PBS	Project Risk Registe	ar			Acronym	PBS Project Rick Register (PRR) Responsible Positions	Hierarchy of Control		Control Selections	♠PBS
. 20	. rojournom ragion				SS	Sub-Contractor Supervisor	6. Elimination	3	%Controls ≥ 91%	
					SM	Site Manager	5. Substitution		%Controls < 0%	
					FM	Foreman	4. Isolation	71	Engineering 970	
Workplace Location:	St Hedwigs Village, 134-140 Reservoir				CA	Contracts Administrator	3. Engineering	109		
Issue Number:	Rd, Blacktown	Updated to clarify Electrical Easment Controls			EHSQ	EHSQ Co-Ordinator	2. Administration	19	ßCheck formulas in L2-L7 if you add rows to ensure range is correct	
Issue Date:		Lasment Controls			PE/SE	Project Engineer / Site Engineer	1. PPE	0	_	Delete Legislation / Codes not applicable to
Activity Description	High Risk Construction Work	Hazard / Impact	Likelihood	Consequence		Mandatory Control Measures	Site Specific Control Measures	Hierarchy of Control	Responsible Status	your jurisdiction Legal and other
		(Worst Credible Consequence)						(Highest Level Control)		requirements
Abseiling outside structure perimeter		Hit by Falling Objects	C Possible	3 Medium	9	Physical barriers to be in place as an exclusion zone to prevent access underneath the work area and must take into consideration the arc, fall and bounce of materials and tools. Signage to be installed. Tools to be on lanyards. Authorised person only to be in direct workzone.	Traffic Control in place for public areas. Materials to be hoisted down on lanyards.	4. Isolation	SS / SM Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination health and safety consultation, coordination and cooperation COP, PBS Safety Guide
Air - Conditioning	Risk of Person Falling more than 2m	Fall of Person	C Possible	3 Medium	9	Platform ladders or EWP's are to be used in the first instance. Work trestles a minimum width of 450mm can be used. Step Ladders may only be used for minor works which take less than 15 minutes to complete and 3 points of contact must be maintained. Delivery drivers or workers are NOT to access the back of trucks unless; "There is a handrail system incorporated onto the back of the vehicle or, "A portable handrail system is provided by the project and, "The use of a portable loading bay platform would be the ideal control measure. When one or more of these controls are implemented, workers may use the access ladder and maintain 3 points of contact when ascending or descending. Ladders to be stepped back from any edges of a building/balconies at least 3m or 1:1 ratio if a full perimeter screen/scaffold has been installed.	Ticketed Personnel required for operation of EWP. Harness to be worn and connected prior to bucket being raised. Harness to be inspected daily before use and maintained as per manufacturer specificiations. Mobile scaffold to be used. Any mobile scaffold over 4m needs to be erected by a ticketed scaffolder.	3. Engineering	SS / SM Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety siks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide
Air - Conditioning		Fire/Explosion	D Unlikely	3 Medium	6	Hot Works Permit to be in place. Area to be clear of combustible materials. Correct PPE to be worn. Flash back arrestors connected to all oxy sets.		3. Engineering	SS/SM/FM Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide, Welding processes COP
Air - Conditioning	Is carried out in an area at a workplace in which there is any movement of powered mobile plant	Hit by Moving Plant	C Possible	4 Large	12	No one is to approach plant unless confirmation has been received by the operator that it is ok to approach. All plant to have flashing beacons operating. Mobile phones not be used when operating plant and equipment. Operator to be appropriately Trained / Ticketed.	Exclusion zone to be in place to prevent unauthorised entry to work area. Access ways to be redirected to ensure no personnel inside operating areas. Outriggers of crane to be protected by jersey kurbs or similar to prevent contact from other plant/veloides. Use Tag Lines when appropriate to control llight weight &/or large panel lifts in windy conditions. Dogman and Operator to sign into Crane Management Sub Plan. Spotter/Dogman to have positive communication with operator (via hand signals, whistle or UHF radio) at all times. Seat belts to be worn at all times where fitted. Refer to mobile crane operations activity in this PRR	4. Isolation	SS/SM/FM Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide, Managing the risks of plant in the workplace COP
Air - Conditioning		Cuts and Lacerations	C Possible	2 Small	6	All guards to be fitted to power tools. Wear gloves when working with sharp steel edges. Eye Protection to be worn when cutting metalwork.	Hot works Permit to be in place	3. Engineering	SS / SM / FM Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety siks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide
Air - Conditioning		Plant Failure	D Unlikely	3 Medium	6	All duct lifters and portable type hoists must have a breaking system so that in the event of a hoisting wire failure the load cannot fall. In addition, outriggers where fitted must be used, SWL must be clearly marked & only propriety attachments are used and only in accordance with manufacturers instructions.		3. Engineering	SS / SM Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide, Managing the risks of plant in the workplace COP
Air - Conditioning		Hit by Falling Objects	D Unlikely	4 Large	8	Authorised person only to be in direct workzone.	Tools to be on lanyards when working above 2m fall risk. Physical barriers to be in place as an exclusion zone and must take into consideration the arc, fall and bounce of materials and tools. Area to be bunled off with signage to prevent unauthorised access.	4. Isolation	SS/SM/FM Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide
All Trades		Electric Shock	B Likely	3 Medium	12	Electrical equipment to be tested and tagged by competent person minimum 3 monthly. RCD's to be tested by a qualified person monthly and trip times to be recorded and given to PBS. Lead stands or insulated hooks must be used to elevate leads above head height.		3. Engineering	SS/SM Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide:
All Trades		Manual Handling Injury	C Possible	3 Medium	9	Ensure load is close to the chest and bend the knees to pick up the load. Lift with legs keeping back straight. Bend the knees to lower the load then release the load to final postion without over extending the back. Contractor to ensure all workers are inducted into the trade specific safe working procedures for manual handling. (eg subcontractor WHS Plan, Trailining Register,)	Use Mechanical Aids. Team Lifts to occur.	3. Engineering	SS/SM Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide, Hazardous manual tasks COP.
Concrete Coring	Risk of Person Falling more than 2m	Fall of Person	B Likely	4 Large	16	Platform ladders or EWP's are to be used in the first instance. Work trestles a minimum width of 450mm can be used. Step Ladders may only be used for minor works which take less than 15 minutes to complete and 3 points of contact must be maintained. Ladders to be stepped back from any edges of a building/balconies at least 3m or 1:1 ratio if a full perimeter screen/scaffold has been installed.	Catch deck to be installed underneath area being cored. Exclusion Zone with spotter to be set up and signage in place.	3. Engineering	SS/SM/FM Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide
Concrete Coring		Hit by Falling Objects	A Almost Certain	3 Medium	15	Concrete Coring Work Permit to be issued.Physical barriers to be in place as an exclusion zone and must take into consideration the arc, fall and bounce of materials and tools underneath the area being cored. Area to be bunted off with signage to prevent unauthorised access. Authorised person only to be in direct workzone.		4. Isolation	SS / SM Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide

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						PBS Project Risk Register (PRR)					
PBS	Project Risk Regist	er			Acronym	Responsible Positions	Hierarchy of Control		Control Selections		
					SS	Sub-Contractor Supervisor	6. Elimination	3	%Controls ≥ 91% Engineering		
					SM	Site Manager	5. Substitution	6	%Controls < 9% Engineering		
	I		1		FM	Foreman	4. Isolation	71			
Workplace Location:	St Hedwigs Village, 134-140 Reservoir Rd, Blacktown				CA	Contracts Administrator	3. Engineering	109	BCheck formulas in L2-L7 if you add rows to ensure range is		
Issue Number:	Rev 5.0	Updated to clarify Electrical Easment Controls			EHSQ	EHSQ Co-Ordinator	2. Administration	19	correct		
Issue Date:	22/09/2021	1			PE/SE	Project Engineer / Site Engineer	1. PPE	0		Delete Legislation / Codes not applicable to your jurisdiction	
Activity Description	High Risk Construction Work	Hazard / Impact (Worst Credible Consequence)	Likelihood	Consequence	Risk Rating	Mandatory Control Measures	Site Specific Control Measures	Hierarchy of Control (Highest Level Control)	Responsible Status	Legal and other requirements	
_	Carried out in an area that may have a contaminated atmosphere	Dust Inhalation	A Almost Certain	2 Small	10	Internal Risk - P2/P3 dust mask to be worn. External Risk - Constant Hosing down with water to be undertaken.	Use of Fans for internal risk. Power tools to have vaccum /water attachments	3. Engineering	SS / SM Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide, Managing risks of hazardo	
Concrete Coring	Is carried out on or near energised electrical installations or services	Contact with Live Existing Services	B Likely	4 Large	16	Concrete Coring Work Permit to be issued. If services located in direct coring zone then additional Energisation/Isolation Permit to be issued and completed. Visual inspection to be conducted for underslab services.		3. Engineering	SS/SM/FM/SE/ Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide, Managing electrical risk in the workplace COP	
Concrete Placement		Environmental Contamination from Spill of Hazardous Chemicals/Substances	C Possible	2 Small	6	Designated washout / recycling areas for concrete and concrete equipment with regular monitoring.		4. Isolation	SS/SM/FM Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide, Managing risks of hazardous chemicals in the workplace COP	
Concrete Placement		Failure of Structure	D Unlikely	5 Very Large	10	Structural Engineer Certification to be received prior to pour for formwork deck. Hold Point - PBS pre pour checklist to be conducted prior to pour of deck commences. Level underneath formwork deck being poured to be closed off and only restricted access allowed (i.e Formwork spotter)	Securing requirements, load points, bracing and fixing details must be verified to be in accordance with an approved design and include suitable structural fixings that account for wind load considerations based on locality.	4. Isolation	SS/SM/FM/SE/ Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide, Safe Design of Structures COP	
Concrete Placement		Exposure to Hazardous Material	C Possible	2 Small	6	Correct PPE to be worn. SDS to be communicated to all workers involved in the task via TBT, training register or SWMS. Hazardous Materials to be stored in designated storage area immediately after use.		4. Isolation	SS/SM Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide, Managing risks of hazardous chemicals in the workplace COP	
Concrete Placement		Fall of Person	B Likely	4 Large	16	Fall Protection must be in place and all reo bars are capped prior to commencing.	Suitable work platforms must be in place for pouring at height.	3. Engineering	SS/SM Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide	
Concrete Placement		Fatigue	C Possible	2 Small	6	Rotate work crews. Monitor number of workers and hours worked. Contractors to provide ways home for workers that may be too fatigued to drive home. Site to have designated rest areas. Min 10hr break between shifts.	Works conducted IAW approved DA hours.	2. Administration	SS/SM Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide	
Concrete Placement		Hit by Falling Objects	B Likely	3 Medium	12	A system must be in place to alert workers of changed boom position.Concreters not to collect any loads by crane. Dogman to land loads I.e helecopters etc. Authorised person only to be in direct workzone.	Documented check to confirm suitable barrier in place with no gaps in containment screens / scaffold to prevent concrete slurry falling to ground.	3. Engineering	SS / SM Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide	
Concrete Placement		Working in Cold, Inclement or Windy Weather	C Possible	2 Small		Heated amenities to be provided. Suitable Access / Egress to be provided to work areas. Concrete Placing Boom not to work outside the manufacturer's recommendations regards extreme weather (wind speed) If lightning is present in the near sky or immediate sky above then concrete booms must be lowered and persons to remain under cover in lunch sheds until the weather passes.	Inspection to be conducted prior to gates of site open by PBS Site Manager/ EHS Committee to assess all access routes. Any unsuitable work areas are to barricaded off with physical barrier until deemed safe to enter.	4. Isolation	SS/SM/HSR Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide, Managing the work environment and facilities COP	
Concrete Placement		Working in High Temperatures - Heat Stress/Heat Exhaustion	C Possible	2 Small	6	Sufficient quantities of cool drinking water is readily available close to work areas. Regularly rotate workers who perform more strenuous activities with less demanding tasks, Take regular work breaks in cooler areas such as air conditioned sheds.	Shade Covers to be installed. Workers to consider wearing broad brimmed hats and sunglasses for UV protection.	3. Engineering	SS/SM/HSR Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide, Managing the work environment and facilities COP	
Concrete Placement	Carried out in an area that may have a contaminated atmosphere	Dust Inhalation	C Possible	2 Small	6	Internal Risk - P2/P3 dust mask to be worn. External Risk - Constant Hosing down with water to be undertaken.	Use of Fans for internal risk. Power tools to have vaccum attachments	3. Engineering	SS / SM Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide, Managing risks of hazard	
Concrete Pump	Is carried out in an area at a workplace in which there is any movement of powered mobile plant	Plant Over-Turning	C Possible	4 Large	12	Set up in an area that is approved by PBS Site Manager. Plant is not to set up or traverse within the zone of influence of a service trench/ excavation or on a service trench. Outriggers must be set up on stable ground. Licenced operators to operate boom/satellite pumps only.	Penetration covers to be physically secured with signage and be of sufficient strength to support likely plant or equipment in the area. If sizable penetration, load & point limits to be displayed. Compaction test is required prior to set up of outriggers on disturbed soil. Outriggers of crane to be protected by jersey kurbs or similar to prevent contact from other plant/vehicles.	3. Engineering	SS / SM Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide, Managing the risks of plant in the workplace COP	

