Arboricultural Impact Assessment (AIA)

JUNE 2019

Pendle Road
Clitheroe
BB7 1LN

URBAN GREEN

QUALITY MANAGEMENT

Project No.:	UG 132
Project:	Pendle Road, Clitheroe – Phases 2, 3 &4
Location:	Standen Farm, Higher Standen, Clitheroe, BB7 1LN
Title:	Arboricultural Impact Assessment
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Checked By:	Greg Thorne

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Rev:	Date:	Issue/Purpose/ Comment:	Prepared:	Checked:
02	10/07/2019	Drawing update	GT	RP
03	17/09/2019	Drawing update - Fixed	GT	RP

CONTENTS

1. Executive Summary

1.1.1. Urban Green has been instructed by Taylor Wimpey Manchester to carry out an Arboricultural Survey to British Standard 5837:2012 guidelines at Pendle Road, Clitheroe, BB7 1LN and produce our findings in a report.

1.1.2. It is proposed to develop the site into 1040 plots of residential housing alongside landscape improvements such as parking and soft landscaping. This report covers the site of phases 2, 3 & 4 of the development. Full details of the proposed site layout can be seen on the plans included in Appendix 4.

1.1.3. The proposed development necessitates the removal of 5 trees within the site boundary; these trees have been classified as U grade as per BS5837 and are unsuitable for retention. It is recommended that this tree loss is mitigated for by replacement tree planting and the production of a robust soft landscaping scheme.

1.1.4. T29 is also shown for removal, however this relates to the planning application applicable for Pendle Road, Clitheroe – Link Road.

1.1.5. Before any tree works are carried out trees should first be assessed for their suitability for protected species by a suitably qualified and experienced ecologist.

1.1.6. Tree protection fencing, and ground protection will need to be installed at the alignment shown on the Tree Protection Plan in Appendix 4 before any construction activity takes place.

1.1.7. The trees referenced as part of this report are numbered from T30 to G46. This report makes up part of a larger survey that also informs the report UG 132: Pendle Road, Clitheroe – Spine Road.

1.1.8. It will also be necessary to carry out supervised root pruning of T31, T32, T35, T42# & W43# as indicated on the Tree Protection Plan.

1.1.9. Information regarding the layout of new utilities and drainage and final site levels should be submitted to the Arboricultural Consultant so that the impact of these on the retained trees can be assessed.

2. Introduction

2.1. Instructions and references

2.1.1. We have been instructed by Taylor Wimpey Manchester to carry out an Arboricultural Impact Assessment (AIA) in accordance with BS 5837:2012 Trees in relation to design, demolition and construction – Recommendations at the site location and produce our findings in a report to be submitted with a detailed planning application.

2.1.2. All trees, regardless of their statutory status, are a material consideration in a planning application. BS 5837 recognises the potential conflict between trees and development. The standard sets out to assist those concerned with trees in relation to construction and aid with decision making. This is achieved by providing impartial and balanced information on trees and their potential impacts.

2.1.3. Due to the size and nature of the site, it was decided that the survey methodology would include broadly grouping trees that share very similar characteristics. This method is in line with point 4.2.4 of BS 5837:2012 that states 'Trees forming groups...should be identified and considered as groups where the arboriculturist determines that this is appropriate... It may be appropriate to assess the quality and value of trees as a whole, rather than individuals.'

2.1.4. The area relating to this application is indicated by the red line boundary shown in Figure 1. The OS Grid Reference is SD 75170 40840

Figure 1 – Site Location Plan – Pendle Road, Clitheroe, BB7 1LN

2.2. Scope

2.2.1. The AIA takes into account any potential impacts on existing trees including the effect of any tree loss required to implement the design and recommendation for the establishment of new trees. The AIA will also asses any potentially damaging activities proposed in the vicinity of retained trees and the effect that the retained trees may have on the development such as potential nuisance caused by excessive leaf/fruit litter, lighting levels and potential damage to structures.

2.3. Documents provided

2.3.1. A scaled plan has been provided with tree positions already plotted. Any extra trees found on site that were not included on the original plan have been plotted according to measurements taken on site and/or using aerial photography.

2.3.2. Tree locations which have been estimated are illustrated on the Tree Protection Plan in Appendix 4. The exact locations of these trees must be verified, and any discrepancies discussed with the Arboricultural Consultant before starting works on site.

2.3.3. A plan outlining the development proposals has been overlaid with the Tree Constraints Plan in order to assess the potential impacts.

2.4. Limitations

2.4.1. The report is based upon a visual inspection. The consultant shall not be responsible for events that happen after the date of the report due to factors that were not apparent at the time, and the acceptance of this report constitutes an agreement with the guidelines and the terms listed in this report.

2.4.2. The consultant accepts no liability in respect of the trees unless the recommendations of this report are carried out under his supervision.

2.4.3. Assessing the potential influence of trees upon load bearing soils, beneath existing and proposed structures resulting from water abstraction by trees or rehydration of shrinkable soils was not included in the contract brief and is therefore not considered in the report. The consultant cannot be held responsible for damage arising from such action.

2.4.4. Trees are living organisms whose health, condition and structure can change over time. The contents of this report are valid for a period of one year from the date of the report.

2.4.5. Potentially hazardous trees are highlighted, and appropriate recommendations are made. However, this report is not a substitute for a full tree risk assessment or management plan which are specifically designed to minimise risk and liability associated with responsibility for trees.

3. Legislation

3.1. Tree protection status

3.1.1. A Tree Preservation Order (TPO) is an order made by a Local Authority to protect specific trees, groups of trees or woodlands in the interests of amenity. A TPO prohibits the cutting down, topping, lopping, uprooting and wilful damage or destruction of trees without the Local Authority's written consent.

3.1.2. At the time of writing the report, we have not yet received a response from the Local Planning Authority to our request regarding the status of trees on or adjacent to the site. An email was sent to planning@ribblevalley.gov.uk at 14.55 on 19th June 2019.

3.1.3. It is recommended that the Local Authority is consulted before any tree works are undertaken, as new TPOs may have been created since the time of enquiry, and heavy fines exist for unauthorised works to protected trees.

3.1.4. All works to trees covered by a TPO require permission from the Local Authority, including any pruning. However, this does not include trees that are dead or have become dangerous. The removal of dead branches is also excluded from a TPO. Although the above exceptions exist, it is advisable to give the Local Authority five days' notice in writing of any intended removal. Permission is not needed where tree work is required to implement an approved planning application.

3.1.5. In a Conservation Area, all trees greater than 75mm in diameter at 1.5m above ground level are protected. Where tree work is required in a Conservation Area, a Section 211 notice of intent must be submitted the Local Planning Authority who have six weeks to decide to either make a TPO or allow the work to proceed.

3.1.6. The proposed work can proceed after six weeks as it is presumed that the Local Authority consents if they have not responded in that time.

