



ONTARIO COLLEGE OF TRADES

ORDRE DES MÉTIERS DE L'ONTARIO

Apprenticeship
Training Standard

Schedule of Training

Agriculture – Fruit Grower

Trade Code: 640F

Development Date: 2000

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PREFACE

This Schedule of Training was developed by the Ministry of Training, Colleges, and Universities (MTCU), in partnership with the Industry Advisory Committee and in consultation with representatives from the industry. This document is intended to be used by apprentice, supervisor/trainer and sponsor/employer as a "blueprint" for training and as a prerequisite for completion and certification.

This training document becomes the apprentice's only record of workplace training performance. Supervisor/trainer and apprentice are required to sign off and date the skill following each successful acquisition, unless a skill is marked shaded (optional).

The care and maintenance of this training document are the joint responsibility of the apprentice and the sponsor/employer. By signing off the skill, the supervisor/trainer and the apprentice are indicating that the apprentice has demonstrated competence of the skill. This training standard has been developed specifically for documenting the apprentices' acquisition of skills of the trade.

Please Note: Apprenticeship Training and Curriculum Standards were developed by the Ministry of Training, Colleges and Universities (MTCU). As of April 8th, 2013, the Ontario College of Trades (College) has become responsible for the development and maintenance of these standards. The College is carrying over existing standards without any changes.

However, because the Apprenticeship Training and Curriculum Standards documents were developed under either the Trades Qualification and Apprenticeship Act (TQAA) or the Apprenticeship and Certification Act, 1998 (ACA), the definitions contained in these documents may no longer be accurate and may not be reflective of the Ontario College of Trades and Apprenticeship Act, 2009 (OCTAA) as the new trades legislation in the province. The College will update these definitions in the future.

Meanwhile, please refer to the College's website (<http://www.collegeoftrades.ca>) for the most accurate and up-to-date information about the College. For information on OCTAA and its regulations, please visit: <http://www.collegeoftrades.ca/about/legislation-and-regulations>

DEFINITIONS

ACA

Apprenticeship and Certification Act, 1998

Certificate of Apprenticeship (C of A)

Certification issued to individuals who have demonstrated that they have completed an apprenticeship in Ontario.

Certificate of Qualification (C of Q)

Certification issued to C of Q applicants who have achieved a passing grade on the certification exam for their trade.

Competence

The ability of an individual to perform a skill repeatedly and without assistance in the workplace to the standard set out in the Training Standard or Schedule of Training.

Competency Analysis Profile

A document that identifies the training needs of an individual trade and details the skills/skill sets that must be demonstrated.

Industry Committee (IC) - under the ACA and Provincial Advisory Committee (PAC) under the TQAA

Under the ACA and TQAA, the Minister may appoint a provincial committee in any trade or group of trades to advise the Minister in matters relating to the establishment and operation of apprenticeship training programs and trades qualifications.

Journeyman or Equivalent

A person who has acquired the knowledge and skills in a trade, occupation or craft as attested to by a provincial or territorial authority.

Mandatory

Status assigned to unshaded individual skills, skill sets or general performance objective which must be signed off for the apprentice to complete their program.

Optional

Status assigned to shaded individual skills, skills sets or general performance objective for which sign-off is not required for the apprentice to complete the program.

Schedule of Training

An apprenticeship training standard which includes the on-the-job performance objectives and off-the-job learning outcomes

Sign-off

Signature of the sponsor/employer of record or an individual, to whom that sponsor or employer has delegated signing authority, indicating an apprentice's achievement of competence.

Skill

Individual skill described in the Training Standard (note: does not mean the larger skill groups referred to in the Training Standard as Skill Sets, Training Units, or General Performance Objective, but the individual skills that make up those groups).

Skill Sets

Group of individual skills found in the Training Standard (may also be called Training Unit or General Performance Objective)

Skill Set Completion Form (and Learning Outcome Completion Form)

Lists all skill sets and includes space for sign-off by sponsor/employer of record.

Sponsor/Employer

Means a person that has entered into a registered training agreement under which the person is required to ensure that an individual is provided with workplace-based training in a trade, other occupation or skill set as part of an apprenticeship program approved by the Director.

Sponsor/Employer of Record

Refers to the sponsor or employer documented as the signatory to the current training agreement or contract. In order for an sponsor/employer to be considered for the training of apprentices, they must identify that the workplace has qualified journeypersons or equivalent on site and can identify that the workplace has the tools, equipment, materials, and processes which have been identified by Provincial Advisory Committees (PACs) or Industry Committees (ICs) to be required for the trade.

Supervisor

An individual, who oversees the execution of a task, oversees the actions or work of others.

Trainer

A qualified trainer in a compulsory trade is a journeyperson with a Certificate of Qualification or in a voluntary trade is an individual who is considered equivalent to a journeyperson with a Certificate of Qualification.

TQAA

Trades Qualification and Apprenticeship Act.

Training Standard

A document that has been written in concise statements, which describe how well an apprentice must perform each skill in order to become competent. In using the document, trainers will be able to ensure that the apprentice is developing skills detailed for the occupation.

IMPORTANT DIRECTIONS

Apprentice

1. All complete skills or skill sets must be signed and dated by both the apprentice and sponsor/employer when either all terms of the contract have been completed or the apprentice leaves the employ of the employer.
2. It is the responsibility of the apprentice to inform the apprenticeship staff at the local Ministry of Training, Colleges and Universities office regarding the following changes:
 - change of sponsor/employer address;
 - change of apprentice name or address;
 - transfer to a new sponsor/employer.
3. The Skill Set Completion Form and Learning Outcome Completion Form must be completed and signed by the current sponsor/employer and presented to the local Apprenticeship Client Services Office at the fulfillment of all terms of a Training Agreement.
4. The apprentice completion form with the Completed and Authorized Schedule of Training must be presented to the local Apprenticeship Client Services Unit.

Sponsors/Employers and Supervisors/Trainers

The Schedule of Training identifies skills and supporting learning outcomes required for this trade/occupation and its related training program.

This Schedule of Training has been written in concise statements which describe how an apprentice must perform each skill/outcome in order to become competent. Competence means being able to perform the task to the required standard.

In using this training standard, supervisors/trainers will be able to ensure that the apprentice is developing the skills detailed for the trade/occupation.

Supervisors/Trainers and apprentices are required to sign off and date the skills following each successful acquisition.

Sponsors/Employers participating in this training program will be designated as the Signing Authority and are required to attest to successful achievement by signing the appropriate box included at the end of each skill set.

