


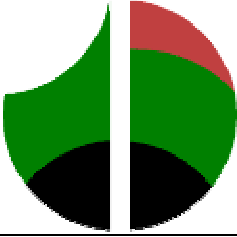






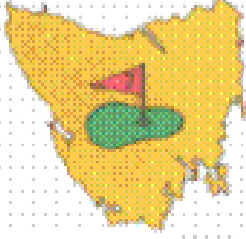


**Draft National Turf Industry
Delivery and Assessment Guide**

Certificate II - Horticulture

**Final
Adopted July 2006**

National Turf Industry Delivery and Assessment Guide

The National Turf Industry Delivery and Assessment Guide have been endorsed by the following organisations:

	<p style="text-align: center;">Australian Golf Union</p>		<p style="text-align: center;">Australian Golf Course Superintendents Association</p>
	<p style="text-align: center;">Golf Course Superintendents Association of WA</p>		<p style="text-align: center;">Cricket Victoria</p>
	<p style="text-align: center;">NSW Golf Course Superintendents Association</p>		<p style="text-align: center;">SA Golf Course Superintendents Association</p>
	<p style="text-align: center;">QLD Golf Course Superintendents Association</p>		<p style="text-align: center;">VIC Golf Course Superintendents Association</p>
	<p style="text-align: center;">TAS Golf Course Superintendents Association</p>		<p style="text-align: center;">Australian Bowling Greenkeepers Federation</p>
	<p style="text-align: center;">Turfgrass Association of Australia – SA, VIC, NSW, ACT, WA</p>		

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National Turf Industry Delivery and Assessment Guide

Introduction:

In 2003, the Australian Golf Course Superintendents Association (AGCSA), in conjunction with the wider turfgrass industry formed the National Turfgrass Education Working Group to review the current educational pathway and establish an industry supported standard throughout Australia. The Committee's role is to ensure that all education is delivered in a uniform manner across Australia.

The National Turfgrass Education Committee has representatives encompassing all sectors of the industry including Registered Training Organisations and practicing turf managers.

The National Turf Industry Delivery Assessment Guides have been compiled by the National Turf Education Working Group and are to be used as additional support to the National Training Package. The Working Group recommends that the Certificate III – Horticulture Delivery and Assessment Guide are used in conjunction with the Certificate II – Horticulture Delivery and Assessment Guide.

Certificate II in Horticulture.

RTC2307A Operate machinery and equipment

This module enables you to conduct the maintenance and operation of machinery and equipment. This module is designed for operators who will work under supervision in the turf management or other relevant industries. By completing this module, the student will be able to- prepare machinery and equipment for use, operate machinery and equipment, check and complete machinery and equipment

Activities & Assessment:

Students are to be competent in operation of 5 pedestrian turf machines. (eg line trimmer, lawn edger, rotary mower, cylinder mower, centrifugal pump, and blower.

Students are to be competent in operation of 5 pieces of turf equipment (e.g. hand held lawn edger, bowling green ditch leveller, dew removal equipment etc.)

- Machinery and equipment is selected appropriate to job requirements and confirmed against a work plan.
- Routine pre-operational checks of machinery and equipment are carried out to manufacturers specifications.
- Equipment is securely attached and calibrated for operation to manufacturers specifications.
- Faulty machinery and equipment is identified, safety tagged, and reported to supervisor.
- OHS hazards in the workplace are identified, risk assessed and reported according to enterprise requirements.
- Machinery and equipment is operated in a safe and controlled manner, and monitored for performance and efficiency.
- Risks to self, others and the environment are recognised and minimized according to enterprise and OHS requirements.
- Suitable personal protective clothing and equipment is selected, used, maintained and stored according to OHS requirements.
- Environmental implications associated with machinery operation are identified, assessed and reported to the supervisor
- Machinery and equipment shut-down procedures are carried out to manufacturers specifications and enterprise requirements.
- Machinery and equipment operational records are maintained.
- Machinery and equipment damage, malfunctions or irregular performance are recorded and/or reported.
- Machinery and equipment is cleaned, secured and stored according to manufacturers specifications.

Assessment by practical examination

Key Terms: Machinery and equipment, safety procedures, performance and efficiency of machinery and equipment may be planning and organising, coordinated work schedules, calculation and measurement of load, consumption and oil and fuel requirements, problem-solving skills faults or malfunctions, work plan requirements, communicate, measure and record

Resources:

ANTA tool box access via west one

National Turf Industry Delivery and Assessment Guide

Certificate II in Horticulture. RTC2401A Treat weeds

This module enables you to conduct the process of treating weeds using cultural, biological and chemical methods. This module is designed for operators who will work under supervision in the turf management or other relevant industries. By completing this module, the student will be able to prepare to treat weeds, treat weeds, carry out post treatment observations and operations.

Activities & Assessment:

Identify a minimum 30 Weeds to common name.

- Weeds which impact on gardens and turf, and natural areas are recognised by common name.
- Weed occurrence are recorded and reported to the supervisor.
- Treatment methods are selected in consultation with the supervisor.
- Equipment is selected and prepared for use according to manufacturers specifications.
- OHS hazards are identified, risks assessed and reported to the supervisor.
- Suitable personal protective equipment (PPE) is selected, used, maintained and stored.
- Treatments are prepared according to supervisor's instructions and manufacturers guidelines.
- Treatments are applied in such a way that non-target damage is minimised.
- Treatments are applied according to OHS and regulatory requirements.
- Equipment is shut down and cleaned with full consideration of environmental impacts and OHS requirements.
- Treatment waste is disposed of causing minimal environmental damage.
- Records are maintained to turf industry best practice.

Assessment by written examination and written or oral identification test

Key Terms: Area covered by the weed, off target damage, hand weeding, herbicides, biological agents, cultivation, slashing, cutting, burning, ripping, backpack sprayers, spray tanks, fertiliser spreaders, tractor drawn cultivation equipment, weedicide applicators, handsaws, chainsaws and brushcutters. OHS hazards, hazardous chemicals, environment, personal protective equipment safety procedures involved in chemical handling. Weather conditions, regulatory requirements, disposal of chemicals, record keeping, transport of chemicals.

Resources:

CLM toolbox

Books:

Internet

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Certificate II in Horticulture

RTC2404A Treat plant pests, diseases and disorders

This module enables you to conduct the process of treating plant pests, diseases, and disorders using cultural, biological and chemical methods. This module is designed for operators who will work under supervision in the turf management or other relevant industries. By completing this module, the student will be able to prepare to treat plant pests, diseases and disorders, apply treatments to plant pests, diseases and disorders, carry out post treatment operations

Activities & Assessment:

Identify a minimum 5 pests, 5 disorders, 5 diseases to common name.

