Level 2 NVQ Diploma in Construction Operations and Civil Engineering Services - Construction Operations (Construction) (6574)

September 2017 Version 3.2





Qualification at a glance

| Subject area | Construction |
|--------------------------------|--|
| City & Guilds number | 6574 |
| Age group approved | 16-18,19+ |
| Assessment | Portfolio of evidence |
| Support materials | Centre handbook Candidate logbook |
| Registration and certification | Consult the Walled Garden/Online Catalogue for last dates |

| Title and level | GLH | TQT | City & Guilds number | Accreditation number |
|--|-----|-----|----------------------------|----------------------|
| Level 2 NVQ Diploma In Construction Operations and Civil Engineering Services (Construction) - Construction Operations – Modular Pavement | 137 | 410 | 6574-11 | 601/7983/1 |
| Level 2 NVQ Diploma In Construction Operations and Civil Engineering Services (Construction) - Construction Operations – Laying Kerbs and Channels | 137 | 410 | 6574-12 | 601/7983/1 |
| Level 2 NVQ Diploma In Construction Operations and Civil Engineering Services (Construction) - Construction Operations – General Building Operations | 137 | 410 | 6574-13 | 601/7983/1 |
| Level 2 NVQ Diploma In Construction Operations and Civil Engineering Services (Construction) - Construction Operations – Drainage Construction | 137 | 410 | 6574-14 | 601/7983/1 |

| Level 2 NVQ Diploma In Construction Operations and Civil Engineering Services (Construction) - Construction Operations – Structural Concreting | 137 | 410 | 6574-15 | 601/7983/1 |
|---|-----|-----|---------|------------|
| Level 2 NVQ Diploma In Construction Operations and Civil Engineering Services (Construction) - Construction Operations – Non-structural Concreting | 137 | 410 | 6574-16 | 601/7983/1 |
| Level 2 NVQ Diploma In Construction Operations and Civil Engineering Services (Construction) - Construction Operations – General Construction | 137 | 410 | 6574-17 | 601/7983/1 |
| Level 2 NVQ Diploma In Construction Operations and Civil Engineering Services (Construction) - Construction Operations – Excavation and Reinstatement | 137 | 410 | 6574-18 | 601/7983/1 |

| Version and date | Change detail | Section |
|-----------------------|---|--|
| 3.0 November 2015 | Updated title | Qualifications at |
| | Updated QANs | a Glance, |
| | Replaced units 608, 611, 633, 648, 660, 672 and 679, 701, 705 and 721 with 368, 612, 316, 331, 366, 352, 370, 362 and 711 | Structure and Units |
| | Added units 102, 225 and 358 Removed phone numbers | Last pages |
| 3.1 April 2016 | City & Guilds Group statement updated | Useful contacts |
| | Phone numbers removed | Useful contacts |
| | Unit 224, LO2.1 amended | Units |
| 3.2 September 2017 | Added TQT and GLH details | Qualification at a Glance, Structure |
| | Deleted QCF | Appendix |



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| Unit 362 | Slinging and hand signalling the movement of suspended loads in the workplace | 116 |
| Unit 366 | Preparing and operating powered units, tools or pedestrian plant, machinery or equipment in the | |
| | workplace | 124 |
| Unit 368 | Moving, handling and storing resources in the workplace | 131 |
| Unit 370 | Setting out secondary dimensional work control | in |
| | the workplace | 137 |
| Unit 612 | Placing and finishing non-specialist concrete in t workplace | he 144 |
| Unit 681 | Providing temporary excavation support in the | |
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| Unit 682 | Reinstating excavation and highway surfaces in | the |
| | workplace | 157 |
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| | workplace | 163 |
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1 Introduction



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

| Area | Description |
|---|--|
| Who are the qualifications for? | This qualification is ideal for individuals who work as an operative in the construction sector, laying drainage, kerbs, channels and pavements. It also includes excavating holes and trenches and concreting. It provides an opportunity for them to demonstrate their competence in this area and gain a Level 2 NVQ Diploma in Construction Operations and Civil Engineering Services. |
| What do the qualifications cover? | It covers the following specialist areas: • Modular paving • Laying kerbs and channels • General building operations • Drainage construction • Structural and non-structural concreting • General construction • Excavation and reinstatement Upon completion, learners show that they have the required skills and knowledge and are competent in this specialist trade area. |
| Are the qualifications part of a framework or initiative? | This qualification forms the competence based element of the Intermediate Apprenticeship in Construction Civil Engineering (Level 2), pathway 1: Construction Operations. |
| What opportunities for progression are there? | There is not a level 3 Diploma or an advanced apprenticeship for construction operations as requirements of the occupational area are covered at this level. However, after gaining work experience there are opportunities to progress into plant operations related to construction operations and also occupational work supervision, management or technical support areas. |

Structure

To achieve the **Level 2 Diploma in Construction Operations and Civil Engineering Services (Modular Pavement) (6574-11)**, learners must achieve **41** credits in total. **26** credits must come from the mandatory units plus a minimum of **10** credits from Optional group A and a minimum of **5** credits from Optional group B.

Level 2 Diploma in Construction Operations and Civil Engineering Services (Modular Paving Pavement Construction)

| Unit accreditation number | City & Guilds unit number | Unit title | Credit value |
|---------------------------------|------------------------------------|--|-----------------|
| Mandatory | | | |
| A/503/1170 | 101 | Conforming to general health, safety and welfare in the workplace | 2 |
| J/503/1169 | 218 | Conforming to productive working practices in the workplace | 3 |
| J/503/9627 | 294 | Laying modular pavement in the workplace | 14 |
| J/506/4673 | 370 | Setting out secondary dimensional work control in the workplace | 7 |
| Optional A | | | |
| T/503/9560 | 239 | Establishing work area protection and safety in the workplace | 10 |
| K/503/9622 | 698 | Segregating the area for highways works in the workplace | 12 |
| Optional B | | | |
| K/503/9457 | 102 | Preparing and mixing concrete and mortars in the workplace | 8 |
| D/600/8281 | 224 | Erecting and dismantling access/working platforms in the workplace | 8 |
| Y/600/8165 | 225 | Placing and compacting concrete in the workplace | 13 |
| M/503/9623 | 284 | Installing street ironwork in the workplace | 9 |

| J/506/4642 | 316 | Preparing and operating forward tipping dumpers to receive, transport and discharge materials in the workplace | 16 |
|------------|-----|--|----|
| R/506/4661 | 331 | Preparing and operating ride- on rollers to compact materials in the workplace | 16 |
| F/506/4669 | 352 | Preparing for, and arranging and securing plant or machinery for transportation in the workplace | 16 |
| A/506/4668 | 358 | Preparing to and directing and guiding the movement of vehicles, plant or machinery in the workplace | 12 |
| R/506/3929 | 362 | Slinging and hand signalling the movement of suspended loads in the workplace | 10 |
| F/506/4672 | 366 | Preparing and operating powered units, tools or pedestrian plant, machinery or equipment in the workplace | 7 |
| F/503/1171 | 368 | Moving, handling and storing resources in the workplace | 5 |
| K/503/9636 | 681 | Providing temporary excavation support in the workplace | 15 |
| H/503/9442 | 682 | Reinstating excavation and highway surfaces in the workplace | 12 |
| A/600/8157 | 730 | Reinstating ground condition in the workplace | 12 |

To achieve the **Level 2 Diploma in Construction Operations** and Civil Engineering Services (Laying Kerbs and Channels) (6574-12), learners must achieve 41 credits in total. 26 credits must come from the mandatory units plus a minimum of 10 credits from Optional group A and a minimum of 5 credits from Optional group B.

Level 2 Diploma in Construction Operations and Civil Engineering Services (Laying Kerbs and Channels)

| Unit accreditation number | City & Guilds unit number | Unit title | Credit value |
|---------------------------------|------------------------------------|--|-----------------|
| Mandatory | | | |
| A/503/1170 | 101 | Conforming to general health, safety and welfare in the workplace | 2 |
| J/503/1169 | 218 | Conforming to productive working practices in the workplace | 3 |
| J/506/4673 | 370 | Setting out secondary dimensional work control in the workplace | 7 |
| D/503/9634 | 733 | Laying kerbs and channels in the workplace | 14 |
| Optional A | | | |
| T/503/9560 | 239 | Establishing work area protection and safety in the workplace | 10 |
| K/503/9622 | 698 | Segregating the area for highways works in the workplace | 12 |
| Optional B | | | |
| K/503/9457 | 102 | Preparing and mixing concrete and mortars in the workplace | 8 |
| D/600/8281 | 224 | Erecting and dismantling access/working platforms in the workplace | 8 |
| Y/600/8165 | 225 | Placing and compacting concrete in the workplace | 13 |
| M/503/9623 | 284 | Installing street ironwork in the workplace | 9 |

| J/506/4642 | 316 | Preparing and operating forward tipping dumpers to receive, transport and discharge materials in the workplace | 16 |
|------------|-----|--|----|
| R/506/4661 | 331 | Preparing and operating ride- on rollers to compact materials in the workplace | 16 |
| F/506/4669 | 352 | Preparing for, and arranging and securing plant or machinery for transportation in the workplace | 16 |
| A/506/4668 | 358 | Preparing to and directing and guiding the movement of vehicles, plant or machinery in the workplace | 12 |
| R/506/3929 | 362 | Slinging and hand signalling the movement of suspended loads in the workplace | 10 |
| F/506/4672 | 366 | Preparing and operating powered units, tools or pedestrian plant, machinery or equipment in the workplace | 7 |
| F/503/1171 | 368 | Moving, handling and storing resources in the workplace | 5 |
| K/503/9636 | 681 | Providing temporary excavation support in the workplace | 15 |
| H/503/9442 | 682 | Reinstating excavation and highway surfaces in the workplace | 12 |
| A/600/8157 | 730 | Reinstating ground condition in the workplace | 12 |

To achieve the Level 2 Diploma in Construction Operations and Civil Engineering Services (General Building Operations) (6574-13), learners must achieve 50 credits in total. 40 credits must come from the mandatory units plus a minimum of 10 credits from the optional units. Learners may achieve further credits from the Elective group. However any credits achieved from the Elective group will not count towards the qualification.

the Level 2 Diploma in Construction Operations and Civil Engineering Services (General Building Operations)

| Unit accreditation number | City & Guilds unit number | Unit title | Credit value |
|---------------------------------|------------------------------------|--|-----------------|
| Mandatory | | | |
| A/503/1170 | 101 | Conforming to general health, safety and welfare in the workplace | 2 |
| J/503/1169 | 218 | Conforming to productive working practices in the workplace | 3 |
| J/503/9627 | 294 | Laying modular pavement in the workplace | 14 |
| J/506/4673 | 370 | Setting out secondary dimensional work control in the workplace | 7 |
| D/503/9634 | 733 | Laying kerbs and channels in the workplace | 14 |
| Optional | | | |
| T/503/9560 | 239 | Establishing work area protection and safety in the workplace | 10 |
| K/503/9622 | 698 | Segregating the area for highways works in the workplace | 12 |
| Elective | | | |
| D/600/8281 | 224 | Erecting and dismantling access/working platforms in the workplace | 8 |
| M/503/9623 | 284 | Installing street ironwork in the workplace | 9 |
| J/506/4642 | 316 | Preparing and operating forward tipping dumpers to receive, transport and discharge materials in the workplace | 16 |

| R/506/4661 | 331 | Preparing and operating ride- on rollers to compact materials in the workplace | 16 |
|------------|-----|---|----|
| F/506/4669 | 352 | Preparing for, and arranging and securing plant or machinery for transportation in the workplace | 16 |
| A/506/4668 | 358 | Preparing to and directing and guiding the movement of vehicles, plant or machinery in the workplace | 12 |
| R/506/3929 | 362 | Slinging and hand signalling the movement of suspended loads in the workplace | 10 |
| F/506/4672 | 366 | Preparing and operating powered units, tools or pedestrian plant, machinery or equipment in the workplace | 7 |
| F/503/1171 | 368 | Moving, handling and storing resources in the workplace | 5 |
| K/503/9636 | 681 | Providing temporary excavation support in the workplace | 15 |
| H/503/9442 | 682 | Reinstating excavation and highway surfaces in the workplace | 12 |
| A/600/8157 | 730 | Reinstating ground condition in the workplace | 12 |

To achieve the **Level 2 Diploma in Construction Operations** and Civil Engineering Services (Drainage Construction) (6574-14), learners must achieve 46 credits in total. 31 credits must come from the mandatory units plus a minimum of 10 credits from Optional group A and a minimum of 5 credits from Optional group B.

Level 2 Diploma in Construction Operations and Civil Engineering Services (Drainage Construction)

| Unit accreditation number | City & Guilds unit number | Unit title | Credit value |
|---------------------------------|------------------------------------|--|-----------------|
| Mandatory | | | |
| A/503/1170 | 101 | Conforming to general health, safety and welfare in the workplace | 2 |
| J/503/1169 | 218 | Conforming to productive working practices in the workplace | 3 |
| J/506/4673 | 370 | Setting out secondary dimensional work control in the workplace | 7 |
| Y/504/6775 | 711 | Installing drainage in the workplace | 19 |
| Optional A | | | |
| T/503/9560 | 239 | Establishing work area protection and safety in the workplace | 10 |
| K/503/9622 | 698 | Segregating the area for highways works in the workplace | 12 |
| Optional B | | | |
| K/503/9457 | 102 | Preparing and mixing concrete and mortars in the workplace | 8 |
| D/600/8281 | 224 | Erecting and dismantling access/working platforms in the workplace | 8 |
| Y/600/8165 | 225 | Placing and compacting concrete in the workplace | 13 |
| M/503/9623 | 284 | Installing street ironwork in the workplace | 9 |

| J/506/4642 | 316 | Preparing and operating forward tipping dumpers to receive, transport and discharge materials in the workplace | 16 |
|------------|-----|--|----|
| R/506/4661 | 331 | Preparing and operating ride- on rollers to compact materials in the workplace | 16 |
| F/506/4669 | 352 | Preparing for, and arranging and securing plant or machinery for transportation in the workplace | 16 |
| A/506/4668 | 358 | Preparing to and directing and guiding the movement of vehicles, plant or machinery in the workplace | 12 |
| R/506/3929 | 362 | Slinging and hand signalling the movement of suspended loads in the workplace | 10 |
| F/506/4672 | 366 | Preparing and operating powered units, tools or pedestrian plant, machinery or equipment in the workplace | 7 |
| F/503/1171 | 368 | Moving, handling and storing resources in the workplace | 5 |
| K/503/9636 | 681 | Providing temporary excavation support in the workplace | 15 |
| H/503/9442 | 682 | Reinstating excavation and highway surfaces in the workplace | 12 |
| A/600/8157 | 730 | Reinstating ground condition in the workplace | 12 |

To achieve the **Level 2 Diploma in Construction Operations** and Civil Engineering Services (Structural Concreting (6574-15), learners must achieve 55 credits in total. 40 credits must come from the mandatory units plus a minimum of 10 credits from Optional group A and a minimum of 5 credits from Optional group B.

Level 2 Diploma in Construction Operations and Civil Engineering Services (Structural Concreting)

| Unit accreditation number | City & Guilds unit number | Unit title | Credit value |
|---------------------------------|------------------------------------|--|-----------------|
| Mandatory | | | |
| A/503/1170 | 101 | Conforming to general health, safety and welfare in the workplace | 2 |
| J/503/1169 | 218 | Conforming to productive working practices in the workplace | 3 |
| M/503/9637 | 731 | Pouring concrete to form structures in the workplace | 18 |
| R/503/9663 | 732 | Erecting and striking proprietary formwork in the workplace | 17 |
| Optional A | | | |
| T/503/9560 | 239 | Establishing work area protection and safety in the workplace | 10 |
| K/503/9622 | 698 | Segregating the area for highways works in the workplace | 12 |
| Optional B | | | |
| K/503/9457 | 102 | Preparing and mixing concrete and mortars in the workplace | 8 |
| D/600/8281 | 224 | Erecting and dismantling access/working platforms in the workplace | 8 |
| Y/600/8165 | 225 | Placing and compacting concrete in the workplace | 13 |
| M/503/9623 | 284 | Installing street ironwork in the workplace | 9 |

| J/506/4642 | 316 | Preparing and operating forward tipping dumpers to receive, transport and discharge materials in the workplace | 16 |
|------------|-----|--|----|
| R/506/4661 | 331 | Preparing and operating ride- on rollers to compact materials in the workplace | 16 |
| F/506/4669 | 352 | Preparing for, and arranging and securing plant or machinery for transportation in the workplace | 16 |
| A/506/4668 | 358 | Preparing to and directing and guiding the movement of vehicles, plant or machinery in the workplace | 12 |
| R/506/3929 | 362 | Slinging and hand signalling the movement of suspended loads in the workplace | 10 |
| F/503/1171 | 368 | Moving, handling and storing resources in the workplace | 5 |
| F/506/4672 | 366 | Preparing and operating powered units, tools or pedestrian plant, machinery or equipment in the workplace | 7 |
| K/503/9636 | 681 | Providing temporary excavation support in the workplace | 15 |
| H/503/9442 | 682 | Reinstating excavation and highway surfaces in the workplace | 12 |
| A/600/8157 | 730 | Reinstating ground condition in the workplace | 12 |

To achieve the **Level 2 Diploma in Construction Operations** and Civil Engineering Services (Non-structural Concreting) (6574-16), learners must achieve 59 credits in total. 44 credits must come from the mandatory units plus a minimum of 10 credits from Optional group A and a minimum of 5 credits from Optional group B.

Level 2 Diploma in Construction Operations and Civil Engineering Services (Non-structural Concreting)

| Unit accreditation number | City & Guilds unit number | Unit title | Credit value | |
|---------------------------------|------------------------------------|---|-----------------|--|
| Mandatory | | | | |
| A/503/1170 | 101 | Conforming to general health, safety and welfare in the workplace | 2 | |
| J/503/1169 | 218 | Conforming to productive working practices in the workplace | 3 | |
| R/504/6774 | 612 | Placing and finishing non- specialist concrete in the workplace | 21 | |
| M/503/9637 | 731 | Pouring concrete to form structures in the workplace | 18 | |
| Optional A | | | | |
| T/503/9560 | 239 | Establishing work area protection and safety in the workplace | 10 | |
| K/503/9622 | 698 | Segregating the area for highways works in the workplace | 12 | |
| Optional B | | | | |
| K/503/9457 | 102 | Preparing and mixing concrete and mortars in the workplace | 8 | |
| D/600/8281 | 224 | Erecting and dismantling access/working platforms in the workplace | 8 | |
| Y/600/8165 | 225 | Placing and compacting concrete in the workplace | 13 | |
| M/503/9623 | 284 | Installing street ironwork in the workplace | 9 | |

| J/506/4642 | 316 | Preparing and operating forward tipping dumpers to receive, transport and discharge materials in the workplace | 16 |
|------------|-----|--|----|
| R/506/4661 | 331 | Preparing and operating ride- on rollers to compact materials in the workplace | 16 |
| F/506/4669 | 352 | Preparing for, and arranging and securing plant or machinery for transportation in the workplace | 16 |
| A/506/4668 | 358 | Preparing to and directing and guiding the movement of vehicles, plant or machinery in the workplace | 12 |
| R/506/3929 | 362 | Slinging and hand signalling the movement of suspended loads in the workplace | 10 |
| F/506/4672 | 366 | Preparing and operating powered units, tools or pedestrian plant, machinery or equipment in the workplace | 7 |
| F/503/1171 | 368 | Moving, handling and storing resources in the workplace | 5 |
| K/503/9636 | 681 | Providing temporary excavation support in the workplace | 15 |
| H/503/9442 | 682 | Reinstating excavation and highway surfaces in the workplace | 12 |
| A/600/8157 | 730 | Reinstating ground condition in the workplace | 12 |

To achieve the **Level 2 Diploma in Construction Operations** and Civil Engineering Services (General Construction) (6574-17), learners must achieve 44 credits in total. 10 credits must come from the mandatory units plus a minimum of 10 credits from Optional group A, a minimum of 19 credits from Optional group B and a minimum 5 credits from Optional group C.

Level 2 Diploma in Construction Operations and Civil Engineering Services (General Construction)

| Unit accreditation number | City & Guilds unit number | Unit title | Credit value |
|---------------------------------|------------------------------------|---|-----------------|
| Mandatory | | | _ |
| A/503/1170 | 101 | Conforming to general health, safety and welfare in the workplace | 2 |
| J/503/1169 | 218 | Conforming to productive working practices in the workplace | 3 |
| F/503/1171 | 368 | Moving, handling and storing resources in the workplace | 5 |
| Optional A | | | |
| T/503/9560 | 239 | Establishing work area protection and safety in the workplace | 10 |
| K/503/9622 | 698 | Segregating the area for highways works in the workplace | 12 |
| Optional B | | | |
| R/504/6774 | 612 | Placing and finishing non- specialist concrete in the workplace | 21 |
| Y/504/6775 | 711 | Installing drainage in the workplace | 19 |
| Optional C | | | |
| K/503/9457 | 102 | Preparing and mixing concrete and mortars in the workplace | 8 |
| D/600/8281 | 224 | Erecting and dismantling access/working platforms in the workplace | 8 |
| Y/600/8165 | 225 | Placing and compacting concrete in the workplace | 13 |
| M/503/9623 | 284 | Installing street ironwork in the workplace | 9 |

| J/506/4642 | 316 | Preparing and operating forward tipping dumpers to receive, transport and discharge materials in the workplace | 16 |
|------------|-----|--|----|
| R/506/4661 | 331 | Preparing and operating ride- on rollers to compact materials in the workplace | 16 |
| F/506/4669 | 352 | Preparing for, and arranging and securing plant or machinery for transportation in the workplace | 16 |
| A/506/4668 | 358 | Preparing to and directing and guiding the movement of vehicles, plant or machinery in the workplace | 12 |
| R/506/3929 | 362 | Slinging and hand signalling the movement of suspended loads in the workplace | 10 |
| F/506/4672 | 366 | Preparing and operating powered units, tools or pedestrian plant, machinery or equipment in the workplace | 7 |
| K/503/9636 | 681 | Providing temporary excavation support in the workplace | 15 |
| H/503/9442 | 682 | Reinstating excavation and highway surfaces in the workplace | 12 |
| A/600/8157 | 730 | Reinstating ground condition in the workplace | 12 |

To achieve the Level 2 Diploma in Construction Operations and Civil Engineering Services (Excavation and Reinstatement) (6574-18), learners must achieve 54 credits in total. 27 credits must come from the mandatory units plus a minimum of 10 credits from Optional group A, a minimum of 12 credits from Optional group B and a minimum 5 credits from Optional group C.

Level 2 Diploma in Construction Operations and Civil Engineering Services (Excavation and Reinstatement)

| Unit accreditation number | City & Guilds unit number | Unit title | Credit value |
|---------------------------------|------------------------------------|--|-----------------|
| Mandatory | | | |
| A/503/1170 | 101 | Conforming to general health, safety and welfare in the workplace | 2 |
| J/503/1169 | 218 | Conforming to productive working practices in the workplace | 3 |
| Y/503/9650 | 240 | Excavating holes and trenches - manual digging in the workplace | 10 |
| A/503/9639 | 297 | Locating and protecting utilities apparatus and substructures in the workplace | 12 |
| Optional A | | | |
| T/503/9560 | 239 | Establishing work area protection and safety in the workplace | 10 |
| K/503/9622 | 698 | Segregating the area for highways works in the workplace | 12 |
| Optional B | | | |
| H/503/9442 | 682 | Reinstating excavation and highway surfaces in the workplace | 12 |
| A/600/8157 | 730 | Reinstating ground condition in the workplace | 12 |
| Optional C | | | |
| K/503/9457 | 102 | Preparing and mixing concrete and mortars in the workplace | 8 |
| D/600/8281 | 224 | Erecting and dismantling access/working platforms in the workplace | 8 |

| Y/600/8165 | 225 | Placing and compacting concrete in the workplace | 13 |
|------------|-----|--|----|
| M/503/9623 | 284 | Installing street ironwork in the workplace | 9 |
| J/506/4642 | 316 | Preparing and operating forward tipping dumpers to receive, transport and discharge materials in the workplace | 16 |
| R/506/4661 | 331 | Preparing and operating ride- on rollers to compact materials in the workplace | 16 |
| F/506/4669 | 352 | Preparing for, and arranging and securing plant or machinery for transportation in the workplace | 16 |
| A/506/4668 | 358 | Preparing to and directing and guiding the movement of vehicles, plant or machinery in the workplace | 12 |
| R/506/3929 | 362 | Slinging and hand signalling the movement of suspended loads in the workplace | 10 |
| F/506/4672 | 366 | Preparing and operating powered units, tools or pedestrian plant, machinery or equipment in the workplace | 7 |
| F/503/1171 | 368 | Moving, handling and storing resources in the workplace | 5 |
| K/503/9636 | 681 | Providing temporary excavation support in the workplace | 15 |
| H/503/9442 | 682 | Reinstating excavation and highway surfaces in the workplace | 12 |
| A/600/8157 | 730 | Reinstating ground condition in the workplace | 12 |

Total Qualification Time

Total Qualification Time (TQT) is the total amount of time, in hours, expected to be spent by a Learner to achieve a qualification. It includes both guided learning hours (which are listed separately) and hours spent in preparation, study and assessment.

| Title and level | GLH | TQT |
|---|-----|-----|
| Level 2 NVQ Diploma In Construction Operations and Civil Engineering Services (Construction) - Construction Operations – Modular Pavement | 137 | 410 |
| Level 2 NVQ Diploma In Construction Operations and Civil Engineering Services (Construction) - Construction Operations – Laying Kerbs and Channels | 137 | 410 |
| Level 2 NVQ Diploma In Construction Operations and Civil Engineering Services (Construction) - Construction Operations – General Building Operations | 137 | 410 |
| Level 2 NVQ Diploma In Construction Operations and Civil Engineering Services (Construction) - Construction Operations – Drainage Construction | 137 | 410 |
| Level 2 NVQ Diploma In Construction Operations and Civil Engineering Services (Construction) - Construction Operations – Structural Concreting | 137 | 410 |
| Level 2 NVQ Diploma In Construction Operations and Civil Engineering Services (Construction) - Construction Operations – Non-structural Concreting | 137 | 410 |
| Level 2 NVQ Diploma In Construction Operations and Civil Engineering Services (Construction) - Construction Operations – General Construction | 137 | 410 |
| Level 2 NVQ Diploma In Construction Operations and Civil Engineering Services (Construction) - Construction Operations – Excavation and Reinstatement | 137 | 410 |



2 Centre requirements

Approval

The approval process for Construction qualifications is available at our website. Please visit **www.cityandguilds.com/construction** for further information.

