

**Arboricultural Report  
and Tree Survey for the Proposed Development  
at  
Alvechurch Sports and Social Club,  
Radford Road,  
Alvechurch,  
Birmingham.  
B48 7LD**

**Prepared for Westbourne Leisure**



A trading name of RG Consultancy Ltd

**Prepared by  
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Our Ref 0422-10053  
February 2023**

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## **1.0 Introduction**

- 1.1 This Arboricultural Report has been prepared by Ruskins Tree Consultancy to inform the planning application for the construction of an extension to the southern side of the Alvechurch Inn.
- 1.2 In May 2022 we visited the site to undertake a Tree Condition Survey which surveyed the trees, groups of trees and hedges in accordance with BS5837:2012 '*Trees in relation to design, demolition and construction – recommendations*'. This information was then circulated to the design team to inform the design process.
- 1.3 We have subsequently been provided with a copy of the proposed layout plan (Drawing Number 1132-07D Revised Site Layout) and have been instructed to assess the impact of development proposals on the arboricultural resource and to produce the following:
- Arboricultural Report and Preliminary Arboricultural Method Statement
  - Tree Protection Plan.

## **2.0 Report Limitations**

- 2.1 Trees are living organisms as well as self-supporting dynamic structures. Their physiological and structural condition can change rapidly in response to a wide range of biotic/abiotic factors. They have the potential to fail structurally, both with and without prior manifestation of any reasonably observable symptoms.
- 2.2 This report is prepared for the planning application purposes only and does not evaluate the degree of risk posed by trees.
- 2.3 It is beyond the scope of this report to comment in relation to structural damage – direct or indirect, existing or potential – that might be associated with vegetation growth, or vegetation-related soil subsidence or heave.
- 2.4 Any management recommendations set out within this report are of an advisory and preliminary nature only and relate to trees within the context of current site use.
- 2.5 Any physical alterations to site conditions subsequent to the date of the site survey will have the potential to change/invalidate the findings and recommendations of this report.
- 2.6 Findings relate to the condition of the trees as found at the time of survey.
- 2.7 The findings and recommendations of this report are limited to a period of 24 months from the date of this report. In the event of any changes in the rooting environment of the trees including excavation works, waterlogging or removal of any underground structures /services the condition of the trees should be reviewed.
- 2.8 After extreme weather events or if any large branch failure, storm damage, structural failure or symptoms of disease or decay including fungi are observed then we recommend that the condition of the trees should be reviewed.

### **3.0 Statutory Tree Protection**

- 3.1 The property is located in the Alvechurch Conservation Area. Due to the Conservation Area status all the trees with a stem diameter in excess of 75mm are subject to protection under the Conservation Area legislation. Notwithstanding specific exemptions in general terms, a Conservation Area (CA) prevents the cutting down, uprooting, topping, lopping, wilful damage or wilful destruction of trees without submitting 6 weeks prior notification to the local planning authority.
- 3.2 If on receipt of the treeworks notification the LPA wish to stop works from proceeding then a Tree Preservation Order (TPO) must be served, if 6 weeks pass from submission of the CA tree works notification then providing a TPO has not been served the treeworks can be undertaken subject to agreement from the tree owners.
- 3.3 The Conservation Area status does not preclude the presence of Tree Preservation Orders (TPO) which may also serve to protect the trees.
- 3.4 Trees which are clearly shown to be removed in approved drawings are exempt from protection by CA or TPO legislation once full planning permission is granted. Trees which are dead are also exempt from Statutory Protection. In the absence of full planning consent no pruning works or tree removals should be undertaken without the obtaining necessary consent from Bromsgrove District Council.
- 3.5 Nesting birds and protected species (including bats and their roosts) are protected from disturbance under the Wildlife and Countryside Act 1981 (as amended), The Countryside and Rights of Way Act 2000 (as amended) and the Conservation of Habitat and Species Regulations 2017. Prior to any treeworks or vegetation clearance being undertaken the possible presence of nesting birds or protected species needs to be considered and if necessary ecological advice should be sought. The project Ecologists are Darwin Ecology.

### **4.0 Site Description**

- 4.1 The site is described in detail within the planning application in summary Alvechurch Sports and Social Club is located at the eastern end of Alvechurch Conservation Area. The building was erected in the 1960s. The building sits at the centre of a sloping site surrounded by car parking with access from Radford Road.
- 4.2 The trees on site are growing in narrow strips of open ground close to the boundary of the car parking area and within a narrow landscape strip which divides part of the car parking area. The tree resource within the site and close to the boundary is dominated by conifers including Lawson cypress, western red cedar, yews, Leyland cypress and Wellingtonia with some planted cherry laurel and a self-set ash and a mature off-site ash.

## 5.0 **Arboricultural Background Information**

- 5.1 For all trees but particularly those growing in urban areas, root growth is not predictable. Tree roots are opportunistic they grow most prolifically in areas where conditions are favourable and will be deflected by natural features and man-made structures, when hostile conditions are encountered root growth will be limited.
- 5.2 It is generally agreed that the majority of tree roots, even for a mature tree are found in the top 90cm of the soil and these roots are vulnerable to sudden changes in the rooting environment. These roots absorb the moisture and nutrients needed for growth and contrary to popular belief mature trees in the UK do not have a deep taproot that obtains moisture from great depth.
- 5.3 An ideal soil for tree root growth is about 50% pore space (in urban areas this is often significantly reduced), these pores, the spaces between soil particles, are filled with water and air. Construction activity can compact the soil and can dramatically reduce the amount of pore space. This not only inhibits root growth and penetration but also decreases oxygen levels within the soil and reduces the available soil moisture that is essential to the growth and function of the existing roots.
- 5.4 For retained trees it is essential that the structurally important roots will remain undisturbed, these important larger roots radiate outwards from the trunk, they are characterised by being relatively few in number and tapering rapidly from the base of the tree. Even for mature trees they are only 2-3m in length, at this length they are likely to be 2-5cm in diameter and they have lost their rigidity and physical strength. (See Tree Root Systems AAIS 1995).
- 5.5 The two main possibilities for injury to trees during and following the construction process are from direct and indirect damage.
- Direct Damage can be defined as injury resulting from physical contact including contact with machinery or fire, and excavation of the root area.
  - Indirect Damage can be defined as injury resulting from activities that take place near the tree such as level changes, compaction of the soil, or contamination by chemical spillage in proximity to the root plate.
- 5.6 The British Standards Institute published BS5837:2012 'Trees in relation to design, demolition and construction – Recommendations' this document gives clear and current best practice recommendations and guidance on the principles to be applied to achieve a satisfactory juxtaposition of trees with structures. Where development is proposed, the standard provides guidance on how to assess the value and quality of trees and to decide which trees are appropriate for retention.
- 5.7 In summary the quality of the trees resource is assessed, and the trees are divided into 4 categories based a number of factors including; their condition, remaining life-expectancy, landscape, arboricultural and cultural/conservation value.

