Chartwell Tree Consultants Ltd
2 Greencroft Cottages, Farley Common,
Westerham, Kent, TN16 1UB
01959 569 280/07789 907 861
sam@chartwelltreeconsultants.co.uk

Arboricultural Report

BS5837 Tree Survey

At

Barham Court Farm
Church Lane
Barham
CT4 6PB

Client
RCG-BCF Limited

By
Sam Bateson

Date
1st November 2021

Arboricultural ASSOCIATION
Technician Member

Site	Barham Court Farm
Inspection Date	07.06.2021
Inspected By	Sam Bateson

Terms of Reference

- I received instructions from Josh Maasbach via email on the 3rd June 2021 to undertake a survey of the trees with regards a proposed development at the above address.

- The tree survey and arboricultural impact assessment are to be produced with relevant measurements in line with British Standard BS5837: 2012 'Trees in Relation to Design, Demolition and Construction' for all the trees affected by the proposed development.

- To make any other observations or recommendations as required based on the survey.

- The tree plans have been overlaid onto the topographical survey and site designs supplied by CDP Architecture Ltd.

Scope of Report

- This preliminary assessment did not include a detailed examination of tree root systems, aerial access, or the use of internal decay detection equipment.

- The inspection was carried out with the aid of the following equipment:

    - Sounding mallet
    - Metal probe
    - 30m measuring tape
    - Rounded down diameter tape (Stem diameter measured at 1.5m)
    - Compass
    - TruPulse 200 Laser Clinometer

- The tree data gathered is for the purposes of a development site survey in accordance with BS5837: 2012 and is **not** a detailed tree safety inspection.

- A tree owner is advised to have all trees in their ownership regularly inspected; trees are to be re-inspected after strong winds.

- The information contained in this report should be considered valid for a period of 12 months from date of issue.

- Estimated measurements have been taken for private or inaccessible trees.

- Shrubs have not been included.

- Only trees potentially affected by the proposed building have been included in this survey.

- If noted during the site survey the presence of a visible Invasive Weed will be highlighted, however this report is in no way considered an Ecological or Invasive Weed survey and CTC does not offer any advice in regards identification, 'Duty of Care' and or treatment and in all such cases a recommendation to seek specialist advice will be given.

- The information contained in this report is provided without prejudice and is based upon the authors knowledge, experience, qualifications and public research. The author cannot be held responsible for the consequences of a difference of opinion for example, from the Local Planning Authority or the Planning Inspectorate.

Third Party Disclaimer

Any disclosure of this report to a third party is subject to this disclaimer. The report was prepared by Chartwell Tree Consultants Ltd at the instruction of, and for the use by, our client named within the report, the architect of the proposed development and the Local Authority Planning Department. This report does not in any way constitute advice to any third party who is able to access it by any means. Chartwell Tree Consultants Ltd excludes to the fullest extent lawfully permitted all liability whatsoever for any loss or damage arising from reliance on the content of this report.

Site Information

- Consists of multiple large farm buildings and areas of hard standing.

- A new access onto Valley Road is proposed.

- The DBH (Diameter measured at 1.5m off the ground) for trees within hedgerows or private properties has been estimated and these trees have not been inspected for defects.

Rooting Zone

- The soil level has remained the same throughout the area so the root flares on all the trees are exposed.

- There is no evidence of any recent root disturbance or radial trenching having recently taken place.

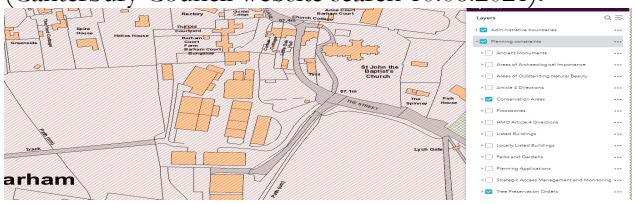
Arboricultural Impact Assessment (AIA)

- **Description of the Proposed Development**

  It is proposed to construct 22 new residential dwellings with associated hard and soft landscaping.

- **Legal Constraints**

  The site is not within a Conservation Area and there are no Tree Preservation Orders (Canterbury Council website search 10.06.2021).



Impact of the Proposed Development on the Amenity Value of the Trees

- **Direct Loss of Trees**

  - I would recommend the removal of the Leylandii Hedges (H1, G2, H3 & H4), Acers (G3, G5, T4, T6 & T7), Ash (T14) and Malus (T9) in order to incorporate the new design and allow for new hard landscaping and as **Category C** trees they should not therefore be considered as a constraint to the development.