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EHS				1		PBS Project Risk Register (PRR)						PF
PBS	Project Risk Regist	er			Acronym	Responsible Positions	Hierarchy of Control		Control Selections		PBS	
					ss	Sub-Contractor Supervisor	6. Elimination	3	%Controls ≥ Engineering	91%		
					SM	Site Manager	5. Substitution	6	%Controls < Engineering	9%		
					FM	Foreman	4. Isolation	71				
Workplace Location:	St Hedwigs Village, 134-140 Reservoir Rd, Blacktown				CA	Contracts Administrator	3. Engineering	109	ßCheck formulas in			
Issue Number:	Rev 5.0	Updated to clarify Electrical Easment Controls			EHSQ	EHSQ Co-Ordinator	2. Administration	19	add rows to ensure correct			
Issue Date:	22/09/2021	1			PE/SE	Project Engineer / Site Engineer	1. PPE	0			Delete Legislation / Codes not applicable to your jurisdiction	
Activity Description	High Risk Construction Work	Hazard / Impact (Worst Credible Consequence)	Likelihood	Consequence	Risk Rating	Mandatory Control Measures	Site Specific Control Measures	Hierarchy of Control (Highest Level Control)	Responsible	Status	Legal and other requirements	
Concrete Pump		Plant Failure	C Possible	4 Large	12	Ensure safety pins are installed to line connectors. Monthly pipe thickness tests to be conducted and checked to ensure minimum density allowance is not exceeded. Servicing and maintenance to be done as per manufacturer's specifications	MEAT linspections to be conducted.	3. Engineering	SS / SM	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide, Managing the risks of plant in the workplace COP	
Concrete Pump	Is carried out in an area at a workplace in which there is any movement of powered mobile plant	Hit by Moving Plant	B Likely	4 Large	16	Linesman to have postive communication with pump operator when positioning the line. Pump operator to have full sight of where concrete boom is being positioned.	Line Pump stands to be used on deck and for static lines on the ground.	3. Engineering	SS/SM	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide, Managing the risks of plant in the workplace COP	
Concrete Pump		Environmental Contamination from Spill of Hazardous Chemicals/Substances	C Possible	2 Small	6	Cattlegrid to be installed at egress point to site. Wash Area to be established as required.		4. Isolation	SS/SM	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide, Managing risks of hazard	
Concrete Pump		Working in Cold, Inclement or Windy Weather	C Possible	1 Very Small	3	Heated amenities to be provided. Suitable Access / Egress to be provided to work areas. Concrete Placing Boom not to work outside the manufacturer's recommendations regards extreme weather (wind speed) If lightning is present in the near sky or immediate sky above then concrete booms must be lowered and persons to remain under cover in lunch sheds until the weather passes.	Inspection to be conducted prior to gates of site open by PBS Site Manager/ EHS Committee to assess all access routes. Any unsuitable work areas are to barricaded off with physical barrier until deemed safe to enter.	4. Isolation	SS/SM/HSR	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide, Managing the work environment and facilities COP	
Concrete Pump		Working in High Temperatures - Heat Stress/Heat Exhaustion	C Possible	1 Very Small	3	Sufficient quantities of cool drinking water is readily available close to work areas. Regularly rotate workers who perform more strenuous activities with less demanding tasks. Take regular work breaks in cooler areas such as air conditioned sheds.	Shade Covers to be installed. Workers to wear broad brimmed hats and sunglasses for UV protection.	3. Engineering	SS/SM/HSR	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide, Managing the work environment and facilities COP	
Confined Space	Risk of Person Falling more than 2m	Fall of Person	B Likely	4 Large	16	Suitable access must be provided into confined space which does not expose the personnel to a risk of fall.	3 points of contact to be maintained when using ladder. Physical barrier to be installed 2m back from the edge of excavation. Shoring box to be used to provide access and control the risk of fall with handrails and midrails.	3. Engineering	SS/SM	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide, Confined spaces COP, Managing the risk of falls at the workplace COP	
Confined Space	Is carried out in or near a confined space	Enguifment / Asphixiation	B Likely	4 Large	16	Confined Space Entry Permit to be issued. Personnel entering confined space & observer both to hold evidence of confined space training. Positive communication to be maintained at all times (i.e UHF radios). Bump test to be conducted on detector to confirm calibration and working order. The confined space then needs to be tested prior to any persons entering the space. Gas Detection to be conducted whilst worker inside confined space. Emergency Procedure to be documented in HR SWMS for the retrieval of injured person.	Breathing appartus (P3) to be worn. No hot works to be conducted within the space.	3. Engineering	SS/SM/FM	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide, Confined spaces COP	
Crane - lifted work boxes		Hit by Falling Objects	A Almost Certain	4 Large	20	All work boxes must be design registered with Relevant Authority. Workbox must be securely attached to crane hook. Directions to crane operator should only be provided from work box by licensed dogger / rigger. Authorised person only to be in direct workzone.		3. Engineering	SS / SM	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide	
Crane - lifted work boxes	Risk of Person Falling more than 2m	Fall of Person	B Likely	4 Large	16	Full body fall - arrest harnesses to be worn at all times (except when using 1st aid crane box) & be attached to work box anchor points or to crane main sling ring above heads of workers. Emergency retrieval arrangements to be in place before lift commences.		3. Engineering	SS/SM	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide	
Crane - lifted work boxes		Plant Failure	C Possible	4 Large	12	All work boxes must be design registered with Relevant Authority. Workbox must be securely attached to crane hook. Emergency retrieval arrangements to be in place before lift commences		3. Engineering	SS/SM	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide, Managing the risks of plant in the workplace COP	
Electrical Easement		Contact with Energised services or breaching exclusion zones	D Unlikely	5 Very Large	10	Easement Exclusion Zone Identified by flagging. Exclusion Zone included in Site inductions. No Works to occur in Exclusion without PBS Site Manager approval and Endeavor Energy (EE) Authorisation Permit. Temporary Fence to be earthed within easement IAW EE guidelines and AS3000.	1. Risk Assessment and crane crew to inducted to site crane plan including lifting radiuses 2. The Electrical Easement is located on the western edge of site and is a Restricted Work Area. All works conducted within the Electrical Easement is to have prior approval site from the PBS Site Manager with a PBS Restricted Work Area or Excavation Permit lodged with and approved by the PBS Site Manager with a PBS Restricted Work Area or Excavation Permit lodged with and approved by the PBS are required to seek authorisation from Endeavour Energy with the Endeavour Energy permit retained on site by PBS and contractors involved in works. 4. Crane Sub plan to identify site map with easement area and visual indicators on site for crane crew. 5. Slewing and luffing restricter fitted to crane to prevent boom entering easement area. Visual demarcation of Easement border to be put in place on site.	4. Isolation	SS / SM	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide, Work Cover Work Near Overhead Powerlines COP, Endevour Energy Easements and Property Tenure (MDI0044), Endevour Energy General Restrictions for Overhead Power Lines - 7-4- 2020.	

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IS						PBS Project Risk Register (PRR)					
P	PBS Project Risk Regist	er			Acronym	Responsible Positions	Hierarchy of Control		Control Selections	• PBS	5
					SS	Sub-Contractor Supervisor	6. Elimination	3	%Controls ≥ Engineering	91%	
					SM	Site Manager	5. Substitution	6	%Controls < Engineering	9%	
					FM	Foreman	4. Isolation	71			
Workplace Lo	ocation: St Hedwigs Village, 134-140 Reservoir Rd, Blacktown				CA	Contracts Administrator	3. Engineering	109	ßCheck formulas in	L2-L7 if you	
Issue N	Number: Rev 5.0	Updated to clarify Electrical Easment Controls			EHSQ	EHSQ Co-Ordinator	2. Administration	19	add rows to ensur correct		
Issu	ue Date: 22/09/2021				PE/SE	Project Engineer / Site Engineer	1. PPE	0	1	Delete Legislation / Codes not applicab your jurisdiction	le to
Activity Descrip	tion High Risk Construction Work	Hazard / Impact (Worst Credible Consequence)	Likelihood	Consequence	Risk Rating	Mandatory Control Measures	Site Specific Control Measures	Hierarchy of Control (Highest Level Control)	Responsible	Status Legal and other requirements	
Electrical	Risk of Person Falling more than 2m	Fall of Person	C Possible	4 Large	12		Competent person to only use EWP below 11m. Ticketed Personnel required for operation of EWP over 11m. Harness to be worn and connected to boom EWP type prior to bucket being raised. Harness to be inspected daily before use and maintained as per manufacturer specifications. Mobile scaffold to be used. Any mobile scaffold over 4m needs to be erected by a ticketed scaffolder.	3. Engineering	SS/SM	WHS Act 2011, WHS Regulations 20 Construction Work COP, How to man: work health and safety risks COP, Whealth and safety consultation, coordin: and cooperation COP, PBS Safety Gu	age ork ation
Electrical	Is carried out on or near energised electrical installations or services	Electrocution	A Almost Certain	4 Large	20	Install RCD protected temporary boards at each level in nominated location being hard wired with 4mm cable (i.e no spider / wander boards allowed). Temporary boards must be physically secured to prevent overturn of board and front covers must be lockable. Temporary boards must have locked overs over circuit - breakers and RCDs associated with outgoing circuits apart from the main switch/isolating switch which must be readily accessible in the event of an emergency. Temp Boards must have signage installed on the front cover.Lock out/Tag out system to be used when isolation of electrical rede required. Isolation / Emergisation Permit to be Issued. Live temporary electrical cabling must be identified with yellow tag tape every 3m, where cabling is accessible. Competent Persons must carry out electrical inspection, testing and tagging of leads 3 monthly and a Qualified person must test RCD's monthly. All temporary electricity provided to socket (general purpose) outlets must be protected by a Residual Current Device. Each Temporary Board & all construction wiring installations must have a completed copy of ACT CES/ NSW CCEW / QLD CTC provided to PBS following each energisation. Electrical apprentices and trade assistants must work under the supervision of a licenced electrician at all times. All electrical work (other than inspection and testing of portable equipment) must be carried out by a licenced electrician must evify their licence before they commence electrical works. Calibration of all testing equipment must be carried out as per manufacturers instructions. Cordless tools are encouraged to be used before power tools. Every cable end (i.e. awaiting termination) must be folded over itself and taped to prevent eye damage and electric shock (in the event of inadvertent energisation). RCD Trip Times to be recorded monthly on a register. HR	Permanent House Distribution Boards diplayed power supplier / Authority compliance labels which allow power connection area a higher control level confirming test and tag' requirements. Permanent House Distribution Boards must be fitted with machanical protection to prevent leads being damaged before use by contractors.	4. Isolation	SS/SM/FM	WHS Act 2011, WHS Regulations 20 Construction Work COP, How to many work health and safety risks COP, W Open health and safety consultation, coordin, and cooperation COP, PBS Safety Gu Managing electrical risks in the workpl COP	age ork ation ide,
Electrical		Hit by Falling Objects	B Likely	3 Medium	12	Authorised person only to be in direct workzone. Authorised person only to be in direct workzone.	Tools to be on lanyards when working above 2m fall risk. Physical barriers to be in place as an exclusion zone and must take into consideration the arc, fall and bounce of materials and tools. Area to be buntled off with signage to prevent unauthorised access.	4. Isolation	SS / SM	WHS Act 2011, WHS Regulations 20 Construction Work COP, How to manawork health and safety risks COP, Whealth and safety consultation, coordinand cooperation COP, PBS Safety Gu	age ork ation
Electrical	Is carried out in an area at a workplace in which there is any movement of powered mobile plant	Hit by Moving Plant	C Possible	4 Large	12	No one is to approach plant unless confirmation has been received by the operator that it is ok to approach. All plant to have flashing beacons operating. Mobile phones not be used when operating plant and equipment. Operator to be appropriately Trained / Ticketed.	Exclusion zone to be in place to prevent unauthorised entry to work area. Access ways to be redirected to ensure no personnel inside operating areas. Outriggers of crane to be protected by jersey kurbs or similar to prevent contact from other plant/vehicles. Use Tag Lines when appropriate to control llight weight &/or large panel lifts in windy conditions. Dogman and Operator to sign into Crane Management Sub Plan. Spotter/Dogman to have positive communication with operator (via hand signals, whistle or UHF radio) at all times. Seat belts to be worn at all times where fitted. Refer to mobile crane operations activity and excavation activity in this PRR.	4. Isolation	SS / SM	WHS Act 2011, WHS Regulations 20 Construction Work COP, How to man- work health and safety risks COP, W health and safety consultation, coordin- and cooperation COP, PBS Safety Gu Managing the risks of plant in the workplace COP	age ork ation ide,
Electrical		Cuts and Lacerations	C Possible	2 Small	6	All guards to be fitted to power tools. All PPE requirements shall be assessed in the contractors HR SWMS	Power and battery operated tools must have manufacturers guards fitted.	3. Engineering	SS/SM/FM	WHS Act 2011, WHS Regulations 20 Construction Work COP, How to many work health and safety risks COP, We hastlin and safety consultation, coordinity and cooperation COP, PBS Safety Gu	age ork ation
Electrical		Fire/Explosion	B Likely	3 Medium	12	Hot Works Permit to be in place Or Isolation / Energisation Permit to be in place. Area to be clear of combustible materials. Correct PPE to be worn.		2. Administration	SS/SM/FM	Open Hall and coperation COP, Basel COP, How to man- work health and safety risks COP, We hall hand safety consultation, coordin- and cooperation COP, PBS Safety Gu Welding processes COP	age ork ation
Electrical		Exposure to Hazardous Material	C Possible	2 Small	6	Correct PPE to be worn. SDS to be communicated to all workers involved in the task via TBT, training register or SWMS. Hazardous Materials to be stored in designated storage area immediately after use.	Hazardous Materials and Dangerous Goods sub plan to be in place.	4. Isolation	SS / SM	WHS Act 2011, WHS Regulations 20 Construction Work COP, How to many work health and safety risks COP, Who Open haith and safety consultation, coordin, and cooperation COP, PBS Safety Qu Managing risks of hazardous chemical the workplace COP	age ork ation ide,
Emergency Planning		Emergency Risk Assessment	E Rare	4 Large	4	Fire extinguisher to be located at every exit point and/or every 500 square metres. Nurse Call point and/or air horn to be located every 500 square metres. Spill Kits to be located at all designated refuelling areas and hazardous chemicals / dangerous goods storage areas. Contractors are to provide their own spill kit relevant for their own, refuelling or other, activities.	PBS will have a multipurpose spill kit available as a back up. 2 x 50 Litre Spill Kits to be held onsite. 1 fire extinguisher (to suit class a,b,c & electrical fire) on each storey adjacent to each exit or temporary stairway at all times. After building reaches 12m effective height, required fire hydrants & fire hose reels must be operational every storey (except the 2 uppermost floors). Emergency Evacuation Map to be installed on every level / at each exit point.	3. Engineering	SS / SM	WHS Act 2011, WHS Regulations 20 Construction Work COP, How to many work health and safety risks COP, We health and safety consultation, coordinate on and cooperation COP, PBS Safety Gu Managing the work environment an facilities COP, First aid in the workpla	age ork ation ide, d
Excavation	Involves, or is likely to involve, the disturbance of asbestos	Exposure to Hazardous Dust	C Possible	3 Medium	9	Unexpected finds protocol to be followed if unknown. If Known, and less than 10m2 PBS to engage an asbestos removalist and monitor tracking of waste to certified waste treatment plant. If Asbestos waste is over 10m2 then relevant authorities shall be notified and an Asbestos removalist shall be engaged. Any health monitoring shall be conducted as per the advice of the Asbestos removalist occupation hygelnist. Test holes of soil conditions to be completed by consultant and results provided to PBS. All PPE requirements are to be worn Le Masks, jump suits. Decontamination of any exposed clothing/PPE shall be undertaken before leaving the effected area.	Contaminated areas to be bunted off using physical barriers and signage installed. Plastic to be installed over contaminated areas to prevent risk of dust arising until removal process is initiated. All workers to hold as	3. Engineering	SS / SM	WHS Act 2011, WHS Regulations 20 Construction Work COP, How to man Open work health and safety risks COP, We health and safety consultation, coordin, and cooperation COP, PBS Safety Gu	age ork ation
Excavation	Is carried out on or near pressurised gas distribution mains or piping; is carried out on or near energised electrical installations or services	Contact with In-Ground Services	A Almost Certain	4 Large	20	Excavation Permit required when penetrating the ground 200mm or more. Digging by mechanical means is not to be carried out within 1m of a known live service unless EHSQ Manager has been consulted	DBYD and ShoreSearch 2020 Utility Loacting Report and Service Docket to be reviewed.Installed Services are to be installed in accordane with approved cordinated design. All new services are to be run and installed outside of designated work areas Energise/Isolate Permit may also be required.	3. Engineering	SS/SM/FM	WHS Act 2011, WHS Regulations 20 Construction Work COP, How to mani work health and safety risks COP, W health and safety consultation, coordini, and cooperation COP, PBS Safety Gu Excavation COP, Managing electrical r in the workplace	age ork ation ide,

