SAFE WORK METHOD STATEMENT

Central Coast TREE REMOVAL PROS

SWMS No.: SWMS-TF01	WORK ACTIVITY DESCRIPTION:	Tree Felling
	HIGH RISK ACTIVITY:	Yes

This summary page is a non-exhaustive list of hazards and is not a substitute for reading the entire SWMS.

Personal Protective Equipment

High Visibility	Foot Protection	Long Sleeve Clothing	Hearing Protection		
Head Protection	Fall Protection	Eye Protection			

Project Details			
Client:	Sample Client	**Project:**	123 Fake St, Burwood NSW
Project Start Date:	01/01/2012	**Expected Finish Date:**	04/01/2011
Project Specific Requirements:	Project General Induction Job Hazard Assessment (JSA) to be completed prior to work commencement		

Activity Requirements		
Plant and Equipment Required for this Activity:	Chainsaws Ropes, Harnesses, Pulleys	
Plant and Equipment Inspections Required:	Daily Plant Inspections to be completed. All electrical equipment to be tested and tagged.	
MSDS(s) Required:	Unleaded Petrol	
Legislation, Australian Standards & Codes of Practice Consulted in the Development of this SWMS:	NSW Occupational Health and Safety Act 2004 NSW Consolidated Occupational Health and Safety Regulations 2007	
Personnel Qualifications & Training Required for this Activity:	Work Cover General Induction Card Certificate III in Arboriculture	Manual handling training Chainsaw training

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Revision Details

Company:	**Central Coast Tree Removal Pros**	**ABN:**	77 226 987 577
Business Address:	Concord Rd North Strathfield NSW 2137	**Senior Employer Representative:**	Geoff Ashton (Mob: 0488 222 296)
Business Phone:	0488 222 296	**Business Email:**	info@centralcoasttreeremovals.com.au
Personnel Responsible for Monitoring this Activity	Supervisor	**Personnel Consulted on Development of SWMS:**	Brad Patten
SWMS Approval Date:	01/01/2012	**To Be Reviewed By:**	01/07/2012

SWMS Review

Acceptance	**Position**	**Signature**	**Date**
We hereby accept the controls as detailed in this SWMS and confirm / controls will be implemented & complied with.	**Personnel** Name:		
Accepted & Approved by Central Coast Tree Removal Pros Representative.	**Managing Director** Geoff Ashton		

Review No.	1	2	3	4	5	6	7	8	9	10
Name & Initials	BP									
Date	01/01/12									

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Hierarchy of Control: *Highest level of Control*				*Lowest Level of Control*
Elimination →	**Substitution** →	**Engineering** →	**Administration** →	**PPE**
The Hierarchy of Control is a list of control measures, in priority order, that can be used to eliminate or minimise exposure to the hazard. Consider elimination before all other options. Be careful to assess any new hazards that are created by eliminating other hazards.				

Risk Matrix				
How severely could it hurt someone or how ill could it make someone?	*How likely is it to occur?*			
	Very Likely Could happen anytime	**Likely** Could happen sometime	**Unlikley** Could happen but very rarely	**Very unlikely** Could happen, but probably not
Catastrophic Permanent disability or illness	3 / High	3 / High	3 / High	2 / Medium
Major Extensive injuries or long term illness	3 / High	3 / High	2 / Medium	2 / Medium
Moderate Medical treatment and several days off work	3 / High	2 / Medium	2 / Medium	1 / Low
Minor First aid treatment needed only	2 / Medium	2 / Medium	1 / Low	1 / Low

Risk Score	
Score	**Action Required**
3 / High	Do something to immediately minimise the risks. Highest management decision is required to continue work.
2 / Medium	Follow management instructions & control measures in place.
1 / Low	OK for now. Review if equipment, material, work processes or procedures change.

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Procedure (in steps)	Potential Hazards	Risk Before	Control Measures	Risk After	Person Responsible
Step 1 Complete Job Hazard Assessment, SWMS, & Daily Plant Inspection	Unknown hazards Incorrect procedures Incorrect protective equipment	3/H		1/L	Supervisor Work Crew
Step 2 Planning	Personal Injury: crushing being hit by falling object hit by moving vehicle slips, trips, falls electric shock	3/H	Assess tree/s to be felled. Determine: • size and arrangement of trees • type of trees (hard/soft wood)high risk area (such as exposed to snow, high winds, insect damage, fire) • dangerous trees. Examples : ○ branches hanging in tree crown (widow makers) ○ rot, scars, hollows, burns ○ another tree lodged in tree ○ nearby hazardous tree ○ may uproot easily ○ extreme lean ○ thick undergrowth ○ restricted work area ○ wood fibre condition won't allow directional control of falling tree Note: Mark dangerous trees with paint or tape. Avoid manual felling wherever possible. Use machines (harvester, dozer excavator or skidder (with protective	2/M	Supervisor Work Crew

