Site Address:

Nether Hall

Pakenham

Suffolk

IP31 2LG

Prepared for:

Richard and Penny Ballard

Prepared by:

Lee Smith *Cert Arb; Level 4 (ABC), PTI (Lantra)*

ARBORICULTURAL REPORT

BS5837 Arboricultural Impact Assessment

Eastwood Tree Services Ltd
Valley Lodge, Valley Farm,
Blacksmiths Lane,
Coddenham, Suffolk,
IP6 9TX
Telephone: 01449 760780
Email: admin@eastwoodtreeservices.com

CONTENTS

1 EXECUTIVE SUMMARY

Thirty-three items of vegetation were considered relevant to the proposed development. They were included in the tree survey and the Arboricultural Impact Assessment.

The trees included in the survey range in maturity from young to mature.

Trees at the site were found to be in varied condition. Categorisation ranged from 'A' for some high value oak trees, with some category 'U' trees also recorded. These were noted to have a limited life expectancy with less than 10 years suitable contribution to the local amenity.

It will be necessary to remove three small holm oak trees to facilitate the proposed development. These are all low amenity value trees, the loss of which will be suitably mitigated with the proposed replacement planting at the site.

The proposed development does have the potential to have an impact on the rooting environment of retained trees at the site. The proposed pavilion building is at the perimeter of, or within the Root Protection Area (RPA) of three significant trees at the site. These trees (T4 – oak, T5 – lime and T29 – oak) have been identified as having good bat roost potential during an ecological survey of the site. Root investigation has been recommended to determine the root morphology of these trees prior to the commencement of any works.

Existing underground services in the area of proposed development are to be moved and additional drainage will be required. These should be routed outside the RPA of retained trees at the site. If there is a requirement for them to be routed through the RPA of any retained trees it will require further investigation to determine impact and the most suitable locations.

The site access/egress will be via an existing part gravel, part dirt track to the east of the site. This track is within the RPA of several trees to be retained at the site. Mitigation in the form of temporary ground protection has been recommended to minimise any compaction and contamination during construction works.

Tree Protection Fencing can be used to create Construction Exclusion Zones at the site, protecting the RPAs of the remaining trees.

Some minor access facilitation pruning is recommended prior to commencement of construction works.

2 INTRODUCTION

2.1 INSTRUCTIONS AND PURPOSE

2.1.1 Instructions have been received from Richard Ballard to carry out a tree survey at Nether Hall and produce an arboricultural report in accordance with the standards set out in *BS5837: 2012 Trees in Relation to design, demolition, and construction- Recommendations*.

2.1.2 It is intended that this report will provide the Local Planning Authority (LPA) with the information needed to assess the arboricultural elements of a planning application.

2.1.3 As part of the planning process this document may be available for inspection by interested parties including members of the public. For that reason, where possible, we have tried to present it in a manner that can be understood by people without detailed tree knowledge. Where technical terms have been used a glossary is provided in the appendix to assist readers

2.1.4 The report consists of:

- A **Tree Survey** which records all relevant information about the trees on or adjacent to the site that may be affected by the proposals.
- This will inform the creation of a **Tree Constraints Plan**, which shows the location of existing trees at the site along with existing buildings (if any). This plan shows constraints to development posed by the trees, including Root Protection Areas and canopy spread.
- An **Arboricultural Impact Assessment** to evaluate the potential impact that the development proposal may have on the trees. This includes **Arboricultural Impact Assessment Plans**, which show the location of the trees in relation to the proposed development and those constraints that are below and above ground.
- **Preliminary Tree protection recommendations**, providing information on how any adverse impact may be mitigated. This will include a **Preliminary Tree Protection Plan**, showing the locations of any tree protection fencing or ground protection to be installed at the site.
- If requested, **Arboricultural Method Statements** will be provided to outline the working practice of any activities to be carried out with the Root Protection Area (RPA) of retained trees at the site, in order to prevent any detrimental impact on the trees.

2.2 SCOPE OF THIS REPORT

2.2.1 Any trees outside the site boundary, but close enough to be affected by the proposed development, are included. Their inclusion does not automatically confer any rights to carry out maintenance or facilitating works and consent would be needed from the parties responsible for them.

2.2.2 The specific design of any proposed development is not considered during the production of the tree constraints plan. Proposed development is considered in the formulation of Arboricultural Impact Assessment.

2.2.3 Any recommendations are made with a view to the long-term management of a sustainable tree population.

2.2.4 In evaluating any issues that lead to those recommendations, the duration and range of the proposed development was considered, but for general management issues a maintenance rotation of 5 years has been assumed.

2.2.5 The report observations are to be considered as correct at the time of inspection only. Trees are a living, self-optimising organism, and are readily affected by many environmental factors. As such their conditions can change in a very short time period.

2.3 Supporting Documents and Information

2.3.1 The following documents or information have been received and relate to the same issues that this report is intended to cover. Unless stated they will not be reproduced in this report.

Information	**Source**	**Date provided**
740 02A Existing Site Plan	Beech Architects	December 2023
740 06C Proposed Site Plan	Beech Architects	December 2023
740 07B Proposed GA Plan - Pool Pavilion	Beech Architects	December 2023
740 08B Proposed Section and Elevations _	Beech Architects	December 2023
Nether Hall Pool PEA Final Draft	Beech Architects	December 2023

2.4 Qualifications and Experience

2.4.1 This report is based on the site observations and any information that has been provided. The conclusions have been reached in the light of the experience and technical knowledge of the inspector and the supervising Arboriculturist.

2.4.2 A brief résumé of the qualifications and details of experience for key staff involved in this report are shown in the appendix.

3 GENERAL SITE INFORMATION

3.1 CURRENT LAND USE

3.1.1 The area surveyed is currently an area of scrub and trees to the east of the main hall buildings. The central section of the area has been cleared. There is an existing concrete slab and small brick structure near the north of the area. A public footpath runs along the east boundary of the area and there is a gravel track providing access to the adjacent farm house and hall buildings. The track becomes dirt as it passes the surveyed area. The track appears to have intermittent use by farm vehicles.

3.2 CURRENT TREE-SCAPE

3.2.1 The area includes many trees ranging from young recently planted oaks to mature oak, lime, yew, and sycamore. The condition of the trees is varied. Many of the older specimens have age related features including large diameter dead wood, and some have decay and fungal infections within their stems. The ecological survey identified three trees in the area as having features providing bat roost potential, and the avenue of matures trees lining the access driveway were also noted to provide potential flight path cover for bats. The trees at the site can be seen from the public footpath but beyond this visibility is limited to the estate grounds.

3.3 CURRENT VISUAL AMENITY VALUE

3.3.1 In regard to the visual aspect of amenity value, the current tree scape collectively provides limited visual amenity to the local area.

3.3.2 Its main visible amenity & impact is as a group.

3.3.3 The mature trees lining the adjacent public footpath provide higher visual amenity than those located on the west side of the site.

3.4 TOPOGRAPHY

3.4.1 The central section of the site is flat. At the west edge of the area surveyed the ground drops away towards the main Hall buildings.

3.5 SOIL ASSESSMENT

3.5.1 The British geological Survey Map (1:50,000) shows the area as having various chalk formation bedrock, with superficial sand and gravel deposits.

3.6 STATUTORY PROTECTION

3.6.1 The area surveyed is within two separate District Council areas. Constraints checks were made on 21st December 2023 with West Suffolk and Mid Suffolk District Councils via their online planning maps.

3.6.2 The checks revealed that the site is not within a conservation area.

3.6.3 The checks did not show any Tree Preservation Orders in effect at the site.

3.6.4 We have not had volunteered to us any other specific protection or designations that may be in force that directly affect the site.

4 TREE SURVEY

4.1 GENERAL SURVEY INFORMATION

4.1.1 The survey took place on 18th December 2023.

4.1.2 The survey was conducted by Lee Smith.

4.1.3 The inspections were conducted from ground level. Unless specified they were from within the curtilage of the specified site, or from public land.

4.1.4 Further investigation, such as climbed inspections or level 3 tree inspections may be recommended if deemed appropriate and will be detailed within the tree survey schedule, included as appendix.

4.1.5 Stem diameter measurements were taken using either tree callipers or a girthing tape.

4.1.6 Height measurements were taken using a clinometer where sight lines allowed. Where this was not possible, they were estimated.

4.1.7 Crown spread measurements were taken using a laser distometer where sightlines and access allowed. Where this was not possible, they have been estimated.

4.1.8 Tree locations have been plotted from the site topographical survey. Trees missing from the topographical survey have been plotted using fixed datum on site.

4.1.9 The survey was unaccompanied.

4.1.10 The weather at the time of the survey was overcast but dry.

4.1.11 Visibility for the survey was considered adequate.

4.1.12 The assessment of the trees has been carried out in accordance with the guidance given in Annexe C of BS5837. In short this requires that any tree on the site with a stem diameter of over 75mm at 1.5m above ground level is recorded.

4.1.13 Details of trees surveyed are recorded in the tree survey schedule at Appendix 1.

4.1.14 The locations of the trees, shading, root protection etc have been recorded on the attached plans at Appendix 2.

4.1.15 Where provided, tree locations have been plotted using topographical survey tree locations. Where a topographical survey has not been provided, tree locations have been plotted taking measurements from fixed datum on or adjacent to the site.

4.1.16 The tree locations are considered accurate enough for the purposes of this report.

4.1.17 The trees are categorised as defined in table 1 of BS5837; 2012. This is summarised below:

Cat	Definition
A	Trees of high quality and value in such a condition as to be able to make a substantial contribution for a minimum of 40 years.
B	Trees of moderate quality and value in such a condition as to make a significant contribution for a minimum 20 years.
C	Trees of low quality and value currently in adequate condition able to remain until new planting can be established. These trees are expected to remain for a minimum of 10 years. It also includes young trees with a stem diameter less than 150mm measured at 1.5 metres above ground level.
U	Trees 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 or forestry management.

4.1.18 Additionally, BS5837:2012 provides subcategories 1-3 within the category system outlined above, which indicate the area(s) in which a tree or group retention value lies. They are as follows:

1. Mainly arboricultural.
2. Mainly landscape.
3. Mainly cultural, including conservation.

4.2 Tree Survey Overview

4.2.1 The tree survey revealed a total of thirty-three items of vegetation worthy of recording. Trees, large shrubs, and other vegetation that meet the criteria have been included.

