Combined Arboricultural Impact Assessment/ Method Statement Land Adjacent to Brynheulog St Clears Carmarthenshire SA33 4ER



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Introduction

This survey was overseen by Ben Clark, Arboricultural Consultant, and Director at Tree Check Arboriculture Ltd. with over 9 years' experience in the arboriculture industry and holding the following qualifications:

- Level 4 Diploma in Arboriculture
- BSc. Geology (University of Southampton)
- LANTRA Professional Tree Inspection Certificate (PTI)
- Various NPTC qualifications in tree surgery.

Ben is a technician member of the arboricultural association and attends regular training and seminars to remain up to date with current arboricultural practices.

This survey was carried out by Josh Clark, Arboricultural Consultant, and Director at Tree Check Arboriculture Ltd. with over 9 years' experience in the arboriculture industry and holding the following qualifications:

- LANTRA Professional Tree Inspection Certificate (PTI)
- Various NPTC qualifications in tree surgery.

The methodology of this report is based on the recommendations provided by the British Standards Institute document BS5837: Trees in Relation to Design, Demolition and Construction – Recommendations, as well as other recommendations provided by institutions such as the Arborical Association.

Brief

Tree Check has been instructed by Obsidian Developments to carry out a tree survey and categorisation at Land Adjacent to Brynheulog, St Clears. Carmarthenshire. Based on the findings, we were also instructed to carry out an impact assessment to consider proposed development on site, as well as produce a method statement to protect retained trees

The following information was available:

- Topographical Survey- 3 point surveys- June 2021
- Drawings- Hammonds Architectural Ltd- April 2024

It should be noted that all of the trees recorded in this report were shown on the topographical plan, and their locations in the Tree Constraints Plan are based on GPS and should be taken as indicative only. All locations and distances should be checked on site.

The site was visited on the 11-Jul-2024 during overcast but dry weather conditions considered favourable for this type of survey.

Scope

- The purpose of this report is to provide a recommended method statement aimed at avoiding, or minimising negative impact to trees by proposed development.
- Trees have only received a cursory inspection and this report does not constitute a full tree condition/safety survey. Ongoing inspection should proceed as per the landowner's tree management plan.
- A tree constraints plan has been produced to indicate the locations of trees and the BS5837 calculated rooting areas. in relation to the site.
- The intended purpose of this report is that it is used as an aid to assess impact on, and constraints caused by trees when designing the layout of the site.
- Where trees have been noted to be hazardous in terms of unacceptable third-party risk this has been noted and recommendations given.
- General management recommendations have been given where appropriate.





- The inspection was carried out at ground level from inside the site and along adjacent public roads trees were not climbed and no internal decay detection was used. It is our policy to recommend further investigation with decay detection equipment where features observed during visual inspection warrant such action.
- All heights of trees were estimated from ground level.
- Branch spread was measured from the base of the trees in four cardinal directions using a laser tape measure.
- Stem Diameter was measured at 1.5m above ground level using a diameter tape measure.
- Data on the observed structural condition of the tree has been entered, e.g., collapsing, leaning and the presence of any observed decay or physical defect has been noted.
- Soil analysis has not been carried out.





Interpretation

BS Categories

Trees have been assigned retention categories in accordance with BS5837. These are as follows:

<u>Category A-</u> Trees with a high retention value which are either arboriculturally important, important within the landscape, or culturally/ecologically important.

<u>Category B-</u> Trees with a moderate retention value i.e. they are good examples of their species, provide some notable amenity value to the area, or provide significant ecological or cultural value.

<u>Category C-</u> Trees with a low retention value. Including trees with defects which reduce their amenity value or expected lifespan but not to the extent that they cannot be realistically retained within the development.

<u>Category U-</u> Trees of which retention is considered unrealistic within the context of the development due to poor condition and low life expectancy.

See <u>Table 1</u> in the appendices of this report for more information on the allocation of categories and subcategories.

Tree Age Ratings

Y- Young trees in their early stage of growth, have undergone minimal secondary thickening and are still primarily composed of active tissue.

EM- Early mature trees that have started to show characteristics of maturity such more developed crowns and increased stem thickness.

M- Mature fully developed trees.

OM- Over mature trees that are starting to show signs of decline.

A- Ancient trees that have reached a notably old age for their species and are therefore considered to be important.

V- Veteran trees with notable features such as wounds, cavities, cracks, etc. that provide significant habitat value. These are usually older trees.

