APPENDIX 1
SPECIFICATION FOR BCP ARBORICULTURAL CONTRACT

Contents

1. Introduction and Background

1.1. Bournemouth, Christchurch and Poole Council (BCP) manages a landscape in no small part defined by its' trees. BCP's tree stock is the largest natural asset the Council owns and manages. Its' trees are the single biggest positive contributor to biodiversity, air quality and climate change mitigation in the conurbation.

1.2. Trees are the common element that features across all its many and varied landscapes from the miles of tree lined streets, award winning urban parks and gardens to woodlands and internationally important heathland and other sites managed for nature conservation. The town of Bournemouth's inception is linked to its association with Pines and trees of all species are a link to the historic landscape of BCP.

1.3. Trees are universally recognised as vital to providing a healthy and safe future landscape that will be desirable to live in. Across the world societies that are serious about greening their cities and urban environments look to trees as the major contributor. For a largely urban conurbation there is an enviable level of tree cover across BCP. As a local authority we are rightly proud and protective of our tree stock. We strive to maintain the existing stock to a high standard and replace and increase canopy cover for the future.

1.4. The safety of BCP residents and our visitors is paramount. The Arboricultural contract forms an integral part of the Council tree risk management programme (TRMI). The successful contractor will be expected to fully engage with BCP's Arboricultural team to help deliver it.

1.5. The provision of tree surgery and other arboricultural services is expected to be of the highest standard. The Contractor will meet all relevant British standards and industry best practice. The Contractor will demonstrate a commitment to the ethos of BCP Councils' tree management. They will also demonstrate a company ethos of continuing personal development of their staff deployed to the contract at all levels.

2. Scope

2.1. The Arboricultural Contract will consist of four main elements.

- A programme of annualised works
- A programme of routine works
- Issuing of additional work orders for tree surgery operations based on hourly rates or operations that have a specified value within the contract and a mixture of both.
- Emergency Response

3. Annualised Works

3.1. Will constitute a programme of works designed to manage the stock of existing pollarded trees (see pollard specification at section 9.16). The programme will be sufficient to ensure that the entire stock is re-pollarded on a frequency of no sooner than five years and no longer than six years.

3.2. The pollard stock is primarily but not exclusively comprised of street trees. Parked cars can present operational problems and the contractor will need to demonstrate how they will resolve this issue so that 'problem trees or areas' are not left incomplete.

3.3. BCP Council will provide works orders in the Autumn for a specified number of pollards for that years' cycle.

4. Routine Works

4.1. The Routine works programme is designed to deliver a programme of works across BCP to actively manage the street tree stock. It is an important element of the Council Tree Risk Management Program. The works include crown lifting to statutory heights (section 9.9 & 9.10), deadwood removal (section 9.19), pruning to clear highway assets such as street lighting and signs. Also, selective pruning to mitigate contact with overhead cables and other structures.

4.2. BCP Council will issue a quarterly works order and the contractor will be required to complete the specified number of trees shown on the order. This will include both major and minor roads. Payment will be made on completion of the works order.

4.3. It is anticipated that Routine works will involve primarily, but not exclusively, the street tree stock. The contractor may be asked to undertake similar works to trees on other sites for example adjacent to formal routes within parks, gardens or cemeteries.

4.4. In conjunction with routine works, additional work orders (AWO) may be issued to mitigate any remedial works identified during the TRMI survey undertaken by the BCP Arboricultural Officer prior to issuing the quarterly works order.

5. Additional Work Orders (AWO)

5.1. Work orders will be issued to the contractor for a variety of works. An AWO will be priced as follows:

- Using the hourly rate
- Using the rate for a scheduled operation
- A combination of both.

5.2. Work Orders will be issued to the contractor electronically via the Council's tree management software system (see section 12) and will include a 'complete by' date based on a priority code which will form part of the key performance indicators (KPI) (see section 11).

6. Emergency Response

6.1. The Contractor shall at all times during the contract period to be able to provide a full arboricultural emergency service. This service will be available 24 hours a day – 365 days a year.

6.1.1. The contractor will provide a staffed method of contact for emergency response for both normal working hours and out of hours.

