

### Overview

This unit is about making preparations to carry out a survey, carrying out the survey in the most appropriate way, and collecting, checking and verifying the data and presenting it in a suitable format. You will need to confirm the specification and methods ensuring that all permissions have been obtained and suitable equipment is available. You will also need to check the equipment, brief the people involved and ensure that all arrangements are in place and conform to specified requirements.

You will need to carry out the survey in accordance with agreed procedures, consulting others where relevant and implement changes to allow for changing circumstances that may arise. You will also need to record the data and ensure that any restoration needed is carried out.

You will need to collect, check and verify the data, present it including the provision of any commentary in a suitable format and also advise people how to interpret the data.

### Performance criteria

*You must be able to:*

#### Prepare to carry out surveys

- P1 confirm that the **survey** specification and the **survey method** statement is accurate before starting the work
- P2 check and confirm, before starting work, that people who will be affected have given their **permission**
- P3 arrange for suitable **equipment** to be brought to the site and kept safely and securely
- P4 check **equipment** so that it is accurate before it is used for taking measurements
- P5 brief the people who will be involved in the **survey** about **survey** and **safety** arrangements
- P6 check and confirm that signs, arrangements for personal **safety, equipment** and site access conform to good practice, legislation and regulation

#### Carry out surveys

*You must be able to:*

- P7 conduct the **survey** in a way which maintains the level of accuracy required, balances content and cost and keeps disruption to a minimum
- P8 conform to **safe working practices** when on the site
- P9 consult with experts when specialist information is needed which is relevant to the **survey**
- P10 set appropriate horizontal and vertical controls and record them
- P11 take accurate observations and measurements using valid methods
- P12 change work procedures and practices to allow for different **circumstances and conditions**
- P13 record **survey** data clearly and accurately and store it securely for later analysis
- P14 restore areas which have been opened up for access so that subsequent processes can take place

#### Present survey data

*You must be able to:*

- P15 collect together recorded **survey** data to allow an accurate analysis to be made
- P16 check and verify the **survey** data to maintain accuracy and integrity
- P17 **present** the data, commentary and any support information accurately, clearly and in a format which is suitable for those who need to use it
- P18 advise people who will be using the **survey** data on how to interpret it and highlight the scope and limitations on its use

### Knowledge and understanding

*You need to know and understand:*

#### Prepare to carry out surveys

- K1 how to confirm that the **survey method** statement is accurate before starting the work (application)
- K2 how to check and confirm, before starting work, that people who will be affected have given their **permission** (application)
- K3 how to arrange for suitable **equipment** to be brought to the site and kept safely and securely (application)
- K4 how to check **equipment** (application)
- K5 how to brief the people who will be involved in the **survey** about **survey** and **safety** arrangements (application)
- K6 how to check and confirm that signs, arrangements for personal **safety**, **equipment** and site access conform to good practice, legislation and regulations (application)

#### Carry out surveys

*You need to know and understand:*

- K7 how to conduct the **survey** (application)
- K8 how to conform to **safe working practices** when on the site (application)
- K9 how to consult with experts when specialist information is needed which is relevant to the **survey** (application)
- K10 how to set appropriate horizontal and vertical controls and record them (application)
- K11 how to take accurate observations (application)
- K12 how to change work procedures and practices to allow for different **circumstances and conditions** (application)
- K13 how to record and store **survey** data (application)
- K14 how to restore areas which have been opened up for access so that subsequent processes can take place (application)

#### Present survey data

*You need to know and understand:*

- K15 how to collect together recorded **survey** data to allow an accurate analysis to be made (application)
- K16 how to check and verify the **survey** data to maintain accuracy and integrity (application)
- K17 how to **present** the data, the commentary and any support information accurately, clearly and in a format which is suitable for those who need to use it (application)
- K18 how and why to advise people who will be using the **survey** data on how to interpret it and highlight the scope and limitations on its use (synthesis)

### Scope/range

#### Prepare to carry out surveys

- 1 Survey - type:
  - 1.1 land
  - 1.2 building
  - 1.3 engineering
  - 1.4 environmental
- 2 Survey - method:
  - 2.1 visual
  - 2.2 approximate measured
  - 2.3 detailed measurement of all specified features
  - 2.4 graphic
  - 2.5 instrumental
  - 2.6 method statement
- 3 Permission from:
  - 3.1 client
  - 3.2 site owner and occupiers
  - 3.3 adjoining owners and occupiers
  - 3.4 notifiable authorities
- 4 Equipment:
  - 4.1 mechanical
  - 4.2 optical
  - 4.3 electronic
- 5 Safety:
  - 5.1 personal safety
  - 5.2 equipment and clothing
  - 5.3 safe use of access equipment
  - 5.4 health and safety practice and regulations
  - 5.5 industry codes of practice
  - 5.6 regulations applying to the survey site
  - 5.7 signage

#### Carry out surveys

- 6 Survey - type:

### Scope/range

- 6.1 land
- 6.2 building
- 6.3 engineering
- 6.4 environmental
- 7 Survey - method:
  - 7.1 visual
  - 7.2 approximate measured
  - 7.3 detailed measurement of all specified features
  - 7.4 graphic
  - 7.5 instrumental
  - 7.6 method statement
- 8 Safe working practices:
  - 8.1 personal safety
  - 8.2 equipment and clothing
  - 8.3 safe use of access equipment
  - 8.4 health and safety practice and regulations
  - 8.5 industry codes of practice
  - 8.6 regulations applying to the survey site
  - 8.7 signage
  - 8.8 site access & working areas
- 9 Circumstances and conditions:
  - 9.1 topography
  - 9.2 water
  - 9.3 obstacles
  - 9.4 climatic variation
  - 9.5 live conditions (e.g. buildings and sites in use, roads, railways, runways)
  - 9.6 planned circumstances
  - 9.7 emergency circumstances

### Present survey data

- 10 Survey - method:
  - 10.1 visual
  - 10.2 approximate measured

# COSCCOO04 (SQA Unit Code - HA3W 04)

Prepare for, collect, analyse and present survey data in construction



## Scope/range

- 10.3 detailed measurement of all specified features
- 10.4 graphic
- 10.5 instrumental
- 10.6 method statement
- 11 Present:
  - 11.1 orally
  - 11.2 in writing
  - 11.3 graphically
  - 11.4 electronically

# COSCCOO04 (SQA Unit Code - HA3W 04)

Prepare for, collect, analyse and present survey data in construction



---

**Developed by** ConstructionSkills

---

**Version number**

---

**Date Approved** December 2012

---

**Indicative review date** December 2018

---

**Validity** Current

---

**Status** Original

---

**Originating organisation** ConstructionSkills

---

**Original URN** COSCCOO04

---

**Relevant occupations** Building and civil engineering technicians; estimators; valuers and assessors managers; quantity surveyors

---

**Suite** Construction Contracting Operations

---

**Keywords** land survey; building survey; engineering survey

---