  - Five **Category B** trees, Gleditsia (T5), Acers (T8 & T16), Beech (T15 & T17) and the group of Beech (G4) require removal due to their proximity to the proposed development and in order to facilitate the design. These trees have grown in close proximity to each other and have adapted as a group, and therefore it is not recommended to retain single trees due to high risk of failure once others have been removed.

  - Due to the nature of the proposal and the intensity of the build program in my professional opinion it is not feasible or practicable to retain some moderate value individual or grouped trees within the proposed build area. In terms of the removed species characteristics and growth potential their retention would not be in keeping with the overall scale and layout of the proposed development.

  - Their loss is to be mitigated by the planting of new native and non-native trees with an appropriate size and stature (can be subject to a detailed planning condition) that will result in no net loss of canopy cover in the future.

  - The poor physiological and structural condition of the Acer (T10) and Ash (T12 & T13) are such that their removal is recommended on purely arboricultural grounds regardless of whether the development is permitted or not. For the purposes of the survey, these trees have been recorded as **Category U** (BS5837: 2012, Table 1) being in a condition where they cannot be retained as living trees for longer than 10 years. These trees are extremely poor specimens with any remedial works considered unlikely

to produce trees with any degree of longevity. Not required to facilitate the design – recommend owner arrange inspection/removal.

- Container grown, native species should be sourced (Majestic Trees, Hilliers, Barchams for example) so that the rooting system is kept complete which aids establishment. Heavy standard trees with a girth of 12-14cm, 2-3m in height should be sourced as these will offer an immediate visual impact for the site. The above nurseries will offer a delivery, planting and care package service which is advisable.

- It is my opinion that the loss of these trees will not have a significant detrimental impact on visual amenity of the site and the additional planting will improve area greening and biodiversity.

Retained Trees

- Providing that adequate tree protection is implemented, the amenity value of the trees on the site will be preserved. Retained trees will be protected from soil compaction and impact damage where necessary by protective barriers and / or systems and methods of ground protection. Protective barriers will be fit for purpose, complying with BS5837: 2012 unless otherwise agreed with the Local Planning Authority (LPA). Such alternatives may include the use of temporary buildings or existing hard surfaces as part of tree protection or alternative fencing specification for areas of lower risk e.g. areas for future planting.

Above and Below Ground Constraints

- The British Geological Survey Map Sheet 289 (Solid & Drift Edition) indicates the underlying geology to be Lewes Nodular Chalk Formation which is not considered to contain highly shrinkable soils. It is recommended that a geotechnical specialist / structural engineer undertake a detailed soil investigation to determine the actual underlying geology and Plasticity Index which may then inform the foundation design.

- The design of any new planting and landscape proposals should be based upon a soil analysis which considers the pH and any nutrient deficiencies or imbalances.

- The proposed building will result in an <3% incursion into the root protection area of the Sycamore (T3) which is deemed acceptable/negligible and therefore conventional construction methods can be used. The new and replacement hard surfacing will require a low-invasive above ground solution (see below).

- It is my professional opinion that the development will not result in the significant loss of rooting area and will not result in any significant root damage. This is based upon:

    - Precautions (e.g. manual excavation) to ensure that any roots encountered are dealt with appropriately. Roots over 2.5cm diameter are only to severed after consultation with an arboriculturist.

    - Leaf fall in the autumn months can be mitigated by the use of non-slip paving areas and guards/grilles on the gutters and gullies.

    - Shading is not a constraint to the proposal.

- Tree protection fencing and ground protection during the duration of the development.

- New surfacing within the RPA's of the retained trees (shown in GREEN on the draft TPP) is to be installed by hand (existing surface removal etc). New hard surfaces are to be installed with low invasive techniques using hand tools and the utilization of a cellular confinement system as part of the sub-base. This surface must be fit-for-purpose with specialist advice obtained from an engineer to meet the above performance specification. Proprietary products such as 'Cellweb, CORE, Terram etc' are available that can help deliver the performance specification e.g. www.geosyn.co.uk or telephone 0870 850 1018 (Geosynthetics Ltd). **Example Below**