5.8 The BS5837 (2012) Categories referred to in this report are described in detail in Appendix 1. The BS5837 (2012) categories are described below,

Category U:	Those in such a poor condition that they cannot realistically be retained
Category A:	Trees of high quality
Category B:	Trees of moderate quality
Category C	Trees of low quality

5.9 The BS5837 (2012) also provides information on the protection of trees during the development process. It includes a calculator for Root Protection Areas (RPA) which aims to ensure a sufficient volume of soil and proportion of the root system is protected to maintain the health and vigour and ensure the longevity of the trees.

5.10 The Root Protection Area is not related to the canopy spread of the tree; in simple terms it is an area calculated as a multiple of the trunk diameter. For trees with a trunk diameter in excess of 1250mm the RPA is capped at a total area of 707m<sup>2</sup>. See Attached Tree Survey Plan in Appendix 1 for further details.

5.11 The RPA is in effect a theoretical area that if all the soil and roots around the periphery of the circle were removed there would be sufficient area around the tree to maintain the tree in a healthy condition. The RPA does not show the expected extent of root growth but indicates an area of ground considered necessary to support the tree at the time of surveying but into the future. Post development the tree will adapt to the changes in its rooting environment providing it has retained a sufficient proportion of its root system and a sufficient area/volume of soil area is available for the tree.

5.12 The relative sensitivity of different species of trees to development works is well known and acknowledged within BS5837 (2012) but the RPA formula in BS5837 does not give any weight to different tree species. The RPA is based on the trunk diameter and would be the same for trees of the same trunk size regardless of species. This results in RPAs which for trees which are tolerant to disturbance is very conservative but would be an appropriate size for the more sensitive tree species.

5.13 Trees have a natural resilience to disturbance and root loss, so many fallen trees will continue to grow for many years, consider the recumbent mulberry tree, or fallen woodland and parkland trees (which if not removed) will continue to grow.

5.14 The RPA is by its nature a conservative estimate of the area needed to support a healthy tree. In this case the proposed encroachment will be only on one side of the RPA, and it is accepted that the root system can withstand the loss of a proportion of the root system.

5.15 British Standard 5837 Chapter 4.6.2 states “Where pre-existing site conditions or other factors indicate that rooting has occurred asymmetrically, a polygon or equivalent area should be produced, modifications to the shape of the RPA should reflect a soundly based arboricultural assessment of the likely root distribution”).

- 5.16 When adjusting the Root Protection Area of trees, the Arboricultural Consultant needs to consider a number of factors Paragraph 4.6.3 of BS5837 (2012) states that;

*Any deviation in the RPA from the simple circle should take full account of the following factors whilst still providing adequate protection for the root system:*

- a) the morphology and disposition of the roots, when influenced by past or existing site conditions (e.g. the presence of roads, structures and underground apparatus);*
- b) topography and drainage;*
- c) the soil type and structure;*
- d) the likely tolerance of the tree to root disturbance or damage, based on factors such as species, age, condition and past management.*

- 5.17 Appropriate tree surgery works, the provision of tree protection measures and appropriately specified, supervised and implemented works can reduce the risk of damage to the retained trees.

## **6.0 Arboricultural Impact Assessment**

- 6.1 The site is previously developed with tarmac hardstanding covering the majority of the ground around the sports and social club. The tree resource is growing in narrow strips of open ground close to the boundary of the car parking area, within a narrow landscape strip which divides part of the car parking area and beyond the site boundary within the site is dominated by conifers including Lawson cypress, western red cedar, yews, Leyland cypress and Wellingtonia with some planted cherry laurel and a self-set ash and a mature off-site ash tree.

- 6.2 An ash tree T16 growing within a narrow strip of open ground within the car park is to be removed to ease constraints around the proposed extension. Two dead trees which are remote from the proposed works are to be removed, the remaining trees are to be retained.

- 6.3 It should be noted that the site is intensively developed with extensive tarmac car parking. There are also retaining and boundary walls to the boundary of the site. This built form and the topography of the site with a slope downhill from west to east will have had a significant impact on the root growth of the trees.

- 6.4 The proposed extension is approximately 7.8m from the western red cedar T20, with existing tarmac hardstanding covering the area between this tree and the proposed extension. The tarmac hardstanding and sloping site will have impacted on the soil conditions and available soil moisture which in turn will have impacted on root growth. At 7.8m from the tree the impact of any root severance will be very limited.

- 6.5 The proposed extension results in an encroachment into 7.7% of the theoretical Root Protection Area./ The loss of 7.7% of the theoretical Root Protection Area within an area of existing tarmac will not impact on the health, stability or longevity of this

- 6.6 The ash tree T21 is located off-site, it is some 5.5m from the existing building on raised ground beyond a retaining wall, this tree is declining and we recommend that with the tree owners' permission it is inspected to determine the condition of the lower trunk and when in full leaf, the extent of deadwood and dieback in the canopy and any symptoms of Ash Dieback Disease.

