



BS5837:2012 Tree Survey Report

Proposed Relocation of Wendover Cricket Club to Tring Road, Wendover Site

Tring Road, Wendover, Aylesbury HP22 5PN

9th July 2021

Revision B 7th September 2021

ENVIRONMENTAL AND
SUSTAINABILITY CONSULTANTS

Document Control

Date of first Issue	Revision	Date of Revision	Issued By	Checked by
9 th June 2021	-	-	LB	MJB
	A	30 th July 2021	MJB	LB
	B	7 th September 2021	MJB	LB

Contents

Executive Summary	4
1 Introduction.....	7
2 Limitations & Methodology	8
Third Party Liability	8
Subsistence Risk	8
Survey Methodology	9
3 Project Requirements & Site Overview	11
Site Context	11
Proposed Development	12
4 Baseline Factors.....	12
Tree Preservation Orders (TPO) or Conservation Area (CA) Designation	12
Existing Trees on Site	12
Root Protection Area (RPA)	13
5 Arboricultural Implications Assessment.....	14
6 Tree Protection Method Statement	16
Protective Fencing Prior to Commencement of Work.....	16
Tree Pruning	16
Installation of New Fencing.....	18
Construction of New Surfacing	18
7 Conclusions	19
Appendix A - Schedule of Trees	22
Appendix B - Tree Survey & Constraints Plan	23
Appendix C - Method Statement for Tree Protection	24
Appendix D - Photographic Record.....	30
Appendix E - Tree Preservation Order (TPO) & Conservation Area (CA)	33

Executive Summary

The trees on the application site have been assessed in accordance with BS 5837:2012 "Trees in relation to design, demolition and construction - Recommendations".

This report has been prepared in connection with the full planning application for the relocation of Wendover Cricket Club, Wendover, Aylesbury which will be lost as a result of the HS2 project. This includes the construction one cricket pitch, car parking, access road and a cricket pavilion.

The application site is located off the B4009 Upper Icknield Way/Tring Road, less than 1 mile from the town centre of Wendover. The site is currently arable farmland with a pedestrian footpath and the B4009 on the south eastern boundary and a veterinary centre adjacent to the north eastern edge of the site.

The site comes under the planning jurisdiction of Buckinghamshire Council and an online search for protected trees for Aylesbury www.aylesburyvalcdc.gov.uk/protected-tree-search confirms there are no Tree Preservation Orders ('TPOs') or Conservation Area (CA) constraints affecting the trees.

The survey includes 7 individual trees and 5 groups of trees. All trees are located within the site boundary, with the exception of a row of poor conifers (G5) which are within the application land. The survey contains a mix of species including, Ash, Hawthorn, Sycamore, Lime, Willow and other native trees and shrubs.

The vast majority of trees included in the survey are trees of moderate quality, with 4 of the 5 groups categorised as B2, i.e. trees that are present in numbers such that they collect a higher rating than they might as individuals. All individual trees are

also categorised as B2 with one group (G5) categorised as C2, i.e. trees of lower quality.

There are no category U which are dead, dying or with serious defects with no long-term merit for retention and no category A1 trees; high quality of particular arboricultural importance, on site.

Of the 7 individual trees and 5 groups surveyed, 1 tree from G1 will require removal to facilitate construction of the development. The new access road is close to the trunks of the other trees in the group and will require protection using a “no-dig” cellular confinement system to protect the tree roots when constructing the new bellmouth access.

The layout of the car park on the whole does not encroach into the RPA of any of the trees to be retained, with the exception of T3 which has 2 car parking spaces encroaching approximately 2m into the root protection area which is detrimental to the survival of the tree. It is recommended that the layout is amended to move the spaces outside of the RPA. If not, then a “no-dig” cellular confinement system should be used to protect the tree roots when constructing the car parking spaces.

Recommendations have been made within the report to safeguard the trees surrounding the application site which are to be retained and protected from any damage due to construction work including specification for the installation of new fencing and the erection of protective fencing around them to separate from the construction activities.

There are opportunities to include new trees around the cricket field and recommendations for locations and specification has been provided.

As long as the recommendations within this report are fully adhered to, the impact of the development will have negligible impact to the visual amenity of the locality and the tree population.

1 Introduction

1.1 This tree survey report has been prepared for the applicant Wendover Cricket Club in respect of the full planning application for the relocation of Wendover Cricket Club, Wendover, Aylesbury which will be lost as a result of the HS2 project in order to:

- Assess the quality of the Trees in proximity to the proposed building work;
- Investigate any legal protection of the trees;
- Provide an Arboricultural Assessment with regard to the proposals; and
- Recommend measures which will suitably protect the trees during the construction process

1.2 The survey report is to inform the planning application which is to be submitted by the client.

1.3 In accordance with recommended best practice, the Arboricultural information is provided within this report in accordance with BS5837:2012.

1.4 The report is based on the following drawings which have been supplied by the client's agent:

- Topographical Survey, reference RGL-16-2515-01 by RGL Surveys Ltd dated November 2016
- Proposed Layout, reference 21045-01 by Agripower Ltd, dated 22 June 2021

2 Limitations & Methodology

- 2.1 The survey is concerned with the arboricultural aspects of the site only. The trees, on site have been surveyed and classified in accordance with BS 5837:2012 "Trees in relation to design, demolition and construction - Recommendations".
- 2.2 The survey was undertaken using the Visual Tree Assessment (VTA) methodology to conduct a preliminary assessment of the above ground portion of the tree.
- 2.3 Trees are large dynamic organisms whose health and condition can change rapidly, therefore due to their changing nature and other site considerations, this report and any recommendations made are valid for a 12 month period following the site survey which was conducted on 10th June 2021. After a period of 5 years, the information in this survey should not be relied upon.

Third Party Liability

- 2.4 The limit of Encon Associates Limited indemnity over any matter arising out of this report extends only to the instructing client. Encon Associates Limited cannot be held liable for any third party claim that arises following this report.

Subsistence Risk

- 2.5 This report is primarily concerned with the condition of existing trees and the application of current guidance for their retention. Any discussion of soil characteristics is only presented where this may have a direct effect on tree growth. This report does not seek to address the specific area of subsidence risk assessment or damage to buildings or structures.