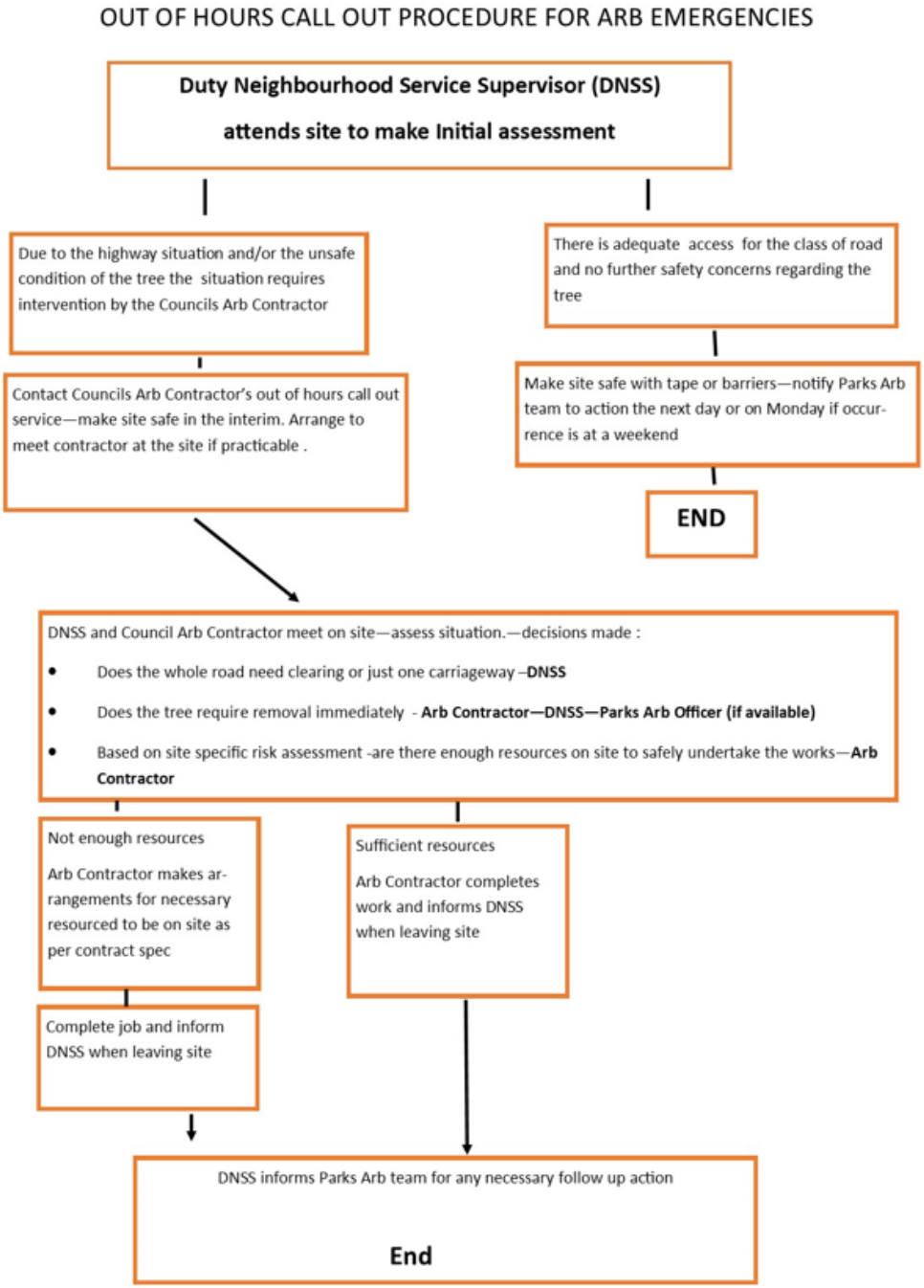
6.1.2. A suitably qualified and experienced member of staff will be available to attend site anywhere in the BCP area within one hour of receiving notification of an incident.

6.1.3. Within two hours of notification of an incident the contractor will have sufficient resources on site to effectively and safely resolve the situation.

6.1.4. The Contractor will liaise with the Councils Response Officer and any other appropriate Council Representative.

6.1.5. The Contractor will submit a schedule of resources they deployed responding to the emergency. The schedule will use the day works and schedule of rates and in a format to be agreed. Once audited a retrospective works order will then be issued.

