Level 1 NVQ Certificate in Basic Track Maintenance (7597-11)

September 2011 Version 1.0
## Qualification at a glance

<table>
<thead>
<tr>
<th>Subject area</th>
<th>Rail Engineering</th>
</tr>
</thead>
<tbody>
<tr>
<td>City &amp; Guilds number</td>
<td>7597</td>
</tr>
<tr>
<td>Age group approved</td>
<td>16-18, 19+</td>
</tr>
<tr>
<td>Entry requirements</td>
<td>None</td>
</tr>
<tr>
<td>Assessment</td>
<td>Portfolio</td>
</tr>
<tr>
<td>Fast track</td>
<td>Automatic approval available</td>
</tr>
<tr>
<td>Support materials</td>
<td>Centre handbook</td>
</tr>
<tr>
<td>Registration and certification</td>
<td>Consult the City &amp; Guilds website for information</td>
</tr>
</tbody>
</table>

### Title and level

<table>
<thead>
<tr>
<th>Title and level</th>
<th>City &amp; Guilds number</th>
<th>Accreditation number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level 1 Certificate in Track Maintenance</td>
<td>7597-11</td>
<td>600/0662/6</td>
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1 Introduction

This document tells you what you need to do to deliver the qualifications:

<table>
<thead>
<tr>
<th>Area</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Who are the qualifications for?</td>
<td>They are for anyone working in railways engineering, including those preparing for a specialised role or management responsibility.</td>
</tr>
<tr>
<td>What do the qualifications cover?</td>
<td>These qualifications prove competence of industrial performance, knowledge and understanding and recognise the ability of individuals working in traction and rolling stock within the rail sector.</td>
</tr>
<tr>
<td>Are the qualifications part of a framework or initiative?</td>
<td>The Level 1 is part of the Rail Engineering Apprenticeship Framework.</td>
</tr>
<tr>
<td>What opportunities for progression are there?</td>
<td>Candidates who are successful will be able to progress in employment or to a range of further education and professional body qualifications. For example:</td>
</tr>
<tr>
<td></td>
<td>• (7597) Level 2 NVQs in Rail Engineering Track Maintenance</td>
</tr>
<tr>
<td></td>
<td>• Institute of Leadership and Management qualifications</td>
</tr>
</tbody>
</table>

Qualification structure

To achieve the Level 1 Certificate in Basic Track Maintenance, learners must achieve 15 credits from the mandatory units.

<table>
<thead>
<tr>
<th>Unit accreditation number</th>
<th>City &amp; Guilds unit</th>
<th>Unit title</th>
<th>Credit value</th>
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<tbody>
<tr>
<td>F/601/7815</td>
<td>201</td>
<td>Prepare to undertake duties in the rail industry</td>
<td>2</td>
</tr>
<tr>
<td>L/502/6507</td>
<td>202</td>
<td>Contribute to the security of the environment in the rail industry</td>
<td>1</td>
</tr>
<tr>
<td>M/502/6368</td>
<td>101</td>
<td>Undertake routine manual maintenance of the permanent way</td>
<td>3</td>
</tr>
<tr>
<td>T/502/6369</td>
<td>102</td>
<td>Carry out corrective manual adjustments to permanent way assets</td>
<td>3</td>
</tr>
<tr>
<td>A/502/6373</td>
<td>103</td>
<td>Dismantle and remove permanent way assets and components</td>
<td>3</td>
</tr>
<tr>
<td>Y/502/6395</td>
<td>104</td>
<td>Reinstall the work site after permanent way engineering activities</td>
<td>3</td>
</tr>
</tbody>
</table>
2 Centre requirements

This section outlines the approval processes for centres to offer these qualifications and any resources that centres will need in place to offer the qualifications including qualification-specific requirements for the staff delivering the qualifications.

Centres already offering City & Guilds qualifications in this subject area

Centres approved for the current (7588-01) Level 1 NVQ in Railway Engineering (Permanent Way Renewals) (7588-04) Level 1 NVQ in Railway Engineering (Permanent Way Maintenance) which have been active during the last two years have already been automatically approved for this qualification so they can start registering candidates under these new qualification immediately.

For any other cases, our general qualification approval process applies.

Resource requirements

Assessors and internal verifiers

Assessors' and internal verifiers' requirements have been specified by GoSkills in their assessment strategy. The full document is available from our website.

Centre staff may undertake more than one role, assessor and/or internal verifier, but must never internally verify their own assessments.

The primary responsibility of the assessor is to assess candidates to the required quality and consistency against the national occupational standard. It is important that an assessor can recognise occupational competence as specified by the national standard. Assessors therefore need to have a thorough understanding of assessment and quality assurance practices, as well as in depth technical understanding related to the qualifications for which they are assessing candidates.