3.1.7. It is an offence to remove more than $5m^3$ of timber in any one calendar quarter without having first obtained a felling licence from the Forestry Commission. It must be noted, however, that this excludes sites where planning permission has already been granted.

3.2. Wildlife

3.2.1. Prior to the commencement of any tree works, the trees should be assessed for the presence of protected species, some of which are subject to the *Wildlife and Countryside Act 1981* (as amended) and the *Conservation of Habitats and Species Regulations 2017*.

3.2.2. Where there is evidence that bats, birds or other protected species are present, the advice of a suitably qualified ecologist should be sought.

3.2.3. If tree works are carried out during the bird nesting season (March to August inclusive), trees would need to be inspected by a qualified ecologist within the 24-hour period prior to the commencement works.

4. Arboricultural Impact Assessment (AIA)

4.1. Summary of the development

4.1.1. It is proposed to develop the site into 1040 plots of residential housing alongside landscape improvements such as parking and soft landscaping. This report covers phases 2, 3 & 4 of the development. Full details of the proposed site layout can be seen on the plans included in Appendix 4.

4.2. Tree constraints

4.2.1. BS 5837:2012 recognises that conflicting requirements of the planning system for development means that trees are only one factor which need to be taken into consideration. Although there may be certain specimens that can pose significant constraints to development due to their importance, it is essential that inappropriate tree retention is avoided.

4.2.2. Trees can be adversely affected on development sites if their protection is not factored into the wider project management of onsite operations. We have transposed the tree survey plan over plans detailing current proposals in order to assess the impact on surveyed trees.

4.2.3. It is essential that roots are protected from construction works including physical damage from excavation and changes in soil structure from compaction and changes in ground levels.

4.3. Root Protection Areas (RPAs) explained

4.3.1. The RPA is an area of ground around the base of a retained tree, which is calculated in relation to the stem diameter, where disturbance should be kept to a minimum and avoided if at all possible.

4.3.2. The majority of tree roots grow within the upper 600mm of the soil profile where most nutrients are available as the result of the decomposition of organic matter close to the surface. Rooting conditions become less favourable at depth as the soil density increases, creating anaerobic conditions.

4.4. Impacts of development

4.4.1. This part of the proposed development necessitates the removal of 5 trees. T30 (dead), T36 (dead), T37 (in decline), T38 (history of major snap-outs) and T45 (significant decay) are category U trees, and as such are unsuitable for retention. It is recommended that the tree loss is mitigated for by replacement tree planting and the production of a robust soft landscaping scheme.

4.4.2. It will be necessary to carry out supervised root pruning of T31, T32, T35, T39, T42# & W43# as indicated on the Tree Protection Plan in appendix 4. This will allow for construction of hard surfacing within the Root Protection Areas.

4.4.3. Ground protection will need to be installed within the alignment specified in the Tree Protection Plan (in Appendix 4) to protect the RPAs of T31, T32, T35, T39, T40, T42# & W43#.

4.4.4. If the location of the proposed footpath intersecting the RPA of T40 is fixed, this section must be constructed using a no dig, cell web system to mitigate against potential compaction of the rooting system. However, it is advised that this footpath is relocated outside of the RPA of this tree to mitigate any risk of damage to the rooting system.

4.4.5. T33 & T41 can be retained as the development will have little or no effect on these trees. T44 should be retained at present as it would make an interesting feature by the development; it appears to be an old pollard or historically failed at 3.25m with an open hollow stem giving at unusual aesthetic value. If land use were to change in close proximity to the stem it should be re-evaluated for retention. G46 is on third party land and unaffected by the proposed development.

4.5. Tree surgery works

4.5.1. Tree works that are recommended within the Tree Works Schedule (Appendix 4) are works required to facilitate development and also include details or remedial works. Tree works stated in the Tree Data Schedule (Appendix 1) are of a general maintenance nature and can be carried out at any time as per recommendations.

4.5.2. Tree works required to facilitate the development will be carried out prior to the commencement of any onsite operations. This should allow sufficient space for approved construction to be carried out.

4.5.3. Any unforeseen tree works that become apparent during the construction process will require written consent from the Local Authority Tree Officer.

4.6. Protective fencing

4.6.1. Temporary protective fencing will need to be installed at the alignment indicated on the Tree Protection Plan in Appendix 4, prior to the commencement of any construction activities on site including the delivery of materials and site facilities.

4.6.2. Any fencing that is damaged so that it is no longer able to protect retained trees must be replaced/repaired immediately with appropriate fencing.

4.6.3. The required specification for protective fencing is illustrated in the Tree Protection Plan (Insert 1).

4.6.4. The 'in-ground' system involves driving vertical scaffold poles approximately 0.6m into the ground onto which are affixed horizontal scaffold poles and bracing struts. 2m high anti-climb weldmesh panels are then wired to the scaffold framework. The vertical scaffold poles should be at a maximum of 3m apart.

4.6.5. No fixing shall be made to any tree and all possible precautions shall be taken to prevent damage to the tree roots when locating uprights.

4.6.6. A 600mm x 300mm warning sign reading "TREE PROTECTION AREA KEEP OUT" shall be fixed to every 10m of protective fencing, as illustrated on the Tree Protection Plan (Insert 2).

4.7. Ground protection for pedestrians or light vehicles

4.7.1. The primary method of ground protection is the installation of a compressible layer (e.g. woodchip) over a geotextile fabric with side butting scaffold boards.

4.7.2. Ground protection measures whilst working the RPA must be capable of supporting the expected loads and avoid compaction of the soil.

4.7.3. The boarding will be left in place until the construction works are finished.

4.7.4. Scaffolding may first be erected with the uprights on spreader boards and the ground protection installed around the uprights.

4.8. Demolition and removal of surfaces in the RPA

4.8.1. During demolition, the following restrictions will apply:

- Where direct damage by falling masonry is likely, the tree should be protected by exterior grade plywood sheets constructed around the main stem.
- The main body of any mechanical excavator will operate outside the RPA.
- Masonry will be pulled away from trees where possible.
- When breaking masonry, a fine water spray will be used to minimise dust particles.
- Excessive dust particles on trees will be removed each day by spraying with water.
- Hard surfaces should be kept in place for as long as possible during construction works in order to prevent soil compaction in the RPA.
- During surface removal, the following restrictions will apply:
- Only hand operated tools will be used to lift existing surfaces and sub-base. No mechanical excavators are to be used.
- No excavation below the existing sub-base will occur.
- All surface removal within the RPA will be supervised by the Arboricultural Consultant or the Local Authority Tree Officer.

4.9. Temporary site cabins

4.9.1. All storage facilities and deliveries will make use of existing hard surfaces to avoid unnecessary compaction within RPAs. The locations will be agreed in writing with the LPA prior to delivery and will remain in the agreed locations unless approved by the LPA.