6.1.6. **Emergency Response Flow Chart**



7. Estimated Volume of works

Work Type	Estimated number of operations per annum for BCP wide contract	Notes
Annualised Works	250-500	This is anticipated number of operations per annum however this will be subject to budget availability
Routine Works	2500-5000	This is anticipated number of operations per annum however this will be subject to budget availability
Additional Work Orders (AWO's) issued per annum	1000-2000	This is anticipated number of operations per annum however this will be subject to budget availability
Emergency response works	Average of 8 Weeks (for 1 Arb Team) per annum	Intention is to utilise the Council's own in-house Arb team and other in-house chainsaw trained staff to carry out low risk, ground-based emergency tree works during storm events to free up the contractor to concentrate on incidents requiring greater expertise and range of equipment and vehicles.

7.1. For descriptive purposes the tree stock is defined as:

7.1.1. **Street Trees:**

7.1.1.1. Tree growing on a roadside verge or shrub bed

7.1.1.2. Tree within a tree planting pit on the roadside

7.1.1.3. Tree planted directly within the footway – any tree adjacent to a highway growing between the curb edge and the front boundary of a property. A tree close to the highway that is not associated with a piece of public open space.

7.1.2. **Public Open Space (POS):**

7.1.2.1. Tree growing on Council owned or maintained land to include public parks, sports grounds, linear planting strips between roads, small stands of trees, all publicly owned or maintained trees not considered street trees.

7.1.3. **Cemeteries:**

7.1.3.1. There are four sites within Bournemouth: Wimborne Rd, East, North and Kinson Cemeteries.

7.1.3.2. There is one site within Christchurch: Jumpers Cemetery.

7.1.3.3. There are five sites within Poole: Branksome Cemetery, Poole Cemetery, Broadstone Cemetery, Parkstone Cemetery and Poole Crematorium

7.1.3.4. In addition to the above there are the following closed churchyards: St James, St Peters and St Clements (Bournemouth). Priory and Millhams Street (Christchurch). St James (Poole Town), Canford Magna (Merley) and St Mary's (Poole)

7.1.3.5. Tree works within cemeteries presents issues including restricted access and times when tree works cannot be undertaken. The presence of headstones which are both costly to repair or replace and can cause distress to relatives if they are damaged. The contractor will be liable for any damage caused during tree works operations.

7.1.4. **Woodland sites:**

7.1.4.1. Within the BCP conurbation there are several woodlands. They vary greatly in size and species make up. Some cover less than half a hectare, others are extensive.

7.1.4.2. Typical make up is mixed broadleaf and conifer which reflects the landscape history of the area. Others are predominately broadleaf or conifer. They are located throughout the area, some within urban areas with limited access. Others form elements within much larger sites such as golf courses and heathland.

7.1.4.3. The contractor will be expected to demonstrate that they have the specialism both in personnel and equipment be able to undertake both routine safety works, as well as woodland management such as thinning and extraction within these varied environments.

7.1.5. **Natural Habitats sites:**

7.1.5.1. BCP contains a number of internationally important heathland sites. Trees form a component of these sites, however due to their particular ecology tree numbers have to be controlled.

7.1.5.2. Due to their designations and the need to protect vulnerable habitats there will be restrictions on work methods.

8. Classification of Tree Sizes

8.1. The classification of trees and their sizes as referenced to in the Contract and the Schedule of Rates are to be based on the table (TCS) below:

