

Glossary of Terms	
ASIC	Aviation Security Identification Card
CC	Construction Control
HRCW	High Risk Construction Work
HRWL	High Risk Work Licence
IMTE	Inspection, Measuring and Testing Equipment
MOWP	Method of Working Plan
NAPL	Newcastle Airport Pty Ltd
OEM Manual	Original Equipment Manufacturer Manual
PMP	Project Management Plan
PPE	Personal Protective Equipment
RCS	Respirable Crystalline Silica
RPE	Respiratory Protective Equipment
TSP	Transport Security Program
TTMP	Temporary Traffic Management Plan
Works Safety Officer	NAPL shall engage and be responsible for providing suitably qualified Works Safety Officers to undertake any Airside works

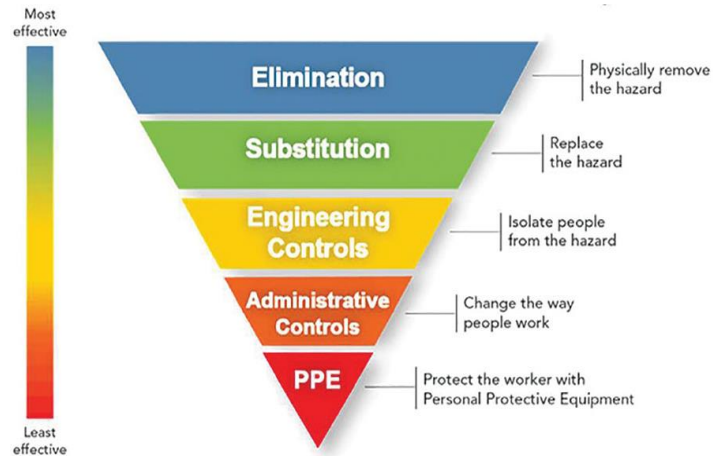
Construction Control Permits and Sequences

The following permits and sequences are applicable to the nominated High Risk Work Activities on this project, and many are required to be initiated by the Subcontractor and reviewed by CC prior to works commencing. Subcontractor SWMS are to acknowledge the requirement to complete the CC permit in the project specific SWMS developed for the project.

S030407 Harness Use Permit	S030408 Hot Works Permit	S030411 Plant Induction Permit
S030415 Ladder Permit	S030414 Scaffold Handover Review	S030408 Hot Works Permit
Q030422 Isolation of Electrical Services Permit	Q030423 Electrical Energisation Permit	S030431 Temporary Powerboard Installation Permit
S030431 Temporary Powerboard Operation Permit	S030425 Excavation Permit	S030427 Concrete and Coring Cutting Permit
Q030428 Confined Space Permit	S030429 Asbestos Permit	S030435 Roof Access Permit
S110810 Suspended Deck Sequence	S110811 Slab-on-ground Sequence	S110815 Pre-cast Sequence
S110816 Structural Steel Sequence	S110840 Partitions and Ceilings Sequence	S110850 Wet Area Sequence
Quick Cut and Demo Saw Permit (NSW only)		

Construction Control Risk Matrix

A		Qualitative Scale	Quantitative Scale	B		Magnitude Scale	Probability Scale	C		Likely	Possible	Unlikely	Very Rare	D	Score	Ranking	Action
	Extreme	Fatality, significant disability, catastrophic property damage	\$50,000+		Likely	Monthly in the industry	Good chance		Extreme	16	14	11	7		14 – 16	Severe (S)	Action Immediately
	High	Minor amputation, minor permanent disability, moderate property damage	\$15,000 - \$50,000		Possible	Yearly in the industry	Even chance		High	15	12	8	4		11 – 13	High (H)	Action with 24 hrs.
	Medium	Minor injury resulting in an Loss Time Injury or Medically Treated Injury	\$1,000 - \$15,000		Unlikely	Every 10 years in the industry	Low chance		Medium	13	9	5	2		7 – 10	Medium (M)	Action within 48 hrs.
	Low	First Aid Treatment with no lost time.	\$0 - \$1,000		Very Rarely	Once in a lifetime in the industry	Practically no chance		Low	10	6	3	1		1 – 6	Low (L)	Action within 5 working days.



As a guide the following 'Hierarchy of Controls' shall be used when considering risk controls during a risk assessment:

- Level 1: Eliminate the hazard.
- Level 2: Substitute the hazard for something safer. Isolate the hazard from people. Reduce the risks via engineering controls.
- Level 3: Reduce exposure to the hazard using administrative actions. Use Personal protective equipment.

Procedure 3.01 Risk Management provides detailed guidance on how to complete a Risk Assessment.

Project Risk Assessment Applicable Hazard / High Risk Construction Work Activity The intention of this section is to identify and describe the high-risk construction work activities that the project presents during construction. Complete a site-specific scope summary in the yellow sections below. The hazards that are to be included here are: <ul style="list-style-type: none"> ○ Pre-existing (e.g., contaminants in the ground or existing buildings) ○ Design (e.g., 65m tall building) ○ Construction (e.g., cranes and scaffold) 			
1	Client / Government or Other stipulated requirements for the project:		✓
	Airside Construction works requirements and ASIC Induction as required		
	For control measures click Client / Project Specific Requirements		
2	Scope summary where there is a risk of a person falling 2m or more:		✓
	Applicable to Milestones 1, 2 and 3		
	For control measures click [HRCW] Work that involves a risk of a person or object falling more than 2m		
3	Scope summary for works involving structural alterations that require temporary support to prevent collapse:		✓
	Applicable to whole of project works		
	For control measures click [HRCW] Work that involves structural alteration requiring temporary support to prevent collapse		
4	Scope summary for works involving demolition:		✓
	Applicable to Milestone 1, 2 and 3		
	For control measures click [HRCW] Work that involves demolition of an element that is load bearing		

5	Scope summary for works involving the disturbance of asbestos:	N/A
	No asbestos identified as per Hazmat report	
	For control measures click [HRCW] Work that involves the likely disturbance of asbestos	
6	Scope summary for works involving excavation to a depth greater than 1.5m:	✓
	Applicable to Milestone 1, 2 and 3	
	For control measures click [HRCW] Work that involves Excavation	
7	Scope summary for works near pressurised gas:	✓
	Applicable to Milestone 1, 2 and 3	
	For control measures click [HRCW] Work that is carried out on or near pressurised gas distribution mains or piping	
8	Scope summary for works near energised electrical installations:	✓
	Applicable to Milestone 1, 2 and 3	
	For control measures click [HRCW] Work that is carried out on or near electrical installations or services	
9	Scope summary for works that may have contaminated or flammable atmospheric conditions:	N/A
	Not applicable to scope	
	For control measures click [HRCW] Work that is carried out in an area that may have a contaminate or flammable atmosphere	
10	Scope summary for works involving Pre-cast or Tilt-up panels:	✓
	Potential for Milestone 1, 2 and 3. Yet to be determined	
	For control measures click [HRCW] Work that involves tilt-up or precast concrete	
11	Scope summary for works adjacent to a road or railway:	✓
	Site is bounded by Williamtown Drive and Airport Ave and Kindler Way. No Railway.	
	For control measures click [HRCW] Work that is carried out on, in, or adjacent to, a road or other traffic corridor	

12	Scope summary for works involving the use of or disturbance of a Hazardous Material or Dangerous Substance: 53:05	✓
	Working in and around PFAS.	
	Refer to PFAS Management Plan. Additional CC controls are included in section <u>Hazardous Substances / Dangerous Goods (HSDG)</u>	
13	Scope summary for works involving movement of mobile plant:	✓
	Use of Mobile Crane, Mobile Concrete Pump, Earthmoving Plant, Forklift/Telehandler	
	For control measures click <u>[HRCW] Work that is carried out in an area where there is movement of powered mobile plant</u>	
14	Scope summary for works on or near chemical, fuel or refrigerant lines:	✓
	Potential installation of the building HVAC system. Plant room and circulation throughout project.	
	For control measures click <u>[HRCW] Works that are carried out on or near chemical, fuel, or refrigerant lines</u>	
15	Scope summary for works involving the cutting of Crystalline Silica Materials:	✓
	The structure of the building will be made from concrete. All fixings and alterations to the formed structure will involve cutting SCM. Cutting of SCM <input type="checkbox"/> Tiling <input type="checkbox"/> Blockwork <input type="checkbox"/> Mixing of Cement / Mortar / Silica containing product <input type="checkbox"/> Sweeping <input type="checkbox"/> Shotcrete	
	For control measures click <u>[HRCW] The cutting of Crystalline Silica Materials</u>	
16	Scope summary for works involving confined spaces:	✓
	Not applicable to scope of works	
	For control measures click <u>[HRCW] Work that is carried out in or near a confined space</u>	

17	Review of unusual High Risk Work Activities that may occur on the project: NB: If one of these Hazards are present, project specific controls are to be developed.	N/A
	<input type="checkbox"/> Telecommunication Towers <input type="checkbox"/> Risk of Drowning <input type="checkbox"/> Diving work <input type="checkbox"/> Artificial Extremes of Temperature <input type="checkbox"/> Tunnels <input type="checkbox"/> Explosives	
18	Scope summary for Environmental consideration on the project:	✓
	Sediment run off, Dust suppression (land, heritage, air, water, noise)	
	For control measures click Environmental	
19	Other unique or special hazards:	✓
	Working in accordance with the Aviation Transport Security Act 2004 (Cth) and Regulations 2005 (Cth) Working under the control of NAPL's Transport Security Program (TSP)	

Project Specific Risk Register

Instructions:

The standard control measures included below have been developed in consideration of legislative requirements, industry advice and in consultation with the Construction Control HSEQ team and Project teams since 1988.

Automatic links have been provided in this document, press Ctrl, and click on the link to follow it e.g., [Instructions](#): You can return to the previous section after clicking on a link by using Alt and the left arrow key.

The project team are to consider the site-specific hazards and risk associated with the project and consider if the standard control measures are applicable.

- If they are not applicable the team are to use ~~strike through~~ to indicate that section is not applicable to the project
- If additional or amended controls are required, the team are to change the text to **purple** to allow for easy recognition.
- The standard control measures that require team input prior to project commencement are marked in **green**. Please update the **green** sections to align with the project requirements and once complete change the text to **purple** to allow for easy recognition.

Activity / Item	Hazards / Risks	Initial Risk Score	Control Measures / Risk Treatment	Legislation, Codes of Practice, and Guidelines (including other available information on hazard / risk)	Residual Risk Score
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1. Project Establishment

Project Delivery/Quality	Planning and Design	12 High	<ul style="list-style-type: none"> Implement Design Management procedure 9.01 Design Management - L3 Complete Q090102 Design Management Plan - L3 Conduct thorough design reviews and validations - L3 Document register for all design documents - L3 	ISO 9001:2018 Design CoP DPB Act DPB Reg	4 Low
	Changes to Client Requirements	12 High	<ul style="list-style-type: none"> Establish clear communication channels with client as per contractual requirements- L3 Register client requests and action status via an appropriate process - L3 Undertake monthly PCG Meetings - L3 Review client request action items and progress using the S020207 Project BMS Performance Meeting record - L3 Include contingency plans in the project schedule and budget - L3 	ISO 9001:2018 Design CoP	4 Low
	Lack of Documented Information Control	12 High	<ul style="list-style-type: none"> Implement a project specific document control system to ensure all project documentation is accurately maintained, controlled, and readily accessible - L3 Regularly review and update documents to reflect the current status and requirements - L3 Conduct training sessions for staff on document management protocols - L3 	ISO 9001 Quality ISO 19011 Auditing	4 Low
	Inadequate Process Control	9 Medium	<ul style="list-style-type: none"> Implement project specific process controls identified in the Q070305 Project Management Plan - L3 Monitor process performance through S010402 Project Audit Record and the Q040103 Corporate Audit Schedule - L3 Use key performance indicators (KPIs) to track and measure process effectiveness - L3 	ISO 9001 Quality ISO 19011 Auditing	2 Low
	Use of non-compliant material	9 Medium	<ul style="list-style-type: none"> Confirm project requirements with suppliers using the Q0805-series supplier Scope of Services documentation - L3 Source materials from reputable suppliers - L3 Verify compliance with requirements using the approved ITP process prior to accepting completed services - L3 Maintain detailed records of material specifications and test results using the Q110202 ITP Register and associated records - L3 	ISO 9001 Quality	2 Low
	Delays in equipment / material delivery	12 High	<ul style="list-style-type: none"> Schedule equipment orders in advance wherever possible - L3 Complete Q080302 Supplier Assessment to ensure suitable service provider capabilities - L3 Monitor supplier performance and delivery schedules - L3 	ISO 9001 Quality	4 Low

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	Substandard service/task implementation (Poor Workmanship)	12 High	<ul style="list-style-type: none"> Verify competent subcontractor supervision in compliance with the Q070305 Project Management Plan - L3 Complete Q080302 Supplier Assessment to ensure suitable service provider capabilities - L3 Undertake S030413 Work Activity Observation as required to verify quality delivery of tasks being undertaken - L3 All workers must comply with the requirements of the Q030409 Inspection and Competency Matrix - L3 Undertake the S030402 Project Inspection Record weekly - L3 	ISO 9001 Quality	4 Low
	Unplanned Environmental delays or outcomes.	13 Medium	<ul style="list-style-type: none"> Complete a Q070408 Dilapidation Report for the project - L3 Request client reports relating to environmental concerns or hazards - L3 Assess and control environmental factors using the Q030104 Project Risk Register - L3 Develop and implement an environmental management plan - L3 Undertake the S030402 Project Inspection Record weekly. 	ISO 9001 Quality	2 Low
	Regulatory Compliance/ Approval Delays	12 High	<ul style="list-style-type: none"> Engage with regulatory authorities as soon as practicable for the project - L3 Submit all relevant applications and track status - L3 Coordinate and schedule all regulatory inspections and hold points - L3 	Building Certifiers Act Building Certifiers Reg EPBC Act	4 Low
	Inadequate Stakeholder Communication	12 High	<ul style="list-style-type: none"> Develop a comprehensive stakeholder communication plan in consultation with the client - L3 Hold regular progress meetings with key stakeholders - L3 Ensure transparent and timely reporting of project status - L3 	EPBC Act EP&A Act	4 Low
	Client Satisfaction	12 High	<ul style="list-style-type: none"> Clearly define project scope and deliverables in consultation with the client - L3 Establish regular communication channels with the client for updates and feedback - L3 Implement a client satisfaction survey at completion to capture feedback and address concerns promptly - L3 	NCC	4 Low

Activity / Item	Hazards / Risks	Initial Risk Score	Control Measures / Risk Treatment	Legislation, Codes of Practice, and Guidelines (including other available information on hazard / risk)	Residual Risk Score
1.1 Client / Project Specific Requirements	Airside and border security risks	16 Severe	<ul style="list-style-type: none"> Construction Control must carry out Airside Works in accordance with an approved Method of Working Plan (MOWP) and Notice to Airmen (NOTAMS) Construction Control and its subcontractors are to obtain ASIC induction to work in Airside and restricted areas as required. Construction Control will ensure the requirements of NAPL's Transport Security Program (TSP) are in place whilst working at the airport. Construction Control will include in site inductions, security instructions to work at the airport and ensure workers understand their legislative obligation requirements to the Act and Regulation. Construction Control, at site induction, will advise and inform the workers that many parts of the Airport are under the Department of Defence and airport security staff surveillance. NAPL will provide contractor and trade parking area within 500m of the site. Construction Control and its subcontractors are not permitted to park in the gated airport car parks. NAPL will procure banner mesh which will be provided to Construction Control to be set up on the perimeter fences and temporary hoarding. Perfluoroalkyl and polyfluoroalkyl substances (PFAS) management Foreign Object Damage (FOD) management Construction Control will, as far as reasonably practicable, minimise dust impact on parked cars and rental operations. No use of chemical pesticides or termiticides for new construction work All building materials to be used for construction are to be non-reflective. All outdoor lighting must comply with AS 1158 'Lighting for roads and public spaces' and AS 4282 'control of obtrusive effects of outdoor lighting' and the lighting controls detailed in the Civil Aviation Safety Authority (CASA) Manual of Standards (MOS-139) Aerodromes 	<p>Aviation Transport Security Act 2004 (Cth)</p> <p>Aviation Transport Security Regulations 2005 (Cth)</p> <p>Contract No. NAPL 010-2023 Schedule 28</p>	3 Low

Activity / Item	Hazards / Risks	Initial Risk Score	Control Measures / Risk Treatment	Legislation, Codes of Practice, and Guidelines (including other available information on hazard / risk)	Residual Risk Score
			<ul style="list-style-type: none"> Both vehicular and pedestrian access to the existing sewage treatment plant must not be impeded during both construction and operation. The pedestrian footpath to the north-east of the substation must be maintained or an alternative measure must be provided. Should it be damaged through construction, it must be fully repaired. Refer to drawings 17284-H-DR-C-1020 through 17284-H-DR-C-1025 for erosion and sediment control plan. For major works and as agreed with NAPL, Construction Control will complete a Disruptive Access Notice (DAN) to NAPL minimum of 10 days for any interface works conducted outside the boundary of the construction site. The client work permit form will be submitted to NAPL of a minimum of 48 hours prior to any works commencing outside the boundary of the construction site regardless of whether it will affect NAPL operations. A services isolation permit will be submitted with the NAPL work permit prior to any isolation works commencing. Upon NAPL's approval, work will commence FIP isolations must be approved by client superintendent before isolation works commence. Ensure all applicable services are isolated and contact is made with TOC in case of additional isolation required on day/night of works Construction Control will work in accordance with the Principal's Policy – Operation of Cranes and Tall Structures in the Vicinity of the Newcastle Airport. A request for approval of Temporary Obstructions will be submitted to Air Base Command Post (ABCP) via NAPL's work permit procedure for any cranes or tall structures exceeding 10m above ground level. Further guidance is provided in NAPL Main Works Contract VOL.3 (08.03.2023). Follow the controls listed in 1.9 Working in and Adjacent to Airport and 9.7 Client / Public Interface 		
1.2 Communication and Regulatory Compliance	Not following legal requirements or planning, preparing, and consulting	16 Severe	<ul style="list-style-type: none"> CC control measures provided in this PRR, PMP (and other project specific documentation) that are developed in consultation and in consideration of legislative requirements, industry advice and in consultation with Subcontractors and the CC team – L3 Ensure SWMS are developed for High-Risk Work Activities, that are reviewed by CC in consideration of the PRR – L3 Continually review and improve processes and procedures – L3 CC BMS Control Group to review all applicable legislative changes and industry trends and update documentation and provide training to applicable staff – L3 	WH&S Act 2011 NSW WH&S Reg 2017	7 Medium

Activity / Item	Hazards / Risks	Initial Risk Score	Control Measures / Risk Treatment	Legislation, Codes of Practice, and Guidelines (including other available information on hazard / risk)	Residual Risk Score
1.3 Worker Competency	Lack of worker competency	14 Severe	<ul style="list-style-type: none"> Ensure CC project personnel are listed on the <i>Q140605 Training and Competency Matrix</i> and all required training has been completed for each team member according to their project role requirements – L3 Competency requirements are assessed to be in accordance with the <i>Q030409 Inspection and Competency Compliance Matrix – L3</i> Ensure a copy of all applicable engineers' credentials are stored in the SharePoint Project Safety folder – L3 All workers competing High Risk Work shall have appropriate licensing or certificate of competency as required by regulatory authorities – L3 	NSW WH&S Reg 2017, S39 Construction CoP, S6	7 Medium
1.4 Labour Hire	Incompetent worker	14 Severe	<ul style="list-style-type: none"> Labour Hire workers engaged by a Subcontractor or CC are to be treated as direct employees of that company regarding HSEQ documentation, consultation, and task specific training – L3 All workers competing High Risk Work shall be trained into a SWMS and have appropriate licensing or certificate of competency as required by regulatory authorities – L3 In the ACT, all Labour Hire agencies are to be registered with WorkSafe – L3 	NSW WH&S Reg 2017, S39 Construction CoP, S6	7 Medium

Activity / Item	Hazards / Risks	Initial Risk Score	Control Measures / Risk Treatment	Legislation, Codes of Practice, and Guidelines (including other available information on hazard / risk)	Residual Risk Score
1.5 Adjacent Structures	Noise disturbance	10 Medium	<ul style="list-style-type: none"> Adhere to working hours of 7 am to 5 pm Mon-Fri and 7 am to 2 pm Saturday – L1 Notify adjoining neighbours of works to be undertaken – L3 	NSW WH&S Reg 2017, Part 4.1 Environment Protection Reg, Schedule 2	6 Low
	Damage to structures	10 Medium	<ul style="list-style-type: none"> CC shall ensure a <i>Q070407 Latent Conditions Checklist</i> and <i>Q070408 Dilapidation Report</i> is undertaken and controls are incorporated into the PMP and/or this PRR – L2 Ensure good line of sight at entry and exit points – L2 	NSW WH&S Reg 2017, S298 Construction CoP	6 Low

Activity / Item	Hazards / Risks	Initial Risk Score	Control Measures / Risk Treatment	Legislation, Codes of Practice, and Guidelines (including other available information on hazard / risk)	Residual Risk Score
1.6 Site Fencing / Access / Egress	Unauthorised entry	14 Severe	<ul style="list-style-type: none"> Ensure the construction site is secure with 2.44m high fence in line with NAPL's TSP requirements to separate the public from airside security and construction activities – L2 Fencing that is galvanised rail-less chain wire, at least 2.44m in height and includes a minimum three strand barbed wire top section fence with three gates; Access Gates that is galvanised rail-less chain wire, at least 2.44m in height and includes a minimum three strand barbed wire top section fence with three gates. <p>Perimeter inspection and maintenance</p> <ul style="list-style-type: none"> A cleared area of 3m landside and 2m airside near the fence is provided to permit regular inspections of the fence and perimeter. Security fencing and gates will be maintained at all times. All security fencing erected to form part of the air side/land side or landside security zone barrier at Newcastle Airport shall conform to, or be assessed as equal or superior to, the Australian Standard 'AS1725 -1975: Any alternative forms of airport security fencing must use materials and construction methods which conform to the relevant Australian Standards. Such fencing must also provide at least the same anti climb and anti-penetration resistance as the AS1725-1975 Standard. The fence structure including the base of the fence will be kept clear of foliage that may conceal cutting or damage. Further, Newcastle Airport will ensure that no flora grows over the fence line which may assist an unauthorised person to gain airside access. Where the fence crosses drains, culverts or other depressions that may lend themselves to assisting unauthorised entry, the area will be secured in such a manner as to prevent access under the fence. Where buildings or other permanent obstacles form part of the landside and airside boundary, all possible entry points will be secured to prevent unauthorised access. The security fencing will be kept clear of any object, such as trees, parked vehicles, airport equipment, pallets or baggage containers, which may provide assistance to breach the security barrier. Construction Control works, on landside, will mark a 3m line from the perimeter fence as a visual reminder to all workers to ensure materials, parked vehicles and any objects are not within 3m of security fencing. Ensure gates are monitored and closed when not in use and locked at the end of day – L2 Install construction signage on the gate including: - L3 <ul style="list-style-type: none"> Construction Control sign with afterhours contacts, company name, license number and ACN Site Rules 'Construction Site – Authorised Persons Only' sign 	<p>NSW WH&S Reg 2017, S298</p> <p>Construction CoP</p> <p>Work Environment CoP, S2.1</p> <p>AS1725-1975</p> <p>NAPL Transport Security Program</p>	7 Medium

Activity / Item	Hazards / Risks	Initial Risk Score	Control Measures / Risk Treatment	Legislation, Codes of Practice, and Guidelines (including other available information on hazard / risk)	Residual Risk Score
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			<ul style="list-style-type: none"> ○ Speed limit sign ○ Mandatory PPE – Hard hat, Hi-Vis clothing and Safety Footwear ○ Visitor signage directing visitors to site office 		
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Activity / Item	Hazards / Risks	Initial Risk Score	Control Measures / Risk Treatment	Legislation, Codes of Practice, and Guidelines (including other available information on hazard / risk)	Residual Risk Score
	Exposure to construction hazards	14 Severe	<ul style="list-style-type: none"> When working outside the construction boundary fence, work shall be physically isolated and signposted to prevent public entering work areas – L2 A spotter is to be used in areas of medium to high public usage or for high-risk public e.g., children – L2 <i>S030402 Project Inspection Records</i> are to be conducted in accordance with PMP requirements – L3 	NSW WH&S Reg 2017, S298 Construction CoP, S7.1	7 Medium

Activity / Item	Hazards / Risks	Initial Risk Score	Control Measures / Risk Treatment	Legislation, Codes of Practice, and Guidelines (including other available information on hazard / risk)	Residual Risk Score
	Inappropriate access	14 Severe	<ul style="list-style-type: none"> ▪ Ensure designated access and egress paths have been instigated and are even, clear, unobstructed, and pedestrians are isolated from vehicles and plant – L2 ▪ Access stairs must not exceed 250mm between steps and/or landing – L2 ▪ Ensure visibility around access ways is not blocked inside or outside the fencing – L2 ▪ Ensure access ladders are secured and extend at least 1m past the landing area – L2 	NSW WH&S Reg 2017, S40 Construction CoP, S7.1 Work Environment CoP, S2.1	7 Medium

Activity / Item	Hazards / Risks	Initial Risk Score	Control Measures / Risk Treatment	Legislation, Codes of Practice, and Guidelines (including other available information on hazard / risk)	Residual Risk Score
	Obstructed access & egress	12 High	<ul style="list-style-type: none"> ▪ Ensure loading zones don't block access ways – L2 ▪ Where only one point of access stair is possible, it shall be a stretcher access to allow emergency services access to the area – L2 ▪ A documented Risk Assessment must be developed to consider areas where an obstructed access or egress occurs – L3 	NSW WH&S Reg 2017, S40 Construction CoP	4 Low

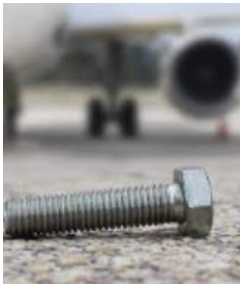
Activity / Item	Hazards / Risks	Initial Risk Score	Control Measures / Risk Treatment	Legislation, Codes of Practice, and Guidelines (including other available information on hazard / risk)	Residual Risk Score
	Slips / trips / falls	12 High	<ul style="list-style-type: none"> Always maintain good housekeeping – L2 Ensure designated access and egress paths are even, clear, and free of slip / trip hazards – L2 	NSW WH&S Reg 2017, S40 Construction CoP	4 Low

Activity / Item	Hazards / Risks	Initial Risk Score	Control Measures / Risk Treatment	Legislation, Codes of Practice, and Guidelines (including other available information on hazard / risk)	Residual Risk Score
1.7 Underground and Overhead Services	Unplanned contact with services	14 Severe	<ul style="list-style-type: none"> Identify all underground services using 'Before-You-Dig-Australia' – L2 A Q070407 <i>Latent Conditions Checklist</i>, Q070406 <i>Pre-excavation Documentation</i> form and Q070409 <i>Designated Plant Setup Locations</i> form are to be developed by the CC project team pre-commencement and uploaded to Simpel Documents – L3 The Q070406 <i>Pre-excavation Documentation</i> is a cover page for the BYD, client and consultant services drawings. The Q070409 <i>Designated Plant Setup Locations</i> form considers overhead obstacles. All Subcontractors and CC are to review these documents prior to commencing works and develop site specific control measures applicable to the scope of works - L3 Where insulated cabling is over areas used by vehicles then the minimum height shall be 4.6m – L2 All existing service pits in plant trafficable areas shall be identified and protected with a minimum 800mm high barrier or marker – L3 	WH&S Act 2011, S305 Construction CoP Excavation CoP	7 Medium
1.8 [HRCW] Work that is carried out on, in, or adjacent to, a road or other traffic corridor that is in use by traffic other than pedestrians.	Collison with traffic or person or property	16 Severe	<ul style="list-style-type: none"> Task specific SWMS must be developed prior to commencing works – L3 Work areas withing 2m of a roadway must be isolated from adjacent roads and other traffic corridors using concrete / water barriers - L2 Any Temporary Traffic Management Plan (TTMP) which affects public roads must be developed by a competent person in accordance with the Q030409 <i>Inspection and Competency Compliance Matrix</i>. TTMP must be developed in consultation with the client (NAPL), and confirmed prior to implemented and applicable works commencing that may impact a public road - L2 Traffic management must include controls for emergencies. Ensure traffic control measures are implemented in accordance with the TMP – L2 All workers must remain within the limits of the controlled area. – L1 Ensure traffic control devices will not become a hazard and not obstruct permanent road signage – L1 Ensure good line of sight at entry and exit points – L2 Ensure (5) km/h speed signage is displayed at entry points – L3 	NSW WH&S Reg 2017, S307 and 315 Construction CoP AS 1742 Traffic HIGH RISK WORK s291(k) Work Health Safety Regulations	7 Medium
	Incompetent traffic controller	12 High	<ul style="list-style-type: none"> All temporary traffic controllers, flaggers, spotters on public roads shall have available evidence of completing an appropriate Traffic Controller Course in compliance with the Q030409 <i>Inspection and Competency Compliance Matrix</i>– L2 Signage is only installed by personnel with appropriate competency and authorisations 	NSW WH&S Reg 2017, S40 Construction CoP	4 Low

Activity / Item	Hazards / Risks	Initial Risk Score	Control Measures / Risk Treatment	Legislation, Codes of Practice, and Guidelines (including other available information on hazard / risk)	Residual Risk Score
1.9 Working in / adjacent to airport	Craneage – Visibility	16 Severe	<ul style="list-style-type: none"> No crane operations during low visibility weather or at night – L1 Seek approval from Airport Operations for lift during the planning phase – L3 Crane boom to be painted Orange/White, Yellow/Black, Yellow/White or Red/White – L2 Once crane is approved, on day of operation, notify Airport Operations Officer prior to erecting all crane operations – L3 For any crane approved that penetrates the OLS the crane mast will be required to be fitted with either a red low intensity obstacle light or medium intensity obstacle light and a high-viz flag – L3 	Airports Act 1996, Part 12	7 Medium
	Unauthorised Access	14 Severe	<ul style="list-style-type: none"> No materials to be placed within 3m of Airside Fence – L2 Follow all Airport mandated security requirements – L3 Ensure an authorised ASIC holder is supervising when accessing/working Airside – L3 	Airports Act 1996	7 Medium
	Foreign Object Debris (FOD) & Dust	14 Severe	<ul style="list-style-type: none"> Secure all materials – L2 Cover bins with shade cloth or similar to prevent items being blown away – L2 Dust is to be suppressed using suitable means (i.e. water, gravel, etc.) – L2 	Airports Act 1996, Part 131D	7 Medium
	Public	12 High	<ul style="list-style-type: none"> Ensure designated walkways, paths and road crossings are established, kept clear and clean – L2 Where slips / trips & fall hazards cannot be eliminated appropriate barricading and signage is to be installed – L2 	NSW WH&S Reg 2017, S40 Construction CoP, S7.1	4 Low

Activity / Item	Hazards / Risks	Initial Risk Score	Control Measures / Risk Treatment	Legislation, Codes of Practice, and Guidelines (including other available information on hazard / risk)	Residual Risk Score
	Unauthorised works and damage to aircraft and airfield operations on Airside	16 Severe	<p>While working Airside, Construction Control must comply with all directions given by Works Safety Officers.</p> <ul style="list-style-type: none"> Aircraft or other airfield operations must not be interrupted by construction work under the control of CC. Hours of work for work within or adjacent to aircraft movement areas are restricted and may be subject to interruptions due to aircraft or other airfield operations. Where an Airside work area contains aircraft movement areas, the aircraft movement areas will be delineated by U/S Markings provided and maintained by Construction Control, under the direction of NAPL's Works Safety Officers Construction Control and its Subcontractors must not enter an Airside work area requiring U/S Markings until these have been placed by the Works Safety Officer. Once placed, the U/S Markings must not be moved, altered, or interfered with in any way by CC and its Subcontractors. CC must delineate the Airside work area, including the special events zone as specified by the Airside Special Events Zone application. If required, Airside Special Event Zones will be applied for and obtained by NAPL. CC will ensure that the delineation remains in place in good order until the work in that Airside work area and Special Events Zone has been completed. Construction Control workers and construction mobile plant must not traverse outside the Airside work area without the permission of a Works Safety Officer. Any permitted moves must be made under the control of a person authorised to escort Airside movements. <p>Construction Control must ensure that there is a Site Manager for the purposes of the MOWP¹ who is able to initiate, on behalf of CC, any actions necessary to meet CC's obligations concerning Airside Works.</p> <p>Construction Control will ensure the Site Manager is appropriately briefed by NAPL's Works Safety Officer and will properly instruct all workers engaged in Milestones 1, 2 & 3 concerning working in and around the Airport.</p>	<p>NAPL 010-2023 Schedule 28 (Preliminaries)</p> <p>Section 8.1 Airside Works</p>	4 Low