- 6.7 Ash Dieback Disease is a disease that affects ash (*Fraxinus*) trees, caused by a fungus called *Hymenoscyphus fraxineus*. The main symptoms which are easier to spot in mid-late summer, when a healthy ash should be in full leaf are:
- Dead branches
  - Blackening of leaves, which often hang on the tree.
  - Discoloured stems, often with a diamond-shaped lesion where a leaf was attached.
  - Trees may eventually drop limbs, collapse or fall.
- 6.8 Once a tree is infected the disease is usually fatal - but a limited number of trees may be tolerant or resistant to infection. Mature ash trees infected by ash dieback may survive for several years but often succumb to a secondary attack by other pests or pathogens, including honey fungus, which can cause butt or root rot and lead to the tree falling. As the disease progresses it makes the main branches and stem brittle and prone to partial or complete failure.
- 6.9 We have only viewed the ash tree T20 from within the site, but it should be noted that any works to this tree would benefit from the opportunity to access the car parking area of the social club.
- 6.10 Based on the tree species, the existing site conditions and their distance from the proposed works it is my opinion that the proposed extension can be constructed without impacting on the health, stability or longevity of the retained trees.
- 6.11 We recommend that during the groundworks and construction works the existing tarmac hardstanding outside the footprint of the proposed extension is retained. This tarmac will provide a suitable surface for construction access and scaffolding and will prevent compaction and damage to the root systems and rooting environment of the retained trees. In addition the above ground parts of the tree will be protected by the erection of Tree Protection Fencing.
- 6.12 The proposed development offers the opportunity post construction works to remove some of the existing hardstanding to the western flank of the extension where there will be no future vehicle access and replace with open ground or permeable and porous hardstanding. The removal of any hardstanding close to trees and installation of new hardstanding would be supervised by the Arboricultural Clerk of Works See Section 7 of this report.
- 6.13 Any replacement hardstanding in proximity to the retained trees following the proposed works would be specified to avoid excavation beneath the depth of the existing hardstanding. The specification for these works and the demolition and construction methodology will be reviewed by the Arboricultural Clerk of Works prior to works commencing on site.
- 6.14 All works within the theoretical root protection area of the retained trees including the removal of the existing hardstanding, drainage works and proposed new hardstanding and any landscaping will be undertaken following a detailed Arboricultural Method Statement and under the direct on-site supervision by the Arboricultural Clerk of Works.



6.15 The following sections of this report outline the site works in relation to the retained trees, it is proposed as recommended in BS5837 (2012) that subject to planning consent being granted, the guidelines outlined in this report will be revisited and addressed in detail prior to site works commencing.

## **7.0 Tree Protection Measures**

7.1 As recommended in BS5837 (2012) it is proposed that subject to planning, the guidelines and parameters outlined in this section of the report will be revisited and addressed in detail prior to site works commencing. This section aims to give the basic guidelines for the successful retention of the retained trees within the proposed development.

7.2 The main points of note regarding the tree protection measures during the proposed works are listed below:

- **An Arboricultural Clerk of Works (ACoW) will be appointed to help ensure that the retained trees are considered during the preparation of all external works drawings and are successfully protected during the proposed works.**
- **Prior to any works commencing on site a meeting will be held with the site manager, client representative, demolition contractor and groundworkers to discuss the Tree Protection Measures associated with this project.**
- **Trees identified for removal as per the approved drawings will be clearly marked with spray paint.**
- **Any tree works will be undertaken by a suitably qualified and insured Arboricultural Contractor.**
- **The Tree Protection Fencing will be installed prior to enabling, demolition, groundworks or construction works commencing and will remain in situ during the construction programme.**
- **No Machinery will overhang or pass over the line of the Tree Protection Fencing.**
- **The existing tarmac will be retained during within the theoretical Root Protection Area of retained trees during groundworks and construction works.**
- **Prior to any Enabling / Demolition / Construction works commencing the Tree Protection Measures will be inspected by the ACoW.**
- **The Tree Protection / Site Logistics Plan will be on display in the site agent's office.**
- **Any variations to the agreed construction methodology that may impact on the retained trees or the ground around the retained trees will be reviewed by the ACoW**
- **All works within the fenced-off Tree Protection / Construction Exclusion Zone and as identified on the Tree Protection Plan will be specified to avoid excavation, level changes and damage to the root system of the retained trees. The specifications and construction methodologies for all these works will be reviewed by the ACoW prior to works commencing.**
- **The removal of existing hardstanding will be undertaken following the guidance outlined in the Arboricultural Method Statement and under direct Arboricultural Supervision by the ACoW.**
- **The removal or movement of Tree Protection Fencing will only be undertaken following discussion with, and receipt of written confirmation from the ACoW.**

**7.3 Arboricultural Site Supervision**

- 7.4 Damage to trees (including their root systems) may impact on their health, stability and or vitality. Damage may result in the partial or complete structural failure of the tree and increases the risk of personal injury. It is therefore essential that if development is permitted this report is read by all parties and the guidelines are followed by the main contractor, site agent and all contractors, particularly those undertaking demolition and groundworks on site.
- 7.5 To ensure that the construction process is undertaken with minimal disturbance to the retained tree stock, an Arboricultural Clerk of Works (ACoW) as recommended within BS5837 will be appointed to undertake regular inspections of the site.
- 7.6 The site agent will be primarily responsible for the implementation of the tree protection measures and ensuring that the retained trees are not damaged during the demolition and construction programme. The Arboricultural Clerk of Works role shall be to:
- a. To assess the specification and methodology of the proposed works and ensure these works have the minimum impact on the retained trees.
  - b. Brief the workers on the necessity to protect the retained trees.
  - c. To ensure the agreed methodology is followed by direct on-site supervision.
  - d. To prune roots using clean sharp pruning tools during manual excavation (if necessary).
  - e. To provide direction on tree protection issues as they arise.
  - f. To monitor and photograph the works undertaken.
- 7.7 Prior to works commencing a site meeting will be held with the site agent and the arboricultural site supervisor. The purpose of this meeting is to brief the site agent on the arboricultural issues to be considered, agree programme of work and the location tree protection fencing.
- 7.8 All site operatives are briefed on the Tree Protection Issues as part of the site induction process.
- 7.9 Arboricultural monitoring site visits will be undertaken at regular intervals during the construction process. During the 1<sup>st</sup> 3 months of construction works site the visits will be undertaken on a maximum of a fortnightly basis, as the construction programme progresses the intervals will increase with the maximum interval between site visits of 4 weeks.
- 7.10 Within 5 days of the visit, the Local Authority tree officer will be notified by email of all visits undertaken.
- 7.11 To deal with any site queries or issues involving trees, the Arboricultural Clerk of Works will provide a contact number that will be answered during all the hours of works on site. The Bromsgrove District Council Arboricultural Officer will be informed of any incidents or issues involving trees.

