Tree Climbing Aerial Rigging and Removal

Business Name:	ABN:	
Business Address:		
Contact Person:	Phone:	Email:

THIS RISK ASSESSMENT IS APPROVED BY THE PCBU OF THE PROJECT

Under the Work Health and Safety Regulation (WHS Regulation), a person conducting a business or undertaking (PCBU) is required to ensure that a RISK ASSESSMENT is prepared before the proposed work starts.

Full Name:		
Signature:	Title:	Date:

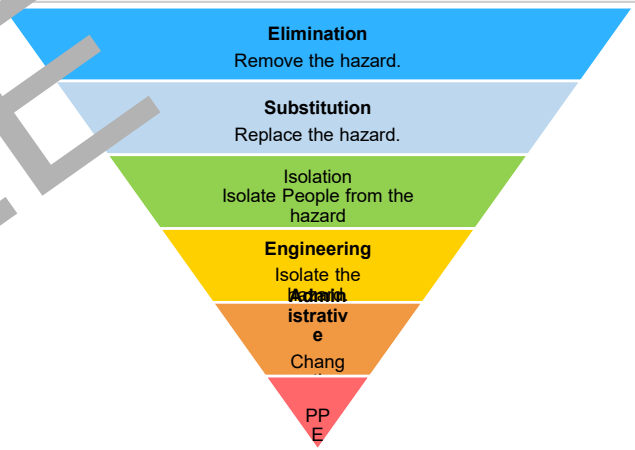
CLIENT OR PRINCIPAL CONTRACTOR DETAILS

Client:	SCOPE OF WORKS
Project Name:	
Project Address:	
Project Manager:	
Contact Phone:	
Date Risk Assessment supplied to Project Manager:	

RISK MATRIX

LIKELIHOOD	INSIGNIFICANT	MINOR	MODERATE	MAJOR	CATASTROPHIC	SCORE	ACTION
ALMOST CERTAIN	3 HIGH	3 HIGH	4 ACUTE	4 ACUTE	4 ACUTE		
LIKELY	2 MODERATE	3 HIGH	3 HIGH	4 ACUTE	4 ACUTE	4A ACUTE	DO NOT PROCEED
POSSIBLE	1 LOW	2 MODERATE	3 HIGH	4 ACUTE	4 ACUTE	3H HIGH	Rev before work
UNLIKELY	1 LOW	1 LOW	2 MODERATE	3 HIGH	4 ACU	2M MO RATE	Ensure control measures in place.
RARE	1 LOW	1 LOW	2 MODERATE	3 HIGH	3 H	1L LOW	Monitor and keep records.

HIERARCHY OF CONTROLS



Risk Rating & Required Action:

4A	Stop work. The risk is intolerable. E inate the hazar redesign the activity before proceeding. A Safe Work Method Statement (SWMS) or hi er-level authorisati is required.
3H	Review and approve additional c rols b ask arts. Senior supervisor sign-off needed.
2M	Ensure all nominated controls are in ace and effe ive. Proceed with caution; monitor conditions.
1L	Proceed, following standard operating procedures Monitor and keep records.

Consequence Scale:

Consequence	People (injury/illness)	Project / Assets	Compliance / Reputation
Catastrophic	Fatality or permanent total disability	project shutdown	Significant regulator intervention; criminal prosecution
Major	Serious injury/illness (hospital > 5 days)	critical delay	Improvement notice; major media coverage
Moderate	Medical-treatment injury; lost-time > 1 day	moderate delay	Minor breach; adverse client comment
Minor	First-aid only, no lost time	negligible delay	Isolated non-conformance
Insignificant	No injury	no schedule impact	Deviation caught and corrected on site

Notes on Hierarchy of Controls:
Remember to apply controls in the preferred order shown by the coloured pyramid:

1. **Eliminate**
2. Substitute
3. Isolate
4. Engineering
5. Administrative
6. PPE

Always document **why** a lower-order control is accepted if elimination or substitution is not reasonably practicable.