Class Size	Girth	Height	Crown Spread	Designation
Cat 1S	300-600mm	0-5m	N/A	Standard
Cat 1P	300-600mm	0-5m	N/A	Plus
Cat 2S	600-900	0-7M	N/A	Standard
Cat 2P	600-900	0-7M	N/A	Plus
Cat2.1S	600-900	7M+	N/A	Standard
Cat2.1P	600-900	7M+	N/A	Plus
Cat3S	900-1200	0-7M	N/A	Standard
Cat3P	900-1200	0-7M	N/A	Plus
Cat3.1S	900-1200	7-15M	0-7M	Standard
Cat3.1P	900-1200	7-15M	0-7M	Plus
Cat3.2S	900-1200	15M+	7M +	Standard
Cat3.2P	900-1200	15M+	7M +	Plus
Cat4 S	1200-1500	0-7M	N/A	Standard
Cat4 P	1200-1500	0-7M	N/A	Plus
Cat4.1S	1200-1500	7-15M	0-10M	Standard
Cat4.1 P	1200-1500	7-15M	0-10M	Plus
Cat4.2S	1200-1500	7-15M	0-10M	Standard
Cat4.2 P	1200-1500	7-15M	0-10M	Plus
Cat5S	1500 +	0-10M	N/A	Standard
Cat5 P	1500 +	0-10M	N/A	Plus
Cat5.1 S	1500+	10-17M	0-7M	Standard
Cat5.1 P	1500+	10-17M	0-7M	Plus
Cat5.2 S	1500+	10-17M	7-15M	Standard
Cat5.2 P	1500+	10-17M	7-15M	Plus
Cat5.3 S	1500+	17M+	15M +	Standard
Cat5.3 P	1500+	17M+	15M +	Plus

Standard: any tree where there are no significant mitigating factors impacting on the works.

Plus: trees where additional factors impact on carrying out the tree works. These could include working on the Highway, within Cemeteries and where access is restricted such as Housing/PHP sites.

The Standard(S) & Plus(P) designation will be assigned to the tree by the Councils Arboricultural Officers.

Girth size measured in mm at 1.5m on the stem or above any pronounced swelling or protuberance. Crown spread measured in metres at the widest point from drip line to drip line

9. Service Delivery

9.1. Requirements

9.1.1. Next to each specification there is a reference to an item code e.g. ***D/F –Direct Fell***. This relates to a particular arboricultural operation, staff member or piece of machinery and will be used on work orders.

9.1.2. In the event that conditions or other factors imposed are so onerous for the contractor to carry out a specific SOR operation, (as this would cause a significant disadvantage), at the discretion of the Council Representative and in consultation with the contractor, a fixed price quotation may be asked for based on the Schedule of Day Work Rates submitted in Tender Response – Part C – Pricing Evaluation. Such exceptional circumstances may include extremely poor ground conditions and or where large volumes of timber need to be extracted from an area with no vehicular access.

9.2. Multi-stemmed trees

9.2.1. Each stem over 1000mm girth will be viewed as an individual tree. Stems which are less than 1000mm girth shall be removed as part of the overall specified rate. (See also section 9.23 COP- Coppice Stool).

9.3. Direct Fell - D/F

9.3.1. To be used where there is adequate space for the tree to be cut down in one piece. Whenever required it is the Contractor's responsibility to protect surfacing beneath the tree during felling. Utilising, for example, tyres or brush wood to reduce the likelihood of damage.

9.3.2. Felling will normally be carried out as close to ground level as reasonably practicable, except where the stump is likely to form a hazard, where upon the tree shall be felled to a height of 1.2m until stump removal takes place, (if required). The final cut will be level, even and free of protrusions which could cause injury or damage to persons or property.

9.4. Section Fell - S/F

9.4.1. To be used where there is insufficient space for the tree to be cut down in one piece or for other situations where it would be undesirable, unsafe or impracticable to direct fell.

9.4.2. The tree will be dismantled and wherever required sections will be lowered to the ground under control using industry approved techniques and equipment.

9.4.3. The most practicable and safe method of accessing the tree will be assessed in accordance with relevant industry and Health & Safety guidelines, with particular reference to The Working at Height Regulations 2005 (WAHR).

9.4.4. The stem will be cut down as close to ground level as reasonably practicable, except where the stump is likely to form a hazard, where upon the stump shall be left at a height of 1.2m until stump removal takes place. The final cut will be level, even and free of protrusions which could cause injury or damage to persons or property.

9.5. **Clear Wind throw Trees**

9.5.1. For the purposes of the contract a wind throw tree is defined as one that has moved from the vertical, lifting or destabilising its root plate in the process. This is recognised as, potentially, one of the most hazardous tree surgery operations.

9.5.2. The contractor must demonstrate that they have suitable trained staff and understand and employ the use of specialist techniques and equipment to deal with large windblown trees. Windblown trees may also be ‘hung up’ as well.

