

Safe Work Method Statement

Groundworks including Excavation and Landscaping

PCBU:	Robertson's Remedial and Painting Pty Ltd 10/56 Buffalo Road, Gladesville NSW 2111 Phone: (02) 9181 3519 ABN: 16 140 746 247	Site address:	[Insert Site Address Here]
Project Manager:	■ [Insert Project Manager Name Here]	Date SWMS provided to PC:	19-Mar-26
Work activity:	Groundworks including Excavation and Landscaping	Principal Contractor (PC):	[Insert Principal Contractor (PC) Here]

High Risk Construction Work (HRCW):
☒ Risk of a person falling more than 2 metres ☐ Likely to involve disturbing asbestos ☒ Work in or near a shaft or trench deeper than 1.5 m or a tunnel ☐ Work on or near chemical, fuel or refrigerant lines ☐ Tilt-up or precast concrete elements ☐ Work on a telecommunication tower ☐ Temporary load-bearing support for structural alterations or repairs ☐ Use of explosives ☐ Work on or near energised electrical installations or services ☐ Work on, in or adjacent to a road, railway, shipping lane or other traffic corridor in use by traffic other than pedestrians ☐ Demolition of load-bearing structure ☐ Work in or near a confined space ☐ Work on or near pressurised gas mains or piping ☐ Work in an area that may have a contaminated or flammable atmosphere ☒ Work in an area with movement of powered mobile plant ☐ Work in areas with artificial extremes of temperature ☐ Work in or near water or other liquid that involves a risk of drowning ☐ Diving work

Person responsible for ensuring compliance with SWMS:	■ [Insert Supervisor Name Here]	Date SWMS received:	19-Mar-26
What measures are in place to ensure compliance with the SWMS?	Toolbox meetings, SWMS sign off, job observations and supervision review. If issues with the SWMS or new hazards are identified, the supervisor must be notified. When changes are made to SWMS, it will be communicated to all workers.		
Person responsible for reviewing SWMS control measures:	■ [Insert Project Manager Name Here]	Date SWMS received by reviewer:	19-Mar-26
How will the SWMS control measures be reviewed?	The control measures implemented will be reviewed and if necessary, revised annually or if work methods change, the control measures are not effective in controlling the risk, a new hazard/risk is identified or following an incident. The SWMS will be reviewed in consultation with workers and/or others who may be affected by the SWMS. Any changes to the SWMS will be communicated with workers at induction, daily pre-starts and toolbox talks.		
Reviewer's signature:	■ [Insert Project Manager Name Here]	Review date:	19-Mar-26

This SWMS must be kept and be available for inspection until the high-risk construction work to which this SWMS relates is completed. If the SWMS is revised, all versions should be kept. If a notifiable incident occurs in relation to the high-risk construction work in this SWMS, the SWMS must be kept for at least 2 years from the date of the notifiable incident.

Safe Work Method Statement

PRE-REQUISITES TABLE

Must be in place before starting work			
PPE — All Persons on Site	- Steel-capped footwear (AS/NZS 2210.3) - High-vis vest (AS/NZS 4602) or long sleeves - Hard hat (AS/NZS 1801) - Eye protection (AS/NZS 1337.1) - Cut-resistant gloves — general groundworks	Additional PPE	- Full body harness with retrieval line (AS/NZS 1891.1) — for entry to excavations >1.5m without shoring - P2 respirator (AS/NZS 1716) — mandatory for silica tasks, dust-generating work, contaminated soil handling - Nitrile gloves — wet concrete handling, contaminated material, chemical products - Waterproof boots (gumboots) — wet concrete, dewatering, drainage installation - Hearing protection Class 5 (AS/NZS 1270) — all powered tool operation and plant within 10m - Anti-vibration/impact gloves — compaction equipment and jackhammering tasks - Disposable coveralls — if handling confirmed contaminated material or asbestos-containing soil
Licences / Qualifications	- White Card — Construction Induction (all workers) - High Risk Work Licence (HRWL) or RTO-issued VOC — for all plant operation (excavator LE, loader LL/LS, dozer LZ, roller LR) — VOC by RTO only, not on-site assessments - Working at Heights training — current within 2 years - Confined Space Entry training — required before entry to any classified confined space - First aid certificate — minimum one qualified first aider on site at all times	Permits & Approvals	- Confined Space Entry Permit (if applicable — sewer pit entry, enclosed excavation with atmospheric risk) - Dial Before You Dig (DBYD) authority — plans current within 30 days before any ground disturbance - Dewatering licence or local authority approval (if required for discharge volumes) [Insert any site-specific or DA-condition permits required here]
Plant & Equipment	- Excavator, backhoe, skid steer, front-end loader, roller — HRWL/VOC required - Plate compactor, rammer, ride-on roller — vibration-dampened handles - Powered tools — jackhammer, angle grinder, core drill, rotary hammer — on-tool extraction or wet suppression required for silica tasks - Extension leads and portable RCDs — test and tagged per AS/NZS 3012 (3-monthly)	Hazardous Substances	- Hazardous Substances Register maintained on site — all chemicals (concrete admixtures, solvents, fuels, primers) listed with current SDS (within 5 years) - SDS accessible at all times — workers briefed before use of each product - Wet concrete: pH 12–13 alkaline — chemical burn risk; nitrile gloves and waterproof boots required for contact tasks - Contaminated soil — unexpected finds protocol applies: stop work, isolate, notify supervisor, test before proceeding

