

**ARBORICULTURAL
METHOD STATEMENT
to BS 5837:2005
at
Site at Rabbit Ings
Lund Hill Lane
Royston
Barnsley
South Yorkshire**

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1 Introduction

1.1 Purpose of the Method Statement

- 1.1.1 This method statement has been prepared to ensure good practice in the protection of trees during the proposed development at Rabbit Ings, Royston.

1.2 Terms of Reference

- 1.2.1 We are instructed by our client to prepare a method statement for a proposed landscaping scheme based on our arboricultural report dated 31st March 2008, reference 8460 AB. The survey and report conform to the most recent specifications outlined in BS 5837:2005 *Trees in Relation to Construction*.

- 1.2.2 For this purpose I have been supplied with the landscaping layout.

1.3 Status of the Method Statement

- 1.3.1 This method statement should be included as part of the specification and schedule of works issued to the contractors, and can form part of the contract.
- 1.3.2 The method statement should be available on site for inspection by local authority officers, contractors and other relevant persons.

1.4 Description of The Site Restoration

- 1.4.1 I understand that it is proposed to carry out restoration works to the disused colliery tip to promote habitat for wildlife and to increase the ecological value of the site. This will require the construction of car parking areas, footpaths and ponds as well as some re-profiling of some of the spoil heaps to aid access or to stabilise them.
- 1.4.2 It is also proposed to renew and restore the sports pitches at the south west corner of the site. This will include the re-routing of some services as well as increasing ground levels in some areas.

2 Arboricultural Implications

- 2.1 Eighteen trees require removal for arboricultural reasons, these include **T6, T8, T11, T15, T30, T34, T36, T77, T100, T106, T108, T111, T116, T117, T118, T138, T139** and **T140**. The individual details of these trees problems are described in Appendix 1.
- 2.2 Eighty eight trees, groups of trees and partial groups of trees will require removal to facilitate the proposed reclamation of this site. Details of these trees can be found in Appendix 1 and Appendices 5.
- 2.3 Many of these trees mentioned above require removal to obtain sufficient path widths or for the re-profiling of some areas to make them more stable or to improve health and safety. Although a significant number trees are to be removed from the site this will be more than made up for in the large areas of new planting that are proposed.
- 2.4 It may also be prudent to crown lift, crown reduce or crown clean trees as necessary to ensure the health and safety of members of the public who will use this site upon completion.
- 2.5 The table below summarises the main areas where trees could become damaged by the proposed development and the methods that need to be adopted in order to prevent such damage:

<u>Potential Conflict</u>	<u>Preventative Action</u>	<u>Reference</u>	<u>Trees Affected</u>
Low hanging tree canopies not able to be protected by the fencing.	Crown raise/Prune back in accordance with <i>BS 3998: 1989, Recommendations for Tree Work</i> .	Section 2.4.	Trees whose canopies hang below 2.5m over a footpath or 5.6m over a car park or road.
Passage of machinery and storage of materials over RPA.	Construction of fencing to acceptable standards.	Sections 3.2, 4.4 and the Site Plan at Appendix 5.	T107 – T110, T112 – T115, T119 – T137 and T141 – G173
Damage to roots caused by underground services.	Adopt methods which avoid digging trenches across rooting areas.	Section 4.2	G172
Hard surfaces to be constructed within the RPA.	Specialist construction techniques and materials to be used. <i>No-Dig Method</i> .	Section 4.2.4, Section 6 and the Site Plan at Appendix 5.	G173, G175, G181, G183, G188, G193, G194, G195, G196, G201 and G204.

Changes in ground level within RPA.	Remove trees where significant changes need to be made to ground levels/slopes.	Section 4.3	T33, T35 – T79, T83 – T99, T101 – T105, T107, G179, part of G181 and part of G182.
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- 2.6 Due to the topography of the site and the limitations as to where the path can run it may prove necessary during construction of the path to remove trees which impede its progress as and when they are encountered. The removal of such trees should be agreed when they arise with a JCA consultant and the Local Authority Tree Officer.

3 Site Preparation Prior to Development

3.1 Necessary Tree Works

- 3.1.1 The first operation will be the necessary arboricultural works as described in Section 2 and Appendix 1 of this report. All tree works should be carried out in accordance with BS 3998: 1989 *Recommendations for tree work*.

3.2 Protective Fencing

- 3.2.1 The erection of the protective fencing for the trees which require it (T107 – T110, T112 – T115, T119 – T137 and T141 – G173) will be the very first job following completion of the tree work. No other work, including soil stripping, demolition, or the bringing onto site of materials or machinery, shall commence until the fencing is installed and inspected. In exceptional circumstances where such activity is deemed necessary prior to the erection of fencing, a representative from JCA shall be informed so that they may be present to oversee the operations.
- 3.2.2 The protective fencing should be constructed in accordance with BS 5837: 2005 *Trees in Relation to Construction*, and should be located as shown on the attached plan at Appendix 5. The area enclosed by the fencing is referred to as the **Construction Exclusion Zone (CEZ)**. This area should be considered a complete exclusion zone; there should be no pedestrians, vehicles, storage of materials, equipment or machinery with the fenced areas unless specified within this method statement.
- 3.2.3 Due to the nature of the site the provision of protective fencing for the trees away from the sports ground area of the site will be impractical, however care should be taken to treat those areas covered with trees which do not have protective fencing as a construction exclusion zone. These areas of trees should only be encroached into as far as is necessary to do the works and no machinery should be used or stored or any materials stored within the RPA (Root Protection Area) of any retained tree.

- 3.2.4 The protective fencing will be appropriate to the degree and proximity of likely construction works. BS 5837: 2005 recommends a vertical and horizontal, scaffold framework, well braced to resist impacts, with vertical tubes at no more than 3m intervals. These should be driven into the ground. The use of rubber or concrete feet is not acceptable as these will move upon impact. Weld mesh panels should be affixed to this framework with scaffold clamps - See figure 1. A similar, sturdy, wooden construction would be acceptable.

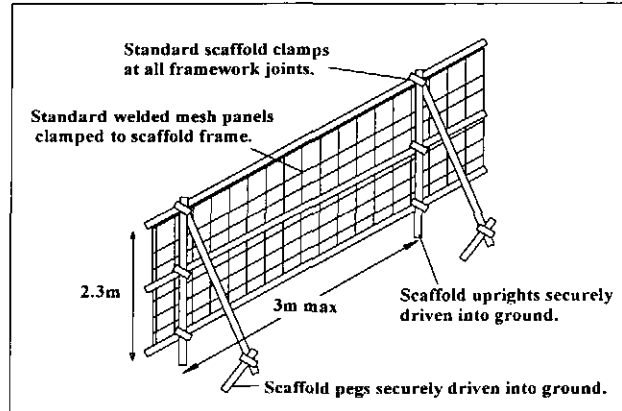


Figure 1. Fencing to BS 5837: 2005

- 3.2.5 The CEZ should have adequate, weatherproof signs informing all relevant persons that access is denied.
- 3.2.6 No operations should take place which require the removal of part of the protective fencing without prior agreement with the local authority tree officer or a JCA consultant.
- 3.3 Site Inspection Prior to Commencement**
- 3.3.1 Once the necessary tree works have been completed and the protective fences are in place, our consultant will visit the site, meet with the relevant local authority representative, and check that the tree works and the protective fences are satisfactory. Any necessary amendments to the tree works or to the protective fences will be agreed at this meeting and confirmed in writing.

4 Development Phase

4.1 The Root Protection Area (RPA)

- 4.1.1 The Root Protection Areas (RPAs) have been plotted on the attached Site Plans at Appendix 5.
- 4.1.2 The positions of the protective fences are shown on the Site Plan at Appendix 5 – Sport Pitch Area. Where possible, the protective fencing should be positioned to ensure that the RPA is completely protected and if feasible the fencing should be positioned to protect an even greater area, beyond that of the RPA. In addition, where tree canopies extend beyond the RPA, where practicable, the fencing should be positioned to protect these also.
- 4.1.3 Occasionally it is not practical to fence off the entire RPA or in the case of some areas on the site any of the RPA of trees to be retained and make it a construction exclusion zone (CEZ). In such circumstances all relevant parties need to be made aware of the *RPA position and the limitations which apply to works within these areas* so that the soils do not become compacted or roots damaged in any way.
- 4.1.4 On this occasion it is not possible to fence off the entire RPA of **G173, G175, G181, G183, G188, G193, G194, G195, G196, G201 and G204**. The fence line has therefore been positioned to protect as much of the RPA as possible whilst still allowing room for the new power cable to be brought through.
- 4.1.5 It should be noted however, that the trees and groups of trees not mentioned for protective fencing or for the possibility of having works carried out in their RPAs should be left alone and their RPA be regarded as an exclusion zone.

4.2 Work Within the RPA

- 4.2.1 *Services:* New underground services should be grouped together and routed away from Root Protection Areas. It is my understanding it is proposed to divert the existing overhead cables along the footpath to the east of the playing field. Excavations need to be kept to a minimum with the RPA of the trees that a line the footpath. Where this is not possible, techniques should be adopted which avoid the severance of many roots. Some examples are listed below:

- **Radial trenching:** This is illustrated in figure 2. Trenches should be hand-dug and kept as narrow as possible. They should not extend to within 1m from the base of the tree trunk. Exposed roots larger than 25mm in diameter should be retained with their bark intact. A mechanical mole should ideally be used for the section beneath the tree. Our representative should be informed in advance of such operations so that monitoring arrangements can be made.

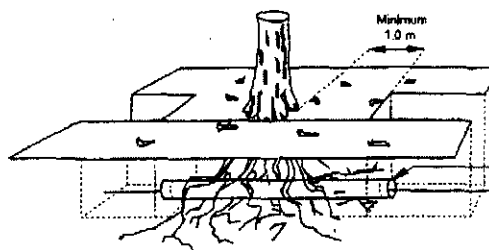


Figure 2: Radial Trenching

- **Mechanical Mole:** Pits are excavated beyond the RPA and the mechanical device is sent through the protected area at a depth of no less than 0.6m. Machinery should be selected which can be externally lubricated by water rather than oil etc.
- 4.2.2 Over-ground services should ideally be routed away from areas where they are likely to interfere with the crowns of mature trees. Similarly any landscaping should take account of over-ground services and mature tree size.
- 4.2.3 NJUG 10: *Guidelines for the Planning, Installation and Maintenance of Utility Services in Proximity to Trees* is a principle set of guidelines on working near trees for the utilities sector and should be considered when installing services.
- 4.2.4 **Special Surfaces:** It is proposed to construct, a several footpaths and a small car parking area within the RPA of some of the retained trees. Special construction techniques will be required in order to protect the roots of these trees during the development and to ensure that they are able to access oxygen and water once the development is complete. The only acceptable construction technique is the No Dig Method. Please refer to Section 6 for further details.
- 4.2.5 **Exposed Roots:** Any tree roots exposed within the RPA should be left as intact as careful digging with hand tools will allow. Roots can become desiccated quickly and should be covered with a dry cloth to prevent freezing overnight or a wet cloth on warm days.

4.3 Changes in Ground Level

- 4.3.1 The majority of tree roots usually lie within the upper strata of top soil. As such, any reduction of ground level within the RPA can cause serious root damage. As mentioned previously several trees, groups of trees and parts of groups of trees will require removal to facilitate the re-profiling of some areas.

4.4 Removal of Protective Fencing

- 4.4.1 When the major landscaping phase is complete, all drainage and service runs are in place the footpaths laid, and the main site machinery has been removed, the protective fencing may be dismantled. Drivers need to be made aware of, and avoid, the RPAs.

4.5 Post Construction Landscaping

- 4.5.1 Many of the trees on site will be subject to some form of soft landscaping or seeding beneath their canopy's after the construction of the footpaths and the re-profiling of some of the embankments. At this stage the protective fencing will have been removed.
- 4.5.2 The landscaping works should be carried out in such a way as to avoid ground level changes or deep digging. Tractor mounted rotovation or other mechanised cultivation methods must not be used.
- 4.5.3 No heavy machinery should be brought into the vicinity of retained trees.
- 4.5.4 Herbicides should be appropriate for the purpose and should not be used in such a way as to damage any retained trees or vegetation.
- 4.5.5 Tree planting schemes should consider the future use, layout and design of the site. There should also be consideration of soils and climate, and the local landscape character.

5 Completion

5.1 Completion Meeting

- 5.1.1 Upon completion of the works specified above, a JCA consultant will invite a local authority representative to meet with them on site to agree on any remedial works required.
- 5.1.2 Any necessary remedial works will be confirmed in writing and should be carried out to BS 3998: 1989 *Recommendations for tree work*.

