



## **National Unit specification: general information**

**Unit title:** Monitoring Signing, Lighting and Guarding

**Unit code:** F8M4 04

**Superclass:** TF

**Publication date:** October 2014

**Source:** Scottish Qualifications Authority

**Version:** Second

## **Credit points and level**

1 National Unit credit(s) at SCQF level 6: (1 SCQF credit points at SCQF level 6\*)

*\*SCQF credit points are used to allocate credit to qualifications in the Scottish Credit and Qualifications Framework (SCQF). Each qualification in the Framework is allocated a number of SCQF credit points at an SCQF level. There are 12 SCQF levels, ranging from Access 1 to Doctorates.*

**Unit Aim**

This unit is designed to allow the candidate to demonstrate the skills and knowledge required to successfully monitor the signing, lighting and guarding of a work site. The candidate will be able to monitor a work site survey to ensure that suitable provision is in place for the site location requirements and those with special needs, including cyclists and horse riders, and to monitor the protection of pedestrians, site personnel and vehicular traffic on site. They will also be able to monitor the provision and control of portable traffic signals in line with site location requirements and traffic conditions, and they will be able to monitor site safety throughout the signing, lighting and guarding operation.

Candidates undertaking this unit must use the current version of *Safety at Street Works and Road Works: A Code of Practice*.

**Learning Outcome 1 Monitor a work site survey****Assessment criteria:**

- 1.1 ensure that the planned provision of footways, traffic lanes and safety zones from a given planned site meets the requirements of:
  - (a) **the site location**
  - (b) people with **special needs**
- 1.2 ensure that the planned provision of footways, traffic lanes and safety zones minimises disruption to traffic and provides for the safe passage of pedestrians
- 1.3 ensure that the planned provision for vehicles and plant within the confines of the working area gives adequate coverage and safety for people and vehicles in the vicinity
- 1.4 check for problems with the planned provision arising from the site survey and confirm the appropriate action required
- 1.5 carry out an on-site risk assessment in respect of signing, lighting and guarding to ensure that provision is made to control any identified hazards.

**Learning Outcome 2 Understand how to monitor a work site survey****Assessment criteria:**

- 2.1 describe the requirements of the Code of Practice in respect of surveying the work site
- 2.2 describe the health and safety requirements relating to surveying the work site
- 2.3 explain how to plan provision of footways, traffic lanes and safety zones to meet the requirements of:
  - (a) **the site location**
  - (b) people with **special needs**
- 2.4 explain how to minimise disruption to traffic and ensure the safe passage of pedestrians when planning provision of footways, traffic lanes and safety zones
- 2.5 explain how to plan provision for vehicles and plant within the confines of the working area to ensure:
  - (a) traffic lanes
  - (b) safe passage through the site
  - (c) advance signing
  - (d) type of traffic

- (e) volume of traffic
- 2.6 describe the problems that can occur with planned provision arising from a work site survey, and the appropriate remedial action to resolve them
- 2.7 explain the site conditions for the use of Priority signing and Give and Take systems of working.

### Learning Outcome 3 Monitor the protection of pedestrians, vehicular traffic and site personnel

#### Assessment criteria:

- 3.1 ensure that personal protective equipment is selected to meet the job requirements
- 3.2 assess the provision of footways, traffic lanes and safety zones for:
  - (a) the requirements of the **site location**
  - (b) the safe passage of pedestrians
  - (c) minimising disruption to and ensuring safety of vehicular traffic
  - (d) any identified **special needs**
- 3.3 confirm that the provision for controlling the movement of pedestrians, vehicles and plant within the confines of the working area:
  - (a) minimises delay and inconvenience
  - (b) makes adequate safety provisions
- 3.4 ensure that **equipment** selected meets the **site location** requirements and any **special needs**
- 3.5 ensure that pre-use inspection checks of **equipment** are completed
- 3.6 monitor the positioning and removal of **equipment** according to the specified sequence
- 3.7 check for problems with the protection of pedestrians, vehicular traffic and site personnel, and confirm the appropriate action required.

### Learning Outcome 4 Understand how to monitor the protection of pedestrians, vehicular traffic and site personnel

#### Assessment criteria:

- 4.1 describe the personal protective **equipment** to meet the job requirements
- 4.2 describe the factors governing the provision of footways, traffic lanes and safety zones and when it is necessary to liaise with the highway authority
- 4.3 explain how the **equipment** meets the requirements of the **site location** and any **special needs**
- 4.4 describe pre-use **equipment** checks
- 4.5 identify the specified sequences for positioning and removing **equipment**
- 4.6 describe potential problems with the protection of pedestrians, vehicular traffic and site personnel, and the appropriate remedial action.

