

Enfield Tree Maintenance Contract

APPENDIX 2

Current Specification

ANNEX B

SPECIFICATION

G1. INTRODUCTION (PRELIMINARIES)

G1.1 The Council is endeavouring to build on its high reputation for its standard of Tree Maintenance; consequently this *contract* has enhanced the previous maintenance regimes and the *Contractor* is required to execute the works described in this *Specification* in accordance with the best arboricultural practice and to maintain vigorous standards of cleanliness and tidiness.

Providing the Service required under the *contract* shall include but not limited to:

- a) regular maintenance of trees within the borough and housing sites
- b) Planting of new and replacement trees
- c) Felling and Grinding
- d) Surveying works
- e) 24 hrs emergency call out service
- f) Root Pruning
- g) Various other related tree maintenance works as requested by the *Authorised Officer*.

The *Contractor* shall, in Providing the Service, assist the *Authority* to uphold its values and support its vision.

Enfield Values

- *One Team* – Working together across teams, departments and partners to deliver the best possible services for Enfield's residents.
- *Customer First* – Treating the community, colleagues and partners with fairness and respect, listening and responding to their needs and designing our services around the people we serve.
- *Achieving Excellence* – Consistently striving to deliver standards of excellence through ambition, creativity, innovation, pride in our achievements and a 'can-do' attitude to new challenges.
- *Empowering People* – Enabling our staff and the local community to make informed choices and giving our staff the skills, knowledge and confidence to improve services, take personal responsibility, accept risk and recognise success.

Enfield Vision

Our vision is to make Enfield a better place to live and work, delivering fairness for all, growth and sustainability and strong communities. Underpinning this commitment we have a number of priorities, the delivery of which will contribute to improving the quality of life for all residents in the borough.

Other aims and objectives as may be notified to the *Contractor* by the *Authorised Officer*, from time to time. The *Contractor's* contribution to these objectives will be measured through the Key Performance Indicators contained in the Incentive Schedule.

The service areas included in this contract and a brief description of the management requirements for each site are listed below :

Highways

The Council's responsibility, as the Highway Authority, is to maintain the public highway to a condition fit for traffic and pedestrians that might ordinarily be expected to use it.

There are an estimated 25000 trees situated within the street scene in Enfield. All are subject to cyclical pruning and pollarding programmes.

Highway trees have an established inspection and maintenance regime, which programmes the inspection of Lime trees, Plane trees and Silver and Sugar Maples on a three yearly cycle, and all other species on a 4 yearly cycle.

It may be necessary on occasions to provide pruning attention out of cycle however this will be subject to specific concerns that will be identified and agreed by the Council's Arboricultural team.

Car Parks

Car Parks contain trees with less demanding work requirements. Works to trees in these sites will be restricted to Risk Management and clearance of growth obstructing sight lines, vehicle and pedestrian passage, and adjacent utilities. All Environment Car Parks are surveyed at the same cycle as the adjacent road they are entered from.

Tree works within Car Parks, are currently and will continue to be undertaken by the in-house manual workforce or Direct Labour Organisation (DLO).

On occasions additional support may be required by the *Contractor* using the specifications terms and conditions contained within this contract.

Parks and Open Spaces, Cemeteries and Allotments

The largest proportion of Enfield's trees, estimated at approximately 60,000, are located within parks, open spaces, cemeteries and allotments.

Tree works within Parks, Open Spaces, and Allotments, are currently and will continue to be undertaken by the DLO.

Tree works within Cemeteries are currently and will continue to be undertaken by either the Cemetery term groundwork's *Contractor* or by the DLO.

On occasions additional support for all sites may be required by the *Contractor* using the specifications terms and conditions contained within this *Contract*.

Housing

Enfield Housing has approximately 12,000 trees. These are located predominantly within communal areas. The remainder of the trees are located within the front and rear gardens of individual properties

Enfield Housing also manages *Sites* located outside of the London Borough of Enfield in Broxbourne, and Potters Bar. The Contractor will be required as instructed to carry out works on these *Sites*.

Enfield Housing does not currently operate a cyclical programme of works. However, it is intended that a cyclical programme will be introduced. It is intended that all the trees within communal areas will surveyed on a two year cycle and all trees within gardens will surveyed be on a 3 year cycle.

Other Sites

All tree related works are managed within their own service areas with works being commissioned on a need to do basis.

Works within these areas may be carried out by the Parks' in-house DLO, or by the *Contractor* using the specifications terms and conditions contained within this *Contract*.

G1.2 While Providing the Service, the *Contractor* shall

- (i) protect the safety of users, workers or other persons;
- (ii) maintain the condition of trees managed by the Authority, in accordance with the *Authority's* Corporate Tree Strategy, in such a way that it does not constitute a danger to the public;
- (iii) provide a high quality service to the users of the Borough;
- (iv) assist the *Authorised Officer*, other representatives of the *Authority*, and Others with statutory duties or functions in relation to the site works or other works in adjoining roads, to perform those duties and functions unimpaired;
- (v) minimise delay to users of the *Sites* and of adjoining roads or facilities;
- (vi) minimise the risk of adverse effects on the environment and on the amenity enjoyed by the owners and occupiers on land adjacent to the *Sites* and to adjoining roads and facilities;
- (vii) ensure that all accidents and emergencies are responded to in a timely manner and their adverse effects minimised; detailed records kept and action taken to reduce their re-occurrence; provide detail record sheets to the *Authorised Officer*, **see G23**.

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- (viii) minimise the risk of damage or disturbance to or destruction of third party property;
- (ix) ensure that members of the public are treated with due courtesy and consideration;
- (x) ensure that users of the *Sites* are given adequate information and are forewarned of any events on, or any matters affecting, the *Sites* to enable them to minimise any adverse consequences upon them of those events or matters;
- (xi) ensure that members of the public and Others are given adequate opportunity to bring to the attention of the *Contractor* any matters affecting the ability of the *Contractor* to meet these objectives;
- (xii) ensure that all data that he compiles, relating to the operation and maintenance of the tree works is passed to the *Authorised Officer*;
- (xiii) ensure that the Borough Tree Stock is maintained to the highest standard that can reasonably be expected and that is appropriate to its character and is permitted by available budget;
- (xiv) Dispose of all waste generated by their operations under this contract safely, with due consideration for the environment and in accordance with legislation; see also statement required on recycling, **G17.2**.
- (xvi) Leaving all maintenance and landscaped sites in a clean and tidy condition at each visit.

G1.3 The Normally Permitted Working Hours shall be:

- (i) Monday to Friday 08.00 to 18:00
- (ii) Saturday 08:00 to 13:00
- (iii) No working will normally be permitted on Sundays and Public Holidays

Any works undertaken outside these times will require the *Authorised Officer* or their representative's prior approval. Noise abatement provisions apply.

G2. MOBILISATION

G2.1 The *Contractor* shall commence Mobilisation, as soon as is reasonably practicable after receiving notification from the *Authority* that they are to be appointed, to ensure that they are fully ready and able to Provide the Service from the *Commencement Date*. The activities undertaken during Mobilisation shall include:

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- establishing and testing all internal and external communication facilities and systems;
- establishing electronic links with the Authority's database system. The Authority currently use Ezytreev, but given the adaptations in technology, this may change during the *Contract Period*.
- establishing electronic links with the Council's traffic noticing and permitting system to allow the *Contractor* to raise permits and traffic orders/notifications.
- establishing electronic links for a hosted web page or secure file hosting service to be used by Council officers.
- establishing all administrative systems;
- preparing accommodation and Equipment for the *Contractor*
- developing a working relationship with the *Authorised Officer* and their staff;
- becoming familiar with the *Sites* and all interfaces and boundaries;
- appraising the tasks carried out by the outgoing service providers and identifying any tasks required by the *Authority*, which have not been carried out by previous service providers;
- taking all reasonable steps to obtain from the outgoing service providers and the *Authorised Officer* all records, programmes and other information necessary or required for the carrying out of his duties under this contract;
- identifying where these records, programmes and other information are incomplete or missing and makes recommendations to the *Authorised Officer* regarding actions necessary to complete them;
- liaising, as appropriate, with the outgoing service providers or any Others to ensure that the transitional arrangements operate smoothly;
- becoming familiar with any residual duties to be performed by the outgoing service providers and any ongoing work being performed within the borough and advising the *Authorised Officer* as appropriate;
- developing, finalising and submitting a first operational edition of the *Contractors Plan*.
- all Key Performance Indicators and their targets will be reviewed in the Strategic Board meetings Quarterly following the six-month settling down period at the start of the contract.

G3. GENERAL MANAGEMENT

G3.1 The *Contractor shall* consult and liaise all relevant statutory bodies and other authorities who may be affected by their delivery of the service to ascertain their requirements or advice on relevant matters in connection with works affected within the borough. The *Contractor's* particular attention is drawn to the list contained in (Appendix C Statutory Bodies and other Affected Organisation) to this Specification. The *Contractor shall* report upon such consultation to the *Authorised Officer* and shall provide him with advice and recommendations, whenever required, regarding the requirements of all such bodies and authorities. The *Contractor shall* advise the *Authorised Officer*, through information included in their *Contractors Plan*, how he proposes to comply with the requirements of these bodies and authorities, which affect or may affect the service.

G3.2 The *Contractor shall* liaise with the *Authorised Officer* and the police in relation to all fatal and other major accidents and co-operate with police or other investigations into the cause of such accidents.

G3.3 The *Contractor shall* attend all meetings convened by the *Authorised Officer* and Others relating to the management, operation and maintenance of the Contract and the obligations of the *Contractor*. The *Contractor shall*, so far as he is reasonably able, ensure his appropriate representation at meetings with the *Authority*, *Authorised Officer*, or others on matters related to his Provision of the Service. In this context, "appropriate representation" shall be attendance by members of his staff with the requisite level of authority, competence and level of involvement in the contract to be able to contribute effectively to the meeting objective. Where his regular representative is unavailable to attend any meeting the *Contractor shall* ensure that a suitably briefed and competent deputy, of similar seniority, attends. Only in exceptional circumstances will complete non-attendance by the *Contractor* be considered as acceptable. The frequency, dates and venues of all meetings *shall* be set by the *Authorised Officer*, in consultation with the *Contractor*. The *Contractor's* attendance at meetings is expected to include, though not necessarily limited to those listed below:

Meeting Type	Anticipated Frequency	Core attendees
Strategic Board Meetings	Quarterly throughout the contract	<p><u>Authority</u> <i>Authorised Officer</i>, supervisory staff and client representatives</p> <p><u>Contractor</u> <i>Contract Manager</i> and <i>Contractor's</i> supervisory staff</p>
Contract/Performance Meetings	Monthly throughout the contract	<p><u>Authority</u> <i>Authorised Officer</i>, supervisory staff and client representatives</p> <p><u>Contractor</u> <i>Contract Manager</i> and</p>

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		<i>Contractor's</i> supervisory staff
Coordination Meetings	As agreed between the <i>Authorised Officer</i> and the <i>Contract Manager</i>	<p><u>Authority</u> <i>Authorised Officer</i>, supervisory staff and client representatives</p> <p><u>Contractor</u> <i>Contract Manager</i> and <i>Contractor's</i> supervisory staff</p>

The agenda for the meeting are expected to include, but not necessarily be limited to the following issues:

Strategic Board Meetings

1. The general state of the relationship between the Parties;
2. Setting and Reviewing Key Performance Indicators
3. The *Contractor's* overall performance against the Key Performance Indicators (quarterly and annual reviews);
4. Needs for sharing training and joint workshops
5. Innovation opportunities.

Contract/Performance Meetings

- The general state of the relationship between the Parties;
- The *Contractor's* performance against the Key Performance Indicators (monthly review);
- Additions, deletions and feature changes to contract
 - Budget adjustments
 - Resourcing implications
- Health, Safety and Welfare issues;
- Risk Register Issues;
- Current spending, against budgets;
- Potential innovations, continuous improvements, to be referred to the Strategic Board
- Needs for shared training and joint workshops;

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- Confirmation of progress with current *Purchase Orders*;
- Operational issues arising.
- Environmental issues, recycling, handling and reduction of waste.
- The latest revision of the *Contractor's Plan for the Service*;
 - Traffic Management Act Network Management Duty;
 - Strategic Road Network;
 - NRSWA Notices; (New Roads and Street Works Act)
 - Co-ordination of all works programmes.

G3.4 The *Contractor shall* provide, maintain and operate appropriate facilities and systems for:

- the management of information and records relating to the Borough's Tree Stock;
- the management of information and records relating to traffic noticing and permitting;
- the management of a web page for use by Enfield Tree Officers to access specific information i.e. New tree planting aftercare attendance dates.
- assisting the *Authorised Officer* in decision-making relating to programmes of work for maintenance and improvement of the borough;
- receiving and transmitting communications, information, records and data from and to the *Authorised Officer*
- the operation of management information systems, which are part of the information technology owned and/or used by the *Authority*.

G3.5 The Contractor shall use the hosted EZYTREEV tree data base management system as detailed in (Appendix D – The Authority's System, Standards and Procedures) **Tree Database Management**.

G3.6 The *Contractor shall*, be compliant with the New Roads and Street Works Act 1991 and Traffic Management Act 2004, and be responsible for arranging Traffic Notices and Permits for all works where required, as detailed in (Appendix D – The Authority's System, Standards and Procedures) **Traffic Noticing and Permitting**.

G3.7 The *Contractor shall* provide a facility to allow the *Authority* to download information and documents directly related to the Contract to be accessed by the *Authorised Officer* i.e. New Tree Planting aftercare dates, Risk Assessments, KPI's,

and *Contractors Plan*, etc. as detailed in (Appendix D – The Authority’s System, Standards and Procedures) **Electronic Information Access**.

G3.8 The *Contractor shall* establish liaison procedures and arrange regular meetings with the *Authorised Officer* or members of the *Authority’s* staff to assist and enable the *Authority* to achieve their environmental strategic aims and objectives and to minimise the risk of adverse effects on the environment.

G4. Demobilisation

G4.1 The *Contractor shall* commence demobilisation, as soon as the *Authorised Officer* confirms, in writing, the date of the end of the *contract period* for this contract. The activities undertaken during Demobilisation shall include:

- delivering to the *Authorised Officer* (the extent and format of which shall be as he reasonably requires) all operational records, collected data, calculations and results of all analyses produced by the *Contractor* in connection with the surveys and other investigations and enquiries related to the contract;
- providing all necessary facilities, advice and assistance to enable the incoming service provider to perform their duties equivalent to the *Contractor’s* Mobilisation duties;
- handing back all materials and equipment, provided by the *Authority*, in good order at the end of the *contract period*;
- transferring all digital information that is accumulated during the *contract period* to the *Authorised Officer*, other than the *Contractor’s* commercially confidential digital information;
- preparing and submitting to the *Authorised Officer*, no later than three months before the end of the *contract period*, a report on all outstanding defects and work in progress and identifying *Purchase Order* work that the *Contractor* expects to be completed after the end of the *contract period*.

G5. ASSET MANAGEMENT

G5.1 The *Contractor shall*, during Mobilisation and throughout the contract period, assist the *Authorised Officer* in establishing, developing, improving and keeping updated all inventories and records that will form part of the *Authority’s* asset information database including the Highway Information Asset Management Plan (HIAMP). The *Authorised Officer* may, or may not, instruct or allow the *Contractor* to undertake specific asset data collection services as a part of this contract. If such services are commissioned a separate *Purchase Order* under this contract will be raised.

G5.2 The *Contractor shall* retain all asset data information that he collects, or is provided with by the *Authorised Officer*, in good order for the duration of this contract in such form as to be capable of audit (including electronic means) by the *Authorised Officer* and *shall* be compatible, where appropriate, with the *Authority’s* systems as

described in Appendix D to this *Specification*. The *Contractor shall* make such records available for inspection by the *Authorised Officer* at all reasonable times. The *Contractor shall* provide copies of any records as requested by the *Authorised Officer*. Whenever records are created or maintained on a computer or other electronic storage device, the *Contractor shall* back up such records using a suitable procedure accepted by the *Authorised Officer*.

G5.3 All or any of the works within any affected site within the London Borough of Enfield as required by the *Authorised Officer*. All site locations *shall* be provided as part of a Monthly or Quarterly program subject to the *Contractors* current commitments within the Contract.

G5.4 The current asset data information is available via EZYTREEV.

G6. ACCESS

G6.1 To gain access to locations and areas the *Contractor* may use only those access points and gateways currently available, although the Council would welcome recommendations for alterations. This would comply with the Councils continuous improvement ethos. It is the *Contractors* responsibility to acquaint themselves with each area.

G6.2 The *Authority* may at times restrict or prohibit the use by the *Contractor* of vehicular access points to, or roads within, the locations if this is considered by the Council to be necessary or desirable.

G6.3 The *Contractor shall* ensure that any vehicles or plant used within the locations in the performance of the *Contract shall* be in compliance with all traffic regulations, highway laws and the highway authority, driven in a safe and courteous manner, having due regard to other users, the safety, convenience and well-being of the general public and Council staff.

G6.4 The *Contractor's* work programme *shall* be organised to ensure the minimum disruption to traffic flow, and the *Contractor shall* discuss any potential site difficulties in advance with the *Authority*. The *Contractor shall* be responsible for liaising with the appropriate traffic authorities when traffic/access problems are foreseen. Within partnership working the *Authorised Officer* can be consulted. Any Damaged caused by *Contractor's* vehicles, will be repaired at *Contractor's* costs.

G6.5 The Contractor should also minimise disruption to pedestrian flow whenever possible, and in particular in communal Housing areas, and other areas of high pedestrian flow such as town centres and areas adjacent to schools.

G6.6 The *Contractor* must not park their vehicles on the footway, verge, or other soft landscaping areas as this can result in considerable damage (and causes inconvenience to pedestrians). *Contractors* occasionally feel that it is better to park on the footway to avoid causing disruption to traffic but the instruction is not to do this and risk being fined, which would not be reclaimable.

G6.7 The *Contractor shall* be permitted to attach signs to tree stems in accordance with G10. Some areas may need signs requesting no parking to allow works to be carried out so that vehicles or other highway traffic do not obstruct the working area. This will be the *Contractor's* responsibility, but failure to provide a clear working area will not be a reason for delaying works. The *Contractor* should make all necessary arrangements to ensure that areas of work are accessible using all appropriate methods. The *Contractor* will also follow the latest recommendations of the Traffic Signs Manual Chapter 8 when carrying out works in proximity of the Highway and these will be approved by the *Authorised Officer* or representative.

G7.0 HEALTH AND SAFETY (ENVIRONMENTAL PROTECTION)

G7.1 The *Contractor shall* at all times adopt working practices that will safeguard the environment from pollution, noise or other injurious hazards.

G7.2 No fuel oils, petrol cans, pesticides or any other potentially hazardous equipment or materials shall be left unattended unless in secure storage approved by the *Authorised Officer*. Any machinery unattended and not in store *shall* be left in a safe and secure manner and rendered incapable of being activated by an unauthorised person.

G7.3 The Council reserves the right to make spot checks on machinery, equipment and materials being used in the execution of this contract. If at any time the *Authority* is of the opinion that an item of machinery, equipment and materials is unsafe, unfit for its purpose, or in such a condition to be detrimental to Enfield Council's good name, the *Contractor shall* withdraw that item from use until such time as the defect or defects have been made good. See also G9.2.

G7.4 The *Contractor shall* be responsible for all consequences of pollution, noise and other injurious hazards that may arise out of or in the course of or by the carrying out of the Contract unless due to the act or neglect of the Council or of any person for whom the Council is responsible.

G8 REPORTS AND DOCUMENTS

G8.1 The *Contractor shall* complete and submit to the *Authority* such reports or documentation required by the Council in the execution of the contract.

G8.2 The *Contractor shall* supply prior to the commencement of the contract generalised Risk Assessments and Method Statements for the types of works listed below.

- Pruning of Forest type trees.
- Pruning of Ornamental Trees.
- Root Pruning.
- Trench Excavation.
- Tree Planting.
- Felling.
- Grinding.
- Stemming.
- Tree works on Borough Roads.

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- Tree works on Principal Roads.
- Emergency Callout Tree works day time.
- Emergency Callout Tree works night time.
- All other Trees off the Highway (Housing, Education, Parks etc.)

All other situations that require Risk assessments and Method statements shall be site specific and therefore shall be supplied by the *Contractor* when requested by the *Authorised Officer*.

G9. CORPORATE IMAGE AND SIGNBOARDS

G9.1 The *Contractor shall* ensure all staff engaged on sites around the Borough are respectfully dressed. It is the responsibility of the *Contractor* to ensure that all staff have appropriate summer and winter personal protective clothing, in line with internal risk assessments and codes of practice.

G9.2 Corporate Image – The *Contractor* is to provide all staff working in the borough with high visibility clothing with the *Contractors* name and company logo clearly shown on all items of clothing with the words '*working for Enfield Council*'. All Vehicles, Plant and equipment of sufficient size to have displayed the same message, this could be via magnetic means. The message will also have the *Contractors* main office contact phone number added to them.

G9.3 The *Contractor shall* issue identity photo cards to all employed or subcontractor to carry out works as specified within this *Contract* including details as G9.2.

G10 NOTIFICATION SIGNS / INFORMATION BOARDS

G10.1 The *Contractor shall* be permitted to attach signs notifying residents of intended works to tree stems. These signs will be of re-usable type with dates and times that can be altered by either wiping with a damp cloth or by slotting templates into a retainable slot. Signs *shall* be of non weather able material i.e. Plastic/Metal that will not deteriorate during poor weather conditions.

G10.2 The *Contractor shall* at no time be permitted to attach signs to any other structure/object/property situated in the road or near the tree to receive attention, only to the tree that works are intended.

G10.3 Signs *shall* only be attached to Tree Stems and only with string or rope of a degradable type i.e. Manila. At no time *shall* a sign be attached by any other means that may result in damage to the Tree. Cable Ties and Nails *shall* not be permitted at any time.

G10.4 Dates *shall* be specified on the signs of the intended date that works are programmed, if this date cannot be met for whatever reason the signs *shall* to be removed or the Dates changed before the end of the business day specified by the sign attached to the tree.

G10.5 The *Contractors* details i.e. name of company and contact Telephone number *shall* be clearly displayed on any sign. The sign *shall* also stipulate clearly in bold block letters that Tree Pruning Works are intended and requesting that no vehicles park within an agreed area of the Tree that works are intended on the Date specified.

G10.6 Wording for the signs is to be agreed with the *Authorised Officer* prior to commencing of the Contract. No signs *shall* be permitted if the wording has not been previously agreed and confirmed in writing by the *Authorised Officer*.

G10.7 On completion of works the sign *shall* be removed from site taking care not to leave any material used in attaching the sign.

G10.8 Each location, site should be left in a clean safe and tidy condition

G10.9 The *Contractor shall* supply, erect, maintain, and remove 'A' frame information boards to comply with G12 Public Safety and Traffic Management. The information boards shall be erected at each end of the works prior and shall indicate that Tree works are being carried out by the *Contractor* on behalf of the Authority. Details to be agreed during Mobilisation.

G11. CUSTOMER SERVICES AND PUBLIC LIAISON

G11.1 The *Contractor* shall provide any information that is needed to enable the *Authorised Officer* to prepare statements or responses to questions or issues raised by or on behalf of any public organisation (including the United Kingdom parliament, any local authority or any member or representatives of the foregoing), within any time periods which may be imposed by the *Authorised Officer* (acting reasonably having regard to the purpose of the provision, nature and extent of the information requested) unless it is impossible for the *Contractor* to do so, in which case the *Contractor* forthwith gives notice to the *Authorised Officer* setting out in full the reasons.

G11.2 Where such questions or issues are raised with, or addressed to the *Contractor* shall not communicate directly with such public organisations in respect thereof without having obtained the prior written approval from the *Authorised Officer* of the form and terms of its communications save to the extent that it is legally required to do otherwise.

G11.3 The *Contractor* shall provide the *Authorised Officer* with the information necessary for the operation of the *Authority's* information service specifically including, but not limited to, details of proposed lane closures and traffic safety and management measures.

G11.4 Where instructed to do so by the *Authorised Officer*, the *Contractor* shall arrange for signs to be erected to inform users of planned road closures and or lane closures at least 28 days before implementation, giving the times and dates of the closure, to enable users to choose an alternative route.

G11.5 The *Contractor* shall make recommendations to the *Authorised Officer* on publicity arrangements for any work on the Affected Property / Asset and when requested by the *Authorised Officer*, the *Contractor* shall prepare draft circular letters advising local residents of works that will affect them and shall submit such letters, with addresses, to the *Authorised Officer* for approval. The *Contractor* shall deliver circular letters when requested by the *Authorised Officer* and shall inform relevant authorities affected by any work.

G12. PUBLIC SAFETY AND TRAFFIC MANAGEMENT

The *Contractor* will submit notices of works on the Highway to the Council's Street Works Register which will also be in compliance with the New Roads and Street Works Act 1991 (NRSWA) and Traffic Management Act 2004 and as amended from time to time.

G12.1 The *Contractor* will provide advance notices and be compliant with relevant current legislation when planning and undertaking works on any part of the highway open to the public; the *Contractor* shall carefully consider the varying needs of all highway users. The *Contractor* shall take full account of the recommendations contained in the following whenever Providing the Service:

"Traffic Signs Manual - Chapter 8 Traffic Safety Measures and Signs for Road Works and Temporary Situations" as revised 20 June 2009, or any subsequent revisions: published by the Stationery Office; The Traffic Signs Manual is now in two parts - Part 1 Design and Part 2 Operation, and is available in hard copy format and electronically.

It can be accessed via the DFT website <http://www.dft.gov.uk>

(1) Interpretation of Terms Used in "Chapter 8"

- The interpretation of the term 'Working Area' in Chapter 8 shall be the same as "Site" as defined in Clause 1.1.33 of the Standard Conditions of Contract for Services.
- 'Works Traffic' shall mean vehicles and Equipment that are required to Provide the Service within each Site.

G12.2 When planning temporary traffic management and safety measures the *Contractor shall* take into account any particular requirements contained in any communication from, or instruction issued by, the *Authorised Officer*.

G12.3 Where the works meet the criteria for a registered activity under the London Permit Scheme the *Contractor* is to submit a notice or permit application to the Street Works Register for approval for a permit to be issued. The following information will be required to be submitted to the Local Authority's NRSWA Team with the appropriate advance notice periods as determined in the London Permit Scheme :-

- Traffic Management Details

- Work Commencement dates
- Estimated duration
- Site Location
- Contact details of *Contractor*
- Description of works

G12.4 Methods of making Permit applications must be made electronically using the EToN system (please refer to Appendix D). If the system is not functioning, a permit application must still be made by alternative means such i.e. by fax, post or hand delivery and must comply with the requirements set out in the Technical Specification for EToN.

G12.5 The *Contractor* shall, during Mobilisation and at regular intervals throughout the *contract period* and as far as is reasonably practicable, consult with the *Authorised Officer*, the *Authority's* Environmental Protection & Safety Team, the Metropolitan Police, and any Others that he is likely to affect in Providing the Service, regarding their temporary traffic management and safety proposals. The *Contractor shall*, if instructed to make changes to their proposals as a result of the above consultations by the *Authorised Officer*, submit revised proposals within the timescale permitted by the *Authorised Officer*. Thereafter the *Contractor shall* furnish such details and information as may be reasonably requested by the *Authorised Officer*. The *Contractor shall* also undertake separate, similar, consultations prior to the start of major works, when instructed to do so by the *Authorised Officer*, and shall furnish such details and information as may be reasonably requested by the *Authorised Officer*. Such information shall include, but not necessarily limited to:

- (i) The planned phasing of the Works;
- (ii) Working Drawings showing traffic management layout proposals, including:
 - a. Proposed positioning of temporary traffic signals
 - b. Proposed width of lanes
 - c. Proposed working areas
 - d. Proposed safety zones
 - e. Proposals for maintaining access to commercial and private frontages
 - f. Proposed wording and locations of Information Boards
- (iii) The planned timing of operations;
- (iv) Restrictions on working methods arising from the use of substances hazardous to health.

G12.6 The *Contractor shall*, unless otherwise permitted by the *Authorised Officer*, provide, erect, maintain, reposition, cover and uncover and finally promptly remove all pedestrian and vehicular temporary traffic management and safety measures as required as part of Providing the Service. Where the circumstances of any particular situation are not covered by the recommendations or described in the guidance referred to in sub-Clause G12.1, the *Contractor shall* submit proposals for dealing with that situation to the *Authorised Officer*.

G12.7 The *Contractor shall* keep traffic signs clean, secure and legible and ensure that all signs required to be lit, whether by external or internal lighting, are so lit during periods when road vehicles are required to display lights.

G12.8 Except where this contract provides the *Contractor shall* not change in any manner any permanent or temporary traffic signs without an explicit instruction to do so from the *Authorised Officer*. In such situations the *Contractor* will be given written notice, to indicate when, and how, such signs are to be moved.

G12.9 All temporary traffic management and safety measures made necessary by work forming part of the *service shall* be fully operational before the *Contractor* commences any work which affects the highway or the public's use of it.

G12.10 Any area of highway which has been closed because of work forming part of the *service shall* not be re-opened until all appropriate temporary traffic management and safety measures have been completed and the highway is in a suitable condition for public use.

G12.11 Where work forming part of the *service* is carried out on, or adjacent to, a highway open to traffic the *Contractor shall* comply with Chapter 8 Traffic Signs Manual Parts 1 and 2 where applicable.

G12.12 Direction 53 of the Traffic Signs Regulations and General Directions 2002 requires that the placing of all temporary traffic signals on the highway must be authorised (almost always in writing) by the relevant traffic authority. The *Contractor shall*, therefore, submit all applications for temporary traffic signal approvals to the *Authorised Officer*.

G12.13 The *Contractor shall* comply with all reasonable requests for information from the *Authorised Officer* to enable the *Authority* to fulfil its network management duty under Section 16 of the Traffic Management Act 2004.

G12.14 Where appropriate the *Contractor shall* provide, and suitably sign, points of entry to and exit from each *Site*, for Equipment engaged on work forming part of the *service*. The *Contractor* shall ensure that when any Equipment is reversing within a *Site* on or adjacent to a highway open to traffic, it does so only under the supervision of a person designated for the purpose of controlling traffic movements.

G12.15 Where work is carried out on or adjacent to a highway open to traffic the *Contractor shall* ensure that the workforce and the site supervisory staff at all times wear high visibility warning clothing complying with BS EN 471. Clothing

shall be to Table 1, Class 2 of that standard and *shall* comply with the requirements of paragraph 4.2.3(b). The colour of the clothing *shall* normally be “fluorescent yellow” or “fluorescent orange-red” complying with Table 2. The retro reflective material used shall be to Class 2 as defined in Table 5. Clothing complying with other specifications may be used in accordance with Clause 104.2 where it offers equivalent performance, provided that the *specification* given is not inconsistent with the basic health and safety requirements set out in Annex 2 of the Personal Protective Equipment Directive (89/686/EEC). The *Contractor shall* ensure that the person in charge of the workforce is readily distinguishable from the remainder of the workforce.

