

## **Standard in development**

### **L6: Professional arboriculturist**

#### **Title of occupation**

Professional arboriculturist

#### **UOS reference number**

ST0922

#### **Core and options**

No

#### **Option title/s**

#### **Level of occupation**

Level 6

#### **Route**

Agriculture, environmental and animal care

#### **Typical duration of apprenticeship**

36 months

#### **Degree apprenticeship**

## Target date for approval

28/2/2020

## Resubmission

No

## Would your proposed apprenticeship standard replace an existing framework?

No

## Does professional recognition exist for the occupation?

No

## Occupation summary

This occupation is found in local authorities, highway authorities, private arboricultural consultancies, private commercial arboricultural companies, parks, arboretums, charities, housing associations.

The broad purpose of the occupation is managing peri-urban and urban trees including writing and implementing proactive strategic plans to enhance the environment to benefit people, air quality, biodiversity, amenity and the built environment, while mitigating risk to people, buildings and property from trees by coordinating proactive inspections and undertaking tree work operations within an appropriate time-scale.

An overarching focus of the role is being able to advise tree owners of how to ensure they are adhering to their Duty of Care while complying with relevant legislation, regulations and statute and common law. These include, but are not limited to, the Highways Act, Town and Country Planning Act, Countryside Act, Local Government (Miscellaneous Provisions) Act, Occupier's Liability Act and Local and National Policy. Developing tree policies and strategies that can be adopted to provide management guidance and plans for individual tree management and can be relevant to a large geographic area which incorporate management of a large number of trees (e.g. highways, parks, estates, housing sites, etc.). Strategies would include emergency planning for extreme weather events and outbreaks of threats to the immediate and wider tree population - such as the identification of a pest, pathogen or disease.

Another key function of an Professional Arboriculturist is designing and specifying tree planting plans and advising planning policy related to trees on development sites. In their daily work, an employee in this occupation interacts with Colleagues, the general public, stakeholders, clients, landowners, lawyers, insurers, contractors, politicians and civil servants. Other professionals that an Professional Arboriculturist will have regular contact with are highways engineers; town planners; utility providers and contractors; landscape architects; ecologists; architects; and street lighting engineers to name but a few.

An employee in this occupation will be responsible for:

- Managing a team of tree professionals
- Assessing tree health and risk
- Managing contractors
- Dealing with complaints
- Understanding and applying law relating to trees
- Planning and prioritising survey requirements to ensure work delivery and discharge of legal Duty of Care
- Creating and implementing planting programmes in relation to amenity, ecosystem services and replacement for development, managing and writing policy and strategy relating to these issues
- Financial management and resourcing, including income generation.

### **Typical job titles**

Urban Tree Manager, Senior Arboricultural Consultant, Senior Arboricultural Officer, Tree Manager, Contract Delivery Manager, Principal Consultant, Senior Tree Officer, Arboretum Curator, Arboricultural Manager, Principal Tree Officer