4.2.2 The numbers of trees in each category are shown in the table below:

A	B	C	U
4	13	14	2

4.2.3 For full details of individual trees, including general recommended works and rationale for categorisation, please see the tree survey sheets included as appendix 1.

4.3 Potential Tree Constraints

4.3.1 Protection for retained trees at sites subject to development is an increasingly recognised priority, and hugely important for retaining the character and amenity value which they provide.

4.3.2 Development has the potential to adversely affect trees long term retention both through physical damage (above and below ground), and by increasing requirements for pruning or removal in the future. Views and vistas can also be interrupted. Sympathetic and well-planned proposals can however enhance and improve tree cover and amenity.

4.3.3 In order to ensure that the retained trees on site are properly protected during the complete development process, the tree rooting zones are to be considered as important areas.

4.3.4 For the purpose of development, the rooting zone of the tree is known as the Root Protection Area or RPA. This represents the area of ground around the tree which, where possible should remain undisturbed.

4.3.5 Additionally, the stems and canopies of retained trees require protection from accidental damage and onerous pruning requirements.

4.3.6 The physical protection of retained trees can be achieved by creating a Construction Exclusion Zone (CEZ) based on each tree's RPA.

4.3.7 Visual guidance of the constraints posed by the trees to the site can be seen on the attached Tree Constraints Plan (TCP). Where trees pose a constraint to the proposed development, these constraints should be a consideration or influence on the final design and layout proposals.

5 ARBORICULTURAL IMPACT ASSESSMENT

5.1 DEVELOPMENT PROPOSAL

5.1.1 The proposal is for construction of an outside swimming pool with pavilion building and covered pergola. The development will require the installation of a water supply, power and drainage for the pavilion building, and the relocation of the main power supply to the site, which currently terminates in the southeast corner of the site, next to T11 - Lime.

5.2 ARBORICULTURAL IMPACT ASSESSMENT

5.2.1 As part of the impact assessment the proposed activities are considered against above and below ground tree constraints determined by the tree survey. Below ground constraints are informed by the Root Protection Area (RPA) of each tree to be retained at the site. This is an area measured radially from the base of the tree, within which no development activities should take place without mitigation to prevent significant damage to the tree roots. BS5837 considers roots above 25mm diameter to be significantly important to the structural stability and physiological health of the tree.

Above ground constraints include the canopy spread and height, and shade cast by the canopy.

5.2.2 Within the site, fifteen trees, groups or wooded areas have the potential be impacted by the proposed development and as such pose a possible constraint to the planed activity. These trees are identified in the table on the following page.

5.2.3 **Those trees that have been included on the main survey for removal on purely arboricultural grounds are included within this section for reference only and are not considered a constraint to the proposed development.

5.2.4 Visual guidance of the impacts detailed in this table can be seen in the Arboricultural Impact Assessment Plans, included as appendix 2.

5.2.5 Arboricultural Impact Assessment Table:

Impact	Reason	Cat A Trees	Cat B Trees	Cat C Trees	**Cat U Trees
Trees for removal.	Facilitate proposed development.	/	T9	T8, T10	/
	Facilitate site access/egress.	/	/	/	/
	Facilitate site storage/facilities.	/	/	/	/
	Facilitate infrastructure and utilities.	/	/	/	/
Retained trees with the potential to have disturbed RPAs.	Facilitate proposed development.	T4	T5, T15, T29	T12	/
	Facilitate site access/egress.	T2, T4	T5, T29	T3, T6	/
	Facilitate site storage/facilities.	/	/	/	/
	Facilitate infrastructure and utilities.	T7	T15, T16	T12-T14	T11
Retained trees which will require pruning.	Facilitate proposed development.	/	/	/	/
	Facilitate site access/egress.	/	/	T3	/
	Facilitate site storage/facilities.	/	/	/	/
	Facilitate infrastructure and utilities.	/	/	/	/
Retained trees which will create shade over proposed development.	n/a	T7	T15, T16	/	T18

5.3 Discussion of Individual Arboricultural Impacts

5.3.1 **Trees for removal:**

T8, T9 and T10, all semi-mature Holm oaks are very close to the proposed pavilion building. T9 in particular, which has the highest amenity value in the group would require significant lateral canopy reduction, and approximately 19% of its RPA is within the footprint of the proposed pavilion. These trees are relatively small, and their loss could be easily mitigated with fresh planting at the site following the construction of the pavilion.

5.3.2 **Trees with the potential to have disturbed RPAs:**

Trees T4 – oak, T5 – lime and T29 – oak are significant, mature trees at the site. They are all considered worthy of retention at the site and were identified as having bat roost potential during the ecology survey. The proposed pavilion building stands at the edge of the RPA for T4 and T29 and encroaches within approximately 7% of the RPA for T5. This is within the allowance for additional hard standing set out in BS5837. Given the maturity of these trees and their proximity to the proposed pavilion building, there is a reasonable chance that their roots will have spread into the proposed location. Given their condition, and value as ecological assets they should be afforded suitable protection, and it would be advisable to carry out some root investigation to determine the true extent of their root morphology within the area of proposed development. The makeup of the site provides potential for T4 and T5 to have a root morphology which extends asymmetrically to the east, where these is less woody vegetation competition, and less compaction (from the public footpath/farm vehicle access). This could be investigated and would better inform the assessment of root morphology, and recommendations for suitable footings for the proposed building.

T12 and T15 – yew have root protection areas which extend into the area of proposed pool surround surfacing and retaining wall. The encroachment for T12 is minimal and not considered a significant constraint. Approximately 7% of the RPA of T15 is within the area. The tree may have significant (>25mm diameter) roots in the area, but there has been dense vegetation there until recently, and a hedgerow in the area may have further limited the root spread of T15. Root investigation is advised to assess the presence of significant roots along the location of the proposed retaining wall, with root pruning carried out where practical to remove minor roots of T15 entering the area.

Site access/egress for construction traffic will pass over areas within the RPA of trees T2-T6, and T29. The existing gravel track ceases at the edge of the area and becomes unmade ground. While there has been historic farm vehicle and foot traffic activity in the area, there will be the potential for additional compaction and contamination from construction traffic. This should be mitigated and would require temporary anti-compaction/contamination surfacing along the route of access/egress up to the point where it meets the existing gravel track.

The existing site plan (740 02A Existing Site Plan – Beech Architects) shows water and power supplies within the area which will need to be diverted around the pool development. It is understood that these will supply the plant room and pool. These should be diverted outside the RPA of existing trees at the site. The development will require installation of drainage for the pool/pavilion building. There are existing drainage runs to the west of the area of proposed development which currently serve the main estate house. If suitable these should be utilised to connect any additional drainage for the proposed development. The RPAs of retained trees around the perimeter of the area forms a near complete ring, with a 1.8m gap between T20 – yew and T21 – lime. This would be the most suitable location for additional drainage and utilities

to access/egress the development. Services entering any other part of the development area will require further investigation to assess their impact on roots of retained trees at the site.

The proposed site plan states that the existing mains power supply to the house is to be moved. It currently terminates over ground at a pole near to T11 – lime and continues below ground, through the RPA of trees T11-T16. If the pole is to be moved and it is agreeable with the power supply company this would be best located to the south of the site, with the cable routed outside the perimeter of the RPAs of retained trees in this area. This would affect the supply to the proposed pool development and the notes above should be considered regarding any additional services into the area.

5.3.3 **Retained trees which will require pruning:**

T3 – oak is a young tree. It will require minor pruning to clear the access track. This will not have any detrimental long term on its value, providing it is carried out sympathetically.

The proposed section and elevations plan mentions trimming branches to frame the view of the estate house. Provided this is carried out within the limits of BS3998;2010 this will not have a detrimental long-term effect on the trees.

5.3.4 **Retained trees which will create shade over proposed development:**

Trees T7 - oak, T15 – yew, T16 – sycamore, and T18 horse chestnut will cast some shadow over the proposed pool. Given that it is outdoors development the shade provided should be reasonable and mostly limited to the latter parts of the day.

5.4 Recommendations to Mitigate Impacts

5.4.1 Root investigation is recommended to determine the root morphology of trees T4 – oak, T5 – lime, T15 – yew and T29 – oak. This investigation should be carried out in a manner that is minimally disruptive to the trees at the site. Given the considerable number of trees, including some which have been recently removed, investigation using compressed air technology to expose the roots is deemed suitable as this will offer the opportunity to identify species of roots encountered, either visually, or through laboratory sample analysis where visual analysis is not sufficient. This may also be required to determine suitable routes for utility/drainage runs, if there is a requirement for them to enter the RPA of retained trees. This investigation should be carried out prior to the commencement of construction as it will provide information to inform the design of footings and construction methods used to achieve the proposed development.

5.4.2 Where it is not already paved, temporary ground protection should be used along the site access/egress route. An example of low load ground protection is shown in appendix 8.6. This could be adjusted to accommodate heavier loads by using large purpose made load spreading track mat boards over a compressible layer of well composted woodchip and a non-woven geotextile fabric base.

5.5 Site Facilities and Material Storage Location

5.6.1 Site facilities such as temporary offices or toilet blocks and materials required for the proposed development must be situated outside the RPA of any tree to be retained at the site.

5.6.2 Where there is a risk of soil contamination from stored materials, suitable bunds or ground protection must be used.

5.6.3 Locations of acceptable site facilities and material storage locations are shown in the Site Storage Plan at appendix 8.

5.6 Replacement Tree Planting

5.6.1 Replacement trees will be required as part of the remediation and enhancement landscaping measures. It is understood that replacement screening trees are proposed along the east boundary of the development. They will provide a comparable level of canopy cover as the trees they are replacing.

5.6.2 New trees should be planted as heavy standards to provide some immediate presence and should be planted in accordance with current industry guidelines and good practice (BS4428 – General Landscape Operations, BS8545:2014 Trees-from nursery to independence in the landscape).

