



# ARBORICULTURAL IMPACT ASSESSMENT

## **SITE LOCATION**

144 Nottingham Road  
Ravenshead  
Nottingham  
NG15 9HL

## **ISSUE DATE**

12<sup>th</sup> March 2024

## **SEED REF**

1605-AIA-V1-A

## **CLIENT**

AM2 Architects

ARBORICULTURAL CONSULTANCY

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## DOCUMENT CONTROL

Date	Author	Checked	Revision
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The tree survey was a preliminary assessment from ground level and observations were made solely from visual inspection for the purposes of an assessment relevant to planning and development. This report is not a tree risk assessment and should not be construed as such. While every attempt has been made to provide a realistic and accurate assessment of the trees' condition at the time of inspection, it may have not been appropriate, or possible, to view all parts or all sides of every tree to fulfil the assessment criteria of a tree risk assessment.

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## Plans

### Tree Constraints Plan

Ref: 1605-TCP-001-C Revision: C

### Arboricultural Impact Plan

Ref: 1605-AIP-002-A Revision: A

### Draft Tree Protection Plan

Ref: 1605-TPP-003-A Revision: A



# 1. Introduction

## Background & Instruction

- 1.1.1. This report has been prepared by Sebastian Onslow *FdSc Arb. MArborA. MICFor (Chartered Arboriculturist)*, Principal Arboricultural Consultant at SEED Arboriculture Ltd. Sebastian is a Professional member of the Institute of Chartered Foresters (Chartered Arboriculturist) and a Professional Member of the Arboricultural Association (AA) and is therefore required to uphold the professional and ethical standards within the ICF and AA Codes of Conduct. Sebastian holds the LANTRA certificate in Professional Tree Inspection.
- 1.1.2. This Arboricultural Impact Assessment (AIA) has been prepared by SEED Arboriculture Ltd on behalf of AM2 Architects in support of a planning application for the demolition of the existing property and replacement of 1no. dwelling at 144 Nottingham Road, Ravenshead, Nottingham, NG15 9HL (hereafter referred to as the 'site').
- 1.1.3. The planning application is to be submitted to Gedling Borough Council.

## Purpose

- 1.1.4. The tree survey and AIA has been carried out in accordance with the recommendations outlined within British Standard BS5837:2012 'Trees in relation to design, demolition and construction – Recommendations'.
- 1.1.5. This AIA report:
- Provides the baseline survey data of existing trees, including a Tree Schedule and Tree Constraints Plan (TCP).
  - Evaluates the direct and indirect impacts of the Proposed Development upon the existing trees.
  - Where necessary, provides details of mitigation and tree protection, including a Draft Tree Protection Plan

## Site Description

- 1.1.6. The site is situated south of the village of Ravenshead, Nottinghamshire. The site is centred at UK National Grid Reference (SK 55600 53970) and comprises of a detached residential property, set within mature wooded grounds. Neighbouring properties and mature woodland border the site to the north, south and west. Access to the site is from the east off the A60 Nottingham Road. The application boundary is illustrated on the Site Location Plan (**Appendix 1**).



## Reference Documents

1.1.7. **Table 1** provides a summary of documents which provide the basis for this tree survey and AIA.

*Table 1 - Reference Documents*

Document	Reference Number	Prepared By	Date
Topographical Survey	PJRC-496-1	P J Rhodes Consultancy Ltd	January 2023
Site Plan	-	AM2 Architects	March 2024

## 2. Planning Policy and Legislation

### National Planning Policy Framework (NPPF)

2.1.1. The following paragraphs within the NPPF set out policies which guide the planning policy and decision-making process of Local Planning Authorities in relation to trees. These are:

2.1.2. **Paragraph 136**

Trees make an important contribution to the character and quality of urban environments and can also help mitigate and adapt to climate change. Planning policies and decisions should ensure that new streets are tree-lined, that opportunities are taken to incorporate trees elsewhere in developments (such as parks and community orchards), that appropriate measures are in place to secure the long-term maintenance of newly-planted trees, and that existing trees are retained wherever possible. Applicants and local planning authorities should work with highways officers and tree officers to ensure that the right trees are planted in the right places, and solutions are found that are compatible with highways standards and the needs of different users.

2.1.3. **Paragraph 180 (b & d)**

Planning policies and decisions should contribute to and enhance the natural and local environment by:

Recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland;

minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures;

#### 2.1.4. Paragraph 186

When determining planning applications, Local Planning Authority's (LPA) should apply the following principles:

If significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternate site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;

development on land within or outside a Site of Special Scientific Interest, and which is likely to have an adverse effect on it (either individually or in combination with other developments), should not normally be permitted. The only exception is where the benefits of the development in the location proposed clearly outweigh both its likely impact on the features of the site that make it of special scientific interest, and any broader impacts on the national network of Sites of Special Scientific Interest;

Development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused unless there are wholly exceptional reasons and a suitable compensation strategy exists.

Development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to improve biodiversity in and around developments should be integrated as part of their design, especially where this can secure measurable net gains for biodiversity or enhance public access to nature where this is appropriate.

#### Local Planning Policy

2.1.5. This AIA has considered the relevant Local Planning Policy, which includes:

##### **Greater Nottingham Aligned Core Strategies (Part 1 Local Plan) (Adopted September 2014)**

- Policy 16: Green Infrastructure, Parks and Open Space
- Policy 17: Biodiversity

##### **Gedling Borough Local Planning Document (Part 2 Local Plan) (Adopted July 2018)**

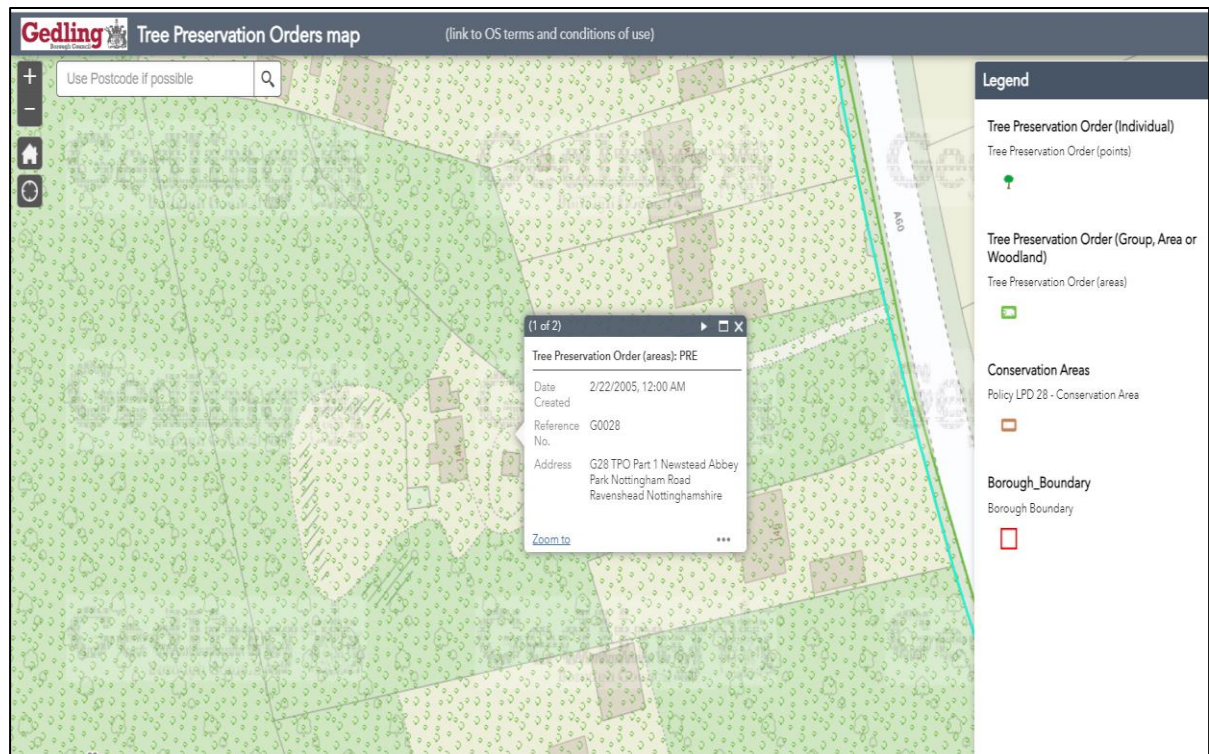
- Policy LPD 18 – Protecting and Enhancing Biodiversity
- Policy LPD 19 – Landscape Character and Visual Impact

#### Statutory Tree Protection & Designations

2.1.6. A search using the online mapping services available from Gedling Borough Council on 6<sup>th</sup> March 2024 confirmed that all trees across the site are afforded statutory protection under Tree Preservation Order (TPO) G0028 (Group G28) Part 1 – Newstead Abbey Park, Nottingham Road, Ravenshead, Nottinghamshire (22.02.2005) and Area Order 00141 - Newstead Abbey Park Station, Nottingham Road, Ravenshead, Nottinghamshire (01.03.2021). The site is not positioned within a local Conservation Area. See **Figure 1** below.