- Plant pests, diseases and disorders which impact on gardens and turf, and natural areas are recognised by common name.
- Details of the plant pest, disease and disorder occurrence are recorded and reported to the supervisor.
- Treatment methods are selected in consultation with the supervisor.
- Equipment is selected and prepared for use according to manufacturers specifications.
- OHS hazards are identified, risks assessed and reported to the supervisor.
- Suitable personal protective equipment (PPE) is selected, used, maintained and stored.
- Treatments are prepared according to supervisor's instructions and manufacturers guidelines.
- Non-target damage is minimised.
- Treatments are applied according to OHS and regulatory requirements.
- Equipment is shut down and cleaned with full consideration of environmental impacts.
- Treatment waste is disposed of causing minimal environmental damage.
- Records are maintained according to enterprise guidelines.

Assessed by identification test, written or oral examination and spray simulation.

Key Terms: Plant pests, diseases, chewing and sucking mouth parts nematode, fungi, viruses, bacteria, disorders include toxic soil, soil air and water abnormalities, nutrient deficiencies, extreme environmental conditions, cultural control, foliar nutrients, insecticides, fungicides, release of biological agents, pheromone traps, baits, hormones, backpack sprayers, spray tanks, fertiliser spreaders, OHS hazards, hazardous chemicals, personal protective equipment, identifying hazards, assessing and reporting risks, cleaning, maintaining and storing tools and equipment,

Resources:

Info pest
West one tool box
Plantfile (frank)
Control pest units refer

Books:

Internet

Certificate II in Horticulture.

RTC2701A Follow OH&S procedures

This module is designed to provide learners with the skills and knowledge required to follow Occupational Health and Safety (OHS) policies and procedures. It covers the need to comply with workplace procedures in hazard identification and risk control, observe safe practices during work operations, and participate in arrangements for maintaining health and safety of all people in the workplace. Requires knowledge of employee and employer responsibilities under the OHS Act, enterprise procedures relating to hazards, fires, emergencies, accidents and risk control, and OHS signs and symbols relevant to area of work.

It is recommended that this module be delivered by a registered training organisation.

Activities & Assessment:

- Recognise hazards in the workplace and report to supervisor.
- Assess risks associated with identified hazards.
- Follow accurately workplace procedures and work instructions for controlling risks.
- Follow workplace procedures for dealing with accidents, fire and emergencies, as necessary, within the scope of responsibilities and competencies.
- Recognise risks to fellow workers, other people and animals and take action to eliminate or reduce them.
- Recognise and carry out employee responsibilities prescribed in OHS legislation.
- Undertake safety training as directed.
- Identify work for which protective clothing or equipment is required, and use, maintain and store personal protection equipment in accordance with industry best practice.
- Undertake basic safety checks on all machinery and equipment before operation.
- Identify hazards associated with handling of hazardous substances, notify appropriate persons and risk assessment.
- Identify noise hazards, notify appropriate persons, and risk assess in accordance with OHS requirements.
- Assess manual handling job risks prior to activity and carry out work according to currently recommended safe practice.
- Access OH&S information as required.
- Contribute to on going monitoring and reporting on all aspects of workplace safety.
- Raise OHS issues with designated personnel in accordance with enterprise procedures and relevant OHS legislation.
- Contribute to participative arrangements in the workplace within organisational procedures and scope of responsibilities and competencies.
- Contribute towards the development of effective solutions to control the level of risk associated.

Assessment by Workplace Safety Audit, Workplace Risk Assessment and Safe Work Method Statement on two pieces of equipment.

Key Terms: noise, chemicals, gases, manual handling, plants, solar radiation, electricity, overhead hazards, confined spaces, tripping hazards, water bodies, firearms, explosives, damaged or broken structures, damaged or worn equipment, items blocking exits, poor surfaces, and spillages and breakages. Employee responsibilities in OHS legislation. Drugs & alcohol relevant OH&S training

Resource:

National Turf Industry Delivery and Assessment Guide

Certificate II in Horticulture.

RTC2702A Observe environmental work practices

This module enables the process of observing and contributing to positive environmental work practices. This module is designed for operators who will work under supervision in the turf management or other relevant industries. By completing this module, you will be able to follow environmental workplace practices, contribute to improved environmental work practices, recognise and report on a potential environmental threat and maintain environmental records.

Activities & Assessment:

- Workplace practices and work instructions relating to potential environmental impacts are recognised and followed, and clarification is sought where necessary.
- Changes to work practices and procedures are responded to positively and promptly in accordance with industry best practice.
- Relevant legislation, codes and national standards that impact on workplace environmental practices are recognised and followed.
- Suggestions are made to designated personnel for improvements to workplace practices where possible information is gathered and improvements are suggested to support the development of improved workplace approaches to environmental practices.
- Environmental issues and their relationship to workplace practices are discussed in the workplace with colleagues and designated personnel.
- Contributions to the review of environmental practices and policies are made within limits of responsibility. Signs or symptoms of the potential environmental threat are recognised.
- Information about or observations of a potential environmental threat are reported to supervisors and/or appropriate authorities.
- Location and extent of the potential environmental threat is accurately recorded.
- Reports on the potential environmental threat are completed according to industry best practice.
- Environmental records are accurately prepared as required according to industry best practice.
- Environmental records are stored securely in a form accessible for reporting purposes.

Assessment by workplace environmental audit and written or oral test

Key Terms: Environmental hazards and threats, communicate accurately with supervisors and workplace colleagues, keep simple records. Environmental legislation, policies and workplace/industry practices, environmental performance, environmental issues, water catchments, ecosystems, habitat, efficient use of resources, sustainability and waste minimisation. Environmental impacts, hazards and risks environmental workplace procedures and work instructions environmental hazard and risk identification, environmental performance hazard and incident recording and reporting procedures, environmental data.

Resources:

AGCSA
Environmental Video

EPA VARIOUS STATES

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RTC2704A Provide basic first aid

This competency covers the process of providing essential first aid in responding to an emergency using basic life support measures. The first aider is not expected to deal with complex casualties or incidents, but to provide an initial response where first aid is required. The first aider will generally be working under supervision. It requires the ability to respond positively to emergencies in line with practiced actions and demonstrate basic first aid casualty management principles.

Activities & Assessment:

The completion of a recognised first aid certificate equivalent or higher than –

- St John's Basic Life Support (Level 1)
- Australian Red Cross Essential First Aid

Key Terms: Preserve life, pulse rates, bleeding, shock, burns, fits, choking, heart attack, fractures, poisoning, drowning, lack of oxygen, fire, gas, fumes, electrical situations, snakebite, poisoning, respiratory arrest, electrocution, vital signs

Resources:

Current first aid course materials.