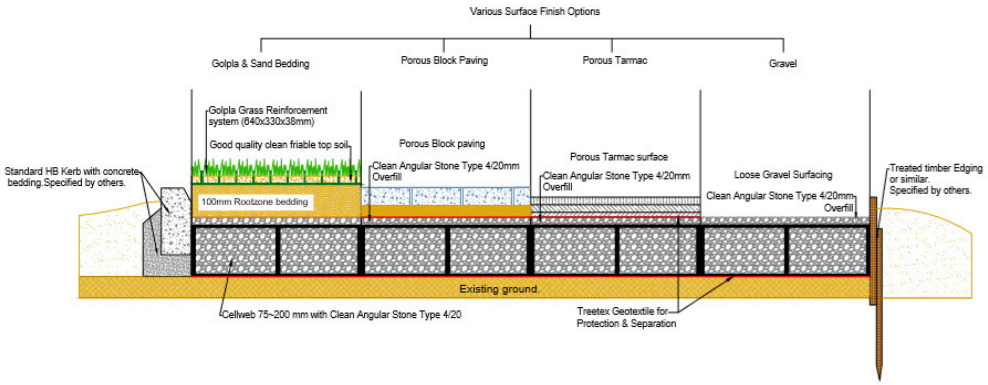


Diagram 2: Example of low-invasive surfacing with alternative surface treatments and no-dig edging

- In order to minimise the impact on the rooting area and tree root function within the RPA's the design of any new surface should adequately consider and allow for the following factors:

    - Allows gaseous exchange (horizontally and vertically)
    - Water permeable while preventing contaminants entering the soil
    - Preserves the soil structure at a suitable bulk density
    - Prevents contaminants entering the rooting area
    - Prevents damage to the roots during demolition or construction
    - Recognises the fact that the majority of roots are found in the top 600mm of soil.

    Practical measures that can achieve this include:

    - No significant changes in ground level
    - No soil capping
    - No excavation / minimal excavation e.g. removal of turf layer or organic material
    - Avoiding soil compaction methods e.g. when constructing a sub base

- Sufficient distances (in accordance with BS5837: 2012 Table A1) should be allowed between young trees / new planting and built structures to minimize the impact of future growth.

- It is important that the foundation design of the new building gives consideration where relevant to the underlying soil type, retained and removed trees (heave potential) and new planting. Further information can be obtained from NHBC Chapter 4.2 'Building Near Trees'.

- As long as the above is followed then the overall rooting environment will not be significantly altered from that already encountered.

Construction of the Proposed Development

- **Ground Level Changes**

  No ground level changes within the RPA's of the trees to be retained without arboriculturist consultation.

- **Planning of Construction Operations**

  The proposed design layout makes allowance for the following:
  - Access for underground utilities without the need to enter any RPA's
  - Location for delivery and storage of materials, welfare facilities and contractors' car parking
  - A moderate intensity, moderate impact build programme.

- **End Use of the Space**

  The proposed layout offers a good degree of space for the intended use of the site.

- **Conclusion**

  The adoption of a detailed Arboricultural Method Statement should ensure there are no adverse effects as the result of any excavations and construction operations.

- **Arboricultural Method Statement (AMS)**

- **Purpose**

  An Arboricultural Method Statement (AMS) will be required where any demolition or construction operations, including access, are proposed within the RPA (or crown spread where this is greater) of any retained trees. This applies to trees within the scope of the proposed development.

  The intention of the method statement is to minimise the risk of any adverse impact on the trees to be retained (especially damage caused by excavation and soil compaction) and to clearly demonstrate how relevant operations will be undertaken. It should also specify appropriate tree and ground protection measures in accordance with BS5837 which will be detailed on a Tree Protection Plan (TPP).

- **Heads of Terms**

  Areas of relevance to the proposed development to be addressed in the detailed Arboricultural Method Statement include:

Pre-development tree works
All works will be carried out in accordance with BS3998: 2010 'Recommendations for Tree Work' and in line with a schedule of works agreed by the Local Planning Authority as part of any approved planning permission.

Tree protective barriers and ground protection measures (specification, location and dimensions)
Protective fencing will be fit for purpose, complying with Figures 2-4 in BS5837:2012 or any other specification agreed in writing with the Local Planning Authority. For example, site huts or temporary buildings may be used as part of the protective barriers (BS5837 section 6.2.2.3). They shall be erected prior to any demolition or construction (excluding pre-development tree works) taking place at distances specified within the approved plans and remain in place until completion of the construction phase. Removal is only to take place following the approval of the Local Planning Authority / Local Authority Tree Officer.