NOTICE OF COLLECTION OF PERSONAL INFORMATION

1. At any time during your apprenticeship training, you may be required to show this training standard to the Ministry of Training, Colleges and Universities (the Ministry). You will be required to disclose the signed Apprenticeship Completion form to the Ministry in order to complete your program. The Ministry will use your personal information to administer and finance Ontario's apprenticeship training system, including confirming your completion and issuing your certificate of apprenticeship.
2. The Ministry will disclose information about your program completion and your certificate of apprenticeship to the Ontario College of Trades, as it is necessary for the College to carry out its responsibilities.
3. Your personal information is collected, used and disclosed by the Ministry under the authority of the Ontario College of Trades and Apprenticeship Act, 2009.
4. Questions about the collection, use and disclosure of your personal information by the Ministry may be addressed to the:

Manager, Employment Ontario Contact Centre
Ministry of Training, Colleges and Universities
33 Bloor St. E, 2nd floor, Toronto, Ontario M7A 2S3
Toll-free: 1-800-387-5656; Toronto: 416-326-5656
TTY: 1-866-533-6339 or 416-325-4084.

ROLES & RESPONSIBILITIES OF APPRENTICE, SPONSOR/EMPLOYER AND SUPERVISOR/TRAINER

Apprentice “Apprenticeship is Learning On-the-job”

- Practice safe work habits.
- Use your apprenticeship training standard as a journal to keep track of which skills you have achieved.
- Talk over your training plan with your Training Consultant, Employer, Union, or Sponsor.
- Know what tools are required for your trade and how to use them.
- Ask questions and keep asking.
- Talk to your employer about your training needs.
- Demonstrate enthusiasm and good work habits.
- Ensure that you and your supervisor/trainer sign off skill/skill sets upon demonstration of competency.

Sponsor/Employer “Training is an Investment”

- Demonstrate safe work habits.
- Attest to successful achievement by signing the skill/skills sets.
- Provide opportunities and time for the apprentice to learn the trade.
- Offer practical trade training experiences that cover all of the skill sets.
- Foster work ethics that support training while minimizing productivity losses.
- Set out clear expectations, then recognize or reward performance excellence.
- Involve both the apprentice and supervisor/trainer in developing the training plan.
- Use the Training Standard as a monitoring tool and part of regular performance evaluations.
- Select supervisors/trainers with good communication skills and who work well with others.
- Encourage supervisors/trainers to take upgrading courses - (e.g. Train the Trainer, Mentor Coach, etc).
- Complete the Skill Set Completion Form once the apprentice has demonstrated competency in the training.
- Ensure that the apprentice always works under the direction of or has access to a qualified supervisor/trainer.
- Vary the apprentice’s exposure to all the skills set out in the training standard.

Supervisor/Trainer

- Demonstrate safe work habits.
- Treat apprentices fairly and with respect.
- Use the Training Standard as a guide to evaluating competence in each skill area. In using the Training Standard, supervisors/trainers will be able to ensure that the apprentice is developing skills detailed for the trade/occupation.
- Review the Training Standard with the apprentice and develop a training plan.
- Respond fully to all questions.
- Be patient. Explain what is to be done then, show how it is done, and then let the apprentice demonstrate the task.
- Provide continuous feedback.
- Sign off individual skills/skill sets once the apprentice demonstrates competence in the skill.

Suggestions for Assessing the Progress of the Apprentice in the Workplace

- Use informal daily observation.
- Provide constructive feedback to build confidence.
- Allow the supervisor/trainer time to teach and demonstrate the skills.
- Take prompt action wherever problems occur.
- Conduct regular performance reviews involving the apprentice, supervisor/trainer and sponsor/employer.
- Use the Training Standard as the reference for establishing the competency of the apprentice.

SKILL SET COMPLETION FORM

SKILLS SETS	TITLE	SIGNING AUTHORITY
U5390.0	PROTECTS SELF AND OTHERS	
U5391.0	PREPARES LAND	
U5392.0	PERFORMS TRANSPLANTING	
U5393.0	SETS UP AND MAINTAINS PLANT TRAINING SUPPORT SYSTEMS	
U5394.0	TRAINS AND PRUNES PLANTS	
U5395.0	FERTILIZES PLANTS	
U5396.0	PERFORMS CROP PROTECTION PROCEDURES	
U5397.0	PERFORMS GROUND COVERING PRACTICES	
U5398.0	PERFORMS CROP AND PLANT DENSITY/THINNING PRACTICES	
U5399.0	PERFORMS PROPAGATION PROCEDURES	
U5400.0	OPERATES & MAINTAINS FARM MECHANICAL & POWER EQUIPMENT SYSTEMS	
U5401.0	PERFORMS HARVESTING & GRADING TECHNIQUES	

NOTE ON SHADED PERFORMANCE OBJECTIVES AND SKILLS:

- Shaded performance objectives and skill sets are optional. The shaded skills do not have to be demonstrated or signed-off for completion of the on-the-job component of the apprenticeship
- The learning outcomes will cover all of the skill sets, both shaded and unshaded.

LEARNING OUTCOMES COMPLETION FORM

Date of Completion	Organization Name(s)	SIGNING AUTHORITY

APPRENTICE COMPLETION FORM

APPRENTICE NAME	
Print	
Signature	
Client ID	

Skill Sets and Learning Outcomes when completed should be signed by the Supervisor/Trainer and presented with this completion form to your local Apprenticeship Client Services Office. Any supporting documentation should also be attached.

In-school Completed Yes () No () Not applicable ()
 (Proof to be provided)

Hours completed as Yes () No () Not applicable ()
 Per Contract:

SPONSOR/EMPLOYER INFORMATION	
Name	
Address	
Telephone	
E-mail Address	
Signature of Signing Authority	

You will be required to disclose this signed form to the Ministry of Training, Colleges and Universities in order to complete your program. The Ministry will use your personal information to administer and finance Ontario's apprenticeship training system. For further information please see the notice/declaration for collection of personal information that is referenced in the table of contents of this training standard.

A. DESCRIPTION/DUTIES

A **FRUIT GROWER** is a person who is responsible for the planting, cultivating, propagating, spraying, irrigating, transplanting, pruning, and harvesting of all types of fruit. They operate and maintain mechanical and power equipments and systems and farm mechanical equipment.

A **FRUIT GROWER** is a person who:

- reads and interprets fruit growing documentation and procedures including land preparation, transplanting, plant training support systems, fertilization, crop protection, density/thinning, and propagation;
- develops layout block designs and prepare, fertilize, fumigate, cultipack, spray, and cultivate the land;
- transplants plants by preparing plants, staking/trellising plants, planting fruit trees, small fruit plants, vines, and protecting, irrigating, and fertilizing plants;
- performs propagation procedures;
- performs harvesting and grading techniques;
- operates and maintains farm tractors and accessories, farm trucks, harvesting equipment, chainsaw and power pruners, irrigation systems, packing line system and components, cold storage and controlled atmospheric facilities, and air compressors and systems.