First 5 minutes (videorecording) 2001, Wiseowl, North Carlton, Vic.
Injury & illness : emergency response part 1 & part 2 (videorecording) 2001, Vocam Worldwide Pub., East Melbourne, Vic.

Books:

Lippmann, John & Natoli, David 2000, *First aid and emergency care : a practical guide for first aid at home, the workplace and in the field*, J. L. Publications, Carnegie, Vic.

St John Ambulance Australia 2000, *Occupational first aid*, St. John Ambulance Australia, Forrest, A.C.T.

St John Ambulance Australia 2003, *Australian first aid : an authorized manual of St John Ambulance Australia*, St John Ambulance Australia, Canberra, A.C.T.

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RTC2705A Work effectively in industry

This competency standard covers the process of working effectively on an individual basis and with others. It requires the ability to obtain information about the industry, observe employment requirements, and accept responsibility for quality of own work, maintain safety of self and others, participate in workplace teams, and follow work schedules. This requires knowledge of industry/workplace awards and conditions, employer expectations, relevant legislation and Codes of Practice, OHS policies and procedures, workplace policies and procedures, emergency procedures, organisational structure, and workplace communication channels.

This unit is closely aligned to RTC2801A “Participate in workplace communications”.
Consider co-assessment with this unit of competency.

Activities & Assessment:

- 1. Obtain information about the industry:** Sources of information about the Turf Management industry are found, including information on OH&S, awards, employment terms and conditions, career pathways/options and codes of practice. Assessment by assignment.
- 2. Observe employment requirements and accept responsibility for quality of own work:** Employers expectations are met including, working routines, dress code, punctuality, code of conduct, workplace cleanliness and adherence to policies and procedures. Industry developments are used in the workplace to improve productivity and working conditions. Problems within the work environment are recognised and appropriate measures taken. Assessment by workplace supervisor
- 3. Plan and undertake own work:** Work instructions are understood and the work-load prioritised according to the given time frame. Work requirements, tools, materials, machinery, manpower are identified and any need for assistance is communicated clearly to the appropriate person. Assessment by workplace supervisor
- 4. Promote workplace co-operation and contribute to a productive work environment:** Relationships with other employees are courteous and productive. This includes the passing on of information/skills and an appreciation of the cultures and backgrounds of others. Where conflict occurs it is recognised and where possible resolved with or without the aid of the supervisor. Assessment by workplace supervisor

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Key Terms: work schedules, workplace co-operation, accept responsibility, employment requirements, manage own work, communication channels, organisational structure, emergency procedures, workplace policies and procedures, OHS policies, codes of practice, employer's expectations, industry/workplace awards and conditions, unions, industry associations, industry journals, daily routines, periodic routines and ad hoc activities, time and weather contingencies, workplace agreements, workplace relations, workers compensation, consumer protection and trade practices, duty of care, building regulations, hygiene, equal employment opportunity (EEO), and anti-discrimination, employment contracts, etiquette, prioritised, punctuality, employment terms and conditions

Resources:

Books:

Adair, John & Allen, Melanie 2003, *The concise time management and personal development*, Thorogood, London.

Bos, Nick et al. (ed.) 2003, *Workplace health and safety handbook*, Safe Work College, [South Brisbane, Qld.].

Coomb, Bob (ed.) 1995, *Horticulture Australia : the complete reference of the Australian horticultural industry*, Morescope Publishing, Hawthorn East, Vic.

DeVito, Joseph A 2004, *The interpersonal communication book*, Pearson Education, Boston, MA.

Dicker, Laurie 2001, *Making conflict resolution happen : a simple and effective guide to dealing with conflict at work*, Business + Publishing, Warriewood, N.S.W.

Fire safety for industry (videorecording), 2004, Vocam, East Melbourne, Vic.

Kay, Frances, 2003, *Kickstart your time management*, Capstone/Wiley, Hoboken, NJ.

Sultmann, W F & Burton, T 2003, *People skills : guiding you to effective interpersonal behaviour*, Australian Academic Press, Bowen Hills, Qld.

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RTC2801A Participate in workplace communications

This competency standard covers the process of effectively participating in workplace communications. It requires the ability to follow simple spoken messages, perform routine workplace duties, follow simple written notices, obtain and provide information in response to workplace requirements, complete relevant work related documents, and participate in workplace meetings and discussions.

**This unit is closely aligned to RTC2705A “Work effectively in industry”.
Consider co-assessment with this unit of competency.**

Activities & Assessment:

- 1. Follow routine spoken messages:** workplace spoken communication is understood and if not, clarification is sought until the communication is understood.
Assessment by workplace supervisor
- 2. Perform workplace duties following routine written notices:** workplace written communication is understood and if not, clarification is sought until the communication is understood.
Assessment by workplace supervisor
- 3. Obtain and provide information in response to workplace requirements:** the communication structure within the work place is understood and used appropriately. The communication structure is used to gain essential information. Both written and oral communication is delivered in an accurate, legible and courteous and concise manner.
Assessment by workplace supervisor
- 4. Complete relevant work related documents:** forms related to employment and work records are completed accurately. Written and mathematical errors in record keeping are identified and rectified.
Assessment by workplace supervisor
- 5. Participate in workplace meetings and discussions:** attendance at workplace meetings occurs on time and personal inputs are clear, constructive and relevant to discussion point. Input from others is listened too and their opinion respected. Meeting protocols are understood and adhered to.
Assessment by workplace supervisor

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Key Terms: computers, telephones, radios, team, workplace meetings and discussions, effective communication, face to face, telephone, written means, computers, e-mail, facsimile, 2-way radio, mobile phone, industry forums, paging systems, answering machines, memos, instructions, forms, non-verbal, gestures, signals, signs, diagrams, discretion, confidentiality, level of supervision, work rosters, instructions, labels, symbols, signs

Resources:

Books:

Blamires, Harry 2000, *The Penguin guide to plain English : express yourself clearly and effectively*, Penguin, London.

DeVito, Joseph A 2004, *The interpersonal communication book*, Pearson Education, Boston, MA.

Hayes, John 2002, *Interpersonal skills at work*, Routledge, New York.

Le Rossignol, Karen 1999, *Communication skills for the workplace*, Eastern House, Croydon, Vic.

Leigh, Judith 2002, *Organizing and participating in meetings*, Oxford University Press, New York.

Listening (videorecording) 199?, Ash-Quarry Productions, South Yarra, Vic.

Mattock, John (ed.) 2003, *Cross-cultural communication*, Kogan Page, Sterling, VA.