aligned with Safe Work Australia's Managing the risk of fatigue at work *(2023) and ISO 45001:2018 clauses 6–8.*

JOB STEP	POTENTIAL HAZARDS	IR	CONTROL MEASURES	RR
SPECIFIC WORK STEPS	HAZARDS THAT MAY ARISE	INITIAL RISK	SPECIFIC MEASURES TO BE PUT IN PLACE TO ELIMINATE OR CONTROL THE RISKS	RESIDUAL RISK
1. WHS Governance, Legal Compliance and Consultation	• Failure to identify and comply with WHS Act 2011, WHS Regulations and relevant Codes of Practice for arboriculture, tree work, EWPs and high risk work • No clear WHS responsibilities for officers, managers, supervisors and workers involved in tree climbing and aerial rigging • Inadequate consultation with workers and HSRs about high-risk tree climbing and removal activities • Lack of system to review and update risk assessments for complex tree work, including deadwooding, rigging and tree removal at height • Insufficient due diligence by officers to ensure adequate resourcing for safe aerial tree work • Failure to verify contractor and labour-hire compliance with WHS duties	4A	• Develop and implement a WHS governance framework that expressly references duties under the WHS Act 2011 and WHS Regulations for tree climbing, aerial rigging, pruning and removal • Define and document WHS roles, responsibilities and accountabilities for officers, managers, supervisors, climbers, ground crew and EWP operators, including due diligence obligations • Establish formal worker consultation and HSR mechanisms (e.g. toolbox talks, safety committees, pre-job briefings) specifically addressing aerial tree work and rigging risks • Implement a documented process for developing, approving and periodically reviewing high-level risk assessments and SWMS for all tree climbing and aerial rigging activities • Undertake regular compliance audits against applicable Australian Standards and industry best-practice guidance (e.g. arboriculture and EWP guidance material) • Implement a contractor management procedure requiring verification of licences, insurances, WHS systems and SWMS before engagement for tree lopping and removal work	2M
2. Competency, Licensing and Training Management	• Tree climbers, riggers and ground crew lacking formal competency for aerial tree work, rigging and chainsaw use aloft • Inadequate verification of High Risk Work licences for EWP operations • Insufficient training in advanced climbing techniques, spurs, double rope systems and work positioning for tall or complex trees • No structured refresher training for emergency aerial rescue, complex rigging or pruning near structures and services • Use of inexperienced workers for supervision of tree lopping and aerial pruning operations • Inadequate familiarisation when introducing new climbing systems, friction devices or rigging hardware	4A	• Establish a competency framework for all roles (climbers, aerial rescue climbers, riggers, ground crew, EWP operators, supervisors) referencing nationally recognised units of competency and industry standards • Implement a licence and qualification verification system (including expiry tracking) for EWP High Risk Work licences and relevant arboriculture qualifications • Require documented training and assessment in tree climbing with spurs, SRT/DRT rope techniques, aerial chainsaw operations, rigging and pruning at height before independent work is allowed • Schedule periodic refresher training and scenario-based drills for aerial rescue, rigging failure response and complex canopy work on at least an annual basis • Ensure only experienced and deemed-competent personnel are appointed as supervisors and lead climbers for high-risk operations such as large tree removals and deadwooding • Maintain individual training records, competency sign-offs and supervision plans for new or developing climbers and riggers	2M