Root Protection Areas (RPA's)

Root Protection areas have been calculated according to BS5837 and represent the estimated minimum rooting area required by the tree to carry out its functions.

Excavation in this area can cause physiological or structural harm to a tree and the movement of machinery or personnel over this area can cause soil compaction and in turn, physiological harm to the tree.

There will be excavation works going on in the RPA's of several trees. The methodology of this works will be stated in this method statement.

Remaining Contribution

Remaining contribution has been estimated based on the trees overall condition, approximate age, and the life expectancy of the species in question. This is based on the assumption that new factors are not introduced that will affect the trees life expectancy, such as pathogens, climate factors or other biotic or abiotic influences.





Terminology

See annex v for a glossary of the terms commonly used in tree reports.

Trees and groups are numbered with the following prefixes:

- **T-** individual trees.
- G- groups of trees with similar characteristics and rooting areas.
- H- Hedgerows.
- W- woodland groups, designated as such due to the presence of woodland features such as natural regeneration,





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Tree Schedule

Ref	Tag	Species	Height (m)	Stem Diameter (mm)	S		d (m E S))	Crown Clearance (m)	Lowest Branch (m)	Survey Notes	Recommendations	Life Stage	Life Expectancy (years)	Retention Category	RPA Area (m²)	RPA Radius (m)	Photo
GI	N/A	Holm oak (Quercus ilex) Common hawthorn (Crataegus monogyna) Goat willow (Salix caprea) Dogwood (Cornus sp.) Sycamore (Acer pseudoplatanus)	7	350	3	3	3	3	0	0		No action required at this time.	EM	20- 40	В2	55	4.2	2
ні	N/A	Blackthorn (Prunus spinosa) Common ash (Fraxinus excelsior) Sycamore (Acer pseudoplatanus) Wych elm (Ulmus glabra) Common hawthorn (Crataegus monogyna)	4	100	0.5	0.5	0.5	0.5	0		Providing habitat and screening between the site and the road.	Implement a hedgerow management plan to in include box cutting annually outside of nesting bird season.	Μ	20- 40	В2	4	1.2	1





Arboricultural Impact Assessment/Method Statement

I. Tree Preservation Orders and Conservation Areas

The site isn't subject to any tree preservation orders and is not situated within a conservation area.

2. Root Protection Areas (RPA's)

Root Protection areas have been calculated according to BS5837. These represent the below ground constraints for a given tree, the radius of which is included in the tree schedule and represented as an orange circle or polygon on the tree constraints plan.

3. Areas of Caution

A number of areas on site have been highlighted as areas of caution, these are areas where there is a heightened risk of damage to the above ground structure or root system of retained trees through the proposed works. Certain methodologies in this document will state that they must be followed within areas of caution. The location of all areas of caution can be found on the <u>Tree Protection Plan</u> within the appendix section of this report.

4. Tree Removal

No trees are recommended for removal to make way for development.

• If the proposed layout is changed in any way that causes a conflict with the RPA of retained trees the project arboriculturalist must be consulted.

5. Pruning Works

No Pruning Works are required to make way for development.

• If the proposed layout is changed in any way that causes a conflict with the RPA of retained trees the project arboriculturalist must be consulted.

6. Impact from Construction Activity

Physical Damage

Wherever construction or demolition work takes place on a site with retained trees, there is a risk of damage to the branches of retained trees from the movement and use of plant within the site.

The following trees are at significant risk of direct physical damage during development works and the methodology outlined below must be followed in order to prevent such incidents from occurring:

- GI
- HI

Control Measures

- By maintaining a construction exclusion zone, with tree protective barrier fencing segregating retained trees from the rest of site, physical damage to trees can be avoided.
- Tree protective barrier fencing must be installed in the configuration outlined in the Tree Protection Plan.
- The alternative tree protective fencing (figure 3) as outlined in BS5837 is preferable for this site due it's tight nature with fencing within RPA's. This configuration avoids driving posts into the ground, thus reducing root disturbance.





- The crowns of all trees must be enclosed within the tree protective fencing. If more space is needed than the current crown extents allow, the project arboriculturalist must be consulted in order to arrange appropriate pruning measures.
- Machine operators are to be briefed on positioning their equipment to avoid contact with branches from retained trees and the root protection zones.
- Where access is required beneath the crown or canopy area of retained trees, all pruning work to facilitate access must be caried out prior to the development stage, height restriction barriers are to be installed at the edge of areas of caution where entry beneath barriers occurs, and banksmen are to be assigned to make sure no contact with branches is made during the movement or use of plant.

