



**Arboricultural Impact Assessment
Wigton Heath Farm
Manor House Lane
Alwoodley
Leeds
LS17 9JD**

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1. Introduction

1.1. Instruction and Brief

- 1.1.1. Tree Care Consultancy was commissioned by Park Lane Homes & Alwoodley Golf Club to prepare an Arboricultural Survey and Impact Assessment in response to Leeds City Council refusal of full planning permission reference 23/01925/FU. The report produced relates solely to reason 5 of the refusal of planning permission and includes the following information:
- A tree survey, undertaken in accordance with British Standard 5837:2012 'Trees in relation to design, demolition and construction' – Recommendations.
 - A Tree Constraints Plan which details all trees and hedgerow material within influencing distance of the required visibility splays.
 - An Arboricultural Impact Assessment which evaluates any potential impact the proposal may have on surrounding trees.
- 1.1.2. This report is based on site observations and information provided by Park Lane Homes & Alwoodley Golf Club. Conclusions have been made in light of the surveyors experience and qualifications.
- 1.1.3. This report is only concerned with trees in relation to construction and makes no attempt to provide a full safety inspection of the trees surveyed. It should not be seen as an alternative for a Tree Hazard Assessment which is specific to minimising the risk and liability associated with trees.
- 1.1.4. Climatic conditions including storms, drought and temperature-related factors can cause damage and failure in apparently healthy trees. It should be remembered that all trees do pose a risk and whilst every effort has been made to detect any major defects in inspected trees, no guarantee can be given as to their safety. Although the risk should be managed to an acceptable level, no tree can be guaranteed as safe at all times.
- 1.1.5. This report is based on Visual Tree Assessment (VTA) methodology, as devised by Mattheck (1991). V.T.A is a ground level visual assessment of a tree, which is carried out to identify obvious mechanical defects, signs of ill health, potential mechanical failure and the suitability of a tree to a site. The survey is compiled in accordance with British Standard 5837:2012 'Trees in relation to design, demolition and construction' - Recommendations with Root Protection Areas (RPA's) based upon section 4.6 of the document.

1.2. Site Visit

- 1.1.1 A tree survey was undertaken by Stephen Waterson on 30 May 2023. Stephen has many years' experience within the Arboricultural industry, predominantly in the role of a Local Authority Tree Officer, though more recently he has worked in the role of Arboricultural Consultancy. He has a wide range of experience covering tree management, trees in relation to development and tree work applications associated with protected trees. In 1997 Stephen was awarded the Technicians Certificate in Arboriculture. As part of his continuing professional development Stephen attends seminars and develops contacts with fellow professionals ensuring his knowledge and awareness of industry best practice is current and up to date.
- 1.1.2 On the day of the survey the weather conditions were dry with no visibility constraints.
- 1.1.3 Measurements were calculated using the necessary instruments or estimated where access could not be gained. No climbing inspections or decay detection analysis was undertaken.
- 1.2.1. Details explaining the criteria and methodology used in generating the tree survey schedule is included in Appendix 1 and 2. Trees were graded using table 1 of BS5837. The resulting tree survey data results are included within the tree survey schedule at Appendix 3.
- 1.1.4 This survey should be read in conjunction with a Tree Constraints Plan (TCP) at appendix 4. These plans have been prepared by overlaying tree survey data onto a topographical that denotes the required visibility splays demanded by the proposed development. The author has relied on the accuracy of these drawings in the production of this report.

1.3. Site & Tree Description

- 1.3.1. The trees and hedgerow subject of this report occupy verge locations at the junction of Wigton Heath and Moseley House Lane and includes a range of native material characteristic of the rural landscape. The combination of this material provides a strong landscape presence.

1.4. Tree Status

1.4.1. It is understood the site is not located within a Conservation Area and that no trees on site are subject of Tree Preservation Order (TPO) controls. In the case of trees that are subject of TPO, Conservation Area controls or planning application procedures, it is essential the Local Authority's advice is sought and where necessary consent obtained prior to undertaking any tree removal or pruning operations.