Safe Work Method Statement

	• Dewatering pumps — on RCD-protected circuits, intake screened • Concrete pump, vibrator, screed rail, power float • Formwork components, props, bracing, trench boxes • Spill response kit — minimum capacity 110% of largest chemical container on site • First aid kit — locations confirmed at induction • Fire extinguisher (ABE) — within 5m of chemical storage and fuel use		• Flammable liquids stored per AS 1940 — separated from ignition sources, direct sun, and incompatible materials • Silica-containing materials (concrete, masonry, mortar, tile beds, fibre-cement) — wet suppression or on-tool extraction required; no dry cutting
Consultation	Workers consulted in preparation of this SWMS per NSW WHS Regulation r.299(3) and r.300(2). SWMS reviewed with all workers before work commences — workers sign off before starting.	Legislative Basis	Work Health and Safety Act 2011 (NSW) WHS Regulation 2017 (NSW) rr.291–302 SafeWork NSW Code of Practice: Construction Work Code of Practice: Managing the Risk of Falls at Workplaces Code of Practice: Managing Risks of Hazardous Chemicals in the Workplace Code of Practice: How to Manage Work Health and Safety Risks AS 4678 Earth-Retaining Structures AS/NZS 3012 Electrical Installations — Construction and Demolition Sites AS 1940 Storage and Handling of Flammable and Combustible Liquids

Safe Work Method Statement

Brief Description: Master SWMS for groundworks and landscaping activities. Covers site administration (induction, emergency response, weather, public interface), excavation and trenching (including >1.5m shoring requirements), underground and overhead services management, powered mobile plant operation, silica dust control (jackhammering, cutting, grinding, and core drilling), formwork and steel fixing, concrete pouring and finishing, backfill and compaction, drainage and stormwater installation, dewatering operations, shoring and temporary support, and contaminated soil management. Applicable HRCW: risk of fall >2m; shaft or trench deeper than 1.5m; movement of powered mobile plant.

STEP-BY-STEP SAFE WORK METHOD TABLE

	Task	Hazard	Risk (Pre)	Controls	Risk (Post)	Responsibility	CCVS Code
1	Site induction, daily sign-in and SWMS induction	- Workers commencing without site awareness — uncontrolled hazard exposure - SWMS controls not understood or verified before commencing work - Unauthorised workers accessing site	Low (1)	Admin: - Daily Sign-In and critical control confirmation completed by all workers — recorded in Breadcrumb - Site induction completed by all workers on first day — recorded in Breadcrumb - SWMS (site-specific) induction completed and signed by all workers including membership in PM's WhatsApp work group — recorded in Breadcrumb - Toolbox talk conducted weekly — covers tasks, hazards, controls, weather, site changes — recorded in Breadcrumb - All workers hold Construction Induction Card (White Card) — recorded in Breadcrumb	Low (1)	- SUP — conduct induction, confirm sign-in, verify White Card and SWMS sign-off - WKR — sign Daily Sign-In and SWMS induction register before starting work	STOP-WORK TRIGGER - Worker cannot produce White Card - Worker not site and SWMS inducted - Worker unfamiliar with Emergency Response procedures RISK CODE: SYS-L1

Safe Work Method Statement

	Task	Hazard	Risk (Pre)	Controls	Risk (Post)	Responsibility	CCVS Code
2	Emergency response	- Medical emergency on site — delayed response - Fire or chemical spill — escalation without plan - Worker incapacitated at height or in excavation - Building evacuation required - Natural disaster — storm, flood, earthquake	High (9)	Engineering: - First aid kit, fire extinguisher, and spill kit locations confirmed at induction — eye wash cup available if chemical products in use Admin: - Site Emergency Plan communicated at induction and reviewed at toolbox talk after any update — emergency contacts displayed at site entry - Call 000 for any serious injury or emergency — supervisor directs responders with site address available - Assembly point identified and communicated at induction — muster procedure: supervisor conducts headcount and confirms all workers accounted for - Chemical spill: spill response equipment available where chemicals are decanted — minimum capacity 110% of largest container, drains protected, waste contained for disposal - Fire: activate alarm, evacuate, call 000 — do not fight fire beyond incipient stage — fire extinguisher locations identified at induction - Incident reporting: notify PM's WhatsApp work group — notifiable incidents reported to SafeWork NSW per WHS Act s.38	Low (1)	- SUP — maintain and communicate Emergency Plan; confirm first aid and firefighting resources in place - WKR — attend induction, know assembly point, emergency contacts, and 000 response	STOP-WORK TRIGGER - Any emergency — all work ceases until area declared safe by supervisor - No restart without toolbox talk on incident and changed controls RISK CODE: SYS-H9
3	Hot and dangerous weather	- Heat stress, heat stroke, and dehydration — outdoor work in direct sun - Slip hazard from wet surfaces during and after rain - Wind dislodging materials or affecting plant stability - UV exposure — prolonged outdoor work	Medium (3)	Engineering: - Cool drinking water available within 50m of all work positions at all times Admin: - Monitor Bureau of Meteorology forecasts daily — adjust work schedule in extreme heat - Wind triggers: >40 km/h — suspend all elevated work (scaffold, EWP, fall restraint, IRA) - Shade and rest breaks scheduled during high UV periods — acclimatisation plan for new workers in hot conditions	Low (2)	- SUP — monitor conditions, enforce wind and heat triggers, adjust schedule - WKR — report signs of heat stress or unsafe conditions immediately	STOP-WORK TRIGGER - Worker shows signs of heat stress - Wind exceeds trigger threshold (>40 km/h for elevated work) - Lightning within 5 km - Rain making surfaces unsafe for elevated or excavation work RISK CODE: SYS-M3