Site access, parking and site facilities
To be in accordance with the plans agreed by the Local Planning Authority and outside of the Root Protection Areas of any retained trees unless appropriate ground protection measures are in place and approved by the LPA.

Works programme / phasing
The phasing and timing of any works likely to impact on the Root Protection Area of any retained trees is to be clearly identified to ensure that adequate protection, precautions and supervision are in place.

Storage of spoil and building materials
No spoil or building materials are to be stored with the Root Protection Areas of any retained tree unless specifically agreed by the Local Planning Authority. Details of the Construction Exclusion Zones can be seen on the Tree Protection Plan.

Demolition of the existing building(s) and removal of hard surfacing
In accordance with detailed method statement to avoid unauthorised incursions into the Root Protection Areas of any retained trees.

Changes to ground levels
Changes to ground levels are only to be made in accordance with the approved plans and where a detailed method statement has been produced to minimise the impact on the rooting systems of the retained trees. Where this necessitates the lowering of existing ground levels then this should only be undertaken with the use of hand tools and care taken not to damage any structural roots. Treatment of any exposed roots is to be in accordance with BS5837:2012.

Details of construction works within the Root Protection Areas
As per 'Changes to ground levels'.

Details of 'Special Engineering' methods
Where relevant, specifications relating to special engineering methods will be included as an annex to the Arboricultural Method Statement.

Location and installation method for drainage and other utilities
The use of overhead utilities is not anticipated for this development. Where possible, existing underground utility runs will be re-used. Where new services runs are required,

these will be routed outside of the Root Protection Area of any retained trees unless specifically agreed by the Local Planning Authority and subject to a detailed method statement.

Upgrade or installation of new hard surfacing within Root Protection Areas

In order to minimise the impact on the rooting area and tree root function the design and construction of a new surface should adequately consider and allow for the following factors:

- Allow gaseous exchange (horizontally and vertically)
- Water permeable
- Preserves the soil structure at a suitable bulk density
- Prevention of contaminants entering the rooting area
- Allows for future growth of the root system
- Prevents damage to the roots during demolition or construction
- Recognises that the majority of roots are found in the top 600mm of soil

New surfaces should be installed with 'low invasive' techniques using hand tools and the utilization of a cellular confinement system as part of the sub-base.

Removal of boundary / retaining walls and installation of new fencing within Root Protection Areas

To be accompanied by a detailed method statement to ensure minimal damage to existing roots.

Site responsibilities and the role of the pre-commencement meeting

Unless otherwise agreed in writing, it will be the responsibility of the Site Manager to ensure that the content of the Arboricultural Method Statement is adhered to. The main contractor and any sub-contractors are to be briefed by the Site Manager on the relevant sections of this prior to commencing any work. The Site Manager is responsible for contacting the LPA at any time issues relating to the trees on site are raised.

Prohibited activities and general precautions

In line with BS5837:2012.

Supervision, reporting and audit process

Day-to-day supervision will be the responsibility of the Site Manager.

Emergency procedures

Clearly defined emergency procedures e.g. for fuel spillages or unauthorised incursions into Construction Exclusion Zones to be prepared and communicated to all site personnel.

TREE SURVEY SCHEDULE

Client: RCG-BCF Limited
Site: Barham Court Farm
Date of Survey: 7th June 2021
Arboricultural Consultant / Surveyor: S Bateson
Weather: Clear
Tagged: No