An **AGRICULTURE - FRUIT GROWER** demonstrates knowledge of:

- land preparation
- transplanting
- plant training support systems
- plant training and pruning
- plant fertilization
- crop protection
- ground covering techniques
- crop and plant density and thinning procedures
- propagation procedures
- farm mechanical & power equipment basic maintenance procedures
- harvesting & grading techniques

BENCHMARK/GUIDELINE TOTAL TRAINING TIMEFRAMES: (ON-THE-JOB AND OFF-THE-JOB):

4,000 - 6,000 hours or 2 TO 3 years as determined by Industry guidelines
Includes **16 weeks (480 hours)** of in-school training.

U5390.5 **Demonstrate safe work habits** working around farmstead, farm equipment, fruit- storage and - processing systems by: performing a daily check of farm yard and buildings; staying outside guards and barricades; wearing appropriate clothing; confining long hair; removing jewellery; no substance abuse; staying inside the drive-row/alleyway; and, ensuring that others are safely away from moving and operating equipment; in accordance with OHSA and farm standards/practices.

Date Completed

Apprentice

Supervisor/Trainer

U5390.6 **Work safely around people** by recognizing danger zones around moving equipment, vehicles, fruit storage facilities, and processing equipment, ensuring that safe distances are kept between self, others, and equipment during all farm operations, in accordance with farm standards/practices and OHSA.

Date Completed

Apprentice

Supervisor/Trainer

U5390.7 **Conduct pre-operational check of farm equipment and fruit packing systems** by: carrying out a pre-operational check; checking that all moving parts are operational and functioning; and, identifying and reporting equipment that is unsafe or inoperable; and, ensuring that guards and safety devices are in place, secured, and not damaged; in compliance with farm standards/practices and OHSA.

Date Completed

Apprentice

Supervisor/Trainer

U5390.8 **Report injuries to supervisor**, ensuring that the injured person is attended to and that all information describing how incident occurred is reported clearly and accurately, so that future recurrence of similar accidents is prevented.

Date Completed

Apprentice

Supervisor/Trainer

U5390.9 **Assist in the completion of written safety and injury reports** by following farm procedures and applicable safety acts and regulations, so that the information collected for government, legal, or insurance forms is complete and accurate and required deadlines are adhered to.

Date Completed

Apprentice

Supervisor/Trainer

U5390.10 **Follow farm procedures for applying first aid** to treat conditions including sudden illnesses, burns, cuts, abrasions, sprains, chemical inhalations, and contaminants in eyes, so that the condition of the victim is stabilized and prepared for further first aid treatment.

Date Completed

Apprentice

Supervisor/Trainer

U5390.11 **Lock out and tag mechanical equipment** by shutting down machine or crop/material handling process ensuring that no materials can enter the equipment being repaired or maintained, and no damage or injury is caused to the operator or machine, in accordance with farm standards/practices and OHS A

Date Completed

Apprentice

Supervisor/Trainer

U5390.12 **Handle designated chemicals** using specified handling and storage equipment, so that the operator is protected from injury, the environment from contamination, and procedures are followed in compliance with Workplace Hazardous Materials Information System (WHMIS).

Date Completed

Apprentice

Supervisor/Trainer

U5390.13 **Operate lifting, hoisting, and loading equipment** including hoists, chain falls, ladders, personal lift equipment, block, tackles, slings, cables, and/or chains, to remove, transport, store, and load materials, crops, and/or equipment, in compliance with OHS A and farm standards/practices.

Date Completed

Apprentice

Supervisor/Trainer

U5390.14 **Handle pesticides and fertilizers** using specified handling and storage equipment, so that operator is protected from injury, the environment from contamination, and procedures are followed in compliance with environmental protocols, government regulations, and farm standards/practices.

Date Completed

Apprentice

Supervisor/Trainer

U5390.15 **Operate power activated tools and equipment** by: following required procedures; checking the power source and switches; and, identifying and reporting worn, damaged, or defective parts/components; so that the equipment is operated safely and efficiently, and no damage or injury is caused to the equipment or operator in accordance with manufacturer's specifications, government regulations, and farm standards/practices.

Date Completed

Apprentice

Supervisor/Trainer

U5390.16 **Work around ponds and irrigations systems** by following farm standards/practices and government regulations, to ensure that the operator is protected from injury and the environment is protected from contamination.

Date Completed

Apprentice

Supervisor/Trainer

U5390.17 **Operate farm vehicles** by: demonstrating safe working habits when working with gasoline, diesel, propane and/or natural gas powered vehicles; checking for damaged or defective components/parts in the braking, steering, exhaust, fuel and suspension systems; and, operating vehicles in a safe manner; so that vehicle damage or personal injury are prevented, in accordance with legal or government regulations and farm standards/practices.

Date Completed

Apprentice

Supervisor/Trainer

U5391.0 PREPARES LAND

U5391.1 **Read and interpret land preparation documents** including manuals and fact sheets, commodity publications, and equipment manufacturer’s recommendations to identify: drainage requirements; site preparation requirements; soil tilth recommendations; methods of elimination of competing vegetation; control of pest complex; soil amendments; irrigation requirements; wind and frost control procedures; and, any other information needed to complete a plan for land preparation.

Date Completed

Apprentice

Supervisor/Trainer

U5391.2 **Develop a layout block design** by: following required procedures; performing calculations to determine acreage, plant density, number/quantity of plants, and slope of land; measuring land/fields to determine area, width, and length of field; determining perimeter of area and travel lengths; and, sketching to scale to identify land size, aspect, shape, topography, row orientation, and travel paths; so that the layout design is completed and prepared in accordance with farm standards/practices.

Date Completed

Apprentice

Supervisor/Trainer

U5391.3 **Collect soil samples for land preparation** by using soil probes, following required protocols and procedures, and completing documentation or reports, so that the soil sample is correctly taken to identify nematodes, disease, and soil fertility information, in accordance with laboratory sheets and farm standards/practices.

Date Completed

Apprentice

Supervisor/Trainer

U5391.4 **Till uncultivated sod** by: strip tilling, cultivating, ploughing, and/or discing; using required equipment including mould board plow, discs, herbicides, tractors, and accessories; and, following specified cultivation procedures; so that the soil is tilled and ready for planting, as specified in manufacturer’s recommendations and farm standards/practices.