Figure 1 – Online search for Tree Preservation Orders (TPOs) and Conservation Areas

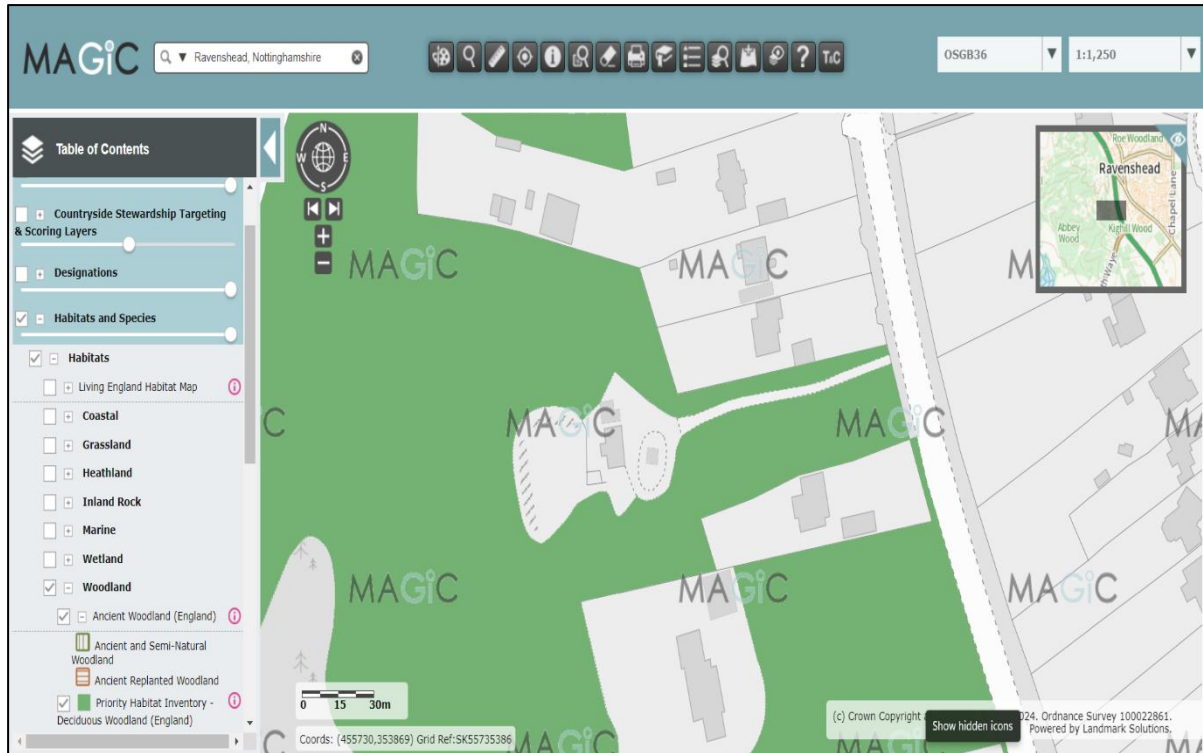


## Felling Licence

- 2.1.7. Tree felling is restricted under the Forestry Act 1967. Under this act, there is an exemption from the need for a felling licence for “Felling trees immediately required for the purpose of carrying out development authorised by planning permission (granted under the Town and Country Planning Act 1990)”
- 2.1.8. If full planning permission is granted, then any trees which require felling to implement the approved plans are exempt from this statutory protection. Outline planning permission does not provide an exemption to the regulations that control tree felling in the Forestry Act 1967.
- 2.1.9. **Woodland Status**
- 2.1.10. A review of Magic Map was undertaken to understand the status of woodland either on the site or within influencing distance. It was confirmed that as of 06.03.2024, no Ancient Woodland<sup>1</sup> designations are present upon or immediately adjacent to the Site.
- 2.1.11. Woodland at the site is classified as Priority Habitat Inventory – Deciduous Woodland (England). This is a non-statutory designation which has the potential to be a material consideration in the planning process.

<sup>1</sup> Ancient woods are areas of woodland that have persisted since 1600 in England and Wales, and 1750 in Scotland. The Magic Maps website (<https://magic.defra.gov.uk/MagicMap.aspx>) has been used to search for ancient woodland on or adjacent to a site.

Figure 2 – Online Search using Magic Maps shows designated woodlands across the site



### 3. Baseline Tree Survey

- 3.1.1. The tree survey was undertaken in on 19<sup>th</sup> October 2023, by Ryan Kearney *FdSc Arb*, Arboricultural Consultant at Seed Arboriculture Ltd.
- 3.1.2. The tree survey was undertaken in accordance with the methodology outlined within BS5837:2012.
- 3.1.3. The locations of the trees surveyed are illustrated on the Tree Constraints Plan (TCP) (**Appendix 3**) together with details of the constraints to new development in accordance with BS5837, including:
  - Tree Retention Category
  - Root Protection Areas (RPAs)
  - Tree Canopy Spreads
- 3.1.4. Details for each of the trees surveyed are provided in the Tree Schedule (**Appendix 2**), including; reference numbers, species, tree dimensions, life stage, physiological and structural condition, and retention category.



## Tree Survey Summary

### *Trees*

- 3.1.5. The survey recorded 31no. individual trees, comprising of 11no. category B, 9no. category C and 11no. category U retention value.

### *Groups*

- 3.1.6. The survey recorded 9no. group of trees, comprising of 6no. category B and 3no. category C retention value.

### *Hedgerows*

- 3.1.7. No hedgerows were recorded during the survey.

*Figure 3 – View of existing property from north looking south*



*Figure 4 – View of existing driveway from west looking east towards the Nottingham Road*



*Figure 5 – View of rear garden with boundary tree groups G3 and G7*



*Figure 6 – View of property frontage from east looking west along entrance driveway*



## 4. Impact Assessment

- 4.1.1. The impact of the Proposed Development upon existing trees is illustrated on the Arboricultural Impact Plan (**Appendix 3**).
- 4.1.2. The Proposed Development will require the part-loss of 1no. group of trees. This includes 1no. Lawson cypress tree to be removed from within Group G1. The overall group is of B category retention value. The single tree removal is necessary for emergency response access vehicles. Loss of the tree is not considered to be of a detrimental impact to the wider character and appearance of the area.
- 4.1.3. All trees proposed for removal are illustrated with a red canopy outline on the Arboricultural Impact Plans at **Appendix 3**.
- 4.1.4. BS5837:2012 states that competing needs for development mean that trees are only a single factor requiring consideration within the wider planning balance. Care should be taken to avoid misplaced tree retention which can lead to excessive pressure throughout the development phase or post-development once land and/or properties are inhabited.

*Figure 7 – View of emergency response vehicle and existing narrow driveway*



### Root Protection Areas (RPAs)

- 4.1.5. The RPA is an area equivalent to a circle with a radius 12 times the diameter of the trees measured at 1.5 metres for single stemmed trees. For trees with more than one stem, one of two calculation methods should be used. In all cases, the stem diameter(s) should be measured in accordance with Annex C, and the RPA should be guided from Annex D of BS5837:2012.
- 4.1.6. The RPA is an area in which no ground works should be undertaken without due care in relation to the retained tree(s), to avoid soil compaction, changes in levels or soil contamination which could alter the trees condition and/or stability. The shape of the RPA and its exact location will depend upon arboricultural considerations and ground conditions.
- 4.1.7. The RPA for the trees has been calculated as prescribed by BS5837:2012 and are shown in relation to the Proposed Development on the Arboricultural Impact Plan at **Appendix 3**.