¹ NAPL Method of Working Plan

Activity / Item	Hazards / Risks	Initial Risk Score	Control Measures / Risk Treatment	Legislation, Codes of Practice, and Guidelines (including other available information on hazard / risk)	Residual Risk Score
	<p>Potential construction hazards to Airside</p> 	16 Severe	<ul style="list-style-type: none"> CC will not allow or permit any equipment that may damage pavements or material hazardous to aircraft operations to be brought Airside. NAPL or a Works Safety Officer may direct CC to remove any equipment that may damage pavements or material considered to be hazardous to aircraft operations. CC and its subcontractors will immediately comply with such direction. CC must prevent sand, loose material or other fine material from being blown or washed from an Airside work area onto Aircraft Movement Areas. CC must prevent spillage of material whilst in any Airside work area. Any spillage which occurs must be immediately removed by CC and its subcontractors to the satisfaction of the Works Safety Officer Where construction plant from some Airside work area repeatedly cross, or are used in close proximity to, an Aircraft Movement Area, CC must have on standby, in that Airside work area, a self-propelled vacuum sweeper with non-metallic bristles, manned and ready, to remove spilled material at any time. CC and its subcontractors must provide an operational manned vacuum sweeper for each such Airside work area. Where there is potential damage to work surfaces, CC will ensure a suitable construction plant is available to reinstate the area to NAPL safety standards. CC will ensure the work area is clear of any FOD and ensure all plant and equipment is stored clear of the Airside work area. No materials, including stockpiles of excavated or imported materials shall remain within the Airside work area. All construction vehicles, mobile plant and delivery vehicles must display their company logo and/or identification of the owner of the vehicle on both sides of the vehicle/plant. The display must be clearly visible at all times, and sufficiently large to be legible from 5m away. 	<p>NAPL 010-2023 Schedule 28 (Preliminaries)</p> <p>Section 8.2</p>	4 Low
	Ambient Noise	12 High	<ul style="list-style-type: none"> Due to the high levels of noise exposure from working adjacent to an active airfield, all personnel conducting works at Newcastle Airport for Construction Control must carry hearing protection on their person at all times. 		
	Wind / Materials	12 High	<ul style="list-style-type: none"> Ensure all materials / equipment are securely stored – L2 Keep all perimeter fencing and fencing approaches free of debris – L2 	<p>Airports Act 1996, Part 131D</p> <p>Construction CoP, S7.6</p>	4 Low

Activity / Item	Hazards / Risks	Initial Risk Score	Control Measures / Risk Treatment	Legislation, Codes of Practice, and Guidelines (including other available information on hazard / risk)	Residual Risk Score
1.10 Welfare Facilities (Amenities – lunch-sheds, toilets, etc)	Dehydration / Hypothermia	14 Severe	<ul style="list-style-type: none"> Ensure cool, clean drinking water is always available – L3 Provide cooled / heated amenities sheds – L2 Ensure workers are provided adequate heat / cold protection – L3 Drinking facilities are to be located where there is a likelihood of hot and strenuous work activities – L3 Ensure workers are provided adequate UV protection (work in shaded areas, hat, and sunscreen) – L3 Follow the controls listed in the Fatigue and Stress section – L3 	WH&S Act 2011, S40 Construction CoP, S7.1 Work Environment CoP, S2.8	7 Medium
	Heat / Cold Stress	14 Severe	<ul style="list-style-type: none"> Ensure extreme hot and cold environments are monitored and workers take breaks accordingly – L2 Supervisors shall monitor work and where required rotate or stop work in extreme heat / cold conditions – L2 	NSW WH&S Reg 2017, S40 Work Environment CoP, S4.1	7 Medium
	Extreme Wind / Rain / Ice	12 High	<ul style="list-style-type: none"> CC Foreman to complete the <i>S030202 Environmental Checklist</i> where required to isolate and handover work areas, or part of, as deemed safe – L2 	NSW WH&S Reg 2017, S40	4 Low
	Inadequate amenities	1 High	<ul style="list-style-type: none"> Ensure cool, hygienic drinking water is always available – L2 Where a meal room is provided it shall have adequate tables and seating with a floor area of not less than 1m² per person for each person using the room at any one time - L2 Each room shall have a hot water urn, refrigerator, food warming facilities, shelves, sink, garbage bins and air conditioning – L2 Where showering or the changing of clothes on-site is required, there shall be at least one shower cubicle per 25 persons with a non-slip floor area of 0.5m² per person – L2 Drinking facilities are to be located where there is a likelihood of hot and strenuous work – L3 In multi-storey buildings, toilets shall be located on at least every second floor – L3 The ratio of water closets and hand basins shall be 1:20 males; 1:15 females – L3 A designated Female only toilet is to be provided on site, with suitable sanitary facilities – L1 Ensure amenities are installed and maintained in accordance with Work Environmental and Facilities Code of Practice – L3 	NSW WH&S Reg 2017, S41 Construction CoP, S7.2 Work Environment CoP, S3.1 Consultation CoP, S2	4 Low
	Poor / Unauthorised access	14 Severe	<ul style="list-style-type: none"> Amenities shall always have safe means of access – L2 All amenities are to be locked prior to the closure of site each day or when workers are not on-site – L2 	Work Environment CoP, s2.1 & 3.1	7 Medium
	Electrocution / Fire	16 Severe	<ul style="list-style-type: none"> Ensure electrical supply is in accordance with AS 3012. RCD protection to be isolated with main isolating switch available – L2 Appropriate fire protection to be available in each amenity shed – L2 	Electrical CoP, S3.3 AS 3012 Electrical	7 Medium

Activity / Item	Hazards / Risks	Initial Risk Score	Control Measures / Risk Treatment	Legislation, Codes of Practice, and Guidelines (including other available information on hazard / risk)	Residual Risk Score
	Biological hazards	12 High	<ul style="list-style-type: none"> Ensure the amenities are kept clean and rubbish removed regularly – L2 	Work Environment CoP, S2.2	4 Low

Activity / Item	Hazards / Risks	Initial Risk Score	Control Measures / Risk Treatment	Legislation, Codes of Practice, and Guidelines (including other available information on hazard / risk)	Residual Risk Score
1.11 Workplace Ergonomics	Musculoskeletal Disorders	12 High	<ul style="list-style-type: none"> Office equipment shall be ergonomically designed – L2 Screen height should be below eye level and within an arm's length – L2 When seated at workstation elbows should be at least 50mm above work surface – L2 Ensure keyboard, mouse and task materials are within comfortable reach of hands – L2 Avoid positioning screen directly under light source(s) or facing windows – L2 Ensure manual handling training has been undertaken – L3 	WH&S Act 2011, S40 and 60 Construction CoP Manual Tasks CoP	4 Low
1.12 Latent Conditions	Unexpected Asbestos find	14 Severe	<ul style="list-style-type: none"> Complete a <i>Q070407 Latent Conditions Checklist</i> prior to the project commencing – L3 Stop working – L2 Determine if any worker/s are injured or exposed and make area safe by isolating or leaving a spotter in a safe area to warn people – L2 Contact CC staff member, who will contact the PM – L3 Contact asbestos assessor and wait for their report – L3 Isolate area and contact PM and HSE Manager – L2 Follow the controls listed in the [HRCW] Work that involves the likely disturbance of asbestos section – L3 	NSW WH&S Reg 2017, S43 Asbestos Removal CoP AS 3745 Emergency	7 Medium
	Unidentified hazards	12 High	<ul style="list-style-type: none"> Complete a <i>Q070407 Latent Conditions Checklist</i> prior to the project commencing – L3 On handover of an area, the Foreman shall inspect the area for needles, asbestos, hazardous substances, and other hazardous conditions using a <i>S030402 Project Inspection Record</i>; and manage accordingly to make safe before work commences – L2 Prior to each day's work each Subcontractor supervisor must complete a visual site inspection and dynamic assessment in relation to scope of works to ensure areas are safe and any potential hazards/risks in work zone area addressed – L2 	WH&S Act 2011, S40 Construction CoP	4 Low

Activity / Item	Hazards / Risks	Initial Risk Score	Control Measures / Risk Treatment	Legislation, Codes of Practice, and Guidelines (including other available information on hazard / risk)	Residual Risk Score
1.13 [HRCW] Work that involves the likely disturbance of asbestos.	Disease	14 Severe	<ul style="list-style-type: none"> Complete a <i>Q070407 Latent Conditions Checklist</i> prior to the project commencing - L3 Task specific SWMS must be developed prior to commencing works – L3 Licensed asbestos assessor to complete inspection and assessment – L3 Mandatory health monitoring for workers undertaking asbestos removal shall be verified prior to commencement of asbestos removal. – L3 Complete <i>S030429 Asbestos Permit</i> and obtain CC approval prior to works commencing for over 10m2 of ACM – L3 Under 10m2 of non-friable asbestos may be removed by a licensed asbestos contractor or appropriately trained person without the need of an asbestos removal control plan or notification to SafeWork NSW. A task specific SWMS is still required. An asbestos management plan shall be developed by Licensed asbestos assessor – L3 Asbestos air monitoring requirements shall be detailed within asbestos removal plan – L2 Asbestos removal plan shall be developed by qualified asbestos removalist – L3 An Emergency plan shall be documented within the asbestos management plan - L3 Security, signs, and barriers shall be clearly displayed at all times – L2 Obtain a clearance certificate before reoccupying the work area – L2 Follow the controls listed in the Air Monitoring and Health Monitoring section – L3 	NSW WH&S Reg 2017, S81, 435 Asbestos CoP Asbestos Removal CoP HIGH RISK WORK s291(k) Work Health Safety Regulations	7 Medium
1.14 Latent Conditions	Unexpected finds	12 High	<ul style="list-style-type: none"> If an unknown item (e.g., heritage item, artifact, landfill, drum, tank, artifact, medical waste etc.) is located, works in the affected area will be suspended, the area isolated to prevent disturbance and the Site Manager or Project Manager contacted to evaluate the nature of the unexpected find. CC will notify and consult with stakeholders to develop a management plan applicable to the situation – L2 If Asbestos is found, follow the controls listed in the [HRCW] Work that involves the likely disturbance of asbestos section – L3 If Lead is found, follow the controls listed in the Lead section – L3 If a Hazardous or Dangerous Substance is found, follow the controls listed in the Hazardous Substances / Dangerous Goods (HSDG) section – L3 Follow the controls listed in the Air Monitoring and Health Monitoring section – L3 	Construction CoP, S7.2 Work Environment CoP, S3	2 Low

Activity / Item	Hazards / Risks	Initial Risk Score	Control Measures / Risk Treatment	Legislation, Codes of Practice, and Guidelines (including other available information on hazard / risk)	Residual Risk Score
	Disease / Vermin	9 Medium	<ul style="list-style-type: none"> ▪ All areas shall be kept clean and sanitary – L2 ▪ Wastewater from amenities shall be adequately discharged to ensure hygiene and safety – L2 ▪ Ensure adequate supply of cleaning equipment and accessories – L2 ▪ No food shall be consumed inside the structure/project – L2 ▪ Adequate measures shall be implemented to deter or eradicate vermin – L2 ▪ Follow the controls listed in the Air Monitoring and Health Monitoring section – L3 	Construction CoP, S7.2 Work Environment CoP, S3	2 Low

Activity / Item	Hazards / Risks	Initial Risk Score	Control Measures / Risk Treatment	Legislation, Codes of Practice, and Guidelines (including other available information on hazard / risk)	Residual Risk Score
1.15 Biohazard	Used Needles	9 Medium	<ul style="list-style-type: none"> ▪ Don't pick up 'sharps'. Call the sharps hotline (13 22 81) unless you have been trained how to do so safely – L2 ▪ Place needles in a disposal container made for sharps needle end first; contact sharps hotline (13 22 81) for information on disposal. Sharps disposal containers can be purchased from a pharmacy – L2 ▪ Take the disposal container to the syringe/needle and ensure positioned on flat surface – L2 ▪ When disposing of needles use tongs or pliers to pick up needles or other contaminated sharp objects and wear disposable waterproof gloves – L3 	WH&S Act 2011, S40 Construction CoP Work Environment CoP, S3	5 Low

Activity / Item	Hazards / Risks	Initial Risk Score	Control Measures / Risk Treatment	Legislation, Codes of Practice, and Guidelines (including other available information on hazard / risk)	Residual Risk Score
	Human waste Blood, faeces, urine, saliva, bodily fluids, bandages/dressings	9 Medium	<ul style="list-style-type: none"> ▪ If human waste is encountered, works in the affected area will be suspended, the area isolated to prevent disturbance and the Site Manager or Project Manager contacted to evaluate the nature of the unexpected find. CC will research the situation, consult with experts, and develop a management plan applicable to the situation and fluid – L2 ▪ Follow the controls listed in the Air Monitoring and Health Monitoring section – L3 ▪ If applicable, arrange for a specialist cleaning company to attend site and clean the area – L2 ▪ If applicable to the situation, workers on site may clean the area if: <ul style="list-style-type: none"> ○ A SWMS applicable to the situation has been developed ○ Workers have been trained in the correct procedures ○ Appropriate PPE is available including gloves, face mask, eye protection, appropriate footwear and protective clothing ○ A biohazard spill kit or sealable plastic bags, sturdy tongs (or similar) mop, bucket, detergent, disinfectant and/or household bleach are available ○ The area is isolated from other workers <p>Steps</p> <ol style="list-style-type: none"> 1. Put on PPE 2. Prepare tools, equipment and disinfectant required for the situation 3. Clean up the human waste 4. Use disinfectant (according to manufactures instructions) to sanitise the area 5. Keep the area isolated until it is dry and safe for use 6. Clean reusable items with disinfectant 7. Dispose of contaminated waste in – <ul style="list-style-type: none"> ○ Appropriate biohazard container/bags ○ Double bag in strong plastic bags, label bag and place in applicable waste bin ○ For small spills, use the sanitary waste bins 8. Place sharps in sharps container 9. Wash hands thoroughly 10. Record any direct contact with bodily fluids 	WH&S Act 2011, S40 Construction CoP Work Environment CoP, S3	5 Low

Activity / Item	Hazards / Risks	Initial Risk Score	Control Measures / Risk Treatment	Legislation, Codes of Practice, and Guidelines (including other available information on hazard / risk)	Residual Risk Score
	Animals Dead / Dangerous / Animal Waste	9 Medium	<ul style="list-style-type: none"> If a dead or dangerous animal is located, or animal waste is encountered, works in the affected area will be suspended, the area isolated to prevent disturbance and the Site Manager or Project Manager contacted to evaluate the nature of the unexpected find. CC will research the situation, consult with experts, and develop a management plan applicable to the situation/animal – L2 Follow the controls listed in the Air Monitoring and Health Monitoring section – L3 	Construction CoP, S7.2 Work Environment CoP, S3	2 Low
	Virus, bacteria, toxins, pathogenic micro-organisms	9 Medium	<ul style="list-style-type: none"> If a virus, bacteria, toxin or pathogenic micro-organism (or similar) presents a risk to the project, CC will notify and consult with stakeholders to develop a management plan applicable to the situation – L2 If a local, national or global pandemic or health risk occurs CC will notify and consult with stakeholders and health authorities, to develop a management plan applicable to the situation – L2 Follow the controls listed in the Air Monitoring and Health Monitoring section – L3 	Construction CoP, S7.2 Work Environment CoP, S3	2 Low
	Bioactive substance, mould, spores, fungi		<ul style="list-style-type: none"> If a bioactive substance, mould, spores or fungi (or similar) presents a risk to the project, CC will notify and consult with stakeholders to develop a management plan applicable to the situation – L2 Follow the controls listed in the Air Monitoring and Health Monitoring section – L3 	Construction CoP, S7.2 Work Environment CoP, S3	2 Low

Activity / Item	Hazards / Risks	Initial Risk Score	Control Measures / Risk Treatment	Legislation, Codes of Practice, and Guidelines (including other available information on hazard / risk)	Residual Risk Score
1.16 Fatigue and Stress	Fatigue / Stress	12 High	<ul style="list-style-type: none"> Ensure persons working more than 55 hours per week "On-site" take a minimum rest break of not less than 30 minutes approximately every three (3) hours for each day – L1 A minimum of an eight (8) hour rest break prior to commencing work on any subsequent day (excludes travel to and from home) – L2 Pre-employment and ongoing medicals shall be complete to ensure stress is managed appropriately and completed thereafter as required – L3 Follow the controls listed in Sun Exposure section – L3 	NSW WH&S Reg 2017, S40 Construction CoP, S7.2 Work Environment CoP, S3	8 Medium
1.17 Violence / Harassment / Bullying	Physical or Mental Harm	12 High	<ul style="list-style-type: none"> Person affected by drugs or alcohol are not permitted on-site – L1 There shall be a minimum of 2 workers located at the workplace at times – L2 No person shall bully or harass another person. The behaviour that is unacceptable includes: – L1 <ol style="list-style-type: none"> Abusive, insulting, or offensive language Behaviour or language that frightens, humiliates, belittles, or degrades, including criticism Inappropriate comments or communication about appearance, lifestyle, sex, sexual preference, religion, or family Teasing or regularly making someone the brunt of pranks or practical jokes Harmful or offensive initiation practices Physical assault or threats 	NSW WH&S Reg 2017, S40 Bullying CoP	8 Medium
1.18 Project Communication	Communication failure	12 High	<ul style="list-style-type: none"> Communication systems on this project are: Mobile Phone, 2-way radio, Nurse call air-horn siren – L2 Inspection and testing of communication systems shall be documented during routine S030402 <i>Project Inspection Record</i> inspections – L2 The Q070403 <i>Project Emergency Plan</i> shall detail an effective communication system for use in the instance of an injury or site evacuation – L2 	NSW WH&S Reg 2017, S43 Construction CoP, S7.4 Work Environment CoP, S4.2	4 Low
1.19 Isolated Work / Remote Area	Delayed emergency response	14 Severe	<ul style="list-style-type: none"> Site-specific control measures that consider the specifics of the Isolated/Remote Work Area are to be documented in the Q070603 <i>Project Emergency Plan</i> when the project is more than 30 minutes from the nearest emergency services or hospital – L2 	NSW WH&S Reg 2017, S43 and 48	7 Medium
1.20 Lone working	Delayed emergency response	14 Severe	<ul style="list-style-type: none"> Lone working is to be avoided whenever possible - L1 If lone working is required, the responsible supervisor must complete a Risk Assessment (or similar) applicable to the task. Suitable controls may include radio contact, mobile phone check ins, regular physical checks, or coordination of tasks to ensure extra persons are in the area - L3 	NSW WH&S Reg 2017, S43 Construction CoP, S7.4 Work Environment CoP, S4.2	7 Medium

Activity / Item	Hazards / Risks	Initial Risk Score	Control Measures / Risk Treatment	Legislation, Codes of Practice, and Guidelines (including other available information on hazard / risk)	Residual Risk Score
1.21 First Aid / Medical	Laceration / Puncture / Stabbing	16 Severe	<ul style="list-style-type: none"> The first aid requirements on this project are documented in the <i>Q070603 Project Emergency Plan</i> – L3 The <i>Q040202 First Aid Register</i> is to be used to record First Aid Only Injuries – L3 The <i>S040203 Incident Report</i> form shall be used to record injuries and incidents in accordance with the <i>Q070302 Project Management Plan</i> - L3 	NSW WH&S Reg 2017, S42 First-aid CoP, S2	7 Medium
	Burn	16 Severe	<ul style="list-style-type: none"> Cool running water to be available on the project – L2 First-aid kit to have ice packs available – L2 Where specified by SDS eye wash facility to be available – L2 	NSW WH&S Reg 2017, S42 First aid CoP	7 Medium
	First Aid / Medical	16 Severe	<ul style="list-style-type: none"> Complete the <i>S070801 Jan, April, July, Oct Quarterly Review</i> that prompts a three-monthly review of the <i>Q070603 Project Emergency Plan</i>, <i>S070608 First Aid Checklist</i>, <i>S070609 Emergency Equipment Checklist</i> and First Aid training requirements – L3 First-aid kit/s shall be assessed in relation to the nature of the project, work, hazards and workers using the <i>S070608 First Aid Checklist</i> – L3 	NSW WH&S Reg 2017, S42 First aid CoP	7 Medium
	Crush	13 High	<ul style="list-style-type: none"> Location of nearest hospital and local G.P shall be identified in the <i>Q070603 Project Emergency Plan</i> – L3 	NSW WH&S Reg 2017, S42 First aid CoP	5 Low
	Foreign Bodies in Eye	16 Severe	<ul style="list-style-type: none"> First-aid kit to have eye wash kit available – L2 Where specified by SDS eye wash facility to be available – L3 	NSW WH&S Reg 2017, S42 First aid CoP	7 Medium
	Bruising / Sprain / Strain	13 High	<ul style="list-style-type: none"> First-aid kit to have ice pack available – L2 	NSW WH&S Reg 2017, S42 First aid CoP	5 Low
	Poisoning	13 High	<ul style="list-style-type: none"> Follow the controls listed in the Hazardous Substance Incident section – L3 	NSW WH&S Reg 2017, S42 First aid CoP	5 Low
	Fractures / Dislocation	14 Severe	<ul style="list-style-type: none"> Assembly point to be positioned so that it minimises exposure to traffic/road crossings; ensures evacuation is outside the zone of influence of structural collapse or explosion; allows for emergency services provisions; factors in location of on-site hazards e.g., hazardous storage, electricity, mains – L2 Appropriate Emergency Assembly signage to be displayed – L3 	NSW WH&S Reg 2017, S42 First-aid CoP	7 Medium

Activity / Item	Hazards / Risks	Initial Risk Score	Control Measures / Risk Treatment	Legislation, Codes of Practice, and Guidelines (including other available information on hazard / risk)	Residual Risk Score
	Serious Injury / Illness	16 Severe	<ul style="list-style-type: none"> Ensure a site-specific <i>Q070403 Project Emergency Plan</i> is established and reviewed on a quarterly basis – L3 Commence emergency procedures and Call 000, where required – L3 Instigate critical incident management procedure, where required – L3 Follow the controls listed in the First Aid / Medical section – L3 	NSW WH&S Reg 2017, s42 and 43 Construction CoP, S7.3 First-aid CoP	7 Medium
	Medical Delay	15 Severe	<ul style="list-style-type: none"> Ensure stretcher provisions are always available on all working decks to allow safe access / egress in the event of an emergency. – L3 Follow the controls listed in the Lone working or Isolated Work / Remote Area section – L3 	NSW WH&S Reg 2017, s42 Work Environment CoP, S2.1	8 Medium
	Unauthorised access	14 Severe	<ul style="list-style-type: none"> Ensure the <i>Q040202 First Aid Register</i> and First-aid Kit are kept secure from unauthorised access – L2 	First-aid CoP, S3.6	7 Medium

Activity / Item	Hazards / Risks	Initial Risk Score	Control Measures / Risk Treatment	Legislation, Codes of Practice, and Guidelines (including other available information on hazard / risk)	Residual Risk Score
1.22 Air Monitoring and Health Monitoring	Hazardous Substances Classified under WH&S Regs I.e., Asbestos, Isocyanides, Lead, Crystalline Silica, Benzene.	12 High	<ul style="list-style-type: none"> Complete a Q070407 Latent Conditions Checklist prior to the project commencing – L3 All exposure equipment shall be maintained as per OEM Manual requirements – L2 Air monitoring must be carried out to determine the airborne concentration of a substance or mixture at the workplace, if an <u>Exposure Standard for Airborne Contaminants</u> applies, where it is not certain on reasonable grounds whether or not the airborne concentration of a substance or mixture at the workplace exceeds the exposure standard, or monitoring is necessary to determine whether there is a risk to health from RCS on the project. If air monitoring is not reasonably practicable, controls shall be developed and implemented which can be expected to address the hazards for workers undertaking tasks where the exposure limit has been exceeded. Results of site monitoring shall be available via the project Health Safety Committee; and where near exposure limits, health surveillance and further monitoring shall be complete and additional control measures implemented to reduce levels to a practical level – L2 Schedule 14 of the <u>WHS Regulations</u> lists the Hazardous Chemicals that require health monitoring Where a worker is exposed or where an assessment indicates a significant risk of exposure, health surveillance shall be undertaken – L2 Risk Assessment conducted by each Subcontractor shall identify any need for health surveillance for their workers – L3 Assessment of health surveillance data must be undertaken by or under the supervision of a registered medical practitioner with experience in health monitoring Where Health Surveillance is identified as required the applicable Subcontractor shall confirm the implementation of a health surveillance management plan, policy and/or procedure – L3 Construction Control to review and monitor Subcontractor health surveillance policies and procedures via the <i>S070302 Subcontractor Hazard Control Review</i> – L3 Air monitoring shall be managed in accordance with Construction Controls Procedure <i>3.07 Management of Airborne Contaminants and Hazardous Atmosphere</i> – L3 If a Hazardous or Dangerous Substance is found, follow the controls listed in the <u>Hazardous Substances / Dangerous Goods (HSDG)</u> section – L3 	NSW WH&S Reg 2017, Division 3.2.7 Haz Chem CoP	4 Low

Activity / Item	Hazards / Risks	Initial Risk Score	Control Measures / Risk Treatment	Legislation, Codes of Practice, and Guidelines (including other available information on hazard / risk)	Residual Risk Score
	Noise	12 High	<ul style="list-style-type: none"> Noise testing shall be completed by Construction Control on the project to identify noise hazards which have not been effectively controlled. Where testing shows noise in excess of 85db additional controls shall be implemented. Construction Control, Subcontractors and workers must ensure that noise that workers are exposed to at the workplace does not exceed the exposure standard for noise without sufficient controls in place. Part 4.1 Noise of the WHS Regulations lists the exposure standard for noise – L1 Where a worker is frequently required to use PPE to protect the worker from the risk of hearing loss associated with noise that exceeds the exposure standard, the workers employer shall ensure audiometric testing for the worker withing 3 months of the worker commencing work and (at least) every two years after that – L2 	NSW WH&S Reg 2017, S57 & 58 Noise CoP	4 Low
1.23 Psychological Hazards	Emotional distress	12 High	<ul style="list-style-type: none"> A designated and trained Mental Health First Aider will be nominated by CC when more than 50 workers are expected to be on site regularly – L2 Site Rules that provide guidance on dispute resolution and bullying and harassment are to be posted on the notice board – L3 CC to develop and promote the following policies: <ul style="list-style-type: none"> Social Responsibility Policy - L3 Domestic and Family Violence Policy – L3 Anti-Bullying Policy – L3 Anti-Discrimination and Harassment Policy – L3 Vulnerable Worker Policy – L3 Gender Equity Policy – L3 Regular engagement with OzHelp regarding Mental Health and Suicide Intervention and Prevention – L2 Flexible work arrangements to be considered – L2 “Do you need help juggling all of life’s balls?” poster on Project Notice Boards – L3 	NSW WH&S Reg 2017, D11 Psychosocial risks Managing psychosocial hazards at work CoP	4 Low

Activity / Item	Hazards / Risks	Initial Risk Score	Control Measures / Risk Treatment	Legislation, Codes of Practice, and Guidelines (including other available information on hazard / risk)	Residual Risk Score
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2. Demolition, Excavation, Civil Works & Landscaping

2.1 [HRCW] Work that involves demolition of an element of a structure that is load bearing or otherwise related to the physical integrity of the structure	Unplanned collapse	16 Severe	<ul style="list-style-type: none"> Task specific SWMS must be developed prior to commencing works – L3 Complete a <i>Q070407 Latent Conditions Checklist</i> prior to the project commencing – L3 Obtain engineer approved drawings / specifications applicable to the works – L2 Obtain a sign off from an engineer if the demolition requires temporary support or has high risk or unusual features e.g., pre or post tensioned slabs – L2 Ensure a Demolition plan has been developed in compliance with legislative requirements – L2 Inspect demolition as per engineer approved drawings / specifications and established demolition plan during weekly HSE Inspections – L2 Notify Regulator e.g., WorkSafe for any demolition works over 6m – L3 NSW Legislation changes requires demolition to include a named supervisor for the works (1st March 2023) 	NSW WH&S Reg 2017, S142 Demolition CoP AS 2601 Demolition HIGH RISK WORK s291(k) Work Health Safety Regulations	7 Medium
	Damage to adjacent structures	16 Severe	<ul style="list-style-type: none"> Complete a <i>Q070407 Latent Conditions Checklist</i> and <i>Q070408 Dilapidation Report</i> for all buildings / structures within the zone of influence – L2 Follow the control listed in the [HRCW] Work that involves the use of explosives section – L3 	NSW WH&S Reg 2017, S297 and 142 AS 2187.2: Explosives	7 Medium

Activity / Item	Hazards / Risks	Initial Risk Score	Control Measures / Risk Treatment	Legislation, Codes of Practice, and Guidelines (including other available information on hazard / risk)	Residual Risk Score
2.2 [HRCW] Work that is carried out in or near (i) a shaft or trench with an excavated depth greater than 1.5m or (ii) a tunnel.	Collapse & engulfment	16 Severe	<ul style="list-style-type: none"> Task specific SWMS must be developed prior to commencing works – L3 <i>Q070407 Latent Conditions Checklist</i>, <i>Q070406 Pre-Excavation Documentation</i> and <i>S030425 Excavation Permit</i> is to be completed, in consultation with the stakeholders involved, and approved by CC before commencing all excavations – L3 Workers in excavations / trenches are to be trained in trench / excavation collapse emergency procedures – L3 CC shall develop and maintain a <i>Q070603 Project Emergency Plan</i> and communicate emergency procedures to all – L3 Bench/batter/shore all excavations exceeding 1.5m, unless otherwise authorised by a Geotechnical Engineers Report – L2 <p>Where a Geotechnical report is provided CC shall ensure it:</p> <ul style="list-style-type: none"> Describes current site conditions and clearly documents advice Includes diagrams and photos as necessary Includes Geotech engineer's competency <ul style="list-style-type: none"> Mobile plant must be positioned outside the zone of influence, unless a Geotech report specifies otherwise L2 Place spoil at least 1m from the trench/excavation, on the downside of excavations, out of zone of influence – L2. Ensure excavation has appropriate controls for the protection against rising, irruption or inrush of water or material – L2. <p>Controls may include (but not limited to):</p> <ul style="list-style-type: none"> Implementing isolation measures such as barriers or valves Diverting water or material from open excavation; and/or Provision of pumps <ul style="list-style-type: none"> Monitor excavation for soil instability and record details in <i>S030425 Excavation Permit</i> – L3 Where a proprietary shoring system is to be utilised, ensure: - L2 <ul style="list-style-type: none"> Manufacturers Instruction Manual and/or Installation Procedures are followed Workers are trained and competent in the use of the propriety system being used Where a non-proprietary shoring system is to be utilised, shall ensure it is: - L2 <ul style="list-style-type: none"> Designed by a qualified structural/civil/geotechnical engineer Detailed on For Construction drawings Installed by a competent person and verified as correctly installed by the designing engineer prior to use Any changes to the design or installed system are to be authorised and signed off by a qualified structural/civil/geotechnical engineer – L2 If an Emergency situation occurs, follow the controls listed in the Plant Incident and 	<p>NSW WH&S Reg 2017, Division 6.3.3</p> <p>Excavation CoP</p> <p>Falls CoP</p> <p>Plant CoP</p> <p>Work Environment CoP</p> <p>HIGH RISK WORK s291(k)</p> <p>Work Health Safety Regulations</p>	7 Medium