EHS						PBS Project Risk Register (PRR)					
PBS	Project Risk Registe	er			Acronym	Responsible Positions	Hierarchy of Control		Control Selections		PBS
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			1		FM	Foreman	4. Isolation	71			
Workplace Location:	St Hedwigs Village, 134-140 Reservoir Rd, Blacktown				CA	Contracts Administrator	3. Engineering	109	ßCheck formulas in add rows to ensure		
Issue Number:	Rev 5.0	Updated to clarify Electrical Easment Controls			EHSQ	EHSQ Co-Ordinator	2. Administration	19	correct		
Issue Date:	22/09/2021	ı			PE/SE	Project Engineer / Site Engineer	1. PPE	0			Delete Legislation / Codes not applicable to your jurisdiction
Activity Description	High Risk Construction Work	Hazard / Impact (Worst Credible Consequence)	Likelihood	Consequence	Risk Rating	Mandatory Control Measures	Site Specific Control Measures	Hierarchy of Control (Highest Level Control)	Responsible	Status	Legal and other requirements
	Is carried out in or near a shaft or trench with an excavated depth greater than 1.5 metres	Collapse of Excavation / Trenching	A Almost Certain	4 Large	20	Excavation Permit required when penetrating the ground 200mm or more. Excavation / Trench must be either benched; battered; shored or a combination of all if deeper than 1.5m; otherwise proceed as per Geotech report requirements. Any amendments outside geotech report must be signed off by relevant qualified engineer prior to works occuring. Physical Barrier to be installed along top of excavation / trench to prevent plant / vehicles entering the zone of influence. Any spoil must not be stored within zone of influence and must be stored on down slope side.	. Shoring Boxes to provide suitable access in/out of excavation. Adjacent structures, roads and footpaths must be supported or protected to prevent collapse.	4. Isolation	SS/SM/FM	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide
Excavation	Risk of Person Falling more than 2m	Fall of Person	B Likely	4 Large	16	Visual barrier to be installed minimum of 2m back from edge of excavation or Physical barrier installed if closer than 2m to edge. Suitable access to be provided to excavation that does not expose workers to risk of fall. "Deep Excavation" signage to be installed around edge of excavation where deeper than 1.5m		3. Engineering	SS / SM	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide
Excavation	Is carried out in an area at a workplace in which there is any movement of powered mobile plant	Hit by Moving Plant	B Likely	4 Large	16	When using an excavator - Spotter to have positive communication with operator (via hand signals or UHF radio) at all times. No one is allowed in the swing zone of the piece of plant. No one is to approach plant unless the bucketlarm has been lowered and confirmation has been received by the operator that it is ok to approach. All plant to have flashing beacons operating. Mobile phones not be used when operating plant and equipment.	Exclusion zone to be in place to prevent unauthorised entry to work area.	3. Engineering	SS / SM	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide, Managing the risks of plant in the workplace COP
Excavation	Is carried out in an area at a workplace in which there is any movement of powered mobile plant	Hit by Falling Objects	C Possible	3 Medium	9	Any spoil must be stored at least 1m back from edge and on down slope side. All lifting gear is to be maintained as per manufacturer specifications and inspected daily by a competent person-Synthetic slings are to be checked 3 monthly and documented on a register. Chains are to be tested yearly and documented on a register. The SWL of lifting equipment is not to be exceeded. Weight of load to be lifted to be predetermined by a qualified person and marked on load. Selection of sing & slinging techniques for load is predetermined by a competent person. Lifting points are to be predetermined by a competent person and marked on the load. Standard lifting procedures must be documented within HR SWMS. Authorised person only to be in direct workzone.	Physical Barriers to be in place around edge of excavation to prevent the fall of materials / tools into excavation. Tools and materials must be stored at least 1m back from edge of excavation which is deeper than 1.2m deep.	3. Engineering	SS / SM	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide, Excavation COP
Excavation	Is carried out in an area at a workplace in which there is any movement of powered mobile plant	Plant Over-Turning	C Possible	4 Large	12	ROPS/FOPS to be installed on all plant involved in the work activity. Physical Barrier to be installed along top of excavation / trench to prevent plant / vehicles entering the zone of influence. The SWL of plant and its attachments is not to be exceeded. Seat Belts to be worn where fitted.	Penetration covers to be physically secured with signage and be of sufficient strength to support likely plant or equipment in the area. If sizable penetration, load & point limits to be displayed.	3. Engineering	SS / SM	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PSS Safety Guide, Managing the risks of plant in the workplace COP, Excavation COP
Excavation		Fire/Explosion when refuelling plant and equipment	C Possible	3 Medium	9	Hazardous Materials to be stored in designated storage area immediately after use. Fire Fighting equipment to have tag in date of 6 months and be readily accessible to the refuelling area. Refuelling area to be clear of any combustable material.	Designated refuelling area to be identified with signage on site. Hazardous Chemicals and Dangerous Goods Management Sub Plan to be in place.	4. Isolation	SS / SM	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide, Managing risks of hazardous chemicals in the workplace COP
Excavation		Environmental Contamination from Spill of Hazardous Chemicals/Substances	C Possible	2 Small	6	Contractor to provide, and have readily available access to, a spill kit which is appropriately sized for the risk of spill when refuelling or if damage was to occur to a piece of plant and equipment. Workers must be trained in the use of spill kits and the SDS's for chemicals/substances that they are using on this project.		3. Engineering	SS / SM	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide, Managing risks of hazardo
Excavation		Working in High Temperatures - Heat Stress/Heat Exhaustion	C Possible	2 Small	6	Sufficient quantities of cool drinking water is readily available close to work areas. Regularly rotate workers who perform more strenuous activities with less demanding tasks. Take regular work breaks in cooler areas such as air conditioned sheds.	Shade Covers to be installed @ designated smoking areas. Workers to wear broad brimmed hats and sunglasses for UV protection.	3. Engineering	SS/SM/HSR	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide, Managing the work environment and facilities COP
Excavation		Working in Cold, Inclement or Windy Weather	C Possible	2 Small	6		Inspection to be conducted prior to gates of site open by PBS Site Manager/ EHS Committee to assess all access routes. Any unsuitable work areas are to barricaded off with physical barrier until deemed safe to enter.	3. Engineering	SS/SM/HSR	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide, Managing the work environment and facilities COP
Excavation		Works affect neighbouring structures	C Possible	3 Medium	9	Dilapidation survey to be undertaken by consultant. Prior to works starting	Vibration Monitoring to be in place. Noise monitoring to be in place. Letter box drop to occur in neighbouring properties that might be affected by works. Stakeholder Communication Sub Plan to be in place. Noise Management Sub Plan to be in Place.	3. Engineering	SS / SM	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide
Excavation		Unexpected Find	C Possible	2 Small	6	PBS Unexpected Finds protocol to be followed. Contractor to include unexpected finds protocol in their HR SWMS.		2. Administration	SS / SM	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide
Excavation		Damage to protected flora or fauna	C Possible	2 Small	6	Tree Protection zones using robust barricading to be in place with signage. Flora and Fauna Managmenet Sub Plan to be in place.	Timber batten protection to be placed directly onto the tree trunks in High Pedestrian traffic areas (i.e. public locations in the street near PBS hoardings)	4. Isolation	SS / SM	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide

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PBS	Project Risk Registo	er			Acronym	Responsible Positions	Hierarchy of Control		Control Selections		PBS
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					SM	Site Manager	5. Substitution	6	%Controls < Engineering	9%	
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Workplace Location:	St Hedwigs Village, 134-140 Reservoir Rd, Blacktown				CA	Contracts Administrator	3. Engineering	109	ßCheck formulas in add rows to ensur		
Issue Number:	Rev 5.0	Updated to clarify Electrical Easment Controls			EHSQ	EHSQ Co-Ordinator	2. Administration	19	correct		
Issue Date:	22/09/2021	ı			PE/SE	Project Engineer / Site Engineer	1. PPE	0			Delete Legislation / Codes not applicable to your jurisdiction
Activity Description	High Risk Construction Work	Hazard / Impact (Worst Credible Consequence)	Likelihood	Consequence	Risk Rating	Mandatory Control Measures	Site Specific Control Measures	Hierarchy of Control (Highest Level Control)	Responsible	Status	Legal and other requirements
	Is carried out on or near pressurised gas distribution mains or piping; is carried out on or near energised electrical installations or services	Contact with In-Ground Services	B Likely	4 Large	16	Excavation Permit required when penetrating the ground 200mm or more. DBYD to be reviewed. Known services are to be identified and Summary Of Services Location Plan (SOS LP) to be updated on weekly basis including services that are being installed progressively by service trades. Digging by mechanical means is not to be carried out within 1m of a known live service unless EHSQ Manager has been consulted	As builts to be received from the client to confirm existing services. Service Locator to be engaged to conduct survey of site and provide to PBS. Pot Holing via sucker truck/hand digging every 5m to determine direction of service Energise/Isolate Permit may also be required.	3. Engineering	SS/SM/FM	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide, Excavation COP, Managing electrical risks in the workplace
Fencing		Hit by Falling Objects	C Possible	3 Medium	9	No unsecured components to be left outside PBS fence line.	Semi - Permanent Fencing to be installed. Temporary Fencing to be erected in accordance with AS4687 requirements. Handover to be received from contractor that installs fence to confirm installation to australian standards and manufacturer requirements.	3. Engineering	SS / SM	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide
Fencing		Fire/Explosion	D Unlikely	2 Small	4	Hot Works Permit to be in place. Area to be clear of combustible materials. Correct PPE to be worn.		3. Engineering	SS/SM/FM	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide, Welding processes COP
Fire Services	Risk of Person Falling more than 2m	Fall of Person	D Unlikely	4 Large	8	Platform ladders or EWP's are to be used in the first instance. Work trestles a minimum width of 450mm can be used. Step Ladders may only be used for minor works which take less than 15 minutes to complete and 3 points of contact must be maintained. Delivery drivers or workers are NOT to access the back of trucks unless; "There is a handrail system incorporated onto the back of the vehicle or, "A portable handrail system is provided by the project and, "The use of a portable loading bay platform would be the ideal control measure. When one or more of these controls are implemented, workers may use the access ladder and maintain 3 points of contact when ascending or descending. Ladders to be stepped back from any edges of a building/balconies at least 3m or 1:1 ratio if a full perimeter screen/scaffold has been installed.	Ticketed Personnel required for operation of EWP. Harness to be worn and connected prior to bucket being raised. Harness to be inspected daily before use and maintained as per manufacturer specificiations. Mobile scaffold to be used. Any mobile scaffold over 4m needs to be erected by a ticketed scaffolder.	3. Engineering	SS / SM	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide
Fire Services		Fire/Explosion	B Likely	3 Medium	12	Hot Works Permit to be in place. Area to be clear of combustible materials. Correct PPE to be worn. Flash back arrestors to all oxy sets. Isolation/Energisation Permit to be issued.		3. Engineering	SS/SM/FM	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide, Welding processes COP
Fire Services	Is carried out in an area at a workplace in which there is any movement of powered mobile plant	Hit by Moving Plant	D Unlikely	3 Medium	6	No one is to approach plant unless confirmation has been received by the operator that it is ok to approach. All plant to have flashing beacons operating. Mobile phones not be used when operating plant and equipment. Operator to be appropriately Trained / Ticketed.	Exclusion zone to be in place to prevent unauthorised entry to work area. Access ways to be redirected to ensure no personnel inside operating areas. Outriggers of crane to be protected by jersey kurbs or similar to prevent contact from other plant/vehicles. Use Tag Lines when appropriate to control llight weight &for large panel lifts in windy conditions. Dogman and Operator to sign into Crane Management Sub Plan. Spotter/Dogman to have positive communication with operator (via hand signals, whistle or UHF radio) at all times. Seat belts to be worn at all times where fitted. Refer to mobile crane operations activity in this PSR.	4. Isolation	SS / SM	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide, Managing the risks of plant in the workplace COP
Fire Services		Cuts and Lacerations	D Unlikely	1 Very Small	2	All guards to be fitted to power tools. Wear gloves when working with sharp steel edges. Eye Protection to be worn when using explosive power tool. No high velocity/direct action Explosive Power Tool to be used on site unless approved by PBS Site Manager and the controls required are communicated to workers via a toolbox. Explosive Powered Tool charges must be stored in a locked metal box marked "explosives". Used charges must be disposed of immediately after use.	Hot works Permit to be in place	5. Substitution	SS/SM/FM	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide
Fire Services		Exposure to Hazardous Materia	I D Unlikely	2 Small	4	Correct PPE to be worn. SDS to be communicated to all workers involved in the task via TBT, training register or SWMS. Hazardous Materials to be stored in designated storage area immediately after use.		4. Isolation	SS / SM	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide, Managing risks of hazardous chemicals in the workplace COP
Fire Services		Noise	C Possible	2 Small	6	Hearing Protection to be worn.	Signage to be in place when using Explosive Power Tools.	2. Administration	SS / SM	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide, Managing noise and preventing hearling loss at the work COP
Formwork	Risk of Person Falling more than 2m	Fall of Person	A Almost Certain	4 Large	20	Cast/Embed 4mm mesh into larger penetrations. Fixed cover to be on all penetrations over 125mm diameter. All penetration covers to be identified similar to "Danger Penetration Below". If sizeable penetrations are located in areas where plant &/or equipment is likely to be used (eg scissor lift, pallet trolley, forklift), secured covers to be of sufficient strength with load & point load limits displayed. Platform Ladder or work platforms of 450mm minimum width to be used. Physical barrier and signage must be in place to prevent unauthorised personnel from entering restricted area when working on leading edges (i.e formworkers only).	No one is to stand on truck tray unless it has hand rails in place. Minimum of 1.8m lazy joists to surround formworkers working on leading edges at all times. Dincel/AFS to have extra 1m in length ordered and to be erected and braced prior to suspended deck so it can act as a hand rail. Two access ways to be clearly defined under deck and free of all obstructions / slip, trip hazards at all times. Crash deck to be installed under all leading edges.	3. Engineering	SS / SM	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide
Formwork		Hit by Falling Objects	A Almost Certain	3 Medium	15	Exclusion zone to be erected, which still maintains an access point underneath the deck, when working on leading edges or a risk of materials/lools falling over 2 metres exists. This exclusion zone must take into consideration the arc, fall and bounce of materials & tools. Stripping areas must be have barriers and signage in place to prevent unauthorised access. Authorised person only to be in direct workzone.	Structural engineer to provide documented authorisation for all formwork shutter lifting lugs.	4. Isolation	SS / SM	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide
Formwork		Failure of Structure	B Likely	5 Very Large	20	Structural engineer to provide documented authorisation prior to concrete pour & stripping. Engineer to include in drawing or provide written instruction where all load points are on deck. Where material is designed to an international or another standard, engineer must certify that it conforms to relevant australian standard. Evidence verifying formwork sheets conform to Australian Standards must be kept on site. Provide Formwork Documentation in accordance with Section 2.4 of AS3610.1-2010. Hold Point - PBS pre-pour checklist to be completed prior to pouring any decks.	Formwork framing to be protected against impact from moving plant & equipment.	3. Engineering	SS/SM/FM/SE/ CA	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PSS Safety Guide, Safe Design of Structures COP
Formwork		Cuts and Lacerations	B Likely	3 Medium	12	All guards to be fitted to power tools. Wear gloves when working with sharp steel edges.	Frames and timbers are not to obstruct access ways, temporary power boards or emergency exits. Hot works permit to used	3. Engineering	SS/SM/FM	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide

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ormwork	Is carried out in an area at a	Consequence)						Control)		
oniiwork	workplace in which there is any movement of powered mobile plant	Hit by Moving Plant	D Unlikely	3 Medium	6	No one is to approach plant unless confirmation has been received by the operator that it is ok to approach. All plant to have flashing beacons operating. Mobile phones not be used when operating plant and equipment. Operator to be appropriately Trained / Ticketed.	Exclusion zone to be in place to prevent unauthorised entry to work area. Access ways to be redirected to ensure no personnel inside crane operating areas. Outriggers of crane to be protected by jersey kurbs or similar to prevent contact from other plant/vehicles. Use Tag Lines when appropriate to control llight weight &for large panel lifts in windy conditions. Dogman and Operator to sign into Crane Management Sub Plan. Spotter/Dogman to have positive communication with operator (via hand signals, whistle or UHF radio) at all times. Refer to mobile crane operations activity in this PRR.	4. Isolation	SS / SM Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide, Managing the risks of plant in the workplace COP
rames and Trusses	Risk of Person Falling more than 2m	Fall of Person	A Almost Certain	4 Large	20	Platform Ladders or EWP to be used in the first instance. Work trestles of minimum 450mm width can be used. Step Ladders may only be used for minor works which take less than 15 minutes to complete and 3 points of contact must be maintained. Ensure framing packs are stable & stacked at a workable height. Upper floor level are not to be accessed until edge protection and stair void protection are installed and handover certificate has been received and displayed. Suitable access must be provided to upper levels which ensures there is no exposure to worker of risk of fall (swing gate/hatch at top of ladder or similar). All openings from which a person can fall must be adequately protected (such as window and door openings, stair voids etc). No walking on external top plates or within 2 metres of external top plate unless external fall protection is in place. Ensure clear access way from stack to place of erection. Delivery drivers or workers are NOT to access the back of trucks unless; "There is a handrail system incorporated onto the back of the vehicle or, "A portable handrail system is provided by the project and, "The use of a portable loading bay platform would be the ideal control measure. When one or more of these controls are implemented, workers may use the access ladder and maintain 3 points of contact when ascending or descending.	Ceiling joists and upper level joists must be installed from the floor underneath. The laying of floor sheets should begin adjacent to an internal or external access point which provides initial fall protection for workers. Laying of sheets should then proceed using a methodology outlined in the HR SWMS which prevents workers from falling over the edge. Unpacking of trusses must be undertaken off of a suitable work platform from the level underneath. Fall Protection must be in place on Party Wall side prior to works commencing on party wall. When trusses are erected at up to 600 mm centres, persons working between the trusses to fix or brace them can use the erected trusses as a form of fall protection under controlled conditions that must be set out in the HR SWMS. When the spacings of trusses exceed 600mm centres, suitable fall protection must be in place (mobile scaffold, safety nets, catch platform, use of EWP etc) and methodology must be outlined in the HR SWMS.		SS/SM Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide
rames and Trusses		Failure of Structure	D Unlikely	4 Large	8	Ensure all standing frames are suitably braced to prevent potential falling frames. If truss spacing is more than 900mm fix longitudinal bracing as each truss is being stood.		3. Engineering	SS / SM Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide, Safe Design of Structures COP
rames and Trusses		Hit by Falling Objects	B Likely	3 Medium	12	Authorised person only to be in direct workzone.	Tools to be on lanyards when working above 2m fall risk. Physical barriers to be in place as an exclusion zone and must take into consideration the arc, fall and bounce of materials and tools. Area to be bunted off with signage to prevent unauthorised access.	4. Isolation	SS / SM Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide
rames and Trusses	Is carried out in an area at a workplace in which there is any movement of powered mobile plant	Hit by Moving Plant	C Possible	4 Large	12	No one is to approach plant unless confirmation has been received by the operator that it is ok to approach. All plant to have flashing beacons operating. Mobile phones not be used when operating plant and equipment. Operator to be appropriately Trained / Ticketed.	Exclusion zone to be in place to prevent unauthorised entry to work area. Access ways to be redirected to ensure no personnel inside operating areas. Outriggers of crane to be protected by jersey kurbs or similar to prevent contact from other plant/vehicles. Use Tag Lines when appropriate to control llight weight &for large panel lifts in windy conditions. Dogman and Operator to sign into Crane Management Sub Plan. Spotter/Dogman to have positive communication with operator (via hand signals, whistle or UHF radio) at all times. Seat belts to be worm at all times where fitted. Refer to mobile crane operations activity in this PRR.	4. Isolation	SS / SM Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide, Managing the risks of plant in the workplace COP
rames and Trusses		Cuts and Lacerations	C Possible	2 Small	6	All guards to be fitted to power tools. Wear gloves when working with sharp steel edges. Eye Protection to be worn when using explosive power tool. No high velocityldirect action Explosive Power Tool to be used on site unless approved by PBS Site Manager and the controls required are communicated to workers via a toolbox. Explosive Powered Tool charges must be stored in a locked metal box marked "explosives". Used charges must be disposed of immediately after use.	225mm grinder permit to be issued when applicable	5. Substitution	SS/SM/FM Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide
rames and Trusses		Noise	C Possible	2 Small	6	Hearing Protection to be worn.	Signage to be in place when using Explosive Power Tools.	2. Administration	SS / SM Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide, Managing noise and preventing hearling loss at the work COP
lebel Installation	Is carried out in an area which may have a contaminated or flammable atmosphere	Exposure to Hazardous Dust	B Likely	3 Medium	12	Designated cutting area with signage to be installed. Minimum P2 mask, safety glasses and hearing protection to be worn when cutting hebel. M Class Vaccum attachment to be used on saw. Only workers directly involved in the activity to be in the area when cutting being undertaken.		4. Isolation	SS/SM Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide, Managing risks of hazardous chemicals in the workplace COP
ebel Installation	·	Cuts and Lacerations	C Possible	3 Medium	9	All guards to be fitted to power tools. Wear gloves when working with sharp steel edges. Eye Protection to be worn when using explosive power tool. No high velocity/direct action Explosive Power Tool to be used on site unless approved by PBS Site Manager and the controls required are communicated to workers via a toolbox. Explosive Powered Tool charges must be stored in a locked metal box marked "explosives". Used charges must be disposed of immediately after use.		3. Engineering	SS/SM Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, P8S Safety Quide
··· •	Is carried out in an area at a workplace in which there is any movement of powered mobile plant	Hit by Falling Objects	C Possible	4 Large	12	All lifting gear is to be maintained as per manufacturer specifications and inspected daily by a competent person - Synthetic slings are to be checked 3 monthly and documented on a register. Chains are to be tested yearly and documented on a register. The SWL of lifting equipment is not to be exceeded. Weight of load to be lifted to be predetermined by a competent person and marked on load. Selection of sling & slinging techniques for load is predetermined by a competent person. Lifting points are to be predetermined by a competent person. Lifting points are to be predetermined by a competent person and marked on the load. Standard lifting procedures must be documented within HR SWMS. Install Hoarding as detailed on Hoarding Plan (showing dimensions and location on site). Authorised person only to be in direct workzone. Authorised person only to be in direct workzone.	Exclusion zone to be in place to prevent unauthorised entry to work area. Footpath to be closed off and traffic control in place to re route pedestrians as per Traffic Control Plan	4. Isolation	SS / SM Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide
loarding	Risk of Person Falling more than 2m	Fall of Person	B Likely	4 Large	16	Platform Ladders to be used. Delivery drivers or workers are NOT to access the back of trucks unless; "There is a handrail system incorporated onto the back of the vehicle or, "A portable handrail system is provided by the project and, "The use of a portable loading bay platform would be the ideal control measure. When one or more of these controls are implemented, workers may use the access ladder and maintain 3 points of contact when ascending or descending.	Use of Harness Work Permit to be issued. Harness to be inspected daily before use and maintained as per manufacturer specifications. Person with working at heights ticket to conduct works involving use of harness only.	3. Engineering	SS / SM / FM Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide
loarding	Is carried out on, in or adjacent to a road that is in use by traffic other than pedestrians	Hit by Moving Vehicular Traffic	: C Possible	4 Large	12	Consultant holding correct tickets to provide Traffic Management Plan (including Traffic Control Plan) which is specific to the works on site. Signage and Devices to be set up in accordance with approved Traffic Control Plan by workers who hold the correct tickets. Traffic Controllers to position themselves where an escape route is accessible at all times.	Work Vehicles to be set up in approved work zone. Traffic Control Signage and Devices to be implemented as per approved traffic control plan.	3. Engineering	SS / SM Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide

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PBS	Project Risk Regist	er			Acronym	PBS Project Rask Register (PRR) Responsible Positions	Hierarchy of Control		Control Selections		⊕ PBS
. 20					66	Sub Contractor Supervisor	6. Elimination	3	%Controls ≥	019/	TPD3
					SS	Sub-Contractor Supervisor			Engineering %Controls <	91%	
					SM	Site Manager	5. Substitution	6	Engineering	9%	
	St Hedwigs Village, 134-140 Reservoir]		FM	Foreman	4. Isolation	71			
Workplace Location:	Rd, Blacktown	1			CA	Contracts Administrator	3. Engineering	109	ßCheck formulas in L2 add rows to ensure i	2-L7 if you range is	
Issue Number:	Rev 5.0	Updated to clarify Electrical Easment Controls			EHSQ	EHSQ Co-Ordinator	2. Administration	19	correct		
Issue Date:	22/09/2021				PE/SE	Project Engineer / Site Engineer	1. PPE	0			Delete Legislation / Codes not applicable to your jurisdiction
Activity Description	High Risk Construction Work	Hazard / Impact (Worst Credible	Likelihood	Consequence	Risk Rating	Mandatory Control Measures	Site Specific Control Measures	Hierarchy of Control (Highest Level	Responsible	Status	Legal and other requirements
		Consequence)						(Highest Level Control)			
Hoist	Risk of Person Falling more than 2m	Fall of Person	A Almost Certain	4 Large	20	Installation by competent personnel to manufacturer / supplier requirements. Handover certificate to be received from contractor whom erected plant.	For erection, dismantle and maintenance - Use of Harness Work Permit to be issued. Harness to be inspected daily before use and maintained as per manufacturer specifications. Person with working at heights ticket to conduct works involving use of harness only.	3. Engineering	SS/SM/FM	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide
Hoist		Hit by Falling Objects	B Likely	4 Large	16	Exclusion zone using physical barrier to be in place for erection / dismantle / altering of hoist. Authorised person only to be in direct workzone.	Tools to be on lanyards when working above 2m fall risk.	4. Isolation	SS / SM	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide
Hoist		Plant Failure	C Possible	4 Large	12	Installation by competent personnel to manufacturer / supplier requirements. Handover certificate to be received from contractor whom erected it. Load rating must be clearly identified inside the hoist. Only licensed personnel to operate personnel & materials hoist. Daily operator checks to be completed prior to operating each day. Hoist to be maintained as per manufacturer specs.		2. Administration	SS / SM	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide, Managing the risks of plant in the workplace COP
Landscaping	Is carried out on or near pressurised gas distribution mains or piping; is carried out on or near energised electrical installations or services	Contact with In-Ground Services	B Likely	4 Large	16	Excavation Permit required when penetrating the ground 200mm or more. DBYD to be reviewed. Known services are to be identified and Summary Of Services Location Plan (SOS LP) to be updated on weekly basis including services that are being installed progressively by service trades. Digging by mechanical means is not to be carried out within 1m of a known live service unless EHSQ Manager has been consulted	As builts to be received from the client to confirm existing services. Service Locator to be engaged to conduct survey of site and provide to PBS. Pot Holing via sucker truck/hand digging every 5m to determine direction of service Energise/Isolate Permit may also be required.	3. Engineering	SS/SM/FM		WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide, Excavation COP, Managing electrical risks in the workplace
Landscaping	Is carried out in an area at a workplace in which there is any movement of powered mobile plant	Hit by Moving Plant	C Possible	4 Large	12	Spotter to have positive communication with operator (via hand signals or UHF radio) at all times. No one is allowed in the swing zone of the piece of plant. No one is to approach plant unless the bucketarm has been lowered and confirmation has been received by the operator that it is ok to approach. All plant to have flashing beacons operating. Mobile phones not be used when operating plant and equipment.	Exclusion zone to be in place to prevent unauthorised entry to work area. Emergency stop button to be applied to the machine.	4. Isolation	SS / SM	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide, Managing the risks of plant in the workplace COP
Landscaping	Is carried out in an area at a workplace in which there is any movement of powered mobile plant	Plant Over-Turning	D Unlikely	4 Large	8	ROPS/FOPS to be installed on all plant involved in the work activity. Physical Barrier to be installed along top of excavation / trench to prevent plant / vehicles entering the zone of influence. The SWL of plant and its attachments is not to be exceeded. Seat Belts to be worn where fitted.	Penetration covers to be physically secured with signage and be of sufficient strength to support likely plant or equipment in the area. If sizable penetration, load & point limits to be displayed.	4. Isolation	SS / SM	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety siks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide, Managing the risks of plant in the workplace COP
Landscaping		Fire/Explosion when refuelling plant and equipment	C Possible	4 Large	12	Hazardous Materials to be stored in designated storage area immediately after use. Fire Fighting equipment to have tag in date of 6 months and be readily accessible to the refuelling area. Refuelling area to be clear of any combustable material.		4. Isolation	SS / SM	·	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide, Managing risks of hazardous chemicals in the workplace COP
Landscaping		Environmental Contamination from Spill of Hazardous Chemicals/Substances	D Unlikely	3 Medium	6	Contractor to provide, and have readily available access to, a spill kit which is appropriately sized for the risk of spill when refuelling or if damage was to occur to a piece of plant and equipment. Workers must be trained in the use of spill kits and the SDS's for chemicals/substances that they are using on this project.		2. Administration	SS / SM	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide, Managing risks of hazardous chemicals in the workplace COP
Landscaping	Is carried out in an area at a workplace in which there is any movement of powered mobile plant	Hit by Falling Objects	D Unlikely	4 Large	8	All lifting gear is to be maintained as per manufacturer specifications and inspected daily by a competent person - Synthetic Sings are to be checked 3 monthly and documented on a register. Chains are to be tested yearly and documented on a register. The SVIL of lifting equipment is not to be exceeded. Where a dogman is not available - Weight of load to be lifted to be predetermined by a competent person and marked on load. Selection of sling & slinging techniques for load is predetermined by a competent person. Lifting points are to be predetermined by a competent person and marked on the load. Standard lifting procedures must be documented within HR SVMNS. Authorised person only to be in direct workzone.		3. Engineering	SS/SM	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide
Landscaping		Working in High Temperatures - Heat Stress/Heat Exhaustion	E Rare	2 Small	2	Sufficient quantities of cool drinking water is readily available close to work areas. Regularly rotate workers who perform more strenuous activities with less demanding tasks. Take regular work breaks in cooler areas such as air conditioned sheds.	Shade Covers to be installed. Workers to wear broad brimmed hats and sunglasses for UV protection.	3. Engineering	SS/SM/HSR	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide, Managing the work environment and facilities COP
Landscaping		Working in Cold, Inclement or Windy Weather	E Rare	2 Small	2		Inspection to be conducted prior to gates of site open by PBS Site Manager/ EHS Committee to assess all access routes. Any unsuitable work areas are to barricaded off with physical barrier until deemed safe to enter.	3. Engineering	SS/SM/HSR	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, cordination and cooperation COP, PBS Safety Guide, Managing the work environment and facilities COP
Lift Installation	Risk of Person Falling more than 2m	Fall of Person	A Almost Certain	4 Large	20	Physically fix 50 X 25mm mesh or ply to each lift shaft opening after pouring & prior to lift install commencing. Replace mesh / ply lift door opening protection with dead lock keyed lift cage physically fixed across opening before lift install commencing. Ensure temporary handrail is installed at every level with only working level removed for access but replaced before moving working temp platform. Ensure hand rails balustrades are installed & secured on top of car before works commence.	Delivery drivers or workers are NOT to access the back of trucks unless; "There is a handrail system incorporated onto the back of the vehicle or, "A portable handrail system is provided by the project and, "The use of a portable loading bay platform would be the ideal control measure. When one or more of these controls are implemented, workers may use the access ladder and maintain 3 points of contact when ascending or descending.	4. Isolation	SS / SM	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety siks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide
Lift Installation	Is carried out in an area at a workplace in which there is any movement of powered mobile plant	Hit by Moving Plant	C Possible	4 Large	12	approach. All plant to have flashing beacons operating. Mobile phones not be used when	Exclusion zone to be in place to prevent unauthorised entry to work area. Access ways to be redirected to ensure no personnel inside operating areas. Outriggers of crane to be protected by jersey kurbs or similar to prevent contact from other plant/vehicles. Use Tag Lines when appropriate to control llight weight &for large panel lifts in windy conditions. Dogman and Operator to sign into Crane Management Sub Plan. Spotter/Dogman to have positive communication with operator (via hand signals, whistle or UHF radio) at all times. Seat belts to be worn at all times where fitted. Refer to mobile crane operations activity in this PRR.	4. Isolation	SS/SM/FM	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide, Managing the risks of plant in the workplace COP