Notes:
See attached KEY

Tree ID #	Species	Height (m)	Branch spread (m) N	S	E	W	Diameter at breast height (mm)	Root Protection Area Radius (m)	Root Protection Area (m2)	Age class	Physiological Condition	Structural Condition	Preliminary Management Recommendations	Remaining Contribution (Years)	Category Grading
T1	**Acer pseudoplatanus (Sycamore)**	11	3	3	3	3	200,150,150,150	3.94	48.8	Y	Good	No significant defects visible. Unable to inspect stem due to Ivy. Self-sown tree. Multiple stems at ground level.	No works required.	10+	C
G1	**Fraxinus excelsior (Ash),Acer pseudoplatanus (Sycamore)**	11	2	2	2	2	150	1.8	10.2	Y	Good	No significant defects visible. Unable to inspect stem due to Ivy. Self-sown tree. Multiple stems at ground level.	No works required.	10+	C
G2	**X Cupressocyparis leylandii (Leyland Cyp**	8	1.5	1.5	1.5	1.5	200	2.4	18.1	MA	Good	No significant defects visible. Minor deadwood <2.5cm. Co-dominant stems. Previously canopy raised.	Remove.	10+	C
T3	**Acer pseudoplatanus (Sycamore)**	18	9	9	9	9	1,300	15	707.0	M	Good	No significant defects visible. Unable to inspect stem due to Ivy. Suckers around stem base. Minor trunk wounds. Broken branches in crown. Co-dominant stems.	Remove Ivy. Remove ground suckers and re-inspect.	20+	B
T4	**Acer pseudoplatanus (Sycamore)**	15	4	3	4	3	380,250,300	6.54	134.4	MA	Good	No significant defects visible. Unable to inspect stem due to Ivy. Self-sown tree. Multiple stems at ground level. Minor deadwood <2.5cm. Co-dominant stems.	Remove.	10+	C
T5	**Gleditsia triacanthos (Honey Locust)**	9	2	3	5	0	300	3.6	40.7	MA	Good	No significant defects visible. Unable to inspect stem due to Ivy. Unbalanced crown shape.	Remove.	20+	B
T6	**Acer pseudoplatanus (Sycamore)**	15	4	2	2	2	250,200	3.84	46.3	MA	Good	No significant defects visible. Unable to inspect stem due to Ivy. Self-sown tree. Multiple stems at ground level. Minor deadwood <2.5cm. Co-dominant stems.	Remove.	10+	C
T7	**Acer platanoides (Norway Maple)**	15	4	4	2	5	400	4.8	72.4	MA	Good	No significant defects visible. Unable to inspect stem due to Ivy. Multiple stems at ground level. Minor deadwood <2.5cm. Co-dominant stems.	Remove.	10+	C
T8	**Acer platanoides (Norway Maple)**	15	3	6	6	6	350,300,250,250	6.97	152.6	MA	Good	No significant defects visible. Unable to inspect stem due to Ivy. Multiple stems at ground level. Minor deadwood <2.5cm. Co-dominant stems.	Remove.	20+	B
G3	**Acer pseudoplatanus (Sycamore)**	9	2	2	2	2	150	1.8	10.2	Y	Good	No significant defects visible. Unable to inspect stem due to Ivy. Self-sown tree. Multiple stems at ground level.	Remove.	10+	C

TREE SURVEY SCHEDULE

Client: RCG-BCF Limited
Site: Barham Court Farm
Date of Survey: 7th June 2021
Arboricultural Consultant / Surveyor: S Bateson
Weather: Clear
Tagged: No

Notes:
See attached KEY

Tree ID #	Species	Height (m)	Branch spread (m) N	S	E	W	Diameter at breast height (mm)	Root Protection Area Radius (m)	Root Protection Area (m2)	Age class	Physiological Condition	Structural Condition	Preliminary Management Recommendations	Remaining Contribution (Years)	Category Grading
H1	**X Cupressocyparis leylandii (Leyland Cyp**	2.5	1	1	1	1	150	1.8	10.2	Y	Good	No significant defects visible. Previously crown reduced.	Remove.	10+	C
H1.5	**Mixed native hedgerow**	2.5	1	1	1	1	150	1.8	10.2	Y	Good	No significant defects visible. Previously crown reduced.	To be retained. Section close to proposed dwelling - see TPP for location.	20+	B
T9	**Malus (Apple)**	3.5	4.5	3	3	3	200,150,150	3.5	38.5	MA	Good	No significant defects visible. Unable to inspect stem due to Ivy. Raised surface roots. Unbalanced crown shape. Previously crown reduced. Co-dominant stems.	Remove.	10+	C
H2	**X Cupressocyparis leylandii (Leyland Cyp**	4	1	1	1	1	200	2.4	18.1	MA	Good	No significant defects visible. Previously crown reduced.	Maintain as a compact hedge.	10+	C
H2.5	**X Cupressocyparis leylandii (Leyland Cyp**	4	1	1	1	1	200	2.4	18.1	MA	Good	No significant defects visible. Previously crown reduced.	Maintain as a compact hedge.	10+	C
T10	**Acer campestre (Field Maple)**	10	4	4	3	5	350,250,250	5.96	111.6	M	Poor	Unable to inspect stem due to undergrowth. Decay present on stem. Fungal brackets visible on stem. Major bark wounding on stem. Multiple stems above 1.5m. Dieback in crown. Low bud/leaf density. Co-dominant stems. Ganoderma spp. Phellinus spp.	Removal recommended - owner should arrange inspection - not required to facilitate proposal.	<10	U
H3	**X Cupressocyparis leylandii (Leyland Cyp**	9	4	4	4	4	250	3	28.3	M	Fair	Unable to inspect stem due to Ivy. Unable to inspect stem due to undergrowth. Dieback in crown. Broken branches in crown. Moderate deadwood. Previously crown reduced. Co-dominant stems. Portions of hedge have died off to the East. Understorey self-seeded Ash and Elder in places.	Remove.	10+	C

