

National Certificate in Building, Construction and Allied Trades Skills (BCATS)
Teacher Information & Resources

**Demonstrate knowledge of the
drainlaying industry within a
BCATS environment**

Unit Standard – 25322

Level 2, Credit 2





Teaching and assessment tips

Intent – The intent of the unit standard is that the learner is able to demonstrate basic knowledge of the carpentry industry including:

- major industry sectors
- industry work processes
- industry clients, supply and inter-trade relationships
- the impact of regulatory and trade bodies on the industry and
- industry jobs and their training requirements.

It is intended that a learner who has an interest in a particular industry can achieve credits for their exploration of that industry by completing the relevant unit.

Unit standard Interpretation

No more than 2 of the Demonstrate Knowledge units that relate to BCATS industries can be incorporated in the qualification.

A worksheet that covers the assessment requirements for this unit standard is included in this document. Also included are model answers for that worksheet.

Assessment



Assessment of this unit standard consists of:

- Completion of the worksheet

Worksheet US 25322

Student Name: _____

Section 1

1. By definition, where does drainlaying work take place?

2. Name the points on a plumbing system where drainlaying work technically begins and ends

3. Name 4 basic skills required in drainlaying work:

Section 2 Work processes

4. Where is a drain located in relation to the property boundary?

5. Who may legally carry out drainlaying work?

6. Name 2 approved outfalls for storm water and foul water

Storm water

Foul water

7. Normally what has waste water been used for?

8. What does foul water contain?

9. Legally, where can waste pipes discharge?

10. Legally, where must foul water discharge?

11. Why do gully traps contain a water seal?

12. Name 2 causes of loss of trap seals:

13. What does a drain vent do?

Section 3 Client base

14. For a drainlayer, who would be a direct client?

15. List 4 possible clients a drainlayer could sub-contract to:

Section 4 Supply relationships

16. Explain what is meant by “accredited supply network”:

17. Who is usually the accredited network supplier for water mains and sewers?

18. What is a trade account?

19. What is a trade discount?



20. What does "five year guarantee" mean?

21. Why does a drainlayer need product training?

Section 5 Relationships with other trades

22. What does a person require in order to legally carry out drainlaying work?

23. What tasks are plumbers responsible for in relation to the installation of drains?

24. What tasks are builders and architects responsible for in relation to the installation of drains?

25. Name 3 tasks that a Territorial Authority might engage a drainlayer to do.

Section 6 Requirements of industry bodies

Insert the correct words in order to complete the following sentences:

- 26. A trainee drainlayer must sign a training agreement with their employer and the organisation called
- 27. Where is training to become a drainlayer usually carried out "
..... " .
- 28. The Skills Organisation is tasked with how training providers train and assess trainees.
- 29. The Plumbers, Gasfitters and Drainlayers Board (PGDB) is tasked with setting and marking exams, issuing licenses, and taking legal action against drainlaying work.
- 30. Proposed drainlaying work cannot be carried out until a
..... has been issued by the building consent authority [or territorial authority?]
- 31. In order to legally lay or reticulate supplies, a drainlayer must be
..... to do so by the supply network.

Section 7 Job roles and training requirements

- 32. What does a trainee drainlayer do?

- 33. Who supervises a trainee drainlayer?

- 34. What do drainlayers at all levels (including trainees) require in order to legally carry out drainlaying?

- 35. List the 5 steps required to become a registered drainlayer:



36. What is the name of the certification which allows drainlayers to work outside the property boundary?

37. Name 2 tasks that drainlayers may be engaged to carry out beyond the property boundary:

Assessor Sign off:

Assessor name:	RESULT: A = Achieved, N = Not Yet Achieved
Assessor signature: Date:.....	

Model Answers

Section 1

1. By definition, where does drainlaying work take place?

Within the property boundary.

2. Name the points on a plumbing system where drainlaying work technically -begins and ends

Begins - from the waste water or foul water outlets of the plumbing system

Ends - at an approved out fall.

3. Name four basic skills required in drainlaying work:

Any four of:

- *excavation*
- *dewatering*
- *laying drain pipes and installing fittings*
- *establishing line and gradient*
- *backfilling.*

Section 2 Work processes

4. Where is a drain located in relation to the property boundary?

Within the property boundary.

5. Who may legally carry out drainlaying work?

Only a licenced drainlayer.

6. Name two approved outfalls for storm water and foul water

Stormwater - any two of:

- *storm-water sewer*
- *kerb channel*
- *soak pit.*

Foul water - either:

- *sewer, or*
- *septic tank.*

7. Normally what has waste water been used for?

Either:

- *washing, or*
- *bathing.*

8. What does foul water contain?

Human waste (i.e. urine and/or excrement).

9. Legally, where can waste pipes discharge?

Either:

- *in the open air above a gully trap, or*
- *directly connected to the drain.*

10. Legally, where must foul water discharge?

Directly to the drain or via a discharge stack which is connected to a drain.