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						PBS Project Risk Register (PRR)		_		
PBS	Project Risk Registe	er			Acronym	Responsible Positions	Hierarchy of Control		Control Selections	PBS
					SS	Sub-Contractor Supervisor	6. Elimination	3	%Controls ≥ Engineering	1%
					SM	Site Manager	5. Substitution	6	%Controls < Engineering	9%
			1		FM	Foreman	4. Isolation	71		
Workplace Location:	St Hedwigs Village, 134-140 Reservoir Rd, Blacktown				CA	Contracts Administrator	3. Engineering	109	ßCheck formulas in L2-L	
Issue Number:	Rev 5.0	Updated to clarify Electrical Easment Controls			EHSQ	EHSQ Co-Ordinator	2. Administration	19	add rows to ensure ran correct	je is
Issue Date:	22/09/2021				PE/SE	Project Engineer / Site Engineer	1. PPE	0		Delete Legislation / Codes not applicable to your jurisdiction
Activity Description	High Risk Construction Work	Hazard / Impact (Worst Credible Consequence)	Likelihood	Consequence	Risk Rating	Mandatory Control Measures	Site Specific Control Measures	Hierarchy of Control (Highest Level Control)	Responsible St	atus Legal and other requirements
ift Installation		Fire/Explosion	C Possible	4 Large	12	Hot Works Permit to be in place. Area to be clear of combustible materials. Correct PPE to be worn. Flash back arrestors to all oxy sets.		3. Engineering	SS/SM/FM C	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide, Welding processes COP
ift Installation		Cuts and Lacerations	D Unlikely	2 Small	4	All guards to be fitted to power tools. All PPE requirements shall be assessed in the contractors HR SWMS		3. Engineering	SS/SM/FM C	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide
<i>f</i> lasonry	Risk of Person Falling more than 2m	Fall of Person	A Almost Certain	4 Large	20	Delivery drivers or workers are NOT to access the back of trucks unless; "There is a handrail system incorporated onto the back of the vehicle or, "A portable handrail system is provided by the project and, "The use of a portable loading bay platform would be the ideal control measure. When one or more of these controls are implemented, workers may use the access ladder and maintain 3 points of contact when ascending or descending.	Scaffold to be used with hand rails and mid rails or mesh panels. Ticketed Personnel required for operation of EWP. Harness to be worn and connected prior to bucket being raised. Harness to be inspected daily before use and maintained as per manufacturer specificiations.	3. Engineering	SS/SM C	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide
Masonry		Hit by Falling Objects	B Likely	4 Large	16	Physical barriers to be in place as an exclusion zone to prevent access adjacent to or behind the uncured wall and must take into consideration the arc, fall and bounce of materials and tools.	Tools to be on lanyards when working above 2m fall risk.	4. Isolation	SS/SM C	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage pen work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide
lasonry		Cuts and Lacerations	C Possible	2 Small	6	All guards to be fitted to power tools. Brick saw to be locked on solid bench.		3. Engineering	SS/SM/FM C	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide
flasonry		Failure of Structure	B Likely	4 Large	16	Temporary bracing of all 'green walls' above 1.5m to be installed prior to any additional courses being laid. Contractor supervisor to ensure scaffold decks not overloaded with max loading signage visible. Masonry walls must be designed by a qualified and registered engineer. Masonry walls must not be erected in adverse weather conditions.		3. Engineering	SS/SM/FM/SE/ CA	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide, Safe Design of Structures COP
l lasonry		Noise	C Possible	2 Small	6	Hearing Protection to be worn. Brick Saw to be set up in an isolated cutting area with signage Wet cutting only		4. Isolation	SS/SM C	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide, Managing noise and preventing hearing loss at the work COP
lasonry		Environmental Contamination from Spill of Hazardous Chemicals/Substances	D Unlikely	2 Small	4	Designated washout / recycling areas for concrete and concrete equipment with regular monitoring. Waste water must be controlled from flowing across walkways, work areas and outside site boundaries.		4. Isolation	SS / SM	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide, Managing risks of hazardous chemicals in the workplace COP
	Carried out in an area that may have a contaminated atmosphere	Dust Inhalation	C Possible	2 Small	6	Correct PPE to be worn when mixing cement including P2/P3 dust mask. Wet Brick Saw to be set up in an isolated cutting area with signage.	Brick saw to have water attachment and P2 mask to be worn when operating.	4. Isolation	SS/SM C	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide, Managing risks of hazardo
•	Is carried out in an area at a workplace in which there is any movement of powered mobile plant	Hit by Moving Plant	A Almost Certain	4 Large	20	No one is to approach plant unless confirmation has been received by the operator that it is ok to approach. All plant to have flashing beacons operating. Mobile phones not be used when operating plant and equipment. Operator to be appropriately Trained / Ticketed.	Exclusion zone to be in place to prevent unauthorised entry to work area. Access ways to be redirected to ensure no personnel inside operating areas. Outriggers of crane to be protected by jersey kurbs or similar to prevent contact from other plant/vehicles. Use Tag Lines when appropriate to control weight after large panel lifts in windy conditions. Dogman and Operator to sign into Crane Management Sub Plan. Spotter/Dogman to have positive communication with operator (via hand signals, whistle or UHF radio) at all times. Seat belts to be worn at all times where fitted. Refer to mobile crane operations activity in this PRR.	4. Isolation	SS / SM	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide, Managing the risks of plant in the workplace COP
ncludes Vehicle Mounted	Is carried out in an area at a workplace in which there is any movement of powered mobile plant	Hit by Moving Plant	A Almost Certain	4 Large	20	Spotter/Dogman to have positive communication with operator (via hand signals, whistle or UHF radio) at all times. No one is to approach plant unless confirmation has been received by the operator that it is ok to approach. All plant to have flashing beacons operating. Mobile phones not be used when operating plant and equipment. Dogman and Operator to sign into Crane Management Sub Plan. Use Tag Lines when appropriate to control llight weight &for large panel lifts in windy conditions. Operator to be appropriately Trained / Ticketed.	Exclusion zone to be in place to prevent unauthorised entry to work area. Access ways to be redirected to ensure no personnel inside crane operating areas. Outriggers of crane to be protected by jersey kurbs or similar to prevent contact from other plant/vehicles.	4. Isolation	SS / SM	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide, Managing the risks of plant in the workplace COP
lobile Crane Operations ncludes Vehicle Mounted rane/Telehandler/Franna/Cr wler)		Hit by Falling Objects	B Likely	4 Large	16	Dogman and Operator to sign into Crane Management Sub Plan. All lifting gear is to be maintained as per manufacturer specifications and inspected daily by a competent person - Synthetic slings are to be checked 3 monthly and documented on a register. Chains are to be tested yearly and documented on a register. Authorised person only to be in direct workzone.	Tag Lines to be used when appropriate to control light weight &/or large panel lifts in windy conditions	3. Engineering	SS/SM C	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage pen work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide
includes Vehicle Mounted	Is carried out in an area at a workplace in which there is any movement of powered mobile plant	Plant Over-Turning	B Likely	4 Large	16	Dogman and Operator to sign into Crane Management Sub Plan. Seat belts to be worn at all times where fitted. The SWL of the plant and its attachments is not to be exceeded. Set up in an area that is approved by PBS Site Manager. Lift study to be completed for any loads 20 Tonne or when expecting to use crane over 95% capacity. Plant is not to set up or traverse within the zone of influence of a service trench or on a service trench. Outriggers must be set up on stable ground.		3. Engineering	SS/SM (WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide, Managing the risks of plant in the workplace COP

