signs, and all other existing infrastructure along the street) within the 'zone of influence'. Any entry into private land is subject to the consent of the owner and any inspection of buildings on privately affected land shall include details of the whole building where only part of the building may fall within the 'zone of influence'. A copy of the report is to be forwarded to the Planning Secretary and each of the affected property owners.	Pre-construction dilapidation reports Construction Management Plan
C10	In the event that access for undertaking a Pre-Construction Dilapidation Report is denied by an adjoining owner, the Applicant must demonstrate, in writing, to the satisfaction of the Certifier that all reasonable steps have been taken to obtain access and advise the affected property owner of the reason for the report and that these steps have failed.	Note

SSD 10437	Description	Reference
C11	Any damage to the public way including trees, footpaths, kerbs, gutters, road carriageway and the like must be made safe and functional by the Applicant. Damage must be fully rectified by the Applicant in accordance with the Council's standards prior to the final Occupation Certificate being issued for public domain works or before the final Occupation Certificate is issued for the development, whichever is sooner.	Dilapidation Report
C12	The Applicant must ensure that all of its employees, contractors (and their sub-contractors) are made aware of, and are instructed to comply with, the conditions of this consent relevant to activities they carry out in respect of the development.	Project induction
C13	Prior to the commencement of works, the Applicant must either: (a) amend, or prepare an addendum to, the Community Consultation Strategy (CCS) applicable to the CSSI approval (CSSI 7400) to apply to the development; or (b) prepare a CCS for the development, independent of the CCS applicable to the CSSI approval, to provide mechanisms to facilitate communication between the Applicant, the relevant Council and the community (including adjoining affected landowners and businesses, and others directly impacted by the development), during the design and construction of the development and for a minimum of 12 months following the completion of construction. The CCS for the development must: (i) identify people to be consulted during the design and construction phases; (ii) set out procedures and mechanisms for the regular distribution of accessible information about or relevant to the development; (iii) provide for the formation of community-based forums, if required, that focus on key environmental management issues for the development; (iv) set out procedures and mechanisms: • through which the community can discuss or provide feedback to the Applicant; • through which the Applicant will respond to enquiries or feedback from the community; and • to resolve any issues and mediate any disputes that may arise in relation to construction and operation of the development, including disputes regarding rectification or compensation.	Community Consultation Strategy
C14	The CCS must be submitted to the Planning Secretary for approval no later than one month before the commencement of construction.	Note
C15	Construction must not commence until the CCS has been approved by the Planning Secretary, or within another timeframe agreed with the Planning Secretary	Note
C16	The CCS, as approved by the Planning Secretary, must be implemented for a minimum of 12 months following the completion of construction.	Note

SSD 10437	Description	Reference
C17	Unless the CCS applicable to the CSSI approval (CSSI 7400) has been amended or augmented in accordance with this consent, prior to the commencement of works, a Community Consultative Committee (CCC) must be established for the development in accordance with the Department's Community Consultative Committee Guidelines: State Significant Projects. The CCC must begin to exercise functions in accordance with such Guidelines before the commencement of construction and continue to do so for the duration of construction and for at least six months following the completion of construction. Notes: •The CCC is an advisory committee only. •In accordance with the Guidelines, the Committee should comprise an independent chair and appropriate representation from the Applicant, Council and the local community.	Note

SSD 10437	Description	Reference
C18	Prior to the commencement of any earthwork or construction, the Applicant shall: (a) amend, or prepare an addendum to, the Construction Pedestrian and Traffic Management Plan (CPTMP) applicable to the CSSI approval (CSSI 7400) to apply to the development. The amended CPTMP must be prepared in consultation with the Sydney Coordination Office within TfNSW, and submitted for approval to the Planning Secretary and a copy provided to the Certifying Authority; or (b) prepare a final CPTMP in consultation with the Sydney Coordination Office within TfNSW. The CPTMP shall specify matters including, but not limited to, the following: (i) a description of the development; (ii) location of any proposed work zone(s); (iii) details of crane arrangements including location of any crane(s) and crane movement plan; (iv) haulage routes; (v) proposed construction hours; (vi) predicted number of construction vehicle movements, detail of vehicle types and demonstrate that proposed construction vehicle movements can work within the context of road changes in the surrounding area, noting that construction vehicle movements are to be minimised during peak periods; (vii) construction vehicle access arrangements; (viii) construction program and construction methodology, including any construction staging; (ix) a detailed plan of any proposed hoarding and/or scaffolding; (x) measures to avoid construction worker vehicle movements within the precinct; (xi) consultation strategy for liaison with surrounding stakeholders, including other developments under construction and Sydney Metro City and Southwest; (xii) identify any potential impacts to general traffic, cyclists, pedestrians, bus services within the vicinity of the site from construction vehicles during the construction of the proposed works. Proposed mitigation measures should be clearly identified and included in the CPTMP; and (xiii) identify the cumulative construction activities of the development and other projects within or around the development site, including the Sydney Metro City and Southwest and private development. Proposed measures to minimise the cumulative impacts on the surrounding road network should be clearly identified and included in the CPTMP. (c) Submit a copy of the final development specific CPTMP to Sydney Coordination Office within TfNSW for endorsement; (d) Provide the builder's direct contact number to small businesses adjoining or impacted by the construction work and the Transport Management Centre and Sydney Coordination Office within Transport for NSW to resolve issues relating to traffic, public transport, freight, servicing and pedestrian access during construction in real time. The Applicant is responsible for ensuring the builder's direct contact number is current during any stage of construction; and (e) A copy of the final development specific CPTMP must be submitted for approval to the Planning Secretary and a copy provided to the Certifying Authority	CPTMP
C19	Prior to the commencement of any earthwork or construction, the Applicant shall:	

SSD 10437	Description	Reference
	(a) amend, or prepare an addendum to, the Construction Environmental Management Plan (CEMP) applicable to the CSSI approval (CSSI 7400) to apply to the development. The amended CEMP must be submitted for approval to the Planning Secretary and a copy provided to the Certifying Authority, or	
	(b) prepare a Construction Framework Environmental Management Plan (CFEMP) for the development, independent of the CEMP approved with the CSSI station works. The CFEMP must be submitted for approval to the Planning Secretary and a copy provided to the Certifying Authority. The CFEMP must:	This document
	(i) describe the relevant stages and phases of construction including work program outlining relevant timeframes for each stage/phase;	Section 5.2.2
	(ii) describe all activities to be undertaken on the site during site establishment and construction of the development;	Section 6.3
	(iii) clearly outline the stages/phases of construction that require ongoing environmental management monitoring and reporting;	Appendix 2
	(iv) detail statutory and other obligations that the Applicant is required to fulfil during site establishment and construction, including approvals, consultations and agreements required from authorities and other stakeholders, and key legislation and policies;	Section 8
	(v) include specific consideration of measures to address any requirements of the EPA during site establishment and construction;	Section 8
	(vi) describe the roles and responsibilities for all relevant employees involved in the site establishment and construction of the works;	Section 7.3
	(vii) detail how the environmental performance of the site preparation and construction works will be monitored, and what actions will be taken to address identified potential environmental impacts;	Section 11
	(viii) document and incorporate all sub environmental management plans (Sub-Plans), studies and monitoring programs required under this consent; and	Section 8.1
	(ix) include arrangements for community consultation and complaints handling procedures during construction.	Section 9.3
C20	In the event of any inconsistency between the consent and the CFEMP, the consent shall prevail.	Note
C21	The CFEMP and any associated Sub-Plans should be revised:	Section 12
	(a) at each key stage of the works;	
	(b) in response to future development consents;	
	(c) in response to major changes in site conditions or work methods; and	
	(d) in support of licence variations as necessary.	

