

# Landscape Horticulturist Level Four

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### LINE C ORGANIZE WORK

#### **C1 Perform Site Assessments**

Inspect site specific environmental conditions .....	C1-1
Evaluate soil erosion .....	C1-1

#### **C2 Use Documentation and Reference Material**

Interpret landscape drawings and design intent.....	C2-1
Reference documentation pertaining to estimating.....	C2-2

#### **C3 Maintain Records**

Describe examples of additional records .....	C3-1
Describe types of work records.....	C3-3

#### **C4 Participate in Job Planning Activities**

Identify labour requirements .....	C4-1
Schedule labour, materials, tools and equipment .....	C4-2
Identify and schedule sub-contractors.....	C4-5
Verify scope of project and determine sequence of job .....	C4-7
Plan site-specific staging .....	C4-8

### LINE D PARTICIPATE IN MARKETING AND SALES

#### **D4 Prepare Estimates**

Interpret site information and documentation .....	D4-1
Identify sources of information pertaining to estimating.....	D4-14
Estimate material costs .....	D4-14
Estimate labour costs .....	D4-20
Estimate equipment costs.....	D4-21
Estimate additional costs .....	D4-22
Coordinate project logistics.....	D4-24
Risk management strategies used in landscape industry estimation .....	D4-25
Provide estimates.....	D4-30

### **LINE E USE COMMUNICATION AND MENTORING TECHNIQUES**

#### **E2 Use Mentoring Techniques**

Describe leadership in the organization .....	E2-1
Define the roles and responsibilities of the mentor .....	E2-8
Describe training skills .....	E2-10
Describe learning styles and needs .....	E2-13
Describe the value of essential skills in the workplace.....	E2-14
Manage time.....	E2-16
Examine the concept of power in an organization .....	E2-21
Recognize ethical and social responsibility issues in the work place .....	E2-23
Interpret the employment standards.....	E2-33

### **LINE F APPLY HORTICULTURAL PRACTICES**

#### **F2 Identify Plants and Plant Requirements**

Describe native plants common to the horticulture industry .....	F2-1
Describe seasonal plants common to the horticulture industry in BC .....	F2-6
Describe plants suitable for green infrastructure projects.....	F2-8
Describe plants suitable for edible landscapes.....	F2-10
Identify and describe 90 woody and non-woody plants .....	F2-13

#### **F5 Manage Pests, Diseases and Invasive Species**

Hazards and safe work practices .....	F5-2
Discuss the implications of pest management .....	F5-4
Identify the factors for selecting and applying treatment methods .....	F5-9
Describe pest control products, formulations and application equipment.....	F5-10
Identify regulated versus non-regulated pests in BC.....	F5-12
Identify quarantine protocols.....	F5-17
Prepare samples for lab testing .....	F5-19
Develop a diagnostic checklist.....	F5-19
Develop an IPM program.....	F5-20
Practical Competency 1: Develop an IPM program proposal .....	F5-25

### **LINE G APPLY ENVIRONMENTAL PRACTICES**

#### **G1 Practice Environmental Stewardship**

Identify opportunities for stewardship related to green infrastructure and biodiversity.....	G1-1
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#### **G2 Practice Biodiversity Enhancement**

Define biodiversity.....	G2-1
Ensuring and practicing biodiversity within landscapes .....	G2-5
Describe selection of plants to ensure diversity within landscapes .....	G2-7
Describe a variety of habitats that support a range of organisms .....	G2-10
Describe bio-diverse enhancement strategies .....	G2-12

## **LINE H PERFORM PRE-CONSTRUCTION ACTIVITIES**

### **H1 Participate in Landscape Design Activities**

<b>Part One: Describe styles, approaches, characteristics, elements, and principles .....</b>	<b>H1-2</b>
Examine influential historical and cultural landscape styles .....	H1-2
Examine sustainable approaches to design and contemporary gardens .....	H1-6
Describe the design characteristics of plants and materials .....	H1-12
Describe the elements and principles of design.....	H1-12
Describe the Principles of Design: Unity, Balance, Sequence, Rhythm and Proportion.....	H1-17
Describe the visual element of colour .....	H1-22
<b>Part Two: Describe the design process .....</b>	<b>H1-27</b>
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Identify components of a landscape drawing .....	H1-43
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Create a planting plan.....	H1-55
Design Implementation .....	H1-56
Describe maintenance and evaluation .....	H1-56
Participate in basic landscape design activities .....	H1-57

## **LINE K INSTALL GREEN INFRASTRUCTURE SYSTEMS**

### **K1 Select Green Infrastructure**

Determine green infrastructure needs .....	K1-2
Describe factors affecting the selection of green infrastructure .....	K1-6
Identify Xeriscape principles .....	K1-11
Identify green infrastructure practices and technologies .....	K1-14
Select green infrastructure technologies, methods and products.....	K1-18
Identify green infrastructure systems .....	K1-19
Compare types of green, blue and grey infrastructures .....	K1-20
Identify benefits of plants within green infrastructure systems .....	K1-21
Identify benefits of the urban forest.....	K1-23

### **K2 Install Green Roofs and Walls**

Select and use hand tools, power tools, and equipment.....	K2-2
Describe types and functions of green roof systems .....	K2-2
Describe the process and procedures to install green roofs and walls.....	K2-7
Describe the non-organic components used in green roofs and walls .....	K2-10
Describe the characteristics of organic components used in green roofs and walls .....	K2-14

### **K3 Install Rainwater and Stormwater Management Systems**

Select and use hand tools, power tools, and equipment.....	K3-1
Describe types and functions of rainwater/stormwater management systems.....	K3-2
Describe processes and procedures to install rain/stormwater systems .....	K3-11
Describe the components of rainwater/stormwater management systems.....	K3-15
Describe the components of rainwater/ stormwater harvesting systems .....	K3-17
Describe the components of rainwater/ stormwater retention systems .....	K3-21

**K4 Install Erosion Control**

Describe tools and equipment.....	K4-1
Identify erosion control methods and their application.....	K4-4
Describe installation methods .....	K4-8
Install erosion control material .....	K4-9

**K5 Install Biodiverse Plantings and Natural Areas**

Describe installation considerations for biodiverse plantings and natural areas.....	K5-2
Describe installation procedures for biodiverse plantings and natural areas .....	K5-5

**LINE N MAINTAIN GREEN INFRASTRUCTURE****N1 Maintain Green Roofs and Walls**

Select and use hand tools, power tools, and equipment .....	N1-1
Describe types and functions of green roof systems and green walls .....	N1-1
Describe processes and procedures for maintaining green roofs and walls .....	N1-2
Identify non-horticultural elements requiring inspection and maintenance .....	N1-7

**N2 Maintain Rainwater and Stormwater Management Systems**

Describe processes and procedures for maintaining the function of rainwater and stormwater management systems .....	N2-1
Identify non-horticultural elements requiring inspection and maintenance .....	N2-7

**N3 Maintain Erosion Control**

Describe the procedures to inspect erosion control materials .....	N3-1
Describe the procedures to repair erosion control materials .....	N3-4

**N4 Maintain Biodiverse Plantings and Natural Areas**

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Identify criteria for monitoring site .....	N4-2
Describe maintenance procedures.....	N4-4

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