Safe Work Method Statement

	Task	Hazard	Risk (Pre)	Controls	Risk (Post)	Responsibility	CCVS Code
4	Residents and public interface	- Fall from unprotected edge — residents or public not excluded from drop zones - Falling objects striking residents or members of public - Dust and debris reaching occupied areas - Noise and access disruption to residents - Unauthorised entry to work zones	Medium (3)	Engineering: - Physical barriers (barricades, mesh, hoarding) around all work zones accessible to residents or public - Temporary fence or hard barriers protecting all unprotected edges >1.5m - Drop zones below all elevated work barricaded to full fall-line of debris - OPTIONAL: noise mats repositioned progressively during demolition; silica air monitoring deployed if residents report visible dust Admin: - Residents notified via third party minimum 48 hours before work commences — written notice specifying dates, times, and nature of work - Work hours comply with council DA conditions and strata by-laws — no work outside approved hours without written approval - Signage at building entry and work zones: 'CONSTRUCTION WORK IN PROGRESS', contact details, and exclusion zone warnings	Low (1)	- SUP — verify barriers in place, notifications sent, and signage erected before work commences - WKR — confirm exclusion zone is established before starting each day	STOP-WORK TRIGGER - Resident or member of public enters exclusion zone - Barricade displaced or removed - Complaint of health effect from dust, fumes, or noise — notify PM's WhatsApp work group RISK CODE: SYS-M3

Safe Work Method Statement

5	Excavation and trenching • Collapse of excavation walls — burial and suffocation • Fall into open excavation • Contact with underground services — electrocution or rupture • Flooding and water ingress — destabilised walls • Ground vibration from adjacent plant — induced collapse • Atmospheric contamination — gas build-up or oxygen depletion • Impact on adjacent buildings and structures	High (6)	Engineering: • Shoring installed progressively as depth increases — benching/battering per geotechnical report; never steeper than soil classification allows • Dewatering active if water table encountered — discharge via sediment control • Edge protection: spoil stockpile setback minimum 1m or equal to excavation depth (whichever is greater) from excavation edge • Safe access/egress for excavations >1.5m — ladders secured to trench shields extending minimum 1m above top; or ramps/steps as appropriate • Controls to prevent objects falling on workers in excavations >1.5m — toe boards and guard rails at excavation edge; trench box sheets extending above trench depth • Barricading: up to 1m deep — bunting/barrier mesh with star pickets (safety caps, max 2.5m spacing, at least 1m from edge); >1m deep — crowd control barriers, water-filled barriers, or 1.8m interlockable hard fencing; >1.5m deep — 'DANGER DEEP EXCAVATION' signage Admin: • DBYD plans obtained and current (within 30 days) — service locations confirmed by non-destructive potholing within 1m of any indicated service before mechanical excavation • Adjacent buildings and structures assessed by competent person (structural/geotechnical engineer) before excavation commences — vibration monitoring implemented per engineer's assessment • Shoring, benching, or battering for excavations >1.5m designed by competent person per AS 4678 and WHS Regulation Chapter 6 • Daily inspection of excavation walls by competent person before any worker entry — checklist completed • After rain: re-inspection of walls and shoring before re-entry • Excavations isolated and made safe at end of each shift — barriers, covers, or backfill as appropriate	Low (2)	• SUP — verify DBYD current, shoring design on site, and daily inspection completed before worker entry • WKR — confirm shoring in place and inspection signed off before entering any excavation >1.5m	HOLD POINT 5 1. Current DBYD, as-built drawings, and services layout obtained and on site 2. Adjacent buildings and structures assessed by competent person — vibration controls implemented per engineer's assessment 3. DBYD plans current (within 30 days) — services confirmed by non-destructive potholing within 1m of any indicated service 4. Shoring, benching, or battering design by competent person on site and current for ground conditions 5. Barricading and signage in place per depth requirements above STOP-WORK TRIGGER • Wall cracking, slumping, or movement observed • Water ingress not controlled by dewatering • Shoring damaged or displaced • Services exposed and not confirmed de-energised • Spoil encroaching on edge setback • Worker in excavation >1.5m without shoring or benching • DBYD not sighted before ground disturbance • Adjacent structure integrity concern identified RISK CODE: WAH-H6
---	---	----------	---	---------	---	--

Safe Work Method Statement

	Task	Hazard	Risk (Pre)	Controls	Risk (Post)	Responsibility	CCVS Code
6	Underground and overhead services — location and protection	• Electrocution from contact with underground power cables or overhead lines • Gas main rupture — explosion and fire • Water main burst — flooding and excavation instability • Telecommunications damage — service disruption and liability • Sewer damage — contamination and environmental harm • Plant contact with overhead conductors	High (9)	Engineering: • Services physically exposed by hand or vacuum excavation before mechanical plant operates within proximity — exposed services supported and protected from damage • Isolation of services where practicable — de-energise, shut off, or depressurise before work within proximity Admin: • DBYD plans obtained, current (within 30 days), and reviewed by all workers involved in ground disturbance before commencement • Service locator (CAT/Genny or GPR) used to confirm locations — services marked on ground with paint/flags before any mechanical excavation • Hand dig or vacuum excavation (potholing) within 1m horizontal and 300mm vertical of any indicated service — no mechanical excavation within this zone • Service owner contacted and clearance obtained for work near high-risk services (HV power, high-pressure gas) • Overhead services identified — approach distances and work zones (Zone A/B/C) established — electrical spotters required in Zone B — plant fitted with limiting devices where it can reach Zone C; clearances: up to 132kV — 3m; 132–330kV — 6m; above 330kV — 8m • Competent spotter required when working within 500mm of underground asset • Service strike emergency procedure briefed to all workers — isolation points identified; gas: evacuate, no ignition, call 000 and gas authority; electrical: do not approach, isolate at source, call 000 and network provider • All workers inducted on service locations marked on site plan	Low (2)	• SUP — confirm DBYD current, potholing complete, and spotter assigned before mechanical excavation commences • WKR — confirm service locations marked on ground before operating any mechanical plant	HOLD POINT 6 1. DBYD plans obtained, current, and reviewed by all workers involved in ground disturbance 2. Service locator (CAT/Genny or GPR) used and services marked on ground with paint or flags 3. Potholing within 1m horizontal and 300mm vertical of any indicated service — completed and recorded 4. Service owner clearance obtained for high-risk services (HV power, high-pressure gas) 5. Overhead service approach distances and work zones established — spotters assigned STOP-WORK TRIGGER • Service encountered not shown on DBYD plans • Any service contact — even minor • Odour of gas detected • Water flow from unknown source • Service locator readings inconsistent with plans • Mechanical plant within 1m of unconfirmed service • Plant approaching overhead power line safe approach distance • Spotter not available within 500mm of underground asset RISK CODE: ELE-H9