### **Are there any statutory/regulatory or other typical entry requirements?**

No

## Occupation duties

| DUTY  | KSBS   |
|---|--|
| <p><b>Duty 1</b> Provide advice and consultancy about trees including tree management, health, the law, risk and the role of trees in development to the public, clients, other professions and colleagues. Advise on amenity, peri-urban and urban tree planting and management; trees with special value (e.g. ancient, historic context, rare, visually important) and the impact of developments and new infrastructure in relation to trees.</p> | <p>K1 K2 K4 K5 K7 K8 K12 K13 K14 K15 K16 K17 K23 K25 K27 K44 K48 K49 K51 K52 K54 K57<br/>S1 S2 S3 S6 S7 S8 S9 S10 S11 S12 S13 S14 S16 S18 S19 S21 S22 S23 S25 S27 S28 S29 S30 S34 S35<br/>B1 B2 B3 B4 B5 B6 B7 B8 B9</p> |
| <p><b>Duty 2</b> Able to act as an expert witness on amenity, peri-urban and urban tree related matters.</p>  | <p>K46<br/>S1 S7<br/>B1 B2 B3 B4 B5 B6 B7 B8 B9</p>  |
| <p><b>Duty 3</b> Advocate for incorporating professional tree expertise in green infrastructure design and peri-urban and urban planning. Contribute to green infrastructure innovations and actively promote the benefits of trees within planning policy.</p>   | <p>K3 K14 K16 K17 K18 K39 K42 K45 K47<br/>S1 S2 S7 S13 S20 S22 S24 S29 S30 S31 S35<br/>B1 B2 B3 B4 B5 B6 B7 B8 B9</p>  |
| <p><b>Duty 4</b> Research, collect and interpret data on trees by recording and capturing data related to site factors, plant health, amenity value, natural capital, ecosystem services, suitability, risk, community perspectives, threats and historical value.</p>  | <p>K1 K2 K4 K7 K8 K9 K10 K11 K13 K14 K15 K18 K22 K24 K26 K37 K38 K39 K40 K48 K49 K50 K53 K54<br/>S1 S2 S3 S4 S5 S6 S7 S9 S12 S13 S15 S17 S18 S19 S21 S22 S23 S26 S29 S31 S34 S39<br/>B1 B2 B3 B4 B5 B6 B7 B8 B9</p>      |
| <p><b>Duty 5</b> Contribute to the development and implementation of tree management plans and strategies, where applicable, incorporating reference to legislation, regulation, policy and best practice (e.g. national planning policy, local and regional planning policy).</p>  | <p>K1 K3 K5 K13 K14 K15 K16 K17 K19 K25 K38 K39 K47 K48 K49 K50 K51<br/>S1 S2 S3 S6 S7 S8 S9 S17 S18 S19 S22 S26 S28 S29 S30 S31 S34<br/>B1 B2 B3 B4 B5 B6 B7 B8 B9</p>  |

| DUTY  | KSBS  |
|---|---|
| <p><b>Duty 6</b> Lead on delivering proactive tree management that includes managing quality of tree works (in accordance with BS3998), community/stakeholder engagement, environmental impact and health and safety. Reference to Duty of Care, Highways Act and New Roads and Street Works Act.</p>   | <p>K1 K5 K7 K8 K9 K13 K14 K15 K24 K25 K27 K28 K33 K34 K37 K38 K40 K43 K45 K48 K49 K50 K51 K53 K54<br/>S2 S5 S9 S10 S11 S12 S15 S18 S19 S20 S21 S22 S23 S24 S25 S27 S28 S34 S36 S39<br/>B1 B2 B3 B4 B5 B6 B7 B8 B9</p>     |
| <p><b>Duty 7</b> Manage amenity tree survey and inspection regimes taking into account duty of care and foreseeable risk to people, buildings and property to determine appropriate mitigation options.</p>   | <p>K1 K4 K8 K24 K26 K28 K29 K33 K35 K36 K40 K41 K43 K48 K52 K53<br/>S2 S8 S9 S18 S19 S20 S21 S23 S25 S27 S29 S36<br/>B1 B2 B3 B4 B5 B6 B7 B8 B9</p>   |
| <p><b>Duty 8</b> Survey and inspect trees in complex and unusual circumstances for example ancient or veteran trees, those that are rare, those that are of historical or cultural importance or those involved in subsidence.</p>  | <p>K1 K4 K5 K8 K9 K10 K11 K12 K13 K14 K19 K20 K22 K23 K24 K26 K46 K51 K53 K54<br/>S1 S7 S9 S10 S12 S16 S18 S19 S20 S22 S32 S33<br/>B1 B2 B3 B4 B5 B6 B7 B8 B9</p>   |
| <p><b>Duty 9</b> Inform the development process by adhering to the Town and Country Planning Act while undertaking surveys and producing detailed BS5837 reports, produce high quality plans and associated guidance for professional planners, architects and engineers in relation to trees, e.g. Tree Surveys, Arboricultural Impact Assessments (AIA), Arboricultural Method Statements (AMS), Tree Preservation Order and Conservation Area advice / guidance.</p> | <p>K2 K4 K5 K9 K10 K11 K13 K19 K20 K24 K25 K26 K28 K30 K32 K33 K34 K40 K41 K42 K43 K45 K52 K57<br/>S1 S2 S3 S4 S5 S6 S8 S9 S10 S14 S17 S19 S21 S22 S23 S24 S25 S26 S27 S28 S31 S32 S33<br/>B1 B2 B3 B4 B5 B6 B7 B8 B9</p> |
| <p><b>Duty 10</b> Utilise tree data via defined software (Tree Management Databases, Computer Aided Design (CAD), Building Information Modelling (BIM)) and Geographic Information Systems (GIS) to inform strategic amenity tree management and policy to aid with influencing decision makers.</p>  | <p>K1 K3 K7 K8 K9 K12 K14 K15 K16 K17 K18 K24 K25 K29 K30 K31 K33 K34 K35 K37 K40 K42 K45 K52<br/>S2 S3 S4 S6 S9 S11 S12 S13 S14 S21 S29 S30 S34<br/>B1 B2 B3 B4 B5 B6 B7 B8 B9</p>                                       |

