

Golf Course Supervisor

UNIT 29

Install drainage systems

Overview

The aim of this unit is to provide the learner with the knowledge, understanding and skills required to install drainage systems.

The learner will be working to a previously developed plan that meets specifications and tolerances.

	Learner Outcomes		Assessment Criteria
	The learner will:		The learner can:
1	be able to calculate drainage requirements	1.1	identify drainage requirements
		1.2	calculate drainage requirements at a level which will prevent flooding or water logging
2	be able to install drainage systems	2.1	position reference marks according to specification
		2.2	install drainage systems from the list below which meet requirements and specifications: <ul style="list-style-type: none">• sub surface systems• surface channels• sustainable drainage systems
		2.3	ensure levels and falls are in accordance with requirements and specifications
		2.4	adopt practices to minimise damage to existing structures and services
		2.5	ensure the surface is restored near to its original condition
		2.6	maintain effective working relations with the relevant people
3	be able to select, use and maintain equipment during installation of drainage	3.1	select appropriate equipment for this area of work

		3.2	use equipment according to instructions
		3.3	prepare, maintain and store equipment in a safe and effective working condition
4	be able to promote health and safety and good environmental practice	4.1	work in a way which promotes health and safety, is consistent with relevant legislation, codes of practice and any additional requirements which apply to installing drainage
		4.2	ensure work is carried out in a manner which minimises environmental damage
		4.3	manage and dispose of waste in accordance with legislative requirements and codes of practice
5	know and understand the calculations required for drainage	5.1	explain how to make drainage calculations
6	know and understand the principles of drain installation	6.1	explain why soil drainage is beneficial for grass growth
		6.2	describe the advantages, disadvantages and application of the following types of drainage systems: <ul style="list-style-type: none"> • sub surface systems • surface channels • sustainable drainage systems
		6.3	explain the typical problems that may occur and effective methods of dealing with these
		6.4	describe why the type, size, depth and spacing of drainage pipes/tiles varies with the soil texture
7	know and understand the types of equipment required and how to maintain it	7.1	describe the equipment which will be necessary for installing drainage
		7.2	explain the importance of and methods of maintaining equipment in a fit state for use to minimise risks
8	know and understand the relevant health and safety legislation and environmental practice	8.1	explain the current health and safety legislation, codes of practice and any additional requirements
		8.2	describe the safety aspects of working in trenches

		8.3	describe the possible environmental damage and how to respond appropriately
		8.4	explain the correct and appropriate methods for disposing of waste
		8.5	explain the records required for management and legislative purposes and the importance of maintaining them