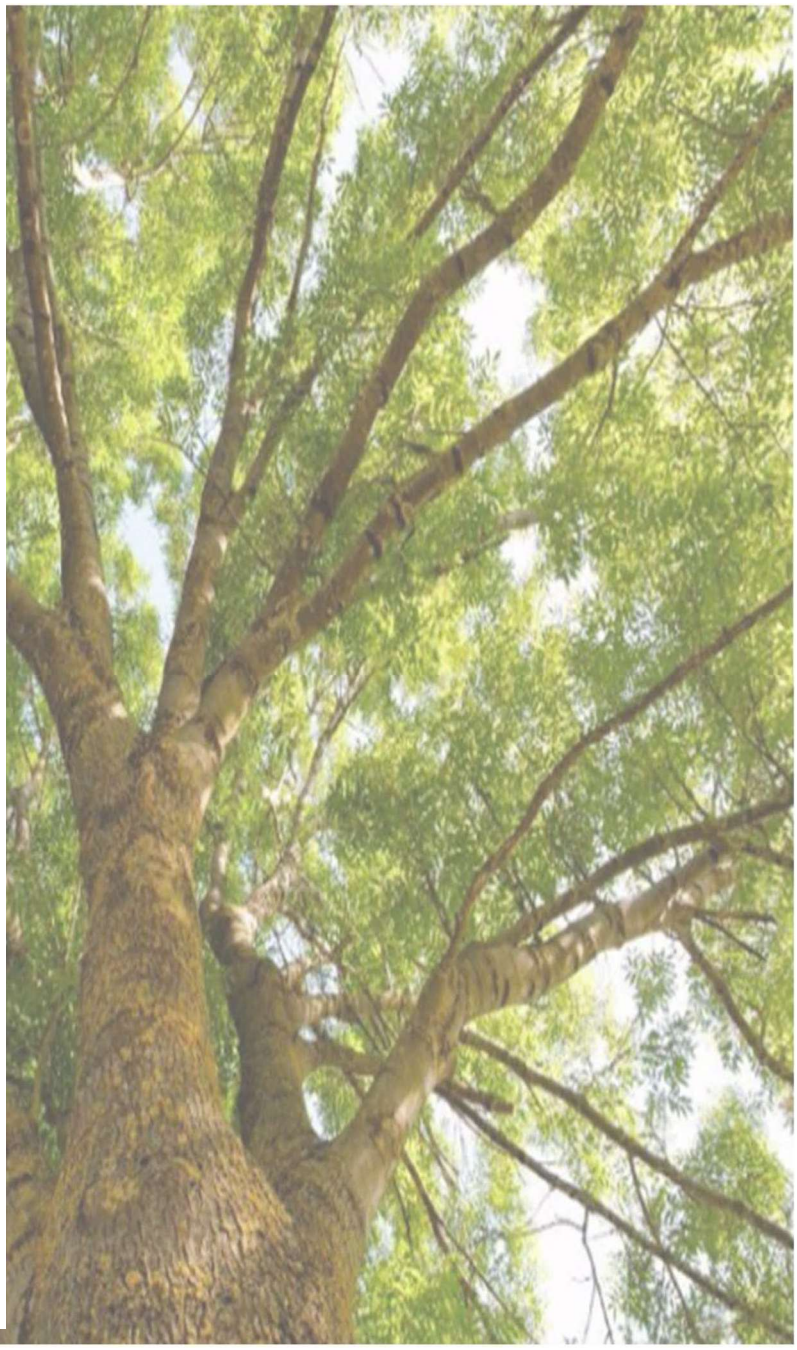
Arboricultural Impact Assessment

Prepared for:

Land Development Agency



Proposed site:

Anglesea Terrace Cork

Project Title:

LDA Anglesea Terrace Cork Project

Prepared by:

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19/09/2025

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Executive Summary

This arboricultural report has been commissioned by Henry J Lyons Architects on behalf of the LDA to provide information to assist with the planning process in relation to a proposed development at the above location.