Activity / Item	Hazards / Risks	Initial Risk Score	Control Measures / Risk Treatment	Legislation, Codes of Practice, and Guidelines (including other available information on hazard / risk)	Residual Risk Score
			Trench / Excavation collapse section – L3		
	Drowning	16 Severe	<ul style="list-style-type: none"> Ensure excess water is pumped from excavations prior to working in areas – L1 Ensure safe and practical access is always provided to work areas, with no exposure to fall zones – L2 After excessive water ingress or rain, stability of the excavation is to be reassessed prior to workers re-entering – L2 	WH&S Reg. S305 Excavation CoP, S5	7 Medium
	Damage to adjacent structures	16 Severe	<ul style="list-style-type: none"> Complete a <i>Q070407 Latent Conditions Checklist</i> and <i>Q070408 Dilapidation Report</i> for all buildings / structures within the zone of influence – L2 	NSW WH&S Reg 2017, S297 and 142	7 Medium
	Plant and equipment	16 Severe	Follow the controls listed in the [HRCW] Work that is carried out in an area where there is movement of powered mobile plant section – L3		7 Medium
	Striking live services	16 Severe	Follow the controls listed in the Underground and Overhead Services section – L3 Follow the controls listed in the Location and Isolation of Services (above and below ground) – L3		7 Medium

Activity / Item	Hazards / Risks	Initial Risk Score	Control Measures / Risk Treatment	Legislation, Codes of Practice, and Guidelines (including other available information on hazard / risk)	Residual Risk Score
2.3 Location and Isolation of Services (above and below ground)	Uncontrolled release of substance	16 Severe	<ul style="list-style-type: none"> Ensure a CC Q070407 Latent Conditions Checklist, Q070406 Pre-Excavation Documentation Form and S030425 Excavation Permit is complete and approved by CC Site Management before work commences – L3 Review BYD and where required contact asset owner to determine any requirements/conditions – L3 Ensure all services (gas, water, sewer, electricity, and telecommunications) are physically located using non-destructive techniques prior to starting works – L2 Contact CC site management prior to any isolation of services – L2 When services are required to be isolated or disconnected, ensure the isolation of the services are confirmed using the Q030418 Services Sign Off Record (or similar), with isolation points clearly identified on drawings and physically disconnected, isolated, or locked out / tagged out if required – L2 All known services within 1m of the excavation / trench location in a work area are to be progressively exposed by hand (potholed) – L2 All known HP Gas Lines within 2m of the excavation / trench location in a work area require 'Jemena' to be contacted (02 6203 0600) prior to commencing work for a "services identification for high pressure lines" check to be completed – L3 Work zones must be isolated, and barriers erected according to the task specific needs – L3 All works shall be in accordance with the Excavation Code of Practice – L3 	NSW WH&S Reg 2017, S305 Excavation CoP AS 5601 Gas	7 Medium
	Unplanned Contact	16 Severe	<ul style="list-style-type: none"> Ensure a CC Q070407 Latent Conditions Checklist, Q070406 Pre-Excavation Documentation Form and S030425 Excavation Permit is complete and approved by CC Site Management before work commences – L3 Ensure services remaining live are appropriately identified using remote location devices – L2 Expose services at sufficient intervals using hand tools with nonconductive handles or hydro excavation truck to identify their location, depth, and alignment – L2 Physical protection for service installed or exclusion zones implemented and communicated to effected parties – L2 All services are to be considered live unless specifically noted otherwise – L2 When services are required to be isolated or disconnected, ensure the isolation of the services are confirmed using the Q030418 Services Sign Off Record (or similar), with isolation points clearly identified on drawings and physically disconnected, isolated, or locked out / tagged out if required – L2 Manage working with 'live power' in accordance with [HRCW] Work that is carried out on or near electrical installations or services section – L3 	NSW WH&S Reg 2017, S304 Excavation CoP, S3.5	7 Medium

Activity / Item	Hazards / Risks	Initial Risk Score	Control Measures / Risk Treatment	Legislation, Codes of Practice, and Guidelines (including other available information on hazard / risk)	Residual Risk Score
2.4 Civil Plant Use	Hit or crush by equipment	16 Severe	Follow the controls listed in the [HRCW] Work that is carried out in an area where there is movement of powered mobile plant and Earthmoving equipment section – L3		7 Medium
2.5 Use of products	Hazardous Substances	16 Severe	Follow the controls listed in the Hazardous Substances / Dangerous Goods (HSDG) section – L3		7 Medium
2.6 Manual Handling	Injury	12 Medium	Follow the controls listed in the Manual Handling section – L3		7 Medium
2.7 Tree removal / pruning	Plant and Equipment	16 Severe	<ul style="list-style-type: none"> Operators not to wear loose clothing, jewellery, rings or watches – L1 The chipper is fed off the centre line and from the kerb side (where practical) – L2 Two workers operate the chipper at all times – L3 Follow the controls listed in the [HRCW] Work that is carried out in an area where there is movement of powered mobile plant section – L3 	WH&S Act 2011 S21 COP Plant AS 4273	7 Medium
	Work at Height	12 High	Follow the controls listed in the [HRCW] Work that involves the risk of a person or object falling more than 1.8m section – L3		4 Low
	Noise	12 High	<ul style="list-style-type: none"> Ensure appropriate ear protection is worn during plant operation – L3 Follow the controls listed in the Noise section – L3 	NSW WH&S Reg 2017, S57 Noise CoP	4 Low
	Flying Objects	12 High	<ul style="list-style-type: none"> Ensure all guarding required by the OEM Manual is in place – L2 Ensure safety glasses or goggles are worn are worn – L3 	NSW WH&S Reg 2017, S40	4 Low
	Manual Handling	12 High	<ul style="list-style-type: none"> Ensure drop down table is fitted at the rear – L2 Follow the controls listed in the Manual Handling section – L3 	NSW WH&S Reg 2017, S60 Manual Tasks CoP	4 Low
	Cuts	12 High	<ul style="list-style-type: none"> Ensure safety gloves and protective trousers cut-resistant leg protection are worn – L3 	NSW WH&S Reg 2017, S40	4 Low
	Hazardous Substances	12 High	Follow the controls listed in the Hazardous Substances / Dangerous Goods (HSDG) and Hazardous Substance Incident section – L3		4 Low

Activity / Item	Hazards / Risks	Initial Risk Score	Control Measures / Risk Treatment	Legislation, Codes of Practice, and Guidelines (including other available information on hazard / risk)	Residual Risk Score	
2.8 Shotcreting	Work at Height – Falling object / person	16 Severe	<ul style="list-style-type: none">Isolate the area affected by the shotcreting – L3Ensure the hopper guard is down when in operation – L3Ensure eye and ear protection, and gloves are worn – L3Follow the controls listed in the [HRCW] Work that involves the risk of a person or object falling more than 1.8m section – L3	NSW WH&S Reg 2017, S297 Construction CoP, S7.5	7 Medium	
	Collapse	12 High	<ul style="list-style-type: none">Where concrete panels, shotcrete, piers, anchors, and/or capping beams etc. are used to prevent collapse during construction, CC shall ensure it is:<ul style="list-style-type: none">Designed by a qualified structural/civil/geotechnical engineer – L2Detailed on 'For Construction' drawings – L3Installed by a competent person and verified as correctly installed by the designing engineer prior to use – L3Any changes to the design or installed system are to be authorised and signed off by a qualified structural/civil/geotechnical engineer – L3	NSW WH&S Reg 2017, Division 6.3.3 Construction CoP Excavation CoP	4 Low	
	Noise	12 High	<ul style="list-style-type: none">Area to be isolated and specific hazards sign-posted surrounding immediate area – L2Workers in immediate area to wear suitable hearing protection – L3Follow the controls listed in the [HRCW] Work that is carried out in an area where there is movement of powered mobile plant and Noise section – L3	NSW WH&S Reg 2017, S57 Noise CoP	4 Low	
	Slips / Trips / Falls	12 High	<ul style="list-style-type: none">Areas must be isolated with physical barricading and appropriate warning signage – L2Housekeeping in areas must be always maintained – L3	NSW WH&S Reg 2017, S40 Construction CoP, S7.1	4 Low	
	Manual Handling	12 High	Follow the controls listed in the Manual Handling section – L3			4 Low
	Pump failure / collapse / explosion	16 Severe	<ul style="list-style-type: none">Ensure operator has the appropriate competency to operate the specific plant and equipment being used – L3Ensure all line clips are installed – L2Ensure pump and line are inspected and maintained as per manufacturer guidelines to prevent air system failure – L3Ensure plant specific pre-operational inspection checklist is complete prior to operation – L3Follow the controls listed in the [HRCW] Work that is carried out in an area where there is movement of powered mobile plant section – L3	NSW WH&S Reg 2017, S203 Plant CoP	7 Medium	
	Hazardous Substance	12 High	Follow the controls listed in the Hazardous Substances / Dangerous Goods (HSDG) and Hazardous Substance Incident section – L3			4 Low

Activity / Item	Hazards / Risks	Initial Risk Score	Control Measures / Risk Treatment	Legislation, Codes of Practice, and Guidelines (including other available information on hazard / risk)	Residual Risk Score
2.9 [HRCW] Work that involves the use of explosives	Damage to adjacent structures	16 Severe	<ul style="list-style-type: none"> Complete a Q070407 Latent Conditions Checklist and Q070408 Dilapidation Report for all buildings / structures within the zone of influence – L2 Task specific SWMS must be developed prior to commencing works – L3 Discuss the scope of works with the CC HSE Manager prior to works commencing to assist in developing applicable control measures – L3 Ensure a specialist consultant has completed an Explosives Management Plan that has been approved by the Regulator e.g., WorkSafe – L3 	NSW WH&S Reg 2017, S297 and 142 AS 2187.2: Explosives HIGH RISK WORK s291(k) Work Health Safety Regulations	7 Medium
	Noise / Vibration	12 High	<ul style="list-style-type: none"> Consult with all surrounding building managers / owners and other effected by works – L3 	NSW WH&S Reg 2017, S297	4 Low

Activity / Item	Hazards / Risks	Initial Risk Score	Control Measures / Risk Treatment	Legislation, Codes of Practice, and Guidelines (including other available information on hazard / risk)	Residual Risk Score
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3. Plant and Equipment

3.1 [HRCW] Work that is carried out in an area at a workplace in which there is any movement of powered mobile plant	Worker on foot approaching active plant item	16 Severe	<ul style="list-style-type: none"> Task specific SWMS must be developed prior to commencing works – L3 A plant specific CC <i>S030411 Plant Operation Permit</i> is to be completed before any plant item is used on site – L2 Ensure access to work areas are clear, have an even surface and suitable lighting is available – L2 All mobile plant must be fitted with functional warning devices as per OEM Manual and Plant Risk Assessment – L2 Ensure a clear area of operations – if there is a risk of people being hit by the machine or falling objects an exclusion zone must be implemented – L2 Before moving into / through a plant operator's zone of influence workers must obtain eye contact and approval by the plant operator – L2 Where a SWMS or plant Design Risk Assessment identifies high risk of noise, workers in the immediate area shall wear suitable hearing protection and isolate the work zone – L2 Risks associated with reversing of the plant are to be included in SWMS (i.e., reversing alarm, warning devices, spotter etc) – L3 A plant specific pre-operational maintenance and inspection checklist must be complete each day prior to the plan being used – L3. Where reasonably practicable, an internal traffic movement plan shall be developed, implemented, and communicated to all workers with appropriate signage displayed onsite and as part of the sites TTMP – L3 Competent Operator to be verified in the CC <i>S030411 Plant Operations Permit</i> as per the CC <i>Q030409 Inspection and Competency Compliance Matrix</i> – L3 All workers shall wear appropriate high visibility clothing – L3 Currency and availability of all plant service, maintenance, manufactures instructions manual and plant risk assessment is to be reviewed via the <i>S030411 Plant Operations Permit</i> – L3 CC shall develop and maintain a <i>Q070603 Project Emergency Plan</i> and communicate emergency procedures to all – L3 If an Emergency situation occurs, follow the controls listed in the Plant Incident section – L3 	<p>NSW WH&S Reg 2017 Plant CoP</p> <p>HIGH RISK WORK s291(k) Work Health Safety Regulations</p>	7 Medium
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Activity / Item	Hazards / Risks	Initial Risk Score	Control Measures / Risk Treatment	Legislation, Codes of Practice, and Guidelines (including other available information on hazard / risk)	Residual Risk Score
	Incompetent Operator	12 High	<ul style="list-style-type: none"> ▪ Plant shall be used as per the plant specific OEM Manual that is available on-site – L3 ▪ Competent Operator to be verified within the plant specific CC S030411 <i>Plant Operations Permit</i> for all major plant and approved by CC prior to use: - L3 <ul style="list-style-type: none"> ○ S0304011a EWP - see Elevated Work Platforms (EWP) section ○ S030411b Mobile Crane - see Mobile Crane and Tower Crane section ○ S030411c Tower Crane - see Mobile Crane and Tower Crane section ○ S030411d Mobile Concrete Pump – see Concrete Pumps section ○ S030411e Static Tower Concrete Pump – see Concrete Pumps section ○ S030411f Forklift/Telehandler – see Forklift / Telehandler section ○ S030411g Earthmoving Equipment – see Earthmoving equipment section ○ S030411h Hoist – see Personnel & Materials Hoists section ○ S030411i Other (powered mobile plant that can't be carried by hand) ▪ S030411 <i>Plant Operations Permits</i> operator competency requirement to align with the CC Q030409 <i>Inspection and Competency Compliance Matrix</i> – L3 ▪ An S080302 <i>Acquisition Assessment</i> to be complete prior to purchase / hire of a plant item directly by CC – L3. ▪ Workers using hand equipment/tools shall be deemed competent by their immediate supervisor prior to use. Evidence of training in specific hand tools and equipment shall be maintained by the Subcontractor – L3 ▪ Plant shall be stored in designated areas as directed by CC. Plant should be positioned as not to create additional risks or block access – L2 	NSW WH&S Reg 2017, S203 and Schedule 5 Plant CoP, S5	4 Low

Activity / Item	Hazards / Risks	Initial Risk Score	Control Measures / Risk Treatment	Legislation, Codes of Practice, and Guidelines (including other available information on hazard / risk)	Residual Risk Score
	Plant Failure - collapse / fire / explosion	12 High	<ul style="list-style-type: none"> Items of plant listed under Schedule 5.1 of the WH&S Regulation must have design registration with WorkSafe – L3 The applicable plant items include: <ul style="list-style-type: none"> Pressure equipment Gas cylinders Tower cranes Lifts, escalators and moving walkways Hoists designed to move people Work boxes suspended from cranes Concrete placing booms Mobile Cranes The operator must ensure the Plant Item registration number is permanently marked on the item of plant in a visible place – L2 In-service Fire Extinguisher to be in cabin of Major Plant as per OEM Manual – L2 Plant identified as defective shall be isolated and where required locked to prevent use – L2 A plant specific pre-operational maintenance and inspection checklist must be implemented – L3 Routine maintenance must be recorded in the <i>S030411 Plant Operations Permit</i> – L3 Any modifications to a plant item shall be engineer approved with certification readily available – L2 	NSW WH&S Reg 2017, S213 Plant CoP, S3.6 and 3.7 AS 2550 Cranes AS 1418 Cranes	4 Low
	Hazardous substances	15 Severe	<ul style="list-style-type: none"> Only electric powered plant shall be operated in confined spaces – L1 Ensure adequate ventilation for LPG and fuel powered plant and machinery Follow the controls listed in the Hazardous Substances / Dangerous Goods (HSDG) and Hazardous Substance Incident section – L3 	NSW WH&S Reg 2017, S206 Plant CoP	8 Medium
	Slip / trip / fall	16 Severe	<ul style="list-style-type: none"> Ensure access to work areas have clear and even surface and suitable lighting – L1 	Plant CoP, S10.2	7 Medium
	Exposure to moving parts	16 Severe	<ul style="list-style-type: none"> All safety guarding and devices must be operational and in use on plant and machinery – L3 Any plant/equipment with safety guarding missing/defective shall be removed from site and/or locked/tagged out to prevent use – L3 	NSW WH&S Reg 2017, S203 and Schedule 5 Plant CoP, S5	7 Medium

Activity / Item	Hazards / Risks	Initial Risk Score	Control Measures / Risk Treatment	Legislation, Codes of Practice, and Guidelines (including other available information on hazard / risk)	Residual Risk Score
	Rollover / Falling objects	12 High	<ul style="list-style-type: none"> Where specified by the OEM Manual or Plant Risk Assessment an appropriate operator protective structures TOPS/ROPS/FOPS fitted that is compliant with CC's Q030409 <i>Inspection & Competency Compliance Matrix</i> or otherwise assessed, complete with legible compliance plate – L2 All earthmoving machinery >1.5T must be fitted with appropriate ROPS / FOPS – L2 	NSW WH&S Reg 2017, S217 Falls CoP, S3.6 and 3.7	4 Low
	Work at Height	16 Severe	<ul style="list-style-type: none"> All plant items must be fitted with appropriate fall prevention systems to allow maintenance, inspection, and operation – L2 Follow the controls listed in the [HRCW] Work that involves the risk of a person or object falling more than 1.8m section – L3 	NSW WH&S Reg 2017, S217 Falls CoP	7 Medium
	Collision with people / property	16 Severe	<ul style="list-style-type: none"> All mobile plant must be fitted with warning devices as per manufactures requirements – L2 Risks associated with reversing of plant are to be included in SWMS (i.e. reversing alarm, warning devices, spotter etc) – L3 No person other than the operator rides on the plant unless the person is provided with a level of protection that is equivalent to that provided to the operator – L1 	NSW WH&S Reg 2017, S214 and 215 Plant CoP, S4.4	7 Medium
	Noise / Vibration	12 High	<ul style="list-style-type: none"> All appropriate guarding shall be maintained on plant/equipment to isolate noise sources – L2 Where a SWMS or Plant Design Risk assessment identifies a medium to high risk of noise, workers in the immediate area shall wear suitable hearing protection and have area appropriately isolate and/or signposted – L2 Plant design risk assessment are to be completed and available for all major plant – L3 Inspection and maintenance records to be provided prior to start – L3 	NSW WH&S Reg 2017, S57 and 204 Plant CoP Noise CoP	4 Low
3.2 Earthmoving equipment	Unsafe operation	16 Severe	<ul style="list-style-type: none"> Follow the controls listed in the [HRCW] Work that is carried out in an area where there is movement of powered mobile plant section – L3 Complete a CC S030411g <i>Earthmoving Equipment Operation Permit</i> prior to use on site – L3 Safety pins to be installed on all excavation attachments – L2 All plant shall have appropriate reverse signals and audible alarms – L2 All workers, excluding the plant operator, shall be isolated outside the swing area or movement zone of the plant whilst in operation by physical barricade and signage – L2 	NSW WH&S Reg 2017, S203 and Schedule 5 Plant CoP, S5	7 Medium

Activity / Item	Hazards / Risks	Initial Risk Score	Control Measures / Risk Treatment	Legislation, Codes of Practice, and Guidelines (including other available information on hazard / risk)	Residual Risk Score
	Using excavator / piling rig as crane	16 Severe	<ul style="list-style-type: none"> Follow the controls listed in the [HRCW] Work that is carried out in an area where there is movement of powered mobile plant section – L3 Follow the controls listed in the Lifting Devices section – L3 Excavators/Piling Rigs can be used for lifting operations that are described within the plant's OEM Manual – L2 An excavator operator completing lifting operations must be trained and competent in the capacity of the machine they are operating to conduct lifting operations, before using the machine to complete lifting operations – L2 Lifting points on the plant are to have SWL indicated and to be certified by the manufacturer or engineer – L2 Only use attachments identified in the load/lifting chart. A copy of the load chart should be available in the operator's cabin – L2 Plant must not enter the excavations zone of influence – L1 Lifts should be planned to minimise personnel in the lifting zone – L2 Where the rated capacity of earthmoving equipment exceeds 1 tone, Burst Protection must be fitted to both the boom and dipper arm of the equipment used as crane – L2 If the applicable plant does not have burst control fitted, SWMS needs to include measures that ensure workers are well clear of plant and load in the event of a hydraulic failure – L2 Foundations shall be prepared and compacted to support loading requirements – L2 No lifting over public without traffic management in place to prevent public entering area/s concerned – L1 Ensure erection and dismantle methods for lifting operations are documented, including method of using certified lifting points – L3 Plant Operator has ultimate responsibility to ensure the plant is fit-for-purpose – L2 A certified Rigger or Dogman must chain / sling the load. Plant operator cannot be the Dogman / Rigger – L2 Exclusion zones must be in place to isolate the plant from pedestrians/workers – L3 Do not lift materials over workers or sheds. Where impractical appropriate 'Class C' hoarding shall be implemented – L2 Lifting operations not described in the plant's OEM Manual are considered to be a Slewing Crane operation and the relevant HRWL is required before this type of lifting is conducted. In this instance the following items need to be completed: – L3 <ul style="list-style-type: none"> A <i>S030404 Mobile Crane Setup Checklist</i> is completed prior to using the plant as a crane Ensure Operator has a HRWL certified to the crane capacity and monitor wind speeds and loading – L3 	NSW WH&S Reg 2017, S304 Plant CoP Excavation CoP, S4.3 AS 2550 Cranes AS 4991 Lifting devices, S15	7 Medium

Activity / Item	Hazards / Risks	Initial Risk Score	Control Measures / Risk Treatment	Legislation, Codes of Practice, and Guidelines (including other available information on hazard / risk)	Residual Risk Score
3.3 Drilled or Driven Piers (Set-up and use of drill rigs for foundation piers)	Unsafe operation		<ul style="list-style-type: none"> Follow the controls listed in the [HRCW] Work that is carried out in an area where there is movement of powered mobile plant section – L3 Ensure a <i>S030411g Earthmoving Equipment Operational Permit</i> is completed prior to use on site to verify key aspects including design assessments, operator competency, plant specific pre-operational inspection and maintenance completed – L3 Keep workers 1.5m clear of operating rig. Minimise workers in vicinity of rig – L2 Ensure rig operators are wearing ear protection – L3 Barricade work area to prevent unauthorised workers from entering the works area – L2 Ensure holes are secured and protected from a fall risk before removing drill rig more than 300mm above the completed hole and before moving the rig. The drill rig remaining in place will act fall protection until a cover can be placed – L2 	NSW WH&S Reg 2017, S304 Plant CoP Excavation CoP, S4.3	
3.4 Elevated Work Platforms (EWP) Examples: Scissor-lift Boom-lift Polecat	Unsafe Operation	16 Severe	<ul style="list-style-type: none"> Follow the controls listed in the [HRCW] Work that is carried out in an area where there is movement of powered mobile plant section – L3 Ensure a CC <i>S030411a EWP Plant Operations Permit</i> is completed prior to use on site to verify key aspects including design assessments, operator competency, plant specific pre-operational inspection and maintenance completed – L3 For boom-lift operation the following must be verified prior to fall-arrest equipment use: - L2 <ul style="list-style-type: none"> Daily inspection of fall-arrest equipment is completed prior to operation of the EWP Appropriate training has been completed by all workers involved: <ul style="list-style-type: none"> Operator WP Class HRWL for Boomlifts over 11 metres VOC for EWP under 11 metres Appropriate maintenance records available as per manufacturer instructions for fall-arrest equipment – L3 	NSW WH&S Reg 2017, S214 Plant CoP, S3 AS 2550.10 EWP AS 1891.4 Fall-arrest	7 Medium
	Rollover	16 Severe	<ul style="list-style-type: none"> Check path before driving EWP over rough or new ground – L3 All open edges voids, excavations, trenches shall be appropriately isolated to prevent exposure to fall zones – L2 EWP shall be used only as per manufacturer's instructions – L3 Operator to be familiar with safe maximum wind speed for the EWP and monitor conditions using Bureau of Metrology information – L3 	NSW WH&S Reg 2017, S203 and Schedule 5 Plant CoP, S5	7 Medium
3.5 Forklift / Telehandler	Unsafe Operation	16 Severe	<ul style="list-style-type: none"> Follow the controls listed in the [HRCW] Work that is carried out in an area where there is movement of powered mobile plant section – L3 Ensure a CC <i>S030411f Forklift/Telehandler Operation Permit</i> is completed prior to use on site to verify key aspects including design assessments, operator competency, plant specific pre-operational inspection and maintenance completed – L3 	NSW WH&S Reg 2017, S203 and Schedule 5 Plant CoP, S5	7 Medium

Activity / Item	Hazards / Risks	Initial Risk Score	Control Measures / Risk Treatment	Legislation, Codes of Practice, and Guidelines (including other available information on hazard / risk)	Residual Risk Score
3.6 Mobile Cranes	Unsafe Operation of Mobile Crane	16 Severe	<ul style="list-style-type: none"> Follow the controls listed in the [HRCW] Work that is carried out in an area where there is movement of powered mobile plant section – L3 Ensure a CC S030411b <i>Mobile Crane Operation Permit</i> is completed prior to use on site to verify key aspects including design assessments, operator competency, plant specific pre-operational inspection and maintenance completed – L3 Each time the mobile crane attends site complete an CC S030404 <i>Mobile Crane Setup Checklist</i> – L3 	NSW WH&S Reg 2017, S203 Plant CoP, S3.7 AS 2550 Cranes	7 Medium
	Crane failure / collapse	16 Severe	<ul style="list-style-type: none"> Ensure a Q070409 <i>Designated Plant Setup Location</i> form has been completed and a copy of the completed document and applicable drawings available for consideration by the site team and crane crew – L3 Ensure site-specific SWMS and hazard controls are developed and reviewed by CC before works commence – L3 Foundations shall be suitably prepared and compacted to support specified loading requirements with compaction testing results available – L2 Ensure a Daily Plant Preoperational Checklist is completed – L3 	NSW WH&S Reg 2017, S203 Plant CoP, S3.7 AS 2550 Cranes	7 Medium
	Public / Pedestrians	16 Severe	<ul style="list-style-type: none"> The crane's operating zone is to be isolated between the extended outriggers – L2 'Crane Operation Area' warning signage must be displayed in immediate area – L3 Lifts should be planned to minimise workers in the lifting zone – L2 	NSW WH&S Reg 2017, s203 AS 2550 Cranes	7 Medium
	Incompetent operator / Incorrect lifting processes	16 Severe	<ul style="list-style-type: none"> Ensure Operator is certified to the crane capacity – L3 All cranes must use a certified Rigger or Dogman. Crane operator cannot be the Dogman/Rigger used to chain/sling load – L2 When leaving the crane unattended, always raise the hook and remove the keys / remote to prevent unauthorised use – L2 	NSW WH&S Reg 2017, s39, 81 & 207 Construction CoP, S6 AS 2550 Cranes	7 Medium
	Falling objects	16 Severe	<ul style="list-style-type: none"> No lifting over public areas without traffic management in place to prevent public entering area/s – L3 Do not lift materials over workers and/or sheds. Coordinate onsite works and crane operations to prevent. Where impractical appropriate 'Class C' hoarding shall be implemented – L2 Ensure erection and dismantle methods are documented – L3 Crane crew has ultimate responsibility for each lift and to ensure the crane is fit-for-purpose – L2 	NSW WH&S Reg 2017, s203 and 217 Falls CoP, S3.6 and 3.7	7 Medium

Activity / Item	Hazards / Risks	Initial Risk Score	Control Measures / Risk Treatment	Legislation, Codes of Practice, and Guidelines (including other available information on hazard / risk)	Residual Risk Score
	High Winds	16 Severe	<ul style="list-style-type: none"> An anemometer (wind gauge) is to be fitted to all cranes in an appropriate location, at the top of the boom, not protected from winds – L2 Crane OEM Manual must state the maximum wind speed that the crane may be operated up to, and the operator must know these limits and not exceed them – L2 Unless confirmed in the OEM Manual the following wind speed apply: - L2 <ul style="list-style-type: none"> No lifting is to be attempted with winds over 43km/h (12m/second) For wind speeds under 43km/h (12m/second), lifting is at the discretion of the crane crew 	NSW WH&S Reg 2017, s203 Tower Crane CoP 2019	7 Medium
	Lifting equipment failure	16 Severe	<ul style="list-style-type: none"> Follow the controls listed in the Lifting Devices section – L3 		7 Medium
3.7 Tower Cranes	Unsafe Operation of Tower Crane	16 Severe	<ul style="list-style-type: none"> Follow the controls listed in the [HRCW] Work that is carried out in an area where there is movement of powered mobile plant section – L3 Ensure a CC S030411c Tower Crane Operation Permit is completed prior to use – L3 Complete a Simpel Plant Inspection within the completed S030411c Tower Crane Operation Permit at the following designated periods: - L3 <ul style="list-style-type: none"> Pre-installation / Crane Base Crane base concrete strength results Pre-operation checklist Pre-dismantle checklist 	NSW WH&S Reg 2017, S203 Plant CoP, S3.7 Tower Crane CoP 2019 AS 2550 Cranes	7 Medium
	Crane failure / collapse	16 Severe	<ul style="list-style-type: none"> Ensure a Q070409 Designated Plant Setup Location form has been completed and a copy of the completed document and applicable drawings available for consideration by the site team and crane crew – L3 Ensure site-specific SWMS and hazard controls are developed and reviewed by CC before works commences – L3 Foundations shall be suitably prepared and compacted to support specified loading requirements with compaction testing results available – L2 Ensure a Daily Plant Operational Checklist is completed – L3 	NSW WH&S Reg 2017, S203 Plant CoP, S3.7 AS 2550 Cranes	7 Medium
	Public / Pedestrians	16 Severe	<ul style="list-style-type: none"> The base of the Crane is to be isolated by a lockable hording or fence to at least 2m away from the crane – L2 Lifts should be planned to minimise personnel in the lifting zone – L2 	NSW WH&S Reg 2017, s203 AS 2550 Cranes	7 Medium
	Incompetent operator / Incorrect lifting processes	16 Severe	<ul style="list-style-type: none"> Ensure Operator is certified to drive a Tower Crane – L3 All cranes must use a certified Rigger or Dogman. Crane operator cannot be the Dogman / Rigger used to chain / sling load (unless the crane has a remote control) – L2 When leaving the crane unattended, always raise the hook and remove the keys and secure the hoarding to prevent unauthorised use – L2 	NSW WH&S Reg 2017, s39, 81 & 207 Construction CoP, S6 AS 2550 Cranes	7 Medium

Activity / Item	Hazards / Risks	Initial Risk Score	Control Measures / Risk Treatment	Legislation, Codes of Practice, and Guidelines (including other available information on hazard / risk)	Residual Risk Score
	Falling objects	16 Severe	<ul style="list-style-type: none"> No lifting over public areas without traffic management in place to prevent public entering area/s – L2 Do not lift materials over workers and/or sheds. Coordinate onsite works and crane operations to prevent. Where impractical appropriate 'Class C' hoarding shall be implemented – L2 Ensure erection and dismantle methods are documented in the SWMS – L3 Crane crew has ultimate responsibility for each lift and to ensure the crane is fit-for-purpose – L2 	NSW WH&S Reg 2017, s203 and 217 Falls CoP, S3.6 and 3.7	7 Medium
	High Winds	16 Severe	<ul style="list-style-type: none"> An anemometer (wind gauge) is to be fitted to all cranes in an appropriate location, at the top of the boom, not protected from winds – L2 Crane manufacturers must state the maximum wind speed that the crane may be operated up to, and the operator must know these limits and not exceed them – L2 Unless confirmed in the OEM Manual the following wind speed apply: - L2 <ul style="list-style-type: none"> For wind speeds under 54km/h (15m/second), lifting is at the discretion of the crane crew. If wind speeds are over 54km/h (15m/second) and the manufacturers maximum wind speed is higher, a Risk Assessment is to be completed by Construction Control and the crane crew. This RA is to consider manufacturers maximum wind speeds, surface area of items being lifted, size to weight ratio, boom length and surface area of the boom, crane slew brake capacity, doggers ability to control the load, visibility, wind gusts and the effect of wind on the crane. No lifting is to be attempted with winds over 72km/h (20m/second) 	NSW WH&S Reg 2017, s203 Tower Crane CoP 2019	7 Medium
	Lifting equipment failure	16 Severe	<ul style="list-style-type: none"> Follow the controls listed in the Lifting Devices section – L3 		7 Medium