5.7 Soil Remediation Measures

5.7.1 Soil remediation measures are not deemed necessary at this stage.

5.8 Retained Tree Pruning and General Works

5.8.1 The following table details the pruning required in relation to the proposed development:

Tree reference	**Tree Category**	**Pruning requirements**	**Reason**
T3	C	Prune lateral spread over access track by 1m	Access facilitation.
T20-T22	B	Lateral reduction pruning to enhance view of estate house	Vista pruning.
T29	B	Level 3 inspection of main stem	To determine structural integrity of main stem.

5.8.2 It is recommended that any access or development facilitation pruning is carried out prior to the commencement of development activity at the site.

5.8.3 Any general tree pruning required will be specified in the tree survey schedule included as appendix 1.

5.8.4 Any pruning works to retained trees should be carried out by suitably qualified and experienced arborists to the standards set out in *BS3998; Tree Work Recommendations*.

6 RETAINED TREE PROTECTION

6.1 CONSTRUCTION EXCLUSION ZONES

6.1.1 All retained trees on the site will require protection. This can be achieved with by the creation of Construction Exclusion Zones based on the Root Protection Areas of the trees. The location of these zones is detailed in the Preliminary Tree Protection Plan, included as part of appendix 2.

6.1.2 Tree Protection fencing must be of a suitable to prevent access into CEZs and withstand impact from activity on the site. A commonly used solution is Herras fencing, secured in place with connector brackets and stabilising struts, anchored to a base plate with ground pins, or block tray. An example of Tree Protection Fencing as recommended in BS5837;2012 is included as appendix 4.

6.1.3 In areas where protection of RPAs cannot be achieved through CEZs, additional protection will be required in the form of anti-compaction and anti-pollution ground protection cover. The location of these zones is detailed in the Preliminary Tree Protection Plan, included as part of appendix 2.

6.1.4 Ground protection must be of a suitable construction to prevent compaction or contamination of the soil beneath. A commonly used solution is a geo-textile membrane beneath a layer of compressible material (such as composted woodchip), with a load spreading board (such as a track-mat) laid on top. An example of low load ground protection cover is shown in appendix 6.

6.2 ARBORICULTURAL METHOD STATEMENT

8.2..1 The proposed development may require an Arboricultural Method Statement (AMS) detailing the specific protection measures necessary for certain activities. This should specify acceptable construction techniques and necessary tree works, alongside any additional tree protection measures. This will be included in this document only if part of the original instruction.

6.3 ARBORICULTURAL SITE SUPERVISION

6.3.1 The following table lays out the requirements for Arboricultural supervision relating to the proposed development.

Activity	**Development stage**	**Type of supervision**
Root investigation	Pre-commencement of development works	To be carried out by suitably qualified Arboriculturist
Installation of Tree Protection Fencing	Pre-commencement of development works	Site visit to inspect completed after installation
Installation of ground protection measures	Pre-commencement of development works	Site visit to inspect completed after installation
Works within RPA of retained trees (if required)	Development works	On site supervision by suitably qualified Arboriculturist
Post completion Tree Survey	Post completion of development works	To be carried out by suitably qualified Arboriculturist

7 COMPLIANCE STATEMENT

Every endeavour has been made to present this report in a clear fashion, with accurate information, reasonable conclusions, and appropriate recommendations. In line with our ISO procedures the report will be reviewed and agreed before release by an appropriate person within the company group. This should ensure compliance with our quality standard. However, should you have any questions, problems or queries about this report please do not hesitate to contact us.

L. Smith.

Consulting Arboriculturist

Date: 22nd December 2023

The technical content of this report, and its conclusions have been checked and agreed upon by Mr Elliott Brydon.

E. Brydon.

Director, Eastwood Tree Services Ltd

Date: 3rd January 2024

8 APPENDIX

8.1 APPENDIX 1. TREE SURVEY SCHEDULE

BS5837:2012 Tree Survey

Eastwood Tree Services
Valley Farm
Blacksmiths Lane
Coddenham
Suffolk
IP6 9TX
Phone: 01449 760780

Client: Nether Hall
Project: Nether Hall BS5837 Tree Survey 2023
Survey Date: 18/12/2023
Surveyor: Lee Smith

Tree and Tag No / Species	Hght (m)	Stems No	Stems Ø (mm)	Crown	Spread (m)	Clear (m)	Age	RP A (m²) R (m)	Phys Condition	Structural Condition	Preliminary Recommendations / Survey Comment	Cat ERC
T1											Estimated Measurements	
Common Oak *Quercus robur*	17.5	1	1050	N	6.3	6	M	A: 498.8 R: 12.6	Fair	C: Fair S: Fair B: Fair	No action :: Unspecified Gravel track beneath canopy to the north/west. Canopy spread to south estimated.	A.1.2 >40 yrs
				E	5.1	6						
				S	8	3						
				W	4.3	6						
T2											Estimated Measurements	
Common Oak *Quercus robur*	17.5	1	1115	N	6.5	8	M	A: 562.5 R: 13.38	Fair	C: Fair S: Fair B: Good	No action :: Unspecified Gravel track beneath canopy to north/west. Canopy spread to south estimated. Wound on main stem with exposed desiccated wood and cavity.	A.1.2 >40 yrs
				E	6	8						
				S	7	3						
				W	10	3						
T3											Estimated Measurements	
Common Oak *Quercus robur*	5	1	180	N	2.8	3	Y	A: 14.7 R: 2.16	Good	C: Good S: Good B: Good	Raise low canopy :: To 5.0m Good condition. Small stature limits value. Will require access facilitation pruning over access track to prevent damage. Light pruning to reduce overhang by 1m.	C.1 >40 yrs
				E	3	1.5						
				S	2.8	3						
				W	2.3	3						
T4 574											Estimated Measurements	
Common Oak *Quercus robur*	15	1	1280	N	5.5	8	OM	A: 707 R: 15	Decline	C: Fair S: Fair B: Fair	No action :: Unspecified Dirt track beneath canopy to north/west. Tree has features of early stage veteran status. Wounding and minor cavities in canopy. Identified as having bat roost potential in ecological report.	A.1.2 >40 yrs
				E	9	8						
				S	6	3						
				W	4.5	6						

Age Classifications: N Newly planted; Y Young; SM Semi-mature; EM Early Mature; M Mature; OM Over Mature

Condition: C Crown; S Stem; B Basal area

Stems: Ø Diameter; (Eq) Equivalent stem diameter using BS5837:2012 definition

ERC: Estimated Remaining Contributio

Tree and Tag No Species	Hght (m)	Stems No	Stems Ø (mm)	Crown Spread (m)	Crown Clear (m)	Age	RP A (m²) R (m)	Phys Condition	Structural Condition	Preliminary Recommendations Survey Comment	Cat ERC
T5 575										Estimated Measurements	
Common Lime *Tilia europaea*	21	1	1380	N 10 6 E 4.5 3 S 10 3 W 5.8 3		M	A: 707 R: 15	Fair	C: Fair S: Poor B: Fair	No action :: Unspecified Stem diameter is approximate due to epicormic growths at base of tree. Dirt track beneath canopy to north and west. Canopy spread to south estimated. Significant cavity in main stem between 1-3m above ground level, where stem trifurcates. Significant dead wood in canopy. Minor apical dieback in canopy. Identified as having bat roost potential in ecological report.	**B.1.2** 20 to 40 yrs
T6										Estimated Measurements	
Common Walnut *Juglans regia*	8	1	340	N 2.4 4 E 3.3 3 S 5 3 W 3.5 5		SM	A: 52.3 R: 4.08	Fair	C: Fair S: Fair B: Fair	No action :: Unspecified Stem has significant lean to south. Canopy spread to south estimated.	**C.1.2** 10 to 20 yrs
T7										Estimated Measurements	
Common Oak *Quercus robur*	23.5	1	890	N 3.5 8 E 5.8 3 S 11 3 W 4.5 8		M	A: 358.4 R: 10.68	Fair	C: Fair S: Fair B: Fair	No action :: Unspecified Dirt track beneath canopy to north and west. Canopy spread to south estimated.	**A.1.2** >40 yrs
T8											
Holm Oak *Quercus ilex*	6	1	220	N 3.6 1 E 2 1 S 2.6 1 W 3.5 1		SM	A: 21.9 R: 2.64	Fair	C: Fair S: Fair B: Fair	No action :: Unspecified Small stature limits value.	**C.1** 20 to 40 yrs
T9											
Holm Oak *Quercus ilex*	8	1	280	N 3.4 2 E 1.9 2 S 4 2 W 3.5 1		SM	A: 35.5 R: 3.36	Fair	C: Fair S: Fair B: Fair	No action :: Unspecified	**B.1** 20 to 40 yrs

Age Classifications: N Newly planted; Y Young; SM Semi-mature; EM Early Mature; M Mature; OM Over Mature

Condition: C Crown; S Stem; B Basal area

Stems: Ø Diameter; (Eq) Equivalent stem diameter using BS5837:2012 definition

ERC: Estimated Remaining Contributio

Tree and Tag No Species	Hght (m)	Stems No	Stems Ø (mm)	Crown Spread (m)	Crown Clear (m)	Age	RP A (m²) R (m)	Phys Condition	Structural Condition	Preliminary Recommendations Survey Comment	Cat ERC
T10											
Holm Oak *Quercus ilex*	8	1	230	N 2 E 2 S 2 W 2.5	2 1 1 1	SM	A: 23.9 R: 2.75	Fair	C: Fair S: Fair B: Fair	No action :: Unspecified Small stature limits value.	C.1 10 to 20 yrs
T11											
Common Lime *Tilia europaea*	8	1	830	N 3.8 E 1.2 S 2.3 W 3.5	5 5 2 5	OM	A: 311.7 R: 9.96	Poor	C: Poor S: Poor B: Poor	No action :: Unspecified Significant basal cavity. Tree has recently been reduced to the main stem structure at 8m. Sparse canopy of epicormic growths.	U.2 <10 yrs
T12											
Common Yew *Taxus baccata*	5	1	410	N 5.3 E 3.3 S 4.5 W 3	1 1 0.5 3	M	A: 76.1 R: 4.92	Fair	C: Fair S: Fair B: Fair	No action :: Unspecified Tree has recently been reduced. Asymetric canopy with sparse growth to east. Predominantly screening value.	C.1.2 20 to 40 yrs
T13											
Common Yew *Taxus baccata*	5	2	255 (Eq)	N 3.8 E 1.7 S 2.1 W 2.3	4 4 4 4	SM	A: 29.3 R: 3.05	Poor	C: Poor S: Fair B: Fair	No action :: Unspecified Tree has recently been reduced. Sparse remaining canopy.	C.2 10 to 20 yrs
T14											
Common Lime *Tilia europaea*	5	2	595 (Eq)	N 2 E 2 S 3 W 2	4 4 4 4	M	A: 160 R: 7.13	Fair	C: Poor S: Fair B: Fair	No action :: Unspecified Tree has been recently reduced to main stem structure. Sparse remaining canopy of epicormic growths.	C.1.2 20 to 40 yrs
T15											
Common Yew *Taxus baccata*	5	3	459 (Eq)	N 5.4 E 3.6 S 3 W 5.3	3 3 3 3	M	A: 95.2 R: 5.5	Fair	C: Fair S: Fair B: Fair	No action :: Unspecified Canopy has been recently reduced.	B.1.2 20 to 40 yrs