Resource requirements

Centre staffing

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
- personal and social development
- employability.

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

Centre staff may undertake more than one role, eg tutor and assessor or internal verifier, but cannot internally verify their own assessments.

Assessors and internal verifiers

Assessors must have sufficient, verifiable, relevant current industry experience, knowledge and understanding of the occupational working area at, or above, the level being assessed.

This must be of sufficient depth to be effective and reliable when judging candidates' competence. Assessors' experience, knowledge and understanding could be verified by a combination of

- curriculum vitae and employer endorsement
- references
- possession of a relevant NVQ/SVQ, or vocationally related qualification
- corporate membership of a relevant professional institution
- interview.

(The verification process must be recorded and available for audit)

Assessors **must** have sufficient occupational expertise so they have up to date experience, knowledge and understanding of the particular aspects of work they are assessing. This could be verified by records of continuing professional development achievements. Assessors:

- should only assess in their acknowledged area of occupational competence
- shall be prepared to participate in training activities for their continued professional development
- must have a sound, in-depth knowledge of, and uphold the integrity of, the sector's NOS and the Assessment Strategy
- must hold, or be working towards, a qualification as listed within 'Assessing and Assuring Quality of Assessment', either in the Regulated Qualification Framework (RQF), or the Scottish Credit and Qualifications Framework (SCQF):
 - o Level 3 Award in Assessing Competence in the Work Environment
 - o Level 3 Certificate in Assessing Vocational Achievement
 - o SVQ (SCQF level) Assessing Competence in the Work Environment
 - o SVQ (SCQF level) Assessing Vocational Achievement

or hold one of the following:

- A1 Assess candidates using a range of methods
- D32/33 Assess candidate performance, using differing sources of evidence

Holders of A1 and D32/33 must assess to the reviewed National Occupational Standards (NOS) for Learning and Development.

In Scotland, approval for exemptions must be obtained from the Scottish Qualifications Authority.

Continuing Professional Development (CPD)

Centres must support their staff to ensure that they have current knowledge of the occupational area, that delivery, mentoring, training, assessment and verification is in line with best practice, and that it takes account of any national or legislative developments.

Candidate entry requirements

City & Guilds does not set entry requirements for these qualifications. However, centres must ensure that candidates have the potential and opportunity to gain the qualifications successfully.

Age restrictions

These qualifications are approved for 16 - 18, and 19 + 18 learners. There are no age limits attached to learners undertaking the qualification unless this is a legal requirement of the process or the environment.



3 Delivering the qualification

Initial assessment and induction

An initial assessment of each learner should be made before the start of their programme to identify:

- if the learner has any specific training needs,
- support and guidance they may need when working towards their qualifications
- any units they have already completed, or credit they have accumulated which is relevant to the qualifications
- the appropriate type and level of qualification.

We recommend that centres provide an induction programme so the learner fully understands the requirements of the qualifications, their responsibilities as a learner, and the responsibilities of the centre. This information can be recorded on a learning contract.

Support materials

The following resources are available for these qualifications:

| Description | How to access |
|-------------------|--|
| Candidate logbook | Available to download from the City & Guilds website |

Recording documents

Candidates and centres may decide to use a paper-based or electronic method of recording evidence.

City & Guilds endorses several ePortfolio systems, including our own, **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**.

City & Guilds has developed a set of Recording Forms including examples of completed forms, for new and existing centres to use as appropriate. *Recording forms* are available on the City & Guilds website.

Although new centres are expected to use these forms, 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. Amendable (MS Word) versions of the forms are available on the City & Guilds website.



4 Assessment

Assessment of the qualification

Candidates must have a completed portfolio of evidence for each unit. Centres are able to download the 6574 logbook from the City & Guilds website.

Aspects to be assessed through performance in the workplace

Direct evidence produced through normal performance in the workplace is the primary source for meeting the requirements. This includes naturally occurring documentary evidence (hard copy and electronic), direct observation of activities and witness testimony as relevant. Individual units will specify any exceptions to this position.

Workplace evidence must be supported by the required evidence of knowledge and understanding. This evidence may be identified by:

- questioning the candidate
- recognised industry education and training programme assessment or professional interview assessment that has been matched to NOS requirements
- performance evidence.

A holistic approach towards the collection of evidence should be encouraged. The focus should be on assessing activities generated by the whole work experience rather than focusing on specific tasks. This would show how evidence requirements could be met across the qualification to make the most efficient use of evidence.



5 Units

Structure of units

These units each have the following:

- City & Guilds reference number
- unit accreditation number
- title
- level
- credit value
- unit aim
- learning outcomes which are comprised of a number of assessment criteria
- notes for guidance.

Unit 101 Conforming to general health, safety and welfare in the workplace

| UAN: | A/503/1170 |
|---------------|--|
| Level: | 1 |
| Credit value: | 2 |
| GLH: | 7 |
| Aim: | This unit is about awareness of relevant current statutory requirements and official guidance, responsibilities, to self and others, relating to workplace health, safety and welfare, personal behaviour and security in the workplace. |

Learning outcome

The learner will:

1. comply with all workplace health, safety and welfare legislation requirements

Assessment criteria

- 1.1 comply with information from workplace inductions and any health, safety and welfare briefings attended relevant to the occupational area
- 1.2 use health and safety control equipment safely to carry out the activity in accordance with legislation and organisational requirements
- 1.3 comply with statutory requirements, safety notices and warning notices displayed within the workplace and/or on equipment
- 1.4 state why and when health and safety control equipment, identified by the principles of protection, should be used relating to types, purpose and limitations of each type, the work situation, occupational use and the general work environment, in relation to:
 - a. collective protective measures
 - b. personal protective equipment (PPE)
 - c. respiratory protective equipment (RPE)
 - d. local exhaust ventilation (LEV)
- 1.5 state how the health and safety control equipment relevant to the work should be used in accordance with the given instructions
- 1.6 state which types of health, safety and welfare legislation, notices and warning signs are relevant to the occupational area and associated equipment
- 1.7 state why health, safety and welfare legislation, notices and warning signs are relevant to the occupational area
- 1.8 state how to comply with control measures that have been identified by risk assessments and safe systems of work.

The learner will:

2. recognise hazards associated with the workplace that have not been previously controlled and report them in accordance with organisational procedures

Assessment criteria

The learner can:

- 2.1 report any hazards created by changing circumstances within the workplace in accordance with organisational procedures
- 2.2 list typical hazards associated with the work environment and occupational area in relation to resources, substances, asbestos, equipment, obstructions, storage, services and work activities
- 2.3 list the current health and safety executive top ten safety risks
- 2.4 list the current health and safety executive top five health risks
- 2.5 state how changing circumstances within the workplace could cause hazards
- 2.6 state the methods used for reporting changed circumstances, hazards and incidents in the workplace.

Learning outcome

The learner will:

3. comply with organisational policies and procedures to contribute to health, safety and welfare

Assessment criteria

- 3.1 interpret and comply with given instructions to maintain safe systems of work and quality working practices
- 3.2 contribute to discussions by offering/providing feedback relating to health, safety and welfare
- 3.3 contribute to the maintenance of workplace welfare facilities in accordance with workplace welfare procedures
- 3.4 safely store health and safety control equipment in accordance with given instructions
- 3.5 dispose of waste and/or consumable items in accordance with legislation
- 3.6 state the organisational policies and procedures for health, safety and welfare, in relation to:
 - a. dealing with accidents and emergencies associated with the work and environment
 - b. methods of receiving or sourcing information
 - c. reporting
 - d. stopping work
 - e. evacuation
 - f. fire risks and safe exit procedures
 - g. consultation and feedback
- 3.7 state the appropriate types of fire extinguishers relevant to the work
- 3.8 state how and when the different types of fire extinguishers are used in accordance with legislation and official guidance.

The learner will:

4. work responsibly to contribute to workplace health, safety and welfare whilst carrying out work in the relevant occupational area

Assessment criteria

The learner can:

- 4.1 demonstrate behaviour which shows personal responsibility for general workplace health, safety and welfare
- 4.2 state how personal behaviour demonstrates responsibility for general workplace health, safety and welfare, in relation to:
 - a. recognising when to stop work in the face of serious and imminent danger to self and/or others
 - b. contributing to discussions and providing feedback
 - c. reporting changed circumstances and incidents in the workplace
 - d. complying with the environmental requirements of the workplace
- 4.3 give examples of how the behaviour and actions of individuals could affect others within the workplace.

Learning outcome

The learner will:

5. comply with and support all organisational security arrangements and approved procedures

Assessment criteria

- 5.1 provide appropriate support for security arrangements in accordance with approved procedures:
 - a. during the working day
 - b. on completion of the day's work
 - c. for unauthorised personnel (other operatives and the general public)
 - e.for theft
- 5.2 state how security arrangements are implemented in relation to the workplace, the general public, site personnel and resources.

Unit 101 Conforming to general health, safety and welfare in the workplace

Supporting information

Guidance

This unit must be assessed in a work environment, in accordance with:

- the Additional Requirements for Qualifications using the title NVQ in RQF
- the Construction Skills' Consolidated Assessment Strategy for Construction and the Built Environment.

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of relevant occupational expertise and knowledge, and must use a combination of assessment methods as defined in the Consolidated Assessment Strategy.

Workplace evidence of skills cannot be simulated.

Unit 102 Preparing and mixing concrete and mortars in the workplace

| UAN: | K/503/9457 |
|---------------|---|
| Level: | 1 |
| Credit value: | 8 |
| GLH: | 27 |
| Aim: | This unit aims to provide the learner with the necessary skills and knowledge to: |
| | interpret information |
| | adopt safe and healthy working practices |
| | select materials and equipment |
| | prepare and mix concrete and mortars |

Learning outcome

The learner will:

1. know how to comply with relevant legislation and official guidance when preparing and mixing concrete and mortars.

Assessment criteria

The learner can:

- 1.1 describe the different types of relevant information used with the method/procedure to prepare and mix concrete and mortars.
- 1.2 describe their responsibilities regarding potential accidents and health hazards, whilst working:
 - a. in the workplace
 - b. below ground level
 - c. at height
 - d. with tools and equipment
 - e. with materials and substance
 - f. with movement/storage of materials
 - g. by manual handling and mechanical lifting.
- 1.3 describe the organisational security procedures for
 - a. tools
 - b. equipment
 - c. personal belongings

in relation to

- a. site
- b. workplace
- c. company
- d. operative.
- 1.4 state what the accident reporting procedures are and who is responsible for making reports.

The learner will:

2. maintain safe and healthy working practices when preparing and mixing concrete and mortars.

Assessment criteria

- 2.1 use health and safety control equipment safely to carry out the activity in accordance with current legislation and organisational requirements when preparing and mixing concrete and mortars.
- 2.2 comply with information relating to specific risks to health when preparing and mixing concrete and mortars.
- 2.3 state why and when health and safety control equipment, identified by the principles of protection, should be used, relating to preparing and mixing concrete and mortars, and the types, purpose and limitations of each type, the work situation and general work environment, in relation to:
 - a. collective protective measures
 - b. personal protective equipment (PPE)
 - c. respiratory protective equipment (RPE)
 - d. local exhaust ventilation (LEV).
- 2.4 describe how the relevant health and safety control equipment should be used in accordance with the given instructions.
- 2.5 state how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with fires, spillages, injuries and other task-related hazards.

The learner will:

3. select the required quantity and quality of resources for the methods of work to prepare and mix concrete and mortars.

Assessment criteria

- 3.1 select resources associated with own work in relation to:
 - a. materials
 - b. components
 - c. tools
 - d. equipment.
- 3.2 describe the characteristics, quality, uses, sustainability, limitations and defects associated with the resources in relation to:
 - a. aggregate
 - b. sand
 - c. lime
 - d. cement
 - e. water
 - f. additives
 - g. hand tools
 - h. mixing plant and equipment.
- 3.3 state how the resources should be used correctly.
- 3.4 state how any problems associated with the resources are reported.
- 3.5 outline any potential hazards associated with the resources and methods of work.
- 3.6 describe how to calculate quantity, volume and wastage associated with the method/procedure to prepare and mix concrete and mortars.

The learner will:

4. minimise the risk of damage to the work and surrounding area when preparing and mixing concrete and mortars.

Assessment criteria

The learner can:

- 4.1 protect the work and its surrounding area from damage in accordance with safe working practices and organisational procedures.
- 4.2 minimise damage and maintain a clean work space.
- 4.3 dispose of waste in accordance with current legislation.
- 4.4 describe how to protect work from damage and the purpose of protection in relation to:
 - a. general workplace activities
 - b. other occupations
 - c. adverse weather conditions.
- 4.5 state why the disposal of waste should be carried out safely in accordance with:
 - a. environmental responsibilities
 - b. organisational procedures
 - c. manufacturers' information
 - d. statutory regulations
 - e. official guidance.

Learning outcome

The learner will:

5. complete the work within the allocated time when preparing and mixing concrete and mortars.

Assessment criteria

- 5.1 demonstrate completion of the work within the allocated time.
- 5.2 state the purpose of the work programme.
- 5.3 state why deadlines should be kept in relation to agreed start and finish times.

The learner will:

6. comply with the given contract information to prepare and mix concrete and mortars to the required specification.

Assessment criteria

- 6.1 demonstrate the following work skills when preparing and mixing concrete and mortars:
 - a. gauging and mixing.
- 6.2 gauge and mix mortars and/or concrete to given working instructions.
- 6.3 safely use:
 - a. materials
 - b. hand tools
 - c. mixing plant and equipment
 - d. ancillary equipment.
- 6.4 safely store the materials, tools and equipment used when preparing and mixing concrete and mortars.
- 6.5 describe how to apply safe and healthy work practices, follow procedures, report problems and establish the authority needed to rectify them, to:
 - a. gauge and mix concrete and mortars by hand and mixer
 - b. carry out pre-use checks on mechanical mixers
 - c. use hand tools, mixing plant and equipment
 - d. work with plant and machinery.
- 6.6 state the needs of other occupations and how to effectively communicate within a team when preparing and mixing concrete and mortars.
- 6.7 describe how to maintain the tools and equipment used when preparing and mixing concrete and mortars.

Unit 102 Preparing and mixing concrete and mortars in the workplace

Supporting information

Guidance

This unit must be assessed in a work environment, in accordance with:

- a. the Additional Requirements for Qualifications using the title $\,$ NVQ in RQF $\,$
- b. the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment.

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of relevant occupational expertise and knowledge, and must use a combination of assessment methods as defined in the Consolidated Assessment Strategy.

Workplace evidence of skills cannot be simulated.

Unit 218 Conforming to productive working practices in the workplace

| UAN: | J/503/1169 |
|---------------|---|
| Level: | 2 |
| Credit value: | 3 |
| GLH: | 10 |
| Aim: | The aim of this unit is to provide the learner with an awareness of: |
| | productive communication with line management, colleagues and customers |
| | interpreting information |
| | planning and carrying out productive work practices |
| | working with others or as an individual |

Learning outcome

The learner will:

1. communicate with others to establish productive work practices

Assessment criteria

- 1.1 communicate in an appropriate manner with line management, colleagues and/or customers to ensure that work is carried out productively
- 1.2 describe the different methods of communicating with line management, colleagues and customers
- 1.3 describe how to use different methods of communication to ensure that the work carried out is productive.

The learner will:

2. follow organisational procedures to plan the sequence of work

Assessment criteria

The learner can:

- 2.1 interpret relevant information from organisational procedures in order to plan the sequence of work
- 2.2 plan the sequence of work, using appropriate resources, in accordance with organisational procedures to ensure work is completed productively
- 2.3 describe how organisational procedures are applied to ensure work is planned and carried out productively, in relation to:
 - a. using resources for own and other's work requirements
 - b. allocating appropriate work to employees
 - c. organising the work sequence
 - d. reducing carbon emissions
- 2.4 describe how to contribute to zero/low carbon work outcomes within the built environment.

Learning outcome

The learner will:

3. maintain relevant records in accordance with the organisational procedures

Assessment criteria

- 3.1 complete relevant documentation according to the occupation as required by the organisation
- 3.2 describe how to complete and maintain documentation in accordance with organisational procedures, in relation to:
 - a. job cards
 - b. worksheets
 - c. material/resource lists
 - d. time sheets
- 3.3 explain the reasons for ensuring documentation is completed clearly and within given timescales.

The learner will:

4. maintain good working relationships when conforming to productive working practices

Assessment criteria

- 4.1 carry out work productively, to the agreed specification, in conjunction with line management, colleagues, customers and/or other relevant people involved in the work to maintain good working relationships
- 4.2 apply the principles of equality and diversity and respect the needs of individuals when communicating and working with others
- 4.3 describe how to maintain good working relationships, in relation to:
 - a. individuals
 - b. customer and operative
 - c. operative and line management
 - d. own and other occupations
- 4.4 describe why it is important to work effectively with line management, colleagues and customers
- 4.5 describe how working relationships could have an effect on productive working
- 4.6 describe how to apply principles of equality and diversity when communicating and working with others.

Unit 218 Conforming to productive working practices in the workplace

Supporting information

Guidance

This unit must be assessed in a work environment, in accordance with:

- the Additional Requirements for Qualifications using the title NVQ in RQF
- the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment.

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of relevant occupational expertise and knowledge, and must use a combination of assessment methods as defined in the Consolidated Assessment Strategy.

Workplace evidence of skills cannot be simulated.

Unit 224 Erecting and dismantling access/working platforms in the workplace

| UAN: | D/600/8281 |
|---------------|---|
| Level: | 2 |
| Credit value: | 8 |
| GLH: | 27 |
| Aim: | This unit aims to provide the learner with the necessary skills and knowledge to: |
| | interpret information |
| | adopt safe and healthy working practices |
| | select materials and equipment |
| | erect and dismantle access equipment suitable for the work operations |

Learning outcome

The learner will:

1. interpret the given information relating to the work and resources when erecting and dismantling access/working platforms

Assessment criteria

- 1.1 interpret and extract information from specifications, method statements, risk assessments and manufacturers' information
- 1.2 comply with information and/or instructions derived from risk assessments and method statement
- 1.3 state the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented
- 1.4 describe different types of information, their source and how they are interpreted in relation to:
 - a. specifications
 - b. current legislation
 - c. method statements
 - d. risk assessments
 - e. manufacturers' information.

The learner will:

2. know how to comply with relevant legislation and official guidance when erecting and dismantling access/working platforms

Assessment criteria

The learner can:

- 2.1 describe their responsibilities under current legislation and official guidance whilst working:
 - a. in the workplace
 - b. at height
 - c. in confined areas
 - d. with tools and equipment
 - e. with movement/storage of materials and by manual handling
- 2.2 describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company and operative
- 2.3 state what the accident reporting procedures are and who is responsible for making reports.

Learning outcome

The learner will:

3. maintain safe working practices when erecting and dismantling access/working platforms

Assessment criteria

- 3.1 use personal protective equipment (PPE) and access equipment safely to carry out the activity in accordance with legislation and organisational requirements when erecting and dismantling access/working platforms
- 3.2 explain why, when and how personal protective equipment (PPE) should be used, relating to erecting and dismantling access/working platforms, and the types, purpose and limitations of each type
- 3.3 state how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with fires, spillages, injuries and other task-related hazards.

The learner will:

4. select the required quantity and quality of resources for the methods of work to erect and dismantle access/working platforms

Assessment criteria

The learner can:

- 4.1 describe the characteristics, quality, uses, limitations and defects associated with the resources in relation to:
 - a. ladders/crawler boards
 - b. stepladders/platform steps
 - c. trestles
 - d. proprietary staging/podiums
 - e. proprietary towers
 - f. mobile scaffold towers
 - g. protection equipment and notices
 - h. tools and ancillary equipment
- 4.2 select resources associated with own work in relation to materials, components, tools and equipment
- 4.3 state how the resources should be used correctly, how problems associated with the resources are reported and how the organisational procedures are used
- 4.4 outline potential hazards associated with the resources and method of work
- 4.5 describe how to calculate quantity of equipment required associated with the method/procedure to erect and dismantle access equipment/working platforms.

Learning outcome

The learner will:

5. minimise the risk of damage to the work and surrounding area when erecting and dismantling access/working platforms

Assessment criteria

- 5.1 protect the work and its surrounding area from damage
- 5.2 minimise damage and maintain a clean work space
- 5.3 describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions
- 5.4 dispose of waste in accordance with legislation
- 5.5 state why the disposal of waste should be carried out in relation to the work.

The learner will:

6. complete the work within the allocated time when erecting and dismantling access/working platforms

Assessment criteria

- 6.1 demonstrate completion of the work within the allocated time
- 6.2 state the purpose of the work programme and explain why deadlines should be kept in relation to:
 - a. organisational procedures for reporting circumstances which will affect the work programme.

The learner will:

7. comply with the given contract information to erect and dismantle access/ working platforms to the required specification

Assessment criteria

- 7.1 demonstrate the following work skills when erecting and dismantling access/working platforms:
 - a. moving
 - b. positioning/erecting
 - c. securing
 - d. checking
 - e. dismantling
 - f. removing
- 7.2 erect, dismantle and store two of the following access equipment to given access regulations:
 - a. ladders/crawler boards
 - b. stepladders/platform steps
 - c. proprietary towers
 - d. trestle platforms
 - e. mobile scaffold towers
 - f. proprietary staging/podiums
- 7.3 describe how to apply safe work practices, follow procedures, report problems and establish the authority needed to rectify them, to:
 - a. provide protection to the work area
 - b. establish a base for equipment
 - c. erect proprietary access equipment to manufacturer's instructions suitable for the work
 - d. erect non-proprietary access equipment suitable for the work
 - e. place protective screens and notices
 - f. check/monitor equipment during the period of use
 - g. dismantle and store access equipment
 - h. use tools and equipment
 - i. work at height
- 7.4 safely use and store materials, hand tools and ancillary equipment
- 7.5 state the needs of other occupations and how to communicate within a team when erecting and dismantling access/working platforms
- 7.6 describe how to maintain the tools and equipment used when erecting and dismantling access/working platforms.

Unit 224 Erecting and dismantling access/working platforms in the workplace

Supporting information

Guidance

This unit must be assessed in a work environment and in accordance with:

- the Additional Requirements for Qualifications using the title NVQ in ROF
- the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment
- Craft, Supervisory, Technical, Managerial and Professional Units and Qualifications with NVQ in the Regulated Qualification Framework (RQF) title and SVQs.

Assessors for this unit must use a combination of the following assessment methods:

- observation of normal work activities within the workplace that clearly confirms the required skills
- questioning the learner on knowledge criteria that clearly confirms the required understanding
- review other forms of evidence that can clearly confirm industry required skills, knowledge and understanding.

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of occupational expertise and knowledge of erecting and dismantling access/working platforms to be effective and reliable when confirming a learner's competence.

Workplace evidence of skills cannot be simulated.

This unit must be assessed against the following endorsements:

- Own occupational area of work
- Plus two or more of the following:
- Ladders/crawler boards
- Step ladders/platform steps
- Proprietary towers
- Trestle platforms
- Mobile scaffold towers
- Proprietary staging/podiums

Unit 225 Placing and compacting concrete in the workplace

| UAN: | Y/600/8165 |
|---------------|---|
| Level: | 2 |
| Credit value: | 13 |
| GLH: | 43 |
| Aim: | This unit aims to provide the learner with the necessary skills and knowledge to: |
| | interpret information |
| | adopt safe and healthy working practices |
| | select materials and equipment |
| | prepare for, place and compact concrete |

Learning outcome

The learner will:

1. interpret the given information relating to the work and resources when placing and compacting concrete.

Assessment criteria

- 1.1 interpret and extract information from:
 - a. drawings
 - b. specifications
 - c. schedules
 - d. manufacturers' information.
- 1.2 comply with information and/or instructions derived from risk assessments and method statement.
- 1.3 state the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented.
- 1.4 describe different types of information, their source and how they are interpreted in relation to:
 - a. drawings
 - b. specifications
 - c. schedules
 - d. manufacturers' information
 - e. oral and written instructions.

The learner will:

2. Know how to comply with relevant legislation and official guidance when placing and compacting concrete.

Assessment criteria

The learner can:

- 2.1 describe their responsibilities under current legislation and official guidance whilst working:
 - a. in the workplace
 - b. below ground level
 - c. at height
 - d. with tools and equipment
 - e. with materials and substances
 - f. with movement/storage of materials
 - g. by manual handling and mechanical lifting.
- 2.2 describe the organisational security procedures for:
 - a. tools
 - b. equipment
 - c. personal belongings

in relation to

- a. site
- b. workplace
- c. company
- d. operative.
- 2.3 state what the accident reporting procedures are and who is responsible for making reports.

Learning outcome

The learner will:

3. maintain safe working practices when placing and compacting concrete.

Assessment criteria

- 3.1 use personal protective equipment (PPE) safely to carry out the activity in accordance with legislation and organisational requirements when placing and compacting concrete.
- 3.2 explain why and when personal protective equipment (PPE) should be used, relating to placing and compacting concrete, and the types, purpose and limitations of each type.
- 3.3 state how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with fires, spillages, injuries and other task-related hazards.

The learner will:

4. select the required quantity and quality of resources for the methods of work to place and compact concrete.