4.9.2. If storage facilities require siting within RPAs, every effort will be made to ensure that any damage to aerial parts of retained trees is avoided and that appropriate footings are used to avoid root damage or compaction of the soil.

4.10. Utilities

4.10.1. At the time of writing Urban Green have not been made aware of any new utilities or service runs that will be associated with the development. Information regarding the layout of new utilities and drainage and final site levels should be submitted to the Arboricultural Consultant so that the impact of these on the retained trees can be assessed.

4.11. Recommendations

4.11.1. All operations that could affect trees on and adjacent to the site must be considered as part of the project management of the Proposed Development. It is therefore recommended that an Arboricultural Consultant is appointed as part of the design and management team to advise on pre-development issues and supervise on-site operations.

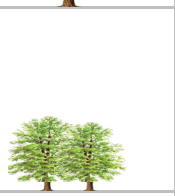
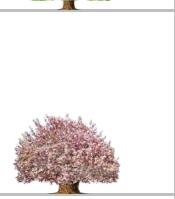
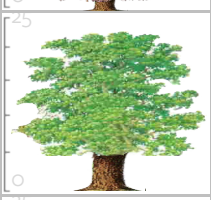
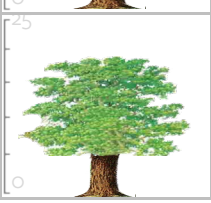
4.11.2. The Arboricultural Consultant may also have an advisory role in the preparation of site including tree surgery works and the protection of trees during demolition processes.

4.11.3. The Arboricultural Consultant shall be responsible for inspecting all protective fencing prior to the commencement of all onsite activity.

Appendix 1 – Tree Data Schedule

The following pages contain information gathered during the site survey. The reader should refer to Appendix 2 in order to correctly interpret the tree data. All images within the Tree Data Schedule are diagrammatical only. Their purpose is to indicate, at a glance, the relative dimensions of each tree. The images are computer generated based on measurements recorded for stem diameter, crown spread, crown height and overall height.

Job name: Standen, Clitheroe | Surveyor: Russel Pearce | Survey date: 17/06/2019

Reference (T= Tree, G = Group, H = Hedge, W = Woodland)	Age & Species	Height (m)	Crown Ht (m)	Diameter (mm)	Crown Spread (m) N W E S	Scaled Tree Diagram (m) 9 0 9	Notes	Recommendations: Priority	Recommendations: Inspect Freq (yrs)	Physiological Condition: Structural Condition	Life Expectancy (yrs): Retention Category
T1	Semi-Mature Beech Fagus sylvatica	11	1	330	N 4, W 2, E 5, S 4		1: Acceptable condition at present. 2: Primary union at 3m is included - monitor. 3: Access prevented detailed inspection. 4: 3rd party land.	No action required. n/a	3	Good Good	40+ B
T2	Semi-Mature Ash Fraxinus excelsior	13	1	340	N 4, W 4, E 4, S 4		1: Acceptable condition at present. 2: Some dieback in lower northern crown.	No action required. n/a	3	Good Good	40+ B
G3	Young Mixed Species	av 9	av 1	av 150	N av, W 3, E 3, S 3 each		1: Acceptable condition at present. 2: Access prevented detailed inspection. 3: Possibly Cat B as group, as individuals would be Cat C. 4: X13 trees - rowan, oak, beech, ash. 5: 3rd party land.	No action required. n/a	3	Good Good	40+ C
T4	Semi-Mature Ash Fraxinus excelsior	12	0.5	340	N 4, W 4, E 4, S 6		1: DBH estimated. 2: Access prevented detailed inspection. 3: Acceptable condition at present. 4: Asymmetric crown due to proximity to neighbouring trees.	No action required. n/a	3	Good Good	40+ B
T5	Semi-Mature Wild Cherry Prunus avium	10	1	700	N 4, W 3.5, E 4, S 6.5		1: DBH estimated; access prevented detailed inspection. 2: Dense ivy prevented a detailed inspection. 3: Asymmetric crown due to proximity of neighbouring trees.	No action required. n/a	3	Good Good	40+ B
T6	Mature Ash Fraxinus excelsior	22	5	1200	N 7, W 5, E 8, S 13		1: Access prevented detailed inspection. 2: Dense ivy prevented a detailed inspection. 3: Deadwood throughout crown. 4: Epicormic growth withinn internal crown.	Remove ivy and re-inspect for defects, remove deadwood. Moderate	1	Good Fair	40+ B
T7	Mature Ash Fraxinus excelsior	19	6	1000	N 9, W 7, E 4, S 9		1: Access prevented detailed inspection, not fully inspected due to dense vegetation. 2: Minor deadwood within crown. 3: Reduced density of canopy. 4: Pruning wounds in lower crown.	Monitor. n/a	1.5	Fair Good	40+ B

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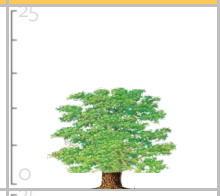
Reference (T= Tree, G = Group, H = Hedge, W = Woodland)	Age & Species	Height (m)	Crown Ht (m)	Diameter (mm)	Crown Spread (m) N W E S	Scaled Tree Diagram (m) 9 0 9	Notes	Recommendations: Priority	Recommendations: Inspect Freq (yrs)	Physiological Condition	Life Expectancy (yrs)
										Structural Condition	Retention Category
T8	Semi-Mature English Oak Quercus petrea	13	2	700	N 5.5 W 6.5 E 4 S 5		1: Access prevented detailed inspection. 2: Large historical tearout at 3.5-5m, good reaction wood, underlying wood appears sound.	No action required. n/a	3	Good Fair	40+ B
G9	Young Mixed Species	av 5	av 0.1	av 120	N av W 2 E 2 S 2 each		1: Acceptable condition at present.	No action required. n/a	3	Good Good	40+ C
T10	Mature Ash Fraxinus excelsior	14	2	580	N 5 W 5 E 8 S 7		1: Acceptable condition at present. 2: Bulge at base of stem to 1.25m, acute taper. 3: Dieback in outer 0.5m of crown - monitor.	Monitor. n/a	1.5	Fair Good	20-40 C
T11	Semi-Mature Hawthorn Crataegus monogyna	5	0.5	370	N 4 W 4 E 4 S 4		1: Acceptable condition at present. 2: Minor stem wounds, occluded.	No action required. n/a	3	Good Good	40+ A
T12	Mature Sycamore Acer pseudoplatanus	18	1	1360	N 7 W 9 E 8 S 10.5		1: Good specimen. 2: Cavity at base on west side - decay detection required if in high risk area. 3: High Cat B tree. 4: Twin stemmed co dominant at 4m.	No action required. n/a	3	Good Good	40+ B
T13	Semi-Mature Ash Fraxinus excelsior	14	4	290	N 5 W 5 E 5 S 5		1: Acceptable condition at present. 2: On steep embankment. 3: Reduction in crown density.	No action required. n/a	3	Fair Good	40+ C