### New RPA Incursions

- 4.1.8. The proposed patio will result in new incursions within the RPA of T11 and T12 (pedunculate oak).
- 4.1.9. The site gateway, access and driveway widening works will require minor groundworks within the RPA of trees bordering the existing driveway.
- 4.1.10. The existing property and outbuildings will be demolished adjacent to the RPAs of retained trees.
- 4.1.11. The impact of the RPA incursions has been considered acceptable subject to mitigation measures being specified in an Arboricultural Method Statement.
- 4.1.12. Mitigation measures for these incursions have been suggested below, however, an Arboricultural Method Statement should be produced following planning approval to provide detail on mitigation measures and detailed working methods around retained trees.

### New RPA Incursions – Permanent Hard-Surfacing

- 4.1.13. Where new permanent hard-surfacing will result in a new RPA incursion, this has been summarised below.
- 4.1.14. Mitigation measures for the incursion has been suggested below, however, an Arboricultural Method Statement should be produced following planning approval to provide detail on mitigation measures and detailed working methods around retained trees. See Section 5 for further details.
- **T11 (pedunculate oak)** – New incursion for the proposed patio – 6m<sup>2</sup> of the total 41m<sup>2</sup> RPA, therefore a 14% new incursion.  
Mitigation – Manual excavation works to be undertaken under arboricultural supervision.
  - **T12 (pedunculate oak)** – New incursion for the proposed patio – 1m<sup>2</sup> of the total 222m<sup>2</sup> RPA, therefore a <1% new incursion.
  - Mitigation – Negligible impact, no mitigation strategy necessary.
- 4.1.15. The proposed RPA incursions falls within the tolerance limits as detailed within Section 7.4.2 of BS5837:2012 which states that new permanent hard surfacing should not exceed 20% of any existing unsurfaced ground within the RPA.

### **New RPA Incursions – Site Gateway, Access and Driveway Alterations**

- 4.1.16. The existing access and driveway will be altered and widened in part which will require minor groundworks within the RPA of adjacent trees. The front wall and piers will be rebuilt.
- 4.1.17. The proposed RPA incursions fall within the tolerance limits as detailed within Section 7.4.2 of BS5837:2012 which states that new permanent hard surfacing should not exceed 20% of any existing unsurfaced ground within the RPA. The RPA incursions are not considered to be detrimental to the health and vitality of the trees.
- 4.1.18. The removal of the existing hard surfacing / surface vegetation within the RPA must be undertaken using hand-tools only under the direct supervision/guidance of the project arboriculturist.

### **Tree Canopies & Shade**

- 4.1.19. The distribution of tree canopy cover on and within influencing distance of the site is illustrated on the TCP (**Appendix 3**). The Tree Schedule lists the vertical clearance from site ground level to significant tree branching of individual trees. This measurement informs the impacts of accessibility and development beneath tree canopies.
- 4.1.20. If considered appropriate the principal tree shadow constraints can be shown on the TCP and are plotted in accordance with BS5837 using the current height of surveyed trees.
- 4.1.21. Where shading is unavoidable, the potential adverse impact of shadowing should also be reviewed on balance with the positive aspects of retaining a degree of canopy shade. BS5837:2012 (para. 5.3.4, a) NOTE 1) states that “shading can be desirable to reduce glare or excessive solar heating, or to provide comfort during hot weather. The combination of shading, wind speed/turbulence reduction and evapotranspiration effects of trees can be utilised in conjunction with the design of buildings and spaces to provide local microclimatic benefits”.
- 4.1.22. As the proposed new dwelling occupies a similar position to that already existing, shading from retained trees is not considered to be a significant issue. Given the context of the site set within dense woodland, it is assumed any new occupants will understand that trees will cast shade across the garden for part of the day.

### **Facilitation Tree Pruning**

- 4.1.23. To provide sufficient clearance for construction and future use of the Proposed Development, several trees will require minor pruning work to be carried out.
- 4.1.24. Required tree pruning is likely to include the following:
- T7 (Japanese maple) – Trim back from proposed dwelling to allow clearance for construction scaffolding and working zone.
- 4.1.25. A final specification for facilitation tree pruning should be determined by the Project Arboriculturist following a pre-commencement site meeting with the appointed contractor.
- 4.1.26. Further requirements for facilitation pruning may be identified during the course of construction and should be addressed by ongoing liaison with the Project Arboriculturist.

### Future growth

- 4.1.27. As the proposed new dwelling occupies a similar footprint to that existing, future growth of trees is not considered to be an issue.
- 4.1.28. Minor pruning of lateral branches will address any issues where the canopy of trees encroaches towards the proposed dwelling and low over the access driveway.

## 5. Tree Protection

- 5.1.1. An overview of the recommended tree protection measures has been provided within this AIA. A draft Tree Protection Plan (TPP) is provided at **Appendix 3**.
- 5.1.2. Full details of tree protection measures including construction methods, schedule of arboricultural supervision and specific forms of tree protection should be provided within a detailed Arboricultural Method Statement following planning approval.
- 5.1.3. To ensure all tree protection measures are implemented, arboricultural supervision should be undertaken by an appointed Project Arboriculturist (PA). The PA will be a suitably qualified arboriculturist appointed by the client / contractor / other party responsible for implementation of tree protection measures.

### Tree Protection Fencing

- 5.1.4. The principal protection for the retained trees is provided by Tree Protection Fencing (TPF) positioned to form a Construction Exclusion Zone (CEZ) around retained trees. No access should be allowed to the other than for operations specified in the approved documents or those agreed with the LPA later.
- 5.1.5. The indicative location of Tree Protection Fencing (TPF) is illustrated on the Draft Tree Protection Plans at **Appendix 3**.
- 5.1.6. The CEZ must be in place prior to the commencement of construction work on site. The TPF must not be moved or relocated without approval from the Project Arboriculturist and, where necessary, approval from the Local Planning Authority.
- 5.1.7. The TPF specification should be fit for the purpose of excluding construction activity and appropriate to the degree and proximity of work taking place around the retained trees.
- 5.1.8. The most common specification as illustrated in BS5836:2012 Figure 3b (**Appendix 4**) comprises welded mesh panels (Heras Fencing) on rubber or concrete feet, the panels should be joined together using a minimum of two anti-tamper couplers, installed so that they can only be removed from within the fence. The distance between fence couplers should be at least 1m and should be uniform throughout the fence. The panels should be supported on the inner side by stabilizer struts, which should normally be attached to a base plate secured with ground pins. Where the fencing is to be erected on retained hard surfacing or it is otherwise unfeasible to use ground pins, e.g. due to the presence of underground services, the stabilizer struts should be mounted on a block tray.
- 5.1.9. Weatherproof signage will be attached to the fencing with words such as 'Construction Exclusion Zone – No Access' (signage example at **Appendix 4**).



- 5.1.10. At the end of the project the fence will be removed only after confirmation by the Project Arboriculturist and the Council that this is appropriate.

### **Excavation within RPAs**

- 5.1.11. The proposed site access gateway alterations and driveway widening will require excavation within the RPAs of adjacent trees. To minimise the impact upon the retained trees, the following methodology should be followed.
- 5.1.12. Paragraph 7.2.1 of BS5837:2012 recognises that although existing ground levels should be retained within the RPA, limited manual excavation within the RPA might be acceptable, subject to justification.
- 5.1.13. All ground excavations will be carried out under supervision of the Arboricultural Clerk of Works (ACoW), when within tree RPAs. The replacement front boundary wall and piers should utilise the existing footings in this area.
- 5.1.14. The operations should be carried out using hand-held tools where possible and preferably by compressed air soil displacement. Limited mechanical excavation may be acceptable subject to the agreement of the ACoW.
- 5.1.15. Roots smaller than 25 mm diameter may be pruned back, making a clean cut with a suitable sharp tool (e.g. bypass secateurs or handsaw), except where they occur in clumps. Roots occurring in clumps or of 25 mm diameter and over should be severed only following consultation with the ACoW.

### **Temporary Ground Protection within RPAs**

- 5.1.16. There will be a requirement to position a working zone within the unsurfaced RPA of trees T2, T24 (sycamore) and Group G1 (mixed species group). This will be necessary for the reconfigured front gated access including replacement wall and piers. As a result, there will be a requirement for ground protection.
- 5.1.17. To reduce the likelihood of ground compaction through development, it will be necessary to install temporary Ground Guards. MultiTrack Ground Guards are to be installed as illustrated with a yellow cross-hatch on the draft Tree Protection Plan at **Appendix 2**.
- 5.1.18. The Ground Guards will comprise of either suspended wooden walkway beneath the scaffolding or 100mm of woodchip laid onto geotextile base overlaid with wooden boards. This will significantly reduce the likelihood of ground compaction as detailed within BS5837:2012 Clause 6.2.3.3 Note a. The final methodology will be detailed within an Arboricultural Method Statement.