C22	Prior to the commencement of any earthwork or construction, the Applicant shall: (a) amend, or prepare an addendum to, the Construction Noise and Vibration Management Sub-Plan (CNVMP) applicable to the CSSI approval (CSSI 7400) to apply to the development. The amended CNVMP must be submitted for approval to the Planning Secretary and a copy provided to the Certifying Authority, or (b) prepare and implement a Construction Noise and Vibration Management Sub-Plan (CNVMP) for the development, independent of the CNVMP approved with the CSSI station works. The CNVMP must be submitted for approval to the Planning Secretary and a copy provided to the Certifying Authority. The Sub-Plan must include: (i) identification of the specific activities that will be carried out and associated noise sources at the premises; (ii) identification of all potentially affected sensitive residential receiver locations; (iii) quantification of the rating background noise level (RBL) for sensitive receivers, as part of the Sub-Plan, or as undertaken in the EIS; (iv) the construction noise, ground-borne noise and vibration objectives derived from an application of the EPA Interim Construction Noise Guideline (ICNG), as reflected in conditions of approval; (v) prediction and assessment of potential noise, ground-borne noise (as relevant) and vibration levels from the proposed construction methods expected at sensitive receiver premises against the objectives identified in the ICNG and conditions of approval; (vi) where objectives are predicted to be exceeded, an analysis of feasible and reasonable noise mitigation measures that can be implemented to reduce construction noise and vibration impacts; (vii) description of management methods and procedures, and specific noise mitigation treatments/measures that can be implemented to control noise and vibration during construction; (viii) where objectives cannot be met, additional measures including, but not necessarily limited to, the following should be considered and implemented where practicable; reduce hours of construction, the provision of respite from noise/vibration intensive activities, acoustic barriers/enclosures, alternative excavation methods or other negotiated outcomes with the affected community; (ix) where night-time noise management levels cannot be satisfied, a report shall be submitted to the Planning Secretary outlining the mitigation measures applied, the noise levels achieved and justification that the outcome is consistent with best practice; (x) measures to identify non-conformances with the requirements of the Sub-Plan, and procedures to implement corrective and preventative action; (xi) suitable contractual arrangements to ensure that all site personnel, including sub-contractors, are required to adhere to the noise management provisions in the Sub-Plan; (xii) procedures for notifying residents of construction activities that are likely to affect their noise and vibration amenity; (xiii) measures to monitor noise performance and respond to complaints; (xiv) measures to reduce noise related impacts associated with offsite vehicle movements on nearby access and egress routes from the site; (xv) procedures to allow for regular professional acoustic input to construction activities and planning; and (xvi) effective site induction, and ongoing training and awareness measures for personnel (e.g. toolbox talks, meetings etc).	Construction Noise and Vibration Management Sub-Plan

SSD 10437	Description	Reference
C23	Prior to the commencement of any earthwork or construction, the Applicant shall: (a) amend, or prepare an addendum to, the Air Quality Management Sub-Plan (AQMP) applicable to the CSSI station works (CSSI 7400) to apply to the development. The amended AQMP must be submitted to the Planning Secretary for approval and a copy provided to the Certifying Authority, or (b) prepare an Air Quality Management Sub-Plan (AQMP) for the development, independent of the AQMP approved with the CSSI station works. The AQMP must be submitted to the Planning Secretary for approval and a copy provided to the Certifying Authority. The Sub-Plan must include, as a minimum, the following elements: (i) be prepared by a suitably qualified and experienced expert in accordance with the EPA's Approved Methods for the Modelling and Assessment of Air Pollutants in NSW (the Approved Methods); (ii) relevant environmental criteria to be used in the day-to-day management of dust and volatile organic compounds (VOC/odour); (iii) mission statement; (iv) dust and VOCs/odour management strategies consisting of: • objectives and targets; • risk assessment; • suppression improvement plan. (v) monitoring requirements including assigning responsibility (for all employees and contractors); (vi) communication strategy; and (vii) system and performance review for continuous improvements.	Air Quality Management Plan
C24	The Sub-Plan must detail management practices to be implemented for all dust and VOC/odour sources at the site. The Sub-Plan must also detail the dust, odour, VOC and semi-volatile organic compounds (SVOC) monitoring program (eg. frequency, duration and method of monitoring) to be undertaken for the project.	
C25	The Applicant must also develop and implement an appropriate comprehensive Reactive Air Quality and Odour Management Plan which will incorporate an Ambient Air Monitoring Program and Reactive Management Strategy to ensure that the assessment criteria are met during the works.	Reactive Air Quality and Odour Management Plan

SSD 10437	Description	Reference
C26	Prior to the commencement of any earthwork or construction, the Applicant shall: (a) amend, or prepare an addendum to, the Construction Waste Management Sub-Plan (CWMP) applicable to the CSSI station works (CSSI 7400) to apply to the development. The amended CWMP must be submitted to the Planning Secretary for approval and a copy provided to the Certifying Authority, or (b) prepare a Construction Waste Management Sub-Plan (CWMP) for the development, independent of the CWMP approved with the CSSI station works. The CWMP must be submitted to the Planning Secretary for approval and a copy provided to the Certifying Authority. The Sub-Plan must include, as a minimum, the following elements: (i) require that all waste generated during the project is assessed, classified and managed in accordance with the EPA's "Waste Classification Guidelines Part 1: Classifying Waste"; (ii) demonstrate that an appropriate area will be provided for the storage of bins and recycling containers and all waste and recyclable material generated by the works; (iii) procedures for minimising the movement of waste material around the site and double handling; (iv) waste (including litter, debris or other matter) is not caused or permitted to enter the waters of Sydney Harbour; (v) any vehicle used to transport waste or excavation spoil from the site is covered before leaving the premises; (vi) the wheels of any vehicle, trailer or mobilised plant leaving the site and cleaned of debris prior to leaving the premises; (vii) details in relation to the transport of waste material around the site (on-site) and from the site, including (at a minimum): • a traffic plan showing transport routes within the site; • a commitment to retain waste transport details for the life of the project to demonstrate compliance with the Protection of the Environment Operations Act 1997; and • the name and address of each licensed facility that will receive waste from the site (if appropriate).	Construction Waste Management Sub-Plan
C27	Prior to the commencement of construction, the Applicant must submit to the Certifying Authority evidence that sufficient off-street parking has been provided for heavy vehicles and for site personnel, to ensure that construction traffic associated with the development does not utilise on-street parking or public parking facilities.	CTMP
C28	Where construction/building works require the use of a public place including a road or footpath, approval under section 138 of the Roads Act 1993 for a Barricade Permit is to be obtained from the relevant authority prior to the commencement of work. Details of the barricade construction, area of enclosure and period of work are required to be submitted to the satisfaction of the relevant authority.	CTMP
C29	Unless already carried out under CSSI 7400 for the relevant street frontages and duration of the development, a separate application under section 138 of the Roads Act 1993 is to be made to the relevant road authority to erect a hoarding and/or scaffolding in a public road (if required) and such application is to include: (a) architectural, construction and structural details of the design as well as any proposed artwork (b) structural certification prepared and signed by an appropriately qualified practising structural engineer.	CTMP
C36	Prior to the commencement of any earthwork or remediation works for the development, the Applicant must submit to the satisfaction of the Certifier an Unexpected Finds Protocol which has been reviewed and endorsed by an EPA accredited site auditor. The protocol must outline contingency measures and the procedures to be followed in the event unexpected finds of contaminated material are encountered during works.	Soil and Water Management Procedure Remediation Action Plan