G12.16 Whenever instructed to do so by the *Authorised Officer*, the *Contractor shall* appoint a Traffic Safety Officer who shall oversee all arrangements necessary for traffic management and safety. The Traffic Safety Officer *shall* have one or more nominated deputies. The *Contractor shall* provide the *Authorised Officer* with the names of his Officer and his nominated deputies and with telephone numbers or details of other means by which they or one of them can be contacted at any time. When required in any *Purchase Order* the Traffic Safety Officer or a nominated deputy *shall* be on the Site at all times when temporary traffic management and safety measures are in operation and *shall* be readily available to deal with all related matters.

The Traffic Safety Officer (and all deputies) shall be entirely responsible for all liaison with the *Authorised Officer* and, where necessary, with the Police, in connection with any temporary traffic management and safety measures as follows:

- (i) arranging and agreeing nature and extent of measures required;
- (ii) setting out the measures;
- (iii) controlling traffic during periods when measures are necessary;
- (iv) ensuring that all requirements for the measures are met;
- (v) inspection and maintenance of equipment;
- (vi) arranging the duties of watchmen to ensure that each *Site* is patrolled and inspected at appropriate intervals;
- (vii) arranging and ensuring that at all times whilst the measures are in place the *Contractor's* communication base (radio and/or telephone) is manned by a competent person;
- (viii) dealing with traffic in emergencies, including notifying the Police immediately of any accidents, emergencies and the like;
- (xi) reinstatement or temporary alterations to the measures as requested by the Police in the event of an emergency;

- (x) the *Contractor shall* supply to the *Authorised Officer* and the Police, the name and telephone number of the Traffic Safety Officer and his deputy, one of whom is to be available at all times in case of an emergency.

G12.17 If an accident or breakdown occurs on a carriageway or hard shoulder open to traffic within or in the vicinity of the *Site*, the *Contractor shall* act as requested by police officers acting under their statutory powers and notify the *Authorised Officer* immediately.

G12.18 Signs *shall* either be sited for the duration of the roadworks where it is safe and appropriate to do so or provision made to enable their use at short notice.

G12.19 The *Contractor shall* provide adequate storage facilities clear of any safety zone. Storage on any central reserve or in front of safety fencing shall not be permitted.

G12.20 The *Contractor shall* take particular care with the siting of all Equipment and Plant and the stacking and heaping of Materials within the highway, to ensure that they do not cause unreasonable obstruction or impair visibility, or cause damage to any other council asset such as trees.

G12.21 The *Contractor shall* take into consideration the difficulty of parking in some parts of the Borough and shall devise methods of working that avoid the parking of any vehicles or plant in a manner that contravenes of any Traffic Regulation Order. Parking difficulties *shall* not be in any way interpreted as a failure on the part of the *Authorised Officer* to provide right of access.

G12.22 The *Contractor shall* ensure that only vehicles which are essential for Providing the Service are allowed to enter any Site.

G12.23 Temporary traffic management and safety measures involving the use of two way manual or two/three way temporary traffic signal control *shall* not be permitted on any street defined as a Traffic Sensitive Street in the Affected Property / Asset section of the documents for this contract during the peak hours 09:30 to 15:30 Monday to Friday, this will include Principal Roads, without the permission of the *Authorised Officer*. Three and four way temporary traffic signal operations will not be permitted without the prior written consent of the *Authorised Officer*. The *Contractor* will be provided with a list of traffic sensitive roads/streets showing restricted working hours during Mobilisation.

G12.24 All roads are to be left in a safe and fully operational condition after each day's operation.

G12.25 On roads where restricted working hours apply, no disruptions to traffic flows *shall* be permitted during the peak hours defined in G12.23 above, except in the case of emergencies as instructed by the *Authorised Officer*.

G12.26 Any temporary traffic management and safety measures that are likely to affect access to or from any event likely to generate significant volumes of traffic will not be permitted unless authorised by the *Authorised Officer*.

G12.27 Except as otherwise authorised the *Contractor shall* so arrange their working as to ensure that, as far as possible, all obstructions can be removed from a carriageway and that traffic lanes can be operated within 30 minutes of an instruction being issued by the *Authorised Officer* or the Police.

G12.28 The *Contractor shall* be permitted to ask members of the public to move to allow works to be carried out. If members of the public refuse to move, the *Contractor shall* return as soon as the area is clear and complete the operation.

G12.29 The *Contractor shall* be responsible for ensuring, so far as he reasonably can, that none of their work activities are impeded by parked vehicles. Where it is necessary to relocate a vehicle that is legally parked it is the *Authority's* policy to create a temporary parking restriction, through the issue of a temporary traffic order, at the location in question. Once this order comes into force, the vehicle becomes illegally parked and may be relocated. Therefore the *Contractor shall*, when planning their operations, consider whether parked vehicles pose a potential threat to their progress. If the *Contractor* believes this may be a problem, he *shall* submit a request for a temporary traffic order to the *Authority Officer*, with regard to the timescales for temporary traffic order preparation, please allow 9 weeks.

G12.30 Wherever the *Contractor* perceives that a suspension, of either a Resident's Parking Bay, Communal Parking Bay or On-Street Parking Bay, is necessary for the proper execution of any of their activities, he should request such a suspension through the *Authorised Officer*. The *Contractor shall* not attempt to relocate any vehicle without the written confirmation from the *Authorised Officer* that an appropriate temporary traffic order is in force. Once such an order is in place, the *Contractor shall* arrange for the timely relocation of the vehicle, so that it is left:

- With no damage that was not present before the vehicle was moved;
- Parked safely, on the public highway;
- Within 10 minutes walking distance of its original location;
- Where it does not cause any obstruction;
- Where it is not contravening any waiting or loading restriction.

G12.31 When relocating a vehicle, the *Contractor shall* record the following details regarding each vehicle:

- Manufacturer;
- Model;
- Colour;
- Registration Number;
- Time of relocation;
- Location vehicle is relocated from;
- Location vehicle is relocated to.

G12.32 The *Contractor shall*, immediately after completion of each vehicle relocation, provide the information required by sub-Clause 31 of this Clause to the

Metropolitan Police and the *Authority's* Parking Service. The same information shall be copied to the *Authorised Officer* at the end of each working day.

G13. CONTRACTORS PLAN

G13.1 During Mobilisation the *Contractor* shall develop, a first operational *Contractors* Plan, and submit it to the *Authorised Officer* for acceptance not less than four weeks before the *commencement date*. Any subsequent revisions shall normally be submitted not less than two working days before each scheduled monthly progress meeting between the *Authorised Officer* and the *Contractor*. The plan *shall* be sufficiently detailed to fully inform the *Authorised Officer* of the *Contractor's* intentions for Providing the Service during the following month and shall indicate "hold points" as follows

- *Contractors* hold points where no further work *shall* proceed without the written approval of a designated person of the *Contractor's* management who shall be named in the Plan
- *Authorised Officers* Points: where no further work *shall* proceed without the written acceptance of the *Authorised Officer*

G13.2 The *Contractor shall* ensure that the information provided in each edition of the Plan includes:

- (i) the period of Service which the Plan is targeted to describe;
- (ii) detailed method statements for the *services* to be provided, as listed in the *specification*;
- (iii) full details of the depot and facilities that he proposes to operate from in Providing the Service;
- (iv) the timing of:
 - the operations which the *Contractor* plans to carry out in order to Provide the Service, and
 - any work to be undertaken by the *Authority* or Others and associated access dates either as stated in the *Specification* or as later agreed with them by the *Contractor*;
- (v) his provisions, listed against each service activity, for:
 - time risk allowances,
 - health and safety requirements, and
 - the procedures set out in this contract.

G13.3 The *Contractor shall* provide the following information

- (i) A current copy of his programme showing all planned operations;
- (ii) A current copy of the *Contractor's* Health and Safety Plan;
- (iii) A current waste management plan, which describes precisely how the *Contractor* proposes to eliminate, reduce or manage the disposal of all arisings (including hazardous, noxious and clinical waste) generated as a consequence of Providing the Service and details of the waste disposal sites that he is intending to use;
- (iv) A current list of the registration numbers of all vehicles that may be used for the transport of waste materials;
- (v) Current details of the structure of the *Contractor's* team, together with names, disciplines and CV's of the *Contractor's* key personnel;
- (vi) Copies of current policy statements on Quality Management, Health and Safety and Staff Training, including employees holding appropriate National Vocational Qualifications. Statements *shall* be supported by details of Third Party Quality Accreditation (if held) and outline Quality Plans;
- (vii) Current details of any Subcontractors engaged or proposed, the criteria used in their selection and their experience in the type of work to be undertaken on this contract;
- (viii) Full details of the fuel requirements of all vehicles and Equipment that he proposes to use in Providing the Service;
- (ix) Full details of exhaust emissions for all vehicles and motorised Equipment that he proposes to use in Providing the Service. See G27.1
- (x) Full details of the type, numbers, condition and maintenance schedules of Equipment to be used in Providing the Service.

G14 GOODS AND MATERIALS USED TO PROVIDE THE SERVICE

G14.1 British Standards and British Standard Codes of Practice incorporated in this contract by a reference, which does not include a date shall be the respective editions current on the *Contract* date, and incorporating all British Standards Institution amendments current on that date. British Standards and British Standard Codes of Practice incorporated in the contract by a reference that includes a date shall be deemed to exclude British Standards Institution amendments issued after that date except any such amendments shown in brackets immediately following the stated date.

G14.2 In respect of all other references the date of the edition applicable to this contract *shall* be the date of the edition current on the date stated in this contract and incorporating all published amendments current on that date.

G14.3 Where a British Standard incorporated in this contract has been superseded by a Harmonised European Standard, or a European Standard, issued prior to the date stated in this contract then such Harmonised European Standard or European Standard shall be substituted for the British Standard and any amendments thereto contained in the *Specification*.

G14.4 Except where the specified standard implements or is technically equivalent to a Harmonised European Standard or to a European Standard adopted for use after 31 December 1985, any requirement for goods or materials to comply with the specified standard shall be satisfied by compliance with:

- a relevant standard or code of practice of a national standards body or equivalent body of any Member State of the European Economic Area; or
- a relevant international standard recognised for use in any Member State of the European Economic Area; or
- a technical regulation of any Member State of the European Economic Area; or
- traditional procedures of manufacture of any Member State of the European Economic Area where these are the subject of a written technical description sufficiently detailed to permit assessment of the goods or materials for the use specified; or
- a European Technical Approval (ETA) issued in accordance with the Construction Products Directive 89/106/EEC (or, until procedures are available for the issue of ETAs, a *specification* sufficiently detailed to permit assessment) for goods or materials of an innovative nature or subject to innovative processes of manufacture and which fulfil the purpose provided for by the specified standard provided that the proposed standard, code of practice, regulation, *specification*, technical description or European Technical Approval provides, in use, levels of safety, suitability and fitness for purpose equivalent to those required by the specified standard in so far as they are not inconsistent with the 'Essential Requirements' of the Construction Products Directive (89/106/EEC). This Clause applies also to works only in so far as the means of carrying out such works are indivisibly associated with the goods or materials for which an alternative standard, code of practice, regulation, *specification* or technical description is proposed.

G14.5 Where any work, goods or materials to be used in Providing the Service are the subject of a United Kingdom Accreditation Service (UKAS) or equivalent accredited third party quality management scheme or a UKAS or equivalent accredited third party product certification scheme, only work, goods or materials conforming with such a scheme *shall* be used and the *Contractor shall* in each

case submit to the *Authorised Officer* a copy of the certificate of conformity affirming compliance with the scheme, unless the goods or materials bear a prescribed certification mark. Where specific training and/or competency requirements are included in any quality management scheme the *Contractor shall* provide copies of the relevant training and/or competency assessments certificates and/or registration/skill cards of the workforce to the *Authorised Officer* for acceptance. On site confirmation of appropriate training and skill base of specific operatives will form part of the *Authorised Officer* monitoring systems.

G14.6 The requirement for any goods or materials to be manufactured or supplied subject to a quality management scheme or product certification scheme *shall* be satisfied by compliance with an equivalent quality management scheme or product certification scheme of any Member State of the European Economic Area, provided that the proposed scheme is designed to ensure in use levels of safety, suitability and fitness for purpose equivalent to those provided for by the scheme specified. This sub-Clause applies also to works only in so far as the means of carrying out such works are indivisibly associated with the goods or materials for which an alternative quality management scheme or product certification scheme is proposed.

G14.7 Where any work, goods or materials to be used in Providing the Service are the subjects of a nationally recognised quality management scheme, the *Contractor shall* require the supplier of such items to prepare an appropriate Quality Plan and include a copy of it in their plan.

G14.8 The *Contractor shall* make available and shall require any of their suppliers to make available on request contemporary quality records as identified in BS EN ISO 9001:2000 to demonstrate achievement of the required quality and the effectiveness of the quality system. Copies of all quality records *shall* be made available immediately to the *Authorised Officer*. The *Contractor shall* report any non-conforming product/service and *shall* require its supplier to report immediately any non-conforming product/service to the *Contractor*. The *Contractor shall* immediately pass these reports to the *Authorised Officer*, and undertake no further related work until remedial or other measures have been undertaken.

G14.9 Where any work, goods or materials are required to have a British Board of Agrément Certificate only work, goods or materials so certificated *shall* be used and the *Contractor shall* in each case submit to the *Authorised Officer* a copy of the certificate.

G15. CONTRACTOR'S DEPOT

G15.1 The *Contractor shall*, throughout the *contract period* and Demobilisation, administer this contract from a suitable depot. The location and facilities offered by this depot, together with copies of any licences or consents relevant to its operation *shall* be fully described in the *Contractor's Plan*.

G15.2 The *Contractor shall* not administer any part of this contract from any other depot without the prior acceptance of the alternative by the *Authorised Officer*.

G16. CONTRACTOR'S PRICES

G16.1 The *Contractor* is reminded that, in accordance with the Conditions of Contract (Clause 1.1.9), the rates and prices in the *contract price* must include their full charges for providing the full scope of the *service* to the extent set forth or reasonably implied in the documents on which the tender was based including, but not necessarily being limited to, the following:

- Mobilisation and Demobilisation costs, overheads and profit, the provision, servicing of *Contractor's* offices, communication and IT systems, messes, stores, workshops, compounds or other facilities including everything required by the *Contractor* in connection therewith;
- the provision of a competent and adequately trained and resourced labour force and suitable depot resources;
- the provision of sufficient time, planning, preparation, monitoring and resources to ensure that the *service* is undertaken safely and without risk to the health of the workforce or the public;
- the procurement, hire, storage, servicing, delivery, operation and subsequent removal of all Equipment, to or at any Site;
- the procurement, storage, transportation and fixing, erecting and installing or placing of Plant and Materials in position and costs in connection therewith including delivery, to or at any Site;
- the collection, transportation, storage, drying, multiple handling (including taking all appropriate contamination prevention measures) and disposal, in an authorised manner, of all hazardous and non-hazardous waste of any kind;
- the effect on the Contractor's Plan of general statutory obligations and operational restrictions, liaison requirements, insurances, liabilities and risks involved in the delivery of the *service* set forth or reasonably implied in the documents on which the tender is based;
- complying with any stated quality assurance requirements, providing certificates of conformity where required, and complying with all stated standards, including European Directives;
- operating in a considerate, courteous and co-operative manner;
- working within any time, noise or any other constraints stated in this contract;
- taking delivery of materials and goods supplied by Others, unloading, storage, and costs in connection therewith;

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- temporary works, including the provision of temporary access equipment if required;
- the effect on the programming of any element of the *service* to the extent set forth or reasonably implied in the *Specification*;
- the provision of all appropriate welfare facilities, and temporary accommodation where required, at each *Site*;
- waste and taking all reasonable measures to reduce wastage of all materials;
- all checking, inspecting, examining, measuring and verifying goods, materials and workmanship including supplying results, reports and certificates;
- travelling to, between and from different *Sites* within the *Authority*;
- working in an unproductive manner, as a consequence of the nature of the work required;
- providing adequate progress reporting, as required by the *Authorised Officer*;
- complying with constraints to accessibility of any part of the Authority, except when undertaking services where price adjustments are allowed by this contract;
- dealing with changes in weather conditions, traffic flows and parking.
- complying with the public safety and traffic management requirements contained in this *Specification*;
- traffic safety and control personnel;
- traffic signs, driver information signs, traffic signs provided by the *Authorised Officer*, including maintaining, cleaning, repositioning, covering, uncovering and removing;
- complying with the requirements for labour and Equipment working on or adjacent to a highway;
- collecting and returning traffic signs provided by the *Authorised Officer*;
- surveillance and replenishing of stocks;
 - immediate reinstatement and replacement of defective or damaged items;
 - working outside of the contract's Normally Permitted Working Hours when instructed to do so by the *Authorised Officer*, or when it is

essential for the execution of the work. The exception is that the *Contractor* may add price adjustments for working outside of the contract's Normally Permitted Working Hours where price adjustments are allowed by this *Contract* and as agreed in advance by the Authorising Officer.

- undertaking all consultation, liaison and issuing all notifications required by this *Contract*.

G17. WASTE MANAGEMENT

G17.1 The *Contractor shall* comply with current regulations contained within the current Environmental Protection Act 1990 relating to Waste Management.

G17.2 The *Contractor shall* provide a waste management statement before the commencement of the contract to demonstrate the method the *Contractor* intends to use to dispose of green waste generated by works from this contract.

G17.3 The disposal of green waste may involve transporting the waste out of the Borough to the *Contractors* Depot for recycling, and should comply with any legislation governing or restricting timber movement in the uk.

G17.4 Alternatively the *Contractor* could seek agreement with North London Waste Eco Park <http://www.londonwaste.co.uk/> or an alternative waste transfer station to dispose of arisings. The *Contractor* is to allow for all costs relating to the disposal of all green waste generated by works in this *Contract* within their rates.

G17.5 The *Contractor* shall also allow for clearing green waste generated primarily not from this Contract, inclusive of chippings, logs and stumps from an area known as the "Hanger Area" within Trent Country Park. This shall be on one occasion per month for every consecutive month for the term length of the contract. The amount to be removed monthly is usually but not limited to 100 tonnes but also may be less as the *Authority* reserves the right to retain or re use this green waste.

The *Contractor* shall keep the facility clean, tidy and properly secure.

The *Contractor* will not alter or modify any part of the facility without the written permission of the Authorised Officer.

G18. FIRST AID

G18.1 The *Contractor shall* provide, and maintain a First Aid Kit for each site team and vehicle used within the Borough, which *shall* be at all times accessible to site staff during working hours.

G18.2 The kit should be of a size recommended by the Health and Safety Executive for the number of the *Contractor's* staff on site.

G18.3 The *Contractor shall* provide or ensure that there is provided within each

team a person(s) trained to administer First Aid treatment to their staff if they become injured or become ill at work.

G18.4 The *Contractor* is to ensure that nominated site staff members attend periodic First Aid refresher courses.

G18.5 If the above provisions are not incorporated in the *Contractors* Health and Safety documents by implication, they will need to be added.

G19. STAFF, TRAINING, CONDUCT AND WELFARE

G19.1 The *Contractor shall* employ in and about the provision of the Services only such persons as are careful, skilled, honest and experienced, and suitably qualified in the work that they are to perform. The *Contractor shall* ensure that only well-trained and knowledgeable staff are engaged in the provision of the Services. All machine operators to have received associated, suitable and recorded training.

G19.2 NOT USED

G19.3 The *Contractor shall* at all times employ sufficient staff to ensure that the Services are provided at all times to agreed programmes and in all respects to a high standard of excellence.

G19.4 The *Contractor shall* make their own arrangements at their own expense for any additional staff or other resources that may be required to ensure that the *specification* is met regardless of any delay or shortfall following inclement weather, during staff holidays, absence through sickness, training and instructions, special events or members of the public preventing the service being carried out in accordance with the *specification* or for any other reason causing the delay or shortfall to bring these services up to *specification*. Where additional work is required the *Contractor* shall ensure that the Services continue to be provided in accordance with the contract.

G19.5 The *Contractor shall* ensure that a *Contract Manager* is employed to manage the *Contract* and to ensure that all site staff are properly instructed with regard to:

The task or tasks that persons perform:

- Current rules, regulations, conditions, procedures and standards of the *Authority* (as may be referred to or notified to the *Contractor* by the *Authority*):
- Any relevant provisions of this *Contract*.
- Current regulations, conditions, procedures and statutory requirements concerning health and safety at work; and the Control of Substances Hazardous to Health Regulations 2004.
- Awareness of the Environmental Protection Act relating to Waste Management.

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- Valid First Aid course certificates of each staff member on site with attendance of periodic refresher courses as required.

The Contract manager shall also carry out the following tasks:

- Proactive inspection and monitoring of the *Contractors* works:
- Daily monitoring the performance of the *Contractors* staff and ensuring the compliance of the *Contractors* staff with any relevant provision of this *Contract*:

G19.6 The Council is keen to support Apprenticeships within the Borough. Therefore the *Contractor shall* take on at least 2 apprentices who live within Enfield, and provide them with appropriate education and on the job training. The Contractor shall include their proposal as part of their Tender submission, and Contractors Plan.

G19.7 The *Contractor* is encouraged to provide joint training opportunities that will include the DLO. This is to keep everyone updated on current legislations and current standards.

G20.0 MANAGEMENT OF HEALTH AND SAFETY AT WORK REGULATIONS 1994

G20.1 The *Contractor shall* make a suitable and sufficient assessment of the risks to Health and Safety of their employees to which they are exposed whilst at work and of the risks to the Health and Safety of persons not in their employment arising out of, or in connection with, the conduct of the contracted staff.

G20.2 The *Contractor shall* not employ a young person (i.e. someone ~who is over school leaving age but under the age of 18) unless they have made or renewed a risk assessment. Health and Safety (Young Persons) Regulations 1997.

G20.3 The *Contractor* will review risk assessments on at least an annual basis. Risk assessments will be reviewed by the Contractor when the nature of the Services has changes, in the event of an incident (including near misses), or where additional risks and/or hazards have been identified. All Risk assessments to be provided to the Authorised Officer, within 7 days of their review or writing.

G20.4 The *Contractor shall* provide their staff with comprehensible and relevant information on:

- a) The risks to their Health and Safety identified by the assessment
- b) The preventative and protective measures
- c) The procedures for dealing with serious and imminent dangers
- d) The identity of staff nominated to oversee evacuation procedures

G20.5 If the *Contractor* engages an employee on a fixed term contract, or engages a person employed by an employment business, the *Contractor* must provide that person with comprehensive information on:

- a) Any special qualifications, skills or training required to be held by that employee if they are to carry out the work safely
- b) The specific features of the jobs to be filled by those staff insofar as those that are likely to affect their health and safety.

This information is to be provided before the employee concerned commences their duties.

G20.6 The Work Method statements *shall* show clear lines of responsibility for health and safety, safe systems of work, provision of protective clothing and *shall* demonstrate how the *Contractor* will ensure the safety of their own employees, employees of the *Authority* and of all persons including members of the public.

G21. SAFETY AUDITS

G21.1 *The Contractor shall* include in the *Contractor's* Plan of how they carry out Safety Audits and Safety Inspections.

G21.2 *The Contractor shall* keep records of all Safety Inspections and Safety Audits on file and a copy of such audits *shall* be sent to the *Authority* within 7 days of completion.

G22. FIRE PRECAUTIONS WORKPLACE REGULATIONS 1997

G22.1 *The Contractor shall* make an assessment of the fire risk at each place of work. This assessment is to be recorded and made available to the *Authority* on request.

G22.2 *The Contractor* will prepare an evacuation plan for each place of work.

G22.3 *The Contractor* will train staff in fire precautions. This training is to be recorded and made available to the *Authorised Officer* on request.

G23. ACCIDENTS, NEAR MISSES AND INCIDENT RECORDING AND REPORTING

G23.1 *The Contractor shall* maintain a record of all accidents, near misses and incidents in the Borough and provide copies to the *Authority* on a monthly basis or as requested.

G23.2 An accident book *shall* record details of the accident, near miss and incident, the incident date and the action taken and the closing date.

G24. PROVISION AND USE OF WORK EQUIPMENT REGULATIONS (PUWER) 1992

G24.1 *The Contractor shall* ensure that work equipment is so constructed or adapted as to be suitable for the job for which it is used or provided. The

Contractor when selecting work equipment shall have due regard to the working conditions and the risks to the health and safety of staff.

G24.2 The *Contractor shall* carry out a risk assessment to select work equipment and assess its suitability for particular tasks. Specific reference should be made to Hand Arm Vibration Syndrome, maximum time working under duress and rotation of work practices.

G24.3 The *Contractor shall* ensure that work equipment is maintained in an efficient state, working order and in good repair. A maintenance log is to be kept and made available to the *Authority* on request.

G24.4 Where work equipment has a specific risk to health or safety the *Contractor shall* ensure that equipment is restricted to those staff who have been given time task of using it, and that repairs, modifications, maintenance and servicing is restricted to those staff who have been specifically designated to perform operations of that description and that they have been given adequate training to do this type of work.

G24.5 The *Contractor shall* ensure that all staff who use work equipment have available to them adequate health and safety information and where appropriate written instructions about the use of work equipment. This also applies to staff that supervise or manage the use of work equipment.

G24.6 The *Contractor shall* ensure that all staff who use work equipment have received adequate training for the proposes of health and safety including methods which may be adopted when using work equipment any risks which such use may entail and precautions to be taken. An identical provision applies to supervisors and managers. This training should be formally recorded and available to the *Authority* upon request.

G24.7 The *Contractor shall* take measures, which are effective to prevent access to any dangerous part of machinery, or to any rotating stock bar or to stop the movement of any dangerous part of machinery or rotating stock bar before any part of a member of staff enters a dangerous zone.

G25. PROVISION OF PERSONAL PROTECTIVE EQUIPMENT 1992 (PPE)

G25.1 The *Contractor shall* ensure that suitable, relative industry recognised, PPE is provided to their staff that may be exposed to a risk to their health and safety while at work.

G25.2 The *Contractor will* ensure that before choosing PPE, an assessment is carried out in order to determine whether the PPE provided is suitable. This assessment will be recorded and made available to the *Authority* on request. PPE's should be readily available and free of charge.

G25.3 The *Contractor shall* ensure that a sufficient stock of spare parts are available and that a maintenance programme, including where appropriate,

cleaning, disinfections, examination, repair, testing and record keeping, which should be available for inspection by the *Authority* on request.

G25.4 Where PPE is provided the *Contractor shall* ensure that staff are provided with such information, instruction and training as is adequate and appropriate. This training is to be recorded and made available to the *Authority* on request.

G26. MANUAL HANDLING OPERATIONS REGULATIONS 1992

G26.1 The *Contractor shall*, so far as is reasonably practicable avoid the need for their staff to undertake any manual handling operations, which involve a risk of being injured.

G26.2 Where this is not reasonably practicable the *Contractor shall* make a suitable and sufficient assessment of all such manual handling operations.

G26.3 The *Contractor shall* take all appropriate steps to reduce the risk of injury to those staff to the lowest reasonably practicable.

G26.4 Where manual handling cannot be avoided the *Contractor shall* ensure that staff are provided with such information, instruction and training as is adequate and appropriate. This training is to be recorded and made available to the *Authority* on request.

G27. VEHICLES/PLANT/MACHINERY

G27.1 Emissions: New emission limits (Euro 5 and Euro 6) have been introduced for cars and commercial vehicles (heavy and light) with respect to a number of pollutants, especially nitrogen oxides and particulate pollutants.

The minimum acceptable shall be compliant with the Euro 6 for large commercials and Euro 5 emission standards for cars and vans; except for vehicles type approved after 1st September 2014 and for the registration and sale of new types of cars and vans as of 1 September 2015 where Euro 6 shall be compliant.

All Contractor's heavy duty road vehicles and non-road diesel engines shall meet the following emission standard at the Commencement Date:

- Heavy duty road vehicles > 3500 kg kerb weight – Euro 6 is the minimum acceptable standard.
- Non-road diesel engines between 19 and 36 kW – Stage 3A European emission standards.
- Non-road diesel engines between 37 and 560 kW – Stage 3B European emissions standards.

G27.2 Safety Equipment on Vehicles: The London Borough of Enfield is committed to improving the safety of all Vulnerable Road users on London's roads, and as such has implemented an organisation wide initiative to ensure that all businesses working for or on behalf of the London Borough of Enfield take measures to improve the safety of their vehicles. It is now mandatory for all

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new and existing contracts, for *Contractors* and their sub-contractors who deliver to a LBE premises or *Site* to adopt these Work Related Road Risk safety requirements. Failure to meet these requirements could result in vehicles being turned away from site and could be considered a breach of contract.

The *Contractor shall* ensure that any Van, which it uses to provide the *Services* shall, bear prominent signage on the rear of the vehicle to warn cyclists of the dangers of passing the vehicle on the inside.

The *Contractor ensures that* any Lorry, which it uses to provide the *Services shall*

- have Side Guards fitted, unless the Operator can demonstrate to the reasonable satisfaction of the Authority that the vehicle will not perform the function for which it was built if Side Guards are fitted;
- have a close proximity warning system fitted comprising: a front-mounted, rear-facing CCTV camera with in-cab live feed from the said camera or a Fresnel Lens where the Fresnel Lens provides a reliable alternative to the CCTV camera and where the Operator has obtained the Authority's approval to use the Fresnel Lens, which approval the Authority may withhold in its unfettered discretion; and a Close Proximity Sensor.
- have a Class VI Mirror; and
- bear prominent signage on the rear of the vehicle to warn cyclists of the dangers of passing the vehicle on the inside.

G27.3 Driver Licence Checks: The Contractor shall before commencing to work on the contract each driver who works on the contract will have had a driving licence check with the DVLA and will have their licence rechecked on a regular basis.

G27.4 Breakdown: In the event of machinery breakdown the *Contractor shall* notify the *Authorised Officer* immediately and take appropriate action to resolve the problem to ensure compliance with the time periods specified for completing any/all works. The *Contractor should* allow for machinery replacement / repair on a maximum of 48 hours (2 x business days)

G27.5 Repairs: The *Contractor shall* not carry out the refuelling, servicing or repair of the machines on the grass sward, paved areas or any other Hard or Soft Landscaped areas, or within the boundaries of non Council owned properties. Any damage caused to any structure or surface by spillage of fuels, oils or solvents *shall* be made good by the *Contractor* as directed by the *Authorised Officer*, all at the *Contractor's* own expense.

G27.6 Method Statements: The *Contractor shall* include a Method Statement, comprising a technical specification of the Equipment, materials and methods to be used for re-fuelling of any/all machinery to be used during any/all works on behalf of The London Borough of Enfield. Each Method Statement *shall* be clearly

cross-referenced to the appropriate section of the Contractor's Health and Safety Plan.

G28.0 DUTY OF CARE

G28.1 CONDITION FEEDBACK: If during any/all Tree works, Fungal Fruiting bodies cavities or structural weakness or any other concerns are identified on a specimen receiving any attention instructed by the *Authorised Officer* it *shall* be an accepted responsibility of the *Contractor* to notify by means of electronic contact i.e. Email the *Authorised Officer* at the first available opportunity or within a minimum of 1 *Business Day*. If the structural stability of the tree is questionable or considered immediately dangerous the *Contractor shall* be required to notify the *Authorised Officer* immediately with a view to staying on site until the *Authorised Officer* has inspected the specimen and determined the severity of the situation and will then authorise any required immediate works to make the tree safe.