1.5. Soil Assessment

1.5.1. No soil testing was undertaken and no soil information was provided to the author.

2. Tree Quality Assessment

2.1.1. As highlighted in table 1 below, the tree survey included 18No. individual trees and 6No. tree groups/hedgerow material. Of these 3No. individual trees were identified as retention category 'B' material, 13No. individual trees and 6No. tree groups/hedgerows were identified as retention category 'C' material. The remaining 2No. individual trees were identified as retention category 'U' material.

2.1.2. The tree and hedgerow material present collectively serve to provide a strong landscape presence, though it will be noted of the trees present T2 is structurally unsound and T18 is dead.

2.1.3. The tree and hedgerow material are periodically pruned away from the adjoining highway to ensure safe passage of vehicles negotiating the junction of Wigton Heath and Manor House Lane and likewise travelling in either direction. However it will be noted from the tree survey that additional work is currently deemed necessary in order to provide adequate clearance for high sided vehicles travelling along Manor House Lane.

Table 1:

| Category | Category Description | Tree Numbers |
|------------------------|---|--|
| 'A' | Trees of high quality, with life expectancy in excess of 40 years | Nil |
| 'B' | Trees of moderate quality, with life expectancy in excess of 20 years | T6, T15, T23 |
| 'C' | Trees of low quality with life expectancy in excess of 10 years or young trees | H1, T3, T4, T5, H7, G8, G9, T10, T11, T12, H13, T14, H16, T17, T19, T20, T21, T22, T24 |
| 'U' | Seriously defective trees that cannot be retained in present context for longer than 10 years | T2, T18 |
| Total number of trees: | | 18No. individual trees & 6No. trees groups & hedgerows |

3. Arboricultural Impact Assessment

- 3.1.1. The following section evaluates the Leeds City Council reason 5 of refusal 23/01925/FU. Where potential conflicts exist these are highlighted and possible remedial action recommended. The assessment is based on the surveyor's findings and information provided by Park Lane Homes & Alwoodley Golf Club.
- 3.1.2. The Local Planning Authority may be prepared to accept the removal of trees in a poor condition or those with a minimal, safe, useful life expectancy. This usually includes category 'U' and 'C' trees. The removal of category "A" and "B" grade trees may also on occasions be viewed acceptable where compensatory replacement planting can be provided or where in overall planning terms the loss is found to be justified.
- 3.1.3. The proposed scheme demonstrates compliant visibility splays that will serve the proposed development without the need to undertake any tree removal whatsoever. Where trees are recommended for removal, this is based on arboricultural grounds alone and should be carried out irrespective of the proposed development.

3.2. Tree Work Necessary to Undertake the Proposed Development

- 3.2.1. As detailed in Table 2 below the proposed development will not require the removal of any trees or hedgerow material in order to accommodate the required visibility splays.
- 3.2.2. It will be noted T2 and T18 will require removal on arboricultural management grounds irrespective of the proposed development.
- 3.2.3. It must also be accepted that trees G9, T10, T11, T17, T19, T20, T21, T22, T23 presently conflict with the required vertical highway clearance and as such will require periodic clearance work irrespective of the proposed development. Such work will not compromise the attractiveness of trees and hedgerow material that borders the highway any more than it does throughout the Leeds City Council highway network.

Table 2:

| Tree categories A, B, C & U | Trees to be retained and protected | Trees to be removed for development | Trees to be removed for arboricultural management reasons |
|-----------------------------|--|-------------------------------------|---|
| 'A' | Nil | Nil | Nil |
| 'B' | T6, T15, T23 | Nil | Nil |
| 'C' | H1, T3, T4, T5, H7, G8, G9, T10, T11, T12, H13, T14, H16, T17, T19, T20, T21, T22, T24 | Nil | Nil |
| 'U' | Nil | Nil | T2, T18 |

3.3. Below Ground Constraints

- 3.3.1. As recommended in BS5837 we have plotted the RPAs onto the attached Tree Constraints Plans (TCP) taking full account of the surrounding structures, topographical factors, tree condition and the probable root disposition.
- 3.3.2. The proposed visibility splays at the junction of Wigton Heath and Manor House Lane will not create any adverse impacts upon retained tree and hedgerow material.