Safe Work Method Statement

	Task	Hazard	Risk (Pre)	Controls	Risk (Post)	Responsibility	CCVS Code
7	Powered mobile plant — excavators, loaders, rollers	- Collision with workers, structures, or other plant - Rollover — unstable or saturated ground conditions - Contact with overhead power lines - Crush injury during reversing or slewing - Noise-induced hearing loss — sustained plant operation - Hand-arm vibration — operator and ground crew - Blind spots — rear and low-level hazards	High (6)	Engineering: - Reversing camera and alarm operational before plant commences work - Rotating beacon active during all plant operation - Physical barriers between plant operating zone and pedestrian areas where practicable - Zone of influence calculated for plant near excavations and underground pipes — clay 1:1 ratio, sand/fill 2:1 ratio — physical barriers (wheel stoppers, berms) installed to restrict movement within zone Admin: - Operator holds current HRWL where required by legislation, or RTO-issued VOC for specific plant class (excavator LE, roller LR, loader LL/LS, dozer LZ) — licence or VOC sighted and recorded; on-site VOC assessments not accepted - Plant safety verification completed upon arrival — plant approved for use; plant setup permit issued where required - Plant pre-start inspection completed and recorded daily — all safety systems functional (ROPS, FOPS, seatbelt, reversing alarm, camera/mirrors) - Exclusion zones established: minimum 3m from operating plant for pedestrians — spotter in place when pedestrians must enter zone - Overhead power line assessment completed before commencing — clearances maintained: up to 132kV — 3m; 132–330kV — 6m; above 330kV — 8m - Travel paths, exclusion zones, overhead hazards, and underground services all identified before work commences - Spotter assigned for all reversing and blind-spot operations — communication by hand signals or two-way radio - Ground bearing capacity confirmed adequate for plant type before entry — geotechnical information reviewed	Low (2)	- SUP — sight and record licence/VOC, approve plant setup, confirm exclusion zones before operation - OP — complete and sign daily pre-start inspection; confirm spotter is in position before reversing	HOLD POINT 7 - Operator HRWL or RTO VOC sighted and recorded for each specific plant class to be operated - Plant safety verification and pre-start inspection completed and signed - Exclusion zones established and marked — spotter briefed and in position - Overhead power line assessment completed — clearances confirmed - Ground bearing capacity confirmed adequate for plant type STOP-WORK TRIGGER - Licence or VOC not current or not sighted - Pre-start defect not rectified before commencing - Pedestrian enters exclusion zone - Spotter not available during reversing operations - Overhead power line approach distance compromised - Ground conditions unsafe — soft, unstable, or saturated - Operator displaying signs of fatigue RISK CODE: MOB-H6

Safe Work Method Statement

	Task	Hazard	Risk (Pre)	Controls	Risk (Post)	Responsibility	CCVS Code
8	Jackhammering, cutting, grinding and core drilling — silica dust	- Silica dust inhalation — silicosis (fatal, irreversible) from concrete, masonry, mortar, tile beds, or fibre-cement - Dust exposure to adjacent workers and residents - Flying debris and disc or bit failure — eye and face injury - Noise-induced hearing loss — sustained powered tool use - Hand-arm vibration syndrome — jackhammering and compaction tools	High (6)	Engineering: - Wet suppression: integrated water feed or continuous low-pressure misting at point of cut on all powered tools — surface kept wet; no high-pressure sprays; manage slurry by removing before it dries - Where wet methods are not practicable: on-tool extraction with M-class industrial vacuum or dust extractor fitted with HEPA filter - RCD protection on all 240V tools and leads — battery tools preferred in damp or wet areas - Clean-up (bulk) using M-class vacuum with HEPA extraction or wet clean — no blowers or compressed air - Maintain tools and extractors — replace HEPA filters per manufacturer's schedule; remove defective equipment from service Admin: - Exclusion zone ≥5m in place and signed before any silica-generating task commences — close or tape doors; use plastic or zip walls indoors - Record silica work at Daily Sign-In inBreadcrumb: task, planned controls, and estimated duration - Air monitoring deployed where required — high dust tasks, indoor or poor ventilation, extended duration, or as directed by WHS consultant - Tool rotation every 30 minutes for sustained vibration exposure — vibration exposure log maintained	Low (2)	- SUP — confirm wet suppression or extraction operating and exclusion zone in place before any silica-generating task commences - WKR — confirm P2 respirator fit-checked and worn; confirm wet method or extraction running before cutting commences	HOLD POINT 8 - Wet suppression or on-tool extraction operating on all powered tools before commencing — no dry jackhammering, cutting, grinding, or core drilling on silica-containing materials - P2 respirators worn and fit-checked by all workers in the dust zone - Area isolated and signed — exclusion zone ≥5m in place - Air monitoring deployed where required (high dust tasks, indoor, poor ventilation, extended duration) STOP-WORK TRIGGER - Wet method stops or extraction fails during cutting - P2 respirator not worn by any worker in dust zone - Exclusion zone breached by unauthorised person - Visible dust escaping beyond exclusion zone - Guard removed or defective on cutting disc or drill RISK CODE: SIL-H6