G28.2 On occasions the *Contractors Operatives* may consider that the tree is too dangerous to wait for the *Authorised Officer* and is in danger of falling at any time. In these situations the *Contractor shall* contact the *Authorised Officer* by mobile phone to highlight the condition of the tree and the immediate works that are required to make the site safe. On these occasions the *Authorised Officer* may allow the staff to carry out any necessary works prior to the *Authorised Officer* attendance by authorising works over the phone.

G29 CONTROL OF NOISE AND VIBRATION

G29.1 Noise: The Authority's Commercial Standards Section has informally agreed that the following measures would be acceptable and these are given as a guide; however it is for the *Contractor* to decide whether to seek the Commercial Standards Section's formal consent to their proposed methods of work and to the steps he proposes in order to minimise noise.

The total noise level from all sources when measured 2.0m above the ground at noise control stations selected by the Overseeing Organisation *shall* not exceed by more than 3dB(A) the ambient equivalent continuous noise level, L_{eq} , at the control station measured over the same period. Exceptionally, the *Contractor* may be given permission to carry out works which exceed the noise levels above provided that 7 days' notice of the date and timing of these works is given to the Overseeing Organisation and the *Contractor* demonstrates that he intends to take all reasonable measures to mitigate the noise nuisance. After consultation with the Commercial Standards Section and the Health and Safety Executive and any other party, a decision will be given within three days of receipt of the notice.

All vehicles and mechanical Equipment *shall* be fitted with effective exhaust silencers and shall be maintained in good and efficient working order so that extraneous noises from vibration, creaking, squeaking and the like are reduced.

G29.2 General Limitation of Noise: The *Contractor shall* ensure that all practicable measures to control noise produced by their operations required under or by virtue of any enactment, regulation of working rule of any industry are strictly

complied with and *shall* take all other reasonable measures to minimise noise having regard to the recommendations given in BS 5228 Code of Practice for Noise Control on Construction and Demolition Sites.

All compressors used on the site *shall* be 'Sound Reduced' models fitted with properly lined acoustic covers and all ancillary pneumatic tools *shall* be fitted with mufflers or silencers of the type recommended by the manufacturers. The *Contractor shall*, when required by the Overseeing Organisation, provide and erect effective acoustic screens to enclose the source of noise emanating from their Equipment. When work is being undertaken at night, the use of compressors *shall* cease at midnight.

The *Contractor shall* ensure that all vehicles and mechanical Equipment are fitted with effective exhaust silencers and are maintained in good and efficient working order so that extraneous noises from vibration, creaking, squeaking and the like are reduced to a minimum. Maintenance of Equipment shall not be carried out between 20:00 and 07:00 hours (09:00 hours on Sundays) without the written permission of the Overseeing Organisation, except when the work is essential for. The saving of life or property or for the safety of the Works.

The *Authorised Officer* may limit the use of mechanical Equipment or appliance of any description to such extent and for such purpose and period as he may decide if, in their opinion, the use of such Equipment is likely to cause injury to persons or property or be impracticable.

Machines in intermittent use *shall* be shut down in the intervening periods between work or throttled down to a minimum.

G30 SERVICES AND INSPECTIONS

G30.1 Individual work sheets/specifications when issued *shall* be completed within 1 calendar month from the date of issue (with the exception of Emergency Works) unless the type/volume of works desire a shorter or longer period and will therefore be specified by the *Authorised Officer* on the work sheet.

G30.2 The *Contractor shall* be required to inform the *Authorised Officer* electronically at the end of each business week of the Works that have been completed and updated on the Councils hosted EZYTREEV system, to allow the *Authorised Officer* to monitor progress. The *Authority* will inspect a representative area and report back within 2 business weeks if the standard needs improvement. Any rectifications are to be carried out within 10 business days (2 Weeks), Unless otherwise agreed with the *Authorised Officer*.

G30.3 The *Contractor shall* submit a Tree Works Inspection Report on an electronic pro-form as shown in **G30.4** or similar approved by the *Authorised Officer* on the completion of tree works or every 5 Business days, whichever is sooner.

G30.4 Tree Works Inspection Report Pro-forma

Information to be provided by the *Contractor*

ARBORICULTURE WORKS – INSPECTION REPORT

Purchase order number:

Locations of Operations	Date Completed

Contractor's comments:

.....
.....

This works has been satisfactorily completed (Contractor)

PRINT NAME:.....

SIGNED:..... DATE: / / 20....

Received only by (Client)

PRINT NAME:

SIGNED: DATE: / / 20....

Copy to Contractor

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Copy to retain

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G31. ADDING VALUE / COLLABORATIVE WORKING

G31.1 Prices. See G16. The *Authority* is looking for ongoing savings, and opportunities to do so throughout the *Contract Period*. The *Authority* is therefore keen to consider innovative solutions, and joint working opportunities which would maximise value for money for the Council and the *Contract*.

G31.2 Waste Management. See G17. The *Authority* is looking for a collaborative approach to green waste management, and is prepared to offer space within one of our Parks for a green waste provision, which would be setup, managed, and maintained by the *Contractor*. This would be in mutual agreement with the Council who may wish to use this facility as part of their green waste provision.

G31.3 Any proposals which will reduce the cost of the *Contract* through joint working, procurement, and/or sharing of resources, etc., should be included in the *Contractors* tender submission. Similarly any environmental proposals should also be included in the submission. Particular consideration should be given to joint working with the DLO.

G32. THE PUBLIC SERVICES (SOCIAL VALUE) ACT 2012

The Government's definition of social value is "a concept which seeks to maximize the additional benefit that can be created by procuring or commissioning goods and services, above and beyond the benefit of merely the goods and services themselves".

Under the Social Value Act, if a potential service provider offers community benefit beyond the contract *specification*, (economically, environmentally / socially), then this should be taken into consideration by the authority in deciding where to award a contract.

The Technical Questionnaire Annex C includes an opportunity for the *Contractor* to demonstrate how they are able to add benefit to the local community in line with the Act.

G33. LONDON LIVING WAGE

G33.1 The Living Wage is defined by the Living Wage Foundation as the hourly rate of pay "deemed adequate for a worker to provide their family with the essentials of/for life".

G33.2 The *Contractor* is to ensure that all its employees are paid an hourly wage (or equivalent hourly wage) to the London Living Wage

G33.3 The *Contractor* is to provide such information concerning the London Living Wage and as the contractor or its nominees may reasonably require.

G34 KEYS AND PADLOCKS

G34.1 All keys are to signed for by the *Contractor* prior to the Authorised Officer handing over keys.

G34.2 The *Contractor shall* be responsible for the safekeeping of any keys and padlocks provided to him by the Council and *shall* only permit such keys and padlocks to be given to those members of his staff whose names and addresses have been supplied to the Council and then only to the extent strictly required for the purpose of performing the *Service*.

G34.3 The *Contractor shall* ensure that the Council is informed immediately of any loss of any such keys or padlocks. The *Contractor shall* at his own cost replace any such keys or padlocks and will reimburse the Council for the cost of any works reasonably incurred, or likely to be incurred in the replacement of any door locks, gates or other locked barriers arising out of the loss of such keys as agreed with the *Authorised Officer*

G35. ENFIELD HOUSING

G35.1 Works requested to be carried out in a front or back garden, the *Contractor shall* directly communicate with the tenant to arrange work dates and access. Enfield Housing will supply contact details to the *Contractor* to allow them to do so.

G35.2 The *Contractor shall* give at least 10days notice to the *Authorised officer* or Tenancy manager to allow Enfield Housing to inform residents of upcoming works, both in communal and private gardens.

G35.3 Where necessary the *Authorised Officer* or Housing Tenancy Manager will mediate between the *Contractor* and the tenant to assist with access.

G35.4 If the *Contractor* requires specific parking on Enfield Housing *Sites* they must liaise with the Area Tenancy manager to arrange this if possible.

G36. UTILITY SEARCHES

If instructed via a Purchase Order the Contractor shall arrange for a full set of Statutory Undertakers Service Plans to be provided to the Authority in an electronic format.

These should be current, and no older than 60days.

The information should be suitable, and maybe issued to the *Contractor* to allow them to carry out works which require Statutory Undertakers Service Plans.

This information shall not relieve the *Contractor* of their Health and Safety obligations, and in all instances the *Contractor* shall carry out their own due diligence and use appropriate underground utility location equipment (e.g CAT scan).

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Enfield Council Tree Specifications And Definitions

TCD.1.0 GENERAL DEFINITIONS

For the purposes of the specification the following Definitions apply.

ARISINGS – All material produced as a result of any/all works included within this document.

BASAL GROWTH – A shoot or stem emanating from the root system or rootstock or grafted area at or just below ground level, and is classified for the purpose of this contract as the same as Epicormic Growth or Stem Growth or Sucker Growth and is covered within this document by the specification for **Stemming TC1.14**.

SUCKER – Shoots or stems emanating from the root system below ground level or just at ground level, this growth is usually unwanted growth from the rootstock often from a grafted or budded plant, and is covered within this document by the specification for **Stemming TC1.14**

EPICORMIC GROWTH – Shoots or stems emanating from adventitious or latent buds as either reaction growth to heavy pruning/pollarding or reduction and or normal annual growth, and is classified for the purpose of this contract as the same as Basal Growth or Stem Growth or Sucker Growth, and is covered within this document by the specification for **Stemming TC1.14**

TRUNK – The main stem of the tree that supports the crown, a generally clear of limbs or branches and other growths to the point where the crown forms.

STUMP – The trees root ball and the remaining part of the lower trunk of the tree that has been felled or lost near to ground level, sometimes referred to as a stool.

KNUCKLE – The area of swelling developed from regular re-growth following regular pollarding from which all growth has been removed.

SCAFFOLD BRANCHES – The branches that are among the largest on the tree and that form the main structure of the crown also known as the “branch framework”.

LIMB – A large individual component that makes up the branch framework forming the trees crown and structure.

BRANCHES – The secondary woody sub structure growth upon the Scaffold Branches or Branch Framework or Limbs.

CROWN – The part/s of a tree above the trunk which is formed from and incorporates the limb and branch framework, and is known as the uppermost part of the tree.

LEADER – The dominant stem or trunk that forms the apex of the tree.

CANOPY – The complete visual outer branches of the tree.

STEM – The axis (trunk of a central leader) of a tree on which branches (scaffold branches/ branch framework) are attached.

GRAFTED AREA – The point at the base of the tree i.e. Rootstock area where an individual species of tree has been Grafted during the process of Propagation onto the Rootstock of a parent plant within the same Genera.

OPERATIVE/S – Shall be the term used to describe the staff engaged to undertake the works for the *Contractor*, whether directly employed by the *Contractor* or sub-contracted to them.

PRUNING - Pruning may be specified as one, or a combination, of the operations listed below and shall include all sub specifications included within the specification. Trees shall be specified by location, specie, type and group. In appropriate cases the desired shape shall also be described.

- **TC1.1 - FORMATIVE PRUNING**
- **TC1.2 - CROWN LIFTING**
- **TC1.3 - CROWN THINNING**
- **TC1.4 - CROWN REDUCTION**
- **TC1.5 - DEADWOOD REMOVAL/CLEANING OUT**
- **TC1.6 - POLLARDING**
- **TC1.7 - RE-POLLARDING**
- **TC1.8 - CROWN RESHAPING**
- **TC1.9 - TREE SURGERY**
- **TC1.10 - CROWN RENEWAL/REFORMING/RESTORATION**
- **TC1.11 - CUT BACK TO BOUNDARY AND/OR SERVICES**
- **TC1.12 - COMBINATION PRUNE**
- **TC1.13 - SPECIFIC BRANCH REMOVAL**
- **TC1.14 - STEMMING**

The *Contractor* shall under no circumstances use climbing irons (spikes) when pruning live trees. The use of climbing irons must only be used during felling or dismantling operations, unless prior consent is given by the *Authorised Officer* in the rare occurrence that it is deemed necessary to use them during emergency works.

At no time during any pruning procedure shall any Timber be dropped/lowered into adjacent property that does not form part of Council ownership without written prior permission from the *Authorised Officer* and or Land Owner.

At no time during any-pruning procedure shall any of the *Contractors* operatives enter any adjacent property that does not form part of the Council's ownership without prior written permission from the *Authorised Officer* and or Land Owner.

All pruning *specifications* shall be carried out in accordance with best Arboricultural practices i.e. BS3998 – British Standards Recommendations for Tree Work.

Any service equipment situated in the surface near or around the tree or attached to any structure near the tree, that may be obstructed/touched by the trees crown/growth (i.e. lamp columns telegraph poles, overhead wires/cables, road signage, etc) shall be cleared as part of the pruning process. Care shall be taken not to damage these services during such works, any damage caused to such services shall be the responsibility of the *Contractor*. Care shall be taken to retain a reasonable overall shape to the trees crown on completion of the clearance of these services.

On completion the area shall be swept and or raked to ensure any/all arisings or accumulation of litter/rubbish previously attached or caught within the trees structure and any unauthorised notices are removed to the *Contractors* own tip/recycling centre. The site shall be left in a clean and safe condition.

DAMAGED AREAS - Any damage or rutting caused by machines or work procedures to any surface type/area i.e. Grass Verges, Paved areas etc during any works contained within this contract document shall be required to be made good at the *Contractor's* own expense using imported topsoil and seed / turf or Hard Landscaping materials to the satisfaction of the *Authorised Officer*.

TREE GROUPS: Trees will be categorised within one of two categories as listed below. Trees will be classified by their Genera

Ornamental	PRUNUS	MALUS	PYRUS
	LABURNUM	SORBUS	BETULA
	LIQUIDAMBER	COTONEASTER	MESPILUS
	ACACIA	CERCIS	GLEDITSIA
	LABURNUM	RHUS	ARBUTUS
	CRATAEGUS	ILEX	LIGUSTRUM
	LAUREL		OTHER
			ORNAMENTALS
Forest Type	ACER	ROBINIA	FRAXINUS
	PLATANUS	TILIA	AESCULUS
	ALNUS	CARPINUS	CATALPA
	AILANTHUS	JUGLANS	CASTANEA
	GINKGO	ULMUS	LIRIODENDRON
	ZELKOVA	PLANE	PAULOWNIA
	QUERCUS	POPULUS	SALIX
	FAGUS	TAXUS	ABIES
	CYPRESSES	JUNIPERS	CEDRUS
	LARIX	PICEA	TSUGA
	PINUS	EUCOLYPTUS	

This list is neither inclusive or exhaustive.

TCD.2.0 REFERENCE DOCUMENTS

BS:- British Standards Institution
DEFRA:- Department for Environment Food and Rural Affairs

Highway Work

New Roads and Street Works Act 1991(NRSWA)
Traffic Signs Manual - Chapter 8 Traffic Safety Measures and Signs
for Road Works and Temporary Situations Part 1 Design 2009
Traffic Signs Manual - Chapter 8 Traffic Safety Measures and Signs
for Road Works and Temporary Situations Part 2 Operations 2009
Traffic Management Act 2004
Local Government Miscellaneous Provisions Act 1976

Wildlife

The Wildlife and Countryside Act 1981(as amended)
The Conservation (Natural Habitats etc,) Regulations 1994
Countryside and Rights of Way Act 2000 (CROW)
The Environment Act 1995
The Conservation of Habitats and Species Regulations 2010
The Hedgerows Regulations 1997

Planting Work

BS 3936: Nursery Stock 1992 Nursery Stock – specification for trees
and shrubs
Part 1: 1980 Trees and Shrubs
BS 5236: Cultivation and planting of trees in the advanced nursery
stock category.
British Standard 4043: 1989 Transplanting root-balled trees
DEFRA (HM Engineer)
Code of Practice for the use of herbicides on weeds in watercourses
and lakes.
Approved products for farmers and growers.
The Plant Health (England) Order 2005
(as amended)
Plant Health (Forestry)(Great Britain) Order 2005
Plant Health (England) (Amendment) (England and Scotland) Order
2013
BS 4428: 1989 Code of practice for general landscape operations
(excluding hard surfaces)
Forestry Stewardship Council (FSC)
Department Environment Food and Rural Affairs (DEFRA)

Planning

Town and Country Planning Act 1990
Town and Country Planning (Trees) Regulations 2012
Anti-Social Behavior Act: Part 8
National Planning Policy Framework
LBE Unitary Development Plan

LBE Development Management Document

Timber

BS 4072: Wood preservation by means of copper / chromium / arsenic compositions

Part 1: 1987 Specification for preservatives

Part 2: 1987 Wood preservatives by means of copper / chromium / arsenic compositions.

General

National Tree Safety Group – Common Sense Risk Management of Trees 2011

The London Plan

London Tree and Woodland Framework

Highways Act 1980 – section 154

Health and Safety at Work Act 1974

Management of Health and Safety at Work Regulations 1999

The Work at Height Regulations 2005

Provision and Use of Work Equipment Regulations 1998

Control of Substances Hazardous to Health Regulations 2002 (COSHH)

Lifting Operations Lifting Equipment Regulations 1998 (LOLER)

BS3998 Tree Pruning Recommendations

BS 3990: 2010 Tree Work

British Standard 5837: 2012 Trees in relation to design, demolition and construction

Food and Environmental Protection Act 1985

Control of Pesticides Regulations 1986 (as amended)

Controlled Waste Regulations 1991

Provision and use of Work Equipment Regulations 1998 (PUWER)

Lifting Operations and Lifting Equipment Regulations 1998 (LOLER)

Reporting of Injuries Diseases and Dangerous Occurrence's Regulations 1985 (RIDDOR).

NJUG 10 vol.4 2007 – Guidelines for the planning, installation and maintenance of utility apparatus in proximity to trees.

BS 3882 – Specification for topsoil and requirements for use

The above is guidance that Enfield Council expects the Contractor to comply with any relevant legislation and to work to arboricultural industry best practice.

It is the Contractors responsibility to keep updated with all legislation relevant to all/any arboricultural works authorised by Enfield Council including all amendments.

This list is neither inclusive or exhaustive.

TC1.0 PRUNING

TC1.1 FORMATIVE PRUNING:-

TC1.1.1 The corrective pruning and shaping of young newly planted trees up to and including Semi Mature specimens 5 years after planting, to ensure good establishment and development of a sound branch framework in keeping with the species natural growth pattern and location, which in maturity shall be free from major physical defects and shall allow for the development of a well formed, healthy evenly branched tree of good shape and form.

TC1.1.2 Pruning shall be undertaken following the principles of sound arboricultural Practices BS 3998 British Standard Recommendations for Tree Work. Final cuts shall be back to the branch collar, or in the absence of a branch collar, opposite and equal to the angle of the bark ridge at the base of the branch on the main stem, or to a suitable live growth emanating from the cut branch to retain as far as possible, the existing shape of the tree. Cuts shall be slanted to integrate with the existing growth pattern of the tree.

TC1.1.3 The style of formative pruning will depend upon specie. Two distinct categories are defined:-

- A Bush headed varieties** - ornamental species such as Japanese flowering cherries, thorn and similar species will require special formative pruning in keeping with their natural shape.
- B Forest type trees** – such as Acer, Lime, Plane and similar will require formative pruning to ensure a straight trunk, a well-balanced crown and retention of a clear central leader.

TC1.1.4 Formative Pruning shall only be carried out using non-motorised tools, only hand tools such as Pull Saws, Bow Saws, Secateurs and long arm loppers shall be used unless otherwise agreed in writing by the *Authorised Officer*.

TC1.1.5 Formative Pruning shall include the removal of Basal/Epicormic/Stem/Sucker growth emanating from the rootstock or stem of the tree, up to the first branch or the start of the branch framework in accordance with the *specification* **TC1.14 STEMMING**, unless the specimen is of Fastigiated growth habit where such branching is characteristic of the specie or variety.

TC1.1.6 Formative Pruning shall include the removal of competing co-dominant stems, dead dying or diseased stems/branches, badly damaged stems/branches, crossing or misshapen Stems/Branches, to formulate the desired shape through to maturity.

TC1.1.7 Formative Pruning shall include the removal and/or reduction of any stems/branches that may be causing an obstruction to pedestrians or vehicles. Traffic site lines and any branches etc that obstruct public footpaths, public highways, or other public areas such as communal areas and or parks and open spaces to ensure a safe unobstructed passage for users of Corporate land or Public Rights of Way.

TC1.1.8 The completed tree must not have rips or tears at the end of the cut on completion of works.

TC1.1.9 Further general information with relation to this specification can be found in the Definitions section of this Contract, and should be read by the *Contractor*

TC1.2 CROWN LIFTING

TC1.2.1 The removal of growth from the crown/canopy of the tree or branch framework to a specified height above ground level i.e. 3mtrs over pedestrian footpaths/areas and 6mtrs over the Public Carriageway or any other vehicular area unless otherwise specified by the *Authorised Officer*. This shall also include Stem/Sucker growth from the base of the tree or the main stem or the Branch Framework, to ensure unimpeded passage to pedestrians or vehicles using the area beneath the tree and to clear any form of structure, and/or to clear any Road Signage/Street Furniture obstructed by the Trees low growth.

TCS1.2.2 The desired clear height should be achieved either by the removal of whole branches, or by the removal of only those parts which extend below the desired clear height specified. With strongly downward sloping branches the branch tip should be restricted to the removal of secondary growth rather than removing the entire branch but not to leave stubs.

TCS1.2.3 This operation shall be carried out in a manner that *shall* maintain a well-balanced crown. However on occasions when specified by the *Authorised Officer* Crown Lifting may result in the canopy base being not at one single level but stepped to allow for different clearances, for example where a tree overhangs both a footway and a vehicle route where different height clearances are required.

TCS1.2.4 The completed tree must not have rips or tears at the end of the cut. The finished tree should retain a good form in line with the trees character/habit.

TC1.2.5 Further general information with relation to this specification can be found in the Definitions section of this Contract, and should be read by the *Contractor*

TC1.3. CROWN THINNING

TC1.3.1 An operation to reduce leaf density by selective removal of a proportion of secondary and small live branch growth from throughout the crown. Thinning shall include the selective removal of weak thin crossing branches, and sound branches to achieve an even density of foliage around a well-spaced and balanced branch structure. Thinning shall also take place at branch tips using specialised Pruning tools such as extended Pole Saws. Crown Thinning will be specified as a percentage of crown density by the *Authorised Officer* this shall usually be between but not limited to 10% and 50%.

TC1.3.2 Crown Thinning shall also include the removal of all deadwood and damaged branches in accordance with *specification* Ref : **TC1.5 DEADWOOD REMOVAL/CLEANING OUT** that shall be incorporated as part of the Reduction process where required.

TC1.3.3 Crown Thinning shall not concentrate on the removal of inner lower branches but should be even throughout the Centre and outer framework of the canopy. This selective Thinning should increase light penetration, and air movement within the crown. Thus improving branch taper and strength.

TC1.3.4 The completed tree must not have rips or tears at the end of the cut. The pruning cuts should be angled no greater than is necessary to ensure a rapid run-off of water. The finished tree should retain a good form in line with the trees character/habit.

TC1.3.5 Further general information with relation to this specification can be found in the Definitions section of this *Specification*, and should be read by the *Contractor*

TC1.4. CROWN REDUCTION

TC1.4.1 To reduce the overall height and spread of a tree while retaining a good overall shape/form. The Crown of the tree shall be reduced in height and/or spread by shortening back branches or leaders from their tip to an acceptable branch, branchlet, twig or bud, which should be at least 30% of the diameter of the branch or leader to be removed, to promote the growth of existing and/or new shoots. On completion the tree shape should retain the natural habit and form of the specie. Crown Reduction will be specified as a percentage of crown density by the *Authorised Officer* this shall usually be between but not limited to 10 and 50%.

TC1.4.2 Any vertical branches and stems shall be cut off neatly just above the nearest suitably placed live growth. The lowest horizontal branches should be cut back to a suitably placed vertical or near vertical growth to ensure upright regrowth, and therefore assisting in retaining the natural habit and form of the specie.

TC1.4.3 At all times the natural flowing outline of the tree must be observed, to ensure that upon completion, the tree has a natural and balanced appearance.

TC1.4.4 Occasionally it may be necessary to reduce unusually long verticals or horizontals more than the % specified to achieve a balanced crown with a natural habit and form for the specie.

TC1.4.5 Crown Reduction includes the removal of all Deadwood and Cleaning in accordance with specification Ref : **TC1.5 DEADWOOD REMOVAL/CLEANING OUT** that shall be incorporated as part of the Reduction process where required.

TC1.4.6 The completed tree must not have rips or tears at the end of the cut. The pruning cuts should be angled no greater than is necessary to ensure a rapid run-off of water. The finished tree should retain a good form in line with the trees character/habit.

TC1.4.7 Further general information with relation to this *specification* can be found in the Definitions section of this *Specification*, and should be read by the *Contractor*

TC1.5 DEADWOOD REMOVAL/CLEANING OUT

TC1.5.1 The removal of any/all undesirable limbs/branches from within the crown that may result in a risk or cause detriment to the trees health, vigour, habit, or form. The removal of broken, diseased, dying or dead limbs, branches that are weak, crossing/rubbing suppressed or considered of low vigour, suckering (epicormic) growth from within the crown and foreign bodies attached to or in the Tree (e.g. climbing plants, wire, rope, nails fungal bodies, polythene, notice boards, where these are not an integral part of the tree and where the tree shall not be damaged or weakened by their removal, etc.).

TC1.5.2 Where an object has been enveloped by a tree, only the exposed area of the object should be removed providing private property i.e. Boundary Fences are not damaged. It may be necessary in situations where materials have completely girdled the tree to sever them only and then notify the *Authorised Officer*.

TC1.5.3 The completed tree must not have rips or tears at the end of the cut. The pruning cuts should be angled no greater than is necessary to ensure a rapid run-off of water.

TC1.5.4 Further general information with relation to this specification can be found in the Definitions section of this *Contract*, and should be read by the *Contractor*

TC 1.6 POLLARDING

TC1.6.1 The removal of vertical and lateral growth from the trees branch framework area emanating from the top of the tree trunk, or from a previous Pollard point, to leave branch stumps to a height specified by the *Authorised Officer*, this will usually be but not limited to a height between 8m and 14m above ground level. This shall also include the removal of all growth twigs and branches beneath the Pollard points .

TC1.6.2 The remaining Branch stumps shall be of sound condition and the final cut shall be smooth and completed in one operation. The angle of the final cut shall slope away from the centre of the crown. Any dead or dying or decaying wood shall be removed as part of the stump selection process.

TC1.6.3 When works are on or adjacent to a Public Highway or Carriageway Pollarding shall include the complete removal of limbs that extend over the kerb line into the public highway up to a height of 6mtrs that may pose an obstruction to high sided vehicles i.e. Buses/Lorries as part of the stump selection process. The final cut shall be flush to the trunk and slope away from the tree.

TC1.6.4 Heavy wood removed from the tree during this process shall be lowered by ropes or other means in compliance with HSC regulations and shall not be dropped and therefore causing damage to any surface type, structure, utility, or property, beneath the tree. Any damage caused during the Pollarding process shall be repaired/replaced like for like at the *Contractors* own cost.

TC1.6.5 Pollarding shall also include the removal of all Stem, Basal, and or Epicormic growth in accordance with **TC1.14 STEMMING**.

TC1.6.6 The completed tree must not have rips or tears at the end of the cut. The pruning cuts should be angled no greater than is necessary to ensure a rapid run-off of water.

TC1.6.7 Further general information with relation to this *specification* can be found in the Definitions section of this *Contract*, and should be read by the *Contractor*

TC 1.7 RE-POLLARDING

TC1.7.1 To maintain a Pollarded form, and to increase the trees structural stability by reducing the effects of wind throw. This applies to trees that have been pollarded within the previous 2 to 5 years. Generally this would have been to a height of but not limited to 8mtrs to 14mtrs above ground level.

TC1.7.2 All re-growth since the last pollarding procedure shall be removed taking care not to cut below the previous Pollard points or existing knuckles unless specified by the *Authorised Officer*. Care shall be taken not to damage knuckles, branches, or the trunk. Motorised tools i.e. Chainsaws/Hedge

cutters shall not be used unless prior written agreement by the *Authorised Officer*.

TC1.7.3 Pollarding shall also include the removal of all Stem, Basal, and or Epicormic growth in accordance with **TC1.14 STEMMING**.

TC1.7.4 The completed tree must not have rips or tears at the end of the cut. The pruning cuts should be angled no greater than is necessary to ensure a rapid run-off of water.

TC1.7.5 Further general information with relation to this *specification* can be found in the Definitions section of this *Contract*, and should be read by the *Contractor*

TC 1.8 CROWN RESHAPING

TC1.8.1 Reshaping is the reduction in crown spread or height and reshaping of a tree to reform the tree to a more balanced structure or to a size more compatible with its location, or in response to storm damage, or that is severely encroaching an adjacent property.

TC1.8.2 Any adjacent service structure or property boundary line shall be cleared while still retaining a reasonable form to the trees crown. This may not always be possible dependant on the proximity of the tree to the adjacent property or object, in these situations the *Authorised Officer* may be required to be in attendance to direct the amount of the crown to be pruned.

TC1.8.3 After a trees crown has been cut back from an adjacent property or *Service* object the remainder of the crown shall be pruned to accommodate a more balanced form.

TC1.8.4 Crown Reshaping shall also include the removal of all Stem, Basal, and or Epicormic growth in accordance with **TC1.14 STEMMING**.

TC1.8.5 The completed tree must not have rips or tears at the end of the cut. The pruning cuts should be angled no greater than is necessary to ensure a rapid run-off of water.

TC1.8.6 Further general information with relation to this *specification* can be found in the Definitions section of this *Contract*, and should be read by the *Contractor*

TC 1.9 TREE SURGERY

TC1.9.1 Tree Surgery will apply to Mature or Over Mature specimens that are either very large specimens or that are not necessarily maintained to a regular cyclical program, or that are trees classed as Veteran Trees or Trees situated on SSSI's (Scientific Sites of Special Interest), or that may be covered by Conservation Areas or TPO's (Tree Preservation Orders). Where tree surgery is required the location, tree species and type will be given and a full detailed

specification of the work required to be carried out shall be supplied by the *Authorised Officer* to the *Contractor*.

TC1.9.2 Tree Surgery may be a combination of but not limited to the *specifications* listed below:

- **Crown Lifting – TC 1.2**
- **Crown Thinning – TC 1.3**
- **Crown Reduction – TC 1.4**
- **Deadwood Removal/Cleaning Out – TC 1.5**
- **Crown Reshaping – TC 1.8**
- **Crown Renewal/Reforming/Restoration – TC1.10**
- **Cut Back from Boundary and/or Services – TC 1.11**
- **Specific Branch Removal – TC 1.13**
- **Stemming – TC 1.14**
- **Removal and Climbing Plants – TC 2.2**
- **Cavities – TC 7**
- **Pollarding - TC 1.6**
- **Re-Pollarding - TC 1.7**

TC1.9.3 The completed tree must not have rips or tears at the end of the cut. The pruning cuts should be angled no greater than is necessary to ensure a rapid run-off of water.

TC1.9.4 Further general information with relation to this *specification* can be found in the Definitions section of this *Contract*, and should be read by the *Contractor*

TC 1.10 CROWN RENEWAL/REFORMING/RESTORATION

TC1.10.1 This applies to trees that have been previously Pollarded/Re-Pollarded as specified in *specifications* **TC1.6** and **TC1.7**, and all sub clauses within these *specifications*.