Date Completed

Apprentice

Supervisor/Trainer

U5391.5 **Till existing orchard or vineyard soil** by: cultivating, ploughing, rotovating, sub-soiling, and/or discing; using required equipment including tractor, disc, rotovator, or plough; and, following specified cultivation procedures; so that the orchard soil/bed is prepared for planting within specified time frames and in accordance with laboratory soil analysis, reference materials, and farm standards/practices.

Date Completed

Apprentice

Supervisor/Trainer

U5391.6 **Till previously cropped crop** by: cultivating, rotovating, mulch tilling, and/or discing; performing soil sampling procedures; using equipment including: tractor and accessories, disc, rotovator, and soil probe; following specified cultivation procedures; and, applying required herbicides and fertilizers; so that the field soil is prepared for planting within specified time frames and in accordance with laboratory soil analysis, manufacturer’s recommendations, reference materials, and farm standards/practices.

Date Completed

Apprentice

Supervisor/Trainer

U5391.7 **Fertilize new planting site/soil for bed preparation** by calibrating and using fertilizer or manure spreader, rotovator, disc, tractor and accessories and by adding soil amendments, so that the soil/site is fertilized and amended in preparation for planting within specified time frames and, in accordance with laboratory soil analysis, manufacturer’s recommendations, government recommendations, environmental protocols, and farm standards/practices.

Date Completed

Apprentice

Supervisor/Trainer

U5391.8 **Perform weed control techniques** by: spraying, mowing, and cultivating; calibrating applicator equipment; and, using tractor and accessories, discs, sprayer, and personal protective equipment; so that weeds are controlled, in accordance with specified time frames, field observations and analysis, reference materials, environmental protocols, government regulations, and farm standards/practices.

Date Completed

Apprentice

Supervisor/Trainer

U5391.9 **Perform nematode control techniques** by: fumigating, cultipacking, and cultivating; calibrating applicator equipment; and, using tractor and accessories, specialized fumigation equipment, discs, and personal protective equipment; so that the nematodes are controlled, in accordance with specified time frames, soil analysis report, reference materials, laboratory recommendations, manufacturer’s recommendations, environmental protocols, government regulations, and farm standards/practices.

Date Completed

Apprentice

Supervisor/Trainer

U5391.10 **Perform soil-borne disease control techniques** by: spraying, fumigating, and cultivating; calibrating applicator equipment; and, using tractor and accessories, discs, sprayer, specialized fumigation equipment, and personal protective equipment; so that the soil borne diseases are eliminated, in accordance with specified time frames, reference materials, manufacturer’s recommendations, and farm standards/practices.

Date Completed

Apprentice

Supervisor/Trainer

U5391.11 **Perform drainage techniques** by identifying low areas, marking out wet sites, and taking corrective actions, so that the soil moisture is maintained and controlled, in accordance with reference materials, manufacturer’s recommendations, and farm standards/practices.

Date Completed

Apprentice

Supervisor/Trainer

U5392.5 **Plant fruit trees** by: using required tools and equipment including tree planters, diggers, or manual planting equipment; following specified procedures; identifying the type or cultivar of trees; checking for disease, damage, and quality; setting out the trees; and, performing the required planting techniques for cultivar and/or rootstocks; so that the fruit trees are planted to affect optimum tree growth and development, in accordance with specified time frames, layout block design, nursery publications, and farm standards/practices.

Date Completed

Apprentice

Supervisor/Trainer

U5392.6 **Plant vines** by: using vine planting tools and equipment; following specified planting procedures; identifying type/variety of vines; checking vines for disease or damage; and, setting out the vines; so that the vines are planted to affect optimum growth and development, in accordance with specified time frames, layout block design, nursery publications, and farm standards/practices.

Date Completed

Apprentice

Supervisor/Trainer

U5392.7 **Plant small fruit plants** by: using small fruit planting tools and transplanter; following specified planting procedures; identifying type and variety of small fruit plants; checking plants for disease or damage; and setting out the plants; so that the small fruits are planted to affect optimum growth and development, in accordance with specified time frames, layout block design, nursery publications, and farm standards/practices.

Date Completed

Apprentice

Supervisor/Trainer

U5392.8 **Perform plant protection procedures** by: checking plants for disease or insect presence; identifying and selecting the correct type and method of pest or disease control; and, completing required records; so that plant damage is avoided or kept to a minimum and plant protection is maintained to affect optimum growth and development, in accordance with specified time frames, nursery publications, government regulations, environmental protocols, and farm standards/practices.

Date Completed

Apprentice

Supervisor/Trainer

U5393.0 SET UPS AND MAINTAINS PLANT TRAINING SUPPORT SYSTEMS

U5393.1 **Read and interpret plant training support systems documentation** including manufacturer’s recommendations, nursery material, and growing reference information, to identify type of support system, installation procedures, required materials and equipment, system operating principles, layout and capacity of system, and other information needed to set up and install plant training support systems.

_____	_____	_____
Date Completed	Apprentice	Supervisor/Trainer

U5393.2 **Lay out block design of plant training support systems** by determining: plant density; location of plants; plant pollinators; plant quality or grading; advanced ordering of materials; orientation of rows; cultivar mix; working spaces; harvesting accessibility; and, drainage requirements; so that the layout design is correctly developed to help the installation of a support system, in accordance with manufacturer’s recommendations, Provincial or Municipal government regulations, and farm standards/practices.

_____	_____	_____
Date Completed	Apprentice	Supervisor/Trainer

U5393.3 **Select training support system installation tools and equipment** including auger, post-driver, water gun, wire installation equipment, planter equipment, and trellis systems, using information from job specifications and manufacturer’s recommendations, so that the installation tools and equipment selected are the correct ones for the application, free from defects, and ready and available to perform the job, in accordance with OHSA and farm standards/practices.

_____	_____	_____
Date Completed	Apprentice	Supervisor/Trainer

U5393.4 **Install plant training support systems** by using required equipment and tools and following specified installation procedures, so that the support system is installed in accordance with predetermined layout block design, and manufacturer’s recommendations, and farm standards/practices.

_____	_____	_____
Date Completed	Apprentice	Supervisor/Trainer

U5393.5 **Maintain plant training support system** by: following procedures; checking plant attachments; making adjustments; replacing or repairing worn, damaged, or defective components including posts, wires, or attachments; and, identifying and reporting system problems or defects; in accordance with manufacturer's recommendations and farm standards/practices.

Date Completed

Apprentice

Supervisor/Trainer

U5394.0 TRAINS AND PRUNES PLANTS

U5394.1 **Prepare pruning and training tools and equipment** by sharpening cutting edges, lubricating moving parts, and checking that safety devices are in place, so that the tools and equipment are prepared and ready for optimum cutting and personal safety, as specified by farm standards/practices and manufacturer's recommendations.

