

Landscape Horticulturist Level Two

TABLE OF CONTENTS

Version Control	iii
TABLE OF CONTENTS	v
ACKNOWLEDGMENTS	xi
PROGRAM OVERVIEW	xiv
• ITA Occupational Analysis Chart—Landscape Horticulturist	xv
• Roles and Responsibilities	xviii
• Program Delivery	xix
• Program Assessment and Completion Requirements	xx
• Training Topics and Suggested Time Allocation	xxi
• Assessment Guidelines – Level 2	xxii
• Tools and Equipment—Supplied by Apprentice	xxiii
• Reference Material	xxiii
• Use of Different Units of Measurement in the Learning Resources	xxiv
LEARNING RESOURCES	xxv

LINE B USE TOOLS EQUIPMENT AND VEHICLES

B1 Use hand tools

Select and use hand tools	B1-1
Perform hand tool maintenance	B1-8
Store hand tools	B1-9

B2 Use power tools

Select and use power tools	B2-1
Perform power tool maintenance	B2-9
Store power tools	B2-10

B3 Use measuring equipment

Select and use measuring equipment	B3-1
Perform maintenance on measuring equipment	B3-2
Store measuring equipment	B3-3

B4 Use vehicles and motorized equipment, trailers and attachments

Identify basic vehicle systems and components	B4-2
Consider factors for the selection of vehicles, motorized equipment, attachments and trailers.....	B4-5
Describe the procedure to attach a trailer to a vehicle	B4-5
Inspect vehicles, motorized equipment, attachments and trailers.....	B4-7
Operate vehicles and motorized equipment	B4-9

LINE C ORGANIZE WORK

C1 Perform site assessments

Select and use specific tools and equipment independently	C1-1
Identify markings for public and private utilities	C1-1
Mark locations of private utilities	C1-2
Identify existing plants	C1-3
Assess landscape site soils	C1-4
Examine soil compaction and drainage.....	C1-6
Recognize soil erosion	C1-12
Perform soil tests	C1-15



C2 Use documents and reference material

Interpret symbols and abbreviations to determine the scope of work.....	C2-2
Interpret project specifications	C2-5
Interpret specified scale	C2-9
Read plans	C2-11
Identify current government legislation and company policies	C2-15

C3 Maintain records

Describe examples of additional records	C3-1
Describe the purpose of comparing packing slips with original orders.....	C3-2

C6 Organize materials and equipment

Describe the purpose of inspection and verification of plants and materials.....	C6-1
Describe storage area specifications for equipment and hazardous materials.....	C6-2

C7 Transport materials

Describe the transportation of materials	C7-1
Describe the procedure to perform circle checks	C7-5

C8 Transport equipment

Describe considerations in determining route	C8-2
Describe the procedure to perform circle checks	C8-3
Describe the transportation of equipment and attachments	C8-4

LINE F APPLY HORTICULTURAL PRACTICES

F1 Practice basic plant science

Describe the microscopic anatomy of plants	F1-1
Describe plant organ internal anatomy.....	F1-6
Describe plant growth	F1-12
Describe stages in the life cycle of angiosperms and gymnosperms.....	F1-14
Describe water movement through a plant	F1-19
Describe basic principles of photosynthesis.....	F1-22
Explain the influence of environmental factors on plant physiology	F1-24
Describe the growth response to external stimuli	F1-29
Describe basic growth responses to plant hormones	F1-31

F2 Identify plants and plant requirements

Recognize a range of plant materials commonly used in horticulture	F2-1
Explain plant hardiness zones.....	F2-5
Identify weeds	F2-7
Describe the characteristics of weeds	F2-8
Recognize and describe bud, bark, foliage, flower, and fruit characteristics	F2-11
Identify and describe 75 woody and non-woody plants	F2-18

F3 Manage plant health and growing conditions

Collect samples to prepare for testing	F3-2
Describe types of tests.....	F3-5
Interpret test results.....	F3-7
Develop a plan for implementing corrective measures.....	F3-8
Determine factors for plant selection and placement.....	F3-9
Amend growing conditions to meet plant requirements	F3-11
Measure and apply fertilizer and amendments	F3-13

F4 Prune plant materials

Describe shrub, vine and groundcover pruning considerations.....	F4-1
Select and use tools and equipment.....	F4-11
Demonstrate pruning techniques for young and established shrubs, groundcovers and vines.....	F4-14
Describe timing of pruning shrub, vine and groundcover.....	F4-19
Demonstrate safe working practices and operation of common pruning equipment and tools.....	F4-23
Organize and dispose of pruned material.....	F4-27