It will be the responsibility of the approved centre to select and appoint assessors. Potential assessors should:

- hold (or be working towards) an appropriate qualification, as specified by the appropriate regulatory authority, confirming their competence to assess NVQ candidates,
- have the necessary and sufficient experience of the role for which they intend to undertake assessments and actual experience of the functions described by the occupational standards that comprise the qualification.
A primary responsibility of the internal verifier is to assure the quality and consistency of assessments carried out by the assessors for whom they are responsible. Internal verifiers therefore need to have a thorough understanding of quality assurance and assessment practices, as well as sufficient technical understanding related to the qualifications they are internally verifying.

It will be the responsibility of the approved centre to select and appoint internal verifiers. Potential internal verifiers should:

- hold (or be working towards) an appropriate qualification, as specified by the appropriate regulatory authority, confirming their competence to internally verify NVQ assessments,
- hold (or be working towards) an appropriate qualification, as specified by the appropriate regulatory authority, confirming their competence to verify NVQ candidates,
- have the necessary and sufficient experience of the role for which they intend to verify assessments. This experience will have provided potential verifiers with detailed knowledge of the functions described by the occupational standards that comprise the qualification.

Trainee assessors and internal verifiers must have a plan, which is overseen by the recognised assessment centre, to achieve the internal verifier qualification within an agreed timescale.

**Continuing professional development (CPD)**

Centres are expected to support their staff in ensuring that their knowledge remains current of the occupational area and of best practice in delivery, mentoring, training, assessment and verification, and that it takes account of any national or legislative developments.

**Candidate entry requirements**

Candidates should not be entered for a qualification of the same type, content and level as that of a qualification they already hold.

In addition, centres must ensure that candidates have the potential and opportunity to gain the qualifications successfully.

There are no formal entry requirements for candidates undertaking this qualification.

**Age restrictions**

These qualifications are not approved for use by learners under the age of 16 and City & Guilds cannot accept any registrations for candidates in this age group.
3 Delivering the qualification

Initial assessment and induction
Centres will need to make an initial assessment of each candidate prior to the start of their programme to ensure they are entered for an appropriate type and level of qualification.

Recommended delivery strategies
Centre staff should familiarise themselves with the structure, content and assessment requirements of the qualification before designing a course programme.

Centres may design course programmes of study in any way which:
- best meets the needs and capabilities of their candidates
- satisfies the requirements of the qualification.

When designing and delivering the course programme, centres might wish to incorporate other teaching and learning that is not assessed as part of the qualification. This might include the following:
- literacy, language and/or numeracy
- personal learning and thinking skills
- personal and social development
- employment rights and responsibilities

Where applicable, this could involve enabling the candidate to access relevant qualifications covering these skills.
4 Assessment

Summary of assessment methods
Candidates will be required to complete a portfolio of evidence for each unit.

Evidence requirements
The evidence requirements have been specified by GoSkills in their assessment strategy. The full document is available from our website. The evidence requirements have been identified for each of the units in section 5 of this handbook.

Evidence of occupational competence must be generated and collected through performance under workplace conditions. The evidence collected under these conditions must also be as naturally occurring as possible.

The optimum method of collecting evidence of a candidate’s competence is by direct observation of naturally occurring activity in the workplace. This observation must be carried out by a qualified assessor. Observation of naturally occurring activity in the workplace may not be practicable. In these cases the method of collecting evidence of a candidate’s competence will be by simulation. This observation must be carried out by a qualified assessor.

There is however NO simulation permitted for units within this qualification.

Assessment in simulated conditions is only permissible with the express prior consent of the External Verifier. The External Verifier is likely to allow assessment to take place in simulated conditions due to reasons of:
- Health and Safety
- confidentiality
- operational constraints
- cost
- rarity of opportunity.

Witness testimony can be gathered from a candidate’s colleagues, managers, customers, suppliers, etc. They should:
- be specific to the activities or product
- give a brief description of the circumstances of the observation
- give a brief description of the background of the witness and the observed activity
- identify the aspects of the competence demonstrated.
Product evidence must be assessed in order to ensure that:
- the evidence meets the required standard
- the candidate has followed the correct processes to generate the product
- the evidence is authentic.

In regards to the acceptability of knowledge evidence, the optimum method of collecting evidence of a candidate’s knowledge is by oral questioning following direct observation in the workplace. This questioning must be carried out by a qualified assessor.

In section 5 of this handbook we have listed all units and identified for each one of them:
- those performance statements for which evidence must be collected by direct observation of naturally occurring activity in the workplace,
- those performance statements for which evidence may be collected by a range of alternative assessment methods,
- when the use of simulation is allowed.