Assessment criteria

- 4.1 describe the characteristics, quality, uses, limitations and defects associated with the resources in relation to:
 - a. aggregates
 - b. cements
 - c. concrete
 - d. reinforcement
 - e. membranes
 - f. release agents
 - g. anti-heave materials
 - h. moulds
 - i. hand and/or powered tools
 - j. slump test equipment
 - k. skips
 - I. poker vibrator
 - m. tampers
 - n. floats and trowels.
- 4.2 select resources associated with own work in relation to:
 - a. materials
 - b. components
 - c. fixings
 - d. tools
 - e. equipment.
- 4.3 state how the resources should be used correctly, how problems associated with the resources are reported and how the organisational procedures are used.
- 4.4 outline potential hazards associated with the resources and method of work.
- 4.5 describe how to calculate quantity and wastage associated with the method/procedure to place and compact concrete.

The learner will:

5. minimise the risk of damage to the work and surrounding area when placing and compacting concrete.

Assessment criteria

The learner can:

- 5.1 protect the work and its surrounding area from damage.
- 5.2 minimise damage and maintain a clean work space.
- 5.3 describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions.
- 5.4 dispose of waste in accordance with legislation.
- 5.5 state why the disposal of waste should be carried out in relation to the work.

Learning outcome

The learner will:

6. complete the work within the allocated time when placing and compacting concrete.

Assessment criteria

- 6.1 demonstrate completion of the work within the allocated time.
- 6.2 state the purpose of the work programme and explain why deadlines should be kept in relation to:
 - a. types of progress charts, timetables and estimated times
 - b. organisational procedures for reporting circumstances which will affect the work programme.

The learner will:

7. comply with the given contract information to place and compact concrete to the required specification.

Assessment criteria

- 7.1 demonstrate the following work skills when placing and compacting concrete:
 - a. receiving
 - b. handling
 - c. transporting
 - d. placing
 - e. compacting
 - f. finishing
 - g. curing.
- 7.2 transport, place and compact structural and/or non-structural concrete to contractor's working instructions, placed in at least one of the following locations:
 - a. below ground level
 - b. at ground level
 - c. above ground level.
- 7.3 describe how to apply safe work practices, follow procedures, report problems and establish the authority needed to rectify them, to:
 - a. handle and test concrete
 - b. transport and place concrete
 - c. compact and finish concrete
 - d. cure and protect concrete
 - e. use hand tools, power tools and equipment.
- 7.4 safely use and store hand tools, portable power tools and ancillary equipment.
- 7.5 state the needs of other occupations and how to communicate within a team when placing and compacting concrete.
- 7.6 describe how to maintain the tools and equipment used when placing and compacting concrete.

Unit 225 Placing and compacting concrete in the workplace

Supporting information

Guidance

This unit must be assessed in a work environment and in accordance with:

- the Additional Requirements for Qualifications using the title NVQ in RQF
- the ConstructionSkills 'Consolidated Assessment Strategy for Construction and the Built Environment – Craft, Supervisory, Technical, Managerial and Professional Units and Qualifications with NVQ in the Regulated Qualification Framework (RQF) title and SVQs.

Assessors for this unit must use a combination of the following assessment methods:

- observation of normal work activities within the workplace that clearly confirms the required skills
- questioning the learner on knowledge criteria that clearly confirms the required understanding
- review other forms of evidence that can clearly confirm industry required skills, knowledge and understanding.

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of occupational expertise and knowledge of placing and compacting concrete to be effective and reliable when confirming a learner's competence.

Workplace evidence of skills cannot be simulated.

Evidence for assessment criteria 7.2 must be for at least three different structures/placements.

This unit must be assessed against the following endorsement:

Own occupational area of work

Unit 239 Establishing work area protection and safety in the workplace

| UAN: | T/503/9560 |
|---------------|--|
| Level: | 2 |
| Credit value: | 10 |
| GLH: | 33 |
| Aim: | This unit aims to provide the learner with the necessary skills and knowledge to: |
| | interpret information |
| | adopt safe and healthy working practices |
| | select materials, components and equipment |
| | prepare, provide for and maintain the protection and safety of the occupational area of work |

Learning outcome

The learner will:

1. interpret the given information relating to the work and resources when establishing work area protection and safety

Assessment criteria

- 1.1 interpret and extract relevant information from drawings, plans, risk assessments, method statements, specifications, schedules, site inspections and manufacturers' information
- 1.2 comply with information and/or instructions derived from risk assessments and method statements
- 1.3 describe the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented
- 1.4 describe different types of information, their source and how they are interpreted in relation to:
 - a. drawings
 - b. plans
 - c. risk assessments
 - d. method statements
 - e. specifications
 - f. schedules
 - g. site inspection reports
 - h. manufacturers' information
 - i. regulations
 - j. official guidance associated with protecting work areas.

The learner will:

2. know how to comply with relevant legislation and official guidance when establishing work area protection and safety

Assessment criteria

The learner can:

- 2.1 describe their responsibilities regarding potential accidents and health hazards, whilst working:
 - a. in the workplace
 - b. below ground level
 - c. in confined spaces
 - d. at height
 - e. with tools and equipment
 - f. with materials and substances
 - g. with movement/storage of materials and by manual handling and mechanical lifting
- 2.2 describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company and operative
- 2.3 explain what the accident reporting procedures are and who is responsible for making reports.

Learning outcome

The learner will:

3. maintain safe and healthy working practices when establishing work area protection and safety

Assessment criteria

- 3.1 use health and safety control equipment and access equipment safely to carry out the activity in accordance with current legislation and organisational requirements when establishing work area protection and safety
- 3.2 comply with information relating to specific risks to health when establishing work area protection and safety
- 3.3 explain why and when health and safety control equipment, identified by the principles of protection, should be used, relating to establishing work area protection and safety, and the types, purpose and limitations of each type, the work situation and general work environment, in relation to:
 - a. collective protective measures
 - b. personal protective equipment (PPE)
 - c. respiratory protective equipment (RPE)
 - d. local exhaust ventilation (LEV)
- 3.4 describe how the relevant health and safety control equipment should be used in accordance with the given instructions
- 3.5 describe how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with fires, spillages, injuries and other task-related hazards.

The learner will:

4. select the required quantity and quality of resources for the methods of work to establish work area protection and safety

Assessment criteria

The learner can:

- 4.1 select resources associated with own work in relation to materials, components and fixings, and tools and equipment
- 4.2 describe the characteristics, quality, uses, sustainability, limitations and defects associated with the resources in relation to:
 - a. safety and security barriers
 - b. protection and safety notices
 - c. temporary structures
 - d. signs and lighting
 - e. hand and/or powered tools and equipment
- 4.3 describe how the resources should be used correctly and how problems associated with the resources are reported
- 4.4 explain why the organisational procedures have been developed and how they are used for the selection of required resources
- 4.5 describe any potential hazards associated with the resources and methods of work
- 4.6 describe how to calculate quantity, length and area associated with the method/procedure to establish work area protection and safety.

Learning outcome

The learner will:

5. minimise the risk of damage to the work and surrounding area when establishing work area protection and safety

Assessment criteria

- 5.1 protect the work and its surrounding area from damage in accordance with safe working practices and organisational procedures
- 5.2 minimise damage and maintain a clean work space
- 5.3 dispose of waste in accordance with current legislation
- 5.4 describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions
- 5.5 explain why the disposal of waste should be carried out safely in accordance with environmental responsibilities, organisational procedures, manufacturers' information, statutory regulations and official guidance.

The learner will:

6. complete the work within the allocated time when establishing work area protection and safety

Assessment criteria

- 6.1 demonstrate completion of the work within the allocated time
- 6.2 describe the purpose of the work programme and explain why deadlines should be kept in relation to:
 - a. types of progress charts, timetables and estimated times
 - b. organisational procedures for reporting circumstances which will affect the work programme.

The learner will:

7. comply with the given contract information to establish work area protection and safety to the required specification

Assessment criteria

- 7.1 demonstrate the following work skills when establishing work area protection and safety:
 - a. measuring
 - b. setting out
 - c. positioning
 - d. assembling
 - e. constructing
 - f. securing
 - g. dismantling
- 7.2 install, maintain and remove temporary protection and safety arrangements for the work area, to given working instructions, relating to barriers/temporary structures and one of the following:
 - a. protection and safety notices
 - b. safety lighting
- 7.3 safely use materials, hand tools, portable power tools and ancillary equipment
- 7.4 safely store the materials, tools and equipment used when establishing work area protection and safety
- 7.5 describe how to apply safe and healthy work practices, follow procedures, report problems and establish the authority needed to rectify them, to:
 - a. plan for the protection and the safety of the work and surrounding environment
 - b. install, check and maintain the protection and safety equipment
 - c. dismantle and remove protection and safety equipment
 - d. install safety notices
 - e. install lighting systems
 - f. use hand tools, power tools and equipment
 - g. work at height
 - h. use access equipment
- 7.6 describe the needs of other occupations and how to effectively communicate within a team when establishing work area protection and safety
- 7.7 describe how to maintain the tools and equipment used when establishing work area protection and safety.

Unit 239 Establishing work area protection and safety in the workplace

Supporting information

Guidance

This unit must be assessed in a work environment, in accordance with:

- the Additional Requirements for Qualifications using the title NVQ in RQF
- the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment.

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of relevant occupational expertise and knowledge, and must use a combination of assessment methods as defined in the Consolidated Assessment Strategy.

Workplace evidence of skills cannot be simulated.

This unit must be assessed against the following endorsement:

• Own occupational area of work

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Unit 240 Excavating holes and trenches - manual digging in the workplace

| UAN: | Y/503/9650 |
|---------------|---|
| Level: | 2 |
| Credit value: | 10 |
| GLH: | 33 |
| Aim: | The aim of this unit is to provide the learner with an awareness of: |
| | interpreting information |
| | adopting safe and healthy working practices |
| | selecting materials, components and equipment |
| | carrying out the excavation of holes and trenches |

Learning outcome

The learner will:

1. interpret the given information relating to the work and resources when excavating holes and trenches by manual digging

Assessment criteria

- 1.1 interpret and extract relevant information from drawings, risk assessments, method statements, specifications, schedules and manufacturers' information
- 1.2 comply with information and/or instructions derived from risk assessments and method statements
- 1.3 describe the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented
- 1.4 describe different types of information, their source and how they are interpreted in relation to:
 - a. drawings
 - b. specifications
 - c. schedules
 - d. risk assessments
 - e. method statements
 - f. manufacturers' information
 - g. statutory and regulatory codes of practice for excavations and support of the excavations.

The learner will:

2. know how to comply with relevant legislation and official guidance when excavating holes and trenches by manual digging

Assessment criteria

The learner can:

- 2.1 describe their responsibilities regarding potential accidents and health hazards whilst working:
 - a. in the workplace
 - b. below ground level
 - c. with tools and equipment
 - d. with materials and substances
 - e. with movement/storage of materials and by manual handling and mechanical lifting
- 2.2 describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company and operative
- 2.3 explain what the accident reporting procedures are and who is responsible for making reports.

Learning outcome

The learner will:

3. maintain safe and healthy working practices when excavating holes and trenches by manual digging

Assessment criteria

- 3.1 use health and safety control equipment safely to carry out the activity in accordance with current legislation and organisational requirements when excavating holes and trenches by manual digging
- 3.2 comply with information relating to specific risks to health when excavating holes and trenches by manual digging
- 3.3 explain why and when health and safety control equipment, identified by the principles of protection, should be used, relating to excavating holes and trenches by manual digging and the types, purpose and limitations of each type, the work situation and general work environment, in relation to:
 - a. collective protective measures
 - b. Personal Protective Equipment (PPE)
 - c. Respiratory Protective Equipment (RPE)
 - d. Local Exhaust Ventilation (LEV)
- 3.4 describe how the relevant health and safety control equipment should be used in accordance with the given instructions
- 3.5 describe how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with fires, spillages, injuries and other task-related hazards.

The learner will:

4. select the required quantity and quality of resources for the methods of work to excavate holes and trenches by manual digging

Assessment criteria

The learner can:

- 4.1 select resources associated with own work in relation to materials and components, and tools and equipment
- 4.2 describe the characteristics, quality, uses, sustainability limitations and defects associated with the resources in relation to:
 - a. digging equipment for the excavation of holes and trenches
 - b. hand and/or powered tools and ancillary equipment
- 4.3 describe how the resources should be used correctly and how problems associated with the resources are reported
- 4.4 explain why the organisational procedures have been developed and how they are used for the selection of required resources
- 4.5 describe any potential hazards associated with the resources and methods of work
- 4.6 describe how to calculate quantity, length, area and wastage associated with the method/procedure to excavate holes and trenches by manual digging.

Learning outcome

The learner will:

5. minimise the risk of damage to the work and surrounding area when excavating holes and trenches by manual digging

Assessment criteria

- 5.1 protect the work and its surrounding area from damage in accordance with safe working practices and organisational procedures
- 5.2 minimise damage and maintain a clean work space
- 5.3 dispose of waste in accordance with current legislation
- 5.4 describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions
- 5.5 explain why the disposal of waste should be carried out safely in accordance with environmental responsibilities, organisational procedures, manufacturers' information, statutory regulations and official guidance.

The learner will:

6. complete the work within the allocated time when excavating holes and trenches by manual digging

Assessment criteria

- 6.1 demonstrate completion of the work within the allocated time
- 6.2 describe the purpose of the work programme and explain why deadlines should be kept in relation to:
 - a. types of progress charts, timetables and estimated times
 - b. organisational procedures for reporting circumstances which will affect the work programme.

The learner will:

7. comply with the given contract information to excavate holes and trenches by manual digging to the required specification

Assessment criteria

- 7.1 demonstrate the following work skills when excavating holes and trenches by manual digging:
 - a. measuring
 - b. marking out
 - c. excavating
 - d. securing
- 7.2 excavate holes and trenches in highway location and/or construction site to given working instructions
- 7.3 safely use materials, hand tools, portable power tools and ancillary equipment
- 7.4 safely store the materials, tools and equipment used when excavating holes and trenches by manual digging
- 7.5 describe how to apply safe and healthy work practices, follow procedures, report problems and establish the authority needed to rectify them, to:
 - a. identify and confirm the type of surface and sub-surface composition
 - b. remove ironwork, modular components
 - c. excavate ground structures manually
 - d. guide excavating machine to excavate ground structures
 - e. avoid damage to service apparatus and sub-structures
 - f. identify and store excavated and reusable materials
 - g. position, secure and remove excavation supports
 - h. provide for access and egress
 - i. work with plant and machinery
 - j. use hand tools, power tools and equipment.
- 7.6 describe the needs of other occupations and how to effectively communicate within a team when excavating holes and trenches by manual digging
- 7.7 describe how to maintain the tools and equipment used when excavating holes and trenches by manual digging.

Unit 240 Excavating holes and trenches - manual digging in the workplace

Supporting information

Guidance

This unit must be assessed in a work environment, in accordance with:

- the Additional Requirements for Qualifications using the title NVQ in RQF
- the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment.

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of relevant occupational expertise and knowledge, and must use a combination of assessment methods as defined in the Consolidated Assessment Strategy.

Workplace evidence of skills cannot be simulated.

This unit must be assessed against the following endorsement:

• Own occupational area of work.

Unit 284 Installing street ironwork in the workplace

| UAN: | M/503/9623 |
|---------------|--|
| Level: | 2 |
| Credit value: | 9 |
| GLH: | 30 |
| Aim: | The aim is to provide the learner with the necessary skills and knowledge for: |
| | interpreting information |
| | adopting safe and healthy working practices |
| | selecting materials, components and equipment |
| | preparing for and installing street ironwork to new and reinstatement situations |

Learning outcome

The learner will:

1. interpret the given information relating to the work and resources when installing street ironwork

Assessment criteria

- 1.1 interpret and extract relevant information from drawings, risk assessments, method statements, specifications, schedules and manufacturers' information
- 1.2 comply with information and/or instructions derived from risk assessments and method statements
- 1.3 describe the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented
- 1.4 describe different types of information, their source and how they are interpreted in relation to:
 - a. drawings
 - b. specifications
 - c. schedules
 - d. risk assessments
 - e. method statements
 - f. manufacturers' information and regulations for street ironwork fixtures.

The learner will:

2. know how to comply with relevant legislation and official guidance when installing street ironwork

Assessment criteria

The learner can:

- 2.1 describe their responsibilities regarding potential accidents and health hazards, whilst working:
 - a. in the workplace
 - b. below ground level
 - c. with tools and equipment
 - d. with materials and substances
 - e. with movement/storage of materials and by manual handling and mechanical lifting
- 2.2 describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company and operative
- 2.3 explain what the accident reporting procedures are and who is responsible for making reports

Learning outcome

The learner will:

3. maintain safe and healthy working practices when installing street ironwork

Assessment criteria

- 3.1 use health and safety control equipment safely to carry out the activity in accordance with current legislation and organisational requirements when installing street ironwork
- 3.2 comply with information relating to specific risks to health when installing street ironwork
- 3.3 explain why and when health and safety control equipment, identified by the principles of protection, should be used, relating to installing street ironwork, and the types, purpose and limitations of each type, the work situation and general work environment, in relation to:
 - a. collective protective measures
 - b. personal protective equipment (PPE)
 - c. respiratory protective equipment (RPE)
 - d. local exhaust ventilation (LEV)
- 3.4 describe how the relevant health and safety control equipment should be used in accordance with the given instructions
- 3.5 describe how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with fires, spillages, injuries and other task-related hazards.

The learner will:

4. select the required quantity and quality of resources for the methods of work to install street ironwork

Assessment criteria

The learner can:

- 4.1 select resources associated with own work in relation to materials, components and fixings, and tools and equipment.
- 4.2 describe the characteristics, quality, uses, sustainability, limitations and defects associated with the resources in relation to:
 - a. sand, cement, mortar, patent epoxy resin-based materials
 - b. access covers and frames, gully grates and frames
 - c. hand and/or powered tools and equipment
- 4.3 describe how the resources should be used correctly and how problems associated with the resources are reported
- 4.4 explain why the organisational procedures have been developed and how they are used for the selection of required resources
- 4.5 describe any potential hazards associated with the resources and methods of work
- 4.6 describe how to calculate quantity and size associated with the method/procedure to install street ironwork.

Learning outcome

The learner will:

5. minimise the risk of damage to the work and surrounding area when installing street ironwork

Assessment criteria

- 5.1 protect the work and its surrounding area from damage in accordance with safe working practices and organisational procedures
- 5.2 minimise damage and maintain a clean work space
- 5.3 dispose of waste in accordance with current legislation
- 5.4 describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions
- 5.5 explain why the disposal of waste should be carried out safely in accordance with environmental responsibilities, organisational procedures, manufacturers' information, statutory regulations and official guidance.

The learner will:

6. complete the work within the allocated time when installing street ironwork

Assessment criteria

- 6.1 demonstrate completion of the work within the allocated time
- 6.2 describe the purpose of the work programme and explain why deadlines should be kept in relation to:
 - a. types of progress charts, timetables and estimated times
 - b. organisational procedures for reporting circumstances which will affect the work programme.

The learner will:

7. comply with the given contract information to install street ironwork to the required specification.

Assessment criteria

- 7.1 demonstrate the following work skills when installing street ironwork:
 - a. measuring
 - b. marking out
 - c. positioning
 - d. fitting
 - e. levelling
 - f. aligning
 - g. securing
- 7.2 install street ironwork to new and/or reinstatement situations to given working instructions relating to the following:
 - a. access covers and frames
 - b. gully grates and frames
- 7.3 safely use materials, hand tools, portable power tools and ancillary equipment
- 7.4 safely store the materials, tools and equipment used when installing street ironwork
- 7.5 describe how to apply safe and healthy work practices, follow procedures, report problems and establish the authority needed to rectify them, to:
 - a. locate the area/position where the street ironwork is to be installed
 - b. confirm the street ironwork, fixing and bedding requirements
 - c. position, fit, align and secure the street ironwork
 - d. protect ironwork during curing
 - e. use hand tools, power tools and equipment
 - f. use ancillary equipment.
- 7.6 describe the needs of other occupations and how to effectively communicate within a team when installing street ironwork
- 7.7 describe how to maintain the tools and equipment used when installing street ironwork

Unit 284 Installing street ironwork in the workplace

Supporting information

Guidance

This unit must be assessed in a work environment, in accordance with:

- the Additional Requirements for Qualifications using the title NVQ in ROF
- the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment.

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of relevant occupational expertise and knowledge, and must use a combination of assessment methods as defined in the Consolidated Assessment Strategy.

Workplace evidence of skills cannot be simulated.

This unit must be assessed against the following endorsement:

Own occupational area of work

Plus against one of the following:

- New
- Reinstatement.

Unit 294 Laying modular pavement in the workplace

| UAN: | J/503/9627 |
|---------------|--|
| Level: | 2 |
| Credit value: | 14 |
| GLH: | 47 |
| Aim: | The aim is to provide the learner with the necessary skills and knowledge for: |
| | interpreting information |
| | adopting safe and healthy working practices |
| | selecting materials, components and equipment |
| | preparing and laying modular pavement manually or by machine |

Learning outcome

The learner will:

1. interpret the given information relating to the work and resources when laying modular pavement

Assessment criteria

- 1.1 interpret and extract relevant information from drawings, risk assessments, method statements, specifications, schedules and manufacturers' information
- 1.2 comply with information and/or instructions derived from risk assessments and method statements
- 1.3 describe the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented
- 1.4 describe different types of information, their source and how they are interpreted in relation to:
 - a. drawings
 - b. specifications
 - c. schedules
 - d. risk assessments
 - e. method statements
 - f. manufacturers' information
 - g. regulations governing the laying of modular pavement.

The learner will:

2. know how to comply with relevant legislation and official guidance when laying modular pavement

Assessment criteria

The learner can:

- 2.1 describe their responsibilities regarding potential accidents and health hazards whilst working:
 - a. in the workplace
 - b. below ground level
 - c. with tools and equipment
 - d. with materials and substances
 - e. with movement/storage of materials and by manual handling and mechanical lifting
- 2.2 describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company and operative
- 2.3 explain what the accident reporting procedures are and who is responsible for making reports.

Learning outcome

The learner will:

3. maintain safe and healthy working practices when laying modular pavement

Assessment criteria

- 3.1 use health and safety control equipment safely to carry out the activity in accordance with current legislation and organisational requirements when laying modular pavement
- 3.2 comply with information relating to specific risks to health when laying modular pavement
- 3.3 explain why and when health and safety control equipment, identified by the principles of protection, should be used, relating to laying modular pavement, and the types, purpose and limitations of each type, the work situation and general work environment, in relation to:
 - a. collective protective measures
 - b. personal protective equipment (PPE)
 - c. respiratory protective equipment (RPE)
 - d. local exhaust ventilation (LEV)
- 3.4 describe how the relevant health and safety control equipment should be used in accordance with the given instructions
- 3.5 describe how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with fires, spillages, injuries and other task-related hazards.

The learner will:

4. select the required quantity and quality of resources for the methods of work to lay modular pavement

Assessment criteria

The learner can:

- 4.1 select resources associated with own work in relation to materials and components, and tools and equipment
- 4.2 describe the characteristics, quality, uses, sustainability, limitations and defects associated with the resources in relation to:
 - a. sand, graded granular material, lean mix concrete
 - b. blocks, stone setts, bricks, flags, natural stone
 - c. hand and/or powered tools and equipment
- 4.3 describe how the resources should be used correctly and how problems associated with the resources are reported
- 4.4 explain why the organisational procedures have been developed and how they are used for the selection of required resources
- 4.5 describe any potential hazards associated with the resources and methods of work
- 4.6 describe how to calculate quantity, length, area and wastage associated with the method/procedure to lay modular pavement.

Learning outcome

The learner will:

5. minimise the risk of damage to the work and surrounding area when laying modular pavement

Assessment criteria

- 5.1 protect the work and its surrounding area from damage in accordance with safe working practices and organisational procedures
- 5.2 minimise damage and maintain a clean work space.
- 5.3 dispose of waste in accordance with current legislation
- 5.4 describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions
- 5.5 explain why the disposal of waste should be carried out safely in accordance with environmental responsibilities, organisational procedures, manufacturers' information, statutory regulations and official guidance.

The learner will:

6. complete the work within the allocated time when laying modular pavement

Assessment criteria

The learner can:

- 6.1 demonstrate completion of the work within the allocated time
- 6.2 describe the purpose of the work programme and explain why deadlines should be kept in relation to:
 - a. types of progress charts, timetables and estimated times
 - b. organisational procedures for reporting circumstances which will affect the work programme.

Learning outcome

The learner will:

7. comply with the given contract information to lay modular pavement to the required specification

Assessment criteria

- 7.1 demonstrate the following work skills when laying modular pavement:
 - a. measuring
 - b. marking out
 - c. cutting
 - d. laying
 - e. levelling
 - f. aligning
 - g. compacting
 - h. finishing
- 7.2 lay modular pavement manually and/or by machine to given working instructions, for one of the following:
 - a. block paving
 - b. brick paving
 - c. stone/concrete setts
 - d. natural stone rough cut (riven/cropped)
 - e. natural stone uniformly cut (sawn in dimension)
 - f. flags
- 7.3 safely use materials, hand tools, portable power tools and ancillary equipment
- 7.4 safely store the materials, tools and equipment used when laying modular pavement
- 7.5 describe how to apply safe and healthy work practices, follow procedures, report problems and establish the authority needed to rectify them, to:
 - a. confirm the type of block, brick, sett, flag and natural stone modular pavement
 - b. set out the area and prepare ground and foundation for modular pavement construction

- c. confirm substrate matches given specification
- d. mark and cut modular paving
- e. lay modular block, brick, sett, flag and natural stone pavements manually and/or by machine
- f. lay modular block, brick, sett, flag and natural stone pavement, domestic and/or commercial to the required design/pattern, levels and stability
- 7.6 describe how to apply safe and healthy work practices, follow procedures, report problems and establish the authority needed to rectify them, to:
 - a. monitor work against specification(s)
 - b. identify the differences between rigid (bound) and flexible (unbound) paving
 - c. install kerbs, channels, edgings and drainage
 - d. lift modular paving for removal maintenance and repair
 - e. maintain and repair modular paving to match existing design functions
 - f. use hand tools, power tools and equipment
- 7.7 describe the needs of other occupations and how to effectively communicate within a team when laying modular pavement
- 7.8 describe how to maintain the tools and equipment used when laying modular pavement.