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3. Planning, Job Hazard Analysis and Site Assessment Systems	• Inadequate pre-job planning for complex tree removal, deadwooding and pruning at height • Failure to systematically identify overhead powerlines, underground services, roads, structures and public interfaces • No structured methodology for assessing tree health, stability and load-bearing capacity prior to climbing or rigging • Poor selection of work method (climbing with spurs vs EWP vs crane assisted removal) due to absent planning criteria • Inadequate communication of job hazards and control measures to all workers and subcontractors • Lack of formal review process for high-risk or non-standard jobs (e.g. la decayed trees over dwellings or traffic	4A	• Implement a documented job planning an te assessm t procedure to be completed before any aerial tree work or rigging begins • Adopt a standardised tree risk assessment fo vering speci , defects, decay, lean, root plate condition, deadwood, wind ex osure and previou damage • Include mandatory checks fo erhead and unde services, traffic conditions, public access, nearby structures an onme l constraints with ne pre-job assessment • Develop dec n-making teria t termin hen to use tree climbing, EWPs, cranes or alternative access meth including clusion c ditions for unsafe climbing • Req pre-st brie gs and toolbox meetings to communicate site-specific hazards, rigging plans, drop z escap utes and no-go areas to all personnel • Introd e igher-l el approval process for complex or high-consequence jobs, including review by a senior a oris r WHS dviser where appropriate	2M
4. Equipment Procurement, Design and Engineering Controls	• Purchase or use of non-certified climbing, rigging and fall equipment not desig d for arboricultural use • Inadequate selec of , sli and hardware for dyna ic loads generated during rigging and sectio felling • Use of EWPs, cranes or winches not suitable for tree work environments or with insufficient capacity and reach • Lack of engineered anchor point capacity or unsuitable rigging points on compromised trees • Improvised or modified equipment that undermines manufacturer specifications and safety margins • Inconsistent specification of chainsaws, friction devices and lowering systems for high-energy tree rigging tasks	4A	[redacted]	2M

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5. Inspection, Maintenance and Asset Management	• Degradation or hidden damage to ropes, harnesses, spurs, carabiners and rigging hardware due to poor inspection regimes • Failure of chainsaws aloft, EWPs or cranes due to inadequate preventive maintenance • Lack of traceability and service history for critical life-support equipment • Continued use of equipment beyond manufacturer's recommended service life • Unreported or undocumented incidents of shock-loading or near misses involving rigging gear • Inadequate pre-use checks of EWPs, load-handling equipment and chainsaws used in the tree	4A	[redacted]	2M
6. Work Method Selection, SWMS and Procedure Integration	• Inconsistent or unsafe selection of climbing, rigging or EWP methods for [illegible] or complex trees • Lack of documented procedures for aerial rigging, overhe[illegible]branch cutting and tree dismantlin[illegible] • Failure to integra[illegible] SWMS higher-level organisa[illegible]isk contr[illegible] and policies • Use of generic SWMS that do [illegible] reflect site-specific hazards such as deadwood, rot or confined space access for canopy • Workers not understanding or following documented procedures for pruning, deadwooding or tree removal at height • No system to update SWMS and procedures when introducing new techniques or equipment (e.g. SRT systems, mechanical devices)	3H	[redacted]	2M
7. Fatigue, Work Scheduling and Weather Management	• Excessive physical workload from prolonged climbing, spur use and	3H		1L

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	overhead cutting leading to fatigue-related errors • Inadequate planning for extreme heat, high wind, storms or low-visibility conditions during aerial work • Compressed schedules and time pressure driving unsafe rigging decisions or rushed pruning at height • Insufficient rest breaks for climbers and EWP operators engaged in repetitive or high-effort tasks • Lack of policy on ceasing work in unsafe weather conditions for elevated or rope access activities • Work sequencing that does not allow rigging set-up, inspection and housekeeping between major cuts		[redacted]	
8. Traffic, Public Interface and Site Control	• Members of the public entering drop zones, exclusion areas or work sites during aerial pruning or tree removal • Vehicle and plant interaction with pedestrians and cyclists on or near public roads and foot[redacted] • Inadequate traffic management when working over or adjacent to [redacted] driveways or carpark[redacted] • Lack of effective exclusion zones beneath climbers, rigging lines and overhead cutting activities • Poor control of noise, dust and debris affecting neighbouring properties and bystanders • Insufficient signage, barriers and spotters to manage public interaction during tree lopping operations	4A	[redacted]	2M
9. Emergency Preparedness, Rescue and First Aid	• Delayed rescue of an injured or suspended climber due to lack of trained aerial rescue personnel on site • Inadequate emergency planning for equipment failure, uncontrolled limb fall or tree failure during rigging	4A	[redacted]	2M