It is important that the correct asset/component/equipment, in the correct environment, is used when assessing the learner. The rail industry is a live production environment and assessment ‘on the job’ is not suitable in all instances. The industry has provided guidance as to where an alternative is possible. To support the alternatives the following definitions have been used:

**Replication**

The asset, component or equipment is in its normal operating condition/status (as in the live environment) but any task is carried out purely for the purposes of the assessment.

An alternative is where the assessment is undertaken in the live environment but the asset, component or equipment has been modified to allow for the assessment (for example, for the replication of fault conditions).

**Simulation**

The asset component or equipment is reproduced in a protected environment, entirely separate from the live environment (for example, test rig or simulator).

**Recording forms**

Candidates and centres may decide to use a paper-based or electronic method of recording evidence. To support the delivery of vocational qualifications we offer our own e-portfolio, Learning Assistant, an easy-to-use and secure online tool to support and evidence learners’ progress towards achieving qualifications. Further details are available at: www.cityandguilds.com/eportfolios.

Recording forms are available on the City & Guilds website. Centres may devise or customise alternative forms, which must be approved for use by the External Verifier before they are used by candidates and assessors at the centre.
5    Units

Availability of units
Below is a list of the learning outcomes for all the units. If you want to
download a complete set of units, go to www.cityandguilds.com

Structure of units
These units each have the following:
• City & Guilds reference number
• unit accreditation number (UAN)
• title
• level
• credit value
• unit aim
• relationship to NOS, other qualifications and frameworks
• endorsement by a sector or other appropriate body
• information on assessment
• learning outcomes which are comprised of a number of assessment
criteria
• notes for guidance.
## Unit 201 Prepare to undertake duties in the rail industry

### UAN: F/601/7815

<table>
<thead>
<tr>
<th>Level</th>
<th>2</th>
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</thead>
<tbody>
<tr>
<td>Credit value</td>
<td>2</td>
</tr>
<tr>
<td>GLH</td>
<td>18</td>
</tr>
</tbody>
</table>

### Relationship to NOS:
This unit is linked to GoSkills National Occupational Standard Unit P1 – Maintain and develop personal knowledge, understanding and skills in the rail industry

### Endorsement by a sector or regulatory body:
This unit is endorsed by GoSkills, approved as a shared unit

### Aim:
This unit is about identifying the rules, regulations, instructions and procedures that you must comply with to make sure you are fit for duty. It outlines the requirements that enable you to commence duties in a safe and knowledgeable manner and to ensure safe lines of communication within the working environment.

### Learning outcome
The learner will:
1. Be able to complete personal preparation

### Assessment criteria
The learner can:
1.1 Meet organisational standards for appearance and conduct
1.2 Comply with organisational procedures relating to fitness for duty
1.7 Possess the required documentation and equipment as specified by the organisation

### Learning outcome
The learner will:
2. Know how to complete personal preparation

### Assessment criteria
The learner can:
2.1 List the standards of appearance and conduct required by the organisation
2.2 Describe the importance of appearance, conduct and fitness in relation to the role
2.3 Describe organisational procedures relating to fitness for duty
| 2.4 | List the type of equipment required for duty |
| 2.5 | Describe how to access and use required equipment |
| 2.6 | List the documents required when completing personal preparation |
| 2.7 | Describe the standards of behaviour required by the organisation |

**Learning outcome**

The learner will:

3. Be able to prepare for duty

**Assessment criteria**

The learner can:

3.1 Communicate to the relevant person any necessary information relating to personal duties
3.2 Access and confirm information relating to the work to be undertaken
3.3 Comply with organisational procedures relating to personal safety
3.4 Complete preparations for duty within the allocated time
3.5 Complete required documents accurately and process them correctly

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| 4.1 | Describe organisational procedures relating to booking on and booking off duty |
| 4.2 | List the duties that are to be undertaken and describe organisational procedures relating to them |
| 4.3 | Describe organisational and legal requirements relevant to personal duties |
| 4.4 | List the people within the organisation who are relevant to the work role |
| 4.5 | Describe the relevant documentation completion requirements within the organisation |

**Learning outcome**

The learner will:

4. Know how to prepare for duty

**Assessment criteria**

The learner can:
Unit 202  Contribute to the security of the work environment in the rail industry

UAN: L/502/6507
Level: 2
Credit value: 1
GLH: 5
Relationship to NOS: This unit is linked to GoSkills National Occupational Standard Unit 2 Contribute to the Security of the Work Environment in the Rail Industry
Endorsement by a sector or regulatory body: This unit is endorsed by Go Skills approved as a shared unit

Aim:
This unit is about making sure you understand the importance of maintaining the security of the work environment. It outlines the rules, regulations and procedures which ensure a secure work environment and identifies how to respond to security breaches and emergencies which may arise.