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PBS	Project Risk Regist	ter			Acronym	Responsible Positions	Hierarchy of Control		Control Selections		PBS
					SS	Sub-Contractor Supervisor	6. Elimination	3	%Controls ≥ Engineering	91%	
					SM	Site Manager	5. Substitution	6	%Controls < Engineering	9%	
					FM	Foreman	4. Isolation	71			
Workplace Location:	St Hedwigs Village, 134-140 Reservo				CA	Contracts Administrator	3. Engineering	109	ßCheck formulas in		
Issue Number:	: Rev 5	.0 Updated to clarify Electrical Easment Controls			EHSQ	EHSQ Co-Ordinator	2. Administration	19	add rows to ensure correct		
Issue Date:	: 22/09/202	21			PE/SE	Project Engineer / Site Engineer	1. PPE	0	_		Delete Legislation / Codes not applicable to your jurisdiction
Activity Description	High Risk Construction Work	Hazard / Impact (Worst Credible Consequence)	Likelihood	Consequence	Risk Rating	Mandatory Control Measures	Site Specific Control Measures	Hierarchy of Control (Highest Level Control)	Responsible	Status	Legal and other requirements
obile Crane Operations ncludes Vehicle Mounted rane/Telehandler/Franna/Cr wler)	Is carried out on or near energised electrical installations or services	Contact with Overhead Power Lines	C Possible	4 Large	12	Dogman and Operator to sign into Crane Management Sub Plan. No unloading / loading of trucks to happen in the vacinity of these powerlines. All plant to remain at a minimum approach distances to powerlines. Up to 132,000 volts = 3m. 132,000 - 330,000 volts = 6m. Above 330,000 = 8m.	Install height/location indicators. Non conductive barrier to be installed between plant and power lines. Competent Spotter to have positive communication with plant (UHF radios) and observe plant movements when design envelope has the potential to reach closer than 3 metres to power lines. Install signage as visual reminder. Non conductive tag lines to be used to control load. All crane works are to have a PBS approved lift plan in place that conforms with the PBS Crane Sub plan to ensure Electrical Easment is not encroached.	3. Engineering	SS / SM	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide, Managing the risks of plant in the workplace COP, Managing electrical risks in the workplace COP
obile Crane Operations ncludes Vehicle Mounted rane/Telehandler/Franna/Cr wler)		Plant Failure	C Possible	4 Large	12	All lifting gear is to be maintained as per manufacturer specifications and inspected daily by a competent person - Synthetic slings are to be checked 3 monthly and documented on a register. Chains are to be tested yearly and documented on a register. Daily inspection to be completed by operator prior to operation. Plant to serviced and maintained as per manufacturers specifications.	Work box available for rescue	3. Engineering	SS / SM	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide, Managing the risks of plant in the workplace COP
erimeter Screens	Risk of Person Falling more than 2m	Fall of Person	A Almost Certain	4 Large	20	Install handrails & mesh prior to lifting screens. Documented emergency procedure for retrieval of injured workers to be included in HR SWMS.	Use of Harness Work Permit to be issued. Harness to be inspected daily before use and maintained as per manufacturer specifications. Person with working at heights ticket to conduct works involving use of harness only.	6. Elimination	SS/SM/FM	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide
erimeter Screens		Hit by Falling Objects	A Almost Certain	4 Large	20	Lifting control by competent person. Lifting screens handover certificate to be provided prior to works being allowed to commence on decks. Authorised person only to be in direct workzone.		2. Administration	SS / SM	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide
erimeter Screens		Failure of Structure	B Likely	5 Very Large	20	Structural engineer to approve design and erection to be done by competent personnel. Lifting control by qualified person.		2. Administration	SS/SM/FM/SE/ CA	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide, Safe Design of Structures COP
iling	Risk of Person Falling more than 2m	Fall of Person	D Unlikely	4 Large	8	Exclusion zone to be in place using physical barriers around each pier. Piers must be covered if work is not being conducted.		3. Engineering	SS / SM	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide
iling	Involves, or is likely to involve, the disturbance of asbestos	Exposure to Hazardous Dust	C Possible	3 Medium	9	Test Holes of soil conditions to be completed by consultant and results provided to PBS.	Contaminated areas to be bunted off using physical barriers and signage installed. Plastic to be installed over contaminated areas to prevent risk of dust arising until removal process is initiated.Plan created to highlight affected asbestos KNOWN areas, with likely areas also highlighted. This plan is then to be communicated to contractors and used in their internal communications with the workers.	4. Isolation	SS / SM	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide
iling	Is carried out in an area at a workplace in which there is any movement of powered mobile plant	Hit by Moving Plant	C Possible	4 Large	12	Spotter to have positive communication with operator (via hand signals or UHF radio) at all times. No one is allowed in the swing zone of the piece of plant. No one is to approach plant unless confirmation has been received by the operator that it is ok to approach. All plant to have flashing beacons operating. Mobile phones not be used when operating plant and equipment. All immediate workers must be outside the swing zone and behind a physical barrier protecting the hole.	Exclusion zone to be in place to prevent unauthorised entry to work area.	4. Isolation	SS / SM	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide
iling	Is carried out in an area at a workplace in which there is any movement of powered mobile plant	Plant Over-Turning	B Likely	4 Large	16	ROPS/FOPS to be installed on all plant involved in the work activity. Physical Barrier to be installed along top of excavation / trench to prevent plant / vehicles entering the zone of influence. The SWL of plant and its attachments is not to be exceeded. Seat Belts to be worn where fitted.	Penetration covers to be physically secured with signage and be of sufficient strength to support likely plant or equipment in the area. If sizable penetration, load & point limits to be displayed.	3. Engineering	SS / SM	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide, Managing the risks of plant in the workplace COP
iling		Plant Failure	B Likely	3 Medium	12	All lifting gear is to be maintained as per manufacturer specifications and inspected daily by a competent person - Synthetic slings are to be checked 3 monthly and documented on a register. Chains are to be tested yearly and documented on a register. Daily inspection to be completed by operator prior to operation. Plant to serviced and maintained as per manufacturers specifications.		3. Engineering	SS / SM	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide, Managing the risks of plant in the workplace COP
ling	Is carried out on or near pressurised gas distribution mains or piping; is carried out on or near energised electrical installations or services	Contact with In-Ground Services	B Likely	4 Large	16	Excavation Permit required when penetrating the ground 200mm or more. DBYD to be reviewed. Known services are to be identified and Summary Of Services Location Plan (SOS LP) to be updated on weekly basis including services that are being installed progressively by service trades. Digging by mechanical means is not to be carried out within 1m of a known live service unless EHSQ Manager has been consulted	As builts to be received from the client to confirm existing services. Service Locator to be engaged to conduct survey of site and provide to PBS. Pot Holling via sucker truck/hand digging every 5m to determine direction of service Energise/Isolate Permit may also be required.	3. Engineering	SS/SM/FM	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide, Excavation COP, Managing electrical risks in the workplace
· ·	Is carried out in an area at a workplace in which there is any movement of powered mobile plant	Hit by Falling Objects	D Unlikely	3 Medium	6	Any spoil must be stored at least 1m back from edge and on down slope side. All lifting gear is to be maintained as per manufacturer specifications and inspected daily by a competent person - Synthetic sings are to be checked 3 monthly and documented on a register. Chains are to be tested yearly and documented on a register. The SWL of lifting equipment is not to be exceeded. Where a dogman will not be used - Weight of load to be lifted to be predetermined by a competent person and marked on load. Selection of sling & slinging techniques for load is predetermined by a competent person. Lifting points are to be predetermined by a competent person and marked on the load. Standard lifting procedures must be documented within HR SVMS. Authorised person only to be in direct workzone.		3. Engineering	SS / SM	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide
umbing	Risk of Person Falling more than 2m	Fall of Person	C Possible	4 Large	12	Platform ladders or EWP's are to be used in the first instance. Work trestles a minimum width of 450mm can be used. Step Ladders may only be used for minor works which take less than 15 minutes to complete and 3 points of contact must be maintained. Delivery drivers or workers are NOT to access the back of trucks unless; "There is a handrall system incorporated onto the back of the vehicle or, "A portable handrall system is provided by the project and, "The use of a portable loading bay platform would be the ideal control measure. When one or more of these controls are implemented, workers may use the access ladder and maintain 3 points of contact when ascending or descending. Ladders to be stepped back from any edges of a building/balconies at least 3m or 1:1 ratio if a full perimeter screen/scaffold has been installed.	Ticketed Personnel required for operation of EWP. Harness to be worn and connected prior to bucket being raised. Harness to be inspected daily before use and maintained as per manufacturer specificiations. Mobile scaffold to be used. Any mobile scaffold over 4m needs to be erected by a ticketed scaffolder.	3. Engineering	SS / SM	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide
Plumbing		Fire/Explosion	C Possible	3 Medium	9	Hot Works Permit to be in place. Area to be clear of combustible materials. Correct PPE to be worn. Flash back arrestors to all oxy sets.	Flash/welding Screens to be installed to protect the public and other workers.	3. Engineering	SS/SM/FM	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide, Welding processes COP

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						PBS Project Risk Register (PRR)					
PBS	Project Risk Regist	er			Acronym	Responsible Positions	Hierarchy of Control		Control Selections		PBS
					SS	Sub-Contractor Supervisor	6. Elimination	3	%Controls ≥ Engineering	91%	
					SM	Site Manager	5. Substitution	6	%Controls < Engineering	9%	
					FM	Foreman	4. Isolation	71			
Workplace Location	St Hedwigs Village, 134-140 Reservoir Rd, Blacktown				CA	Contracts Administrator	3. Engineering	109	ßCheck formulas in		
Issue Number	: Rev 5.0	Updated to clarify Electrical Easment Controls			EHSQ	EHSQ Co-Ordinator	2. Administration	19	add rows to ensure correct		
Issue Date	22/09/2021				PE/SE	Project Engineer / Site Engineer	1. PPE	0			Delete Legislation / Codes not applicable to your jurisdiction
Activity Description	High Risk Construction Work	Hazard / Impact	Likelihood	Consequence	Risk Rating	Mandatory Control Measures	Site Specific Control Measures	Hierarchy of Control	Responsible	Status	Legal and other
		(Worst Credible Consequence)						(Highest Level Control)			requirements
mbing		Cuts and Lacerations	C Possible	2 Small	6	All guards to be fitted to power tools. All PPE requirements shall be assessed in the contractors HR SWMS		3. Engineering	SS/SM/FM	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide
umbing	Is carried out in an area at a workplace in which there is any movement of powered mobile plant	Hit by Moving Plant	B Likely	4 Large	16	No one is to approach plant unless confirmation has been received by the operator that it is ok to approach. All plant to have flashing beacons operating. Mobile phones not be used when operating plant and equipment. Operator to be appropriately Trained / Ticketed.	Exclusion zone to be in place to prevent unauthorised entry to work area. Access ways to be redirected to ensure no personnel inside operating areas. Outriggers of crane to be protected by jersey kurbs or similar to prevent contact from other plant/vehicles. Use Tag Lines when appropriate to control llight weight &for large panel lifts in windy conditions. Dogman and Operator to sign into Crane Management Sub Plan. Spotter/Dogman to have positive communication with operator (via hand signals, whistle or UHF radio) at all times. Seat belts to be worn at all times where fitted. Refer to mobile crane operations activity and excavation activity in this PRR.	4. Isolation	SS / SM	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide, Managing the risks of plant in the workplace COP
ımbing		Hit by Falling Objects	C Possible	2 Small	6	Authorised person only to be in direct workzone.	Tools to be on lanyards when working above 2m fall risk. Physical barriers to be in place as an exclusion zone and must take into consideration the arc, fall and bounce of materials and tools. Area to be buntled off with signage to prevent unauthorised access.	4. Isolation	SS / SM	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide
ımbing		Environmental Contamination from Spill of Hazardous Chemicals/Substances	E Rare	2 Small	2	Contractor to provide, and have readily available access to, a spill kit which is appropriately sized for the risk of spill when refuelling or if damage was to occur to a piece of plant and equipment. Workers must be trained in the use of spill kits and the SDS's for chemicals/substances that they are using on this project.		3. Engineering	SS / SM	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety sisks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide, Managing risks of hazardous chemicals in the workplace COP
ımbing		Exposure to Hazardous Material	D Unlikely	2 Small	4	Correct PPE to be worn. SDS to be communicated to all workers involved in the task via TBT, training register or SWMS. Hazardous Materials to be stored in designated storage area immediately after use.	Hazardous Materials and Dangerous Goods sub plan to be in place.	4. Isolation	SS / SM	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide, Managing risks of hazardo
st Tension Stressing		Plant Failure	B Likely	3 Medium	12	Gauge to be calibrated as per manufacturer specifications. Plant and equipment to be maintained as per manufacturer specifications.		2. Administration	SS / SM	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide, Managing the risks of plant in the workplace COP
ost Tension Stressing		Hit by Falling Objects	B Likely	4 Large	16	Place solid back board in position behind stressing conduct prior to installing stressing cables. Ensure barrier installed behind stressing equipment during initial and final stress. Signage to be installed whilst stressing. Authorised person only to be in direct workzone.		3. Engineering	SS / SM	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide
st Tension Stressing	Risk of Person Falling more than 2m	Fall of Person	B Likely	4 Large	16	Fall Protection must be in place around edge of slab.	PT pans to be filled in as soon as is practicable. Covers to be installed over PT pans until filled in where they are situated in access ways. Delivery drivers or workers are NOT to access the back of trucks unless; "There is a handrail system incorporated onto the back of the vehicle or, "A portable handrail system is provided by the project and, "The use of a portable loading bay platform would be the ideal control measure. When one or more of these controls are implemented, workers may use the access ladder and maintain 3 points of contact when ascending or descending.	3. Engineering	SS / SM	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide
st Tension Stressing		Cuts and Lacerations	B Likely	3 Medium	12	All guards to be fitted to power tools. Wear gloves when working with sharp steel edges.	Use a spotter at exiting point of tendon to ensure no other workers in the vicinity. Spotter is not to stand directly behind/in front of ducts. Erect physical barriers and signage as an exclusion zone. Strand ends to be protected and capped.	4. Isolation	SS/SM/FM	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide
st Tension Stressing		Fire/Explosion	C Possible	3 Medium	9	Hot Works Permit to be in place. Area to be clear of combustible materials. Correct PPE to be worn.		3. Engineering	SS/SM/FM	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide, Welding processes COP
st Tension Stressing		Failure of Structure	C Possible	5 Very Large	15	Forworker/Engineer to include in drawing or provide written instruction where load points are on deck. Ensure satisfactory concrete testing before final stress.	Location of where coil is to be set down on deck is to be physically marked/indicated.	3. Engineering	SS/SM/FM/SE/ CA	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide, Safe Design of Structures COP
ecast	Involves tilt-up or precast concrete	Failure of Structure	B Likely	5 Very Large	20	Structural engineers load point and panel approval are provided prior to erection. HR SWMS to include engineered propping method and reference lift plan & erection process plan. Structural engineer sign off to be provided after installation. Correct bolts to be used to secure props. Locks to be installed on every prop.	Formwork engineering certificate provided before setting pads.	3. Engineering	SS/SM/FM/SE/ CA	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PSS Safety Guide, Safe Design of Structures COP
ecast	Involves tilt-up or precast concrete	Hit by Falling Objects	A Almost Certain	5 Very Large	21+	Suitable rigger experienced in precast erection to supervise lifting process. Secondary secure line to be used when "cracking" the load. No workers to be in the release zone when driver is cracking the load. Engineer designed and approved precast insert points use compatible lifting clutches. Panel to be hooked up by an intermediate rigger. Birth certificate to be issued to PBS before approval to erect or unload on site. Authorised person only to be in direct workzone.	Exclusion zone to be in place to ensure personnel are not underneath suspended loads or in restricted areas. Tools to be on lanyards when working out of EWP.	4. Isolation	SS / SM	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide
sidential Plaster (ACT ly)		Hit by Falling Objects	D Unlikely	3 Medium	6	Authorised person only to be in direct workzone.	Physical barriers to be in place as an exclusion zone and must take into consideration the arc, fall and bounce of materials and tools . Area to be bunted off with signage to prevent unauthorised access.	4. Isolation	SS / SM	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide
oof Hand-Rail Installation	Risk of Person Falling more than 2m	Fall of Person	A Almost Certain	4 Large	20	Erected in accordance with suppliers installation manual to full perimeter of structure. Handover Certificate to be completed and provided to PBS. Scaff Tag (or equivalent signage) to be displayed on rail adjacent to entry point. HR SWMS to be developed by installer.	Entry point to roof to ensure there is no exposure to worker of risk of fall (swing gate at top of ladder or similar) EWP, Platform ladder, Scaffold, snappy scaffold or painters tressel system to be used for the install of roof perimeter hand-rail system.	3. Engineering	SS / SM	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide

