# TRENCHING AND SLOT CUTTING FOR INSTALLATION OF UTILITY PIPES



#### ACCREDITATION

Upon successful achievement learners will be issued with a Smart Awards certificate valid for 3 years.

#### TYPE, LEVEL AND GRADING

Training and Assessment Level 2 Pass

#### **DURATION AND RATIO**

1-day experience/refresher. Trainer 1.10

# PRE-REQUISITE

This qualification is available to anyone over the age of 18 who is capable of reaching the required standard. There are no barriers that restrict access or progression thereby promoting equal opportunity. It is expected however that learners will have a level of literacy adequate to cope with the assessment.

#### **ENTRY REQUIREMENTS**

There are no formal entry requirements and Smart Awards will not restrict access on the grounds of prior academic attainment, age, employment, geographic location or any other grounds. There are no barriers that restrict access or progression thereby promoting equal have a level of literacy adequate to cope with the examination.

#### **SECTOR SUBJECT AREA (SSA)**

5.2 Building and Construction

#### AGE RANGE

18vrs plus

#### SAFE PRACTICE

It is the responsibility of the centre in consultation with the assessor to ensure that risk assessments have been carried out. During this training you must take account of the relevant worksite operational requirements, procedures and safe working practices.

#### INTRODUCTION

This qualification is for those involved in excavating trenches and slot for installing utility pipes using machines, including how to comply with health and safety legislation. The target audience is aimed at those working in the telecoms and utility sectors including suppliers and contractors.

# **Learning Outcomes**

- Know the processes, regulations and legislations associated with working safely in trenching and slot cutting for installation of utility pipes
- Know the procedures, tools, equipment and materials for trenching and slot cutting to create trenches for installation of utility pipes
- Know the requirements for correct use of trenching machinery.
- Be able to carry trenching and slot cutting to create trenches for installation of utility pipes

# Structure

Learners must achieve one mandatory unit to pass.

# Purpose

Prepare for further learning or training and/or develop knowledge and/or skills in a subject area.

# **Behaviours**

- Logical and creative thinking skills
- Analytical and problem-solving skills
- · Ability to work independently and as part of a team
- Can use own initiative
- A thorough and organised approach to work
- Ability to work with a range of internal and external people
- Ability to communicate effectively orally and in writing in a variety of situations and at all levels with colleagues and customers
- Maintain productive, professional and secure working environment
- Listen actively, ask questions, clarify points and restate or rephrase
- statements to check mutual understanding
- Act within the limits of your authority
- Refer issues outside the limits of your authority to appropriate people
- Show integrity, fairness and consistency in decision-making
- Take personal responsibility for making things happen
- Protect your own and others' work against negative impacts
- Model behaviour that shows, and inspires others to show, respect, helpfulness and cooperation.

#### **EXPECTATIONS AT LEVEL 2**

#### **Summary**

Achievement at level 2 reflects ability to select and use relevant knowledge, ideas, skills and procedures to complete well-defined tasks and address straightforward problems. It includes taking responsibility for completing tasks and procedures and exercising autonomy and judgement subject to overall direction or guidance.

# **Knowledge and Understanding**

- Use understanding of facts, procedures and ideas to complete well-defined tasks and address straightforward problems.
- Interpret relevant information and ideas.
- Be aware of the types of information that are relevant to the area of study or work.
- Demonstrate and/or work with knowledge and understanding of basic processes, materials and terminology.

## **Application and Action**

- Complete well-defined, generally routine tasks and address straightforward problems.
- Select and use relevant skills and procedures
- Select appropriate tools and materials and use safely and effectively (for example without waste)
- Adjust tools where necessary following safe practices
- Plan and organise both familiar and new tasks
- Identify, gather and use relevant information to inform actions
- Identify how effective actions have been

#### **Autonomy and Accountability**

- Take responsibility for completing tasks and procedures
- Exercise autonomy and judgement subject to overall direction or guidance
- Show an awareness of others' roles, responsibilities and requirements in carrying out work

#### **ASSESSMENT**

Practical assessment Multiple choice questions

# **Assessment Criteria**

- Mark out the trench route and follow documentation showing the requirements.
- Follow organisational process and specifications for trenching and ensuring the security of the trench and to seek approval for any deviation from requirements.
- Carry out pre trencher safety checks including vehicles; ground conditions; travel routes/directions; access and egress; vision; soil types; soil stability; overhead obstructions, minimum distances; powerlines; buried services; other workers.
- Carry out observation prior to and during manoeuvring the machine
- Carry out ground checks, work specification and placement of material
- Carry out safe dig processes.
- Mark and carry out pilot hole to identify network plant infrastructures
- Demonstrate how to maintain safety and stability machine.
- Carry out safe communication systems and signals
- Demonstrate the safe positioning of load on machine.
- Demonstrate the requirement for load security and use of a banksman.
- Carry out safe parking of the machine
- Carry out shut down procedures and machine security
- Follow industry safe working practices
- Demonstrate safe use of machine on slopes
- Carry out trench size including depth, the bedding and fine fill requirements in line with organisations specifications.
- Carry out trenching tasks safely
- Leave site secured, sign and guarded to the NRSWA requirements for the next activity to take place.
- Reinstate the excavation in line with HAUC requirements.
- Demonstrate loading and unloading procedures for machine transportation
- Demonstrate clearing the site and reporting the site status and record and store information to organisational requirements. Carry out all end of shifts and shut down procedures