SSD 10437	Description	Reference
C37	Prior to the commencement of any earthwork or remediation works for the development, the Applicant must submit evidence to the Planning Secretary that a Site Auditor accredited under the Contaminated Land Management Act 1997 has been appointed to independently review the implementation and validation of the remediation works.	Note
C38	The Applicant must ensure the remediation works for the development are undertaken by a suitably qualified and experienced consultant(s) in accordance with the approved Remedial Action Plan and relevant guidelines produced or approved under the Contaminated Land Management Act 1997.	Remediation Action Plan
C39	Upon completion of the remediation works and prior to the commencement of construction of works within the land affected by contamination as identified in Figure 3 - Southern Precinct of the Contaminated Sites Strategy Report prepared by Douglas Partners dated 30 September 2020, a Site Audit Report and a Site Audit Statement, prepared in accordance with the NSW Contaminated Land Management - Guidelines for the NSW Site Auditor Scheme 2017, which demonstrates the site is suitable for its approved land use, must be submitted to the Planning Secretary for information.	Remediation Action Plan
C40	Within one month following the completion of the remediation works for the development, a Remediation Validation Report (RVR) must be submitted to the Planning Secretary for information. The RVR must be prepared by a suitably qualified and experienced consultant(s) and in accordance with the approved remedial action plan and relevant guidelines produced or approved under the Contaminated Land Management Act 1997.	Remediation Action Plan
n/a	During excavation and construction, the Archaeological Monitoring and Findings Procedure is to be implemented if any aboriginal archaeological objects are found or detected.	Appendix 4
n/a	During excavation and construction, the Archaeological Management Strategy, the unexpected finds protocol and other recommendations set out in the Archaeological Method Statement, dated July 2020 prepared by AMBS Ecology and Heritage shall be adhered	Note
D1	A copy of the approved and certified plans, specifications and documents incorporating conditions of approval and certification must be kept on the Site at all times and must be readily available for perusal by any officer of the Department, Council or the Certifying Authority.	Note

SSD 10437	Description	Reference
D2	A site notice(s) shall be prominently displayed at the boundaries of the site for the purposes of informing the public of project details including, but not limited to the details of the Builder, Certifying Authority and Structural Engineer. The notice(s) is to satisfy all but not be limited to, the following requirements: (a) minimum dimensions of the notice are to measure 841 mm x 594 mm (A1) with any text on the notice to be a minimum of 30-point type size; (b) the notice is to be durable and weatherproof and is to be displayed throughout the works period (c) the approved hours of work, the name of the site/project manager, the responsible managing company (if any), its address and 24-hour contact phone number for any inquiries, including construction/noise complaint are to be displayed on the site notice; and (d) the notice(s) is to be mounted at eye level on the perimeter hoardings/fencing and is to state that unauthorised entry to the site is not permitted.	CCS
D3	Construction, including the delivery of materials to and from the site, may only be carried out between the following hours: (a) between 7am and 6pm, Mondays to Fridays inclusive; and (b) between 7:30am and 3:30pm, Saturdays.	Noise and Vibration Management Sub Plan Project Induction
D4	No work may be carried out on Sundays or public holidays.	Noise and Vibration Management Sub Plan Project Induction
D5	Activities may be undertaken outside of these hours if required: (a) by the Police or a public authority for the delivery of vehicles, plant or materials; or (b) in an emergency to avoid the loss of life, damage to property or to prevent environmental harm.	Noise and Vibration Management Sub Plan Project Induction Out of hours permit
D6	Notification of such activities must be given to affected residents before undertaking the activities or as soon as is practical afterwards.	CCS
D7	Rock breaking, rock hammering, sheet piling, pile driving and similar activities may only be carried out between the following hours: (a) 9am to midday, Monday to Friday; (b) 2 pm to 5pm Monday to Friday; and (c) 9am to midday, Saturday.	Noise and Vibration Management Sub Plan Project Induction

SSD 10437	Description	Reference
D8	To protect the safety of work personnel and the public, the work site must be adequately secured to prevent access by unauthorised personnel, and work must be conducted at all times in accordance with relevant SafeWork requirements	OHS Management Plan
D9	The Department must be notified in writing to compliance@planning.nsw.gov.au immediately after the Applicant becomes aware of an incident. The notification must identify the development (including the development application number and the name of the development if it has one), and set out the location and nature of the incident.	Section 12.1
D10	Subsequent notification must be given and reports submitted in accordance with the requirements set out in Appendix 1.	Section 12.1
D11	The Department must be notified in writing to compliance@planning.nsw.gov.au within seven days after the Applicant becomes aware of any non-compliance. The Certifying Authority must also notify the Department in writing to compliance@planning.nsw.gov.au within seven days after they identify any non-compliance.	Section 12 Section 9.3.2
D12	The notification must identify the development and the application number for it, set out the condition of consent that the development is non-compliant with, the way in which it does not comply and the reasons for the non-compliance (if known) and what actions have been, or will be, undertaken to address the non-compliance.	Section 12 Section 9.3.2
D13	A non-compliance which has been notified as an incident does not need to also be notified as a non-compliance.	Note
D14	The Applicant must ensure the requirements of the Construction Environmental Management Plan, Construction Pedestrian Traffic Management Plan, Construction Noise and Vibration Management Sub-Plan, Air Quality Management Plan and Construction Waste Management Plan required by Part B of this consent are implemented during construction.	Note
D15	The development must be constructed to achieve the construction noise management levels detailed in the Interim Construction Noise Guideline (DECC, 2009). All feasible and reasonable noise mitigation measures must be implemented and any activities that could exceed the construction noise management levels must be identified and managed in accordance with the management and mitigation measures identified in the approved CNVMP.	CNVMP
D16	The Applicant must ensure construction vehicles (including concrete agitator trucks) do not arrive at the subject site or surrounding areas outside of the construction hours of work outlined under condition D3.	CTMP Project Induction
D17	The Applicant must implement, where practicable and without compromising the safety of construction staff or members of the public, the use audible movement alarms of a type that would minimise noise impacts on surrounding noise sensitive receivers.	CTMP CNVMP
D18	The Applicant must ensure that any work generating high noise impact (i.e. work exceeding a NML of LAeq 75dBA) as measured at the sensitive receiver must only be undertaken in continuous blocks of no more than 3 hours, with at least a 1 hour respite between each block of work generating high noise impact, where the location of the work is likely to impact the same receivers. For the purposes of this condition 'continuous' includes any period during which there is less than one hour respite between ceasing and recommencing any of the work the subject of this condition.	CNVMP