Survey Methodology

- 2.6 The survey was undertaken from ground level with the aid of binoculars where necessary.
- 2.7 No aerial inspection nor invasive probing or drilling has been undertaken. No excavations were carried out nor soil or root samples taken.
- 2.8 The height of each subject tree was measured on site using an electronic Disto measuring device.
- 2.9 The canopy spread of each subject tree was measured on four compass points using measuring tape.
- 2.10 The locations of the trees have been taken from the topographical survey provided. We cannot guarantee the absolute accuracy of tree locations; however, the positions are believed to be accurately represented based on the GPS locations used by the surveyor. Encon Associates cannot be held responsible for any discrepancy in the position of the trees.
- 2.11 The information contained within the “Schedule of Trees” includes the following for each surveyed tree:
- 1 **Tree reference number** - cross referenced with the Tree Survey Plan A3618-01 and Tree Constraints Plan A3618-02.
 - 2 **Species** - have been given their common and botanical name where specifically known
 - 3 **Height** - measured on site using an electronic Disto measuring device
 - 4 **Stem diameter** - have been calculated by measuring the circumference at a height of 1.5m from ground level to determine the diameter

- 5 **Branch spread** - the circles indicated on the tree survey plan are a representation of the overall spread of the crown in each compass direction
- 6 **Height of crown clearance** - given in metres above adjacent ground level
- 7 **Age class** - young (YNG) up to 10 years, semi-mature (SM) 1/3 life expectancy, early mature (EM) 2/3 life expectancy, mature (M) over 2/3 life expectancy, over mature (OM) declining/moribund, veteran (V) exceptionally old tree towards the end of its life, (D) dead
- 8 **Condition & Comments** - good (G) sound tree needing little or no attention, fair (F) minor but rectifiable defects, poor (P) major structural and/or physiological defects that would be inappropriate to retain and/or expensive, dead (D) no longer alive or those dying and unlikely to recover. General observations on 'physiological/structural condition' and 'preliminary management' is also provided
- 9 **Estimated remaining contribution** - in years e.g. <10, 10+, 20+ and 40+
- 10 **Category grading** - have been given a grade to classify the quality of each tree based on the Condition Classes and subcategories given overleaf
- 11 **RPA** - Protective measures as per BS 5837 section 4.6 which states that an area based on a radius equal to 12 times the stem diameter should be protected against damage to roots known as the "Root Protection Area" (RPA) given in m². A radius has also been given shown around each tree on the drawing.

2.12 Category grading for the assessment of tree quality (in accordance with Table 1 "Cascade chart for tree quality assessment" within BS 5837:2012) is described below:

U Trees unsuitable for retention - Those in such a condition that they cannot be realistically be retained as living trees in the context of the current land use for longer than 10 years

A Trees of high quality - With an estimated remaining life expectancy of at least 40 years

B Trees of moderate quality - With an estimated remaining life expectancy of at least 20 years

C Trees of low quality - with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150mm

2.13 Subcategories grading for the assessment of tree quality (in accordance with Table 1 "Cascade chart for tree quality assessment" within BS 5837:2012) is described below:

1 Mainly arboricultural qualities - Trees that are a particularly good example of their species, especially if rare or unusual

2 Mainly landscape qualities - Trees, groups or woodlands of particular visual as arboricultural and/or landscape features

3 Mainly cultural values, including conservation - Trees, groups or woodlands of significant conservation, historical, commemorative or other value eg veteran trees or wood-pasture

For full description of subcategories, refer to Table 1, page 9 of the BS 5837:2012 document.

3 Project Requirements & Site Overview

Site Context

3.1 The application site is located off the B4009 Upper Icknield Way/Tring Road, less than 1 mile from the town centre of Wendover. The site is currently arable farmland with a pedestrian footpath and the B4009 on the south eastern boundary and a veterinary centre adjacent to the north eastern edge of the site.

Proposed Development

- 3.2 The full planning application is for the relocation of Wendover Cricket Club, Wendover, Aylesbury which will be lost as a result of the HS2 project. This includes the construction of one cricket pitch, car parking, access road and a cricket pavilion.

4 Baseline Factors

Tree Preservation Orders (TPO) or Conservation Area (CA) Designation

- 4.1 The site comes under the planning jurisdiction of Buckinghamshire Council and an online search for protected trees for Aylsbesbury www.aylesburyvaldc.gov.uk/protected-tree-search confirms there are no Tree Preservation Orders ('TPOs') or Conservation Area (CA) constraints affecting the trees.

Existing Trees on Site

- 4.2 The survey includes 7 individual trees and 5 groups of trees. All trees are located within the site boundary, with the exception of a row of poor conifers (G5) which are within the application land. The survey contains a mix of species including, Ash, Hawthorn, Sycamore, Lime, Willow and other native trees and shrubs.
- 4.3 The vast majority of trees included in the survey are trees of moderate quality, with 4 of the 5 groups categorised as B2, i.e. trees that are present in numbers such that they collect a higher rating than they might as individuals. All individual trees are also categorised as B2 with one group (G5) categorised as C2, i.e. trees of lower quality.

- 4.4 There are no category U which are dead, dying or with serious defects with no long-term merit for retention and no category A1 trees; high quality of particular arboricultural importance, on site.
- 4.5 Details of the locations and Root Protection Areas (RPA) are provided on the Tree Constraints Plan (TCP) appended to this report.
- 4.6 A schedule of trees and their condition including their category grading and RPA radius is attached in Appendix B.

Root Protection Area (RPA)

- 4.7 The Root Protection Area (RPA) of a tree is defined in BS5837 as the area surrounding the trunk that contains sufficient rooting volume to ensure the survival of the tree and is calculated as an area based on the stem diameter of the tree.
- 4.8 The RPA's have been calculated in accordance with BS5837 and are detailed in the Tree Schedule located in Appendix A of this report. Where ground constraints have, or are likely to have, had an effect on tree root development, for example, where level changes or changes in rooting medium eg heavily compacted ground, areas of hard standing etc, have influenced tree root growth, the RPA is unlikely to follow an exact circle and will probably be more elliptical in shape.
- 4.9 Detailed analysis of the ground conditions has not been carried out, however a visual assessment concluded that all trees are growing unrestricted in areas within and around the perimeter of the site. Some are close to the main road and footpath which is likely to have influenced the formation of roots.

4.10 Tree root systems are typically concentrated within the uppermost 600mm of the soil, although it may be deeper within the dense mass of roots and soil closer to the base of the tree. The development of the root system is influenced by the availability of water, nutrients, oxygen and soil penetrability ie how compacted the ground is and therefore the root spread does not generally show the symmetry seen in the branch system. The roots of the trees are likely to have been influenced by their proximity to adjacent structures/ hardstanding, and/or changes in level.