Age Classifications: N Newly planted; Y Young; SM Semi-mature; EM Early Mature; M Mature; OM Over Mature

Condition: C Crown; S Stem; B Basal area

Stems: Ø Diameter; (Eq) Equivalent stem diameter using BS5837:2012 definition

ERC: Estimated Remaining Contributio

Tree and Tag No Species	Hght (m)	Stems No	Stems Ø (mm)	Crown Spread (m)	Crown Clear (m)	Age	RP A (m²) R (m)	Phys Condition	Structural Condition	Preliminary Recommendations Survey Comment	Cat ERC
T16											
Sycamore *Acer pseudoplatanus*	20	1	700	N 5.6 E 6 S 5.7 W 6	10 10 10 10	M	A: 221.7 R: 8.4	Fair	C: Fair S: Fair B: Fair	No action :: Unspecified Tree not included on topographical survey. Location plotted using measurements from other trees in area.	**B.1** 20 to 40 yrs
T17											
Common Yew *Taxus baccata*	6	2	311 (Eq)	N 2.5 E 3.1 S 4 W 3.4	1 2 3 3	M	A: 43.8 R: 3.73	Fair	C: Fair S: Fair B: Good	No action :: Unspecified Slightly sparse canopy.	**B.1.2** 20 to 40 yrs
T18											
Common Horse Chestnut *Aesculus hippocastanum*	13.5	1	400	N 4 E 2.5 S 3 W 5.5	4 4 4 4	SM	A: 72.4 R: 4.8	Poor	C: Poor S: Poor B: Fair	No action :: Unspecified Significant canker on main stem and in canopy.	**U.2** <10 yrs
T19											
Common Yew *Taxus baccata*	8	1	220	N 1.2 E 2.5 S 2 W 1.7	1 1 1 1	SM	A: 21.9 R: 2.64	Fair	C: Fair S: Fair B: Fair	No action :: Unspecified Suppressed by adjacent trees.	**C.1** 20 to 40 yrs
T20											
Common Yew *Taxus baccata*	8	1	250	N 3.8 E 3.5 S 3.6 W 2.3	3 3 3 3	SM	A: 28.3 R: 3	Fair	C: Fair S: Fair B: Fair	No action :: Unspecified	**B.1.2** 20 to 40 yrs
T21											
Small-Leafed Lime *Tilia cordata*	11.5	1	290	N 3.3 E 2.5 S 2.6 W 5.1	2 2 2 2	SM	A: 38.1 R: 3.48	Fair	C: Fair S: Fair B: Fair	No action :: Unspecified Stem leans to west.	**B.1** 20 to 40 yrs

Age Classifications: N Newly planted; EM Early Mature; Y Young; M Mature; SM Semi-mature; OM Over Mature

Condition: C Crown; S Stem; B Basal area

Stems: Ø Diameter; (Eq) Equivalent stem diameter using BS5837:2012 definition

ERC: Estimated Remaining Contributio

Tree and Tag No Species	Hght (m)	Stems No	Stems Ø (mm)	Crown Spread (m)	Crown Clear (m)	Age	RP A (m²) R (m)	Phys Condition	Structural Condition	Preliminary Recommendations Survey Comment	Cat ERC
T22										Estimated Measurements	
Common Yew *Taxus baccata*	15	1	700	N 3.8 E 4.3 S 5.1 W 4.3	1.5 1.5 1.5 1.5	M	A: 221.7 R: 8.4	Fair	C: Fair S: Fair B: Good	No action :: Unspecified Stem diameter is approximate due to dense basal growth. Minor dead wood in canopy and some apical dieback.	**B.1.2** 20 to 40 yrs
T23											
Common Lime *Tilia europaea*	19	1	650	N 3.9 E 2 S 3.7 W 3.7	4 4 4 4	M	A: 191.2 R: 7.8	Fair	C: Fair S: Fair B: Fair	No action :: Unspecified Stem diameter is approximate due to dense epicormic growths on main stem. Minor apical dieback.	**B.1.2** 20 to 40 yrs
T24											
Common Lime *Tilia europaea*	19	1	650	N 3.9 E 2 S 3.7 W 2	4 4 4 4	M	A: 191.2 R: 7.8	Fair	C: Fair S: Fair B: Fair	No action :: Unspecified Stem diameter is approximate due to dense epicormic growths on main stem. Minor apical dieback.	**B.1.2** 20 to 40 yrs
T25										Estimated Measurements	
Common Lime *Tilia europaea*	17	1	650	N 3.9 E 3.9 S 3.7 W 2	4 4 4 4	M	A: 191.2 R: 7.8	Decline	C: Fair S: Fair B: Fair	No action :: Unspecified Stem diameter is approximate due to dense epicormic growths on main stem. Minor apical dieback. Moderate dead wood in canopy.	**C.1.2** 10 to 20 yrs
T26											
Common Holly *Ilex aquifolium*	6	1	250	N 5.7 E 2.5 S 2 W 3.2	1 1 1 1	M	A: 28.3 R: 3	Fair	C: Fair S: Fair B: Fair	No action :: Unspecified Stem leans to north. Primarily screening value.	**C.2** 10 to 20 yrs
T27											
Common Lime *Tilia europaea*	23	1	550	N 3.6 E 4.3 S 2.3 W 3.1	10 10 10 10	M	A: 136.9 R: 6.6	Fair	C: Fair S: Ivy B: Fair	No action :: Unspecified Stem diameter is approximate due to thick ivy on main stem.	**B.1** 20 to 40 yrs

Age Classifications: N Newly planted; Y Young; SM Semi-mature; EM Early Mature; M Mature; OM Over Mature

Condition: C Crown; S Stem; B Basal area

Stems: Ø Diameter; (Eq) Equivalent stem diameter using BS5837:2012 definition

ERC: Estimated Remaining Contributio

Tree and Tag No Species	Hght (m)	Stems No	Stems Ø (mm)	Crown Spread (m)	Crown Clear (m)	Age	RP A (m²) R (m)	Phys Condition	Structural Condition	Preliminary Recommendations Survey Comment	Cat ERC
T28											
Sycamore *Acer pseudoplatanus*	16	1	400	N 3.5 8 E 5.8 8 S 3.3 8 W 2 8		SM	A: 72.4 R: 4.8	Fair	C: Fair S: Fair B: Fair	No action :: Unspecified Asymmetric canopy. Suppressed by neighbouring trees.	C.1 20 to 40 yrs
T29 576											
Common Oak *Quercus robur*	21	1	1200	N 5.1 10 E 3.8 10 S 7.8 10 W 6.3 10		M	A: 651.5 R: 14.4	Fair	C: Fair S: Fair B: Poor	Further inspection :: On internal trunk decay. Significant basal wound on north side of main stem, with associated cavity. Localised hollow sounds produced by stem in vicinity of cavity when tapped with a mallet. Decayed fungal fruiting bodies attached to southeast side of main stem at location of secondary wound. Fruiting bodies too decayed to accurately identify, but potentially cerioporus squamosis. Identify as having bat roost potential in ecological report. Recommend level 3 inspection of main stem to assess structural integrity of main stem.	B.1.2 20 to 40 yrs
T30											
Sycamore *Acer pseudoplatanus*	10	1	200	N 3 4 E 3 4 S 3 4 W 2 4		SM	A: 18.1 R: 2.4	Fair	C: Fair S: Fair B: Fair	No action :: Unspecified Small stature limits value.	C.2 20 to 40 yrs
T31											
Sycamore *Acer pseudoplatanus*	10	1	230	N 3 4 E 3.5 4 S 3.5 4 W 2 4		SM	A: 23.9 R: 2.75	Fair	C: Fair S: Fair B: Fair	No action :: Unspecified Small stature limits value.	C.2 20 to 40 yrs
T32											
Sycamore *Acer pseudoplatanus*	10	1	190	N 3.5 4 E 3.8 4 S 2 4 W 2 4		SM	A: 16.3 R: 2.27	Fair	C: Fair S: Fair B: Fair	No action :: Unspecified Small stature limits value.	C.2 20 to 40 yrs

Age Classifications: N Newly planted; Y Young; SM Semi-mature; EM Early Mature; M Mature; OM Over Mature

Condition: C Crown; S Stem; B Basal area

Stems: Ø Diameter; (Eq) Equivalent stem diameter using BS5837:2012 definition

ERC: Estimated Remaining Contributio

Tree and Tag No Species	Hght (m)	Stems No	Stems Ø (mm)	Crown Spread (m)	Crown Clear (m)	Age	RP A (m2) R (m)	Phys Condition	Structural Condition	Preliminary Recommendations Survey Comment	Cat ERC
TG1											Estimated Measurements
A Group - -	12	1	220	N 4.5 E 4.5 S 4.5 W 4.5	5 5 5 5	SM	A: 21.9 R: 2.64	Fair	C: Fair S: Fair B: Fair	No action :: Unspecified Group of trees not included on topographical survey. Group located adjacent to gravel track leading down to main hall. Includes yew, lime and sycamore. Trees are a reasonable distance from proposed development. Some Ivy covered stems. Lower canopies have been regularly pruned back from gravel track.	B.1.2 20 to 40 yrs