6 Hard Surface Building Techniques

6.1 Scope of Recommendations

- 6.1.1 This section outlines the options available for constructing hard surfaces within the RPA of a tree. Only one method is acceptable; the No-Dig Method.
- 6.1.2 The design of such a construction needs to be sensitive to the requirements of tree roots, substantial enough to withstand the expected levels of traffic and practicable in terms of ease of fabrication. The methods suggested here are intended to fulfil all of these requirements. However any proposed car park or path construction should be approved by a qualified structural engineer prior to implementation.
- 6.1.3 The information contained in this section should not be regarded as exhaustive. Research into this subject is ongoing, new products and materials are continually becoming available, and new designs conceived.
- 6.1.4 We are not qualified to recommend any particular construction method in terms of durability or structural integrity.

6.2 Considerations

- 6.2.1 The following points need to be considered before opting for a particular construction design:
- 6.2.2 **Nature of Traffic.** The design needs to take into account whether the traffic is likely to be heavy or light duty. Most car parks need to be able to withstand at least the weight of a Fire Engine. It is assumed that only pedestrian traffic will be using the pathways.
- 6.2.3 **Ground Characteristics.** A geo-technician is occasionally required to assess the ground characteristics of the particular site, particularly the load bearing capacity of the subsoil.
- 6.2.4 **Vigour and Proximity of Nearby Trees.** The trees situated close to the proposed driveway are reasonably vigorous and are situated at a sufficient distance such that they are likely to cope well with a sympathetically planned construction.

6.3 Protecting Tree Roots

- 6.3.1 In constructing a road or drive with a sympathetic approach in terms of tree roots, the following criteria need to be met:
- 6.3.2 Severance of roots should be avoided. However if it is necessary to sever roots or if they are severed accidentally we must be informed so that we are able to assess the situation and recommend accordingly.

- 6.3.3 Soil compaction must be minimized. This will involve the use of hand tools within the RPA of the trees. Where machinery is used, the lightest machine available which is capable of the task should be selected. Ideally construction should be undertaken in dry weather between May and October when the ground is driest and least prone to compaction.
- 6.3.4 Oxygen and water must be able to diffuse into the soil beneath the engineered surface.
- 6.3.5 Toxic substances which could leach into the ground must be avoided, as should substances which affect the pH value of the soil, for example limestone.
- 6.3.6 Roots should be prevented from infiltrating and ultimately breaking up the engineered surface.

6.4 Site Preparation

- 6.4.1 To construct a car park or footpath with a sympathetic approach in terms of tree roots will require no digging. Example illustrations of the *No-Dig* method of construction are to be found on the following page.
- 6.4.2 **The No-Dig Method:** (See Figure 1) This involves the construction of a surface with no excavation, soil stripping or site grading. All construction takes place above ground level. Preparation is as follows:
 - 6.4.2.1 Ground vegetation is killed using a suitable herbicide. Care must be taken to select a herbicide which does not damage the tree roots within the treated area. One such product suggested by the Arboricultural Advisory and Information Service is *Glyphosate*. It is essential that product labels are read and understood before use.
 - 6.4.2.2 Once the vegetation has died, the dead organic matter should be removed. This helps prevent the future build up of anaerobic conditions or settlement due to decomposition.
 - 6.4.2.3 Major protrusions such as tree stumps need to be removed with minimum disturbance to the soil. Stumps should be ground out rather than excavated. Resulting hollows should be filled with *sharp sand*.

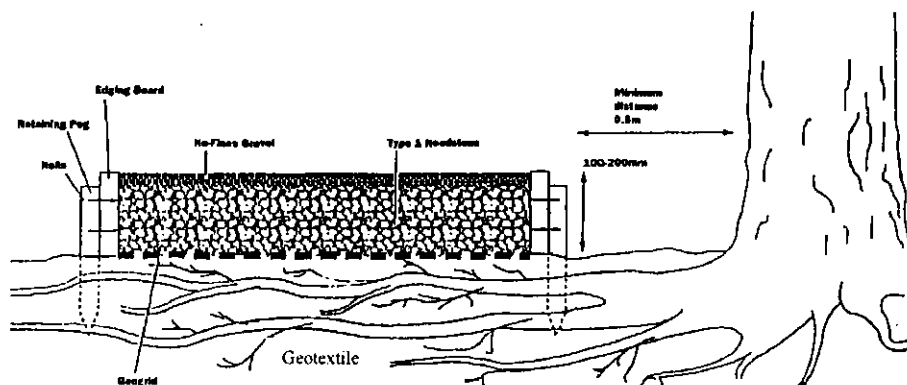


Figure 1. A light duty drive constructed using the *No Dig Method*

6.5 Construction Methods

6.5.1 For both the *No-Dig* and *Minimum Dig Methods* of construction the principles of road or drive design sympathetic to tree roots remain the same. The road or drive can be divided into three basic layers (see figure 5 on page 17); the *Root Barrier*, the *Sub-Base* and the *Finished Surface*:

6.5.2 **The Root Barrier.** In order to protect the construction from future infiltration by tree roots it will be necessary to first lay down a *root barrier* or *geo-textile*. The *geo-textile* should have the following properties:

- 6.5.2.1 **Strength** - to resist puncture by tree roots and granular sub-base material.
- 6.5.2.2 **Porosity** - to allow adequate passage of water and oxygen across the geo-textile. This should not be assumed, but should be confirmed with the manufacturer.
- 6.5.2.3 **Durability** - Once installed the geo-textile cannot easily be replaced and therefore needs to maintain these properties in the long term.
- 6.5.3.4 **The Sub-base.** A system needs to be adopted which obtains maximum strength, load spread and porosity with minimum depth. In order to do this construction should incorporate an aggregate sub-base with either a geogrid or a geo-web:

6.5.3 The Geogrid. Geogrids are high tensile strength synthetic grids, designed to support roads on soft ground.

When placed on a geogrid the granular sub-base material penetrates the mesh but is unable to pass through it, forming a positive interlock (Figure 3).

This interlock between aggregate and geogrid provides a reinforced platform and improved load spread, helping to reduce the compaction of the underlying ground

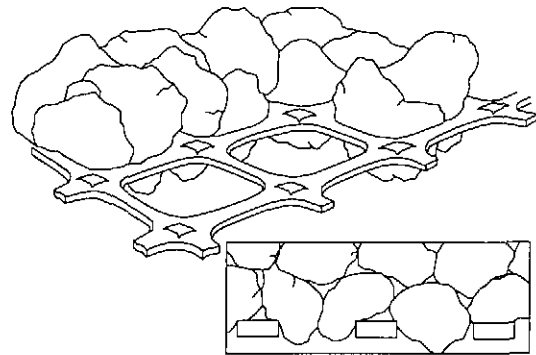
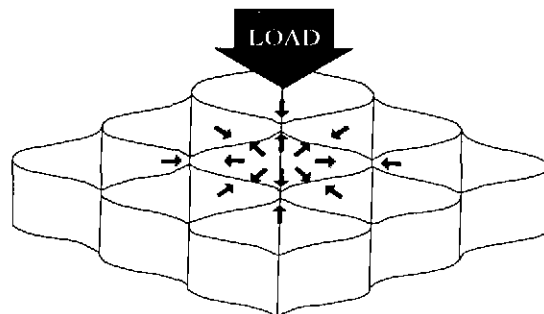


Figure 3. The Geogrid.

6.5.4 The Geoweb. The geoweb is a 3-dimensional polythene product, which uses established principles of cellular confinement to maximise strength, and spread load (Figure 3).



Manufacturers claim that over soft compressible soils a geoweb reinforced sub base has equivalent performance to an unreinforced sub-base five times its thickness.

Figure 4. Cellular confinement and load spread.

6.5.5 Perforations in the cell walls allow water and air to migrate laterally throughout the reinforced layer. These perforations also greatly increase the friction between granular infill and the geoweb which greatly increases the ability of the structure to spread any load from above.

6.5.6 Infill Material. A *No-Fines* aggregate infill is required in order to maintain porosity. This has a low fines content thus remaining freely draining and allowing oxygen to diffuse into the soil, even when compacted. Limestone aggregate should be avoided as this is likely to leach into the soil below and alter the pH value, which is critical to many species of trees. Particle size must not exceed 50mm.

6.5.7 **The Aggregate Sub-base.** A *No-Fines* aggregate sub-base is required beneath the geoweb.

6.5.8 **The Finished Surface.** The ideal surface would be hard wearing and durable, it should have long-term permeability to both, air and water as well as maintaining high friction, i.e. be non-slippery. There is no available road surface which fully satisfies all of these requirements. In practice a compromise has to be made:

6.5.8.1 For the car parking areas I would recommend Tarmac as the best option. Tarmac meets the requirements mentioned above initially, providing a *No-Fines* grade is specified.

6.5.8.2 For the footpaths I would recommend the use of the same no fines aggregate as will be used for the sub base

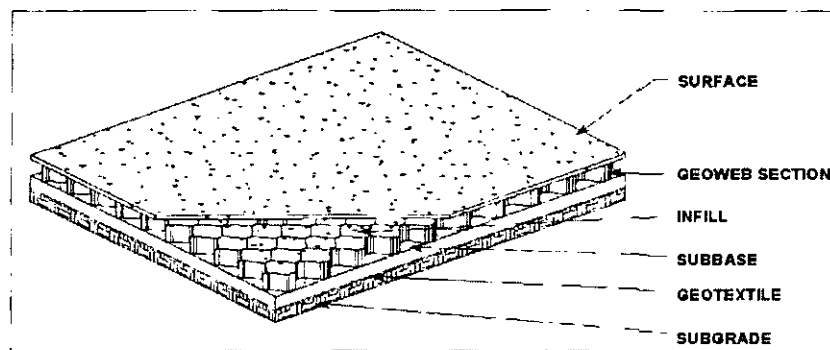


Figure 5. Material layers used in the Geoweb cellular confinement system.

6.6 Development and Post Development

6.6.1 Soil compaction must be avoided during the construction of the surface and at all phases of the development.

6.6.2 Once the surface is constructed it should only be used for light traffic. Materials and machinery to be used in the subsequent development stage should be delivered via alternative routes. If this is not possible then smaller vehicles than are conventionally used should be employed for delivery.

Appendix 1: Tree Works

Ref No.	Age & Species & Latin Name	Height (m)	Crown Height (m)	Stem Diameter (cm)	Crown Spread N W E S	Observations	Recommendations	Physio-logical Condition & Structural Condition	Amenity Value	Life Expectancy (yrs)	Retention Category
T1	Mature Black Poplar <i>Populus nigra</i>	17	0	96	6 10 5 8	Multi-stemmed at 2m with an unbalanced crown. Large bark wound where leader failed – sections appear hollow. Deadwood and stubs. Low hanging crown. Large ripped branch noted.	Remove to facilitate landscaping scheme	FAIR POOR	L O W	10-20	C
T2	Mature Black Poplar <i>Populus nigra</i>	16	1	56	3 9 9 3	Single stemmed and vertical with an unbalanced crown. Low hanging crown. Large cavity noted. Minor epicormic shoots noted. Decay and stubs.	Remove to facilitate landscaping scheme	FAIR POOR	L O W	10-20	C
T3	Mature Black Poplar <i>Populus nigra</i>	17	1.5	58	2 8 7 1	Single stemmed and leaning with an unbalanced crown. Minor epicormic shoots noted. Deadwood and stubs.	Remove to facilitate landscaping scheme	FAIR FAIR	L O W	10-20	C
T4	Mature Black Poplar <i>Populus nigra</i>	15	3	33	0 4 6 1	Single stemmed and leaning with an unbalanced crown – suppressed by T3. Minor epicormic shoots noted. Deadwood and stubs.	Remove to facilitate landscaping scheme	FAIR FAIR	L O W	10-20	C
T5	Mature Black Poplar <i>Populus nigra</i>	16			0 6 7 5	Single stemmed and leaning with an unbalanced crown. Deadwood and stubs.	Remove to facilitate landscaping scheme	FAIR FAIR	L O W	10-20	C
T6	Mature Black Poplar <i>Populus nigra</i>	-	-	Est 67	- - -	Failed specimen due to fire damage. Split at 0.5m.	Remove to facilitate landscaping scheme	- -	D E A D	<10	R
T7	Early mature Hawthorn <i>Crataegus monogyna</i>	6		14+1 6	See plan	Situated on adjacent land. True to species. Multi-stemmed at ground level with a balanced crown. No evidence of significant pruning. No major visible defects. Low hanging crown.	Remove to facilitate landscaping scheme	FAIR FAIR	L O W	10-20	C
T8	Mature Black Poplar <i>Populus nigra</i>	16		64 at base	-	Twin stemmed and vertical with an unbalanced crown. Split at union – included bark here. Fire damaged. Resting in canopy of T9. No future.	Remove ASAP	- -	D E A D	<10	R
T9	Mature Black Poplar <i>Populus nigra</i>	16		58	4 7 6 4	Twin-stemmed at 2m with an unbalanced crown. . Bark wounds throughout. Deadwood and stubs.	Remove to facilitate landscaping scheme	FAIR FAIR	L O W	10-20	C
T10	Mature Black Poplar <i>Populus nigra</i>	16		59	2 8 8 5	Multi-stemmed at 2m with an unbalanced crown. – included bark here. Bark wounds throughout. Minor fire damage.	Remove to facilitate landscaping scheme	FAIR FAIR	L O W	10-20	C