Unit 294 Laying modular pavement in the workplace

Supporting information

Guidance

This unit must be assessed in a work environment, in accordance with:

- the Additional Requirements for Qualifications using the title NVQ in RQF
- the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment.

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of relevant occupational expertise and knowledge, and must use a combination of assessment methods as defined in the Consolidated Assessment Strategy.

Workplace evidence of skills cannot be simulated.

This unit must be assessed against the following endorsement:

- Own occupational area of work.
- Plus against one of the following:
- Block paving
- Brick paving
- Stone/Concrete setts
- Flags
- Natural stone rough cut
- Natural stone uniformly cut

Unit 297 Locating and protecting utilities apparatus and substructures in the workplace

| UAN: | A/503/9639 |
|---------------|---|
| Level: | 2 |
| Credit value: | 12 |
| GLH: | 40 |
| Aim: | The aim is to provide the learner with the necessary skills and knowledge for: |
| | interpreting information |
| | adopting safe and healthy working practices |
| | selecting materials, components and equipment |
| | identifying, locating and protecting Utilities apparatus and sub-structures |

Learning outcome

The learner will:

1. interpret the given information relating to the work and resources when locating and protecting utilities apparatus and sub-structures

Assessment criteria

- 1.1 interpret and extract relevant information from drawings, risk assessments, method statements, specifications, schedules, survey information and manufacturers' information
- 1.2 comply with information and/or instructions derived from risk assessments and method statements
- 1.3 describe the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented
- 1.4 describe different types of information, their source and how they are interpreted in relation to:
 - a. drawings
 - b. specifications
 - c. schedules
 - d. risk assessments
 - e. method statements
 - f. organisational and manufacturers' information
 - g. regulations governing utilities.

The learner will:

2. know how to comply with relevant legislation and official guidance when locating and protecting utilities apparatus and sub-structures

Assessment criteria

- 2.1 describe their responsibilities regarding potential accidents and health hazards whilst working:
 - a. in the workplace
 - b. below ground level
 - c. at height
 - d. with tools and equipment
 - e. with materials and substances
 - f. with movement/storage of materials and by manual handling and mechanical lifting
- 2.2 describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company and operative
- 2.3 explain what the accident reporting procedures are and who is responsible for making reports
- 2.4 describe the types of fire extinguishers available when locating and protecting utilities apparatus and sub-structures and describe how and when they are used.

The learner will:

3. maintain safe and healthy working practices when locating and protecting utilities apparatus and sub-structures

Assessment criteria

- 3.1 use health and safety control equipment safely to carry out the activity in accordance with current legislation and organisational requirements when locating and protecting utilities apparatus and sub-structures
- 3.2 comply with information relating to specific risks to health when locating and protecting utilities apparatus and sub-structures
- 3.3 explain why and when health and safety control equipment, identified by the principles of protection, should be used, relating to locating and protecting utilities apparatus and sub-structures, and the types, purpose and limitations of each type, the work situation and general work environment, in relation to:
 - a. collective protective measures
 - b. personal protective equipment (PPE)
 - c. respiratory protective equipment (RPE)
 - d. local exhaust ventilation (LEV)
- 3.4 describe how the relevant health and safety control equipment should be used in accordance with the given instructions
- 3.5 describe how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with fires, spillages, injuries, damage to utilities apparatus and substructures and other task-related hazards
- 3.6 demonstrate the safe use of a fire extinguisher relevant to a typical fire associated with locating and protecting utilities apparatus and sub-structures as relevant to the operations.

The learner will:

4. select the required quantity and quality of resources for the methods of work to locate and protect utilities apparatus and sub-structures

Assessment criteria

The learner can:

- 4.1 select resources associated with own work in relation to materials and components, tools and equipment, and electronic location instruments
- 4.2 describe the characteristics, quality, uses, sustainability, limitations and defects associated with the resources in relation to:
 - a. electronic instruments
 - b. marking and protection materials
 - c. hand and/or powered tools and equipment
 - d. ancillary equipment
- 4.3 describe how the resources should be used correctly and how problems associated with the resources are reported
- 4.4 explain why the organisational procedures have been developed and how they are used for the selection of required resources
- 4.5 describe any potential hazards associated with the resources and methods of work.

Learning outcome

The learner will:

5. minimise the risk of damage to the work and surrounding area when locating and protecting utilities apparatus and sub-structures

Assessment criteria

- 5.1 protect the work and its surrounding area from damage in accordance with safe working practices and organisational procedures
- 5.2 minimise damage and maintain a clean work space
- 5.3 dispose of waste in accordance with current legislation
- 5.4 describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions
- 5.5 explain why the disposal of waste should be carried out safely in accordance with environmental responsibilities, organisational procedures, manufacturers' information, statutory regulations and official guidance.

The learner will:

6. complete the work within the allocated time when locating and protecting utilities apparatus and sub-structures

Assessment criteria

- 6.1 demonstrate completion of the work within the allocated time
- 6.2 describe the purpose of the work programme and explain why deadlines should be kept in relation to:
 - a. types of progress charts, timetables and estimated times
 - b. organisational procedures for reporting circumstances which will affect the work programme.

The learner will:

7. comply with the given contract information to locate and protect utilities apparatus and sub-structures to the required specification

Assessment criteria

- 7.1 demonstrate the following work skills when locating and protecting utilities apparatus and sub-structures:
 - a. measuring
 - b. locating
 - c. marking out
 - d. positioning
 - e. protecting and securing
- 7.2 locate and protect sub-surface and/or overhead utilities apparatus to given working instructions, relating to:
 - a. gas
 - b. fuel
 - c. electric.
 - d. communications
 - e. water
 - f. sewage
- 7.3 safely use materials, hand tools, portable power tools, ancillary equipment and electronic instruments
- 7.4 safely store the materials, tools and equipment used when locating and protecting utilities apparatus and sub-structures
- 7.5 describe how to apply safe and healthy work practices, follow procedures, report problems and establish the authority needed to rectify them, to:
 - a. ensure electronic equipment is calibrated
 - b. identify utilities apparatus and sub-structures by electronic location, trial holes and visual
 - c. confirm the type of service (gas, fuel, electric, communication, water, sewage)
 - d. confirm structures (foundations, manholes, inspection chambers, joint/junction boxes)
 - e. confirm any natural environment (tree roots, natural watercourse)
 - f. mark the location of the service apparatus and sub-structures
 - g. provide for the recognition and protection of the service apparatus, sub-structure, and the natural environment during operational activities
 - h. use hand tools, power tools and equipment
 - i. work at height
- 7.6 describe the needs of other occupations and how to effectively communicate within a team when locating and protecting utilities apparatus and sub-structures
- 7.7 describe how to maintain the tools and equipment used when locating and protecting utilities apparatus and sub-structures.

Unit 297 Locating and protecting utilities apparatus and substructures in the workplace

Supporting information

Guidance

This unit must be assessed in a work environment, in accordance with:

- the Additional Requirements for Qualifications using the title NVQ in RQF
- the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment.

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of relevant occupational expertise and knowledge, and must use a combination of assessment methods as defined in the Consolidated Assessment Strategy.

Workplace evidence of skills cannot be simulated. This unit must be assessed against the following endorsement:

• Own occupational area of work.

Unit 316

Preparing and operating forward tipping dumpers to receive, transport and discharge materials in the workplace

| UAN: | J/506/4642 |
|---------------|---|
| Level: | 2 |
| Credit value: | 16 |
| GLH: | 53 |
| Aim: | The aim of this unit is to provide the learner with an awareness of: |
| | interpreting information adopting safe and healthy working practices selecting and or using materials, components and equipment for plant or machinery operations setting up, operating and shutting down plant or machinery to receive and transport bulk material loads. |

Learning outcome

The learner will:

1. Interpret the given information relating to the preparation and use of forward tipping dumpers to carry out transporting and discharging operations.

Assessment criteria

- 1.1 interpret and extract relevant information from:
 - a. drawings
 - b. specifications
 - c. schedules
 - d. risk assessments
 - e. manufacturers' information
- 1.2 comply with information and/or instructions derived from risk assessments and method statements
- 1.3 describe the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented
- 1.4 describe different types of information, their source and how they are interpreted in relation to:
 - a. drawings
 - b. specifications
 - c. schedules
 - d. method statements
 - e. risk assessments
 - f. manufacturers' information
 - g. current regulations governing the operation of forward tipping dumpers.

The learner will:

2. Organise with others the sequence and operation in which transporting and discharging operations using forward tipping dumpers are to be carried out.

Assessment criteria

The learner can:

- 2.1 organise the work according to given information or instructions
- 2.2 describe how to communicate ideas between team members
- 2.3 organise and communicate with team members and other associated occupations
- 2.4 describe how to organise resources prior to and during transporting and discharging operations.

Learning outcome

The learner will:

3. Know how to comply with relevant legislation and official guidance when carrying out transporting and discharging operations using forward tipping dumpers.

Assessment criteria

The learner can:

- 3.1 describe their responsibilities regarding potential accidents, health hazards and the environment whilst working:
 - a. in the workplace
 - b. below ground level
 - c. in confined spaces
 - d. at height
 - e. with tools and equipment
 - f. with materials and substances
 - g. with movement/storage of materials
 - h. by manual handling and mechanical lifting
- 3.2 describe the organisational security procedures for:
 - a. tools
 - b. equipment
 - c. personal belongings

in relation to:

- a. site
- b. workplace
- c. company
- d. operative
- 3.3 explain what the accident reporting procedures are and who is responsible for making reports.

The learner will:

4. Maintain safe and healthy working practices when preparing for and carrying out transporting and discharging operations using forward tipping dumpers.

Assessment criteria

- 4.1 use health and safety control equipment safely and comply with the methods of work to carry out the activity in accordance with legislation and organisational requirements during transporting and discharging operations.
- 4.2 demonstrate compliance with given information and relevant legislation when carrying out transporting and discharging operations using forward tipping dumpers in relation to two or more of the following:
 - a. safe use and storage of plant or machinery
 - b. safe use and storage of tools and equipment
 - c. specific risks to health
- 4.3 explain why and when health and safety control equipment, identified by the principles of protection, should be used, relating to forward tipping dumper use, and the types, purpose and limitations of each type, the work situation and general work environment, in relation to:
 - a. collective protective measures
 - b. Personal Protective Equipment (PPE)
 - c. Respiratory Protective Equipment (RPE)
 - d. Local Exhaust Ventilation (LEV)
- 4.4 describe how the relevant health and safety control equipment should be used in accordance with the given working instructions
- 4.5 describe how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with:
 - a. fires
 - b. spillages
 - c. injuries
 - d. other task-related activities.

The learner will:

5. Request and select the required quantity and quality of resources to prepare for and carry out transporting and discharging operations using forward tipping dumpers.

Assessment criteria

The learner can:

- 5.1 request and select resources associated with forward tipping dumpers in relation to:
 - a. consumables
 - b. materials
 - c. tools
 - d. ancillary equipment and/or accessories
- 5.2 describe the:
 - a. characteristics
 - b. quality
 - c. uses
 - d. sustainability
 - e. limitations
 - f. defects

associated with the resources, and how they should be used correctly, relating to:

- a. consumables, lubricants and fuels
- b. attachments and load coverings
- c. hand tools, ancillary equipment and accessories
- 5.3 describe how the resources should be used correctly and how problems associated with the resources are reported
- 5.4 explain why the organisational procedures have been developed and how they are used for the selection of required resources
- 5.5 describe any potential hazards associated with the resources and methods of work.
- 5.6 describe how to identify:
 - a. weight
 - b. quantity
 - c. pressure
 - d. length
 - e. area

associated with the method/procedures to carry out transporting and discharging operations.

The learner will:

6. Minimise the risk of damage to the work and surrounding area when preparing to and transporting and discharging materials.

Assessment criteria

The learner can:

- 6.1 protect the work and its surrounding area from damage in accordance with safe working practices and organisational procedures
- 6.2 prevent damage and maintain a clean work space
- 6.3 dispose of waste in accordance with current legislation
- 6.4 describe how to protect work from damage and the purpose of protection in relation to:
 - a. general workplace activities
 - b. other occupations
 - c. adverse weather conditions
- 6.5 explain why the disposal of waste should be carried out safely in accordance with:
 - a. environmental responsibilities
 - b. organisational procedures
 - c. manufacturers' information
 - d. statutory regulations
 - e. official guidance.

Learning outcome

The learner will:

7. Complete the work within the allocated time when preparing to and transporting and discharging materials using forward tipping dumpers.

Assessment criteria

The learner can:

- 7.1 demonstrate completion of the work within the allocated time.
- 7.2 describe the purpose of the work programme and describe why deadlines should be kept in relation to:
 - a. types of progress charts, timetables and estimated times
 - b. organisational procedures for reporting circumstances which will affect the work programme.

Learning outcome

The learner will:

8. Comply with the given contract information to receive, transport and discharge materials using forward tipping dumpers to the required specification.

Assessment criteria

The learner can:

8.1 demonstrate the following work skills when preparing for and transporting and discharging materials using forward tipping dumpers:

- a. checking
- b. adjusting
- c. communicating
- d. manoeuvring
- e. positioning
- f. receiving
- g. depositing
- h. transporting
- i. discharging
- j. cleaning
- 8.2 use and maintain hand tools and ancillary equipment and/or accessories
- 8.3 prepare to, position, set up and operate forward tipping dumpers to receive, transport and discharge loads to given working instructions
- 8.4 shut down and secure forward tipping dumpers
- 8.5 describe how to apply safe and healthy work practices, follow procedures, report problems and establish authority needed to rectify, to:
 - a. identify the characteristics of the forward tipping dumpers used for transporting and discharging work
 - b. carry out function checks to receive, transport and discharge loads
 - c. identify characteristics, type and volume of loads to receive and transport
 - d. prepare, set up and adjust for operational requirements
 - e. carry out pre-operational checks for obstructions, stability, safety and security of the work and surrounding area
 - f. recognise and determine when specific skills and knowledge are required and report accordingly
- 8.6 describe how to apply safe and healthy work practices, follow procedures, report problems and establish authority needed to rectify, to:
 - a. identify the area for discharging
 - b. check to avoid damage to structures and utilities service apparatus
 - c. receive, transport and discharge materials safely and securely
 - d. be on the public highway
 - e. shut down and secure the forward tipping dumper
 - f. use hand tools, ancillary equipment and accessories
- 8.7 describe the needs of other occupations and how to effectively communicate within a team when preparing to and carrying out transporting and discharging operations.
- 8.8 describe how to maintain the:
 - a. plant and machinery
 - b. hand tools
 - c. ancillary equipment

used for transporting and discharging operations.

Preparing and operating **Unit 316** forward tipping dumpers to receive, transport and discharge materials in the workplace

Supporting information

Guidance

This unit must be assessed in a work environment and in accordance with:

- the Additional Requirements for Qualifications using the title NVQ in
- the Construction Skills' Consolidated Assessment Strategy for Construction and the Built Environment Craft, Supervisory, Technical, Managerial and Professional Units and Qualifications with NVQ in the Regulated Qualification Framework (RQF) title and SVQs.

Assessors for this unit must use a combination of the following assessment methods:

- observation of normal work activities within the workplace that clearly confirms the required skills
- questioning the learner on knowledge criteria that clearly confirms the required understanding
- review other forms of evidence that can clearly confirm industry required skills, knowledge and understanding.

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of occupational expertise and knowledge of preparing and operating forward tipping dumpers to transport and discharge materials to be effective and reliable when confirming a learner's competence.

Workplace evidence of skills cannot be simulated.

This unit must be assessed against one of the following endorsements:

- forward tipping dumper wheeled
- forward tipping dumper tracked.

Unit 331 Preparing and operating rideon rollers to compact materials in the workplace

| UAN: | R/506/4661 |
|---------------|--|
| Level: | 2 |
| Credit value: | 16 |
| GLH: | 53 |
| Unit aim: | The aim of this unit is to provide the learner with an awareness of: |
| | interpreting information adopting safe and healthy working practices selecting and or using materials, components and equipment for plant and machinery operations |
| | setting up, operating and shutting down plant or machinery for compaction work. |

Learning outcome

The learner will:

1. Interpret the given information relating to the preparation and use of ride-on rollers to carry out compacting operations.

Assessment criteria

- 1.1 interpret and extract relevant information from:
 - a. drawings
 - b. specifications
 - c. schedules
 - d. risk assessments
 - e. manufacturers' information
- 1.2 comply with information and/or instructions derived from risk assessments and method statements
- 1.3 describe the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented
- 1.4 describe different types of information, their source and how they are interpreted in relation to:
 - a. drawings
 - b. specifications
 - c. schedules
 - d. method statements
 - e. risk assessments
 - f. manufacturers' information
 - g. current regulations governing the operation of ride-on rollers for compaction work.

The learner will:

2. Organise with others the sequence and operation in which compacting operations using ride-on rollers are to be carried out.

Assessment criteria

The learner can:

- 2.1 organise the work according to given information or instructions
- 2.2 describe how to communicate ideas between team members
- 2.3 organise and communicate with team members and other associated occupations
- 2.4 describe how to organise resources prior to and during compacting operations using ride-on rollers.

Learning outcome

The learner will:

3. Know how to comply with relevant legislation and official guidance when carrying out compacting operations using ride-on rollers.

Assessment criteria

The learner can:

- 3.1 describe their responsibilities regarding potential accidents, health hazards and the environment whilst working:
 - a. in the workplace
 - b. below ground level
 - c. in confined spaces
 - d. at height
 - e. with tools and equipment
 - f. with materials and substances
 - g. with movement/storage of materials
 - h. by manual handling and mechanical lifting
- 3.2 describe the organisational security procedures for:
 - a. tools
 - b. equipment
 - c. personal belongings

in relation to:

- a. site
- b. workplace
- c. company
- d. operative
- 3.3 explain what the accident reporting procedures are and who is responsible for making reports.

The learner will:

4. Maintain safe and healthy working practices when preparing for and carrying out compacting operations using ride-on rollers.

Assessment criteria

- 4.1 use health and safety control equipment safely and comply with the methods of work to carry out the activity in accordance with legislation and organisational requirements during compacting operations
- 4.2 demonstrate compliance with given information and relevant legislation when carrying out compacting operations using ride-on rollers in relation to two or more of the following:
 - a. safe use and storage of plant or machinery
 - b. safe use and storage of tools and equipment
 - c. specific risks to health
- 4.3 explain why and when health and safety control equipment, identified by the principles of protection, should be used, relating to ride-on roller use, and the types, purpose and limitations of each type, the work situation and general work environment, in relation to:
 - a. collective protective measures
 - b. Personal Protective Equipment (PPE)
 - c. Respiratory Protective Equipment (RPE)
 - d. Local Exhaust Ventilation (LEV)
- 4.4 describe how the relevant health and safety control equipment should be used in accordance with the given working instructions
- 4.5 describe how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with:
 - a. fires
 - b. spillages
 - c. injuries
 - d. other task-related activities.

The learner will:

5. Request and select the required quantity and quality of resources to prepare for and carry out compacting operations using ride-on rollers.

Assessment criteria

The learner can:

- 5.1 request and select resources associated with ride-on rollers in relation to:
 - a. consumables
 - b. materials
 - c. tools
 - d. ancillary equipment and/or accessories
- 5.2 describe the:
 - a. characteristics
 - b. quality
 - c. uses
 - d. sustainability
 - e. limitations
 - f. defects

associated with the resources, and how they should be used correctly, relating to:

- a. consumables, lubricants and fuels
- b. attachments and compaction operational aids
- c. hand tools, ancillary equipment and accessories
- 5.3 describe how the resources should be used correctly and how problems associated with the resources are reported
- 5.4 explain why the organisational procedures have been developed and how they are used for the selection of required resources
- 5.5 describe any potential hazards associated with the resources and methods of work
- 5.6 describe how to identify:
 - a. weight
 - b. pressure
 - c. quantity
 - d. length
 - e. area

associated with the method/procedures to carry out compaction work using ride-on rollers.

The learner will:

6. Minimise the risk of damage to the work and surrounding area when preparing for and compacting materials.

Assessment criteria

The learner can:

- 6.1 protect the work and its surrounding area from damage in accordance with safe working practices and organisational procedures
- 6.2 prevent damage and maintain a clean work space
- 6.3 dispose of waste in accordance with current legislation
- 6.4 describe how to protect work from damage and the purpose of protection in relation to:
 - a. general workplace activities
 - b. other occupations
 - c. adverse weather conditions
- 6.5 explain why the disposal of waste should be carried out safely in accordance with:
 - a. environmental responsibilities
 - b. organisational procedures
 - c. manufacturers information
 - d. statutory regulations
 - e. official guidance.

Learning outcome

The learner will:

7. Complete the work within the allocated time when preparing to and compacting materials.

Assessment criteria

- 7.1 demonstrate completion of the work within the allocated time
- 7.2 describe the purpose of the work programme and describe why deadlines should be kept in relation to:
 - a. types of progress charts, timetables and estimated times
 - b. organisational procedures for reporting circumstances which will affect the work programme.

The learner will:

8. Comply with the given contract information to compact materials using ride-on rollers to the required specification.

Assessment criteria

- 8.1 demonstrate the following work skills when preparing for and compacting materials using ride-on rollers:
 - a. checking
 - b. adjusting
 - c. communicating
 - d. manoeuvring
 - e. positioning
 - f. compacting
- 8.2 use and maintain hand tools, ancillary equipment and/or accessories
- 8.3 prepare for, position, set up and operate ride-on rollers to compact a variety of materials, in various locations, to given working instructions
- 8.4 shut down and secure ride-on rollers
- 8.5 describe how to apply safe and healthy work practices, follow procedures, report problems and establish authority needed to rectify, to:
 - a. identify the characteristics of the ride-on roller used for compaction operations
 - b. carry out function checks for compaction operations
 - c. identify the area for the compaction work
 - d. prepare, set up and adjust for operational requirements
 - e. carry out pre-operational checks for obstructions, stability, safety and security of the work and surrounding area
 - f. identify geological, environmental and material changes and report
 - g. check to avoid damage to structures and utilities service apparatus
 - h. recognise different compaction methods
 - i. recognise and work compaction patterns
- 8.6 describe how to apply safe and healthy work practices, follow procedures, report problems and establish authority needed to rectify, to:
 - a. recognise and determine when specific skills and knowledge are required and report accordingly
 - b. compact materials safely and securely
 - c. complete compaction work
 - d. be on the public highway
 - e. shut down and secure the ride-on roller
 - f. use hand tools, ancillary equipment and accessories
- 8.7 describe the needs of other occupations and how to effectively communicate within a team when preparing to and carrying out compacting operations
- 8.8 describe how to maintain the:
 - a. plant and machinery
 - b. hand tools
 - c. ancillary equipment
 - used to compact materials.

Unit 331 Preparing and operating rideon rollers to compact materials in the workplace

Supporting information

Guidance

This unit must be assessed in a work environment and in accordance with:

- the Additional Requirements for Qualifications using the title NVQ in RQF
- the Construction Skills' Consolidated Assessment Strategy for Construction and the Built Environment Craft, Supervisory, Technical, Managerial and Professional Units and Qualifications with NVQ in the Regulated Qualification Framework (RQF) title and SVQs.

Assessors for this unit must use a combination of the following assessment methods:

- observation of normal work activities within the workplace that clearly confirms the required skills
- questioning the learner on knowledge criteria that clearly confirms the required understanding
- review other forms of evidence that can clearly confirm industry required skills, knowledge and understanding.

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of occupational expertise and knowledge of preparing and operating ride-on rollers to compact materials to be effective and reliable when confirming a learner's competence.

Workplace evidence of skills cannot be simulated.

This unit can be assessed against one of the following endorsements:

- Roadbuilding operations deadweight
- Roadbuilding operations vibratory
- Roadbuilding operations pneumatic tyred
- Roadbuilding operations pedestrian operated.

Unit 352 Preparing for, and arranging and securing plant or machinery for transportation in the workplace

| UAN: | F/506/4669 |
|---------------|--|
| Level: | 2 |
| Credit value: | 16 |
| GLH: | 53 |
| Unit aim: | The aim of this unit is to provide the learner with an awareness of: |
| | interpreting information |
| | adopting safe and healthy working practices |
| | selecting materials and equipment |
| | preparing materials |
| | applying render to external backgrounds. |

Learning outcome

The learner will:

1. Interpret the given information relating to the preparation of, and arranging and securing plant or machinery for transportation.

Assessment criteria

- 1.1 interpret and extract relevant information from:
 - a. drawings
 - b. specifications
 - c. schedules
 - d. method statements
 - e. risk assessments
 - f. manufacturers' information
- 1.2 comply with information and/or instructions derived from risk assessments and method statements
- 1.3 describe the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented
- 1.4 describe different types of information, their source and how they are interpreted in relation to:
 - a. drawings
 - b. specifications
 - c. schedules
 - d. method statements
 - e. manufacturers' information
 - f. method statements
 - g. current regulations governing the arrangement and security of plant or machinery for transportation.

The learner will:

2. Know how to comply with relevant legislation and official guidance when arranging and securing plant or machinery for transportation.

Assessment criteria

The learner can:

- 2.1 describe their responsibilities under current legislation and official guidance whilst working:
 - a. in the workplace
 - b. below ground level
 - c. in confined spaces
 - d. at height
 - e. with tools and equipment
 - f. with materials and substances
 - g. with movement/storage of materials
 - h. by manual handling and mechanical lifting
- 2.2 describe the organisational security procedures for:
 - a. tools
 - b. equipment
 - c. personal belongings

in relation to:

- a. site
- b. workplace
- c. company
- d. operative
- 2.3 explain what the accident reporting procedures are and who is responsible for making reports.