Age Classifications: N Newly planted; Y Young; SM Semi-mature; EM Early Mature; M Mature; OM Over Mature

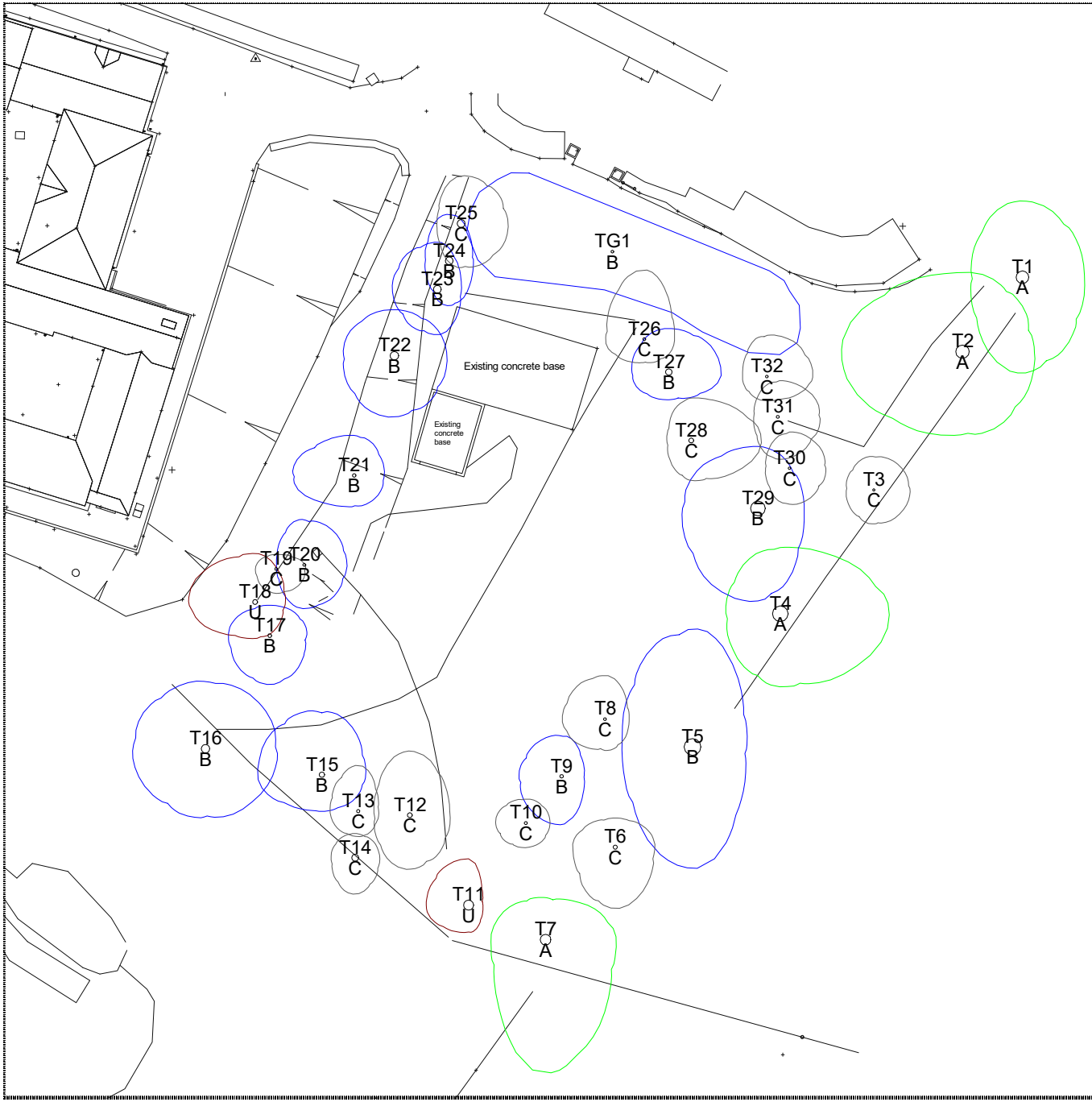
Condition: C Crown; S Stem; B Basal area

Stems: Ø Diameter; (Eq) Equivalent stem diameter using BS5837:2012 definition

ERC: Estimated Remaining Contributio

8.2 APPENDIX 2. SITE PLANS

8.2.1 Tree Constraints Plan
8.2.2 Arboricultural Impact Assessment Plan – Proposed Development
8.2.3 Arboricultural Impact Assessment Plan – Root Protection Areas
8.2.4 Arboricultural Impact Assessment Plan – Tree Shade
8.2.5 Arboricultural Impact Assessment Plan – Tree Removals
8.2.6 Preliminary Tree Protection Plan
8.2.7 Site Storage Plan

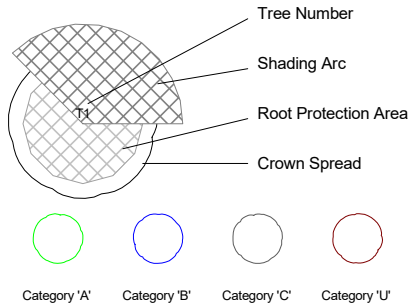


Eastwood Tree Services Ltd

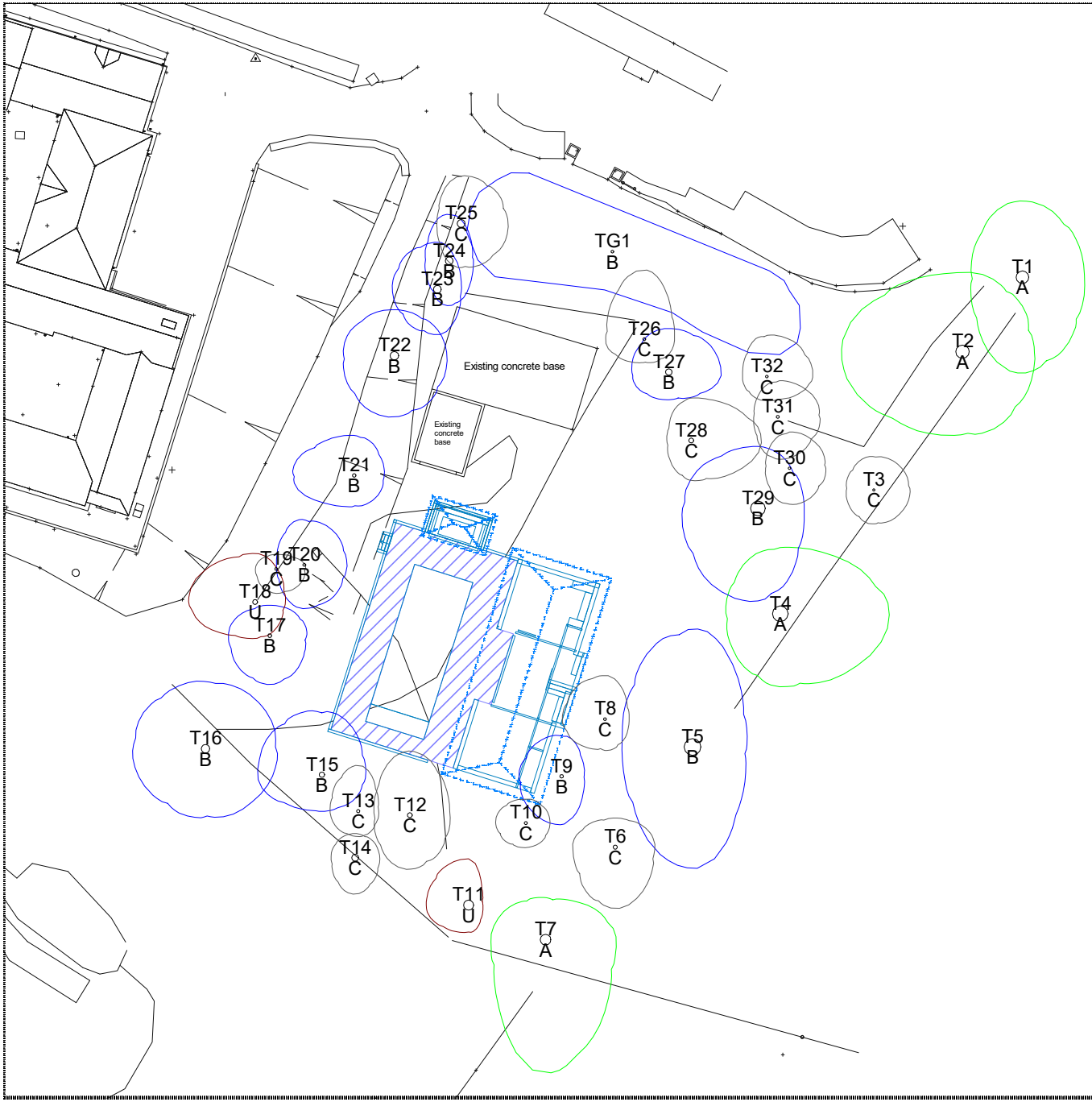
Valley Farm, Blacksmiths Lane,
Coddenham, Suffolk, IP6 9TX
Email; admin@eastwoodtreeservices.com Tel; 01449 760780

Tree Constraints Plan

SCALE :	DATE :	N
1 : 500 @ A4	19/12/2023	
MAP FILENAME : 4488 - Nether Hall TCP		



0 30m



Eastwood Tree Services Ltd

Valley Farm, Blacksmiths Lane,
Coddenham, Suffolk, IP6 9TX
Email; admin@eastwoodtreeservices.com Tel; 01449 760780