### **Building Demolition adjacent to Retained Trees**

- 5.1.19. The proposed demolition of the existing property and outbuildings should be undertaken following installation of tree protective barriers/fencing prior to commencement of operations. This will ensure all plant and vehicles engaged in demolition operate outside the RPA of trees to be retained. Clause 7.3.4 of BS5837:2012 suggests; 'Where trees stand adjacent to structures to be removed, the demolition should be undertaken inwards within the footprint of the existing building (often referred to as a "top down, pull back"'. To ensure that foreseeable damage does not occur, whilst the proposed demolition of the existing dwelling is undertaken, the Project Arboriculturist will be on-site throughout.




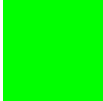


## 6. References

- 6.1.1. British Standard 5837:2012 'Trees in Relation to Design, Demolition and Construction - Recommendation'
- 6.1.2. British Standard 3998:2010 'Tree work – Recommendations'
- 6.1.3. BS8545:2014 Trees: from nursery to independence in the landscape – Recommendations
- 6.1.4. National Planning Policy Framework (NPPF) 2023
- 6.1.5. The Forestry Act 1967
- 6.1.6. The Town and Country Planning Act 1990
- 6.1.7. The Town and Country Planning (Tree Preservation) (England) Regulations 2012.

## Appendix 1 – Site Location Plan



## Appendix 2 – Tree Schedule

Category and Definition	Criteria (including subcategories where appropriate)			ID Colour on Plan
<b>Trees unsuitable for retention (see Note)</b>				
<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; and/or</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>			<p>Dark Red (127-000-000)</p> 
<b>Trees to be considered for retention (see Note)</b>				
	<b>1 - Mainly arboricultural qualities</b>	<b>2 - Mainly landscape qualities</b>	<b>3 - Mainly cultural values, including conservation</b>	
<p><b>Category A</b></p> <p>Trees of high quality with an estimated remaining life expectancy of at least 40 years.</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>Trees, groups or woodlands of particular visual importance as arboricultural and/or landscape features.</p>	<p>Trees, groups or woodlands of significant conservation, historical, commemorative or other value (e.g. veteran trees or wood-pasture).</p>	<p>Light Green (000-255-000)</p> 
<p><b>Category B</b></p> <p>Trees of moderate quality with an estimated remaining life expectancy of at least 20 years.</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>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>Trees with material conservation or other cultural value.</p>	<p>Mid Blue (000-000-255)</p> 
<p><b>Category C</b></p> <p>Trees of low quality currently in adequate condition with at least 10 years life expectancy, or young trees with a stem diameter below 150mm.</p>	<p>Unremarkable trees of very limited merit or such impaired condition that they do not qualify in higher categories</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>Trees with no material conservation or other cultural value.</p>	<p>Grey (091-091-091)</p> 

## BS5837:2012 TREE SCHEDULE

<b>DATE</b>	<b>CLIENT</b>	<b>SITE</b>	<b>REFERENCE</b>
19/10/2023	AM2 Architects	144 Nottingham road, Ravenshead	1605-TS-001-C

Tree No.	Common Name	Botanical Name	Height (m)	Stem Dia (mm)	Crown Spread (m)				Height of Crown Clearance (m)	Age Class	Phys Con	Struc Con	Additional notes	Preliminary recommendations	BS5837 Retention Category	RPA (m <sup>2</sup> )	RPA Radius (m)
					N	E	S	W									
T1	Silver birch	<i>Betula pendula</i>	18	550	5	5	4	3	0	Dead	Dead	Poor	Standing dead tree. Honey fungus suspected	Remove tree on health and safety grounds	U	137	6.60
T2	Sycamore	<i>Acer pseudoplatanus</i>	17	780	7	9	8	7	4	Mat	Good	Fair	Located on edge of woodland next to driveway and main road. Tree is large and stands out from neighbouring trees. Moderate deadwood within canopy. Large wound associated with main stem at approx 8m with limited occlusion. Good canopy vigour.	Reduce canopy by 15% to reduce weight on dysfunctional limb.	B2	272	9.30
T3	Sycamore	<i>Acer pseudoplatanus</i>	12	540	3	3	3	3	5	Mat	Fair	Fair	Locked on edge of driveway next to woodland. Tree has previously been topped with good regrowth. Management will be required to continue pollarding tree as regrowth will have weak attachment points. Limited wider value.	No works required	C1, 2	137	6.60
T4	Sycamore	<i>Acer pseudoplatanus</i>	18	590	6	7	8	6	5	Mat	Good	Fair	Located within woodland next to driveway. Tree has large wound associated with base to south. Rooting flare has decayed with decay showing up to 1m within stem. Moderate deadwood within canopy. Good canopy vigour.	No works required	B2	163	7.20
T5	Common beech	<i>Fagus sylvatica</i>	18	590	8	6	8	9	6	Mat	Good	Good	Large beech next to residential driveway. Slight lean to the west but structurally sound. Good occlusion associated with previous pruning wounds.	No works required	B1, 2	163	7.20
T6	Lawson's cypress	<i>Chamaecyparis lawsoniana</i>	12	400	3	3	3	3	3	Mat	Fair	Fair	Ornamental tree under the canopy of T5. Situated next to domestic driveway. Previous crown lift to 3m. Recent wounds with no signs of occlusion.	No works required	C	72	4.80
T7	Japanese maple	<i>Acer palmatum</i>	7	260	5	5	5	5	2.5	Mat	Good	Good	Ornamental tree located close to existing dwelling. Small area of decay at base from old pruning wound with pooling associated. Tree is large for its species and has good form. Good quality specimen.	Trim back encroaching branches as necessary for construction scaffolding and working zone.	B1	28	3.00
T8	Yew	<i>Taxus baccata</i>	10	410	4	3	4	5	3	Mat	Fair	Fair	Mature yew within domestic driveway turning circle. Recent crown raise.	No works required	B	72	4.80

## BS5837:2012 TREE SCHEDULE

<b>DATE</b>	<b>CLIENT</b>	<b>SITE</b>	<b>REFERENCE</b>
19/10/2023	AM2 Architects	144 Nottingham road, Ravenshead	1605-TS-001-C

Tree No.	Common Name	Botanical Name	Height (m)	Stem Dia (mm)	Crown Spread (m)				Height of Crown Clearance (m)	Age Class	Phys Con	Struc Con	Additional notes	Preliminary recommendations	BS5837 Retention Category	RPA (m <sup>2</sup> )	RPA Radius (m)
					N	E	S	W									
T9	Lawson's cypress	<i>Chamaecyparis lawsoniana</i>	12	490	4	4	4	4	3	E/Mat	Fair	Fair	Located in front of house within turning circle on driveway. Part of the ornamental planting on site.	No works required	C1	113	6.00
T10	Sycamore	<i>Acer pseudoplatanus</i>	22	931	6	9	10	7	8	Mat	Good	Fair	Large multi stem sycamore set 3m from driveway. Dominant canopy amongst other sycamores in adjacent group. Previous lateral reduction away from driveway. Recent wounds are yet to show any occlusion.	No works required	B1, 2	387	11.10
T11	Pedunculate oak	<i>Quercus robur</i>	8	300	4	5	6	4	5	E/Mat	Fair	Fair	Located on edge of woodland next to residential garden. Existing stairs present to east directly at base. Some large wounds associated with lower stem where old stems have been removed. Suppressed by neighbouring tree.	No works required	C1, 2	41	3.60
T12	Pedunculate oak	<i>Quercus robur</i>	13	700	5	7	8	6	8	Mat	Fair	Fair	Located on edge of woodland next to residential garden. Located on edge of cliff area spud 2m higher than garden level. Tree has had some recent pruning wounds associated with main stem with no occlusion. Moderate Epicormic growth associated with main stem and lower branches. Canopy has previously been reduced with northern side smaller.	No works required	B1, 2	222	8.40
T13	Pedunculate oak	<i>Quercus robur</i>	20	570	6	9	5	5	4	Mat	Good	Good	Large oak situated on raised embankment overhanging the garden. Minor deadwood and good crown vigour. Recent crown raise visible.	No works required	B2	150	6.90
T14	Sitka spruce	<i>Picea sitchensis</i>	22	450	5	5	5	5	2	Mat	Good	Good	Large non native spruce on edge of garden. Situated in a raised bed. Decay present within main stem at base, some occlusion and reactive growth present. Recent crown lift. Deadwood associated with main stem as expected for species.	No works required	C1	92	5.40
T15	Common beech	<i>Fagus sylvatica</i>	22	540	5	0	4	4	8	Mat	Poor	Poor	8m long wound from previous snap-out on main stem. Some occlusion present, the tree may recover. However this tree would be considered very high risk if the target area was to change.	No works required	U	137	6.60