TC1.10.2 With previously pollarded trees a selected number of branches shall be retained to reform the crown of the tree. However the branches retained shall be selected to form a balanced and evenly distributed crown. One to Five branches (usually 5 unless previously agreed with the *Authorised Officer*) shall be selected per knuckle to reform the crown. Branches selected shall be vigorous and firmly attached. To ensure a balanced crown the retained branches may require thinning and/or reducing. All other re-growth shall be removed taking care not to damage the retained re-growth or existing knuckles, branches, or the trunk. Motorised tools i.e. Chainsaws/Hedge cutters shall not be used unless prior written agreement by the *Authorised Officer*.

TC1.10.3 Crown Renewal/Restoration also includes the removal of all Stem/Epicormic/Basal growth as specified in **TC1.14** and all sub clauses within this *specification*.

TC1.10.4 Further general information with relation to this *specification* can be found in the Definitions section of this *Contract*, and should be read by the *Contractor*

TC 1.11 CUT BACK FROM BOUNDARY AND/OR SERVICES

TC1.11.1 This *shall* consist of the cutting back of any growth that is growing over or towards adjacent property, and/or adjacent services i.e. lamp columns, street signs, telegraph poles, overhead wires etc. Although this will usually apply to one side only of a tree the emphasis *shall* still be to achieve a natural form to the crown shape of the tree where ever possible.

TC1.11.2 Unless otherwise specified by the *Authorised Officer* the crown of the tree that *shall* usually be but not limited to the lateral branch framework, *shall* be reduced to provide a 1mtr. clearance over or away from any/all *services*.

TC1.11.3 When the crown of the tree is growing over adjacent premises. Unless the branch(s) of the tree that shall usually be but not limited to the lateral branch framework, shall be reduced to provide a 2mtr. clearance over or away from any/all adjacent property. When branch/branches are only affecting an adjacent garden they *shall* be reduced by 1mtr. or back to the boundary perimeter as specified by the *Authorised Officer* while still retaining a reasonable balanced form to the crown of the tree wherever possible.

TC1.11.4 Unless specified by the *Authorised Officer* only secondary branches *shall* be removed so as to retain the natural form and habit of the tree while still clearing the service obstacle or clearing the adjacent property. Vertical branches and stems shall be cut off neatly just above the nearest suitably placed live growth. The lowest horizontal branches should be cut back to a suitably placed vertical or near vertical growth to ensure upright re-growth, and therefore assisting in retaining the natural habit and form of the specie.

TC1.11.5 The completed tree must not have rips or tears at the end of the cut. The pruning cuts should be angled no greater than is necessary to ensure a rapid run-off of water.

TC1.11.6 Further general information with relation to this *specification* can be found in the Definitions section of this *Contract*, and should be read by the *Contractor*.

TC 1.12 COMBINATION PRUNE

TC1.12.1 Combination pruning *shall* be a combination of all the *specifications* listed below. Combination Pruning shall be specified by tree group/type, height to be lifted, percentage to be thinned and reduced, and in accordance with best Arboricultural practices i.e. BS3998 – British Standards Recommendations for Tree Work.

- **TC 1.2 Crown Lifting:** and all sub clauses within the title clause.
- **TC 1.3 Crown Thinning:** and all sub clauses within the title clause.
- **TC 1.4 Crown Reduction:** and all sub clauses within the title clause.
- **TC 1.14 Stemming:** and all sub clauses within the title clause.

TC1.12.2 The completed tree must not have rips or tears at the end of the cut. The pruning cuts should be angled no greater than is necessary to ensure a rapid run-off of water.

TC1.12.3 Further general information with relation to this *specification* can be found in the Definitions section of this *Contract*, and should be read by the *Contractor*.

TC1.13 SPECIFIC BRANCH REMOVAL

TC1.13.1 On occasions the *Contractor shall* be required to remove specific branch/(s) as directed by the *Authorised Officer* Branch(s) may be part of the branch framework/scaffold branches, or from a multistem specimen.

TC1.13.2 Works *shall* be in accordance with best Arboricultural Practices BS3998.

TC1.13.3 The completed tree must not have rips or tears at the end of the cut. The pruning cuts should be angled no greater than is necessary to ensure a rapid run-off of water.

TC1.13.4 Further general information with relation to this *specification* can be found in the Definitions section of this *Contract*, and should be read by the *Contractor*.

TC1.14 STEMMING

TC1.14.1 This specification applies to the stemming of all trees including Lime Trees that are categorised separately in the schedule of rates section.

TC1.14.2 Stemming is defined as shoots emanating from dominant or Latent buds along the branches, trunk, buttress roots, and arising from roots within 1mtr of the trunk or planting pit – whichever is greater. The removal of all suckering/ epicormic growth arising from the base or stem of the tree shall be removed up to a minimum height of five metres above ground level or to the point where branch framework occurs whichever is greater, this is likely to require the use of one section of ladder to achieve this height. Also the removal of any self-seeded shrub or tree (i.e. Buddleia or Elderberry) that may be growing from the base or within the structure of the tree.

TC1.14.3 Should any Hypodermic Needles be discovered around the base of the tree during this process works at the location of concern shall cease immediately and the *Authorised Officer* shall be notified without delay. The area including the exposed Hypodermic Needles shall be secured to prevent

Public access until clearance of the site is carried out by the *Authorities* approved *Service*.

TC1.14.4 All Epicormic/Stem/Basal growth shall be removed by non-mechanical means, ensuring that the final cut is flush with the trunk, root, and/or buttress and the finish shall be smooth and without shoots, left torn or wispy.

TC1.15 REMOVAL OF CLIMBING PLANTS

TC1.15.1 On occasions the removal of Climbing plants i.e. Ivy/Vines may be required to allow unimpeded visual surveys to take place or to reduce the wind resistance in the specimen. The *Authorised Officer shall* specify if/when this works may be required.

TC1.15.2 On instruction from the *Authorised Officer*, the *Contractor shall* cut/sever any climbing plant at or near the base of the tree. Care shall be taken not to cut into or damage the surface area of the trunk/bark during this process, and using non-motorised tools where possible. The climbing plant *shall* then be removed from all areas of the trunk and crown taking care not to damage any part of the tree during this process.

TC1.15.3 The Climbing plant shall be removed from the area of severance to a height of 1m above the start of the branch framework of the tree.

TC1.15.4 Any Epicormic growth left exposed on completion of this process *shall* be removed in accordance with specification **TC1.14** and all sub clauses within this *specification*. Any damaged part of the crown shall be removed in accordance with *specification* **TCS1.5**.

TC 2.0 REMEDIAL GROUND BASED WORKS

TC 2.0 GENERAL

TC2.0.1 On completion of any works within **TC2.0** the area shall be swept and or raked to ensure any/all arisings or accumulation of litter/rubbish previously attached or caught within the trees structure and any unauthorised notices are removed to the *Contractors* own tip/recycling centre. The site *shall* be left in a clean and safe condition.

TC2.0.2 Care shall be taken not to damage any surrounding services and or equipment's situated in the surface near or around the tree, or overhead cables running through the trees crown that may be obstructed/touched by the crown/growth (i.e. Lamp columns Telegraph Poles, overhead wires/cables, Road signage, etc). Care shall be taken not to damage these services during such works; any damage caused to such services shall be the responsibility of the *Contractor*.

TC 2.3 REMEDIAL GROUND BASED WORKS

TC2.3.1 Specifically for working on roads and footpaths, Remedial Ground Based Works will be carried out by ground staff with hand tools only to clear the public highways and footways of obstructive growth. To provide a clean well maintained aesthetically pleasing tree lined road. To deal with all minor tree works that are required on all trees situated in specified roads or to individually specified trees. *The Contractor shall* move through the borough in a methodical manner or by way of roads specified by *the Authority*.

TC2.3.2 Every individual tree specified by the *Authorised Officer shall* have all Basal/Epicormic/Stem growth removed as per *specification TC S1.14* and all associated sub clauses.

TC2.3.3 No part of the crown *should* be lower than 3mtrs over the pavement or 6mtrs over any adjacent road, as per *specification TC 1.2* and all associated sub clauses. Long arm pruners can be used where possible to acquire the required height.

TC2.3.4 Newly planted trees that have matured and become self-supporting *shall* have stakes and ties removed as per *specification TC 6.5* and all associated sub clauses.

TC2.3.5 Newly planted and young trees *shall* have stakes and ties as appropriate. This will include the loosening of ties that have become too tight. The reinstatement of stakes and ties as per *specifications TC 5.2 and TC 6.4* and all associated sub clauses. Any foreign object attached to the trunk of the tree i.e. signs, advertising leaflets, Nails, string/rope etc, shall be removed and transferred to the *Contractors* own tip/recycling facilities.

TC2.3.6 A list of completed roads *shall* be reported to the *Authorised Officer* weekly as per **Table Example 1** listed below, highlighting any signs of disease fungal infections or concerns. Any tree considered to be structurally unsound *shall* be reported to the *Authorised Officer* immediately, it may be necessary on such occasions for the operative to stay on site until the *Authorised Officer* arrives, instructing appropriate action to ensure the trees safety.

TC2.3.7 Table 1 identifies the data for feedback that *shall* be required and *shall* be filled in by the operatives carrying out Remedial/Ground Works and passed to the *Authorised Officer* (Electronic means *should* be favoured in line with Government and Council policy to minimise paper use).

Table 1

Road	Location	Pstcd	Species	Date Completed	Operative	Notes
Larmans Road	Outside 3	EN3	Lime (Tilia)	16 th August 2007	David Smith	Fungal Bracket identified at base, Decay identified at Base
Larmans Road	Outside 19	EN3	Lime (Tilia)	16 th August 2007	David Smith	No concerns to report
Larmans Road	Outside 46	EN3	Lime (Tilia)	16 th August 2007	David Smith	Tree stump
Larmans Road	Outside 98	EN3	Lime (Tilia)	16 th August 2007	David Smith	Vacant Planting Pit

TC2.3.8 Works *shall* be in accordance with best Arboricultural Practices BS3998.

TC2.3.9 The completed tree(s) must not have rips or tears at the end of the cut. The pruning cuts *should* be angled no greater than is necessary to ensure a rapid run-off of water.

TC2.3.10 The volume of trees and roads will be agreed between the *Contractor* and the *Authorised Officer* to ensure the request is achievable.

TC 3.0 GROUND WORKS

TC 3.1 EXCAVATE INSPECTION TRENCH

TC3.1.1 Inspection Trench's *shall* be specified by location and dimensions to be excavated to a minimum depth of 600mm, and a minimum width of 300mm and to length that *shall* be specified by the *Authorised Officer* usually 3 lin. mtrs.

TC3.1.2 The *Contractor* shall Cat scan any/all sites before commencing any excavation or ground penetration to assist in locating any/all underground services in conjunction with Utility/Service Maps.

TC3.1.3 At no time *shall* the *Contractor* disturb remove or undermine any structure including but not limited to surface areas of neighbouring/adjacent property that is not within the ownership of the local authority. All/any roots/ root structures exposed within the area of the excavated trench *shall* be cut back cleanly at both soil faces. At no time *shall* root severance be carried out if severance will result in structural instability of the tree.

TC3.1.4 Excavation for inspection Trench's may involve the lifting of paving stones or the breaking out of other hard surface material over the area to be treated. The *Contractor shall* be responsible for and bear the cost of, removing the existing surface and their reinstatement, therefore the *Contractor shall* carefully excavate the area affected and store any excavated material taking care not to damage re-useable material. The *Contractor shall* be responsible for the safe replacement to the correct levels of all surface types inclusive of paving stones and/or other hard or soft surface landscaping that may be removed during this process i.e. Asphalt/Concrete/Block pavement, grass/turf, soil etc. Any excess excavated or damaged material that is not re-useable *shall* be removed to the *Contractor's* own tip. Any surface material damaged during excavation *shall* be repaired to match the existing surrounding surface at the *Contractor's* own cost.

TC3.1.5 Where excavation is to be undertaken in grassed areas the *Contractor shall* be required to reinstate these areas using the turf and soil lifted from the site before commencing excavation.

TC3.1.6 All roots within the trench shall be cut back cleanly at both soil faces. All roots *shall* be removed from the trench and the trench backfilled ensuring that soil is compacted in 150mm layers.

TC3.1.7 A detailed report will be forwarded to the *Authority* detailing in full the size and amount of roots found within the area of excavated trench (e.g. 0-25mm /25mm-50mm /50mm-75mm etc) and at what depth the roots were found, and of the soil type within the area excavated, on completion of all works at each specified site. The *Contractor shall* also supply digital photos of

all roots exposed during the excavation works, along with a digital photo of the trench on severance of all roots, and a digital photo of the reinstated area.

TC3.1.8 On completion the area shall be swept and or raked to ensure any/all arisings or accumulation of litter/rubbish previously attached or caught within the trees structure and any unauthorised notices are removed to the *Contractors* own tip/recycling centre. The site *shall* be left in a clean and safe condition.

TC 3.2 ROOT PRUNING

TC3.2.1 The severance of roots to enable the level reinstatement of surface areas or Kerb Lines. Root pruning shall be specified by location and dimensions of area to be pruned.

TC3.2.2 The *Contractor shall* Cat scan any/all sites before commencing any excavation or ground penetration to assist in locating any/all underground services in conjunction with Utility / Service Maps.

TC3.2.3 Root pruning may involve the lifting of paving stones or the breaking out of other hard or soft landscaped surface material over the area to be treated. The *Contractor shall* be responsible for and bear the cost of, removal of the existing surface. The *Contractor shall* also be responsible for the safe reinstatement to the correct levels on a like for like basis of all surface types and any existing areas damaged during these works. Any excess excavated or damaged material that is not re-useable *shall* be removed to the *Contractor's* own tip.

TC3.2.4 Surface root pruning shall involve the removal of all roots on, above, or just below, ground level and the removal of all roots or portions of roots, which are located beneath the ground to a sufficient depth so as to allow for the reinstatement of the surface to an even level. No roots, which provide a significant part of the structural support to a tree, shall be removed without the prior consent of the *Authorised Officer*.

TC3.2.5 On completion the area shall be swept and or raked to ensure any/all arisings or accumulation of litter/rubbish previously attached or caught within the trees structure and any unauthorised notices are removed to the *Contractors* own tip/recycling centre. The site shall be left in a clean and safe condition.

TC 4.0 TREE REMOVAL

TC 4.1 REMOVE FALLEN TREE/HUNG UP BRANCH

TC4.1.1 When instructed by the *Authorised Officer*, the *Contractor shall* clear specified sites/locations of fallen trees or fallen timber, timber may be part of or the whole of a tree.

TC4.1.2 The *Contractor shall* be required to remove hanging, damaged or potentially dangerous timber from within the crown of the tree or from within the crown of adjacent trees that may have been affected by a fallen or hung up tree. Timber may be part of or whole trees.

TC4.1.3 Care *shall* be taken not to damage any surrounding structures property services and or equipment situated near or around the tree, or overhead cables running through the trees crown that may be obstructed/touched by the crown/growth (i.e. Lamp columns Telegraph Poles, overhead wires/cables, Road signage, etc). Care *shall* be taken not to damage these services during such works; any damage caused to such services *shall* be the responsibility of the *Contractor*.

TC4.1.4 The *Authority* will specify these trees by specie and Diameter at Breast Height (DBH).

TC4.1.5 On completion the area shall be swept and or raked to ensure any/all arisings or accumulation of litter/rubbish previously attached or caught within the trees structure and any unauthorised notices are removed to the *Contractors* own tip/recycling centre. The site shall be left in a clean and safe condition.

TC 4.2 WOODLAND THINNING

TC4.2.1 The *Contractor* shall when instructed by the *Authorised Officer* to remove specified trees from Wooded Areas. Felling shall be specified by tree specie and location. Felling shall be carried out in accordance with Arboricultural and HSC best practice. This shall be undertaken as a single operation on the same day. All Chipping's and arisings shall be removed unless otherwise agreed with the *Authorised Officer*.

TC4.2.2 No existing trees *shall* be used as winch anchors unless agreed by the *Authority*. If such agreement is given then any tree used for anchorage *shall* be protected in accordance with BS 3998 unless it is a tree that has also been identified for removal.

TC4.2.3 The *Contractor shall* work in accordance with any legal constraints that apply to Wildlife that may include but not be limited to all of those listed in

TD.2.0 REFERENCE DOCUMENTS

TC4.2.4 Care *shall* be taken not to damage any surrounding services and or equipment situated in the surface near or around the tree, or overhead cables running through the trees crown that may be obstructed/touched by the crown/growth (i.e. Lamp columns Telegraph Poles, overhead wires/cables, Road signage, etc). Care *shall* be taken not to damage these services during such works; any damage caused to such services shall be the responsibility of the *Contractor*.

TC4.2.5 The *Contractor shall* be required to remove hanging, damaged or potentially dangerous timber from within the crown of adjacent trees or overhead services i.e. electric or telephone cables, lamp columns that have occurred during the Woodland Thinning process. Timber may be part of or whole trees.

TC4.2.6 Any deep holes created by the Felling of trunks shall be reinstated to the original levels and firmed before the *Contractor* leaves site.

TC4.2.7 No Fires *shall* be permitted without exception.

TC4.2.8 All arisings shall be cleared from site none *shall* be left over night.

TC4.2.9 All tools and equipment *shall* be cleared from site none *shall* be left over night, and on completion the site *shall* be left clean and safe.

TC4.2.10 On completion the area *shall* be swept and or raked to ensure any/all arisings or accumulation of litter/rubbish previously attached or caught within the trees structure and any unauthorised notices are removed to the *Contractors* own tip/recycling centre. The site *shall* be left in a clean and safe condition.

TC4.3 GRUBBING OUT

TC4.3.1 This *shall* consist of the complete removal of young trees up to a Diameter of 75mm by means of hand tools only.

TC4.3.2 The *Contractor shall* Cat scan any/all sites before commencing any excavation or ground penetration to assist in locating any/all underground services in conjunction with Utility / Service Maps.

TC4.3.3 The whole root ball shall be removed and all lateral roots shall be severed at the edge of the tree pit.

TC4.3.4 All arisings shall be removed to the *Contractors* own tip/recycling facilities.

TC4.3.5 The *Contractor shall* be responsible for the safe reinstatement of the pit area to the same as the surrounding area and to the correct levels i.e. paving stones and/or other hard or soft surface Asphalt/Concrete/Block pavement, turf or soil and therefore *shall* make allowances for this cost in their Rates. Any excess excavated or damaged material *shall* be removed to the

Contractor's own tip/recycling facilities. Any surface material damaged during the removal process *shall* be repaired to match the existing surrounding surface at the *Contractor's* own cost.

TC4.3.6 On completion the area *shall* be swept and or raked to ensure any/all arisings or accumulation of litter/rubbish previously attached or caught within the trees structure and any unauthorised notices are removed to the *Contractors* own tip/recycling centre. The site *shall* be left in a clean and safe condition.

TC 4.4 FELLING

TC4.4.1 Felling *shall* be specified by tree species, location and size. Felling should be carried out in accordance with Arboricultural and HSC best practice. This *shall* be undertaken as a single operation on the same day unless otherwise agreed by the *Authorised Officer*.

TC4.4.2 Care shall be taken not to damage any surrounding services and or equipment situated in the surface near or around the tree, or overhead cables running through the trees crown that may be obstructed/touched by the crown/growth (i.e. Lamp columns Telegraph Poles, overhead wires/cables, Road signage, etc). Care *shall* be taken not to damage these services during felling works; any damage caused to such services shall be the responsibility of the *Contractor*.

TC4.4.3 A stump of approximately 1mtr in height shall be left. Removal of this 1mtr section of trunk shall form part of the stump grinding specification. This is to allow area users to more easily identify an obstruction within the location of use, than would be apparent if the tree were to be felled to ground level. The 1mtr stump *shall* have red and white luminous warning tape wrapped around the stump to enhance the stump visually to pedestrians or vehicles all material shall be supplied by the *Contractor* and should therefore be accounted for in their price.

TC4.4.4 On occasions depending on the situation i.e. (Root ball lifted with surrounding surface area that is displaced by surface lateral root system due to a fallen tree). It may be necessary to place protective barriers around the stump and the affected area after the tree has been removed prior to the Stump Grinding/Removal takes place, the *Contractor* shall make allowances for the supply and installation of all required materials in their price.

TC4.4.5 Clear Felling or Heavy wood removed from the tree during this process *shall* be lowered by ropes or other means in compliance with Arboricultural and HSC best practice and shall not be dropped therefore causing damage to the surface beneath the tree. Any damage caused to the surrounding surface area during the Felling process *shall* be repaired to match existing surrounding surfaces at the *Contractors* own cost.

TC4.4.6 The *Contractor shall* be required to remove hanging, damaged or potentially dangerous timber from within the crown of adjacent trees or

overhead services i.e. telephone cables, lamp columns that may have been affected by felled fallen or hung up trees. Timber may be part of or whole trees.

TC4.4.7 On completion the area *shall* be swept and or raked to ensure any/all arisings or accumulation of litter/rubbish previously attached or caught within the trees structure and any unauthorised notices are removed to the Contractors own tip/recycling centre. The site *shall* be left in a clean and safe condition.

TC 4.5 STUMP GRINDING

TC4.5.1 The *Contractor shall* Cat scan any/all sites before commencing any excavation or ground penetration to assist in locating any/all underground services in conjunction with Service/Utility Maps.

TC4.5.2 Where stump grinding or root ball removal is required as a single operation the *Contractor shall* include the complete removal of the Stump/Root ball to allow consideration for replacement planting in the future, or to allow reinstatement to the same level and standard of the surrounding area and type of surface. Also any surface lateral roots or large buttress roots emanating from the stump in the surrounding area shall be removed completely to allow complete reinstatement of the surrounding area. Prior to commencing the grinding process the stump that is usually but not limited to 1mtr in height as part of the Felling *specification* and any protective tape or barriers on or surrounding the stump *shall* be removed to the *Contractors* own tip/recycling facilities.

TC4.5.3 All reinstatement of the areas where a stump/rootball or surface root has been removed, and surrounding area that has been disturbed or damaged during the removal process *shall* be the responsibility of the *Contractor*. The *Contractor* may be asked in accordance with the *Purchase Order* to reinstate to as close as possible to the surface type of the surrounding area. It is the responsibility of the *Contractor* to identify and supply suitable and sufficient materials to allow the reinstatement of the site. On no account shall the arisings from the Stump Grinding operations be used to infill or part infill the hole. The *Contractor shall* ensure adequate precautions are in place to make the hole and ground around the operation site safe until such time reinstatement by the *Contractor* is carried out.

TC4.5.4 On occasions a Sapling/Semi Mature specimen may require removal where as a Stump Grinding machine is unwarranted. These Stumps can be Grubbed out using Hand Tools i.e. Mattocks. The complete Root ball *shall* be removed and the area *shall* be reinstated as specified in clause **TC 4.5.3**.

TC4.5.5 On occasions the *Contractor shall* attend to a stump/rootball that has been lifted completely from the ground. On such situations the Public *shall* be prevented from accessing the area by means of barriers/trestles until removal

of the stump/rootball allows full reinstatement to be carried out in accordance with sub clause TC 4.5.3.

TC4.5.6 During the Grinding process the *Contractor shall* ensure usage of protective barriers to envelope the site to prevent stones/debris from damaging adjacent property or injuring any persons in or passing the area of works.

TC4.5.7 No existing trees *shall* be used as winch anchors unless agreed by the *Authorised Officer*. If such agreement is given then any tree used for anchorage shall be protected in accordance with BS 3998.

TC4.5.8 On completion the area *shall* be swept and or raked to ensure any/all arisings or accumulation of litter/rubbish previously attached or caught within the trees structure and any unauthorised notices are removed to the *Contractors* own tip/recycling centre. The site *shall* be left in a clean and safe condition.

TC 4.6 CHEMICAL TREATMENT OF STUMPS

TC4.6.1 The killing of stumps that cannot be removed with machinery due to access or position. The *Contractor shall* on instruction from the *Authorised Officer* apply an approved poison to stumps.

TC4.6.2 The *Contractor shall* apply Chemicals in accordance with current industry standard and legislation and the manufacturer's label recommendations/guidelines/specifications.

TC4.6.3 The minimum chemical for the job should be used. Should the *Contractor*, having inspected the site, consider that an alternative chemical to that specified is required, the opinion and written authority of the *Authorised Officer* must be sought before implementing any changes. The *Contractor* must provide a list of the proprietary products, including MAPP/HSE Nos., he proposes to use, (including equivalent alternatives) together with rates of application for each section of the contract.

TC4.6.4 Protection of the environment: the *Contractor* will undertake the works in such a manner as to avoid contamination of any person, animal or property, and take particular care to protect water, wildlife and natural habitats. The *Contractor* will pay specific attention to sites where the mixing of chemicals takes place.

TC4.6.5 All Chemical applications *shall* be in accordance with legislative requirements and restrictions, i.e. in accordance with Control of Substances Hazardous to Health Regulations (2002) **COSHH**, and keep a fully updated **COSHH** register that *shall* be made available to the *Authorised Officer* on request.

TC4.6.6 The staff handling and applying the Chemicals *shall* be fully qualified in handling and applying chemicals.

TC4.6.7 Any re-growth *shall* be removed from the stump and cleared from the location to the *Contractors* own tip/recycling facilities before any application of Chemicals commences.

TC4.6.8 The circumference of the stump shall be drilled with 20mm holes approximately every 50-75mm around the circumference of the stump to ensure any living Cambium is openly injured. On application of the Chemical the stump *shall* then be covered immediately with thick Polythene and fixed in position with flat headed clout nails.

TC4.6.9 On completion the area *shall* be swept and or raked to ensure any/all arisings or accumulation of litter/rubbish previously attached or caught within the trees structure and any unauthorised notices are removed to the *Contractors* own tip/recycling centre. The site *shall* be left in a clean and safe condition.

TC4.6.10 It *shall* be the *Contractors* responsibility to ensure effective poisoning of stumps. The *Contractor shall* bear the cost of any return visits for additional applications that may be required to kill the stump.

TC 4.7 REINSTATMENT OF TREE PITS

TC4.7.1 The *Contractor shall* when required by the *Authorised Officer* to remove all grindings following stump removal, and top up the pit with good quality top soil/medium of a type as specified in the Tree Planting *specification TC5.0* and all sub clauses within this *specification*, the pit *shall* then be firmed to prevent sinkage.

TC4.7.2 On hard landscaped areas only the tree pit *shall* be topped up with soil/planting medium to within 15mm of the surrounding surface area. This void *shall* be filled with bitumen/asphalt.

TC4.7.3 The *Contractor shall* make allowances to provide all materials required to carry out this *specification*.

TC4.7.4 The finished level *shall* be consistent with the surrounding surface area with no sinkage or trips.

TC4.7.5 On completion the area shall be swept and or raked to ensure any/all arisings or accumulation of litter/rubbish previously attached or caught within the trees structure and any unauthorised notices are removed to the *Contractors* own tip/recycling centre. The site shall be left in a clean and safe condition.

TC 4.8 COPPICING

TC4.8.1 Coppicing is a managed process whereby a tree is cut down in order that it can produce multi-stemmed new growth for a continuous harvesting yield over a repeated short rotation.

TC4.8.2 If the plant is being re-coppiced then stumps of not more than 200mm tall *shall* be left where each trunk has been removed. If a tree is being coppiced for the first time a single stump of not more than 200mm tall *shall* remain.

TC4.8.3 The cuts *shall* be sloping outwards away from the centre of the main plant with the highest point of each stem being retained in the centre of the plant. No flat surfaces should be remaining to allow rain water to naturally run off the remaining stool while at the same time leaving a large surface area to encourage maximum re-growth from advantages/latent buds.

TC4.8.4 The plant to be Coppiced will be identified by specie and size that will be measured around the circumference of the base of the plant at ground level.

TC4.8.5 Coppicing *shall* be carried out in accordance with Arboricultural and HSC best practice. All Chipping's and arisings shall be removed unless otherwise agreed with the *Authorised Officer*.

TC4.8.7 The *Contractor shall* work in accordance with any legal constraints that apply to Wildlife that may include but not be limited to all of those listed in

TD.2.0 REFERENCE DOCUMENTS

TC4.8.8 Care *shall* be taken not to damage any surrounding services and or equipment situated in the surface near or around the tree, or overhead cables running through the trees crown that may be obstructed/touched by the crown/growth (i.e. Lamp columns Telegraph Poles, overhead wires/cables, Road signage, etc). Care shall be taken not to damage these services during such works; any damage caused to such services shall be the responsibility of the *Contractor*.

TC4.8.9 The *Contractor shall* be required to remove hanging, damaged or potentially dangerous timber from within the crown of adjacent trees or overhead services i.e. electric or telephone cables, lamp columns that have occurred as a result of the Coppicing process. Timber may be part of or whole trees.

TC4.8.10 Any deep holes created by the Felling of trunks shall be reinstated to the original levels and firmed before the *Contractor* leaves site.

TC4.8.11 No Fires *shall* be permitted without exception.

TC4.8.13 All tools and equipment and arisings shall be cleared from site none shall be left overnight unless otherwise agreed with the *Authorising Officer*, and on completion the site *shall* be left clean and safe.

TC4.8.14 On completion the area shall be raked to ensure any/all arisings or accumulation of litter/rubbish previously attached or caught within the trees structure and any unauthorised notices are removed to the *Contractors* own tip/recycling centre. The site *shall* be left in a clean and safe condition.

TC 5.0 NEW TREE PLANTING

TC 5.1 TREE PLANTING

TC 5.1.1 The *Contractor shall* carry out all tree planting specified by the *Employer* in accordance with the *Specification*. These *specifications* include standards necessary for and incidental to the execution and completion of planting including supply of materials, and supply of specified stock i.e *Genera, Species, Cultivar*, and in accordance with BS 3936: Nursery Stock Part 1: 1980 Trees and Shrubs and BS 4043 recommendations for transplanting root balled trees.

TC5.1.2 The *Authority shall* supply to the *Contractor* lists containing the following information; species, variety, cultivar, size, location of planting site and the required reinstatement of the area surrounding the tree. Where planting is required to be carried out by a specific date or dates this will also be indicated.

TC5.1.3 Tree types with size specification Information given in following format:

Description	Code	Comment
Girth	(G)	measured at 1m above ground level
overall height	(H)	measured from ground level
clear stem	(CS)	measured from ground level
Description	Code	Size
Feathered tree	(FTHD)	H 2.5-3.0m
Standard tree	(STD)	G 8-10cm H 2.75-3.0m CS 1.8-2.10m
Selected standard	(SS)	G 10-12cm H 3.0-3.5m CS 1.8-2.10m
Heavy standard	(HS)	G 12-14cm H 3.6-4.25m CS 1.8-2.10m
Extra heavy standard	(EHS)	G 14-16cm H 4.25-5.0m CS 1.8-2.10m

TC5.1.4 The *Contractor shall* provide all plant material in accordance with BS 3936 Nursery stock General, Part 1 - Trees and shrubs and Part 4 - Forest trees. All plant material *shall* be obtained from Nurseries where it *shall* have been grown under soil and climatic conditions similar to those of the Borough.

TC5.1.5 The *Authority shall* supply to the *Contractor* the proposed planting season a list giving details of number, type, root condition, *Genera, Species*, and *Cultivar* applicable of trees to be planted. Additional lists may be supplied after this time. The planting season shall normally but not be limited to commencing from the beginning of November and run through to the middle of March annually, however climate change, nursery stock, and other factors may influence a variation. In the event of any variation to the scheduled planting season the *Contractor* shall be notified by the *Authorised Officer*. Containerised Trees may be planted throughout the season on instruction from the *Authorised Officer* only, in these situations additional watering may be required, to ensure establishment and survival. It may on occasions be a requirement to alter occasional sites or *species* the *Authorised Officer* shall

reserve the right to make alterations to individual locations or species at any time.