Smith, Helen 2003, *Letter-writing, e-mail & texting*, Foulsham, London.

Summers, Jane & Smith, Brett (eds.) 2004, *Communication skills handbook : how to succeed in written and oral communication*, John Wiley & Sons Australia, Milton, Qld.

Certificate II in Horticulture.

RTE2606A Maintain pressurised irrigation systems

This competency standard covers the process of maintaining pressurised irrigation systems, including the repair and replacement of basic, simple components under routine supervision. Maintaining pressurised irrigation systems requires knowledge of major components of a pressurised irrigation system, maintenance requirements and procedures for system components.

Activities & Assessment:

- 1. Carry out pre- and post-season maintenance:** Equipment and systems are visually checked/tested in preparation for use. This includes flushing lines, cleaning filters, checking sprinkler, valve and basic controller operation.
Assessment by written quiz and component identification
- 2. Carry out routine maintenance activities on pressurised irrigation delivery systems, including maintenance of individual components:** All irrigation system components are identified as to purpose and basic maintenance requirements. Routine maintenance of filters, strainers, pump screens is performed along with visual assessment for example checking for wet/dry spots, leaks etc.
Assessment by written quiz and component identification
- 3. Record and report maintenance activities:** irrigation maintenance is recorded, according the workplace requirements. This may include parts used, time spent, etc.
Assessment workplace supervisor

Key Terms: manufacturers specifications, drip lines, pipes, risers, valves, sprinklers, emitters, pipes, jets, microjets, laterals, Micro-irrigation, flushed, computer controllers, effluent,/treated water identification.

Resources:

IAA learning Guides

Maintaining Hunter sprinkler systems (videorecording) 1999, Hunter Industries, San Marcos, Calif.

Books:

Choate, Richard B 1994, *Turf irrigation manual: the complete guide to turf and landscape irrigation systems*, Weathermatic publication, Dallas, Tex.

Ferber, D 1993, *Hardie irrigation landscape training guide*, James Hardie Irrigatio, [Beverly, S. Aust.]

Melby, P 1995, *Simplified irrigation design: professional designer and installer: metric version*, 2nd edn, Van Nostrand Reinhold, New York.

Pira, E S 1997, *A guide to golf course irrigation system design and drainage*, Ann Arbor Press, Chelsea, Michigan.

Internet

Irrigation Manufacturer's web sites

Certificate II in Horticulture.

RTF2015A Prepare turf surfaces for play

This competency covers the preparation of turf surfaces for match play under routine supervision and checking. It includes mowing and the use of other basic equipment, as well as marking out surfaces to the correct dimensions and rules of play. It is considered appropriate that a Level 2 operator be able to prepare surfaces for at least three different sports.

Activities & Assessment:

1. Practical component: the participant will already have skills in the operation of mowing and other tools and equipment necessary for the tasks, so this competency assesses preparation for play, not machinery use. The practical component consists of mowing, rolling and other cultural preparations of the surface, as well as performing other practical procedures under instruction required prior to the surface being offered for play. The participant will be assessed on at least three of the following surfaces:

- A golf hole (including tees and surrounds, rough, fairway and green, and moving the golf hole and tee markers as instructed).
- A bowling green (including assessing the pace of the green)
- A cricket wicket (including line marking and installing stumps)
- A football outfield (including line marking)
- A racetrack, or
- Another sports surface not listed

Assessment is by individual performance of the tasks, with oral questioning by the supervisor regarding mowing and rolling and the basic requirements for play.

2. Rules and Dimensions of sports surfaces: the participant will complete a written assignment that lists the important factors regarding three of the above surfaces. The assignment will include scale diagrams indicating any dimensions and terms essential for the preparation of the sports surface.

Assessment: Written Assignment

Key Terms: Stimpmeter, popping crease, return crease, bowling crease, rink.

Resources:

Books:

Liffman (1984)	Bowling greens: a practical guide
Liffman (1986)	Sportsgrounds and turf wickets: a practical guide
Beard (1984)	Golf course management

Internet

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Certificate II in Horticulture.

RTF2019A Renovate grassed areas

This competency covers the renovation of various turf surfaces under routine supervision and checking. It includes the use of renovation machinery and equipment. It is considered appropriate that a Level 2 operator be able to renovate surfaces for at least three different sports.

Activities & Assessment:

1. Practical component: the participant will already have skills in the operation of renovation tools and equipment necessary for the tasks, so this competency assesses the cultural process of renovation, not machinery use. The practical component may consist of dusting and topdressing, coring, de-thatching, levelling, oversowing and any other renovation practices required for the surface. The participants will be assessed on at least three of the following surfaces:

- A golf green
- A bowling green
- A cricket wicket
- A football outfield
- A racetrack, or
- Another turfgrass surface not listed

Assessment is by practical performance of the tasks in small groups, along with individual oral questioning by the supervisor regarding the purpose of the renovation treatments.

1. Renovation Assignment: the participant will complete a written assignment based on the three sports surfaces renovated. The assignment will include and list the important factors involved in turf renovation requirements.

Assessment: Written Assignment

Key Terms: aeration, coring, solid tining, water injection, de-thatching, thatch, mat, infiltration, compaction, topdressing, dusting, shaving, scarifying, grooming.

Resources:

Turf tool box

Books:

Beard (2000)	Turf Management for Golf Courses
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RTF2020A Assist with turf construction

This competency requires the participant to work under supervision in the construction of a sand-based turf surface. It involves machinery operation, some basic plan interpretation, layout and dimensioning, but no surveying tasks.

**It is recommended where possible this module be delivered in conjunction with
Cert III - RTF3001A Construct Turf Playing Surfaces.**

Activities & Assessment:

The participant will already have skills in the use of hand tools and the operation of machinery for the tasks, so this competency assesses the process of construction, not machinery use. The competency will include the following:

- Base preparation and compaction using suitable machinery
- Reading and interpreting a construction plan
- Installing and marking grade stakes
- Holding a staff or lens for level readings
- Using a tape measure to accurately mark dimensions
- Manual digging and levelling of base and drainage lines
- Manual installation of gravel and rootzone materials
- Installation of drainage pipe
- Use of boning rods
- Installation, levelling and consolidation of rootzone material.

Assessment by group practical project

Key Terms: rootzone, USGA, perched water table, California Method, flat pipe, infiltration, drainage, aeration, amendment, compaction, % fall, cut/fill.

Resources:

Turf tool box

Books:

University of California	Construction of sand putting greens
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Internet

www.usga.org (turf management link)

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RTF2023A Support turf establishment

This competency covers the practical tasks involved in establishing turf by seeding, sprigging or sodding, including basic calculations for materials and pre and post-establishment tasks.