## BS5837:2012 TREE SCHEDULE

<u>DATE</u>	<u>CLIENT</u>	<u>SITE</u>	<u>REFERENCE</u>
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Tree No.	Common Name	Botanical Name	Height (m)	Stem Dia (mm)	Crown Spread (m)				Height of Crown Clearance (m)	Age Class	Phys Con	Struc Con	Additional notes	Preliminary recommendations	BS5837 Retention Category	RPA (m <sup>2</sup> )	RPA Radius (m)
					N	E	S	W									
T16	Sycamore	<i>Acer pseudoplatanus</i>	22	530	8	2	3	5	4	Mat	Fair	Fair	Major stem decay from base to 2.5m north side. Promising occlusion around the wound, however this would be a high risk tree if the target area was to change. Honey fungus suspected.	No works required	U	125	6.30
T17	Sycamore	<i>Acer pseudoplatanus</i>	22	871	8	8	8	8	8	O/Mat	Declining	Declining	Mutli-stem large sycamore. Major decay, bleeding cankers. Extensive white/ brown stem rot. Mycelium rhizomes present on decaying sapwood. Honey fungus suspected. Monitor for fruiting bodies at base.	No works required	U	346	10.50
T18	Yew	<i>Taxus baccata</i>	8	505	6	6	3	2	3	Mat	Good	Good	Yew, shaded by adjacent trees.	No works required	B	113	6.00
T19	Red cedar species	<i>Thuja sp.</i>	15	420	3	3	3	3	5	S/Mat	Good	Good	Large conical form, no visible defects at time of survey.	No works required	C	82	5.10
T20	Sycamore	<i>Acer pseudoplatanus</i>	16	500	5	5	7	7	3	Mat	Declining	Poor	Advancing honey fungus decay at base.	No works required	U	113	6.00
T21	Bird cherry	<i>Prunus padus</i>	12	250	3	2	2	2	8	S/Mat	Declining	Declining	Severely declined	No works required	U	28	3.00
T22	Sycamore	<i>Acer pseudoplatanus</i>	12	550	5	3	2	4	10	Mat	Declining	Declining	Regrowth from failed stem. Large pool of water and decay at base	No works required	U	137	6.60
T23	Yew	<i>Taxus baccata</i>	12	350	5	5	6	5	3	Mat	Good	Good	Large offsite yew tree.	No works required	B2	55	4.20
T24	Sycamore	<i>Acer pseudoplatanus</i>	17	450	7	8	6	6	4	Mat	Good	Fair	Offsite tree, good vigour associated with crown.	No works required	B2	92	5.40
T25	Silver birch	<i>Betula pendula</i>	15	380	4	4	4	4	12	S/Mat	Poor	Poor	Slim form in dense group. Minor decay and fungi at base. Declining crown with moderate dieback. Consider removing if group is cut back, this tree would be exposed and more likely to fail due to poor form and vigour.	Monitor for further decline.	C	64	4.50

## BS5837:2012 TREE SCHEDULE

**DATE** 19/10/2023     **CLIENT** AM2 Architects     **SITE** 144 Nottingham road, Ravenshead     **REFERENCE** 1605-TS-001-C

Tree No.	Common Name	Botanical Name	Height (m)	Stem Dia (mm)	Crown Spread (m)				Height of Crown Clearance (m)	Age Class	Phys Con	Struc Con	Additional notes	Preliminary recommendations	BS5837 Retention Category	RPA (m <sup>2</sup> )	RPA Radius (m)
					N	E	S	W									
T26	Sycamore	<i>Acer pseudoplatanus</i>	18	370	5	6	5	6	12	Mat	Fair	Fair	Minor decay of previous wound at 0.5m. Water pooling at branch union also at 0.5m. Minor deadwood in crown.	No works required	C	64	4.50
T27	Sycamore	<i>Acer pseudoplatanus</i>	18	530	3	4	7	5	6	Mat	Fair	Fair	Twin stem at 2m. Mutual canopy with T26, good vigour associated with crown.	No works required	C2	125	6.30
T28	Silver birch	<i>Betula pendula</i>	12	480	4	4	4	4	10	Mat	Declining	Declining	Tree situated near site boundary. Heavily decayed at base, major dieback of crown. Honey fungus suspected.	No works required	U	102	5.70
T29	Bird cherry	<i>Prunus padus</i>	12	480	4	4	5	4	10	Mat	Declining	Poor	Heavily declining tree situated next to access road. Major deadwood and Fungi associated with canopy.	No works required	U	102	5.70
T30	Bird cherry	<i>Prunus padus</i>	12	380	4	4	5	4	10	Mat	Declining	Poor	Heavily declining tree situated next to access road. Major deadwood and Fungi associated with canopy. Branch hanging over road also has major dieback and is likely to fail.	No works required	U	64	4.50
T31	Sycamore	<i>Acer pseudoplatanus</i>	15	280	3	3	3	3	0	Mat	Dead	Declining	Failed tree, currently leaning on adjacent sycamore. Recent failure, currently the target area is a domestic driveway currently in use.	No works required	U	34	3.30
G1	Sycamore, Silver birch, Common beech, English holly, Cherry laurel, Pedunculate oak, Yew, Red cedar species		Min 4 - Max 20	Min 50 - Max 600	See associated plans				2	Mat	Fair	Fair	Mixed mostly native small woodland. Mostly yew understory, sycamore and silver birch canopy. Some dead standing trees and decay normally associated with woodland setting.	Part-removal for development. 1no. Lawson cypress tree to be removed adjacent to driveway (see AIP Plan).	B	See associated plans	
G2	Field maple, Sycamore, Silver birch, Lawson's cypress, Wild cherry, Rhododendron species, Yew		Min 8 - Max 18	Min 50 - Max 900	See associated plans				1	Mat	Good	Fair	Woodland listed on edge of site boundary. Comprised predominantly of mature sycamore. Moderate deadwood throughout. Limited new younger growth. Good screening value with adjacent residential dwellings.	No works required	B2	See associated plans	
G3	Sycamore, Pedunculate oak, Rowan		Min 16 - Max 22	Min 150 - Max 580	See associated plans				2	Mat	Good	Fair	Mixed native woodland area with expected decay and deadwood. Trees situated on raised embankment next to garden have a slight lean north.	No works required	B	See associated plans	
G4	Cherry laurel		Ave 3.5	Ave 50	See associated plans				0.2	S/Mat	Fair	Fair	-	No works required	C2	See associated plans	