| DUTY   | KSBS   |
|--|--|
| <p><b>Duty 11</b> Evaluate and act in accordance with current legislation (statutory and common law), best practice, relevant case law and regulations related to trees.</p>   | <p>K5 K6 K7 K16 K17 K46 K57<br/>S1 S5 S7 S8 S9 S17 S18 S19 S24 S26<br/>B1 B2 B3 B4 B5 B6 B7 B8 B9</p>  |
| <p><b>Duty 12</b> Design and specify amenity, peri-urban and urban tree planting plans by incorporating ‘right tree, right place’ methodologies; identification of suitable sites; appropriate tree species selection; materials; planting and after care; biosecurity; provenance of tree stock; implementing knowledge of current National House Building Council (NHBC) guidance for trees in relation to buildings; and adhering to BS8545.</p>  | <p>K3 K7 K9 K10 K11 K14 K21 K22 K24 K25 K28 K32 K33 K44 K45<br/>K50 K51<br/>S3 S6 S7 S9 S14 S15 S18 S19 S21 S23 S24 S25 S27 S28 S30 S31 S36<br/>B1 B2 B3 B4 B5 B6 B7 B8 B9</p>   |
| <p><b>Duty 13</b> Manage tree work operations such as felling, aerial pruning and planting; to include planning, resourcing, procurement (contract creation and tendering for contracts in line with UK and EU regulations and legislation) and management of contractors, health and safety, environmental considerations, access and quality enforcement with reference to BS3998, relevant legislation and regulations, Risk Assessment procedures and arboricultural best practice guidance.</p> | <p>K1 K5 K6 K7 K15 K23 K24 K25 K27 K28 K29 K32 K33 K35 K36 K40 K43 K48<br/>S8 S9 S11 S14 S19 S22 S25 S27 S28 S34 S36<br/>B1 B2 B3 B4 B5 B6 B7 B8 B9</p>                          |
| <p><b>Duty 14</b> Identify and manage tree pests, pathogens and diseases including prevention, management of spread and regulatory reporting. Identify and evaluate future threats to UK trees. Manage the impact of tree pests, pathogens and diseases on amenity trees, human health, ecosystems and the wider environment.</p>  | <p>K3 K9 K10 K11 K14 K15 K22 K33 K34 K37 K40 K42<br/>S2 S7 S8 S9 S10 S11 S14 S15 S16 S18 S19<br/>B1 B2 B3 B4 B5 B6 B7 B8 B9</p>  |
| <p><b>Duty 15</b> Manage the promotion of the organisation and its products and services. Manage relationships with members of the public, other professionals, other professions and key stakeholders.</p>  | <p>K27 K29 K30 K31 K32 K33 K34 K35 K37 K39 K40 K41 K42 K43 K51 K52 K56 K57<br/>S1 S2 S5 S7 S9 S17 S19 S22 S23 S24 S25 S27 S28 S29 S31 S34 S35<br/>B1 B2 B3 B4 B5 B6 B7 B8 B9</p> |