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			structure) or explosives (by licensed persons – UBE) Assemble crew. Ensure sufficient experience for type of felling activities. Allow sufficient time for job - hours/days Assess intended work area. Determine: • suitable access/egress (including heavy vehicles) • location of public/private/logging roads • suitable machinery/equipment • provision for amenities (water, toilets, shelter) • suitable communication • location of nearest medical facility/first aid requirements • level of visibility • ground conditions (type of soil, broken ground, stump holes, steep gradients, pits, drop offs, wells, etc) • conflicts with environmental issues • lighting and adequacy of artificial lighting (if relevant). Do not work in No-Go Zones of powerlines electrical power lines unless de-energised/isolated from the power supply and evidence of the continuing isolation of the power supply is obtained. Develop traffic management plan if required (working in close proximity to mobile plant or roadside works). Develop site/task specific SWMS as required.		
Step 3 Preparation	Personal Injury: crushing being hit by falling object hit by moving vehicle slips, trips, falls	3/H	Test all communication equipment. If unsuitable, do not continue. Barricade/place signage in area. Ensure non-essential persons cannot enter. Determine suitable fall area. Ensure fall area includes two times the length of the tree to: • persons • property	2/M	Supervisor Work Crew

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	electric shock		• roads • machinery/equipment • overhead power lines Note: Increase this distance if felling downhill Ensure fall area is clear of machinery, equipment, stumps, brush, other trees. Select direction of fall based on: • lean of tree • heaviest branches • general crown weight • type of crown • wind • location of escape route • availability of equipment • suitability for cross cutting on ground • vehicle loading/removal Determine escape route (45 degrees, extending from 6m min from stump). Clear escape route of vegetation or other obstacles – ensure clear path. Ensure weather is suitable. Do not fell in high winds, extreme rain or lightning storms. Inspect tree for rot, insect damage or other hazards. Remove before felling. Inspect all tools/equipment for damage. Ensure all safety devices and guards are in place on chainsaw. Ensure ropes are free of damage, kinks, knots, spliced joins and adequate SWL. Ensure all shackles are “D” type with secure pins (no open-sided C hooks) Do not operate faulty equipment. For machinery, ensure: • suitable capability for powered required • good cab visibility • protective structure (FOPS) • seatbelt in place, working		

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			• has chain shot guard • reinforced windscreen		
Step 4 Felling	Personal Injury: crushing being hit by falling object hit by moving vehicle slips, trips, falls	3/H	Prepare tree for felling (cut off low branches). Ensure no persons in fall area. Use agreed communication (eg: radio, hand signals and/or whistles). Trees larger than 200mm: • cut scarf (45 degree V shape angle between ¼ to 1/3 diameter of trunk • scarf should face direction of fall • ensure hingewood is 1/10 of tree's diameter • backcut above scarf in required position. Ensure more than 1/10 diameter of trunk (but never less than 50mm) Trees larger than 200mm: • insert wedges if required (as soon as possible after backcut) • drive home wedges whilst cutting Once backcut taken up and tree begins to fall: • use agreed communication to signal fall • remove saw and switch to off (this allows operator to hear) • move to planned escape route • watch for falling debris • watch for kickback/bounce. For much larger trees – use quarter cutting techniques: • cut scarf as normal • plan cut (mark felling cuts on map or tree) • select side of tree for first cut (if rot or lean	1/L	Supervisor Work Crew

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present –use that side)

- Back up to hingewood
- Tap holding wedge in into cut
- Make second cut on safe side.

Using wedges:

- remove bark for wedge position, exposed solid wood
- drive wedge in with mallet
- drive wedge in as felling cuts proceed

Note: Do not hit plastic wedges into closed cuts as this can shatter the wedge and cause facial injuries.

For smaller trees - use split level back cut.

Trees with slight lean:

- cut scarf as normal
- start backcut on leaning side
- narrower hingewood than normal
- use wedge
- do second cut at opposite side to lean
- tap wedge in whilst cutting
- drive wedge home – tree falls

Tree with slight lean (leaning back from fall area):

- normal scarf and backcut
- place wedges in direction of lean

Tree fails to fall:

Cut up:

- Use machine to push if possible.

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			• If not, do not approach tree in direction of fall • If safe, insert wedges in backcut. • If too tight for wedges, rescarf and backcut in reverse direction (cut above first cut approx 1 diameter of trunk's height) Hung-up: • Use machine • Do not approach in direction of fall • If manually – use canthook or levering device to dislodge. Note: Do not leave trees in cut-up or hung-up position unless barricading and clearly signing the area to prevent persons entering.		
Step 5 Cross Cutting	crushing being hit by falling object hit by moving vehicle slips, trips, falls electric shock	3/H	Check area where tree fell. Ensure no overhead hazards (suspended branches, electrical cables etc) or working in fall area. Check ground conditions. Ensure not slippery, too steep or near a drop off. Ensure sufficient room to move/work. Ensure tree is stable – chock if suitable. If position of tree is not safe –do not continue. Use equipment to move tree to safe location. Do not cross cut if tree suspended above 1.5m. Walk beside tree, not on top. Do not stand/walk on felled materials. Trim branches were required from outside –in. Watch for limbs under tension (spring back) Do not bring chainsaw blade into contact with ground. Ensure chainsaw tip does not contact limbs (kickback).	1/L	Supervisor Work Crew

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			Note: Use caution if tree is resting on its branches. When the branches are cut, it can unbalance the tree, which can fall onto/crush persons. Always work uphill to tree. Do not stand in pathway of root plates (can spring back into position when trunk cut).		

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SWMS Sign-On

We, the undersigned, confirm that we have read this Safe Work Method Statement and understood its contents. We also confirm that we are qualified to carry out the works identified in this SWMS. We understand that the controls in this SWMS must be applied as documented; otherwise work is to cease immediately.

Name	Signature	Date	Time	Employer

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