SSD 10437	Description	Reference
D19	Any noise generated during construction of the development must not be offensive noise within the meaning of the Protection of the Environment Operations Act 1997 or exceed approved noise limits for the site.	CNVMP
D20	Vibration caused by construction at any residence or structure outside the Site must be limited to: (a) for structural damage, the latest version of DIN 4150-3 (1992-02) Structural vibration - Effects of vibration on structures (German Institute for Standardisation, 1999); (b) for human exposure to vibration, the evaluation criteria set out in the Environmental Noise Management Assessing Vibration: a Technical Guideline (Department of Environment and Conservation, 2006) (as may be updated or replaced from time to time);	CNVMP
D21	Vibratory compactors must not be used closer than 30 metres from residential or heritage buildings unless vibration monitoring confirms compliance with the vibration criteria specified above. These limits apply unless otherwise outlined in the amended CNVMP applicable to the CSSI approval (CSSI 7400) or the project specific CNVMP required by condition B51.	CNVMP
D22	The Applicant must take all reasonable steps to minimise dust generated during all works authorised by this consent. During construction, the Applicant must ensure that: (a) exposed surfaces and stockpiles are suppressed by regular watering; (b) all trucks entering or leaving the site with loads have their loads covered; (c) trucks associated with the development do not track dirt onto the public road network; (d) public roads used by these trucks are kept clean; and (e) land stabilisation works are carried out progressively on site to minimise exposed surfaces.	AQMP CTMP
D23	All erosion and sediment control measures must be effectively implemented and maintained at or above design capacity for the duration of the construction works and until such time as all ground disturbed by the works have been stabilised and rehabilitated so that it no longer acts as a source of sediment. Erosion and sediment control techniques, as a minimum, are to be in accordance with the publication Managing Urban Stormwater: Soils & Construction (4th edition, Landcom, 2004) commonly referred to as the 'Blue Book'.	Soil and Water Management Procedure
D24	Any seepage or rainwater collected on-site during construction or groundwater must not be pumped to the street stormwater system unless separate prior approval is given in writing by the EPA in accordance with the Protection of the Environment Operations Act 1997.	Soil and Water Management Procedure
D25	Adequate provisions must be made to collect and discharge stormwater drainage during construction of the development. Prior written approval of Council must be obtained to connect or discharge site stormwater to Council's stormwater drainage system or street gutter.	Soil and Water Management Procedure

SSD 10437	Description	Reference
D26	A separate written approval from Council is required to be obtained in relation to any proposed discharge of groundwater into Council's drainage system external to the site, in accordance with the requirements of section 138 of the Roads Act 1993.	Soil and Water Management Procedure
D27	The Applicant must ensure that any asbestos encountered is monitored, handled, transported and disposed of by appropriately qualified and licensed contractors in accordance with the requirements of SafeWork NSW and relevant guidelines, including: (a) Work Health and Safety Regulation 2017; (b) SafeWork NSW Code of Practice – How to Manage and Control Asbestos in the Workplace September 2016; (c) SafeWork NSW Code of Practice – How to Safely Remove Asbestos September 2016; and (d) Protection of the Environment Operations (Waste) Regulation 2014.	Soil and Water Management Procedure RAP Unexpected Finds Procedure
D28	All construction vehicles are to be contained wholly within the Site, except if located in an approved on street work zone, and vehicles must enter the Site before stopping.	CTMP
D29	A Road Occupancy Licence must be obtained from the relevant transport authority for any works that impact on traffic flows during construction activities.	CTMP
D30	The public way must not be obstructed by any materials, vehicles, refuse skips or the like, under any circumstances. Non-compliance with this requirement will result in the issue of a notice by the Planning Secretary to stop all work on site.	CTMP
D31	The Applicant shall ensure that the 24-hour contact telephone number is continually attended by a person with authority over the works for the duration of the development.	CCS
D32	All vehicles involved in the excavation and / or demolition process and departing from the property with materials, spoil or loose matter must have their loads fully covered before entering the public roadway.	CTMP AQMP
D33	Prior to the commencement of work, suitable measures are to be implemented to ensure that sediment and other materials are not tracked onto the roadway by vehicles leaving the Site. It is an offence to allow, permit or cause materials to pollute or be placed in a position from which they may pollute waters.	CTMP AQMP Soil and Water Management Procedure

Appendix 2 – Obligations, Approvals and Licences Register

The regulatory authority and approval requirements are outlined in Table 20.

Table 20: Regulatory authority and approval requirements

Regulatory authority	Approval / licence required for the SSD 10438 & SSD 10437
Department of Planning and Environment (DPE)	Project Planning Approval granted under Part 5.1 of the *Environmental Planning and Assessment Act 1979 (EP&A Act).* Approval of reports, studies and plans as required by the Project Planning Approval.
NSW Environment Protection Authority (EPA)	The *Protection of the Environment Operations Act 1997 (*POEO Act) details in Schedule 1 the activities for which a licence is required for the premises at which it is carried out. Construction works associated with the Basement or Southern Precinct are not listed as scheduled activities under the POEO Act. Any seepage or rainwater collected on-site during construction or groundwater must not be pumped to the street stormwater system unless separate prior approval is given in writing by the EPA in accordance with the Protection of the Environment Operations Act 1997.
Roads and Maritime Services (RMS) and other road authorities	In accordance with the *Roads Act 1993,* John Holland will obtain the consent of the appropriate roads authority to erect a structure, carry out work in, on or over a public road, or dig up or disturb the surface of a public road. If the applicant is a public authority, the roads authority must consult with the applicant before deciding whether or not to grant consent or concurrence. As required, road occupancy permits will be sought in accordance with the Construction Traffic Management Plans.
Sydney Water	In accordance with the *Sydney Water Act 1994,* John Holland will obtain prior approval to connecting to the sewer.
Utilities Authorities	To be consulted prior to disturbing any assets