Activity / Item	Hazards / Risks	Initial Risk Score	Control Measures / Risk Treatment	Legislation, Codes of Practice, and Guidelines (including other available information on hazard / risk)	Residual Risk Score
3.8 Lifting Devices Examples: Bins Steel fixing Stands Slings Chains Lifting boxes / bags	Inadequate inspection - Equipment failure	12 High	<ul style="list-style-type: none"> Prior to the use of any lifting device with a major plant item, a lifting gear register is to be attached to the <i>S030411 Plant Operation Permit</i> with the details of annual Non-Destructive Testing (NDT), inspection dates, certification results (including the crane hook, slings / chains, stands and any lifting attachments or lifting boxes/bags) completed by an independently accredited lifting gear inspection service (LEEA or equivalent) or Advanced Rigger – L2 All lifting devices, including soft slings, must be inspected prior to use for the day by the Dogman / Rigger – L2 Lifting devices must have appropriate markings and stamped or tagged with Working Load Limits (WWL) or Safe Working Load (SWL) – L2 If any of the following defects are visible, the lifting device shall be clearly marked to indicate rejection, withdrawn from service, and referred to an independently accredited lifting gear inspection service (LEEA or equivalent) or Advanced Rigger for assessment for repair, Proof Load Testing or Non-Destructive Test (NDT) certification: - L2 <ul style="list-style-type: none"> Cuts, nicks, gouges, cracks, excessive corrosion, heat damage, bent or distorted components or any other defects Signs of overloading, such as any visible deformation of components Markings that have become detached or illegible. In such cases the lifting device may be returned to service after being assessed by a competent person that it: <ul style="list-style-type: none"> is in good condition; and has been re-marked following verification of its identity and capacity Prior to any repair work an independently accredited lifting gear inspection service (LEEA or equivalent) or an Advanced Rigger shall make an assessment and prepare a report on defects and damage requiring repair including: <ul style="list-style-type: none"> Details of how the incident happened or circumstances leading to the discovery of the defective parts Nature and extent of the damage and defects Proposed action based on the manufacturer's recommendations Following any repair work Lifting devices must have complete Proof Load Testing or Non-Destructive Examination or alternative verification as per AS 4991:2004 Earthmoving or other plant used as a crane must have certified anchor points or be chained / slung by an appropriately licensed rigger. Where the rated capacity of earthmoving equipment exceeds 1 tone, Burst Protection must be fitted to both boom and dipper arm of the equipment used as crane – L2 	NSW WH&S Reg 2017, S54 and 214 Plant CoP Construction CoP, S7.6 AS 4991:2004, S15.1.3 AS 4991:2004, S13.1 AS 4991:2004, S13.8	4 Low
	Incompetent operator / inspector	12 High	<ul style="list-style-type: none"> All chaining / slinging loads shall be carried-out by a qualified Dogman or Rigger – L2 Workers inspecting lifting devices shall have appropriate instruction and training as per AS 4991:2004 – L3 	NSW WH&S Reg 2017, S39 Construction CoP AS 4991:2004, S13.1	4 Low

Activity / Item	Hazards / Risks	Initial Risk Score	Control Measures / Risk Treatment	Legislation, Codes of Practice, and Guidelines (including other available information on hazard / risk)	Residual Risk Score
	Fall from Work Box	16 Severe	<ul style="list-style-type: none"> ▪ A risk assessment is to be conducted where the use of plant specifically designed to lift and support people e.g., EWP, or scaffold is first considered and if suitable used prior to the consideration of the use of a Work Box – L1 ▪ Task specific SWMS must be developed prior to commencing works – L3 ▪ Work Boxes must: <ul style="list-style-type: none"> ○ Be design registered with the regulator e.g. WorkSafe – L3 ○ Have a WLL, tare mass, & Design Registration number clearly marked upon it – L3 ○ Have sides not less than 1m high – L2 ○ Have fall arrest anchorage points – L2 ○ Have lifting slings supplied attached to the lifting points by hammerlocks or moused shackles – L2 ○ Have a chain or rope safety factor of at least 10 ○ The door is to be inward opening, self-closing with a latch to prevent unintentional opening – L2 ▪ Prior to use: <ul style="list-style-type: none"> ○ The Work Box must be securely attached to the crane – L2 ○ Fall arrest harness fitted and attached to harness points or main sling ring above the workers heads – L2 ○ Direction to the crane operator should only be given from the Work Box by a ticketed Dogman or Rigger – L2 ○ Other workers (other than the Dogman) in the Work Box are to have Work Safely at Heights training – L3 ○ Workers must remain inside the work box on the floor while it is lifted or suspended – L2 ○ Emergency retrieval arrangements are put in place before the lift so workers can safely exit the Work Box in the event of a crane failure – L2 ○ The crane must not travel while suspending a Work Box – L1 ▪ The crane lifting the Work Box shall: <ul style="list-style-type: none"> ○ Where practicable, be equipped with a secondary back-up system that will prevent the load from falling if the primary lifting device fails – L2 ○ Have a minimum rated capacity of a least twice the load (min 1000kg) at the maximum radius of the task being performed – L2 ○ Be fitted with an upper hoist limit (anti two block) device – L2 ○ Have levers and foot pedals fitted with constant pressure systems, so crane stops immediately after the operator removes pressure – L2 ○ Be a modern crane, that is fit for purpose – L2 	AS2550.1 2011 Cranes, hoists and winches Safe use Part 1 General Requirements AS 1418.17-1996: Cranes Part 17: Design and construction of workboxes	7 Medium

Activity / Item	Hazards / Risks	Initial Risk Score	Control Measures / Risk Treatment	Legislation, Codes of Practice, and Guidelines (including other available information on hazard / risk)	Residual Risk Score
			<ul style="list-style-type: none"> Prior to the arrival of a work box intended to be used as a First Aid Box on site, task specific controls related to the use of a First Aid box shall be developed. First Aid boxes must be clearly identified and marked as First Aid boxes and only be used to retrieve injured people. First Aid boxes must have outward opening doors for ease of access, with self-closing doors and a latch to prevent unintentional opening – L3 		

Activity / Item	Hazards / Risks	Initial Risk Score	Control Measures / Risk Treatment	Legislation, Codes of Practice, and Guidelines (including other available information on hazard / risk)	Residual Risk Score
3.9 Mobile Concrete Pumps	Unsafe Operation of a Mobile Concrete Pump	16 Severe	<ul style="list-style-type: none"> Follow the controls listed in the [HRCW] Work that is carried out in an area where there is movement of powered mobile plant section – L3 Ensure a CC S030411d <i>Mobile Concrete Pump Operation Permit</i> is completed prior to use on site to verify key aspects including design assessments, operator competency, plant specific pre-operational inspection and maintenance completed – L3 Each time the mobile concrete pump attends site complete a CC S030404a <i>Mobile Concrete Pump Setup Checklist</i> – L3 	NSW WH&S Reg 2017, s203 Plant CoP, S3.7	7 Medium
	Pump and/or line failure / collapse	16 Severe	<ul style="list-style-type: none"> Ensure a Q070409 <i>Designated Plant Setup Location</i> form has been completed and a copy of the completed document and applicable drawings available for consideration by the site team and pump crew – L3 Ensure all line clips are installed – L2 Ensure all daily inspections, monthly thickness tests, yearly inspections, and (6) year major inspections have been completed, and are in the logbook (as per AS 2550.15) – L2 / L3 	NSW WH&S Reg 2017, s203 Construction CoP, S7.6 AS 2550:2015	7 Medium
	Explosion	14 Severe	<ul style="list-style-type: none"> Check areas for overhead hazards and interactions with concrete pump and associated works – L2 	Plant CoP, S3.2	7 Medium
	Other trades / public	16 Severe	<ul style="list-style-type: none"> Ensure 'Pumping in Progress' signage is displayed and 'zone of influence' is isolated – L2 Work zones to be demarked and barriers are erected according to the site-specific needs and tasks undertaken. – L2 	NSW WH&S Reg 2017, s203 Plant CoP, S3.2	7 Medium
	Work at Height	16 Severe	<ul style="list-style-type: none"> Access ladders that comply with AS1657 are to be installed, secured and extend 1m past the work platform (and/or have grabrails) – L2 An appropriate fall-arrest device (e.g., inertia reel) is to be put in place and extended down to the access point, and remain in place ready for use in the case of a breakdown or service etc – L3 Prior to on site jumping of the static pump, prior to each lift, complete a S030411e(i) <i>Static Tower Pump Jumping Checklist</i> within the Inspections tab of the completed S030411e <i>Static Concrete Tower Pump Operation Permit</i> – L3 	NSW WH&S Reg 2017 S78 AS 1892.5 Ladders NSW WH&S Reg 2017, S217 Falls CoP, S3.6 and 3.7 Construction CoP, S7.6	7 Medium

Activity / Item	Hazards / Risks	Initial Risk Score	Control Measures / Risk Treatment	Legislation, Codes of Practice, and Guidelines (including other available information on hazard / risk)	Residual Risk Score
3.10 Static Tower Concrete Pumps	Unsafe Operation of a Static Concrete Tower Pump	16 Severe	<ul style="list-style-type: none"> Follow the controls listed in the [HRCW] Work that is carried out in an area where there is movement of powered mobile plant section – L3 Ensure a CC S030411e Static Concrete Tower Pump Operation Permit is completed prior to use on site to verify key aspects including design assessments, operator competency, plant specific pre-operational inspection and maintenance completed – L3 Prior to on site jumping of the static pump, prior to each lift, complete a S030411e(i) Static Tower Pump Jumping Checklist within the Inspections tab of the completed S030411e Static Concrete Tower Pump Operation Permit – L2 	NSW WH&S Reg 2017, S203 Plant CoP, S3.7	7 Medium
	Pump and/or line failure / collapse	16 Severe	<ul style="list-style-type: none"> Location of the pump has been approved by the projects Structural Engineer – L2 Propping design, specific to the project structure has been provided or approved by a Structural Engineer – L2 Concrete Placement Boom checklist is available – L3 Power supply has been tested and CES form submitted – L2 Mechanical protection for electrical cable to 2.5m above the ground – L2 Concrete static lines must be installed as per AS 2550.15 with all pines, pipe clamps and anchor brackets in place and secure – L2 Each section of the static line pipe is to be identified with a permanently fixed identification – L3 Compliance plates and all safety/warning signage is in place and in good condition – L3 Manage Lifting Equipment in accordance with the Lifting Devices section – L3 	NSW WH&S Reg 2017, S203 Plant CoP, S3.7	7 Medium
	Collision	14 Severe	<ul style="list-style-type: none"> Check areas for overhead hazards and interactions with concrete pump and associated works – L2 	Plant CoP, S3.2	7 Medium
	Other trades / public	16 Severe	<ul style="list-style-type: none"> Ensure a Q070409 Designated Plant Setup Location form has been completed and a copy of the completed document and applicable drawings available for consideration by the site team and pump crew – L3 Ensure all line clips are installed – L2 Ensure 'Pumping in Progress' signage is displayed – L2 Work zones to be demarked and barriers are erected according to the site-specific needs and tasks undertaken – L2 	NSW WH&S Reg 2017, S203 Plant CoP, S3.2	7 Medium

Activity / Item	Hazards / Risks	Initial Risk Score	Control Measures / Risk Treatment	Legislation, Codes of Practice, and Guidelines (including other available information on hazard / risk)	Residual Risk Score
	Work at Height	16 Severe	<ul style="list-style-type: none"> Access ladders that comply with AS1657 are to be installed, secured and extend 1m past the work platform (and/or have grabrails) – L2 An appropriate fall-arrest device (e.g., inertia reel) is to be put in place and extended down to the access point, and remain in place ready for use in the case of a breakdown or service etc – L3 Prior to on site jumping of the static pump, prior to each lift, complete a S030411e(i) Static Tower Pump Jumping Checklist within the Inspections tab of the completed <i>S030411e Static Concrete Tower Pump Operation Permit</i> – L3 	NSW WH&S Reg 2017 S78 AS 1892.5 Ladders NSW WH&S Reg 2017, S217 Falls CoP, S3.6 and 3.7 Construction CoP, S7.6	7 Medium

Activity / Item	Hazards / Risks	Initial Risk Score	Control Measures / Risk Treatment	Legislation, Codes of Practice, and Guidelines (including other available information on hazard / risk)	Residual Risk Score
3.11 Personnel & Materials Hoists	Unsafe operation of a hoist	16 Severe	<ul style="list-style-type: none"> Follow the controls listed in the [HRCW] Work that is carried out in an area where there is movement of powered mobile plant section – L3 Ensure a CC S030411h Hoist Operation Permit is completed prior to use – L3 Adequate lighting must be provided at the loading and unloading area – L2 Hoist must be installed in accordance with OEM Manuals – L2 	NSW WH&S Reg 2017, S217 Falls CoP, S3.6 and 3.7 Construction CoP, S7.6	7 Medium
	Work at Height – Falling object / person	16 Severe	<ul style="list-style-type: none"> Must have overhead protection for operator. If the load is not fully enclosed and there is a risk the material may fall, an isolation zone is to be installed beneath the hoist at a safe distance to prevent a worker being struck by the falling material and/or the material ricocheting off the ground – L2 Obtain Structural Engineers advice that confirms the hoist connection points to the proposed structure are suitable – L2 The landings of the hoist must be guarded with mesh or similar at each floor to prevent fall risk or contact with moving parts – L2 	NSW WH&S Reg 2017, S217 Falls CoP, S3.6 and 3.7 Construction CoP, S7.6	7 Medium
	Mechanical failure	12 High	<ul style="list-style-type: none"> Hoist is to be installed as per OEM Manual instructions / specifications and by an Intermediate Rigger or Intermediate Scaffolder – L2 Upon installation a 'handover' certificate must be provided to certify compliance with AS1418.1, AS1418.7 and the site-specific design – L2 Load Rating must be displayed inside the hoist – L3 Must have an appropriate electrical supply, which is marked and secured – L2 Must be serviced monthly with evidence attached to the S030411h Hoist Operation Permit – L3 	NSW WH&S Reg 2017, S207 Plant CoP, S3.7 AS 2550.7 Hoists AS 1418.1 Hoists	4 Low

Activity / Item	Hazards / Risks	Initial Risk Score	Control Measures / Risk Treatment	Legislation, Codes of Practice, and Guidelines (including other available information on hazard / risk)	Residual Risk Score
3.12 Builders Lifts	Mechanical failure	16 Severe	<ul style="list-style-type: none"> Ensure the lift has been registered, tested, and authorized for service by Regulator e.g., WorkSafe – L2 Adequate lighting must be provided at the loading and unloading area – L2 Hoist must be installed in accordance with OEM Manuals – L2 A poster is fixed in the car giving the following instructions and information in letters and numerals of at least 25 mm: – L3 <ul style="list-style-type: none"> This lift is for general goods loading only Capacity of this lift: [?] kg's Industrial forklifts shall not be used for loading a lift The weight of any single good shall not exceed: [?] kg's (1/4 lift capacity) Person authorised to operate this lift: [?] 24 hours emergency line has been provided in the lift car and is serviced by lift installer. If telephone connection cannot be provided, two way radio or intercom must be provided from lift car to the site office and a procedure for calling in a lift technician in the case of an emergency put in place. The lift should not be operatable when an emergency contact is not available – L3 	NSW WH&S Reg 2017, S37 and 203 Plant CoP, S1.5 and 3.7 WSACT GN 0026	7 Medium
	Poor access	16 Severe	<ul style="list-style-type: none"> Clear access / egress from the builder's lift shall be maintained at all times – L2 The interior of the car shall be lined with plywood or other impact absorbing material to prevent damage to the car while loading materials and the floor of the car is covered with timber planks or with 10 mm thick plywood to evenly distribute the floor load – L2 	NSW WH&S Reg 2017, S204 Plant CoP, S3.2	7 Medium
	Incompetent operator	16 Severe	<ul style="list-style-type: none"> The lift must only be operatable by a person trained and authorised by CC Site Management in the site Builders Lift procedures – L3 A ticketed hoist driver may be designated as the person authorised to operate the lift – L3 Ensure appropriate information is provided to the builders lift operator to ensure safe operation – L3 	NSW WH&S Reg 2017, S39 Construction CoP Plant CoP	7 Medium
	Unauthorised use	16 Severe	<ul style="list-style-type: none"> Lifts shall be isolated / locked when not in use to prevent unauthorised operation – L2 	NSW WH&S Reg 2017, S203	7 Medium

Activity / Item	Hazards / Risks	Initial Risk Score	Control Measures / Risk Treatment	Legislation, Codes of Practice, and Guidelines (including other available information on hazard / risk)	Residual Risk Score
3.13 Hot Works Examples: Welding, Oxy / Acetylene	Fire	16 Severe	<ul style="list-style-type: none"> Ensure a CC <i>S030408 Hot Work Permit</i> is completed and approved by CC prior to Welding or Oxy use – L3 Ensure flashback arrestors are installed at the Oxy Handset and bottles – L2 Ensure an appropriate fire extinguisher is available – L2 Ensure area is cleared of debris and flammables when conducting hot works – L2 Protect items that cannot be removed, but may be affected by hot works – L2 Monitor area for 5 minutes after hot works to ensure no smouldering fire – L3 The use of the <i>S030408 Hot Works Permit</i> for grinding is at the discretion of the CC Project Manager and must be communicated to all workers on site if required. The permit may be instigated due to fire risk, bushfire hazard warnings or when approaching project completion when fire alarms have been activated or to protect finished surfaces – L2 	Welding CoP S3.4 Work Environment CoP AS 4839 Oxy AS 3833 Dang Subs	5 Low
	Exposure to Hazardous Substances	13 High	<ul style="list-style-type: none"> Follow the controls listed in the Hazardous Substances / Dangerous Goods (HSDG) and Hazardous Substance Incident section – L3 Storage, handling, and disposal requirements from the SDS are incorporated into contractors site-specific SWMS/JSA – L3 Oxy & Acetylene bottles stored on site will be securely fastened on a trolley fitted with a fire extinguisher in the upright position and separated from other sets by 5m – L2 Task specific SWMS/JSA to consider if health surveillance is required – L3 	NSW WH&S Reg 2017, Division 3.2.7 Welding CoP Haz Chem CoP	8 Medium
	Pedestrians	13 High	<ul style="list-style-type: none"> Barricading / welding shields shall be installed to prevent workers without appropriate eye protection from accidental welding flashes – L2 	Welding CoP,	3 Low
3.14 9" Angle Grinder & Quick Cut Saws	Noise	12 High	<ul style="list-style-type: none"> Ensure appropriate ear protection is worn by operator and workers in immediate area – L3 	NSW WH&S Reg 2017, S57 Noise CoP	4 Low
	Flying Objects	14 Severe	<ul style="list-style-type: none"> Ensure eye protection or face shield is worn – L3 	NSW WH&S Reg 2017, S35	7 Medium
	Blade jamming when cutting	12 High	<ul style="list-style-type: none"> 9" Angle Grinders should not be used for cutting tied 'reo-bar' in a vertical or standing up position, instead use an "Oxy" or other cutting device 	NSW WH&S Reg 2017, S35	4 Low

Activity / Item	Hazards / Risks	Initial Risk Score	Control Measures / Risk Treatment	Legislation, Codes of Practice, and Guidelines (including other available information on hazard / risk)	Residual Risk Score
3.15 Hot Works	Hot Works	14 Severe	<ul style="list-style-type: none"> Ensure an appropriate fire extinguisher is available – L2 Ensure area is cleared of debris and flammables when conducting hot works – L2 Protect items that cannot be removed, but may be affected by hot works – L2 Monitor area for 5 minutes after hot works to ensure no smouldering fire – L3 Using a <i>S030408 Hot Works Permit</i> for grinding is at the discretion of the Project Manager and must be communicated to all workers on site when required. The permit may be instigated due to fire risk, bushfire hazard warnings or near project completion when fire alarms have been activated or to protect finished surfaces – L2 	NSW WH&S Reg 2017, S35	7 Medium
	Electrical Shock	16 Severe	Follow the controls listed in the Electrical Tools and Extension Leads section – L3		7 Medium
	Manual Handling	12 High	<ul style="list-style-type: none"> Follow the controls listed in the Manual Handling section – L3 		7 Medium

Activity / Item	Hazards / Risks	Initial Risk Score	Control Measures / Risk Treatment	Legislation, Codes of Practice, and Guidelines (including other available information on hazard / risk)	Residual Risk Score
3.16 Explosive Power Tools (EPT)	EPT Failure	12 High	<ul style="list-style-type: none"> EPT to be removed for repair following repeated or regular misfires – L3 Inspection and maintenance as per OEM Manual – L3 	NSW WH&S Reg 2017, S35 S/L Reg 1950 S9A Plant CoP, s 3.6 and 3.7	8 Medium
	Incompetent Operator	10 Medium	<ul style="list-style-type: none"> SWMS/JSA to be developed in line with the OEM Manual – L3. Operator has been trained in the safe use of the EPT prior to use – L3 	NSW WH&S Reg 2017, S39 Plant CoP	8 Medium
	Explosives	15 Severe	<ul style="list-style-type: none"> EPT only to be loaded at the place the EPT is to be used – L3 Loaded EPT's shall not be carried or transported from place to place at the workplace, unless because of mechanical failure the EPT cannot be unloaded – L3 Follow the controls listed in the Hazardous Substances / Dangerous Goods (HSDG) and Hazardous Substance Incident section – L3 	S/L Reg 1950 S9A NSW WH&S Reg 2017, S35 Construction CoP, S Haz Chem CoP	8 Medium
	Powder Actuated Tools	12 High	<ul style="list-style-type: none"> 'Warning – Explosive-Powered Tool in Use' signage must be displayed indicating EPT in use – L3 Used explosive strips are to be immersed in water and placed in an appropriate bin – L2 Charges to be stored in a metal lockable container or other recommended storage system by the manufacturer – L2 	NSW WH&S Reg 2017, S35 S/L Reg 1950 S9A Plant CoP, s 3.6 and 3.7	8 Medium
	Flying Objects	12 High	<ul style="list-style-type: none"> Ensure there is no person in the line of fire – L2 Ensure safety glasses are worn by operator – L3 	NSW WH&S Reg 2017, S35	8 Medium
	Noise	13 High	<ul style="list-style-type: none"> Ensure appropriate ear protection is worn by operator and workers in immediate area – L3 	NSW WH&S Reg 2017, S57 Noise CoP	8 Medium
	Plant failure	14 High	<ul style="list-style-type: none"> Ensure routine maintenance is complete as per OEM Manual – L2 Complete preoperational inspection of pant as per OEM Manual – L3 	NSW WH&S Reg 2017, S35 Plant CoP, s 3.6 and 3.7	8 Medium
3.17 Power Tools	Incompetent Operator	10 Medium	<ul style="list-style-type: none"> SWMS/JSA to be developed in line with the OEM Manual – L3. Operator has been trained in the safe use of the EPT prior to use – L3 	NSW WH&S Reg 2017, S39 Plant CoP	8 Medium
	Flying Objects	12 High	<ul style="list-style-type: none"> Ensure there is no person in the line of fire – L2 Ensure safety glasses are worn by operator – L3 	NSW WH&S Reg 2017, S35	8 Medium
	Noise	13 High	<ul style="list-style-type: none"> Ensure appropriate ear protection is worn by operator and workers in immediate area – L3 	NSW WH&S Reg 2017, S57 Noise CoP	8 Medium

Activity / Item	Hazards / Risks	Initial Risk Score	Control Measures / Risk Treatment	Legislation, Codes of Practice, and Guidelines (including other available information on hazard / risk)	Residual Risk Score
	Plant failure	14 High	<ul style="list-style-type: none"> ▪ Ensure routine maintenance is complete as per OEM Manual – L2 ▪ Compete preoperational inspection of pant as per OEM Manual – L3 	NSW WH&S Reg 2017, S35 Plant CoP, s 3.6 and 3.7	8 Medium

Activity / Item	Hazards / Risks	Initial Risk Score	Control Measures / Risk Treatment	Legislation, Codes of Practice, and Guidelines (including other available information on hazard / risk)	Residual Risk Score
	Electrocution	16 High	Follow the controls listed in the Electrical Tools and Extension Leads section – L3		7 Medium

Activity / Item	Hazards / Risks	Initial Risk Score	Control Measures / Risk Treatment	Legislation, Codes of Practice, and Guidelines (including other available information on hazard / risk)	Residual Risk Score
3.18 Portable Generators	Electrical	15 Severe	<ul style="list-style-type: none"> Follow the controls listed in the Electrical Tools and Extension Leads and [HRCW] Work that is carried out on or near electrical installations or services section – L3 When a generator supplies a fixed installation, it must be: <ul style="list-style-type: none"> installed and certified by a licensed electrician and a Certificate of Electrical Safety (CES) provided – L2 inspected by a licensed electrical inspector before it is used for the first time, and after any alteration to the location or installation of the generator – L2 Where generators are supplying fixed switchboards, the RCD may be mounted on the switchboard – L2 Ensure generator is earthed / grounded to suitable means. Use ground-fault circuit interrupters (GFCIs) as per the manufacturer's instructions – L2 Manufacturers or suppliers of generators must provide information regarding relevant earth and bonding connections if the generator is used to supply portable tools and equipment. This information should be on label displayed prominently on the generator and indicate whether the unit is a bonded generator or an isolated winding generator – L2 Electrical socket-outlets on generators must be protected by RCD not exceeding 30 mA and should be connected in accordance with AS/NZS 3012 – L2 Portable socket-outlet assemblies (PSOA) must not be used in connection with isolated winding generators, as the RCD will not function. Only one item of class 1 electrical equipment must be used with an isolated winding generator – L2 	Electrical CoP Industry Standard – Electrical, S5 AS 3012 Electrical	6 Low
	Manual Handling	14 High	<ul style="list-style-type: none"> Follow the controls listed in the Manual Handling section – L3 		8 Medium
	Noise / Vibration	14 High	<ul style="list-style-type: none"> Position generator as far away as practical from work areas and gathering places – L2 Ensure appropriate ear protection is worn by workers in the immediate area – L2 	NSW WH&S Reg 2017, S57 Noise CoP	8 Medium
	Exposure to Hazardous Substance – Carbon-monoxide	15 Severe	<ul style="list-style-type: none"> Follow the controls listed in the Hazardous Substances / Dangerous Goods (HSDG) and Hazardous Substance Incident section – L3 Use in well ventilated areas. Consider alternative electric and diesel generators. Battery-operated CO alarms should be used in immediate enclosed work areas. – L2 Task specific SWMS to consider if health surveillance is required – L3 	NSW WH&S Reg 2017, S49 Haz Chem CoP Construction CoP, S7.1 Plant CoP, S4.6	8 Medium
	Fire	15 Severe	<ul style="list-style-type: none"> Ensure suitable fire extinguisher is immediately accessible – L2 Allow motor to cool before refuelling – L1 	NSW WH&S Reg 2017, S35	8 Medium

Activity / Item	Hazards / Risks	Initial Risk Score	Control Measures / Risk Treatment	Legislation, Codes of Practice, and Guidelines (including other available information on hazard / risk)	Residual Risk Score
3.19 Calibration	Inaccurate Inspection, Measuring, Test Equipment (IMTE)	12 High	<ul style="list-style-type: none"> Ensure all Inspection Measuring and Testing Equipment (IMTE) is checked in accordance with OEM Manuals – L2 Visually check all IMTE prior to each use to ensure it is in calibration dates and is not damaged or broken – L2 All IMTE must be identifiable with serial number and have available onsite records of calibration and maintenance and appropriate storage – L2 	NSW WH&S Reg 2017, Part 4.7 Electrical CoP ISO 9001 QAMS	4 Low
3.20 Temporary support structures	Equipment failure	16 Severe	<ul style="list-style-type: none"> All temporary support structures must be inspected prior to use and on a routine basis specified by the manufacturer, in absence, at weekly intervals in the <i>S030402 Project Inspection Record</i> – L3 	NSW WH&S Reg 2017, S54 and 214 Plant CoP	1 Medium

Activity / Item	Hazards / Risks	Initial Risk Score	Control Measures / Risk Treatment	Legislation, Codes of Practice, and Guidelines (including other available information on hazard / risk)	Residual Risk Score
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4. Fall Protection

4.1 [HRCW] Work that involves the risk of a person or object falling more than 2m.	Falling person	16 Severe	<ul style="list-style-type: none"> Task specific SWMS must be developed prior to commencing works – L3 Appropriate edge protection must always be installed and maintained. At 1.8m this shall include a handrail (900mm), mid-rail (500mm) and toe boards (0 to 150mm), or mesh screens incorporating kick-plates of a solid construction – L2 Temporary edge protection must be registered with inspection and maintenance frequencies defined – L3 Temporary edge protection that is intended to protect persons working on roofs of buildings having slopes not greater than 35° must be engineer certified to comply with AS 4994 – L2 Temporary edge protection including formwork and excavation handrails must be of a solid construction and be inspected / verified as per manufacturers / engineers' specifications – L2 Gap between working fall protection platform and building horizontally to be no greater than 225mm; floor to be no greater than 300mm vertically from structure platform – L2 Timber planks must have a 300mm overlap or be secured / lashed. Metal planks are as per Engineer or OEM Manual requirements – L2 All fall zones must have suitable fall protection implemented using the 'Hierarchy of Control' (controls are listed in preference order from the topmost preferred to bottom least preferred): <ul style="list-style-type: none"> Work from the ground or a solid structure – L1 Work using Perimeter Scaffolding – L2 Work using EWP (Scissor-lift, Boom-lift, etc.) – L2 Work Using Mobile Scaffold – L2 Work using Platform ladder / Trestle – L2 Work using Step ladder / Builders – L2 Work using Fall-arrest equipment (harness / lanyard) – L2 	NSW WH&S Reg 2017, s54 Falls CoP, Section 4.2 AS 1576 Scaffold AS 4576 Scaffold AS 4994 Temporary edge Protection HIGH RISK WORK s291(k) Work Health Safety Regulations	7 Medium
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Activity / Item	Hazards / Risks	Initial Risk Score	Control Measures / Risk Treatment	Legislation, Codes of Practice, and Guidelines (including other available information on hazard / risk)	Residual Risk Score
			<ul style="list-style-type: none"> CC shall develop and maintain a <i>Q070603 Project Emergency Plan</i> with Incident and Emergency Response Scenarios applicable to work at height and communicate emergency procedures to all – L3 Prior to accessing an existing buildings roof area, or a new buildings roof area post fall protection measure being removed, a <i>S030435 Roof Access Permit</i> must be completed – L3 A means of safe access must be provided prior to accessing an area of the project that presents a Work at Height risk – L2 Manage the following control measures in accordance with the specific sections nominated: - L3 <ul style="list-style-type: none"> Scaffold – see Scaffold Erection & Dismantle section Mobile Scaffold – see Mobile Scaffold section Temporary Edge Protection – see Temporary edge protection section Harness Use – see Fall Arrest Equipment / Harness Use section EWP – see Elevated Work Platforms (EWP) section Perimeter Screens – see Perimeter Screens section Ladders and Trestles – see Ladders and Trestles section 		
	Falling object	15 Severe	<ul style="list-style-type: none"> Isolate area below with a physical barricade and provide spotter or signs – L2 All tools / equipment shall be stored 2m back from any exposed edges – L2 Full enclosure screening shall be installed on perimeter faces to a minimum of 2m above the working deck – L2 Hoarding / gantry shall be erected to prevent falling object risks to public – L2 	NSW WH&S Reg 2017, s78, 79 & s220, s225, s236 Falls CoP AS 1576 Scaffold AS 4576 Scaffold	7 Medium
	Manual Handling	12 High	Follow the controls listed in the Manual Handling section – L3		4 Low