Ref No.	Age & Species & Latin Name	Height (m)	Crown Height (m)	Stem Diameter (cm)	Crown Spread			Observations	Recommendations	Physio-logical Condition & Structural Condition	Amenity Value	Life Expectancy (yrs)	Retention Category
					N	W	E						
T11	Mature Black Poplar <i>Populus nigra</i>	16	3	Est 50	3 6 7 3			Multi-stemmed at 2m with an unbalanced crown. In decline. Major fire damage.	Remove	POOR POOR	L O W	<10	R
T12	Mature Black Poplar <i>Populus nigra</i>	16	3	72	2 7 7 5			Twin-stemmed at 0.5m with an unbalanced crown. Included bark at union. Deadwood stubs. Hanging branches.	Remove to facilitate landscaping scheme	FAIR FAIR	L O W	10-20	C
T13	Mature Black Poplar <i>Populus nigra</i>	16	2	58	5 5 3 6			Single stemmed and leaning with an unbalanced crown. Elder at base. Concrete fence slabs against stem. Bark wounds throughout.	Remove to facilitate landscaping scheme	FAIR FAIR	L O W	10-20	C
T14	Mature Black Poplar <i>Populus nigra</i>	17	4	66	6 2 2 7			Twin-stemmed at 1.5m with an unbalanced crown. Minor included bark at union. Stubs and deadwood. Bark wounds throughout.	Remove to facilitate landscaping scheme	FAIR FAIR	L O W	10-20	C
T15	Mature Black Poplar <i>Populus nigra</i>	16	3	57	5 6 2 6			Multi-stemmed at 2m with an unbalanced crown. Major fire damage to south of which it can't recover. Hanging branches. Deadwood and stubs.	Remove	POOR POOR	L O W	<10	R
T16	Mature Black Poplar <i>Populus nigra</i>	16	2	48	10 0 2 5			Twin-stemmed at 2m with an unbalanced crown. Cavity noted at 1.8m – extends into tree 10cm. Deadwood and stubs.	Remove to facilitate landscaping scheme	FAIR FAIR	L O W	10-20	C
T17	Mature Black Poplar <i>Populus nigra</i>	17	2	53	7 0 3 8			Multi-stemmed at 1m with an unbalanced crown – minor included bark at union. Stubs and deadwood. No major visible defects.	Remove to facilitate landscaping scheme	FAIR FAIR	L O W	10-20	C
T18	Mature Black Poplar <i>Populus nigra</i>	17	0.5	36+3 2	10 5 2 8			Twin-stemmed at ground level with an unbalanced crown. Overhanging footpath. Minor epicormic shoots noted. Wide spreading. Deadwood and stubs. Low hanging crown. No major visible defects.	Remove to facilitate landscaping scheme	FAIR FAIR	L O W	10-20	C
T19	Mature Black Poplar <i>Populus nigra</i>	16	2	33+3 4	8 0 4 7			Overhanging footpath. Twin-stemmed at ground level with an unbalanced crown. Suppressed slightly by T18. Large bark wounds to south – healing well.	Remove to facilitate landscaping scheme	FAIR FAIR	L O W	10-20	C
T20	Mature Black Poplar <i>Populus nigra</i>	16	0	58	8 3 2 6			Single stemmed and leaning with an unbalanced crown. Snapped branch to north with cavity noted with decay. Deadwood and stubs.	Remove to facilitate landscaping scheme	FAIR FAIR	L O W	10-20	C

Ref No.	Age & Species & Latin Name	Height (m)	Crown Height (m)	Stem Diameter (cm)	Crown Spread			Observations	Recommendations	Physio-logical Condition & Structural Condition	Amenity Value	Life Expectancy (yrs)	Retention Category
					W	N	E						
T21	Early mature Black Poplar <i>Populus nigra</i>	15	3	48	2	6	0	Twin-stemmed with a slight lean and an unbalanced canopy. Deadwood and stubs. Suppressed by T20.	Remove to facilitate landscaping scheme	FAIR FAIR	L O W	10-20	C
T22	Mature Black Poplar <i>Populus nigra</i>	16	3	70	3	7	0	Multiple stemmed at 0.5m with an unbalanced canopy. Bark wounds throughout. Deadwood and stubs.	Remove to facilitate landscaping scheme	FAIR FAIR	L O W	10-20	C
T23	Mature Black Poplar <i>Populus nigra</i>	17	2	60	1	8	4	Twin-stemmed at 0.5m with an unbalanced crown. Stem removed to east – healing slowly. Deadwood and stubs.	Remove to facilitate landscaping scheme	FAIR FAIR	L O W	10-20	C
T24	Mature Black Poplar <i>Populus nigra</i>	16	2	65	3	7	3	Multi-stemmed at 1.5m with an unbalanced crown. Deadwood and stubs. Epicormic shoots noted. Resting against fence resulting in a bark wound.	Remove to facilitate landscaping scheme	FAIR FAIR	L O W	10-20	C
T25	Mature Black Poplar <i>Populus nigra</i>	16	3	58	2	8	4	Multi-stemmed at 2m with an unbalanced crown. Major deadwood and stubs. No major visible defects.	Remove to facilitate landscaping scheme	FAIR FAIR	L O W	10-20	C
T26	Mature Black Poplar <i>Populus nigra</i>	16	2	70	2	10	1	Multi-stemmed at ground level with an unbalanced crown. Large bark wound to south – healing slowly. Possible hollow sections. Deadwood and stubs. Epicormic shoots noted.	Remove to facilitate landscaping scheme	FAIR FAIR	L O W	10-20	C
T27	Mature Black Poplar <i>Populus nigra</i>	15	2	55	0	7	3	Multi-stemmed at 1m with an unbalanced crown. Minor epicormic shoots noted. Decay stub noted at 1m.	Remove to facilitate landscaping scheme	FAIR FAIR	L O W	10-20	C
T28	Mature Black Poplar <i>Populus nigra</i>	15	2	42	4	6	2	Multi-stemmed at 2.5m with an unbalanced crown. Deadwood and stubs. Epicormic shoots noted. No major visible defects.	Remove to facilitate landscaping scheme	FAIR FAIR	L O W	10-20	C
T29	Mature Black Poplar <i>Populus nigra</i>	15	1	36	0	6	3	Single stemmed and vertical with an unbalanced crown. Deadwood and stubs. Epicormic shoots noted. Some exposed roots.	Remove to facilitate landscaping scheme	FAIR FAIR	L O W	10-20	C
T30	Mature Black Poplar <i>Populus nigra</i>	1	-	40	-	-	-	Stump with epicormic shoots noted.	Remove	DEAD DEAD	D E A D	<10	R

Ref No.	Age & Species & Latin Name	Height (m)	Crown Height (m)	Stem Diameter (cm)	Crown Spread			Observations	Recommendations	Physio-logical Condition & Structural Condition	Amenity Value	Life Expectancy (yrs)	Retention Category
					W	N	E						
						S							
T31	Mature Black Poplar <i>Populus nigra</i>	15	2.5	42	5	1	5	Multi-stemmed at 1.5m with an unbalanced crown. Deadwood and stubs. Nest in canopy. Epicormic shoots noted.	Remove to facilitate landscaping scheme	FAIR FAIR	L O W	10-20	C
T32	Mature Black Poplar <i>Populus nigra</i>	15	3	48	4	3	5	Twin-stemmed at 0.5m with an unbalanced crown. Split and included bark at union. Leader ripped. No long term future. Deadwood, stubs and bark wounds with decay.	Remove to facilitate landscaping scheme	FAIR FAIR	L O W	10-20	C
T33	Mature Black Poplar <i>Populus nigra</i>	17	3	70	3	7	6	Overhanging road. Multi stemmed at ground level with an unbalanced canopy. Exposed roots. Epicormic growth. Deadwood and stubs with decay.	Remove to facilitate landscaping scheme	FAIR FAIR	L O W	10-20	C
T34	Mature Black Poplar <i>Populus nigra</i>	16	2.5	40x2	6	7	3	Twin stemmed at ground level with an unbalanced canopy. Split at union. Large bark wound at base to 1.5m. Decaying stubs. Deadwood. No long term future. In decline.	Remove	POOR POOR	L O W	<10	R
T35	Mature Black Poplar <i>Populus nigra</i>	16	2	65	3	8	8	Overhanging road. Multi stemmed at ground level with an unbalanced canopy. Exposed roots. Epicormic growth. Deadwood and stubs with decay. Ripped branches.	Remove to facilitate landscaping scheme	FAIR FAIR	L O W	10-20	C
T36	Mature Black Poplar <i>Populus nigra</i>	14	5	24+18	2	0	1	Twin stemmed at 0.1m with an unbalanced and high canopy. No long term future. Exposed roots. Deadwood. Suppressed specimen.	Remove	POOR POOR	L O W	<10	R
T37	Mature Black Poplar <i>Populus nigra</i>	16	2	60	2	7	3	Overhanging road. Multi stemmed at ground level with an unbalanced canopy. Exposed roots. Epicormic growth. Deadwood and stubs with decay.	Remove to facilitate landscaping scheme	FAIR FAIR	L O W	10-20	C
T38	Mature Black Poplar <i>Populus nigra</i>	16	2	65	1	7	2	Overhanging road. Multi stemmed at ground level with an unbalanced canopy. Exposed roots. Epicormic growth. Deadwood and stubs with decay.	Remove to facilitate landscaping scheme	FAIR FAIR	L O W	10-20	C
T39	Mature Black Poplar <i>Populus nigra</i>	15	3	50	1	3	2	Overhanging road. Multi stemmed at ground level with an unbalanced canopy. Exposed roots. Epicormic growth. Deadwood and stubs with decay.	Remove to facilitate landscaping scheme	FAIR FAIR	L O W	10-20	C
T40	Mature Black Poplar <i>Populus nigra</i>	15	2	50	0	3	0	Overhanging road. Multi stemmed at ground level with an unbalanced canopy. Exposed roots. Epicormic growth. Deadwood and stubs with decay.	Remove to facilitate landscaping scheme	FAIR FAIR	L O W	10-20	C

Ref No.	Age & Species & Latin Name	Height (m)	Crown Height (m)	Stem Diameter (cm)	Crown Spread			Observations	Recommendations	Physio-logical Condition & Structural Condition	Amenity Value	Life Expectancy (yrs)	Retention Category
					W	N	E						
T41	Mature Black Poplar <i>Populus nigra</i>	15	2	34	2	3	0	Single stemmed and slightly leaning. No long term future. Deadwood and stubs with decay. Epicormic growth.	Remove to facilitate landscaping scheme	FAIR FAIR	L O W	10-20	C
T42	Mature Black Poplar <i>Populus nigra</i>	17	2.5	45 x 7	4	6	7	Overhanging road. Multi stemmed at ground level with an unbalanced canopy. Epicormic growth. Deadwood and stubs with decay. Nest in canopy. Wide spreading. No major visible defects.	Remove to facilitate landscaping scheme	FAIR FAIR	L O W	10-20	C
T43	Mature Black Poplar <i>Populus nigra</i>	12	2	28	0	6	0	Twin stemmed at 2m. No long term future. Deadwood and stubs. No major visible defects found.	Remove to facilitate landscaping scheme	FAIR FAIR	L O W	10-20	C
T44	Mature Black Poplar <i>Populus nigra</i>	16	2	40	1	7	3	Twin stemmed at 2m with an unbalanced canopy. Deadwood and stubs. Minor epicormic growth.	Remove to facilitate landscaping scheme	FAIR	L O W	10-20	C
T45	Mature Black Poplar <i>Populus nigra</i>	16	2	37	2	6	3	Single stemmed with a slight lean. Deadwood and stubs. Minor epicormic growth. No major visible defects.	Remove to facilitate landscaping scheme	FAIR	L O W	10-20	C
T46	Mature Black Poplar <i>Populus nigra</i>	16	2	38	1	7	3	Single stemmed with a slight lean. Deadwood and stubs. Minor epicormic growth. No major visible defects.	Remove to facilitate landscaping scheme	FAIR	L O W	10-20	C
T47	Mature Black Poplar <i>Populus nigra</i>	16	2	30	0	3	0	Single stemmed with a slight lean. Deadwood and stubs. Minor epicormic growth. No major visible defects.	Remove to facilitate landscaping scheme	FAIR	L O W	10-20	C
T48	Mature Black Poplar <i>Populus nigra</i>	17	2	50	2	8	3	Twin stemmed at 2m. Bark wounds throughout. Deadwood and stubs. No major visible defects.	Remove to facilitate landscaping scheme	FAIR	L O W	10-20	C
T49	Mature Black Poplar <i>Populus nigra</i>	16	2	38	1	8	1	Single stemmed. Bark wounds throughout. Deadwood and stubs. No major visible defects.	Remove to facilitate landscaping scheme	FAIR	L O W	10-20	C
T50	Mature Black Poplar <i>Populus nigra</i>	16	2	45	0	8	2	Single stemmed. Bark wounds throughout. Deadwood and stubs. No major visible defects.	Remove to facilitate landscaping scheme	FAIR	L O W	10-20	C