This report includes:

- an assessment of the trees, their quality and value in accordance with BS 5837:2012 - Trees in relation to design, demolition and construction;
- the site context and observations on the trees;
- local planning policies relevant to the consideration of trees on the site;
- the impact of the proposed development upon the tree population in and around the site;
- methods of reducing impacts on trees; and
- measures to be taken to protect trees during the proposed works.

1.0 Introduction

1.1 Instructions

Arbor-Care Ltd (Professional Consulting Tree Service) was retained to undertake an on-site tree survey of all trees that could be potentially be impacted by the proposed development within and adjacent to the site extents (Figure 1), the findings of the report will be used to inform design of development works and support a planning application for same.

The objective of the impact assessment was to identify the areas that contained trees, groups of trees, and to ensure where possible that these areas would be retained and to identify the trees that are to be removed to facilitate the development.

The survey commenced at the eastern boundary and continued in a westerly direction. The survey was undertaken on the 2nd of September 2024.

The below impact assessment report is based on the British standard *BS 5837:2012 Trees in relation to design, demolition and construction recommendations*, this standard gives recommendations and guidance on the principles to be applied to achieve a satisfactory juxtaposition of trees, including shrubs, hedges and hedgerows, with structures. It sets out to assist those concerned with trees in relation to construction to form balanced judgements. This impact assessment report will be accompanied by an inventory of trees and hedgerows on site and a tree protection plan.

The Arboricultural Impact Assessment and a tree protection plan was prepared for the site identifying trees that may be impacted on by the proposed development based on the proposed design.

1.2 Methodology

An initial tree survey and visual condition assessment was on the 2nd of September 2024. The purpose of this report and in accordance with *BS 5837: 2012 Trees in relation to design, demolition and construction*. *Recommendations* only trees with diameters of 75mm or greater were surveyed.

Also in accordance with section 4.4.2.3 of the British standard document where trees formed obvious groups these were assessed and recorded as groups. All trees were individually tagged

with a metal disc. This was placed on the northern side of the tree where practical. Where trees could not be tagged these were given a virtual number for example T1

> *Section 4.4.2.3 of BS 5837: 2012 states:*
>
> *Trees growing as groups or woodland should be identified and assessed as such where the arboriculturist determines that this is appropriate. However, an assessment of individuals within any group should still be undertaken if there is a need to differentiate between them, e.g. in order to highlight significant variation in attributes (including physiological or structural condition).*
>
> *NOTE: The term "group" is intended to identify trees that form cohesive arboricultural features either aerodynamically (e.g. trees that provide companion shelter), visually (e.g. avenues or screens) or culturally, including for biodiversity (e.g. parkland or wood pasture), in respect of each of the three subcategories.*

The survey concentrated primarily on the significant trees/vegetation located within the development area and has been based on the topographical survey plan provided.

The objective of this survey was to gather information regarding the trees within or adjacent to the development area and the impact the proposed scheme may have on the trees. **Please refer to Appendix A for the tree inventory**.

Significant trees can be equated as those trees whose visual importance to the surrounding area are sufficient to justify special efforts to protect/preserve and whose loss would have an irremediable adverse impact on the local environment. Significance can also be placed depending on the trees age, another variable to imply significance can be the aesthetic merit of the tree based on its unusual size, intrinsic physical features or outstanding appearance or occurring in a unique location or context, and thus provides a special contribution as a landmark or landscape feature.

All above parts of the trees were visually examined. Tree diameters (DBH) were estimated at 1.5 meter above grade as per standard arboricultural practice. Tree height was measured with the use of a clinometer (Where practical).

