

# City & Guilds Level 3 Certificate of Competence in Utility Arboriculture Assisted Tree Felling (0038-34)

March 2022 Version 1.1

Assessment Pack – Centre and Candidate Version

Version and date	Change detail	Section
1.0 December 2021	First version	
1.1 March 2022	Corrected formatting and typographical errors	Throughout
	Removed requirement for simulated overhead electrical network	Page 4
	Added 'In areas where different voltages are used to the ones listed within this guidance, regional variation may be applied.'	
	Added pre-requisites	
	Activity 10 Amended criteria 'signs must be erected warning others of the work being carried out in accordance with New Roads and Street Works Act'	Practical observation descriptor table
	Activity 11 Removed 'and adequate leverage' from description	
	Activity 20 Removed 'the felling method chosen and safe working zones' from criteria	
	Activity 21 Removed 'use wedges/felling aids to prevent a tree sitting back even when using a pulling device' from criteria	
	Amended activity description (11)	Practical table

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## **Pre-requisites**

Candidates must have achieved:

Level 3 Certificate of Competence in Utility Arboriculture Basic Electrical Knowledge (0038-30) Level 3 Certificate of Competence in Utility Arboriculture Tree Species Recognition, Growth Characteristics and Associated Hazards (0038-31)

Level 3 Certificate of Competence in Utility Arboriculture Ground-based Pruning (0038-32) Level 2 Certificate of Competence Chainsaw Maintenance and Cross-cutting (0039-20) Level 2 Certificate of Competence in Felling Small Trees up-to 380mm (0039-21) or equivalent qualifications.

Centres must ensure that any pre-requisites stated are met.

## Introduction

This assessment relates to the units in the Qualification Handbook. The assessment(s) can be achieved at pass grade only. If any task is not achieved the candidate is unsuccessful.

This assessment is for unit 305 Utility Arboriculture Assisted Tree Felling covering the following learning outcome:

1. Carry out utility arboriculture assisted tree felling

General guidance on the requirements for assessment can be found in the Assessor Guidance document available on the City & Guilds web site **www.nptc.org.uk** 

The assessor must complete the Practical Table mark sheet for each candidate which should be kept by the assessor for a minimum period of twelve months.

## Record of assessment (ROA)

A prepopulated record of assessment must be completed by the assessor following an assessment. The number of learning outcomes is listed above, these must be ticked in the relevant 'met' or 'not met' sections of the ROA.

### **ARAS Forms**

An Assessment Result Advice Slip (ARAS form) must be completed by the assessor following an assessment. The ARAS is not a certificate but, based on the evidence of the candidate's performance, is a recommendation to City & Guilds that the candidate has either met or not met the assessment criteria. All feedback is to be recorded by the assessor on the feedback section of the ARAS form.

#### **Assessment Time**

The expected assessment time for this qualification is 1-2 hours.

#### Site/workshop requirements:

Trees with a diameter between 200mm-380mm

## **Equipment/Machinery:**

Assisted felling equipment, chainsaw, felling aids

#### **Consumables:**

Sufficient fuel and oil/charged battery

This is a closed book assessment.

In areas where different voltages are used to the ones listed within this guidance, regional variation may be applied.

# **Practical observation descriptor table**

# **Unit 305 Utility Arboriculture Assisted Tree Felling**

	number and description from check list	Assessment criteria
1	Identify the hazards, risks and controls associated with the site, task and machine	Identify hazards, risks, and controls relevant to the site task and machine
2	Explain the emergency procedures relevant to the site	Emergency procedures relevant to the work site
3	Explain the records required for management and legislative purposes and the importance of maintaining them	Records required may include:  site specific risk assessment method statement work equipment inspection records other  The importance of maintaining records may include: legal requirements auditing/managing requirements safe working operations other
4	Select appropriate equipment for the felling operation	Appropriate equipment selected which may include:  chainsaw ropes strops, connectors felling aids pulleys/blocks other
5	Inspect pulling rope and ancillary equipment and comment on condition and compatibility	<ul> <li>Select and inspect work equipment:</li> <li>check for signs of damage or fatigue to equipment</li> <li>ensure rope, strops, chokers, shackles, other ancillary equipment are compatible</li> <li>components are compliant with current legislation</li> </ul>
6	State factors to consider when estimating the load	Loads may be estimated by considering:  tree species branching habit severity of lean against felling direction wind conditions tree size other

