## SKILLS FRAMEWORK FOR LANDSCAPE
### TECHNICAL SKILLS AND COMPETENCIES (TSC) REFERENCE

<table>
<thead>
<tr>
<th>TSC Category</th>
<th>Arboriculture</th>
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</thead>
<tbody>
<tr>
<td>TSC</td>
<td>Tree Removal</td>
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<tr>
<td>TSC Description</td>
<td>Undertake felling of trees to clear area for new developments or remove diseased or decaying trees</td>
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</tbody>
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### TSC Proficiency

<table>
<thead>
<tr>
<th>TSC Proficiency Description</th>
<th>Level 1</th>
<th>Level 2</th>
<th>Level 3</th>
<th>Level 4</th>
<th>Level 5</th>
<th>Level 6</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>LNS-GNM-1007-1.1</td>
<td>LNS-GNM-2007-1.1</td>
<td>LNS-GNM-3007-1.1</td>
<td>LNS-GNM-4007-1.1</td>
<td>LNS-GNM-5007-1.1</td>
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<tr>
<td>Perform tree felling for small trees and support tree felling operations on site</td>
<td>Perform tree felling for large trees by executing felling tasks from height or in complex situations</td>
<td>Oversee tree felling operations on site</td>
<td>Direct tree felling operations on site by providing technical guidance to the execution teams</td>
<td>Plan tree felling operations by assessing scope and risks on site, developing execution schedules, establishing procedures for tree felling and reviewing operations periodically</td>
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### Knowledge

- Site preparation requirements for tree removal
- Methods for cutting and felling small trees
- Use of tools, equipment and machinery required for tree and stump removal
- Factors affecting method of stump removal
- Grinding procedures for stump removal
- Wood chipping and log processing methods
- Personal Protective Equipment (PPE) required for tree felling operations
- Relevant guidelines for workplace safety and health (WSH)
- Tree climbing and other access methods and techniques
- Different felling cuts used in tree felling according to size and condition of trees
- Methods to estimate branch weight
- Use of tools, equipment and machinery required for tree felling and stump removal
- Rigging and directional felling procedures
- Site clearing and environmental compliance requirements
- Personal Protective Equipment (PPE) required for tree felling operations
- Relevant guidelines for workplace safety and health (WSH)
- Process of marking trees before felling
- Application of different felling cuts according to situations
- Rigging and directional felling procedures
- Communication procedures and equipment for site communication
- Personal Protective Equipment (PPE) required for tree felling operations
- Relevant guidelines for workplace safety and health (WSH)
- Tree health, structure and stability parameters
- Compression and tension woods arising out of tree structure
- Considerations for selection of felling methods in different situations
- Application of tools and equipment for tree felling in various situations
- Rigging techniques and applications
- Rigging calculations and load specifications
- Risks associated with tree felling
- Recognised tree felling methods for application in standard cases
- Alternate tree felling methods for non-standard situations
- Relevant guidelines for workplace safety and health (WSH)
- Risk assessment of tree felling operations
- Advantages and limitations of different tree felling methods
- Planning considerations and factors for arboriculture works
- Implications of terrain, ground conditions, season, weather and tree condition on the felling of trees
- Legislative and regulatory compliance requirements for tree felling
- Environmental impact mitigation for tree felling operations
- Relevant guidelines for workplace safety and health (WSH)

### Abilities

- Prepare sites for felling trees
- Confirm instructions on tree felling process, sequence of cuts, drop
- Prepare sites for tree removal works by establishing drop zones
- Perform pre-operational and safety checks for selected tools
- Inspect sites for readiness to commence felling operations
- Communicate felling cuts and methods to be
- Assess sites to understand scope of tree felling operations
- Specify felling cuts and methods to be deployed
- Establish the scope and objectives of tree removal
- Evaluate risks associated with tree removal on site

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| Zones and tool selection with the site supervisor | Perform pre-operational and safety checks for selected tools, equipment and machinery according to manufacturer’s specifications and organisational guidelines |  | Deployed to the technician | Plan the sequence of felling cuts to control direction of fall | Specify tools, equipment and machinery to be used based on tree and site requirements |
| • Perform pre-operational and safety checks for selected tools, equipment and machinery according to manufacturer’s specifications and organisational guidelines | • Perform removal of tree stumps by grinding to below-ground levels using manual or mechanised means |  | • Rig tree sections to facilitate safe felling cuts from height or in confined spaces | • Calculate dimensions and mass of tree sections to determine rigging approaches |
| • Fell tree stumps in one piece using basic cuts | • Process felled logs into manageable blocks or chips using appropriate techniques |  | • Guide felling by directing technicians involved in felling | • Communicate felling procedures to site supervisors |
| • Process felled logs into manageable blocks or chips using appropriate techniques | • Guide movement and activities of ground technicians during tree felling |  | • Guide movement and activities of ground technicians during tree felling | • Monitor tree removal operations at the site |
| • Restore tree removal site after completion of felling operations | • Specify tools, equipment and machinery to be used based on tree and site requirements |  | • Ensure adherence to relevant WSH for arboriculture operations | • Provide technical guidance to tree felling team in complex cases |
| • Adhere to relevant WSH guidelines for arboriculture operations | • Calculate dimensions and mass of tree sections to determine rigging approaches |  | • Oversee clearance and restoration of tree removal site to a safe state | • Enforce adherence to applicable WSH guidelines |
| • Identify trees to be felled on site during site evaluation | • Develop plan for tree removal operations |  | • Oversee adherence to relevant WSH for arboriculture operations | • Review tree felling operations periodically |
| • Develop plan for tree removal operations | • Establish procedures for tree felling for a site based on site evaluation |  | • Process timber blocks with disposal equipment to clear sites in accordance with manufacturers’ guidelines | • Establish the monitoring requirements for the tree felling operations |
| • Establish the monitoring requirements for the tree felling operations | • Monitor tree removal operations at the site |  | • Adhere to relevant WSH guidelines for arboriculture operations | • Review tree felling operations periodically |
| • Develop plans to manage the impact of tree felling on the surrounding areas and environment | • Provide technical guidance to tree felling team in complex cases |  | • Adhere to relevant WSH guidelines for arboriculture operations | • Review tree felling operations periodically |