11. Why do gully traps contain a water seal?

To prevent foul gases from the drain entering the building.

12. Name two causes of loss of trap seals:

- *siphonage (evacuation or suction), and*
- *compression.*

13. What does a drain vent do?

Allows air into or out of the drainage system in order to ventilate it and to prevent the loss of the trap seal.

Section 3 Client base

14. For a drainlayer, who would be a direct client?

A home or business owner who engages the drainlayer directly and pays them for their work.

15. List four possible clients a drainlayer could sub-contract to:

Any four of:

- *architect*
- *builder*
- *plumber*
- *property management company*
- *territorial authority (TA)*
- *sub-division developer*

Section 4 Supply relationships

16. Explain what is meant by “accredited supply network”:

Any person or company that is given permission to sell and/or supply a service, for example water mains or sewers.

17. Who is usually the accredited network supplier for water mains and sewers?

The territorial authority (TA).

18. What is a trade account?

An account that a drainlayer holds with a merchant or supplier allowing them to purchase goods without paying upfront, but are invoiced at the end of the month.

19. What is a trade discount?

A discount that merchants or suppliers give to tradespeople.

20. What does “five year guarantee” mean?

That the product will be replaced if it fails within five years, provided that it was correctly installed, not subjected to unduly harsh conditions, and properly registered with the manufacturer.

21. Why does a drainlayer need product training?

In order to learn how to correctly operate, install and maintain a particular product.

Section 5 Relationships with other trades

22. What does a person require in order to legally carry out drainlaying work?

A current drainlaying practicing licence.

23. What tasks are plumbers responsible for in relation to the installation of drains?

Installing waste and foul water discharge pipes and connecting them to the drain.

24. What tasks are builders and architects responsible for in relation to the installation of drains?

They provide building and site plans showing the proposed layout of drainage systems and locations for connections and access. Builders also construct the structures from which drains lead, and arrange for the completion of work (such as concreting paths) after drainlayers have finished.

25. Name three tasks that a Territorial Authority might engage a drainlayer to do

- *connect to sewers*
- *lay sewers*
- *reticulate potable water supply*

Section 6 Requirements of industry bodies

Insert the correct words in order to complete the following sentences:

26. A trainee drainlayer must sign a training agreement with their employer and the organisation called

The Skills Organisation.

27. Where is training to become a drainlayer usually carried out ".....".

On the job.

28. The Skills Organisation is tasked with how training providers train and assess trainees.

Moderating.

29. The Plumbers, Gasfitters and Drainlayers Board (PGDB) is tasked with setting and marking exams, issuing licenses, and taking legal action against drainlaying work.

Registration;

practicing;

unlawful.

30. Proposed drainlaying work cannot be carried out until a
has been issued by the building consent authority [or territorial authority]

Building consent.

31. In order to legally lay or reticulate supplies, a drainlayer must be
to do so by the supply network.

Sewers; potable water; accredited.

Section 7 Job roles and training requirements

32. What does a trainee drainlayer do?

Learns the trade of drainlaying.

33. Who supervises a trainee drainlayer?

In the first year a trainee needs to be supervised by a drainlayer holding a certifying drainlayer licence. After the first year a trainee needs to be supervised by a drainlayer holding either a Tradesman or Certifying licence.

34. What do drainlayers at all levels (including trainees) require in order to legally carry out drainlaying?

Drainlaying practicing licences.

35. List the five steps required to become a registered drainlayer:

- *sign a training agreement with the employer and The Skills Organisation*
- *hold a Limited certificate trainee drainlayer licence*
- *successfully complete the appropriate National Certificate in Drainlaying*
- *pass the PGDB's registration exam*
- *apply to the PGDB for registration, and pay the required fees.*

36. What is the name of the certification which allows drainlayers to work outside the property boundary?

"Accreditation" by the network supplier.

37. Name two tasks that drainlayers may be engaged to carry out beyond the property boundary:

- *laying sewers*
- *reticulating potable water supplies.*

Example of oral assessment questions

1. By definition, where is a drain laid?

Underground and within the property boundary

2. Who is legally responsible for the drain?

The property owner.

3. Who is legally responsible for pipes and connections beyond the property boundary?

The territorial authority (local council).

4. Aside from the building owner, who else can raise a building consent for drainlaying work?

A registered and currently licenced drainlayer.

5. Who issues building consents?

The Building Consent Authority, which is usually the territorial authority/local council.

6. Who determines whether drainlaying work that has been carried out is correct and complies with regulations?

Where a building consent is required, the work must be checked by the building inspector from the building control authority in your area (your local council).

7. Who can legally carry out drainlaying work?

A person holding a Tradesman Drainlayer licence or a Certifying Drainlayer licence.

8. Who is allowed to supervise a trainee drainlayer?

A drainlayer holding a Certifying Drainlayer licence or a Tradesman Drainlayer Licence.

9. Does a registered drainlayer legally require supervision?

Yes

10. When can drainlayers legally carry out drainlaying work beyond the property boundary?

When accredited by the network supplier.