

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

TSC Category	Arboriculture					
TSC	Tree Transplantation					
TSC Description	Undertake the transplantation of grown trees or large shrubs from original site to new receptor sites to facilitate new developments, modifications to existing developments or conservation					
TSC Proficiency Description	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
		LNS-GNM-2008-1.1	LNS-GNM-3008-1.1	LNS-GNM-4008-1.1	LNS-GNM-5008-1.1	
		Perform tree transplantation procedures for trees and/or large shrubs using mechanised methods	Lead the on-site execution of tree transplantation in accordance with established procedures and guidelines	Manage the technical execution of tree transplantation for the purpose of facilitating new development, modifications to existing development or tree conservation	Drive the scope assessment, planning and execution of tree transplantation to facilitate new developments, modifications to existing developments or tree conservation	
Knowledge		<ul style="list-style-type: none"> Techniques and methods for site preparation, planting and establishment of small trees and/or large shrubs General preparation methods and techniques for tree transplantation Root ball preparation Estimation of size and volume of trees and/or large shrubs and corresponding transplantation requirements Procedures for tree establishment Use of tools, equipment and machinery required for tree extraction and establishment Methods of providing support to newly transplanted trees and/or large shrubs Hazards and risks associated with tree transplantation Post-planting care methods for small trees and/or large shrubs Personal Protective Equipment (PPE) 	<ul style="list-style-type: none"> Tree identification Pests, diseases and defects in tree form and structure Process of marking trees before extraction Methods to calculate root ball sizes, tree height and mass Types of tools, equipment and machinery and their application, required for transplantation of trees Lifting processes for trees Large scale heavy machinery required for transplantation of trees Transportation processes for trees and/or large shrubs and associated care requirements Methods of providing support to newly transplanted trees and/or large shrubs Personal Protective Equipment (PPE) required for tree transplantation Relevant industry standards, legislation 	<ul style="list-style-type: none"> Site assessment methods for a tree extraction and receptor sites Parameters to assess tree viability for transplantation Risks associated with tree extraction Precautions to be observed during tree transplantation process Root ball size estimation for tree transplantation Various approaches for transplantation based on tree and/or large shrubs requirements Post-establishment tree care requirements and procedures Ways to minimise transplantation shock Relevant industry standards, legislation and guidelines for workplace safety and health (WSH) 	<ul style="list-style-type: none"> Tree assessment techniques and methods Metrics for evaluating suitability of tree for transplantation Root ball size estimation for tree transplantation Advantages and limitations of tree transplantation procedures Legislative and regulatory compliance requirements for tree transplantation Relevant industry standards, legislation and guidelines for workplace safety and health (WSH) 	

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

		<p>required for tree transplantation</p> <ul style="list-style-type: none"> • Relevant industry standards, legislation and guidelines for workplace safety and health (WSH) 	<p>and guidelines for workplace safety and health (WSH)</p>			
Abilities		<ul style="list-style-type: none"> • Carry out excavation works using mechanised machinery and tools for tree extraction according to instructions • Perform general preparation of trees and/or large shrubs for transplantation • Prepare root ball by covering extracted root system with appropriate materials • Secure trees and/or large shrubs to minimise risks of damage during transport • Prepare trenches and/or holes, fills and other receptor site requirements for transplantation • Establish trees at receptor sites using appropriate machinery and tools • Perform post-transplantation tree care and monitoring until stabilisation of tree condition • Adhere to relevant WSH guidelines for arboriculture operations 	<ul style="list-style-type: none"> • Determine the requirements for the transplanting process • Supervise excavation around the trees for extraction taking into consideration root ball requirements • Supervise the preparation of root ball for transplantation • Identify tools, equipment, machinery and material requirements for tree and/or large shrubs transplantation • Supervise the lifting of the trees from original site using appropriate support and safety systems • Supervise loading, transportation, unloading and planting of trees and/or large shrubs at receptor sites • Supervise the clearing, processing and cartage of debris from sites in accordance with organisational procedures and environmental waste management requirements • Oversee adherence to relevant WSH guidelines for arboriculture operations 	<ul style="list-style-type: none"> • Assess sites to understand scope, risks and complexity of operations • Communicate risks involved in tree transplantation to all stakeholders • Develop work schedules and resource allocation plans for tree and/or large shrubs transplantation works • Obtain all appropriate permits and permissions according to legislation and regulations • Manage the sourcing and selection of all resources to suit the planting, removal and/or transplanting activities and priority of works • Communicate established transplantation procedures to site supervisors • Provide technical guidance to transplantation teams • Guide all practices to ensure that they meet guidelines and regulations determined by industry standards and legislation 	<ul style="list-style-type: none"> • Lead site and tree assessment to determine scope, risk and complexity of transplanting operations • Evaluate tree structures, form and health to understand viability of transplantation • Evaluate quality of root system and root ball size to be retained to minimise transplant shock • Evaluate risks associated with tree and/or large shrubs transplantation • Develop procedures for tree extraction, transportation and establishment at receptor sites • Establish the monitoring requirements for the transplantation process • Develop plans to manage the impact of tree extraction on the surrounding area and environment • Approve completion of transplantation process after site review 	