

## LANFe8 - SQA Unit Code HL4D 04

### Excavate, prepare and form foundations for vehicle restraint systems



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#### Overview

This standard describes how to excavate, prepare and form foundations for vehicle restraint systems (VRS).

This standard is designed for a VRS installer working on highways.

This standard covers:

- Excavating
- Preparing
- Form foundations

for vehicle restraint systems.

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#### Performance criteria

*You must be able to:*

- P1 carry out work in accordance with relevant health and safety legislation, risk assessment requirements and company policies
- P2 carry out all work in accordance with instructions and specifications
- P3 select and prepare tools, equipment and resources ready for use
- P4 use recommended working practices to excavate ground to conform with required specifications
- P5 place concrete and compact to form for foundation strength, size, profile and finish
- P6 establish appropriate provision to support the future installation of posts
- P7 carry out work in a manner which causes minimal damage to the surrounding area
- P8 set up signs and barriers to protect people and create a safe working environment
- P9 monitor and maintain signs and protective barriers in good working order within your level of responsibility
- P10 maintain tools, equipment and resources in a clean and serviceable condition throughout work
- P11 dispose of waste and excess materials safely to minimise environmental risk according to legal requirements

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#### Knowledge and understanding

*You need to know and understand:*

- K1 the health and safety requirements associated with excavation work
- K2 the health and safety requirements associated with sign and barrier installation including permits-to-work schemes
- K3 where to obtain instructions on how to carry out your work such as drawings, specifications, schedules, method statements, standard operating procedures (SOPs), manufacturers' guidelines or verbal instructions
- K4 the types of equipment used for excavating post holes and strip trenches
- K5 the procedures to follow when uncharted services or substructures are located
- K6 the procedures to follow if services or substructures are damaged
- K7 how and when temporary supports should be used to support excavations
- K8 the precautions to take when shafts or hidden substructures are located
- K9 the reasons for traffic management when working adjacent to highways and other transport systems
- K10 the types of signs and protective barriers used within the fencing industry
- K11 the storage requirements of signs and protective barriers
- K12 the methods and ratios used for mixing, placing, compacting, finishing and curing concrete
- K13 the methods used for forming pockets in concrete for future fixing
- K14 the techniques used for casting-in fixing items
- K15 the legal requirements controlling the disposal of waste and excess materials
- K16 the potential impact of your work on the surrounding area and how to minimise this

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**Developed by** Lantra

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**Version number** 1

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**Date approved** October 2011

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**Indicative review date** April 2016

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**Validity** Current

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**Status** Original

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**Originating organisation** Lantra

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**Original URN** O29NFe4

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**Relevant occupations** Fencing

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**Suite** Fencing

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**Key words** VRS; fence; hole; highways