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	• Absence of suitable rescue equipment for rope access or EWP incidents • Poor communication with emergency services about site access, hazards and tree conditions • Insufficient first aid coverage for remote or difficult-to-access tree work locations • No rehearsed procedure for dealing with contact with powerlines or electrical installations		[redacted]	
10. Hazardous Energy, Utilities and Environmental Conditions	• Contact with or arcing from overhead or adjacent electrical conductors during climbing or rigging • Uncontrolled movement of branches or trunks due to misjudged tension, stored energy or wind loading • Failure to account for environmental conditions such as unstable ground, steep terrain or saturated soils affecting tree stability and plant access • Exposure to hazardous flora and fauna (e.g. bees, wasps, snakes, toxic plants) during climbing and pruning activities • Noise, vibration, dust and emissions from chainsaws and other plant affecting workers and neighbours • Inadequate planning for erosion, vegetation protection or waste management in sensitive environments	3H	[redacted]	1L
11. PPE Management and Hierarchy of Control Integration	• Over-reliance on PPE instead of higher-order controls for fall prevention and rigging risks • Inconsistent provision, selection and use of PPE suited to aerial tree work (helmets with chinstraps, eye and hearing protection, chainsaw protective clothing, gloves)	2M	[redacted]	1L

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	• Lack of systems to ensure PPE is inspected, maintained and replaced before failure • Inadequate training on the limitations of PPE in high-risk aerial rigging and cutting tasks • Workers modifying PPE in ways that compromise performance (e.g. unauthorised helmet attachments)		[redacted]	
12. Contractor, Subcontractor and Labour-Hire Control	• Engagement of contractors for tree lopping and removal without adequate WHS systems or competency • Poor coordination between principal contractor, subcontractors and labour-hire workers during complex rigging operations • Unclear allocation of WHS responsibilities and supervision arrangements on multi-employer sites • Contractual pressure driving unsafe productivity targets or under-resourcing of jobs • Inconsistent induction and briefing of subcontractor personnel on site-specific hazards and procedures	3H	[redacted]	2M
13. Information, Communication and Supervision Systems	• Miscommunication between climbers, riggers, EWP operators and ground crew during cutting and lowering operations • Lack of reliable communication methods where line-of-sight is obstructed or noise levels are high • Inadequate supervision of inexperienced climbers or ground crew on complex trees • Failure to escalate concerns about tree stability, weather or equipment limits during operations	3H	[redacted]	1L

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	• Insufficient documentation and handover between planning, supervisory staff and on-site crews		[redacted]	
14. Health Monitoring, Fitness for Work and Psychosocial Risks	• Workers with medical conditions, reduced fitness or substance impairment performing aerial tree work • Insufficient consideration of musculoskeletal strain from repetitive climbing, spur use and overhead chainsaw work • Psychological stress from high-consequence work at height or exposure to traumatic events (e.g. serious incidents or near misses) • Lack of systems to manage alcohol and other drugs risk for climbers, riggers and operators • No health monitoring or ergonomic review of tasks with high manual handling demand (e.g. dragging branches, handling rigging gear)	3H	[redacted]	2M
15. Incident Reporting, Investigation and Continuous Improvement	• Under-reporting of near misses, minor injuries or equipment f[redacted]uring aerial work and rigg[redacted] operations • Recurring incide[redacted] becaus[redacted] causes are not ide[redacted]ddress[redacted]at a system level • Lack of trend analysis to identif[redacted] systemic weaknesses in p[redacted]g, training or equipment management • Failure to share lessons learned across crews and sites performing tree pruning, deadwooding and removal • Inadequate monitoring of corrective action implementation and effectiveness	3H	[redacted]	1L

EMERGENCY RESPONSE – CALL 000 FOR EMERGENCIES

Ensure to have an Emergency Management Plan in place as well as adequate numbers of trained first aid staff with easy access to fully stocked first aid kits, rescue equipment, material safety data sheets, adequate access to emergency communication equipment and fire-fighting equipment suitable for all classes of fire and ignition sources.