Appendix 3 – Integrated Management System Procedures

IMS procedure references
Environment Management Manual JH-MAN-ENV-001
Strategic and Business Planning JH-MPR-BUA-020
Environment Policy JHG-POL-GEN-002
Resource Planning JH-MPR-PPL-003
Project Launch JH-MPR-PMA-001
Planning and Programming JH-MPR-PMA-002
Environmental Planning JH-MPR-ENV-001
Managing SQE Risks JH-MPR-SQE-006
Global Mandatory Requirement 9 JHG-STD-WHS-009
Learning and Development JH-MPR-PPL-020
Employee Records JH-MPR-PPL-021
Verification of Competency JH-MPR-PAE-005
Counselling and Disciplinary JH-MPR-PPL-012
Internal Design Management JH-MPR-DES-001
Management of Design Consultants JH-MPR-DES-002
Letting of Consultant, Subcontract, Supply Packages JH-MPR-PMA-005
Administration of Consultant, Subcontract or Supply Packages JH-MPR-PMA-006
Performance Rating of Subcontractors JH-MPR-QUA-004
Site Induction JH-MPR-SQE-001
Health Safety Management & Consultation Arrangements JH-MPR-WHS-004
Community Relations JH-MPR-CCM-005
Corporate Communications JH-MPR-CCM-004
Performance Statistics – Safety, Quality & Environment JH-MPR-SQE-009
Project Documentation Control Procedure JH-MPR-QUA-005
Inspection of Subcontracted Works JH-MPR-QUA-003
Hazardous Chemicals Management JH-MPR-SQE-011
Asbestos Procedure JH-MPR-WHS-024
Plant and Equipment JH-MPR-PAE-001
Managing Safety for Senior Leaders JH-MPR-WHS-020
Purchasing JH-MPR-PMA-004
Emergency Evacuation and Response JH-MPR-PMA-008
Monitoring and Review JH-MPR-SQE-002
Inspection, Testing and Surveillance JH-MPR-SQE-004
Workplace Hazard Identification and Inspection JH-MPR-WHS-006
Resource Use Reporting JH-MPR-ENV-002

IMS procedure references
Project Monthly Reporting and Reforecasting and Review JH-MPR-PMA-015
WHSR Planning JH-MPR-WHS-001
Independent Project Reviews JH-MPR-PMA-018
Non-conformance and Corrective Action JH-MPR-SQE-007
Incident and Event Management JH-MPR-SQE-010
Project Completion Procedure JH-MPR-PMA-016

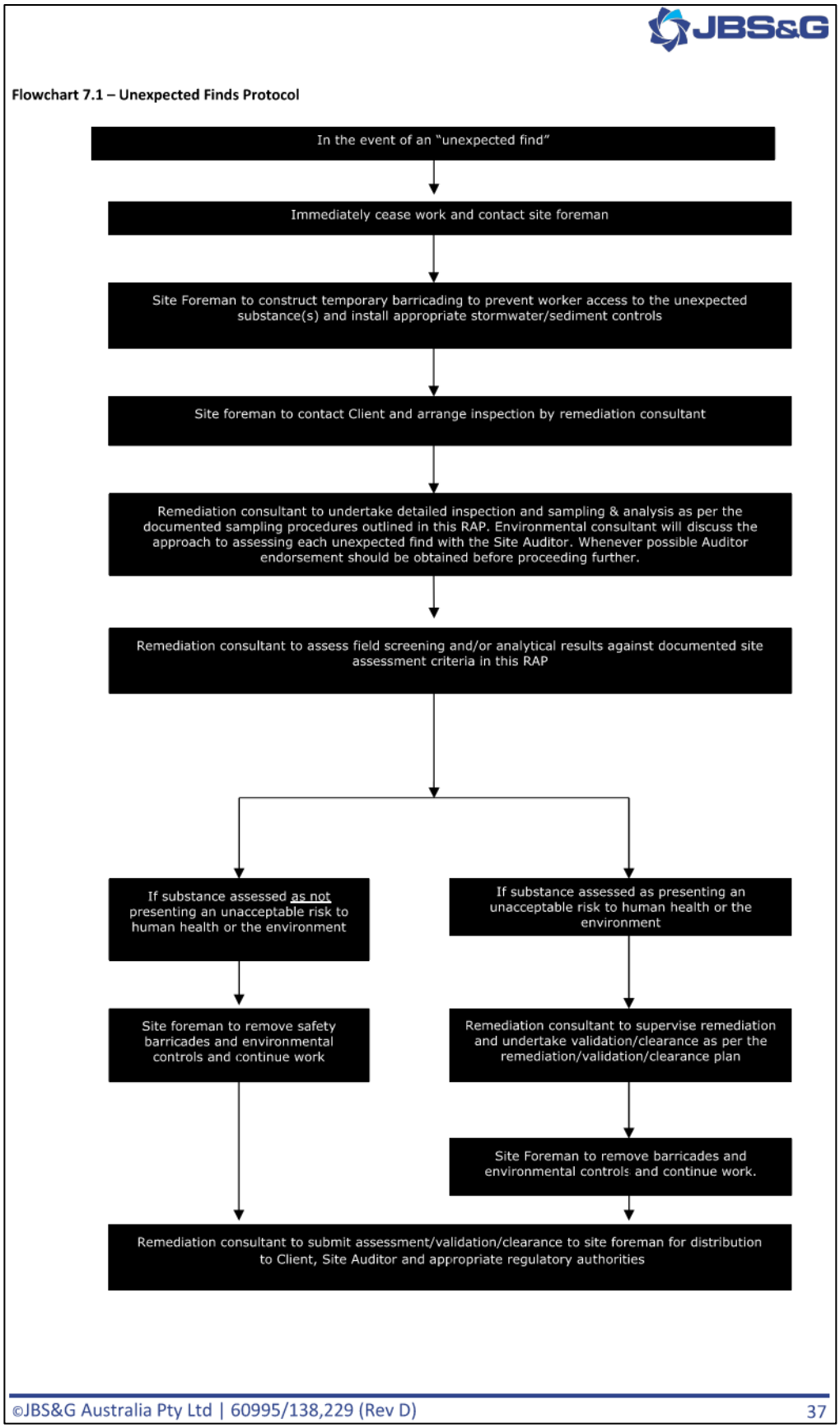
Appendix 4 – Archaeological monitoring and findings procedure

During excavation works, any findings of an archaeological nature will require:

1. Stop excavating in the area of the archaeological finding
2. Contact the site's archaeologist to attend site to inspect the finding
3. The archaeologist will proceed to record the findings within the context site. Findings will then be removed from the site
4. The archaeologist will provide a notice of clearance for the affected zone

Excavation required will recommence

Appendix 5 – Unexpected finds procedure



Appendix 6 – Incident Notification and Reporting Requirements (DPE)

WRITTEN INCIDENT NOTIFICATION REQUIREMENTS

1. A written incident notification addressing the requirements set out below must be emailed to the Department at the following address: compliance@planning.nsw.gov.au within seven days after the Applicant becomes aware of an incident. Notification is required to be given under this condition even if the Applicant fails to give the notification required under condition A17 or, having given such notification, subsequently forms the view that an incident has not occurred.
2. Written notification of an incident must:
   a. identify the development and application number;
   b. provide details of the incident (date, time, location, a brief description of what occurred and why it is classified as an incident);
   c. identify how the incident was detected;
   d. identify when the Applicant became aware of the incident;
   e. identify any actual or potential non-compliance with conditions of consent;
   f. describe what immediate steps were taken in relation to the incident;
   g. identify further action(s) that will be taken in relation to the incident; and
   h. identify a project contact for further communication regarding the incident.
3. Within 30 days of the date on which the incident occurred or as otherwise agreed to by the Planning Secretary, the Applicant must provide the Planning Secretary and any relevant public authorities (as determined by the Planning Secretary) with a detailed report on the incident addressing all requirements below, and such further reports as may be requested.
4. The Incident Report must include:
   a. a summary of the incident;
   b. outcomes of an incident investigation, including identification of the cause of the incident;
   c. details of the corrective and preventative actions that have been, or will be, implemented to address the incident and prevent recurrence; and
   d. details of any communication with other stakeholders regarding the incident.