Activities & Assessment:

Completion of three practical group projects: In all cases, participants (under supervision) will prepare the soil, calculate the area and materials required, and manage the newly established turf until it is being mown at final height. The three projects are:

- Establish turf by seed. Seed sowing may be by hand, by hydroseeding or by seed drill depending on the situation.
- Establish turf by sprigs
- Establish area by turfing (sodding)

Assessment by group practical activities

Identify common name of 10 commonly used local turf grasses

Assessment by individual identification test

Key Terms: sowing rate, hydroseeding, seed drill, sprig, asexual propagation, sexual propagation, cultivation, sodding, turfing.

Resources:

Turf tool box

Books:

Internet

Certificate II in Horticulture.

RTF2504A Determine basic properties of soils/growing media

This competency requires the participant to take a representative soil sample and perform a range of basic soil physical and chemical tests in the field and in the lab, as well as interpret a standard soil laboratory analysis to determine basic nutrient requirements.

Activities & Assessment:

Sampling and Testing (small group practical and individual report)

1. **For a turf surface** (eg: green, tee, sportsground) take at least 20 random plug samples. Unless otherwise instructed, the samples should be 100mm depth, and in each case the top 50mm (including the thatch layer) should be separated from the bottom 50mm. The 20 samples in each case are then thoroughly mixed to create a representative sample. Halve this sample, remix, halve again as necessary to end up with around 500g representative sample.
2. **In the laboratory**, conduct a pH, soil salinity, soil texture (jar method) and Infiltration Rate test on each sample.
3. **In the field**, conduct an Infiltration Rate test and any other field tests instructed.
4. **Package** up and send each sample to a nutrient testing laboratory. Observe the results and basic recommendations.
5. **Compile** the results in a written report.

Assessment by Individual written test. Each participant will be required to pass a written examination on the basic chemical and physical properties of soil.

Key Terms: Infiltration Rate, compaction, soil texture, soil structure, aeration, thatch, pH, salinity, main mineral nutrients, available nutrient.

Resources:

Turf tool Box

Books:

Handreck and Black	Growing media for ornamental plants and turf

Internet

Certificate II in Horticulture.

RTC2012A Plant trees and shrubs

This competency standard covers the manual planting of trees, shrubs and other containerised and bare-rooted plants, and related tasks such as site preparation and pre-planting treatments. It applies to planting activities in parks and gardens, domestic and commercial landscapes, sporting facilities, planting of windbreaks and shelter belts, programmed environmental maintenance, rehabilitation of natural areas, and the reversal of environmental degradation. Work is usually done under routine supervision and with intermittent checking. Competency is demonstrated by the application of knowledge and skills to a range of planting tasks and roles usually within established enterprise guidelines.

Activities & Assessment:

1. Getting organise and preparing site
 - Tools and equipment are prepared
 - Site marked out
 - Competing plants are controlled
 - Plants are watered thoroughly prior to planting
2. Preparing planting holes
 - Planting holes are dug to sufficient size to ensure root grow outwards and downwards.
 - Sides of hole are scored to remove glazing for root penetration
 - Hole is a correct depth so the plant stem and root system junction is not too deep
 - Stakes are placed prior to planting
 - Soil modification
3. Planting
 - Plants are remove from container without damage
 - Root treatments applied i.e. Trimming etc.
 - Planting hole backfilled free from large soil lumps
 - Soil consolidated and shallow basin from fro water retention
4. Post planting care
 - Mulching material is applied evenly to site
 - Plants are secured to provide support
 - Plants are pruned as required
 - Fertilizer applied as required
 - Plants watered in to ensure air pockets are removed and rootball and planting soil is thoroughly wet.
5. Completing the task
 - Tools and equipment used, cleaned and store in appropriate manner.
 - All waste material disposed of according to industry Standards

Assessment would encompass the above activities in a group practical activity

National Turf Industry Delivery and Assessment Guide

Key Terms:

Soil modification, Soil types, mulches, planting material, container plants, rootball, dehydration, root treatments, fertilizer, consolidation, air space

Resources:

Books:

John Mulholland	<i>Maintaining healthy shrubs & trees in Australian Conditions</i>
Annette Mc Farlane	<i>Successful Gardening in warm climates</i>

Maintaining healthy shrubs & trees in Australian Conditions

John Mulholland ISBN 0 646 167 367

Successful Gardening in warm climates.

Annette Mc Farlane ISBN 0 86417 868 9

Internet:

- www.dnr.qld.gov.au fact sheets on planting trees and shrubs
- www.gardenweb.com a link site for gardening information

National Turf Industry Delivery and Assessment Guide

Certificate II in Horticulture.

RTC2016A Recognise plants

This competency standard covers the process of recognising plants that are commonly encountered in horticulture or land management situations. Recognising plants is likely to be under routine supervision with intermittent checking by supervisors, requires a knowledge of plant identification techniques, plant nomenclature, enterprise procedures for obtaining and supplying advice and information about plants, and enterprise expectations about the range and number of plants to be recognised.

Activities & Assessment:

- 1. Plant identification:** 10 turfgrasses, 30 Ornamental plants these including trees, shrubs, ferns, climbers, groundcovers and bedding plants.
Assessment by collection using common and botanical names growth habit and practical identification test to common names.
- 2. Plants external identification features are studied:** Leaf, flower shapes. Leaf arrangement. Growth habit, growing characteristics, growing situation, Fruit type. Monocotyledon, Dicotyledon
Assessed by examination written.

Key Terms: Monocotyledon, Dicotyledon, Leaf and flower shapes. Leaf arrangement. Growth habit, Plant growing characteristics, Fruit types, Environment

Resources:

Books:

Aldous D. Chivers I	<i>Sports Turf and Amenity Grasses A manual for use and identification</i>
Harry Oakman	<i>Tropical and Sub -Tropical Gardening</i>
Keith Williams	<i>Native Plants Queensland</i>
S Macoboy	<i>What tree is that?</i>
S Macoboy	<i>What flower is That?</i>
Annette Mc Farlane	<i>Successful Gardening in warm climates</i>

Internet:

www.agcsa.com.au

www.gcsaa.org

www.usqa.org

www.dnr.qld.gov.au

www.gardenweb.com

www.anbg.gov.au

Certificate II in Horticulture.

RTC2210A

Maintain properties and structures

This competency standard covers the functions required to maintain and repair properties and structures in a situation that does not require the specialist skills of another trade. It involves the application of basic skills and knowledge to match equipment and materials to job requirements, and select the appropriate tools to carry out repairs. The work is likely to be carried out under routine supervision with intermittent checking usually within a team environment.