Ref No.	Age & Species & Latin Name	Height (m)	Crown Height (m)	Stem Diameter (cm)	Crown Spread			Observations	Recommendations	Physio-logical Condition & Structural Condition	Amenity Value	Life Expectancy (yrs)	Retention Category
					W	N	E						
T51	Mature Black Poplar <i>Populus nigra</i>	17	3	50	1	6	2	Twin stemmed at 1m. Bark wounds throughout. Deadwood and stubs. No major visible defects.	Remove to facilitate landscaping scheme	FAIR FAIR	L O W	10-20	C
T52	Mature Black Poplar <i>Populus nigra</i>	16	4	32	0	3	0	Single stemmed. Bark wounds throughout. Deadwood and stubs. No major visible defects.	Remove to facilitate landscaping scheme	FAIR FAIR	L O W	10-20	C
T53	Mature Black Poplar <i>Populus nigra</i>	16	4	36	2	5	1	Single stemmed. Bark wounds throughout. Deadwood and stubs. No major visible defects.	Remove to facilitate landscaping scheme	FAIR FAIR	L O W	10-20	C
T54	Mature Black Poplar <i>Populus nigra</i>	17	2	62	6	8	2	Multi stemmed at 2m with an unbalanced canopy. Deadwood and stubs. Elder at base. Ripped branch at 2m. No major visible defects.	Remove to facilitate landscaping scheme	GOOD FAIR	L O W	10-20	C
T55	Mature Black Poplar <i>Populus nigra</i>	16	2	55	3	8	7	Overhanging road. Multi stemmed at ground level with an unbalanced canopy. Epicormic growth. Deadwood and stubs. Wide spreading. No major visible defects.	Remove to facilitate landscaping scheme	FAIR FAIR	L O W	10-20	C
T56	Mature Black Poplar <i>Populus nigra</i>	16	3	38	1	2	3	Twin stemmed at 1m with an unbalanced canopy. Deadwood and stubs with decay. Epicormic growth.	Remove to facilitate landscaping scheme	FAIR FAIR	L O W	10-20	C
T57	Mature Black Poplar <i>Populus nigra</i>	15	5	35	1	2	6	Once twin stemmed now single stemmed – fused together. Cavities noted. Deadwood and stubs. Overhanging road.	Remove to facilitate landscaping scheme	FAIR FAIR	L O W	10-20	C
T58	Mature Black Poplar <i>Populus nigra</i>	16	3	50	4	3	3	Overhanging road. Multi stemmed at ground level with an unbalanced canopy. Epicormic growth. Deadwood and stubs with decay.	Remove to facilitate landscaping scheme	FAIR FAIR	L O W	10-20	C
T59	Mature Black Poplar <i>Populus nigra</i>	17	2.5	65	3	6	5	Overhanging road. Multi stemmed at ground level with an unbalanced canopy. Epicormic growth. Deadwood and stubs with decay. Large bark wound to south.	Remove to facilitate landscaping scheme	FAIR FAIR	L O W	10-20	C
T60	Mature Black Poplar <i>Populus nigra</i>	16	3	57	2	5	6	Twin stemmed at 1m with an unbalanced canopy. Deadwood and stubs with decay. Minor epicormic growth.	Remove to facilitate landscaping scheme	FAIR FAIR	L O W	10-20	C

Ref No.	Age & Species & Latin Name	Height (m)	Crown Height (m)	Stem Diameter (cm)	Crown Spread			Observations	Recommendations	Physio-logical Condition & Structural Condition	Amenity Value	Life Expectancy (yrs)	Retention Category
					W	N	E						
T61	Mature Black Poplar <i>Populus nigra</i>	17	2.5	56	4	2	3	Twin stemmed at 0.5m with an unbalanced canopy. Deadwood and stubs. Minor Epicormic growth. No major visible defects.	Remove to facilitate landscaping scheme	FAIR FAIR	L O W	10-20	C
T62	Mature Black Poplar <i>Populus nigra</i>	16	3	51	6	2	2	Twin stemmed at 1.9m with an unbalanced canopy. Deadwood and stubs. Minor Epicormic growth. No major visible defects.	Remove to facilitate landscaping scheme	FAIR FAIR	L O W	10-20	C
T63	Mature Black Poplar <i>Populus nigra</i>	16	3	32	3	3	5	Overhanging road. Multi stemmed at ground level with an unbalanced canopy. Epicormic growth. Deadwood and stubs with decay. Cavities throughout. Large bark wound near base with decay present.	Remove to facilitate landscaping scheme	FAIR FAIR	L O W	10-20	C
T64	Mature Black Poplar <i>Populus nigra</i>	6+0	-	15	0	0	4	Overhanging road. Multi stemmed at ground level. No long term future. Deadwood and stubs with decay. Topped at 1m.	Remove to facilitate landscaping scheme	FAIR FAIR	L O W	10-20	C
T65	Mature Black Poplar <i>Populus nigra</i>	15	3	32	5	3	4	Single stemmed and vertical with an unbalanced canopy. Close to road. Major deadwood and stubs with decay.	Remove to facilitate landscaping scheme	FAIR FAIR	L O W	10-20	C
T66	Mature Black Poplar <i>Populus nigra</i>	17	3	38	1	3	6	Overhanging road. Multi stemmed at ground level with an unbalanced canopy. Epicormic growth. Deadwood and stubs with decay. Cavities throughout.	Remove to facilitate landscaping scheme	FAIR FAIR	L O W	10-20	C
T67	Mature Black Poplar <i>Populus nigra</i>	17	3	41+37	5	3	7	Twin stemmed at ground level with an unbalanced canopy. Nest in canopy. Epicormic growth. Deadwood and stubs with decay. Overhanging road.	Remove to facilitate landscaping scheme	FAIR FAIR	L O W	10-20	C
T68	Mature Black Poplar <i>Populus nigra</i>	16	4	37	3	2	6	Single stemmed and vertical with an unbalanced canopy. Close to road. Major deadwood and stubs with decay. Cavities throughout. Exposed roots.	Remove to facilitate landscaping scheme	FAIR FAIR	L O W	10-20	C
T69	Mature Black Poplar <i>Populus nigra</i>	16	4	38+32+15x4	7	4	6	Multi stemmed at ground level with an unbalanced canopy. Deadwood and stubs with decay. Cavities. Overhanging road. Epicormic growth.	Remove to facilitate landscaping scheme	FAIR FAIR	L O W	10-20	C
T70	Mature Black Poplar <i>Populus nigra</i>	17	5	To 30	1	4	5	Overhanging road. Multi stemmed at ground level with an unbalanced canopy. Epicormic growth. Deadwood and stubs with decay. Cavities.	Remove to facilitate landscaping scheme	FAIR FAIR	L O W	10-20	C

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					W	N	E						
T71	Mature Black Poplar <i>Populus nigra</i>	16	6	To 20	2	6	7	Overhanging road. Multi stemmed at ground level with an unbalanced canopy. Epicormic growth. Deadwood and stubs with decay. Cavities throughout.	Remove to facilitate landscaping scheme	FAIR FAIR	L O W	10-20	C
T72	Mature Black Poplar <i>Populus nigra</i>	15	5	To 25	3	2	7	Overhanging road. Multi stemmed at ground level with an unbalanced canopy. Epicormic growth. Deadwood and stubs with decay. Cavities throughout.	Remove to facilitate landscaping scheme	FAIR FAIR	L O W	10-20	C
T73	Mature Black Poplar <i>Populus nigra</i>	6	0	To 15	0	3	2	Multi stemmed at ground level with an unbalanced canopy. True to species. Fused and ripped branches.	Remove to facilitate landscaping scheme	FAIR FAIR	L O W	10-20	C
T74	Mature Black Poplar <i>Populus nigra</i>	7	0	To 10	0	0	2	Multi stemmed at ground level with an unbalanced canopy. True to species. Fused and ripped branches.	Remove to facilitate landscaping scheme	FAIR FAIR	L O W	10-20	C
T75	Mature Black Poplar <i>Populus nigra</i>	6	0	To 7	2	2	2	Multi stemmed at ground level with a balanced canopy. Fused and broken branches. True to species. No major visible defects.	Remove to facilitate landscaping scheme	FAIR FAIR	L O W	10-20	C
T76	Mature Black Poplar <i>Populus nigra</i>	16	3	67	3	3	7	Twin stemmed at 7m with an unbalanced canopy. Cavities. Ripped stubs with decay. Overhanging road.	Remove to facilitate landscaping scheme	FAIR FAIR	L O W	10-20	C
T77	Mature Black Poplar <i>Populus nigra</i>	4.5	-	-	-	-	-	Fire damaged. Overhanging road. Fungal bracket present.	Remove	POOR POOR	L O W	<10	R
T78	Mature Black Poplar <i>Populus nigra</i>	16	4	28+30	1	3	6	Twin stemmed at ground level with an unbalanced canopy. Overhanging road. Epicormic growth. Deadwood and stubs with decay. Cavities throughout. Snapped leader resulting in rip wound.	Remove to facilitate landscaping scheme	FAIR FAIR	L O W	10-20	C
T79	Mature Black Poplar <i>Populus nigra</i>	17	3	50+53	3	4	7	Twin stemmed at ground level with an unbalanced canopy. Included bark here. Deadwood and stubs with decay. Cavities. Decaying stub at base. Wide spreading.	Remove to facilitate landscaping scheme	FAIR FAIR	L O W	10-20	C
T80	Mature Black Poplar <i>Populus nigra</i>	17	5	63	7	6	4	Twin stemmed at 4m with an unbalanced canopy. Large rip wound from failed leader. Large bark wound at base with decay.	Remove to facilitate landscaping scheme	FAIR FAIR	L O W	10-20	C

Ref No.	Age & Species & Latin Name	Height (m)	Crown Height (m)	Stem Diameter (cm)	Crown Spread			Observations	Recommendations	Physio-logical Condition & Structural Condition	Amenity Value	Life Expectancy (yrs)	Retention Category
					W	N	E						
T81	Early mature Hawthorn <i>Crataegus monogyna</i>	7	0	20	2	2	0	Multi stemmed at ground level with an unbalanced canopy. True to species. Fused and ripped branches.	Remove to facilitate landscaping scheme	FAIR FAIR	L O W	10-20	C
T82	Early mature Hawthorn <i>Crataegus monogyna</i>	6	0	15	1	2	2	Multi stemmed at ground level with an unbalanced canopy. True to species. Fused and ripped branches.	Remove to facilitate landscaping scheme	FAIR FAIR	L O W	10-20	C
T83	Mature Black Poplar <i>Populus nigra</i>	16	3	52	4	3	0	Twin stemmed at 2.5m with an unbalanced canopy. Deadwood and stubs. No major visible defects. Epicormic growth.	Remove to facilitate landscaping scheme	FAIR FAIR	L O W	10-20	C
T84	Mature Black Poplar <i>Populus nigra</i>	17	4	49	3	3	2	Twin stemmed at 2m with an unbalanced canopy. Deadwood and stubs. No major visible defects. Epicormic growth.	Remove to facilitate landscaping scheme	FAIR FAIR	L O W	10-20	C
T85	Mature Black Poplar <i>Populus nigra</i>	16	3	52	4	2	3	Single stemmed and vertical with an unbalanced canopy. Epicormic growth. Deadwood and stubs. Minor cavities.	Remove to facilitate landscaping scheme	FAIR FAIR	L O W	10-20	C
T86	Mature Black Poplar <i>Populus nigra</i>	16	3	49	3	4	3	Twin stemmed at 3m with an unbalanced canopy. Epicormic growth. Deadwood and stubs. Bark wound at base.	Remove to facilitate landscaping scheme	FAIR FAIR	L O W	10-20	C
T87	Mature Black Poplar <i>Populus nigra</i>	17	2	39	3	0	1	Twin stemmed at 3m with an unbalanced canopy. Epicormic growth. Deadwood and stubs. Bark wound at base.	Remove to facilitate landscaping scheme	FAIR FAIR	L O W	10-20	C
T88	Mature Black Poplar <i>Populus nigra</i>	16	1	58	3	6	2	Single stemmed and vertical with an unbalanced canopy. Deadwood and stubs. Epicormic growth. Minor cavities.	Remove to facilitate landscaping scheme	FAIR FAIR	L O W	10-20	C
T89	Mature Black Poplar <i>Populus nigra</i>	16	3	57	3	7	4	Twin stemmed at 7m with an unbalanced canopy. Deadwood and stubs. Epicormic growth. Minor cavities.	Remove to facilitate landscaping scheme	FAIR FAIR	L O W	10-20	C
T90	Semi mature Black Poplar <i>Populus nigra</i>	16	6	32	2	2	1	Single stemmed and vertical with an unbalanced canopy. No major visible defects. Epicormic growth.	Remove to facilitate landscaping scheme	FAIR FAIR	L O W	10-20	C