Learning outcome
The learner will:
1. Be able to contribute to the security of the work environment in the rail industry

Assessment criteria
The learner can:
1.1 Comply with security systems and procedures
1.2 Obtain confirmation of visitor credentials
1.3 Respond to breaches of security within the limits of own personal authority
1.4 Report any actions taken to the relevant person(s) in line with organisational procedures
### Learning outcome

The learner will:

2. Know how to contribute to the security of the work environment in the rail industry

### Assessment criteria

The learner can:

2.1 Describe how to maintain a secure work environment
2.2 Describe organisational security procedures
2.3 List the types of security breaches that may occur
2.4 Describe the organisation's emergency situation procedures in relation to security
2.5 Describe the security systems and procedures in the local facilities and work areas
2.6 Describe the organisation’s policy for receiving visitors
2.7 Describe the limits of own authority in relation to security
Unit 101

Undertake routine manual maintenance of the permanent way

UAN: M/502/6368
Level: 1
Credit value: 3
GLH: 16

Relationship to NOS: This unit is linked to National Occupational Standards for Rail Engineering Unit P3 Undertake Routine Maintenance of the Permanent Way

Endorsement by a sector or regulatory body: This unit is endorsed by GoSkills, approved as a shared unit

Aim: The purpose of this unit is for learners to demonstrate occupational competency in undertaking routine maintenance of the Permanent Way

Learning outcome
The learner will:
1. Be able to undertake routine manual maintenance of the permanent way

Assessment criteria
The learner can:
1. Set up a safe system of work in line with organisational procedures and work to the system
2. Follow the relevant maintenance schedules to carry out the required work
3. Carry out the maintenance activities within the limits of own personal authority
4. Carry out the maintenance activities in the specified sequence and in an agreed time scale
5. Report any instances where the maintenance activities cannot be fully met or where there are identified defects outside the planned schedule to the appropriate person
6. Complete relevant maintenance records accurately and pass them on to the appropriate person.
### Learning outcome

The learner will:

2. Know how to undertake routine manual maintenance of the permanent way

### Assessment criteria

The learner can:

1. List the organisation's procedures that define the appropriate safe system of work for the activity
2. Describe how to follow the organisation's approved maintenance schedules and related specifications
3. List the types of maintenance activities that could be required
4. Describe how to identify and confirm the assets, equipment or components to be maintained
5. List organisational methods, techniques and procedures for maintenance of the permanent way
6. Describe the organisation's procedures for the: • recording of work carried out • component and equipment care and control
7. Describe the implications of not following the policies and procedures for the care and control of components and equipment
8. Describe how to check the maintenance activity to ensure compliance with the original specification
9. Describe the relevant approved reporting lines and procedures
10. Describe the likely impact of own work on the operations of other departments and the impact of their work on the activity
11. Explain the limits of own authority and responsibility and those of others involved.
Unit 101  Undertake routine manual maintenance of the permanent way

Supporting information

The learner will be expected to work within their organisation’s procedures and also within the limits of their own responsibility. The assets or equipment to be maintained will be aspects of the track and its associated infrastructure. It could include the maintenance requirements for plain line, switches, drains and vegetation.

The types of maintenance activities involved will follow set procedures and must take account of track access limitations. The activities include, as appropriate:

- Tightening bolts, nuts and screws to specific requirements
- Filling and replenishing lubricators
- Cleaning out ditches, drains and catch pits
- Fixing, fitting or refitting pads, insulators, rail fastenings, fishplates and bolts
- Applying lubricants – point oiling/fishplate greasing
- Cutting back/clearing vegetation
- Removing and disposing of waste
- Boxing in ballast.

When assessing the unit the following points should be covered as appropriate:

Assessment criterion 2.1
- The organisation’s safety management system
- Relevant sections of the health and safety at work act
- Control of substances hazardous to health (COSHH)
- Track access restrictions
- Track work instructions
- Task risk control sheets
- Current rule book
- Regulations for working under overhead line equipment (OHLE) and in vicinity of direct current (DC) lines
- Manual handling regulations
- Reporting of injuries, diseases and dangerous occurrences regulations (RIDDOR)
- Safety sign regulations
- Personal protective equipment (PPE)
- Health and safety at work act (HASWA)

Assessment criterion 2.5 the methods, techniques and procedures include as appropriate:
• Method statements
• Hot weather restrictions
• Extreme weather plans
• Track work instructions
• Task risk control sheets
Unit 102  Carry out corrective manual adjustments to permanent way assets