| DUTY  | KSBS   |
|---|--|
| <p><b>Duty 16</b> Manage directly employed or contract workforce and volunteers, including work culture, workforce planning, motivation, quality, health and safety, skills, recruitment, retention, training and development.</p>  | <p>K27 K29 K30 K31 K32 K35 K38 K39 K40 K41 K52 K55<br/>S2 S5 S9 S17 S18 S19 S20 S21 S22 S25 S27 S28 S31 S34 S35 S36 S38<br/>B1 B2 B3 B4 B5 B6 B7 B8 B9</p>                         |
| <p><b>Duty 17</b> Financial management to include budgeting, financial reporting and, where applicable, sourcing funding (for example Urban Tree Challenge Fund). Generate income including developing business cases, identifying market / audience, quality, customer service, managing targets and developing opportunities.</p> | <p>K21 K28 K29 K30 K31 K32 K33 K34 K40 K42 K43 K45 K47 K55 K57<br/>S2 S5 S7 S11 S13 S14 S19 S22 S23 S24 S25 S27 S28 S29 S30 S31 S34 S35 S37 S39<br/>B1 B2 B3 B4 B5 B6 B7 B8 B9</p> |
| <p><b>Duty 18</b> Manage systems and processes, including specialist tree management databases, to drive improvements and utilise relevant information to manage and influence organisational change, enhancing business performance and service delivery.</p>  | <p>K7 K12 K14 K24 K28 K29 K30 K31 K32 K33 K34 K35 K38 K39 K40 K42 K43 K47 K55 K56 K57<br/>S2 S4 S5 S9 S11 S13 S26 S34 S36 S37 S38<br/>B1 B2 B3 B4 B5 B6 B7 B8 B9</p>               |

## KSBS

### Knowledge

**K1:** Techniques for undertaking tree works to industry standards including British Standard 3998 (as updated) and other industry best practice guidance.

**K2:** Principles and regulation for managing of trees on construction sites including British Standard 5837 (as updated) and other best practice guidance.

**K3:** Factors for establishing trees to independence in the landscape, standards and regulations including British Standards 8545 (as updated) and other best practice guidance.

**K4:** Tree inspection methodologies and assessment options to provide informed management decisions.

**K5:** The legal framework around trees including statutory protection for trees and penalties associated with breaches of legislation and regulations.

**K6:** The difference between statutory and common law, relevant legislation, regulations and appropriate case law related to trees and how these relate to proportionate decision making.

**K7:** The purpose and components of proactive tree management plans incorporating risk assessment methodologies which identify, quantify and evaluate risk.

**K8:** Principles of tree risk quantification and the systems that apply tree risk quantification.

**K9:** Techniques for identifying tree pests, pathogens and diseases e.g. visual recognition, keys and online resource, implications, treatments, notifiable pests and appropriate biosecurity principles to reduce impacts.

**K10:** The principles of tree classification, identification of common, amenity and specimen trees including characteristics and requirements of different tree species.

**K11:** Tree biology including physiology, growth, development and structure.

**K12:** Knowledge of the principles of bio-mechanics in relation to trees and tree statics and dynamics including the application of section modulus.

**K13:** Tree assessment methodologies (eg. Body language of trees).

**K14:** The benefits of trees to nature, the environment, ecosystem services and natural capital.

**K15:** Woodland management principles; silvicultural systems and techniques.

**K16:** The implications of national planning policy in the context of trees and understanding of the hierarchy of planning policy.

**K17:** The role that policy and strategy play in local, organisational and national governance and understanding the difference between policy and strategy.

**K18:** Tree valuation methodologies, their benefits, weaknesses and use for different purposes e.g. valuing an individual tree and demonstrating the value of ecosystem services provided by urban tree populations.

**K19:** The features of statutory designations (SSSI, archaeology, land designations), sources of information on where they apply and their implications for tree management.

**K20:** Protected species designations (e.g. European protected species) the likely protected species found in association with trees and compliance.

**K21:** Identification of new funding sources including funding schemes for tree planting and tree management and techniques for accessing them e.g. grant applications, business cases.

**K22:** The principles for resilience of trees and woodlands (biosecurity).

**K23:** The value of deadwood habitat, techniques for management and suitability for different situations.

**K24:** Tree inventory systems - their function in management and analysis of urban tree populations.

**K25:** The functions and value of software applications in relation to tree management (For example: GIS, CAD, MS Products, Building Information Modelling (BIM)).