Activity / Item	Hazards / Risks	Initial Risk Score	Control Measures / Risk Treatment	Legislation, Codes of Practice, and Guidelines (including other available information on hazard / risk)	Residual Risk Score
4.2 Scaffold Erection & Dismantle	Scaffold collapse	16 Severe	<ul style="list-style-type: none"> Follow the controls listed in the [HRCW] Work that involves the risk of a person or object falling more than 1.8m section Scaffolds should be built as per the manufacturer's instruction manual - L2 <p>AS 4576 describes scaffold as Large or Small</p> <p>Construction Control defines a Small Scaffold as:</p> <ul style="list-style-type: none"> Handrails under 4m A free-standing access scaffold Scaffold under 4m to the highest working deck <p>Small scaffold can be built by a person holding a scaffold HRWL, built as per the manufacturer's instruction manual or to a clear sketch - L2</p> <p>Construction Control defines Large Scaffold as all scaffold more complex than described above in Small Scaffold – L2</p> <ul style="list-style-type: none"> The requirements for Large Scaffold are: <ul style="list-style-type: none"> Design drawings that take into consideration the site specifics are developed and approved 'For Construction' by a suitably qualified Structural/Mechanical/Scaffold Engineer are to be provided to CC by the scaffolding Subcontractor prior to scaffold works commencing on site – L2 The scaffolding Subcontractor is to deliver all equipment to site prior to the planned works, that allows the installers to build the scaffold in accordance with the drawings and the 1m rule. If this is not possible the Subcontractor is to advise CC via email prior to commencing the works – L2 The Scaffold Drawing is kept up to date by the qualified scaffolder – L3 Adjustments to the original Scaffold Drawings required to meet site conditions, that are in line with the OEM Manual, can be certified by a qualified scaffolder with a Scaffold Handover Certificate – L3 Adjustments to the original Scaffold Drawings required to meet site conditions, that are not in line with the OEM Manual, require the approval of a suitably qualified Scaffold/Structural/Mechanical Engineer – L2 Large Scaffold must be erected / dismantled by a qualified scaffolder holding a Scaffold HRWL – L2 Install physical protective barriers where scaffold is likely to be hit by plant or vehicles - L2 Ensure component list / description, instructions, maintenance and inspection regime, 	<p>NSW WH&S Reg 2017, s78, 79 & s220, s225, s236</p> <p>Falls CoP</p> <p>AS 1576 Scaffold</p> <p>AS 4576 Scaffold</p>	

Activity / Item	Hazards / Risks	Initial Risk Score	Control Measures / Risk Treatment	Legislation, Codes of Practice, and Guidelines (including other available information on hazard / risk)	Residual Risk Score
			<p>details of Working Load Limits (WLL) and other information on loading, max heights and working platforms is provided – L2</p> <ul style="list-style-type: none"> A 'Scaff-Tag' shall be placed at each access point of the scaffold, detailing the Qualified Scaffolder inspecting, duty loading and date of initial hand-over and subsequent monthly inspections – L2 Ties are to be installed as per OEM Manual or scaffold drawings approved by an engineer – L2 All Scaffold components manufactured post 2009 shall be appropriately marked with supplier and system type – L2 In the event of weather extremes, the scaffold shall be closed to workers. Once the event has passed, before reopening, the scaffold shall be checked and re-certified by a qualified scaffolder holding a scaffold HRWL – L2 Foundations shall be suitably prepared and compacted to support specified loading requirements with compaction testing results available for scaffold setup on ground, gardens, soil or potentially non supportive material – L2 Where possible all sole boards shall be at least 225mm wide and long enough to support at least two standards – L2 No scaffold to be modified unless authorised by CC – L2 Where there is a risk of uplift and/or dislodgement of anticipated (I.e., strong winds) planks must be secured / lashed – L2 		
	Falls from height	16 Severe	<ul style="list-style-type: none"> Ensure a sequential erection or '1m rule' method is used in accordance with AS 4576 and 'WorkSafe Guide to Scaffolding Safety'- L2 Gap between scaffold and building horizontally to be no greater than 225mm; scaffold access is to be no greater than 300mm vertically above or below the structure platform - L1 Scaffold planks must have a 300mm overlap or be secured / lashed - L2 No person other than a scaffolder is permitted on a scaffold or part thereof until such time it has been certified to AS 1576 using a handover certificate including the erector's signature and competency – L3 Handrail (900mm), mid-rail (500mm) and toe-boards (150mm), or mesh screens incorporating kick-plates shall be provided where a person or object could fall 2m or more – L2 	<p>NSW WH&S Reg 2017, S79 and 225</p> <p>Falls CoP</p> <p>AS 1576 Scaffold</p> <p>AS 4576 Scaffold</p>	7 Medium

Activity / Item	Hazards / Risks	Initial Risk Score	Control Measures / Risk Treatment	Legislation, Codes of Practice, and Guidelines (including other available information on hazard / risk)	Residual Risk Score
	Falling objects	14 Severe	<ul style="list-style-type: none"> Where there is a potential for an object to fall into public space supporting a road, foot path or structure, full enclosure screening shall be installed on each scaffold face affected to a minimum height 2m above the last working deck – L2 Upon handover scaffold shall not be opened to other persons until a CC S030414 <i>Scaffold Handover Review</i> has been complete by a competent person to verify installation as per drawings – L3 Internal guardrails to be installed on the scaffold where a fall may be greater than 1.8m – L2 	NSW WH&S Reg 2017, S79 and 225 Falls CoP AS 1576 Scaffold AS 4576 Scaffold	7 Medium
	Access & Egress	12 high	<ul style="list-style-type: none"> Ensure openings in edge protection at points of access to stairways or ladders are adequately protected with gates or are least 600mm from working platforms – L2 Ensure suitable access to all scaffold, with materials stored to always allow unimpeded access along the deck – L1 Access step heights must not exceed 250mm – L2 Fixed or under construction stairways require appropriate handrail / mid-rail – L2 Stairways 1.0 m in width or greater shall have secure handrails on both sides at 900mm height – L2 Ensure stretcher provisions are always available to working decks, to allow safe access / egress in the event of an emergency – L2 Ensure access ladders are secured and extend at least 1m past the landing area – L2 	NSW WH&S Reg 2017, S79 Falls CoP Work Environment CoP, S2.1 AS 1576 Scaffold AS 4576 Scaffold	4 Low

Activity / Item	Hazards / Risks	Initial Risk Score	Control Measures / Risk Treatment	Legislation, Codes of Practice, and Guidelines (including other available information on hazard / risk)	Residual Risk Score
4.3 Mobile Scaffold	Scaffold collapse	16 Severe	<ul style="list-style-type: none"> Follow the controls listed in the [HRCW] Work that involves the risk of a person or object falling more than 1.8m section – L3 Mobile scaffold shall be erected and used as per AS/NZS 1576 & 4576 and/ or manufacturer's specifications – L2 All mobile scaffolds over 4m shall only be erected and dismantled by a qualified scaffolder as per the Q030409 <i>Inspection Compliance Matrix</i> – L3 All mobile scaffolds under 4m shall be erected and dismantled by a competent person as per the Q030409 <i>Inspection Compliance Matrix</i> – L3 Erected mobile scaffolds are to be reviewed on a regular basis during site walks, S030402 <i>Project Inspection Records</i> and S030413 <i>Work Activity Observations</i>. The S030401 <i>Mobile Scaffold Checklist</i> may be used to monitor and review the safe erection and use of mobile scaffolds – L3 Mobile scaffolds shall be visually inspected daily prior to its use by the person using it – L3 	NSW WH&S Reg 2017, S225 AS 1576 Scaffold AS 4576 Scaffold	7 Medium
	Work at Height – Falling object / person	16 Severe	<ul style="list-style-type: none"> Do not locate a mobile scaffold within 1m of any unprotected edge or penetration, unless measures are used to prevent it crossing that point, such as a fixed fence, rail or wheel stop – L2 No worker is permitted to remain on a mobile scaffold while it is moved – L1 Guardrails and toe boards, or mesh screens incorporating kick-plates shall be provided where a person or object could fall a distance of 1.8m or more – L2 	NSW WH&S Reg 2017, s54 and 79 Falls CoP AS 1576 Scaffold AS 4576 Scaffold	7 Medium
	Access & Egress	12 High	<ul style="list-style-type: none"> Ensure access ladders are secured and extend at least 1m past the landing area – L2 All castors must be in the "locked" position prior to any person accessing a mobile scaffold – L2 	NSW WH&S Reg 2017, S40 WSACT GN 0025 Scaffolding	4 Low

Activity / Item	Hazards / Risks	Initial Risk Score	Control Measures / Risk Treatment	Legislation, Codes of Practice, and Guidelines (including other available information on hazard / risk)	Residual Risk Score
4.4 Temporary edge protection	Work at Height – Falling object / person	16 Severe	<ul style="list-style-type: none"> Follow the controls listed in the [HRCW] Work that involves the risk of a person or object falling more than 1.8m section – L3 Appropriate edge protection must be always installed. At 1.8m this shall include handrail (900mm), mid-rail (500mm) and toe boards (150mm), or mesh screens incorporating kick-plates of a solid construction shall be provided – L2 Temporary edge protection must be registered with inspection and maintenance frequencies defined – L2 Temporary edge protection that is intended to protect persons working on roofs of buildings having slopes not greater than 35° must be engineer certified to comply with AS 4994 – L2 Temporary edge protection including formwork and excavation handrails must be of a solid construction and be inspected / verified as per manufacturers / engineers specifications – L2 	NSW WH&S Reg 2017, S54 Falls CoP, S4.2 AS 4994 Temporary edge protection	7 Medium
4.5 Perimeter Screens	Work at Height – Falling object / person	16 Severe	<ul style="list-style-type: none"> Follow the controls listed in the [HRCW] Work that involves the risk of a person or object falling more than 1.8m section – L3 Ensure supplier provides certified structural engineering drawings for the installation and raising methods / requirements – L2 Ensure needles are set prior to lifting screens into place – L2 Ensure all props, pins and safety clips are installed prior to releasing screens – L2 Ensure gaps between slab edge and screen are isolated above before stripping formwork – L2 Ensure trailing decks are kept clean and free of debris – L2 Trailing decks to have load rating signposted – L3 Ensure fall controls are used when installing top deck flaps – L2 	NSW WH&S Reg 2017, S54 Falls CoP, S4.2 Construction CoP, S7.6 AS 1576 Scaffold AS 4576 Scaffold	7 Medium

Activity / Item	Hazards / Risks	Initial Risk Score	Control Measures / Risk Treatment	Legislation, Codes of Practice, and Guidelines (including other available information on hazard / risk)	Residual Risk Score
4.6 Fall Arrest Equipment / Harness Use	Work at Height – falling object / falling person / slip/trip/fall	16 Severe	<ul style="list-style-type: none"> Consider if it is reasonably practicable to complete the works from the ground, solid construction, scaffold, guardrail, EWP or similar – L2 Follow the controls listed in the [HRCW] Work that involves the risk of a person or object falling more than 1.8m section – L3 Harness and associated equipment is only to be used after approval of a CC S030407 <i>Harness Use Permit</i> by CC – L2 All anchor points must be certified by a competent person and adequate for intended use. Certification to be attached to the CC Harness Use Permit – L2 A competent person, with Working at Height training, may assess an anchor point as being suitable to an ultimate strength of 15KN e.g., a large structural beam or concrete column – L2 A suitable communication method is to be instigated between team members – L2 If access is via an unprotected roof area complete a CC S030435 <i>Roof Access Permit</i> prior to accessing the roof – L3 	NSW WH&S Reg 2017, S79 Falls CoP, s3.6 and 3.7	7 Medium
	Incompetent user, inspector, supervisor, manager	16 Severe	<ul style="list-style-type: none"> All workers involved in the instalment, inspection, maintenance, operation, and supervision must have documented evidence in Simpel of completed training and competencies as per the Q030409 Inspection Compliance Matrix – L2 S030407 Harness Use Permits must have attached evidence that the attachment point/s have – L2 <ul style="list-style-type: none"> design certification by a suitably qualified engineer installation certified by a suitably qualified person an appropriate inspection regime applied A competent person, with Working at Height training, may assess an anchor point as being suitable to an ultimate strength of 15KN e.g., a large structural beam or concrete column – L2 	NSW WH&S Reg 2017, S39 Falls CoP, s3.6 and 3.7 Plant CoP, S3.3 AS 1891.4 Fall-arrest equipment, S3	7 Medium
	Equipment failure	16 Severe	<ul style="list-style-type: none"> A competent person must inspect harness and associated equipment daily prior to operation using the CC Q030428 <i>Harness Checklist</i> or equivalent – L2 Harnesses must be within 10 years of D.O.M and have all labels legible – L2 Harness and associated equipment must be maintained on a register, stating pass of routine inspections by a competent person in accordance with the Q030409 <i>Inspection Compliance Matrix</i> and a copy attached to the S030407 <i>Harness Use Permit</i> – L2 	NSW WH&S Reg 2017, s39 and 213 Plant CoP AS 1891.4 Fall-arrest equipment, S5	7 Medium

Activity / Item	Hazards / Risks	Initial Risk Score	Control Measures / Risk Treatment	Legislation, Codes of Practice, and Guidelines (including other available information on hazard / risk)	Residual Risk Score
	Suspended trauma	16 Severe	<ul style="list-style-type: none"> A task-specific SWMS and Retrieval Plan must be developed per the <i>S030407 Harness Use Permit</i> and approved by CC project management – L3 First-aid must be notified that harnesses are in use and operators to have suitable communication to supervisory personnel – L3 CC shall develop and maintain a <i>Q070603 Project Emergency Plan</i> and communicate emergency procedures to all. Emergency procedures for suspended worker are documented in the PEP – L3 	NSW WH&S Reg 2017, s80 and 217 Falls CoP, S3.6 and 3.7 Construction CoP, S7.6	5 Low

Activity / Item	Hazards / Risks	Initial Risk Score	Control Measures / Risk Treatment	Legislation, Codes of Practice, and Guidelines (including other available information on hazard / risk)	Residual Risk Score
4.7 Rope Access	Work at Height – falling object / falling person / slip/trip/fall	16 Severe	<ul style="list-style-type: none"> In the initial planning phase for the works consider if it is reasonably practicable to complete the works from the ground, solid construction, scaffold, behind a guardrail, or from an EWP or similar – L2 Follow the controls listed in the <u>[HRCW] Work that involves the risk of a person or object falling more than 1.8m</u> section – L3 Rope Access equipment is only to be used after approval of a CC S030407 <i>Harness Use Permit</i> by CC – L2 All anchor points must be certified by a competent person and adequate for intended use. Certification to be attached to the CC Harness Use Permit – L2 A competent person, with Working at Height training, may assess an anchor point as being suitable to an ultimate strength of 15KN e.g., a large structural beam or concrete column – L2 A suitable communication method is to be instigated between team members. This is to include communication methods with an isolated worker if only one person on the rope. Follow the controls listed in the <u>Lone working</u> section – L2 If access is via an unprotected roof area complete a CC S030435 <i>Roof Access Permit</i> prior to accessing the roof – L3 	NSW WH&S Reg 2017, S79 Falls CoP, s3.6 and 3.7	7 Medium
	Incompetent user, inspector, supervisor, manager	16 Severe	<ul style="list-style-type: none"> All workers involved in the instalment, inspection, maintenance, operation, and supervision must have documented evidence in Simpel of completed training and competencies as per the Q030409 <i>Inspection Compliance Matrix</i>: – L2 <ul style="list-style-type: none"> Level 1 IRATA Level 2 IRATA Level 3 IRATA CC may consider SPRAT qualified workers, via the use of a Risk Assessment A minimum of two workers must be on site and always be participating in the works – L2 A Level 3 IRATA trained supervisor is to be on site, the other workers in the Rope Access team may be Level 1, 2 or 3 – L3 All workers have been consulted on the SWMS and task specific planning – L3 Weather conditions are assessed each day prior to starting works and during the day to consider strong winds, storms, heat, cold and UV – L2 S030407 <i>Harness Use Permits</i> must have attached evidence that the attachment point/s have – L2 <ul style="list-style-type: none"> design certification by a suitably qualified engineer installation certified by a suitably qualified person an appropriate inspection regime applied 	NSW WH&S Reg 2017, S39 Falls CoP, s3.6 and 3.7 Plant CoP, S3.3 AS 1891.4 Fall-arrest equipment, S3 Safe Work Australia guide to managing risk of industrial rope access systems	7 Medium

Activity / Item	Hazards / Risks	Initial Risk Score	Control Measures / Risk Treatment	Legislation, Codes of Practice, and Guidelines (including other available information on hazard / risk)	Residual Risk Score
	Equipment failure	16 Severe	<ul style="list-style-type: none"> A competent person must inspect rope access equipment daily prior to operation using the CC Q030428 <i>Harness Checklist</i> or equivalent – L2 Equipment must be within (10) years of D.O.M and have all labels legible – L2 Rope access equipment must be maintained on a register, stating pass of routine inspections by a competent person in accordance with the Q030409 <i>Inspection Compliance Matrix</i> and a copy attached to the S030407 <i>Harness Use Permit</i> – L2 Each rope access worker must remain attached to two lines, always, during the planned works, a primary and a backup – L2 Each rope access line must be rigged to hang free from hazardous surfaces, including sharp edges, abrasive or hot surfaces or hazardous plant – L1 If hot works are required, provide rope protection like steel lanyards or hot works blankets – L2 Exclusion zones are to be established below the works – L2 All tools and objects will be secured to a lanyard or for large/heavy tools a separately anchored line – L2 The workers have a helmet designed for rope access work and other PPE as required by the environment and task – L3 	NSW WH&S Reg 2017, s39 and 213 Plant CoP AS 1891.4 Fall-arrest equipment, S5	7 Medium
	Suspended trauma	16 Severe	<ul style="list-style-type: none"> A task-specific Safe Work Method Statement, Retrieval Plan and Emergency Procedures must be developed per the S030407 <i>Harness Use Permit</i> and approved by CC project management – L3 Follow the controls listed in the <u>Suspended worker</u> section – L3 First-aid must be notified that harnesses are in use and operators to have suitable communication to supervisory personnel – L3 Rope Access Area must be identified on the Project Emergency Plan (PEP) and approved by CC Emergency Controller – L3 CC shall develop and maintain a Project Emergency Plan (PEP) and communicate emergency procedures to all. Emergency procedures for suspended worker are documented in the PEP – L3 	NSW WH&S Reg 2017, s80 and 217 Falls CoP, S3.6 and 3.7 Construction CoP, S7.6	5 Low

Activity / Item	Hazards / Risks	Initial Risk Score	Control Measures / Risk Treatment	Legislation, Codes of Practice, and Guidelines (including other available information on hazard / risk)	Residual Risk Score
4.8 Ladders and Trestles	Work at Height – falling object / falling person / slip/trip/fall	16 Severe	<ul style="list-style-type: none"> Follow the controls listed in the [HRCW] Work that involves the risk of a person or object falling more than 1.8m section – L3 Working platforms must be industrial grade and used as per manufacturer instructions – L2 A CC S030415 Ladder Permit is required prior to the use of an A frame or step ladder (except for access & egress) – L2 Ensure access ladders are secured and extend at least 1m past the landing area – L2 Extension ladders to be secured at the top as a minimum, installed at 1:4 ratio and visually checked before use – L2 A working platform must be at least 300mm wide. Trestles are to be at least 2 planks wide – L2 Trestle may only be used up to a 1.5m span – L2 Ensure fall prevention is in place next to identified hazards, open windows, or unprotected edges – L2 	NSW WH&S Reg 2017 S78 AS 1892.5 Ladders NSW WH&S Reg 2017, S217 Falls CoP, S3.6 and 3.7 Construction CoP, S7.6	8 Medium
	Electric shock	16 Severe	<ul style="list-style-type: none"> No metal ladders to be used for electrical work – L1 	NSW WH&S Reg 2017 S78	7 Medium
	Ladder / trestle collapse	16 Severe	<ul style="list-style-type: none"> Ladders and Trestles must be industrial grade with SWL displayed – L2 Ladders and Trestles must be used as per manufacturers guidelines and fully extended – L2 	NSW WH&S Reg 2017 S78	7 Medium

Activity / Item	Hazards / Risks	Initial Risk Score	Control Measures / Risk Treatment	Legislation, Codes of Practice, and Guidelines (including other available information on hazard / risk)	Residual Risk Score
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5. Building Services

5.1 [HRCW] Work that is carried out on or near pressurised gas distribution mains or piping	Uncontrolled release of substance	16 Severe	<ul style="list-style-type: none"> Task specific SWMS must be developed prior to commencing works – L3 A <i>Q070407 Latent Conditions Checklist</i>, <i>Q070406 Pre-excavation Documentation</i> form and <i>Q070409 Designated Plant Setup Locations</i> form are to be developed by the CC project team pre-commencement and uploaded to Simpel Documents – L3 Ensure all services (gas, water, sewer, electricity, and telecommunications etc.) are physically located prior to starting works – L2 Ensure services are isolated, with isolation points clearly identified and physically isolated and/or locked out / tagged out – L2 Contact CC site management prior to any isolation of services – L2 All known services within one 1m of the excavation / trench location in a work area are to be progressively exposed by hand (potholed) – L2 Where strata changes occur or information on services are limited site-specific procedures shall be developed which may include – L2: <ul style="list-style-type: none"> Using remote location devices Exposing services at sufficient intervals to identify their location and/or lie Using gas detectors Hand digging, using hand tools with non-conductive handles All known HP Gas Lines within two 2m of the excavation / trench location in a work area require 'Jemena' or the equivalent authority are to be contacted prior to commencing work to coordinate a "services identification for high pressure lines" – L3 Work zones must be isolated, and barriers erected according to the site specific needs and tasks – L3 CC shall develop and maintain a <i>Q070603 Project Emergency Plan</i> and communicate emergency procedures to all – L3 If an Emergency situation occurs, follow the controls listed in the Gas Leak section – L3 	NSW WH&S Reg 2017, S305 Excavation CoP AS 5601 Gas HIGH RISK WORK s291(k) Work Health Safety Regulations	7 Medium
	Manual Handling	12 High	<ul style="list-style-type: none"> Follow the controls listed in the Manual Handling section – L3 		7 Medium

Activity / Item	Hazards / Risks	Initial Risk Score	Control Measures / Risk Treatment	Legislation, Codes of Practice, and Guidelines (including other available information on hazard / risk)	Residual Risk Score
5.2 [HRCW] Work that is carried out on or near energised electrical installations or services	Failure to identify if electrical equipment is energised	16 Severe	<ul style="list-style-type: none"> Task specific SWMS must be developed prior to commencing works – L3 A Q070407 Latent Conditions Checklist, Q070406 Pre-excavation Documentation form and Q070409 Designated Plant Setup Locations form are to be developed by the CC project team pre-commencement and uploaded to Simpel Documents – L3 Before electrical work is carried out on electrical equipment, the equipment must be tested by a competent electrician to determine whether or not it is energized. Exposed parts should be treated as live until isolated and proven not to be energized – L1 High Voltage exposed parts must be earthed after being de-energised – L1 	NSW WH&S Reg 2017, S291 (K) HIGH RISK WORK s291(k) Work Health Safety Regulations	7 Medium
	Inadvertent re-energisation of de-energised equipment	16 Severe	<ul style="list-style-type: none"> Electrical equipment that has been de-energized to allow electrical work to be carried out is not to be inadvertently re-energised while the work is being carried out. Workers must confirm the isolation prior to carrying out related works – L1 Subcontractors must complete an CC's Q030422 Isolation of Electrical Services Permit, or their own Isolation Permit prior to commencing any works on a potentially 'live' service/board/equipment – L3 	NSW WH&S Reg 2017, S291 (K)	7 Medium

Activity / Item	Hazards / Risks	Initial Risk Score	Control Measures / Risk Treatment	Legislation, Codes of Practice, and Guidelines (including other available information on hazard / risk)	Residual Risk Score
	Electric work on energised electrical equipment	16 Severe	<ul style="list-style-type: none"> ▪ No work is to be carried out on live electrical equipment unless: <ul style="list-style-type: none"> ○ It is necessary that the electrical equipment to be worked on is energised for the work to be carried out properly or for testing purposes – L1 ○ It is necessary for the purposes of testing required under clause 155 of the WH&S regulation – L2 ○ There is no reasonable alternative means of carrying out the work – L2 ▪ Task specific SWMS must be developed prior to commencing works – L3 ▪ For all live low voltage switchboard work and/or high-risk testing / fault finding the electricians completing the work are to have available in the immediate area a Low Voltage Rescue Kit and competent 'Safety Observer' trained in its use – L3 <p>Low Voltage Rescue Kits must consist of:</p> <ul style="list-style-type: none"> ○ Weatherproof bag, orange high visibility, synthetic non-tear material with unique Emergency "Glow in The Dark" Strip, carry strap ○ Rescue crook, double insulated fiberglass 25mm and tested to withstand 5kV between the handle and hook ○ Insulated gloves, size 11, 1000V (AS/NZS 2225) ○ Emergency isolation sign 260 x 175mm ○ Fire Blankets 1800 x 1200mm (AS/NZS 3504) ○ "Isolate Here in Emergency" sign ○ Torch LED dolphin non-conductive 2x D size batteries ○ Multi trauma dressing EO sterilized ○ Thermal accident shock blanket ○ CPR face mask (CE Approved) ○ List of contents and conformity card <ul style="list-style-type: none"> ▪ Low Voltage Rescue Kits must be fully inspected, and items are to be tested in accordance with manufacturer requirements at six-monthly intervals. Items that are defective, faulty or out of date are to be immediately removed, replaced by a compliant item, and/or tagged out of service until repaired and/or tested by a competent person – L3 	NSW WH&S Reg 2017, S291 (K)	7 Medium

Activity / Item	Hazards / Risks	Initial Risk Score	Control Measures / Risk Treatment	Legislation, Codes of Practice, and Guidelines (including other available information on hazard / risk)	Residual Risk Score
	Unauthorised access to equipment while it is being worked on	16 Severe	<ul style="list-style-type: none"> Only authorised persons permitted in the immediate area where electrical work on energized electrical equipment is being carried out – L1 All workers must be trained and competent to carry out assigned tasks. Licenced electrician always on site during the works to supervise – L3 	NSW WH&S Reg 2017, S291 (K)	7 Medium
	Use of inadequate or faulty equipment or procedures	16 Severe	<ul style="list-style-type: none"> Use of fit-for-purpose tools and equipment that have been properly tested and are maintained in good working order. Inspect prior to each use and remove any faulty equipment from the site – L1 All workers shall be trained in the correct and safe use of equipment and PPE – L3 The electrician site supervisor shall be allocated responsibility to ensure the SWMS is implemented, monitored, and reviewed as required – L3 The electrician site supervisor shall be a qualified electrician trained in first aid and emergency response procedures – L3 	NSW WH&S Reg 2017, S291 (K)	7 Medium
	Failure to assess the risks associated with the electrical work	16 Severe	<ul style="list-style-type: none"> All workers shall be inducted into site-specific SWMS. An additional risk assessment is to be completed in consultation with workers if the SMWS does not identify all the risk due to site-specific or changed conditions – L1 Work area shall be cleared of obstructions to allow for easy access and exit – L2 The point at which the electrical equipment is to be disconnected or isolated from the electricity supply must be clearly marked or labelled, clear of obstructions and capable of being operated quickly – L2 Workers must be trained and competent to carry out their tasks. Competent supervisor on site at all times – L3 	NSW WH&S Reg 2017, S291 (K)	7 Medium
	Contact with energised electrical services when working on it with equipment	16 Severe	<ul style="list-style-type: none"> No work on live power where practicable – L1 Isolation/Energisation Permit System utilized to verify testing of completion of task to the standard required. No person is authorised to energise power without a completed Permit – L1 Safe work practices shall be practiced ensuring while electrical work is being carried out on energised electrical equipment, all persons are prevented from creating electrical risks by inadvertently making contact with an exposed energized component of the equipment – L1 All workers must be trained and competent to carry out assigned tasks. Licenced electrician on site at all times to supervise works – L3 Before You Dig – Refer to current approved excavation drawings – L3 	NSW WH&S Reg 2017, S291 (K)	7 Medium

Activity / Item	Hazards / Risks	Initial Risk Score	Control Measures / Risk Treatment	Legislation, Codes of Practice, and Guidelines (including other available information on hazard / risk)	Residual Risk Score
	Electric Shock / electrocution	16 Severe	<ul style="list-style-type: none"> No electrical equipment should be assumed to be de-energized after isolation. Always test prior to touching using multi-meter – L1 Clearly identify the electrical equipment to be worked on and the appropriate point of supply. Identification of equipment should include labelling that is both consistent and clear at the equipment to be worked on and all points of possible isolation – L2 The electrical equipment to be worked on must be isolated from all sources of supply either by opening switches, removing fuses, or switching circuit breakers. Where isolation is affected at a removable or rack-out circuit breaker or combined fuse switch then it should be racked out or removed to provide a visible break for isolation verification – L2 All electrical equipment, unless proven to be de-energised, must be treated as live. Any voltage tests must be conducted between all conductors and between all conductors and earth. Testing must be carried out to confirm isolation by use of a multi-meter – L2 Multi Metre must be tested for correct operation immediately before use, and again after use to confirm that the instrument is still working – L2 All circuit breakers, switches and combined fuse switch units should be locked off where possible. Where fitted locking facilities are not available, temporary securing devices must be used. Securing devices must be able to withstand likely disruption – L2 Locks to be used include; padlocks, lockout stations, lockout kits, circuit breaker lockouts, valve lockouts, plug lockouts, group lock boxes, and safety lockout jaws (sometimes called hasps). Tags to be used where required are out of service tags and personal danger tags. Isolation/lockout tags shall have plant description, name, and contact details of person placing lock/tag isolation, authorise person to remove lock/tag, date, time, and signature – L2 Notices must be clearly understandable and where appropriate, signed and dated by all personnel involved in the work. Tags should be only removed with the permission of all the signatories to the tags or if not possible by the signatory's immediate supervisor – L2 	NSW WH&S Reg 2017, S291 (K)	7 Medium
	Manual Handling	12 High	<ul style="list-style-type: none"> Follow the controls listed in the Manual Handling section – L3 		7 Medium

Activity / Item	Hazards / Risks	Initial Risk Score	Control Measures / Risk Treatment	Legislation, Codes of Practice, and Guidelines (including other available information on hazard / risk)	Residual Risk Score
5.3 Electrical Construction Wiring	Electric Shock / electrocution	16 Severe	<ul style="list-style-type: none"> Follow the controls listed in the [HRCW] Work that is carried out on or near electrical installations or services section – L3 Prior to the energisation of any electrical circuit on site (excluding Temporary Power boards that are considered in the Temporary Electrical Powerboards section) a CC Q030423 Electrical Energisation Permit is to be completed – L3 Prior to the initial energisation of any electrical circuit on a project, CC are to communicate the time and date of the occurrence to all workers on site. This communication can take the form of a whole of site toolbox talk, CC Daily Prestart, Simpel Notification and/or signage – L3 	NSW WH&S Reg 2017, S291 and 299 Electrical CoP AS 3000 Electrical	5 Low
5.4 Electrical Tools and Extension Leads	Damage to electrical tool / lead causing shock or fire	16 Severe	<ul style="list-style-type: none"> Electrical leads Tested and tagged as per Electrical Code of Practice (frequencies specified in PMP) – L3 Checked prior to use. If faulty, removed from service until repaired – L2 Recorded on a register which is provided to CC – L3 Flexible leads must not be run across metal components and must be protected against damage – L2 No extension leads set up to be greater than 30m – L1 No Double Adaptors allowed on site – L1 All 3 pin plugs and extension lead sockets shall be non-rewireable or transparent. – L2 Extension lead use shall be limited to the floor on which the power is sourced, except for falsework or service shafts – L2 	NSW WH&S Reg 2017, Part 4.7 Electrical CoP Industry Standard – Electrical, S5 AS 3760 Electrical	8 Medium
	Trip / Slip / Fall	13 High	<ul style="list-style-type: none"> Extension leads must be raised to a practical level using insulated means. – L2 	NSW WH&S Reg 2017, S40 Construction CoP, S7.1	4 Low