3.4. Above Ground Constraints

- 3.4.1. Retained trees can be expected to achieve their overall dimensions subject to appropriate management and routine pruning operations. The expected growth of the retained trees is not considered to cause any conflicts with the proposed development and related use of the of the road junction that cannot reasonably be addressed by ongoing management.
- 3.4.2. Any necessary pruning works should be carried out in accordance with BS3998:2010 – 'Recommendations for Tree Work.'

3.5. Tree Work Necessary Unrelated to Proposed Development

- 3.5.1. The removal or pruning work to several trees has been recommended due to health and safety concerns. These works are highlighted in the 'Recommendations' section of the Tree Survey Schedule and should be carried out regardless of gaining planning approval for the proposed development.
- 3.5.2. It is presumed the matter of tree protection is one the Local Planning Authority would be agreeable to conditioning as part of a detailed planning permission.

4. Conclusions

- 4.1.1. No trees are recommended for removal on arboricultural management grounds alone irrespective of the proposal. No tree removal will be required to maintain the required visibility splays at the junction of Wigton Heath and Manor House Lane ensuring no loss of amenity will arise. Retained tree cover will require periodic pruning back from the highway in order to maintain safe passage of vehicles negotiating Wigton Heath and Manor House Lane irrespective of the proposed development.
- 4.1.2. The protection of trees and their subsequent health and future potential is dependent upon all persons operating within the site. Communications are vitally important to ensure that all parties understand the reason for tree protection and its continued existence. Providing all necessary tree protection works are undertaken, retained trees and development alike will satisfactorily coexist.
- 4.1.3. It is hoped that this report and recommendations provides all necessary information, however should there be any queries or should clarification of any points be required, please contact the report author.

5. Appendices

Appendix 1 – Explanation of Survey Details

Tree Id- Each tree/group has been given a unique number, which coincides with the drawings located in appendix 3.

Species & botanical name- where identifiable the full botanical name has been given. Where a cultivar, variety or species cannot be accurately given the genus name only will be given.

Height (m)- measured approximately to the nearest 1m. If height issues are critical, measurements can be collected accurately using optical instruments.

No of stems- the number of separate stems each individual tree has.

Stem Dia @1.5m (mm)- the diameter of the given tree at 1.5m above soil level, (on sloping ground taken on the up-slope side of the tree base). Where the tree is multi-stemmed measurements will be record for each stem.

Spread- indicates the crown radius from the base of tree in four compass directions, recorded to the nearest metre.

Crown height + direction (m)- recorded as the first significant branch and direction of growth.

Life stage- described as young, semi-mature, early-mature, mature or over-mature.

Physiological condition (P)- an assessment of the trees health. Considers vitality, die back and the presence of disease. Described as Good = no significant health problems Fair = symptoms of ill health that can be remediated Poor = significant ill health.

Structural condition (S)- an assessment of the trees structural condition. Described as Good = no significant defects Fair = significant defects that can be remediated Poor = significant defects no remedy.

Observations – negative and positive- narrative comments on general condition, significant defects and overall appearance (e.g. the presence of any decay).

Preliminary management recommendations- e.g. requires pruning or further investigation of suspected defects is needed.

Life expectancy- preliminary management recommendations, e.g. requires pruning or further investigation of suspected defects is needed.

Retention Category- Each tree/group is identified with a retention category in accordance with BS5837 (an in depth explanation is provided on the following page)

RPA radius (m)- minimum area in metres which should be left undisturbed around each retained tree.