Ref No.	Age & Species & Latin Name	Height (m)	Crown Height (m)	Stem Diameter (cm)	Crown Spread			Observations	Recommendations	Physiological Condition & Structural Condition	Amenity Value	Life Expectancy (yrs)	Retention Category
					W	N	E						
T91	Mature Black Poplar <i>Populus nigra</i>	17	0	62	2	2	6	Twin stemmed at 2.5m with an unbalanced canopy. Epicormic growth. Deadwood and stubs. Bark wound at base.	Remove to facilitate landscaping scheme	FAIR FAIR	L O W	10-20	C
T92	Mature Black Poplar <i>Populus nigra</i>	16	2	42	2	2	8	Single stemmed and vertical with an unbalanced canopy. Deadwood and stubs. Epicormic growth. Minor cavities.	Remove to facilitate landscaping scheme	FAIR FAIR	L O W	10-20	C
T93	Mature Black Poplar <i>Populus nigra</i>	17	3	53	8	0	2	Twin stemmed at 3m with an unbalanced canopy. Deadwood and stubs. Epicormic growth. Minor cavities. Large bark wounds. Hollow section due to fire damage.	Remove to facilitate landscaping scheme	FAIR FAIR	L O W	10-20	C
T94	Mature Black Poplar <i>Populus nigra</i>	16	5	48	1	2	3	Single stemmed and vertical with an unbalanced canopy. Deadwood and stubs. Epicormic growth. Minor cavities.	Remove to facilitate landscaping scheme	FAIR FAIR	L O W	10-20	C
T95	Mature Black Poplar <i>Populus nigra</i>	16	4	46	2	1	6	Single stemmed and vertical with an unbalanced canopy. Deadwood and stubs. Epicormic growth. Minor cavities. Bark wound to south – appears ok.	Remove to facilitate landscaping scheme	FAIR FAIR	L O W	10-20	C
T96	Mature Black Poplar <i>Populus nigra</i>	17	1	54	2	1	5	Single stemmed and vertical with an unbalanced canopy. Deadwood and stubs. Epicormic growth. Minor cavities.	Remove to facilitate landscaping scheme	FAIR FAIR	L O W	10-20	C
T97	Mature Black Poplar <i>Populus nigra</i>	16	3	53	2	2	5	Single stemmed and vertical with an unbalanced canopy. Deadwood and stubs. Epicormic growth. Minor cavities.	Remove to facilitate landscaping scheme	FAIR FAIR	L O W	10-20	C
T98	Mature Black Poplar <i>Populus nigra</i>	16	3	47	1	2	5	Single stemmed and vertical with an unbalanced canopy. Deadwood and stubs. Epicormic growth. Minor cavities.	Remove to facilitate landscaping scheme	FAIR FAIR	L O W	10-20	C
T99	Mature Black Poplar <i>Populus nigra</i>	16	3	56	1	1	4	Twin stemmed at 2m. Deadwood and stubs. Epicormic growth. Minor cavities. Dead co-dominant stem.	Remove to facilitate landscaping scheme	FAIR FAIR	L O W	10-20	C
T100	Mature Black Poplar <i>Populus nigra</i>	-	-	52	-	-	-	Twin stemmed at 2.5m. Failed at base – root plate lifted. Maintain for wildlife purposes for now.	Remove	POOR POOR	L O W	<10	R

Ref No.	Age & Species & Latin Name	Height (m)	Crown Height (m)	Stem Diameter (cm)	Crown Spread N W E S	Observations	Recommendations	Physio-logical Condition & Structural Condition	Amenity Value	Life Expectancy (yrs)	Retention Category
T101	Mature Black Poplar <i>Populus nigra</i>	17	4	58	4 1 4 4	Single stemmed with a heavy lean. Epicormic growth. Deadwood and stubs with decay. No major visible defects. Along waterway.	Remove to facilitate landscaping scheme	FAIR FAIR	L O W	10-20	C
T102	Mature Black Poplar <i>Populus nigra</i>	16	2	57	1 1 5 2	Single stemmed with a significant lean. Epicormic growth. Deadwood and stubs with decay. No major visible defects. Located along waterway	Remove to facilitate landscaping scheme	FAIR FAIR	L O W	10-20	C
T103	Mature Black Poplar <i>Populus nigra</i>	17	1.5	56	1 1 5 3	Single stemmed and leaning. Multiple pruning wounds due to crown lifting - healing well. In water. Deadwood and stubs.	Remove to facilitate landscaping scheme	FAIR FAIR	L O W	10-20	C
T104	Mature Black Poplar <i>Populus nigra</i>	16	3	39	1 1 3 3	Single stemmed and leaning. Multiple pruning wounds due to crown lifting - healing well. In water. Deadwood and stubs. Epicormic growth.	Remove to facilitate landscaping scheme	FAIR FAIR	L O W	10-20	C
T105	Mature Black Poplar <i>Populus nigra</i>	13	-	40	0 4 0 4	Single stemmed and leaning with an unbalanced canopy. Deadwood and stubs with decay. Major Epicormic growth. Multiple pruning wounds due to crown lifting - healing well.	Remove to facilitate landscaping scheme	FAIR FAIR	L O W	10-20	C
T106	Mature Black Poplar <i>Populus nigra</i>	10	0	43	0 4 0 4	Single stemmed and leaning with an unbalanced canopy. Major Epicormic growth. Almost flat on the ground.	Remove	POOR POOR	L O W	<10	R
T107	Mature Black Poplar <i>Populus nigra</i>	12	6	50	7 2 0 0	Twin stemmed at 2m with an unbalanced canopy. Poor form. Insignificant	Remove to facilitate landscaping scheme	FAIR FAIR	L O W	10-20	C
T108	Mature Black Poplar <i>Populus nigra</i>	7	-	37	-	Twin stemmed at 2m with an unbalanced canopy. Topped at 4m and 7m. No long term future. In decline.	Remove	POOR POOR	L O W	<10	R
T109	Mature Black Poplar <i>Populus nigra</i>	17	3	73	0 1 4 7	Single stemmed and leaning with an unbalanced canopy. Broken branches. Deadwood and stubs.	Crown clean	FAIR FAIR	L O W	10-20	C
T110	Mature Black Poplar <i>Populus nigra</i>	17	3	57	6 1 4 5	Single stemmed and leaning with balanced canopy. No major visible defects. Major deadwood to lower canopy.	Crown clean	GOOD GOOD	M O D	20-40	B

Ref No.	Age & Species & Latin Name	Height (m)	Crown Height (m)	Stem Diameter (cm)	Crown Spread N W E S	Observations	Recommendations	Physio-logical Condition & Structural Condition	Amenity Value	Life Expectancy (yrs)	Retention Category
T111	Mature Black Poplar <i>Populus nigra</i>	17	7	65	4 1 4 5	Single stemmed and vertical with balanced canopy. Large cavity at 0.2m to 1.5m. Deadwood.	Remove	FAIR POOR	M O D	10-20	R
T112	Mature Black Poplar <i>Populus nigra</i>	17	3	68	5 3 7 7	Multi stemmed at ground level with a balanced canopy. No major visible defects. Deadwood and stubs.	Crown clean	GOOD GOOD	M O D	20-40	B
T113	Mature Black Poplar <i>Populus nigra</i>	15	7	47	5 2 3 3	Single stemmed and leaning with an unbalanced canopy. No major visible defects. Deadwood and stubs	Crown clean	GOOD FAIR	L O W	10-20	C
T114	Mature Black Poplar <i>Populus nigra</i>	16	4	69	7 4 3 5	Twin stemmed at 2m with an unbalanced canopy. Deadwood and stubs.	Crown clean	FAIR FAIR	M O D	10-20	C
T115	Mature Black Poplar <i>Populus nigra</i>	15	5	57	4 3 5 1	Twin stemmed at 2m with an unbalanced canopy. Significant lean and root plate movement. Deadwood and stubs.	Closely monitor and crown clean	FAIR FAIR	M O D	10-20	C
T116	Mature Black Poplar <i>Populus nigra</i>	-	-	48	-	Failed and uprooted now growing on its side. No long term future.	Remove	POOR POOR	L O W	<10	R
T117	Mature Black Poplar <i>Populus nigra</i>	6	2	37	0.5 0.5 0.5 0.5	Topped at 1m. Some regrowth. No long term future.	Remove	POOR POOR	L O W	<10	R
T118	Mature Black Poplar <i>Populus nigra</i>	5	2	38	1 0.5 1 1	Topped at 1m. Some regrowth. No long term future.	Remove	POOR POOR	L O W	<10	R
T119	Mature Black Poplar <i>Populus nigra</i>	17	4	55	3 0 6 5	Single stemmed and vertical with an unbalanced canopy. No major visible defects. Deadwood and stubs.	Crown clean	GOOD GOOD	M O D	20-40	B
T120	Mature Black Poplar <i>Populus nigra</i>	17	4	51	4 1 7 5	Single stemmed and leaning with balanced canopy. Minor bark damage at 0.75m.	Monitor. Crown clean.	GOOD FAIR	M O D	10-20	C

Ref No.	Age & Species & Latin Name	Height (m)	Crown Height (m)	Stem Diameter (cm)	Crown Spread			Observations	Recommendations	Physio-logical Condition & Structural Condition	Amenity Value	Life Expectancy (yrs)	Retention Category
					W	N	E						
						S							
T121	Mature Black Poplar <i>Populus nigra</i>	17	3	58	1	5	6	Twin stemmed at 2m with a balanced canopy. No major visible defects. Deadwood and stubs.	Crown clean and crown lift 2m.	GOOD GOOD	M O D	20-40	C
T122	Mature Black Poplar <i>Populus nigra</i>	19	2	53	1	5	6	Single stemmed and leaning with balanced canopy. No major visible defects. Deadwood and stubs.	Crown clean and crown lift 2m.	GOOD GOOD	M O D	20-40	B
T123	Mature Black Poplar <i>Populus nigra</i>	18	3.5	62	3	4	6	T4b. No major visible defects. Deadwood and stubs. Overhanging boundary	Crown clean	FAIR FAIR	M O D	10-20	B
T124	Mature Black Poplar <i>Populus nigra</i>	18	3	61	4	6	5	Twin stemmed at 2m with a balanced canopy. Overhanging boundary. Deadwood and stubs.	Crown clean	GOOD GOOD	M O D	20-40	B
T125	Mature Black Poplar <i>Populus nigra</i>	18	3	51	2	2	6	Twin stemmed at 2m with a balanced canopy. Broken branch at 2m and 8m. Deadwood and stubs.	Crown clean	GOOD FAIR	M O D	10-20	C
T126	Mature Black Poplar <i>Populus nigra</i>	18	2.5	57	3	3	3	Single stemmed and vertical with balanced canopy. Cavity at 1m and base. Broken branch at 10m. Deadwood and stubs.	Closely monitor and crown clean	FAIR FAIR	M O D	10-20	C
T127	Mature Black Poplar <i>Populus nigra</i>	17	3	65	3	4	5	Single stemmed and vertical with balanced canopy. Significant cambium dieback around base. Deadwood and stubs. Bark wounds at base.	Closely monitor and crown clean	FAIR FAIR	M O D	10-20	C
T128	Mature Black Poplar <i>Populus nigra</i>	18	3	61	2	5	4	Twin stemmed at 2m with a balanced canopy. No major visible defects. Deadwood and stubs. Overhanging boundary.	Crown clean	GOOD FAIR	M O D	10-20	C
T129	Mature Black Poplar <i>Populus nigra</i>	17	3	52	1	2	3	Twin-stemmed at 1.5m with an unbalanced crown. No major visible defects. Deadwood and stubs. Overhanging boundary.	Crown clean	GOOD FAIR	M O D	10-20	C
T130	Mature Black Poplar <i>Populus nigra</i>	17	3	53	1	3	3	Twin-stemmed at 2m with a balanced crown. No major visible defects. Deadwood and stubs. Overhanging boundary.	Crown clean	GOOD FAIR	M O D	10-20	C