UAN: T/502/6369
Level: 1
Credit value: 3
GLH: 16
Relationship to NOS: This unit is linked to GoSkills National Occupational Standard Unit P4 – Carry out Routine Adjustments to Permanent Way Assets
Endorsement by a sector or regulatory body: This unit is endorsed by GoSkills, approved as a shared unit
Aim: This placeholder is for the unit aims, so please type something in here. The purpose of this unit is for learners to demonstrate occupational competency to carry out routine adjustments to Permanent Way assets

Learning outcome
The learner will:
1. Be able to carry out corrective manual adjustments to permanent way assets

Assessment criteria
The learner can:
1.1 Set up a safe system of work for the activity in line with organisational procedures and work to the system
1.2 Follow the appropriate schedules and related specifications for the asset/component being adjusted
1.3 Carry out required adjustments in the specified sequence and in an agreed timescale within limits of own authority in line with organisational requirements
1.4 Confirm that the adjusted asset/component meets the required operating specification
1.5 Report instances where the asset/component fails to meet the required operational specification after adjustments or where there are identified defects outside the required adjustments
1.2 Ensure all required documentation is processed accurately in line with organisational procedures.
<table>
<thead>
<tr>
<th>Learning outcome</th>
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</thead>
<tbody>
<tr>
<td>The learner will:</td>
</tr>
<tr>
<td>2. Know how to carry out corrective manual adjustments to permanent way assets</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Assessment criteria</th>
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</thead>
<tbody>
<tr>
<td>The learner can:</td>
</tr>
<tr>
<td>2.1 List the relevant Health and Safety legislation, regulations and safe working practices appropriate to the activity and organisation</td>
</tr>
<tr>
<td>2.2 Describe how to follow maintenance schedules and related specifications as approved by own organisation</td>
</tr>
<tr>
<td>2.3 Describe the methods, techniques and procedures for the adjustment of permanent way assets and components including</td>
</tr>
<tr>
<td>- method statements</td>
</tr>
<tr>
<td>- risk assessments</td>
</tr>
<tr>
<td>- hot weather precaution plans</td>
</tr>
<tr>
<td>- extreme weather plans</td>
</tr>
<tr>
<td>- emergency preparedness plans</td>
</tr>
<tr>
<td>2.4 Describe the types of maintenance records and documentation procedures required by own organisation</td>
</tr>
<tr>
<td>2.5 Describe the organisation’s procedures for the use, care and control of tools and equipment including calibration and the implications of not following these procedures</td>
</tr>
<tr>
<td>2.6 Describe the waste disposal procedures and whom to apply to for authorisation</td>
</tr>
<tr>
<td>2.7 Describe the relevant reporting lines and procedures relating to carrying out routine adjustments to permanent way assets within own organisation</td>
</tr>
<tr>
<td>2.8 Describe the impact of the activity on the operations of other departments and their impact on the activity</td>
</tr>
<tr>
<td>2.9 Explain the limits of own authority and responsibility when carrying out routine adjustments to permanent way assets</td>
</tr>
</tbody>
</table>
Unit 102  Carry out corrective manual adjustments to permanent way assets

Supporting information

The type of asset or component to be worked on will be that associated with plain line switches and crossings involving a single stage process.

The type and complexity of adjustments to be made, including as appropriate:
- Rail adjustment and regulation
- Adjustment switch setting
- Sleeper spacing and squaring
- Ballast re-profiling and boxing-in
- Operational support for stressing rails
- Operational support for straightening of rail ends
- Operational support for point testing
- Conductor rail (pots, anchors)

When assessing the unit the following points should be covered as appropriate:

Assessment criterion 2.1
- The organisation’s safety management system
- Relevant sections of the health and safety at work act
- Control of substances hazardous to health (COSHH)
- Track access restrictions
- Track work instructions
- Task risk control sheets
- Current rule book
- Regulations for working under overhead line equipment (OHLE) and in vicinity of direct current (DC) lines
- Manual handling regulations
- Reporting of injuries, diseases and dangerous occurrences regulations (RIDDOR)
- Safety sign regulations
- Personal protective equipment (PPE)
- Health and safety at work act (HASWA)
## Unit 103  Dismantle and remove permanent way assets and components

<table>
<thead>
<tr>
<th>UAN:</th>
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<tbody>
<tr>
<td>Level:</td>
<td>1</td>
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<tr>
<td>Credit value:</td>
<td>3</td>
</tr>
<tr>
<td>GLH:</td>
<td>16</td>
</tr>
</tbody>
</table>

**Relationship to NOS:**
This unit is linked to GoSkills National Occupational Standard Unit P9 – Dismantle and Remove Permanent Way Assets and Components

**Endorsement by a sector or regulatory body:**
This unit is endorsed by GoSkills, approved as a shared unit

**Aim:**
The purpose of this unit is for learners to demonstrate occupational competency in dismantling and removing Permanent Way assets and components