The learner will:

3. Maintain safe and healthy working practices when preparing for and arranging and securing plant or machinery for transportation.

Assessment criteria

- 3.1 use health and safety control equipment safely and comply with the methods of work to carry out the activity in accordance with current legislation and organisational requirements when arranging and securing plant or machinery for transportation
- 3.2 demonstrate compliance with given information and relevant legislation when arranging and securing plant or machinery for transportation in relation to two or more of the following:
 - a. safe use of access equipment
 - b. safe use, storage and handling of materials
 - c. safe use and storage of tools and equipment
 - d. specific risks to health
- 3.3 explain why and when health and safety control equipment, identified by the principles of protection, should be used, relating to arranging and securing plant or machinery for transportation, and the types, purpose and limitations of each type, the work situation and general work environment, in relation to:
 - a. collective protective measures
 - b. Personal Protective Equipment (PPE)
 - c. Respiratory Protective Equipment (RPE)
 - d. Local Exhaust Ventilation (LEV)
- 3.4 describe how the relevant health and safety control equipment should be used in accordance with the given working instructions
- 3.5 describe how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with:
 - a. fires
 - b. spillages
 - c. injuries
 - d. other task-related hazards.

The learner will:

4. Select the required quantity and quality of resources to prepare for, and arrange and secure plant or machinery for transportation.

Assessment criteria

The learner can:

- 4.1 select resources associated with the work in relation to:
 - a. materials
 - b. components
 - c. fixings
 - d. tools and equipment
 - e. lifting accessories
 - f. load restraint equipment
- 4.2 describe the:
 - a. characteristics
 - b. quality
 - c. uses
 - d. sustainability
 - e. limitations
 - f. defects

associated with the resources, and how they should be used correctly, relating to:

- a. lifting accessories and load restraint equipment, steel wire rope, chain, fabric, web hooks, shackles, clamps, netting and sheeting
- b. hand tools and ancillary equipment
- 4.3 describe how the resources should be used correctly and how problems associated with the resources are reported
- 4.4 explain why the organisational procedures have been developed and how they are used for the selection of required resources
- 4.5 describe any potential hazards associated with the resources and method of work
- 4.6 describe how to identify:
 - a. weight
 - b. bearing pressure
 - c. quantity
 - d. length
 - e. area

associated with the method/procedure to carry out the work.

The learner will:

5. Minimise the risk of damage to the work and surrounding area when preparing for and arranging and securing plant or machinery for transportation.

Assessment criteria

The learner can:

- 5.1 protect the work and its surrounding area from damage in accordance with safe working practices and organisational procedures
- 5.2 prevent damage and maintain a clean work space
- 5.3 dispose of waste in accordance with legislation
- 5.4 describe how to protect work from damage and the purpose of protection in relation to:
 - a. general workplace activities
 - b. other occupations
 - c. adverse weather conditions
- 5.5 explain why the disposal of waste should be carried out safely in accordance with:
 - a. environmental responsibilities
 - b. organisational procedures
 - c. manufacturers' information
 - d. statutory regulations
 - e. official guidance.

Learning outcome

The learner will:

6. Complete the work within the allocated time when preparing to, and arranging and securing plant or machinery for transportation.

Assessment criteria

- 6.1 demonstrate completion of the work within the allocated time
- 6.2 describe the purpose of the work programme and describe why deadlines should be kept in relation to:
 - a. types of progress charts, timetables and estimated times
 - b. organisational procedures for reporting circumstances which will affect the work programme.

The learner will:

7. Comply with the given contract information to prepare to, and arrange and secure plant or machinery for transportation to the required specification.

Assessment criteria

The learner can:

- 7.1 demonstrate the following work skills when preparing to, and arranging and securing plant or machinery for transportation:
 - a. measuring
 - b. gauging
 - c. calculating
 - d. selecting
 - e. fitting
 - f. configuring
 - g. testing
 - h. balancing
 - i. adjusting
 - j. securing
 - k. positioning
 - I. removing
- 7.2 use and maintain
 - a. hand tools
 - b. ancillary equipment
 - c. lifting accessories
 - d. load restraint equipment
- 7.3 prepare for, and arrange plant, machinery or associated equipment for transportation to given working instructions by at least two of the following methods:
 - a. driving and operating the following types of plant:
 - i. wheeled machinery
 - ii. tracked machinery
 - iii. rolling machinery

onto the transport (non-operational activities)

- b. suspended loads by slinging and signalling at least three of the following:
 - i. balanced
 - ii. unbalanced
 - iii. loose
 - iv. bundled
 - v. containers
 - vi. drums (slinging and signalling)
- c. by directing and guiding the operations of lifting plant (not craneage), eg lift truck, excavator
- d. directing and guiding machine operators (movement)
- e. driving transport into plant or machinery on hydraulic jack legs or suspended from a gantry (raised loads)
- 7.4 secure plant, machinery or associated equipment for safe movement
- 7.5 describe how to apply safe and healthy work practices, follow procedures, report problems and establish authority needed to rectify, to:
 - a. determine vehicle capacity

- b. determine weights and sizes (height, length, width) of plant and machinery to be loaded
- c. check loading and unloading areas
- d. recognise the requirements to drive and operate plant and machinery for loading and unloading under no load conditions
- e. recognise the requirements to sling and signal loads for transportation
- f. recognise the requirements to direct and guide the operations of plant or machinery for loading and unloading
- g. recognise the requirements to direct and guide the movement of vehicles, plant and machinery for loading and unloading
- h. recognise the requirements to load equipment using hydraulic jacks and supports
- 7.6 describe how to apply safe and healthy work practices, follow procedures, report problems and establish authority needed to rectify, to:
 - a. ensure load is prepared for transportation, secured, restrained, immobilised, hydraulic systems locked, articulation and slew systems locked
 - b. differentiate between load restraint equipment and lifting accessories
 - c. recognise proximity hazards
 - d. select and use suitable lifting accessories and load restraint equipment
 - e. arrange and secure loads
 - f. recognise and determine when specific skills and knowledge are required and report accordingly
 - g. confirm balance, stability and correct weight distribution
 - h. check stability and weight distribution of load prior to releasing securing restraints and lifting accessories
 - i. load and unload on a public highway
- 7.7 describe how to apply safe and healthy work practices, follow procedures, report problems and establish authority needed to rectify, to:
 - a. identify and mark overhangs
 - b. remove and store lifting accessories and load restraint equipment on completion of loading and unloading
 - c. use hand tools and ancillary equipment
 - d. use access equipment
 - e. work at height
- 7.8 describe the needs of other occupations and how to effectively communicate within a team when preparing to and arranging and securing plant or machinery for transportation
- 7.9 describe how to maintain the:
 - a. hand tools
 - b. ancillary equipment
 - c. lifting accessories
 - d. load restraint equipment

used to arrange and secure plant or machinery for transportation.

Unit 352 Preparing for, and arranging and securing plant or machinery for transportation in the workplace

Supporting information

Guidance

This unit must be assessed in a work environment and in accordance with:

- the Additional Requirements for Qualifications using the title NVQ in ROF
- the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment Craft, Supervisory, Technical, Managerial and Professional Units and Qualifications with NVQ in the Regulated Qualification Framework (RQF) title and SVQs.

Assessors for this unit must use a combination of the following assessment methods:

- observation of normal work activities within the workplace that clearly confirms the required skills
- questioning the learner on knowledge criteria that clearly confirms the required understanding
- review other forms of evidence that can clearly confirm industry required skills, knowledge and understanding.

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of occupational expertise and knowledge of preparing for, and arranging and securing plant for haulage to be effective and reliable when confirming a learner's competence.

Workplace evidence of skills cannot be simulated.

Unit 358 Preparing to and directing and guiding the movement of vehicles, plant or machinery in the workplace

| UAN: | A/506/4668 |
|---------------|---|
| Level: | 2 |
| Credit value: | 12 |
| GLH: | 40 |
| Unit aim | The aim of this unit is to provide the learner with an awareness of: |
| | interpreting information |
| | adopting safe and healthy working practices |
| | selecting materials, components and equipment for plant or machinery. |

Learning outcome

The learner will:

1. Interpret the given information relating to preparing to, and directing and guiding the movement of vehicles, plant or machinery.

Assessment criteria

- 1.1 interpret and extract relevant information from:
 - a. drawings
 - b. specifications
 - c. schedules
 - d. risk assessments
 - e. plant and vehicle movement plans
 - f. manufacturers' information.
- 1.2 comply with information and/or instructions derived from risk assessments and method statements
- 1.3 describe the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented
- 1.4 describe different types of information, their source and how they are interpreted in relation to:
 - a. drawings
 - b. specifications
 - c. schedules
 - d. method statements
 - e. risk assessments
 - f. plant and vehicle movement plans
 - g. manufacturers' information
 - h. codes of practice for the direction and guidance of vehicles, plant and machinery.

The learner will:

2. Organise with others the sequence and in which directing and guiding the movement of vehicles, plant or machinery is to be carried out.

Assessment criteria

The learner can:

- 2.1 organise the work according to given information or instructions
- 2.2 describe how to communicate ideas between team members
- 2.3 organise and communicate with team members and other associated occupations
- 2.4 describe how to organise resources prior to and during directing and guiding vehicles, plant or machinery.

Learning outcome

The learner will:

3. Know how to comply with relevant legislation and official guidance when directing and guiding the movement of vehicles, plant or machinery.

Assessment criteria

The learner can:

- 3.1 describe their responsibilities regarding potential accidents, health hazards and the environment whilst working:
 - a. in the workplace
 - b. below ground level
 - c. in confined spaces
 - d. at height
 - e. with tools and equipment
 - f. with materials and substances
 - g. with movement/storage of materials
 - h. by manual handling and mechanical lifting
- 3.2 describe the organisational security procedures for:
 - a. tools
 - b. equipment
 - c. personal belongings

in relation to:

- a. site
- b. workplace
- c. company
- d. operative
- 3.3 explain what the accident reporting procedures are and who is responsible for making reports.

The learner will:

4. Maintain safe and healthy working practices when preparing to, directing and guiding the movement of vehicles, plant or machinery.

Assessment criteria

- 4.1 use health and safety control equipment safely and comply with the methods of work to carry out the activity in accordance with legislation and organisational requirements when directing and guiding vehicles, plant or machinery
- 4.2 demonstrate compliance with given information and relevant legislation when directing and guiding the movement of vehicles, plant or machinery in relation to two or more of the following:
 - a. safe use and storage of tools
 - b. safe use and storage of equipment
 - c. specific risks to health
- 4.3 explain why when health and safety control equipment, identified by the principles of protection, should be used, relating to directing and guiding vehicles, plant or machinery, and the types, purpose and limitations of each type, the work situation and general work environment, in relation to:
 - a. collective protective measures
 - b. Personal Protective Equipment (PPE)
 - c. Respiratory Protective Equipment (RPE)
 - d. Local Exhaust Ventilation (LEV)
- 4.4 describe how the relevant health and safety control equipment should be used in accordance with the given working instructions
- 4.5 describe how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with:
 - a. fires
 - b. spillages
 - c. injuries
 - d. other task-related hazards.

The learner will:

5. Select the required quantity and quality of resources to prepare to, and direct and guide the movement of vehicles, plant or machinery.

Assessment criteria

The learner can:

- 5.1 select resources associated with directing and guiding vehicles, plant or machinery in relation to:
 - a. hand tools
 - b. ancillary equipment
 - c. signalling and communication equipment
- 5.2 describe the:
 - a. characteristics
 - b. quality
 - c. uses
 - d. sustainability
 - e. limitations
 - f. defects

associated with the resources, and how they should be used correctly, relating to:

- a. signalling and communication equipment
- b. barriers, cones, signs
- c. lighting equipment
- d. hand tools and ancillary equipment
- 5.3 describe how the resources should be used correctly and how problems associated with the resources are reported
- 5.4 explain why the organisational procedures have been developed and how they are used for the selection of required resources
- 5.5 describe any potential hazards associated with the resources and method of work
- 5.6 describe how to identify:
 - a. weight/bearing pressures
 - b. quantity
 - c. length
 - d. area

associated with the method/procedures for directing and guiding the movement of vehicles, plant and machinery.

The learner will:

6. Minimise the risk of damage to the work and surrounding area when preparing to and directing and guiding the movement of vehicles, plant or machinery.

Assessment criteria

The learner can:

- 6.1 protect the work and its surrounding area from damage in accordance with safe working practices and organisational procedures
- 6.2 prevent damage and maintain a clean work space
- 6.3 dispose of waste in accordance with legislation
- 6.4 describe how to protect work from damage and the purpose of protection in relation to:
 - a. general workplace activities
 - b. other occupations
 - c. adverse weather conditions
- 6.5 explain why the disposal of waste should be carried out safely in accordance with:
 - a. environmental responsibilities
 - b. organisational procedures
 - c. manufacturers' information
 - d. statutory regulations
 - e. official guidance.

Learning outcome

The learner will:

7. Complete the work within the allocated time preparing to, and directing and guiding the movement of vehicles, plant or machinery.

Assessment criteria

- 7.1 demonstrate completion of the work within the allocated time
- 7.2 describe the purpose of the work programme and describe why deadlines should be kept in relation to:
 - a. types of progress charts, timetables and estimated times
 - b. organisational procedures for reporting circumstances which will affect the work programme.

The learner will:

8. Comply with the given contract information to prepare to, and direct and guide the movement of vehicles, plant or machinery to the required specification.

Assessment criteria

- 8.1 demonstrate the following work skills when preparing to, and directing and guiding vehicles, plant or machinery:
 - a. measuring
 - b. gauging
 - c. estimating
 - d. interpreting
 - e. judging
 - f. explaining
 - g. preparing
 - h. commanding
 - i. directing
 - j. guiding
 - k. indicating
 - I. informing
 - m. instructing
 - n. signing
 - o. positioning
 - p. moving
 - q. securing
 - r. signalling
 - s. relaying
- 8.2 use and maintain
 - a. hand tools
 - b. ancillary equipment
 - c. signalling equipment
- 8.3 prepare to, and direct and guide the movement of loaded and unloaded vehicles, including articulated vehicles and plant or machinery (wheeled or tracked) to given working instructions, relating to the following:
 - a. hand signals
 - b. hand signalling equipment
 - c. verbal/electronic communication equipment
- 8.4 describe how to apply safe and healthy work practices, follow procedures, report problems and establish authority needed to rectify, to:
 - a. identify the differences between directing and guiding movement, directing and guiding operations and slinging and signalling
 - b. interpret a work management plan and vehicle movement plan
 - c. identify the hierarchy of traffic control measures and pedestrian separation
 - d. organise and ensure the maintenance of holding areas, routes, exclusion zones, markers and signs
 - e. assess and determine the movement of vehicles, plant and machinery, to include own position of safety, visibility, ground conditions and features, proximity hazards and weight limits
- 8.5 describe how to apply safe and healthy work practices, follow procedures, report problems and establish authority needed to

rectify, to:

- a. recognise and react to changing conditions, ground, environment, weather, light, numbers and types of vehicles, plant and machinery
- b. liaise with, convey and collect information from and to, drivers and operators
- c. recognise and utilise movement aids (camera's, mirrors, audio and visual warnings, etc)
- d. recognise blind-spots, potential crush zones and other limitations to driver visibility
- e. recognise the requirements of directing and guiding the movement of vehicles, plant and machinery onto and from public highways
- f. recognise the requirements of working on public highways 8.6 describe how to apply safe and healthy work practices, follow procedures, report problems and establish authority needed to rectify, to:
 - a. direct and guide different vehicle types and size eg height, weight length, width, tracked, wheeled and articulated
 - b. assess and determine the movement of loads, including unloading, discharging and loading requirements
 - c. direct and guide vehicles, plant and machinery across rough or uneven terrain
 - d. check the integrity of load securing equipment and stability of loads, prior to commencement of movements and on arrival, prior to release
 - e. signal and communicate following recognised and agreed operational procedures
 - f. recognise and determine when specific skills and knowledge are required and report accordingly
 - g. use hand tools and ancillary equipment
- 8.7 describe the needs of other occupations and how to effectively communicate within a team when preparing to and directing and guiding vehicles, plant or machinery
- 8.8 describe how to maintain the:
 - a. hand tools
 - b. ancillary equipment
 - c. signalling and communication equipment

used to direct and guide vehicles, plant or machinery.

Unit 358 Preparing to and directing and guiding the movement of vehicles, plant or machinery in the workplace

Supporting information

Guidance

This unit must be assessed in a work environment and in accordance with:

- the Additional Requirements for Qualifications using the title NVQ in RQF
- the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment Craft, Supervisory, Technical, Managerial and Professional Units and Qualifications with NVQ in the Regulated Qualification Framework (RQF) title and SVQs.

Assessors for this unit must use a combination of the following assessment methods:

- observation of normal work activities within the workplace that clearly confirms the required skills
- questioning the learner on knowledge criteria that clearly confirms the required understanding
- review other forms of evidence that can clearly confirm industry required skills, knowledge and understanding.

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of occupational expertise and knowledge of preparing for, and arranging and securing plant for haulage to be effective and reliable when confirming a learner's competence.

Workplace evidence of skills cannot be simulated.

Unit 362 Slinging and hand signalling the movement of suspended loads in the workplace

| UAN: | R/506/3929 |
|---------------|--|
| Level: | 2 |
| Credit value: | 8 |
| GLH: | 27 |
| Unit aim | This unit aims to provide you with the necessary skills and knowledge to: |
| | interpreting information |
| | adopting safe and healthy working practices |
| | selecting materials, components and equipment |
| | preparing for and slinging and signalling the movement of loads. |

Learning outcome

The learner will:

1. Interpret the given information relating to the preparation for and the slinging and signalling of loads.

Assessment criteria

- 1.1 interpret and extract relevant information from:
 - a. drawings
 - b. specifications
 - c. schedules
 - d. risk assessments
 - e. method statements (lift plans)
 - f. manufacturers' information
- 1.2 comply with information and/or instructions derived from risk assessments and method statements
- 1.3 describe the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented
- 1.4 describe different types of information, their source and how they are interpreted in relation to:
 - a. drawings
 - b. specifications
 - c. schedules
 - d. method statements
 - e. manufacturers' information
 - f. risk assessments
 - g. lift plans
 - h. work instructions
 - i. manufacturers' information
 - j. approved procedures
 - k. codes of practice.

The learner will:

2. Organise with others the sequence and operation in which the slinging and signalling of loads is to be carried out.

Assessment criteria

The learner can:

- 2.1 organise the work according to given information or instructions
- 2.2 describe how to communicate ideas between team members
- 2.3 organise and communicate with team members and other associated occupations
- 2.4 describe how to organise resources prior to and when slinging and signalling of loads.

Learning outcome

The learner will:

3. Know how to comply with relevant legislation and official guidance to carry out slinging and signalling of loads.

Assessment criteria

The learner can:

- 3.1 describe their responsibilities regarding potential accidents, health hazards and the environment whilst working:
 - a. in the workplace
 - b. below ground level
 - c. in confined spaces
 - d. at height
 - e. with tools and equipment
 - f. with materials and substances
 - g. with movement/storage of materials
 - h. by manual handling and mechanical lifting
- 3.2 describe the organisational security procedures for:
 - a. tools
 - b. equipment
 - c. personal belongings

in relation to:

- a. site
- b. workplace
- c. company
- d. operative
- 3.3 explain what the accident reporting procedures are and who is responsible for making reports.

The learner will:

4. Maintain safe and healthy working practices when preparing for and slinging and signalling loads.

Assessment criteria

- 4.1 use health and safety control equipment safely and comply with the methods of work to carry out the activity in accordance with legislation and organisational requirements when slinging and signalling loads
- 4.2 demonstrate compliance with given information and relevant legislation when carrying out the slinging and signalling of loads in relation to at least three of the following:
 - a. safe use and storage of tools and equipment
 - b. safe use, storage and handling of lifting accessories
 - c. safe use of access equipment
 - d. specific risks to health
- 4.3 explain why and when health and safety control equipment, identified by the principles of protection, should be used, relating to slinging and signalling of loads, and the types, purpose and limitations of each type, the work situation and general work environment, in relation to:
 - a. collective protective measures
 - b. Personal Protective Equipment (PPE)
 - c. Respiratory Protective Equipment (RPE)
 - d. Local Exhaust Ventilation (LEV)
- 4.4 describe how the relevant health and safety control equipment should be used in accordance with the given working instructions
- 4.5 describe how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with:
 - a. fires
 - b. spillages
 - c. injuries
 - d. other task-related hazards.

The learner will:

5. Select the required quantity and quality of resources to prepare for and when slinging and signalling loads.

Assessment criteria

The learner can:

- 5.1 select resources associated with slinging/signalling in relation to lifting accessories/aids, hand tools and ancillary equipment
- 5.2 describe the:
 - a. characteristics
 - b. quality
 - c. uses
 - d. sustainability
 - e. limitations
 - f. defects

associated with the resources, and how they should be used correctly, relating to:

- a. lifting accessories
- b. signalling and communication equipment
- c. hand tools and ancillary equipment
- 5.3 describe how the resources should be used correctly, and how problems associated with the resources are reported
- 5.4 explain why the organisational procedures have been developed and how they are used for the selection of required resources
- 5.5 describe any potential hazards associated with the resources and method of work
- 5.6 describe how to identify:
 - a. weight
 - b. quantity
 - c. length
 - d. area

The learner will:

6. Minimise the risk of damage to the work and surrounding area when preparing to and slinging and signalling loads.

Assessment criteria

The learner can:

- 6.1 protect the work and its surrounding area from damage in accordance with safe working practices and organisational procedures
- 6.2 prevent damage and maintain a clean work space
- 6.3 dispose of waste in accordance with legislation
- 6.4 describe how to protect work from damage and the purpose of protection in relation to:
 - a. general workplace activities
 - b. other occupations
 - c. adverse weather conditions
- 6.5 explain why the disposal of waste should be carried out safely in accordance with:
 - a. environmental responsibilities
 - b. organisational procedures
 - c. manufacturers information
 - d. statutory regulations
 - e. official guidance.

Learning outcome

The learner will:

7. Complete the work within the allocated time when preparing to and slinging and signalling loads.

Assessment criteria

- 7.1 demonstrate completion of the work within the allocated time
- 7.2 describe the purpose of the work programme and describe why deadlines should be kept in relation to:
 - a. types of progress charts, timetables and estimated times
 - b. organisational procedures for reporting circumstances which will affect the work programme.

The learner will:

8. Comply with the given contract information to prepare to and sling and signal suspended loads for movement to the required specification.

Assessment criteria

- 8.1 demonstrate the following work skills when preparing to and slinging and signalling loads:
 - a. measuring
 - b. gauging
 - c. estimating
 - d. calculating
 - e. fitting
 - f. fixing
 - g. testing
 - h. balancing
 - i. interpreting
 - j. inspecting
 - k. judging
 - I. explaining
 - m. preparing
 - n. indicating
 - o. informing
 - p. instructing
 - q. signing
 - q. 3igiiiig
 - r. positioning
 - s. adjusting
 - t. configuring
 - u. moving
 - v. securing
 - w. signaling
 - x. relaying
- 8.2 use and maintain lifting accessories, lifting aids and equipment
- 8.3 inspect and prepare lifting accessories prior to slinging
- 8.4 prepare to and attach suspended loads to lifting equipment, using appropriate lifting accessories and load securing methods, to given working instructions for three of the following:
 - a. balanced
 - b. unbalanced
 - c. loose
 - d. bundled
 - e. container
 - f. drum
 - g. a load where the machine operator cannot observe its full movement path
- 8.5 guide, move and place suspended loads to specified destinations, using hand signals, to given working instructions for three of the following:
 - a. balanced
 - b. unbalanced
 - c. loose
 - d. bundled
 - e. container
 - f. drum

- g. a load where the machine operator cannot observe its full movement path
- 8.6 describe how to apply safe and healthy work practices, follow procedures, report problems and establish authority needed to rectify, to:
 - a. identify the differences between:
 - i.slinging and signaling
 - ii.directing and guiding movement of vehicles
 - iii.plant and machinery
 - iv.directing and guiding operations of plant and machinery not being used for lifting operations
 - b. confirm the authority, duties and responsibilities allocated
 - c. identify characteristics of lifting equipment and lifting accessories
 - d. identify and interpret valid certification for maintenance, inspection and thorough examination
- 8.7 describe how to apply safe and healthy work practices, follow procedures, report problems and establish authority needed to rectify, to:
 - a. lift and transfer people
 - b. sling balanced, unbalanced, loose, live, bundled, container drum loads and loads that are blind to the equipment operator
 - c. communicate using hand signals, hand signalling equipment (lights, wands, fluorescent gloves, flags) and electronic communication equipment (loud hailers, radios)
 - d. confirm methods of communication
 - e. recognise blind-spots, potential crush zones and other limitations to driver visibility
 - f. consider the load characteristics including centre of gravity and lifting points to determine the method of slinging
 - g. determine and check the route of the load before and during the lift including distances, clearances and landing position
- 8.8 describe how to apply safe and healthy work practices, follow procedures, report problems and establish authority needed to rectify, to:
 - a. select, handle, inspect and use (assemble, set up and adjust) lifting accessories and aids
 - b. identify rejection criteria for removing lifting accessories from service
 - c. recognise and determine when specific skills and knowledge are required and report accordingly
 - d. attach lifting accessories and sling loads securely
 - e. ensure balance and stability of loads
 - f. attach and use load guidance equipment (tag lines)
 - g. guide and place suspended loads by recognised methods of communication and agreed operational procedures
 - h. land and position loads safely and securely
 - i. remove and store lifting accessories
 - i. use hand tools and ancillary equipment
- 8.9 describe the needs of other occupations and how to effectively communicate within a team when preparing to and slinging and signalling loads
- 8.10 describe how to maintain the:
 - a. lifting accessories
 - b. lifting aids
 - c. signalling and communication equipment used to sling and signal loads.