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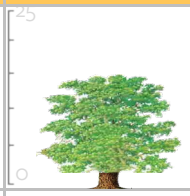
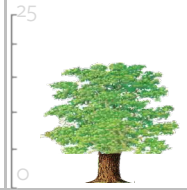
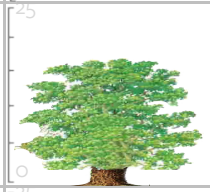
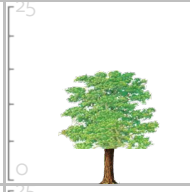
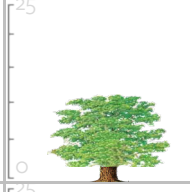
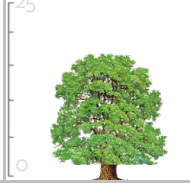
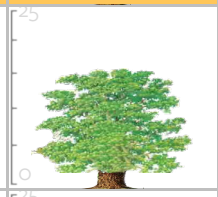
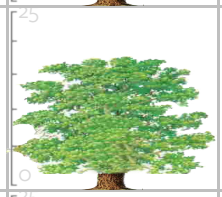
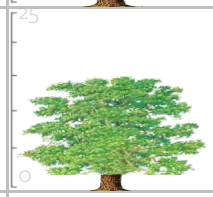
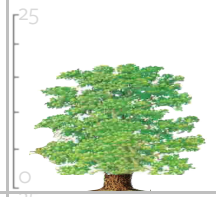
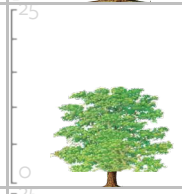
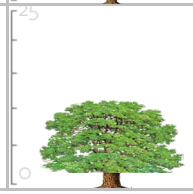
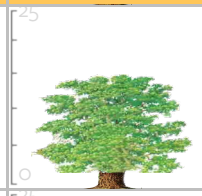
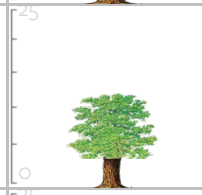
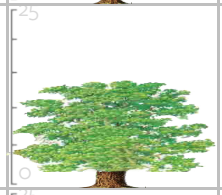
Reference (T= Tree, G = Group, H = Hedge, W = Woodland)	Age & Species	Height (m)	Crown Ht (m)	Diameter (mm)	Crown Spread (m) N W E S	Scaled Tree Diagram (m) 9 0 9	Notes	Recommendations: Priority	Recommendations: Inspect Freq (yrs)	Physiological Condition	Life Expectancy (yrs)
										Structural Condition	Retention Category
T14	Semi-Mature English Oak Quercus petrea	15	1.5	700	N 6.5, W 6.5, E 5.5, S 6.5		1: Good specimen. 2: Stem is occluding barbed wire. 3: Some moderate suppression of crown to north east side by neighbouring ash tree.	No action required. n/a	3	Good Good	40+ B
T15	Over-Mature Ash Fraxinus excelsior	16	4.5	800	N 6, W 5, E 6.5, S 6		1: No long term future. 2: Poor specimen in decline. 3: Large deadwood throughout crown - ash dieback present. 4: Central leader historically lost at 6m. 5: History of shedding limbs/branches.	Remove. High	N/A	Poor Fair	<10 U
T16	Mature Ash Fraxinus excelsior	17	2	1350	N 7.5, W 8, E 8, S 8		1: Limited access to stem due to fence line be and vegetation. 2: History of dropping large branches/limbs - wounds with good reaction wood. 3: Dominant position in landscape.	Crown reduce by approximately 20% - to reduce lever arm and end weight. Moderate	1	Good Fair	40+ B
T17	Semi-Mature Ash Fraxinus excelsior	15	5	280	N 4.5, W 4.5, E 4.5, S 4.5		1: Acceptable condition at present. 2: Brook side tree. 3: Long slender stem.	No action required. n/a	3	Good Fair	40+ C
T18	Semi-Mature English Oak Quercus petrea	11	2	600	N 5, W 5, E 5, S 5		1: Access prevented detailed inspection. 2: Dense ivy prevented a detailed inspection. 3: Deadwood in crown.	No action required. n/a	3	Good Good	40+ B
T19	Early-Mature Sycamore Acer pseudoplatanus	17	2	550	N 4, W 5, E 5, S 5		1: Access prevented detailed inspection. 2: Dense ivy prevented a detailed inspection. 3: Brook side tree.	Remove ivy and reinspect for defects. Moderate	1	Good Fair	40+ B

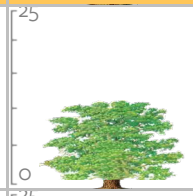
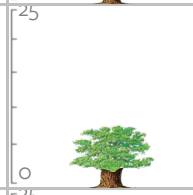
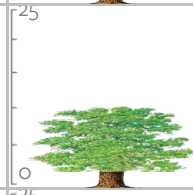
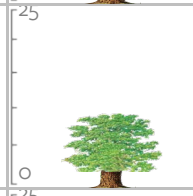
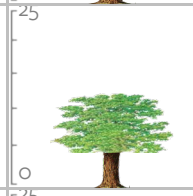
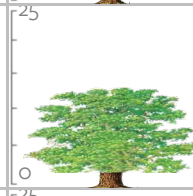
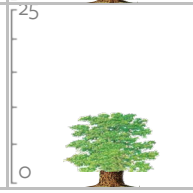
Job name: Standen, Clitheroe | Surveyor: Russel Pearce | Survey date: 17/06/2019

Reference (T= Tree, G = Group, H = Hedge, W = Woodland)	Age & Species	Height (m)	Crown Ht (m)	Diameter (mm)	Crown Spread (m) N W E S	Scaled Tree Diagram (m)	Notes	Recommendations: Priority	Recommendations: Inspect Freq (yrs)	Physiological Condition / Structural Condition	Life Expectancy (yrs) / Retention Category
T20	Mature Ash Fraxinus excelsior	16	1.5	1030	N 8, W 6, E 5, S 8		1: Access prevented detailed inspection. 2: Dense ivy prevented a detailed inspection. 3: Heavily asymmetric crown. 4: Lions tailing throughout crown - appears to be in decline - monitor.	Monitor. n/a	1.5	Fair Fair	10-20 C
T21	Early-Mature Ash Fraxinus excelsior	18	2	1000	N 10, W 9, E 9.5, S 9		1: Acceptable condition at present. 2: Access prevented detailed inspection. 3: Deadwood in crown. 4: Twin stemmed codominant at 3.5m.	No action required. n/a	3	Good Good	40+ B
T22	Early-Mature English Oak Quercus petrea	15	1.5	750	N 8.5, W 8.5, E 8.5, S 8.5		1: Acceptable condition at present, dense ivy prevented a detailed inspection. 2: Brook side tree.	Remove ivy and re-inspect for defects. Moderate	1	Good Fair	40+ B
T23	Over-Mature Ash Fraxinus excelsior	17	2	1040	N 8, W 7.5, E 6, S 7.5		1: Retrenching crown, developing stagheadedness. 2: Large wound from historic extensive tearout, from 1.5-5m. cavitation at base of wound. 3: Percussion test indicates significant decay around root transition zone and lower stem. 4: Good potential for veteranisation if away from development. 5: Porcelain fungus present on north side of stem at base.	Remove. High	N/A	Fair Poor	<10 U
T24	Semi-Mature Ash Fraxinus excelsior	13	2	280	N 5, W 5, E 5, S 5		1: Acceptable condition at present.	No action required. n/a	3	Good Good	40+ B
T25	Mature Field Maple Acer campestre	11	2	600	N 5.5, W 5.5, E 5.5, S 5.5		1: Excellent specimen.	No action required. n/a	3	Good Good	40+ A