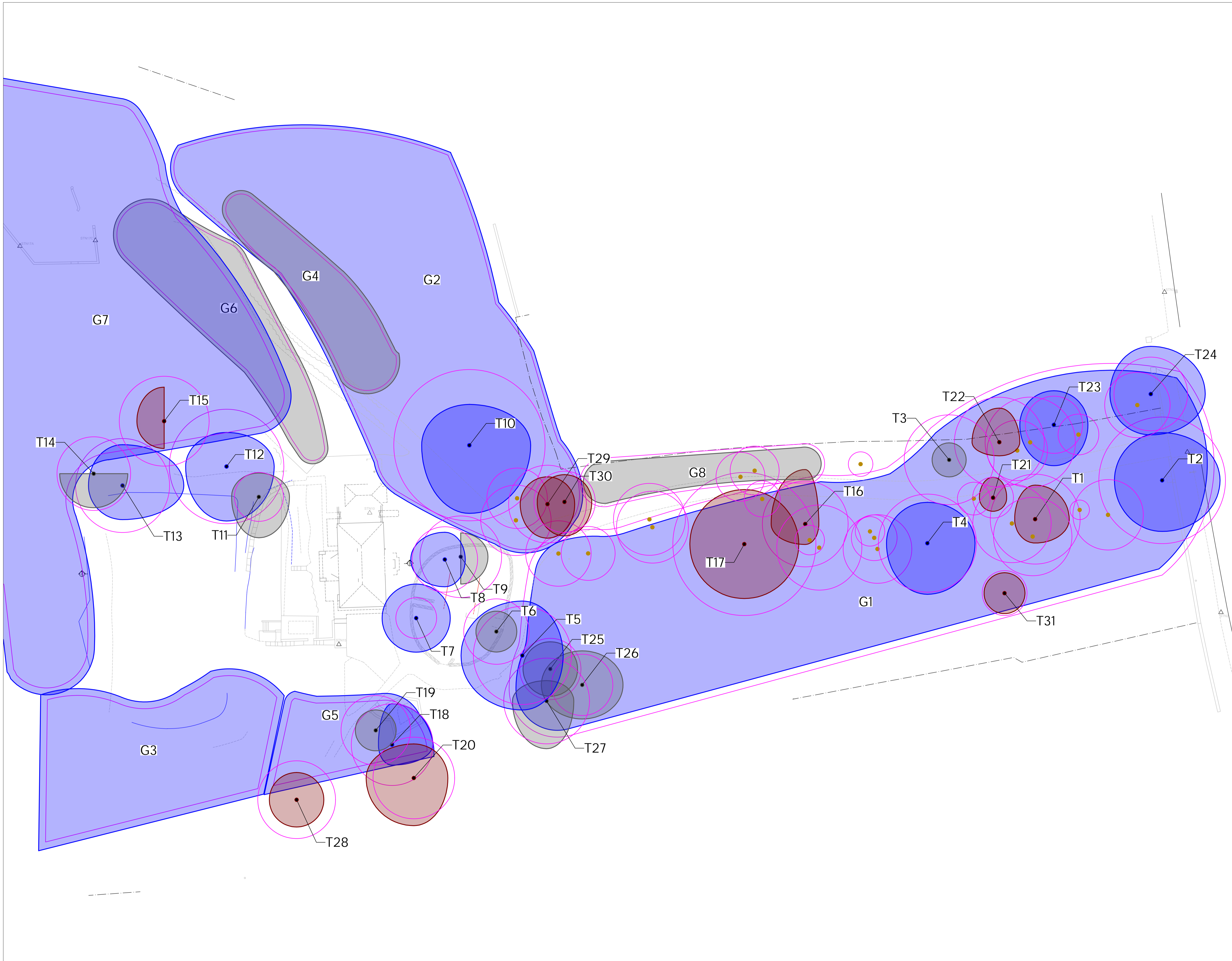


## BS5837:2012 TREE SCHEDULE

<b>DATE</b>	<b>CLIENT</b>	<b>SITE</b>	<b>REFERENCE</b>
19/10/2023	AM2 Architects	144 Nottingham road, Ravenshead	1605-TS-001-C

Tree No.	Common Name	Botanical Name	Height (m)	Stem Dia (mm)	Crown Spread (m)				Height of Crown Clearance (m)	Age Class	Phys Con	Struc Con	Additional notes	Preliminary recommendations	BS5837 Retention Category	RPA (m <sup>2</sup> )	RPA Radius (m)
					N	E	S	W									
<b>G5</b>	Sycamore, Lawson's cypress, Scots pine, Rowan, Yew		Min 10 - Max 22	Min 100 - Max 400a	See associated plans				2	Mat	Good	Good	Mostly native mix. Lower canopy mostly consistent of young sycamore and mixed age yew trees. Upper canopy consists of a group of Scots pine as well as mature sycamore. Decay and deadwood present as expected from woodland setting. Good overall vigour and crown cover.	No works required	<b>B</b>		See associated plans
<b>G6</b>	Cherry laurel		Ave 3.5	Ave 50	See associated plans				0.2	S/Mat	Fair	Fair	-	No works required	<b>C2</b>		See associated plans
<b>G7</b>	Sycamore, Silver birch, Lawson's cypress, Copper beech, Common ash, Pedunculate oak, Black locust, Yew		Min 2 - Max 20	Min 50 - Max 650	See associated plans				5	Mat	Good	Fair	Located on edge of site. Small walled area to north of woodland with trees growing throughout. Area has recently had Laurel and rhododendron cleared from understory. Well established and is a continuation of the wider woodland. Trees typical of woodland form. Moderate deadwood throughout.	No works required	<b>B2</b>		See associated plans
<b>G8</b>	English holly, Cherry laurel, Rhododendron species, Elder		Ave 4	Ave 100	See associated plans				0.5	S/Mat	Fair	Fair	-	No works required	<b>C2</b>		See associated plans
<b>G9</b>	Cedar of Lebanon, Pedunculate oak, Yew		Min 8 - Max 20	Min 250 - Max 1000	See associated plans				3	E/Mat	Good	Good	Located directly offsite behind wooden fence. No access to base, attributes estimated.	No works required	<b>B2</b>		See associated plans

## Appendix 3 – Plans



**KEY:**

- Trees / Groups
  - Canopy Spread
  - Tree Stem
  - Root Protection Area
- A Category Tree (High quality / retention value)
- B Category Tree (Moderate quality / retention value)
- C Category Tree (Low quality / retention value)
- U Category Tree (No remaining retention value)
- Hedgerows (Not assigned BS5837:2012 category)

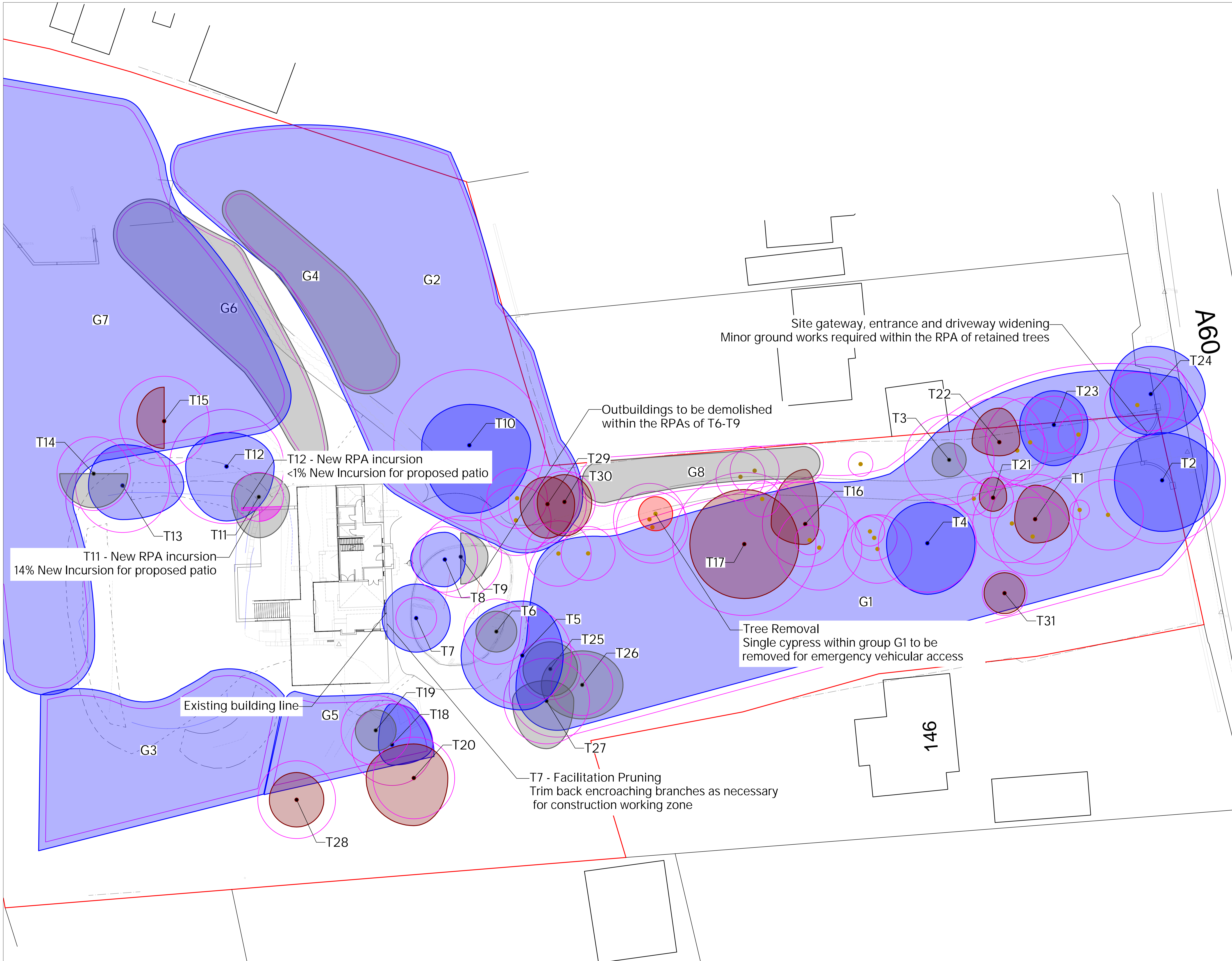


Rev	Description	Date
Rev C	Issue to client	19.10.2023
Rev B	Issue to client	17.08.2023
Rev A	Issue to client	21.07.2023
Rev		