Safe Work Method Statement

	Task	Hazard	Risk (Pre)	Controls	Risk (Post)	Responsibility	CCVS Code
9	Formwork and steel fixing	• Collapse of formwork during concrete pour — structural failure • Struck by falling formwork components during erection or stripping • Puncture wounds from exposed rebar and tie wire • Manual handling of heavy formwork and steel — musculoskeletal injury • Working at height on formwork platforms — fall risk	Medium (4)	Engineering: • Formwork designed by competent person — load calculations for concrete head and pump pressure; props and bracing per formwork design • Rebar caps on all exposed vertical reinforcement at all times • Mechanical lifting for formwork panels >25kg Admin: • Formwork inspection by competent person before pour — checklist completed and signed; design documentation on site • Strip sequence planned and documented — no early stripping before concrete reaches minimum specified strength confirmed by testing • Steel fixing schedule and bar schedule checked against engineering drawings before installation	Low (2)	• SUP — confirm formwork design on site, inspection completed, and rebar caps in place before pour commences • WKR — confirm rebar caps in place and formwork bracing matches design before starting work	STOP-WORK TRIGGER • Formwork movement, bulging, or deflection during pour • Props not plumb or bracing inadequate • Rebar caps missing on any vertical bar • Concrete strength not confirmed before stripping • Formwork design not available for inspection on site RISK CODE: STR-M4
10	Concrete pouring and finishing	• Concrete pump line failure — high-pressure release or whip • Chemical burns from wet concrete — alkaline pH 12–13 • Manual handling — vibrator, screeds, and finishing tools • Slip hazard on wet concrete surfaces • Noise from pump and vibrator operation	Medium (4)	Engineering: • Concrete pump lines secured at all connections — safety chains or clips installed; whip restraints fitted at all bends • Formwork bracing checked immediately before pour commences • Vibrator connected to safety line to prevent loss into pour Admin: • Pour plan reviewed before commencement — sequence, volume, timing, and finishing requirements confirmed • Formwork pre-pour inspection completed and signed off by competent person • Concrete docket checked on arrival — slump, strength, and admixtures match specification; reject non-conforming loads • Wash-out area prepared before pour — no wash-out to stormwater or drainage	Low (2)	• SUP — confirm pump lines secured, formwork inspection signed, and wash-out area prepared before pour commences • WKR — confirm concrete docket matches spec and pump connections are secured before opening valves	STOP-WORK TRIGGER • Pump line blockage with pressure build-up — bleed pressure before clearing • Formwork movement or deflection during pour • Concrete slump or strength does not match specification • Rain affecting surface finish quality or mix integrity • Wash-out water entering stormwater drain RISK CODE: PRE-M4

Safe Work Method Statement

	Task	Hazard	Risk (Pre)	Controls	Risk (Post)	Responsibility	CCVS Code
11	Backfill, compaction, and grading	- Hand-arm vibration syndrome from sustained compaction equipment use - Noise exposure — plate compactor and roller operation - Dust generation during dry conditions — silica-containing fill - Struck by powered mobile plant during backfill operations - Trench collapse during backfill — inadequate progressive support	Medium (3)	Engineering: - Compaction equipment fitted with vibration-dampened handles - Dust suppression with water spray applied during dry conditions before and during compaction - Backfill placed in controlled lifts — maximum layer thickness per geotechnical specification Admin: - Compaction testing at specified intervals and depths per geotechnical requirements — test results recorded and compared to specification before next lift placed - Fill material source and quality confirmed before placing — no contaminated, organic, or unsuitable material - Vibration exposure log maintained — tool rotation every 30 minutes for sustained hand-held compaction - Level checks against survey marks — final levels verified by surveyor before handover	Low (1)	- SUP — confirm fill material approved, lift thickness controlled, and compaction testing completed per spec - WKR — confirm vibration rotation schedule followed and dust suppression active before dry compaction	STOP-WORK TRIGGER - Vibration exposure limit reached for operator — rotate immediately - Contaminated or unsuitable fill material identified - Compaction test failures — do not place next lift - Trench wall movement observed during backfill operations - Dust generation from fill not controlled by water suppression RISK CODE: PRE-M3
12	Drainage and stormwater installation	- Working in trenches — wall collapse risk during pipe laying - Manual handling of pipes, pits, and grates — musculoskeletal injury - Exposure to existing sewer or contaminated stormwater — infection and contamination - Crush injury during pipe lowering and positioning	Medium (4)	Engineering: - Trench shored or battered per excavation task requirements before any worker entry - Mechanical lifting for pipes and pit components >25kg — slings and hooks rated for load - Pipe bedding material placed and compacted to design before pipe laying commences - Existing services located and protected per Step 6 requirements before trenching Admin: - Pipe grades and falls checked against hydraulic design drawings — invert levels surveyed before backfill - Joining method confirmed per specification — solvent cement, rubber ring, or mechanical coupling as applicable - No entry to live sewer pit without confined space entry permit and atmospheric monitoring - CCTV inspection of completed pipework where specified in contract	Low (2)	- SUP — confirm trench shoring in place, pipe grades checked, and joining method confirmed before installation commences - WKR — confirm mechanical lift rigging rated for load before lowering any pipe or pit component	STOP-WORK TRIGGER - Trench not shored when depth and soil conditions require it - Connection to live sewer without isolation and confined space assessment - Pipe grade or invert level does not match hydraulic design - Existing services not confirmed and marked before pipe crossing - Water ingress into trench not controlled RISK CODE: PRE-M4