Chemical Damage

There is a risk of chemical damage to trees from the mixing and storage of cement and other damaging chemicals.

The following trees are at significant risk of chemical damage during development works and the methodology outlined below must be followed in order to prevent such incidents from occurring:

- GI
- HI

Control Measures

- Materials that may have an adverse effect on the health of trees will not be stored or transported within the RPA. E.g., oil, bitumen, cement, and concrete.
- Concrete and cement will not be mixed within 10m of the base of trees.
- Cement and concrete will be mixed downhill from the base of trees or watercourses to avoid the risk of contamination to runoff.
- Where it is not possible to mix and store concrete downhill from trees and watercourses, sediment barriers will be used to prevent runoff from storage and mixing areas.

Soil Compaction

With the movement of personnel and machinery around site, there is always a risk of soil compaction when construction activity takes place near retained trees.

The following trees are at significant risk of damage through soil compaction during development works and the methodology outlined below must be followed in order to prevent such incidents from occurring:

- GI
- HI

Control Measures for Construction Exclusion Zones

- By maintaining a construction exclusion zone, with tree protective barrier fencing segregating retained trees from the rest of site, soil compaction related damage to trees can be avoided.
- Tree protective barrier fencing must be installed in the configuration outlined in the <u>Tree Protection Plan</u>.
- The standard level of tree protective fencing (figure 3) as outlined in BS5837 is preferable for this site due to volume of plant and vehicle movement expected on site. This configuration avoids driving posts into the ground, thus reducing root disturbance.
- No materials are to be stored within the RPA's of trees for any period of time, including in areas of caution.
- All RPA's are to be checked on site and marked out, measured based on the RPA radius shown in the tree schedule.
 - Upon completion of works within areas of caution, the fencing surrounding the ground protection is to be removed, all fencing components are to be stored outside of the RPA of retained trees.





- Ground protection is then to be removed, this must be rolled back towards the edge of the RPA;s of
 retained trees, so that personnel and/or machinery can always work from protected ground, or from
 the outside of the RPA.
- Once ground protection is removed, the tree protective fencing is to be reinstated in its original configuration.

7. RPA Incursions

Construction of Heavy Structures Within the RPA's of Retained Trees

There are no conflicts between the RPA's of trees on site with the current proposed layout of buildings or heavy structures.

 If the proposed layout is changed in any way that causes a conflict with the RPA of retained trees the project arboriculturalist must be consulted.

Construction of Light Structures Within the RPA's of Retained Trees

There are no conflicts between the RPA's of trees on site with the current proposed layout of light structures.

• If the proposed layout is changed in any way that causes a conflict with the RPA of retained trees the project arboriculturalist must be consulted.

Demolition Within or Adjacent to the RPA's of Retained Trees

No demolition work is proposed within or adjacent to the root protection areas of retained trees.

• If the proposed layout is changed in any way that causes a conflict with the RPA of retained trees the project arboriculturalist must be consulted.

Installation of Services Within the RPA's of Retained Trees

There is no conflict between the proposed layout of service routes and the RPA's of retained trees.

• If the proposed layout is changed in any way that causes a conflict with the RPA of retained trees the project arboriculturalist must be consulted.

Hard Surfacing Within the RPA's of Retained Trees

No hard surfacing installation is proposed within the RPA of any retained trees on site.

 If the proposed layout is changed in any way that causes a conflict with the RPA of retained trees the project arboriculturalist must be consulted.

Other Excavation Works in RPA's

No excavation works within the RPA of trees is proposed. If the design is changed to include the necessity for excavation within the RPA of any retained trees, the project arboriculturist must be consulted.

 If the proposed layout is changed in any way that causes a conflict with the RPA of retained trees the project arboriculturalist must be consulted.

8. Level Changes

No conflicts involving level changes are anticipated on site, although no level data has been provided. If there are any significant level changes around trees the project arboriculturalist must be consulted.





 If the proposed layout is changed in any way that causes a conflict with the RPA of retained trees the project arboriculturalist must be consulted.

9. Impact of Retained Trees on the Proposed Structure

Shading Issues

No retained trees are likely to cause shading issues to proposed structures. This is due to their size and distance from proposed structures as well as the placement of all proposed structures to the south of all standard trees within influencing distance of site.

• No specific methodology is applicable for this section due to absence of significant impact.