9.5.3. The contracted rate will normally be expected to deal with this eventuality.

9.5.4. In exceptional circumstances and at the client's discretion an additional allocation of hourly rate works may be awarded.

9.6. **Clear fallen tree**

9.6.1. For the purposes of the contract a fallen tree will include trees that have failed for any other reason than through wind throw.

9.7. **Hung Up tree**

9.7.1. A tree that has failed for any other reason than wind throw and has become lodged in an adjacent tree.

9.8. **Branch Removal - B/R**

9.8.1. This refers to the removal of individual selected branches within the crown of the tree which will be removed completely or reduced to a clearly specified point along its length.

9.8.2. The branches will be identified, normally by it’s compass orientation within the tree, an approximation of the diameter and the distance from ground level or position in relation to other fixed structures. If possible the branch will be marked with paint.

9.9. **Crown Lift (Pedestrian) - C/L-P**

9.9.1. The object of this work is to increase the distance between ground level and the lowest branch to comply with statutory height clearances above the footway and allow the safe passage of pedestrians in other situations. It will also be employed in other situations such as to create or reinstate site lines, vistas and clear adjacent objects.

9.9.2. Pruning will involve the removal of tertiary, secondary and only when required primary branches. Unless otherwise stated the crown will be lifted to a height of 2.5m although at times heights up to 3.5m may be specified. For heights above 3.5m C/L-V Crown Lift (Vehicular) will be used.

9.9.3. Unless otherwise stated the pruning to include the entire crown not just that which is above the footway or highway.

9.10. **Crown Lift (Vehicular) - C/l –V**

9.10.1. The object of this work is to increase the distance between ground level and the lowest branch to comply with statutory height clearances above the carriageway and allow the safe passage of vehicles in other situations. It will also be employed in other situations such as to create or reinstate site lines, vistas and clear adjacent objects.

9.10.2. Pruning will involve the removal of tertiary, secondary and only when required primary branches. Unless otherwise stated on major roads the crown will be lifted to a height of 5.5m although at times heights up to 6.5m may be specified across the carriage way. On minor roads the crown to be lifted to 5.2m at the centre line and 2.5 adjacent to the kerb.

9.10.3. Unless otherwise stated the pruning to include the entire crown not just that which is above the footway or highway.

9.11. **Crown Clean - C/C**

9.11.1. The removal of dead, diseased, dying, broken and crossing branches and poor pruning stubs.

9.12. **Crown Reduction (Localised) - C/R-L**

9.12.1. Trees are to be cut back to a specified overall distance from the object(s) obstructed. Localised crown reduction, e.g. reduction in length/ or removal of selected branches or spread of canopy will usually be on one side only and will be specified in metres.

9.13. **Crown Reduction (Total) - C/R- T**

9.13.1. Will involve the reduction in height and spread of the entire crown. Amounts will normally be specified by a percentage reduction i.e. 20% (1/5th of the crown). These works are to leave the crown in a natural, balanced and aesthetically pleasing condition.

9.13.2. The Contractor will take the opportunity to improve the shape and balance of the tree in keeping with its species and growth habit.

9.14. **Stump Grind (in Tarmac) - S/G -1**

9.14.1. Stumps shall be ground out or mechanically excavated to a minimum depth of 450mm and any surface roots larger than 50mm diameter shall be removed.

9.14.2. Under no circumstances will the arisings from grinding or mulch or tree bark be used for filling voids.

9.14.3. If replacement tree planting is not to take place immediately a tree stake is to be driven into the tree pit so that it does not present a trip hazard (see Appendix 2 - P003 Underground Services & Excavations Procedures).

9.14.4. Paved Areas: If replacement tree planting is not to take place immediately the hole shall be temporarily reinstated and remain the Contractors responsibility until permanent reinstatement is completed

9.14.5. Tree Pits: The hole shall be filled with imported compacted inert 20mm screened topsoil to within 40mm of the surface. This shall be completed with mulch in accordance with the appropriate specification and adjoining surface.

9.15. **Stump Grind (Turf or Border) - S/G -2**

9.15.1. Stumps shall be ground out or mechanically excavated to a minimum depth of 450mm and any surface roots larger than 50mm diameter shall be removed.