**7.12 Tree Protection Measures**

- 7.13 To prevent the proposals impacting on the health, stability or longevity of the retained trees the main requirement is the installation of suitable tree protection fencing, to protect the above ground part of the trees and to prevent compaction and damage to the rooting environment of retained tree during demolition and construction works of the open ground within the Root Protection Areas of retained trees.
- 7.14 The Tree Protection Fencing and Temporary Ground Protection will be installed as per the Tree Protection Plan which will be agreed with the Local Authority Tree Officer, we have provided a draft copy of this plan, (See Appendix 2). The proposed fencing specification can be found in Appendix 3.
- 7.15 Tree protection fencing must be erected prior to any enabling works, demolition, or groundworks commencing, and remain in place throughout construction. The fencing should only be removed only after completion of the construction works.
- 7.16 Within the fenced off Tree Protection Area.
- No excavation by any means.
  - No level changes + or -
  - No storage of plant or materials.
  - No storage or handling of any chemicals including cement washings.
  - No Pedestrian, Machinery or Vehicular Access.
  - Underground service routes will be located outside the Fenced off area.
- 7.17 Clear notices are to be fixed to the outside of the fencing with words such as 'TREE PROTECTION AREA – NO ACCESS OR WORKING WITHIN THIS AREA'. See Appendix 3.
- 7.18 The site agent, all contractors and other relevant personnel are to be informed of the role of the Tree Protection Fencing and Ground Protection Measures and their importance. A copy of the Tree Protection Plan will be displayed on site at all times during construction.
- 7.19 Prior to any demolition works commencing on site the Tree Protection Fencing will be erected and Temporary Ground Protection will be installed. During the demolition works and groundworks the existing site access will be in use. Any plant or vehicles engaged in the works will operate outside the fenced off Tree Protection Areas.
- 7.20 The location of the site office, welfare facilities, storage area needs to be confirmed but this will be located outside the Root Protection Area (RPA). The Tree Protection Plan will be finalised when the site set-up/site logistics plan is available.
- 7.21 For areas of proposed open ground within the RPA of retained trees the existing hardstanding will be broken up and carefully removed, with all the machinery located on the existing hardstanding or on temporary ground protection. No machinery will access the open ground within the Root Protection Area of retained trees. For areas of open ground the ground levels will be returned to original levels using good quality topsoil. During these works no spoil will be stored on the open ground within the RPA of retained trees.

- 7.22 Where there is existing hardstanding the new hardstanding this will be specified and constructed to avoid excavation below the depth of the existing hardstanding and inert sub-base. The sub-base and surface finish will be specified to be both permeable and porous.
- 7.23 Underground services and drainage will be designed to avoid the theoretical root protection areas of retained trees. The final underground services and drainage drawing will be reviewed by the ACoW.
- 7.24 Within the theoretical RPA of the retained trees all works will be undertaken under supervision of the Arboricultural Clerk of Works.
- 7.25 Dismantling the protection barriers around retained trees may be required to allow completion of landscaping works. The removal of the Tree Protection Fencing is not an opportunity for machinery to access the previously fenced off area.
- 7.26 Any landscaping works will be subject to a detailed landscaping methodology which will be reviewed by the ACoW prior to any landscaping works commencing on-site.

## **8.0 Conclusion**

8.1 The British Standard BS5837:2012 contains clear and current recommendations for a best practice approach to the assessment, retention and protection of trees on development sites. This application has and will continue to follow this guidance by:

- Seeking arboricultural advice to inform the layout and design of the proposed development.
- Assessing the quality of the trees and considering the benefits and constraints to development of the site in relation to the quality of the tree resource.
- Continuing to take advice on all aspects of the proposal that may impact upon trees.

8.2 With regard to the previously developed nature of the site and the extensive existing hardstanding, it is my opinion providing the retained trees are subject to appropriate protection that the proposed demolition work and construction works can be undertaken without detriment to the health, or longevity of the retained trees.

8.3 The protection of retained trees during the proposed development works can be achieved by continuing to follow the guidance outlined in this report, the recommendations in BS5837:2012. The proposed Construction Methodology will be reviewed by the Arboricultural Clerk of Works and a detailed site specific Arboricultural Method Statement will be prepared prior to any works commencing on site.

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Ruskins Tree Consultancy a trading name of R G Consultancy Limited

February 2023

## **Appendix 1**

### **Tree Condition Survey**

### **Tree Survey Plan**

### **Tree Removals Plan**

### **Tree Protection Fencing Specification**

### **Tree Protection Fencing Notice**

## **Tree Condition Survey at Alvechurch Sports and Social Club, Radford Road, Alvechurch, Birmingham. B48 7LD**

**Prepared for Westbourne Leisure**



A trading name of RG Consultancy Ltd

**Prepared by**  
**Peter Wilkins BA (Hons) MArborA MEnvSc CEnv**  
**Our Ref 0422-10053 Rev 1**  
**May 2022**  
**Revised February 2023**

**Tree Condition Survey for Alvechurch Sports and Social Club, Radford Road, Alvechurch, Birmingham. B48 7LD**

**1.0 Introduction**

This tree condition survey has been compiled on behalf of Westbourne Leisure , the site was visited in May 2022 and an assessment of the trees' condition was made in accordance with BS5837 (2012) 'Trees in relation to design, demolition and construction – Recommendations'.

Following preparation of our tree survey we have received a copy of the proposed layout plan, this survey has now been updated to show the tree removals necessary to allow for the proposed development.

**2.0 Survey Methodology**

We have surveyed all the individual trees and groups of trees located close to The Great Hall and Library and the London Plane to the south of the Old Hall. The objective of the survey is to collect tree data relevant to the proposed works at the site and to categorise individual trees or tree groups in accordance with BS 5837 (2012) 'based on their condition, quality and future potential.

The purpose of the categories within BS5837 2012, is not to determine whether retention of trees is desirable, '*The purpose of the tree categorization method, which should be applied by an arboriculturist, is to identify the quality and value (in a non-fiscal sense) of the existing tree stock, allowing informed decisions to be made concerning which trees should be removed or retained in the event of development occurring.*' (BS5837 2012 Section 4.5.2). This survey should therefore be regarded as an initial appraisal and observations, assessments or recommendations relating to tree protection zones, remedial tree works, protective fencing, foundation design, material specification are beyond the scope of this report.

The location of the trees is shown on the attached drawing. A detailed inspection of individual trees with respect to decay, defects and hazard is not included. However, trees found to be in a structurally dangerous condition are identified. The trees have been measured using a digital clinometer and a laser measurer.