7	State four factors when selecting pulling equipment	Pulling equipment selection may include:  tree size, shape, and form  consider system loading  configuration of components  compatibility of components  safe working loads  other
8	State the consequences of not carrying out an assisted fell operation in an organised and appropriate manner	Consequences of not carrying out an assisted fell operation in an organised and appropriate manner may include:  injury to operators/ third parties  damage to the electrical network  damage to property/ structures  damage to equipment  damage to the environment  financial loss  other
9	Explain the necessity for off-set pulling	Offset pulling should be used when:  working on sloping ground  where a grounds person cannot achieve a safe distance of two tree lengths  moving an operator to a safer position  to divert pulling directions  other
10	State factors to consider when planning the felling operation	Factors to consider when planning the felling operation may include:  • the conditions of the site, (terrain, soil, weather) • safe working distance of at least two tree lengths from others not involved in the felling operation must be maintained • no-one directly below on steep slopes • operators on site should all have a whistle to raise the alarm in the event of an accident • ensure that all underground and overhead wayleaves have been accurately identified before felling commences • signs must be erected warning others of the work being carried out in accordance with New Roads and Street Works Act • additional measures taken if any person could enter the two-tree length exclusion zone, e.g., banks person • other

11	Use approved insulated rods to install an adequate attachment point within the tree to be felled to give sufficient security for the pulling system	Use approved insulated rods to install system(s) to the tree to be felled and prepare for felling:  • securely install attachment points within the tree to be felled using an appropriate method  • attachment points installed at a minimum of 1/3 of the height of the tree  • must be a non-return, retrievable system  • consider stability, strength condition and location of anchor points
12	Position and set up pulling equipment	Position of equipment appropriate to the task:     suitability of anchor points     position of rope system     re-direct system used as applicable     check compatibility of system     check system configuration     system must be retrievable     non return system     operators at a safe distance, and in an appropriate location
13	Pre-tension the pull system to ensure all components are correctly configured and functional	The system is tensioned to ensure:  all parts are functional and correctly configured  adequate for the anticipated load  clear communication systems are established  system is free of obstructions  other
14	Carry out pre-start checks and setting of the machine for use	Pre-start checks and setting of the machine to include:  chain tension and condition checked for safe and effective use safety features checked for condition and function external nuts and bolts checked for security chainsaw contains sufficient fuel and chain oil for operations battery saw contains sufficient oil and charge
15	Demonstrate safe starting of the chainsaw	Chainsaw is checked, started and function tested ready for use in accordance with manufactures information

16	Explain the benefits for using a holding cut for assisted fell operations	The reason for incorporating a back-hold technique may include:  • reduces the risk of trapping the saw  • reduces the risk of early release  • gives the operator more time to fell the tree  • re -evaluate escape route if required  • gives time for the assist rope to be tensioned appropriately  • other
17	Explain the use of felling aids as a back- up for assisted felling	Alternative felling aids and their use may include:  Wedges:  placed in felling cut and driven in to aid tree movement  other  Felling levers:  placed in the felling cut and lifted to aid tree movement  other
18	Explain the importance of clear communication during assisted felling operations	Importance of clear communication may include:  • general site safety  • accident prevention  • job efficiency  • operators understand roles and  • responsibilities  • other
19	State the appropriate actions to be taken should the tree become hung-up	Actions to be taken should a tree become hung up may include:  • stop work  • re-assess the situation  • re-assess danger zones and escape routes  • if tree is in contact with the line contact the network operator and seek further advice  • use appropriate take down method

20	Carry out an assisted fell of a tree adjacent to an overhead line	Carry out an assisted fell of a tree adjacent to an overhead line:  communication systems in place as appropriate  no danger of the tree falling back onto conductors  selection and preparation of escape routes  a sink of the appropriate dimensions  felling cuts made with a suitable hold and felling aid employed using a safe and effective felling method  a hinge being retained of adequate dimensions  appropriate aid tools are used  escape routes being used as soon as the tree begins to fall  site checked for safety once tree has fallen  stump height left appropriate to site specification
21	State alternative techniques used to deal with trees of varying size and condition	Alternative techniques used to deal with trees of varying size and condition:  • small trees leaning away or weighted away from the line can be felled with step cut or reducing V cut as appropriate  • larger trees, when appropriate, can be felled with the aid of a winch, with the line dead  • if the tree is unsuitable for felling away from the line use an appropriate dismantling technique with the line dead  • Tree felled with line dead, and conductors lowered (line drop)  • other
22	Clean and tidy working area	Clean and tidy working area as per site specification
23	Dispose of waste safely in line with legislation	All waste produced from activities is disposed of in line with legislation, good practice and/or site requirements
24	Use appropriate tools, equipment, and personal protective equipment (PPE)	All tools, equipment and personal protective equipment is used in line with industry good practice
25	Carry out work to minimise environmental damage	It is ensured that any possible environmental damage is always minimised
26	Worked in a way which maintains health and safety and is consistent with relevant legislation and industry good practice	All activities must be completed in a way which protects the operator and those around them