Activities & Assessment:

1. Major utilities are identified and located.

Assessment: Check list verified and signed by supervisor

2. Items requiring maintenance in the workplace are identified. Items may include: all physical turf industry related property infrastructure and resources located within the perimeters of the employers address.

Assessment: Check list verified and signed by supervisor

3. Tools and equipment are identified for the purpose of maintenance.

Assessment: Check list verified and signed by supervisor

4. Personal Protective Equipment recognised and utilised where required.

Assessment: Check list verified and signed by supervisor

5. Hazard identification relating to the maintenance items are assessed and reported as per legislation requirement. Eg OH&S

Assessment: Check list verified and signed by supervisor

All assessment: supported by completion of a learning guide and task booklet and supported by supervisor testimonials.

Key Terms:

Structures, buildings, pathways, waterways, drainage, Irrigation, electrical & motorised hand and power tools, PPE, hazard identification & assessment

Resources:

Videos:

Safety Care Australia Pty. Ltd. 1992, *Carpentry* - SCA

East D. 1993 *Fence and Gates: design and construction* - Inkata Australia

Books:

Colour library Books 1993 - Eagle Moss Publications	<i>Successful DIY Step by Step</i>
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Certificate II in Horticulture.

RTC 2301A Undertake operational maintenance of machinery

This competency covers basic maintenance procedures required to support machinery operations. It involves non specialist skills to perform basic servicing and repairs on a range of machinery according to scheduled maintenance programs

Activities & Assessment:

- 1. Principles of operation:** underpinning knowledge on the operating principles of various systems used on turf machinery – 2 stroke, 4 stroke and diesel engines hydraulic systems electrical systems lubrication systems bearings and belts
Assessment by written test or assignment on the mechanical principles covered
- 2. Maintenance practicals:** undertake routine maintenance tasks and adjustments on a range of turf equipment. Includes at least one practical session on the following: changing engine oil and filters, changing air and fuel filters, cleaning air filters, greasing, adjusting belt tensions checking for bearing wear, adjusting cylinder to bed knife and adjusting cutting height, check operation of all safety switches and guarding.
Assessment by participation in group practical work
- 3. Basic fault finding:** diagnose a range of problems on turf machinery mainly fuel, electrical and quality of cut issues.
Assessment by participation in group practical activities
- 4. Determining maintenance requirements:** Manufacturer's maintenance books to be interpreted to determine the scheduled maintenance requirements of machinery used should include: servicing intervals cylinder to bed knife adjustment grades or types of oil to be used safety features
Assessment by written test or assignment on maintenance requirements

Key Terms: 2stroke, 4stroke, diesel, bed knife, reels, bearings, belts hydraulic system terminology

Resources:

Service manuals, operator's manuals, and OHS websites

Books:

Kondinin group tool box	A practical workshop guide
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Certificate II in Horticulture.

RTC 2304A Operate and maintain chainsaws

This competency standard covers the maintenance, preparation and operation of hand held chainsaws in a work environment. It requires the application of skills and knowledge to crosscut fallen timber using appropriate cutting techniques to maximise volume and quality recovery. It also requires knowledge of licensing and OHS legislative requirements associated with chainsaw operation along with duty of care to self, others and the environment.

Activities & Assessment:

- 1. OHS requirements:** underpinning knowledge of basic OHS and specific OHS legislation related to the use of chainsaws is covered. In particular safety equipment, safety features of machines used, personal protective equipment, protection of bystanders and the general public, sprung loads when cutting fallen timber, exit paths and route management.
Assessment is by written test and practical demonstration
- 2. Maintenance practicals:** undertake routine maintenance and adjustment of the chainsaw including: removal of the chain and bar assembly, cleaning the chain adjuster and drive sprocket, check for wear on drive sprocket, chain and bar. Re-assemble chain saw and sharpen and adjust chain, check all oil and fuel levels, clean air cleaner and test run saw
Assessment by practical demonstration
- 3. Cutting practicals:** undertake various cutting activities on fallen timber taking into account loads which are sprung and timber which will move once it has been cut. Bystanders and the general public must be considered and kept safe and emergency exit routes maintained
Assessment by practical demonstration

Key Terms: cutting bar, chain, cross cut, chaps, sprung load, exit routes, chainsaws, personal protective equipment, fallen timber, logs, chain files and depth gauges

Resources:

Books:

Stihl	Chainsaw safety manual
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Video

Chain saw safety video Stihl

Internet

www.safetyline.net.au

National Turf Industry Delivery and Assessment Guide

Certificate II in Horticulture.**RTC 2306 Operate vehicles**

This competency standard covers the process of maintaining and operating vehicles in a rural, horticultural or land management setting. It requires the application of basic driving skills to safely utilise various controls and features of a range of vehicles and demonstrate safe driving techniques.

Activities & Assessment:

- 1. Vehicles** to be used are selected and all key features of the vehicle are identified and checked for operational status pre start checks are identified and carried out and all controls are adjusted to suit operator
Assessment by practical demonstration
- 2. Securing loads** on vehicles: loads of various shapes and sizes are selected to be secured on the back of Ute small trucks and four wheel utility vehicles loads should be secured using a selection of ropes, chains and binders, and tie down straps. Types of loads to include wheel barrows, drums, cement mixers, hand mowers, and various hand tools
Assessment by practical demonstration
- 3. Vehicle operation:** demonstrated use of the vehicles should reflect situations found in industry; vehicles should be operated on broken ground across and over undulations and reversing activities should be demonstrated
Assessment by practical demonstration

Minimum vehicles to be covered: Ute, four wheel off road utilities eg gator, twister, mule etc, small truck if possible (not in B class category)

Key Terms: chains, binders, tie down straps, twister, mule, and gator

Resources: range of vehicles, chains and binders, ropes, drums, and small equipment

Books:

Internet

Certificate II in Horticulture.

RTC2309A Operate tractors

This competency standard covers the operation of tractors with or without attached equipment. It requires the application of skills to safely utilise the various components and controls of tractors. Check and confirm operational status, and set and secure equipment for operation. It also requires knowledge of the distinguishing characteristics of individual tractors including rated power, steering systems, and operational complexities.