Appendix 7 – Aspects and Impacts Register

CONSEQUENCE - RISK					
RATING	**1**	**2**	**3**	**4**	**5**
Workplace Health and Safety	* First aid injury, and/or * Minor safe working issues	* Medical treatment, and/or * Moderate safe working breach likely to impact on operations	* Serious medical / hospital treatment resulting in need alternate working or resulting in lost time injury, and/or * Significant safe working breach with actual impact on operations	* Serious or permanent Injury, and/or * Significant safe working beach with immediate impact on operations on one or more worksites	* 1 or more fatalities, and/or * Major breach of safe working with immediate and extensive impact on one or more worksites
Budget ($AUD)	<$<enter> **(<1%)** over project budget	$<enter> to $<enter> **(1% to 5%)** over project budget	$<enter> to $<enter> **(3% to 5%)** over project budget	$<enter> to $<enter> **(5% to 10%)** over project budget	>$ <enter> **(>10%)** over project budget
Time Schedule (Target Program)	< <enter> days / weeks / months **(<1% of program)** over the critical path program	<enter> to <enter> days / weeks / months **(1% to 2% of program)** over the critical path program	<enter> to <enter> days / weeks / months **(2% to 3% of program)** over the critical path program	<enter> to <enter> days / weeks / months **(3% to 5% of program)** over the critical path program	><enter> days / weeks / months **(>5% program)** over the critical path program
Environment & Natural Resources	* Low severity environmental impact(s) or impact on natural resources availablity that are promptly reversible and affected area is within the site boundary	* Nuisance or low severity environmental impact(s) or impact on natural resources availablity that are promptly reversible and affected area is outside the site boundary	* Moderate severity environmental impact(s) or impact on natural resources availablity where the affected area is within the site boundary	Moderate severity environmental impact(s) or impact on natural resources availablity where the affected area is outside the site boundary	High severity environmental impact(s) or impact on natural resources availablity at local scale significance
Quality	* Rework Costs less than or equal to 20K	* Rework Costs less than or equal to 100K but greater than 20K	* Rework Costs less than or equal to 250K but greater than 100K	* Rework Costs less than or equal to 5% contract value but greater than 250K	Rework Costs greater than 5% of contract value
Reputation / Community / Media	* Public concern restricted to local complaints * Lack of contribution to the community	* Minor, adverse local public or media attention and complaints * Employees warned only * Minor change in community amenity values	* Attention from media and/ or heightened concern by local community * Stakeholder action will disrupt planned project activities * Disciplinary action may be taken * Temporary reduced community access to services or employment	* Significant adverse national media / public / NGO attention * Considerable and prolonged adverse community impact and dissatisfaction publicity expressed * Stakeholder action will delay achievement of major elements of the Project * Permanently reduced community access to services or employment	* Serious public or media outcry with international coverage * Significant adverse community impact & condemnation * Stakeholder action will prevent achievement of the project objectives * Reduced cohesion of community
Governance / Legal / Regulatory	* Very minor technical breach of regulation or policy or code of ethics. No fine / penalty	* Minor legal issues, non-compliances and breaches of regulation, policy or code of ethics * Enforceable Undertaking	* Moderate breach of regulation, policy or code with investigation or report to authority * Moderate legal proceedings initiated * Several Improvement Notices	* Significant breach of regulation, policy or code with fine or other regulatory action. Significant litigation / legal action * Shut down of part of a project due to regulatory breach * Prohibition Notice	* Major breach of regulation, policy or code with fine * Major litigation * Major investigation by regulatory body * Prosecution / Accreditation loss
Management Impact	* Impact of event absorbed through normal activity	* Will require some local management attention over several days	* Significant event that can be managed with careful attention, will take some project managers much time for several weeks * Local operation of contingency plan	* Major event that requires the implementation of crisis and contingency plans at a project level, regional area or support function (DRP) * Will require the involvement of senior managers and will take up the time of project managers for several weeks	* Critical event or disaster with significant impact on John Holland that requires considerable senior management time to handle over several months * Full implementation of an John Holland's crisis management plan for days to weeks

		CONSEQUENCE				
	RATING	1	2	3	4	5
LIKELIHOOD	ALMOST CERTAIN	D	C	B	A	A
	LIKELY	D	D	C	B	A
	POSSIBLE	E	D	C	C	B
	UNLIKELY	E	E	D	C	B
	RARE / REMOTE	E	E	D	D	C

PROBABILITY OR CHANCE	QUALITATIVE ASSESSMENT	RECURRENCE TIMEFRAME
≥ 90%	Almost certain to occur during the project / contract life	Less than "Monthly"
51% to 89%	Considered likely to occur during the project / contract life	"Monthly" to "Yearly"
30% to 50%	Considered a possible occurrence during the project / contract life	Between 2 and 5 years
5% to 29%	Considered unlikely to occur during the project / contract life	Between 5 and 20 years
< 5%	Considered a rare occurrence to happen during the project / contract life	Greater than every 20 years

CONTROL EFFECTIVENESS	GUIDANCE
Satisfactory	Nothing more to be done except review and monitor the current controls. To the extent that is reasonably achievable, controls are well designed for the risk (i.e. follow the hierarchy of controls) and address the root causes. Management considers that the controls are operating effectively and reliably at all times.
Improving	Controls are designed correctly, are in place and operating reasonably effectively. Some minor/ isolated exceptions may exist, however do not represent a systematic weakness in operating effectiveness. Some more work to be done to improve the overall effectiveness.
Partial	While the design of controls may be largely correct in that they treat most of the root causes of the risk, implementation and/or operational effectiveness is only partial
Poor	Significant control gaps. Either controls do not treat root causes or they do not operate at all effectively. Controls, if they exist are just reactive rather than proactive.
Nil	Virtually no credible control. Management has no confidence that any degree of control is being achieved due to poor control design and/or very limited operational effectiveness.