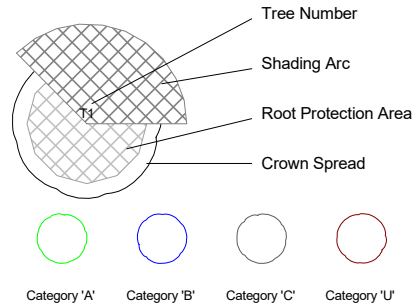
Proposed Development Plan

SCALE : 1 : 500 @ A4

DATE : 19/12/2023

MAP FILENAME : 4488 - Nether Hall Proposed Development

N



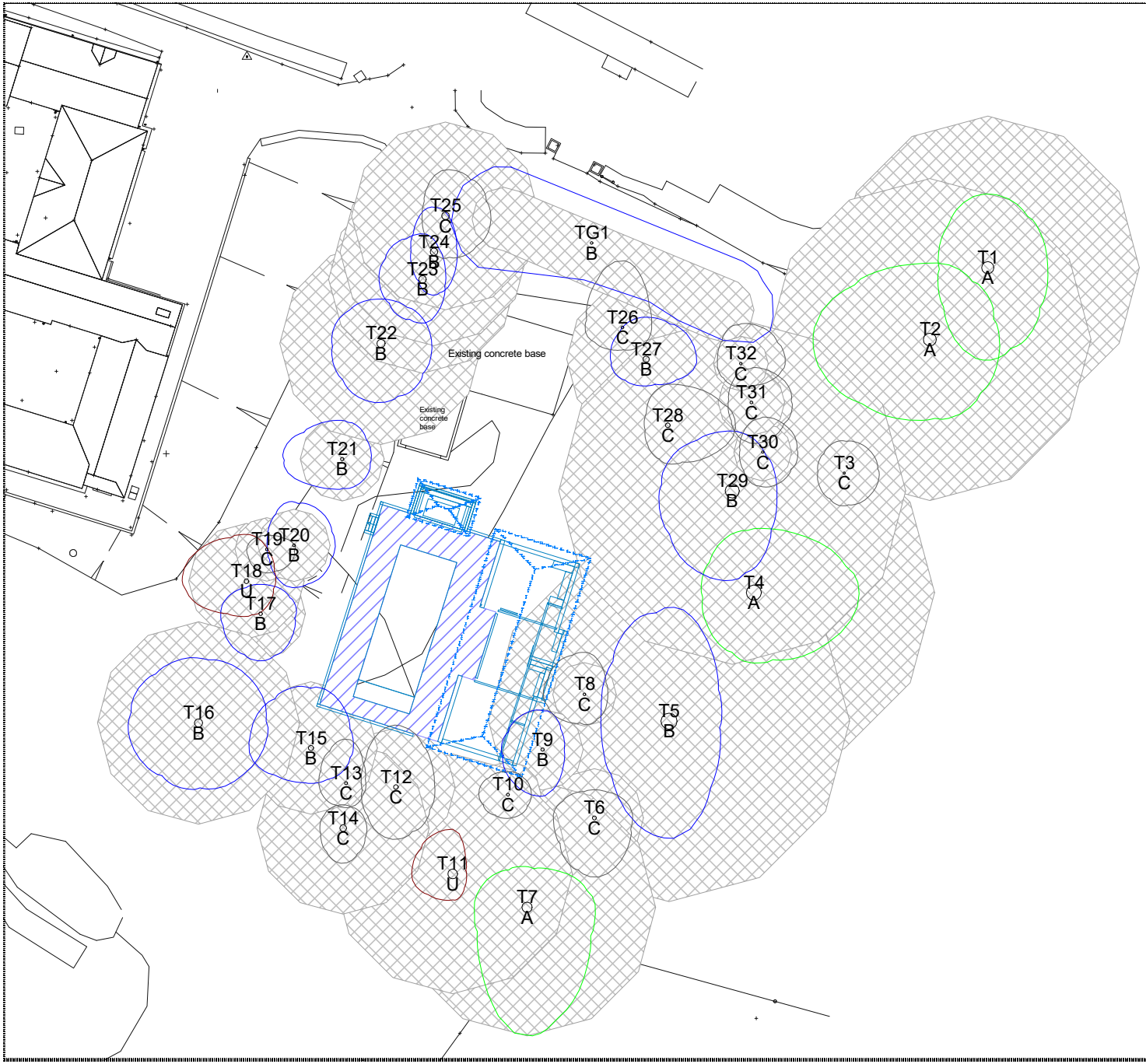
0 30m

Proposed Development

Proposed Paving

Proposed Ground Floor

Proposed Roofline



Eastwood Tree Services Ltd

Valley Farm, Blacksmiths Lane,
Coddenham, Suffolk, IP6 9TX
Email; admin@eastwoodtreeservices.com Tel; 01449 760780

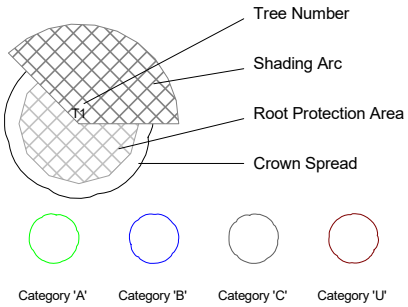
AIA Plan
Root Protection Areas

SCALE : 1 : 500 @ A4

DATE : 19/12/2023

MAP FILENAME : 4488 - Nether Hall - AIA RPA

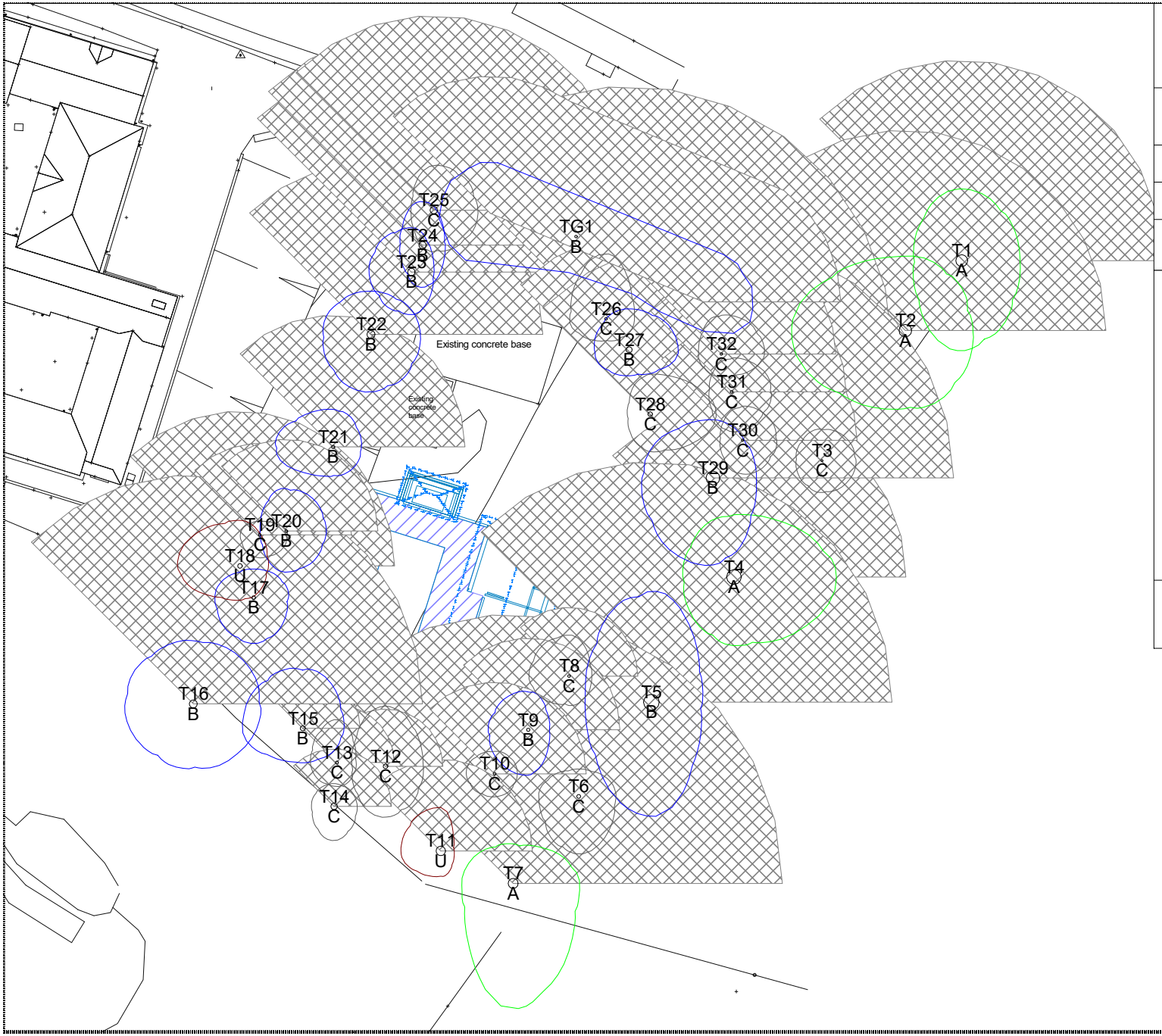
N



0 30m

Proposed Development

Proposed Paving
Proposed Ground Floor
Proposed Roofline



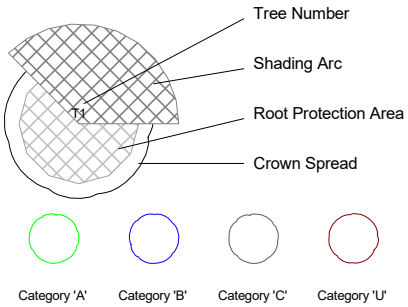
Eastwood Tree Services Ltd

Valley Farm, Blacksmiths Lane,
Coddenham, Suffolk, IP6 9TX
Email; admin@eastwoodtreeservices.com Tel; 01449 760780