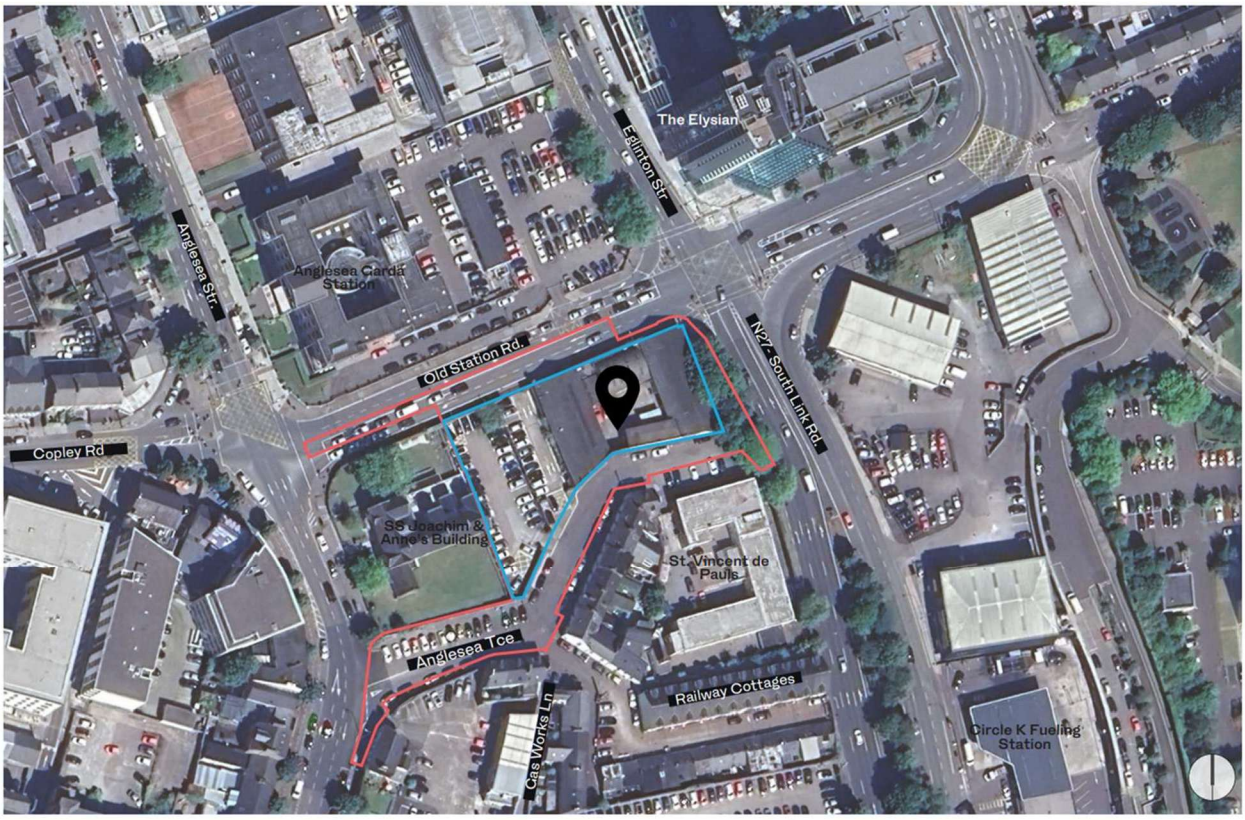
A generalised system was employed to describe the overall health of the trees. The system uses a three tier rating scale with the following descriptors:

Specimen condition 3-tier rating system

- Poor- 1-30%
- Fair- 31-60%
- Good- 61-100%

2.0 Initial Tree Survey Overview

2.1 Figure 1 Site location, site highlighted in Blue



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Located between Anglesea Terrace and Old Station Road, Cork, the site (fig.1) comprises of circa 2,500 m² [0.25ha] and is accessed via Anglesea Terrace. There is a secondary entrance the site Old Station Road. The subject lands are within the ownership of Cork City Council (CCC) and comprise of existing Storage Buildings, Open Yards, and surface car parking areas. The site is bounded on the west by St Joachim and Anne's sheltered housing (protected structure) and the South Link Road on the East.