Safe Work Method Statement

	Task	Hazard	Risk (Pre)	Controls	Risk (Post)	Responsibility	CCVS Code
13	Dewatering operations	- Electrical hazard from electric pumps operating in or near water - Excavation instability from rapid or uncontrolled water removal - Contaminated water handling — exposure to pollutants - Erosion and sediment runoff — environmental harm - Noise from continuous pump operation	Medium (3)	Engineering: - Electric pumps on RCD-protected circuits — leads clear of standing water at all times - Pump intake screened to prevent blockage and pump damage - Discharge via sediment control — silt fence, sediment basin, or filter sock in place before pumping commences - No direct discharge to stormwater without sediment filtration Admin: - Dewatering conducted in accordance with project Erosion and Sediment Control Plan (ESCP/SWMP) - Dewatering licence or local authority approval obtained if required for discharge volumes - Water quality tested if contamination suspected — disposal via licensed facility if contaminated - Pump operation monitored — excavation stability checked during dewatering - Discharge location, flow rate, and duration recorded daily	Low (1)	- SUP — confirm RCD protection in place, sediment controls installed, and ESCP requirements met before pumping commences - WKR — confirm leads are clear of water and discharge is to sediment-controlled outlet before starting pump	STOP-WORK TRIGGER - Electrical fault detected on pump — isolate immediately - Discharge entering stormwater without filtration - Excavation instability observed during dewatering operations - Contaminated water identified — cease and contain - Pump discharge flooding or entering adjacent property RISK CODE: ENV-M3

Safe Work Method Statement

	Task	Hazard	Risk (Pre)	Controls	Risk (Post)	Responsibility	CCVS Code
14	Shoring and temporary support	• Collapse of unsupported excavation or adjacent structure — burial • Crush injury during shoring installation or removal • Failure of shoring system under unexpected load • Working in confined trench — restricted egress if collapse occurs • Manual handling of heavy shoring components	High (6)	Engineering: • Hydraulic or mechanical shoring systems rated for soil type and excavation depth • Props and struts positioned per shoring design — bearing plates on all contact surfaces; waling and sheeting per design specification • Shoring to remain in place until backfill reaches safe height confirmed by engineer Admin: • Shoring system designed by competent person or structural engineer — design documentation on site and current for actual ground conditions before installation commences • Shoring components inspected before installation — certified, rated, and matched to design specification • Installation supervised by competent person — progressive installation from top down in trenches; no worker entry to unshored excavation >1.5m • Any changes to shoring design or installed system authorised and signed off by qualified engineer before changes made • Daily inspection of shoring by competent person — condition, alignment, load, and ground movement recorded • Shoring removal sequence planned before removal commences — never remove from bottom up • After rain or seismic event: re-inspection of all shoring before re-entry • Subcontractor to submit competency records for nominated shoring inspection personnel	Low (2)	• SUP — confirm shoring design on site, installation supervised by competent person, and daily inspection completed before worker entry • WKR — confirm shoring in place and daily inspection signed before entering any excavation >1.5m	HOLD POINT 14 1. Shoring system designed by competent person or structural engineer — design documentation on site and current for ground conditions 2. Shoring components inspected before installation — certified, rated, and matched to design 3. Installation supervised by competent person — progressive top-down installation confirmed 4. No worker entry to unshored excavation >1.5m depth STOP-WORK TRIGGER • Shoring movement, displacement, or deformation observed • Ground cracking or slumping adjacent to excavation • Shoring components damaged or not matched to design specification • Competent person not available for inspection before worker entry • Water ingress undermining shoring foundations RISK CODE: STR-H6

Safe Work Method Statement

	Task	Hazard	Risk (Pre)	Controls	Risk (Post)	Responsibility	CCVS Code
15	Contaminated soil management	- Exposure to asbestos fibres in disturbed soil — mesothelioma risk - Hydrocarbon vapour inhalation during excavation - Skin contact with contaminated material — dermal absorption - Incorrect disposal — environmental harm and regulatory liability	Medium (4)	Engineering: - Contaminated soil stockpiled on plastic sheeting — covered with plastic when not actively being loaded for transport - Dust suppression applied during excavation and loading of contaminated material - Separate stockpiles for different contamination types — no mixing of contamination categories - Stormwater controls in place to prevent contaminated runoff reaching drains or waterways Admin: - Contamination assessment report reviewed before earthworks commence — known contamination areas mapped on site plan - Unexpected finds protocol: stop work, isolate area, notify supervisor, test before proceeding — do not resume without written clearance - Waste classification obtained per NSW EPA guidelines before any off-site disposal — disposal to licensed facility only with tracking documentation - Chain of custody records maintained for all contaminated soil removed from site - If asbestos suspected: stop work immediately, isolate area, engage licensed asbestos assessor before proceeding	Low (2)	- SUP — confirm contamination assessment on site, unexpected finds protocol communicated, and licensed disposal facility confirmed before earthworks commence - WKR — report any unexpected odour, discolouration, or unusual material to supervisor immediately and stop excavation	STOP-WORK TRIGGER - Unexpected odour, discolouration, or material inconsistent with contamination report - Suspected asbestos-containing material encountered — do not disturb further - No waste classification available for material to be removed - Licensed disposal facility not confirmed before load departs site - Dust from contaminated material not controlled by suppression RISK CODE: HAZ-M4