TREE SURVEY SCHEDULE

Client: RCG-BCF Limited
Site: Barham Court Farm
Date of Survey: 7th June 2021
Arboricultural Consultant / Surveyor: S Bateson
Weather: Clear
Tagged: No

Notes:
See attached KEY

Tree ID #	Species	Height (m)	Branch spread (m) N	S	E	W	Diameter at breast height (mm)	Root Protection Area Radius (m)	Root Protection Area (m2)	Age class	Physiological Condition	Structural Condition	Preliminary Management Recommendations	Remaining Contribution (Years)	Category Grading
T11	**Acer campestre (Field Maple)**	13	6	4	5	5	600	7.2	162.9	M	Fair	No significant defects visible. Unable to inspect stem due to undergrowth. Dieback in crown. Moderate deadwood. Co-dominant stems. Nesting holes in crown.	No works required.	20+	B
T12	**Fraxinus excelsior (Ash)**	17	6	7	6	6	750	9	254.5	M	Fair	Epicormics on stem. Dieback in crown. Low bud/leaf density. Moderate deadwood. Ash Die Back (Hymenoscyphus fraxineus).	Removal recommended - owner should arrange inspection - not required to facilitate proposal.	<10	U
T13	**Fraxinus excelsior (Ash)**	15	6	5	6	6	700	8.4	221.7	M	Fair	Cavity on stem. Dieback in crown. Low bud/leaf density. Moderate deadwood. Nesting holes in canopy. Ash Die Back (Hymenoscyphus fraxineus).	Removal recommended - owner should arrange inspection - not required to facilitate proposal.	<10	U
H4	**X Cupressocyparis leylandii (Leyland Cyp,Fraxinus excelsior (Ash)**	9	2	2	1	3	250	3	28.3	M	Good	No significant defects visible. Unable to inspect stem due to Ivy. Unable to inspect stem due to undergrowth. Broken branches in crown. Moderate deadwood. Previously crown reduced. Co-dominant stems.	Remove.	10+	C
G4	**Fagus sylvatica (Beech) x 5**	15	4	4	5	5	400,200	5.36	90.3	M	Good	No significant defects visible. Unable to inspect stem due to Ivy. Multiple stems at ground level. Minor deadwood <2.5cm. Co-dominant stems. Lapsed pollard. Lapsed beech hedging.	Remove.	20+	B
T14	**Fraxinus excelsior (Ash)**	10	3	4	3	3	200,150,150	3.5	38.5	Y	Good	No significant defects visible. Unable to inspect stem due to Ivy. Self-sown tree. Multiple stems at ground level.	Remove.	10+	C
T15	**Fagus sylvatica (Beech)**	6	3	3	3	2	250	3	28.3	MA	Good	No significant defects visible. Unable to inspect stem due to Ivy. Unbalanced crown shape.	Remove.	20+	B
T16	**Acer campestre (Field Maple)**	14	6	6	6	6	350,350,300,250,250	8.14	208.2	M	Good	No significant defects visible. Unable to inspect stem due to Ivy. Minor deadwood <2.5cm. Co-dominant stems.	Remove.	20+	B
T17	**Fagus sylvatica (Beech)**	10	7	2	4	4	350,200	4.84	73.6	MA	Good	No significant defects visible. Unable to inspect stem due to Ivy. Unbalanced crown shape.	Remove.	20+	B
G5	**Acer pseudoplatanus (Sycamore)**	12	4	4	4	4	150,150,150	3.12	30.6	MA	Good	No significant defects visible. Unable to inspect stem due to Ivy. Self-sown tree. Multiple stems at ground level.	Remove.	10+	C

Notes:
Do not scale from this drawing
All dimensions to be checked on site

TREE SURVEY & CONSTRAINTS PLAN

T1 Tree Number

- A Category
- B Category
- C Category
- U Category
- Group Boundary and Category
- Root protection area
- Branch spread
- Shade arc
- Existing property & hard standing footprint