TC5.1.6 The *Contractor* shall work in accordance with any legal constraints that apply to the import or transport of Trees/Timber that may include but not be limited to all of those listed in **TD.2.0 REFERENCE DOCUMENTS** when sourcing and supplying trees for Tree Planting within Enfield.

TC5.1.7 The *Contractor* shall provide in the first operational *Contractors Plan* for approval a list of those nurseries where it is proposed to seek supplies. The *Authority* may at their discretion decide to inspect plant material at those nurseries or request proof of provenance and the *Contractor* shall be required to make arrangements to facilitate such inspections or acquire documentation at request. Any such inspections shall not be taken as approval of the stock but as an indication of the standard required.

TC5.1.8 Trees shall be true to *Genera Species* and *Cultivar* , specified and grown in accordance with good horticultural practices. All trees *shall* be of specimen quality symmetrical, and trained in development and appearance as to be of superior form. They *shall* be sound healthy, vigorous, well branched and densely foliated when in leaf; free of disease and insects, eggs, or larvae; and shall have healthy, well developed root systems. They *shall* be free from physical damage or other conditions that would prevent or inhibit vigorous growth. Trees with multiple leaders *shall* be rejected. Trees with damaged or crooked leader, bark abrasions, sunscald, disfiguring knots, insect damage, or cuts of limbs over 20mm in diameter that are not completely closed/included *shall* be rejected.

TC5.1.9 Trees *shall* conform to the measurements specified, except that plants larger than those specified may be used if approved by the *Authorised Officer*. Use of larger plants *shall* not increase the contract price. If larger plants are approved, the root ball *shall* be increased in proportion to the size of the tree.

TC5.1.10 All trees *shall* be labelled by the plant name. Labels *shall* be attached securely to all trees, when delivered to site. Tree labels *shall* be durable and legible, with information provided in weather-resistant ink or embossed lettering. Labels *shall* be removed at the end of guarantee period.

TC5.1.11 Trees *shall* be subject to inspection for conformity to the *specification* requirements and approval by the *Authorised Officer* at their place of establishment, and on delivery if required. Such approval *shall* not impair the right of inspection and rejection during progress of the work.

TC5.1.12 Substitutions *shall* not be permitted unless authorised by the *Authorised Officer* in writing.

TC5.1.13 The *Contractor shall* ensure that all stock is adequately protected during transit to ensure survival. No stock is to be stored overnight on any vehicle to protect from frost to roots and branches. Branches *shall* be carefully

tied with twine or rope only in such a manner that no damage will occur to the bark or branches.

TC5.1.14 During transportation of trees the *Contractor shall* exercise care to prevent injury and drying out of the trees. Should the roots be dried out during transportation or the buds/leaves suffer from wind scorch, or large branches broken, balls of earth broken or loosened, or areas of bark torn, the *Authorised Officer* may reject the injured tree(s) and order them replaced at no additional cost to the *Authority*. All loads of trees *shall* be covered at all times with tarpaulin or canvas, loads that are not protected will be rejected.

TC5.1.15 During transportation all **bare root** trees *shall* be adequately covered with wet soil, sawdust, woodchips, moss, peat, straw, hay, or other acceptable moisture-holding medium that has been previously sterilised and then covered by a tarpaulin or canvas. Loads that are not protected in the above manner may be rejected.

TC5.1.16 The *Contractor shall* ensure that prior to and following delivery all stock is stored in a sheltered position and roots are covered to protect them from drying out or frost damage. At the earliest opportunity after delivery the temporary storage arrangements *shall* be made until the stock can be planted in its permanent planting position.

TC5.1.17 Where upon receipt of deliveries from the supplier the *Contractor shall* be required to provide temporary storage of all supplied stock at the *Contractors* own site until such a time that the stock can be planted at the designated location. This site *shall* be secure providing reasonable defensive measures from the threat of theft, vandalism, contamination, or mechanical damage or stress. The *Contractor shall* notify the *Authority* not less than 2 business days before the delivery of stock to the *Contractor's* place of storage. The *Authority* may at their discretion inspect the stock and storage facilities at any subsequent time by prior arrangement. Any/all stock that does not comply with specifications or definitions within the *Specification* or that does not comply in accordance with BS 3936: Nursery Stock Part 1: 1980 Trees and Shrubs and BS 4043 recommendations for transplanting root balled trees, *shall* be rejected and *shall* be removed from the stock pile.

- Bare rooted stock -to be heeled in trenches at nursery planting depth, the roots *shall* be kept moist and placed so that they are covered at all times with the heeling-in medium.
- Root wrapped stock – Non porous packaging material to be removed and to be treated as for bare rooted stock.
- Root balled stock –Supplied in porous material such as Hessian *shall* be supported upright with the ball immersed in a deep layer of suitable medium i.e. pulverised bark, sand, peat, approved soil, damp straw or hay. Root ball stock to be retained and treated as for bare rooted stock.

TC5.1.18 Containerised stock *shall* be stood out in a sheltered position in a well-drained weed free zone, support *shall* be provided for taller specimens to

prevent specimens blowing over. Watering *shall* be carried out as required to prevent stock drying out. Species susceptible to frost damage *shall* be protected with temporary suitable cover i.e. Straw or Hessian. All tree stock of size light standard and above *shall* have their stems supported and kept clear of the ground whilst heeled in or stood out.

TC5.1.19 The *Contractor shall* include in their *contract price* for the provision of all staff and machinery necessary for unloading and storage of trees received. Particular care to follow registered / recorded manual handling codes of practice as supplied at tender, with any subsequent amendments.

TC5.1.20 For all trees, planting pits of at least 900mm by 900mm by 600mm deep *shall* be excavated to accommodate the root ball of the tree, depending on the depth of the root ball the excavation may need to be deeper to ensure the Nursery mark/Collar is situated at the correct level. Under all circumstances the tree pit should provide a margin of at least 125mm in all directions beyond the root ball unless authorised by the relevant Officer. The bottom of the pit *shall* be forked over to loosen soil to a depth of 300mm and the side walls of the planting pit lightly forked to assist root penetration. Undesirable excavated soils i.e. subsoil/subgrade soils shall be kept separate from the planting medium and removed from the area to the *Contractor's* own tip/recycling facilities and not used as backfill in any planted or lawn area, on completion of each day's work. Excavated topsoil shall only be returned to bottom of the pit or used for filling in around the root ball of the tree only if it is of a similar quality to the planting medium recommended in accordance with BS 3882 suitable for horticultural, agricultural, arboricultural usage. Topping up after removal of un-required subsoil shall also be with a recommended topsoil in accordance with BS 3882 suitable for horticultural, agricultural, arboricultural usage.

TC5.1.21 The *Contractor shall* not carry out any planting operations in weather or ground conditions, which would be harmful to the soil condition or structure. I.e. when the ground is frosted, or in drought conditions or in a waterlogged condition.

TC5.1.22 During any/all planting procedures the *Contractor shall* protect all existing trees, shrubs, other vegetation, site features, and improvements, structures, and utilities specified or unspecified or on submitted drawings/plans. Removal or destruction of existing vegetation landscape features, or utilities, or other assets is prohibited unless specifically authorised by the *Authorised Officer*. See also **TCD.1.0 GENERAL DEFINITIONS - DAMAGED AREAS**

TC5.1.23 The *Contractor shall* Cat scan any/all sites before commencing any excavation or ground penetration to assist in locating any/all underground services in conjunction with Service/Utility Maps where available. All excavations *shall* be carried out using hand digging tools only to prevent damage to underground services or damage to the surrounding area. At no time during the excavation process should post-hole borers or mechanical methods be used to assist in the excavation. However subject to various

surface material it may on occasions be necessary to use power assisted concrete breaking machinery to break through the initial surface area.

TC5.1.24 The *Contractor shall* include in their *contract price* for the breaking out and lifting of any surface and or Tree Pit materials and for any necessary reinstatement works, on a like for like basis.

TC5.1.25 Any objects i.e. stones greater than 50mm in diameter or other undesirable debris *shall* be removed from the excavation to the *Contractors* own tip/recycling facilities, care *shall* be taken not to contaminate recyclable material with any detritus that is considered undesirable.

TC5.1.26 All Planting pits *shall* be excavated and planted in one operation at no time *shall* pits be left open over night or pre excavated and left open for long periods of time. This will ensure that the pit does not fill with water becoming waterlogged and/or compacted, or baked hard and dry during periods of wet or dry conditions and also does not present a hazard.

TC5.1.27 Feathered Tree, Standard Tree, Selective Standard Tree, Heavy Standard Tree, Extra Heavy Standard Trees shall all be supported by stakes.

TC5.1.28 The *Contractor shall* supply stake(s) that *shall* be machine rounded straight peeled and of larch or chestnut without projections not less than 75mm in diameter and 2.4m in length, pointed at base in accordance with BS 4428. Peeled larch stakes *shall* have been pressure treated/tannalised with non-injurious wood preservative to BS 1282 to 8.5kg/m³ minimum net dry salt retention or of approved similar type.

TC5.1.29 The amount of stake(s) required per individual tree shall be 1 Stake for Feathered Trees, and Standard Trees i.e 8-10cm and Selected Standard size trees i.e. 10-12cm girth and 2 Stakes for Heavy Standard i.e. 12-14cm girth and Extra Heavy Standard i.e. 14-16cm girth.

When installing 2 Stakes per tree a cross bar *shall* be installed between the 2 stakes and the tree *shall* be attached to the cross bar using the ties and spacers. The cross bar *shall* be of the same type as the tree stakes specified in this contract and *shall* have flat edges cut out of the bar and the stakes at the points of attachment to allow a level firm joint. All tree stakes used in all planting procedures shall be driven in to penetrate undisturbed soil so that they are secure and upright providing the desired support for the tree.

TC5.1.30 One tree stake *shall* be positioned to allow room for the spacing of tree roots within the pit, the stake *shall* be positioned on the kerb side of the planting pit. Where heavy and extra heavy standard trees are being planted two stakes with a cross bar *shall* be used, these *shall* be positioned one either side of the tree running parallel with the pavement. All tree stakes used in all planting procedures *shall* be driven in to penetrate undisturbed soil so that they are secure and upright providing the desired support for the tree and guards where specified

TC5.1.31 The Staked Tree *shall* be held firmly by the Stake(s) in an straight upright position and not leaning at an angle, at no time *shall* any part of the Tree be in contact with the adjacent stake(s), the stake(s) *shall* be reduced to 1.8m on completion.

TC5.1.32 Irrigation pipes *shall* be incorporated with every tree planted, these *shall* be placed in the planting pit beneath the centre of the root ball extending around the perimeter of the base of the tree pit, and will emerge from the finished ground level by 50mm next to the tree support stake(s). Where 2 x stakes are provided the Irrigation pipe will emerge next to the stake that is positioned furthest away from the Road to reduce road pollutants from being able to enter the ends of the tubes.

TC5.1.33 Irrigation pipes *shall* be of the “Root Rain Urban Irrigation System” type supplied by “GreenBlue Urban Ltd, contactable at enquiries@greenblueurban.com or of approved similar type. The Root Rain Irrigation System *shall* be of the type highlighted by Greenleaf’s specification “Root Rain Urban Irrigation System” and comprises of a length of 2.5mtr. flexible perforated 35mm diameter pipe with removable plastic cap to prevent litter or debris from entering pipe but to allow watering to take place, also a bracket enabling attachment to the tree stake (Not the Tree) *shall* be provided, or of approved similar type.

TC5.1.34 Root directors *shall* be incorporated within every planting pit unless otherwise specified before the placing of the tree into the pit. Root directors *shall* be installed in accordance with the manufacturer’s specifications. Root directors *shall* be placed to the correct depth and *shall* not be visible on completion of the planting process.

TC5.1.35 Root directors *shall* be the type supplied by “Greenleaf Urban tree and landscape products, contactable at enquiries@greenblueurban.com or of approved similar type. Root directors *shall* not be visible above the final soil level on completion of the planting operation.

TC5.1.36 Prior to the tree being placed in the tree pit any non-degradable material used in the transportation or packaging of the tree i.e. plastic wraps, bags, pots, wire baskets, string etc. *shall* be removed from the root ball of the tree. Care *shall* be taken not to damage the root system/structure, trunk area, bark, or crown of the tree during this process. Immediately after the tree is removed from its container/wrapping, it *shall* be placed within the tree pit to prevent drying out of soft root hairs. Any ropes/strings securing the branch framework into a compact state for transporting *shall* be removed taking care not to damage the tree during the process. All root wrappings, containers, ropes, and strings, *shall* be disposed of to the *Contractors* own tip/recycling facilities taking care not to contaminate any recyclable material that is stored within the *Contractors* complex.

TC5.1.37 Prior to planting, any damaged roots or undesirable roots (those likely to be detrimental to the future growth of the root system) and/or damaged branches in the head of the tree *shall* be pruned back to sound

wood using hand cutting tools only that *shall* be cleaned on completion of works to prevent transfer of harmful organisms.

TC5.1.38 The tree *shall* be planted at the same relationship to finished grade as they were to the ground from which they were dug (i.e. correct planting depth requires the Nursery mark to be at or slightly above the finished consolidated down grade level) it may be necessary to build up planting medium below the root ball or to excavate extra soil from the base of the tree pit to ensure that the Nursery mark is set at the correct required depth. The tree *shall* not be lifted by the upper part of the trunk and the trunk *shall* not be used as leverage to position the tree in the planting pit. The roots of the tree *shall* be gently teased away from the root ball to prevent girdling or root wrapping and spaced as evenly as possible within the boundaries of the excavated pit.

TC5.1.39 The second operative *shall* then back fill around the root ball using previously excavated suitable soils and supply additional approved topsoil to BS 3882 if required and incorporate P4 water retaining crystals. The planting medium *shall* be gradually firmed around and between branches of the root system, avoiding the creation of air pockets as well as ensuring maximum contact between the roots and the planting medium. Ensure that the backfill immediately around the base of the root ball is consolidated with foot pressure sufficient to prevent the root ball from shifting or leaning.

TC5.1.40 Broad leaf P4 Water Crystals *shall* be supplied by the *Contractor* and used in accordance with manufacturer's instructions. No crystals *shall* be left above ground as they will breakdown faster due to sunlight and during wet weather could provide a hazardous slippery surface.

TC5.1.41 Planting medium *shall* be of a premium grade topsoil in accordance with BS 3882 suitable for horticultural, agricultural, arboricultural usage and incorporate a minimum of 1.5 percent of approved quality well-rotted organic matter. A sample of the medium to be used *shall* be required for the authorisation of the *Authorised Officer* samples shall weigh 1kg (2lbs) and be packaged in a plastic bag. Samples *shall* be typical of the material to be utilised in the planting process and provide an accurate indication of colour, texture, and organic make up. Topsoil stockpiles shall be protected from contamination. Substitute medium shall not be permitted unless authorised by the *Authorised Officer* in writing.

TC5.1.42 The tree *shall* be secured to each stake of the type specified by two ties each secured to the stake(s) (under no circumstances to the tree) with two nails. One tie shall be positioned approximately 25mm below the top of the stake(s), the other approximately halfway between the top tie and ground level. Spacers or pads *shall* be used to ensure that no part of the tree touches the stake(s).

TC5.1.43 Tree ties and collars *shall* be the "Holdfast Rubber Blocks Ref HB2 and Hold Fast Tree Belting Ref HR40" type supplied by "Greenleaf Urban tree

and landscape products, contactable at enquiries@greenblueurban.com. or of approved similar type.

TC5.1.44 The Nails *shall* be 50mm galvanised clout type, or of approved similar type.

TC5.1.45 The *Contractor shall* provide a strimming guard for all new trees that are planted on grassed areas/verges. Strimming Guards *shall* be a rolled cylinder of plastic expanding up to 12.5cm in diameter and be 22.5cm tall” as supplied by “Acorn Planting Products Ltd , contactable at www.acorn-p-p.co.uk . or of approved similar type. The base of the tree guard *shall* be buried to a depth of 50mm to prevent trimmer cord lifting and cutting under the guard.

TC5.1.46 In tree pits set in grass verges/areas a circular area of turf to an area 800mm in diameter and 50mm deep *shall* be excavated to provide a sharp clear edge to retain the Mulch. The tree *shall* be located centrally within the excavated area of grass/turf, the surface area *shall* be lightly forked to assist percolation.

TC5.1.47 Immediately on completion of Planting the *Contractor shall* Water the tree in accordance with the *specification TC 6.3* and its associated sub clauses. On completion of the watering process it may be necessary to top up the pit with planting medium to achieve the required level following watering assisted settlement.

TC5.1.48 The *Contractor shall* on completion of watering apply mulch of a type in accordance with the definition for mulch **TC 6.2**. In pits with hard surrounding surfaces the Mulch *shall* be applied up to the surrounding edge of the pit unless specified by the *Authorised Officer*. In pits situated in grass areas mulch *shall* be applied within the boundaries of the circular pit, attaining a minimum level slightly proud (approx 50-75mm) of the surrounding grass surface area but not heaped

TC5.1.49 Any tree pits that have been specified for mulching *shall* be set at 50mm below the surrounding ground level to assist in retaining the applied mulch within the Planting pit area.

TC5.1.50 The *Contractor shall* be responsible for the clearance of all surplus materials and or undesirable materials, i.e. all stones, weeds roots and other deleterious material brought to the surface by cultivation operations *shall* be disposed from site to the *Contractor's* own tip/recycling facilities.

TC5.1.51 On completion the area *shall* be swept and or raked to ensure any/all arisings or accumulation of litter/rubbish previously attached or caught within the trees structure and any unauthorised notices are removed to the *Contractors* own tip/recycling centre. The site *shall* be left in a clean and safe condition.

TC5.1.52 The Contractor *shall* provide an aftercare service for the newly planted tree in full accordance with clause **TC 6.0 AFTERCARE** for the full term of the tree planting guarantee.

TC5.1.52 The Contractor *shall* supply a guarantee certificate with each individual tree as it is planted. The guarantee period for trees *shall* begin at the end of the planting season that the tree is planted in, this date *shall* be the 31 March. As an example if a new tree is planted on the 11 November 2014 or the 1 March 2015 the 36 month Guarantee period for both will commence from the 31 March 2015. The Contractor *shall* provide a form/certificate to the *Authorised Officer* declaring the size and species and location of tree planted and the date planted. The form *shall* be signed by both Contractor and *Authorised Officer* and a copy kept by each for reference, the form *shall* act as a Certificate of guarantee commencing from the date agreed by the *Authorised Officer*, for a period of 36 months.

TC5.1.52 Guarantee Certificate

Information to be provided by the *Contractor*

ENFIELD COUNCIL TREE MAINTENANCE CONTRACT – GUARANTEE CERTIFICATE

Purchase order number:

Species including size	Location	Date Guarantee to run from

We hereby certify that the information provided below Guarantees the individual planted tree for a period of 36 months from the dates indicated above.

PRINT NAME:.....

SIGNED:.....

DATE: / / 20....

Received only by (Client)

PRINT NAME:

SIGNED:

DATE: / / 20....

Copy to Contractor

☐

Copy to retain

☐

TC5.1.53 Under this Guarantee the *Contractor shall* be responsible for any defects arising from poor workmanship or materials not in accordance with this contract.

TC5.1.54 Under this Guarantee the *Contractor shall* accept full responsibility for any trees that do not establish during this period and *shall* proceed in accordance with *Specification TC 6.0 AFTERCARE* and all relevant sub clauses to replace the failed specimen at the *Contractors* own cost.

TC 6.0 AFTERCARE

TC 6.1 AFTERCARE

TC6.1.1 The *Contractor shall* look after and maintain the tree in accordance with **TC 6.0 Aftercare** and all associated sub clauses as regular as is considered necessary (usually on a two weekly cycle during the growing period) to look after the tree up to the point of establishment.

TC6.1.2 The Aftercare period *shall* be 36 months for a newly planted tree in accordance with sub clause **TC5.1.52**. Additional aftercare instructions that are issued at the end of the initial 36 month period will be for 12 months, but the *specification* **TC 6.0 AFTERCARE** and all sub clauses will apply in full to any period specified.

TC6.1.3 The *Contractor shall* provide and replace any damaged or missing ties, stakes and guards during the period of establishment.

TC6.1.4 During the period of establishment the *Contractor shall* ensure that the natural growth of the tree is not constricted by the ties. The *Contractor shall* check ties on a regular basis and replace as necessary.

TC6.1.5 The *Contractor shall* allow within their *contract price* for removal of ties and stakes once the tree is successfully established that will generally be the end of the 36 month Aftercare and Guarantee period. Stakes *shall* be removed completely from the specified location and *shall* not at any time be cut at their base. The resultant hole *shall* be filled from existing topsoil or added to as required ensuring that the depth of the hole is filled to prevent sinkage. Tree stakes and ties that are in good condition *shall* be retained for use. Broken or defective materials *shall* be disposed of to the *Contractor's* tip and at his own cost. The *Authority shall* notify the *Contractor* of the timing of this operation.

TC6.1.6 The *Contractor shall* on identification of a tree that is not firm in its planting location carry out necessary works to re-establish structural stability to the tree in the desired upright position.

TC6.1.7 The *Contractor shall* allow within their *contract price* for regular watering of Trees during the full term of the guarantee and or aftercare period to assist in establishment and prevent wilting and stress especially during very Hot/Drought like periods. Watering *shall* be in accordance with *specification* **TC 6.3**. The timing for this operation shall be 1 Watering visit per 2 week period from April through to October totalling 14 separate Watering operations throughout the growing season unless otherwise approved by the *Authorised Officer*.

TC6.1.8 Mulch *shall* be topped up as required in accordance with *specification* **TC 6.2**, and all sub clauses within this *specification*.

TC6.1.9 During all aftercare visits any Weed growth or self-seeded vegetation *shall* be removed from the base planting pit surface area of the tree to the *Contractors* own tip/recycling facilities. Residual herbicides *shall* not be used.

TC6.1.10 The *Contractor shall* remove all litter/rubbish/foreign objects from within the structure of the tree or from within any protective galvanised or iron tree guard that was installed at the planting stage during any/all Aftercare visits to the *Contractors* own tip/recycling centre.

TC6.1.11 The *Contractor shall* remove all unauthorised notices attached to the tree or attached to the protective guard, during any/all Aftercare visits to the *Contractors* own tip/recycling centre.

TC6.1.12 The *Contractor shall* remove all litter/rubbish/foreign objects from any watering bag that has been attached to the tree during or after the planting process during any/all Aftercare visits to the *Contractors* own tip/recycling centre in accordance with the *specification TC7.6 SLOW RELEASE WATERING BAG INSTALATION* and all sub clauses.

TC6.1.13 The *Contractor shall* re-attach or replace as required any watering bag that has been previously installed during or after the planting process and has since come away from the tree in accordance with the *specification TC7.6 SLOW RELEASE WATERING BAG INSTALATION* and all sub clauses.

TC6.1.14 On completion of all aftercare visits the area *shall* be cleared of all tools and related debris, the site *shall* be swept and or raked and left in a clean and safe condition removing all/any debris to the *Contractors* own tip/recycling facilities.

TC6.1.15 The *Contractor shall* replace, without cost, as soon as suitable conditions permit, and within a specified planting period, all trees determined by the *Authorised Officer* that have failed and died or in an unacceptable condition during and at the end of the guarantee/Aftercare period. To be considered acceptable, plants *shall* be free of dead or dying branches and branch tips and *shall* bear foliage of normal density, size, and colour. Replacements *shall* closely match adjacent specimens of the same species. Replacements *shall* be subject to all requirements stated in the planting and the supply *specifications. TC 5.1.*

TC6.1.16 Any trees that have failed and subsequently replaced in accordance with the Guarantee/Aftercare *specification* will be subject to a new Guarantee/Aftercare programme in accordance with **TC 5.1.52** or **TC 6.0**, whichever is applicable and all/any sub clauses where applicable. The guarantee of all replacement plants *shall* be as if a newly planted specimen with no cost implications to Enfield.

TC6.1.17 All Aftercare visits will be recorded electronically on an agreed system that the *Authorised Officer* has free access to allow him to copy or print where required. These records will be kept up to date weekly.

TC6.1.18 On completion all areas *shall* be left in a clean and safe condition.

TC 6.2 MULCHING

TC6.2.1 The *Contractor shall* supply and apply to individual locations when specified a well-rotted Mulch to a grade of 50-75mm that has been composted for no less than 3-4 months prior to usage, and be Pest and Disease free. At no time shall fresh material be used as a compost or Mulch.

TC6.2.2 The Mulch *shall* not contain any litter or plastics, non-organic matter, Invasive plants or seeds and should be sterile.

TC6.2.3 If it is necessary for the contractor to import Mulch lines of provenance will need to be supplied. Import in this instance will apply to any source used exterior to the London Borough of Enfield. The supplier should be an Forestry Stewardship Council (FSC) approved supplier. Also Department Environment Food and Rural Affairs (DEFRA) restrictions with relation to the import of wood/timber/mulch must be adhered to and the produce itself must be from 100% natural and environmentally friendly and sustainable sources.

TC6.2.4 A sample of the medium to be used *shall* be required for the authorisation of the *Authorised Officer* samples *shall* weigh 1kg (2lbs) and be packaged in a plastic bag. Samples *shall* be typical of the material to be utilised in the planting process and provide an accurate indication of colour, texture, and organic make up.

TC6.2.5 Previously Mulched locations *shall* be topped up as required taking care not to exceed original ground levels.

TC6.2.6 Areas not previously Mulched *shall* have the surface area around the base of the tree scraped off using hand tools only to a depth of 50mm up to the edge of any surrounding hard surface, or up to a Diameter of 800mm with the tree being kept central to the excavated surface area for any soft landscaped surrounding surface before applying Mulch. Care *shall* be taken not to damage any surface root structure during this process. Any debris created during this process *shall* be removed to the *Contractors* own tip/recycling facilities.

TC6.2.7 Substitute mulch *shall* not be permitted unless authorised by the *Authorised Officer* in writing.

TC6.2.8 On completion the area *shall* be swept and or raked to ensure any disturbed surface material has been either replaced in the pit area or removed to the *Contractors* own tip or if of an undesirable substance i.e. removed weed growth, litter etc. The site *shall* be left in a clean and safe condition.

TC 6.3 WATERING

TC6.3.1 On occasions of hot dry/drought periods it may be necessary to water trees either established stock or young to semi mature specimens. This will be as specified by the *Authorised Officer*. Newly planted trees would be covered under an aftercare guarantee period incorporated in the Tree Planting *specification*.

TC6.3.2 Where irrigation pipes are available on young or Semi mature specimens the *Contractor shall* apply 30 litres of water directly into the irrigation pipes to ensure that the water reaches the preferred target area. The Surface area surrounding the tree shall be lightly forked to a maximum depth of 6 inches to allow Percolation to occur and relieve compaction. Surface roots are to be avoided where possible to prevent any damage and therefore any stress followed by a further application of up to 10ltrs of water to be applied to the surface area surrounding the tree.

TC6.3.3 Where watering bags have been installed the *Contractor shall* fill the bags to full capacity as well as applying water into the irrigation tubes as specified in sub clause **TC6.3.6.** and *shall* attend to any maintenance required to ensure that the watering bags are performing as designed that may require removal cleaning and de-compacting the soil area beneath the bag. in accordance with the *specification* **TC7.6 SLOW RELEASE WATERING BAG INSTALATION** and all sub clauses.

TC6.3.4 While applying water to the base of the tree or directly into the irrigation pipes it may be necessary to apply short breaks in the watering process to allow the water to soak/percolate into the soil to avoid water overflowing onto any surrounding surface area and away from the target tree.

TC6.3.5 Semi mature or larger more Mature specimens that do not have irrigation pipes will require the Surface area surrounding the tree to be lightly forked to a maximum depth of 6 inches to allow Percolation to occur and relieve compaction. Surface roots are to be avoided where possible to prevent any damage and therefore any stress.

TC6.3.6 When instructed by the *Authorised Officer* the *Contractor shall* water specified trees, utilising the water tubes when available, or applying to a lightly forked surface area within 2 business days using the specified rates of application.

Standard Trees	30 litres per tree per visit
Heavy Standard Trees	40 litres per tree per visit
Extra Heavy Standard Trees	50 litres per tree per visit

TC6.3.7 Watering *shall* include the removal of any undesirable vegetative growth litter or plastics, and/or non-organic matter from within the pit area of the tree up to the edge of any hard landscaped surface area, or within 800mm

of the base of the tree in a soft landscaped area, or that is caught within the structural framework of the tree or from within any attached protective guards

TC6.3.8 On completion the area *shall* be swept and or raked to ensure any disturbed surface material has been either replaced in the pit area or removed to the *Contractors* own tip or if of an undesirable substance i.e. removed weed growth, litter etc. The site *shall* be left in a clean and safe condition.

TC 6.4 RE-TYING

TC6.4.1 All galvanised nails used to attach the ties *shall* be fixed into the stake(s); at no time *shall* ties be fixed to trees with nails. The tree *shall* be secured to each stake by two ties each tie secured to the stake with two nails. One tie *shall* be positioned approximately 25mm below the top of the stake, the other approximately halfway between the top tie and ground level. Spacers or pads *shall* be used to ensure that no part of the tree touches the stake.

TC6.4.2 On occasions the *Contractor shall* be required to re-tie a tree to a stake by replacing the existing ties if still attached, and replacing with new to ensure the tree is attached firmly and correctly to the adjacent stake(s), or to replace missing ties and collars. This process shall be a repeat process of **TC 6.4.1**.

TC6.4.3 All materials used for tying or re-tying *shall* be supplied by the contractor and should therefore be accounted for within the price.

TC6.4.4 Only the types of ties, spacers/collars and nails specified in **TC5.0** and all/any sub clauses *shall* be used unless otherwise agreed by the *Authorised Officer*.

TC6.4.5 On completion the area *shall* be swept and or raked to ensure any/all arisings or accumulation of litter/rubbish previously attached or caught within the trees structure and any unauthorised notices are removed to the *Contractors* own tip/recycling centre. The site *shall* be left in a clean and safe condition.

TC 6.5 STAKE REMOVAL

TC6.5.1 Removal of no longer required Stakes *shall* be as specified by the *Authorised Officer*.

TC6.5.2 Stakes *shall* be removed completely from the specified location completely and *shall* not at any time be cut at their base. The resultant hole *shall* be filled from existing topsoil or added to as required ensuring that the depth of the hole is filled to prevent sinkage. Tree stakes and ties that are in good condition shall be retained for use. Broken or defective materials *shall* be disposed of to the *Contractor's* tip and at his own cost.

TC6.5.3 Specialised stake levering tools *shall* be permitted to remove Stakes strictly in accordance with the manufacturers *specifications/guidance*, care *shall* be taken at all times to create minimal disturbance to the Tree or the Root structure during this process.

TC6.5.4 The *Contractor shall* ensure that no damage is caused to the Tree Stem or Crown during this process.

TC6.5.5 On completion the area *shall* be swept and or raked to ensure any/all arisings or accumulation of litter/rubbish previously attached or caught within the trees structure and any unauthorised notices are removed to the *Contractors* own tip/recycling centre. The site *shall* be left in a clean and safe condition.