Safe Work Method Statement

CCVS TABLE

Task	Critical Control	Who Checks	How Often	What They Look For
Excavation — competent person inspection (Step 5)	Excavation walls and shoring inspected by competent person daily before worker entry and after any rain event — inspection record signed	Supervisor	Daily before worker entry; after rain	Daily inspection checklist signed; DBYD current and on site; potholing record completed; no cracking, slumping, or water ingress observed; spoil setback maintained
Underground services — DBYD and potholing (Step 6)	DBYD current (within 30 days); all services potholed within 1m horizontal and 300mm vertical of any indicated service before mechanical excavation commences	Supervisor	Before mechanical excavation commences in any new area	DBYD print-out dated within 30 days on site; potholing records completed for all services in work zone; services marked on ground with paint or flags; service owner clearances for HV/gas obtained
Powered mobile plant — operator competency and pre-start (Step 7)	Operator HRWL or RTO-issued VOC sighted and recorded for specific plant class; daily pre-start inspection completed and signed; exclusion zones established before operation	Supervisor	Before each plant commences work — daily	Licence or RTO VOC on file; daily pre-start checklist signed; reversing alarm and camera functional; exclusion zone marked; spotter briefed and in position
Silica dust — wet suppression and extraction (Step 8)	Wet suppression or on-tool M-class HEPA extraction operating on all cutting/grinding/drilling tools before commencing work on silica-containing materials	Supervisor	Before each silica-generating task commences	Water feed or misting confirmed operating at tool before starting; M-class vacuum with HEPA confirmed operational where wet method not used; exclusion zone ≥5m signed and in place; P2 respirator worn and fit-checked; daily sign-in records task and controls
Shoring — design and competent person supervision (Step 14)	Shoring design by competent person or structural engineer on site before installation; installation supervised by competent person; daily inspection signed before worker entry	Supervisor	Before installation commences; daily before worker entry to any shored excavation	Engineer design documentation on site and current for ground conditions; competent person present during installation; daily inspection checklist signed; shoring components match design specification; no movement, deformation, or water ingress
Contaminated soil — unexpected finds and disposal (Step 15)	Contamination assessment report on site before earthworks; unexpected finds protocol communicated to all workers; licensed disposal facility confirmed before any material leaves site	Supervisor	Before earthworks commence; at each load departure	Contamination assessment report present and reviewed; site plan with known contamination areas available; unexpected finds protocol in daily toolbox talk record; waste classification and disposal facility manifest on file for each load

Safe Work Method Statement

RISK RATING MATRIX — Consequence × Likelihood

Risk Level	Description of Consequence or Impact	Consequence	Unlikely (1)	Possible (2)	Almost Certain (3)
HIGH	Actual/Potential fatality, disability or irreversible damage. Major structural failure. Off-site environmental discharge not contained, significant long-term environmental harm.	Major (3)	Medium (3)	High (6)	High (9)
MEDIUM	Actual/Potential temporary disability, MTI or LTI. Structural failure/damage, >1-day outage. On-site environmental discharge contained, minor remediation, short-term harm.	Moderate (2)	Low (2)	Medium (4)	High (6)
LOW	Incident requiring first aid. Environmental discharge immediately contained, minor clean-up, no short-term environmental harm.	Minor (1)	Low (1)	Low (2)	Medium (3)

Level Likelihood / Probability

Almost Certain (3)	Occurs frequently; >66% chance of occurring
Possible (2)	Could happen occasionally; >33% but <66% chance of occurring
Unlikely (1)	May occur only in exceptional circumstances; <33% chance of occurring

Class / Ranking Description / Requirements

High 6, 9	STOP immediately. Implement controls. Controls recorded on a SWMS.
Medium 3, 4	Planned control. Controls recorded on a SWMS.
Low 1, 2	Managed via routine procedure.

Note — WHS Act s.18 "reasonably practicable": Requires consideration of the likelihood of the risk, degree of harm, knowledge of the hazard, availability and suitability of controls, and cost vs. risk. If you cannot show how that decision was made, the action becomes harder to defend after an incident.

Safe Work Method Statement

WORKER SWMS INDUCTION SIGN-OFF			
Date:	Name:	Signature:	I confirm I have read and understood this SWMS. I will verify that critical controls are in place prior to commencing high-risk tasks and will suspend work if controls are not established.
Date:	Name:	Signature:	I confirm I have read and understood this SWMS. I will verify that critical controls are in place prior to commencing high-risk tasks and will suspend work if controls are not established.
Date:	Name:	Signature:	I confirm I have read and understood this SWMS. I will verify that critical controls are in place prior to commencing high-risk tasks and will suspend work if controls are not established.
Date:	Name:	Signature:	I confirm I have read and understood this SWMS. I will verify that critical controls are in place prior to commencing high-risk tasks and will suspend work if controls are not established.
Date:	Name:	Signature:	I confirm I have read and understood this SWMS. I will verify that critical controls are in place prior to commencing high-risk tasks and will suspend work if controls are not established.
Date:	Name:	Signature:	I confirm I have read and understood this SWMS. I will verify that critical controls are in place prior to commencing high-risk tasks and will suspend work if controls are not established.
Date:	Name:	Signature:	I confirm I have read and understood this SWMS. I will verify that critical controls are in place prior to commencing high-risk tasks and will suspend work if controls are not established.
Date:	Name:	Signature:	I confirm I have read and understood this SWMS. I will verify that critical controls are in place prior to commencing high-risk tasks and will suspend work if controls are not established.
Date:	Name:	Signature:	I confirm I have read and understood this SWMS. I will verify that critical controls are in place prior to commencing high-risk tasks and will suspend work if controls are not established.
Date:	Name:	Signature:	I confirm I have read and understood this SWMS. I will verify that critical controls are in place prior to commencing high-risk tasks and will suspend work if controls are not established.