Appendix 2 – Cascade Chart for Tree Quality Assessment (Extract BS5837)

| Category and definition | Criteria (including subcategories where appropriate) | | | Identification on Plan |
|---|---|---|---|------------------------|
| Category U Those in such a condition that they cannot realistically be retained as living trees in the context of the current land use for longer than 10 years | <ul style="list-style-type: none"> Trees that have a serious, irremediable, structural defect, such that their early loss is expected due to collapse, including those that will become unviable after removal of other category U trees (e.g. where, for whatever reason, the loss of companion shelter cannot be mitigated by pruning) Trees that are dead or are showing signs of significant, immediate, and irreversible overall decline Trees infected with pathogens of significance to health and/or safety of other trees nearby, or very low quality trees suppressing adjacent trees of better quality NOTE: Category U trees can have existing or potential conservation value which it might be desirable to preserve | | | DARK RED |
| TREES TO BE CONSIDERED FOR RETENTION | | | | |
| Category and definition | Criteria – Subcategories | | | Identification on Plan |
| | 1 Mainly arboricultural values | 2 Mainly landscape values | 3 Mainly cultural values, including conservation | |
| Category A Trees of a high quality with an estimated remaining life expectancy of at least 40 years | Trees that are particularly good examples of their species, especially if rare or unusual, or essential components of groups, or of formal or semi-formal arboricultural features (e.g. the dominant and/or principal trees within an avenue) | Trees, groups or woodlands of particular visual importance as arboricultural and/or landscape features | Trees, groups or woodlands of significant conservation, historical, commemorative or other value (e.g. veteran trees or wood-pasture) | LIGHT GREEN |
| Category B Those of moderate quality with and estimated remaining life expectancy of at least 20 years | Trees that might be included in category A, but are downgraded because of impaired condition (e.g. presence of significant though remediable defects, including unsympathetic past management and storm damage), such that they are unlikely to be suitable for retention for beyond 40 years; or trees lacking the special quality necessary to merit the category A designation | Trees present in numbers, usually as groups or woodlands, such that they attract a higher collective rating than they might as individuals; or trees occurring as collectives but situated so as to make little visual contribution to the wider locality | Trees with material conservation or other cultural value | MID BLUE |