9.15.2. Under no circumstances will the arisings from grinding or mulch or tree bark be used for filling voids.

9.15.3. The hole shall be reinstated immediately to the following specification:

9.15.3.1. The hole shall be filled with imported and compacted inert 20mm screened topsoil to within 60mm of the surface.

9.15.3.2. This shall be completed to surface level with turf or mulch appropriate to the adjoining surface.

9.16. **Re-Pollard (Existing) - PO – E**

9.16.1. The removal of all crown re-growth from trees which are currently, and within accepted time scales for their species, managed as pollards back to but not beyond the previous pruning points.

9.16.2. This will typically, **but not exclusively**, relate to existing pollarded street trees such as Lime(Tilia), London Plane (Platanus) and Maple (Acer) pollarded on a five – seven year cycle.

9.16.3. Works must only be undertaken during the accepted season for pollard works (December – February).

9.17. **Decay & Defects Detection Report**

9.17.1. The Contractor will provide a report using an industry recognised equipment such as the PICUS.

9.17.2. The machine must be capable of testing for both decay and internal cracks and the report available in electronic form and hard copy if requested.

9.18. **Aerial Inspection - A/I**

9.18.1. The Contractor may be required to undertake aerial inspections on specified trees as directed by the Council's Representative. A written report shall be completed by the Contractor and submitted to the Supervising Officer.

9.18.2. The report will be based on an agreed template, which may be supplied in written or electronic versions as agreed with the Council's Representative. The report will be supplemented with photographs taken from the ground and from within the tree as specified by the Council's Representative.

9.18.3. The aerial inspection will be undertaken by an employee of the Contractor with a minimum arboricultural qualification of level 3 as defined by the Arboricultural Association www.trees.org.uk/Careers/Studying-Arboricultural/Qalifications and a minimum of 5 years practical experience as an arboriculturist.

9.19. **Dead Wood - D/W**

9.19.1. Unless otherwise specified by the supervising officer the Contractor will remove all dead and diseased branches with a diameter of 50mm (at any point in its length) or above, or over 1metre in length whichever is the greater.

9.20. **Dead Wood (Habitat Creation) - D/W – H**

9.20.1. In certain sites and locations it is not necessary or desirable to remove all dead wood. The intention will be to retain it where it is safe to do so and in other cases reduce in length rather than remove sturdy dead branches so that they are unlikely to break out.

9.20.2. Coronet pruning (pruning designed to replicate natural breakage that creates opportunities for colonisation by fungi and habitat for insects, birds and mammals) will be employed.

9.20.3. As a rule on sites or parts of sites maintained with a conservation bias, deadwood will only be removed over well used paths, entrances, car parks and congregation areas. This may involve removing and/or reducing dead branches on one side of a tree. Instructions will normally be accompanied by a plan showing what areas of the site require this type of dead wooding.

9.21. **Reduce tree to 3-4m habitat pole with side branching - H/P-1**

9.21.1. Where instructed to do so by the Council's representative the Contractor will reduce a tree (normally dead or dying but not exclusively) to a height of 3-4m any side branching to be reduced to approx. 1m in length. Coronet pruning (see D/W –H) to be employed for all end cuts. Climbing irons may be used for this operation.

9.22. **Reduce tree to 3-4m habitat pole no side branching - H/P-2**

9.22.1. Where instructed to do so by the Council's Representative the Contractor will reduce a tree (normally dead or dying but not exclusively) to a height of 3-4m and remove all branching.

9.22.2. Coronet pruning (see D/W –H) to be employed for all end cuts. Climbing irons may be used for this operation.

9.23. **Multi stemmed coppice stool – COP**

9.23.1. This will relate to multi-stemmed trees with a stem diameter 1000mm or less and a maximum height of 10m.

9.23.2. Coppicing will mean the cutting of all stems back to the height of the coppice stool and the removal of any incidental growth unless otherwise instructed by the Council's Representative.

10. Arisings

10.1. All arisings to include timber and chip remain the property of BCP Council unless otherwise stated on a work order or other written form of communication. In that instance the Contractor is free to dispose of or make use of the timber or chip providing it complies with all current waste disposal regulations and any additional BCP policies. Removal and disposal are at the Contractor's own cost.