### Learning outcome
The learner will:
1. Be able to dismantle and remove permanent way assets and components

### Assessment criteria
The learner can:
1.1 Set up a safe system of work in line with organisational procedures and work to the system
1.2 Follow the appropriate diagrams and related specifications to dismantle and remove permanent way assets and components
1.3 Establish, and where appropriate, mark component orientation for re-assembly
1.4 Ensure that any stored energy or substances are released safely and correctly in line with organisational procedures
1.5 Remove the required components using approved tools and techniques
1.6 Take suitable precautions to prevent damage to components, tools and equipment during removal
1.7 Check the condition of the removed components and record those that will require replacing
1.8 Label and store the removed components in an appropriate location in line with organisational procedures
1.9 Store or discard the removed components in line with organisational procedures
1.10 Maintain documentation in accordance with own organisation's procedures

<table>
<thead>
<tr>
<th>Learning outcome</th>
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<tbody>
<tr>
<td>The learner will:</td>
</tr>
<tr>
<td>2. Know how to dismantle and remove permanent way assets and components</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Assessment criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>The learner can:</td>
</tr>
<tr>
<td>2.1 List the organisation's procedures that define the appropriate safe system of work for the activity</td>
</tr>
<tr>
<td>2.2 Describe how to follow engineering diagrams and related specifications as approved by own organisation for the assets and components concerned</td>
</tr>
<tr>
<td>2.3 Describe the safe working practices for the release of stored energy or substances</td>
</tr>
<tr>
<td>2.4 Describe the methods and techniques for temporary and permanent component removal including:</td>
</tr>
<tr>
<td>- manual methods</td>
</tr>
<tr>
<td>- mechanical methods</td>
</tr>
<tr>
<td>2.5 Describe the methods for identifying defects and discrepancies in components</td>
</tr>
<tr>
<td>2.6 Describe own organisation's procedures for the labelling, storage and/or disposal of components</td>
</tr>
<tr>
<td>2.7 Describe own organisation's procedures for tool and equipment care including calibration requirements</td>
</tr>
<tr>
<td>2.8 Describe the relevant reporting lines and procedures as approved by own organisation</td>
</tr>
<tr>
<td>2.9 Describe the likely impact of the activity on the operations of other departments and the impact of their work on the activity</td>
</tr>
<tr>
<td>2.10 Explain the limits of own authority and responsibility and those of others involved in the activity.</td>
</tr>
</tbody>
</table>
Unit 103  Dismantle and remove permanent way assets and components

Supporting information

The learner will be expected to work within their organisation's procedures and specifications and will be responsible for the quality of their work working within the limits of their own responsibility.

The type of equipment to be dismantled will be that associated with, including as appropriate:

- Plain line
- Switches and crossings
- Drains
- Longitudinal timbers
- Level crossings
- Lubricants

The manual and/or mechanical removal techniques or procedures to be followed will be those for both temporary and permanent situations, including as appropriate:

- Unfastening
- Untying
- Releasing

The complexity of the removal operations may be influenced by:

- Track configuration
- Using variable/diverse sources of information
- Track stability procedures
- Environmental procedures

When assessing the unit the following points should be covered as appropriate:

**Assessment criterion 2.1**

- The organisation's safety management system
- Relevant sections of the health and safety at work act
- Control of substances hazardous to health (COSHH)
- Track access restrictions
- Track work instructions
- Task risk control sheets
- Current rule book
- Regulations for working under overhead line equipment (OHLE) and in vicinity of direct current (DC) lines
- Manual handling regulations
• Reporting of injuries, diseases and dangerous occurrences regulations (RIDDOR)
• Safety sign regulations
• Personal protective equipment (PPE)
• Health and safety at work act (HASWA)

**Assessment Criterion 2.5:**
the methods include as appropriate:
• Recorded information
• Visual inspection
• Dynamic inspections/observations
Unit 104  Reinstall the work site after permanent way engineering activities

UAN: Y/502/6395
Level: 1
Credit value: 3
GLH: 16
Relationship to NOS: This unit is linked to GoSkills National Occupational Standard Unit P28 Reinstall the Work Area after Permanent Way Engineering Activities
Endorsement by a sector or regulatory body: This unit is endorsed by GoSkills, approved as a shared unit

Aim: The purpose of this unit is for learners to demonstrate occupational competency in reinstalling the work area after Permanent Way engineering activities