Appendix 3 - Tree Survey Schedule

| Tree ID | Species, Botanical Name | Height (m) | No of stems | Stem @ 1.5M (mm) | | | | Crown height+ direction (m) | Life stage | Physiological (P) and Structural (S) condition. Observations- negative and positive | Recommendations | Life expectancy | Retention category | RPA Radius (m) | |
|---------|--|------------|-------------|----------------------|------------------|---|---|-----------------------------|--------------|---|---|--|--------------------|----------------|--------------|
| | | | | Average | Spread - N,E,S,W | | | | | | | | | | Ground level |
| H1 | Hawthorn, <i>Crataegus monogyna</i> | 5 | 1 | Average 60 estimate | See plan. | | | Ground level | Early-mature | S=Good, P=Good. Off site, located within golf course boundary. Provides low level screen for existing dwellings along Wigton Heath. | Continue cyclical maintenance providing clearance to Wigton Heath. | 10 to 20 yrs | C2 | 0.7 | |
| T2 | Downy Birch, <i>Betula pubescens</i> | 8 | 1 | 260 | 2 | 4 | 2 | 2 | 3-e | Early-mature | S=Poor, P=Fair. Sheer fracture visible to both north, east and south aspects of stem. Limited reaction grow, rendering tree liable to fail over access road (Wigton Heath). | Inform owner of tree condition. | <10 yrs | U | 3.1 |
| T3 | Downy Birch, <i>Betula pubescens</i> | 8 | 1 | 180 | 2 | 2 | 3 | 1 | 4-e | Early-mature | S=Fair, P=Fair. Sparse crown, probably an indication of drought stress. Superficial surface wounds to stem with callus growth present. | No work required | 10 to 20 yrs | C2 | 2.2 |
| T4 | Downy Birch, <i>Betula pubescens</i> | 8 | 1 | 160 | 1 | 1 | 1 | 1 | 4-e | Early-mature | S=Fair, P=Fair. Sparse crown, probably an indication of drought stress. Slender, pole type form. | No work required | 10 to 20 yrs | C2 | 1.9 |
| T5 | Holly, <i>Ilex aquifolium</i> | 5 | 2 | 90 80 | 1.5 | 1 | 1 | 1 | | Semi-mature | S=Fair, P=Poor. Sparse appearance, probably an indication of stress. Lower dead stem with symptoms of <i>Phytophthora ilicis</i> . | No work required | 10 to 20 yrs | C2 | 1.4 |
| T6 | Sessile Oak, <i>Quercus petraea</i> | 8 | 1 | 530 | 4.5 | 4 | 5 | 5 | 2-s | Early-mature | S=Good, P=Good. Biased crown formation to the west. Historically pruned away from electrical apparatus. Previous pruning to maintain highway clearance. | No work required | 20 to 40 yrs | B1 | 6.4 |
| H7 | Hawthorn, <i>Crataegus monogyna</i> | 2 | 1 | Average 60 estimate | See plan. | | | Ground level | Mature | S=Good, P=Good. Mixture of mature and newly planted items. Collectively forms dense, low level feature. | Remove tree guards. | 10 to 20 yrs | C2 | 1.8 | |
| G8 | Mixture of Blackthorn, <i>Prunus spinosa</i> & Hawthorn, <i>Crataegus monogyna</i> | 2.5 | 1 | Average 80 estimate | See plan. | | | Ground level | Semi-mature | S=Poor, P=Fair. Recent and historical pruning present. Poor quality material. | No work required | 10 to 20 yrs | C2 | 1 | |
| G9 | Goat Willow, <i>Salix caprea</i> | 4.5 | 1 | Average 100 estimate | See plan. | | | 2-n | Semi-mature | S=Fair, P=Fair. 8 stems in group. Most northern item houses a sheer fracture to the main stem, not viable for retention. Crowns slightly overhanging highway. | Crown lift to gain 5.2m clearance over highway. This work is necessary to comply with Highways Act 1980. | 10 to 20 yrs | C2 | 1.2 | |
| T10 | Sessile Oak, <i>Quercus petraea</i> | 5 | 1 | 260 | 2 | 5 | 2 | 3 | 1.5-e | Semi-mature | S=Fair, P=Good. Forms part of the linear group. Low crown overhanging highway. | Crown lift to gain 5.2m clearance over highway. This work is necessary to comply with Highways Act 1980. | 10 to 20 yrs | C2 | 3.1 |
| T11 | Sessile Oak, <i>Quercus petraea</i> | 4.5 | 1 | 90 | 0.5 | 1 | 1 | 1 | 1.5-e | Young | S=Fair, P=Good. Young, establishing item, competing for light with adjoining items. Crown slightly overhanging highway. | Crown lift to gain 5.2m clearance over highway. This work is necessary to comply with Highways Act 1980. | 20 to 40 yrs | C2 | 1.1 |
| T12 | Sycamore, <i>Acer pseudoplatanus</i> | 7 | 6 | Average 90 | 2.5 | 2 | 2 | 3 | 1-n | Semi-mature | S=Fair, P=Fair. One stem historically truncated. Appears to show a recent drop in vitality. | No work required | 10 to 20 yrs | C2 | 2.6 |
| H13 | Hawthorn, <i>Crataegus monogyna</i> | 3 | 1 | Average 40 estimate | See plan. | | | Ground level | Mature | S=Good, P=Good. Hedging material. Lacks recent management though historically laid and periodically reduced in overall height. | No work required | 10 to 20 yrs | C2 | 0.5 | |