10.2. Timber < 200mm in diameter- most timber arisings from tree surgery operations of this size is to be chipped and either utilised in situ or taken to another location as instructed. Chip utilised in situ is to be spread evenly and must not be left in deep piles.

10.3. Timber > 200mm in diameter – most timber arisings from tree surgery operations of this size and above will be converted into bio-mass fuel for use in the Councils bio-mass boilers.

10.4. This timber will normally include all softwood and lower grade hardwoods. It will be, wherever practicable, converted into 2m lengths and transported to a timber store provided by BCP Council (currently Queens Park). The Contractor will manage the timber store in a safe manner and ensure the timer is stacked and stored to maximise drying and ease of handling.

10.5. There will be occasion when trees such as mature Cedar, Oak, Scots Pine and other species that provide high quality timber will need to be felled. As a Council we intend to process these to increase the value and make use of the timber. There will be an opportunity for the Contractor to provide a processing service if they have such a facility.

10.6. When timber is to be treated as per 10.5 specific written instruction will be issued to the contractor detailing how the tree is to be felled, the timber handled both pre and post conversion.

11. Performance Management

11.1. Operational Management meetings will be arranged with the Contractor to monitor and assess compliance with the requirements of the Contract. These meetings will be arranged at monthly intervals during the life of the contract.

11.2. The contract will be subject to monitoring, against Key Performance Indicators (KPIs). Performance Review meetings will be arranged with the Contractor to monitor and assess their performance against the KPIs stated at 11.3. These meetings will be arranged at quarterly intervals during the life of the contract.

11.3. Key Performance Indicators (KPIs) include the below (although not exhaustive):

11.3.1. 75% of work orders carried out within the 'complete by date'

11.3.2. Emergency response performance:

11.3.2.1. on 95% of occasions (initial attendance on site to assess within prescribed time scale see 6.1.2.)

11.3.2.2. on 95% of occasions (after assessment within prescribed time scale see 6.1.3) attendance on site with necessary resources.

11.3.3. 10% year on year usage of electric vehicles, plant and machinery or alternative fuel vehicles.

11.3.4. Less than 5% of waste to go to landfill.

11.4. Any amendments to these KPIs during the term of the contract will be subject to review and amendment as agreed by both parties.

12. Tree Management Software

12.1. BCP Council uses Tree Management Software to assist with the management of its' trees. It is utilised in all aspects of managing the Councils' tree stock and will also be used to manage other aspects of this contract, including the issuing of arboricultural additional works orders. The Contractor will be required to fully engage with this process.

12.2. The successful Contractor will be required to equip, at the Contractor's cost, their Office and any teams employed on the arboricultural contract with the hardware and software necessary to fully engage with this system. This includes an Android tablet per team and a user licence per team. Currently, the user licence costs c. £500.00 plus VAT per annum and c. £20.00 plus VAT per month for mobile data.

13. Health & Safety

13.1. Arboriculture is a potentially dangerous occupation. Safe working practices are essential, and the levels of safety and efficiency for undertaking works will be constantly reviewed, to include, but not limited to risk assessment, Health and Safety monitoring, Self-Auditing, statutory inspections and use of Mobile Elevated Work Platforms (MEWP) to undertake certain tasks where possible.

13.2. The successful Contractor will have MEWP's as an integral part of the teams assigned to the contract and will employ them when appropriate.

13.3. Use of the MEWP will not attract additional payment and must be included in the quoted price for both schedule of rates and hourly rates.

13.4. Rope and harness access remains an integral part of tree surgery and will continue to constitute a major element of this contract.

14. Sustainable Working Practices

14.1. The Contractor will show how they as a company are committed to sustainable working. Where practicable, BCP Council are adopting electric powered machinery and vehicles as alternatives to those requiring fossil fuels.

14.2. The Contractor will be expected to have an established sustainable working policy, typically using electric chainsaws and other power tools when possible. If your company is not currently incorporating electric alternatives into their vehicle fleet, plans should be in place to move towards this.

14.3. In addition, the Contractor should demonstrate how their company stays abreast of the development of green initiatives and how their company will incorporate further low carbon working alternatives as technology in this field progresses over the life of the contract.