3.0. The trees

A breakdown of the Tree Categories on site as per BS 5837 2012 is set out in the table 1 below:

Category	Quantity	Category %
A-Tree of high quality	1	4%
B-trees of good quality	21	78%
C (Low quality or trees less than 75mm diameter)	5	18%
U (remove due to poor condition)	0	0%
Total Trees	27	100%

3.0 Planning Policy

The National Planning Framework (NPF)

The National Planning Framework (NPF) seeks to ensure that new development is sustainable and underlines the importance of Green Infrastructure, of which trees form an integral part. This encompasses recognition of the importance of trees in relation to the management of air, soil and water quality along with other associated ecosystem services and climate change adaption. The NPF also seeks to achieve the protection and enhancement of landscapes and a net gain in biodiversity.

The survey area is located with the jurisdiction of Cork City Council. The Local Planning Authorities have a statutory duty to consider both the protection and planting of trees when considering planning applications. The potential impact of development on all trees (including those not protected by a Tree Preservation Order or other statutory designation) is therefore a material consideration.

Cork City Council Development Plan 2022-2028

I have reviewed the policy document and there are no Tree Preservation Orders on the site. However , Chapter 6 of the development plan relates to Green & Blue infrastructure Study and Strategy. Objective 6.5 relates to Trees & Woodland . It states:

Objective 6.5

Trees & Urban Woodland

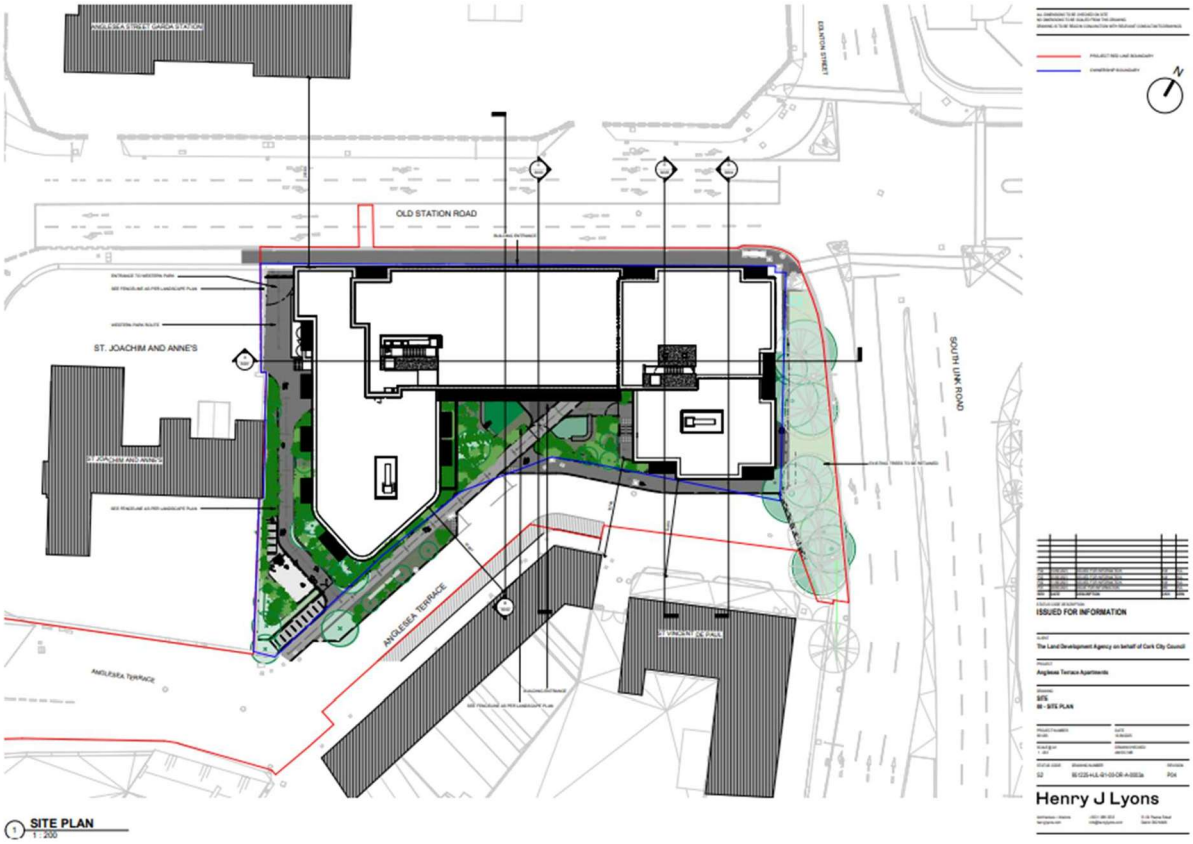
a. To protect and enhance the City's tree and urban woodlands in public and private ownership. Cork City Council will seek to survey, map and maintain existing important individual and groups of trees, using Tree Preservation Orders as appropriate;
b. To encourage the planting of new urban woodlands and trees where appropriate throughout the City and particularly where there are deficiencies in tree coverage as identified in the Cork City Green and Blue Infrastructure Study;
c. To support the preparation of a City Tree Strategy which provides a vision for long-term planting, protection and maintenance of trees, hedgerows and woodlands;
d. To support retaining existing trees and the planting of new trees as part of new developments subject to care on the species of tree and the siting and management of the trees to avoid conflict with transport safety and residential amenity in particular;
e. To promote the planting of pollinator friendly native deciduous trees and mixed forestry to benefit biodiversity.