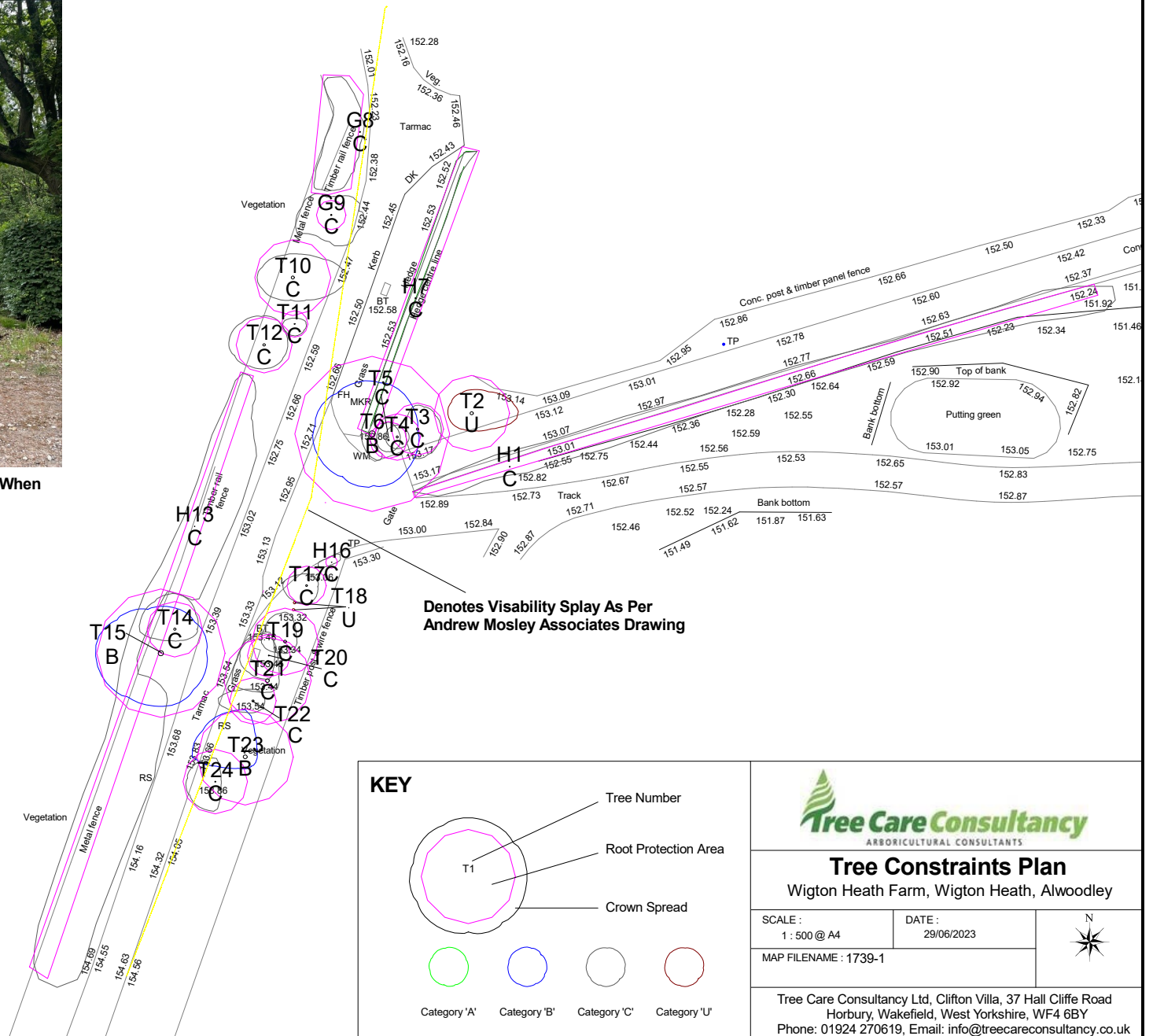
| Tree ID | Species, Botanical Name | Height (m) | No of stems | Stem @ 1.5M (mm) | | | | Crown height+ direction (m) | Life stage | Physiological (P) and Structural (S) condition. Observations- negative and positive | Recommendations | Life expectancy | Retention category | RPA Radius (m) | |
|---------|--------------------------------------|------------|-------------|---------------------|-----------|---|---|-----------------------------|------------|---|---|--|--------------------|----------------|-----|
| | | | | 3 | 2 | 1 | 3 | | | | | | | | 4 |
| T14 | Sessile Oak, <i>Quercus petraea</i> | 5 | 1 | 190 | 3 | 2 | 1 | 3 | 2-n | Semi-mature | S=Fair, P=Good. Forms part of the linear group. Unbalanced form. | No work required | 10 to 20 yrs | C2 | 2.3 |
| T15 | Sessile Oak, <i>Quercus petraea</i> | 7 | 1 | 440 | 4 | 4 | 5 | 6 | 1-n | Early-mature | S=Good, P=Good. Forms part of the linear group. Poor pruning stubs. Potential to provide a lasting contribution. | No work required | 10 to 20 yrs | B2 | 5.3 |
| H16 | Hawthorn, <i>Crataegus monogyna</i> | 3 | 1 | Average 40 estimate | See plan. | | | | | Mature | S=Fair, P=Fair. Remnants of a hedge line. Previously coppiced. | No work required | 10 to 20 yrs | C2 | 0.5 |
| T17 | Downy Birch, <i>Betula pubescens</i> | 8 | 2 | 120 60 | 1 | 1 | 2 | 2 | 1-w | Semi-mature | S=Good, P=Good. Co-dominant stemmed with low hanging branches that presently obstruct highway. Reasonably formed tree. | Crown lift to gain 5.2m clearance over highway. This work is necessary to comply with Highways Act 1980. | 10 to 20 yrs | C2 | 1.6 |
| T18 | Dead Birch | n/a | | | | | | | Dead | Dead item. Could be retained in the short term for habitat purposes. | Inform owner of its condition. | n/a | U | n/a | |