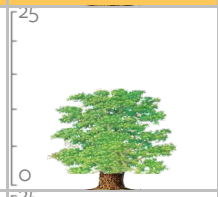
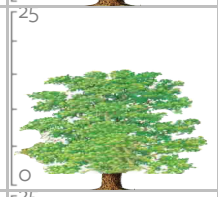
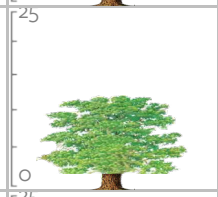
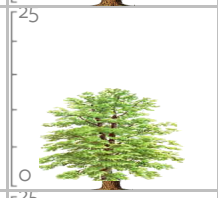
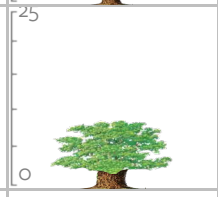
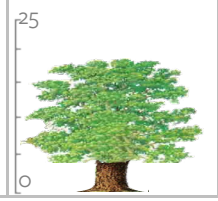
Job name: Standen, Clitheroe | Surveyor: Russel Pearce | Survey date: 17/06/2019

Reference (T= Tree, G = Group, H = Hedge, W = Woodland)	Age & Species	Height (m)	Crown Ht (m)	Diameter (mm)	Crown Spread (m) N W E S	Scaled Tree Diagram (m) 9 0 9	Notes	Recommendations: Priority	Recommendations: Inspect Freq (yrs)	Physiological Condition: Structural Condition	Life Expectancy (yrs): Retention Category
T26	Early-Mature English Oak Quercus petrea	15	2	940	N 7, W 5.5, E 7, S 7		1: Acceptable condition at present. 2: Minor historic tear outs. 3: Minor deadwood. 4: Low limb to south west damaged, no targets.	No action required. n/a	3	Good Good	40+ B
T27	Over-Mature Ash Fraxinus excelsior	12	4	590	N 2, W 4, E 4, S 4		1: Tree in advanced state of decline.	Remove. Moderate	N/A	Poor Poor	<10 U
T28	Mature English Oak Quercus petrea	14	2	1110	N 9, W 9, E 5, S 10		1: Good specimen. 2: Historic tearouts and deadwood - not significant in oak.	No action required. n/a	3	Good Good	40+ A
T29	Early-Mature Hawthorn Crataegus monogyna	4	0.5	320	N 3, W 2, E 3, S 3		1: Central column of decay within cavity. 2: Longitudinal split at base.	Remove. Moderate	N/A	Fair Very Poor	<10 U
T30	Mature **English Oak** Quercus petrea	12	4	820	N 5, W 5, E 6, S 7		1: Dead tree.	Remove. High	N/A	Poor Poor	<10 U
T31	Young **English Oak** Quercus petrea	6.5	2.25	320	N 5, W 5, E 5, S 5		1: Acceptable condition at present.	No action required. n/a	3	Good Good	40+ C
T32	Mature **English Oak** Quercus petrea	13	2.5	830	N 5, W 6, E 6, S 7		1: Good specimen.	No action required. n/a	3	Good Good	40+ A

Job name: Standen, Clitheroe | Surveyor: Russel Pearce | Survey date: 17/06/2019

Reference (T= Tree, G = Group, H = Hedge, W = Woodland)	Age & Species	Height (m)	Crown Ht (m)	Diameter (mm)	Crown Spread (m) N W E S	Scaled Tree Diagram (m)	Notes	Recommendations: Priority	Recommendations: Inspect Freq (yrs)	Physiological Condition / Structural Condition	Life Expectancy (yrs) / Retention Category
T33	Early-Mature **English Oak** Quercus petrea	11	1	600	N 6, W 6, E 6, S 6		1: Access prevented detailed inspection. 2: Large historic stem wound from 0.75-1.5m. percussion test required to examine extent of decay.	Decay detective. Moderate	1	Good Fair	40+ B
T34	Mature **English Oak** Quercus petrea	7	2.5	760	N 1, W 1.5, E 5, S 5		1: Large historic tearout leading to small crown.	No action required. n/a	3	Good Fair	40+ C
T35	Early-Mature **English Oak** Quercus petrea	10	2	920	N 4, W 6, E 8, S 9.5		1: Acceptable condition at present. 2: Deadwood throughout crown and over crown.	Crown clean and deadwood. Moderate	1	Good Good	40+ B
T36	Mature **English Oak** Quercus petrea	9	2	750	N 4, W 4, E 4, S 4		1: Dead tree.	Remove. Moderate	N/A	Poor Poor	<10 U
T37	Early-Mature **English Oak** Quercus petrea	12	5	540	N 5, W 5, E 5, S 5		1: Only outer 15m max of crown in leaf - long lever arms. 2: Deadwood throughout lower crown.	Remove. Low	N/A	Poor Fair	<10 U
T38	Mature **English Oak** Quercus petrea	13	2	830	N 4.5, W 8, E 9, S 9		1: History of snap outs. 2: Asymmetric, imbalanced crown of low aesthetic value. 3: No long term value.	Remove. High	N/A	Good Poor	<10 U
T39	Semi-Mature **English Oak** Quercus petrea	9	2	880	N 2.5, W 3, E 4, S 6		1: Acceptable condition at present. 2: Large historic limb loss.	No action required. n/a	3	Good Fair	40+ C+