Tree No.	Species	Hgt (m)	Stem Dia. @ 1.5m (m)	No of stems	CS N (m)	CS E (m)	CS S (m)	CS W (m)	ER CY	Vig.	Form	Age Class	Description	Proposed Work	BS Cat
T1	Yew	4	90, 90, 50	3	1	1	1.5	2	SM	A	A	40+	A small, multi-stemmed yew growing in a narrow strip of open ground to the northern Radford Road boundary of the site. With regard to its growing location it has a limited potential for further growth and long remaining life-expectancy.	No Works	C1
T2	Lawson cypress	11	170, 250, 270	3	1.5	1.5	2	1	M	A	A	10-19	A mature, multi-stemmed, slow growing ornamental conifer growing in a narrow strip of open ground to the northern Radford Road boundary of the site. This tree has a sparse canopy which is evidence of its declining vigour, this tree has a relatively short remaining life-expectancy.	No Works	C3
T3	Lawson cypress	11	290	1	1.5	1	1.5	1	M	A	A	20-39	A mature, slow growing ornamental conifer growing in a narrow strip of open ground to the northern Radford Road boundary of the site. With regard to its growing location it has a limited potential for further growth and is considered to have a relatively short remaining life-expectancy.	No Works	C3
T4	Lawson cypress	9	150, 100, 100, 100, 100, 100	7	2	2	2	1	M	A	A	20-39	A mature, multi-stemmed, slow growing ornamental conifer growing in a narrow strip of open ground to the northern Radford Road boundary of the site. With regard to its growing location it has a limited potential for further growth and relatively short remaining life-expectancy.	No Works	C3
T5	Lawson cypress (Dead)	12	500	1	3	3	3	3	Dead			0	A dead mature conifer	Remove (Dead)	U
T6	Wellingtonia / Giant Redwood	20	1400	1	6	5	4	5	M	A	A	40+	A large mature tree growing within the narrow strip of open ground to the western boundary of the car parking area. To the western side of this tree is a retaining wall with the level beyond the boundary being lower than the level within the site. This tree has lost its main leader. This tree forms part of a larger group of redwoods which are growing within the locality. This tree has a limited potential for further significant growth and a long remaining life-expectancy.	No Works	A2
T7	Yew	5	250	m/s	1	2	3	2	SM	A	A	40+	A small, multi-stemmed off-site yew growing in a narrow strip of open ground beyond the western boundary of the site. With regard to its growing location it has a limited potential for further growth and long remaining life-expectancy.	No Works	C1

Tree No.	Species	Hgt (m)	Stem Dia. @ 1.5m (m)	No of stems	CS N (m)	CS E (m)	CS S (m)	CS W (m)	ER CY	Vig.	Form	Age Class	Description	Proposed Work	BS Cat
T8	Elm	6	80	1	1	1	1	1	SM	A	A	40+	A small, semi-mature, elm tree that will succumb to Dutch Elm Disease	No Works	C1
G1	Yews x 2	5	300	m/s	3	3	3	3	SM	A	A	40+	Two small, multi-stemmed off-site yews growing in a narrow strip of open ground beyond the western boundary of the site. With regard to its growing location it has a limited potential for further growth and long remaining life-expectancy.	No Works	C3
T9	Cherry Laurel	6	300	m/s	3	5	5	4	M	A	A	40+	A mature unmanaged evergreen shrub growing to the south-eastern corner of the car park.	No Works	C1
T10	Cherry Dead	3	300	1	1	1	1	1	Dead				A dead tree trunk to the south-eastern corner of the car park.	Remove (Dead)	U
T11	Holly	6	300	m/s	5	4	4	3	M	A	A	40+	A mature off-site holly growing beyond the southern boundary of the site.	No Works	C1
T12	Yew	8	400	m/s	8	4	2	4	EM	A	A	40+	An early mature yew growing in a narrow strip of open ground to the boundary of the car park.	No Works	B3
T13	Lawson cypress	15	150, 160, 250, 250, 250, 250	6	3	3	4	3	M	A	A	10-19	one of a row of three mature, multi-stemmed, slow growing ornamental conifers growing in a narrow strip of open ground to the southern side of the car park. This tree has a sparse, ivy-covered canopy which is evidence of its declining vigour, this tree has a relatively short remaining life-expectancy.	No Works	C3
T14	Lawson cypress	16	400, 250	2	3	2	2	2	M	A	A	10-19	one of a row of three mature, multi-stemmed, slow growing ornamental conifers growing in a narrow strip of open ground to the southern side of the car park. This tree has a sparse ivy-covered canopy which is evidence of its declining vigour, this tree has a relatively short remaining life-expectancy.	No Works	C3

Tree No.	Species	Hgt (m)	Stem Dia. @ 1.5m (m)	No of stems	CS N (m)	CS E (m)	CS S (m)	CS W (m)	ER CY	Vig.	Form	Age Class	Description	Proposed Work	BS Cat
T15	Lawson cypress	16	250, 250	2	2	1	1	1	M	A	A	10-19	One of a row of three mature, multi-stemmed, slow growing ornamental conifers growing in a narrow strip of open ground to the southern side of the car park. This tree has severe dieback canopy with ivy which is evidence of its declining vigour, this tree has a relatively short remaining life-expectancy.	No Works	C3
T16	Ash	2	80, 110, 160, 210	4	3	4	5	5	SM	A	A	40+	A small multi-stemmed tree growing in a narrow strip of open ground to the southern side of the car park	Remove to ease constraints for proposed development.	C1
T17	Goat Willow	8	200	1	4	3	5	5	M	A	A	20-39	A semi-mature multi-stemmed tree growing in the narrow strip of ground to the southern side of the car park.	No Works	C1
G2	Mixed Group	5	50	m/s	2	2	2	4	SM	A	A	40+	A group of lime, ash and hazel saplings growing in the narrow strip of ground to the southern side of the car park.	No Works	C1
T18	Leyland cypress	18	650	1	5	5	5	5	M	A	A	40+	An off-site mature Leyland cypress growing beyond the southern boundary of the site.	No Works	C1
T19	Holly	6	200	m/s	1	1	1	1	SM	A	A	40+	An off-site semi-mature holly growing beyond the southern boundary of the site.	No Works	C1
G3	Row of Leyland cypress	11	450	m/s	4	4	4	4	M	A	A	40+	A row of four off-site Leyland cypresses growing beyond the western boundary of the site. These trees have been topped.	No Works	C3
T20	Western Red Cedar	18	720, 440, 480	3	6	6	5	5	M	A	A	40+	A mature ornamental conifer growing to the western boundary of the car parking area, within a narrow strip of open ground. This tree is growing close to the boundary fence with a brick boundary wall to the northern side of this tree. The canopy of this tree extends into the neighbours' rear garden. The tarmac car park slopes downhill to the western side of this tree. This tree has a limited potential for further growth and has a long remaining life-expectancy.	No Works	B1