5 Arboricultural Implications Assessment

5.1 This section considers the implications that the proposed development may have upon the existing trees adjacent to the site and provide advice on solutions to any issues to ensure the trees are safeguarded.

5.2 Of the 7 individual trees and 5 groups surveyed, 1 tree from G1 will require removal to facilitate construction of the development. The new access road is close to the trunks of the other trees in the group and will require protection using a “no-dig” cellular confinement system to protect the tree roots when constructing the new bellmouth access.

5.3 The layout of the car park on the whole does not encroach into the RPA of any of the trees to be retained, with the exception of T3 which has 2 car parking spaces encroaching approximately 2m into the root protection area which is detrimental to the survival of the tree. It is recommended that the layout is amended to move the spaces outside of the RPA. If not, then a “no-dig”

cellular confinement system should be used to protect the tree roots when constructing the car parking spaces.

- 5.4 As the trees are not covered by a TPO or located within a conservation area no application is required to carry out tree works and there is no legal impediment to them being removed by the landowner. However, as a number of trees are located outside the ownership of the applicant, measures must be taken to ensure they are not detrimentally impacted upon. Permission must also be sought from the landowner before any pruning works can be carried out.
- 5.5 Prior to the removal of any trees, the contractor and/or tree surgeon appointed to carry out the works must ensure the trees are within the applicants' ownership and any necessary regulations and/or licences in accordance with BS5837 are complied with and in place.

New tree planting and landscaping

- 5.6 There are opportunities to include new trees around the cricket field and recommendations for locations are shown on the Tree Protection Plan in the appendices and the following specification is suggested:
- 4.5m high, 16-18 cm girth Extra Heavy Standard root balled trees (supplied by Majestic Trees or similar approved) to be pit planted including timber stake and rubber spacer to secure the tree in an upright position.

6 Tree Protection Method Statement

Protective Fencing Prior to Commencement of Work

6.1 The existing trees close to the application boundary which are to be retained should be protected from damage during construction operations by fencing them off from machinery circulation routes and material storage areas. The distance from the trees to the construction activity is such that damage could occur and therefore construction vehicles should be prevented from unwittingly travelling too close to the trees and causing damage to overhanging branches or compaction of the root zone. Protective fencing as detailed in Appendix D of this report should be erected in front of the line of trees as shown on the Tree Constraints Drawing.

Tree Pruning

6.2 In general, the proposals are a reasonable distance from the majority of existing trees. However, some trees may require pruning to provide the working and access space needed for the construction of the proposed development and therefore “access facilitation pruning” should be carried out to any trees in closer proximity to the works to prevent injurious contact between construction plant and the tree canopy as identified in 5.3. A one-off tree pruning operation, which is directly necessary to provide access for operations on site, is acceptable in accordance with BS5837 as long as “the nature and effects of the pruning are without significant adverse impact on the tree physiology or amenity value”.

6.3 As the trees are not covered by a TPO or located within a conservation area no application is required to carry out work to them, however the trees must be

within the applicant's ownership in order to carry out any pruning works. For trees not within ownership of the applicant, permission from the landowner must be sought prior to undertaking any works.

6.4 Any proposed tree works should be undertaken prior to the commencement of construction activities. Trees on site which are identified to have their crowns lifted and/or formative pruning must be carried in accordance with BS3998 British Standard Tree Work - Recommendations 2010 by a competent tree surgeon to the following specification:

- Where practicable, pruning should be restricted to healthy, small diameter parts of the tree to minimise the size of resultant wounds and enable these to be occluded.
- Crownlift to achieve a clearance of at least 4m above ground level to include complete removal of the lowest primary branches and thereafter secondary and tertiary branches (not exceeding 50mm diameter cuts). When pruning branches back to the main stem or fork, the branch will be removed in small sections using the step cut method leaving a small stub before carrying out the final cut.
- Formative pruning to branches 20mm and less in diameter to be pruned cleanly back to its point of origin, avoiding damaging the bark of the tree and ensuring the canopy maintains a natural shape. Growth greater than 20mm is to be cut back to avoid damage to the branch bark ridge and collar if applicable. All pruning carried out using a sharp handsaw or secateurs. On no account will a chainsaw be used in this operation. All shoots will be removed back to, but not into the branch collar leaving no projections or exaggerating the size of the wound.

Installation of New Fencing

6.5 To ensure the existing trees are not damaged during the installation of any new boundary and security fencing, the following procedures are to be strictly adhered to:

- The dashed line around each tree indicates the Root Protection Area (RPA) as calculated within the Tree Survey Report and shown on the Tree Constraints plan.
- Prior to commencing any work on site, Heras type fencing is to be installed as per the detail appended to this report and in the position indicated on the Tree Constraints Plan
- No excavations using machinery is permitted
- Holes for fence posts are to be carefully dug by hand avoiding damage any roots which may be encountered
- No storage of materials or mixing of cement is to take place within RPA around each tree and should be done well away from the trees
- No machinery or vehicles to travel within the RPA around each tree
- Holes excavated for fence posts to be lined with polythene prior to pouring concrete to prevent cement coming into contact with any tree roots which may be present
- Extreme care to be taken when installing fence posts and panels to prevent damage to trunk or branches of the trees

Construction of New Surfacing

6.6 BS5837:2012 contains Design Recommendations (7.4.2) where hard surfacing is proposed within the RPA of existing trees.

6.7 The layout of the car park on the whole does not encroach into the RPA of any of the trees to be retained, with the exception of T3 which has 2 car parking spaces encroaching approximately 2m into the root protection area which is detrimental to the survival of the tree. It is recommended that the layout is amended to move the spaces outside of the RPA. If not, then a “no-dig” cellular confinement system should be used to protect the tree roots when constructing the car parking spaces.

7 Conclusions

7.1 The trees on the application site have been assessed in accordance with BS 5837:2012 "Trees in relation to design, demolition and construction - Recommendations".

- The site comes under the planning jurisdiction of Buckinghamshire Council and an online search for protected trees for Aylesbury www.aylesburyvaldc.gov.uk/protected-tree-search confirms there are no Tree Preservation Orders ('TPOs') or Conservation Area (CA) constraints affecting the trees.
- The survey includes 7 individual trees and 5 groups of trees. All trees are located within the site boundary, with the exception of a row of poor conifers (G5) which are within the application land. The survey contains a mix of species including, Ash, Hawthorn, Sycamore, Lime, Willow and other native trees and shrubs.
- The vast majority of trees included in the survey are trees of moderate quality, with 4 of the 5 groups categorised as B2, i.e. trees that are present in numbers such that they collect a higher rating than they might

as individuals. All individual trees are also categorised as B2 with one group (G5) categorised as C2, i.e. trees of lower quality.