Job name: Standen, Clitheroe | Surveyor: Russel Pearce | Survey date: 17/06/2019

Reference (T= Tree, G = Group, H = Hedge, W = Woodland)	Age & Species	Height (m)	Crown Ht (m)	Diameter (mm)	Crown Spread (m) N W E S	Scaled Tree Diagram (m) 9 0 9	Notes	Recommendations: Priority	Recommendations: Inspect Freq (yrs)	Physiological Condition / Structural Condition	Life Expectancy (yrs) / Retention Category
T40	Early-Mature **English Oak** Quercus petrea	13	2.5	920	N 4, W 5, E 6.5, S 6		1: Large deadwood from x4 large historic limb failure. 2: Acceptable condition at present. 3: Low aesthetic value.	Deadwood. Moderate	1	Good Fair	40+ C
T41	Mature **Ash** Fraxinus excelsior	16	1.75	700	N 11, W 7.5, E 6, S 8		1: Acceptable condition at present. 2: Reduced density of canopy. 3: Dense ivy prevented a detailed inspection. 4: Not fully inspected due to dense vegetation.	Remove ivy and re-inspect for defects. Moderate	1	Fair Fair	40+ C
T42	Early-Mature **Ash** Fraxinus excelsior	12	2	690	N 9, W 9, E 3, S 4.5		1: Access prevented detailed inspection. 2: Dense ivy prevented a detailed inspection. 3: Deadwood throughout crown.	Remove ivy and re-inspect for defects. Moderate	1	Fair Fair	20-40 C
W43	Early-Mature **Mixed** Species	av 13	av 1	av 650	N av 6, W 6, E 6, S 6 each		1: X75 stems approx. 2: Access prevented detailed inspection. 3: Many stems covered in ivy. 4: Standing deadwood present.	Sever ivy throughout and sanitation fell. Low	1.5	Good Fair	40+ B
T44	Over-Mature **Ash** Fraxinus excelsior	8	1.5	1080	N 5, W 5, E 5, S 5		1: Hollowed out stem, historically failed at 3.25m - open cavity to north. 2: Vigourous regrowth from failure point. 3: Acceptable condition at present. 4: Interesting feature.	No action required. n/a	3	Good Poor	40+ C
T45	Mature **Ash** Fraxinus excelsior	18	4	1200	N 11.5, W 4.5, E 7, S 7.5		1: Numerous limbs lost historically. 2: Deadwood throughout. 3: Bacterial canker in lower stem, failed to occlude over many years. 4: Percussion test indicates significant decay throughout stem.	Remove. High	N/A	Fair Poor	<10 U

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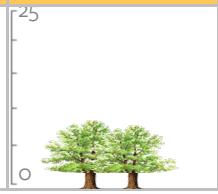
Reference (T= Tree, G = Group, H = Hedge, W = Woodland)	Age & Species	Height (m)	Crown Ht (m)	Diameter (mm)	Crown Spread (m) N W E S	Scaled Tree Diagram (m)	Notes	Recommendations: Priority	Recommendations: Inspect Freq (yrs)	Physiological Condition / Structural Condition	Life Expectancy (yrs) / Retention Category
G46	Semi-Mature **Wych Elm** Ulmus glabra	av 8	av 2	av 320	av 4 (N) 4 (W) 4 (E) 4 (S) each		1: X5 trees. 2: Good specimen. 3: On 3rd party land.	No action required. n/a	3	Good Good	40+ B

Appendix 2 – Tree Schedule Definition of Terms

Tree Referencing	**Individual Trees** T (+number) **Grouped Trees** G (+number) **Hedgerows** H (+number) **Woodlands** W(+number)
Age Category	**Young** Usually <15 years **Semi-mature** Significant growth expected, approximately one third of life expectancy complete **Early-Mature** Full height achieved with further significant growth possible, up to two thirds of life expectancy complete **Mature** Full height has been achieved with possible spreading of the canopy, usually past two thirds of overall life expectancy **Veteran** Usually a tree of significant age with characteristics that give additional cultural, landscape and conservation benefits, **Over-mature** A tree declining due to age as indicated by deterioration in the health and condition of its crown and trunk.
Species	**Botanical Name** conforming to the International Code of Nomenclature for algae, fungi, and plants (ICN). For universal plant recognition. **Common Name** commonly used names usually on a local and national scale.
Tree Height	The vertical distance between the base of the tree (where soil and buttress meet) and the tip of the highest branch on the tree.
Crown Height	Measured from ground level to the height at which the main crown begins.
Stem Diameter (DBH)	Stem diameter is measured at 1.5 m above ground level
Tree Diagrams	A diagrammatical representation of the tree taken from measurements of stem diameter, crown height and spread, and overall height.
Crown	Measurements taken from all four cardinal points in metres.
Notes	Notes are made to inform of any possible defects, peculiarities or points of interest that may relate to the trees position, physiology, safety and possible effects on developments.
Recommendations	Recommendations are made in accordance to good arboricultural practice. Recommendations are made regardless to the end usage of the site.
Priority Scale	Priority is given dependant on the perceived threat and the likelihood of failure given to a possible hazard. The priority of work is given regardless of the end usage of the site. **Urgent** To be carried out as soon as possible. **Very High** To be carried out within 1 month. **High** To be carried out within 3 months. **Moderate** To be carried out within 1 year. **Low** To be carried out within 3 years.
Physiological Condition:	**Good** Usually healthy with no symptoms of poor health or disease. **Fair** Exhibiting signs of poor health or minor disease infections that are not considered to be hazardous. **Poor** Disease present in considerable quantities or with very poor physiological vigour. **Very Poor** Tree is in a moribund state in extremely poor condition, usually with little chance of recovery.
Structural Condition:	**Good** A tree with no significant structural defects. **Fair** Minor defects may have been observed but are not considered to be immediately hazardous. **Poor** Significant defects found. Tree requires monitoring or remedial works. **Very Poor** Major defects that require immediate remedial work or the removal of the tree.
Life Expectancy:	The estimated number of years before the tree may require removal should no unexpected mechanical or environmental impacts occur to the tree.
Retention Category:	Please refer to Tree retention categorisation table on the next page.

Appendix 3 - Tree Retention Category

The following table provides an explanation of retention categories used.		
Trees to be removed		**Colour on Plan**
Category U Includes trees of very low quality that offer little or no amenity value.	Trees that are in such a condition that they should be removed as a matter of good arboricultural practice regardless of given proposals.	**RED**
Trees to be considered for retention		
Category A Trees of a high quality, with an estimated life of expectancy of at least 40 years	Trees that are excellent examples of their species, usually mature, especially if rare or unusual including veteran trees. Category A trees are likely to enhance a development and should be retained wherever possible.	**GREEN**
Category B Trees of moderate quality with an estimated remaining life expectancy of at least 20 years.	Trees that are good examples of their species. B category trees are usually mature or younger trees with the potential to reach A category in the future. Although the retention of these trees is desirable, some losses may be acceptable.	**BLUE**
Category C Trees of low quality with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150 mm.	Unremarkable trees of very limited merit or such impaired condition that they do not qualify in higher categories.	**GREY**