Residual risk / opp Rating	Suggested action	Timing of status report and management plans	Authority to accept or tolerate risk.
A	Take action to eliminate or implement additional controls to reduce it to acceptable level (ALARP/SFAIRP). "WHS / Environmental risks" the task or activity must not be performed. An alternative solution must be found.	Notify as soon as practicable, normally with 24 hours. Manage and re-evaluate risk / opportunity to allow Business Unit reporting monthly Notify John Holland's relevant Board Committee and CEO / CFO	John Holland CEO / COO
B	Implement additional controls to reduce it to ALARP/SFAIRP. "WHS / Environmental risks - The activity or task must not be performed without the explicit concurrence of the Project Director / Project Manager.	Notify as soon as practicable, normally within 72 hours. Manage and re-evaluate risk / opportunity to allow project reporting monthly Notify COO / Business Group EGM / CFO	Project Director or JV Board (where applicable), or Regional EGM
C	Implement additional controls reduce it to ALARP/SFAIRP where it is cost-effective to do so. "Onsite activities" – must not commence without Site	Manage and re-evaluate risk / opportunity to allow project reporting monthly	John Holland Operational / Construction / Project Manager / Director
D	Implement additional controls to reduce to ALARP / SFAIRP (may be tolerable).	Manage and re-evaluate risk / opportunity to allow project reporting monthly	John Holland Team Leader
E	Lower priority (likely to be tolerable).	Monitor, manage and carryout activity in accordance with identified controls	John Holland Supervisor

Aspect	Potential Environmental Impact	Risk Rating Consequence/ Likelihood	Control Measure	Residual Rating Consequence/ Likelihood	Management of residual risk
Approvals and licencing					
Not identifying appropriate approvals, licenses or permits required and proceeding without them.	Works delayed, infringements, prosecution, poor community relations and reputational loss.	C-Likely	Review the project EIS, modification and statutory documentation for requirements relevant to the works. Identify and implement approval requirements within the CFEMP, sub-plans and SEPs. Check contract documentation. Identify and implement requirements from the Contract. Establish a register of approvals, licenses, permits. Pre-construction Compliance Report	D-Unlikely	Maintain Compliance Risk Matrix
Noise					
Noise from general construction activities resulting in impact to residents.	Disturbance to residents or neighbouring businesses. Potential for complaints.	B-Almost Certain	Control measures as per CNVMP are to be implemented. Respond to community enquiries and complaints in accordance with the Community Consultation Strategy (CCS). Monitor noise for compliance as the works progress at receiver locations. Provide periods of respite for high noise generating activities where feasible. Noise efficient equipment to be used on site.	C-Possible	Noise performance will be monitored as per the requirements of the CNVMP
Vibration					
Vibration intensive activities undertaken on the site such as impact piling, vibratory rolling, etc.	Disruption, annoyance and nuisance to residents. Potential damage to adjacent residential and commercial residences and structures. Disruption to businesses as a result of vibration nuisance	B-Almost Certain	Control Measures as per the CNVMP are to be implemented. Determine vibration limits and structure/receiver offset distances. Consult with potentially affected parties prior to commencement of works on their upcoming activities that may be impacted by construction vibration. Ongoing vibration monitoring during vibration intensive works	D-Unlikely	Standard and specific mitigation measures for sensitive receptors around the works will be applied as per the CNVMP
Water quality, erosion and sedimentation					

Aspect	Potential Environmental Impact	Risk Rating Consequence/ Likelihood	Control Measure	Residual Rating Consequence/ Likelihood	Management of residual risk
Sediment laden runoff from construction works leaving site	Degradation of local watercourses. Increased turbidity in local water ways resulting in impact on aquatic life. Fines for sediment escaping site.	C-Almost Certain	Control Measures as per Soil and Water Sub Plan to be implemented. Install stormwater drainage protection within the project area. Ensure measures are inspected and maintained as the works progress and also prior to and post rainfall events. Provide training and awareness on the need to prevent pollution.	E-Unlikely	Undertake regular inspections of work areas pre, during and after works to ensure controls are in good condition.
Non-compliant water from construction works discharged from site	Non-compliant water entering stormwater system waterways (i.e. polluting - not compliant with discharge criteria).	C-Almost Certain	Environmental Manager (or delegate) to approve all water discharges from site. Induction and toolbox talks Toolbox training on site procedures for water discharge Educate site staff on licence conditions and consequences of prosecution	D-Unlikely	Undertake regular inspections of work areas pre, during and after works to ensure controls are in good condition.
Works with the potential to intercept ground water	Ground water entering excavations Without appropriate safeguards onsite could lead to ground water contamination	C-Possible	Induction and toolbox talks Toolbox training on site procedures for water discharge Educate site staff on licence conditions and consequences of prosecution Environmental Manager/representative to approve all water discharges from site	D-Unlikely	Undertake regular inspections of work areas pre, during and after works to ensure controls are in good condition.
Earthworks spoil disposal	Incorrect classification of waste (spoil) resulting in incorrect / illegal disposal/re-use.	C-Possible	Inductions, toolbox talks and training on recycling facilities and waste segregation practices. Separation of waste on site. Tracking of disposal processes. All contamination hotspots would be clearly marked in the field (where possible). Hot spots will be shown within contamination mapping and will be included in the Permit to Disturb process.	D-Unlikely	Regular inspections of work areas Monitor and ensure reporting of all
Washout of concrete in undesignated areas.	Sediment laden/alkaline water polluting surrounding stormwater system / watercourses.	C-Almost Certain	Concrete washout areas clearly marked on SEP and delineated. Inductions on designated concrete washout areas.	D-Unlikely	Regular inspections of concrete washout areas and controls
Contamination					

Aspect	Potential Environmental Impact	Risk Rating Consequence/ Likelihood	Control Measure	Residual Rating Consequence/ Likelihood	Management of residual risk
Management of contaminated or untreated materials	Non-compliant material and contaminated water entering surrounding waterways. Decrease in health of nearby ecosystems.	C-Possible	Implement contamination management procedures and protocols from within Soil and Water Subplan. Identify any contamination hotspots and incorporate procedures for these locations into construction documentation. Develop unexpected finds procedures. Induct personnel on unexpected finds procedure.	D-Unlikely	Undertake regular inspections of work areas pre, during and after works to ensure controls are in good condition. Monitor and ensure reporting of all movements of waste from the worksite
Potential for discovery of unexpected contaminated spoil during construction.	Health effects resulting from airborne contamination, e.g. asbestos. Complaints received from odours released during excavations. Classification of spoil is changed and disposal options altered, costs incurred associated with disposal of higher classification of waste.	C-Possible	If contaminated soil is encountered, all works are to stop in the vicinity of the find and investigations commence. Induct personnel on location, type, nature, concentration of contaminants on site if found.	D-Unlikely	Undertake regular inspections of work areas pre, during and after works to ensure controls are in good condition. Complete regular toolbox talks on how to manage unexpected finds.
Hazardous Materials					
Storage of hazardous substances, leaking plant and equipment and spillage from refuelling.	Localised ground contamination / pollution of stormwater and requiring clean-up. Risk of igniting volatile substances. Unauthorised access to site / potential vandalism/damage leading to pollution.	D-Possible	Induction, toolbox talks and training on appropriate handling and storage of liquids. All storm water drains should be identified prior to works and protection installed. Storage areas to be appropriately bunded. SDS approved prior to bringing hazardous substances on site including risk assessment. SEP showing storage locations and associated controls e.g. spill kits, etc. Training in use of spill kits. Clearly label containers. Regular auditing and inspection of storage areas and materials. Ensure all work sites are secure before leaving the site. All liquids i.e. paint etc. are to be securely locked away at the end of each shift.	E-Unlikely	Regular inspections of storage areas.