- There are no category U which are dead, dying or with serious defects with no long-term merit for retention and no category A1 trees; high quality of particular arboricultural importance, on site.
- Of the 7 individual trees and 5 groups surveyed, 1 tree from G1 will require removal to facilitate construction of the development. The new access road is close to the trunks of the other trees in the group and will require protection using a “no-dig” cellular confinement system to protect the tree roots when constructing the new bellmouth access.
- The layout of the car park on the whole does not encroach into the RPA of any of the trees to be retained, with the exception of T3 which has 2 car parking spaces encroaching approximately 2m into the root protection area which is detrimental to the survival of the tree. It is recommended that the layout is amended to move the spaces outside of the RPA. If not, then a “no-dig” cellular confinement system should be used to protect the tree roots when constructing the car parking spaces.
- Recommendations have been made within the report to safeguard the trees surrounding the application site which are to be retained and protected from any damage due to construction work including specification for the installation of new fencing and the erection of protective fencing around them to separate from the construction activities.
- There are opportunities to include new trees around the cricket field and recommendations for locations and specification has been provided.

7.2 As long as the recommendations within this report are fully adhered to and replacement tree planting is included within the application boundary for the proposed new development, the impact of the development will have minimal impact to the visual amenity of the locality and tree population.

Appendix A - Schedule of Trees

Site: Wendover

Date: 10th June 2021

Weather: Overcast

Ref	Species	Height (m)	Stem Diameter (mm)	Branch spread (m)				Height crown clearance (m)	Age class	Condition & Comments	Years left	Category grading	RPA (m ²)	RPA radius
				N	E	S	W							
G1	Mixed deciduous	10-13	200-500	5.0	5.0	5.0	5.0	1	M	Good. Ash, Pear, Plum.	20+	B2	55	4.20
G2	Mixed Deciduous	10-14	200-900	6.0	6.0	6.0	6.0	1	M	Good. Hawthorn, Sycamore, large leaved Lime.	20+	B2	137	6.60
G3	Sycamore (Acer pseudoplatanus)	16	Multi-stem	7.0	7.0	7.0	7.0	1	M	Good. Several multi stems 250mm.	20+	B2	141	6.71
T1	Larged leaf Lime (Tilia cordata)	12	350	5.0	5.0	5.0	5.0	1.5	M	Good.	20+	B2	55	4.20
G4	Sycamore (Acer pseudoplatanus)	12	Multi-stem	3.0	3.0	3.0	3.0	2	M	Good. Multi stems 100-250.	20+	B2	66	4.57
T2	Larged leaf Lime (Tilia cordata)	16	1000	7.0	7.0	7.0	7.0	2	M	Good. Located in grass verge adjacent road.	20+	B2	452	12.00
G5	Conifer Hedge	7	300	2.0	2.0	2.0	2.0	0	M	Poor. Chamaecyparis with Ivy. Dead/leafless at the base.	<20	C2	41	3.60
T3	Sycamore (Acer pseudoplatanus)	10	400	5.0	5.0	5.0	5.0	0	M	Good. Located off site adjacent to timber post and rail fence.	20+	B2	72	4.80

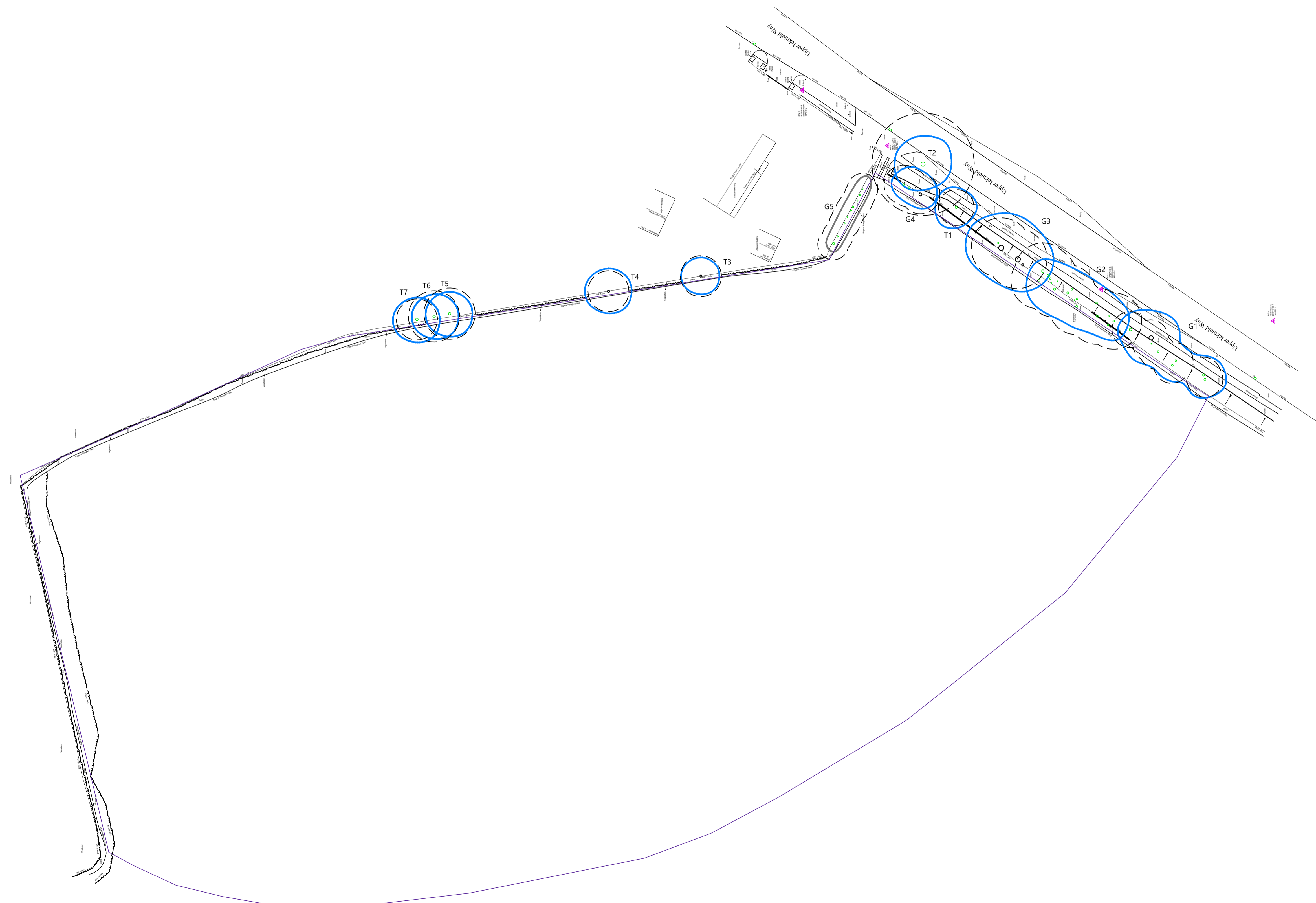
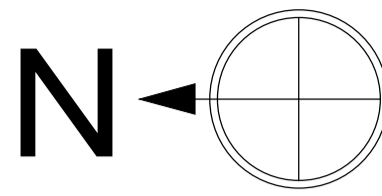
Site: Wendover