Unit 362 Slinging and hand signalling the movement of suspended loads in the workplace

Supporting information

Guidance

This unit must be assessed in a work environment and in accordance with:

- the Additional Requirements for Qualifications using the title NVQ in ROF
- the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment Craft, Supervisory, Technical, Managerial and Professional Units and Qualifications with NVQ in the Regulated Qualification Framework (RQF) title and SVQs.

Assessors for this unit must use a combination of the following assessment methods:

- observation of normal work activities within the workplace that clearly confirms the required skills
- questioning the learner on knowledge criteria that clearly confirms the required understanding
- review other forms of evidence that can clearly confirm industry required skills, knowledge and understanding.

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of occupational expertise and knowledge of slinging and signalling the movement of loads to be effective and reliable when confirming a learner's competence.

Workplace evidence of skills cannot be simulated.

Unit 366

Preparing and operating powered units, tools or pedestrian plant, machinery or equipment in the workplace

| UAN: | F/506/4672 |
|---------------|---|
| Level: | 2 |
| Credit value: | 7 |
| GLH: | 13 |
| Unit aim: | The aim of this unit is to provide the learner with an awareness of: interpreting information adopting safe and healthy working practices selecting and preparing specialised powered tools and/or ancillary equipment operating specialised powered tools and equipment. |

Learning outcome

The learner will:

1. Interpret the given information relating to the preparation and use of powered units, tools or pedestrian plant, machinery or equipment.

Assessment criteria

- 1.1 interpret and extract relevant information from:
 - a. drawings
 - b. specifications
 - c. schedules
 - d. risk assessments
 - e. operating instructions
 - f. manufacturers' information
- 1.2 comply with information and/or instructions derived from risk assessments and method statements
- 1.3 describe the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented
- 1.4 describe different types of information, their source and how they are interpreted in relation to:
 - a. drawings
 - b. specifications
 - c. schedules
 - d. method statements
 - e. risk assessments
 - f. legislation
 - g. codes of practice
 - h. manufacturers' information
 - i. operating instructions.

The learner will:

2. Know how to comply with relevant legislation and official guidance to prepare and use powered units, tools or pedestrian plant, machinery or equipment.

Assessment criteria

The learner can:

- 2.1 describe their responsibilities regarding potential accidents, health hazards and the environment whilst working:
 - a. in the workplace
 - b. below ground level
 - c. in confined spaces
 - d. at height
 - e. with tools and equipment
 - f. with materials and substances
 - g. with movement/storage of materials
 - h. by manual handling and mechanical lifting
- 2.2 describe the organisational security procedures for:
 - a. tools
 - b. equipment
 - c. personal belongings

in relation to:

- a. site
- b. workplace
- c. company
- d. operative
- 2.3 explain what the accident reporting procedures are and who is responsible for making reports.

The learner will:

3. Maintain safe and healthy working practices when preparing for and using powered units, tools or pedestrian plant, machinery or equipment.

Assessment criteria

The learner can:

- 3.1 use health and safety control equipment safely and comply with the methods of work to carry out the activity in accordance with legislation and organisational requirements when using powered units, tools or pedestrian plant, machinery or equipment
- 3.2 demonstrate compliance with given information and relevant legislation when using:
 - a. powered units
 - b. tools or pedestrian plant
 - c. machinery or equipment

in relation to two or more of the following:

- a. safe use of access equipment
- b. safe handling of materials
- c. safe use and storage of materials, tools and equipment
- d. specific risks to health
- 3.3 explain why and when health and safety control equipment, identified by the principles of protection, should be used, relating to powered units, tools or pedestrian plant, machinery or equipment use, and the types, purpose and limitations of each type, the work situation and general work environment, in relation to:
 - a. collective protective measures
 - b. Personal Protective Equipment (PPE)
 - c. Respiratory Protective Equipment (RPE)
 - d. Local Exhaust Ventilation (LEV)
- 3.4 describe how the relevant health and safety control equipment should be used in accordance with the given working instructions
- 3.5 describe how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with:
 - a. fires
 - b. spillages
 - c. injuries
 - d. other task-related hazards.

The learner will:

4. Select the required quantity and quality of resources to prepare for and sustain powered units, tools or pedestrian plant, machinery or equipment.

Assessment criteria

The learner can:

- 4.1 select resources associated with the type of work in relation to:
 - a. fuel
 - b. power source
 - c. lubricants
 - d. consumables
- 4.2 describe the:
 - a. characteristics
 - b. quality
 - c. uses
 - d. sustainability
 - e. limitations
 - f. defects

associated with the resources, and how they should be used correctly, relating to:

- a. power source/fuels
- b. consumables
- c. lubricants
- 4.3 describe how the resources should be used correctly and how problems associated with the resources are reported
- 4.4 explain why the organisational procedures have been developed and how they are used for the selection of required resources
- 4.5 describe any potential hazards associated with the resources and methods of work
- 4.6 describe how to identify:
 - a. quantity
 - b. length
 - c. area
 - d. wastage

associated with the method/procedures to operate powered units, tools or pedestrian plant, machinery or equipment.

The learner will:

5. Minimise the risk of damage to the work and surrounding area when preparing to and using powered units, tools or pedestrian plant, machinery or equipment.

Assessment criteria

The learner can:

- 5.1 protect the work and its surrounding area from damage in accordance with safe working practices and organisational procedures
- 5.2 prevent damage and maintain a clean work space
- 5.3 dispose of waste in accordance with legislation
- 5.4 describe how to protect work from damage and the purpose of protection in relation to:
 - a. general workplace activities
 - b. other occupations
 - c. adverse weather conditions
- 5.5 explain why the disposal of waste should be carried out safely in accordance with:
 - a. environmental responsibilities
 - b. organisational procedures
 - c. manufacturers' information
 - d. statutory regulations
 - e. official guidance.

Learning outcome

The learner will:

6. Complete the work within the allocated time when preparing to and using powered units, tools or pedestrian plant, machinery or equipment.

Assessment criteria

The learner can:

- 6.1 demonstrate completion of the work within the allocated time
- 6.2 describe the purpose of the work programme and describe why deadlines should be kept in relation to:
 - a. types of progress charts, timetables and estimated times
 - b. organisational procedures for reporting circumstances which will affect the work programme.

Learning outcome

The learner will:

7. Comply with the given contract information to operate powered units, tools or pedestrian plant, machinery or equipment to the required specification.

Assessment criteria

- 7.1 demonstrate the following work skills when using powered units, tools or pedestrian plant, machinery or equipment:
 - a. starting

- b. stopping
- c. replenishing
- d. controlling
- e. cleaning
- 7.2 use and maintain:
 - a. powered units
 - b. tools
 - c. ancillary equipment
- 7.3 operate and monitor powered units and tools or pedestrian plant, machinery or associated equipment to given working instructions relating to:
 - a. continual running
 - b. closing down
 - c. cleaning
- 7.4 return powered unit, tools or pedestrian plant, machinery or equipment to a safe operational condition on completion of work
- 7.5 disassemble and/or clean powered unit, tools or pedestrian plant, machinery or equipment
- 7.6 describe how to apply safe and healthy work practices, follow procedures, report problems and establish authority needed to rectify, to:
 - a. prepare, position and set up for work
 - b. secure accessories and tool attachments
 - c. carry out pre-use checks to manufacturer's and suppliers information/procedures
 - d. complete pre-start and post stop checks
 - e. recognise the characteristics of the plant, machinery and equipment
 - f. identify specific operating and safety requirements for the task and work
 - g. recognise and determine when specific skills and knowledge are required and report accordingly
- 7.7 describe how to apply safe and healthy work practices, follow procedures, report problems and establish authority needed to rectify. to:
 - a. operate, use and control
 - b. monitor and maintain
 - c. replenish consumables
 - d. disassemble and clean
 - e. use access equipment
 - f. transport and/or secure
- 7.8 describe the needs of other occupations and how to effectively communicate within a team when preparing for and using powered units, tools or pedestrian plant, machinery or equipment
- 7.9 describe how to maintain the:
 - a. hand tools
 - b. portable power tools
 - c. powered units
 - d. pedestrian plant
 - e. machinery
 - f. ancillary equipment

used for the work.

Unit 366

Preparing and operating powered units, tools or pedestrian plant, machinery or equipment in the workplace

Supporting information

Guidance

This unit must be assessed in a work environment and in accordance with:

- the Additional Requirements for Qualifications using the title NVQ in ROF
- the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment.

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of relevant occupational expertise and knowledge, and must use a combination of assessment methods as defined in the Consolidated Assessment Strategy.

Workplace evidence of skills cannot be simulated.

This unit must be assessed against one of the following endorsements:

- generators
- pumps
- pedestrian operated plant or machinery
- mixers
- compressors
- self-powered tools.

Unit 368 Moving, handling and storing resources in the workplace

| UAN: | F/503/1171 |
|---------------|---|
| Level: | 2 |
| Credit value: | 5 |
| GLH: | 17 |
| Aim: | The aim of this unit is to provide the learner with the skills and knowledge required to: |
| | interpret information |
| | adopt safe and healthy working practices |
| | select aids or equipment to move, handle or store occupational resources |
| | move, handle and store occupational resources to maintain useful condition. |

Learning outcome

The learner will:

1. Comply with given information when moving, handling and/or storing resources.

Assessment criteria

- 1.1 interpret the given information relating to moving, handling and/or storing resources, relevant to the given occupation
- 1.2 interpret the given information relating to the use and storage of lifting aids and equipment
- 1.3 describe the different types of technical, product and regulatory information, their source and how they are interpreted
- 1.4 state the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented
- 1.5 describe how to obtain information relating to using and storing lifting aids and equipment.

The learner will:

2. Know how to comply with relevant legislation and official guidance when moving, handling and/or storing resources.

Assessment criteria

- 2.1 describe their responsibilities under current legislation and official guidance whilst working:
 - a. in the workplace
 - b. in confined spaces
 - c. below ground level
 - d. at height
 - e. with tools and equipment
 - f. with materials and substances
 - g. with movement/storage of materials
 - h. by manual handling and mechanical lifting
- 2.2 describe the organisational security procedures for tools, equipment and personal belongings in relation to:
 - a. site
 - b. workplace
 - c. company
 - d. operative
- 2.3 explain what the accident reporting procedures are and who is responsible for making the reports
- 2.4 state the appropriate types of fire extinguishers relevant to the work
- 2.5 describe how and when the different types of fire extinguishers, relevant to the given occupation, are used in accordance with legislation and official guidance.

The learner will:

Maintain safe working practices when moving, handling and/or storing resources.

Assessment criteria

- 3.1 use health and safety control equipment safely to carry out the activity in accordance with legislation and organisational requirements when moving, handling and/or storing resources
- 3.2 use lifting aids safely as appropriate to the work
- 3.3 protect the environment in accordance with safe working practices as appropriate to the work
- 3.4 explain why and when health and safety control equipment, identified by the principles of protection, should be used, relating to moving, handling and/or storing resources, and the types, purpose and limitations of each type, the work situation, occupational use and the general work environment, in relation to:
 - a. collective protective measures
 - b. Personal Protective Equipment (PPE)
 - c. Respiratory Protective Equipment (RPE)
 - d. Local Exhaust Ventilation (LEV)
- 3.5 describe how the health and safety control equipment relevant to the work should be used in accordance with the given instructions
- 3.6 state how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with:
 - a. fires
 - b. spillages
 - c. injuries
 - d. other task-related hazards.

The learner will:

4. Select the required quantity and quality of resources for the methods of work to move, handle and/or store occupational resources.

Assessment criteria

The learner can:

- 4.1 select the relevant resources to be moved, handled and/or stored, associated with own work
- 4.2 describe the:
 - a. characteristics
 - b. quality
 - c. uses
 - d. sustainability
 - e. limitations
 - f. defects
- 4.3 associated with the occupational resources in relation to:
 - a. lifting and handling aids
 - b. container(s)
 - c. fixing, holding and securing systems
- 4.4 describe how the resources should be handled and how any problems associated with the resources are reported
- 4.5 explain why the organisational procedures have been developed and how they are used for the selection of required resources
- 4.6 describe any potential hazards associated with the resources and methods of work.

Learning outcome

The learner will:

 Prevent the risk of damage to occupational resources and surrounding environment when moving, handling and/or storing resources.

Assessment criteria

- 5.1 protect occupational resources and their surrounding area from damage in accordance with safe working practices and organisational procedures
- 5.2 dispose of waste and packaging in accordance with legislation
- 5.3 maintain a clean work space when moving, handling or storing resources
- 5.4 describe how to protect work from damage and the purpose of protection in relation to:
 - a. general workplace activities
 - b. other occupations
 - c. adverse weather conditions
- 5.5 explain why the disposal of waste should be carried out safely in accordance with:
 - a. environmental responsibilities
 - b. organisational procedures
 - c. manufacturers' information
 - d. statutory regulations
 - e. official guidance.

The learner will:

6. Complete the work within the allocated time when moving, handling and/or storing resources.

Assessment criteria

The learner can:

- 6.1 demonstrate completion of the work within the allocated time
- 6.2 state the purpose of the work programme and explain why deadlines should be kept in relation to:
 - a. progress charts, timetables and estimated times
 - b. organisational procedures for reporting circumstances which will affect the work programme.

Learning outcome

The learner will:

7. Comply with the given occupational resource information to move, handle and/or store resources to the required guidance.

Assessment criteria

- 7.1 demonstrate the following work skills when moving, handling and/or storing occupational resources:
 - a. moving
 - b. positioning
 - c. storing
 - d. securing and/or using lifting aids
 - e. kinetic lifting techniques
- 7.2 move, handle and/or store occupational resources to meet product information and organisational requirements relating to three of the following:
 - a. sheet material
 - b. loose material
 - c. bagged or wrapped material
 - d. fragile material
 - e. tools and equipment
 - f. components
 - g. liquids
- 7.3 describe how to apply safe work practices, follow procedures, report problems and establish the authority needed to rectify them when moving, handling and/or storing occupational resources
- 7.4 describe the needs of other occupations when moving, handling and/or storing resources.

Unit 368 Moving, handling and storing resources in the workplace

Supporting information

Guidance

This unit must be assessed in a work environment, in accordance with the:

- Additional Requirements for Qualifications using the title NVQ in ROF
- ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment.

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of relevant occupational expertise and knowledge, and must use a combination of assessment methods as defined in the Consolidated Assessment Strategy.

Workplace evidence of skills cannot be simulated.

Unit 370 Setting out secondary dimensional work control in the workplace

| UAN: | J/506/4673 |
|---------------|--|
| Level: | 2 |
| Credit value: | 7 |
| GLH: | 23 |
| Unit aim: | This unit aims to provide the learner with the necessary skills and knowledge to: |
| | interpreting information |
| | adopting safe and healthy working practices |
| | selecting setting out equipment and ancillary resources |
| | preparing and setting out secondary dimensional control of the work. |

Learning outcome

The learner will:

1. Interpret the given information relating to setting out dimensional control of the work.

Assessment criteria

- 1.1 interpret and extract relevant information from:
 - a. drawings
 - b. specifications
 - c. schedules
 - d. method statements
 - e. risk assessments
 - f. manufacturers' information
 - g. reference points
- 1.2 comply with information and/or instructions derived from risk assessments and method statements
- 1.3 describe the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented
- 1.4 describe different types of information, their source and how they are interpreted in relation to:
 - a. drawings
 - b. specifications
 - c. schedules
 - d. method statements
 - e. risk assessments
 - f. manufacturers' information
 - g. reference points
 - h. regulations governing buildings and construction work.

The learner will:

2. Know how to comply with relevant legislation and official guidance to set out dimensional control of the work.

Assessment criteria

The learner can:

- 2.1 describe their responsibilities regarding potential accidents, health hazards and the environment whilst working:
 - a. in the workplace
 - b. below ground level
 - c. in confined spaces
 - d. at height
 - e. with tools and equipment
 - f. with materials and substances
 - g. with movement/storage of materials
 - h. by manual handling and mechanical lifting
- 2.2 describe the organisational security procedures for:
 - a. tools
 - b. equipment
 - c. personal belongings

in relation to:

- a. site
- b. workplace
- c. company
- d. operative
- 2.3 explain what the accident reporting procedures are and who is responsible for making reports.

The learner will:

3. Maintain safe and healthy working practices when setting out dimensional control of the work.

Assessment criteria

- 3.1 use health and safety control equipment safely and comply with the methods of work to carry out the activity in accordance with legislation and organisational requirements during setting out dimensional control of the work
- 3.2 demonstrate compliance with given information and relevant legislation when setting out dimensional control of the work in relation to two or more of the following:
 - a. safe use of access equipment/working platforms
 - b. safe handling of materials
 - c. safe use and storage of materials, tools and equipment
 - d. specific risks to health
- 3.3 explain why and when health and safety control equipment, identified by the principles of protection, should be used, relating to setting out dimensional control of the work, and the types, purpose and limitations of each type, the work situation and general work environment, in relation to:
 - a. collective protective measures
 - b. Personal Protective Equipment (PPE)
 - c. Respiratory Protective Equipment (RPE)
 - d. Local Exhaust Ventilation (LEV)
- 3.4 describe how the relevant health and safety control equipment should be used in accordance with the given working instructions
- 3.5 describe how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with:
 - a. fires
 - b. spillages
 - c. injuries
 - d. other task-related hazards.

The learner will:

4. Select the required quantity and quality of resources to set out dimensional control of the work.

Assessment criteria

The learner can:

- 4.1 select resources associated with the work in relation to:
 - a. measuring tools and instruments
 - b. marking materials/components
 - c. tools and equipment
- 4.2 describe the:
 - a. characteristics
 - b. quality
 - c. uses
 - d. sustainability
 - e. limitations
 - f. defects

associated with the resources, and how they should be used correctly, relating to:

- a. measuring tools and instruments
- b. marking equipment
- c. level and alignment tools
- 4.3 describe how the resources should be used correctly and how problems associated with the resources are reported
- 4.4 explain why the organisational procedures have been developed and how they are used for the selection of required resources
- 4.5 describe any potential hazards associated with the resources and method of work
- 4.6 describe how to identify quantity of resources associated with the method/procedure to set out for secondary dimensional work control.

The learner will:

5. Minimise the risk of damage to the work and surrounding area when setting out dimensional control of the work.

Assessment criteria

The learner can:

- 5.1 protect the work and its surrounding area from damage in accordance with safe working practices and organisational procedures
- 5.2 prevent damage and maintain a clean work space
- 5.3 dispose of waste in accordance with legislation
- 5.4 describe how to protect work from damage and the purpose of protection in relation to:
 - a. general workplace activities
 - b. other occupations
 - c. adverse weather conditions
- 5.5 explain why the disposal of waste should be carried out safely in accordance with:
 - a. environmental responsibilities
 - b. organisational procedures
 - c. manufacturers' information
 - d. statutory regulations
 - e. official guidance.

Learning outcome

The learner will:

6. Complete the work within the allocated time when setting out dimensional control of the work.

Assessment criteria

The learner can:

- 6.1 demonstrate completion of the work within the allocated time
- 6.2 describe the purpose of the work programme and describe why deadlines should be kept in relation to:
 - a. types of progress charts, timetables and estimated times
 - b. organisational procedures for reporting circumstances which will affect the work programme.

Learning outcome

The learner will:

7. Comply with the given contract information to set out dimensional control of the work to the required specification.

Assessment criteria

- 7.1 demonstrate the following work skills when setting out dimensional control of the work:
 - a. transferring
 - b. transposing
 - c. levelling
 - d. measuring

- e. marking
- f. positioning
- g. fixing
- h. securing
- 7.2 use and maintain:
 - a. hand tools
 - b. measuring and marking equipment
- 7.3 setting out secondary dimensional control for the work to given working instructions for three or more of the following:
 - a. line
 - b. level
 - c. depth
 - d. area
 - e. height
 - f. angle
- 7.4 describe how to apply safe and healthy work practices, follow procedures, report problems and establish authority needed to rectify, to:
 - a. measure and set out secondary dimensional control for the work
 - b. measure, align and level to dimensional control requirements
 - c. transfer and set out line, angles and levels to dimensional control requirements
 - d. recognise and determine when specific skills and knowledge are required and report accordingly
 - e. use hand tools and measuring and marking equipment
 - f. work at height
 - g. use access equipment
- 7.5 describe how to calculate:
 - a. height
 - b. depth
 - c. angle
 - d. length
 - e. area

associated with the method/procedures to set out secondary dimensional work control

- 7.6 describe the needs of other occupations and how to effectively communicate within a team when setting out dimensional control of the work
- 7.7 describe how to maintain the:
 - a. hand tools
 - b. measuring
 - c. marking and ancillary
 - d. equipment

used to set out dimensional control of the work.

Unit 370 Setting out secondary dimensional work control in the workplace

Supporting information

Guidance

This unit must be assessed in a work environment and in accordance with:

- the Additional Requirements for Qualifications using the title NVQ in ROF
- the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment Craft, Supervisory, Technical, Managerial and Professional Units and Qualifications with NVQ in the Regulated Qualification Framework (RQF) title and SVQs.

Assessors for this unit must use a combination of the following assessment methods:

- observation of normal work activities within the workplace that clearly confirms the required skills
- questioning the learner on knowledge criteria that clearly confirms the required understanding
- review other forms of evidence that can clearly confirm industry required skills, knowledge and understanding.

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of occupational expertise and knowledge of setting out secondary dimensional work control to be effective and reliable when confirming a learner's competence.

Workplace evidence of skills cannot be simulated.

Unit 612 Placing and finishing nonspecialist concrete in the workplace

| UAN: | R/504/6774 |
|---------------|---|
| Level: | 2 |
| Credit value: | 21 |
| GLH: | 70 |
| Aim: | This unit aims to provide the learner with the necessary skills and knowledge to: |
| | interpret information |
| | adopt safe and healthy working practices |
| | select materials and equipment |
| | place and finish non-specialist concrete |

Learning outcome

The learner will:

1. Interpret the given information relating to the work and resources when placing and finishing non-specialist concrete.

Assessment criteria

- 1.1 Interpret and extract relevant information from:
 - a. drawings
 - b. risk assessments
 - c. method statements
 - d. specifications
 - e. schedules
 - f. manufacturers' information.
- 1.2 Comply with information and/or instructions derived from risk assessments and method statements.
- 1.3 Describe the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented.
- 1.4 Describe different types of information, their source and how they are interpreted in relation to:
 - a. drawings
 - b. risk assessments
 - c. method statements
 - d. specifications
 - e. schedules
 - f. manufacturers' information
 - g. current regulations
 - associated with placing and finishing non-specialist concrete.

The learner will:

2. Know how to comply with relevant legislation and official guidance when placing and finishing non-specialist concrete.

Assessment criteria

The learner can:

- 2.1 Describe their responsibilities regarding potential accidents and health hazards, whilst working:
 - a. in the workplace
 - b. below ground level
 - c. at height
 - d. with tools and equipment
 - e. with materials and substances
 - f. with movement/storage of materials
 - g. by manual handling and mechanical lifting.
- 2.2 Describe the organisational security procedures for:
 - a. tools
 - b. equipment
 - c. personal belongings

in relation to:

- a. site
- b. workplace
- c. company
- d. operative.
- 2.3 Explain what the accident reporting procedures are and who is responsible for making reports.

The learner will:

3. Maintain safe and healthy working practices when placing and finishing non-specialist concrete.

Assessment criteria

- 3.1 Use health and safety control equipment safely to carry out the activity in accordance with current legislation and organisational requirements when placing and finishing non-specialist concrete.
- 3.2 Comply with information relating to specific risks to health when placing and finishing non-specialist concrete.
- 3.3 Explain why and when health and safety control equipment, identified by the principles of protection, should be used, relating to placing and finishing non-specialist concrete, and the types, purpose and limitations of each type, the work situation and general work environment, in relation to:
 - a. collective protective measures
 - b. Personal Protective Equipment (PPE)
 - c. Respiratory Protective Equipment (RPE)
 - d. Local Exhaust Ventilation (LEV).
- 3.4 Describe how the relevant health and safety control equipment should be used in accordance with the given instructions.
- 3.5 Describe how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with:
 - a. fires
 - b. spillages
 - c. injuries
 - d. other task-related hazards.

The learner will:

4. Select the required quantity and quality of resources for the methods of work to place and finish non-specialist concrete.

Assessment criteria

The learner can:

- 4.1 Select resources associated with own work in relation to:
 - a. materials
 - b. components and fixings
 - c. tools and equipment.
- 4.2 Describe the characteristics, quality, uses, sustainability, limitations and defects associated with the resources in relation to:
 - a concrete
 - b. fabric reinforcement
 - c. timber
 - d. plywood
 - e. proprietary slab edgings and fixings
 - f. hand tools and equipment.
- 4.3 Describe how the resources should be used correctly and how problems associated with the resources are reported.
- 4.4 Explain why the organisational procedures have been developed and how they are used for the selection of required resources.
- 4.5 Describe any potential hazards associated with the resources and methods of work.
- 4.6 Describe how to calculate
 - a. quantity
 - b. length
 - c. area
 - d. wastage

associated with the method/procedure to place and finish non-specialist concrete.

The learner will:

5. Minimise the risk of damage to the work and surrounding area when placing and finishing non-specialist concrete.

Assessment criteria

The learner can:

- 5.1 Protect the work and its surrounding area from damage in accordance with safe working practices and organisational procedures.
- 5.2 Minimise damage and maintain a clean work space.
- 5.3 Dispose of waste in accordance with current legislation.
- 5.4 Describe how to protect work from damage and the purpose of protection in relation to:
 - a. general workplace activities
 - b. other occupations
 - c. adverse weather conditions.
- 5.5 Explain why the disposal of waste should be carried out safely in accordance with:
 - a. environmental responsibilities
 - b. organisational procedures
 - c. manufacturers information
 - d. statutory regulations
 - e. official guidance.

Learning outcome

The learner will:

6. Complete the work within the allocated time when placing and finishing non-specialist concrete.

Assessment criteria

- 6.1 Demonstrate completion of the work within the allocated time.
- 6.2 Describe the purpose of the work programme and explain why deadlines should be kept in relation to:
 - a. types of progress charts, timetables and estimated times
 - b. organisational procedures for reporting circumstances which will affect the work programme.