Ref No.	Age & Species & Latin Name	Height (m)	Crown Height (m)	Stem Diameter (cm)	Crown Spread			Observations	Recommendations	Physio-logical Condition & Structural Condition	Amenity Value	Life Expectancy (yrs)	Retention Category
					W	N	E						
						S							
T131	Mature Black Poplar <i>Populus nigra</i>	17	2	67	2	7	5	Multi stemmed at 2m. No major visible defects. Deadwood and stubs. Overhanging boundary.	Crown clean and crown lift 2m.	GOOD FAIR	M O D	10-20	C
T132	Mature Black Poplar <i>Populus nigra</i>	17	3.5	52	1	6	4	Multi stemmed at 2m-Included bark here. No major visible defects. Deadwood and stubs. Overhanging boundary.	Crown clean and crown lift 2m. Monitor included bark.	FAIR FAIR	M O D	10-20	C
T133	Mature Black Poplar <i>Populus nigra</i>	16	2	67	1	6	3	Twin stemmed at 2m with an unbalanced canopy. One stem has failed resulting in large bark wound at 7m. Overhanging boundary.	Monitor.	FAIR FAIR	M O D	10-20	C
T134	Mature Black Poplar <i>Populus nigra</i>	16	3	59	2	5	4	Twin stemmed at 2m with an unbalanced canopy. No major visible defects. Overhanging boundary. Deadwood and stubs.	Crown clean.	GOOD FAIR	M O D	10-20	C
T135	Mature Black Poplar <i>Populus nigra</i>	17	2	59	0	6	4	Twin stemmed at 1.5m with an unbalanced canopy. No major visible defects. Deadwood and stubs. Overhanging boundary.	Crown clean.	GOOD FAIR	M O D	10-20	C
T136	Mature Black Poplar <i>Populus nigra</i>	17	3	77	3	5	4	Twin stemmed at 1.5m with an unbalanced canopy. No major visible defects. Overhanging boundary. Deadwood and stubs.	Crown clean.	GOOD FAIR	M O D	10-20	C
T137	Mature Black Poplar <i>Populus nigra</i>	17	2	53	3	5	4	Single stemmed and leaning with an unbalanced canopy. Deadwood and stubs. Overhanging boundary.	Crown clean.	GOOD GOOD	M O D	20-40	B
T138	Mature Black Poplar <i>Populus nigra</i>	17	3	53	1	1	3	Single stemmed and vertical with an unbalanced canopy. Large pruning wound at 1.5m with cavities. Large decay column from base to 4m. Possibly Bat roost.	Remove after Bat survey.	FAIR POOR	M O D	<10	R
T139	Mature Black Poplar <i>Populus nigra</i>	17	5	61	0	0	2	Multi stemmed at ground level with an unbalanced canopy. All stems removed apart from one. No long term future.	Remove	FAIR POOR	M O D	10-20	R
T140	Mature Black Poplar <i>Populus nigra</i>	17	2	64	0	0	4	Multi stemmed from 1.8m. One stem has failed now hung up. Fire damage to base.	Remove	FAIR POOR	M O D	<10	R

Ref No.	Age & Species & Latin Name	Height (m)	Crown Height (m)	Stem Diameter (cm)	Crown Spread		Observations	Recommendations	Physio-logical Condition & Structural Condition	Amenity Value	Life Expectancy (yrs)	Retention Category
					W	N E S						
T141	Mature Black Poplar <i>Populus nigra</i>	17	2	61	4	2 4 5	Single stemmed and leaning with balanced canopy. No major visible defects. Overhanging boundary. Deadwood and stubs.	Crown clean	GOOD GOOD	M O D	10-20	C
T142	Mature Black Poplar <i>Populus nigra</i>	17	3	65	1	5 5	Twin stemmed at 2m with a balanced canopy. No major visible defects. Deadwood and stubs. Overhanging boundary.	Crown clean	GOOD GOOD	M O D	20-40	B
T143	Mature Black Poplar <i>Populus nigra</i>	16	3	47	3	2 4 5	Single stemmed and vertical with balanced canopy. No major visible defects. Few Broken branches. Deadwood and stubs.	Crown clean	GOOD GOOD	M O D	10-20	C
T144	Mature Black Poplar <i>Populus nigra</i>	16	3	59	3	6 2 7	Multi stemmed at 2m. Two stems have failed. Deadwood and stubs. Overhanging boundary.	Closely monitor. Crown clean.	FAIR FAIR	M O D	10-20	C
T145	Mature Black Poplar <i>Populus nigra</i>	16	1.5	64	2	2 6 6	Multi stemmed at 1.5m. One stem has been removed. Deadwood and stubs.	Closely monitor. Crown clean.	FAIR FAIR	M O D	10-20	C
T146	Mature Black Poplar <i>Populus nigra</i>	16	1.5	53	1	2 5 5	Fire damage to base. Deadwood and stubs with decay. Twin stemmed at 1.5m. Cavities throughout.	Closely monitor. Crown clean.	FAIR FAIR	M O D	10-20	C
T147	Mature Black Poplar <i>Populus nigra</i>	16	2.5	78	5	7 5 4	Twin stemmed at 1.5m with a balanced canopy. One large split stem hung up. Failed stem at 8m. Deadwood and stubs.	Closely monitor. Crown clean.	FAIR POOR	M O D	10-20	C
T148	Mature Black Poplar <i>Populus nigra</i>	16	3.5	49	4	5 4 3	Twin stemmed at 1.5m with a balanced canopy. Large bark wound at 1m. Deadwood and stubs.	Crown clean	GOOD FAIR	M O D	10-20	B
T149	Mature Black Poplar <i>Populus nigra</i>	15	3	63	6	4 6 4	Twin stemmed at 0.5m. Two large pruning wounds noted. Deadwood and stubs and snapped branches.	Crown clean.	FAIR FAIR	M O D	10-20	C
T150	Mature Black Poplar <i>Populus nigra</i>	15	2.5	47	3	5 3 2	Twin stemmed at 2m with an unbalanced canopy. Deadwood and stubs. Significant cavity at base.	Closely monitor. Crown clean.	FAIR FAIR	M O D	10-20	C

Ref No.	Age & Species & Latin Name	Height (m)	Crown Height (m)	Stem Diameter (cm)	Crown Spread		Observations	Recommendations	Physio-logical Condition & Structural Condition	Amenity Value	Life Expectancy (yrs)	Retention Category
					W	N E S						
T151	Mature Black Poplar <i>Populus nigra</i>	16	2.5	56	7	4 5 2	Twin stemmed at ground level with a balanced canopy. Major Deadwood and stubs. Overhanging boundary. Failed branch scar at 8m.	Closely monitor and crown clean.	GOOD FAIR	M O D	10-20	C
T152	Mature Black Poplar <i>Populus nigra</i>	16	2.5	55	6	4 5 0	Twin stemmed at 1.5m with a balanced canopy. No major visible defects. Deadwood and stubs. Overhanging boundary.	Crown clean	GOOD FAIR	M O D	10-20	C
T153	Mature Black Poplar <i>Populus nigra</i>	16	2.5	52	4	2 7 1	Twin stemmed at ground level with a balanced canopy. Included bark noted at union. Overhanging boundary.	Closely monitor Included bark and crown clean.	GOOD FAIR	M O D	10-20	C
T154	Mature Black Poplar <i>Populus nigra</i>	16	3	65	6	5 8 4	Twin stemmed at 1.5m with an unbalanced canopy. Deadwood and stubs. Failed branch at 5m.	Crown clean.	GOOD GOOD	M O D	20-40	B
T155	Mature Black Poplar <i>Populus nigra</i>	16	2.5	49	5	3 6 5	Single stemmed and vertical with an unbalanced canopy. Honey fungus at base. Major deadwood and stubs. Overhanging boundary.	Closely monitor and crown clean.	FAIR FAIR	M O D	10-20	C
T156	Mature Black Poplar <i>Populus nigra</i>	15	2	53	4	2 7 2	Twin stemmed at ground level with an unbalanced canopy. Deadwood and stubs. Included bark at union. Overhanging boundary.	Monitor included bark.	GOOD FAIR	M O D	10-20	C
T157	Mature Black Poplar <i>Populus nigra</i>	15	2.5	62	5	6 6 5	Multi stemmed at ground level with an unbalanced canopy. Overhanging boundary. Deadwood and stubs. No major visible defects.	Crown clean	GOOD GOOD	M O I D	20-40	B
T158	Mature Hawthorn <i>Crataegus monogyna</i>	6	1	23	2.5	3 2 2	Single stemmed and vertical with an unbalanced canopy. True to species. Overhanging boundary. No major visible defects.	No action required	GOOD GOOD	M O D	20-40	B
G159	Early mature to mature Hawthorn/ Elderberry <i>Crataegus monogyna</i> <i>Sambucus nigra</i>	To 6	0+	To 14	See plan		Single, multi and twin stemmed specimens. No major visible defects. True to species. Overhanging boundary.	No action required	GOOD FAIR	L O W	10-20	C
T160	Mature Goat Willow <i>Salix caprea</i>	7	0	To 22	3	2 5 4	Multi stemmed at ground level with a balanced canopy. Major bark damage and deadwood. Poor form. No long term future.	No action required	FAIR POOR	L O W	10-20	C

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G161	Young Silver Birch <i>Betula pendula</i>	To 5	0.3 +	To 8	See plan	Single stemmed and vertical with balanced canopy. No major visible defects.	No action required	GOOD GOOD	L O W	20-40	C
T162	Mature Hawthorn <i>Crataegus monogyna</i>	6	0.5	To 13	2 2 2 2	Twin stemmed at ground level with an unbalanced canopy. No major visible defects. Overhanging boundary.	No action required	GOOD GOOD	M O D	10-20	C
T163	Early mature Hawthorn <i>Crataegus monogyna</i>	2.5	0.3	7.5	1.5 1.5 1.5 1.5	Single stemmed and vertical with an unbalanced canopy. No major visible defects.	No action required	GOOD GOOD	L O W	10-20	C
T164	Early mature Hawthorn <i>Crataegus monogyna</i>	3	0.3	7.5	1 1 1 1	Single stemmed and vertical with an unbalanced canopy. No major visible defects.	No action required	GOOD GOOD	L O W	10-20	C
G165	Mature Elderberry <i>Sambucus nigra</i>	3	0.5	To 9	See plan	Multi stemmed at ground level with a balanced canopy. No major visible defects. Poor form.	No action required	FAIR FAIR	L O W	10-20	C
T166	Early mature Hawthorn <i>Crataegus monogyna</i>	5	0	20	1.5 1.5 1.5 1.5	Multi stemmed at ground level with a balanced canopy. No major visible defects. Some broken branches.	No action required	GOOD FAIR	L O W	10-20	C
G167	Mature Hawthorn <i>Crataegus monogyna</i>	5	0	To 30	2 2 2 3	Multi stemmed at ground level with a balanced canopy. No major visible defects. Broken branches and fused branches.	No action required	GOOD FAIR	L O W	10-20	C
T168	Mature Hawthorn <i>Crataegus monogyna</i>	4	0	20	2 2 2 2	Multi stemmed at ground level with a balanced canopy. No major visible defects. True to species.	No action required	GOOD FAIR	L O W	10-20	C
G169	Early mature Hawthorn/ Elderberry <i>Crataegus monogyna</i> <i>Sambucus nigra</i>	3	0	To 13	See plan	Single, multi and twin stemmed specimens. Many broken branches and fused branches. True to species.	No action required	FAIR FAIR	L O W	10-20	C
T170	Mature Elderberry <i>Sambucus nigra</i>	4	0.2	20	1.5 1.5 1.5 1.5	Multi stemmed at ground level with a balanced canopy. Major dieback to canopy. Overhanging boundary.	No action required	POOR FAIR	L O W	<10	C