TC 6.6 RE-STAKING

TC6.6.1 The *Contractor shall* on request from the *Authorised Officer* supply and install Stake/s to already established trees that may require support.

TC6.6.2 Stakes *shall* be supplied and installed in accordance with the *specification* for Tree Planting i.e. **TC 5.0** and all/any sub clauses that refer to Staking within this *specification*.

TC6.6.3 The *Contractor shall* Cat scan any/all sites before commencing any excavation or ground penetration to assist in locating any/all underground services in conjunction with Service Maps.

TC6.6.4 On completion the area *shall* be swept and or raked to ensure any/all arisings or accumulation of litter/rubbish previously attached or caught within the trees structure and any unauthorised notices are removed to the *Contractors* own tip/recycling centre. The site *shall* be left in a clean and safe condition.

TC 7.0 MISCELLANEOUS

TC7.0.1 On completion of all *specifications* included in **TC7.0** the surrounding areas *shall* be swept and or raked to ensure any/all arisings or accumulation of litter/rubbish previously attached or caught within the trees structure and any unauthorised notices are removed to the *Contractors* own tip/recycling centre. The site *shall* be left in a clean and safe condition.

TC 7.1 TREE GUARDS INSTALATION WELD MESH

TC7.1.1 As specified by the *Authorised Officer* weld mesh tree Guards shall be supplied and installed, the type *shall* usually be but not limited to of 3 inch x 1 inch x 12 gauge HDG welded mesh unless otherwise specified by the *Authorised Officer*. Height *shall* be as specified by the *Authorised Officer* i.e. 1200mm high, 1500mm high, or 1800mm high.

TC7.1.2 Prior to attaching weld mesh all sucker/stem/epicormic growth *shall* be removed in accordance with *specification*, **TC 2.1**, and any sub clauses within this *specification*. Also the removal of any other undesirable vegetative growth litter or plastics, and/or non-organic matter from within the pit area of the tree or that is caught within the structural framework of the tree.

TC7.1.3 Prior to attaching weld mesh it may be necessary to lift the lower branches from the crown framework to accommodate the weld mesh. Crown lifting *shall* be carried out in accordance with *specification*, **TC 1.2**, and any sub clauses within this *specification*, and would be requested separately on the purchase order.

TC7.1.4 Weld mesh tree guards shall be attached to the outside of each stake by a minimum of 4 x Galvanised Staples. The Guards shall be set 300mm above ground level and protrude no greater than 50mm above the top of the stake. The Guard shall be tensioned to form a circle around the stem of the tree.

TC7.1.5 Care *shall* be taken not to leave any protruding sharp edges from the Guards.

TC 7.2 WELD MESH TREE GUARD REMOVAL

TC7.2.1 Weld mesh *shall* be removed as specified by the *Authorised Officer*.

TC7.2.2 Staples *shall* be removed using recommended hand tools only i.e. claw hammer, at no time are power tools i.e. power grinders to be used, at no time is the attached weldmesh to be cut leaving the staples embedded in the stake. Staples *shall* be eased out by claw hammers or metal levers and the extracted staples *shall* be retained and removed to the *Contractors* own recycling facilities.

TC7.2.3 Care *shall* be taken not to loosen, break or remove, the stake or the ties, during the removal of weld mesh tree guards, unless removal of the stake and ties are specified by the *Authorised Officer*.

TC7.2.4 If the stake and/or ties are loosened or damaged the *Contractor shall* be responsible for the replacement of the stake and ties in accordance with clauses **TC 5.2**, and **TC 6.4**, and all sub clauses in each of these *specifications*.

TC7.2.5 The *Contractor shall* take care not to damage the trunk or the branch framework of the tree during the weld mesh removal. Any damaged branches *shall* be made good in accordance with *specification TC 1.0*, and all of its clauses.

TC7.2.6 The *Contractor shall* remove all weld mesh to the *Contractors* own tip / recycling facilities.

TC7.2.7 Any weld mesh which can be re-used may be stored at the *Contractors* depot at their own cost for reuse within this *Contract* as requested by the *Authorising Officer*.

TC7.2.8 Immediately following removal of the weld mesh any/all sucker/stem/epicormic growth *shall* be removed in accordance with all clauses, **TC 2.1**, and all sub clauses.

TC7.2.9 Immediately following removal of the weld mesh any litter debris or detritus that has been able to accumulate within the weld mesh *shall* be collected and removed to the *Contractors* own tip/recycling facilities.

TC 7.3 REMOVAL OF CAST IRON TREE GRILLS

TC7.3.1 When required by the *Authorised Officer* cast iron tree grills that are no longer required *shall* be removed from sites specified by the *Authorised Officer*.

TC7.3.2 The *Contractor shall* remove the grill, and all associated materials utilised in the installation of the grill and cleared to the *Contractors* own tip/recycling facilities. If removal of these materials may result in the damage to the tree or its root system the *Contractor shall* first consult with the *Authorised Officer* for guidance and/or instruction.

TC7.3.3 The *Contractor shall* take care not to damage the trunk or the branch framework of the tree during the removal process. Any damaged branches *shall* be made good in accordance with the *specification TC1.1*, and all associated sub clauses. The *Contractor shall* allow for this within the contract price .

TC7.3.4 Once the grill has been removed the *Contractor* will be required to top up the tree pit to bring the pit up to the level of the surrounding surface area. This will be with either soil/medium or Mulch as in accordance with

Specification **TC 6.2 MULCHING** and all associated sub clauses or Clause number **TC5.1.41**.

TC 7.4 REMOVAL OF VERTICAL CAST IRON TREE GUARDS

TC7.4.1 When required by the *Authorised Officer* cast iron tree guards that are no longer required *shall* be removed from sites specified by the *Authorised Officer*.

TC7.4.2 The *Contractor shall* remove the guard, and all associated materials utilised in the installation of the guard and cleared to the *Contractors* own tip/recycling facilities. If removal of these materials may result in the damage to the tree or its root system the *Contractor shall* first consult with the *Authorised Officer* for guidance and/or instruction.

TC7.4.3 The *Contractor shall* take care not to damage the trunk or the branch framework of the tree during the removal process. Any damaged branches *shall* be made good in accordance with the specification **TC 1.0** and all of its sub clauses. The *Contractor shall* allow for this within their tender price.

TC7.4.4 Immediately following removal of the tree guard any/all sucker/stem/epicormic growth *shall* be removed in accordance with all the *specification*, **TC 2.1** and all of its sub clauses.

TC7.4.5 Immediately following removal of the tree guard any litter debris or detritus that has been able to accumulate within the tree guard *shall* be collected and removed to the *Contractors* own tip/recycling facilities.

TC 7.5 DETAILED TREE INVESTIGATION AND REPORTING

TC7.5.1 The *Contractor shall* carry out a full professional inspection of individual trees as requested by the *Authorised Officer* to assess the health and structural integrity of a specific tree or trees using up to date technical equipment as required.

TC7.5.2 The surveyor *shall* hold as a minimum an Arboricultural qualification equivalent to a level **5** Professional Diploma or Foundation degree and be able to demonstrate significant experience in detailed tree investigations and report writing.

TC7.5.3 Minimal-invasive systems will be prioritised i.e. Picus Sonic Tomograph followed by Resistograph etc as appropriate. Other suitable systems that may be available will be considered if offered as an option by the *Contractor* who *shall* demonstrate the system in full and identify the reason for the alternative option.

TC7.5.4 A full professional report will be submitted to the *Authorised Officer* on completion of the survey/inspection. This report will detail the date of the inspection the method used by the surveyor and his/her qualifications and

experience and all relevant information relating to the trees species, dimensions, current condition and influencing factors.

TC7.5.5 The report will further provide all related information documentation and background information of the site, the tree, and the reason for the inspection.

TC7.5.6 The report will present in detail the survey findings, listing all concerns identified during the survey and make recommendation for prioritised remedial works and or future maintenance, and the methods by which these may be implemented along with suitable protection and/or re-planting considerations where applicable.

TC7.5.7 The *Contractor shall* provide all equipment tools machinery, vehicles and Personal Protective Equipment (PPE) etc. required to carry out the survey in accordance with current legislation and best practise.

TC7.5.8 The *Contractor shall* work in accordance with any applicable legal constraints which may include, but not be limited to, all of those listed in **TD.2.0 REFERENCE DOCUMENTS** when accessing or working on trees during Detailed tree investigations.

TC 7.6 SLOW RELEASE WATERING BAG INSTALATION

TC7.6.1 Slow release watering/Irrigation bags *shall* be supplied and installed at the base of individual newly planted trees as specified by the *Authorised Officer*.

TC7.6.2 Bags *shall* be of the a type or similar to bags known as **Tree Gator**. The *Contractor shall* identify the product to be used and provide a sample for the *Authorised Officers* approval.

TC7.6.3 Bags *shall* be installed in accordance with the manufacturer's directions.

TC7.6.4 Watering bags *shall* be filled to full capacity as specified by the manufacturer.

TC7.6.5 The *Contractor shall* attend to any maintenance required to ensure that the watering bags are performing as designed that may require removal cleaning of the slow release holes and de-compacting the soil area beneath the bag, and removing any litter that may have accumulated in, under or around the bags.

TC7.6.6 Bags that are not performing correctly due to manufacturing default or deterioration due to usage and or age the *Contractor shall* replace at no cost to the Council.

TC7.6.7 Bags that are vandalised *shall* be removed to the *Contractors* own tip/recycling centre and replaced at no cost to the Council.

TC7.6.8 Bags shall remain in place and use for the full term of the Tree Planting Guarantee and or the Aftercare programme.

TC 7.7 CAVATIES

TC7.7.1 Cavities or areas of decay discovered whilst carrying out pruning operations or that have become evident during surveying of stock, these *shall* be opened and explored without creating further structural concerns or damage to surrounding living tissue and a report made to the *Authorised Officer* who will then decide if any further work or action is to be carried out.

TC7.7.2 If on further investigation of a Cavity it is considered that the tree may be immediately structurally unsound the *Contractor shall* contact the *Authorising Officer* immediately and be prepared to wait onsite for no more than 1 hour until the *Authorised Officer* can attend.

TC7.7.3 Should the tree be considered immediately dangerous by the *Authorised Officer* an instruction *shall* be given to the *Contractors* to supply the Emergency Callout Team to make the tree safe?

TC 7.8 TREE SURVEYING

TC7.8.1 Inspection, collection and retention of Tree Stock Data. The *Contractor shall* provide a suitably experienced and qualified operative to carry out Tree Inspections/Surveys of individual Trees and/or whole roads and/or Postcode areas or sites/areas of land within Council ownership as specified by the *Authorised Officer*, and record all updated information onto the Data Base agreed by the *Authorised Officer*. The surveyor *shall* utilise all available fields on the Data Base asset management page unless otherwise agreed with the *Authorised Officer*.

TC7.8.2 The Surveyor *shall* be suitably qualified in Tree Identification, trained in Tree Condition Risk Assessment, and have previous experience in undertaking Tree Inspections. The *Contractor shall* provide appropriate indemnification to the Council for the Surveyors inspections.

TC7.8.3 The *Contractor shall* ensure that the Surveyor is provided with transport and relevant Personnel Protective Equipment (PPE) while carrying out Surveying works on Council owned land, and all other equipment (as listed below) that should be required to carry out tree surveys, the costs of these *shall* be included in the *contract price*.

- DBH Tape
- Metric Tape
- Probe
- Clinometers
- Compass
- Binoculars
- Computer Tablet

TC7.8.4 The surveyor *shall* at no time carry out destructive methods of inspection without prior written permission by the *Authorised Officer*.

TC7.8.5 If during the surveying process it is considered that the tree may be immediately structurally unsound the *Contractor shall* contact the *Authorised Officer* immediately and be prepared to wait onsite for no more than 1 hour until the *Authorised Officer* can attend.

TC7.8.6 Should the tree be considered immediately dangerous by the *Authorised Officer* an instruction *shall* be given to the *Contractors* to supply the Emergency Callout Team to make the tree safe?

TC 7.9 CHEMICAL AND/OR BIOLOGICAL CONTROL OF PESTS AND DISEASES

TC7.9.1 The control of undesirable pests or diseases by either natural or unnatural (Chemical) means. On a Purchase Order instruction from the *Authorised Officer* the *Contractor shall* spray an approved insecticide to Trees, shrubs, climbers and creepers to control the spread of pest and diseases. The pesticides record sheet, as detailed in **TC7.9.17** *shall* be used to record all pesticide treatments used, which should be provided to the *Authorised Officer* within 2 business days of treatment.

TC7.9.2 The minimum pesticide for the job should be used. Should the *Contractor*, having inspected the site, consider that an alternative pesticide to that specified is required, the opinion and written authority of the *Authorised Officer* must be sought before implementing any changes. The *Contractor* must provide with their tender a list of the proprietary products, including MAPP/HSE Nos., he proposes to use, (including equivalent alternatives) together with rates of application for each section of the contract. This should be included in the first operational *Contractors* Plan.

TC7.9.3 – The *Contractor shall* apply any chemical in accordance with the manufacturer's recommendations/guidelines/specifications.

TC7.9.4 Protection of the environment: the *Contractor* will undertake the works in such a manner as to avoid contamination of any person, animal or property, and take particular care to protect water, wildlife and natural habitats. The *Contractor* will pay specific attention to sites where the mixing of pesticides and filling of spray tanks take place. The *Contractor* will also provide a statement on how excess spray solution and empty pesticide containers and packaging will be disposed of and from where the *Contractor* proposes to take their clean water supply. The *Authorised Officer shall* be provided with written details.

TC7.9.5 All Chemical applications *shall* be in accordance with legislative requirements and restrictions, i.e. in accordance with Control of Substances Hazardous to Health Regulations (2002) **COSHH**, and keep a fully updated

COSHH register that *shall* be made available to the *Authorised Officer* on request.

TC7.9.6 On completion the area *shall* be swept/raked to ensure any/all arisings/detrus are removed to the *Contractors* own tip/recycling facilities. The site *shall* be left in a clean and safe condition.

TC7.9.7 Legislation References :

- a) The Health and Safety at Work Act etc 1974;
- b) The Food and Environment Protection Act 1985 Part III;
- c) The Control of Pesticides Regulations (as amended) 1986;
- d) The Plant Protection Products Regulations 1995;
- e) The Control of Substances Hazardous to Health Regulations as amended (COSHH) 1994;
- f) Environmental Protection Act 1990;
- g) The Water Resources Act 1991.

TC7.9.8 The bird nesting season *shall* be considered to be from the end of March until the end of July, unless otherwise stated in the instructing *Purchase Order*.

TC7.9.9 Codes of Practice

- a) Code of Practice for the Safe Use of Pesticides on Farms and Holdings 1998. (Part II of the Food and Environment Act 1985 and the Health and Safety at Work Act combined code).
- b) The MAFF Code of Practice for Suppliers of Pesticides to Agriculture, Horticulture and Forestry (Part II of the Food and Environment Act 1985).
- c) The Safe Use of Pesticides for Non-Agricultural Purposes - Health and Safety Commission Approved Code of Practice (Control of Substances Hazardous to Health Regulations 1994).
- d) Code of Practice for the Use of Approved Pesticides in Amenity and Industrial Areas (British Agrochemicals Association and the National Association of Agricultural Contractors).

TC7.9.10 Ineffective applications - If spraying is found to be ineffective 10 business days following treatment due to weather conditions, the *Contractor shall* retreat these areas using the same method and chemical no more than 10 days after the *Authorised Officer* instruction at the *Contractor's* own expense or until satisfactory control is achieved.

TC7.9.11 Notifiable pests – The *Contractor* will notify the *Authorised Officer* of any infestations to agree a management programme. When non-native species become invasive they can transform eco-systems, causing a variety of problems, including seriously threatening native and endangered fauna. These problems are acknowledged in several international treaties, European Union directives and also in domestic legislation. For more information see the [Department for Environment Food and Rural Affairs](#) website.

TC7.9.12 Biological Control of Pest & Diseases – The *Contractor shall* whenever possible consider using biological methods rather than conventional chemical control methods. Certain pests are controlled more efficiently or can be the only effective method to control pests and diseases that become resistant to chemicals. On a *Purchase Order* instruction from the *Authorised Officer* the *Contractor shall* apply in accordance with supplier's recommendations biological control to affected areas.

TC7.9.13 Water Only clean fresh water *shall* be used for mixing etc. The *Contractor* is responsible for making appropriate arrangements with and complying with the regulations of the appropriate Water Authority and *shall* be responsible for any charges levied by that Authority.

TC9.14 Pollution The *Contractor shall* take every reasonable precaution to ensure that pollution is avoided and *shall* be responsible for all the consequences of pollution that may occur as a result of their execution of the works.

TC7.9.15 Signs and Security The *Contractor shall* be required to provide, put up the day of spraying and maintain for the duration of spraying warning signs as approved by the *Authorised Officer*.

The *Contractor* must ensure that the public are clear of any area to be sprayed and is responsible for ensuring that the public are kept out of the area whilst spraying is in progress.

At no time and under no circumstances *shall* any items connected with pesticide application be left unattended. When not in use all such items *shall* be returned to a secure store approved by the *Authorised Officer*. This approval *shall* not remove from the *Contractor* their obligations under the Control of Pesticides Regulations 1986.

TC7.9.16 Any pesticide application records are to submitted to the *Authorised Officer* within 24 hours of application. The *Contractor* is to submit these records on a pro-forma or a similar pro-forma approved by the *Authorised Officer*. (See HTS7.9.17).

TC7.9.17 PESTICIDES PRO-FORMA

Information to be provided by *Contractor*

TREE WORKS – CHEMICALS RECORD

Purchase Order Number:
(minimum one record / day)

Date of visit: / / 20....

Contract Name:

Name of *Contractor*:

Operations carried out	Pesticide used	Locations of Operations	Weather conditions
Pest or Disease control			
Pest or Disease control in any water body			
Total herbicide around individual plants, trees or obstacles in grass			
Other (state purpose)			

Names of operatives on site:

Qualifications of operatives named:

Supervisor

Storeman

Application by

Signed (for *Contractor*)

Contractor's observations on damage by others or any incidents:

.....

.....

TC 7.10 TREE PIT DETAIL

TC 7.10.1 BORDER

TC7.10.1.1 As specified by the *Authorised Officer*, the *Contractor shall* construct a tree pit border in accordance with Drawing Number 2008/112/1001A.

TC7.10.1.2 The surfacing surrounding the tree pit border *shall* be saw cut to accommodate a three or four sided conservation sett in accordance with the drawing dimensions. Conservation granite aggregate setts (silver grey) *shall* be laid on a 100mm C20 Concrete bed and backing which *shall* create the tree pit border directly adjacent to the surrounding saw cut surfacing.

TC7.10.1.3 Any surfacing directly adjacent to the tree pit border which is damaged as part of these works *shall* be reinstated at no additional cost.

TC7.10.1.4 A three sides border *shall* be constructed when the tree pit is adjacent to an existing kerb line. A four sides border *shall* be constructed when installed within an existing paved area.

TC7.10.1.5 Upon construction of the border the site *shall* be left clean and tidy, and any mulch or topsoil which has been disturbed as part of the works *shall* be made good.

TC7.10.2 TREE PIT INFILL

TC7.10.1.1 As specified by the *Authorised Officer*, the *Contractor shall* construct a tree pit infill in accordance with Drawing Number 2008/112/1001A. The *Authorised officer shall* instruct the *Contractor* which material to install as the final surface layer.

TC7.10.1.2 The *Contractor shall* remove up to 100mm of existing material within the tree pit border, and remove to *Contractors* tip / recycling facility. The *Contractor shall* ensure that the surface is level and solid.

TC7.10.1.3 A 50mm layer of sharp sand shall be supplied, laid and compacted within the tree pit border to create a level surface for receiving the surface layer of material.

TC7.10.1.4 The *Contractor shall* install the specified surface material level with the tree pit border, and in accordance with Manufacturers recommendations.

The materials acceptable as a final surface layer shall be.

1) 50mm of recycled bound rubber, such as Tiger Mulch™ as supplied by Star Rubber Environmental Ltd, or similar approved by the *Authorised Officer*.

2) 35mm permeable resin bound gravel, 10mm aggregate, colour to be agreed with *Authorised Officer*.

TC 8.0 EMERGENCY RESPONSE SERVICE

TC8.1.1 The *Contractor shall* be required to provide full cover for emergency works throughout the whole of the Borough. Availability of an effective and efficient emergency team is of paramount importance, to ensure that the *Authority* is able to take measures to protect the safety of the public all year round 24 hours per day 365 days of the year.

TC8.1.2 During periods of high volumes of severe weather related emergency calls or on occasions when the Council sees fit to use alternative resources the Council will reserve the right to instruct its in-house Direct Labour Organisation (DLO) and/or Grounds Maintenance term *Contractors* to work in conjunction with the term Tree *Contractors* to attend and to clear emergency callouts or to attend to emergency callouts.

TC8.1.3 The Council reserves the right to utilise its in-house Direct Labour Organisation (DLO) to respond make safe and clear emergency situations that are received/identified during the DLO's normal Council working periods i.e. Monday to Friday 7.30am -4.30pm throughout the whole of the Borough.

TC8.1.4 The need for the *Contractor* to provide an emergency response to any situation *shall* be as notified, in some cases verbally, to the *Contractor*, and confirmed through a mechanism to be agreed with the *Authorised Officer* during Mobilisation. The *Contractor shall* attend the incident, as instructed, within one hour (Category A) of receiving an instruction to do so from the *Authorised Officer* during Normally Permitted Working Hours and within two hours (Category B) outside of the Normally Permitted Working Hours unless the instruction to provide an emergency response has been withdrawn. The specific lines of communication will be agreed during the mobilisation period.

TC8.1.5 Emergency response requests may include, but not necessarily be limited to:

- 8.1.3.1 All Arboricultural Works in extreme weather conditions, and to attend individual situations where a tree has become dangerous and requires immediate attention to make safe, i.e. Fallen Limb/Tree, Tree hit by Vehicle, Hanging Limb or Tree has become structurally unsound.
- 8.1.3.2 erecting temporary barriers to prevent access to unsafe areas, as a result of 8.1.3.1

TC8.1.6 The *Contractor shall* supply a 24 hour emergency telephone contact number and or relevant contact details for all personnel identified as being on call. The *Contractor shall* allow in their tender for staff to be placed on stand-by to comply with specified response times, a list of personnel identified as being available for Emergency Callout duties *shall* be provided. During normal working hours this may result in redeployment of staff from maintenance works and should be allowed for in the tender document.

TC8.1.7 The *Contractor shall* provide a minimum of three operatives identified as being on 24hour call that will be available at all times, and *shall* be able to call upon additional operatives as required. The *Contractor shall* be responsible for providing all equipment and machinery Personnel Protective Equipment (PPE) and any materials necessary during the emergency callout procedure. All staff covering emergency 24 hour works *shall* be fully trained and qualified in emergency tree work and for usage of machinery, equipment and materials that may be a necessary requirement in relation to emergency works.

TC8.1.8 The *Contractor shall* ensure that their emergency response vehicles are fitted with roof mounted flashing amber lights, front and rear work lights and be marked appropriately to ensure that they are readily visible during hours of darkness.

TC8.1.9 The *Contractor shall* be responsible for supplying all communications equipment (i.e. Mobile Phones/Radios) that may be used for emergency callout at the *contractors* own cost.

TC8.1.10 The *Contractor shall* be responsible for ensuring that all signs, guarding, and barriers are supplied, erected, maintained and dismantled when attending emergency works. These should comply with the Traffic Signs Manual – Chapter 8 Traffic Safety measures for signs and road works and temporary situations.

TC8.1.11 The *Contractor shall* only receive payment for calls instigated by the Authorised Officer or their representatives.

TC8.1.12 Clearance of all debris/arising shall take place as part of the emergency call, where this is not possible all public carriageways and pedestrian walkways and private properties *should* be cleared stacking all debris/arising that cannot be cleared on to an adjacent verge. Any debris/arising stacked overnight *shall* be contained within barriers and lit in accordance with Highways Legislation until clearance can be carried out in full within 24hours.

TC8.1.13 The *Contractor shall* be required to provide digital photos of the emergency situation they have visited on attendance and again on completion for each individual emergency situation attended i.e. before and after photos.

TC8.1.14 The *Contractor shall* be required to submit all call out charges as per schedule of rates prices within 5 working days of completion of works.

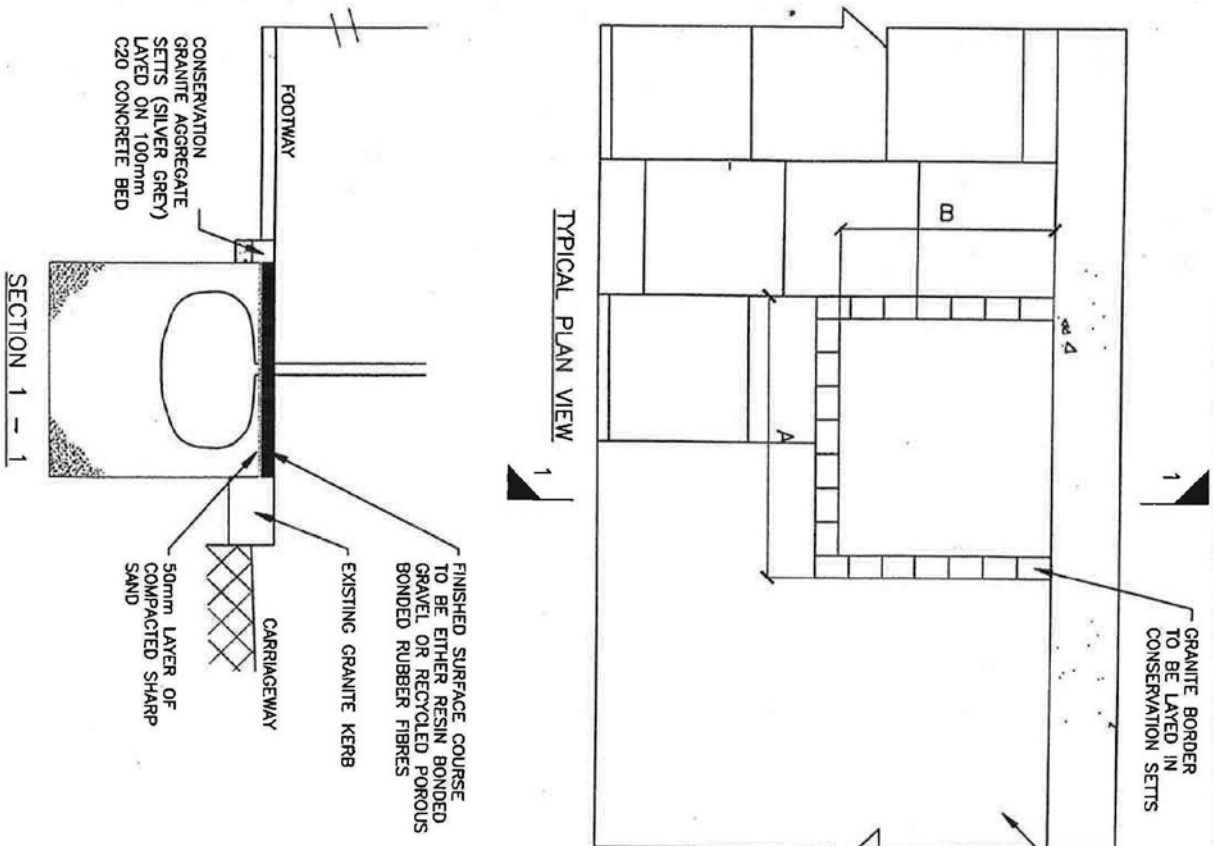
TC8.1.15 The *Contractor shall* be required to submit with all charges a report for each emergency situation attended by their staff. The report is to be filled in by the staff in attendance. This report will provide all information relevant to the emergency callout that they have attended e.g.

- Date of incident
- Names of the team in attendance who have filled out the report

- Location/address
- Reason for the call i.e. fallen tree hanging branch etc.
- Team received call from ?
- Details of any damage to property i.e. Car make model colour registration extent of damage.
- Ownership of the tree that has resulted in the emergency teams need for attendance, along with map clearly identifying the land of ownership where the tree or branch have originated from.
- Before and after digital photographs

TC8.1.16 Charges for emergency situations attended by the *Contractor* that are not accompanied by an attendance report that has been filled in by the attending team will not be authorised for payment.


TC8.1.17 On completion the area shall be swept and or raked to ensure any/all arisings or accumulation of litter/rubbish previously attached or caught within the trees structure and any unauthorised notices are removed to the *Contractors* own tip/recycling centre. The site shall be left in a clean and safe condition.



TYPICAL TREE PIT BORDER DIMENSIONS

INTERNAL DIMENSIONS	A	B
GRANITE SETTS	1050mm	950mm

1. DO NOT SCALE FROM THIS DRAWING.
2. ANY ERRORS OR OMISSIONS TO BE BROUGHT TO THE ENGINEER'S ATTENTION IMMEDIATELY FOUND.
3. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE SHOWN.
4. ALL LEVELS ARE IN METRES AND RELATE TO ORDNANCE DATUM LEVEL UNLESS NOTED OTHERWISE.
5. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER DRAWINGS IN THE SAME SERIES.

Revision details		Date
Rev	Revision details	Date
STATUS		
CONTROLLED DRAWING		
CLIENT		
LONDON BOROUGH OF ENFIELD		
JOB TITLE		
HIGHWAYS SERVICES STANDARD DRAWING		
DRAWING TITLE		
TREE PIT BORDER CONSTRUCTION DETAIL		
 <p>ENFIELD Council</p>		
Author	Checked	Date
MLH	MLH	NOV 2008
12/08	1/1	
DRAWING NO. 2008/12/1001		
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ENFIELD COUNCIL TREE SPECIFICATION APPENDICES

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ENFIELD COUNCIL TREE SPECIFICATION

APPENDIX A

Incentive Schedule

INCENTIVE SCHEDULE

1. Introduction

The achievement of acceptable performance is a shared goal and the criteria and methodology for assessing performance will be the subject of periodic review to meet the overall aim of continuous improvement. Changes to Key Performance targets or individual indicators will be by negotiation and mutual agreement by the parties. Any proposed changes will be presented to the Strategic Board at their quarterly meeting for consideration and ratification. All Key Performance Indicators and their targets will be reviewed by the Strategic Board annually following the six month settling down period at the start of the contract.

2. Key Performance Indicators

The *Contractor's* performance in delivering the contract will have a direct impact the Council's Vision for making Enfield a better place to live and work, delivering fairness for all, growth and sustainability and strong communities.

In order to meet the Council's objectives the *Contractor's* performance will be assessed from the following three sets of indicators:

(1) Contract Management

(2) Customer Satisfaction

(3) Operational Performance

All the Key Performance Indicators focus on activities and outcomes within the *Contractor's* areas of influence. Where a target has not yet been specified these will be the subject of negotiation and agreement between the parties during the mobilisation period.

3. Performance monitoring

Performance monitoring will be a continuous process. The *Contractor* will record and report performance against the Key Performance Indicators on a monthly basis. Although some indicators will only be measured quarterly their current value will be stated in the monthly performance report. A quarterly performance report will be submitted to the Strategic Board for their consideration. The quarterly report will include the whole preceding twelve month period and show each indicator in one of three colours for each month:

Green – will highlight those indicators that have achieved satisfactory or better performance levels per month.