**K26:** Tree inspection tools, equipment, their function, limitations and value for data generation or collection. To include advanced tree assessment technology and interpretation of results e.g. tree decay, structural stem and root stability, vitality and biological activity.

**K27:** Legislation and regulation in relation to Health and safety to include principles of work placed risk assessment and management and production of method statements.

**K28:** Principles and methodologies for management of projects.

**K29:** The principles of customer service including confidentiality, data management and appropriate use of social media.

**K30:** The principles of sales and marketing.

**K31:** Business planning systems and how these relate to small, medium and large organisations.

**K32:** Budgeting, finance management and accounting related to business outputs or budgets.

**K33:** Resource management principles.

**K34:** Needs of different stakeholders and how this impacts on influencing, engaging and building relationships.

**K35:** Principles for motivation, management and leadership of individual staff and a team.

**K36:** The principles and constraints around tree work operations including relevant legislation, regulations and best practice (e.g. NPTC, Working at Height LOLER, PUWER, AFAG, COSSH) and their implications for leading teams, setting policy and process.

**K37:** Methods for community engagement, their value and techniques for evaluating results.

**K38:** The role / influence of public interest and pressure groups on decision making in relation to trees (including knowledge of key agenda setting organisations).

**K39:** Awareness of emerging policy, guidance, thinking, cultural changes in relation to arboriculture (e.g. current valuing of trees as a response to climate change).

**K40:** Communication techniques and tools including their use.

**K41:** Principles of equality, safeguarding and diversity and their implications for policy, process and strategy.

**K42:** The arboricultural profession and how other professions are or could be aligned with arboriculture.

**K43:** Requirements of tendering and procurement processes (eg. OJEU conditions, rules and financial limits, the legal challenge, managing contractors/clients and forms of contracts).

**K44:** Soil science, the implication of soil type and condition on tree physiological processes and their management.

**K45:** The interaction of trees with the built environment (e.g. damage (direct or indirect) to infrastructure, SUDs, rooting volumes, utilities).

**K46:** The responsibilities and requirements of acting as an expert witness including understanding the role of the expert witness in legal proceedings (e.g. has a duty to the court, aware of CPR Part 35).

**K47:** Green infrastructure.

**K48:** Purpose, components and application of tree management plans.

**K49:** Purpose, components and application of tree strategies.

**K50:** Impact of climate change on trees and their role in adaptation applied at a local or regional level.

**K51:** The role, purpose and output of consultation and associated processes.

**K52:** Conflict resolution methodologies.

**K53:** The causes of tree related subsidence to buildings or structures including associated evidence evaluation and mitigation options.

**K54:** The properties of ancient trees, veteran trees and trees of historical or cultural significance and the implications for tree management and planning decisions.

**K55:** Roles and responsibilities for managing employees (directly or indirectly employed) and volunteers.

**K56:** Understand contractual norms and processes (e.g. the role of the client brief, the fee proposal, the scope and the instruction).

**K57:** Understanding the need to provide balanced advice that takes into account constraints / restrictions (e.g. cost and resource) and clearly defines the context of what is known and what is unknown.

## **Skills**

**S1:** Write reports including advocacy.

**S2:** Collect, analyse and identify trends from data.

**S3:** Interpret maps.

**S4:** Define maps that clearly communicate the necessary information.

**S5:** Choose and utilise the appropriate formats to communicate information (e.g. table, image, map, text, graph, etc.).

**S6:** Utilise GIS and CAD software.

**S7:** Research and analytical skills, knowing where to find relevant arboricultural information or what leads to follow to obtain it.

**S8:** Interpret and advise on implications of policy, legislation, regulation and best practice.

**S9:** Make objective decisions that can be justified based on evidence and quality assessment.

**S10:** Inspect trees and use tree survey tools competently including interpreting results from advanced tree decay and biological activity monitoring tools.

**S11:** Specify tree works with priorities to meet a range of criteria, including long term tree health, tree risk management, nuisance management, etc. (also should consider available budgets and the requirements of the tree owner / manager).

**S12:** Apply tree risk management quantification methods to inform decision making.

**S13:** Apply tree valuation methods to inform decision making.

**S14:** Provide advice and specify tree planting including species selection, technical planting guide and planting plan to meet a range of criteria (eg. soil type, landscape type, biosecurity, tree population resilience, eco system services).