Aspect	Potential Environmental Impact	Risk Rating Consequence/ Likelihood	Control Measure	Residual Rating Consequence/ Likelihood	Management of residual risk
Fuel contaminated runoff from construction works leaving site	Fuel contaminated runoff entering stormwater or waterways (i.e. polluting - not compliant with discharge criteria).	D-Possible	All storm water drains should be identified prior to works and controls implemented. Appropriate bunding/storage of substances. Toolbox on site procedures for sediment controls and chemical storage. Educate site staff on project conditions and consequences of prosecution.	E-Unlikely	Regular inspections of works site to ensure all controls are in good health and working.
Biodiversity					
Vegetation trimming / clearing required outside approved work area.	Unauthorised works / removal of vegetation outside defined work area, possibility of removing threatened species, fines incurred.	D-Possible	Implement the controls within Flora & Fauna Management Procedure Induction and tool box training on clearance zones and required protection measures If vegetation, other than grass and weeds, needs to be trimmed or removed, further assessment would be undertaken and approval sought prior to trimming or removal. Inspections during clearing activities. Fencing in place/ clear marking of trees to be retained and cleared / demarcation areas / plans showing clearing areas. Pre clearing checklist to be completed before any clearing of vegetation.	E-Unlikely	Implement Vegetation Removal Permit System. Undertake regular inspections of work areas pre, during and after works to ensure controls are in good condition.
Air Quality					
General construction works; site establishment, excavations, piling	Dust activity in close proximity to residential and commercial premises, complaints received.	D-Possible	Implement the controls within the Air Quality Sub plan Toolbox training on Dust and Air Quality Management. Provide dust mitigation measures through water sprays/misting as required. Cover stockpiles that are not to be worked on for a period of greater than 10 days. SEP approved before works commence.	D-Possible	Undertake regular inspections of work areas pre, during and after works to ensure controls are in good condition.
Exhaust from plant and equipment.	Emissions resulting in air pollution.	D-Possible	Inductions and toolbox training on Dust and Air Quality Management. Well maintained plant/ equipment and pre-start checks and servicing. Non-complaint vehicles removed from site / repaired.	E-Unlikely	Review plant check list prior to operating on site. Undertake verification checks a required.

Aspect	Potential Environmental Impact	Risk Rating Consequence/ Likelihood	Control Measure	Residual Rating Consequence/ Likelihood	Management of residual risk
Heritage					
Unexpected heritage items encountered.	Work delays, additional studies, approvals required, damage to heritage item.	D-Unlikely	Implement the controls within Appendix 4 Archaeological Monitoring and Findings Procedure, general inductions toolbox training on heritage management protocols. If suspected heritage item encountered. work to stop immediately and Environment Manager contacted. Clearly highlight no-go zones on the SEP and communicate requirements to construction personnel during pre-start briefs, inductions and tool-box talks.	D-Unlikely	Undertake regular inspections of work areas pre, during and after works to ensure controls are in good condition. Provide frequent toolbox talks on Unexpected Finds Procedure
Traffic					
Loss of on-street car parking in adjacent residential streets and commercial areas during construction.	Loss of parking availability to adjacent residential and commercial properties could result in community complaints.	D-Likely	Community notifications in accordance with Community Consultation Strategy. Develop Traffic Management Plan / Traffic control procedures.	D-Possible	Complete regular toolbox talks on how to minimise impacts in relation to traffic. Supervisor and traffic controller to monitor traffic management requirements
General construction traffic disturbing public access between local roads.	Disturbance to local residents resulting in complaints being made, limited access, potential for delays at local road access points resulting in complaints.	D-Likely	Deliveries of plant and materials shall be undertaken outside of peak periods where possible Scheduled road movements shall be minimised where possible Oversized deliveries would be undertaken in accordance with the requirements of NSW Police or RMS. Implement Traffic Management Plans in consultation with relevant authorities. Detour routes to be advertised/ notified. Clear notifications / signage.	D-Possible	Complete regular toolbox talks on how to minimise impacts in relation to traffic. Undertake regular inspections of worksite and adjacent streets.
Management of heavy vehicles / access routes	Complaints from sensitive receivers due to increased level and frequency of noise.	D-Likely	Deliveries of plant and materials shall be undertaken outside of peak periods where possible Scheduled road movements shall be minimised where possible Oversized deliveries would be undertaken in accordance with the requirements of NSW Police or RMS. Designated access routes.	D-Possible	Complete regular toolbox talks on how to minimise impacts in relation to traffic. Permits from local council and/or RMS

Aspect	Potential Environmental Impact	Risk Rating Consequence/ Likelihood	Control Measure	Residual Rating Consequence/ Likelihood	Management of residual risk
			Implement Traffic Management Plans. Community Notifications. Pedestrian management with traffic controller in place where required.		
Visual Amenity					
Building Materials Temporary construction sheds and storage containers Plant and equipment movement Lighting	Surrounding aesthetic temporarily altered during construction Lighting towers used during out of hours works may spill on nearby residents	D-Possible	The work area shall be maintained in an orderly manner Lighting required during night works shall be directed towards the work area and are from adjacent sensitive receivers Perimeter hoarding to shield neighbouring businesses/residents	E-Unlikely	Undertake regular inspections of work areas pre, during and after works to ensure controls are in good condition.

Appendix 8 – John Holland Environment Policy

JOHN HOLLAND

ENVIRONMENT POLICY

UP FOR THE CHALLENGE OF IMPROVING LIVES

OUR COMMITMENT

To value the natural environment and communities in which we work.

Our goal across all business activities is to use resources efficiently, respond to climate change, prevent pollution, enhance and protect the environment and our heritage.

OUR APPROACH

John Holland's four values of caring, empowering, imaginative and future-focused are the platform for our everyday interactions. We use these values to guide our approach to the environment.

Caring

We care deeply about what we do and how it affects the environment now and for the future by:

- Driving a strong culture to respect the environment across the business in our offices, on our projects and with our joint venture partners.
- Prioritising the environment, the community, sustainable products and resource efficiency in our decision making.
- Providing best practice training and education to our people to build awareness and capability to protect the environment and respect the communities in which we work and live.

Empowering

We gain trust through action by:

- Empowering our people, partners and subcontractors to speak up about how we can better protect and enhance the environment.
- Encouraging participation and collaboration to achieve sound environmental performance and outcomes.
- Driving accountability by ensuring everyone is responsible for valuing and protecting the environment.

Imaginative

We push the boundaries by:

- Focusing on continual learning and improvement by reviewing performance, capturing and sharing lessons learnt and celebrating successes.
- Exploring and introducing new technologies and approaches that minimise impacts on the environment and provide cost effective solutions that are resource efficient.
- Having a transparent critical risk management process that helps us to continuously identify opportunities and improvements to our systems and processes.

Future-focused

We're in it for the long, long term by:

- Exceeding our legislative, customer and other mandatory requirements.
- Establishing and maintaining an effective management system.
- Ensuring our work leaves a positive legacy for the communities we serve and the environments we operate in.

Joe Barr
Chief Executive Officer
January 2020