Nuisance Caused by Detritus from Trees

No retained trees are likely to cause nuisance by detritus to the proposed structures. This is due to their distance from all areas that are likely to contain hard surfacing, or other areas where accumulation of leaf litter and other detritus arising from retained trees is likely to cause inconvenience to site users.

• No specific methodology is applicable for this section due to absence of significant impact.

Perceived Threat of Damage to Property Through Tree Failure

The threat of tree failure causing injury or damage to property can cause anxiety for residents or site users and increase pressure for removal of trees in close proximity to living spaces or other high use areas.

- Detailed tree inspections to be carried out on all trees within striking distance of living areas to be carried out every 18-24 months.
- Findings and recommendations of all tree inspections to be communicated clearly to residents and site users.
- All recommendations provided in tree safety inspections are to be carried out, with an emphasis on proactive tree management.

Displacement of Lightweight Structures through Secondary Root Thickening

There is no significant risk of displacement of lightweight structures or surfacing through the secondary root thickening of retained trees.

• No specific methodology is applicable for this section due to absence of significant impact.

Indirect Damage through Shrinkable Clay Soils

Larger trees can cause indirect damage to structures by removing water from clay rich soils, causing them to contract, which potentially leads to subsidence.

- No soil analysis has been carried out but, geotechnical advice including soil testing should be taken when construction is taking place near large trees. For advice on avoiding subsidence related damage refer to NHBC Chapter 4.2.
- If soil testing reveals a high level of plasticity, consult a suitably qualified arboriculturalist to work alongside project engineers to determine necessary foundation depths in accordance with NHBC Chapter 4.2.
- The removal of mature trees prior to development in an attempt to prevent subsidence issues is not generally advisable as it may lead to heave, causing damage to built structures.

Potential Damage Through Branch Contact

Not applicable on this site.

• No specific methodology is applicable for this section due to absence of significant impact.





10. Drainage and SUDS

No drainage plans have been provided but the topography of the site and positioning of trees does not suggest any likely conflicts between drainage arrangements and trees, if any drainage features are proposed near any arranged trees the project arboriculturalist must be consulted, including situations where water may be diverted towards or away from trees.

• If the proposed layout is changed in any way that causes a conflict with the RPA of retained trees the project arboriculturalist must be consulted.

II. Conflict from Boundary Walls and Fences

There is no conflict between proposed boundary walls and fences with retained trees.

• If the proposed layout is changed in any way that causes a conflict with the RPA of retained trees the project arboriculturalist must be consulted.

12. Conflict with Proposed Landscaping and Retained Trees

No landscaping is proposed in the RPA of retained trees.

• No turfing, fencing or any other form of hard or soft landscaping or boundary dressing is to be installed into the RPA of retained trees.

13. Scope for Preventing Tree Losses through Design Change

Not applicable as no tree losses are proposed.

• No specific methodology is applicable for this section due to absence of significant impact.

14. Mitigation of Tree Losses

Not applicable as no tree losses are proposed.

• No specific methodology is applicable for this section due to absence of significant impact.





Appendix

Appendix i: Photographs taken on site.

Appendix ii: Tree protection/loss/retention plan showing the location of trees, their root protection areas and their retention category in relation to the proposed development.

Appendix iii: A cascade chart from BS5837: 2012- Trees in relation to design, demolition, and construction– Recommendations explaining the categorisation of trees.

Appendix iv: A diagram showing the recommended configuration for tree protective fencing, from BS5837: 2012- Trees in relation to design, demolition, and construction– Recommendations.

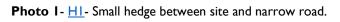
Appendix v: A Glossary of terms and phrases commonly used in tree reports.

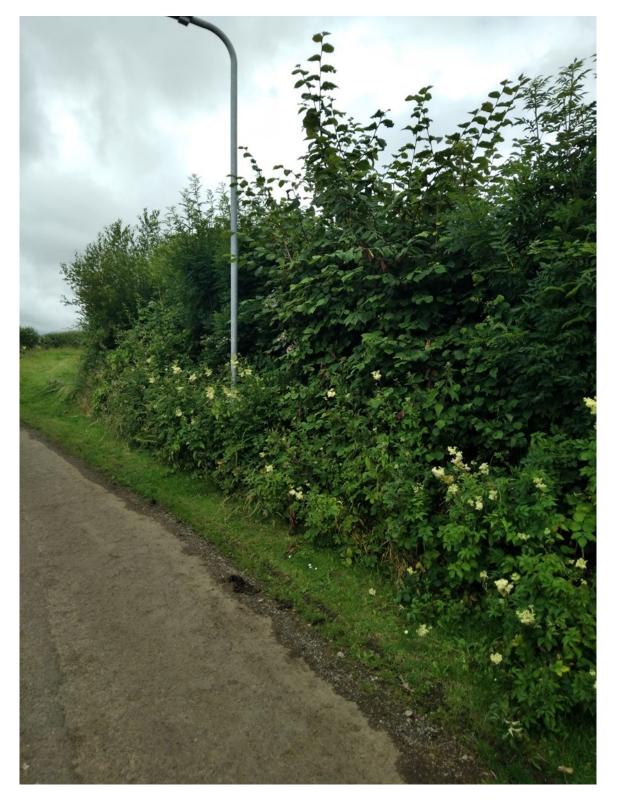
Appendix vi: Information to Inform Selection of Trenchless Solutions for the Installation of Services