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G171	Early mature Hawthorn <i>Crataegus monogyna</i>	4	0	To 11	See plan	Twin stemmed at ground level with an unbalanced canopy. No major visible defects. True to species. Overhanging boundary.	No action required	GOOD FAIR	L O W	10-20	B
T172	Early mature Hawthorn <i>Crataegus monogyna</i>	5	0	21	3 2 2 2	Twin stemmed at ground level with an unbalanced canopy. Single stemmed and vertical with an unbalanced canopy. No major visible defects. True to species. Overhanging boundary.	No action required	GOOD GOOD	L O W	10-20	C
G173	Early mature Goat Willow <i>Salix caprea</i>	To 10	05 +	To 22	See plan	Self sown specimens. Single and multi stemmed. No major visible defects.	No action required	GOOD FAIR	L O W	10-20	C
T174	Mature Hawthorn <i>Crataegus monogyna</i>	9	1	45	3 3 3 3	Twin stemmed at ground level with a balanced canopy. No major visible defects.	No action required	GOOD GOOD	L O W	20-40	C
G175	Early mature + Mature Mixed <i>Mixed</i>	To 8	0	To 20	See plan	Predominately Hawthorn with Elder, Oak and Hazel. Typical of species. Located along water channel. No major visible defects. Single and multi stemmed specimens.	Remove where required to create path	GOOD FAIR	H I G H	10-20	B
T176	Early mature Oak sp <i>Quercus sp</i>	13	1	40	4 4 4 4	Multi stemmed at 1m with a balanced canopy. No major visible defects.	No action required	GOOD GOOD	M O D	20-40	B
T177	Semi mature Ash <i>Fraxinus excelsior</i>	8	0.5	35	4 5 5 4	Single stemmed and vertical with an unbalanced canopy. No major visible defects.	No action required	GOOD GOOD	L O W	40+	C
T178	Mature Crack Willow <i>Salix fragilis</i>	10	0	60	6 5 6 5	Multi stemmed at ground level with a balanced canopy. No major visible defects.	No action required	FAIR FAIR	L O W	10-20	C
G179	Young to early mature Mixed <i>Mixed</i>	To 8	0+	To 35	See plan	Predominately Hawthorn with Birch, Oak and Elder. Excellent for wildlife. No major visible defects. Landscape feature.	Remove to facilitate landscaping scheme	GOOD FAIR	M O D	20-40	B
T180	Semi mature Grey Alder <i>Alnus incana</i>	5	0.2	To 12	2 2 2 2	Multi stemmed at ground level with a balanced canopy. Bark wounds at base – appears ok. No major visible defects.	No action required	GOOD FAIR	L O W	10-20	C

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G181	Semi mature – early mature Mixed <i>Mixed</i>	To 12	0+	To 30	See plan	Predominately Birch with Oak, Willow, Alder, Rose. Single stemmed and vertical with an unbalanced canopy. Shelter belt. Excellent for wildlife. No major visible defects. Planted.	Remove parts highlighted to facilitate landscaping scheme	GOOD GOOD	M O D	40+	A
G182	Young to early mature Mixed <i>Mixed</i>	To 8	0+	To 35	See plan	Predominately Hawthorn with Birch, Oak and Elder. Excellent for wildlife. No major visible defects. Landscape feature.	Remove to facilitate landscaping scheme	GOOD FAIR	M O D	20-40	B
G183	Semi mature – early mature Mixed <i>Mixed</i>	To 12	0+	To 30	See plan	Predominately Birch with Oak, Willow, Alder, Rose. Single stemmed and vertical with an unbalanced canopy. Shelter belt. Excellent for wildlife. No major visible defects. Planted.	Will require thinning out in 5-10 years	GOOD GOOD	M O D	40+	A
G184	Semi mature – early mature Mixed <i>Mixed</i>	To 13	0+	To 38	See plan	Predominately Oak and Birch. No major visible defects. Single stemmed and vertical with balanced canopy. Excellent for wildlife.	Will require thinning out in 5-10 years	GOOD GOOD	M O D	40+	A
G185	Mature Goat Willow <i>Salix caprea</i>	To 10	1	To 32	See plan	Multi stemmed at ground level with a balanced canopy. No major visible defects. Growing close together.	No action required	GOOD FAIR	L O W	20-40	C
T186	Semi mature Downy Birch <i>Betula pubescens</i>	11	1	27	3 3 3 3	Single stemmed and vertical with balanced canopy. No major visible defects.	No action required	GOOD GOOD	M O D	20-40	B
T187	Mature Oak sp. <i>Quercus sp.</i>	9	2	67	7 7 7 7	Multi stemmed at ground level with a balanced canopy. No major visible defects. Fused and broken branches. Exposed roots.	No action required	GOOD FAIR	M O D	40+	B
G188	Young to semi mature Mixed <i>Mixed</i>	To 10	1+	To 25	See plan	Contains Bird Cherry, Field Maple, Elder and Birch. Multi stemmed and single stemmed specimens. No major visible defects. Self sown specimens.	Remove where required to create path	FAIR FAIR	M O D	10-20	C
G189	Semi mature – early mature Mixed <i>Mixed</i>	To 12	0+	To 30	See plan	Predominately Birch with Oak, Willow, Alder, Rose. Single stemmed and vertical with an unbalanced canopy. Shelter belt. Excellent for wildlife. No major visible defects. Planted.	No action required. Will require thinning out in 5-10 years	GOOD GOOD	M O D	40+	A
G190	Semi mature Alder sp. <i>Alnus sp.</i>	To 7	1	13 to 26	See plan	Multi and single stemmed. No major visible defects.	Remove to facilitate landscaping scheme	FAIR FAIR	L O W	10-20	C

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G191	Young – semi mature Downy Birch <i>Betula pubescens</i>	To 12	0+	To 17	See plan	Single stemmed and vertical with balanced canopy. No major visible defects. Self sown.	Remove to facilitate landscaping scheme	GOOD GOOD	M O D	20-40	C
G192	Young to early mature Mixed <i>Mixed</i>	To 8	0+	To 25	See plan	Multi and single stemmed. True to species. No major visible defects. Predominately Hawthorn with Goat Willow.	No action required	GOOD FAIR	M O D	20-40	B
G193	Semi mature – early mature Mixed <i>Mixed</i>	To 14	0+	To 30	See plan	Multi and single stemmed. True to species. No major visible defects. Predominately Birch with Goat Willow. Self sown.	Remove where required to create path	GOOD FAIR	M O D	10-20	C
G194	Semi mature – early mature Mixed <i>Mixed</i>	To 14	0+	To 30	See plan	Multi and single stemmed. True to species. No major visible defects.. Predominately Birch with Goat Willow. Self sown.	Remove where required to create path	GOOD FAIR	M O D	10-20	C
G195	Semi mature – early mature Mixed <i>Mixed</i>	To 14	0+	To 30	See plan	Multi and single stemmed. True to species. No major visible defects.. Predominately Birch with Goat Willow. Self sown.	Remove where required to create path	GOOD FAIR	M O D	10-20	C
G196	Semi mature – early mature Mixed <i>Mixed</i>	To 12	0+	To 30	See plan	Predominately Birch with Oak, Willow, Alder, Rose. Single stemmed and vertical with an unbalanced canopy. Shelter belt. Excellent for wildlife. No major visible defects. Planted.	Remove where required to create path	GOOD GOOD	M O D	40+	A
G197	Mature Black Polar <i>Populus nigra</i>	To 16	0+	To 50	See plan	X 9. Twin, single and multi stemmed. Deadwood and stubs. No major visible defects. Epicormic growth.	Crown clean	GOOD FAIR	M O D	10-20	C

Ref No.	Age & Species & Latin Name	Height (m)	Crown Height (m)	Stem Diameter (cm)	Crown Spread N W E S	Observations	Recommendations	Physiological Condition & Structural Condition	Amenity Value	Life Expectancy (yrs)	Retention Category
G198	Semi-mature-mature Black Poplar <i>Populus nigra</i> 'betulifolia'	15	2	39 to 56	5 5 8 6	2x specimens. 1x single stemmed single stemmed. 1x twin-stemmed and included bark. Large bark wound acceptable condition at present.	Monitor. Remove if required.	FAIR POOR	L O W	10-20	C
T199	Semi-mature-early-mature Sycamore, Hawthorn, Ash and Birch <i>Acer pseudoplatanus</i> , <i>Crataegus monogyna</i> , <i>Fraxinus excelsior</i> and <i>Betula sp</i>	To 16	0+	10 to 40	See plan	Hawthorn boundary hedge line with others species in. Good habitat for wildlife. Multi-stemmed and twin-stemmed specimens. No major visible defects.	No action required.	GOOD GOOD	M O D	20-40	B
T200	Young-early-mature Alder, Birch, Hawthorn, Goat Willow, Sycamore <i>Alnus sp</i> , <i>Betula sp</i> , <i>Crataegus monogyna</i> , <i>Salix caprea</i> , <i>Acer pseudoplatanus</i>	To 15	0+	7.5 to 22	See plan	Boundary group. No evidence of significant pruning. No major visible defects. Good Screenage. Single stemmed, twin-stemmed and multi-stemmed.	No action required.	GOOD GOOD	M O D	20-40	B
G201	Young-semi-mature Sycamore <i>Acer pseudoplatanus</i>	To 10	0.5	To 23	See plan	Boundary group. No evidence of significant pruning. No major visible defects. Good Screenage. Single stemmed, twin-stemmed and multi-stemmed. Self sown.	Remove where required to create path	GOOD GOOD	M O D	20-40	B
T202	Mature Black Poplar <i>Populus nigra</i>	18	2	69	8 8 8 8	Single stemmed and vertical with a balanced crown. No evidence of significant pruning. No major visible defects. Minor epicormic growth. Minor deadwood and stubs. Small bark wound at base – ok. Good formation of wound wood.	Crown clean to benefit tree.	GOOD GOOD	M O D	20-40	B
G203	Young-early-mature Whitebeam <i>Sorbus aria</i>	To 10	1+	11 to 30	See plan	Crown overhangs the road. Single stemmed and vertical with a balanced crown. No evidence of significant pruning. No major visible defects. Boundary Screenage.	Remove 2x trees to create car park	GOOD FAIR	M O D	20-40	C
G204	Early-mature-mature Grey Poplar <i>Populus x canescens</i>	To 16	1+	28 - 38	See plan	Crown overhangs the road. Single stemmed and multi-stemmed. No evidence of significant pruning. Deadwood and stubs and hanging branches. 6x rip wounds. Boundary screenage.	No action required.	GOOD GOOD	M O D	10-20	C

Ref No.	Age & Species & Latin Name	Height (m)	Crown Height (m)	Stem Diameter (cm)	Crown Spread N W E S	Observations	Recommendations	Physio-logical Condition & Structural Condition	Amenity Value	Life Expectancy (yrs)	Retention Category
T205	Early-mature Ash <i>Fraxinus excelsior</i>	9	1	36	4 4 4 4	Multi-stemmed at 1.5m with a well-developed crown, good branch junctions throughout. Multiple pruning wounds, (healing slowly). No major visible defects.	Remove rubble around base.	GOOD GOOD	M O D	20-40	B
G206	Mature Black Poplar <i>Populus nigra</i>	To 15	From 1	26 – 55	See plan	Single stemmed and twin-stemmed leaning, balanced crowns. Occasional pruning wounds, (healing slowly). Significant canker noted. Poor form.	Monitor.	FAIR FAIR	M O D	10-20	C
T207	Early-mature Ash <i>Fraxinus excelsior</i>	14	2.5	28	3 3 3 3	Twin-stemmed at 2m with a well-developed crown, good branch junctions throughout. Occasional pruning wounds, (healing slowly). No major visible defects.	No action required.	GOOD GOOD	M O D	20-40	B

Appendix 2: Glossary of Terms & Abbreviations

Arboriculture	The cultivation of trees in order to produce individual specimens of the greatest ornament, for shelter or any primary purpose other than the production of timber.
Canker	Disease damaged area of a tree, usually caused by fungus or bacteria.
Co-dominant Stem	A stem which has grown in direct competition to the main stem and which has formed a substantial size influencing the appearance of the tree.
Crown Lift	The removal of the lowest branches, usually to a given height. It allows more residual light and greater clearance underneath for vehicles etc.
Crown reduce	The reduction of a tree's height or spread while preserving its natural shape.
Crown thin	The removal of some of the density of a tree's crown, usually 5-25% allowing more light through its canopy and reducing wind resistance.
Deadwood	The removal of all dead, dying and diseased branches from a tree. Also, wood which is dead.
Dieback	Where branches are beginning to show signs of death usually at the tips in the crown.
Epicormic shoots	Small branches that grow in uncharacteristic clusters around the base or the stem of a tree, usually as a result of bad pruning or some other stress factor.
Formative pruning	The trimming of a tree to remove weaknesses and irregularities which may lead to problems. The formative pruning operation is aimed at reducing the potential for future weaknesses or problems within the tree's crown.
Included bark	Where the bark on two adjoining branches or stems is growing tight together, forming a joint with limited physical strength.
Pollarding	A method of tree management in which the main trunk of the tree is cut at about 4m, and the resulting branches are then cropped on a regular basis.
Remedial pruning	The removal of old stubs, deadwood, epicormic growth, rubbing or crossing branches and other unwanted items from the tree's crown. Sometimes referred to as crown cleaning.
Topping	Topping is a form of pruning that removes terminal growth leaving a 'stub' cut end. Topping causes serious health problems to a tree.