_____ Date Completed _____ Apprentice _____ Supervisor/Trainer

U5394.2 **Plan and prepare for pruning** by determining: the cultivar growth patterns; root stock growth habits; required training system; tree shapes; types and methods of cutting and training; seasonal and environmental condition; and, required tools, equipment, and personnel; so that the pruning process is completed efficiently, effectively, and within required times frames, in accordance with farm standards/practices.

_____ Date Completed _____ Apprentice _____ Supervisor/Trainer

U5394.3 Prune fruit trees by: using required equipment; following specified pruning and removal or disposal procedures; so that the trees are pruned for seasonal growth patterns, cultivar characteristics, effective healing, weak or strong tree growth and rejuvenation, tree shape, bud survival rates, bud set, fruit size and quality, harvestability, and disease or insect removal and control; in accordance with farm standards/practices, reference materials, and government regulations.

_____ Date Completed _____ Apprentice _____ Supervisor/Trainer

U5394.4 **Prune vines** by: using required equipment; following specified vine pruning and removal or disposal procedures; so that the vines are pruned for seasonal growth habits, environmental factors, weak or strong vine growth and rejuvenation, disease removal and control, and to match the vine training support system; in accordance with the layout block design, farm standards/practices, and reference materials.

_____ Date Completed _____ Apprentice _____ Supervisor/Trainer

U5394.5 **Prune small fruit plants** by: using required equipment; following specified pruning and removal or disposal procedures; so that the small fruit plants are pruned for seasonal bearing habits, weak and strong plant growth and rejuvenation, bud survival rates, disease or insect removal and control, and to match plant training support system; in accordance with the layout block design, reference materials, and farm standards/practices.

Date Completed

Apprentice

Supervisor/Trainer

U5394.6 **Monitor pruning** by: checking effects of dormant and summer pruning; checking the balance between vegetative growth and bud set; and the quality, size, and colour of fruit and ease of harvesting; incidents of disease, insects, and spray penetration; making necessary seasonal or environmental adjustments; and, completing required records; in accordance with reference materials and farm standards/practices.

Date Completed

Apprentice

Supervisor/Trainer

U5394.7 **Plan and prepare for the training of plants** by determining the stage of maturity, types and methods of training, and required equipment, tools, and personnel, so that the plant training process is completed effectively and efficiently and within required time frames, as specified in reference materials and farm standards/practices.

Date Completed

Apprentice

Supervisor/Trainer

U5394.8 **Implement plant training procedures** by using limb, cane, and plant positioning aids, and following specified manipulation procedures including: tying, spreading, weighting, wiring, twisting, and clipping, so that the limbs, canes, and plants are correctly shaped and positioned, in accordance with reference materials and farm standards/practices.

Date Completed

Apprentice

Supervisor/Trainer

U5394.9 **Monitor plant training process** by: checking fruit size and colour; checking bud set and balance between vegetative and fruiting growth patterns and checking the incidence of disease, insects, and spray penetration; determining harvest yield; making necessary adjustments; and, completing required records; in accordance with reference materials and farm standards/practices.

Date Completed

Apprentice

Supervisor/Trainer

U5395.0 FERTILIZES PLANTS

U5395.1 **Read and interpret fertilization documentation** including reference materials manufacturer’s recommendations to identify: “major/primary” and “micro/minor” nutrients; soil amendments; plant growth; types and operating principles of fertilizing equipment; types and application methods of soil and foliar fertilizers; timing of nutrient applications; and, any information needed to affect optimum plant nutrition/health.

Date Completed	Apprentice	Supervisor/Trainer

U5395.2 **Take a soil, leaf, or fruitlet sample** by collecting a representative soil, fruit or foliar sample within the specified time frames, so that all fertilizers or soil amendments are applied effectively and safely in accordance with reference materials, laboratory soil testing standards, government regulations, and farm standards/practices.

Date Completed	Apprentice	Supervisor/Trainer

U5395.3 **Plan and prepare for plant fertilization** by: reading soil and leaf analysis reports; selecting appropriate fertilizer; determining application methods and rates; and, identifying timing of application; so that the fertilization process is planned as specified in soil and leaf analysis guidelines, reference materials, manufacturer’s recommendations, and farm standards/practices.

Date Completed	Apprentice	Supervisor/Trainer

U5395.4 **Calibrate fertilizer equipment** by: following required maintenance procedures including oiling and greasing; checking components and parts; installing or adjusting safety shields; testing the performance of the equipment; and, attaching applicator unit to tractor; so that the fertilizer equipment is ready for the application, in accordance with farm standards/practices and manufacturer’s recommendations.

Date Completed	Apprentice	Supervisor/Trainer

U5395.5 **Apply fertilizer** by: using required equipment; following specified procedures; monitoring application rate; adjusting application rate; and, cleaning and preparing spreader equipment; ensuring that fertilizer is applied in accordance with daily environmental conditions and seasonal factors, manufacturer’s recommendations, government regulations, environmental protocols, and farm standards/practices.

Date Completed

Apprentice

Supervisor/Trainer

U5395.6 **Monitor fertilizing process** by: checking that the entire site has been covered; checking growth rate, foliage colour, bud set, soil and tissue nutrient levels, yield, and fruit quality; making necessary seasonal and environmental adjustments; and, completing records or documents; so that the fertilizing process is maintained to affect optimum growth and crop quality, in accordance with reference sheets, manufacturer’s recommendations, government regulations, environmental protocols, and farm standards/practices.

Date Completed

Apprentice

Supervisor/Trainer

U5396.0 PERFORMS CROP PROTECTION PROCEDURES

U5396.1 **Read and interpret crop protection documentation** including reference materials and manufacturer’s recommendations to identify: pest type; insects; diseases; weeds; control options and methods including insecticides, miticides, non-chemical, fungicides, and herbicides; timing of spray applications; spraying application methods; and, any other information needed to perform crop protection procedures.

Date Completed	Apprentice	Supervisor/Trainer
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U5396.2 **Plan and prepare for crop protection procedures** including animal, weed, disease, and insect control methods by identifying: pest complex; stage and number of pests; cultivar susceptibility; type and methods for monitoring; types, rate, and application method of pesticides; timing of spray applications; and, required tools, equipment, and personnel; so that the crop protection procedures are completed efficiently, effectively, and safely in accordance with specified time frames, environmental protocols, government regulations, manufacturer’s recommendations, and farm standards/practices.