Amber – will highlight those indicators that have not reached satisfactory performance levels in individual months.

Red – will highlight unsatisfactory performance for any indicator over three or more consecutive months.

INCENTIVE SCHEDULE

The Strategic Board will assess performance trends and seek to achieve continuous improvement by encouraging innovation and targeted action to raise unsatisfactory performance. Continuous achievement of satisfactory and improving performance will be a pre-condition of contract extension. Successive periods of under-performance could lead to early termination of the contract.

4. Key Performance Targets

Service Requirement	Indicator Number	Key Performance Indicator Description	Target per Month for 2015/16	Target per Month for 2016/17	Target per Month for 2017/18	Target per Month for 2018/19	Target per Month for 2019/20	Frequency of Reporting
CONTRACT MANAGEMENT								
Attendance at meetings	TC-PI-1	Appropriate levels of representation by the Contractor at Strategic Board, Programme, Performance, and measurement meetings.	100%	100%	100%	100%	100%	Monthly
Provision of information	TC-PI-2	Performance reports submitted 5 working days before scheduled Monthly progress meetings date	100%	100%	100%	100%	100%	Monthly
	TC-PI-3	Applications for payment submitted 5 working days before scheduled monthly progress meeting	100%	100%	100%	100%	100%	Monthly
Noticing	TC-PI-4	Compliance with NRWSA Noticing	100%	100%	100%	100%	100%	Monthly
Health and Safety	TC-PI-5	Compliance with Traffic Safety and Management requirements	100%	100%	100%	100%	100%	Monthly
	TC-PI-6	Number of occasions teams fail to present on request a Risk Assessment for the current site	3	2	1	0	0	Monthly
Environmental Management	TC-PI-7	Percentage of green waste material that is recycled	100%	100%	100%	100%	100%	Monthly

Service Requirement	Indicator Number	Key Performance Indicator Description	Target per Month for 2015/16	Target per Month for 2016/17	Target per Month for 2017/18	Target per Month for 2018/19	Target per Month for 2019/20	Frequency of Reporting
CUSTOMER SATISFACTION								
Amenity	TC-PI-8	Number of sites assessed as untidy or poorly maintained	NIL	NIL	NIL	NIL	NIL	Monthly
Customer Complaints	TC-PI-9	Information/Data required to allow Officer to respond to customer complaints and other enquiries to be processed by the <i>Contractor</i> within 5 working days	100%	100%	100%	100%	100%	Monthly
Customer Awareness	TC-PI-10	Reported incidents of contractors vehicles and equipment failing to display the agreed contract branding	3	2	1	0	0	Monthly

Service Requirement	Indicator Number	Key Performance Indicator Description	Target per Month for 2015/16	Target per Month for 2016/17	Target per Month for 2017/18	Target per Month for 2018/19	Target per Month for 2019/20	Frequency of Reporting
OPERATIONAL PERFORMANCE								
Project Delivery	TC-PI-11	Number of sites not completed within the agreed programme or specified timescale, without providing photographic evidence identifying reasons for delays which is accepted by the <i>Authorised Officer</i>	3	2	1	0	0	Monthly
Quality of workmanship and materials	TC-PI-12	Number of sites not completed to a satisfactory standard.	3	2	1	0	0	Monthly
	TC-PI-13	Number of instances the Contractor fails to rectify defective or incomplete works within revised agreed timescales.	0	0	0	0	0	Monthly

ENFIELD COUNCIL TREE SPECIFICATION APPENDIX B

Service Level Table

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Preamble to Service Level Table

Where the following specified service levels do not meet the targets set in the Incentive Schedule (Appendix A) in any one month then Low Service Adjustments will be deducted from applications for payment in accordance with clause 52 of Schedule 2 Special Requirements.

SERVICE LEVEL TABLE

Service Requirement	Indicator Number	Description of Authority's Pre-assessment of Damage	Price List Item	Low Service Adjustment
CONTRACT MANAGEMENT				
Attendance at meetings	TC-PI-1	Cost of <i>Authority's</i> representatives lost time and administration of re-scheduling meeting		£150 per event plus reasonable event expenses
Noticing	TC-PI-4	Fixed Penalty Notice for non-compliance with NRSWA Noticing		Fixed penalty notice charge plus 15%
Health and Safety	TC-PI-5	Cost of additional administration and cost of other provider to rectify TM if not undertaken by Contractor		£50 per event plus costs of other provider rectifying TM if not rectified by Contractor upon notification plus 15%
CUSTOMER SATISFACTION				
Customer complaints	TC-PI-9	Cost of additional administration		£50 per event
OPERATIONAL PERFORMANCE				
Project Delivery	TC-PI-11	Late completion due to Contractor failure – additional supervision/project management	Purchase Order	£100 per site
Quality of Workmanship	TC-PI-12	Cost of additional supervision/project management		£100 per site
	TC-PI-13	Cost of additional supervision/project management		£100 per site plus costs of other provider rectifying works if not rectified by Contractor upon notification plus 15%

SERVICE LEVEL TABLE

Where costs owed to the *Authority* by way of Low Service Adjustments in any payment period exceed the value of service provided, then a credit note shall be raised by the *Contractor* for the difference in value between value of services provided and value of Low Service adjustments.

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ENFIELD COUNCIL TREE SPECIFICATION

APPENDIX C

Statutory Bodies and Other Affected Organisations

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STATUTORY BODIES, AND OTHER AFFECTED BODIES

The names and addresses of authorities serving the *Sites* (current at the time of tender preparation) are listed below. This list is not all inclusive and will be developed with the *Contractor* during Mobilisation

<p>UK Power Networks Plan Provision Fore Hamlet Ipswich Suffolk IP3 8AQ</p> <p>Tel: 0800 0280709</p>	<p>GTC Energy House Woolpit Business Park Woolpit Bury St Edmunds Suffolk IP30 9UP</p> <p>Tel: 01359 245 415</p>
<p>British Telecommunications PLC Post Point 3.WW57 Telecom House Trinity Street Hanley Stoke on Trent ST1 5ND</p> <p>Tel: 01392 435430</p>	<p>Fulcrum Pipelines Ltd 2 Europa View Sheffield Business Park Sheffield S9 1XH</p> <p>Tel: 0845 641 3010</p>
<p>National Grid Coventry Road Hinckley LE10 0NU</p> <p>Tel: 01455 232822</p>	<p>ES Pipelines Ltd Hazeldean Station Road Leatherhead Surrey KT22 7AA Tel: 01372 227570</p>
<p>Thames Water Utilities Ltd Drainage Customer Services P.O. Box 436 Swindon Wiltshire SN38 1TU</p> <p>Tel: (08459) 200800</p>	<p>Affinity Water Tamblin Way Hatfield Herts AL10 9EZ</p> <p>Tel: 0845 155 2066</p>

STATUTORY BODIES, AND OTHER AFFECTED BODIES

<p>Virgin Media Field Services Units 12 Mayfair Business Park Broad Lane Bradford BD4 8PW</p> <p>Tel: 0870 888 3117</p>	<p>Telefonica (O2) Street Works L/O CTIL 1-2 Berkley Square 99 Berkley Street Glasgow G3 7HR</p>
<p>Enfield Lighting Services Bouygues E&S Infrastructure Ltd Belgrave House Hatfield Business Park Frobisher Way Hatfield AL10 9TQ Tel:- 01707 630 701</p>	<p>London Borough of Enfield Civic Centre Silver Street Enfield Middlesex EN1 3XD</p> <p>Tel: (020) 8379 1000</p>
<p>Vodafone Street Works Unit 1 Merchants Trade Park Tamar Road St Philips Bristol BS2 0TY</p>	<p>T- Mobile Ericsson Ltd Field Services Deployment Hemel One – Boundary Way Hemel Hempstead HP2 7YU</p>
<p>Network Rail Highways Interface NST Floor 3, Hudson House York YO1 6HP Tel: 01904 383 107</p>	<p>Chief Officer London Fire Brigade Petroleum Branch Room 810 Hampton House 20 Albert Embankment London SE1 7SD Tel. (020) 7587 6386 (Andy Berry)</p>
<p>Mr Mark Dawson Transport for London Directorate of Traffic Operations NRSWA Communications Team Windsor House 42 – 50 Victoria Street London Tel: 0207 343 5207 -</p>	<p>North Area Traffic HQ Traffic Management 11 Grove Road Chadwell Heath Romford Essex RM6 4AG SW1H OTL Tel: (020)83454970 (Sergeant Paul Coppin)</p>

STATUTORY BODIES, AND OTHER AFFECTED BODIES

<p>Mr Alan Gardner CCTV Monitoring Centre Unit 1 Centre Way 1 – 3 Claverings Industrial Estate Edmonton HD8 9TQ</p> <p>Tel: 020 8379 8888</p>	<p>Orange PCS Tudor House 55 Victoria Road London NW10 6NF</p>
<p>Ra Information Systems Ra House 9-10 The Bridge Beresford Way Chesterfield S41 9FG</p> <p>Tel: 0845 365 1071 Email: info@ra-is.co.uk Web: www.ra-is.co.uk</p>	<p>Adshell/Clear Channel Unit 9 Newtons Court Galleon Boulevard Crossway Business Park Dartford Kent DA2 6QL</p>

ENFIELD COUNCIL TREE SPECIFICATION

APPENDIX D

The Authority's Systems, Standards and
Procedures

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Tree Database Management

The *Authority* manages the corporate tree stock using a hosted system known as EZYTREEV. This database is suitable for the recording, surveying, monitoring, collation, storage and processing of tree data.

EZYTREEV is produced by **ra Information Systems** who are contactable at info@ra-is.co.uk or www.ra-is.co.uk or Rachel.Judge@ra-is.co.uk.

The *Contractor* will need to purchase an Ezytreev Contractor's Interface license, to allow them to establish a process that will provide the means of communicating with EZYTREEV. The Contractor should allow for all costs associated for the development, procurement and integration with the council's system and any system requirements.

The *Contractor* shall, ensure, by adopting appropriate procedures, that only authorised users have access to EZYTREEV system so that data is protected from unauthorised or malicious use.

Work instructions will be created by the *Authorities* Arboricultural Officers through EZYTREEV.

Therefore It is expected that the *Contractor's* system shall include for:-

- Access to the *Authorities* hosted EZYTREEV system and will require a suitable Windows 7 business PC with connection to the Internet via a 'broadband' or higher quality permanent connection.
- IT support to ensure that access can be made to the hosting site and manage any necessary configuration of their Firewall technology.
- IT support personnel to be able to communicate and work with our hosted supplier ra-Information Systems in the event of a connection problem.
- Windows 7, or later capable of running Citrix Receiver version 3.4 which is available from the Ezytreev Hosted/Cloud website. There will be additional benefits from having Microsoft Office in order to re-process system data exported in Excel and Word formats.
- Accessing work instructions and relevant maps from the hosted EZYTREEV system to allow distribution to their work force.
- Conversion of work instructions and maps to the Contractors preferred format by the Contractors own IT personal.
- Updating work instructions on EZYTREEV identifying completion of works daily.
- Accessing work instructions by email in word or Excel formats in the event that some works may not always be supported or downloaded from EZYTREEV.

The *Contractor* will produce a method statement clearly identifying the procedures to be used to establish the IT requirements listed above as part of his first operational *Contractor's Plan*. The proposed procedures will need to be approved in principle by the *Authority*.

The *Contractor* will also set in place working procedures and make allowance for in the tender price for continuation of working during unplanned system downtime.

Traffic Noticing and Permitting

The *Contractor* shall, be responsible for submitting traffic notices and traffic permits for works on the public highway in the borough using the councils Electronic Transfer of Notices (EToN System).

The *Contractor* shall be compliant with the New Roads and Street Works Act 1991 and Traffic Management Act 2004, and be responsible for arranging Traffic Notices and Permits for all works where current legislation applies and will need to continue to comply with any amendments to legislation where applicable.

The *Contractor* shall be responsible for arranging and establishing a process that will provide the means of communicating with this system and therefore the *Contractor* should allow for all costs associated for the development, procurement and integration with the council's system and any system requirements.

If required, Enfield Council will apply to our host company for an Oracle licence on behalf of the *Contractor* and will invoice the *Contractor* to recover the cost. We envisage the licence cost to be £1000 per annum.

The *Contractor* shall be required to provide a nominated person(s) to be trained to use Enfield Councils hosted EToN system for permitting. The training will be provided by Enfield Council officers (in accordance with NRSWA) at Enfield Civic Centre.

It is expected that the *Contractor's* system shall include for:-

- Access to the *Authorities* hosted EToN system and will require a suitable Windows 7 business PC with connection to the Internet via a 'broadband' or higher quality permanent connection.
- IT support to ensure that access can be made to the hosting site and manage any necessary configuration of their Firewall technology.
- IT support personnel to be able to communicate and work with our hosted EToN system supplier in the event of a connection problem.
- Java JRE version 1.6.0_31-b05 to be installed on the Windows 7 PC and the *Contractor* IT personnel to support the installation of Java. This version is currently tested and working and should not be updated unless notified by the *authorised* Council officer.
- A standard business PC running Windows 7 and the PC must be patched with the latest Microsoft security patches for Windows 7 and have anti-virus software installed and functioning, with the latest virus definitions loaded.

- Microsoft Internet Explorer version 9 installed with connection to the Internet via a 'broadband' or higher quality permanent connection. However, other internet browser software such as Mozilla Firefox also should work.

The *Contractor* will produce a method statement clearly identifying the procedures to be used to establish the IT requirements listed above as part of his first operational *Contractor's Plan*. The proposed procedures will need to be approved in principle by the *Authority*.

The *Contractor* will also set in place working procedures and make allowance for in the tender price for continuation of working during unplanned system downtime.

Electronic Information Access

The *Contractor* shall, provide a facility to allow the *Authority* to download information and documents directly related to the Contract.

For example this maybe by providing its own hosted web page, or a secure file hosting service.

Please note that the *Authority* has restricted access and firewalls which may require the *Contractors* IT support officers assistance in work with the Councils IT service provider to agree access.

The facility shall provide a secure site that can only be accessed by the *Contractors* own permitted staff and *Authorised officers* using their own specific user name and passwords; no unauthorised person(s) shall be able to view or alter the information.

The *Authorised Officers* will identify any additional information to be added at any time during the term of the contract; the *Contractors* shall comply with any reasonable additional information requests and include in the weekly updates with all other information.

All data shall be updated weekly and will include but not be limited to:

- Contractors Plan
- KPI's Reports
- Risk Assessments and Method Statements
- Aftercare site visit dates
- Emergency Call out reports
- Minutes of meetings

All data shall be retained for the full term of the contract as historical data and remain accessible on a year to year basis for the authorities tree officers.

ENFIELD COUNCIL TREE SPECIFICATION

APPENDIX E

PERMISSION TO PLACE PORTABLE LIGHT SIGNALS ON THE HIGHWAY

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PERMISSION TO PLACE PORTABLE LIGHT SIGNALS ON THE HIGHWAY

This process applies to the prescribed requirements for any promoters of activities on the highway to obtain Formal Authorisation from highway authorities before placing portable light signals on the highway

It is a legal requirement that portable light signals must not be placed on the highway without Formal Authorisation of the relevant authority. For the avoidance of doubt, Formal Authorisation must be obtained for non-notifiable works. It is an offence to place and operate portable light signals on the highway without approval from the traffic authority.

Relevant reference material is shown in Guidance Note 24. Specifically, the Traffic Signs Regulations and General Directions 2002 (the TSRGD) Part II Direction 53 which provides the requirement that permission is required from a traffic authority for the placement of portable light signals on the highway.

An authority may consider applications by promoters to operate a system of general prior approval for the exceptional circumstances permitted by Direction 53(2).

Although placement of portable light signals for Categories of Work of Emergency, Urgent, Special Cases of Urgent and Remedial Dangerous does require Formal Authorisation, these applications will follow an agreed 'fast-track' process. Arrangements for 'fast track' authorisations must be established in advance with each individual authority, including relevant out of hours contact numbers and procedures.

Full retrospective applications for Formal Authorisation for any 'fast-track' applications must be received by the highway authority in accordance with their out of hours procedures or by 10:00 the next working day, whichever is the sooner.

Applications for 2-way portable light signals where a shuttle section includes a road junction should be clearly identified under the Site Location and Details section of the form. The highway authority may require that multiphase portable light signals are used at these sites.

Four sets of suitable ordnance survey based site plans of not less than scale 1:1250 must be supplied for all hard copy applications, or, one set for soft copy and facsimile applications. Plans must show head / controller position, stage diagram details and work schedules.

Proposed signal timings must be submitted with all applications. Use of Vehicle Actuation is standard except where otherwise instructed in writing by the highway authority.

The "Site Location and Details" section must refer to the highest classification of street (Motorway, Trunk Road, A road, B road etc.) on which the portable light signals will be placed for the notified works. A separate schedule of works should be provided with the application if the number and position of signal heads will change through the progress of the works.

PERMISSION TO PLACE PORTABLE LIGHT SIGNALS ON THE HIGHWAY

The promoter will take responsibility for ensuring compliance with any conditions associated with the Formal Authorisation of an approved scheme.

It is the responsibility of the promoter to arrange in advance with the relevant highway authority for the adjustment or suspension of permanent traffic signals, pedestrian crossings, bus lanes or bus stops, controlled parking, Traffic Regulation Orders etc.

Applications must follow the agreed process and flow chart, see Section B. All relevant items of the application form must be completed to enable the highway authority to evaluate the promoter's works.

Any changes to the approved application must be agreed by the highway authority. These changes may require a new application to be submitted.

This process is in addition to NRSWA notice requirements. Normal NRSWA notice procedures must be followed, and the intention to operate portable light signals should be recorded on any notice.

Promoters must comply with the authority procedures and time scales for advising when the portable light signals are activated and deactivated.

All portable light signal equipment must conform to the TSRGD Regulation 35.

Promoters must take account of environmental considerations for their works. This may include seeking approval with the Regional Electricity Company / Highway Authority to utilise mains power supply for portable light signal equipment or ensuring that equipment is battery operated. Use of generators must comply with the Environmental Protection Act 1990.

Promoters must comply with the Safety at Street Works and Road Works Code of Practice and have regard to local highway authority policy and guidance notes and relevant checklists when submitting applications. It is a statutory requirement that 'STOP / GO' boards must be available in case the portable light signals break down.

Work activity must be ongoing on site at all times while signals are being used, unless otherwise directed by the highway authority and in regard to NRSWA s66.

The return to the promoter of an Approved Application Form, together with any Conditions of Approval, will constitute written permission to place portable light signals in regard to the application made. A copy of this permission must be held on site and provided on site for inspection when requested.

Application Process Period.

PERMISSION TO PLACE PORTABLE LIGHT SIGNALS ON THE HIGHWAY

The following minimum notice periods are required for approval process:

Category of Work	Period
Emergency, Special Urgent, Urgent, Remedial Dangerous	Telephone before set-up Fast track/retrospective process
All Minor Works: Traffic Sensitive	10 days
All Minor Works: Non-Traffic Sensitive	7 days
Remedial Works: Dangerous	Fast Track Process
Remedial Works: Non-Dangerous	10 days
Standard Works: Traffic Sensitive	10 days
Standard Works: Non-Traffic Sensitive	7 days
Major Works / Projects	20 days

Note 1: Days are working days in accordance with the New Roads and Street Works Act 1991.

Note 2: Scheme Design and Approval process period will be confirmed by highway authority on request.

Note 3: The highway authority is not obliged to accept a request to design a scheme.

Portable Light Signals Reference Material:

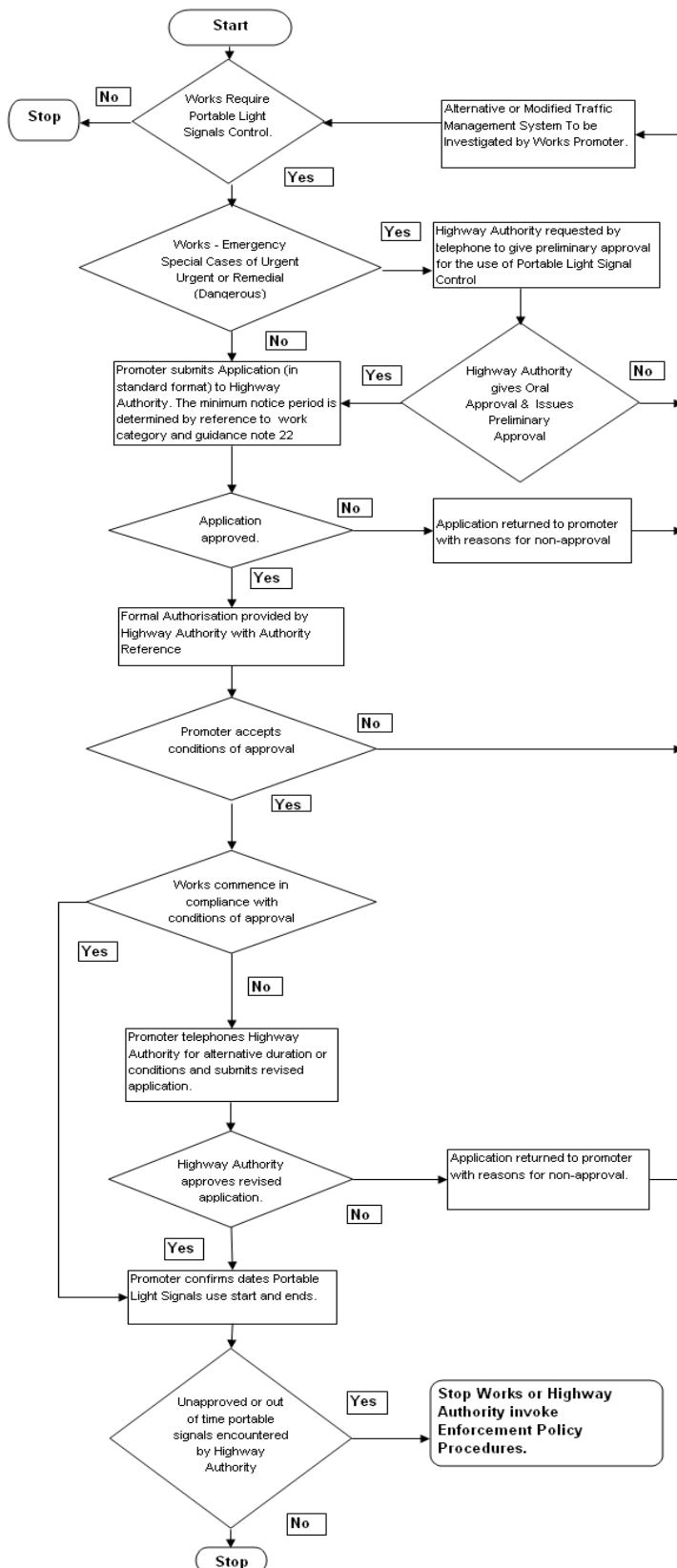
The following references relate to the application, approval and use of portable light signals on the highway. However, this should not be considered as a definitive list.

Reference Material	ISBN / Date
Traffic Management Act 2004	0 10 541804 8
New Roads and Street Works Act 1991	0 10542291 6
Road Traffic Regulation Act 1984	0 10 542784 5
Traffic Signs Manual Chapter 8 Volume One and Two Traffic Safety Measures and Signs for Road Works and Temporary Situations 1991	0 11 550937 2
Safety at Street Works and Road Works Code of Practice	0 11 551958 0
S.I 2002 No. 3113 The Traffic Signs Regulations and General Directions 2002	0 11 042942 7
An Introduction to the Use of Vehicle Actuated Portable Traffic Signals (The 'Pink Book')	0 11 550781 7 May 1986
SI 1992 No. 2985 The Street Works (Registers, Notices, Directions and Designations) Regulations 1992	0 11 025819 3
Code of practice for the Co-ordination of Street Works and works for road purposes and related matters	0 11 552310 3 April 2001

Note: Promoters should contact the relevant highway authority with any concerns regarding these matters.

PERMISSION TO PLACE PORTABLE LIGHT SIGNALS ON THE HIGHWAY

Section B - Portable Traffic Signals Process Flow Diagram



NOTES

WORKS CATEGORY

Emergency
Special Case of Urgent
Urgent
Remedial (Dangerous)
All Minor (Non-Traffic Sensitive)
Standard (Non-Traffic Sensitive)
All Minor (Traffic Sensitive)
Standard (Traffic Sensitive)
Remedial (Non-dangerous)
Major

NOTICE PERIOD

Tel + Notice by 10:00 Next Working Day
Tel + Notice by 10:00 Next Working Day
Tel + Notice by 10:00 Next Working Day
Tel + Notice by 10:00 Next Working Day
7 Working Days
7 Working Days
10 Working Days
10 Working Days
10 Working Days
20 Working Days

GENERAL

The provisions of the Traffic Signs Regulations and General Directions 2002 mean that at least oral approval confirmed in writing is required for all Portable Light Signal Installations whether encompassing junctions or not.

Highway Authorities will maintain a register of all applications and approvals issued.

Highway Authority contacts should be identified within the Streetworks contact page listed on web sites or issued at co-ordination meetings.

Any changes to a formally authorised application must be agreed by the Highway Authority. A new application may be required.

FEES

Highway Authorities may design a scheme on behalf of a promoter. The basis for fees and charges should be agreed in advance.

LIAISON WITH OTHER ORGANISATIONS

The promoter is responsible for initial arrangements with other affected organisations such as: Public Transport Operators, Emergency Services, Adjoining Highway Authorities, Traffic Control Centres, etc.

ASSOCIATED WORKS

The continued operation of Permanent Traffic Signals and Pedestrian Crossings within a portable light signals site is prejudicial to public safety. Except in emergency, prior approval must be sought from the Highway Authority before permanent facilities are suspended.

The promoter should establish with the Highway Authority the arrangements for the suspension and reinstatement of these facilities including identifying the parties authorised to carry out any work.

The promoter should identify (in conjunction with the Highway Authority) any other measures that are necessary to facilitate the works, such as: adjustment of street furniture, making of temporary Traffic Regulation Orders (TRO's) or suspension of any permanent TRO's (No Entry, No Right Turn, One Way Streets, Bus Lanes, Controlled Parking, etc.).

For planned works there is usually a minimum period which is necessary to legally process a temporary Traffic Regulation Order (TRO). Emergency temporary TRO's are only appropriate for Emergencies, Remedial (Dangerous) sites or Urgent works (the latter only by specific agreement).

APPROVAL IN WRITING

Highway Authorities will sign and return the application form to signify "approval in writing" giving the permission to the promoter to place the portable light signals specific to the application.

Promoters must comply with all conditions unless the Highway Authority agrees specific variations with the promoter.

For changes to the approved application the signed approval in writing must contain any revised conditions and will signify "approval in writing" giving the permission to the promoter to place the portable light signals specific to the application.

PERMISSION TO PLACE PORTABLE LIGHT SIGNALS ON THE HIGHWAY**Section C – APPLICATION FOR FORMAL AUTHORISATION**

The Traffic Signs Regulations and General Directions 2002 General Direction 53
Application for Permission or Scheme Design to Place Portable Light Signals on the Highway

PART A To be completed by the Promoter and with reference to Section A Guidance Notes

Signal Application Type (choose one item only)

2-Way	<input type="checkbox"/>	Multiphase	<input type="checkbox"/>	Scheme Design & Approval	<input type="checkbox"/>
-------	--------------------------	------------	--------------------------	--------------------------	--------------------------

Information Submitted (tick applicable items)

Signal Timings must be submitted with the application unless request is for a Scheme Design.

1:1250 Scale Map	<input type="checkbox"/>	Site Plans	<input type="checkbox"/>	Signal Timings	<input type="checkbox"/>
------------------	--------------------------	------------	--------------------------	----------------	--------------------------

Site Location and Details

Street Name:	Address:		
USRN:		Road Classification & Number:	
Ordnance Survey Grid Reference	Easting		Northings
Will the site affect a Level Crossing or Tramway			YES <input type="checkbox"/> NO <input type="checkbox"/>
Will the site affect a Bus Lane?			YES <input type="checkbox"/> NO <input type="checkbox"/>
Will the site affect existing Traffic Signals?			YES <input type="checkbox"/> NO <input type="checkbox"/>
Will the site affect existing Pedestrian Crossing?			YES <input type="checkbox"/> NO <input type="checkbox"/>
Is there a road junction between the signal heads?			YES <input type="checkbox"/> NO <input type="checkbox"/>
Will the site affect Parking / Meter Bays?			YES <input type="checkbox"/> NO <input type="checkbox"/>
Will the site affect a structure?			YES <input type="checkbox"/> NO <input type="checkbox"/>

PERMISSION TO PLACE PORTABLE LIGHT SIGNALS ON THE HIGHWAY

Operating Criteria for Portable Traffic Light Signals

Start Date for Portable Light Signals:			End Date for Portable Light Signals:			
Signal Operation Periods:	24 Hours	Weekday	Weekend	Overnight	Signals Start Time	Signal's Finish Time
(tick applicable items)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		

NRSWA Notice Details

Promoter Reference:		Traffic Sensitive (Y/N)	<input type="checkbox"/>
Work Description:			

Category of Work: (choose one item only)

Emergency (including Remedial Dangerous)	<input type="checkbox"/>	Minor Works (With Excavation)	<input type="checkbox"/>	Special Cases of Urgent	<input type="checkbox"/>
Minor Works (Without Excavation)	<input type="checkbox"/>	Urgent	<input type="checkbox"/>	Remedial Works (Non-Dangerous)	<input type="checkbox"/>
Standard Works	<input type="checkbox"/>			Major Projects	<input type="checkbox"/>

Liaison and co-ordination: The following services should be contacted for comment before application submitted:

Stakeholder	Comment (agreed, name etc)	Date (ddmmyy)
Police		
Ambulance		
Fire		
Adjoining Highway Authority		
Bus Operators		
Other affected stakeholder (name)		
Traffic Control Centre (Directorate)		

Contact Details

To (Authority):		From (Promoter):
Name (print):		Contact Name (print):
Address:		Address:
		Tel:
Tel:	Fax:	E-Mail:
E-Mail:		Promoter Signature:

Traffic Signal Supplier		Promoter 24 hour Emergency Contact Point
Name:		Name:
Address:		Tel:
		Contractor / Organisation undertaking works
		Name:
Tel:	Fax:	Tel:
E-Mail:		E-Mail:

Note:

Any changes to the approved application must be agreed by the highway authority and may require a new application to be submitted.

Submitted By

Name:	Signature:	Date:

PART B To be completed by the highway authority

Approval

The highway authority has considered this application and has made the following decision:

Approved	<input type="checkbox"/>	Not Approved	<input type="checkbox"/>	Authority Reference: (or electronic signature)		
Conditions of Approval:						
Reasons for non-approval:						
Site Visits:	Required		Date of site visit	Outcome of visit:		
	Yes <input type="checkbox"/>	No <input type="checkbox"/>				
Traffic Impact Assessment: (tick the worse case scenario)				Slight <input type="checkbox"/>	Moderate <input type="checkbox"/>	Severe <input type="checkbox"/>
Authority Signatory: (Includes electronic signature)				Name(print):		Date:
Contact Number:				Out of Hours Contact Number:		

Note: Return of the approved application form constitutes the permission in writing and related conditions.