SEED Arboriculture Ltd  
 Suite F6.1, Adelphi Mill, Bollington, Cheshire, SK10 5JB  
 www.seed-arb.co.uk

<b>PROJECT</b> 144 Nottingham Road, Ravenshead	
<b>TITLE</b> Tree Constraints Plan	
<b>DRAWING REF</b> 1605-TCP-001-C	<b>DRAWING NO</b> 001
<b>SCALE</b> 1:250 @ A1	<b>REVISION</b> Rev C



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**ARBORICULTURAL IMPACT**

- Tree / Group to be REMOVED
- Group to be PART-REMOVED
- New RPA Incursion

T12 - New RPA incursion  
 <1% New Incursion for proposed patio

T11 - New RPA incursion  
 14% New Incursion for proposed patio

Outbuildings to be demolished  
 within the RPAs of T6-T9

Site gateway, entrance and driveway widening  
 Minor ground works required within the RPA of retained trees

Tree Removal  
 Single cypress within group G1 to be removed for emergency vehicular access

T7 - Facilitation Pruning  
 Trim back encroaching branches as necessary for construction working zone

Existing building line

Rev A	Issue to client	07.03.2024
Rev	Description	Date



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 www.seed-arb.co.uk

**PROJECT**  
 144 Nottingham Road, Ravenshead

**TITLE**  
 Arboricultural Impact Plan

**DRAWING REF**  
 1605-AIP-002-A

**DRAWING NO**  
 002

**SCALE**  
 1:250 @ A1

**REVISION**  
 Rev A

### Tree Protection Fencing

The principal protection for the retained trees (above and below ground) and associated soils within the Site is through the erection of Tree Protection Fencing (TPF) to create a Construction Exclusion Zone (CEZ).

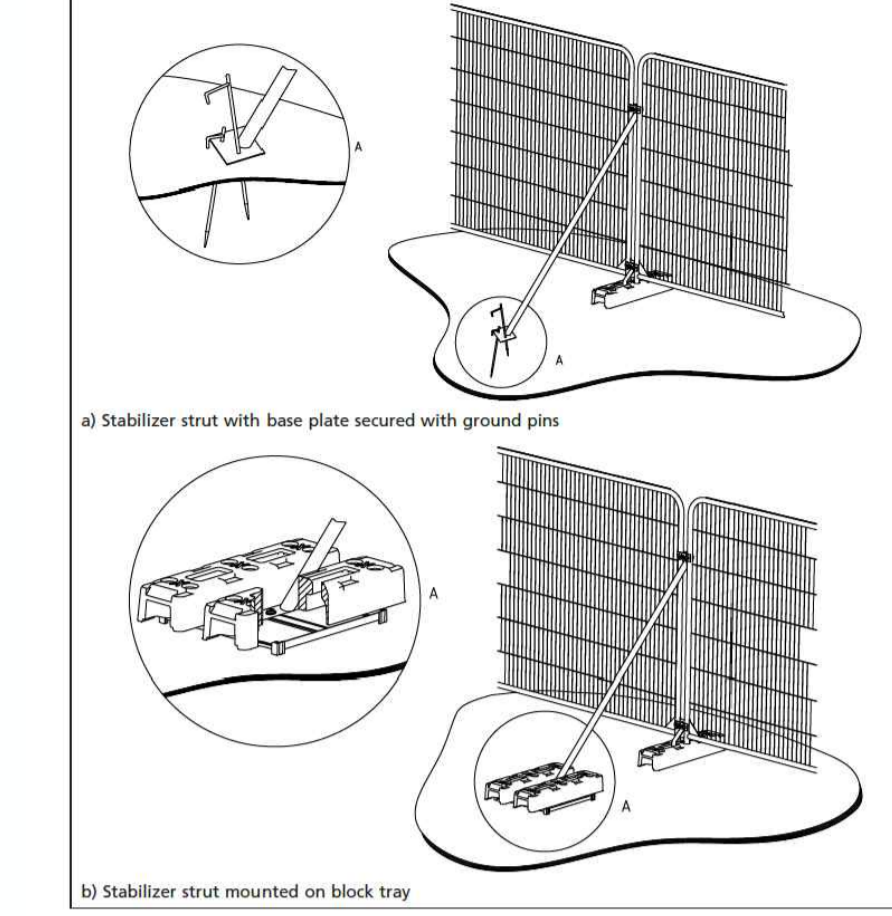
Prior to any on-site demolition or construction, tree protective measures and the CEZ must be in place. TPF Specification is shown in Figure 3 (BS5837:2012) - pictured above.

The following points are critical to the function of the CEZ:

- The protective tree fencing shall be maintained throughout the development phase
- No materials, machinery, temporary structures, chemicals or fuel shall be stored within the CEZ
- No excavations or increases in soil level within the CEZ are permitted without prior written approval from the LPA
- Care should be taken to ensure that wide or tall loads or plant with booms, jibs and counterweights do not come into contact with retained trees. Any transit or traverse of plant in close proximity to trees should be conducted under the supervision of a banks person to ensure that adequate clearance from trees is maintained at all times
- Material which will contaminate the soil such as concrete mixing, diesel oil and vehicle washing must not be discharged within 10m of the tree stems. In the event of an accident or spillage the PA must be notified
- Fires must not be lit in a position where their flames can extend to within 5m of foliage, branches or trunk. This will depend on the size of the fire and the wind direction
- Any landscaping within the CEZ must avoid soil disturbance. Therefore, re-grading and rotavators are not permitted. Any agreed soil re-profiling to facilitate final agreed levels must be carried out by hand with topsoil.