# **Practical tables**

Finish time:

# **Unit 305 Utility Arboriculture Assisted Tree Felling**

	•	
Candidate name:		
Date:		
Start time:		

All criteria must be achieved.

ivity	number and description	Achieve
1.	Identify the hazards, risks and controls associated with the site, task, and machine	
2.	Explain the emergency procedures relevant to the site	
3.	Explain the records required for management and legislative purposes and the importance of maintaining them	
4.	Select appropriate equipment for the felling operation	
5.	Inspect pulling rope and ancillary equipment	
6.	State factors to consider when estimating the load	
7.	State four factors when selecting pulling equipment	
8.	Describe the consequences of not carrying out an assisted fell operation in an organised and appropriate manner	
9.	Explain the necessity for offset pulling	
10.	State factors to consider when planning the felling operation	
11.	Use approved insulated rods to install an adequate attachment point within the tree to be felled to give sufficient security for the pulling system	
12.	Position and set up pulling equipment	
13.	Pre-tension the pull system to ensure all components are correctly configured	
14.	Carry out pre-start checks and setting of the machine for use	
15.	Demonstrate safe starting of the chainsaw	
16.	Explain the benefits for using a holding cut for assisted fell operations	
17.	Explain the use of felling aids as a back-up for assisted felling	
18.	Explain the importance of clear communication during assisted felling operations	
19.	State the appropriate actions to be taken should the tree become hung-up	
20.	Carry out an assisted fell of a tree adjacent to an overhead line	
21.	State alternative techniques used to deal with trees of varying size and condition	
22.	Clean and tidy working area	
23.	Dispose of waste safely in line with legislation	
24.	Use appropriate tools, equipment, and personal protective equipment (PPE)	
25.	Carry out work to minimise environmental damage	
26.	Work in a way which maintains health and safety	
	Grade (P/X)	

Assessor feedback:		
Candidate feedback:		
Assessor signature and date		
Candidate signature and date		

## 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.nptc.org.uk**.

## City & Guilds Centre Manual

This document provides guidance for organisations wishing to become City & Guilds approved centres, as well as information for approved centres delivering City & Guilds qualifications. It covers the centre and qualification approval process as well as providing guidance on delivery, assessment and quality assurance for approved centres.

It also details the City & Guilds requirements for ongoing centre and qualification approval, and provides examples of best practice for centres. 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 and malpractice
- complaints and appeals
- equal opportunities
- data protection
- management systems
- maintaining records
- internal quality assurance
- external quality assurance.

## **Our Quality Assurance Requirements**

This document explains the requirements for the delivery, assessment and awarding of our qualifications. All centres working with City & Guilds must adopt and implement these requirements across all of their qualification provision. Specifically, this document:

- specifies the quality assurance and control requirements that apply to all centres
- sets out the basis for securing high standards, for all our qualifications and/or assessments
- details the impact on centres of non-compliance

Our Quality Assurance Requirements document encompasses the relevant regulatory requirements of the following documents, which apply to all UK centres working with City & Guilds:

Ofqual's General Conditions of Recognition

The centre homepage section of the City & Guilds website also contains useful information on

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

## **Useful contacts**

UK learners	E: learnersupport@cityandguilds.com
General qualification information	
International learners	E: intcg@cityandguilds.com
General qualification information	
Centres	E: information@cityandguilds.com
Exam entries, Certificates, Registrations/enrolment, Invoices, Missing or late exam materials, Nominal roll reports, Results	
Single subject qualifications	E: singlesubjects@cityandguilds.com
Exam entries, Results, Certification, Missing or late exam materials, Incorrect exam papers, Forms request (BB, results entry), Exam date and time change	
International awards	E: intops@cityandguilds.com
Results, Entries, Enrolments, Invoices, Missing or late exam materials, Nominal roll reports	
Walled Garden	E: walledgarden@cityandguilds.com
Re-issue of password or username, Technical problems, Entries, Results, e-assessment, Navigation, User/menu option, Problems	
Employer	T: +44 (0)121 503 8993
Employer solutions, Mapping, Accreditation, Development Skills, Consultancy	E: business@cityandguilds.com

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As the UK's leading vocational education organisation, City & Guilds is leading the talent revolution by inspiring people to unlock their potential and develop their skills. City & Guilds is recognised and respected by employers across the world as a sign of quality and exceptional training.

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