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PBS	Project Risk Regist	er			Acronym	Responsible Positions	Hierarchy of Control		Control Selections		PBS
					SS	Sub-Contractor Supervisor	6. Elimination	3	%Controls ≥ Engineering	91%	
					SM	Site Manager	5. Substitution	6	%Controls < Engineering	9%	
					FM	Foreman	4. Isolation	71			
Workplace Location:	St Hedwigs Village, 134-140 Reservoir Rd, Blacktown				CA	Contracts Administrator	3. Engineering	109	ßCheck formulas in		
Issue Number:	Rev 5.0	Updated to clarify Electrical Easment Controls			EHSQ	EHSQ Co-Ordinator	2. Administration	19	add rows to ensur correct		
Issue Date:	22/09/2021	ı			PE/SE	Project Engineer / Site Engineer	1. PPE	0			Delete Legislation / Codes not applicable to your jurisdiction
Activity Description	High Risk Construction Work	Hazard / Impact (Worst Credible Consequence)	Likelihood	Consequence	Risk Rating	Mandatory Control Measures	Site Specific Control Measures	Hierarchy of Control (Highest Level Control)	Responsible	Status	Legal and other requirements
oofing	Risk of Person Falling more than 2m	Fall of Person	A Almost Certain	4 Large	20	Heavy Duty sarking or safety mesh with adequate overlap and tie points or intermediate battens must be installed. Authorised access to roof only. Delivery drivers or workers are NOT to access the back of trucks unless; "There is a handrail system incorporated onto the back of the vehicle or, "A portable handrail system is provided by the project and, "The use of a portable loading bay platform would be the ideal control measure. When one or more of these controls are implemented, workers may use the access ladder and maintain 3 points of contact when ascending or descending.	Safety Mesh to be signed off by competent person and handover to be given to PBS. Voids to be adequately protected prior to accessing roof level (i.e skylights) Where the slope of a roof exceeds 35 degrees the roof is an inappropriate surface to stand on, even with guardrailing or a catch platfrom. In these circumstances, roof workers need a system to prevent both sliding and falling from the perimeter and this must be documented in the HR SWMS. Use of Harness Work Permit to be issued. Harness to be inspected daily before use and maintained as per manufacturer specifications. Person with working at heights ticket to conduct works involving use of harness only. Safety catch netting installed under potential fall zones. Perimeter scaffolding installed around the perimeter.	3. Engineering	SS/SM/FM	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide
oofing		Hit by Falling Objects	B Likely	4 Large	16	Authorised person only to be in direct workzone.	Tools to be on lanyards when working above 2m fall risk. Physical barriers to be in place as an exclusion zone and must take into consideration the arc, fall and bounce of materials and tools. Area to be bunted off with signage to prevent unauthorised access.	4. Isolation	SS / SM	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PSS Safety Guide
oofing		Noise	D Unlikely	2 Small	4	Hearing Protection to be worn.	Signage to be in place when using Explosive Power Tools.	2. Administration	SS / SM	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide, Managing noise and preventing hearing loss at the work COP
oofing		Cuts and Lacerations	E Rare	2 Small	2	All guards to be fitted to power tools. Wear gloves when working with sharp steel edges. Eye Protection to be worn when using explosive power tool. No high velocity/direct action Explosive Power Tool to be used on site unless approved by PBS Site Manager and the controls required are communicated to workers via a toolbox. Explosive Powered Tool charges must be stored in a locked metal box marked "explosives". Used charges must be disposed of immediately after use.	Hot works Permit to be in place	5. Substitution	SS/SM/FM	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide
oofing	Is carried out in an area at a workplace in which there is any movement of powered mobile plant	Hit by Moving Plant	D Unlikely	4 Large	8	No one is to approach plant unless confirmation has been received by the operator that it is ok to approach. All plant to have flashing beacons operating, Mobile phones not be used when operating plant and equipment. Operator to be appropriately Trained / Ticketed.	Exclusion zone to be in place to prevent unauthorised entry to work area. Access ways to be redirected to ensure no personnel inside operating areas. Outriggers of crane to be protected by jersey kurbs or similar to prevent contact from other plant/vehicles. Use Tag Lines when appropriate to control light weight ∨ large panel lifts in windy conditions. Dogman and Operator to sign into Crane Management Sub Plan. Spotter/Dogman to have positive communication with operator (via hand signals, whistle or UHF radio) at all times. Seat belts to be worn at all times where fitted. Refer to mobile crane operations activity	4. Isolation	SS / SM	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide, Managing the risks of plant in the workplace COP
caffold	Risk of Person Falling more than 2m	Fall of Person	A Almost Certain	4 Large	20	Non - compliant areas of scaffold are to be isolated with signage (i.e Danger - incomplete scaffold). Sequential erection / dismantle method to ensure fall prevention for scaffolders at all times. Scaffolder working platforms to be min 450mm wide with access & handrails above 1.5m fall. No trades to modify any scaffold components / arrangements nor overload platforms.	Delivery drivers or workers are NOT to access the back of trucks unless; *There is a handrail system incorporated onto the back of the vehicle or, *A portable handrail system is provided by the project and, *The use of a portable loading bay platform would be the ideal control measure. When one or more of these controls are implemented, workers may use the access ladder and maintain 3 points of contact when ascending or descending.	3. Engineering	SS / SM	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide
caffold		Hit by Falling Objects	A Almost Certain	4 Large	20	Exclusion zone using physical barrier to be in place for erection / dismantle / altering of scaffold activities. All platforms shall be closely decked such that a gap between individual decking components in a bay is not greater than 10mm - this applies to platforms greater than 2m above ground. Authorised person only to be in direct workzone.	Working platforms are to be fully enclosed to prevent objects / materials falling through. The resultant gap between the finished face of the building and the platform edge or adjacent horizontal member of the scaffold does not exceed 100mm.	3. Engineering	SS / SM	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide
caffold		Failure of Structure	A Almost Certain	5 Very Large	21+	Ensure that person/s are nominated to co-ordinate number of scaffold working decks (i.e close off access to current non working decks) & material loading on each deck at any one time. Scaffold to be erected in accordance with manufacturer's instructions &for in accordance with approved scaffold plan. Handover certificate to be provided and scaff tags to be updated at each access point / change of duty loading every 30 days. No trades to modify any scaffold components / arrangements nor overload platforms. Allowable loading limits to be signed or marked on scaffold decks. Provide protection to scaffold components adjacent to areas where mobile plant is operating.	Use designated loading platforms with loading limit signage displayed. Scaffshield to be installed on all ties	3. Engineering	SS / SM	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide, Safe Design of Structures COP
caffold	Is carried out on or near energised electrical installations or services	Contact with Overhead Power Lines	B Likely	5 Very Large	20	No unloading / loading of trucks to happen in the vacinity of these powerlines. All plant to remain at a minimum approach distances to powerlines. Up to 132,000 volts = 3m. 132,000 - 330,000 volts = 6m. Above 330,000 = 8m.	Endevour Energy to provide intruction where scaffold is in proximity to Easment. (e.g. rubber matting, plywood).	3. Engineering	SS / SM	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide, Managing the risks of plant in the workplace COP, Managing electrical risks in the workplace COP
caffold	Is carried out in an area at a workplace in which there is any movement of powered mobile plant	Hit by Moving Plant	C Possible	4 Large	12	No one is to approach plant unless confirmation has been received by the operator that it is ok to approach. All plant to have flashing beacons operating. Mobile phones not be used when operating plant and equipment. Operator to be appropriately Trained / Ticketed.	Exclusion zone to be in place to prevent unauthorised entry to work area. Access ways to be redirected to ensure no personnel inside crane operating areas. Outriggers of crane to be protected by jersey kurbs or similar to prevent contact from other plant/vehicles. Use Tag Lines when appropriate to control liight weight &/or large panel lifts in windy conditions. Dogman and Operator to sign into Crane Management Sub Plan. Spotter/Dogman to have positive communication with operator (via hand signals, whistle or UHF radio) at all times. Seat belts to be worn if available. Refer to mobile crane operations activity in this PRR.	4. Isolation	SS / SM	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide, Managing the risks of plant in the workplace COP
caffold		Working in High Temperatures - Heat Stress/Heat Exhaustion	D Unlikely	2 Small	4	Sufficient quantities of cool drinking water is readily available close to work areas. Regularly rotate workers who perform more strenuous activities with less demanding tasks. Take regular work breaks in cooler areas such as air conditioned sheds.	Shade Covers to be installed. Workers to wear broad brimmed hats and sunglasses for UV protection.	3. Engineering	SS/SM/HSR	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide, Managing the work environment and facilities COP
caffold		Working in Cold, Inclement or Windy Weather	D Unlikely	2 Small	4	Heated amenities to be provided. Suitable Access / Egress to be provided to work areas. Following adverse weather conditions a full inspection to be conducted by a competent person of the scaffold.	Inspection to be conducted prior to gates of site open by PBS Site Manager/ EHS Committee to assess all access routes. Any unsuitable work areas are to barricaded off with physical barrier until deemed safe to enter.	4. Isolation	SS/SM/HSR	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide, Managing the work environment and facilities COP

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HS I						PBS Project Risk Register (PRR)					
PBS Project Risk Register					Acronym	Responsible Positions	Hierarchy of Control		Control Selections		• PBS
					ss	Sub-Contractor Supervisor	6. Elimination	3	%Controls ≥ Engineering	91%	
					SM	Site Manager	5. Substitution	6	%Controls < Engineering	9%	
				FM	Foreman	4. Isolation	71				
Workplace Location: St Hedwigs Village, 134-140 Reservoir Rd, Blacktown				CA	Contracts Administrator	3. Engineering	109	BCheck formulas in L2-L7 if you add rows to ensure range is correct			
Issue Number: Rev 5.0 Updated to clarify Electrical Easment Controls				EHSQ	EHSQ Co-Ordinator	2. Administration	19				
Issue Date					PE/SE	Project Engineer / Site Engineer	1. PPE	0			Delete Legislation / Codes not applicable to your jurisdiction
Activity Description	High Risk Construction Work	Hazard / Impact (Worst Credible	Likelihood	Consequence	Risk Rating	Mandatory Control Measures	Site Specific Control Measures	Hierarchy of Control (Highest Level Control)	Responsible	Status	Legal and other requirements
Shotcrete	Risk of Person Falling more than 2m	Consequence)						Control)			
Unitarie	NISK OTT ETSONT AIMING MICHE CHAIN 2M	Fall of Person	C Possible	4 Large	12		Mobile scaffold to be used. Any mobile scaffold over 4m needs to be erected by a ticketed scaffolder. HR Licence required for operation of EWP over 11m. Harness to be worn and connected prior to bucket being raised. Harness to be inspected daily before use and maintained as per manufacturer specificiations.	3. Engineering	SS / SM	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety sks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide
Shotcrete		Failure of Structure	C Possible	3 Medium	9	Confirm engineering report (geo-tech) for max depth of unsupported excavation		2. Administration	SS/SM/FM/SE/ CA	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide, Safe Design of Structures COP, Excavation COP
Shotcrete		Hit by Falling Objects	C Possible	2 Small	6	Authorised person only to be in direct workzone.	Exclusion zone using physical barriers to be in place.	4. Isolation	SS / SM	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety sisks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide
Shotcrete		Exposure to Hazardous Materia	A Almost Certain	3 Medium	15	Correct PPE to be worn. SDS to be communicated to all workers involved in the task via TBT, training register or SWMS.		2. Administration	SS / SM	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide, Managing risks of hazardous chemicals in the workplace COP
Shotcrete		Noise	B Likely	3 Medium	12	Hearing Protection to be worn.	Mufflers to be used on plant.	3. Engineering	SS / SM	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide, Managing noise and preventing hearling loss at the work COP
Steel Fixing	Risk of Person Falling more than 2m	Fall of Person	B Likely	4 Large	16	Cast/Embed 4mm mesh into larger penetrations. Fixed cover to be on all penetrations over 125mm diameter. All penetration covers to be identified similar to "Danger Penetration Below". If sizeable penetrations are located in areas where plant lâvor equipment is likely to be used (eg scissor lift, pallet trolley, forklift), secured covers to be of sufficient strength with load limits displayed. Platform ladder to be used when constructing lift shafts Scaffold or the like, platforms with edge protection to be used when constructing lift shafts or vertical walls.	No one is to stand on truck tray unless it has hand rails in place. Platform Ladder or work trestles of 450mm width to be used. Mobile scaffold to be used. Any mobile scaffold over 4m needs to be erected by a ticketed scaffolder.	3. Engineering	SS / SM	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide
Steel Fixing	Is carried out in an area at a workplace in which there is any movement of powered mobile plant	Hit by Moving Plant	C Possible	3 Medium	9	No one is to approach plant unless confirmation has been received by the operator that it is ok to approach. All plant to have flashing beacons operating. Mobile phones not be used when operating plant and equipment. Operator to be appropriately Trained / Ticketed.	Exclusion zone to be in place to prevent unauthorised entry to work area. Access ways to be redirected to ensure no personnel inside crane operating areas. Outriggers of crane to be protected by Jersey kurbs or similar to prevent contact from other plant/vehicles. Use Tag Lines when appropriate to control light weight &for large panel lifts in windy conditions. Dogman and Operator to sign into Crane Management Sub Plan. Spotter/Dogman to have positive communication with operator (via hand signals, whistle or UHF radio) at all times. Seat belts to be worn if available. Refer to mobile crane operations activity in this PRR.	4. Isolation	SS / SM	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide, Managing the risks of plant in the workplace COP
Steel Fixing		Fire/Explosion	C Possible	3 Medium	9	Hot Works Permit to be in place. Area to be clear of combustible materials. Correct PPE to be worn.	Flash/welding Screens to be installed to protect the public and other workers.	3. Engineering	SS/SM/FM	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PSS Safety Guide, Welding processes COP
Steel Fixing		Cuts and Lacerations	B Likely	3 Medium	12	All guards to be fitted to power tools. Install bar caps on all exposed steel bars. Wear gloves when working with sharp steel edges.	Hot works Permit to be in place	3. Engineering	SS/SM/FM	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety sks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide
Structural Steel	Risk of Person Falling more than 2m	Fall of Person	B Likely	4 Large	16	EWP or Scaffold to be used for access for install of structural steel. Platform ladders may also be used on even surfaces. Delivery drivers or workers are NOT to access the back of trucks unless; "There is a handrail system incorporated onto the back of the vehicle or, "A portable handrail system is provided by the project and, "The use of a portable loading by platform would be the ideal control measure. When one or more of these controls are implemented, workers may use the access ladder and maintain 3 points of contact when ascending or descending.	Mobile scaffold to be used. Any mobile scaffold over 4m needs to be erected by a ticketed scaffolder. Ticketed Personnel required for operation of EWP. Harness to be worn and connected prior to bucket being raised. Harness to be inspected daily before use and maintained as per manufacturer specificiations.	3. Engineering	SS / SM	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide
Structural Steel		Fire/Explosion	A Almost Certain	3 Medium	15	Hot Works Permit to be in place. Area to be clear of combustible materials. Correct PPE to be worn. Flash back arrestors to all oxy sets.	Flash/welding Screens to be installed to protect the public and other workers.	3. Engineering	SS/SM/FM	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety stess COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide, Welding processes COP
Structural Steel		Hit by Falling Objects	C Possible	3 Medium	9	Authorised person only to be in direct workzone.	Tools to be on lanyards when working above 2m fall risk. Physical barriers to be in place as an exclusion zone and must take into consideration the arc, fall and bounce of materials and tools.	4. Isolation	SS / SM	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide
Structural Steel	Is carried out in an area at a workplace in which there is any movement of powered mobile plant	Hit by Moving Plant	C Possible	4 Large	12	No one is to approach plant unless confirmation has been received by the operator that it is ok to approach. All plant to have flashing beacons operating. Mobile phones not be used when operating plant and equipment. Operator to be appropriately Trained / Ticketed.	Exclusion zone to be in place to prevent unauthorised entry to work area. Access ways to be redirected to ensure no personnel inside crane operating areas. Outriggers of crane to be protected by jersey kurbs or similar to prevent contact from other plant/vehicles. Use Tag Lines when appropriate to control liight weight ∨ large panel lifts in windy conditions. Dogman and Operator to sign into Crane Management Sub Plan. Spotter/Dogman to have positive communication with operator (via hand signals, whistle or UHF radio) at all times. Refer to mobile crane operations activity in this PRR.	4. Isolation	SS / SM	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide, Managing the risks of plant in the workplace COP
Structural Steel		Cuts and Lacerations	D Unlikely	2 Small	4	All guards to be fitted to power tools. All PPE requirements shall be assessed in the contractors HR SWMS	225mm grinder permit to be issued when applicable	3. Engineering	SS/SM/FM	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide

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						PBS Project Risk Register (PRR)						
PBS Project Risk Register					Acronym	Responsible Positions	Hierarchy of Control		Control Selections		• PBS	
			SS	Sub-Contractor Supervisor	6. Elimination	3	%Controls ≥ Engineering	91%				
					SM	Site Manager	5. Substitution	6	%Controls < Engineering	9%		
					FM	Foreman	4. Isolation	71				
Workplace Locatio	St Hedwigs Village, 134-140 Reservoir Rd. Blacktown				CA	Contracts Administrator	3. Engineering	109	ßCheck formulas in	L2-L7 if you		
Issue Numbe	-,	Updated to clarify Electrical Easment Controls			EHSQ	EHSQ Co-Ordinator	2. Administration	19	add rows to ensure correct			
Issue Date: 22/09/2021					PE/SE	Project Engineer / Site Engineer	1. PPE	0			Delete Legislation / Codes not applicable to your jurisdiction	
Activity Description	High Risk Construction Work	Hazard / Impact (Worst Credible Consequence)	Likelihood	Consequence	Risk Rating	Mandatory Control Measures	Site Specific Control Measures	Hierarchy of Control (Highest Level Control)	Responsible	Status	Legal and other requirements	
wer Crane		Plant Failure	B Likely	4 Large	16	All lifting gear is to be maintained as per manufacturer specifications and inspected daily by a competent person - Synthetic slings are to be checked 3 monthly and documented on a register. Chains are to be tested yearly and documented on a register. Daily inspection to be completed by operator prior to operation. Plant to serviced and maintained as per manufacturers specifications. No 'free fall' option is allowable; if the crane has this option, it must be physically locked out.		4. Isolation	SS / SM	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide, Managing the risks of plant in the workplace COP	
wer Crane		Hit by Falling Objects	C Possible	4 Large	12	Dogman and Operator to sign into Crane Management Sub Plan. All lifting gear is to be maintained as per manufacturer specifications and inspected daily by a competent person - Synthetic slings are to be checked 3 monthly and documented on a register. Chains are to be tested yearly and documented on a register. No 'free fail' option is allowable; if the crane has this option, it must be physically locked out. Authorised person only to be in direct workzone.	Tag Lines to be used when appropriate to control light weight &/or large panel lifts in windy conditions. Immediate rigger licence required when dual lift occuring. Lanyards are to be used on all tools during crane erection/dismantle process. No multi-slinging (Christmas Tree Lifts) of materials for a single crane lift. Minimum 4 lifting points required for material & waste bins and limit load lifting to 1 bin per slung load. Suitably rated hoarding or catch deck to be installed over common areas and access ways.	4. Isolation	SS / SM	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide	
wer Crane	Is carried out on or near energised electrical installations or services	Contact with Overhead Power Lines	C Possible	4 Large	12	Dogman and Operator to sign into Crane Management Sub Plan. No unloading / loading of trucks to happen in the vacinity of these powerlines. All plant to remain at a minimum approach distances to powerlines. Up to 132,000 volts = 3m. 132,000 - 330,000 volts = 6m. Above 330,000 = 8m.	. Competent Spotter to have postive communication with plant (UHF radios) and observe plant movements when design envelope has the potential to reach closer than 10 metres to power lines. Install signage as visual reminder. Non conductive tag lines to be used to control load. Alarm device to be installed on tower crane to indicate location of load. Crane is to be ARC limited to prevent Unauthrosed encroachment of easment.	3. Engineering	SS / SM	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide, Managing the risks of plant in the workplace COP, Managing electrical risks in the workplace COP	
wer Crane		Multiple Crane &/or Satellite Boom/Concrete Pump Collision	B Likely	5 Very Large	20	Dogman and Operators to sign into Crane Management Sub Plan. Communication meeting to be held with other operators (i.e concrete boom) and crane crews daily before work begins on the site for the shift.	An automated anti-collision or zoning system must be installed on the tower cranes and gantry cranes when multiple cranes are planned to be in use and their planned lifting radius will interface with or overlap with other cranes. Crane crews are to be specifically trained in the operating features of the crane inclduing the use and maintenance of the anti - collision or zoning sytem fitted to the crane. Separate vertical and horizontal communication chnnels shall be provided and an established procedure in place and utilised prior to slewing into another crane's radius.	3. Engineering	SS / SM	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide, Managing the risks of plant in the workplace COP	
wer Crane	Risk of Person Falling more than 2m	Fall of Person	A Almost Certain	4 Large	20	Delivery drivers or workers are NOT to access the back of trucks unless; "There is a handrail system incorporated onto the back of the vehicle or, "A portable handrail system is provided by the project and, "The use of a portable loading bay platform would be the ideal control measure. When one or more of these controls are implemented, workers may use the access ladder and maintain 3 points of contact when ascending or descending. Dogman are to remain inside/behind perimeter edge protection when working on decks.	For Erection, Dismantle and Maintenance of the Tower Crane - Use of Harness Work Permit to be Issued. Harness to be inspected daily before use and maintained as per manufacturer specifications. Person with working at heights ticket to conduct works involving use of harness only.	3. Engineering	SS/SM/FM	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide	
affic Control	Is carried out on, in or adjacent to a road that is in use by traffic other than pedestrians	Hit by Moving Vehicular Traffic	A Almost Certain	4 Large	20	Consultant holding correct tickets to provide Traffic Management Plan (including Traffic Control Plan) which is specific to the works on site. Signage and Devices to be set up in accordance with approved Traffic Control Plan by workers who hold the correct tickets. Traffic Controllers to position themselves where an escape route is accessible at all times. Traffic control signs and devices are to be checked daily to confirm they are still erected as per TCP and documented using PBS Traffic Controls Daily Checklist.	Physical Barrier to be set up in between workers and road users. Signage to be held down with weights and/or other appropriate methods to prevent them blowing over. Traffic and Vehicle Management Sub Plan to be in Place. TCP to be generated by Authroised Agency for PBS Contracted Traffic controllers to implement (automated traffic signals) at Site Entry and residents end of site after construction DA hours. 17.108r04v02 TRAFFIX 140 Reservoir Road, Blacktown - TCP Statement" refers. PBS Traffic controllers to be engaged and instructed through Toolbox prior to implementation.	3. Engineering	SS / SM	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP. Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide	
affic Control	Is carried out on, in or adjacent to a road that is in use by traffic other than pedestrians	Impact on current Traffic Conditions	C Possible	5 Very Large	15	Traffic Management and Traffic Control Plan to be in place which has been selected or created by a competent person. Traffic Control signage and devices to be installed as per approved TCP.	No contractor parking on site. Workers are advised to utilise public transport. Work Zone on the road is only to be utilised for delivery of material and tools. Traffic and Vehicle Management Sub Plan to be in place TCP to be generated by Authroised Agency for PBS Contracted Traffic controllers to implement (automated traffic signals) at Site Entry and residents end of site after construction DA hours. *17.108r04v02 TRAFFIX 140 Reservoir Road, Blacktown - TCP Statement* refers. PBS Traffic controllers to be engaged and instructed through Toolbox prior to implementation	5. Substitution	SS / SM	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide	
affic Control	Is carried out on, in or adjacent to a road that is in use by traffic other than pedestrians; Is carried out in an area at a workplace which therre is any movement of powered mobile plant.	Vehicle / Plant Collision	C Possible	5 Very Large	15	Traffic Management and Traffic Control Plan to be in place which has been selected or created by a person holding the correct tickets if works conducted outside PBS Perimeter Fencing. Traffic Control signage and devices to be installed as per approved TCP. Traffic control signs and devices are to be checked daily to confirm they are still erected as per TCP and documented using PBS Traffic Controls Daily Checklist	Traffic and Vehicle Management Sub Plan to be in place. No contractor parking on site. TTCP to be generated by Authroised Agency for PBS Contracted Traffic controllers to implement (automated traffic signals) at Site Entry and residents end of site after construction DA hours. *17.108r04v02 TRAFFIX 140 Reservoir Road, Blacktown - TCP Statement* refers. PBS Traffic controllers to be engaged and instructed through Toolbox prior to implementation	2. Administration	SS / SM	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety sisks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide	
ee Trimming and Remova ork	al	Cuts and Lacerations	C Possible	4 Large	12	All guards to be fitted to power tools. Only competent (as per national unit of competency) and trained operators to use chainsaw. Chainsaw should not be used above shoulder height. Select chainsaw with the shortest practicable bar length for each work task undertaken. Chainsaw to be operated and maintained in accordance with manufacturers instructions. Chainsaw to be started on level ground and be secure when pulling the starter.	225mm grinder permit to be issued when applicable	5. Substitution	SS / SM	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide	
ndows	Risk of Person Falling more than 2m	Fall of Person	B Likely	4 Large	16	Scaffold to be used. Platform ladders may be used on ground floor. Delivery drivers or workers are NOT to access the back of trucks unless: "There is a handrail system incorporated onto the back of the vehicle or, "A portable handrail system is provided by the project and, "The use of a portable loading bay platform would be the ideal control measure. When one or more of these controls are implemented, workers may use the access ladder and maintain 3 points of contact when ascending or descending. Ladders to be stepped back from any edges of a building/balconies at least 3m or 1:1 ratio if a full perimeter screen/scaffold has been installed.	Mobile scaffold to be used. Any mobile scaffold over 4m needs to be erected by a ticketed scaffolder. Loads to arrive pre-slung to eliminate the need for workers to stand on the truck tray. Internal edge protection needed when installing windows from inside the building on any level above ground.	3. Engineering	SS/SM	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide	
ndows		Hit by Falling Objects	B Likely	3 Medium	12	Approved, regularly inspected lifting frames to be used. Check suction and battery strength prior to lifting if applicable. Engineered lifting frames to be inspected annually by boiler maker or other competent person to ensure suitability for purpose and be recorded on plant and equipment register. Authorised person only to be in direct workzone.	Tools to be on lanyards when working above 2m fall risk. Physical barriers to be in place as an exclusion zone and must take into consideration the arc, fall and bounce of materials and tools. Area to be buntled off with signage to prevent unauthorised access.	4. Isolation	SS / SM	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide	
ndows	Is carried out in an area at a workplace in which there is any movement of powered mobile plant	Hit by Moving Plant	C Possible	4 Large	12	No one is to approach plant unless confirmation has been received by the operator that it is ok to approach. All plant to have flashing beacons operating. Mobile phones not be used when operating plant and equipment. Operator to be appropriately Trained / Ticketed.	Exclusion zone to be in place to prevent unauthorised entry to work area. Access ways to be redirected to ensure no personnel inside operating areas. Outriggers of crane to be protected by jersey kurbs or similar to prevent contact from other plant/vehicles. Use Tag Lines when appropriate to control llight weight &for large panel lifts in windy conditions. Dogman and Operator to sign into Crane Management Sub Plan. Spotter/Dogman to have positive communication with operator (via hand signals, whistle or UHF radio) at all times. Seat belts to be worn at all times where fitted. Refer to mobile crane operations activity in this PRR.	4. Isolation	SS / SM	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide, Managing the risks of plant in the workplace COP	
indows		Cuts and Lacerations	D Unlikely	2 Small	4	All guards to be fitted to power tools. All PPE requirements shall be assessed in the contractors HR SWMS	Hot works Permit to be in place	3. Engineering	SS / SM	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, Work health and safety consultation, coordination and cooperation COP, PBS Safety Guide	

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EHS						PBS Project Risk Register (PRR)					
PBS	Project Risk Registe	er			Acronym	Responsible Positions	Hierarchy of Control		Control Selections		PBS
					SS	Sub-Contractor Supervisor	6. Elimination	3	%Controls ≥ Engineering	91%	
					SM	Site Manager	5. Substitution	6	%Controls < Engineering	9%	
					FM	Foreman	4. Isolation	71			
Workplace Location: St Hedwigs Village, 134-140 Reservoir Rd, Blacktown				CA	Contracts Administrator	3. Engineering	109	BCheck formulas in L2-L7 if you add rows to ensure range is			
Issue Number:	Rev 5.0	Updated to clarify Electrical Easment Controls			EHSQ	EHSQ Co-Ordinator	2. Administration	19	add rows to ensur correct	e range is	
Issue Date:	22/09/2021				PE/SE	Project Engineer / Site Engineer	1. PPE	0			Delete Legislation / Codes not applicable to your jurisdiction
Activity Description	High Risk Construction Work	Hazard / Impact (Worst Credible Consequence)	Likelihood	Consequence	Risk Rating	Mandatory Control Measures	Site Specific Control Measures	Hierarchy of Control (Highest Level Control)	Responsible	Status	Legal and other requirements
Local Traffic Condition						PBS will either communicate directly (through Letter drops, Public Notice Boards or Consultation sessions) with these entities, or through the client established communication protocols for feedback when assessing HiIRAC to be implemented when reducing any opential riskly, posed.	Client to be notified where potential impacts clients and village residents TCP to be generated by Authroised Agency for PBS Contracted Traffic controllers to implement (automated traffic signals) at Site Entry and residents end of site after construction DA hours. *17.108r04v02 TRAFFIX 140 Reservoir Road, Blacktown - TCP Statement* refers. PBS Traffic controllers to be engaged and instructed through Toolbox prior to implementation. PM to notify client through formal meeting and correspondence.			Open	
Neighbouring Residents						PBS will either communicate directly (through Letter drops, Public Notice Boards or Consultation sessions) with these entities, or through the client established communication protocols for feedback when assessing HiRAC to be implemented when reducing any potential risk(s) posed.	Client to be notified where potential impacts clients and village residents			Open	
Local Council Requirements						PBS will either communicate directly (through Letter drops, Public Notice Boards or Consultation sessions) with these entities, or through the client established communication protocols for feedback when assessing HiRAC to be implemented when reducing any optential riskly, posed.				Open	
Cutting Grinding or drilling Products containing Crystalline Silica (e.g. Concrete/Bricks/Tiles & Stone)		Respirable Crystalline Silica Exposure	C Possible	4 Large	12	SDS for products to be submitted to PBS prior to works commencing. Contractor SWMS are to capture required work practices to control risk for works conducted. 3. Minimum Requirements are: Use of Wet Cutting/Grinding with P2 Masks, or Dry Cut/Grind/Drill Use of H or M class vacuum/capture systems and attachements and P2 Masks	Extraction units required where works are conducted indoors, regular Housekeeping and maintenance of Vaccum systems	3. Engineering	SS/SM	Open	WHS Act 2011, WHS Regulations 2017, Construction Work COP, How to manage work health and safety risks COP, PBS Safety Guide

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