<table>
<thead>
<tr>
<th>Learning outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>The learner will:</td>
</tr>
<tr>
<td>1. Be able to reinstall the work site after permanent way engineering activities</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Assessment criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>The learner can:</td>
</tr>
<tr>
<td>1.1 Set up a safe system of work in line with organisational procedures and work to the system</td>
</tr>
<tr>
<td>1.2 Reinstall the work site to a safe condition in accordance with agreed requirements and schedules</td>
</tr>
<tr>
<td>1.3 Separate equipment, components, and materials for re-use from waste items and materials</td>
</tr>
<tr>
<td>1.4 Store reusable materials and equipment in an appropriate location</td>
</tr>
<tr>
<td>1.5 Identify, mark and secure any scrap material that cannot be removed immediately in such a way that the safe operation of the railway is maintained</td>
</tr>
<tr>
<td>1.6 Check that all materials and equipment that cannot be removed are secured and stored where they do not interfere with the safe operation of the railway</td>
</tr>
<tr>
<td>1.7 Dispose of waste materials in line with own organisation's procedures</td>
</tr>
<tr>
<td>1.8 Deal with problems within own control promptly and report those that can not be resolved in line with organisational procedures</td>
</tr>
<tr>
<td><strong>Learning outcome</strong></td>
</tr>
<tr>
<td>---------------------</td>
</tr>
<tr>
<td>The learner will:</td>
</tr>
<tr>
<td>2. Know how to reinstate the work site after permanent way engineering activities</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Assessment criteria</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>The learner can:</td>
</tr>
<tr>
<td>2.1 List the organisation’s procedures that define the appropriate safe system of work for the activity</td>
</tr>
<tr>
<td>2.2 Describe the requirements for reinstating the work site</td>
</tr>
<tr>
<td>2.3 Describe how to identify items for re-use and/or waste items</td>
</tr>
<tr>
<td>2.4 List the types of materials and equipment that can be stored</td>
</tr>
<tr>
<td>2.5 Describe own organisation’s methods and procedures for storing materials and equipment</td>
</tr>
<tr>
<td>2.6 Describe the different types and methods of waste disposal procedures in own organisation</td>
</tr>
<tr>
<td>2.7 Describe reporting lines and procedures that are approved by own organisation including knowing whom to approach for authorisation to dispose of waste</td>
</tr>
<tr>
<td>2.8 Explain the limits of own authority and responsibility and those of others involved in the activity.</td>
</tr>
</tbody>
</table>
Unit 104  Reinstall the work site after permanent way engineering activities

Supporting information

When assessing the unit the following points should be covered as appropriate:

Assessment criterion 2.1
- The organisation's safety management system
- Relevant sections of the health and safety at work act
- Control of substances hazardous to health (COSHH)
- Track access restrictions
- Track work instructions
- Task risk control sheets
- Current rule book
- Regulations for working under overhead line equipment (OHLE) and in vicinity of direct current (DC) lines
- Manual handling regulations
- Reporting of injuries, diseases and dangerous occurrences regulations (RIDDOR)
- Safety sign regulations
- Personal protective equipment (PPE)
- Health and safety at work act (HASWA)

Evidence requirements
Evidence must be collected by observation of naturally occurring activity in the workplace, in respect of the assessment criteria outlined below, supporting evidence and evidence for the remaining assessment criteria can be gathered from sources including observation, questioning, professional discussion, simulation, witness testimony, written and product evidence as outlined at unit level.
Appendix 1  Relationships to other qualifications

Literacy, language, numeracy and ICT skills development

This qualification can develop skills that can be used in the following qualifications:

- Functional Skills (England) – see www.cityandguilds.com/functionalskills
- Essential Skills (Northern Ireland) – see www.cityandguilds.com/essentialskillsni
- Essential Skills Wales – see www.cityandguilds.com/esw
Appendix 2  Sources of general information

The following documents contain essential information for centres delivering City & Guilds qualifications. They should be referred to in conjunction with this handbook. To download the documents and to find other useful documents, go to the Centres and Training Providers homepage on www.cityandguilds.com.

**Centre Manual - Supporting Customer Excellence** contains detailed information about the processes which must be followed and requirements which must be met for a centre to achieve ‘approved centre’ status, or to offer a particular qualification, as well as updates and good practice exemplars for City & Guilds assessment and policy issues. Specifically, the document includes sections on:

- The centre and qualification approval process
- Assessment, internal quality assurance and examination roles at the centre
- Registration and certification of candidates
- Non-compliance
- Complaints and appeals
- Equal opportunities
- Data protection
- Management systems
- Maintaining records
- Assessment
- Internal quality assurance
- External quality assurance.

**Our Quality Assurance Requirements** encompasses all of the relevant requirements of key regulatory documents such as:

- Regulatory Arrangements for the Qualifications and Credit Framework (2008)
- SQA Awarding Body Criteria (2007)
- NVQ Code of Practice (2006)

and sets out the criteria that centres should adhere to pre and post centre and qualification approval.