G5-C
T14-C
T15-B
T16-B
T17-B
G1-C
T1-C
G2-C
T3-B
Rooting area for T3 likely to be biased to N, S & E due to existing buildings and hard surfacing to W.
H4-C
G4-B
H1-C
T4-C
T5-B
T7-C
T6-C
T8-B
G3-C
H1.5-B
T9-C
H2-C
H3-C
T11-B
T13-U
T10-U
H2.5-C
Indicative positions shown for G1, G3, H3, H4, G4 & G5

2m 4m 6m 8m 10m 12m 14m
SCALE BAR (Represents on plan 14 metres)

NORTH

A

B

Title	Tree Survey & Constraints Plan
Job	Barham Court Farm - East
Scale	1:250 @ A1
Date	01.11.2021
Drn	SB
Dwg No	001

Chartwell Tree Consultants Ltd
2 Greencroft Cottage
Farley Lane
Westerham
Kent
TN16 1UB

Tel: 01959 569 280
sam@chartwelltreeconsultants.co.uk

Notes:
Do not scale from this drawing
All dimensions to be checked on site

TREE SURVEY & CONSTRAINTS PLAN

T1 Tree Number

- A Category
- B Category
- C Category
- U Category
- Group Boundary and Category
- Root protection area
- Branch spread
- Shade arc
- Existing property & hard standing footprint

2m 4m 6m 8m 10m 12m 14m
SCALE BAR (Represents on plan 14 metres)

H4-C
G4-B
H3-C
H3-C
H3-C
H3-C
T11-B
T13-U
T10-U
T12-U
B
C
C
57.65
56.5
55.150
59.
59.

T11, T12 & T13 plotted by eye as not included on topographical survey

Title	Tree Survey & Constraints Plan
Job	Barham Court Farm - East
Scale	1:250 @ A1
Date	01.11.2021
Drn	SB
Dwg No	001

Chartwell Tree Consultants Ltd
2 Greencroft Cottage
Farley Lane
Westerham
Kent
TN16 1UB

Tel: 01959 569 280
sam@chartwelltreeconsultants.co.uk

Notes:
Do not scale from this drawing
All dimensions to be checked on site

Significant services and drainage installation required within RPA of T14-T17. Unable to retain trees to facilitate.

Recommend fastigiate Hornbeam heavy standard replacement trees for screening.

New planting for unit 18 shown in planting scheme CTC/BAR/PL1.

Rooting area for T3 likely to be biased to N, S & E due to existing buildings and hard-surfacing to W.

Indicative positions shown for G1, G3, H3, H4, G4 & G5

2m 4m 6m 8m 10m 12m 14m
SCALE BAR (Represents on plan 14 metres)

TREE PROTECTION PLAN

- Tree to be retained
- Tree to be removed
- Group to be removed
- Tree protection fencing
- Builders Mesh protection fencing
- CEZ — Construction Exclusion Zone
- Ground protection measures required
- Low-invasive/ Precautionary area. Hand excavation, Cellwebb driveway - AMS recommended
- Indicative replacement tree positions

Title	Draft Tree Protection Plan
Job	Barham Court Farm - East
Scale	1:250 @ A1
Date	01.11.2021
Drn	SB
Dwg No	002

Chartwell Tree Consultants Ltd
2 Greencroft Cottage
Farley Lane
Westerham
Kent
TN16 1UB

Tel: 01959 569 280
sam@chartwelltreeconsultants.co.uk

Recommend t
replacement tr

New planting for unit 18 shown in planting scheme CTC/BAR/PL1.

H4-C

G4-E

H3-C

H3-C

H3-C

H3-C

2m 4m 6m 8m 10m 12m 14m

SCALE BAR (Represents on plan 14 metres)

C

B

C

CEZ

CEZ

CEZ

CEZ

CEZ

T11-B

T12-U

T13-U

T10-U

Site hoarding along access road will form part of tree protection fencing.