Tree No.	Species	Hgt (m)	Stem Dia. @ 1.5m (m)	No of stems	CS N (m)	CS E (m)	CS S (m)	CS W (m)	ER CY	Vig.	Form	Age Class	Description	Proposed Work	BS Cat
T21	Ash	16	900*	1	8	6	9	8	M	A	A	10-19	A mature off-site tree growing beyond the western boundary of the site. This tree is growing on raised ground with a leaning buttressed brick retaining wall with fence above to the boundary. This tree has not been inspected due to its off-site location. It has ivy covering the lower stem and main union and has some deadwood and dieback within the canopy which may be indicative of Ash Dieback Disease. This tree is growing to the western side of the existing building with a canopy that over sails the boundary. With regards to its size and location, we recommend that the condition of this tree is reinspected when in full leaf and then if retained inspected by its owner on a regular basis. The remaining life-expectancy of this tree is limited and compromised by Ash Dieback Disease.	Obtain the tree owners' permission to inspect the condition of the lower trunk and inspect canopy when in full leaf	B2

**Cascade chart** for tree quality assessment

Trees unsuitable for retention (See Note)				Identification on plan
Category and definition	Criteria (including subcategories where appropriate)			
<p><b>Category U</b></p> <p>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</p>	<ul style="list-style-type: none"> <li>Trees that have a serious, irremediable, structural defect, such that their early loss is expected due to collapse, including those that will become unviable after removal of other category U trees (e.g. where, for whatever reason, the loss of companion shelter cannot be mitigated by pruning)</li> <li>Trees that are dead or are showing signs of significant, immediate, and irreversible overall decline</li> <li>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</li> </ul> <p>NOTE Category U trees can have existing or potential conservation value which it might be desirable to preserve; see 4.5.7.</p>			<b>Red</b>
Trees to be considered for retention	1 Mainly arboricultural qualities	2 Mainly landscape qualities	3 Mainly cultural values, including conservation	
<p><b>Category A</b></p> <p>Trees of high quality with an estimated remaining life expectancy of at least 40 years</p>	<p><b>A1</b></p> <p>Trees that are particularly good examples of their species, especially if rare or unusual; or those that are essential components of groups or formal or semi-formal arboricultural features (e.g. the dominant and/or principal trees within an avenue)</p>	<p><b>A2</b></p> <p>Trees, groups or woodlands of particular visual importance as arboricultural and/or landscape features</p>	<p><b>A3</b></p> <p>Trees, groups or woodlands See Table 2 of significant conservation, historical, commemorative or other value (e.g. veteran trees or wood-pasture)</p>	<b>Green</b>
<p><b>Category B</b></p> <p>Trees of moderate quality with an estimated remaining life expectancy of at least 20 years</p>	<p><b>B1</b></p> <p>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</p>	<p><b>B2</b></p> <p>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</p>	<p><b>B3</b></p> <p>Trees with material conservation or other cultural value</p>	<b>Blue</b>
<p><b>Category C</b></p> <p>Trees of low quality with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150 mm</p>	<p><b>C1</b></p> <p>Unremarkable trees of very limited merit or such impaired condition that they do not qualify in higher categories</p>	<p><b>C2</b></p> <p>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</p>	<p><b>C3</b></p> <p>Trees with no material conservation or other cultural value</p>	<b>Grey</b>

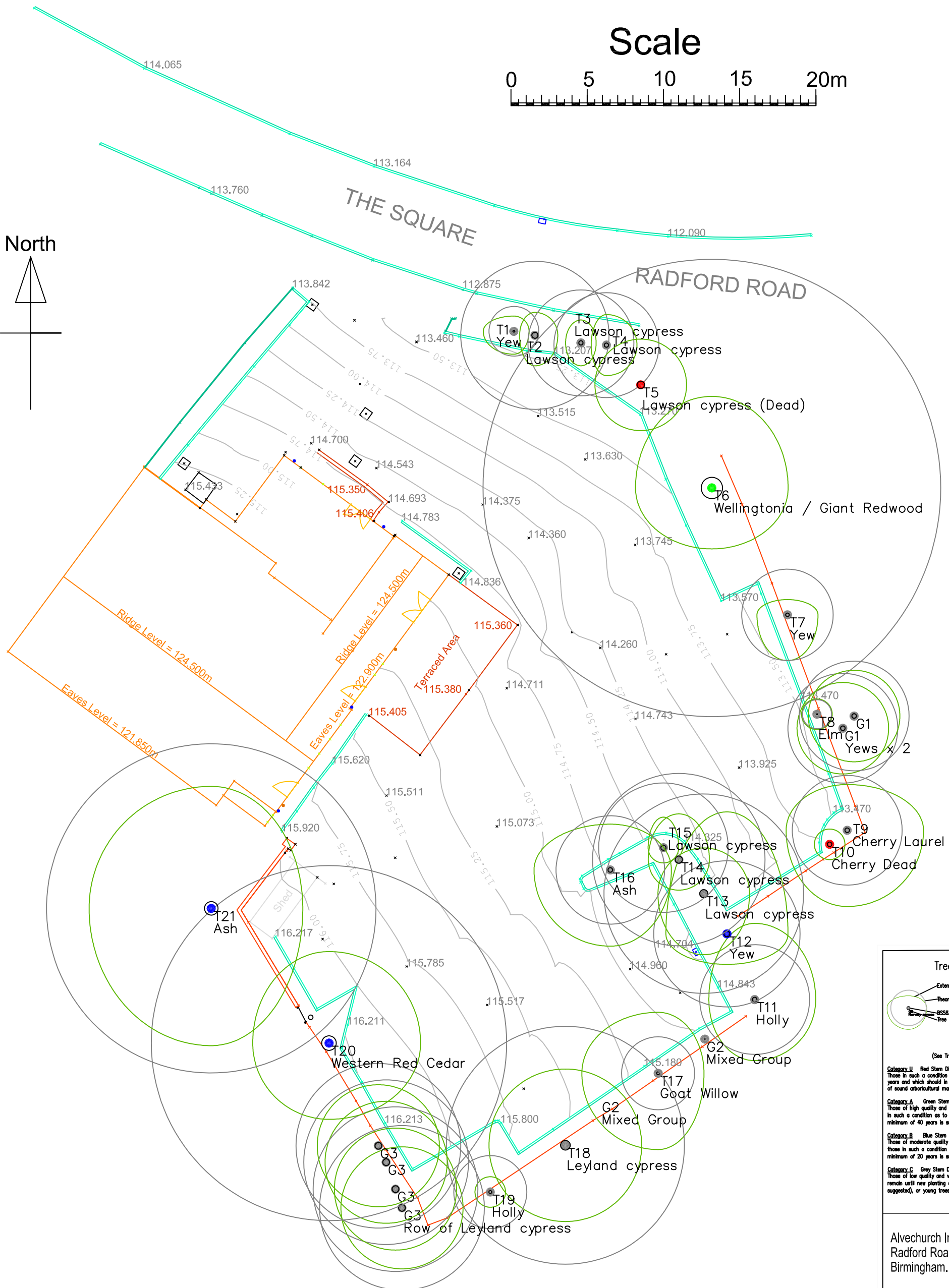
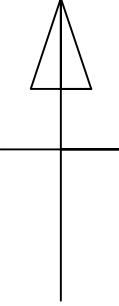
From BS 5837 (2012) Trees in relation to design, demolition and construction – Recommendations