Appendix i: Photos









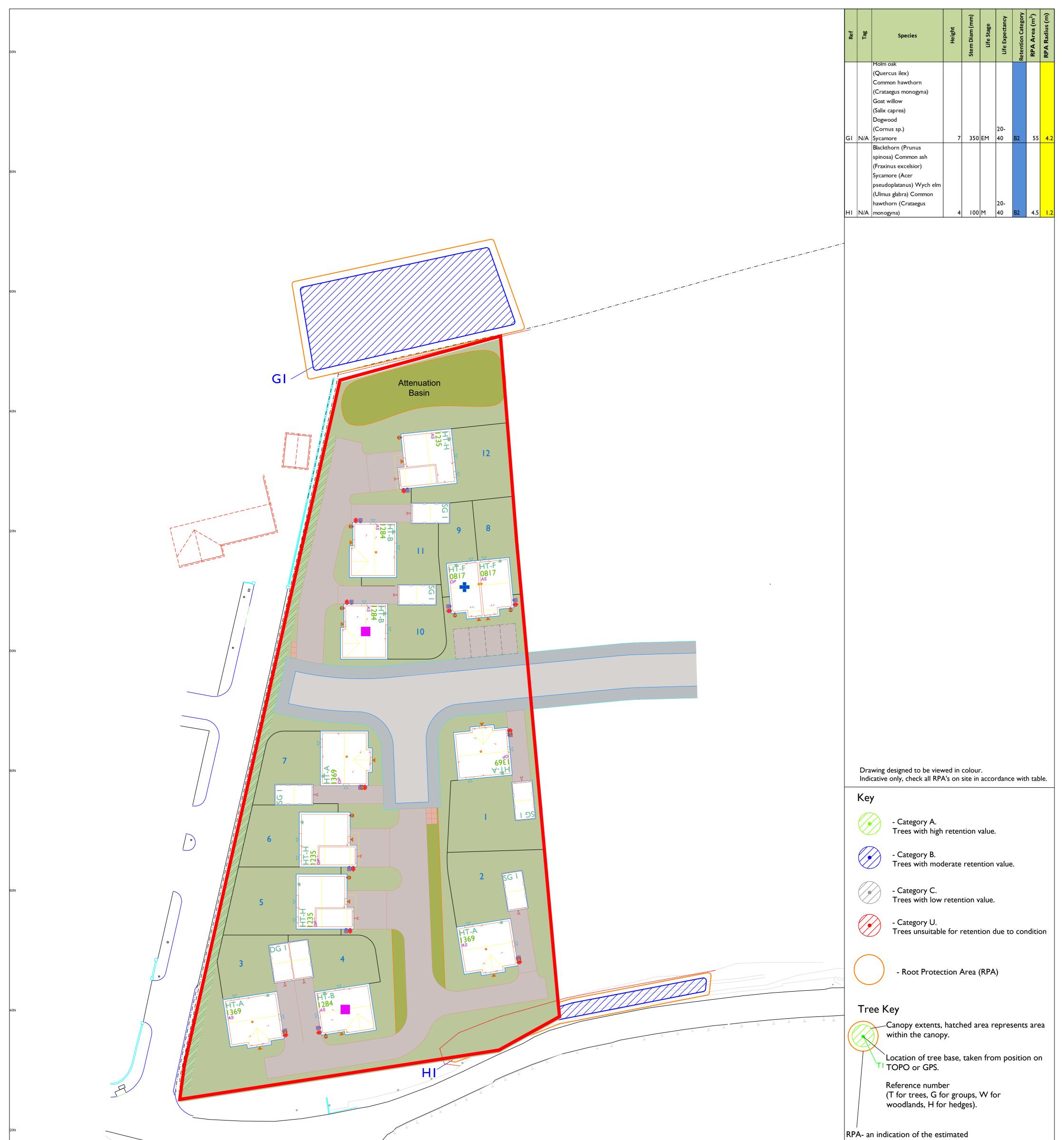
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Photo 2 – GI- Group of trees between site and main road.