The learner will:

7. Comply with the given contract information to place and finish non-specialist concrete to the required specification.

Assessment criteria

- 7.1 Demonstrate the following work skills when placing and finishing non-specialist concrete:
 - a. measuring
 - b. marking out
 - c. laying
 - d. compacting
 - e. finishing
 - f. positioning
 - g. securing.
- 7.2 Lay and finish concrete to given working instructions for three of the following:
 - a. concrete slabs/bases (footing, oversites or paths)
 - b. form slab edging
 - c. position reinforcement
 - d. form surface finish (tamped, floated, brushed and trowelled).
- 7.3 Safely use:
 - a. materials
 - b. hand tools
 - c. ancillary equipment.
- 7.4 Safely store the materials, tools and equipment used when placing and finishing non-specialist concrete.
- 7.5 Describe how to apply safe and healthy work practices, follow procedures, report problems and establish the authority needed to rectify them, to:
 - a. handle, transport and test concrete
 - b. transport, lay, compact, cure and protect concrete with tamped, floated, brushed and trowelled finishes
 - c. cure and protect
 - d. place fabric reinforcement
 - e. concrete mix ratios (volume and gauge boxes)
 - f. place concrete into formwork and shuttering
 - g. form slab edging
 - h. work with plant and machinery
 - i. use hand tools and ancillary equipment.
- 7.6 Describe the needs of other occupations and how to effectively communicate within a team when placing and finishing nonspecialist concrete.
- 7.7 Describe how to maintain the tools and equipment used when placing and finishing non-specialist concrete.

Unit 612 Placing and finishing nonspecialist concrete in the workplace

Supporting information

Guidance

This unit must be assessed in a work environment, in accordance with:

- the Additional Requirements for Qualifications using the title NVQ in RQF
- the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment.

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of relevant occupational expertise and knowledge, and must use a combination of assessment methods as defined in the Consolidated Assessment Strategy.

Workplace evidence of skills cannot be simulated.

This unit must be assessed against three of the following endorsements:

- Concrete slabs/bases
- Form slab edging
- Position reinforcement
- Form surface finish.

Unit 681 Providing temporary excavation support in the workplace

| UAN: | K/503/9636 |
|---------------|--|
| Level: | 2 |
| Credit value: | 15 |
| GLH: | 50 |
| Aim: | This unit aims to provide the learner with the necessary skills and knowledge for: |
| | interpreting information |
| | adopting safe and healthy working practices |
| | selecting materials, components and equipment |
| | preparing for and providing temporary excavation support |

Learning outcome

The learner will:

1. interpret the given information relating to the work and resources when providing temporary excavation support

Assessment criteria

- 1.1 interpret and extract relevant information from drawings, risk assessments, method statements, specifications, schedules and manufacturers' information
- 1.2 comply with information and/or instructions derived from risk assessments and method statements
- 1.3 describe the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented
- 1.4 describe different types of information, their source and how they are interpreted in relation to:
 - a. drawings
 - b. specifications
 - c. schedules
 - d. risk assessments
 - e. method statements
 - f. manufacturers' information
 - g. regulations governing construction works and support of excavations.

The learner will:

2. know how to comply with relevant legislation and official guidance when providing temporary excavation support

Assessment criteria

The learner can:

- 2.1 describe their responsibilities regarding potential accidents and health hazards, whilst working:
 - a. in the workplace
 - b. below ground level
 - c. in confined spaces
 - d. at height
 - e. with tools and equipment
 - f. with materials and substances
 - g. with movement/storage of materials and by manual handling and mechanical lifting
- 2.2 describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company and operative
- 2.3 explain what the accident reporting procedures are and who is responsible for making reports.

Learning outcome

The learner will:

3. maintain safe and healthy working practices when providing temporary excavation support

Assessment criteria

- 3.1 use health and safety control equipment and access equipment/working platforms safely to carry out the activity in accordance with current legislation and organisational requirements when providing temporary excavation support
- 3.2 comply with information relating to specific risks to health when providing temporary excavation support
- 3.3 explain why and when health and safety control equipment, identified by the principles of protection, should be used, relating to providing temporary excavation support, and the types, purpose and limitations of each type, the work situation and general work environment, in relation to:
 - a. collective protective measures
 - b. personal protective equipment (PPE)
 - c. respiratory protective equipment (RPE)
 - d. local exhaust ventilation (LEV)
- 3.4 describe how the relevant health and safety control equipment should be used in accordance with the given instructions
- 3.5 describe how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with fires, spillages, injuries and other task-related hazards.

The learner will:

4. select the required quantity and quality of resources for the methods of work to provide temporary excavation support

Assessment criteria

The learner can:

- 4.1 select resources associated with own work in relation to materials, components and fixings, and tools and equipment
- 4.2 describe the characteristics, quality, uses, sustainability, limitations and defects associated with the resources in relation to:
 - a. poling boards, walings, struts, wedges, soldiers, steel struts and trench sheets
 - b. proprietary systems
 - c. ancillary fixing devices
 - d. hand and/or powered tools and ancillary equipment
- 4.3 describe how the resources should be used correctly and how problems associated with the resources are reported
- 4.4 explain why the organisational procedures have been developed and how they are used for the selection of required resources
- 4.5 describe any potential hazards associated with the resources and methods of work
- 4.6 describe how to calculate quantity, length, area and wastage associated with the method/procedure to provide temporary excavation support.

Learning outcome

The learner will:

5. minimise the risk of damage to the work and surrounding area when providing temporary excavation support

Assessment criteria

- 5.1 protect the work and its surrounding area from damage in accordance with safe working practices and organisational procedures
- 5.2 minimise damage and maintain a clean work space
- 5.3 dispose of waste in accordance with current legislation
- 5.4 describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions
- 5.5 explain why the disposal of waste should be carried out safely in accordance with environmental responsibilities, organisational procedures, manufacturers' information, statutory regulations and official guidance.

The learner will:

6. complete the work within the allocated time when providing temporary excavation support

Assessment criteria

The learner can:

- 6.1 demonstrate completion of the work within the allocated time
- 6.2 describe the purpose of the work programme and explain why deadlines should be kept in relation to:
 - a. types of progress charts, timetables and estimated
 - b. times
 - c. organisational procedures for reporting circumstances which will affect the work programme.

Learning outcome

The learner will:

7. comply with the given contract information to provide temporary excavation support to the required specification

Assessment criteria

- 7.1 demonstrate the following work skills when providing temporary excavation support:
 - a. measuring
 - b. marking out
 - c. preparing
 - d. positioning
 - e. fitting
 - f. supporting
 - g. fixing
 - h. securing
 - i. dismantling
 - j. removing
- 7.2 provide and remove temporary excavation support to given working instructions, relating to two of the following support frameworks:
 - a. skeleton
 - b. open and close boarding
 - c. drag box
 - d. trench box
 - e. coffer dam
 - f. diaphragm wall
 - g. secant support
- 7.3 safely use materials, hand tools, portable power tools and ancillary equipment
- 7.4 safely store the materials, tools and equipment used when providing temporary excavation support
- 7.5 describe how to apply safe and healthy work practices, follow procedures, report problems and establish the authority needed to

rectify them, to:

- a. assess the excavated area and select suitable temporary support for the excavation
- b. provide for safe access and egress around the temporary excavation support
- c. construct/erect/install temporary excavation support
- d. work with and around plant and machinery
- e. inspect and maintain the integrity and safety of the temporary support structure
- f. dismantle and remove the excavation support structure
- g. use hand tools, power tools and equipment
- h. work at height and in confined spaces
- i. use access equipment
- 7.6 describe the needs of other occupations and how to effectively communicate within a team when providing temporary excavation support
- 7.7 describe how to maintain the tools and equipment used when providing temporary excavation support.

Unit 681 Providing temporary excavation support in the workplace

Supporting information

Guidance

This unit must be assessed in a work environment, in accordance with:

- $\bullet \hspace{0.4cm}$ the Additional Requirements for Qualifications using the title NVQ in RQF
- the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment.

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of relevant occupational expertise and knowledge, and must use a combination of assessment methods as defined in the Consolidated Assessment Strategy.

Workplace evidence of skills cannot be simulated.

This unit must be assessed against the following endorsement:

• Own occupational area of work.

Plus against two of the following:

- Skeleton
- Open and close boarding
- Drag box
- Trench box
- Coffer dam
- Diaphragm wall
- Secant support.

Unit 682 Reinstating excavation and highway surfaces in the workplace

| UAN: | H/503/9442 |
|---------------|--|
| Level: | 2 |
| Credit value: | 12 |
| GLH: | 40 |
| Aim: | This unit aims to provide the learner with the necessary skills and knowledge for: |
| | interpreting information |
| | adopting safe and healthy working practices |
| | selecting materials, components and equipment |
| | preparing for and reinstating excavations and highway surfaces |

Learning outcome

The learner will:

1. interpret the given information relating to the work and resources when reinstating excavation and highway surfaces

Assessment criteria

- 1.1 interpret and extract relevant information from drawings, risk assessments, method statements, specifications, schedules and manufacturers' information
- 1.2 comply with information and/or instructions derived from risk assessments and method statements
- 1.3 describe the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented
- 1.4 describe different types of information, their source and how they are interpreted in relation to:
 - a. drawings
 - b. specifications
 - c. schedules
 - d. risk assessments
 - e. method statements
 - f. manufacturers' information
 - g. regulations governing excavations and reinstatement work on highways.

The learner will:

2. know how to comply with relevant legislation and official guidance when reinstating excavation and highway surfaces

Assessment criteria

The learner can:

- 2.1 describe their responsibilities regarding potential accidents and health hazards, whilst working:
 - a. in the workplace
 - b. below ground level
 - c. with tools and equipment
 - d. with materials and substances
 - e. with movement/storage of materials and by manual handling and mechanical lifting
- 2.2 describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company and operative
- 2.3 explain what the accident reporting procedures are and who is responsible for making reports.

Learning outcome

The learner will:

3. maintain safe and healthy working practices when reinstating excavation and highway surfaces

Assessment criteria

- 3.1 use health and safety control equipment safely to carry out the activity in accordance with current legislation and organisational requirements when reinstating excavation and highway surfaces
- 3.2 comply with information relating to specific risks to health when reinstating excavation and highway surfaces
- 3.3 explain why and when health and safety control equipment, identified by the principles of protection, should be used, relating to reinstating excavation and highway surfaces, and the types, purpose and limitations of each type, the work situation and general work environment, in relation to:
 - a. collective protective measures
 - b. personal protective equipment (PPE)
 - c. respiratory protective equipment (RPE)
 - d. local exhaust ventilation (LEV)
- 3.4 describe how the relevant health and safety control equipment should be used in accordance with the given instructions
- 3.5 describe how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with fires, spillages, injuries and other task-related hazards.

The learner will:

4. select the required quantity and quality of resources for the methods of work to reinstate excavation and highway surfaces

Assessment criteria

The learner can:

- 4.1 select resources associated with own work in relation to materials, components and fixings, and tools and equipment
- 4.2 describe the characteristics, quality, uses, sustainability limitations and defects associated with the resources in relation to:
 - a. new and re-usable materials, sub-base, road-base and pavement surface
 - b. cold-lay, warm lay and hot-lay bituminous materials
 - c. sands, jointing materials
 - d. concrete, blocks and flags
 - e. natural soil based materials
 - f. hand and/or powered tools and equipment
- 4.3 describe how the resources should be used correctly and how problems associated with the resources are reported
- 4.4 explain why the organisational procedures have been developed and how they are used for the selection of required resources
- 4.5 describe any potential hazards associated with the resources and methods of work
- 4.6 describe how to calculate quantity, length, area and wastage associated with the method/procedure to reinstate excavation and highway surfaces.

Learning outcome

The learner will:

5. minimise the risk of damage to the work and surrounding area when reinstating excavation and highway surfaces

Assessment criteria

- 5.1 protect the work and its surrounding area from damage in accordance with safe working practices and organisational procedures
- 5.2 minimise damage and maintain a clean work space
- 5.3 dispose of waste in accordance with current legislation
- 5.4 describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions
- 5.5 explain why the disposal of waste should be carried out safely in accordance with environmental responsibilities, organisational procedures, manufacturers' information, statutory regulations and official guidance.

The learner will:

6. complete the work within the allocated time when reinstating excavation and highway surfaces

Assessment criteria

- 6.1 demonstrate completion of the work within the allocated time
- 6.2 describe the purpose of the work programme and explain why deadlines should be kept in relation to:
 - a. types of progress charts, timetables and estimated times
 - b. organisational procedures for reporting circumstances which will affect the work programme.

The learner will:

7. comply with the given contract information to reinstate excavation and highway surfaces to the required specification

Assessment criteria

- 7.1 demonstrate the following work skills when reinstating excavation and highway surfaces:
 - a. backfilling
 - b. consolidating
 - c. laying
 - d. compacting
 - e. positioning
 - f. securing
 - g. finishing
- 7.2 reinstate excavations and highway surfaces to given working instructions, relating to two of the following:
 - a. sub-grades, sub-bases, road-bases
 - b. cold lay bituminous
 - c. warm lay bituminous
 - d. hot lay bituminous
 - e. concrete
 - f. modular
- 7.3 safely use materials, hand tools, portable power tools and ancillary equipment
- 7.4 safely store the materials, tools and equipment used when reinstating excavation and highway surfaces
- 7.5 describe how to apply safe and healthy work practices, follow procedures, report problems and establish the authority needed to rectify them, to:
 - a. confirm the type of ground structure for reinstatement (bituminous, concrete, modular, natural)
 - b. reinstate and compact backfill, sub-grades, sub-bases, road-bases pavement base for the relevant type of ground structure
 - c. protect service apparatus and sub-structures during reinstatement
 - d. reinstate the relevant type of ground surface, pavement surface, specialist surface treatments, kerbs, edge restraints, street ironwork and pavement markings
 - e. dispose of surplus materials
 - f. use hand tools, power tools and equipment
- 7.6 describe the needs of other occupations and how to effectively communicate within a team when reinstating excavation and highway surfaces
- 7.7 describe how to maintain the tools and equipment used when reinstating excavation and highway surfaces.

Unit 682 Reinstating excavation and highway surfaces in the workplace

Supporting information

Guidance

This unit must be assessed in a work environment, in accordance with:

- the Additional Requirements for Qualifications using the title NVQ in ROF
- the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment.

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of relevant occupational expertise and knowledge, and must use a combination of assessment methods as defined in the Consolidated Assessment Strategy.

Workplace evidence of skills cannot be simulated.

This unit must be assessed against own occupational area of work, plus against two of the following endorsements:

- sub-grades, sub-bases, road-bases
- cold lay bituminous
- warm lay bituminous
- hot lay bituminous
- concrete
- modular.

Unit 698 Segregating the area for highways works in the workplace

| UAN: | K/503/9622 |
|---------------|--|
| Level: | 2 |
| Credit value: | 12 |
| GLH: | 40 |
| Aim: | This unit aims to provide the learner with the necessary skills and knowledge for: |
| | interpreting information |
| | adopting safe and healthy working practices |
| | selecting materials, components and equipment |
| | preparing for and segregating the area for highways works |

Learning outcome

The learner will:

1. interpret the given information relating to the work and resources when segregating the area for highways works

Assessment criteria

- 1.1 interpret and extract relevant information from drawings, risk assessments, method statements, specifications, schedules, site inspections and manufacturers' information
- 1.2 comply with information and/or instructions derived from risk assessments and method statements
- 1.3 describe the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented
- 1.4 describe different types of information, their source and how they are interpreted in relation to:
 - a. drawings
 - b. specifications
 - c. risk assessments
 - d. method statements
 - e. schedules
 - f. manufacturers' information
 - g. statutory regulations
 - h. current legislation
 - i. official guidance and codes of practice governing traffic management relating to the highways works.

The learner will:

2. know how to comply with relevant legislation and official guidance when segregating the area for highways works

Assessment criteria

The learner can:

- 2.1 describe their responsibilities regarding potential accidents and health hazards, whilst working:
 - a. in the workplace
 - b. below ground level
 - c. at height
 - d. with tools and equipment
 - e. with materials and substances
 - f. with movement/storage of materials and by manual handling and mechanical lifting
- 2.2 describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company and operative
- 2.3 explain what the accident reporting procedures are and who is responsible for making reports.

Learning outcome

The learner will:

3. maintain safe and healthy working practices when segregating the area for highways works

Assessment criteria

- 3.1 use health and safety control equipment safely to carry out the activity in accordance with current legislation and organisational requirements when segregating the area for highways works
- 3.2 comply with information relating to specific risks to health when segregating the area for highways works
- 3.3 explain why and when health and safety control equipment, identified by the principles of protection, should be used, relating to segregating the area for highways works, and the types, purpose and limitations of each type, the work situation and general work environment, in relation to:
 - a. collective protective measures
 - b. personal protective equipment (PPE)
 - c. respiratory protective equipment (RPE)
 - d. local exhaust ventilation (LEV)
- 3.4 describe how the relevant health and safety control equipment should be used in accordance with the given instructions
- 3.5 describe how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with fires, spillages, injuries, traffic incidents and other task-related hazards.

The learner will:

4. select the required quantity and quality of resources for the methods of work to segregate the area for highways works

Assessment criteria

The learner can:

- 4.1 select resources associated with own work in relation to materials, components and fixings, and tools and equipment
- 4.2 describe the characteristics, quality, uses, sustainability, limitations and defects associated with the resources in relation to:
 - a. signs, lights, guards and portable traffic lights
 - b. pedestrian and vehicular traffic control systems
 - c. tools and ancillary equipment
- 4.3 describe how the resources should be used correctly and how problems associated with the resources are reported
- 4.4 explain why the organisational procedures have been developed and how they are used for the selection of required resources
- 4.5 describe any potential hazards associated with the resources and methods of work
- 4.6 describe how to calculate quantity, length, area and wastage associated with the method/procedure to segregate the area for highways works.

Learning outcome

The learner will:

5. minimise the risk of damage to the work and surrounding area when segregating the area for highways works

Assessment criteria

- 5.1 protect the work and its surrounding area from damage in accordance with safe working practices and organisational procedures
- 5.2 minimise damage and maintain a clean work space
- 5.3 dispose of waste in accordance with current legislation
- 5.4 describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions
- 5.5 explain why the disposal of waste should be carried out safely in accordance with environmental responsibilities, organisational procedures, manufacturers' information, statutory regulations and official guidance.

The learner will:

6. complete the work within the allocated time when segregating the area for highways works

Assessment criteria

- 6.1 demonstrate completion of the work within the allocated time
- 6.2 describe the purpose of the work programme and explain why deadlines should be kept in relation to:
 - a. types of progress charts, timetables and estimated times
 - b. organisational procedures for reporting circumstances which will affect the work programme.

The learner will:

7. comply with the given contract information to segregating the area for highways works to the required specification

Assessment criteria

- 7.1 demonstrate the following work skills when segregating the area for highways works:
 - a. measuring
 - b. locating
 - c. setting out
 - d. positioning
 - e. assembling
 - f. removing
- 7.2 segregate the area for live highways works in compliance with recognised current legislation and official guidance and given working instructions, relating to the following:
 - a. access and egress to site
 - b. work activity and storage of resources
 - c. signs, lighting and guarding, portable traffic signals for traffic management control
- 7.3 remove signs, lighting and guarding, portable traffic signals in compliance with recognised current legislation and official guidance
- 7.4 safely use materials, tools and ancillary equipment
- 7.5 safely store the materials, tools and equipment used when segregating the area for highways works
- 7.6 describe how to apply safe and healthy work practices, follow procedures, report problems and establish the authority needed to rectify them, to:
 - a. plan for site safety, storage of materials and traffic management control around the highways works
 - b. set out signs, traffic lights, guarding for traffic management control
 - c. check and maintain operation of traffic control equipment
 - d. dismantle and remove signs, traffic lights, guarding
 - e. use hand tools, power tools and equipment
- 7.7 describe the needs of other occupations and how to effectively communicate within a team when segregating the area for highways works
- 7.8 describe how to maintain the hand tools and/or portable power tools, ancillary equipment and traffic control equipment used when segregating the area for highways works.

Unit 698 Segregating the area for highways works in the workplace

Supporting information

Guidance

This unit must be assessed in a work environment, in accordance with:

- $\bullet \hspace{0.4cm}$ the Additional Requirements for Qualifications using the title NVQ in RQF
- the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment.

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of relevant occupational expertise and knowledge, and must use a combination of assessment methods as defined in the Consolidated Assessment Strategy.

Workplace evidence of skills cannot be simulated.

This unit must be assessed against the following endorsement:

• Own occupational area of work.

Unit 711 Installing drainage in the workplace

| UAN: | Y/504/6775 |
|---------------|---|
| Level: | 2 |
| Credit value: | 19 |
| GLH: | 63 |
| Aim: | This unit aims to provide the learner with the necessary skills and knowledge to: |
| | interpret information |
| | adopt safe and healthy working practices |
| | select materials, components and equipment |
| | prepare for, install and test new and/or replacement drainage |

Learning outcome

The learner will:

1. Interpret the given information relating to the work and resources when installing drainage.

Assessment criteria

- 1.1 Interpret and extract relevant information from:
 - a. drawings
 - b. risk assessments
 - c. method statements
 - d. specifications
 - e. schedules
 - f. manufacturers' information.
- 1.2 Comply with information and/or instructions derived from risk assessments and method statements.
- 1.3 Describe the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented.
- 1.4 Describe different types of information, their source and how they are interpreted in relation to:
 - a. drawings
 - b. risk assessments
 - c. method statements
 - d. specifications
 - e. schedules
 - f. manufacturers' information
 - g. regulations governing the installation and construction of drainage systems.

The learner will:

2. Know how to comply with relevant legislation and official guidance when installing drainage.

Assessment criteria

The learner can:

- 2.1 Describe their responsibilities regarding potential accidents and health hazards, whilst working:
 - a. in the workplace
 - b. below ground level
 - c. in confined spaces
 - d. at height
 - e. with tools and equipment
 - f. with materials and substances
 - g. with movement/storage of materials
 - h. by manual handling
 - i. by mechanical lifting.
- 2.2 Describe the organisational security procedures for:
 - a. tools
 - b. equipment
 - c. personal belongings

in relation to:

- a. site
- b. workplace
- c. company
- d. operative.
- 2.3 Explain what the accident reporting procedures are and who is responsible for making reports.

The learner will:

3. Maintain safe and healthy working practices when installing drainage.

Assessment criteria

- 3.1 Use health and safety control equipment and access equipment safely to carry out the activity in accordance with current legislation and organisational requirements when installing drainage.
- 3.2 Comply with information relating to specific risks to health when installing drainage.
- 3.3 Explain why and when health and safety control equipment, identified by the principles of protection, should be used, relating to installing drainage, and the types, purpose and limitations of each type, the work situation and general work environment, in relation to:
 - a. collective protective measures
 - b. Personal Protective Equipment (PPE)
 - c. Respiratory Protective Equipment (RPE)
 - d. Local Exhaust Ventilation (LEV).
- 3.4 Describe how the relevant health and safety control equipment should be used in accordance with the given instructions.
- 3.5 Describe how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with:
 - a. fires
 - b. spillages
 - c. injuries
 - d. other task-related hazards.

The learner will:

4. Select the required quantity and quality of resources for the methods of work to install drainage.

Assessment criteria

The learner can:

- 4.1 Select resources associated with own work in relation to:
 - a. materials
 - b. components and fixings
 - c. tools
 - d. equipment.
- 4.2 Describe the characteristics, quality, uses, sustainability, limitations and defects associated with the resources in relation to:
 - a. pipes, fittings and ancillary components
 - b. pre-cast (metal, concrete, clay or plastic) components
 - c. bricks, blocks and sandbags
 - d. granular materials, aggregates, cement, concrete, mortars and sand
 - e. sealant materials (adhesives, compounds, solvents)
 - f. hand and/or powered tools and equipment.
- 4.3 Describe how the resources should be used correctly and how problems associated with the resources are reported.
- 4.4 Explain why the organisational procedures have been developed and how they are used for the selection of required resources.
- 4.5 Describe any potential hazards associated with the resources and methods of work.
- 4.6 Describe how to calculate
 - a. quantity
 - b. length
 - c. area
 - d. wastage

associated with the method/procedure to install drainage.

The learner will:

5. Minimise the risk of damage to the work and surrounding area when installing drainage.

Assessment criteria

The learner can:

- 5.1 Protect the work and its surrounding area from damage in accordance with safe working practices and organisational procedures.
- 5.2 Minimise damage and maintain a clean work space.
- 5.3 Dispose of waste in accordance with current legislation.
- 5.4 Describe how to protect work from damage and the purpose of protection in relation to:
 - a. general workplace activities
 - b. other occupations
 - c. adverse weather conditions.
- 5.5 Explain why the disposal of waste should be carried out safely in accordance with:
 - a. environmental responsibilities
 - b. organisational procedures
 - c. manufacturers' information
 - d. statutory regulations
 - e. official guidance.

Learning outcome

The learner will:

6. Complete the work within the allocated time when installing drainage.

Assessment criteria

The learner can:

- 6.1 Demonstrate completion of the work within the allocated time
- 6.2 Describe the purpose of the work programme and explain why deadlines should be kept in relation to:
 - a. types of progress charts, timetables and estimated times
 - b. organisational procedures for reporting circumstances which will affect the work programme.