LINE G APPLY ENVIRONMENTAL PRACTICES

G1 Practice environmental stewardship

Identify opportunities for stewardship relating to landscape maintenance and installation.....	G1-1
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G3 Practice soil stewardship

Examine the types and functions of soil biota	G3-1
Explain the role of organic matter in soil	G3-5
Describe composting considerations	G3-6
Describe how soil colloids determine soil chemical properties	G3-14
Describe mineral nutrients in soil	G3-17
Describe the effect of salinity and sodicity on soil properties	G3-32
Summarize nutrient management	G3-36
Discuss site remediation	G3-43
Sample soils.....	G3-46
Discuss the importance of preserving soil health	G3-53
Identify the considerations when selecting soil amendments.....	G3-57

G4 Practice water stewardship

Describe elements of water stewardship.....	G4-1
Describe procedures for environmental water sampling.....	G4-8

LINE H PERFORM PRE-CONSTRUCTION ACTIVITIES

H2 Prepare construction site

Select and use tools and equipment	H2-1
Interpret and extract information.....	H2-2
Describe site preparation and protection of existing site elements	H2-3
Remove unwanted materials	H2-4
Create site access	H2-4
Locate utilities	H2-5
Locate and cordon off areas to minimize environmental impact	H2-11
Lay out site	H2-14
Establish grade	H2-14
Verify site is prepared and ready for the next phase	H2-14

LINE I INSTALL HARDSCAPE

I2 Install surface materials

Select and use hand and power tools	I2-1
Select and use equipment	I2-3
Describe the properties and use of surface materials	I2-4
Prepare for installation	I2-10
Install walkway, patio, driveway and parking lot materials	I2-21
Clean-up site.....	I2-30

I3 Install steps and retaining walls

Perform safe work practices.....	I3-4
Select and use hand tools, power tools, and equipment	I3-5
Lay out and mark construction area.....	I3-8
Prepare to install steps and retaining walls.....	I3-10
Install steps and retaining walls.....	I3-18
Cleanup site	I3-34

LINE J INSTALL SOFTSCAPE

J2 Install exterior landscape plants

Select and use hand tools and equipment	J2-1
Plant material selection and consideration	J2-2
Monitor and maintain plant health	J2-13
Prepare planting site.....	J2-15
Lay out plant materials	J2-16
Prepare plant materials	J2-16
Prune plant materials	J2-17
Plant, stake and guy plant materials.....	J2-17
Verify moisture content.....	J2-22
Dispose of or recycle excess materials	J2-22
Describe procedures for post-planting care	J2-23

J3 Transplant plants

Select and use hand tools and equipment	J3-1
Describe reasons for transplanting plants.....	J3-2
Verify plant is viable for transplant	J3-2
Prepare plant for transplantation.....	J3-3
Dig plant material	J3-4
Transplant plants	J3-4
Install plant material.....	J3-10
Prune plant material.....	J3-12
Verify moisture content.....	J3-13
Dispose of or recycle excess materials	J3-14
Describe procedures for post-transplanting care	J3-14

J4 Install mulch

Select and use hand tools and equipment	J4-1
Describe properties and purpose of mulch	J4-1
Prepare the area to be mulched.....	J4-9
Apply mulch	J4-11
Verify mulch installation.....	J4-12

LINE L MAINTAIN HARDSCAPE

L1 Maintain drainage systems

Describe maintenance requirements of drainage systems	L1-1
Describe indicators of failure.....	L1-7
Describe drainage components	L1-11
Describe optimal flow	L1-16
Describe securing of drain covers.....	L1-18
Describe winterizing of drainage systems	L1-18

L3 Maintain surface materials

Describe surface defects and hazards.....	L3-1
Describe maintenance procedures for surfaces.....	L3-3

L4 Maintain steps and retaining walls

Describe defects and hazards for steps and retaining walls	L4-1
Describe maintenance procedures for steps and retaining walls	L4-5

LINE M MAINTAIN SOFTSCAPE**M1 Maintain exterior softscape**

Select and use tools and equipment	M1-1
Describe seasonal planting and removal of plants.....	M1-1
Describe seasonal protection practices	M1-5
Describe removing staking and guying materials.....	M1-8
Describe fertilization of plants	M1-9
Describe mulching of beds and containers	M1-11

M4 Propagate plant materials

Select and use hand tools and materials.....	M4-1
Identify considerations used when selecting stock/parent plants.....	M4-2
Describe the harvesting and dividing of storage organs	M4-3
Describe propagation methods.....	M4-5

APPENDICES

Glossary	Appendix 1
Red Seal Landscape Horticulturist Interprovincial Exam Plant List	Appendix 2