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minumum rooting area require the tree.	minumum rooting area required by the tree.										
Calculated in accordance with BS5837.	Calculated in accordance with BS5837.										
Tree Protective Fe	Tree Protective Fence										
Tree Prote	Tree Protection Plan										
Land adjacent	to Brynheulog										
I:300	1:300 at A1										
Client	Obsidian Developments										
Survey Code	24112										
Drawn by	JC										
Surveyed by	JC										
Date	12/07/2024										



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Appendix iii: Cascade Table for the Categorisation of Trees (BS5837)

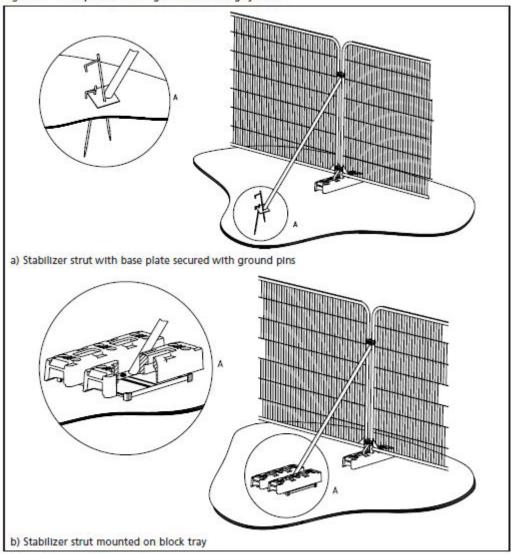
Table 1 – Cascade chart for tree quality assessment

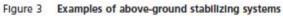
Category and definition		Criteria (including subcategor	ies where appropriate)						
Category and definition Category U Those in such a condition that they cannot realistically be retained as living trees in the context of the current land use for longer than 10 years Category A Those of high quality with an estimated	 Criteria (including subcategories where appropriate) 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 U category trees (i.e. 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 the 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; see 4.5.7 1 Mainly Arboricultural 2 Mainly landscape values 3 Mainly cultural values, including conservation values of their of particular visual conservation; historical, commemorative or other species, especially if rare importance as value (e.g. veteran trees or wood-pasture) 								
remaining life expectancy of at least 40 years	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)	Arboricultural and/or landscape features		BRITISH					
Category B Those of moderate quality with an 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 growing 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 benefits	STANDAR D BS 5837:201 2					
Category C Those of low quality with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150mm	Unremarkable trees of very limited merit or such impaired condition that they do not qualify in higher categories	Trees present in groups or woodlands, but without this conferring on them significantly greater collective landscape value, and/or trees offering low or only temporary/transient landscape benefits	Trees with no material conservation or other cultural value						





Appendix iv: Recommended Configuration for Tree Protective Fencing (BS5837)









Appendix v: Glossary

Aerial Inspection: A close inspection of the aerial part of a tree, either by mobile elevated work platform (MEWP) or by a tree surgeon (climbing inspection). Adaptive Growth; The growth of new wood in response to a stress concentration in the structure of a tree

Adventitious; A shoot which arises from tissue other than a growing shoot apex or bud, for instance in callus associated with a wound.

Anchorage; The holding of the structural root system of a tree with in the soil,.

Architecture; the formation and distribution of a trees branch system.

Arboricultural Impact Assessment: That part of the BS 5837 (2012) procedure that evaluates the tree-related constraints to a development (loss of trees, encroachment into root protection areas etc.).

Arboricultural Method Statement: That part of the BS 5837 (2012) procedure that sets out how site works should be carried out near trees to avoid accidental damage.

Arboriculturalist: A person skilled or knowledgeable in the field of arboriculture. The alternative term 'arboriculturalist' is sometimes used. A Person trained and experienced in the management of trees, and trees in relation to construction.,

Assessment; The process of examining the variables involving a trees condition and location in order to assess the risk posed by an individual tree.

Bole (trunk): The main , vertical stem or trunk of a tree.

Branch: a limb extending from the main stem or parent branch of a tree

Canopy: the combined foliage of a group of trees or a woodland, i.e. the combined area of numerous crowns.