Safe Work Method Statement

WORKER SWMS INDUCTION SIGN-OFF			
Date:	Name:	Signature:	I confirm I have read and understood this SWMS. I will verify that critical controls are in place prior to commencing high-risk tasks and will suspend work if controls are not established.
Date:	Name:	Signature:	I confirm I have read and understood this SWMS. I will verify that critical controls are in place prior to commencing high-risk tasks and will suspend work if controls are not established.
Date:	Name:	Signature:	I confirm I have read and understood this SWMS. I will verify that critical controls are in place prior to commencing high-risk tasks and will suspend work if controls are not established.
Date:	Name:	Signature:	I confirm I have read and understood this SWMS. I will verify that critical controls are in place prior to commencing high-risk tasks and will suspend work if controls are not established.
Date:	Name:	Signature:	I confirm I have read and understood this SWMS. I will verify that critical controls are in place prior to commencing high-risk tasks and will suspend work if controls are not established.
Date:	Name:	Signature:	I confirm I have read and understood this SWMS. I will verify that critical controls are in place prior to commencing high-risk tasks and will suspend work if controls are not established.
Date:	Name:	Signature:	I confirm I have read and understood this SWMS. I will verify that critical controls are in place prior to commencing high-risk tasks and will suspend work if controls are not established.
Date:	Name:	Signature:	I confirm I have read and understood this SWMS. I will verify that critical controls are in place prior to commencing high-risk tasks and will suspend work if controls are not established.
Date:	Name:	Signature:	I confirm I have read and understood this SWMS. I will verify that critical controls are in place prior to commencing high-risk tasks and will suspend work if controls are not established.
Date:	Name:	Signature:	I confirm I have read and understood this SWMS. I will verify that critical controls are in place prior to commencing high-risk tasks and will suspend work if controls are not established.

Safe Work Method Statement

WORKER SWMS AMENDMENT SIGN-OFF			
Date:	Name:	Signature:	I confirm I have read and understood this SWMS. I will verify that critical controls are in place prior to commencing high-risk tasks and will suspend work if controls are not established.
Date:	Name:	Signature:	I confirm I have read and understood this SWMS. I will verify that critical controls are in place prior to commencing high-risk tasks and will suspend work if controls are not established.
Date:	Name:	Signature:	I confirm I have read and understood this SWMS. I will verify that critical controls are in place prior to commencing high-risk tasks and will suspend work if controls are not established.
Date:	Name:	Signature:	I confirm I have read and understood this SWMS. I will verify that critical controls are in place prior to commencing high-risk tasks and will suspend work if controls are not established.
Date:	Name:	Signature:	I confirm I have read and understood this SWMS. I will verify that critical controls are in place prior to commencing high-risk tasks and will suspend work if controls are not established.

If work methods, site conditions, or hazards change — stop, complete this table, re-brief all workers, obtain new sign-offs. Required under WHS Regulation r.300(3).

SWMS AMENDMENTS						
Under WHS Act s18, "reasonably practicable" requires consideration of likelihood of risk, degree of harm, what the person knows about the hazard, availability and suitability of controls, cost vs risk. If you cannot show how that decision was made, the action becomes harder to defend after an incident.						
Date	Work Activity / Task	Hazard / Risk	Risk Rating (Pre)	Controls — Hierarchy of Control	Risk Rating (Post)	Responsible

Safe Work Method Statement

WORKER SWMS AMENDMENT SIGN-OFF			
Date:	Name:	Signature:	I confirm I have read and understood this SWMS. I will verify that critical controls are in place prior to commencing high-risk tasks and will suspend work if controls are not established.
Date:	Name:	Signature:	I confirm I have read and understood this SWMS. I will verify that critical controls are in place prior to commencing high-risk tasks and will suspend work if controls are not established.
Date:	Name:	Signature:	I confirm I have read and understood this SWMS. I will verify that critical controls are in place prior to commencing high-risk tasks and will suspend work if controls are not established.
Date:	Name:	Signature:	I confirm I have read and understood this SWMS. I will verify that critical controls are in place prior to commencing high-risk tasks and will suspend work if controls are not established.
Date:	Name:	Signature:	I confirm I have read and understood this SWMS. I will verify that critical controls are in place prior to commencing high-risk tasks and will suspend work if controls are not established.

If work methods, site conditions, or hazards change — stop, complete this table, re-brief all workers, obtain new sign-offs. Required under WHS Regulation r.300(3).

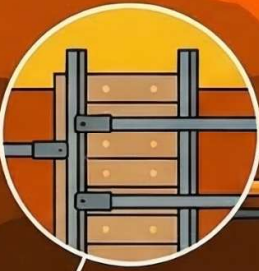
SWMS AMENDMENTS						
Under WHS Act s18, "reasonably practicable" requires consideration of likelihood of risk, degree of harm, what the person knows about the hazard, availability and suitability of controls, cost vs risk. If you cannot show how that decision was made, the action becomes harder to defend after an incident.						
Date	Work Activity / Task	Hazard / Risk	Risk Rating (Pre)	Controls — Hierarchy of Control	Risk Rating (Post)	Responsible

EXCAVATION & SITE SAFETY: CRITICAL PRE-START PROTOCOLS

GROUND STABILITY & SERVICE PROTECTION



**MOBILE PLANT
READINESS**
Verify operator VOC/HRWL,
complete daily pre-starts,
and confirm functional
reversing cameras/alarms.



**DAILY COMPETENT
PERSON INSPECTIONS**
Inspect walls and shoring daily
and after rain for cracking or
water ingress.



**UNDERGROUND
SERVICE VERIFICATION**
Pothole all services within 1m
horizontal and 300mm vertical
before mechanical excavation.

1m
300mm



**MANDATORY DBYD
DOCUMENTATION**
Ensure a Dial Before You
Dig (DBYD) print-out dated
within 30 days is on-site.

OPERATIONAL & ENVIRONMENTAL HAZARDS



**5M SILICA DUST
SUPPRESSION**
Use wet suppression or
M-class HEPA extraction with
a 5m signed exclusion zone.



**CONTAMINATED
SOIL MANAGEMENT**
Review assessment reports
before earthworks and
maintain disposal manifests
for every load.

PROTOCOL & MANDATORY EVIDENCE	
Protocol	Mandatory Evidence
Excavation	Signed inspection record and spoil setback maintained
Shoring	Engineer design documentation and competent person supervision
Services	Service owner clearances for High Voltage (HV) and Gas