AIA Plan - Tree Shade

SCALE :	DATE :	N
1 : 500 @ A4	19/12/2023	

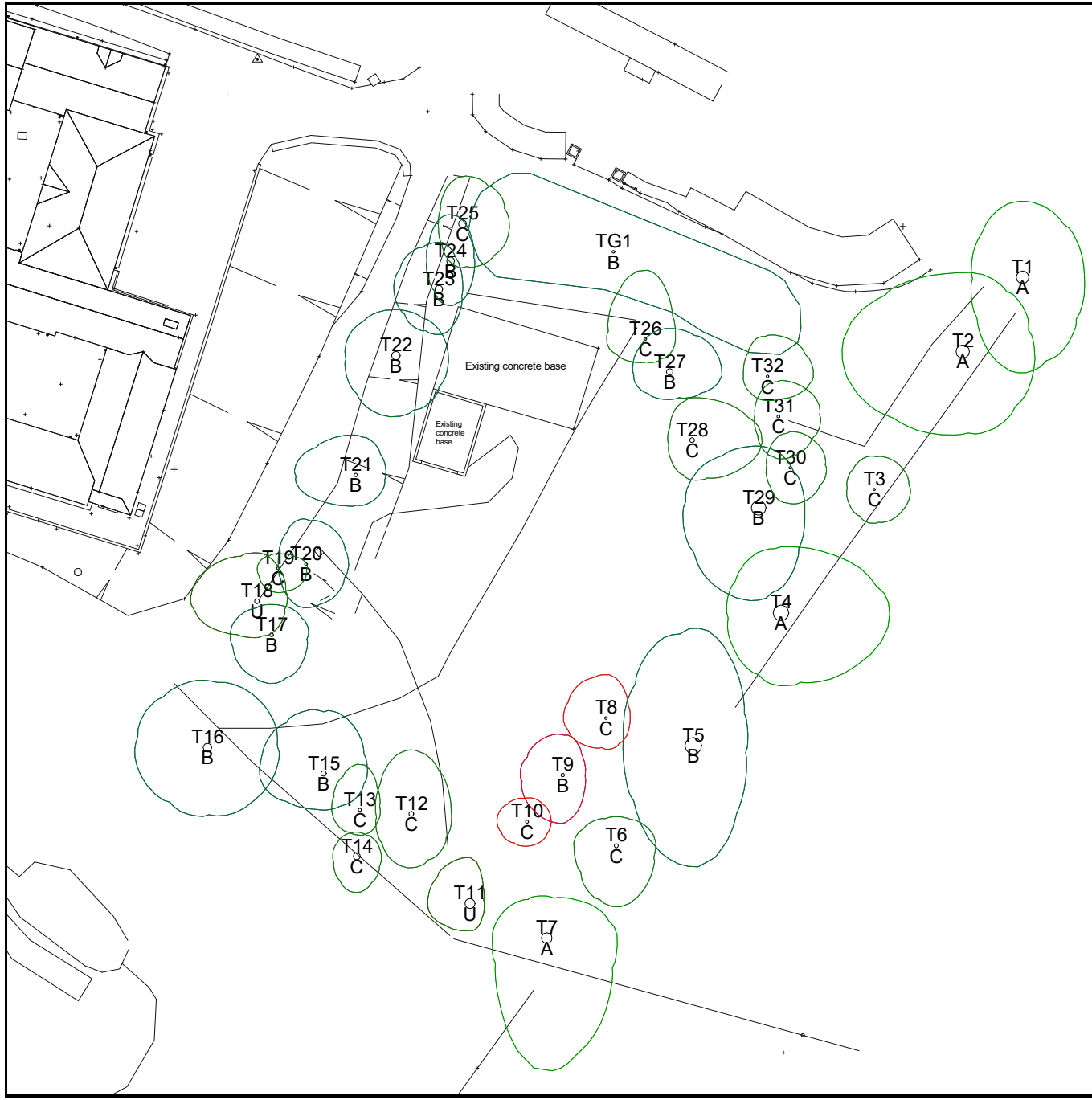
MAP FILENAME :
4488 - Nether Hall - AIA Tree Shade



0 30m

Proposed Development

Proposed Paving
Proposed Ground Floor
Proposed Roofline

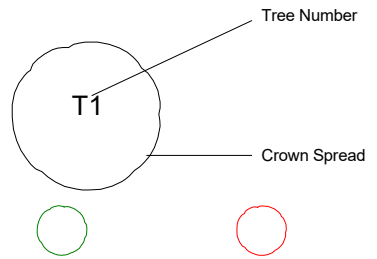


Eastwood Tree Services Ltd

Valley Farm, Blacksmiths Lane,
Coddenham, Suffolk, IP6 9TX
Email; admin@eastwoodtreeservices.com Tel; 01449 760780

Tree Removals Plan

SCALE :	DATE :	N
1 : 500 @ A4	22/12/2023	
MAP FILENAME : 4488 - Nether Hall - TRP		



0 30m

Eastwood Tree Services Ltd

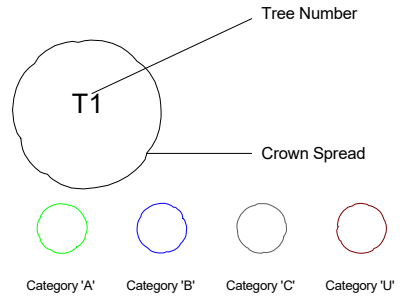
Valley Farm, Blacksmiths Lane,
Coddenham, Suffolk, IP6 9TX
Email; admin@eastwoodtreeservices.com Tel; 01449 760780

Preliminary Tree Protection Plan

SCALE :	DATE :
1 : 500 @ A4	22/12/2023

MAP FILENAME :
4488 - Nether Hall - PTPP

N

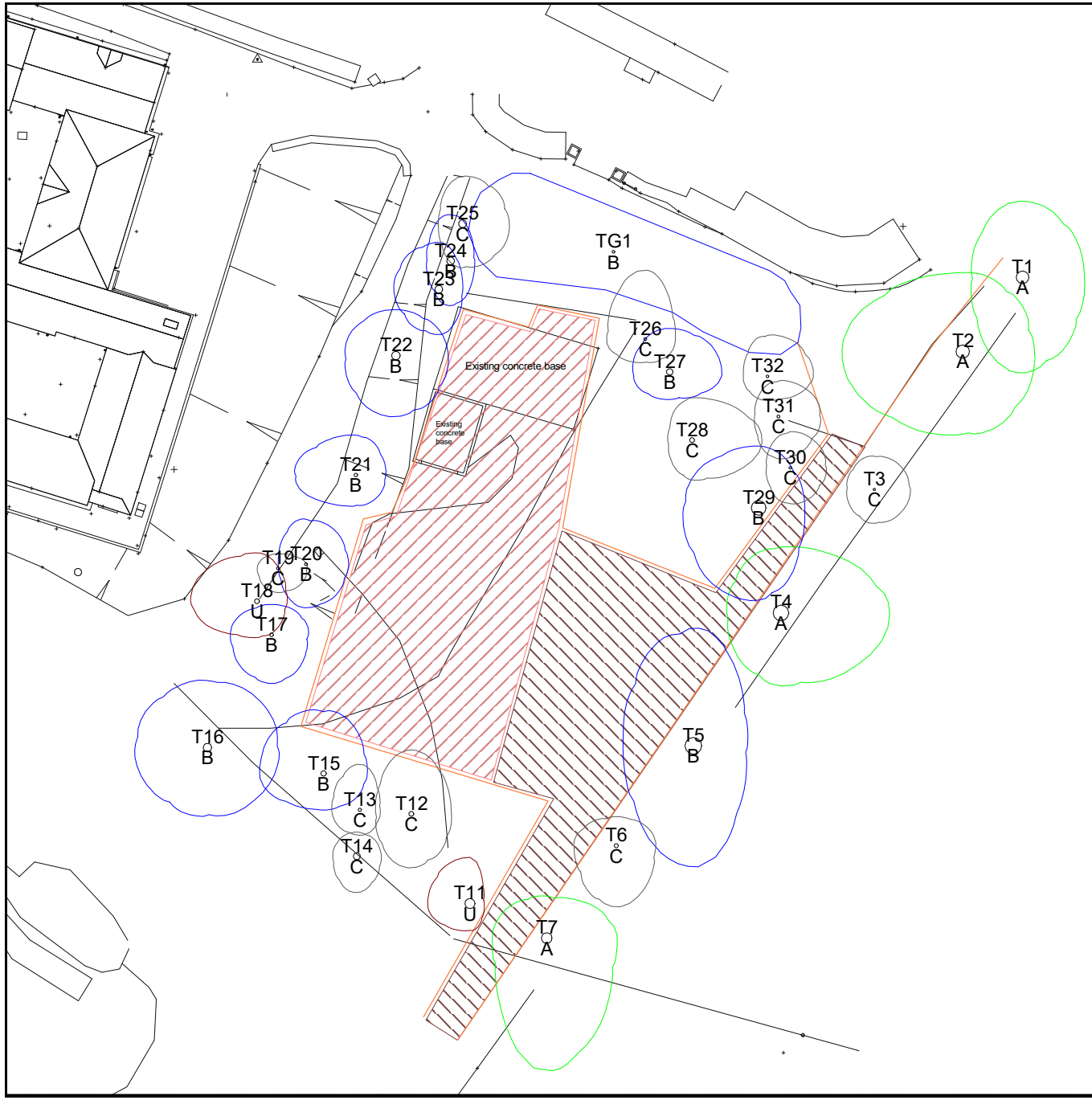


0 30m

Tree Protection

Temporary Ground Protection

Location of Tree Protection Fencing

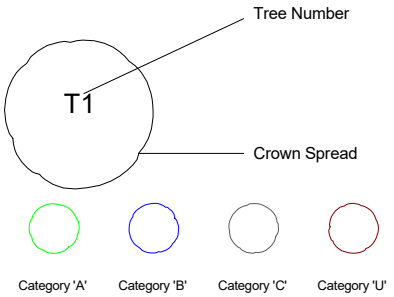


Eastwood Tree Services Ltd

Valley Farm, Blacksmiths Lane,
Coddenham, Suffolk, IP6 9TX
Email; admin@eastwoodtreeservices.com Tel; 01449 760780

Site Storage Plan

SCALE :	DATE :	N
1 : 500 @ A4	22/12/2023	
MAP FILENAME : 4488 - Nether Hall - Site Storage		



0 30m

Site Storage

- Temporary Ground Protection
- Area Suitable for Site Storage
- Location of Tree Protection Fencing

8.3 Appendix 3. Site Photos


Photo 1 (left); Access track at east edge of site, looking northeast. **Photo 2 (right);** Access track at east edge of site, looking southwest.


Photo 3 (left); T4 – oak. **Photo 4 (right);** T5 – lime.