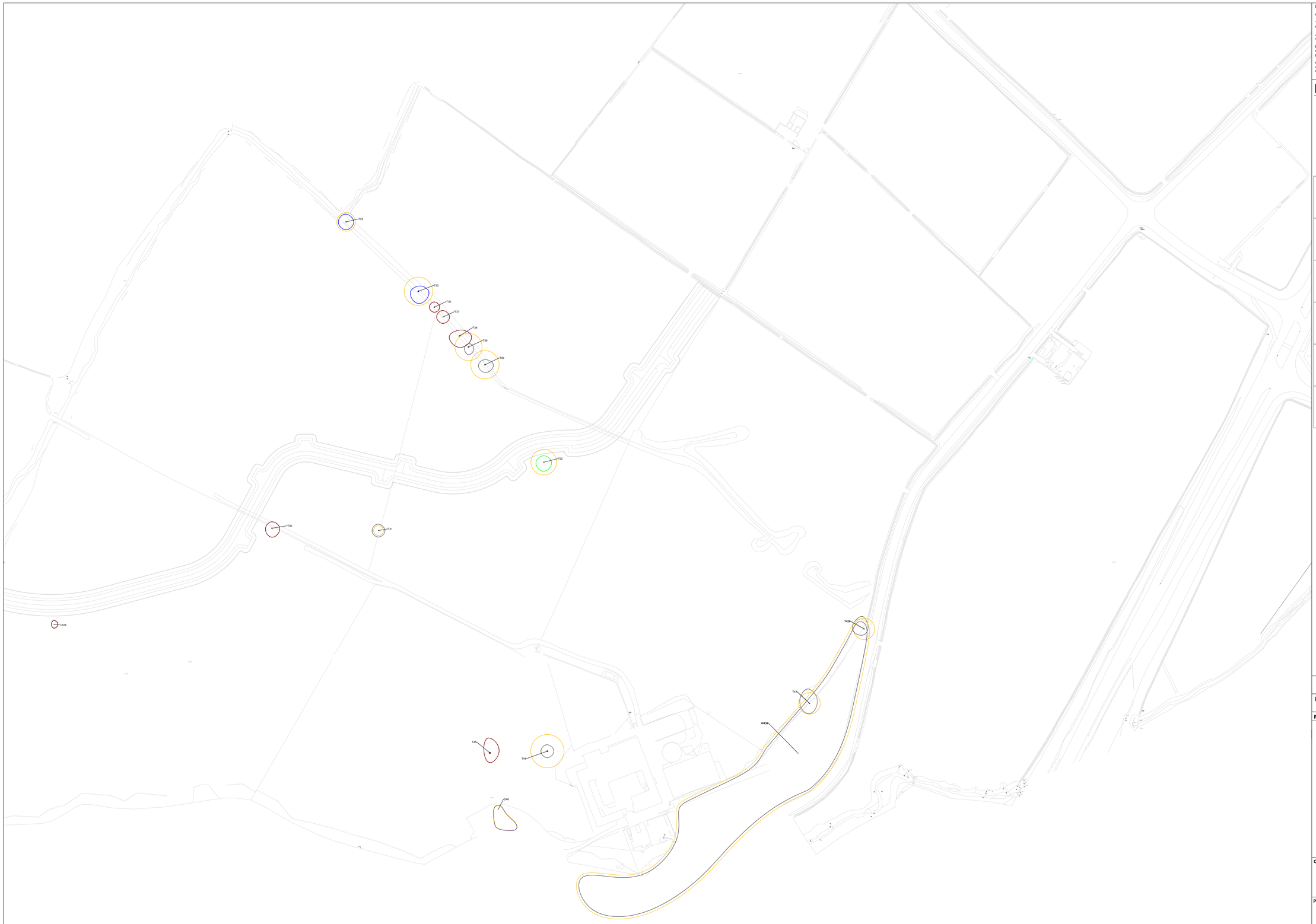
NOTE: Trees that are viewed as borderline and do not fit neatly into either of the categories are given a plus or minus rating (+/-) in the tree data schedule. Therefore, C+ would denote a tree being borderline C/B although C is deemed to be the most appropriate category. Similarly, B- would denote a tree being borderline B/C with B seen as the most appropriate category.

Appendix 4 – Site Plans

The site plans referred to in the report follow this page which include the following:

- Tree Constraints Plan
- Tree Removal Plan
- Tree Works Schedule
- Tree Protection Plan
- Tree Protection Inserts

Although included plans are usually to scale, they are only intended to indicate positions of surveyed trees and dimensions should not be taken from these drawings.



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Graphical representations of equipment on this drawing have been co-ordinated, but are approximations only. Please refer to the specifications and / or details for actual sizes and / or specific contractor construction information.

Notes:-

Category A tree, group or hedge

Category B tree, group or hedge

Category C tree, group or hedge

Category U tree, group or hedge

Root Protection Area (RPA)

\# Position estimated on site

REV.	DATE	DESCRIPTION	DRAWN	CHK'D
P01	19/06/19	PLANNING	RP	GT

URBAN GREEN

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Deva City Office Park, Trinity Way,
Manchester M3 7BF

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Client:
TAYLOR WIMPEY

Project:
PENDLE ROAD, CLITHEROE
PHASE 2, 3 & 4

Title:
TREE CONSTRAINTS PLAN

Issue:
PLANNING

Drawn:	Checked:	Approved:
RP	GT	KO
Project: UG132	**Scale @ A0:** 1:1000	**Date:** 19/06/19
Dwg No: UG_132_ARB_TCP_02		**Revision:** P01

Do not scale this drawing (printed or electronic version).

Contractors must check all dimensions from site

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Responsibility for the reproduction of this drawing in paper form, or issued in electronic format, lies with the recipient to check that all information has been replicated in full and is correct when comparedto the original paper or electronic image.

Graphical representations of equipment on this drawing have been co-ordinated, but are approximations only. Please refer to the specifications and / or details for actual sizes and / or specific contractor construction information.

Notes:-

Category A tree, group or hedge

Category B tree, group or hedge

Category C tree, group or hedge

Category U tree, group or hedge

Retained tree

Removed tree

Extents of pruning

\# Position estimated on site

REV.	DATE	DESCRIPTION	DRAWN	CHK'D
P03	17/10/19	LAYOUT UPDATE	GT	RP
P02	19/06/19	LAYOUT UPDATE	GT	RP
P01	19/06/19	PLANNING	RP	GT

URBAN GREEN

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Deva City Office Park, Trinity Way,
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Client:
TAYLOR WIMPEY

Project:
PENDLE ROAD, CLITHEROE
PHASE 2, 3 & 4

Title:
TREE REMOVAL PLAN

Issue:
PLANNING

Drawn:	Checked:	Approved:
RP	GT	KO
Project: UG132	**Scale @ A0:** 1:1000	**Date:** 19/06/19
Dwg No: UG_132_ARB_TRP_02		**Revision:** P03

Tree Works Schedule

Tree Number	Species	Works Required	Reason
T30, T36, T37, T38	English Oak	Remove	Arboricultural management.
T45	Ash	Remove	Arboricultural management.
T33	English Oak	Decay Detection	Arboricultural management.
T35, T40	English Oak	Crown clean and deadwood	Arboricultural management.
T41, T42	Ash	Remove ivy and reinspect	Arboricultural management.
W43	Mixed	Remove ivy throughout and sanitation fell, remove standing deadwood within falling distance of woodland edge	Arboricultural management.