T11, T12 & T13 plotted by eye as not included on topographical survey

Notes:
Do not scale from this drawing
All dimensions to be checked on site

TREE PROTECTION PLAN

- Tree to be retained
- Tree to be removed
- Group to be removed
- Tree protection fencing
- Builders Mesh protection fencing
- CEZ — Construction Exclusion Zone
- Ground protection measures required
- Low-invasive/ Precautionary area. Hand excavation, Cellwebb driveway - AMS recommended
- Indicative replacement tree positions

Title	Draft Tree Protection Plan
Job	Barham Court Farm - West
Scale	1:250 @ A1
Date	01.11.2021
Drn	SB
Dwg No	002

Chartwell Tree Consultants Ltd
2 Greencroft Cottage
Farley Lane
Westerham
Kent
TN16 1UB

Tel: 01959 569 280
sam@chartwelltreeconsultants.co.uk

KEY TO SURVEY

T1, T2 etc. = Individual tree identification numbers (not TPO reference numbers)

G1, H1, W1, A1 etc = Grouped trees, hedges, woodland, avenues or shrub areas.

Age Class:

Y = Young (<1/3 life expectancy)

MA = Middle Aged (1/3 – 2/3 life expectancy)

M = Mature (2/3 – full life expectancy)

V = Veteran (High value amenity tree)

Work Priority: (informed by ***risk rating*** based on observed defect(s), probability of failure, severity of impact and targets)

Urgent = <1 Month (unless stated otherwise)

High = <3 Months

Medium = < 6 Months

Low = < 12 Months

Routine = As part of regular grounds maintenance

Other Comments:

- ***NESW*** = North, East, South, West
- ***Physiological Condition*** = based upon the performance of the biological processes of the tree and its overall 'health'. Good = normal vigour, Fair = moderately reduced vigour, Poor = low vigour/decline.
- ***Occluded wound*** = where a wound has been progressively closed by the formation of new wood and bark around it.
- ***Non-occluded wound*** = where a wound has not closed (or is in the process of being closed) by the formation of new wood and bark.
- ***Est.* =** estimated measurement.
- ***Av.*** = average measurement.
- ***Basal* =** in or around the base of the trunk.
- ***Epicormic*** = growth arising from adventitious or dormant buds. In the case of European Lime trees this frequently occurs around the base of the tree.
- ***Deadwood*** = Minor (<25mm), Moderate (25mm-150mm) and Major (>150mm).
- ***Self-set*** = naturally established i.e. not intentionally planted tree.

Survey Range & Limitations:

1. The survey was carried out in the form of a visual assessment from ground level; a rubber mallet and simple probe were used to assess the extent of any decay found. Defects (including potential severity of impact), targets and potential ('likelihood') of failure have been considered and used to inform the risk rating and thereby the recommendations and priorities along with appropriate timescales.
2. Only the trees potentially affected by the proposal have been inspected as per instructions received. It is recommended that the owners of any adjacent trees likely to affect the site have their trees inspected by a qualified and competent arborist.

3. This survey expressly excludes any liability for indirect or direct structural damage that the trees may cause to property including any structural movement, subsidence and heave. Where necessary, the opinion of a structural engineer should be sought e.g. where trees are in close proximity to built structures or have been recommended for removal. With regards drains, the advice of a drainage engineer should be sought.
4. As this is survey is preliminary in nature, should any further investigation be required (e.g. using specialist decay detection equipment) then this will be highlighted in the recommendations.
5. All measurements are estimated and tree locations on the maps are approximate.
6. It should be noted that trees are dynamic, living organisms that are subject to an ever-changing environment and that there is no such thing as a 'safe tree' i.e. "...there can be no absolute guarantee of safety" (Mattheck 'The Body Language of Trees', p. 197) where failure can occur without defect or in excessive weather conditions.
7. The Local Planning Authority (Canterbury Council) must be consulted prior to any works being carried out to establish whether any Tree Preservation Orders (TPO's) or Conservation Areas apply to the site. No works should be carried out until any necessary permissions have been obtained. Trees marked as 'TPO' on any maps are for information purposes only and should not be considered authoritative. It is the responsibility of the land owner to ensure compliance with any restrictive Covenants that may apply to the land/trees that may be applicable.
8. Full consideration must be given to current legislation by anyone proposing to carry out works to trees, particularly with regards to the presence of European Protected Species (including bats). Arboricultural ('tree surgery') contractors should be adequately trained, experienced and carry adequate insurance. All works should be carried out to the current edition of British Standard BS3998 'Recommendations for Tree Work'.
9. The information contained in this report should be considered valid for a period of 1 year from date of issue (unless otherwise specified in the survey) assuming that any recommendations are carried out. Additional inspection is recommended following exposure to extreme weather, significant wounding or damage (e.g. incursion into rooting zones, impacts, new fungal fruiting bodies, etc.) or any other event giving cause for concern.