### Learning Outcome 5 Monitor the provision of portable traffic signals and Stop/Go traffic control

#### Assessment criteria:

- 5.1 monitor the inspection and testing of **signals** for correct operation
- 5.2 ensure that **signals** are positioned in the correct sequence, and to meet the requirements of the **site location**
- 5.3 monitor the adjustment of signal controls to suit the prevailing traffic conditions
- 5.4 ensure that **signals** are dismantled and removed in line with current relevant specifications and procedures

- 5.5 ensure that Stop/Go traffic control is installed in a specified sequence
- 5.6 check for any problems with the provision of portable traffic **signals** and Stop/Go traffic control and confirm the appropriate action required.

**Learning Outcome 6    Understand how to monitor the provision of portable traffic signals and Stop/Go traffic control**

**Assessment criteria:**

- 6.1 describe the procedures for inspecting and testing **signals** for correct operation
- 6.2 explain how the site location requirements affect the positioning of **signals**, and the circumstances under which the highway authority must be consulted
- 6.3 describe the correct sequence for positioning **signals**
- 6.4 explain how the prevailing traffic conditions affect the adjustment of signal controls
- 6.5 describe the requirements for dismantling and removal of portable traffic **signals**
- 6.6 describe the requirements for installation and removal of Stop/Go traffic control
- 6.7 describe potential problems with the provision of portable traffic **signals** and Stop/Go traffic control and the appropriate remedial action.

**Learning Outcome 7    Monitor site safety**

**Assessment criteria:**

- 7.1 ensure that an risk assessment has been carried out
- 7.2 monitor site operations in accordance with health and safety requirements
- 7.3 assess site conditions in accordance with health and safety requirements
- 7.4 ensure that safety **equipment** is available and fit for purpose
- 7.5 ensure that **safe working practices** are followed in line with current relevant specifications
- 7.6 check for risks to site safety, and confirm the appropriate action required.

**Learning Outcome 8    Understand how to monitor site safety**

**Assessment criteria:**

- 8.1 explain the purpose of an on-site risk assessment
- 8.2 describe the health and safety requirements for site operations
- 8.3 describe the health and safety requirements for different site conditions
- 8.4 describe the safety **equipment** required during site operations and how to ensure that it is fit for purpose
- 8.5 describe **safe working practices** on site
- 8.6 describe the potential risks to site safety and the appropriate remedial action.

## Evidence Requirements / Scope

Some terms, used in the assessment criteria, cover a range of situations, as follows:

1. **Site location** requirements include:
  - (a) proximity to schools and hospitals
  - (b) users of the route (including those with special needs)
  - (c) weather conditions (including icy roads, heavy rain, snow, fog, etc.)
  - (d) volume of traffic
  - (e) speed of traffic
  - (f) lighting on highways
  - (g) highway situations (including lack of footways; pedestrianized areas; emergency service access; width of traffic lanes, footways and safety zones; inadequate lane widths; serious congestion; private access; bus stops, parking places, etc.; obstruction of driver's view at bends and summits; roundabouts and junctions; footways, ramps, boards and road plates; railway level crossings; tramways; cycle lanes and cycle tracks)
  - (h) different requirements for working at day and night
  - (i) mobile works and minor works
  - (j) the safety zone (length of lead-in taper of cones (T); sideways clearance (S); longways clearance (L); length of exit taper of cones).
2. Those with **special needs** include:
  - (a) visually impaired people
  - (b) people with disabilities
  - (c) users of prams and pushchairs
  - (d) users of wheelchairs and other physically impaired people
  - (e) cyclists
  - (f) young children
  - (g) horse riders.
3. **Safe working practices** include:
  - (a) safe use of tools and **equipment**
  - (b) use of PPE (including, as necessary: high visibility jacket or waistcoat, hard hat, gloves, protective footwear, waterproof clothing)
  - (c) use of risk assessment methods to identify and control hazards on site
  - (d) precautions to minimise danger or inconvenience to road users
  - (e) precautions to minimise danger or inconvenience to site personnel
  - (f) precautions to minimise damage to **equipment** or apparatus.
4. **Equipment** may include as necessary:
  - (a) adequate range of signing, lighting and guarding **equipment** (including signs, cones, **signals**, lamps, footway boards, barriers, portable traffic **signals**)
  - (b) high visibility safety **equipment**
  - (c) suitable materials to construct ramps.
5. **Signals** include:
  - (a) proprietary electrical or engine powered portable traffic lights
  - (b) set of Stop/Go boards.

## **Assessment Requirements**

Assessment for this unit consists of practical observations and knowledge questioning to cover the requirements of the learning outcomes.

For safety reasons, observed assessments of candidates monitoring signing, lighting and guarding activities must take place at a centre, or a location linked to a centre, that has been approved by the centre's external verifier prior to use for assessment. The site used for assessment must be a real road with unpredictable traffic flows.

Current requirements for practical observations, including assessor and verifier qualifications and facilities requirements are provided in the joint awarding organisation centre document.