Learning outcome

The learner will:

7. Comply with the given contract information to install drainage to the required specification

Assessment criteria

- 7.1 Demonstrate the following work skills when installing drainage:
 - a. measuring

- b. marking out
- c. laying
- d. positioning
- e. fitting
- f. levelling
- g. plumbing
- h. aligning
- i. securing
- j. testing
- 7.2 Install and test new and/or replacement, foul and/or surface water drainage for two of the following to given working instructions:
 - a. pipework (eg clay, concrete, metal, or plastic)
 - b. inspection chambers (eg brick, concrete, metal or plastic)
 - c. surface water systems (eg cells, culverts, high capacity, linear, balancing ponds, interceptors, recycling equipment, soak-aways, sustainable urban drainage systems)
 - d. foul water systems (eg cess pools, septic tanks, reed beds, treatment plants)
- 7.3 Safely use:
 - a. materials
 - b. hand tools
 - c. portable power tools
 - d. ancillary equipment
- 7.4 Safely store the materials, tools and equipment used when installing drainage
- 7.5 Describe how to apply safe and healthy work practices, follow procedures, report problems and establish the authority needed to rectify them, to:
 - a. excavate trenches and provide trench support
 - b. confirm ground conditions, site and excavations are suitable for the drainage installation work
 - c. prepare bedding for pipework
 - d. determine levels and gradients
 - e. identify the differences between surface and foul water drainage
 - f. lay, position, level, plumb, align, fit, fix and secure new and replacement drainage systems
 - g. construct structures of a drainage system (storm alleviation, culverts, inspection chambers, lateral drains, overflows, sumps, filter drains, sustainable urban drainage systems)
- 7.6 Describe how to apply safe and healthy work practices, follow procedures, report problems and establish the authority needed to rectify them, to:
 - a. assemble pre-cast components (metal, concrete, clay and plastic) of a drainage system structure (inspection chambers, street iron work)
 - b. connect and seal new systems to existing systems
 - c. conduct smoke, water, ball, air mandrel and close circuit television tests on drainage systems
 - d. work with plant and machinery
 - e. use hand tools, power tools and equipment
 - f. work at height and below ground level

- g. use access equipment
- 7.7 Describe the needs of other occupations and how to effectively communicate within a team when installing drainage
- 7.8 Describe how to maintain the tools and equipment used when installing drainage.

Unit 711 Installing drainage in the workplace

Supporting information

Guidance

This unit must be assessed in a work environment, in accordance with:

- the Additional Requirements for Qualifications using the title NVQ in RQF
- the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment.

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of relevant occupational expertise and knowledge, and must use a combination of assessment methods as defined in the Consolidated Assessment Strategy.

Workplace evidence of skills cannot be simulated.

This unit must be assessed against two of the following endorsements:

- Pipework
- Inspection chambers
- Surface water systems
- Foul water systems.

Unit 730 Reinstating ground condition in the workplace

| UAN: | A/600/8157 |
|---------------|---|
| Level: | 2 |
| Credit value: | 12 |
| GLH: | 40 |
| Aim: | This unit aims to provide the learner with the necessary skills and knowledge for: |
| | interpreting information |
| | adopting safe and healthy working practices |
| | selecting materials, components and equipment |
| | reinstating ground surfaces after completion of work for flags, blocks, black top, cultivated and grassed areas |

Learning outcome

The learner will:

1. interpret the given information relating to the work and resources when reinstating ground condition

Assessment criteria

- 1.1 interpret and extract information from drawings, specifications, schedules and manufacturers' information
- 1.2 comply with information and/or instructions derived from risk assessments and method statement
- 1.3 state the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented
- 1.4 describe different types of information, their source and how they are interpreted in relation to:
 - a. drawings
 - b. specifications
 - c. schedules
 - d. manufacturers' information.

The learner will:

2. know how to comply with relevant legislation and official guidance when reinstating ground condition

Assessment criteria

The learner can:

- 2.1 describe their responsibilities under current legislation and official guidance whilst working:
 - a. in the workplace
 - b. below ground level
 - c. with tools and equipment
 - d. with materials and substances
 - e. with movement/storage of materials and by manual handling and mechanical lifting
- 2.2 describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company and operative
- 2.3 state what the accident reporting procedures are and who is responsible for making reports.

Learning outcome

The learner will:

3. maintain safe working practices when reinstating ground condition

Assessment criteria

- 3.1 use personal protective equipment (PPE) safely to carry out the activity in accordance with legislation and organisational requirements when reinstating ground condition
- 3.2 explain why and when personal protective equipment (PPE) should be used, relating to reinstating ground condition, and the types, purpose and limitations of each type
- 3.3 state how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with fires, spillages, injuries and other task-related hazards.

The learner will:

4. select the required quantity and quality of resources for the methods of work to reinstate ground condition

Assessment criteria

The learner can:

- 4.1 describe the characteristics, quality, uses, limitations and defects associated with the resources in relation to:
 - a. flags
 - b. blocks
 - c. edging
 - d. aggregates
 - e. cement
 - f. black top
 - g. top soil
 - h. seeds
 - i. hand and/or powered tools and equipment
- 4.2 select resources associated with own work in relation to materials, components, fixings, tools and equipment
- 4.3 state how the resources should be used correctly, how problems associated with the resources are reported and how the organisational procedures are used
- 4.4 outline potential hazards associated with the resources and method of work
- 4.5 describe how to calculate quantity and area associated with the method/procedure to reinstate ground condition.

Learning outcome

The learner will:

5. minimise the risk of damage to the work and surrounding area when reinstating ground condition

Assessment criteria

- 5.1 protect the work and its surrounding area from damage
- 5.2 minimise damage and maintain a clean work space
- 5.3 describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions
- 5.4 dispose of waste in accordance with legislation
- 5.5 state why the disposal of waste should be carried out in relation to the work.

The learner will:

6. complete the work within the allocated time when reinstating ground condition

Assessment criteria

- 6.1 demonstrate completion of the work within the allocated time
- 6.2 state the purpose of the work programme and explain why deadlines should be kept in relation to:
 - a. types of progress charts, timetables and estimated times
 - b. organisational procedures for reporting circumstances which will affect the work programme.

The learner will:

7. comply with the given contract information to reinstate ground condition to the required specification

Assessment criteria

- 7.1 demonstrate the following work skills when reinstating ground condition:
 - a. measuring
 - b. marking out
 - c. laying
 - d. bedding
 - e. positioning
 - f. securing
 - g. finishing
- 7.2 reinstate ground conditions to contractor's working instructions for at least two of the following:
 - a. flag
 - b. block
 - c. concrete
 - d. black top surfaces
 - e. cultivated and grassed areas
- 7.3 describe how to apply safe work practices, follow procedures, report problems and establish the authority needed to rectify them, to:
 - a. place and compact sub-grade and sub-base
 - b. form levels
 - c. reinstate hard landscaping of flag, block, concrete and black top surfaces
 - d. reinstate cultivated and grassed areas
 - e. use hand tools, power tools and equipment
- 7.4 safely use and store hand tools, portable power tools and ancillary equipment
- 7.5 state the needs of other occupations and how to communicate within a team when reinstating ground condition
- 7.6 describe how to maintain the tools and equipment used when reinstating ground condition.

Unit 730 Reinstating ground condition in the workplace

Supporting information

Guidance

This unit must be assessed in a work environment and in accordance with:

- the Additional Requirements for Qualifications using the title NVQ in RQF
- the ConstructionSkills 'Consolidated Assessment Strategy for Construction and the Built Environment – Craft, Supervisory, Technical, Managerial and Professional Units and Qualifications with NVQ in the Regulated Qualification Framework (RQF) title and SVQs.

Assessors for this unit must use a combination of the following assessment methods:

- observation of normal work activities within the workplace that clearly confirms the required skills
- questioning the learner on knowledge criteria that clearly confirms the required understanding
- review other forms of evidence that can clearly confirm industry required skills, knowledge and understanding.

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of occupational expertise and knowledge of reinstating ground condition to be effective and reliable when confirming a learner's competence.

Workplace evidence of skills cannot be simulated.

Unit 731 Pouring concrete to form structures in the workplace

| UAN: | M/503/9637 | |
|---------------|--|--|
| Level: | 2 | |
| Credit value: | 18 | |
| GLH: | 60 | |
| Aim: | This unit aims to provide the learner with the necessary skills and knowledge for: | |
| | interpreting information | |
| | adopting safe and healthy working practices | |
| | selecting materials, components and equipment | |
| | preparing for and placing structural concrete | |

Learning outcome

The learner will:

1. interpret the given information relating to the work and resources when pouring concrete to form structures

Assessment criteria

- 1.1 interpret and extract relevant information from drawings, risk assessments, method statements, specifications, schedules and manufacturers' information
- 1.2 comply with information and/or instructions derived from risk assessments and method statements
- 1.3 describe the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented
- 1.4 describe different types of information, their source and how they are interpreted in relation to:
 - a. drawings
 - b. specifications
 - c. schedules
 - d. risk assessments
 - e. method statements
 - f. manufacturers' information
 - g. regulations governing construction works.

The learner will:

2. know how to comply with relevant legislation and official guidance when pouring concrete to form structures

Assessment criteria

The learner can:

- 2.1 describe their responsibilities regarding potential accidents and health hazards whilst working:
 - a. in the workplace
 - b. below ground level
 - c. at height
 - d. with tools and equipment
 - e. with materials and substances
 - f. with movement/storage of materials and by manual handling and mechanical lifting
- 2.2 describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company and operative
- 2.3 explain what the accident reporting procedures are and who is responsible for making reports.

Learning outcome

The learner will:

3. maintain safe and healthy working practices when pouring concrete to form structures

Assessment criteria

- 3.1 use health and safety control equipment and access equipment/working platforms safely to carry out the activity in accordance with current legislation and organisational requirements when pouring concrete to form structures
- 3.2 comply with information relating to specific risks to health when pouring concrete to form structures
- 3.3 explain why and when health and safety control equipment, identified by the principles of protection, should be used, relating to pouring concrete to form structures, and the types, purpose and limitations of each type, the work situation and general work environment, in relation to:
 - a. collective protective measures
 - b. personal protective equipment (PPE)
 - c. respiratory protective equipment (RPE)
 - d. local exhaust ventilation (LEV)
- 3.4 describe how the relevant health and safety control equipment should be used in accordance with the given instructions
- 3.5 describe how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with fires, spillages, injuries and other task-related hazards.

The learner will:

4. select the required quantity and quality of resources for the methods of work to pour concrete to form structures

Assessment criteria

The learner can:

- 4.1 select resources associated with own work in relation to materials, components and fixings, and tools and equipment
- 4.2 describe the characteristics, quality, uses, sustainability, limitations and defects associated with the resources in relation to:
 - a. ready-mix concrete materials
 - b. slump test equipment, skips, poker vibrator, tampers, floats and trowels
 - c. hand and/or powered tools and equipment
- 4.3 describe how the resources should be used correctly and how problems associated with the resources are reported
- 4.4 explain why the organisational procedures have been developed and how they are used for the selection of required resources
- 4.5 describe any potential hazards associated with the resources and methods of work
- 4.6 describe how to calculate quantity, length, area and wastage associated with the method/procedure to pour concrete to form structures.

Learning outcome

The learner will:

5. minimise the risk of damage to the work and surrounding area when pouring concrete to form structures

Assessment criteria

- 5.1 protect the work and its surrounding area from damage in accordance with safe working practices and organisational procedures
- 5.2 minimise damage and maintain a clean work space
- 5.3 dispose of waste in accordance with current legislation
- 5.4 describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions
- 5.5 explain why the disposal of waste should be carried out safely in accordance with environmental responsibilities, organisational procedures, manufacturers' information, statutory regulations and official guidance.

The learner will:

6. complete the work within the allocated time when pouring concrete to form structures

Assessment criteria

- 6.1 demonstrate completion of the work within the allocated time
- 6.2 describe the purpose of the work programme and explain why deadlines should be kept in relation to:
 - a. types of progress charts, timetables and estimated times
 - b. organisational procedures for reporting circumstances which will affect the work programme.

The learner will:

7. comply with the given contract information to pour concrete to form structures to the required specification

Assessment criteria

- 7.1 demonstrate the following work skills when pouring concrete to form structures:
 - a. measuring
 - b. positioning
 - c. placing
 - d. spreading
 - e. vibrating
 - f. compacting
 - g. finishing
- 7.2 place, compact and finish structural concrete in horizontal and vertical formwork to given working instructions relating to two of the following placements:
 - a. chute
 - b. elephant's trunk
 - c. skip
 - d. pump
 - e. mono-rail
- 7.3 safely use materials, hand tools, portable power tools and ancillary equipment
- 7.4 safely store the materials, tools and equipment used when pouring concrete to form structures
- 7.5 describe how to apply safe and healthy work practices, follow procedures, report problems and establish the authority needed to rectify them, to:
 - a. assess and confirm suitability of concrete and area for placement
 - b. place concrete by chute, elephant's trunk, overhead skip, pumping
 - c. pour to correct levels and coverage of steel reinforcement
 - d. work with and around plant and machinery
 - e. support consistency testing
 - f. vibrate, compact, finish and cure the structural concrete
 - g. use hand tools, power tools and equipment
 - h. work at height
 - i. use access equipment
- 7.6 describe the needs of other occupations and how to effectively communicate within a team when pouring concrete to form structures
- 7.7 describe how to maintain the tools and equipment used when pouring concrete to form structures.

Unit 731 Pouring concrete to form structures in the workplace

Supporting information

Guidance

This unit must be assessed in a work environment, in accordance with:

- the Additional Requirements for Qualifications using the title NVQ in RQF
- the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment.

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of relevant occupational expertise and knowledge, and must use a combination of assessment methods as defined in the Consolidated Assessment Strategy.

Workplace evidence of skills cannot be simulated.

This unit must be assessed against the following endorsement:

Own occupational area of work

Plus against two of the following:

·

Chute

- Elephant's trunk
- Skip
- Pump
- Mono-rail.

Unit 732 Erecting and striking proprietary formwork in the workplace

| UAN: | R/503/9663 | |
|---------------|--|--|
| Level: | 2 | |
| Credit value: | 17 | |
| GLH: | 57 | |
| Aim: | This unit aims to provide the learner with the necessary skills and knowledge for: | |
| | interpreting information | |
| | adopting safe and healthy working practices | |
| | selecting materials, components and equipment | |
| | erecting and striking formwork | |

Learning outcome

The learner will:

1. interpret the given information relating to the work and resources when erecting and striking proprietary formwork

Assessment criteria

- 1.1 interpret and extract relevant information from drawings, risk assessments, method statements, specifications, schedules, and manufacturers' and suppliers information
- 1.2 comply with information and/or instructions derived from risk assessments and method statements
- 1.3 describe the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented
- 1.4 describe different types of information, their source and how they are interpreted in relation to:
 - a. drawings
 - b. specifications
 - c. schedules
 - d. risk assessments
 - e. method statements
 - f. manufacturers' and suppliers information.

The learner will:

2. know how to comply with relevant legislation and official guidance when erecting and striking proprietary formwork

Assessment criteria

The learner can:

- 2.1 describe their responsibilities regarding potential accidents and health hazards, whilst working:
 - a. in the workplace
 - b. below ground level
 - c. in confined spaces
 - d. at height
 - e. with tools and equipment,
 - f. with materials and substances
 - g. with movement/storage of materials and by manual handling and mechanical lifting
- 2.2 describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company and operative
- 2.3 explain what the accident reporting procedures are and who is responsible for making reports.

Learning outcome

The learner will:

3. maintain safe and healthy working practices when erecting and striking proprietary formwork

Assessment criteria

- 3.1 use health and safety control equipment and access equipment safely to carry out the activity in accordance with current legislation and organisational requirements when erecting and striking proprietary formwork
- 3.2 comply with information relating to specific risks to health when erecting and striking proprietary formwork
- 3.3 explain why and when health and safety control equipment, identified by the principles of protection, should be used, relating to erecting and striking proprietary formwork, and the types, purpose and limitations of each type, the work situation and general work environment, in relation to:
 - a. collective protective measures
 - b. personal protective equipment (PPE)
 - c. respiratory protective equipment (RPE)
 - d. local exhaust ventilation (LEV)
- 3.4 describe how the relevant health and safety control equipment should be used in accordance with the given instructions
- 3.5 describe how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with fires, spillages, injuries and other task-related hazards.

The learner will:

4. select the required quantity and quality of resources for the methods of work to erect and strike proprietary formwork

Assessment criteria

The learner can:

- 4.1 select resources associated with own work in relation to materials, components and fixings, and tools and equipment
- 4.2 describe the characteristics, quality, uses, sustainability, limitations and defects associated with the resources in relation to:
 - a. proprietary formwork and associated items
 - b. tie systems
 - c. prop systems
 - d. protective coatings
 - e. fixtures and fittings
 - f. access equipment
 - g. hand and/or powered tools and equipment
- 4.3 describe how the resources should be used correctly and how problems associated with the resources are reported
- 4.4 explain why the organisational procedures have been developed and how they are used for the selection of required resources
- 4.5 describe any potential hazards associated with the resources and methods of work
- 4.6 describe how to calculate quantity, length, area and wastage associated with the method/procedure to erect and strike proprietary formwork..

Learning outcome

The learner will:

5. minimise the risk of damage to the work and surrounding area when erecting and striking proprietary formwork.

Assessment criteria

- 5.1 protect the work and its surrounding area from damage in accordance with safe working practices and organisational procedures
- 5.2 minimise damage and maintain a clean work space
- 5.3 dispose of waste in accordance with current legislation
- 5.4 describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions
- 5.5 explain why the disposal of waste should be carried out safely in accordance with environmental responsibilities, organisational procedures, manufacturers' information, statutory regulations and official guidance.

The learner will:

6. complete the work within the allocated time when erecting and striking proprietary formwork

Assessment criteria

- 6.1 demonstrate completion of the work within the allocated time
- 6.2 describe the purpose of the work programme and explain why deadlines should be kept in relation to:
 - a. types of progress charts, timetables and estimated times
 - b. organisational procedures for reporting circumstances which will affect the work programme.

The learner will:

7. comply with the given contract information to erect and strike proprietary formwork to the required specification

Assessment criteria

- 7.1 demonstrate the following work skills when erecting and striking proprietary formwork:
 - a. measuring
 - b. marking out
 - c. aligning
 - d. positioning
 - e. levelling
 - f. plumbing
 - g. securing
 - h. removing
 - i. storing
- 7.2 erect and strike proprietary formwork to given working instructions
- 7.3 safely use materials, hand tools, portable power tools and ancillary equipment
- 7.4 safely store the materials, tools and equipment used when erecting and striking proprietary formwork
- 7.5 describe how to apply safe and healthy work practices, follow procedures, report problems and establish the authority needed to rectify them, to:
 - a. erect and strike proprietary formwork for walls, columns, beams, soffits, channels, ground slabs and bases
 - b. attach and remove safe lifting provision
 - c. position, secure and remove prop and tie systems
 - d. apply release agents
 - e. move, clean, stack and store proprietary forms
 - f. work with plant and machinery
 - g. use hand tools, power tools and equipment
 - h. work at height
 - i. use access equipment
- 7.6 describe the needs of other occupations and how to effectively communicate within a team when erecting and striking proprietary formwork
- 7.7 describe how to maintain the tools and equipment used when erecting and striking proprietary formwork.

Unit 732 Erecting and striking proprietary formwork in the workplace

Supporting information

This unit must be assessed in a work environment, in accordance with:

- the Additional Requirements for Qualifications using the title NVQ in RQF
- the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment.

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of relevant occupational expertise and knowledge, and must use a combination of assessment methods as defined in the Consolidated Assessment Strategy.

Workplace evidence of skills cannot be simulated.

Unit 733 Laying kerbs and channels in the workplace

| UAN: | D/503/9634 | |
|---------------|--|--|
| Level: | 2 | |
| Credit value: | 14 | |
| GLH: | 47 | |
| Aim: | This unit aims to provide the learner with the necessary skills and knowledge for: | |
| | interpreting information | |
| | adopting safe and healthy working practices | |
| | selecting materials, components and equipment | |
| | preparing for and laying kerbs and channels | |

Learning outcome

The learner will:

1. interpret the given information relating to the work and resources when laying kerbs and channels

Assessment criteria

- 1.1 interpret and extract relevant information from drawings, risk assessment, method statements, specifications, schedules and manufacturers' information
- 1.2 comply with information and/or instructions derived from risk assessments and method statements
- 1.3 describe the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented
- 1.4 describe different types of information, their source and how they are interpreted in relation to:
 - a. drawings
 - b. specifications
 - c. schedules
 - d. risk assessments
 - e. method statements
 - f. manufacturers' information
 - g. regulations for laying kerbs and channels.

The learner will:

2. know how to comply with relevant legislation and official guidance when laying kerbs and channels

Assessment criteria

The learner can:

- 2.1 describe their responsibilities regarding potential accidents and health hazards whilst working:
 - a. in the workplace
 - b. below ground level
 - c. with tools and equipment
 - d. with materials and substances
 - e. with movement/storage of materials and by manual handling and mechanical lifting
- 2.2 describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company and operative
- 2.3 explain what the accident reporting procedures are and who is responsible for making reports.

Learning outcome

The learner will:

3. maintain safe and healthy working practices when laying kerbs and channels

Assessment criteria

- 3.1 use health and safety control equipment safely to carry out the activity in accordance with current legislation and organisational requirements when laying kerbs and channels
- 3.2 comply with information relating to specific risks to health when laying kerbs and channels
- 3.3 explain why and when health and safety control equipment, identified by the principles of protection, should be used, relating to laying kerbs and channels, and the types, purpose and limitations of each type, the work situation and general work environment, in relation to:
 - a. collective protective measures
 - b. personal protective equipment (PPE)
 - c. respiratory protective equipment (RPE)
 - d. local exhaust ventilation (LEV)
- 3.4 describe how the relevant health and safety control equipment should be used in accordance with the given instructions
- 3.5 describe how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with fires, spillages, injuries and other task-related hazards.

The learner will:

4. select the required quantity and quality of resources for the methods of work to lay kerbs and channels

Assessment criteria

The learner can:

- 4.1 select resources associated with own work in relation to materials and components, and tools and equipment
- 4.2 describe the characteristics, quality, uses, sustainability, limitations and defects associated with the resources in relation to:
 - a. sand, cement, aggregates, additives
 - b. kerbs and channels
 - c. hand and/or powered tools and ancillary equipment
- 4.3 describe how the resources should be used correctly and how problems associated with the resources are reported
- 4.4 explain why the organisational procedures have been developed and how they are used for the selection of required resources
- 4.5 describe any potential hazards associated with the resources and methods of work
- 4.6 describe how to calculate quantity, length, area and wastage associated with the method/procedure to lay kerbs and channels.

Learning outcome

The learner will:

5. minimise the risk of damage to the work and surrounding area when laying kerbs and channels

Assessment criteria

- 5.1 protect the work and its surrounding area from damage in accordance with safe working practices and organisational procedures
- 5.2 minimise damage and maintain a clean work space
- 5.3 dispose of waste in accordance with current legislation
- 5.4 describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions
- 5.5 explain why the disposal of waste should be carried out safely in accordance with environmental responsibilities, organisational procedures, manufacturers' information, statutory regulations and official guidance.

The learner will:

6. complete the work within the allocated time when laying kerbs and channels

Assessment criteria

The learner can:

- 6.1 demonstrate completion of the work within the allocated time
- 6.2 describe the purpose of the work programme and explain why deadlines should be kept in relation to:
 - a. types of progress charts, timetables and estimated times
 - b. organisational procedures for reporting circumstances which will affect the work programme.

Learning outcome

The learner will:

7. comply with the given contract information to lay kerbs and channels to the required specification

Assessment criteria

- 7.1 demonstrate the following work skills when laying kerbs and channels:
 - a. measuring
 - b. marking out
 - c. cutting
 - d. positioning
 - e. levelling
 - f. aligning
 - g. compacting
 - h. finishing
- 7.2 lay kerbs and/or channels to given working instructions
- 7.3 safely use materials, hand tools, portable power tools and ancillary equipment
- 7.4 safely store the materials, tools and equipment used when laying kerbs and channels
- 7.5 describe how to apply safe and healthy work practices, follow procedures, report problems and establish the authority needed to rectify them, to:
 - a. identify different types of kerbs or channels
 - b. set out the area and prepare ground and foundation for laying kerbs or channels
 - c. lay and align kerbs or channels to the required specifications
 - d. mark and cut kerbs and channels
 - e. monitor work against specification
 - f. use hand tools, power tools and equipment
- 7.6 describe the needs of other occupations and how to effectively communicate within a team when laying kerbs and channels
- 7.7 describe how to maintain the tools and equipment used when laying kerbs and channels.

Unit 733 Laying kerbs and channels in the workplace

Supporting information

Guidance

This unit must be assessed in a work environment, in accordance with:

- the Additional Requirements for Qualifications using the title NVQ in RQF
- the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment.

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of relevant occupational expertise and knowledge, and must use a combination of assessment methods as defined in the Consolidated Assessment Strategy.

Workplace evidence of skills cannot be simulated.

This unit must be assessed against the following endorsement:

• Own occupational area of work.

Plus against one of the following:

- Kerbs
- Channels



Appendix 1 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:

- 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 on such things as:

- Walled Garden: how to register and certificate candidates on line
- **Events**: dates and information on the latest Centre events
- **Online assessment**: how to register for GOLA/e-volve assessments.

Useful contacts

Forms, Free literature

| UK learners General qualification information | E: learnersupport@cityandguilds.com |
|---|-------------------------------------|
| International learners General qualification information | E: intcg@cityandguilds.com |
| Centres Exam entries, Certificates, Registrations/enrolment, Invoices, Missing or late exam materials, Nominal roll reports, Results | E: centresupport@cityandguilds.com |
| Single subject qualifications Exam entries, Results, Certification, Missing or late exam materials, Incorrect exam papers, Forms request (BB, results entry), Exam date and time change | E: singlesubjects@cityandguilds.com |
| International awards Results, Entries, Enrolments, Invoices, Missing or late exam materials, Nominal roll reports | E: intops@cityandguilds.com |
| Walled Garden Re-issue of password or username, Technical problems, Entries, Results, e-assessment, Navigation, User/menu option, Problems | E: walledgarden@cityandguilds.com |
| Employer Employer solutions, Mapping, Accreditation, Development Skills, Consultancy | E: business@cityandguilds.com |
| Publications Logbooks, Centre documents, | |

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