Date: 10th June 2021

Weather: Overcast

Ref	Species	Height (m)	Stem Diameter (mm)	Branch spread (m)				Height crown clearance (m)	Age class	Condition & Comments	Years left	Category grading	RPA (m ²)	RPA radius
				N	E	S	W							
T4	Sycamore (Acer pseudoplatanus)	10	400	5.0	5.0	5.0	5.0	0	M	Good. Located off site adjacent to timber post and rail fence.	20+	B2	72	4.80
T5	Sycamore (Acer pseudoplatanus)	12	500	6.0	6.0	6.0	6.0	3	M	Good. Located off site adjacent to timber post and rail fence.	20+	B2	113	6.00
T6	Grey Willow (Salix cinerea)	10	500	6.0	6.0	6.0	6.0	2.5	M	Good. Located off site adjacent to timber post and rail fence. Fence rail between fork in trunk.	20+	B2	113	6.00
T7	Crab Apple (Malus sylvestris)	10	400	5.0	5.0	5.0	5.0	3	M	Good. Located off site adjacent to timber post and rail fence.	20+	B2	72	4.80

Appendix B - Tree Survey & Constraints Plan



© Encon Associates - DISCLAIMER:

This drawing is copyright and shall not be reproduced nor used for any other purpose without the written permission of Encon Associates. This drawing must be read in conjunction with all other related drawings and documentation. It is the contractor's responsibility to ensure full compliance with the relevant regulations. Limited technical approval has been obtained from the relevant Authorities. It should be understood that all drawings issued are PRELIMINARY and NOT for Construction. Should the contractor start site work prior to approval being given, it is entirely at his own risk. Do not scale from this drawing, use figured dimensions only. It is the contractor's responsibility to check and verify all dimensions on site. Any discrepancies to be reported to Encon Associates immediately. All survey information is provided by the surveying company and Encon Associates cannot accept any liability for any discrepancies there in. All survey information to be verified on site by Contractor. For our Standard Terms and Conditions, please visit www.enconassociates.co.uk/terms. Alternatively, a hard copy can be posted to you.

Notes:

Key to Tree Survey Plan

The RPA (Root Protection Area) is the zone in which the root system is believed to be concentrated, has been calculated for each tree within the site boundary. The results can be found with the Tree Report.

This drawing is based on:

- Topographical Survey, reference RGL-16-2515-01 by RGL Surveys Ltd dated November 2016
- Site Plan New Clubhouse, reference SC - WEND - ADD EQUIV by Sports Clubhouses Ltd, dated May 2021
- Site visit by Encon Associates, 10.06.2021

	Class A
	Class B
	Class C
	Class U
	RPA shown as a dashed circle around each tree