**S15:** Lead on biosecurity controls and ensure compliance.

**S16:** Be able to choose the appropriate decay detection / structural stability assessment equipment.

**S17:** Demonstrate the ability to seek further information from managers, supervisors or colleagues, when necessary, to give clear strategic direction.

**S18:** Clearly communicate decision process to stakeholders in a relevant format and style.

**S19:** Specify, plan, audit, feedback, review and monitor performance measures and outputs.

**S20:** Find solutions in challenging and complex situations.

**S21:** Manage projects, including measuring that they are delivered on time and to budget, where there are multiple stakeholders and where managing a team is required to achieve delivery.

**S22:** Communicate clearly in an appropriate manner to meet objectives.

**S23:** Proactively engage with clients, customers and colleagues, including senior management to deliver business outcomes within an appropriate timeframe.

**S24:** Negotiate effectively with colleagues and stakeholders to achieve desired outcomes.

**S25:** Organise, manage and prioritise your own work, and that of the team, in line with organisational priorities.

**S26:** Define and follow systems to meet a desired set of criteria (e.g. a filing system, a monitoring system or a reporting system).

**S27:** Set, monitor and manage budgets.

**S28:** Define a scope of work which delivers the objectives of a supplied brief ensuring that it clearly communicates necessary information for example fees, timeframe, the process that will be applied and any caveats.

**S29:** Give presentations communicating complex information to a range of audiences e.g. political, non-technical and technical specialists.

**S30:** Manage and chair meetings.

**S31:** Collaborate with other professions and professionals by identifying when specialist input is required.

**S32:** Recognise, from visual inspection, symptoms of structural degradation of trees' woody tissue and propose management responses (e.g. wood decay fungi, stem growth patterns).

**S33:** Identify symptoms of physiological stress and / or poor health including complex scenarios with unusual and interacting factors (e.g. necrotic leaves, upper crown dieback) and draw conclusions of causes and / or recommend appropriate detailed analysis and / or appropriate treatment.

**S34:** Lead projects and areas of work.

**S35:** Build a network of contacts in both arboriculture and aligned professions.

**S36:** Manage employees, contractors and volunteers including health and safety, performance, quality and culture.

**S37:** Lead the development of systems and processes to analyse service delivery to influence organisational change.

**S38:** Analyse personal or an individual's outputs to identify efficiencies and improve performance.

**S39:** Demonstrate techniques for making funding applications.

## Behaviours

- B1:** Always put the interests of your clients or others to whom you have a professional responsibility above your own and respect their confidentiality. Always consider the wider interests of society when making your judgments.
- B2:** Be open and transparent in your dealings. Share the full facts with your clients, making things as plain and intelligible as possible.
- B3:** Treat everyone fairly with courtesy, politeness and respect and consider cultural sensitivities and business practices.
- B4:** Be accountable for all your actions. Take full responsibility for your actions and do not blame others if things go wrong.
- B5:** Set a good example. Remember that both your public and private behaviour could affect your own reputation and that of the profession or business you represent.
- B6:** Practice your profession with due regard to sound ecological, social, economic and environmental principles to the advantage of present and future generations.
- B7:** Be inquisitive about all aspects of your profession, and the context in which you practice.
- B8:** Consider where existing systems and solutions can be improved and where innovative approaches can improve outcomes.
- B9:** Able to work productively alone and constructively in a team.

## Qualifications

### English & Maths

Apprentices without level 2 English and maths will need to achieve this level prior to taking the End-Point Assessment. For those with an education, health and care plan or a legacy statement, the apprenticeship's English and maths minimum requirement is Entry Level 3. A British Sign Language (BSL) qualification is an alternative to the English qualification for those whose primary language is BSL.

**Does the apprenticeship need to include any mandated qualifications in addition to the above-mentioned English and maths qualifications?**

No

## **Professional Recognition**

This standard has professional recognition.

| <b>BODY</b>                      | <b>LEVEL</b> |
|----------------------------------|--------------|
| Institute of Chartered Foresters | MICFor       |