### Tree Protection Fencing - BS5837:2012 Figure 3

Figure 3 Examples of above-ground stabilizing systems

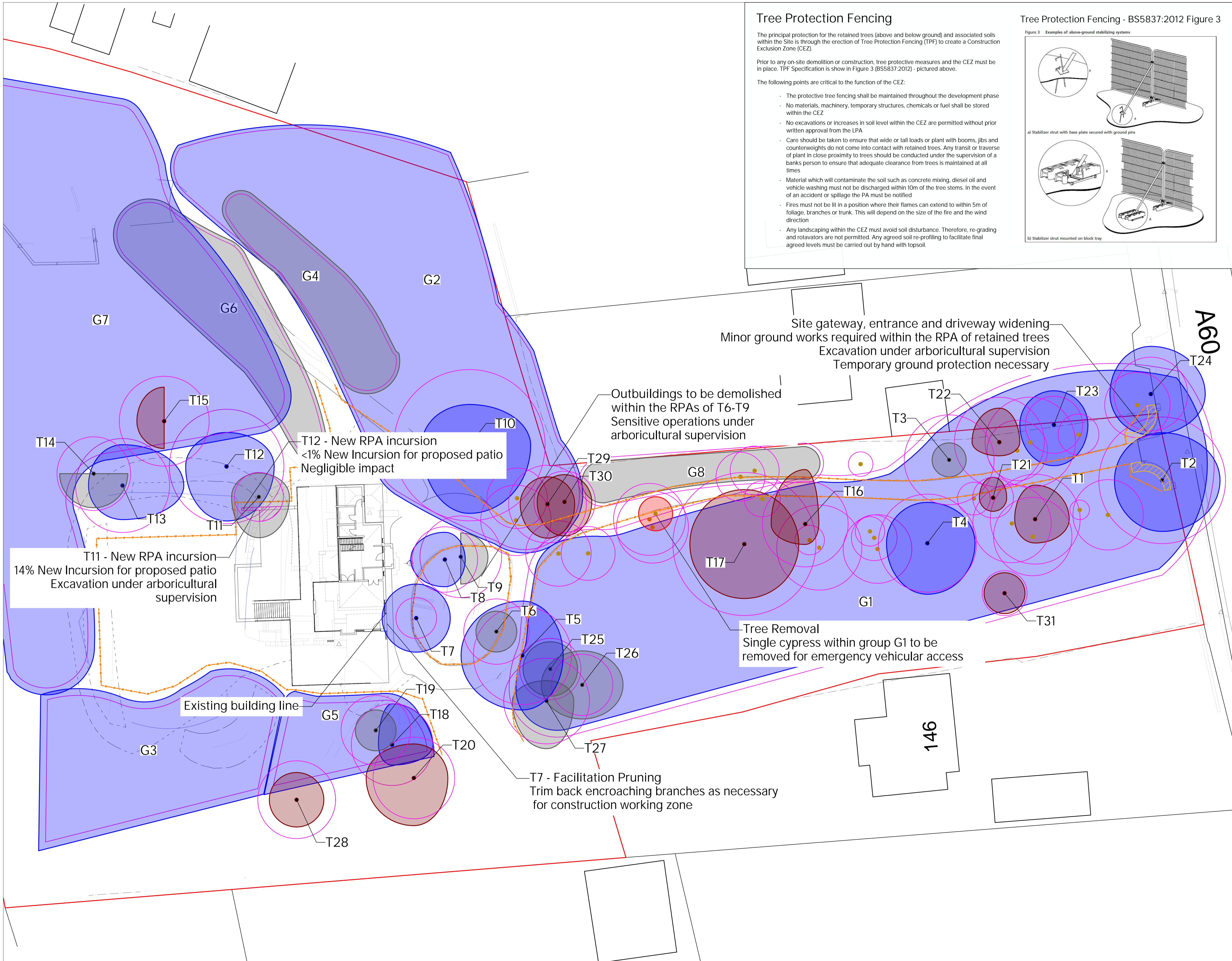


**KEY:**

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  - Canopy Spread
  - Tree Stem
  - Root Protection Area
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- Hedgerows (Not assigned BS5837:2012 category)

**TREE PROTECTION**

- Tree Protection Fencing
- Temporary Ground Protection
- Sensitive excavation under arboricultural supervision



Rev	Issue to client	Date
Rev A	Issue to client	07.03.2024
Rev	Description	Date

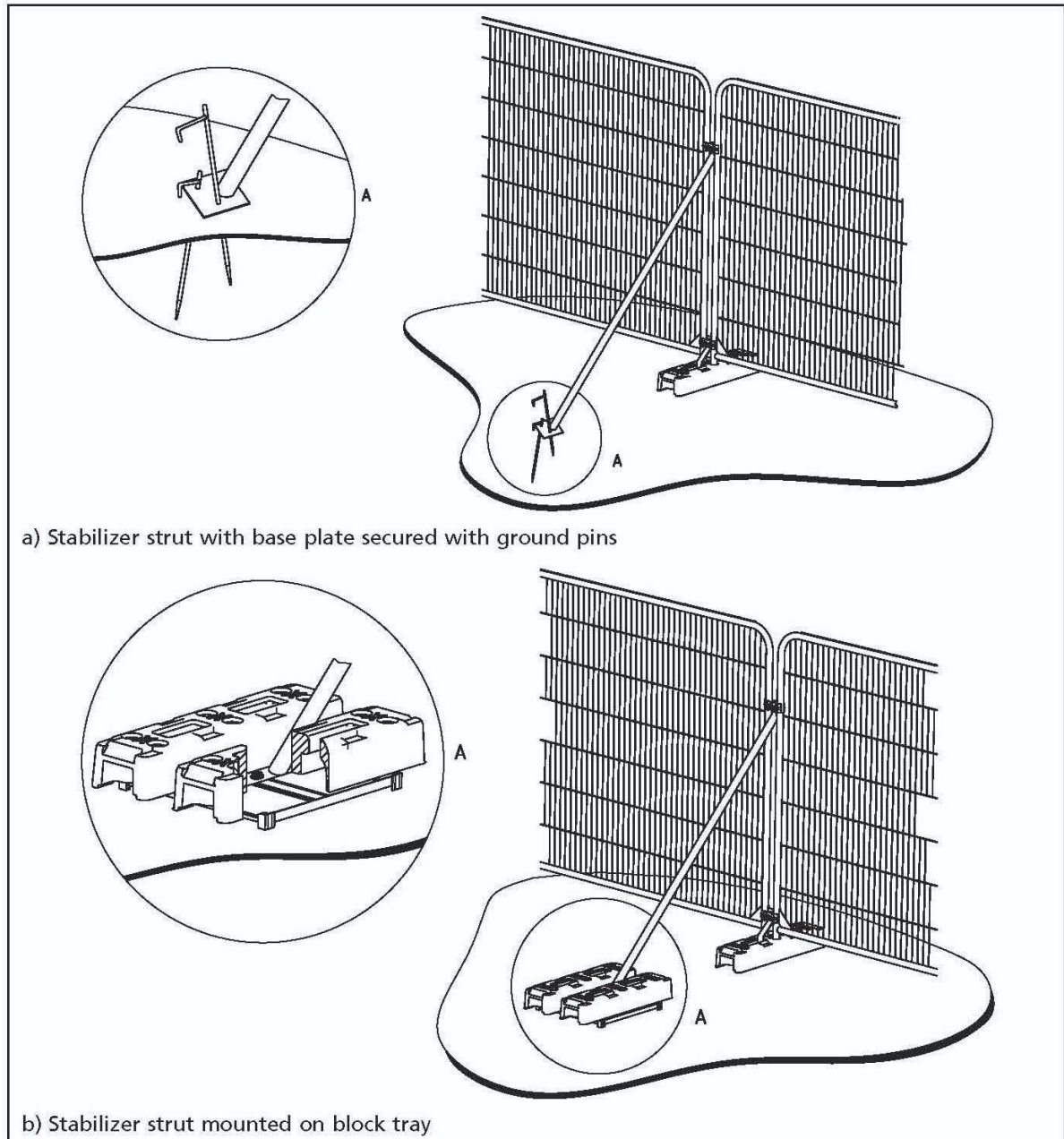
**SEED**  
 SEED Arboriculture Ltd  
 Suite F6.1, Adelphi Mill, Bollington, Cheshire, SK10 5JB  
 www.seed-arb.co.uk

<b>PROJECT</b> 144 Nottingham Road, Ravenshead	
<b>TITLE</b> Tree Protection Plan	
<b>DRAWING REF</b> 1605-TPP-003-A	<b>DRAWING NO</b> 003
<b>SCALE</b> 1:250 @ A1	<b>REVISION</b> Rev A

## Appendix 4 – Tree Protective Fencing

### BS5837:2012 – Figure 3

Figure 3 Examples of above-ground stabilizing systems



# TREE PROTECTION AREA



## NO ACCESS - TREE PROTECTION AREA

- NO MATERIALS, MACHINERY, TEMPORARY STRUCTURES OR CHEMICALS SHALL ENTER OR BE STORED WITHIN THIS AREA
- FENCING WILL NOT BE ALTERED OR MOVED WITHOUT PRIOR AGREEMENT OF THE PROJECT ARBORICULTURIST.



## TREE PROTECTION FENCING

- TREES ENCLOSED BY THIS FENCE ARE PROTECTED BY PLANNING CONDITIONS AND/OR ARE THE SUBJECTS OF A TREE PRESERVATION ORDER.
- UNAUTHORISED DAMAGE TO PROTECTED TREES IS A CRIMINAL OFFENCE AND COULD LEAD TO ENFORCEMENT ACTION.



ARBORICULTURAL CONSULTANTS

For any issues relating to this Tree Protection Fencing or other guidance with any arboricultural matters on this development, please contact **Seed Arboriculture Ltd.**

[www.seed-arb.co.uk](http://www.seed-arb.co.uk)

- [info@seed-arb.co.uk](mailto:info@seed-arb.co.uk)

- 01625 460 252



## Heras 151 System

Utilising the specified equipment you will have the safest and sturdiest fencing system available. HSE has confirmed that this system meets all of the guidelines in HSG151 Publication 'Protecting the Public - Your next move'.

The Heras 151 System is the safest on the market. Providing additional security which makes it the number one system to deter thieves.

- Heavy duty tube frame.
- High visibility plastic feet.
- Heraslock anti-tamper coupler.
- Anti-tamper tool.
- Galvanised finish as standard.
- RFX corner plates and smartweld technology.
- Other colours available.



**Wind Loading**

Calculations available



**Accessories**

Available

Round Top Anti Climb panel.

Yellow plastic hi-vis feet.

Heraslock anti-tamper  
coupler. Anti-tamper tool.