Rev	Date	Description	Drawn	Checked
-----	------	-------------	-------	---------

Client
Wendover Cricket Club

Project
**New Pavilion & Cricket Field
Land West of Tring Road
Wendover**

Title
Tree Survey Plan

Drawing Status
FOR PLANNING APPROVAL

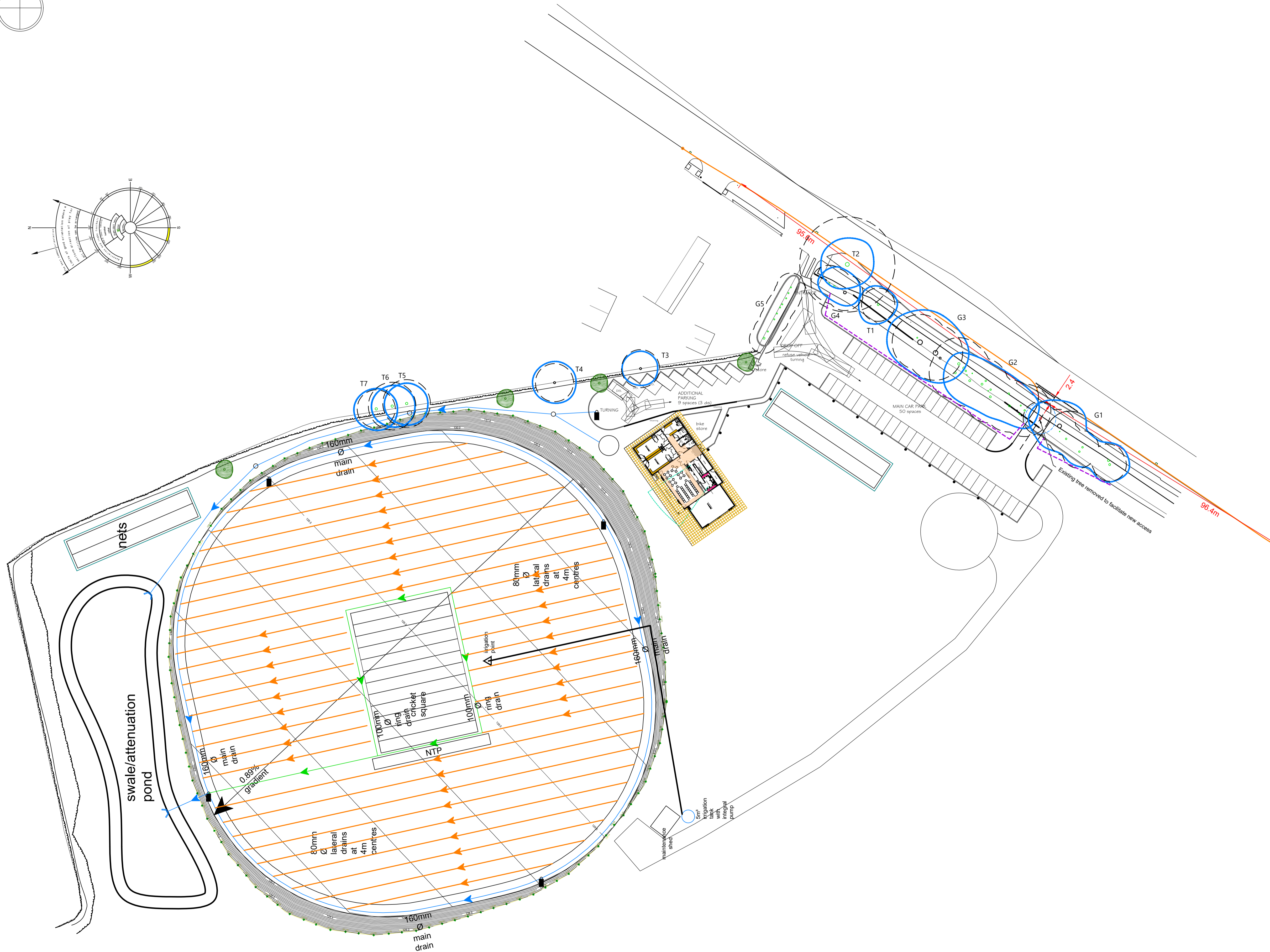
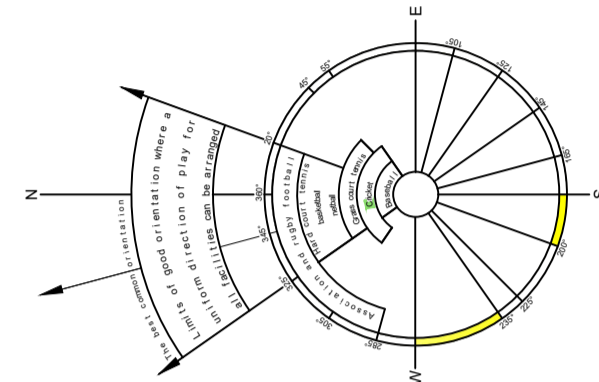
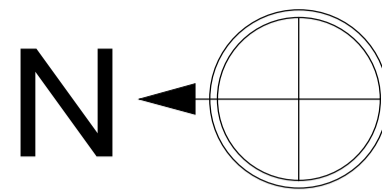
Drawn	MJB	Checked	GM
-------	------------	---------	-----------

Date	09.07.21	Scale (A1)	1:500
------	-----------------	------------	--------------

encon
associates
10 Chapel Lane
Arnold
Nottingham
NG5 7DR
T: 0115 987 55 99 E: enquiries@enconassociates.co.uk W: www.enconassociates.co.uk

Environmental Consultants to the Construction Industry
- BREEM - Code for Sustainable Homes Assessors - Landscape Architecture - Transportation
- Life Cycle Costing - Energy Assessment - SAP - EPC - SBEM - Daylight Calculations

Job Number	Drawing Number	Rev
A3618	01	



© Encon Associates - DISCLAIMER:

This drawing is copyright and shall not be reproduced nor used for any other purpose without the written permission of Encon Associates. This drawing must be read in conjunction with all other related drawings and documentation. It is the contractor's responsibility to ensure full compliance with the relevant regulations. Limited technical approval has been obtained from the relevant Authorities. It should be understood that all drawings issued are PRELIMINARY and NOT for Construction. Should the contractor start site work prior to approval being given, it is entirely at his own risk. Do not scale from this drawing, use figured dimensions only. It is the contractor's responsibility to check and verify all dimensions on site. Any discrepancies to be reported to Encon Associates immediately. All survey information is provided by the surveying company and Encon Associates cannot accept any liability for any discrepancies there in. All survey information to be verified on site by Contractor. For our Standard Terms and Conditions, please visit www.enconassociates.co.uk/terms. Alternatively, a hard copy can be posted to you.

Notes:

Key to Tree Survey Plan

The RPA (Root Protection Area) is the zone in which the root system is believed to be concentrated, has been calculated for each tree within the site boundary. The results can be found with the Tree Report.

- This drawing is based on:
- Topographical Survey, reference RGL-16-2515-01 by RGL Surveys Ltd dated November 2016
 - Site Plan New Clubhouse, reference SC - WEND - ADD EQUIV by Sports Clubhouses Ltd, dated May 2021
 - Site visit by Encon Associates, 10.06.2021

- Class A**
- Class B**
- Class C**
- Class U**
- RPA shown as a dashed circle around each tree**
- Trees to be removed**
- Location of protective fencing**
- Recommended new trees**

A 10.08.21 Revised in line with latest layout MJB LB

Rev	Date	Description	Drawn	Checked

Client
Wendover Cricket Club

Project
**New Pavilion & Cricket Field
Land West of Tring Road
Wendover**

Title
Tree Protection Plan

Drawing Status
FOR PLANNING APPROVAL

Drawn	MJB	Checked	GM
-------	-----	---------	----

Date	09.07.21	Scale (A1)	1:500
------	----------	------------	-------

encon associates
10 Chapel Lane
Arnold
Nottingham
NG5 7DR
T: 0115 987 55 99 E: enquiries@enconassociates.co.uk W: www.enconassociates.co.uk

Environmental Consultants to the Construction Industry
- BREEM - Code for Sustainable Homes Assessors - Landscape Architecture - Transportation
- Life Cycle Costing - Energy Assessment - SAP - EPC - SBEM - Daylight Calculations

Job Number	Drawing Number	Rev
A3618	02	A

Appendix C - Method Statement for Tree Protection

The following Arboricultural Method Statement should be followed by the contractor:

1.1 Root Protection Area (RPA)

The RPA required by the current edition of BS 5837:2012 relates to the stem diameter of each tree when measured at a height of 1.5m from ground level, adjusted where necessary to account for actual rooting patterns on site. The RPAs are to be afforded protection at all times and will be protected by fencing barriers. No works will be undertaken within any RPA that causes compaction to the soil or severance of tree roots.

2.0 Protective Fencing

A protective fence should be erected prior to the commencement of any site works e.g. before any materials or machinery are brought on site, any construction work starts or any stripping of soil commences. The barrier needs to have signs attached stating that this is a Tree Protection Area and that no works are permitted within the barrier. The barrier may only be removed following completion of all construction works.