4.0 The Proposed Development :

Brief Summary Development Description

The development will comprise of 147 no. units. Please refer to the Architectural Statement by Henry J Lyons for further details.

Figure 2: Proposed Development



5.0 Arboricultural Impact Assessment

5.1. Analysis of the Proposal in Respect of Trees

This impact assessment sets out the likely principal direct and indirect impacts of the proposed development on the trees on or immediately adjacent to the site and suitable mitigation measures to allow for the successful retention of significant trees or to compensate for trees to be removed, where appropriate. There are no trees located within the development site, the surveyed trees are outside the development area and the majority of the trees are street trees

5.1.1 In the context of the overall development works the following points are also noted:

- **Arboricultural works** –Tree number 3380 is outside the development area, however it is in decline and within falling distance of an existing building. It may be prudent to remove this tree in the interest of health and safety a further tree condition assessment would need to be undertaken.
- Following the completion of the development, a **tree condition assessment** will not be required out on all retained trees for health and safety purposes.
- **Tree protection measures** – All surveyed trees are being retained and can be successfully protected during the proposed development by using robust fencing which complies with the recommendations outlined within BS5837:2012.
- No materials or equipment other than those required to install tree protection will be delivered to the site until all fencing is in place.
- For details of the tree protection measures required during construction, please refer to the Tree Protection Plan.
- **Compound area** – The proposed site compound has not been designed; there is sufficient space available throughout the site to avoid any unnecessary impacts to retained trees, provided the tree protection measures as detailed within this report are carried out. This need to be confirmed by the appointed contractor.
- **Site access.** The site will be accessed from existing site entrances
- **Daylight and sunlight levels** - Shading by trees have not been assessed in relation to this proposal.

- **Drainage and services** – All new service runs should be located outside the RPAs of retained trees to avoid impacting their condition. If it is found necessary to locate services within tree RPAs, it is recommended that these works are carried out under arboricultural supervision. Methods of work should follow the recommendations in the NJUG guidance. BS5837 (2012) recommends the NJUG guidance as a normative reference to be used in these circumstances.
- **Boundary treatments** – Please refer to the landscape plan for further information on the proposed new tree and vegetation planting.
- **Landscape operations** - Landscaping operations will typically take place at the end of the construction period. These works will normally require the removal of protective fencing to facilitate access for works. There is a risk that plant and machinery may damage soil structure where tree roots are growing. These risks can be managed by maintaining good professional standards of work and working to a method statement. The principle of avoiding soil disturbance or changes in levels within the RPAs of retained trees should be followed unless arboricultural advice has been sought.