Appendix 3: The Author's Qualifications

Principal Consultant and Managing Director

Jonathan Cocking *FRES PDipArb(RFS) FArborA CBIol MIBiol*. Jonathan is a Registered Consultant and Fellow of the Arboricultural Association and sits on its Professional Committee. He has 28 years experience in the arboricultural profession and served for eight years as Senior Arboriculturist with a large local authority before establishing JCA in 1997. He has since developed JCA's portfolio of services and its extensive client base. Jonathan is a Chartered Biologist and an expert witness with much experience of litigation work.

Consulting Arboriculturists

Toby Thwaites *BSc (Hons) HND (Arboriculture)*. Toby joined JCA in 1998 after graduating in Ecology at the University of Huddersfield and has since graduated in Arboriculture at the University of Lancashire. Toby is a JCA team leader and manages an office of consulting arborists.

Andrew Bagshaw *FD (Arboriculture)*. Andrew joined JCA in 2005 having gained several years experience in tree surgery and landscaping. He is trained in aerial rescue and is JCA's principal first aid person. He is currently working towards a degree in arboriculture at the University of Lancashire.

Adam Winson *BSc (Hons) E Con, ND (Arboriculture)*. Prior to working at JCA Adam has worked as a tree surgeon for eight years for a range of private companies and Sydney City Council. Adam achieved a national award for best Dissertation on the subject of Urban Greenspace Management at Sheffield Hallam University. Adam is currently working towards an MSc in Arboriculture at the University of Lancashire.

Robert Godwin *BA (Hons) Landscape Planning, ISA Certified Arborist*. Robert joined JCA having spent several years as an arboricultural consultant particularly in relation to subsidence. He also has considerable experience in landscape and arboricultural contracting. Robert is currently working towards an MSc in Arboriculture at the University of Lancashire.

Edward Jowett *BSc (Hons) Arboriculture*. Edward has achieved his BSc (Hons) Arboriculture at the University of Central Lancashire. He has had temporary appointments as Tree Officer with local authorities in the Manchester area, joining JCA to further his commercial knowledge and experience.

Arboricultural Technician

Victoria Black. Victoria has been with JCA for over 5 years building her knowledge of the arboricultural business. She is currently working towards a degree in arboriculture at the University of Lancashire.

Andrew Bussey. Andrew joined JCA having spent 12 years doing tree surgery for various private companies and a local authority. He has various NPTC qualifications and is currently studying for his Arboricultural Technicians Certificate.

Lee Major. Lee recently joined JCA having gained his RFS Certificate in Arboriculture. Lee also has two years climbing experience, working for a local tree surgeon. He is currently working towards his degree in arboriculture at the University of Lancashire.

Administrative Staff

Andrew C Parker, GM, BA (Hons), PGCE, Practice Manager
Catherine Cocking, Accounts Manager
Sue Guest, Administrative Officer
Sally Whitwam, Administrative Assistant
Yasmin Hussain, Administrative Assistant
Alec Fielden, City and Guilds 3, CAD Technician

Appendix 4: General Guidelines

- A4.1 All work must be to BS 3998:1989 - '*Recommendations for tree work*'.
- A4.2 Staff carrying out the work must be qualified, experienced and ideally be Arboricultural Association approved contractors, and should be covered by adequate public liability insurance.
- A4.3 Any defects seen by a contractor or the client that were not apparent to the consultant must be brought to the consultant's attention immediately.
- A4.4 No liability can be accepted by the consultant in respect of the trees unless the recommendations of this method statement are carried out under the supervision of a JCA consultant.
- A4.5 It is advisable to have trees inspected by a JCA consultant regularly. On this site it is recommended that these inspections are made every year.

Appendix 5: Site Plan

Appendix 5: Site Plan

TITLE: Site at Rabbit Ings (Whole Site),
Lund Hill Lane, Royaston,
Barnsley, Job No: 8460 MS EJ

SCALE: 1:3000

PAPER SIZE: A1

THREE TO BE RETAINED

THESE TO BE REMOVED:

CROWNSEA TO BE
PAID BACK (11)

DESIRE OF TREE
TO BE RETAINED

ORIGINAL OF PAGE
TO BE REMOVED

© 2007 TECNOLOGIA A SPRL

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
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PROSPECTIVE + LONG-TERM (1992)

PROPOSED NEW DRIVE ON/OUT

AREA OF REPAIR NOT PROTECTED BY ERECTOR. NO MATERIALS UNDER STORAGE.

CAUTIONED CONTRACTORS MUST
BE AVOIDED SPECIAL SUBTRACTS
CONSTRUCTION TECHNIQUES
WHAT PROCEEDURE NEED WHEN

WORKING CONDITIONS WITHIN THESE AREAS AND ON-BOARD EXCAVATIONS ARE PERMITTED

AND A UP HE LAMED THERE TO BE
THINNED & REMOVED FOR PA THWAY

1

1

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AGRICULTURAL & FORESTRY CONSULTANTS



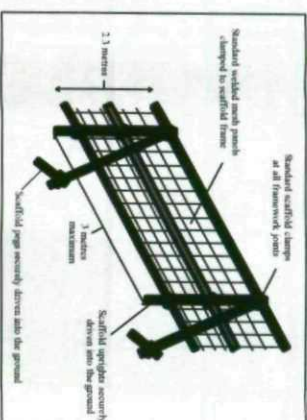
Consultant

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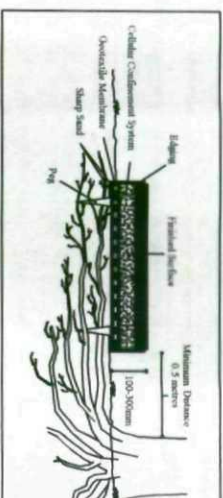
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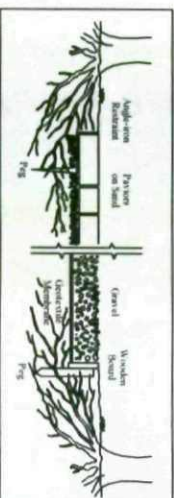
Inset 1: an example of protective fencing



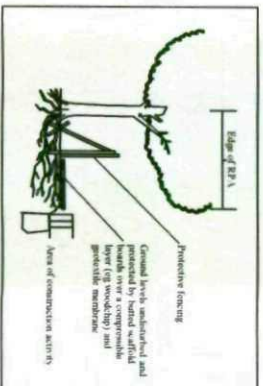
Inset 2: an example of a 'no dig' road construction



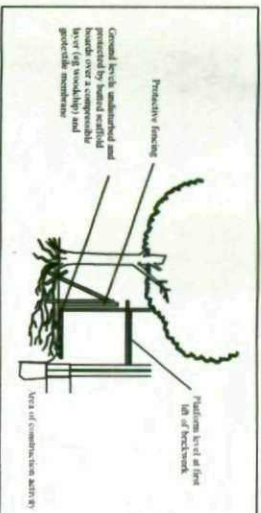
Inset 3: examples of the 'minimum dig' road construction



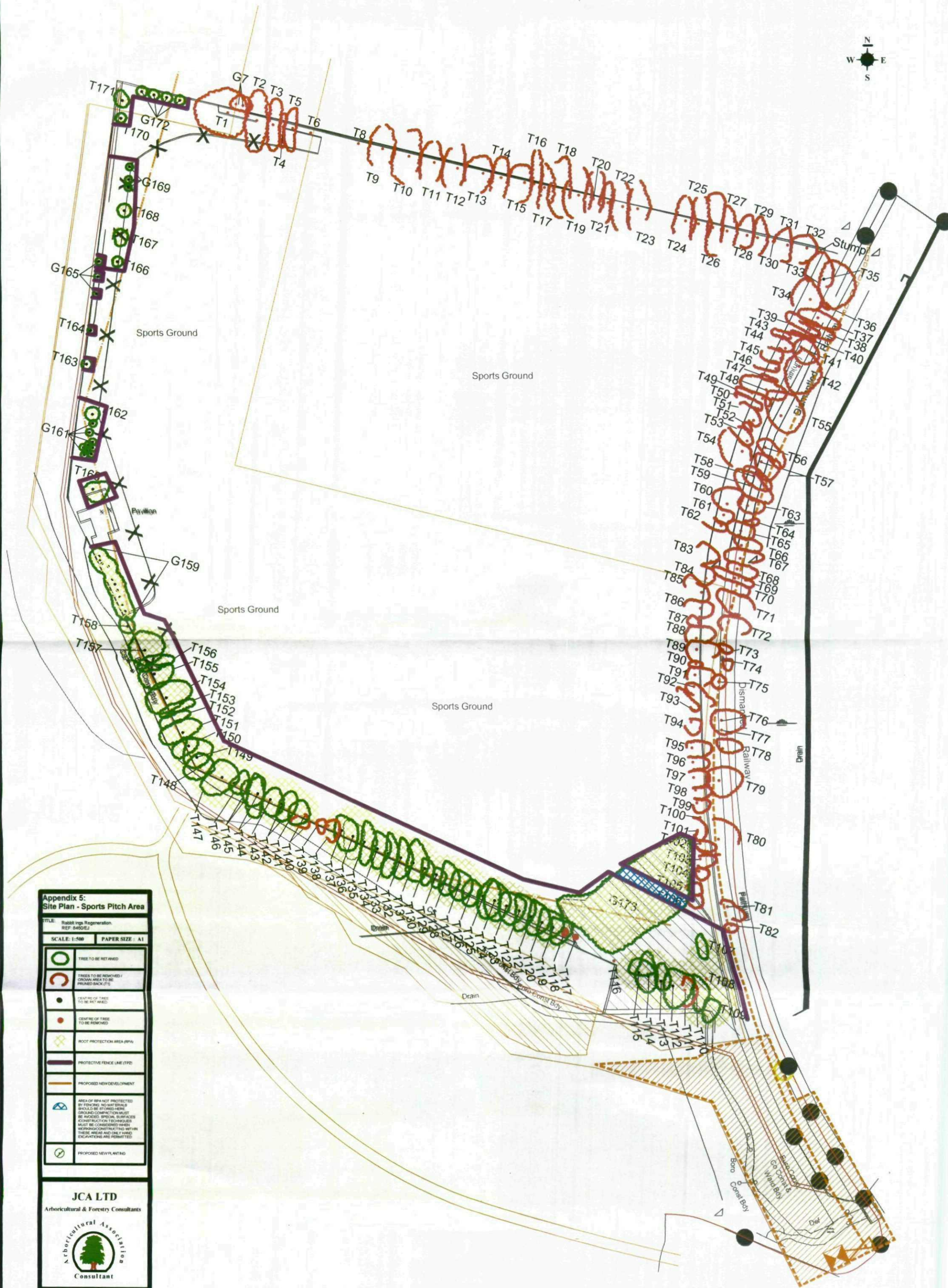
Inset 4: an example of a walkway within the RPA



Inset 5: an example of scaffolding within the RPA



Appendix 5: Site Plan - Sports Pitch Area



Appendix 5:
Site Plan - Sports Pitch Area

TITLE: Rabbit Ings Regeneration
REF: 848062

SCALE: 1:500 PAPER SIZE: A1

	TREE TO BE RETAINED
	TREE TO BE REMOVED / CROWN AREA TO BE PRUNED BACK (TS)
	CENTRE OF TREE TO BE REMOVED
	CENTRE OF TREE TO BE RETAINED
	ROOT PROTECTION AREA (RPA)
	PROTECTIVE FENCE LINE (PFL)
	PROPOSED NEW DEVELOPMENT
	AREA OF RPA NOT PROTECTED BY FENCING. NO MATERIALS SHOULD BE STORED HERE. GROUND COMPACTION MUST BE AVOIDED. SPECIAL SURFACES (CONSTRUCTION TECHNIQUES) MUST BE CONSIDERED WHEN WORKING WITHIN THESE AREAS AND ONLY HAND OPERATIONS ARE PERMITTED.
	PROPOSED NEW PLANTING

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Arbicultural & Forestry Consultants

Arbicultural Association
Consultant

I hope that this method statement provides all the necessary information, but should any further advice be needed please do not hesitate to contact the author.

Signed

.....
Edward Jowett Bsc (Hons) Arboriculture

30th September 2008

For and on behalf of *JCA Ltd*

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