## **Tree Survey Plan**

# Scale



North



**Tree Survey Key**

- Extent of Tree Canopy
- Theoretical Root Protection Area (BS5837)
- BS5837 Category (See Below)
- Tree Survey Number- BS 5837 Category

**BS 5837 Category**  
(See Tree Survey for further details)

**Category U - Red Stem Disc:**  
Those in such a condition that any existing value would be lost within 10 years and which should in the current context, be removed for reasons of sound arboricultural management.

**Category A - Green Stem Disc:**  
Those of high quality and value - in such a condition as to be able to make a substantial contribution (a minimum of 40 years is suggested).

**Category B - Blue Stem Disc:**  
Those of moderate quality and value - those in such a condition as to make a significant contribution (a minimum of 20 years is suggested).

**Category C - Grey Stem Disc:**  
Those of low quality and value - currently in adequate condition to remain until new planting could be established (a minimum of 10 years is suggested), or young trees with a stem diameter below 150 mm.

Alvechurch Inn,  
Radford Road, Alvechurch,  
Birmingham. B48 7LD

Tree Survey Plan  
for  
Westbourne Leisure

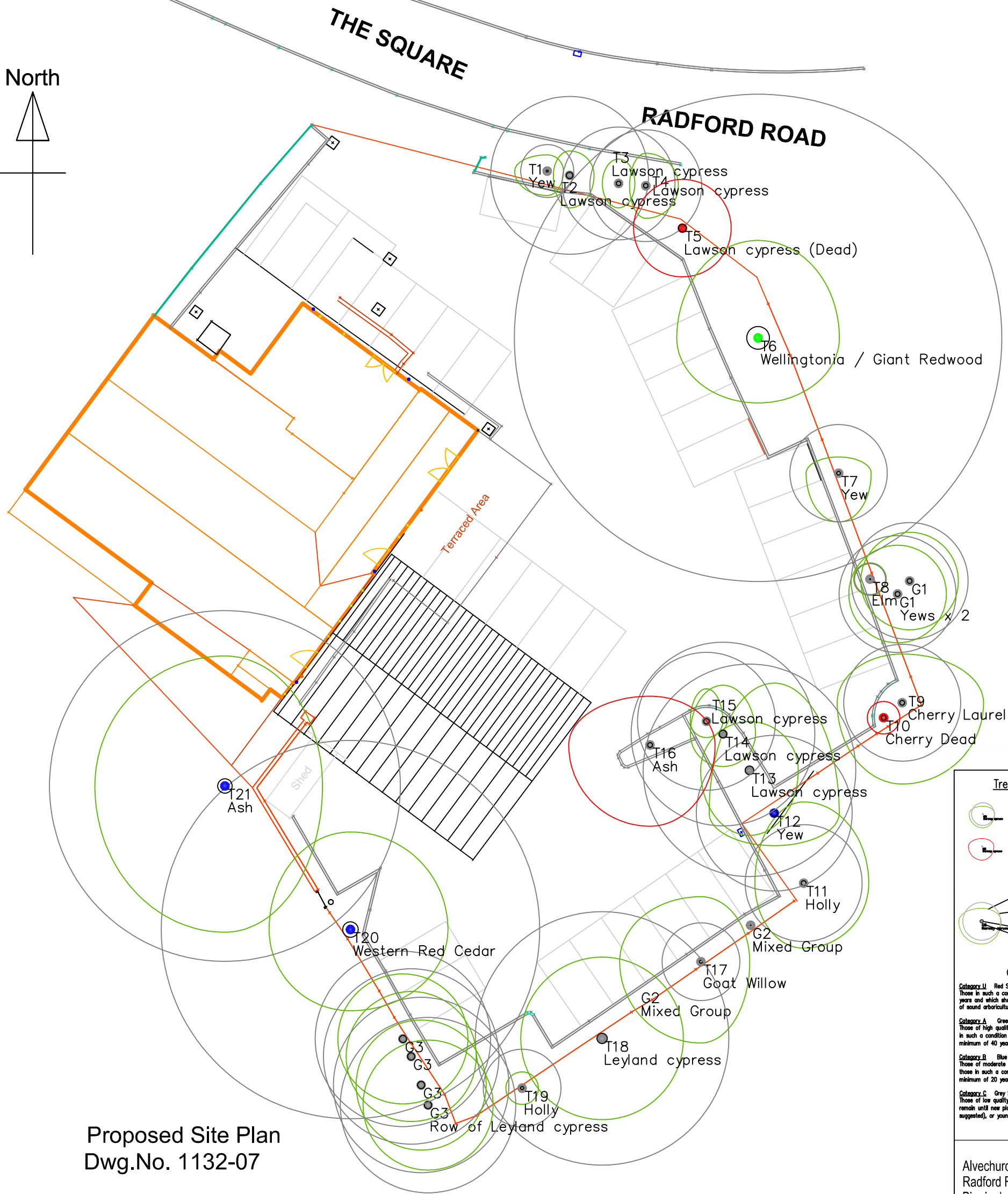
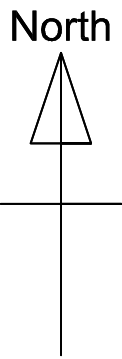
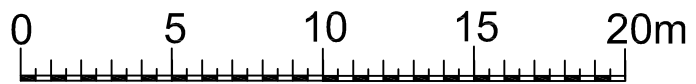
Ruskins Tree Consultancy  
01277 849990 info@ruskins-tree-consultancy.co.uk  
www.ruskins-tree-consultancy.co.uk