Construction Exclusion Zone; The part of a development site from which all pedestrian and vehicular movements are excluded by protective fencing, typically to ensure the wellbeing of trees, during site works. Usually determined by the RPA of a tree.

Crown: in arboriculture the main foliage-bearing portion of a tree containing the leaves and branches

Defect: Any feature of a tree that is likely to make it less safe (in the case of a structural defect) or otherwise to reduce its health, longevity, landscape prominence or conservation value for any other reason.

Dysfunction: The cessation of physiological function in woody material, especially vascular functions such as water and sap transportation.

Failure: Fracture or deformation in any load bearing part of the tree, compromising stability or causing loss of support for part of, or all of the tree structure,

Group: More than one tree in close proximity that possess sufficient similarity or cohesiveness that they can be treated as a single entity for the purpose of this report.

Heave: deformation of shrinkable clay soil related to the expansion caused by rehydration.

Leader: the dominant, vertical shoot or stem of a tree.

Pruning: The cutting off or cutting back of tree branches or foliage to direct growth, remove an obstructing part, mitigate a nuisance, make safe, remove a diseased part, increase longevity, simulate natural damage, enhance habitat for wildlife etc.

Retained Tree: a tree that has been considered suitable for retention and therefore selected to remain as part of the final site layout.

Risk: the likelihood of a hazard to cause actual harm to people or property,

Root Protection Area (RPA); The area around the base of a tree that contains sufficient root volume to ensure the future well-being of the tree in the event of nearby soil disturbance (as on a development site). It is calculated according to guidelines in BS 5837 (2012).





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Subsidence (branch): Branches, especially if spreading, tend gradually to subside under their own weight, and may eventually reach ground level in large open-grown trees. Rapid subsidence may result in crown separation or congested bark and can lead to branch failure where there is no support within the elastic limit of a given branch.

Subsidence (soil): Broadly, the downward movement of ground and an affected foundation influenced by soil properties, weather, foundation depth and nearby vegetation.

Targets: An element of tree risk: the subject of injury or damage within range of a hazard.

Tree: The definition of 'tree' is a composite of tree species, tree form and tree size. The blue book offers the following: A perennial plant with a self-supporting woody main stem, usually developing woody branches at some distance from the ground and growing to a considerable height and size. This definition has the three main elements in general form. For the purposes of 5837 surveys, only plants with a stem diameter of 75mm or above are considered trees.

Tree Constraint Plan (TCP): Site plan showing the tree-related constraints to development as envisaged in BS 5837 (2012). Common constraints are the loss of trees, encroachment into a tree's root protection area.

Tree Condition Inspection/Survey: A procedure to inspect a tree or trees. Variables used to describe a tree include position (if not already plotted on a topographical survey), species identity, maturity, various dimensions (main stem diameter, height, crown radius etc.), aspects of form, vigour, condition, incidence of pests, diseases, damage and defects, evidence of past management etc. Site factors, position in the landscape and site usage may also be relevant. , usually including its position, species identity, dimensions, age class, condition, conservation value etc. as appropriate, and to identify and evaluate defects. It is also common to make management recommendations (see schedule of works). Tree inspection is a fundamental of tree management and advisory practice in arboriculture.

Tree Preservation Order: (UK) an order made by a local authority or other planning authority to protect a tree, group of trees, area of (scattered) trees or woodland under Part VIII of the Town and Country Planning Act 1990. There have been several amendments, the latest being the Town and Country Planning (Tree Preservation) (England) Regulations 2012. An order is generally made on the grounds of amenity and expediency. Anyone proposing works to a TPO tree must seek prior consent from the authority using the form IAPP. With the advent of the 2012 regulations, some of the detail in existing TPOs in England has been revoked.

Tree Protection Plan: scale drawing prepared by an arboriculturalist showing the final layout proposals, tree retention and tree and landscape protection measures detailed within the arboricultural method statement (AMS), which can be shown graphically.

Trunk: see bole.

Vigour: The health and resilience of a tree (from the Latin 'to be strong'), reflected in the capacity of the whole tree to grow (see growth rate). The term is often used as a description of overall condition on a qualitative scale from 'high' to 'low'.

Visual Tree Assessment (VTA): The standard approach to tree risk assessment consisting of the diagnosis of structural defects and the evaluation of their significance from visible signs and the application of biomechanical criteria. Simple equipment such as a sounding mallet, probe and binoculars are commonly used.