REV.	DATE	DESCRIPTION	DRAWN	CHK'D
P01	19/06/19	PLANNING	RP	GT

URBAN GREEN

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Deva City Office Park, Trinity Way,
Manchester M3 7BF

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Client:
TAYLOR WIMPEY

Project:
PENDLE ROAD, CLITHEROE
PHASE 2, 3 & 4

Title:
TREE WORKS SCHEDULE

Issue:
PLANNING

Drawn:	Checked:	Approved:
RP	GT	KO
Project: UG132	**Scale @ A0:** NTS	**Date:** 19/06/19
Dwg No: UG_132_ARB_TWS_02		**Revision:** P01

Do not scale this drawing (printed or electronic version).

Contractors must check all dimensions from site

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Notes:-

- Category A tree, group or hedge
- Category B tree, group or hedge
- Category C tree, group or hedge
- Category U tree, group or hedge
- Retained tree
- Root Protection Area (RPA)
- # Position estimated on site
- Protective fencing (See Insert 1 & Insert 2)
- Supervised Root Pruning
- Ground protection (See Insert 3)
- Cellular confinement system

REV.	DATE	DESCRIPTION	DRAWN	CHK'D
P03	17/10/19	LAYOUT UPDATE	GT	RP
P02	19/06/19	LAYOUT UPDATE	GT	RP
P01	19/06/19	PLANNING	RP	GT

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Client:
TAYLOR WIMPEY

Project:
PENDLE ROAD, CLITHEROE
PHASE 2, 3 & 4

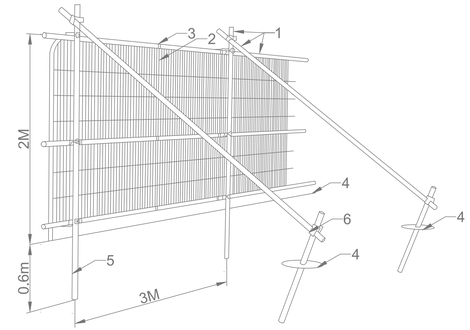
Title:
TREE PROTECTION PLAN

Issue:
PLANNING

Drawn:	Checked:	Approved:
RP	GT	KO
Project:	**Scale @ A0:**	**Date:**
UG132	1:1000	19/06/19
Dwg No:		**Revision:**
UG_132_ARB_TPP_02		P03

Insert 1: Tree protective fencing specification

Default specification for protective barrier

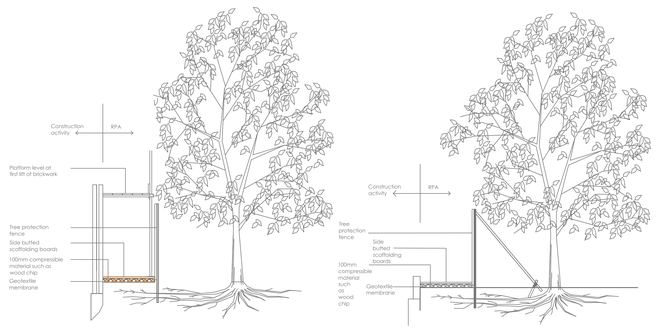


Key

1 Standard scaffold poles
2 Heavy gauge 2m tall galvanised tube and welded mesh infill panels
3 Panels secured to upright and cross-members with wire ties
4 Ground level
5 Uprights driven into the ground untill secure (minimum depth 0.6m)
6 Standard scaffold clamps

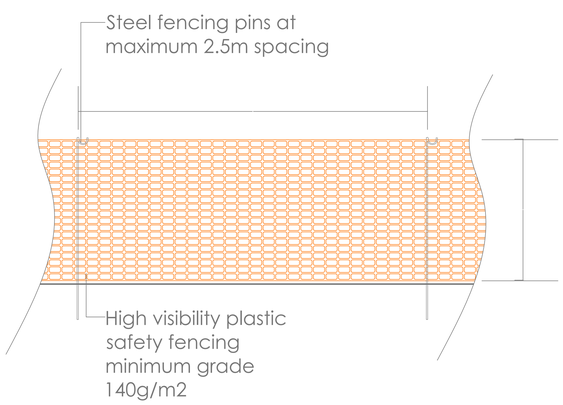
Insert 2: Tree protection notice

Insert 3: Ground protection specification

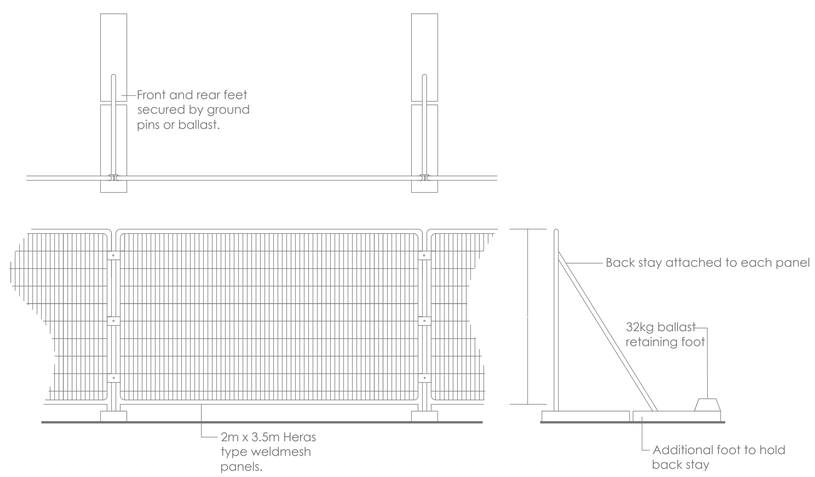


Insert 4: Temporary tree guard specification

Insert 5: Barrier mesh specification



Insert 6: Back-stay support



Notes:-

REV.	DATE	DESCRIPTION	DRAWN	CHK'D
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U R B A N G R E E N

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Client: TAYLOR WIMPEY

Project: PENDLE ROAD, CLITHEROE PHASE 2, 3 & 4

Title: TREE PROTECTION INDEX

Issue: PLANNING

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RP	GT	KO
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UG132	NTS	19/06/19
Dwg No:		**Revision:**
UG_132_ARB_TPI_02		P01