**Access to Assessment & Qualifications** provides full details of the arrangements that may be made to facilitate access to assessments and qualifications for candidates who are eligible for adjustments in assessment.
The **centre homepage** section of the City & Guilds website also contains useful information such as:

- **Walled Garden:** how to register and certificate candidates online
- **Qualifications and Credit Framework (QCF):** general guidance about the QCF and how qualifications will change, as well as information on the IT systems needed and FAQs
- **Events:** dates and information on the latest Centre events
- **Online assessment:** how to register for e-assessments.

**Centre Guide – Delivering International Qualifications** contains detailed information about the processes which must be followed and requirements which must be met for a centre to achieve ‘approved centre’ status, or to offer a particular qualification. Specifically, the document includes sections on:

- The centre and qualification approval process and forms
- Assessment, verification and examination roles at the centre
- Registration and certification of candidates
- Non-compliance
- Complaints and appeals
- Equal opportunities
- Data protection
- Frequently asked questions.
## Useful contacts

<table>
<thead>
<tr>
<th><strong>UK learners</strong></th>
<th><strong>T:</strong> +44 (0)844 543 0033</th>
</tr>
</thead>
<tbody>
<tr>
<td>General qualification information</td>
<td><strong>E:</strong> <a href="mailto:learnersupport@cityandguilds.com">learnersupport@cityandguilds.com</a></td>
</tr>
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<tr>
<th><strong>International learners</strong></th>
<th><strong>T:</strong> +44 (0)844 543 0033</th>
</tr>
</thead>
<tbody>
<tr>
<td>General qualification information</td>
<td><strong>F:</strong> +44 (0)20 7294 2413</td>
</tr>
<tr>
<td><strong>E:</strong> <a href="mailto:intcg@cityandguilds.com">intcg@cityandguilds.com</a></td>
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<tr>
<th><strong>Centres</strong></th>
<th><strong>T:</strong> +44 (0)844 543 0000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exam entries, Certificates, Registrations/enrolment, Invoices, Missing or late exam materials, Nominal roll reports, Results</td>
<td><strong>F:</strong> +44 (0)20 7294 2413</td>
</tr>
<tr>
<td><strong>E:</strong> <a href="mailto:centresupport@cityandguilds.com">centresupport@cityandguilds.com</a></td>
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<tr>
<th><strong>Single subject qualifications</strong></th>
<th><strong>T:</strong> +44 (0)844 543 0000</th>
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</thead>
<tbody>
<tr>
<td>Exam entries, Results, Certification, Missing or late exam materials, Incorrect exam papers, Forms request (BB, results entry), Exam date and time change</td>
<td><strong>F:</strong> +44 (0)20 7294 2413</td>
</tr>
<tr>
<td><strong>F:</strong> +44 (0)20 7294 2404 (BB forms)</td>
<td><strong>E:</strong> <a href="mailto:singlesubjects@cityandguilds.com">singlesubjects@cityandguilds.com</a></td>
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<thead>
<tr>
<th><strong>International awards</strong></th>
<th><strong>T:</strong> +44 (0)844 543 0000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Results, Entries, Enrolments, Invoices, Missing or late exam materials, Nominal roll reports</td>
<td><strong>F:</strong> +44 (0)20 7294 2413</td>
</tr>
<tr>
<td><strong>E:</strong> <a href="mailto:intops@cityandguilds.com">intops@cityandguilds.com</a></td>
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<thead>
<tr>
<th><strong>Walled Garden</strong></th>
<th><strong>T:</strong> +44 (0)844 543 0000</th>
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<tbody>
<tr>
<td>Re-issue of password or username, Technical problems, Entries, Results, e-assessment, Navigation, User/menu option, Problems</td>
<td><strong>F:</strong> +44 (0)20 7294 2413</td>
</tr>
<tr>
<td><strong>E:</strong> <a href="mailto:walledgarden@cityandguilds.com">walledgarden@cityandguilds.com</a></td>
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<tr>
<th><strong>Employer</strong></th>
<th><strong>T:</strong> +44 (0)121 503 8993</th>
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</thead>
<tbody>
<tr>
<td>Employer solutions, Mapping, Accreditation, Development Skills, Consultancy</td>
<td><strong>E:</strong> <a href="mailto:business@cityandguilds.com">business@cityandguilds.com</a></td>
</tr>
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<tr>
<th><strong>Publications</strong></th>
<th><strong>T:</strong> +44 (0)844 543 0000</th>
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<tbody>
<tr>
<td>Logbooks, Centre documents, Forms, Free literature</td>
<td><strong>F:</strong> +44 (0)20 7294 2413</td>
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