ENFIELD COUNCIL TREE SPECIFICATION APPENDIX F

PREVIOUS YEARS TREE WORKS

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Revenue Works based on Financial Year 2013/2014		
	Forest Type	Ornamental
Pruning	Occasion	Occasion
Formative pruning	40	65
Crown lifting	1123	529
Crown thinning	120	80
Crown reduction	235	33
Deadwood removal/cleaning out	567	104
Pollarding	50	None
Re-Pollarding	1558	None
Crown reshaping	26	30
Tree surgery	54	3
Crown renewal/reforming/restoration	None	0
Cut back from boundary and or services	653	310
Combination prune	802	262
Specific branch removal	10	5
Remedial Ground Based Works	Occasion	Occasion
Stemming	2893Lime Trees - 3 x Annually	560
Removal of climbing plants	222	11
Remedial ground based works	9 Days	6 Days
Ground Works	Occasion	Occasion
Excavate inspection trench	25	5
Root pruning	20	5
Tree Removal	Occasion	Occasion
Remove fallen tree hung up branch	18	2
Woodland thinning	None	None
Grubbing out	19	28
Felling	663	229
Stump grinding	273	194
Chemical treatment of stumps	134	7
Temporary reinstatement of tree pits	None	None
Tree Planting	Occasion	Occasion
Tree planting	None	None
Aftercare	Occasion	Occasion
Aftercare	4	1
Mulching	235	336

Watering	2	28
Re-tying	90	124
Stake removal	88	119
Re-staking	13	36
Miscellaneous	Occasion	Occasion
Weld mesh tree guard installation	None	None
Weld mesh tree guard removal	None	None
Installation of cast iron tree grills	None	None
Removal of cast iron tree grills	None	None
Installation of vertical cast iron guards	None	None
Removal of vertical cast iron guards	None	2
Cavities	None	None
Tree surveying	None	None
Chemical and or Biological control of pests and diseases	None	None
Installation of Watering Bags	40	40

Capital Works based on Financial Year 2013/2014		
	Forest Type	Ornamental
Pruning	Occasion	Occasion
Formative pruning	3	0
Crown lifting	15	5
Crown thinning	0	0
Crown reduction	35	1
Deadwood removal/cleaning out	60	1
Pollarding	4	0
Re-Pollarding	3	0
Crown reshaping	0	0
Tree surgery	0	0
Crown renewal/reforming/restoration	0	0
Cut back from boundary and or services	2	2
Combination prune	3	0
Specific branch removal	3	0
Remedial Ground Based Works	Occasion	Occasion
Stemming	6	6
Removal of climbing plants	2	2
Remedial ground based works	1 Days	2 hrs
Ground Works	Occasion	Occasion
Excavate inspection trench	0	0
Root pruning	0	0
Tree Removal	Occasion	Occasion
Remove fallen tree hung up branch	6	3
Woodland thinning	0	0
Grubbing out	0	0
Felling	110	30
Stump grinding	20	65
Chemical treatment of stumps	0	0
Temporary reinstatement of tree pits	None	None
Tree Planting	Occasion	Occasion
Tree planting	144	234
Aftercare	Occasion	Occasion
Aftercare	106	535
Mulching	106	535
Watering	50 on 14 occasions	150 on 14 occasions

Re-tying	0	0
Stake removal	18	0
Re-staking	0	0
Miscellaneous	Occasion	Occasion
Weld mesh tree guard installation	352	16
Weld mesh tree guard removal	None	None
Installation of cast iron tree grills	1	None
Removal of cast iron tree grills	0	40
Installation of vertical cast iron guards	None	None
Removal of vertical cast iron guards	0	40
Cavities	None	None
Tree surveying	None	None
Chemical and or Biological control of pests and diseases	None	None

Enfield Homes Works based on Previous works		
	Forest Type	Ornamental
Pruning	Occasion	Occasion
Formative pruning	-	20
Crown lifting	313	83
Crown thinning	219	67
Crown reduction	275	76
Deadwood removal/cleaning out	52	18
Pollarding	12	-
Re-Pollarding	22	-
Crown reshaping	22	41
Tree surgery	-	-
Crown renewal/reforming/restoration	25	15
Cut back from boundary and or services	103	24
Combination prune	117	12
Specific branch removal	22	8
Remedial Ground Based Works		
Stemming	273	107
Removal of climbing plants	27	-
Remedial ground based works	-	-
Ground Works		
Excavate inspection trench	-	-
Root pruning	10	-
Tree Removal		
Remove fallen tree hung up branch	79	4
Woodland thinning	-	-
Grubbing out	-	17
Felling	84	95
Stump grinding	87	96
Chemical treatment of stumps	34	18
Temporary reinstatement of tree pits	-	-
Tree Planting		
Tree planting	-	100
Aftercare		
Aftercare	-	100
Mulching	-	100
Watering	-	100
Re-tying	-	25

Stake removal	-	12
Re-staking	-	8
Miscellaneous		
Weld mesh tree guard installation	-	-
Weld mesh tree guard removal	-	-
Installation of cast iron tree grills	-	-
Removal of cast iron tree grills	-	-
Installation of vertical cast iron guards	-	-
Removal of vertical cast iron guards	-	-
Cavities	-	-
Tree surveying	-	12
Chemical and or Biological control of pests and diseases	-	-
	-	-

ENFIELD COUNCIL TREE SPECIFICATION APPENDIX G

ENFIELD COUNCIL CORPORATE TREE MANAGEMENT STRATEGY

Contents

1. Preamble
2. Aims
3. Applicable Legislation
4. Service Areas
5. General Requirements
6. Highway Specific Requirements
7. Other Area Specific Requirements
8. Private Land
9. Public Rights of Way
10. Non Registered Land
11. Planning
12. Advice
13. Water Courses
14. Damage to Property
15. Transport for London
16. Review

Appendix 1 Contact Information

1.0 PREAMBLE

Enfield Council values its remarkable heritage of trees. This strategy identifies the method by which the council will manage and increase its tree stock.

Enfield recognises the importance of trees and identifies with the benefits and contribution they play within the urban environment, wildlife, conservation, and climate change.

Trees:

- Soften and frame the built environment;
- Form part of the 'personality' of an area, helping to create a sense of pride and community;
- Benefit health and promote a feeling of well-being;
- Have a positive influence on air quality, noise, flooding and global warming;
- Provide shade and air conditioning effects;
- Provide habitat, enhancing the Council's ability to foster bio-diversity, and make the oxygen we breathe.
- Contribute to wildlife and conservation.

In December 2011, the Forestry Commission published a new best practice document "**National Tree Safety Group – Common sense management of trees**". This provides guidance on the management of trees in the UK to ensure public safety and identifies the legal duty of care owed by tree owners to visitors to their land including their neighbours, employees and even trespassers.

This strategy seeks to extend the good practices that already exist in some service areas to ensure the effective management of trees across the whole Council.

2.0 AIMS

- 2.1 As with all council owned land, the Local Authority has a duty of care and therefore a responsibility to maintain all of its land to a safe standard. The Corporate Tree Strategy will enable the Council to fulfil its duty to do all that is reasonably practical to minimise the risk of people being harmed or property being damaged as a result of an incident associated with trees on Council property.
- 2.2 Compliance with this strategy will ensure that robust and effective arrangements are in place to manage the Council's tree stock that will:
- ensure a reasonable standard of safety to members of the public and users of Council property;
 - enable the number, quality and diversity of trees in Enfield to be sustained, and enhanced wherever possible;
 - provide a clear and transparent set of standards by which the Council manages its tree stock leading to increased levels of customer satisfaction;
- enable the Council to defend litigation cases and third party claims brought against it;
- reduce the potential number and value of third party claims brought against the Council for tree-related damage and associated causes;
- contribute to the achievement of the Council's key aims of growth and sustainability and strong communities by enhancing the 'green' credentials of the borough.
- 2.3 Adoption of this corporate strategy will enable the Council to take a risk based approach to managing trees on a Council-wide basis, thereby maximising value for money within limited resources.
- 2.4 Adoption of this strategy that will also enable the Council to demonstrate compliance with national best practice as far as is reasonably practicable taking into account current resources and financial constraints.
- 2.5 The Strategy also clarifies the Council's obligation with regard to trees on non council land, and identifies other services the Council provides relating to trees.

3.0 APPLICABLE LEGISLATION

- Highways Act 1980
- Occupiers Liability Act 1957/84
- Local Government (Miscellaneous Provisions) Act 1976
- New Roads and Street Works Act 1991
- Town and Country Planning Act 1990
- Wildlife and Countryside Act 1981
- Habitat Regs 1994 (2007 amended)
- Anti Social Behaviour Act 2003
- Access to Neighbouring Lands Act 1992
- Countryside and Rights of Way Act 2000
- Anti-social Behaviour Act 2003 part 8 High Hedges Legislation – dealt with in Planning.

4.0 SERVICE AREAS

4.1 Areas containing trees within Enfield's ownership include:

- Highways, and Car Parks
- Parks, Cemeteries and Allotments
- Housing (Enfield Homes)
- Property Services
- Corporate Buildings
- Education including Schools
- Council run services including
 - Day Care Centres
 - Youth Services
- Libraries
- Sports Centres (Fusion)
- Public Rights of Way
- Property Services

4.2 Areas containing trees not within Enfield's ownership:

- Private Land
- Non Registered Land
- Public Rights of Way
- Water Courses

4.3 Other services provided by Enfield Council include:

- Tree Preservation Orders (TPOs)
- Planning issues
- Conservation issues
- Damage to property
- General advice

5.0 General Requirements

- 5.1 The Strategy identifies the Service areas within the Council's organisation and their respective areas of responsibility. These areas shall have defined boundaries and be recorded graphically on maps.
- 5.2 It is important that resources are applied in a rational way, based on an assessment of risk. Therefore, council owned land with trees shall be divided into risk zones based on the likelihood of people coming into contact with potentially hazardous trees as summarised in the following table.

Usage zone	Level of public usage	Site examples
1	High	Areas within falling distance of busy and moderately used public roads, railways, neighbouring properties, amenity areas and car-parks. Well used way-marked trails and public rights of ways (PROWs).
2	Medium	Areas within falling distance of other lightly used public roads, way-marked trails, PROWs and tracks, paths and desire lines.
3	Low	Areas away not within Zones 1 and 2 such as woodland areas.

- 5.3 In order of priority, all trees within a site will be surveyed by a competent professional, to identify tree condition and reactive works and re-inspection frequencies for each area.
- 5.4 If a tree is surveyed and shows no external signs of defect, it may be left until the next inspection is required.
- 5.5 If the tree is identified to have obvious or inconclusive defects, or any other reasons of concern, i.e. adjacent structures being adversely affected, the surveyor shall make judgement as to whether remedial works are required or if more intense investigations are carried out on the individual tree.
- 5.6 Clearly hazardous, relatively low value trees may in appropriate circumstances be felled as part of area tree management.
- 5.7 For potentially hazardous, higher value trees (eg conservation areas or high amenity value) where the trees retention is sought or the felling is likely to be controversial and may result in adverse public reaction, a more detailed inspection by a suitably qualified person shall be carried out. This person shall prescribe appropriate tree works that may enable the retention of the tree, or support justification for its felling.

- 5.8 Any tree identified during the surveying process that is considered to pose an immediate danger to surrounding structures or area users shall receive attention to make them safe. This attention shall be processed with immediate effect to ensure the tree and the area is made safe within 24 hours.
- 5.9 Any Pests or Diseases identified during the survey that require attention shall be dealt with in accordance to their priority status that will be identified by either industry guidelines or the Arboricultural Officer.
- 5.10 The frequency of re-inspection of all trees shall be based on an assessment of the future hazard the trees present to people or adjacent structures as listed below.
- Likelihood of failure.
 - Severity of failure and its consequences.
 - Deterioration.
 - Influence on adjacent structures e.g. Mechanical or Physiological (subsidence/heave)
- 5.11 The Forestry commission recommends inspection of trees in high usage areas on an annual cycle. Enfield is not resourced to achieve this time frame due to the high volume of sites and the number of trees within Enfield's ownership, against resources available. This is typical of other local Authorities, and it is deemed common working practice within the industry to undertake inspection of trees in high usage areas on a three year cycle.

Usage Zone	Frequency of Inspection
1	At least once 3 years. ^{*#}
2	At least every 5 years. [*]
3	No formal inspection is required

^{*} Unless there are good reasons for extending the period, e.g. the trees are too young to pose a threat.

[#] Ornamental trees on the Highway shall be inspected at least once every 4 years,

- 5.12 Following inspection a schedule of works will be prepared as required. Any prescribed works should have specified timescales in order to ensure that the works is addressed in order of priority in accordance with the list below.
- Immediately
 - Within 3 Months
 - Within 12 Months
 - Before the next scheduled inspection

- 5.13 Where current legislation prevents non immediate works being carried out due to wildlife issues, the required works shall be programmed to be carried out at the earliest opportunity following any prescribed timescales within the legislation.
- 5.14 All tree works shall be carried out by the Highways Arboriculture Contractor or the in-house parks tree operatives.
- 5.15 Tree work best practise is set out in British Standards BS3998: 2010 Tree Work – Recommendations. All tree works shall be carried out in accordance with this British Standard.
- 5.16 All trees inspected shall be electronically recorded on the councils Tree database. All asset information collected, including management records shall be kept up to date, and be used to effectively manage council owned trees, support efficient operations, and in the event of an incident assist in providing a defence against litigation.

6.0 Highways and Car Parks Specific Requirements

- 6.1 The Council is considered in Law to be the owner of trees situated on Council owned land within the curtilage of the highways/street scene and therefore is responsible for them or has a recognised duty of care.
- 6.2 The Council's responsibility, as the Highway Authority, is to maintain the public highway to a condition fit for traffic and pedestrians that might ordinarily be expected to use it. Unless there is a traffic order in force restricting the size or height of vehicles that can use a particular road, a vertical clearance of 17 feet above the carriageway (5.10m) shall be maintained to allow sufficient clearance for vehicles and 6.9 feet (2.1m) shall be maintained to allow sufficient clearance above the footway for pedestrians which might ordinarily be expected to use the highway to gain access or passage.
- 6.3 Highway trees have an established inspection regime, which programmes the inspection of Lime trees, Plane trees and Silver and Sugar Maples on a three yearly cycle, and all other species on a 4 yearly cycle.
- 6.4 Highway trees also have an established maintenance, which is as follows :-

Tree Type	Maintenance Cycle
London Planes, Lime, Silver and Sugar Maple	3 years
Other Forest trees	4 years
Ornamental trees	4 years
Stemming	
Lime, Silver and Sugar Maple	up to 3 times per year
All other trees	up to once per year

This maintenance regime is typical for the majority of trees on the highway, although there are exceptions which are defined below.

- 6.5 A 3 yearly pruning cycle will apply to London Planes, Lime Trees and Silver and Sugar Maples. However where trees are of particular amenity/conservation value and there is adequate space, less intensive management will be carried out to ensure that the trees continue to contribute to visual amenity. Therefore exceptions to the three yearly pruning cycle will include those trees:

- where they have been intensively maintained in the past
- where they are in close proximity to buildings

- that are implicated or in roads regularly implicated in insurance claims against the Council, or where works will improve their safety
 - Where they have an adverse affect on the highway or affect the safe passage of vehicular traffic or pedestrians.
- 6.6 All other large forest type species will be pruned on a 4-year pruning cycle to keep them maintained to an acceptable condition in accordance with the surrounding requirements. It may become necessary on occasions to provide pruning attention out of cycle however this will be subject to specific concerns that will be identified and agreed by the Council's Arboricultural team. These will include.
- Trees that have been intensively maintained in the past
 - Those In close proximity to buildings
 - Those that are implicated, or in roads regularly implicated, in insurance claims against the Council.
 - Where works will improve their safety.
 - Those that have an adverse affect on the highway or affect the safe passage of vehicular traffic or pedestrians
- 6.7 All ornamental tree stock will be subject to a 4-year pruning cycle to keep them maintained to an acceptable condition in accordance with the surrounding requirements.
- 6.8 On occasions any individual tree, irrespective of its species, location or amenity value, may be subject to pruning attention out of cycle. These will include trees:
- That are in decline where structural stability is of concern.
 - Where excavation work within the root area may have compromised structural stability.
 - Where Incidents have occurred resulting in physical impacts with trees that may compromise structural stability.
 - Where there is a need to removal of pests and or diseases from the crown.
- 6.9 When newly established trees of appropriate species have reached a level of maturity they will be included in the pruning cycle relevant to their species requirements. Prior to this time they will only receive attention to formatively prune if and when required.
- 6.10 Lime trees, Silver Maples and Sugar Maples, will have all water shoots or stem suckers removed throughout the peak growing period to ensure that obstruction to the footway is alleviated. This will be carried out up to a maximum of three times each year but actual time frames for this work will be subject to seasonal/climate changes within each individual year.

- 6.11 Stemming to all other trees will be carried out when identified and as necessary to ensure that obstruction to the footway is alleviated. This will occur annually.
- 6.12 All trees may be subject to root pruning where necessary, which should be carried out in accordance with current legislation. Where this requirement is part of works being undertaken by Highway Services programmed or reactive maintenance team, the works may be undertaken by the Highway works contractor in accordance with the Contract conditions, and relevant legislation. In all other instances root pruning shall not be carried out without seeking advice and approval from the Highways Arboriculture team. In particular, in any cases where there may be doubt that the required work may compromise the physiological condition or structural stability of the tree, then the Highways Arboriculture team should be contacted for their approval.
- 6.13 All suitable arisings from tree pruning and other operations will be re-used or recycled as appropriate.

Highway Tree Removal Process

- 6.14 A healthy highways tree that is still considered to contribute to the amenity and environmental value of its location will not be removed by individual request for any reason; any such request will be refused. However this strategy provides a formal avenue of appeal against the Council's refusal of a tree removal request.
- 6.15 The Director of Environment is authorised to agree to a request for the removal of a tree following representation from a resident. The Director can only consider the request following consultation with local residents and subject to agreement by the applicant to pay for the tree's removal and replacement with a new tree in the same area, inclusive of aftercare and all officer administration costs.
- 6.16 Contact details for applying for a tree's removal by individual request can be found in Appendix 1 Contact Information. The application should be made in writing by letter or email.

Removal and Replacement Programme

- 6.17 A removal and replacement programme will be adopted to deal with all scenarios listed below that can not be controlled within routine management operations described elsewhere within this strategy. These will be subject to programme and budget restrictions.
- Removal and replacement of trees which have reached the end of their useful life within the street scene;
 - Removal and replacement of trees which are in decline and present a danger to persons or property;
 - Removal and replacement of those trees where a financial liability has been identified and can not be rectified with pruning;

- Removal and replacement of those trees where there is a conflict with legislation;
 - Removal and replacement of those trees where an environmental benefit will accrue.
- 6.18 Subject to availability of funding where trees are removed, for whatever reason, there will be a one for one replacement programme to ensure that the current stock levels are maintained. All new plantings will be located as near to the removed tree's location as possible but not necessarily in the exact location. This will be determined by suitability of site and may on occasions result in replacement trees being positioned in adjacent roads.
- 6.19 All new plantings will be managed and monitored to assess progress and appropriate action will be taken to ensure that the saplings adapt and establish to their planting position.
- 6.20 Replacement species will be largely native to enhance environmental benefits and provide increased biodiversity and aesthetic impacts where possible.
- 6.21 Where space is particularly limited replacement planting will be confined to species which develop narrow, compact, upright growing crowns, for example ornamental pear (*Pyrus* "Chanticleer")
- 6.22 Where space is not so pressing, ultimately larger growing trees with similar characteristics to the above may be planted, for example fastigate maple (*Acer platanoides* "Columnare"), Turkish hazel (*Corylus columna*), fastigate hornbeam (*Carpinus betulus* "Fastigiata"), Italian Alder (*Alnus cordata*) and where appropriate upright lime (*Tilia cordata* "Greenspire")

Conservation Areas

- 6.23 Trees on the public highway within designated Conservation Areas are maintained as all other highway trees however benefit from similar protection and consideration as privately owned trees in conservation areas.
- 6.24 Any person who performs unauthorised works to, or whose actions result in damage to, a highway tree in a Conservation Area may be subject to prosecution in accordance with the Town and Country Planning Act 1990.
- 6.25 The Council Highways department is exempt from the requirement of notification of intent to manage highway trees situated within a conservation area.
- 6.26 The same legislation applies to Council owned trees protected by Tree Preservation Orders; however this situation is extremely rare as generally the council does not place TPO's on its own trees.
- 6.27 It is recognised that each Conservation area within the borough has characteristics specific to the area that make these areas unique. These

strengthen the character and appearance of the area that make it desirable to preserve and enhance through management action.

- 6.28 Street trees are an important feature of these areas that the residents and the Council wish to preserve. The Council recognises the landscape value of street trees and acknowledges that they are an integral component of the character of Conservation Areas.
- 6.29 Replanting in Conservation Areas will be on a like-for-like basis or with a similar suitable species in an attempt to retain unity with the existing area character and to minimise the number of different species used.
- 6.30 The unique value of these areas warrants the need to avoid large scale removal programmes. Therefore, where appropriate, such programmes will be carried out on a phased basis.
- 6.31 Any proposed removal and replacement programmes will be subject to consultation with residents via associated area groups where all plans and proposals will be submitted for the residents' considerations. This will allow for the opportunity for resident participation in any proposed future felling or planting programs.

7.0 Other Area Specific Requirements

- 7.1 The Council has contractual agreements with organisations which provide services on council owned land, including Go Ape, and Fusion. Where trees are located within the curtilage of these sites, the responsibility of trees shall be with the organisation providing the service.
- 7.2 The organisation shall ensure that any trees within their site are surveyed, maintained, and managed in accordance with this strategy to a standard equal or better than specified.
- 7.3 Trees located on Housing land are currently managed by Enfield Homes on behalf of the council. All such trees shall be managed in accordance with this strategy to a standard equal or better than specified.
- 7.4 Any enquiries relating to trees on Housing land shall be referred to Enfield Homes. Contact details that are listed in Appendix 1 Contact Information.
- 7.5 All trees within schools are the responsibility of individual governing bodies, with the exception of Academy schools.
- 7.6 All schools with the exception of Academy schools shall ensure that any trees within their boundary are managed in accordance with this strategy to a standard equal or better than specified.
- 7.7 For Academy schools it is recommended that they follow the principals of this strategy to a standard equal or better than specified.

8.0 PRIVATE LAND:

- 8.1 Enfield has no management obligations in relation to any tree situated on private land. Trees situated on privately owned land are the responsibility of the Land owner or tenant depending on lease agreements with the land owner.
- 8.2 Trees situated within the boundaries of private land may encroach/overhang a neighbouring property be it adjacent Council owned land or other land that is also within private ownership.
- 8.3 The Public Highway is protected by legislation from such overhang in the form of section 154 of the Highways Act 1980. This legislation provides a legal method for the Local Authority to ensure that the public Highways remain unobstructed at all times.
- 8.4 This legislation only applies to Council Highways land; all other Council owned land does not benefit from this legislation but is entitled under Common Law to clear any overhang from trees on adjacent private land back to the line of boundary.
- 8.5 With relation to any obstructions on or over the highway that prevent the legitimate use of the highway and are a potential safety hazard for highway users, then necessary measures shall be taken by the Authority for the removal of the obstruction.
- 8.6 The Highway Authority shall serve a notice in accordance with Section 154 of the Highways Act 1980 on the owners of obstructions requiring that they are cut back to provide the necessary clearance and abate any nuisance.
- 8.7 If this notice is ignored the Authority will refer to the Council's Enforcement team for assistance who will enforce the notice. If the land owners continue to ignore the Council's request the Council will then arrange with their contractors, under instruction of the Council's Enforcement Officers, to carry out the works and make arrangements to recover costs from the land owner.
- 8.8 The Local Authority may also be called upon to assist with situations where a tree situated on Private land is considered dangerous.
- 8.9 On identification of a tree that is considered dangerous but situated within privately owned land, a Council Tree Officer will attend the site and attempt to inspect the tree.
- 8.10 If the tree is considered dangerous but contained within a private area with no threat to neighbouring persons, property or land, the Council Officer will attempt to contact the land owner and advise them of their legal obligations and responsibility inclusive of the associated legislation, i.e. Occupiers Liability Act 1957/84. The Officer will also provide a list of recommended Tree Contractors for the land owner's consideration.

- 8.11 If a tree situated on private land is considered to be in a dangerous condition and a threat to any persons or neighbouring land, be it Council or other private land, the Officer will contact the land owner and request that the land owner makes arrangements to make the tree safe providing the severity of the situation allows. If the land owner can not, or will not, make arrangements to make the tree safe within a specified time frame or the Officer can not contact the land owner or the tree is considered immediately dangerous the Officer will arrange, in accordance with current legislation i.e. Local Government (Miscellaneous Provisions) Act 1976, to make the tree safe. Arrangements can then be made to recover all associated costs to the authority from the land owner.

9.0 PUBLIC RIGHTS OF WAY:

- 9.1 The Council's duties, as Highway Authority, are to ensure that a Public Right of Way is clear, unobstructed and safe for use only.
- 9.2 Public Rights of Way will be inspected by Highway Inspectors as part of their routine inspections in accordance with the Council's highway asset management arrangements.
- 9.3 Any obstructions or concerns with regard to trees on Public Rights of Way identified by the Inspectors will be referred to the adjacent land owner, or to the Highways Tree Officers, to make the Public Right of Way safe with unobstructed passage. .
- 9.4 Where such Public Rights of Way run through Council owned land, eg Parks or Enfield Homes estates, the relevant owner/department will be responsible for ensuring unobstructed and safe passage.

10.0 NON REGISTERED LAND:

- 10.1 Enfield has no management obligations with regard to any tree situated on Non Registered Land.
- 10.2 If a tree is considered dangerous the Local Authority may take action to make the site safe but only if trees are considered to pose an immediate threat to any person that may be passing, or within the vicinity of the area. The minimum of works will be carried out to ensure the area is left safe.
- 10.3 If a tree is not considered dangerous, enquires will be forwarded to Land Registry in an attempt to identify any registered owner.
- 10.4 Where a registered owner cannot be found, the Council may consider taking on responsibility of maintaining the land to ensure the trees remain in a safe condition.

11.0 PLANNING:

- 11.1 The Local Planning Authority (LPA) manages all trees issues that relate to :
- Planning Applications that affect both privately owned trees as well as Council owned trees.
 - Tree Preservation Orders (TPO's)
 - Conservation areas.
 - High hedges disputes.
- 11.2 All privately owned trees that fall into any of the criteria listed above should be referred to the Council's Planning department; who manage these in accordance with the Council's Development Management Document (DMD).
- 11.3 In the event that a Highway tree is affected by a proposed development, then approval for the removal of the tree will not be granted or deemed to be granted, even if the planning application is approved. This decision may be appealed against in writing by following the Highway tree removal process as detailed in 6.15.
- 11.4 See Appendix 1 Contact Information.

12.0 ADVICE:

- 12.1 Local Authority Tree Officers will be available to provide free verbal advice on private tree related issues to the public. This will be by telephone and will not be inclusive of any site meetings or visits unless the enquiry relates to a Council owned tree.
- 12.2 Information on legal issues will be based on the Tree Officers understanding of current legislation at the time of the enquiry and so would not be admissible in a court of law as evidence.
- 12.3 Tree Officers will not become involved in, or mediate between, neighbours during any disputes.
- 12.4 Where an enquiry requires a service other than advice, the Local Authority Tree Officers will provide contact details of the Arboricultural Association recognised consultants or a list of recommended Contractors.

13.0 WATER COURSES:

- 13.1 Watercourse issues are dealt with in accordance with riparian ownership guidelines “Living on the Edge a guide to the rights and responsibilities of river side occupation”. A copy of these can be acquired from the Environment Agency direct, see contact details that are available in Appendix 1 Contact Information
- 13.2 The adjacent land owner should be identified whenever there is a query relating to trees adjacent to watercourses.
- 13.3 If the Local Authority is the adjacent land owner, the matter will be referred to the relevant Council service provider, eg Parks, Housing etc.
- 13.4 If the adjacent land is privately owned, then the matter will be referred to the adjacent land owner. If ownership details are unknown, then enquiries should be made to the Land Registry to establish adjacent landowner details.
- 13.5 In the event that the adjacent land is not registered, the matter will be referred to the Environment Agency, see contact details listed in Appendix 1 Contact Information.

14.0 DAMAGE TO PROPERTY:

- 14.1 In the event that a tree situated on Council owned land is associated with structural damage to a property, the potential claimant/caller will be advised to contact their household insurers to investigate their claim.
- 14.2 In the event that a tree situated on Council owned land is associated with damage to an adjacent property’s hard landscaping frontage or boundary wall/fence line, the claimant will be referred to the councils Insurance Manager. Contact details are listed in Appendix 1 Contact Information.
- 14.3 In the event that a tree situated on Council owned land is associated with any damage to any adjacent property and the claimant has no household insurance, the claimant will be referred to the Council’s Insurance Manager for advice. Contact details are listed in Appendix 1 Contact Information.

15.0 TRANSPORT FOR LONDON:

- 15.1 Enfield has no management obligations in relation to any tree situated on land that is owned by Transport for London.
- 15.2 Enquiries should be referred to Transport for London. Contact details are listed in Appendix 1 Contact Information.

16.0 REVIEW

- 16.1 This Strategy will be the subject to ongoing monitoring, and should be subject to review annually to guarantee the future of one of Enfield's most valuable assets.

Appendix 1

Contact Information

Environment Agency Contact Details:

Rio House
Waterside Drive
Aztec West
Almondsbury
Bristol
BS32 4UD

Telephone : 0870 8506506

Email : enquiries@environment-agency.gov.uk

www.environment-agency.gov.uk

Councils Insurance Details:

Insurance Manager
Finance and Corporate Resources
Insurance
4th Floor,
Civic Centre,
Silver street,
Enfield,
EN1 3XA

Tel:- 0208 379 4615

Email : insurance@enfield.gov.uk

Tree Removal Request via the Councils Tree Strategy Process:

Highway.Services@enfield.gov.uk

Transport For London

Principal Traffic Coordinator
Surface Transport & Traffic Operations Centre (STTOC)
Traffic Directorate
Transport for London
2nd Floor, Palestra house
197 Blackfriars Road,
London SE1 8NJ

Email: lstccinformationdesk@tfl.gov.uk

Tel:- Customer Services - 08453051234

Enfield Homes (Arms Length Management Organisation)

36-44 South Mall
Edmonton Green
London Borough of Enfield N9 OTN

Email :- trees@enfieldhomes.org

Tel :- 0800 4080160

Enfield Council Footway Crossings

Footway Crossover Helpdesk
Highway Services
Environment Department
1st floor B Block North
Civic Centre
EN1 3XD

Email :- Highway.services@enfield.gov.uk

Tel : 020 8379 2211 or 0208 379 2168

Enfield Council Highway Services

Highway Services
Environment Department
1st floor B Block North
Civic Centre
EN1 3XD

Email :- Highway.services@enfield.gov.uk

Tel : 020 8379 2152 or 0208 379 3482

Enfield Planning Tree Officer

Environment
Development Management
1st floor B Block South
Civic Centre
EN1 3XD

Email : stephen.downing@enfield.gov.uk

Tel :- 020 8379 3845

Fax : - 020 8379 3811

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