Activity / Item	Hazards / Risks	Initial Risk Score	Control Measures / Risk Treatment	Legislation, Codes of Practice, and Guidelines (including other available information on hazard / risk)	Residual Risk Score
5.5 Temporary Electrical Powerboards	Electric shock	16 Severe	<ul style="list-style-type: none"> The project electrician is to apply for a <i>S080431 Temporary Power board Installation Permit</i>, via Simpel, and obtain CC approval, prior to installing all temporary power boards on the project – L3 The project electrician is to apply for a <i>S080432 Temporary Power board Operation Permit</i>, via Simpel, and obtain CC approval, prior to switching on a new temporary switchboard for use on the project. The <i>S080432 Temporary Power board Operation permit</i> will track that the quarterly RCD testing and inspections are occurring as required – L3 Temporary Power boards are to be: <ul style="list-style-type: none"> Tested and tagged as per the Electrical Code of Practice – L3 Provided with RCD protection for all power outlets – L2 Provided with an insulated tie bar for securing leads to – L2 a non-conductive support to assist in keeping cables off the floor or ground – L2 	NSW WH&S Reg 2017 Division 7.7 AS 3760 Electrical Electrical CoP AS 3012 Electrical	8 Medium
	Inadequate signage	12 High	<ul style="list-style-type: none"> The signage on Temporary Power boards must include: – L3 <ul style="list-style-type: none"> 'Danger – Live Parts' where the live parts are a unique Temporary Power board number the Switchboard number of the board it is fed from Identification of the main switch 'Keep Closed–Run All Leads Through Bottom' sign on the Door – L3 	Electrical CoP Industry Standard – Electrical AS 3012 Electrical	4 Low
	Fire	15 Severe	<ul style="list-style-type: none"> Ensure an appropriate fire extinguisher is available at or adjacent to all switchboards – L2 	Industry Standard – Electrical	4 Low
	Access / Egress	12 High	<ul style="list-style-type: none"> Ensure clear access of 1.5 m² is always provided around the power board – L2 	NSW WH&S Reg 2017, S40 Industry Standard – Electrical, S5	3 Low

Activity / Item	Hazards / Risks	Initial Risk Score	Control Measures / Risk Treatment	Legislation, Codes of Practice, and Guidelines (including other available information on hazard / risk)	Residual Risk Score
	Inadequate construction	12 High	<ul style="list-style-type: none"> Robust construction rated to IP23 – L2 Provided with a door that requires the use of a tool for removal, has a facility for locking, and has a means to be retained in the open position – L2 Powerboards shall be fitted with a separate main isolating switch for 'de-energizing' all outgoing circuits and in addition to that a 'lockable cover' is fitted over circuit breakers and RCDs located on that switchboard, which does not prevent access to the main isolating switch – L2 Socket outlets shall be rated at not less than 10Amp, including at least one 15Amp or 16 Amp single phase socket – L2 Powerboards shall be securely mounted, unless of a stable freestanding design – L2 Powerboards shall be secured to working deck. Where this is not practicable, a <i>S030106 Risk Assessment</i> is to be completed that considers the situation, including the freestanding design capacity of the relevant switchboard – L3 	Plant CoP, S3.2 Industry Standard – Electrical, S5 AS 3760 Electrical AS 3012 Electrical	8 Medium
	Slips and Trips	10 Medium	<ul style="list-style-type: none"> Maintain housekeeping around and clear access to switchboard – L2 	NSW WH&S Reg 2017, S40 Construction CoP, S7.1	3 Low
	Electrical shock	16 Severe	<ul style="list-style-type: none"> No Live Work to be conducted, unless the risk of de-energising presents a greater risk – L1 Installation of electrical services shall be by a licensed electrician and in accordance with AS/NZS 3000 & AS/NZS 3012 – L2 Overhead wiring shall be positioned so that they are protected from mechanical, liquid or high temperature damage – L2 RCD to be installed on all power outlets, site sheds and amenities – L2 	NSW WH&S Reg 2017 Part 4.7 Manual Tasks CoP AS 3000 Electrical AS 3012 Electrical Electrical CoP	7 Medium

Activity / Item	Hazards / Risks	Initial Risk Score	Control Measures / Risk Treatment	Legislation, Codes of Practice, and Guidelines (including other available information on hazard / risk)	Residual Risk Score
5.6 [HRCW] Work that is carried out on or near chemical, fuel, or refrigerant lines	Explosion	12 High	<ul style="list-style-type: none"> Task specific SWMS must be developed prior to commencing works – L3 Competent person to join/weld pipework – L2 Develop and follow procedures for pressure testing pipework – L3 A Q070407 <i>Latent Conditions Checklist</i>, Q070406 <i>Pre-excavation Documentation</i> form and Q070409 <i>Designated Plant Setup Locations</i> form are to be developed by the CC project team pre-commencement and uploaded to Simpel Documents – L3 If planning an excavation near a chemical, fuel or refrigerant line follow the controls listed in the [HRCW] Work that is carried out in or near a shaft or trench with an excavated dept greater than 1.5m and Location and Isolation of Services (above and below ground) section – L3 	AS 1571:2020 AS 1210:2010 AS 1345:1995 HIGH RISK WORK s291(k) Work Health Safety Regulations	4 Low
	Release of gas to the environment	12 High	<ul style="list-style-type: none"> Prior to commissioning or demolition, measures must be taken to avoid fluorocarbon refrigerants such as Hydrochlorofluorocarbons (HCFC), Hydro-fluorocarbons (HFC) and Chlorofluorocarbons (CFC) being released to the atmosphere – L2 		4 Low
5.7 Hydraulics	Work at Height – falling object / falling person	16 Severe	Follow the controls listed in the [HRCW] Work that involves the risk of a person or object falling more than 1.8m section – L3		7 Medium
	Hazardous Substances	12 High	Follow the controls listed in the Hazardous Substances / Dangerous Goods (HSDG) and Hazardous Substance Incident section – L3		4 Low
	Fire	15 Severe	Follow the controls listed in the Hot Works section – L3		8 Medium
	Manual Handling	12 High	Follow the controls listed in the Manual Handling section – L3		4 Low

Activity / Item	Hazards / Risks	Initial Risk Score	Control Measures / Risk Treatment	Legislation, Codes of Practice, and Guidelines (including other available information on hazard / risk)	Residual Risk Score
5.8 Mechanical Services Installation	Electric shock or explosion	16 Severe	Follow the controls listed in the [HRCW] Works that are carried out on or near chemical, fuel, or refrigerant lines section – L3 Follow the controls listed in the [HRCW] Work that is carried out on or near electrical installations or services section – L3		7 Medium
	Work at Height – Falling object / Falling person	16 Severe	Follow the controls listed in the [HRCW] Work that involves the risk of a person or object falling more than 1.8m section – L3		7 Medium
	Hazardous Substances	12 High	Follow the controls listed in the Hazardous Substances / Dangerous Goods (HSDG) and Hazardous Substance Incident section – L3		4 Low
	Fire	15 Severe	Follow the controls listed in the Hot Works section – L3		8 Medium
	Manual Handling	12 High	Follow the controls listed in the Manual Handling section – L3		4 Low
5.9 Fire Services Installation	Electric shock	16 Severe	Follow the controls listed in the [HRCW] Work that is carried out on or near electrical installations or services section – L3		7 Medium
	Work at Height – falling object / falling person	16 Severe	Follow the controls listed in the [HRCW] Work that involves the risk of a person or object falling more than 1.8m section – L3		7 Medium
	Hazardous Substances	12 High	Follow the controls listed in the Hazardous Substances / Dangerous Goods (HSDG) and Hazardous Substance Incident section – L3		4 Low
	Fire	15 Severe	Follow the controls listed in the Hot Works section – L3		8 Medium
	Manual Handling	12 High	Follow the controls listed in the Manual Handling section – L3		4 Low
5.10 Lifts	Electric shock	16 Severe	Follow the controls listed in the [HRCW] Work that is carried out on or near electrical installations or services section – L3		7 Medium
	Work at Height – falling object / falling person	16 Severe	<ul style="list-style-type: none"> Lift gates / Lift cages are to be installed prior to removal of fall protection in the lift shaft – L2 Ensure only authorised, trained and competent person has key to open the Lift gates – L2 Lift gates to have swing barriers so door only opens outward – L2 Lift gates to remain closed and locked when unattended – L2 Ensure adequate task lighting is in place before entering lift shaft – L2 Follow the controls listed in the [HRCW] Work that involves the risk of a person or object falling more than 1.8m section – L3 	NSW WH&S Reg 2017, S217 Falls CoP, S3.6 and 3.7	7 Medium
	Hazardous Substances	12 High	Follow the controls listed in the Hazardous Substances / Dangerous Goods (HSDG) and Hazardous Substance Incident section – L3		4 Low
	Fire	15 Severe	Follow the controls listed in the Hot Works section – L3		8 Medium
	Manual Handling	12 High	Follow the controls listed in the Manual Handling section – L3		4 Low

Activity / Item	Hazards / Risks	Initial Risk Score	Control Measures / Risk Treatment	Legislation, Codes of Practice, and Guidelines (including other available information on hazard / risk)	Residual Risk Score
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6. Building Structure

6.1 [HRCW] Work that involves demolition of an element of a structure that is load bearing or otherwise related to the physical integrity of the structure	Unplanned collapse	16 Severe	<ul style="list-style-type: none"> Complete a Q070407 <i>Latent Conditions Checklist</i> prior to the project commencing – L3 Obtain engineer approved drawings / specifications / advice on for all demolition works – L2 Task specific SWMS must be developed prior to commencing works – L3 Inspect structural alterations or repairs as per engineer approved drawings / specifications during weekly S030402 <i>Project Inspection Records</i> to ensure elements have not deteriorated – L3 All temporary props installed on the project are to be effectively secured top and bottom to prevent dislodgement – L2 Structural support systems (including formwork, falsework, shoring, panel bracing, edge protection, propping and other structural support systems) have been: <ul style="list-style-type: none"> designed by a qualified designer – L2 detailed on up-to-date drawings/plans – L3 changes to the design or installed system are authorised and signed off by a qualified designer – L2 	NSW WH&S Reg 2017, S142 Demolition CoP, S3 HIGH RISK WORK s291(k) Work Health Safety Regulations	7 Medium
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Activity / Item	Hazards / Risks	Initial Risk Score	Control Measures / Risk Treatment	Legislation, Codes of Practice, and Guidelines (including other available information on hazard / risk)	Residual Risk Score
6.2 Formwork erection and dismantle	Formwork Collapse	16 Severe	<ul style="list-style-type: none"> Follow the controls listed in the [HRCW] Work that involves structural alteration requiring temporary support to prevent collapse section Ensure an <i>S110810 Suspended Deck Sequence</i> is progressed through the design, erection, pre pour, post pour, pre stripping and post stripping – L3 Ensure Formwork Design Plans are obtained – L3 Ensure a copy of all applicable engineers credentials are stored in the SharePoint Project Safety folder – L3 Ensure a documented inspection of materials to be used is to be completed by the Formworker prior to installation and forwarded to CC – L3 Formwork shall be erected, stripped and back-propped by competent persons and in accordance with AS/NZS 3610 – L2 Ensure CC's Concrete Placement Checklists are completed prior to pour – L3 Ensure CC's Pre-Strip Checklist is completed prior to stripping – L3 Ensure formwork is not braced against other structures unless detailed authorisation is provided by a structural engineer – L2 Shutter supports shall have engineered design drawings and/or WLL marked – L2 / L3 	NSW WH&S Reg 2017, S217 Formwork CoP, S4 AS 3610:1995 Formwork AS 3610.1:2010 Formwork Documentation	7 Medium
	Work at Height – Falling object / person	16 Severe	<ul style="list-style-type: none"> Ensure that at no time are workers exposed to a fall exceeding 1.8m – L2 Guardrails and toe boards, or mesh screens incorporating kick-plates shall be provided where a person or object could fall 1.8m or more – L2 Where the height above the ground is greater than 1.8m and a leading edge is unguarded, a continuous physical barrier shall be installed 2m or more from the leading edge, with appropriate "No access" signage – L2 Ensure the leading edge is protected by additional joists (lazy joists), nets, guardrails or similar – L2 Additionally, where work is carried out on a leading edge there shall also be suitable barriers and signage installed on the level immediately below at a distance not less than 2m from the workface to prevent entry by persons not involved – L2 Ensure minimum 2 planks (450mm wide) are used when working from temporary working decks. These must extend at least 150mm past each frame – L2 All temporary props installed on the project are to be effectively secured top and bottom to prevent dislodgement – L2 	NSW WH&S Reg 2017, S217 Falls CoP, S3.6 and 3.7 Formwork CoP, S4 Construction CoP, S7.6 AS 3610.1:2018 Formwork	7 Medium

Activity / Item	Hazards / Risks	Initial Risk Score	Control Measures / Risk Treatment	Legislation, Codes of Practice, and Guidelines (including other available information on hazard / risk)	Residual Risk Score
	Access & Egress	12 High	<ul style="list-style-type: none"> ▪ Ensure formwork decks shall have safe and suitable access and egress – L2 <ul style="list-style-type: none"> ○ 1st preference – Stretcher stair + secondary stair ○ 2nd preference – Single width stair access (e.g. Combisafe) + secondary stair access. ○ 3rd preference – single width stair access with secondary ladder access ○ 4th preference – 2 x ladder access ▪ Ensure access ladders are secured and extend at least 1m past the landing area – L2 ▪ Housekeeping must be maintained – L2 	NSW WH&S Reg 2017, S40	4 Low
	Explosive Power Tools	13 High	Follow the controls listed in the Explosive Power Tools (EPT) section – L3		5 Low
	Manual Handling	13 High	<ul style="list-style-type: none"> ▪ Follow the controls listed in the Manual Handling section – L3 ▪ Erect bearers from underneath the working deck – L2 	NSW WH&S Reg 2017, S60 Manual Tasks CoP	4 Low

Activity / Item	Hazards / Risks	Initial Risk Score	Control Measures / Risk Treatment	Legislation, Codes of Practice, and Guidelines (including other available information on hazard / risk)	Residual Risk Score
6.3 Installation of Columns	Work at Height – Falling object / falling person	16 Severe	<ul style="list-style-type: none"> Install column reo prior to erection of Formwork – L1 Column openings must have suitable cover until steel work placed in hole – L2 Barricading to be used and worked from outside when covers removed for large columns, until steel installed – L2 Work zones to be demarked and barriers are erected according to the site-specific needs and tasks undertaken – L2 Follow the controls listed in the [HRCW] Work that involves the risk of a person or object falling more than 1.8m section – L3 	NSW WH&S Reg 2017, S217 Falls CoP, S3.6 and 3.7 AS 3610.1 Formwork	7 Medium
	Cuts	12 High	<ul style="list-style-type: none"> All bars under 2.5m in height from formwork deck must be capped – L2 	NSW WH&S Reg 2017, S49	7 Medium
6.4 Jump Form	Work at Height – Falling object / falling person / Slip/trip/fall	16 Severe	<ul style="list-style-type: none"> Hoists and stairs to be installed when possible to remove the use of ladders – L1 Housekeeping must be maintained – L3 Hangers to have minimum of 2 boards and boards must be lapped by at least 150 mm at joins and corners – L2 Isolate area below when raising the Jump Form – L2 Trailing decks to have appropriate handrail system – L2 Follow the controls listed in the [HRCW] Work that involves the risk of a person or object falling more than 1.8m section – L3 	NSW WH&S Reg 2017, S217 Formwork CoP, S4 AS 3610.1 Formwork	7 Medium
	Fatigue / Stress	12 High	<ul style="list-style-type: none"> Follow the controls listed in the Fatigue and Stress section – L3 Drinking water and toilet to be provided in Jump Form – L3 	NSW WH&S Reg 2017, S40 Work Environment CoP	4 Low
	Formwork Collapse	16 Severe	<ul style="list-style-type: none"> Emergency plan to be included into the Jump Form SWMS – L3 Formwork shall have engineered design drawings and/or the WLL marked on them – L2 	Formwork CoP, AS 3610.1 Formwork	7 Medium
	Manual Handling	12 High	<ul style="list-style-type: none"> Follow the controls listed in the Manual Handling section – L3 		4 Low

Activity / Item	Hazards / Risks	Initial Risk Score	Control Measures / Risk Treatment	Legislation, Codes of Practice, and Guidelines (including other available information on hazard / risk)	Residual Risk Score
6.5 Post tension systems	Cut on sharp edges	12 High	<ul style="list-style-type: none"> Obtain suitable location for Bripak and coils of strand from CC Foreman before craning it onto the deck – L2 	NSW WH&S Reg 2017, S40 Construction CoP	4 Low
	Release of tendon under stress	15 Severe	<ul style="list-style-type: none"> Use a portable barricade within 2m of the jack which incorporates two sheets of form ply or equivalent and at least 75mm apart when conducting final stress – L2 “Stressing In-Progress” warning signage to be displayed in immediate area and at entrance way to the area or floor – L3 	NSW WH&S Reg 2017, S35 Plant CoP, S3.2	8 Medium
	Work at Height – Falling object / falling person /	16 Severe	Follow the controls listed in the [HRCW] Work that involves the risk of a person or object falling more than 1.8m section – L3		7 Medium
	Plant	16 Severe	Follow the controls listed in the [HRCW] Work that is carried out in an area where there is movement of powered mobile plant section – L3		7 Medium
	Manual Handling	12 High	Follow the controls listed in the Manual Handling section – L3		4 Low
	Concreting	12 High	Follow the controls listed in the Concrete Placement section – L3		4 Low
	Mechanical / Structural Failure	16 Severe	<ul style="list-style-type: none"> Bripak frame shall have design drawings and/or the WLL marked on them – L2 Documented on plant / equipment register, including maintenance inspection – L3 Daily inspection of the structural equipment / frames prior to use – L3 Barricade the Bripak area when running cables – L2 Use cable feeder where possible – L2 Ensure a braking method is in place to prevent cable overrun – L2 Ensure all ducts and cables are covered – L2 Obtain approval prior to initial and final stressing from CC Foreman – L2 Ensure eye and ear protection are worn when cutting cables – L3 	NSW WH&S Reg 2017, S35 Plant CoP	7 Medium

Activity / Item	Hazards / Risks	Initial Risk Score	Control Measures / Risk Treatment	Legislation, Codes of Practice, and Guidelines (including other available information on hazard / risk)	Residual Risk Score
6.6 Steelfixing	Cut on sharp edges	12 High	<ul style="list-style-type: none"> Install safety caps on all protruding bars – L2 Documented on plant / equipment register, including maintenance inspection – L3 Daily inspection of the Structural equipment / frames prior to use – L3 Identification of the weights of the structures being assembled on the Structural equipment / frames – L3 Ensure gloves are worn around sharp edges – L2 	NSW WH&S Reg 2017, S40	4 Low
	Manual Handling	12 High	Follow the controls listed in the Manual Handling section – L3		4 Low
	Slips and trips	12 High	<ul style="list-style-type: none"> Ensure good housekeeping practices – L2 Safety footwear to be in good condition – L3 	NSW WH&S Reg 2017, S40 Construction CoP	4 Low
	Structural equipment / frames collapsing	14 Severe	<ul style="list-style-type: none"> De-burr bars before delivery, where possible – L2 Structural equipment / frames shall have design drawings / documents and/or the WLL marked on them – L2 	NSW WH&S Reg 2017, S35 AS 4991 Lifting Devices	7 Medium
	Cutting steel - Grinding	12 High	Follow the controls listed in the 9" Angle Grinder & Quick Cut Saws section – L3		4 Low
	Hot works	14 Severe	Follow the controls listed in the Hot Works section – L3		7 Medium
	Work at Height – Falling object / falling person /	16 Severe	<ul style="list-style-type: none"> All steelfixing stands must have engineered design drawings; WLL / SWL displayed and have an appropriate inspection and maintenance regime by a competent person as per the Lifting Devices section – L3 Follow the controls listed in the [HRCW] Work that involves the risk of a person or object falling more than 1.8m section – L3 	NSW WH&S Reg 2017, S217 Falls CoP, S3.6 and 3.7	7 Medium
	Penetrations	16 Severe	Follow the controls listed in the Penetrations section – L3		7 Medium

Activity / Item	Hazards / Risks	Initial Risk Score	Control Measures / Risk Treatment	Legislation, Codes of Practice, and Guidelines (including other available information on hazard / risk)	Residual Risk Score
6.2 [HRCW] Work that involves tilt-up or precast concrete	Panel collapsing / falling	16 Severe	<ul style="list-style-type: none"> Task specific SWMS must be developed prior to commencing works – L3 Ensure an <i>S110815 Pre-Cast Sequence</i> is progressed through the design, fabrication, prior to erection, during erection and prior to removal of bracing – L3 Ensure all panels have individual certification – L2 Minimise personnel in the fall zone of the panel – L2 Ensure panel is erected in accordance with AS 3850 – L2 All panels shall have appropriate certificates and markings as per AS 3850, 2.6.2 – L2 All panels shall have a temporary bracing design approved as per AS 3850, 6.1 – L2 All panels shall be installed as per drawings and visually inspected as per AS 3850, 6.2 – L2 Obtain approval from CC Foreman before removing temporary braces – L3 	NSW WH&S Reg 2017, S217 Falls CoP, S3.6 and 3.7 AS 3850 Precast HIGH RISK WORK s291(k) Work Health Safety Regulations	
	Work at Height	16 Severe	Follow the controls listed in the [HRCW] Work that involves the risk of a person or object falling more than 1.8m section – L3		7 Medium
	Manual Handling	12 High	Follow the controls listed in the Manual Handling section – L3		4 Low
	Frame collapsing / falling	15 Severe	<ul style="list-style-type: none"> Structural equipment / frames shall have design drawings and/or the WLL marked on them – L2 Documented on plant / equipment register, including maintenance inspection – L3 Daily inspection of the frames prior to use – L3 	NSW WH&S Reg 2017 Plant CoP AS 3850 Precast	7 Medium
	Crane Operation	16 Severe	Follow the controls listed in the Crane set-up, commission, and operation and Lifting Devices section – L3		7 Medium
6.7 Structural Steel	Work at Height – Falling object / falling person	16 Severe	<ul style="list-style-type: none"> Isolate the area below installation – L2 Follow the controls listed in the [HRCW] Work that involves the risk of a person or object falling more than 1.8m section – L3 	NSW WH&S Reg 2017, S217 Falls CoP, S3.6 and 3.7	7 Medium
	Manual Handling / Cuts	12 High	Follow the controls listed in the Manual Handling section – L3		4 Low

Activity / Item	Hazards / Risks	Initial Risk Score	Control Measures / Risk Treatment	Legislation, Codes of Practice, and Guidelines (including other available information on hazard / risk)	Residual Risk Score
6.8 Concrete Placement	Formwork collapse	16 Severe	<ul style="list-style-type: none"> Ensure the formwork has been certified prior to pour – L2 Concrete pumps to be cleaned after each pour in a designated and approved area – L2 Ensure a Concrete Placement Checklist is completed – L3 Follow the controls listed in the Formwork erection and dismantle section – L3 	NSW WH&S Reg 2017, S35 Formwork CoP AS 3610.1 Formwork	7 Medium
	Work at Height – Falling object / falling person	16 Severe	<ul style="list-style-type: none"> No items shall be installed into ‘Puds’ for lifting or carrying – L2 Work zones to be demarked and barriers are erected according to the site specific needs and tasks undertaken – L2 Follow the controls listed in the [HRCW] Work that involves the risk of a person or object falling more than 1.8m section – L3 	NSW WH&S Reg 2017, S217 Falls CoP Construction CoP, S7.6	7 Medium
	Personnel hit by plant	14 Severe	<ul style="list-style-type: none"> Work zones to be demarked and barriers are erected according to the site specific needs and tasks – L2 Follow the controls listed in the [HRCW] Work that is carried out in an area where there is movement of powered mobile plant section – L3 Ensure ‘Pumping in Progress’ signage is displayed – L3 	NSW WH&S Reg 2017, S35 Plant CoP	7 Medium
	Mechanical Failure	16 Severe	Follow the controls listed in the Concrete Pumps section – L3		7 Medium
	Inadequate inspection	12 High	Ensure all daily inspections, monthly thickness tests, yearly inspections, and (6) year major inspections have been completed, and are in the log book (as per AS 2550.15) – L2	NSW WH&S Reg 2017, S35 Plant CoP	4 Low
	Manual Handling	12 High	Follow the controls listed in the Manual Handling section – L3		4 Low
	Hazardous Substances	12 High	Follow the controls listed in the Hazardous Substances / Dangerous Goods (HSDG) and Hazardous Substance Incident section – L3		4 Low
6.9 Coring or drilling slab and walls	Silica Containing Materials		Follow the controls listed in the [HRCW] The cutting of Crystalline Silica Materials section – L3		
	Unplanned Electrical Contact	16 Severe	<ul style="list-style-type: none"> Complete <i>S030427 Concrete Coring / Cutting Permit</i> in Simpel – L3 Ensure services are isolated, with isolation points identified – L2 Ensure services remaining live are appropriately identified and protection or exclusion zones documented – L2 	NSW WH&S Reg 2017, S35 Industry Standard – Electrical	7 Medium
	Contact with stressing tendons	14 Severe	<ul style="list-style-type: none"> Complete <i>S030427 Concrete Coring / Cutting Permit</i> in Simpel – L3 Refer to “as built” drawings prior to set out. to ensure location of services and/or stressing tendons – L2 	NSW WH&S Reg 2017, S35	7 Medium
	Cores - Materials falling	14 Severe	<ul style="list-style-type: none"> Complete <i>S030427 Concrete Coring / Cutting Permit</i> in Simpel – L3 Barricade exclusion zone directly beneath coring area – L2 “Spotter” to remain on the floor below, until coring is complete – L2 	NSW WH&S Reg 2017, S217 Falls CoP	7 Medium

Activity / Item	Hazards / Risks	Initial Risk Score	Control Measures / Risk Treatment	Legislation, Codes of Practice, and Guidelines (including other available information on hazard / risk)	Residual Risk Score
	Electrical shock	16 Severe	Manage working with 'live power' in accordance with [HRCW] Work that is carried out on or near electrical installations or services section – L3		7 Medium
	Hazardous Substances	12 High	Follow the controls listed in the Hazardous Substances / Dangerous Goods (HSDG) and Hazardous Substance Incident section – L3		4 Low
	Manual Handling	12 High	Follow the controls listed in the Manual Handling section – L3		4 Low
	Noise	12 High	<ul style="list-style-type: none"> Immediate area to be isolated and signposted to warn others of noise hazard – L2 Ensure appropriate ear-plugs / ear-muffs are worn when coring – L3 Task specific WMS for trades indicate health surveillance is not required for this task – L3 	NSW WH&S Reg 2017, S57 Noise CoP	4 Low
	Flying object	14 Severe	<ul style="list-style-type: none"> Ensure safety glasses / goggles / face shield is worn when coring – L3 	NSW WH&S Reg 2017, S49	7 Medium
	Dust	12 High	Follow the controls listed in the [HRCW] The cutting of Crystalline Silica Materials section – L3		4 Low

Activity / Item	Hazards / Risks	Initial Risk Score	Control Measures / Risk Treatment	Legislation, Codes of Practice, and Guidelines (including other available information on hazard / risk)	Residual Risk Score
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7. Façade and Roof Works

7.1 Masonry Cladding	Cuts	12 High	<ul style="list-style-type: none"> Isolate cutting area from personnel – L2 Ensure cut-off table saws are stable, robust and wet method is used where possible – L2 	NSW WH&S Reg 2017, S35	4 Low
	Flying Objects / Dust	12 High	<ul style="list-style-type: none"> Follow the controls listed in the [HRCW] The cutting of Crystalline Silica Materials section – L3 Manage dust by using wet cutting methods, or a P2 dust mask to be worn with immediate area isolated and signposted to avoid exposure to others – L2 Task specific WMS for trades indicate health surveillance is not required for this task – L3 	NSW WH&S Reg 2017, S35	4 Low
	Noise	12 High	<ul style="list-style-type: none"> Immediate area to be isolated and signposted to warn others of noise hazard – L2 Ensure appropriate earplugs / ear-muffs are worn when cutting / drilling – L3 Task specific WMS for trades indicate health surveillance is not required for this task – L3 	NSW WH&S Reg 2017, S57 Noise CoP	4 Low
	Work at height	16 Severe	<ul style="list-style-type: none"> Follow the controls listed in the [HRCW] Work that involves the risk of a person or object falling more than 1.8m section – L3 Do not overload or alter scaffold – L2 	NSW WH&S Reg 2017, S79 and 225 AS 1576 Scaffold AS 4576 Scaffold	7 Medium
	Slips and Trips	12 High	<ul style="list-style-type: none"> Maintain good housekeeping – L2 	NSW WH&S Reg 2017, S40	4 Low
	Falls from Height	16 Severe	Follow the controls listed in the [HRCW] Work that involves the risk of a person or object falling more than 1.8m section – L3		7 Medium
	Manual Handling	12 High	Follow the controls listed in the Manual Handling section – L3		4 Low
	Hazardous Substances	12 High	Follow the controls listed in the Hazardous Substances / Dangerous Goods (HSDG) and Hazardous Substance Incident section – L3		4 Low
	Power Tools	12 High	Follow the controls listed in the Power Tools sections – L3		4 Low

Activity / Item	Hazards / Risks	Initial Risk Score	Control Measures / Risk Treatment	Legislation, Codes of Practice, and Guidelines (including other available information on hazard / risk)	Residual Risk Score
7.2 Curtain Wall Façade / Windows	Crane	16 Severe	<ul style="list-style-type: none"> Isolate crane area – L2 Follow the controls listed in the Crane set-up, commission, and operation and Lifting Devices section – L3 	WH&S Act 2011 S21 Plant CoP	7 Medium
	Work at Height – Falling object / falling person	16 Severe	<ul style="list-style-type: none"> Follow the controls listed in the [HRCW] Work that involves the risk of a person or object falling more than 1.8m section – L3 Ensure stored glass is secured – L2 	NSW WH&S Reg 2017, S217 Falls CoP Construction CoP	7 Medium
	Cuts to Hands	12 High	<ul style="list-style-type: none"> Wear cut resistant gloves when handling glass product – L3 	NSW WH&S Reg 2017, S40	4 Low
	Manual Handling	12 High	<ul style="list-style-type: none"> Follow the controls listed in the Manual Handling section – L3 	NSW WH&S Reg 2017, S60 Manual Tasks CoP	4 Low
	Structural equipment / frames collapsing	14 Severe	<ul style="list-style-type: none"> Ensure lifting device is certified and checked prior to each lift – L2 Structural equipment / frames shall have design drawings and/or the WLL marked on them – L2 Follow the controls listed in the Crane set-up, commission, and operation and Lifting Devices section – L3 Daily inspection of the Structural equipment / frames prior to use – L3 Documented on plant / equipment register, including maintenance inspection – L3 	NSW WH&S Reg 2017, S39 Construction CoP, S6 AS 4991 Lifting Devices	7 Medium
	Power Tools	12 High	<ul style="list-style-type: none"> Follow the controls listed in the Power Tools sections – L3 	4 Low	
7.3 Concrete structure edge protection prior to and during façade installation	Work at Height –Falling person	16 Severe	<ul style="list-style-type: none"> An engineered, proprietary edge protection system, suitable for use during curtain wall installation or facade, is to be installed prior to screens being lifted or scaffold stripped. The edge protection system must be installed by a competent person, as specified by the manufacturer's instructions – L2 The project team is to consider if the handrail is to be installed prior to the placement of formwork frames or post stripping of each level, the process must ensure that the edge protection can be safely fitted before screens are lifted or scaffold stripped – L1 A handover, that is in compliance with the manufacturer's instructions, must be provided by the installer prior to use – L3 If a non-proprietary edge protection system (e.g., scaffold based) is being considered, which is not designed specifically for curtain wall installation, a <i>S030106 Risk Assessment</i> must be completed and endorsed by the Project Manager and the Project Director prior to procurement – L3 	NSW WH&S Reg 2017, S217 Falls CoP, S3.6 and 3.7	7 Medium