2.1 The fence is required to be sited in accordance with the TCP. The fence must ideally be constructed as per figure 2 in BS 5837:2012 (see detail at the end of this section) and be fit for the purpose of excluding any construction activity. The construction on site should be excluded from the RPA with 'Heras' type Fencing construction, along with a formal briefing of any work person by the site manager with regards to the contents of this method statement.

3.0 Precautions in respect of Temporary Works

If temporary access is required to an RPA then access may only be gained after consultation with the Local Planning Authority and following placement of materials such as geo-textile fabrics that will spread the weight of any vehicular load and prevent compaction to the soil. For pedestrian movements within any RPA then a single thickness scaffold board on top of a compressible layer laid onto a geotextile fabric may be acceptable. Otherwise, there should be no access within the RPA at any time during the contract.

4.0 Access Details

There is no requirement for any special measures related to the retained trees if access for all construction vehicles is kept away from the trees to be retained and stay outside of the RPA.

5.0 Contractors Car Parking

This is likely to be within the existing car park area onsite. The area designated for parking needs to be away from the area around the trees to be retained.

6.0 Site Huts and Toilets

The area designated for site accommodation needs to be away from the area around the trees to be retained.

7.0 Storage Space

The storage of materials should ideally be on existing hard standing away from existing trees. The contractor should not store any materials on site within the RPA of an existing tree.

8.0 Additional Precautions

No storage of materials or lighting of fires should take place within the RPA.

No mixing or storage of materials should take place up a slope where they may leak into an RPA.

8.1 No fires to be lit within 20 metres of any tree stem and the fire size and wind direction should be taken into account so that, no flames come within 5.0m of any foliage.

8.2 No high-sided vehicles or cranes should access the site close to any trees to be retained and should not come into contact with any branches or travel within the RPA

8.3 No notice boards, cables or other services to be attached to any tree.

8.4 Materials which may contaminate the soil should not be discharged within 10m of any tree stem. When undertaking the mixing of materials it is essential that any slope of the ground does not allow contaminants to run towards a tree root area.

9.0 Site Gradients

No alterations of soil levels to take place within the RPA of the protected trees

10.0 Demolition Works

No demolition works to take place within the RPA of the protected trees

12.0 Soft landscaping

Please refer to the separate landscaping scheme

13.0 Use of Herbicides

No herbicide use is predicted, however if used, it should be done so in strict accordance with the manufacturer's instructions and contact with any tree foliage should be avoided.

14.0 On Site Monitoring Regime

All operations to be monitored by the main contractor. The site manager shall contact the appointed specialist if there is a breach of the RPA and tree protection measures. The appointed specialist shall recommend an action plan to incorporate mitigation measures where necessary.

17.0 Remedial Tree Works

The recommended tree works should be undertaken prior to the commencement of construction activities. All tree works are to be carried out in accordance with BS 3998 British Standard Tree Work - Recommendations 2010. Permission must be granted by the local authority prior to working on any tree protected by a Tree Preservation Order. Failure to do so may result in prosecution.

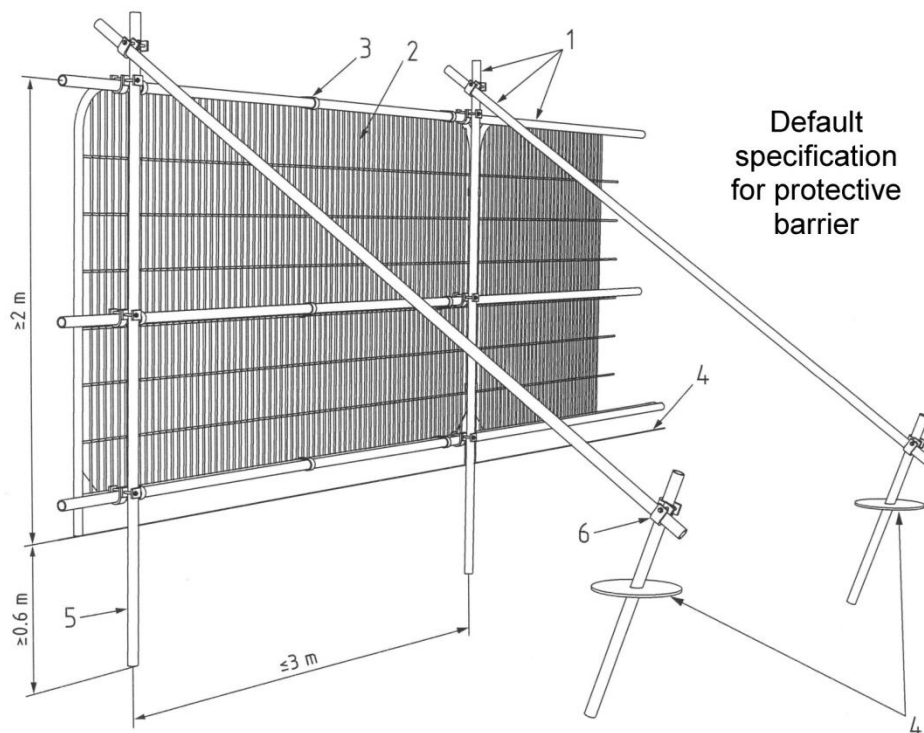
18.0 Responsibilities

It will be the responsibility of the main contractor to ensure that planning conditions are adhered to at all times and that a monitoring regime in regards to tree protection is adopted on site and ensure any necessary licences are in place prior to any felling and all necessary all relevant regulations are adhered.

18.1 The main contractor will be responsible for contacting the Local Planning Authority at any time issues are raised related to the trees on site.

18.2 The main contractor will ensure the build sequence is appropriate to ensure that no damage occurs to the trees during the construction processes. Protective fences will remain in position until completion of ALL construction works on the site.