LEGISLATIVE REFERENCES

RELEVANT LEGISLATION AND CODES OF PRACTICE. DELETE THE LEGISLATIVE REFERENCES FOR ANY STATE THAT ARE NOT APPLICABLE

Queensland & Australian Capital Territory
Work Health and Safety Act 2011
Work Health and Safety Regulations 2011
Legislation QLD: https://www.worksafe.qld.gov.au/laws-and-compliance/work-health-and-safety-laws
Codes of Practice QLD: https://www.worksafe.qld.gov.au/laws-and-compliance/codes-of-practice
Legislation ACT: https://www.worksafe.act.gov.au/laws-and-compliance/acts-and-regulations
Codes of Practice ACT: https://www.worksafe.act.gov.au/laws-and-compliance/codes-of-practice

New South Wales
Work Health and Safety Act 2011
Work Health and Safety Regulations 2025
Legislation NSW: https://www.safework.nsw.gov.au/legal-obligations/legislation
Codes of Practice NSW: https://www.safework.nsw.gov.au/resource-library/list-of-codes-of-practice

Northern Territory
Work Health and Safety (National Uniform Legislation) Act 2011
Work Health and Safety (National Uniform Legislation) Regulations 2011
Legislation NT: https://worksafe.nt.gov.au/laws-and-compliance/workplace-safety-laws
Codes of Practice NT: https://worksafe.nt.gov.au/forms-and-resources/codes-of-practice

South Australia
Work Health and Safety Act 2012 (SA)
Work Health and Safety Regulations 2012 (SA)
Legislation for SA: https://www.safework.sa.gov.au/resources/legislation
Codes of Practice for SA: https://www.safework.sa.gov.au/workplaces/codes-of-practice#COPs

Tasmania
Work Health and Safety Act 2012
Work Health and Safety (Transitional and Consequential Provisions) Act 2012
Work Health and Safety Regulations 2012
Work Health and Safety (Transitional) Regulations 2012
Legislation for TAS: https://worksafe.tas.gov.au/topics/laws-and-compliance/acts-and-regulations
Codes of Practice for TAS: https://worksafe.tas.gov.au/topics/laws-and-compliance/codes-of-practice

Details of permits, licenses or access required by regulatory bodies (add or delete as required):

- Permits from local council
- Authorisation to commence work
- Any required documents.

Victoria
Occupational Health and Safety Act 2004
Occupational Health and Safety Regulations 2017
Legislation VIC: https://www.worksafe.vic.gov.au/occupational-health-and-safety-act-and-regulations
Codes of Practice VIC: https://www.worksafe.vic.gov.au/compliance-codes-and-codes-practice

Western Australia
Work Health and Safety Act 2020
Work Health and Safety Regulations 2022
Legislation Western Australia: https://www.commerce.wa.gov.au/worksafe/legislation
Codes of Practice WA: https://www.commerce.wa.gov.au/worksafe/codes-practice

Safe Work Australia Links
Law and Regulation (All States): https://www.safeworkaustralia.gov.au/law-and-regulation
Model Codes of Practice: https://www.safeworkaustralia.gov.au/resources-publications/model-codes-of-practice

Model Codes of Practice

- Managing noise and preventing hearing loss at work
- Confined spaces
- Labelling of workplace hazardous chemicals
- Managing risks of hazardous chemicals in the workplace
- Welding processes
- First aid in the workplace
- Managing the risk of falls at workplaces
- Hazardous manual tasks
- Managing the risk of falls in housing construction
- Managing electrical risks in the workplace
- Demolition work
- Excavation work
- Work health and safety consultation, cooperation and coordination
- Managing the work environment and facilities
- How to manage work health and safety risks
- Managing risks of plant in the workplace
- Construction work