Activity / Item	Hazards / Risks	Initial Risk Score	Control Measures / Risk Treatment	Legislation, Codes of Practice, and Guidelines (including other available information on hazard / risk)	Residual Risk Score
	Work at Height - Falling Object	16 Severe	<ul style="list-style-type: none"> A 2m exclusion zone from the slab edge back inside the building is to be clearly marked on the slab with red paint before screens are lifted or scaffold stripped – L1 No works are to occur within this 2m zone unless a <i>S030106 Risk Assessment</i> has been completed, with control measures developed. Control measures may include experienced workers only to enter area, exclusion zones below, lanyard use for tools and equipment, spotters and bump stops for scissors, an engineered propriety netting system or physical barricade designed for use as a construction barricade system installed from the underside of slab to the top of slab prior to screens being lifted/removed or scaffold stripped – L3 Plant or materials are not to be stored within the 2m exclusion zone – L1 The Design Risk Assessment shall consider setting service runs at least 2m back from the building edge. Service contractors to fit items with the 2m exclusion zone after the façade glass has been installed. If this is not possible a <i>S030106 Risk Assessment</i> must be completed, and control measures developed – L1 Where possible externally fitted items such as façade brackets are to be installed prior to screens being lifted or scaffold stripped and then adjusted for alignment as required at a later time. If this is not possible, lanyards are to be attached to the brackets and exclusions zones below put in place – L1 Follow the controls listed in the [HRCW] Work that involves the risk of a person or object falling more than 1.8m section – L3 	NSW WH&S Reg 2017, S217 Falls CoP, S3.6 and 3.7	7 Medium
	Work at Height – Falling EWP/Plant	16 Severe	<ul style="list-style-type: none"> Bump stops are to be installed when screens, scaffold or façade panels are not in place to protect the building edge. The bump stops are to be a proprietary system or timber. Timber bump stops shall be: <ul style="list-style-type: none"> Minimum 1m back from the building edge – L2 Minimum of 45mm tall and 70mm wide – L2 Secured at each end and every 2000mm with an 8mm concrete anchor fixed to a depth of 45mm – L2 Inspected weekly using the <i>S030402 Project Inspection Record</i> – L3 Follow the controls listed in the [HRCW] Work that involves the risk of a person or object falling more than 1.8m section – L3 	NSW WH&S Reg 2017, S217 Falls CoP, S3.6 and 3.7	7 Medium
	Manual Handling	12 High	Follow the controls listed in the Manual Handling section – L3		4 Low
	Hazardous Substances	12 High	<ul style="list-style-type: none"> Follow the controls listed in the Hazardous Substances / Dangerous Goods (HSDG) and Hazardous Substance Incident section – L3 	NSW WH&S Reg 2017, S49 Haz Chem CoP Construction CoP	4 Low

Activity / Item	Hazards / Risks	Initial Risk Score	Control Measures / Risk Treatment	Legislation, Codes of Practice, and Guidelines (including other available information on hazard / risk)	Residual Risk Score	
7.4 Roofing	Work at Height – Falling object / falling person	16 Severe	<ul style="list-style-type: none">Safety mesh shall be installed in accordance with AS 4389 and NSW Code of Practice for Working On Roofs Part 1 – L2Ensure safe access to roof, with a secondary means of emergency access available at all times – L2Work from installed sheets, not from mesh side – L2Remove all off cuts to a solid bucket or similar do not use a plastic bag – L2Exclusion zone to be erected below roof installation wherever there is a risk of falling objects.Follow the controls listed in the [HRCW] Work that involves the risk of a person or object falling more than 1.8m section – L3	NSW WH&S Reg 2017, S217 Falls CoP, S3.6 and 3.7 Construction CoP, S7.6 AS 4389 Mesh	7 Medium	
	Cuts to Hands	12 high	<ul style="list-style-type: none">Wear cut resistant gloves when handling sheets and sharp materials – L3	NSW WH&S Reg 2017, S40	4 Low	
	Manual Handling	12 high	Follow the controls listed in the Manual Handling section – L3			4 Low
	Power Tools	12 High	Follow the controls listed in the Power Tools sections – L3			4 Low

Activity / Item	Hazards / Risks	Initial Risk Score	Control Measures / Risk Treatment	Legislation, Codes of Practice, and Guidelines (including other available information on hazard / risk)	Residual Risk Score
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8. Fitout and Finishing Work

8.1 Carpentry	Hazardous Substances	12 High	Follow the controls listed in the Hazardous Substances / Dangerous Goods (HSDG) and Hazardous Substance Incident section – L3		4 Low
	Work at Height – Falling object / falling person	16 Severe	Follow the controls listed in the [HRCW] Work that involves the risk of a person or object falling more than 1.8m section – L3		7 Medium
	Manual Handling	12 High	Follow the controls listed in the Manual Handling section – L3		4 Low
	Slips and Trips	12 High	<ul style="list-style-type: none"> Ensure slip and trip hazards are removed before commencing works – L2 Clean work areas daily – L2 	NSW WH&S Reg 2017, S40	4 Low
	Flying Objects	14 Severe	<ul style="list-style-type: none"> Ensure eye are worn when cutting – L3 	NSW WH&S Reg 2017, S35	7 Medium
	Noise	12 High	<ul style="list-style-type: none"> Ensure appropriate ear protection is worn during plant operation – L3. Follow the controls listed in the Noise section – L3 	NSW WH&S Reg 2017, S57 Noise CoP	4 Low
	Cuts to hands	12 High	<ul style="list-style-type: none"> Ensure gloves are worn around sharp edges – L3 	NSW WH&S Reg 2017, S40	4 Low
	Explosive Power Tools	14 Severe	Follow the controls listed in the Explosive Power Tools (EPT) section – L3		7 Medium
	Power Tools	12 High	Follow the controls listed in the Power Tools sections – L3		
	Laser	12 High	Follow the controls listed in the Lasers section – L3		4 Low

Activity / Item	Hazards / Risks	Initial Risk Score	Control Measures / Risk Treatment	Legislation, Codes of Practice, and Guidelines (including other available information on hazard / risk)	Residual Risk Score
8.2 Joinery	Dust	12 High	Follow the controls listed in the Hazardous Substances / Dangerous Goods (HSDG) and Hazardous Substance Incident section – L3 <ul style="list-style-type: none"> MDF to be cut off site where possible, otherwise a contained area is to be commissioned – L1 Establish cutting areas and cutting benches – L2 Provide vacuum extraction from the saw – L2 Ensure appropriate dust mask, eye and ear protection is worn when cutting – L3 	NSW WH&S Reg 2017, S49 Haz Chem CoP Construction CoP, S7.1	4 Low
	Flying Objects	12 High	<ul style="list-style-type: none"> Ensure appropriate safety glasses / goggles / face shield is worn when cutting / drilling / sanding – L3 	NSW WH&S Reg 2017, S35	4 Low
	Power Tools	12 High	Follow the controls listed in the Power Tools sections – L3		4 Low
	Noise	12 High	<ul style="list-style-type: none"> Ensure appropriate ear protection is worn during power-tool operation – L3 Follow the controls listed in the Noise section – L3 Task specific SWMS for trades indicate health surveillance is not required for this task – L3 	NSW WH&S Reg 2017, S57 Noise CoP	4 Low
	Hazardous Substances	12 High	Follow the controls listed in the Hazardous Substances / Dangerous Goods (HSDG) and Hazardous Substance Incident section – L3		4 Low
	Work at Height – Falling object / falling person	16 Severe	Follow the controls listed in the [HRCW] Work that involves the risk of a person or object falling more than 1.8m section – L3		7 Medium
	Manual Handling	12 High	Follow the controls listed in the Manual Handling section – L3		4 Low
8.3 Waterproofing	Hazardous Substance	12 High	<ul style="list-style-type: none"> Ensure task lighting is adequate and will not ignite the product – L2 Follow the controls listed in the Hazardous Substances / Dangerous Goods (HSDG) and Hazardous Substance Incident section – L3 	NSW WH&S Reg 2017, S49 Haz Chem CoP	4 Low
	Work at Height – Falling object / falling person	16 Severe	Follow the controls listed in the [HRCW] Work that involves the risk of a person or object falling more than 1.8m section – L3		7 Medium
	Power Tools	12 High	Follow the controls listed in the Power Tools sections – L3		4 Low
	Manual Handling	12 High	Follow the controls listed in the Manual Handling section – L3		4 Low

Activity / Item	Hazards / Risks	Initial Risk Score	Control Measures / Risk Treatment	Legislation, Codes of Practice, and Guidelines (including other available information on hazard / risk)	Residual Risk Score	
8.4 Painting	Hazardous Substances	12 High	<ul style="list-style-type: none">Water based paints to be used where possible – L1Projects shall have appropriate paint washout facilities with required water storage, spinning drums, and filters. Paint waste and wash waters shall not be discharged to the stormwater system or drain ways – L2Paint Contractor shall ensure all washout liquids are filtered through fabric into appropriate recycled liquid container. Filters shall be disposed as clean out waste bin located in the paint washout area – L2Follow the controls listed in the Hazardous Substances / Dangerous Goods (HSDG) and Hazardous Substance Incident section – L3	NSW WH&S Reg 2017, S49 Construction CoP, S7.1	4 Low	
	Work at Height – Falling object / falling person	16 Severe	<ul style="list-style-type: none">Ensure fall prevention is in place next to identified hazards, open windows or edges – L2Follow the controls listed in the [HRCW] Work that involves the risk of a person or object falling more than 1.8m section – L3	NSW WH&S Reg 2017, S217 Falls CoP, S3.6 and 3.7	7 Medium	
	Power Tools	12 High	Follow the controls listed in the Power Tools sections – L3			4 Low
	Manual Handling	12 high	Follow the controls listed in the Manual Handling section – L3			4 Low
8.5 Tiling	Respirable Crystalline Silica (RCS)	12 High	<ul style="list-style-type: none">Follow the controls listed in the [HRCW] The cutting of Crystalline Silica Materials section – L3PPE requirements shall be based on task specific risk assessment – L3Task Specific risk assessment shall identify any need for health surveillance and shall be defined by the contractor if required – L3	NSW WH&S Reg 2017, Division 3.2.7 Haz Chem CoP	4 Low	
	Flying Objects / noise	12 High	<ul style="list-style-type: none">Eye, and Ear protection required for all tasks involving the cutting of tile or concrete – L3Isolate area where possible – L2Make hearing protection available to other trades where isolation is not possible – L3	NSW WH&S Reg 2017, S57 Noise CoP	4 Low	
	Power Tools	12 High	Follow the controls listed in the Power Tools sections – L3			4 Low
	Asbestos	16 Severe	<ul style="list-style-type: none">Follow the controls listed in the [HRCW] Work that involves the likely disturbance of asbestos section – L3Notify Site Management immediately if any substance which could be asbestos is located and initiate the “Unexpected Finds” procedure – L3	NSW WH&S Reg 2017, S81 Asbestos CoP Asbestos Removal CoP	7 Medium	
	Hazardous Substance	12 High	Follow the controls listed in the Hazardous Substances / Dangerous Goods (HSDG) and Hazardous Substance Incident section – L3			4 Low
8.6 Floor Finishing	Hot Works	12 High	Follow the controls listed in the Hot Works section – L3			4 Low
	Power Tools	12 High	Follow the controls listed in the Power Tools sections – L3			4 Low

Activity / Item	Hazards / Risks	Initial Risk Score	Control Measures / Risk Treatment	Legislation, Codes of Practice, and Guidelines (including other available information on hazard / risk)	Residual Risk Score
	Manual Handling	12 High	Follow the controls listed in the Manual Handling section – L3		4 Low
	Hazardous Substance	12 High	Follow the controls listed in the Hazardous Substances / Dangerous Goods (HSDG) and Hazardous Substance Incident section – L3		4 Low

Activity / Item	Hazards / Risks	Initial Risk Score	Control Measures / Risk Treatment	Legislation, Codes of Practice, and Guidelines (including other available information on hazard / risk)	Residual Risk Score
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9. Workplace Environment

9.1 Lighting	Slips and Trips	12 High	<ul style="list-style-type: none"> Emergency lighting shall be provided in designated access and egress paths and directly above and in front of switchboards. The lighting shall be hard wired and provide an average of 20 lx at 900mm above floor level along the centre line of the corridor containing the emergency luminaires (or other means as specified in AS/NZS 3012:2019) – L2 Appropriate task specific lighting is to be used where required – L2 Emergency Exit lighting is to be installed as per AS 3012:2019. All exit signs are to be hard wired illuminated green emergency exit signs as per the Australian Standard – L2 	NSW WH&S Reg 2017 S109 Construction CoP Work Environment CoP, S2.6 AS 3012 Electrical	8 Medium
9.2 Penetrations	Work at height -Falling object / falling person	16 Severe	<p>Follow the controls listed in the [HRCW] Work that involves the risk of a person or object falling more than 1.8m section – L3</p> <ul style="list-style-type: none"> All penetrations larger than 100 mm must have fall prevention – L2 Mesh only to be cut when and where materials are being installed – L3 Penetrations shall be adequate for the circumstances applying, securely covered, and marked with 'Danger –Penetration Below' – L3 Ensure pit covers are secure. Where this is not practical implement another form of barricading / exclusion – L3 	NSW WH&S Reg 2017, S217 Falls CoP, S3.6 and 3.7 Construction CoP, S7.6	7 Medium
9.3 Noise	Loss of Hearing	14 Severe	<ul style="list-style-type: none"> Maintenance of plant & equipment as per manufacturer's requirements – L2 Isolate noisy works from others where possible – L2 Ensure appropriate ear protection is worn if noise is expected to exceed daily exposure limits or manufacturer requirement – L3 Follow the controls listed in the Air Monitoring and Health Monitoring section – L3 	NSW WH&S Reg 2017, S57 Construction CoP, S7.1 Noise CoP AS 2436 Noise	7 Medium
	Public Disturbance	12 High	<ul style="list-style-type: none"> Noisy works to be completed as per local legislative & regulatory authority requirements taking into consideration adjacent premises – L3 Industrial, city or town centre areas - Monday to Saturday 6am to 8pm; Sunday and Public Holidays 6am to 8pm – L3 Any other area where work is complete within two weeks - Monday to Saturday 7am to 8pm; Sunday and Public Holidays 8am to 8pm – L3 Any other area where work is not complete within two weeks - Monday to Saturday 7am to 6pm; Sunday and Public Holidays Building work must not exceed Noise Standard – L3 CC shall identify noisy works during S070303 <i>Subcontractor Hazard Control Review</i> and ensure as far as practical work is isolated and engineering controls are documented within SWMS – L3 CC shall review noisy works on site to ensure appropriate isolation and implementation 	Env Protection Act 1997 Environmental Policy 2008 Construction CoP, S7.1	8 Medium

Activity / Item	Hazards / Risks	Initial Risk Score	Control Measures / Risk Treatment	Legislation, Codes of Practice, and Guidelines (including other available information on hazard / risk)	Residual Risk Score
			<p>of engineering controls using the <i>S030402 Project Inspection Record</i> – L3</p> <ul style="list-style-type: none"> Noise monitoring shall be completed by Construction Control on the project perimeter to ensure noise exposure above 85dB is not exceeded. Noise monitoring shall take place on request of client or Project Director; or due to an incident investigation – L2 		
9.4 Materials Handling	Congested access and egress	14 Severe	<ul style="list-style-type: none"> Ensure a <i>Q070409 Designated Plant Setup Location</i> form has been completed and a copy of the completed document and applicable drawings available for consideration by the site team and Subcontractors – L2 Ensure loading areas are designated on the internal traffic management plan – L2 Always ensure good access to loading areas – L2 Use mechanical means where possible to unload or transport materials – L2 All loads to be secured during transportation on site – L2 	NSW WH&S Reg 2017, Sections 40 Work Environment CoP, S2.1	7 Medium
	Manual Handling	14 Severe	Follow the controls listed in the Manual Handling section – L3		
	Materials falling	16 Severe	<ul style="list-style-type: none"> Where material does not have designated lifting points a ticketed dogman shall ensure loads are secure – L3 Site-specific SWMS shall identify exclusion zones for material being moved. Exclusion zones are to be established and adhered to prior to commencing unloading activities. This is to include arrangements for the driver – L3 Trucks delivering structural steel are to have gates or posts fitted to both sides of the trailer designed to prevent sideways load forces. Steel elements are to extend no more than half their height above the top of the gates/posts – L2 Loads that are delivered in multiple layers are to be strapped down in a manner to prevent falling objects as restraints are removed. In some situations, this may require strapping of each layer – L2 Loads are to arrive pre-slung as far as reasonably practical – L1 Every delivery to be unloaded by CC or crane crew is to be assessed by CC and/or the crane crew prior to unloading. Any load deemed unsafe to unload is to be sent away and is not permitted to be unloaded until presented in a safe manner – L1 A CC plant operation permit is not required where a Hiab / Truck mounted crane is unloading from the truck to the ground in a designated loading/unloading area – L3 If the Hiab / Truck mounted crane is being used to lift materials to an area other than the ground, or is setting up in a non-designated loading/unloading area a <i>S030411b Mobile Crane Operation Permit</i> must be completed by the CC staff member responsible for the works and the plant operator prior to use – L3 	Falls CoP Construction CoP, S7.6	7 Medium

Activity / Item	Hazards / Risks	Initial Risk Score	Control Measures / Risk Treatment	Legislation, Codes of Practice, and Guidelines (including other available information on hazard / risk)	Residual Risk Score
9.5 Manual Handling	Muscular / Skeletal injury	12 High	<ul style="list-style-type: none"> Where moving an object in the workplace ensure the access is clear – L2 Evaluate the size / weight of the load and if required, use mechanical aids or get help. – L2 Wear all recommended or specified PPE e.g., gloves, goggles, masks, footwear, etc. – L3 Before you start to lift; ensure that your stance is wide, comfortable, and balanced – L2 Position your body by bending your legs and not your back, so that it is as close as possible to the load – L2 When ready take a firm but comfortable grip and tighten your stomach muscles as you begin lifting – L2 Ensure that you use your leg muscles during the lift, maintain a straight lower back and keep your shoulders parallel – L2 Avoid twisting. If a turn is required while holding object, use leg muscles to shuffle feet around to the required direction – L2 Avoid repetitive motions – L2 When lowering an object use the above sequence but in reverse order – L3 	NSW WH&S Reg 2017, S60 Manual Tasks CoP Work Environment CoP, S2.1	4 Low
	Laceration	12 High	<ul style="list-style-type: none"> Ensure protective trousers cut-resistant leg protection is worn – L3 Where handling material with sharp edges rigger or other suitable gloves shall be worn – L3 	NSW WH&S Reg 2017, S40	4 Low
	Trip / slip / fall	12 High	<ul style="list-style-type: none"> Always maintain good housekeeping – L2 	NSW WH&S Reg 2017, S40	4 Low
9.6 Hazardous Substances / Dangerous Goods (HSDG)	Burns	12 High	<ul style="list-style-type: none"> Ensure adequate segregation is provided for incompatible substances – L2 Storage to be secure well ventilated, cool, dry designated Hazardous Substance storage area with appropriate signage / bunding / isolation; Separation matrix displayed; SDS available at or adjacent to; and PEP, First aid kit and competent person to be available nearby – L2 Storage, handling, and disposal requirements from the SDS are incorporated into Subcontractors site-specific SWMS/JSA where required – L3 Ensure containers holding hazardous substances are labelled, in suitable containers, and include relevant information – L3 Storage shall be in a designated area and in accordance with the National Code of Practice for the Control of Workplace Substances – L3 	NSW WH&S Reg 2017, Sections 49 and 53 Haz Chem CoP Construction CoP AS 3833 Dang Substances	4 Low
	Fire / Explosion	14 Severe	<ul style="list-style-type: none"> In-service Fire Extinguisher to be located adjacent to, or in immediate work area where site-specific SWMS, based on SDS indicates medium or greater risk of fire or explosion – L3 Ensure stored quantities of Dangerous Goods do not exceed Schedule 1 of the National 	NSW WH&S Reg 2017, Sections 40 and 49	7 Medium

Activity / Item	Hazards / Risks	Initial Risk Score	Control Measures / Risk Treatment	Legislation, Codes of Practice, and Guidelines (including other available information on hazard / risk)	Residual Risk Score
			Standard for the Storage and Handling of Workplace Dangerous Goods – L3		
	Illness / Disease	12 High	<ul style="list-style-type: none"> All Hazardous Substances are registered including maximum quantities, location of storage, SDS date, risk score and applicable WMS for the use of the product – L3 Site-specific SWMS must identify any need for health surveillance and must be defined further on each Subcontractors Hazardous Substances Register and/or CC's master <i>Q070602 Hazardous Substances Register</i> – L3 CC/Subcontractors must maintain a register of Risk Assessments / Safety Data Sheet (SDS) that are reviewed less than five 5 years from D.O.M in the Simpel SWMS/Safety Plan module of Simpel – L3 Ensure personnel are trained in the above requirements – L3 Ensure first aid, spill and fire response equipment is available to manage all products on the project – L3 Appropriate spill kit/s to be available for products in use outside hazardous substance storage area – L3 Appropriate storage must be outlined in the SWMS in accordance with the SDS – L3 Follow the controls listed in the Air Monitoring and Health Monitoring section – L3 	NSW WH&S Reg 2017, Sections 49 Haz Chem CoP Construction CoP AS 3833 Dang Substances Environmental Act 1997 Environmental Policy 2008 Waste Act 2001 Environmental Haz Act 1985	4 Low
	Eye Injury	14 Severe	<ul style="list-style-type: none"> Safety Glasses / goggles generally to be worn when working with hazardous substances; unless a site-specific WMS based on SDS, Section 8 defines alternative PPE requirements – L3 	NSW WH&S Reg 2017, S44 Haz Chem CoP	7 Medium
	Exposure	12 High	<ul style="list-style-type: none"> For all substances purchased or brought to site a Hazardous Substance and Dangerous Good Register shall be maintained by the relevant Subcontractors or CC in the Simpel SWMS/Safety Plan Module. Each Hazardous Substance shall be assessed via a Risk Assessment/SWMS/JSA, to manage: - L3 <ul style="list-style-type: none"> associated risks safe use environmental protection PPE requirements storage emergency management (e.g., spill kit and fire response) health surveillance requirements staff training and include an attached SDS, dated in the last 5 years. CC shall ensure during <i>S070303 Subcontractor Hazard Control Review</i> that an appropriate SWMS is developed defining safe storage, use, and disposal for all products identified in the <i>Q070602 Hazardous Substances & Dangerous Goods Register</i> as Medium to High – L3 	NSW WH&S Reg 2017, Sections 49 Haz Chem CoP Construction CoP AS 3833 Dang Substances Environmental Act 1997 Environmental Policy 2008 Waste Act 2001 Environmental Haz Act 1985	7 Medium

Activity / Item	Hazards / Risks	Initial Risk Score	Control Measures / Risk Treatment	Legislation, Codes of Practice, and Guidelines (including other available information on hazard / risk)	Residual Risk Score
			<ul style="list-style-type: none"> ▪ In an emergency, relevant personnel have access to the SDS via their Simpel profile or an internet search (e.g., Google) always via a phone or tablet – L3 ▪ All Construction Control staff, including First Aiders and Emergency Controllers have access to all relevant Hazardous Substances documents via Simpel and the internet – L3 ▪ Standard construction site activities are not likely to see any commonly used hazardous substances exceed the quantities prescribed in Schedule 11 of the WH&S Regulations. If the project is likely to have an uncommonly high quantity of a Hazardous Substance or Dangerous Goods a <i>S030106 Risk Assessment</i> is to be conducted to consider the management and storage of the product – L3 ▪ Subcontractors are to ensure adequate segregation of incompatible substance and containers holding hazardous substances are labelled to include: - L1 <ul style="list-style-type: none"> ○ product name ○ basic safety and environmental information including any risk and safety phrases; and ○ if the substance is a Dangerous Good – class label subsidiary risk label and packing group ▪ Follow the controls listed in the Air Monitoring and Health Monitoring section – L3 		

Activity / Item	Hazards / Risks	Initial Risk Score	Control Measures / Risk Treatment	Legislation, Codes of Practice, and Guidelines (including other available information on hazard / risk)	Residual Risk Score
9.7 Client / Public Interface	Construction works around general public	14 Severe	<ul style="list-style-type: none"> Approved Temporary Traffic Management Plan (TTMP) implemented for project works. Pedestrian traffic diverted around site via the TTMP – L3 Entry gates to be maintained in good condition and kept. Weekly Project Inspection record to be used to assess areas – L3 Construction works in public areas to be isolated to mitigate exposure to works – L2 Construction works to be undertaken within designated hours only and within confines of the site where practicable – L2 Security surveillance of project / surrounding area where practicable – L3 Follow the controls listed in the Site Fencing / Access / Egress and Client / Project Specific Requirements section – L3 	NSW WH&S Reg 2017, S44 Haz Chem CoP	7 Medium
	Construction works around client activities	12 High	<ul style="list-style-type: none"> Client to inform CC Site Management of events which may adversely impact on construction works – L3 CC to inform Client Rep of events which may adversely impact on client operations – L3 Client representative to contact CC Project Manager where an emergency evacuation or significant incident may impact on the project works – L3 Construction works are not to impact on public activities from adjacent areas. Any issues to be managed on a situation by situation basis – L3 Approved <i>Q070603 Project Emergency Plan</i> to be developed and implemented detailing client requirements – L3 Section Client / Project Specific Requirements to details all client specific: <ul style="list-style-type: none"> Induction requirements Emergency protocols Lock-out arrangements Hazard / Dangerous Goods Facilities that may be impacted Restricted or Sensitive Areas Security Arrangements Permit systems Critical infrastructure that may be supporting life or processes 	NSW WH&S Reg 2017, Sections 35 and 308 Construction CoP, S7.4	4 Low

Activity / Item	Hazards / Risks	Initial Risk Score	Control Measures / Risk Treatment	Legislation, Codes of Practice, and Guidelines (including other available information on hazard / risk)	Residual Risk Score
9.8 [HRCW] Work that involves the cutting of crystalline silica material using a power tool or another mechanical process	Legislative noncompliance	12 High	<ul style="list-style-type: none"> Engineered the supply and installation of engineered stone is strictly prohibited on Construction Control projects. Construction Control defines engineered stone as an artificial product that contains 1% or more crystalline silica, determined as a weight/weight (w/w) concentration, and; is created by combining natural stone materials with other chemical constituents such as water, resins or pigments, and; becomes hardened <p>Construction Control defines a Crystalline Silica Substance (CSS) as:</p> <ul style="list-style-type: none"> Engineered stone Natural stone containing Crystalline Silica Porcelain and ceramic tiles Cement, concrete, masonry, mortar or brick products containing Crystalline Silica With a crystalline silica content exceeding 1% <p>Construction Control defines processing of CSS as:</p> <ul style="list-style-type: none"> Crushing Drilling Grinding Polishing Sanding Trimming <p>This activity is legislated as High Risk Construction Work in the ACT.</p> <ul style="list-style-type: none"> (ACT Jurisdiction) A task specific SWMS shall be developed for the processing of Crystalline Silica Materials to ensure that workers are not exposed to a level of respirable crystalline silica which exceeds the workplace exposure standard of 0.05mg/m³ - L3 ACT workers engaged in high-risk crystalline silica work, or who are on the list of declared occupations, must have completed the 10830NAT – Course in the Crystalline Silica Exposure Prevention – L3 (NSW Jurisdiction) The project shall develop a silica management plan/risk assessment to address the hazards associated with processing a CSM – L3 (NSW Jurisdiction) workers who are confirmed to be undertaking “High Risk” CSM Processing must hold silica awareness training which fulfils the requirements of SafeWork NSW – L3 Silica cutting tasks managed by the implementation of specific high-level controls such 	<p>ACT WH&S Reg 2011, Division 3.2.7</p> <p>ACT WH&S Regulation 2011, Chapter 7A 2022</p> <p>NSW WH&S Regulation 2017, Regulation 529</p> <p>WorkSafe ACT Managing Silica Dust at Construction Sites Guidance Note</p> <p>SafeWork Australia Working with silica and silica containing products (National Guide)</p> <p>NSW WH&S Reg 2017, Part 4.10</p>	4 Low

Activity / Item	Hazards / Risks	Initial Risk Score	Control Measures / Risk Treatment	Legislation, Codes of Practice, and Guidelines (including other available information on hazard / risk)	Residual Risk Score
			<p>as wet cutting/dust extraction and administrative controls, combined with appropriately fitted RPE provide a reasonable level of protection to assume workers involved are not exceeding the exposure standard – L2</p> <ul style="list-style-type: none"> ▪ Prior to undertaking any CSS processing on any legacy engineered stone, Construction Control shall register a notification with the relevant state or territory regulator. ▪ Air monitoring shall be managed in accordance with Construction Controls Procedure 3.07 Management of Airborne Contaminants and Hazardous Atmosphere Procedure – L3 ▪ Follow the controls listed in the Air Monitoring and Health Monitoring section – L3 		

Activity / Item	Hazards / Risks	Initial Risk Score	Control Measures / Risk Treatment	Legislation, Codes of Practice, and Guidelines (including other available information on hazard / risk)	Residual Risk Score
	Health Surveillance	12 High	<ul style="list-style-type: none"> ▪ Health monitoring is required: <ul style="list-style-type: none"> ○ For any worker who is required to wear RPE at any time for 30 days (or more) over a twelve-month period and the worker has undertaken tasks that involve the cutting of Crystalline Silica Material – L2 ○ Where a worker is exposed or where an assessment indicates a significant risk of exposure, health surveillance shall be undertaken – L2 ▪ Health Monitoring is to be conducted in accordance with Safe Work Australia guidelines – L3 ▪ Follow the controls listed in the Air Monitoring and Health Monitoring section – L3 	<p>ACT WH&S Reg 2011, Division 7.2.4</p> <p>WorkSafe ACT Managing Silica Dust at Construction Sites Guidance Note</p>	4 Low

Activity / Item	Hazards / Risks	Initial Risk Score	Control Measures / Risk Treatment	Legislation, Codes of Practice, and Guidelines (including other available information on hazard / risk)	Residual Risk Score
	RCS injury to workers or bystanders	16 High	<ul style="list-style-type: none"> ▪ The cutting of engineered stone on site is strictly prohibited – L1 ▪ Dry cutting of a Crystalline Silica Material without control measures is strictly prohibited – L2 ▪ Prior to commencement of tasks which involve cutting SCM, a documented hazard control process outlining controls specific to the task and site conditions shall be developed - L3 ▪ Where available, Safety Data Sheet (SDS) for the SCM used on site shall be considered during the development of controls – L3 ▪ When dust extraction is used SCM identified as containing over 25% Crystalline Silica requires the use of an H class filtration system. SCM containing under 25% Crystalline silica requires the use of an M class filtration system – L2 ▪ In the absence of a material specific safety data sheet, it is to be assumed the silica content of the material to be used is above 25%, Dust extraction controls shall require the use of an H class particulate filter – L3 ▪ Class H and M dust extraction systems are to be used and maintained in accordance with OEM Manuals. Consideration shall be given to selection and replacement of appropriate filters in the documented process – L2 ▪ The effective control measures for the cutting of Crystalline Silica Materials are listed below in preferential order, with (i) being the most preferred through to (v) the least preferred: - L2 <ul style="list-style-type: none"> ○ (i) A water delivery system (<i>Tap water, pump water or pressurised water canister</i>) supplying a continuous feed of water over the cutting area and at least one other control measure ○ (ii) If (i) is not reasonably practicable use a wet dust suppression method, which includes emulsion, spray, curtain, mist or foam of water in the place where airborne crystalline silica is produce and at least one other control measure ○ (iii) If (i) and (ii) are not reasonably practicable attach an approved Class H vacuum to the tool used for cutting and a least one other control measure ○ (iv) If (i) to (iii) are not reasonably practicable use a fully enclosed operator cabin fitted with a high efficiency filtration system ○ (v) If (i) to (iv) are not reasonably practicable use at least one Crystalline silica control measure and respiratory protective equipment (RPE). ▪ Do not wet cut where run-off can cause damage to property or is an environmental concern – L2 ▪ When Isolation is used as a primary control Barricades, exclusion zones and or signage are to be put in place to prevent other workers from entering an area where the cutting of SCM is being conducted – L2 	<p>ACT WH&S Reg 2011, Division 3.2.7</p> <p>WH&S Regulation 2011, Chapter 7A</p> <p>2022</p> <p>WorkSafe ACT Managing Silica Dust at Construction Sites Guidance Note</p> <p>SafeWork Australia Working with silica and silica containing products (National Guide)</p> <p>Haz Chem CoP</p>	