| T19 | Downy Birch, <i>Betula pubescens</i> | 7 | 1 | 230 | 2.5 | 1 | 1 | 2 | 3.5-n | Semi-mature | S=Fair, P=Good. Witches brooms and honey suckle present to stem. Wounds present to roadside stem. | Crown lift to gain 5.2m clearance over highway. This work is necessary to comply with Highways Act 1980. | 10 to 20 yrs | C2 | 2.8 |
| T20 | Hawthorn, <i>Crataegus monogyna</i> | 4 | 6 | Average 60 | 2 | 1 | 2 | 3 | 1-n | Mature | S=Good, P=Good. Typical form for species. Recent pruning. | Crown lift to gain 5.2m clearance over highway. This work is necessary to comply with Highways Act 1980. | 10 to 20 yrs | C2 | 1.8 |
| T21 | Sessile Oak, <i>Quercus petraea</i> | 7 | 1 | 300 | 4 | 1 | 1 | 3 | 1-w | Early-mature | S=Fair, P=Good. Forms part of the linear group. Unbalanced form. Lower stub, snags and dead wood present. | Crown lift to gain 5.2m clearance over highway. This work is necessary to comply with Highways Act 1980. | 10 to 20 yrs | C2 | 3.6 |
| T22 | Goat Willow, <i>Salix caprea</i> | 5 | 1 | 160 | 1 | 1 | 1 | 3 | 3-w | Semi-mature | S=Fair, P=Good. Elevated crown. Vehicle wounding evident. | Crown lift to gain 5.2m clearance over highway. This work is necessary to comply with Highways Act 1980. | 10 to 20 yrs | C2 | 1.9 |
| T23 | Sessile Oak, <i>Quercus petraea</i> | 7 | 1 | 330 | 4 | 1 | 1 | 5 | 2-n | Semi-mature | S=Good, P=Good. Forms part of the linear group. Unbalanced form with low crown over highway. Potential to provide lasting contribution. | Crown lift to gain 5.2m clearance over highway. This work is necessary to comply with Highways Act 1980. | 20 to 40 yrs | B2 | 4 |
| T24 | Hawthorn, <i>Crataegus monogyna</i> | 5 | 6 | Average 90 | 2 | 1 | 3 | 3 | 1-n | Mature | S=Good, P=Good. Typical form for species. Recent pruning. | No work required | 10 to 20 yrs | C2 | 2.6 |



Photograph 1- Northerly Aspect When Exiting Wigton Heath



Photograph 2- Southerly Aspect When Exiting Wigton Heath



Tree Constraints Plan
Wigton Heath Farm, Wigton Heath, Alwoodley

SCALE: 1 : 500 @ A4 DATE: 29/06/2023

MAP FILENAME : 1739-1