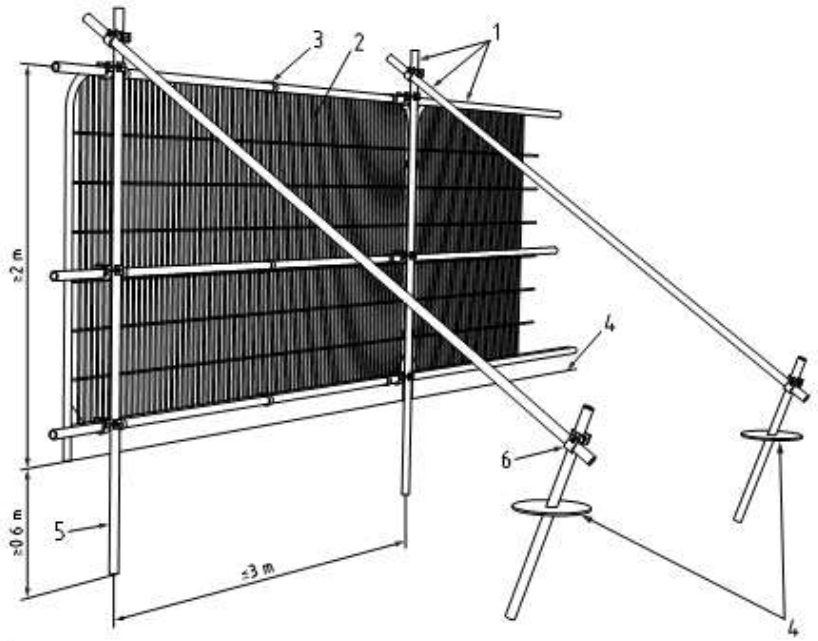

Photo 5 (left); T29 – oak. **Photo 6 (right);** base of T29 – oak.

Photo 7; Central area of site viewed from north corner. Existing concrete pad in the foreground.

Photo 8; Access to area viewed from east.

Photo 9 (left); T12-T14 – yew, with T11 – lime in rear. Photo also shows location of existing overhead power cable termination. **Photo 10 (right);** T17-T20 – yew.

8.4 APPENDIX 4. BS5837;2012 RECOMMENDATIONS FOR TREE PROTECTION FENCING

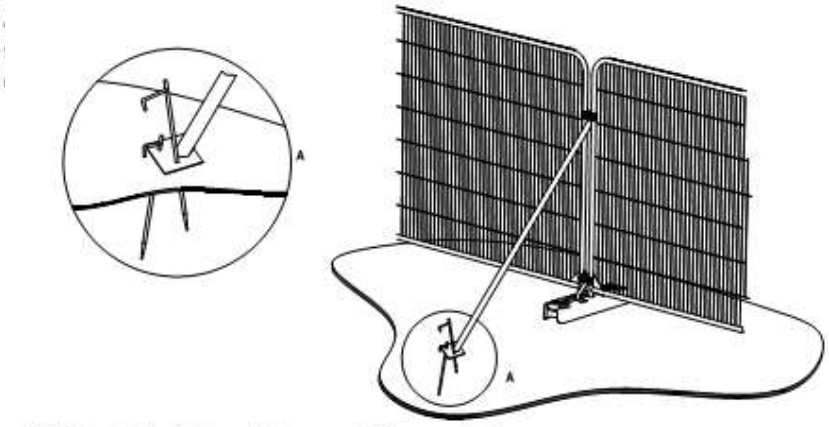


Key

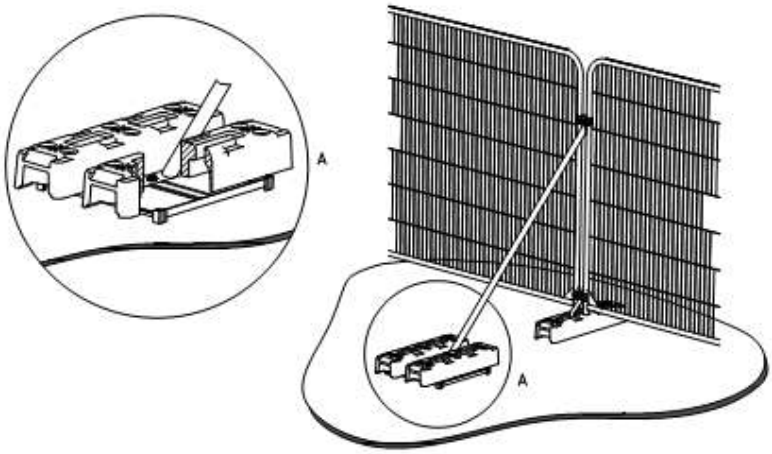
1 Standard scaffold poles

2 Heavy gauge 2 m tall galvanized tube and welded mesh infill panels

3 Panels secured to uprights and cross-members with wire ties



a) Stabilizer strut with base plate secured with ground pins



b) Stabilizer strut mounted on block tray

This area is a tree protection zone and is legally protected

The area is under management and the following must be observed;

- Do not enter without written permission from the arboricultural agent or LPA
- Do not prune or remove any trees
- Do not move or remove protective fencing
- No materials to be stored in the protected area
- No machinery or plant shall enter protected area
- No excavation or spoil in the protected area

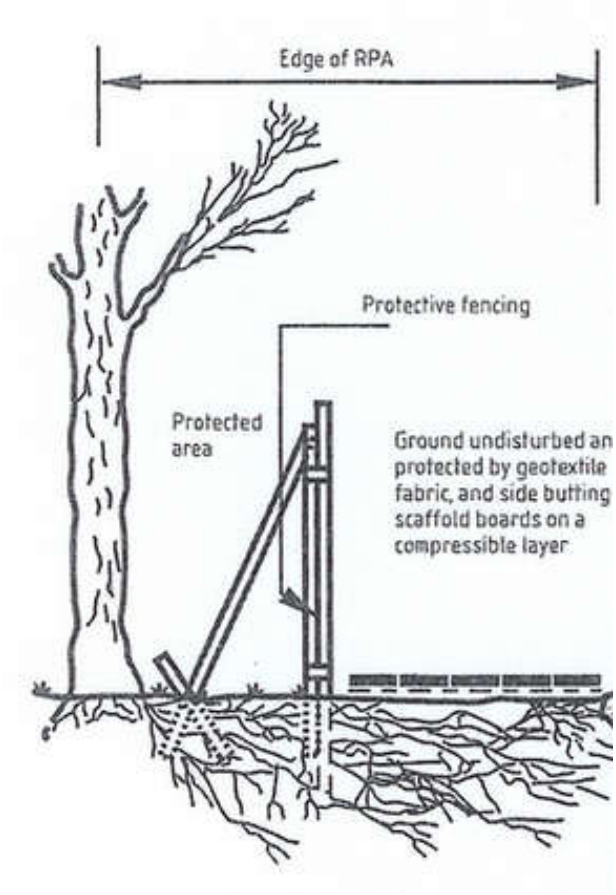
No unauthorised persons beyond this point. Tree preservation control area

Eastwood

Tel: 01449 760780

Email: admin@eastwoodtreeservices.com

8.6 Appendix 6. Example of Low Load Ground Protection



This example uses a geo-textile such as Terram, overlaid by a compressible layer (such as composted woodchip), with side butting scaffold boards as the impact resistant and load spreading top layer. Ground protection boards such as track-mat could be used to create a more stable upper surface.

8.7 APPENDIX 7. QUALIFICATIONS AND EXPERIENCE OF AUTHORS

Arboricultural Consultant.

Lee Smith *Cert.Arb. Level 4. (ABC) Professional Tree Inspection (Lantra)* has worked within the field of arboriculture since 2009. He has experience in amenity and utility arboriculture contracting.

He has undertaken arboricultural consultancy work throughout the south of England. His experience includes tree risk assessment and management for domestic and commercial customers, use of specialist decay detection equipment, surveys, and respective reports to BS5837;2012, and surveys for mortgage and insurance purposes.

He attends regular workshops, training events and seminars to keep his knowledge current.

Director, Eastwood Tree Services Ltd & Arboricultural Advisor.

Elliott Brydon *Cert.Arb Level 4 (ABC)* has worked within arboricultural contracting since 2001. In the last 12 years he has been a senior contract manager and advisor for high profile arboricultural contractors and has now taken on the position as a Director at Eastwood Tree Services.

As Contracts Manager his primary role was to give technical advice and recommendations to corporate and private clients. This role also included the delivery and smooth running of many private and corporate contracts. He continues these operations in his role as Director, as well as planning the future development and progression of services provided by Eastwood Tree Services.

He regularly produces detailed, specific risk assessments and technical method statements, site surveys and completes tender documents.

8.8 APPENDIX 8. STANDARDS OF WORK

Work recommended within this report is, where appropriate, in accordance with British Standards (BS) 3998; 2010 Tree work Recommendations, BS3936: 1992, Nursery Stock, BS4043: 1966 Transplanting of Semi Mature Trees, BS8545 2014; Trees; From Nursery to Independence in the Landscape – Recommendations, or other relevant standards. These current industry documents should be considered as a basic minimum level of performance. Anyone who carries out tree work & arboricultural operations should be able to demonstrate their knowledge, understanding & commitment to all relevant BS recommendations, industry good practice and current safety legislation.

The Trees & Timber industry Sector not only strives to comply with the above, but certain areas of its work are strictly governed by Acts of Parliament. If work includes the application of any Pesticide or Biocide (including weed killers, insecticides, and fertilisers) the operators must hold the correct application licence. Work around live overhead conductors is also strictly controlled, and very specific qualifications and authorisations are needed.

The Arboricultural Association (AA) holds and regulates a register of approved contractors. The contractors that are approved by them are audited on biannual basis.

The HSE will prosecute companies who appoint tree work contractors that are not competent or cause harm to their staff or other people affected by their acts or omissions. In recent years insurance companies have started stating if uninsured contractors have accidents, they will seek to claim losses against the parties who issued instruction/employed the contractor, be they domestic or commercial.

Your trees are a valuable commodity, which deserve good quality care and attention. They will look better, last longer and provide years of pleasure if looked after by people who know what to do and how to do it. We would therefore strongly recommend that when appointing a contractor to do tree work you only use Arboricultural Association Approved Contractors. This is to protect your liabilities and ensure consistent high standards of work.

The Arboricultural Association can be contacted on +44 (0)1242 522152 or www.trees.org.uk. They will be happy to give you contact details for the approved contractor closest to you.