Activity / Item	Hazards / Risks	Initial Risk Score	Control Measures / Risk Treatment	Legislation, Codes of Practice, and Guidelines (including other available information on hazard / risk)	Residual Risk Score
			<ul style="list-style-type: none"> ▪ After cutting of SCM any residual dust or slurry shall be cleaned up immediately as part of the task – L3 ▪ Captured SCM residue (wet or dry) shall be effectively contained and placed into the main site bin or removed from the project by the responsible contractor - L1 ▪ SCM Residue shall not be placed in general waste bins throughout the project – L1 ▪ If applicable to the work activity, install a designated cutting room: - L2 <ul style="list-style-type: none"> ○ Cutting room requirements shall be specific to site conditions and documented in the hazard control process ○ No cutting activities to be undertaken until the cutting room is inspected by the relevant supervisor in consultation with site management ▪ If dust from SCM is likely to be generated from a non-cutting activity (e.g. sweeping, mixing cement, site cleaning etc.) a SWMS, Risk Assessment or JSA is to be documented to manage the risks. RPE is mandatory for these activities – L3 ▪ Other controls may include: <ul style="list-style-type: none"> ○ Hosing down or misting the area ○ Vacuuming instead of sweeping ○ Dust extraction fans ○ Barricades and signage <p>Follow the controls listed in the Air Monitoring and Health Monitoring section – L3</p>		

Activity / Item	Hazards / Risks	Initial Risk Score	Control Measures / Risk Treatment	Legislation, Codes of Practice, and Guidelines (including other available information on hazard / risk)	Residual Risk Score
	Inappropriate selection of PPE/RPE	12 High	<ul style="list-style-type: none"> Wear PPE/RPE as recommended in the relevant SDS and/or as indicated in the SWMS – L3 Task appropriate RPE is mandatory whenever there is a residual risk relating to the control of SCM Hazards – L3 Ensure all RPE that is to be used for the task has been fit tested for each individual worker, using a qualitative fit test prior to commencement – L2 Include appropriate training and instruction on the selection and use of PPE/RPE – L3 Wear protective clothing, e.g., long pants and long- sleeved shirts, to avoid contact with SCM - L3 Use goggles, safety glasses or gloves as required by the specific hazard management process – L3 Follow the controls listed in the Air Monitoring and Health Monitoring section – L3 	ACT WH&S Regulations 2011, Division 3.2.5	4 Low

Activity / Item	Hazards / Risks	Initial Risk Score	Control Measures / Risk Treatment	Legislation, Codes of Practice, and Guidelines (including other available information on hazard / risk)	Residual Risk Score
9.9 [HRCW] Work that is carried out in or near a confined space.	Incompetent workers	12 High	<ul style="list-style-type: none"> Task specific SWMS must be developed prior to commencing works – L3 CC's Q030430 <i>Confined Space Permit</i> is to be complete in consultation with stakeholders involved and approved by CC Site Management prior to works commencing – L3 All persons entering the confined space and the stand-by person are to have completed appropriate training including: - L3 <ul style="list-style-type: none"> the hazards of confined spaces risk assessment procedures risk management steps emergency procedures selection, use, fitting, and maintenance of PPE 	NSW WH&S Reg 2017 S39 and Part 4.3 Confined Spaces CoP AS 2865 Confined Spaces HIGH RISK WORK s291(k) Work Health Safety Regulations	4 Low
	Asphyxiation	16 Severe	<ul style="list-style-type: none"> CC shall develop and maintain a Q070603 <i>Project Emergency Plan</i> and communicate emergency procedures to all – L3 Follow the controls listed in the Air Monitoring and Health Monitoring section – L3 		7 Medium
9.10 [HRCW] Work that is carried out in an area in which there are artificial extremes of temperature.	Exposure to extreme temperatures (hot / cold)	16 Severe	<ul style="list-style-type: none"> Task specific SWMS must be developed prior to commencing works – L3 Ensure appropriate clothing and PPE is provided prior to commencing works – L3 	NSW WH&S Reg 2017, S291 and 299 HIGH RISK WORK s291(k) Work Health Safety Regulations	7 Medium
9.11 [HRCW] Work that is carried out in or near water or other liquid that involves the risk of drowning.	Drowning	16 Severe	<ul style="list-style-type: none"> Task specific SWMS must be developed prior to commencing works – L3 Ensure an appropriately trained first-aider is available with CPR competency and swimming ability – L3 Always work with a partner or preferably a team when working in or around water – L2 Wear life jackets if work is undertaken on water or there is a possibility of falling into water – L2 Communication devices to be waterproof where possible, suitable to area of operation and tested before departure – L2 Be aware of sea conditions and maintain a constant lookout for swell, currents and waves – L2 Keep a lookout for submerged or floating objects – L2 Do not remain between any vessel and the shore – L2 	NSW WH&S Reg 2017, S291 and 299 HIGH RISK WORK s291(k) Work Health Safety Regulations	7 Medium

Activity / Item	Hazards / Risks	Initial Risk Score	Control Measures / Risk Treatment	Legislation, Codes of Practice, and Guidelines (including other available information on hazard / risk)	Residual Risk Score
9.12 [HRCW] Work that is carried out in an area that may have a contaminated or flammable atmosphere.	Injury Disease	16 Severe	<ul style="list-style-type: none"> Task specific SWMS must be developed prior to commencing works – L3 Prevent exposure to and inhalation, absorption or ingestion of substances that may cause a contaminated or flammable atmosphere e.g., dust, fumes, mists, smokes, vapours, gases and biological agents – L2 Follow directions provided in SDS for the products being used, including storage, safe use procedures and PPE/RPE – L2 Follow the controls listed in the Air Monitoring and Health Monitoring section – L3 	NSW WH&S Reg 2017, S291 and 299 HIGH RISK WORK s291(k) Work Health Safety Regulations	7 Medium
9.13 Lasers	Eye Injury	12 High	<ul style="list-style-type: none"> Lasers are to be inspected prior to use – L2 Lasers are to be maintained and calibrated in accordance with the OEM Manual – L2 Lasers or laser products shall not operate unless it has been classified and labelled in accordance with AS 2211– L2 Class 3B or Class 4 lasers or laser products shall not be used – L2 'Laser in Use' signage must be displayed – L2 Use of laser or laser products in building or construction operations shall be in accordance with AS 2397 – L2 	NSW WH&S Reg 2017, S223 Plant CoP AS 2297 Lasers	4 Low

Activity / Item	Hazards / Risks	Initial Risk Score	Control Measures / Risk Treatment	Legislation, Codes of Practice, and Guidelines (including other available information on hazard / risk)	Residual Risk Score
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10. Emergency Response					
10.1 External Threat of harm or damage e.g., Bomb Threat	Explosion	16 Severe	<ul style="list-style-type: none"> Obtain as much information as possible, Call 000 – L3 Instigate critical incident management procedure, where required – L3 Contact CC Site Manager – L3 	NSW WH&S Reg 2017, Sections 51 and 53 Construction CoP, S7.4 AS 3745 Emergency	7 Medium
	Mental Trauma	12 High	<ul style="list-style-type: none"> CC shall Initiate trauma management where required to applicable workers – L2 	NSW WH&S Reg 2017, S43	4 Low
	Adjacent building / public	16 Sever	<ul style="list-style-type: none"> CC project management shall communicate all potential serious events that may affect adjacent structures as soon as possible following and incident – L3 Appropriate contact details of adjacent buildings shall be included in <i>Q070603 Project Emergency Plan</i> – L3 	NSW WH&S Reg 2017, Sections 43 AS 3745 Emergency	7 Medium
10.2 Trench / Excavation collapse	Crush injury	16 Severe	<ul style="list-style-type: none"> Notify the CC Emergency Response Team of situation – L2 Check excavation for signs of workers and severity of collapse [Are they trapped, can you see their full body or just hardhat]; - L2 If worker/s is trapped: - L2 <ol style="list-style-type: none"> Notify emergency services for assistance Assess the excavation for potential of further collapse; if so Shoring may be required to further stabilise the excavation Battering the excavation to eliminate further collapse If safe to do so commence soil removal taking into consideration the position of trapped worker; clearing soil from around the worker Expose worker and commence first-aid assessment and if needed treatment for worker A worker should not be removed if there is potential for further injury or life threatening situation. Wait for Emergency Services to remove worker. If worker/s is not trapped: <ol style="list-style-type: none"> Isolate the incident zone and notify nearby personnel within the affected area; Notify CC Site Manager 	NSW WH&S Reg 2017, S43 Construction CoP AS 3745 Emergency	7 Medium

Activity / Item	Hazards / Risks	Initial Risk Score	Control Measures / Risk Treatment	Legislation, Codes of Practice, and Guidelines (including other available information on hazard / risk)	Residual Risk Score
10.3 Forecast Storm Warning	Damage to property / workers from unrestrained materials or water inrush	14 Severe	<ul style="list-style-type: none"> Assess the severity of storm using data from BOM – L2 If applicable to the severity of the storm, complete a <i>S030202 Environmental Condition Checklist</i> to identify and prepare for site risk treatment options. E.g., identify loose or vulnerable materials plant and/or equipment – L2 Assess the implemented site sediment control, remove material from zones prone to flooding and secure site – L2 Where required commence emergency evacuation of area / site and/or isolate specific areas – L2 	NSW WH&S Reg 2017, S43 Construction CoP AS 3745 Emergency	7 Medium
10.4 Drowning	Water engulfment	16 Severe	<ul style="list-style-type: none"> Locate worker/s requiring rescue and identify potential hazards / constraints – L2 Notify Emergency Response Team of the incident requiring emergency response – L2 Assess the ability to rescue worker/s using available plant / equipment including associated risks – L2 Where safe to do so provide worker in water an appropriate floating device – L2 If unable to retrieve worker/s, or worker is seriously injured contact Emergency Services – L2 	NSW WH&S Reg 2017, S43 Construction CoP AS 3745 Emergency	7 Medium
10.5 Fire / Explosion	Fire / Explosion	16 Severe	<ul style="list-style-type: none"> Notify Emergency Response Team of the incident requiring emergency response – L2 Ensure fire equipment is inspected weekly on the project via a <i>S030402 Project Inspection Record</i> – L3 Ensure fire equipment is inspected every 6 months by a qualified fire protection provider – L2 Ensure no combustible material is present in the immediate areas – L3 Follow the controls listed in the Hazardous Substances / Dangerous Goods (HSDG) section – L3 Include location of Hazardous Substance / Dangerous Goods storage areas on Internal Traffic Management Plan – L3 	NSW WH&S Reg 2017 Sections 43, 51 and 53 Construction CoP, S7.4 AS 3745 Emergency	7 Medium
	Adjacent building / public	14 Severe	<ul style="list-style-type: none"> CC project management shall communicate all potential serious events that may affect adjacent structures as soon as possible following and incident – L3 Appropriate contact details of adjacent buildings shall be included in <i>Q070603 Project Emergency Plan</i> – L3 	NSW WH&S Reg 2017, Sections 43 AS 3745 Emergency	7 Medium

Activity / Item	Hazards / Risks	Initial Risk Score	Control Measures / Risk Treatment	Legislation, Codes of Practice, and Guidelines (including other available information on hazard / risk)	Residual Risk Score
	Inadequate / Inappropriate Fire Fighting Equipment or trained personnel	14 Severe	<ul style="list-style-type: none"> CC shall provide appropriate fire-fighting equipment at / adjacent to potential significant sources of fire / ignition (TPB, hazardous substance / dangerous goods facilities, amenities, plant as per manufacturers guidance) and at amenities exit / entry points unless otherwise assessed on completion of the <i>Q070603 Project Emergency Plan</i> – L2 CC shall ensure a competent supervisor is present with <i>Q140205 Emergency Response Training</i> and <i>Q140210 Fire Extinguisher Training</i> is on site – L3 The <i>Q070603 Project Emergency Plan</i> shall be complete by a competent Emergency Controller and reviewed quarterly to ensure fire-fighting equipment is adequate / appropriate in relation to the nature of the project, work, hazards, and workers – L3 	NSW WH&S Reg 2017 S43 AS 3745 Emergency	7 Medium

Activity / Item	Hazards / Risks	Initial Risk Score	Control Measures / Risk Treatment	Legislation, Codes of Practice, and Guidelines (including other available information on hazard / risk)	Residual Risk Score
	Bushfire	12 High	<ul style="list-style-type: none"> Commence emergency procedures and call 000 where required and evacuate site – L3 	NSW WH&S Reg 2017 Sections 43	4 Low

Activity / Item	Hazards / Risks	Initial Risk Score	Control Measures / Risk Treatment	Legislation, Codes of Practice, and Guidelines (including other available information on hazard / risk)	Residual Risk Score
	Environmental Fire water	12 High	<ul style="list-style-type: none"> Provide appropriate hazardous substance / dangerous goods facilities with suitable bunting, fire-fighting equipment, and signage – L2 The Q070603 <i>Project Emergency Plan</i> shall be complete by competent Emergency Controller and reviewed quarterly to ensure an appropriate spill-kit is provided in relation to the nature of the project, work, hazards, and storage facilities – L3 Manage Environmental Fire water as per emergency services direction or contain and dispose appropriately by external contractor – L3 CC shall ensure a competent supervisor is present with Q140211 <i>Spill Response Training</i> is on site – L3 	NSW WH&S Reg 2017 Sections 40 Environmental Act 1997 Environmental Policy 2008	4 Low

Activity / Item	Hazards / Risks	Initial Risk Score	Control Measures / Risk Treatment	Legislation, Codes of Practice, and Guidelines (including other available information on hazard / risk)	Residual Risk Score
10.6 Suspended worker	Suspension trauma	16 Severe	<ul style="list-style-type: none"> Locate worker/s requiring rescue and identify potential hazards / constraints – L2 Notify Emergency Response Team of the incident requiring emergency response – L2 Assess the situation and consider contacting Emergency Services – L2 Where person is suspended refer to Retrieval Plan attached to S030407 Harness Use Permit – L2 Assess the ability to rescue worker/s using available plant / equipment, including associated risks – L2 Initiate rescue using Retrieval Plan and/or SWMS and available plant/equipment directed by EC – L2 If unable to retrieve worker/s contact Emergency Services – L2 	NSW WH&S Reg 2017, S43 Construction CoP Falls CoP AS 3745 Emergency	7 Medium
10.7 Confined Space Incident	Asphyxiation	16 Severe	<ul style="list-style-type: none"> Notify Emergency Response Team of the incident requiring emergency response – L2 Assess the ability to rescue the worker using confined space emergency rescue plan developed for the specific confined space documented within the SWMS and Q030428 <i>Confined Space Permit</i> – L2 Determine if the worker requires urgent medical attention or is unable to be rescued – L2 Initiate rescue if possible and appropriately trained, using confined space rescue plan – L2 If unable to be rescued or urgent medical attention is required contact Emergency Services – L2 	NSW WH&S Reg 2017, S43 Construction CoP AS 3745 Emergency	7 Medium
10.8 Plant Incident	Being hit by mobile plant	16 Severe	<ul style="list-style-type: none"> Assess the scene for dangers, determine if any worker/s are injured and make area safe – L2 Notify Emergency Response Team of the incident requiring emergency response – L2 Apply first aid and determine if the worker requires urgent medical attention – L2 Preserve site conditions until authorisation received from Regulator to move plant / equipment – L3 Arrange for any structures to be recertified where applicable (formwork, scaffold, adjacent structures) – L2 	NSW WH&S Reg 2017, S43 Construction CoP Plant CoP AS 3745 Emergency	7 Medium

Activity / Item	Hazards / Risks	Initial Risk Score	Control Measures / Risk Treatment	Legislation, Codes of Practice, and Guidelines (including other available information on hazard / risk)	Residual Risk Score
10.9 Gas Leak	Asphyxiation	16 Severe	<ul style="list-style-type: none"> Evacuate all personnel to a minimum distance of 200m of leak – L2 Call 000, where required – L3 Notify Emergency Response Team of the incident requiring emergency response – L2 	NSW WH&S Reg 2017 S43 AS 3745 Emergency	7 Medium
	Explosion	16 Severe	<ul style="list-style-type: none"> Commence emergency evacuation procedures – L1 Ensure no sources of ignition sources are present in the immediate area – L2 	NSW WH&S Reg 2017 Sections 43, 51 and 53	7 Medium
	Mental Trauma	14 Severe	<ul style="list-style-type: none"> CC shall Initiate trauma management where required to affected workers – L3 	NSW WH&S Reg 2017, S43	7 Medium
	Adjacent building / public	14 Severe	<ul style="list-style-type: none"> CC project management shall communicate all potential serious events that may affect adjacent structures as soon as possible following and incident – L3 Appropriate contact details of adjacent buildings shall be included in Project Emergency Plan – L3 	NSW WH&S Reg 2017, Sections 43 AS 3745 Emergency	7 Medium
10.10 Partial Structural Collapse	Serious Injury / Illness	14 Severe	<ul style="list-style-type: none"> Determine if any worker/s are injured and make area safe – L2 Notify Emergency Response Team of the incident requiring emergency response – L2 Make safe with minimum 10m exclusion zone. Where required commence Evacuation Procedures – L2 Call structural engineer to assess situation and provide advice on safe remediation – L2 	NSW WH&S Reg 2017, S43 Construction CoP AS 3745 Emergency	7 Medium
10.11 Hazardous Substance Incident	Serious Injury / Illness or Exposure	14 Severe	<ul style="list-style-type: none"> Assess the scene for dangers, determine if any worker/s are injured and make area safe – L2 Notify Emergency Response Team of the incident requiring emergency response – L2 Apply first aid and determine if the worker requires urgent medical attention – L2 Provide protection for all Hazardous Substance storage areas; – L2 Take immediate action where incident including: – L3 <ul style="list-style-type: none"> Isolate personnel from spills Consult Safety Data Sheet; via their Simpel profile or an internet search (e.g., Google) via a phone or tablet. Contain spill in accordance with SDS with spill kit or other suitable means Commence emergency procedures and call 000, where required – L2 Follow the controls listed in the Air Monitoring and Health Monitoring section – L3 	NSW WH&S Reg 2017 s40 & 43 Haz Chem CoP AS 3833 Dangerous Subs AS 3745 Emergency	7 Medium

Activity / Item	Hazards / Risks	Initial Risk Score	Control Measures / Risk Treatment	Legislation, Codes of Practice, and Guidelines (including other available information on hazard / risk)	Residual Risk Score
	Fire	16 Severe	<ul style="list-style-type: none"> ▪ Notify Emergency Response Team of the incident requiring emergency response – L2 ▪ Ensure fire equipment is inspected weekly on the project via a <i>S030402 Project Inspection Record</i> – L3 ▪ Ensure fire equipment is inspected every 6 months by a qualified fire protection provider – L2 ▪ Ensure no combustible material is present in the immediate areas – L3 ▪ Storage of substances in accordance with the National Code of Practice for the Storage and Handling of Dangerous Goods – L3 ▪ Include location of Hazardous Substance / Dangerous Goods storage areas on Internal Traffic Management Plan – L3 	NSW WH&S Reg 2017 S51 Construction CoP, S7.4 AS 3745 Emergency	7 Medium
	Adjacent building / public	12 High	<ul style="list-style-type: none"> ▪ CC project management shall communicate all potential serious events that may affect adjacent structures as soon as possible following and incident – L3 ▪ Appropriate contact details of adjacent buildings shall be included in <i>Q070603 Project Emergency Plan</i> – L3 	NSW WH&S Reg 2017, S43 Construction CoP AS 3745 Emergency	4 Low
	Release to Environment	12 High	<ul style="list-style-type: none"> ▪ Take immediate action where incident including: – L3 <ul style="list-style-type: none"> ○ Isolate personnel from spills ○ Consult Safety Data Sheet; via their Simpel profile or an internet search (e.g., Google) via a phone or tablet. ○ Contain spill in accordance with SDS with spill kit or other suitable means ○ Follow the controls listed in the Air Monitoring and Health Monitoring section – L3 	NSW WH&S Reg 2017 S40 Environmental Act	4 Low

Activity / Item	Hazards / Risks	Initial Risk Score	Control Measures / Risk Treatment	Legislation, Codes of Practice, and Guidelines (including other available information on hazard / risk)	Residual Risk Score
10.12 HV/LV electrical service strike	Electrocution	16 Severe	<ul style="list-style-type: none"> ▪ Establish a minimum 10m exclusion zone around incident – L1 ▪ Operator to remain in cabin until assessment of the cable to be determine whether the line is live or not – L2 ▪ If electrical cable is live and able to be isolated: - L2 <ol style="list-style-type: none"> 1. Locate electrical source and isolate electrical circuit 2. Contact Emergency services for assistance 3. If possible try and break the contact of the person/plant with the cable 4. Undertake first-aid treatment as required ▪ If electrical cable is live and unable to be isolated: - L2 <ol style="list-style-type: none"> 1. Contact Emergency services for assistance 2. Does the operator need to leave the cabin for a safety reason i.e. fire or life threatening reason? <ol style="list-style-type: none"> a) If No - Operator to remain in cabin; b) If Yes - Do not touch the equipment and the ground at the same time. Operator is to shuffle away from the item of plant with feet together until at least 10m away ▪ Preserve site conditions until authorisation received from regulator to re-enter area 	NSW WH&S Reg 2017, S43 Construction CoP Electrical CoP AS 3745 Emergency	7 Medium

Activity / Item	Hazards / Risks	Initial Risk Score	Control Measures / Risk Treatment	Legislation, Codes of Practice, and Guidelines (including other available information on hazard / risk)	Residual Risk Score
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11. Environmental

11.1 General Waste	Waste entering stormwater / environment	12 High	<ul style="list-style-type: none"> Green waste shall not be dumped in areas affected by stormwater – L1 Projects shall report on recycled waste in <i>S020207 Project BMS Performance Meetings</i> – L3 	Environmental Act EPA Env Policy ISO 14001 Env Mgt	4 Low
11.2 Heritage land / building and/or archaeology	Damage to heritage land / building and/or archaeology	12 Hight	<ul style="list-style-type: none"> Complete a <i>Q070407 Latent Conditions Checklist</i> – L3 Where a project is identified by the client or regulatory authorities as a historical location the project shall be surveyed in consultation with the relevant groups to assess and control any Indigenous and Historic Heritage identified on the site – L3 	Environmental Act EPA Env Policy ISO 14001 Env Mgt	4 Low
11.3 Water Quality	Contaminated Water	12 High	<ul style="list-style-type: none"> If sediment control measures on/or surrounding site are breached the site shall contain the water (as far as practical) using suitable means until appropriate sediment control is put in place. EPA and Local Council shall be contacted where water cannot be contained – L2 Wastewater Subcontractor that removes material from site shall have appropriate controls for emergencies including controls for vehicle malfunction and tip over – L2 Contaminated soil shall be isolated / contained and removed by an approved external contractor. An external consultant shall complete an assessment and report on the safe removal and make good of area. CC Shall implement controls developed from environmental assessment – L3 EPA / Client / WorkSafe / Council shall be contacted where imminent risk to environmental impact – L3 Refer to drawings 17284-H-DR-C-1020 through 17284-H-DR-C-1025 for erosion and sediment control plan. 	ACT Environmental Act 1997 EPA Env Policy EPA Water Policy ISO 14001 Env Mgt	4 Low

Activity / Item	Hazards / Risks	Initial Risk Score	Control Measures / Risk Treatment	Legislation, Codes of Practice, and Guidelines (including other available information on hazard / risk)	Residual Risk Score
11.4 Soil Quality	Contaminated soil	15 Severe	<ul style="list-style-type: none"> Follow the controls listed in the Hazardous Substances / Dangerous Goods (HSDG) section – L3 Contaminated soil shall be isolated / contained and removed by an approved Subcontractor. A specialist consultant shall complete an assessment and report on the safe removal and make good of area. CC Shall implement controls developed from environmental assessment – L2 EPA / Client / WorkSafe / Local Council shall be contacted where imminent risk to environmental impact – L3 Concrete washout areas shall have appropriate matting / bunding to contain spills. Concrete pumping Subcontractor shall have appropriate controls for pump out area breaching / rupturing and/or area leaking into drain-ways – L2 Where fire extinguishing equipment is used material is to be disposed of as per SDS, including fire water if applicable – L2 All spills shall be reported immediately to CC site management. CC shall manage spills as per specific SDS and report to EPA, WorkSafe and local council – L3 	Environmental Act EPA Env Policy ISO 14001 Env Mgt	8 Medium
11.5 Air Quality	Atmospheric Contaminants	15 Severe	<ul style="list-style-type: none"> Follow the controls listed in the [HRCW] The cutting of Crystalline Silica Materials section – L3 Follow the controls listed in the Noise section – L3 Follow the controls listed in the Hazardous Substances / Dangerous Goods (HSDG) section – L3 Work areas shall be cleaned daily – L2 CC shall complete a <i>S030402 Project Inspection Record</i> to review areas weekly – L3 <i>Q070303 Subcontractor Hazard Control Review</i> shall identify works with dusty conditions and ensure suitable controls are implemented, including wetting of dust using water where possible and/or the use of appropriate dust masks and eye protection in extreme dusty conditions – L2 Plant and equipment shall be inspected, used, and maintained as per manufacturer's guidelines to mitigate noise, vibration, and exhaust pollution – L3 <i>S030411 Plant Operations Permit</i> shall be complete on all major plant / equipment prior to operation to verify design, inspection, and maintenance compliance with AS/NZS and system requirements – L3 Where atmospheric contaminants are identified on site, control measures are to be implemented to ensure that the Exposure Standard for Airborne Contaminants is not exceeded – L3 Follow the controls listed in the Air Monitoring and Health Monitoring section – L3 	WHS Act 2011 Environmental Act 1997 EPA Env Policy 2008 ISO 14001 Env Mgt	8 Medium

Activity / Item	Hazards / Risks	Initial Risk Score	Control Measures / Risk Treatment	Legislation, Codes of Practice, and Guidelines (including other available information on hazard / risk)	Residual Risk Score
11.6 Habitats (protected flora / fauna)	Damage to Flora / Fauna	12 High	<ul style="list-style-type: none"> Flora / Fauna shall be protected where required by BA/Client with appropriate fencing. Where Flora / Fauna are impacted, EPA and/or client shall be contacted on appropriate action forward – L2 All trees not to be removed from the site or adjacent verges are to be protected. Trees are to be fenced and 'Tree Protections Zone' signage installed to protect them from damage from plant and equipment during the construction process – L2 	Environment Protection and Biodiversity Conservation Act Environmental Act ISO 14001 Env Mgt	4 Low
11.7 Resource Depletion Water, Energy, Paper, etc	Excessive resources used	12 High	<ul style="list-style-type: none"> Recycling to be removed by external contractor and report provided to Project Manager – L3 Resource depletion shall be considered during the design phase of construction. This shall be documented in the Design Risk Analysis – L3 	Environmental Act EPA Environmental Policy ISO 14001 Env Mgt	4 Low
11.8 Hazardous waste	Industrial waste release into environment	12 High	<ul style="list-style-type: none"> For the management of Asbestos see the [HRCW] Work that involves the likely disturbance of asbestos section – L3 Scheduled hazardous wastes (PCBs and OCPs) and/or Liquid hazardous wastes shall be removed by a licensed waste removal contractor with appropriate control plan developed environmental authorisations obtained – L2 Evidence of appropriate removal / disposal shall be maintained by site – L3 	Environmental Act EPA Env Policy	4 Low
11.9 Lead	Disease / Release to environment	12 High	<ul style="list-style-type: none"> Lead risk work is any work that will likely cause blood lead levels of a worker to exceed 20 µg/dL (0.97 µmol/L), or 5 µg/dL (0.24 µmol/L) for females that may become pregnant – L2 The Exposure Standard for Lead: Time Weighted Average (TWA) 0.15mg/m3 Where exposure exceeding the TWA is identified implement health monitoring in accordance with WH&S Regulation 2017 Chapter 7 Hazardous chemicals, Part 7.2 Lead, Division 4 Health Monitoring, Schedule 14 Requirements for Health Monitoring, Table 14.2. Complete a <i>S030434 Lead Process Work Permit</i> Exclude at risk workers for undertaking "lead risk work" – L2 Provide suitable containment of work area – L2 Exclusion zone to non-essential personnel implemented – L2 Engage Occupation/Industrial Hygienist to develop Lead Remediation Control Plan – L3 Ensure appropriate PPE is worn – L3 Ensure work area is regularly cleaned – L2 Prohibit eating, drinking, and smoking in work area – L1 Provide changing and washing facilities – L2 Provide laundering, disposal and removal of PPE contaminated with lead dust – L2 Undertake Health Monitoring – L3 Review control measures and Health Monitoring results – L3 Follow the controls listed in the Air Monitoring and Health Monitoring section – L3 		

Activity / Item	Hazards / Risks	Initial Risk Score	Control Measures / Risk Treatment	Legislation, Codes of Practice, and Guidelines (including other available information on hazard / risk)	Residual Risk Score
11.10 Hazardous Substance Waste	Release to Environment	12 High	<ul style="list-style-type: none"> Follow the controls listed in the Hazardous Substances / Dangerous Goods (HSDG) and Hazardous Substance Incident section – L3 Follow the controls listed in the Air Monitoring and Health Monitoring section – L3 Projects with hazardous substances shall have an appropriate storage area with adequate bunding to hold all substances within area and any flame retardant used to extinguish flames; suitable spill kits are to be readily available on site – L2 Projects with concrete pours shall have an appropriate concrete washout area defined with adequate bunding to hold material and spills; All concrete slurry from pours, cuts and drills shall be contained and removed – L2 Projects shall have appropriate paint washout facilities with required water storage, spinning drums, and filters. Paint waste and wash waters shall not be discharged to the stormwater system or drain ways – L2 Paint Contractor shall ensure all washout liquids are filtered through fabric into appropriate recycled liquid container. Filters shall be disposed as clean out waste bin located in the paint washout area – L2 Projects which require concrete and paint washout areas shall ensure subcontractor or other independent contractor removes waste as per Hazardous Waste Policy requirements and provides report / record of removal back to manufacturer or approved waste disposal facility – L2 	Environmental Act Hazardous Waste Policy EPA Environmental Policy ISO 14001 Env Mgt	4 Low
11.11 Sun Exposure	Sunburn	12 High	<ul style="list-style-type: none"> working under shade and shelter whenever possible – L1 rotating tasks to reduce sun exposure – L2 scheduling work to cooler times of the day – L1 providing information, instruction, training and supervision to workers – L3 providing water and encouraging workers to stay hydrated – L2 providing personal protective equipment, like SPF 50+ clothing, long sleeves shirts and sunscreen – L3 	Cancer Council / Sunsmart Website	4 Low
11.12 Extreme cold	Hypothermia	12 High	<ul style="list-style-type: none"> Develop control measures applicable to the works – L3 Ensure workers wear suitable attire – L2 Provide gloves to workers – L3 	St Johns First Responder App	4 Low