Activities & Assessment:

- 1. Tractor** to be used is selected and all controls and unique characteristics are identified pre start checks are carried out and any OHS issues are identified and addressed all controls and seating are adjusted to suit the operator
Assessment by practical examination
- 2. Operation** of the tractor should be carried out in situations which reflect industry practices. The tractor should be used on both smooth and broken ground and operated across and over undulations the operator should be given the opportunity to feel the tractor move underneath them. Just driving around on flat ground is not acceptable
Assessment by practical examination
- 3. Hitching of implements:** all operators must demonstrate the ability to hitch and un hitch three point linkage equipment and connect PTO shafts both from the operators position and the person giving directions, the tractor should then be used with the implement attached and the implement used to industry standards
Assessment by practical examination

Minimum tractor equipment:

ROPS frame, seat belt, mirrors,

At least one each of the following implement types: draw bar, remote hydraulics, TPL, PTO

Types of implements to choose from: rotary hoe, smudge board, spring tines, grader blade, pallet forks, carry all, corer, verti drain, slasher mower,

Key Terms: three point linkage, PTO, broken ground, verti drain, smudge board,

Resources: tractor, three point linkage implements, large area to operate tractors and equipment,

Books:

Operate tractors and ride on vehicles	Ken James
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Video

Agriculture tractor safety

Certificate II in Horticulture.

RTC 2706A Apply chemicals under supervision

This competency standard covers the process of applying chemicals and biological agents for the control of weeds, pests and diseases using workplace specific application equipment. The work functions in this standard will be carried out under supervision.

Activities & Assessment:

1. **Demonstration of the ability** to read and interpret the data on both a pesticide label and MSDS sheet, choose the appropriate PPE for the chemical being applied, demonstrate the ability to clean and store PPE after use and decontaminate spray equipment

Assessment by written test and practical demonstration

2. **Equipment use:** spray equipment should be checked prior to use for leaks and malfunctions, equipment should be calibrated to apply the recommended rate of chemical and the appropriate nozzles fitted to suit specific application requirements

Calibration should cover both non powered boom sprays and knap sack sprayers

Measurement and decanting of substances needs to comply with directions

Assessment by practical demonstration

3. **Clean up of chemical spills:** the clean up and disposal of chemical spills needs to be demonstrated in a practical scenario i.e. a drum of water with dye added is tipped over and the student has to demonstrate correct clean up procedures.

Assessment by practical demonstration

Equipment required: boom sprayer, knap sack sprayer, pressure pack sprayer, and PPE equipment, spray dye, measuring equipment.

Key Terms: knapsack, PPE, boom sprayer, MSDS sheet, calibration,

Resources:

Books:

AARTS	Apply chemicals under supervision
toolbox	Conservation land management

Internet :

MSDS.com

Certificate II in Horticulture.

RTE2308A Operate ride-on vehicles

This competency standard covers the process of maintaining and operating two and four wheel all terrain vehicles and ride-on machinery. This unit does not include tractors or motor vehicles, as they are covered by other units of competency.

Machines covered by this competency are; ride-on rotary mowers, both mid-mount and front deck, including rear wheel steering and zero turning radius types. Triplex cylinder mowers as used for mowing golf greens, greens surrounds and golf tees, ride-on sports field/golf fairway mowers, greens rollers (both bowling and golf) and turf trucksters (Cushman/John Deere Gator/Toro Workman & etc).

It requires the application of basic skills and knowledge to safely utilise individual controls and features of ride-on vehicles, with or without attached equipment and to carry out basic maintenance procedures. Competency requires an awareness of duty of care to oneself, others and the environment. The work is likely to be carried out under routine supervision and within enterprise guidelines

Activities & Assessment:

1. Prepare ride-on vehicle for operation:
 - Prior to starting the operation, OHS & W issues relating to the task are identified and reported as applicable.
 - Routine pre-operation checks are made according to manufacturers 'operators manual' and enterprise guidelines.
 - Attached equipment is checked for secure attachment and where applicable correct coupling to PTO or hydraulic connections and tested for safe and efficient operation.
 - An inspection of the vehicle should be made to ensure all safety guards for otherwise exposed moving parts are in place.
 - When the load is loose tools and equipment, correct tie down procedures should be followed if applicable, to avoid damage to equipment and operators, or losing the load.
 - When mains electric rollers are used, the cable should be checked prior to connecting to the power outlet and laid out in the correct manner.

Assessment is by practical examination.

2. Operate ride-on vehicle:
 - Driving of the vehicle/machine is done in a manner that presents minimal risks to the operator (and passengers when applicable), the general public and the environment.
 - Suitable personal protective equipment is selected and worn, including sunscreen and eye protection.
 - The ride-on vehicle is driven in a safe and controlled manner, with attention to vehicle performance and efficiency being noted.
 - Hazards associated with the carrying of passengers (no seat-no ride) and with the attachments and/or loose loads are identified, anticipated and controlled through safe driving techniques.

NB: suggest possible inclusion of detail from unit RTC 2306A

Assessment is by practical examination.

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3. Complete and check ride-on vehicle operation:

- Engine shut down procedures are in accordance with the manufacturers 'Operators Manual'.
- Malfunctions, faults and breakages are reported in accordance with the enterprise requirements.
- The ride-on vehicle is cleaned and stored securely according to enterprise guidelines.

Assessment is by practical examination.

To achieve competency in this unit, three of the five vehicles/machines listed above should be operated to the standard required.

Key Terms:

Resources:

Books:

Internet

Certificate II in Horticulture.

RTE2602A Assist with the operation of pressurised irrigation systems

This competency standard covers the process of assisting with the operation of pressurised irrigation systems as found on Turf areas (Bowling Greens, Golf Courses, Ovals and etc) under routine supervision.

It requires the ability to handle and shift loads within OHS guidelines, follow enterprise policy and procedures relating to irrigation duties, including the affect on the local environment.

Assisting with the operation of pressurised irrigation systems requires a knowledge of the basic components that make up a system and its method of operation, including the time taken to deliver sufficient volumes in relation to the soil infiltration capacity to avoid surface run off.

Activities & Assessment:

1. Assist with the setting up of moveable irrigation components;
 - Irrigation components related to Turf irrigation are identified
 - Irrigation equipment is handled in a safe manner in accordance with OHS practices
 - Irrigation equipment is positioned to ensure correct head to head coverage
 - Irrigation equipment is checked for efficient operation
 - Assembling of irrigation system components is carried out where necessary
 - Water outlets are checked as required by the supervisor

Assessment by ID test plus an assignment on knowledge of the workplace irrigation system.

2. Carryout irrigation operations;
 - Valves are opened and or shut as directed by the supervisor
 - Required pressures and flows are achieved and maintained as directed by the supervisor.
 - Equipment is relocated as necessary
 - Basic operation of irrigation controllers

Assessment by practical demonstration on the job

3. Clean and store irrigation equipment as required;
 - Equipment is cleaned and stored at the end of the season as required by enterprise policy

Assessment by written assignment.

Key Terms:

Resources:

National Turf Industry Delivery and Assessment Guide

Books:

Certificate II in Horticulture.