18.3 Protective fencing should be erected around all trees to be retained as per the following specification:

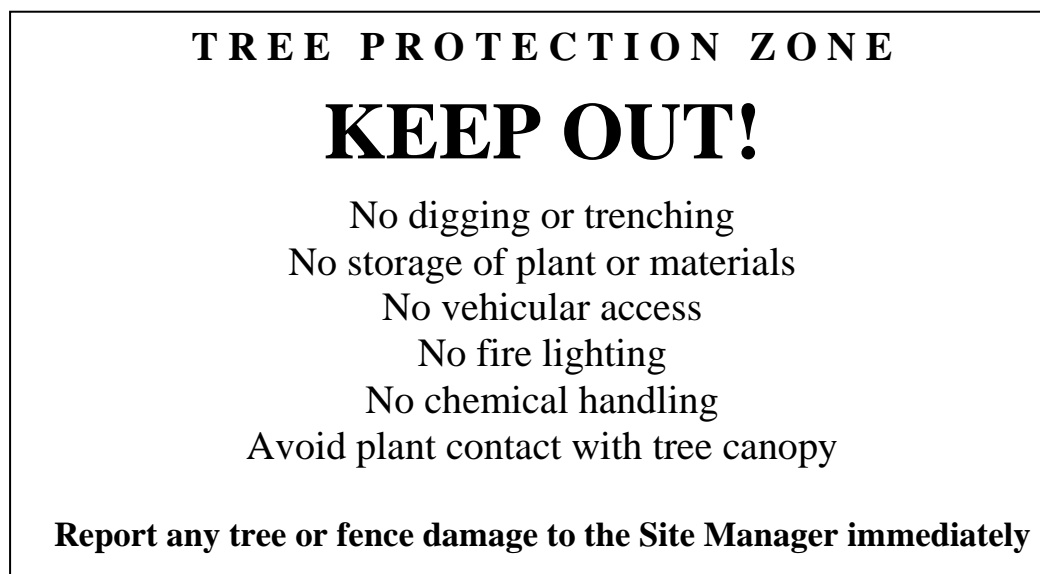


Key

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

18.4 Signs, in accordance with the following example, should be displayed to inform all personnel where the tree protection areas are and to warn them not to enter.

Example of "Keep Out" Sign:



Appendix D - Photographic Record



Photo 1 - View of G1 Ash, Pear and Plum trees adjacent to the footway on Tring Road where the new access is proposed



Photo 2 – View of G2 Hawthorn, Sycamore and Lime and G3 Sycamore adjacent to the footway on Tring Road



Photo 3 – View of T1 Lime, G4 Sycamore and T2 Large Leaved Lime adjacent to the existing access.



Photo 4 - View of the poor row of conifers (G5) within the site boundary



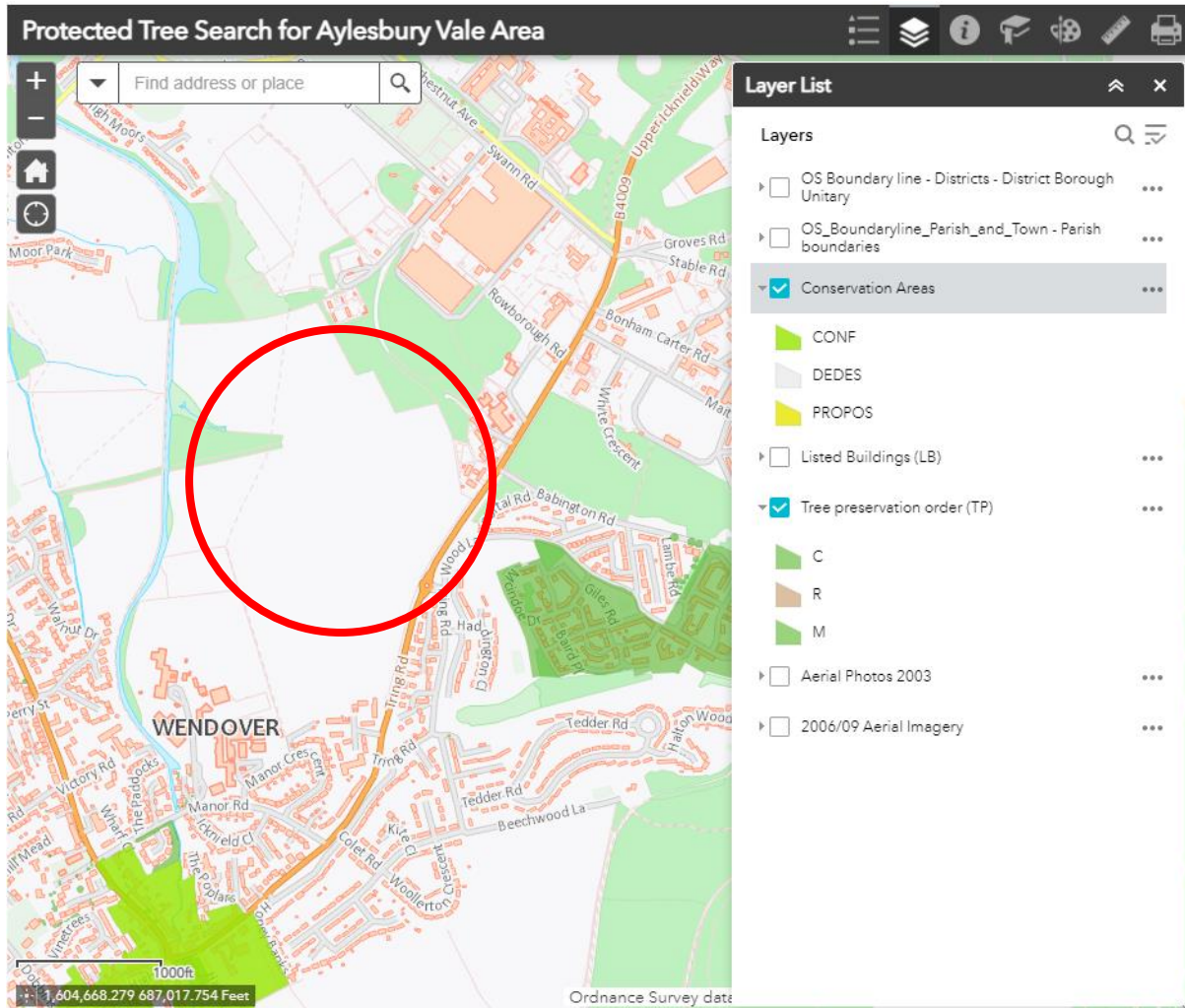
Photo 5 - View of T3 and T4 Sycamores located beyond the northern boundary



Photo 6 – View of T5 Sycamore, T6 Grey Willow and T7 Crab Apple located beyond northern boundary

Appendix E - Tree Preservation Order (TPO) & Conservation Area (CA)

Protected Tree Search for Aylesbury Vale Area shows there are no TPO or CA constraints on the existing trees within and in proximity to the application site



Last updated 9 Jul 2020