Date Completed	Apprentice	Supervisor/Trainer
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U5396.3 **Calibrate crop protection equipment** by: following required maintenance and servicing procedures; testing the performance of the equipment; checking servicing requirements, spraying controls, and operating procedures; performing circle check prior to operating the equipment; checking gauges, dials, nozzles, and belts; mixing chemicals; filling the spraying equipment with prepared chemicals; and, setting controls or gauges; so that the spraying equipment is operated safely, effectively, and efficiently, in accordance with government regulations, manufacturer’s recommendations, reference materials, and farm standards/practices.

Date Completed	Apprentice	Supervisor/Trainer
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U5396.4 **Perform high and/or low volume air-assisted or hydraulic spraying** using required equipment including tractor, specialized spraying equipment, personal protective equipment, and chemical, drenching, and fumigating equipment, so that all pesticides are applied effectively, efficiently, and safely in accordance with specified time frames, reference materials, government regulations, farm standards/practices, and manufacturer’s recommendations.

Date Completed

Apprentice

Supervisor/Trainer

U5396.5 **Monitor crop protection process** by: checking that entire site has been covered; checking plants for disease, insect, or animal damage; checking that plants are free of weed competition; making necessary seasonal and environmental adjustments; and, completing required records/documents; so that plant damage is avoided or kept to a minimum and the crop protection process is maintained to affect optimum pest control, in accordance with reference sheets, manufacturer’s recommendations, government regulations, environmental protocols, and farm standards/practices.

Date Completed

Apprentice

Supervisor/Trainer

U5397.0 PERFORMS GROUND COVERING PRACTICES

U5397.1 **Read and interpret ground covering reference materials** to identify: type of ground cover; ground covering techniques; timing; monitoring procedures; required tools, equipment, and personnel; and, any other information needed to plan the process for ground covering.

Date Completed

Apprentice

Supervisor/Trainer

U5397.2 **Plan and prepare for the ground cover process** by determining: seeding rates; grass variety or clover selection; timing of application; fertilizer requirements; types and methods of cover application; and, required tools, equipment, and personnel; so that the ground cover process is completed efficiently, effectively, and safely in accordance with specified time frames, supplier recommendations, and farm standards/practices.

Date Completed

Apprentice

Supervisor/Trainer

U5397.3 **Implement the ground covering process** by tilling, drilling, broadcasting, seeding, and fertilizing, using tractor and seeders, so that the ground site is covered efficiently, effectively, and safely, in accordance with specified time frames, government regulations, manufacturer’s recommendations, reference materials, and farm standards/practices.

Date Completed

Apprentice

Supervisor/Trainer

U5397.4 **Maintain the ground cover** by fertilizing, mowing, irrigating, and spraying with herbicides, using tractor, mowers, herbicide sprayer, fertilizer equipment, overhead or sprinkler irrigation equipment, and wearing personal protective equipment, so that ground cover is maintained for optimum growth and protection, in accordance with reference materials, environmental protocols, and farm standards/practices.

Date Completed

Apprentice

Supervisor/Trainer

U5398.0 PERFORMS CROP AND PLANT DENSITY/THINNING PRACTICES

U5398.1 **Read and interpret density/thinning documentation** including reference materials, previous farm records, and manufacturer’s recommendations to identify: mechanical and chemical density/thinning procedures; field layout specifications; timing of application; crop density/thinning techniques; required tools, density/thinning equipment, personal protective equipment, maintenance requirements, and monitoring procedures; and, any other information needed to plan the density/thinning process.

Date Completed

Apprentice

Supervisor/Trainer

U5398.2 **Plan and prepare for crop density/thinning** by determining: cultivar; type and methods for density/thinning; seasonal and daily weather conditions; and, required tools and equipment; so that the crop density/thinning process is completed efficiently, effectively, and within required time frames, as specified in farm standards/practices.

Date Completed

Apprentice

Supervisor/Trainer

U5398.3 **Perform chemical density/thinning of fruit** by: using tractor, sprayer, sizing gauges, knives, weather equipment, and personal protective equipment; following specified density/thinning procedures; counting, sizing, and cutting fruitlets; mixing chemicals; and, spraying fruit; so that the crop is thinned for seasonal growth patterns, fruit set characteristics, fruit size and quality, harvestability, and disease or insect removal and control, in accordance with crop development stage, reference materials, manufacturer’s recommendations, government regulations, environmental protocols, and farm standards/practices.

Date Completed

Apprentice

Supervisor/Trainer

U5399.4 **Perform grafting and/or budding techniques** including T-budding, chip budding, and branch or top grafting by: following specified procedures; cutting; cleaning; inserting buds/scion wood into understock; and, using grafting and budding equipment, hand tools, tying utensils, and waxes; so that the selected cultivar/root stocks are prepared and ready to affect optimum growth, in accordance with the stage of crop development, layout block design, nursery reference materials, and farm standards/practices.

Date Completed

Apprentice

Supervisor/Trainer

U5399.5 **Perform planting procedures** including free stand planting, support systems planting, and solid/raised bed planting, by digging, augering, and trenching using shovels, stakes, support materials, power augers, and planting implement, so that the selected cultivar/root stocks are planted, in accordance with the stage of crop development, layout block design, nursery publications, and farm standards/practices.

Date Completed

Apprentice

Supervisor/Trainer

U5399.6 **Cut and layer grape vines** by following specified procedures using knives, axes, and plant clippers, so that the selected cultivar/grape vines are prepared and ready for optimum growth, in accordance with the stage of crop development, nursery publications, and farm standards/practices.

Date Completed

Apprentice

Supervisor/Trainer

U5399.7 **Monitor propagation process** by: checking the number of plants, size and shape of the plants, supported training sites, bud and graft unions, and the alignment of grafts; making necessary adjustments; sucker removal; removing weak/damaged grafts; and, pruning; so that the propagation process is completed and maintained to affect optimum growth, in accordance with reference sheets, nursery publications, layout block design and farm standards/practices.

Date Completed

Apprentice

Supervisor/Trainer

U5400.0 OPERATES & MAINTAINS FARM MECHANICAL AND POWER EQUIPMENT AND SYSTEMS

U5400.1 **Operate and maintain farm tractors and accessories** including trail-type and three-point hitch equipment by: following required procedures; oiling and greasing moving parts; filling the fuel tank with correct fuel; adjusting belts and chains; checking controls and switches; changing tires; and, identifying and reporting worn, damaged, or defective parts, components, or systems; so that the tractor is operating safely and efficiently and no damage or injury is caused to the tractor or the operator in accordance with government regulations and farm standards/practices.

Date Completed

Apprentice

Supervisor/Trainer

U5400.2 **Operate and maintain farm truck and jitney** by: following required procedures; oiling and greasing moving parts; filling the fuel tank with correct fuel; adjusting belts and chains; checking all systems; checking controls and switches; and, identifying and reporting worn, damaged, or defective parts, components, or systems; so that the truck and jitney are operated safely and efficiently and no damage or injury is caused to the truck, jitney, or the operator in accordance with government regulations, manufacturer's recommendations, and farm standards/practices.