RTE2603A Lay irrigation and/or drainage pipes

Introduction

This competency covers the process of setting out and excavating trenches using manual equipment, laying bedding materials, and positioning irrigation and/or drainage of varying types and sizes under routine supervision. Laying pipes requires the ability to read and interpret scale drawings, measure trench width, depth, grade and location, use of power tools and hand tools, and work safely to instructions. This unit requires knowledge of irrigation and/or drainage pipes, types and sizes, hand and power tools and equipment, bedding and backfill materials and handling methods, hand signals for communication, and relevant OHS issues and procedures.

N.B. This unit does not include operating excavation machinery such as trench diggers or ditch witches, but does include the use of mechanical equipment for lowering irrigation and/or drainage pipes.

Activities & Assessment:

1. Plan and prepare job:

- Materials for the job are transported to the location and stacked in a safe position
- Tools, equipment and machinery are selected consistent with the requirements of the job.
- Quality Assurance requirements are recognized and adhered to.
- Personal protective equipment is selected, correctly fitted and used.
- OH&S requirements are adhered to.

Assessment by practical examination

2. Set out and excavate trenches:

- Location and depths of trenches is determined from job drawings.
- Trench location is set out with pegs and string line and clearly marked with appropriate marking material.
- Manual support is provided to machine operator with excavation of trenches, shoring or battering in accordance with OH&S requirements.
- Trenches are cleaned out by hand and corners left square.
- Trench depths and grades are checked for conformity to job requirements.

Assessment by practical examination

3. Install bedding materials:

- Bedding materials are laid and consolidated to specified depths and grades.

Assessment by practical examination

4. Lower and position pipes:

- Pipes are installed / lowered into position with appropriate mechanical equipment according to specifications.
- Pipe joints and fittings are installed to job specifications.
- Pipes are back filled to specifications and cover left level with surrounding ground.

Assessment by practical examination

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5. Clean up:

- Site is cleared and excess soil, debris and unwanted materials removed in accordance with organizational procedures and environmental requirements.
- Tools and equipment are cleaned, maintained and stored.

Assessment by practical examination

Key Terms:

Resources:

Books:

Internet

Certificate II in Horticulture.

RTE2604A Maintain drainage systems

This competency covers the process of carrying out routine maintenance activities for drainage systems, including the repair and replacement of components under routine supervision. It requires the ability to read and follow operational procedures for drainage system maintenance, record and report maintenance observations and activities, control weeds, safely use chemicals, and follow OHS procedures relating to drainage system maintenance.

Maintaining drainage systems requires knowledge of drainage systems and cleaning procedures, OHS procedures, weeds encountered in drainage systems and their control, equipment used to clean and maintain drainage systems, legislation regarding the use of chemicals near waterways, environmentally safe disposal procedures for chemical containers and residues, oils/grease and used parts.

Activities and Assessment:

1. Carry out pre-and post season maintenance:
 - Equipment is prepared pre-season for effective operation in accordance with design specifications and enterprise standards.
 - System is flushed, cleaned, closed down and maintained post-season in accordance with design specifications and enterprise standards
 - Equipment requiring storage is dismantled, loaded, transported and stored without damage according to enterprise standards.

Assessment by practical examination and written test

2. Carry out routine maintenance activities on drainage systems:
 - All maintenance activities are carried out according to the maintenance program and the manufacturers specifications.
 - Mechanical equipment is serviced in accordance with the operators manual or as directed.
 - Drainage system is flushed and cleaned, with simple components replaced as directed.
 - Drainage system is visually inspected for leaks and operating faults, and observations are recorded in the maintenance book.
 - Operation area is maintained in a clean and safe condition, and OHS procedures are followed

Assessment by practical examination

3. Maintain system components
 - System maintenance is carried out at scheduled times using equipment and materials in accordance with enterprise standards.
 - Components are inspected for wear or blockage and reported or replaced according to enterprise guidelines
 - Operation area is maintained in a clean and safe condition, and OHS procedures are followed.

Assessment by practical examination

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4. Monitor and control weed growth
 - Silt is cleared from channels, drains, sumps and crossings with no disruptions to gradients and levels as necessary.
 - System checks ensure a weed free and unobstructed water flow from outlets as necessary.
 - Damage to plants, structures and fittings is minimized through the use of recognized mechanical and chemical methods of weed control according to enterprise guidelines.
 - Operation area is maintained in a clean and safe condition, and OHS procedures are followed.

Assessment by practical examination and written test

5. Record and report maintenance activities
 - All damage and blockage caused by pests and vermin is recorded by damage type, location and the section of the system affected.
 - Damage or faulty pumps, valves, electrical components and computer systems are recorded and reported, and action taken to effect repairs.
 - All routine maintenance activities are recorded and reported in accordance with enterprise standards.

Assessment by practical examination and written test

Key Terms:

Resources:

Books:

Internet

Certificate II in Horticulture.

RTE2707A

Follow site quarantine procedures

This competency standard covers the process of following enterprise site quarantine procedures that are designed to reduce the likelihood of pathogenic organisms entering a Turf site or moving from one part of the site to another. An alternative scenario relates to an effluent treatment plant (in some cases possibly a wetland area) providing irrigation water to a turf facility.

Site quarantine procedures are followed as a routine part of one's work and are applied to visitors to the site. Work is performed under supervision and according to established procedures and policies.

It may apply to work in all rural production and production horticulture enterprises

Activities and Assessments:

1. Prepare to work in quarantine site;
 - Provision should be made to ensure all personal and/or work vehicles are decontaminated before entering the quarantine site.
 - Access to the area and contact with potential contaminants is recorded/reported according to enterprise requirements.
 - Appropriate personal protective clothing and footwear is worn as relates to the site and activity undertaken.

Assessment is by written or oral examination /or written assignment describing the enterprise requirements.

2. Work in a quarantine site;
 - Any OHS issues related to the task are identified and appropriate action taken.
 - Chemicals are stored and handled appropriately.
 - Appropriate decontamination is undertaken upon leaving the area.
 - Appropriate sequence of tasks is undertaken

Assessment is by written or oral examination /or written assignment describing the enterprise requirements.

3. Assist in maintaining site quarantine procedures;
 - All visitors are informed of the quarantine area and procedures requiring protective clothing and footwear if applicable.
 - Any breaches of quarantine procedures by visitors are reported.
 - The site is kept secure at all times as required by the organisation.
 - Deliveries to the site are checked to ensure that established procedures for vehicle decontamination, unloading and storage of supplies are followed – this may require trans-shipping of supplies from an offsite transport to an onsite vehicle.

Assessment is by written or oral examination /or written assignment describing the enterprise requirements.

National Turf Industry Delivery and Assessment Guide

Key Terms:

Resources:

Books:

Internet