Scale	See Scale Bar	Drawn by	PW
Date	20/05/2022	Checked by	JFG
Project No.	0522-10053		
Dwg. No.	TSP-01		

## **Tree Removals Plan**



# Scale



Proposed Site Plan  
Dwg.No. 1132-07

### Tree Removals Plan Key

- Tree to be retained
- Tree to be removed

### Tree Survey Key

- Extent of Tree Canopy
  - Theoretical Root Protection Area (BS5837)
  - BS5837 Category (See Below)
  - Tree Survey Number- BS 5837 Category
- BS 5837 Category**  
(See Tree Survey for further details)

**Category U- Red Stem Disc**  
Those in such a condition that any existing value would be lost within 10 years and which should in the current context, be removed for reasons of sound arboricultural management.

**Category A- Green Stem Disc**  
Those of high quality and value - in such a condition as to be able to make a substantial contribution (a minimum of 40 years is suggested).

**Category B- Blue Stem Disc**  
Those of moderate quality and value - those in such a condition as to make a significant contribution (a minimum of 20 years is suggested).

**Category C- Grey Stem Disc**  
Those of low quality and value - currently in adequate condition to remain until new planting could be established (a minimum of 10 years is suggested), or young trees with a stem diameter below 150 mm.

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Radford Road, Alvechurch,  
Birmingham. B48 7LD

Tree Removals Plan  
for  
Westbourne Leisure

### Ruskins Tree Consultancy

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www.ruskins-tree-consultancy.co.uk

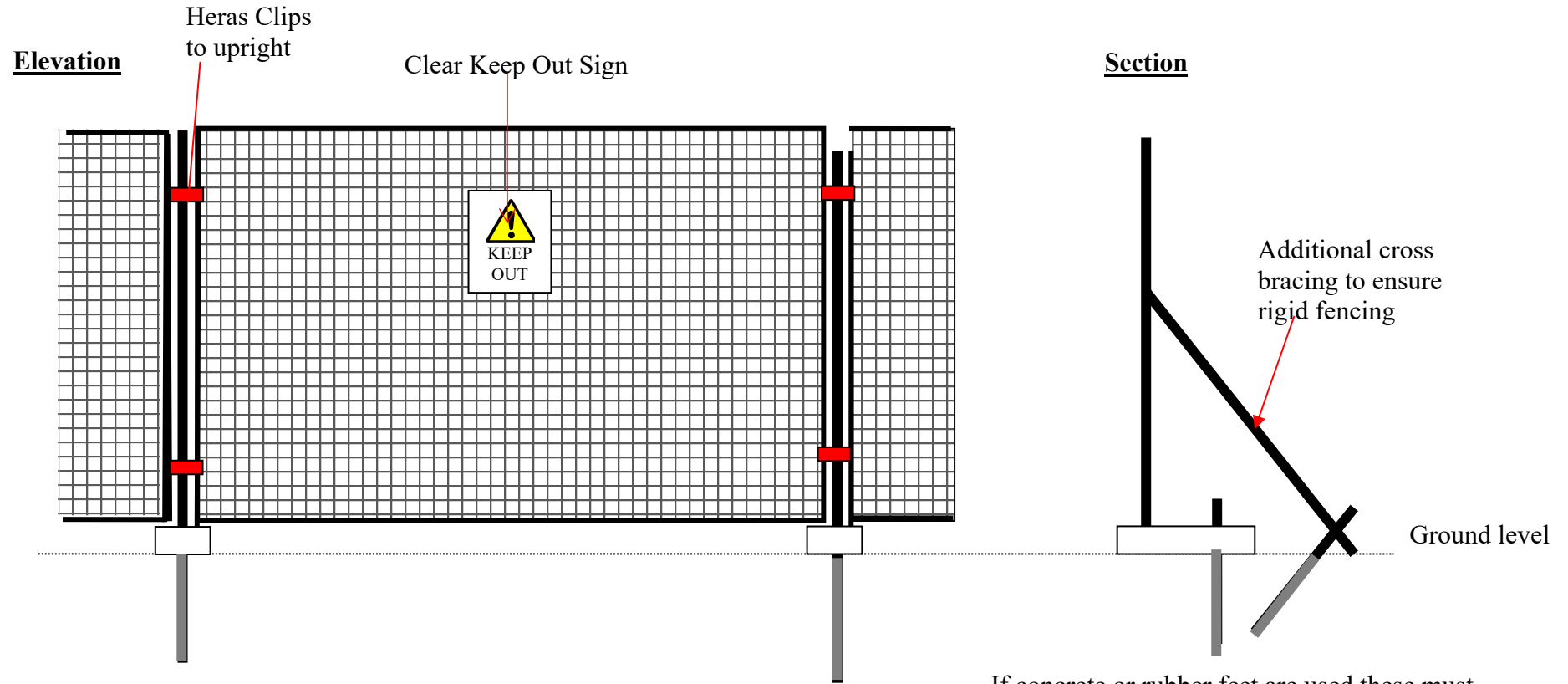
Scale See Scale Bar  
Date 20/02/2023  
Project No. 0522-10053  
Dwg. No. TRP-01

Drawn by  
PW  
Checked by  
JFG

## **Tree Protection Fencing Specification**

### **Tree Protection Fencing Notice**

## Tree Protection Fencing Specification



Tree Protection Fencing should be erected as per the Tree Protection Plan prior to any works commencing or materials being delivered to site.

If concrete or rubber feet are used these must be pinned to the ground to prevent movement.

## **TREE PROTECTION AREA**



## **PLEASE KEEP OUT**

The trees in this area are protected by statutory protection and / or planning conditions. Any works in this fenced off area may result in damage to the above ground parts or root system of these trees.

Damage to these trees is a breach of the planning consent and may lead to enforcement action and / or a criminal prosecution.

Please contact [info@ruskins-tree-consultancy.co.uk](mailto:info@ruskins-tree-consultancy.co.uk) for more information.