Date Completed

Apprentice

Supervisor/Trainer

U5400.3 **Operate and maintain harvesting equipment** by: following required procedures; oiling and greasing moving parts; checking power source; cleaning and adjusting belts and pulleys; checking all moving parts; checking controls and switches; and, identifying and reporting worn, damaged, or defective parts, components, or systems; so that the harvesting equipment is operated safely and efficiently, and no damage or injury is caused to the equipment or the operator, in accordance with government regulations and farm standards/practices.

Date Completed

Apprentice

Supervisor/Trainer

U5400.4 **Operate chainsaws and power pruners** by: following required procedures; oiling and greasing moving parts; checking the power source; checking that power or fuel is available; cleaning and sharpening saw teeth; replacing spark plugs and air filters; checking all moving parts; checking controls and switches; and, identifying and reporting worn, defective, or damaged parts and components; so that the chain saw and power pruners are operated efficiently, safely, and no damage or injury is caused to the equipment or operator, in accordance with manufacturer’s specifications, government regulations, and farm standards/practices.

Date Completed

Apprentice

Supervisor/Trainer

U5400.5 **Operate and maintain irrigation system** by: following required procedures; checking for leaks; repairing leaks; starting up the pump; checking for air blocks; cleaning, scheduling, and manually setting and adjusting the system; performing winterization of the system; performing filter maintenance; and, identifying and reporting worn, damaged, or defective parts; so that the water is flowing consistently and efficiently as specified in manufacturer’s specifications and farm standards/practices.

Date Completed

Apprentice

Supervisor/Trainer

U5400.6 **Operate and maintain packing line system and components** by: following required procedures; safely entering into atmospherically controlled area; identifying and locating power supply, main switch, and fuse/breaker panels; replacing light bulbs; cleaning dirt and dust from components/parts; replacing and repairing pulleys, belts, rollers, brushes, and cups; keeping all electrical equipment free from moisture; turning off lights and motors when not in use; identifying and reporting defective or burnt out motors; and, preparing inventory requests for parts and equipment, so that the packing line and components operate effectively, efficiently, and safely in accordance with manufacturer’s specifications and farm standards/practices.

U5400.7 **Operate and maintain cold storage and controlled atmosphere facilities** by: following required procedures; identifying and locating power supply, main switch, and fuse/breaker panels; keeping electrical equipment free from moisture; cleaning dirt and dust from electrical equipment; checking temperature, gas concentration, and compressor gauges; identifying and reporting defective or damaged parts and equipment; and, making necessary adjustments; so that the produce storage temperatures and environment are correctly maintained in accordance with required sanitation procedures, manufacturer's recommendations, government regulations, and farm standards/practices.

Date Completed

Apprentice

Supervisor/Trainer

U5400.8 **Operate and maintain tile and plastic drainage systems** by: checking flow rate, leaks, line breakage, obstructions in the outlets, and free standing water in fields or low spots; replacing or repairing damaged tiles or parts; and, setting or adjusting water pumps; so that the water/drainage system flows consistently and efficiently as specified in manufacturer's recommendations, government regulations, environmental protocols, and farm standards/practices.

Date Completed

Apprentice

Supervisor/Trainer

U5400.9 **Operate air compressors and systems** by: following required procedures; inspecting the air compression lines for leaks and pressure levels; checking pneumatic pruners for pressure and lubrication; checking power source, oil levels, belts, and lubrication levels; oiling and lubricating moving parts; checking controls and switches; cleaning and checking all moving parts; and, identifying and reporting worn, defective, or damaged parts and components; so that the air compressor and systems are operational, functioning, and ready for use, in accordance with government regulations, manufacturer's recommendations and farm standards/practices.

Date Completed

Apprentice

Supervisor/Trainer

U5401.4 **Perform post-harvest procedures** by: using graders and conveyor systems; following specified procedures; determining type and quantity of containers; maintaining cleanliness on the packing line; mechanically or manually packing fruit in required containers; placing fruit into storage; and, monitoring stored fruit; so that the fruit is packed and stored, in accordance with commodity marketing specifications, government regulations, manufacturer’s recommendations, and farm standards/ practices.

Date Completed

Apprentice

Supervisor/Trainer

U5401.5 **Monitor harvesting process** by: checking fruit for insect or disease damage and mechanical injury; identifying and recording cull-outs; recording harvest quantity and quality; testing random samples for pressure, Brix levels, colour, and taste; and, completing required records and documents; so that the harvesting patterns and results are identified and recorded for future use in accordance with farm standards/practices.

Date Completed

Apprentice

Supervisor/Trainer

C. LEARNING OUTCOMES

16 weeks (480 hours) of in-school training.

1. Protect Self and Others

The apprenticeship is able to maintain a safe farming environment for self and others that complies with current government regulations:

- identify workplace health and safety hazards, corrective action requirements and reporting procedures as specified by current government legislation.
- wear, adjust, and maintain required personal protective equipment
- maintain a clean and organized lab environment
- communicate emergency response procedures
- maintain a clean and organized classroom environment
- work safely around people
- inspect equipment for defects and safe working condition
- identify the procedures to report information about injuries
- describe the process of documenting safety or injury incidences
- state the procedures to follow if injuries occur
- identify the steps in lock out and tagging mechanical equipment
- handle, store, and control hazardous materials utilizing the approved and specified equipment
- describe the procedures for operating and inspecting hoisting and lifting equipment
- handle, store, and control pesticides utilizing the approved and specified equipment
- describe the procedures for inspecting and operating power activated tools and equipment
- describe the procedures and methods for working around ponds and irrigation system
- describe the procedures the operation of farm vehicles in accordance with legal and government regulations

C. Learning Outcomes continued:

2. Land preparation

The apprentice is able to identify, describe, and plan for land preparation, in accordance with reference materials and government regulations

- review and describe all safe work habits and procedures required when performing land preparation.
- describe the climatic and soil requirements for land preparation.
- identify, describe, and complete a layout block design.
- describe the procedures for taking a soil sample.
- describe and identify techniques and procedures for tilling uncultivated sod.
- describe existing orchard or vineyard soil tilling techniques.
- describe previously cropped filed tilling techniques.
- describe fertilizing and preparation techniques of new soil for planting beds.
- identify and describe weed control techniques
- identify and describe nematode control techniques.
- identify and describe soil-borne disease control techniques.
- identify and describe drainage techniques.

