

### Overview

This standard covers the fabrication and installation of permanent structures for the water environment. Structures may include bridges, culverts, weirs, revetments, concrete fencing and coastal defences. The standard covers the actual construction of the structure and the reinstatement of the site following completion of the work.

You must carry out your work in a way which minimises any impact on the natural environment, and enhances the nature, conservation, recreational, and economic value of the natural environment.

If you are working with machinery you need to be appropriately trained or certified in line with current legislation.

This standard is designed for those employees and volunteers working on the fabrication and installation of permanent structures applicable to river, coastal and waterways.

**Performance  
criteria**

**You must be able to:**

- P1 assess the risk and associated with the site and the proposed work
- P2 prepare the site in accordance with organisational procedures and specification
- P3 recognise circumstances which affect operations and take the appropriate action
- P4 access the site in accordance with instructions, specifications and legal requirements
- P5 ensure the appropriate quantity and type of materials are available and ready for use
- P6 select, prepare and use tools and equipment
- P7 place warning signs and barriers in the appropriate locations
- P8 ensure temporary works comply with instructions, design specifications and statutory requirements, and are safe, secure and ready for use
- P9 take the appropriate action to prevent accidental damage to the environment
- P10 keep accurate and up-to-date records as required by relevant legislation and the organisation
- P11 maintain environmental and health and safety legislation and codes of practice
- P12 recognise opportunities to enhance wildlife habitats through modifications to working procedures, and report this to the appropriate person
- P13 ensure your work on the structure is finished to the specifications within the appropriate timescales
- P14 take into account the relevant statutory requirements in relation to the structure and the site
- P15 carry out work in a manner which causes minimal damage to the surrounding area
- P16 restore the site to a safe condition which is consistent with the surrounding environment, clear of unwanted materials and maintains the appropriate access
- P17 dispose of waste and excess materials safely to minimise environmental risk and in accordance with legal requirements
- P18 communicate the completion of the work clearly and accurately to the appropriate person

### Knowledge and understanding

#### You need to know and understand:

- K1 how to interpret risk assessments
- K2 instructions and specifications on how to carry out your work
- K3 the circumstances which may impact on operations such as site hazards, services, working conditions, plant breakdowns, wildlife habitats, recreational and economic use of the water environment, water levels and precipitation
- K4 the appropriate action to take in response to changes in circumstances
- K5 the importance of identifying underground and overhead services and how to identify them
- K6 your responsibilities under current environmental and health and safety legislation and codes of practice
- K7 how to select, prepare and use tools, equipment and materials relevant to the agreed specifications
- K8 the types and quantity of materials which are needed, and the methods for preparing such materials
- K9 the correct use of warning signs and barriers and methods for setting up and using temporary works
- K10 the implications of relevant legislation and organisational requirements for your work
- K11 the procedures for recording and reporting information
- K12 how to maintain environmental good practice during work activities
- K13 the correct procedures for accessing the site
- K14 how to prevent environmental damage
- K15 the opportunities which may arise to enhance wildlife habitats and to whom these should be reported
- K16 the procedures for reporting discoveries of historic interest
- K17 methods and techniques for fabricating and installing structures
- K18 relevant statutory requirements in relation to fabrication and installation work and the site
- K19 the correct actions to take in response to unforeseen circumstances
- K20 how to protect and conserve habitats during work activities
- K21 the ways in which temporary works must be safely and correctly dismantled
- K22 the necessary condition of the site and equipment on completion of work activities
- K23 correct methods of disposing of surplus materials and/or waste
- K24 the importance of restoring the site to an appropriate condition

### Glossary

#### Equipment:

- hand tools
- handheld power tools
- mobile plant
- water-borne plant

#### Materials:

- concrete
- geotextiles
- steel
- timber
- stone
- ballast
- top soil
- brick
- blocks

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Relevant occupations Estate Workers

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