Wind exposure: the degree to which a tree or other object is exposed to wind, with regard both to duration and velocity, often taking into account prevailing wind directions.

Windthrow: the blowing over of a tree at its roots.





References

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- 4. British Standards Institution (2012). Trees in relation to design, demolition and construction : recommendations. London, Eng.: B.S.I.
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Terms and conditions

The Client is the party commissioning and funding the survey. The Consultant is any person(s) employed by Tree Check Arboriculture LTD to carry out any related works, as well as Tree Check Arboriculture LTD as an entity.

Limitations

- 1. This survey reflects the condition of the trees as they were observed on 04/10/2023 The condition of trees can change quickly and if any significant change is observed then a qualified arboriculturist should be consulted regardless of the recommended reinspection period.
- 2. While every attempt has been made to provide accurate recommendations based on the condition of the observed trees, Tree Check Arboriculture Ltd. can accept no liability for damage, injury, or loss of property caused by faults that were not apparent at the time of inspection. These include but are not limited to faults that may only be visible seasonally such as fungal fruiting bodies, or faults that were obscured or inaccessible to the surveyor such as those high up in the crown or obscured by ivy.
- 3. During adverse weather conditions such as storms, otherwise healthy trees can fail. Trees should be visually inspected after any high winds.
- 4. This report cannot predict the reaction of inspected trees to external factors such as extreme climate events, accidents, or vandalism.
- 5. The author(s) can accept no liability for damages if the recommended works are not carried out as per this report in line with BS:3998.
- 6. Operational recommendations (e.g.) climb and dismantle, are for loose guidance only. It remains the responsibility of the assigned contractor to decide on the safest work method. Tree Check Arboriculture LTD. accepts no responsibility for damages occurring during the carrying out of recommended works.
- 7. This report does not cover any underground part of trees, nor does it consider any affect inspected trees may have on shrinkable clay soils since these issues are almost entirely restricted to areas of shrinkable clay soils and soil analysis was not specified in the brief.
- 8. Recommendations made in this report do not override any legislation covering the affected trees. Trees in a conservation area, trees subject to preservation orders and groups of trees requiring felling licenses still require relevant permissions before work can be carried out. Unless otherwise agreed the Tree Check Arboriculture LTD will not be checking for the presence of this legislation or be applying for these permissions. The Client must contact the consultant if they are unsure on this matter.
- 9. Certain areas of the site were inaccessible in the time scale of this survey due to dense vegetation cover. Areas and trees where this has been an issue are described in certain trees and groups in the survey table.
- 10. The findings of this report cannot be relied upon after 12 months from the time of inspection or the recommended reinspection date (if sooner).

Legal Constraints

- 1. The report is for use by the client and any reasonably involved third party advisors only. Rights to reproduce, publish, or broadcast the contents of this reports are reserved.
- 2. It is prohibited to make any amendments or omissions to this report under any circumstances. This report should be provided unaltered and in full to any third-party advisors, contractors or other involved parties to ensure that the hazards highlighted are understood and the necessary remedial works are commissioned. Failure to comply will invalidate the report and Tree Check Arboriculture Ltd. will accept no liability for damages occurring.
- 3. Tree Check Arboriculture LTD retains full title on this, and all subsequent reports until the relevant invoices are settled. Tree Check Arboriculture LTD accepts no liability relating to the contents of reports that have not been fully paid for.
- 4. This report only covers the scope described in the introduction of this report, as discussed with the client, Trees, and methods of inspection not described in the scope were not included, and it is the client's responsibility to bring it to the attention of Tree Check Arboriculture LTD if they feel the scope doesn't fully meet their requirements.
- 5. The consultant is under no obligation to inspect trees in areas that are not freely accessible. It is the client's responsibility to ensure that all relevant areas of site are legally and practically accessible to the consultant.
- 6. In some instances, the consultant may recommend that further professional opinions are sought. For example, structural engineers, geotechnical engineers, drain engineers etc. Tree Check Arboriculture LTD accepts no responsibility for losses occurring from the advice sought from these third parties, nor from damages caused from acting without the consultation of the recommended professionals.
- 7. Tree Check Arboriculture LTD. accepts no responsibility for losses occurring between the time of commissioning and the delivery of a written report. No responsibility is accepted for losses occurring where delays or failure to deliver a report on the agreed date where delays or failures occurred due to circumstances out of the control of Tree Check Arboriculture LTD.
- 8. Each provision of these conditions limiting or excluding liability operates and survives independently of the others