3. Transplanting

The apprentice is able to identify and describe fruit transplanting procedures in accordance with layout block design and transplanting reference materials:

- review and discuss all safe work habits and procedures required when performing transplanting procedures.
- identify and describe transplanting procedures.
- describe the procedures for preparing plants for transplanting.
- design a staking/trellising procedure.
- identify and describe plant handling procedures for transplanting.
- identify and describe planting procedures of fruit trees.
- identify and describe vine planting procedures.
- identify and describe small fruit planting procedures.
- identify and describe plant protection procedures.
- identify and describe type and methods of irrigation.
- identify and describe fertilizing techniques.
- identify and describe fruit pruning and training procedures.
- identify and describe monitoring and recording procedures.

C. Learning Outcomes continued:

4. Plant Training Support Systems

The apprentice is able to identify and describe plant training support systems:

- review and describe all safe work habits and procedures required when performing plant training support.
- identify and describe plant training support procedures and methods.
- identify, describe, and determine the layout block design of support systems.
- identify and describe training support installation tools and equipment.
- identify and describe installation of plant training support systems.
- identify and describe the maintenance of plant training support systems.

5. Plant Training and Pruning

The apprentice is able to identify, describe, and determine plant training and pruning procedures for fruit growing:

- review and discuss all safe working habits and procedures required when performing plant training and pruning.
- identify, describe, and demonstrate the maintenance of pruning and training tools.
- develop a plan for the preparation of pruning of rootstock.
- identify and describe fruit tree pruning procedures.
- identify and describe vine pruning procedures.
- identify and describe small fruit plant pruning procedures.
- identify and describe methods for monitoring and documenting fruit pruning procedures.
- identify and describe methods to develop a plan and prepare for the training of plants.
- identify and describe methods of plant training.
- identify and describe methods for monitoring and documenting plant training procedures.

C. Learning Outcomes continued:

6. Plant Fertilization

The apprentice is able to identify and describe fertilizing procedures fruit growing:

- review and discuss all safe work habits and procedures required when performing fertilizing procedures.
- identify and describe plant fertilization procedures and methods.
- identify, describe, and demonstrate procedures for taking a soil, leaf, or fruitlet sample.
- determine and develop a plan for preparation for the fertilization of plants.
- identify and describe methods for calibrating fertilizer equipment.
- identify and describe application procedures for the fertilization process.
- identify and describe methods for monitoring and documenting the fertilization process.

7. Crop Protection

The apprentice is able to identify, describe, and determine crop protection procedures for fruit growing in accordance with reference materials:

- review and discuss all safe working habits and procedures required when performing crop protection.
- identify, describe, and determine crop protection procedures for fruit growing..
- determine and develop a plan for the preparation for crop protection procedures.
- identify and describe methods for calibrating crop protection equipment.
- identify and describe spraying techniques.
- identify and describe methods for monitoring and documenting the crop protection process.

8. Ground Covers

The apprentice is able to identify and describe ground cover techniques in accordance with reference materials:

- review and discuss all safe work habits and procedures required when performing ground cover techniques.
- identify, describe, and determine ground cover techniques.
- identify, describe, and determine ground cover establishment procedures.
- identify and describe ground cover implementation procedures.
- identify and describe ground cover maintenance procedures.

C. Learning Outcomes continued:

9. Crop and Plant Density/Thinning

The apprentice is able to identify and describe crop and plant thinning procedures in accordance with reference materials and manufacturer's recommendations:

- review and discuss all safe work habits and procedures required when performing crop and plant density/thinning procedures.
- identify and describe crop and plant thinning techniques and procedures.
- identify, describe, and determine thinning techniques and procedures.
- develop a plan to prepare for the thinning of plants.
- identify and describe chemical thinning process.
- identify, describe, and perform maintenance of thinning tools and equipment.
- identify and describe the mechanical thinning process.
- monitor and document thinning procedures.

10. Propagation Procedures

The apprentice is able to identify, describe, and determine appropriate propagation techniques and procedures in accordance with reference materials, government regulations, and nursery recommendations:

- review and discuss all safe work habits and procedures required when performing plant propagation.
- identify, describe, and determine appropriate propagation techniques and procedures.
- develop a plan to prepare for the propagation of plant materials.
- develop a plan to prepare for field site grafting.
- identify, describe, and determine grafting and/or budding techniques.
- identify and describe planting procedures.
- identify and describe cutting and layering techniques.
- monitor and document the propagation process.

C. Learning Outcomes continued:

11. Farm Mechanical & Power Equipment

The apprentice is able to describe the operating principles and maintenance procedures for mechanical and power equipment and systems in accordance with government regulations and reference materials:

- review and discuss all safe work habits and procedures when operating and maintaining mechanical and power equipment and systems.
- describe the operating principles and maintenance procedures for mechanical and power equipment and systems.
- identify and describe the basic operating principles and basic maintenance procedures for farm trucks and jitney.
- identify and describe the basic operating principles and basic maintenance procedures for operating and maintaining harvesting equipment.
- identify and describe the operating principles and basic maintenance procedures for chainsaws and power pruners.
- identify and describe the operating principles and basic maintenance procedures of irrigation systems.
- identify and describe the operating principles and basic maintenance procedures of packing lines, facilities and system components.
- identify and describe the operating principles and basic maintenance procedures of cold storage and controlled atmosphere facilities.
- identify and describe the operating principles and basic maintenance procedures of tile and plastic drainage systems.
- identify and describe the operating principles and basic maintenance procedures for air compressors and systems.

12. Harvesting and Grading Techniques

The apprentice is able to identify, describe, and determine harvesting and grading techniques in accordance with government standards and market grading standards:

- review and discuss all safe work habits and procedures required when performing harvesting and grading.
- identify, describe, and determine procedures for harvesting and grading of fruit.
- identify, describe, and plan for the preparation of the harvesting of fruit crops.
- identify and describe harvesting, field, grading, and storing of fruit.
- identify and describe post-harvest procedures.
- identify and describe monitoring and documentation process.

APPRENTICE RECORD

APPRENTICE NAME (Print):

SPONSOR/EMPLOYER INFORMATION	
Training Agreement #	
Name	
Address	
Telephone	
E-mail Address	

SUMMARY OF TRAINING	
Employment Start Date	
Employment End Date	
Total hours of training & instruction between dates of employment.	

Date Completed

Apprentice

Supervisor/Trainer

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Date Completed

Apprentice

Supervisor/Trainer

You will be required to disclose this signed form to the Ministry of Training, Colleges and Universities in order to complete your program. The Ministry will use your personal information to administer and finance Ontario's apprenticeship training system. For further information please see the notice/declaration for collection of personal information that is referenced in the table of contents of this training standard.