7.0 Discussion & Conclusion

General Change

7.1 My assessment is that there will be no tree loss and that there will be no negative impact on the character and appearance of the immediate surrounding landscape.

Proposal in relation to local planning policy

7.2 The proposed development complies with local planning policy as it relates to trees. A tree survey has been carried out in accordance with best practice and where possible all trees have been retained and can be successfully protected during construction.

Conclusion

7.3 The proposal has been assessed in accordance with BS5837:2012 and special working methods(Tree Protective fencing) have been recommended to minimise tree impacts.

7.4 Retained trees have been assessed and can be successfully protected during development by following the information provided within this report and adhering to industry best practice.

7.5 Provided the recommendations and methods of work, as outlined within this report, are adhered to, the proposed development can be successfully carried out without having a negative impact on the character or appearance of the surrounding landscape.

8.o Recommendations

8.1 The proposal should be carried out in accordance with the recommendations outlined within this report.

8.2 The positioning of tree protective barriers should be installed as detailed within the Tree Protection Plan.

Appendix A: Tree Survey

Key abbreviations used in the survey

Ref No	Specific identification number given to each tree or group. T=Tree/H=Hedge/G=Group/W=Woodland/S=Shrub.	
Tag No.	Tree marked with individual tree tag of this reference number on site.	
Species	Common name followed by botanical name shown in *italics*	
RPA	Root Protection Area (As defined by BS5837)	
Stem diameter	Diameter of main stem, measured in millimetres at 1.5 m above ground level. (MS = Multi-stem tree measured in accordance with BS5837 Annexe C)	Av / Average: indicates an average representative measured dimension for the group or feature
Spread	The width and breadth of the crown. Estimated on the four compass points in metres.	
Crown clearance	The estimated height (in metres) above ground level of the lowest significant branch attachments.	
#	Estimated dimensions	
*	Indicates estimated position of tree (not indicated on topographical survey).	
P	Privately owned tree (e.g. tree not located in the public highway or adjacent public land).	
Category	Categorisation of the quality and benefits of trees on Site as per Table 1 and 2 of BS5837:2012. 1=Arboricultural quality/value 2=Landscape quality/value 3=Cultural quality/value (including conservation)	
	A=High quality/value 40yrs+ (light green). B=Moderate quality/value 20yrs+ (mid blue) C=Low quality/value min 10yrs/stem diameter less than 150mm (grey). U=Unsuitable for retention (dark red).	
Life stage	**Young (Y):** Newly planted tree 0-10 years. **Semi-Mature (SM):** Tree in the first third of its normal life expectancy for the species (significant potential for future growth in size). **Early Mature (EM):** Tree in the second third of its normal life expectancy for the species (some potential for future growth in size) **Mature (M):** Tree in the final third of its normal life expectancy for the species (having typically reached its approximate ultimate size). **Over Mature (OM):** Tree beyond the normal life expectancy for the species. **Veteran (V):** Tree which is of interest biologically, aesthetically or culturally because of its condition, size or age.	
Structural condition	**Good:** No significant structural defects **Fair:** Structural defects which can be resolved via remedial works. **Poor:** Structural defects which cannot be resolved via remedial works. **Dead:** Dead.	
Physiological condition	**Good:** Normal vitality including leaf size, bud growth, density of crown and wound wood development. **Fair:** Lower than normal vitality, reduced bud development, reduced crown density, reduced response to wounds. **Poor:** Low vitality, low development and distribution of buds, discoloured leaves, low crown density, little extension growth for the species. **Dead:** Dead **Fair/Good** = Indicates an intermediate condition **Fair – Good** = Indicates a range of conditions (e.g. within a group)	
Preliminary management recommendations	Works identified during the tree survey as part of sound arboricultural management, based on the current context of the Site (where relevant reference has been made to tree management based on the potential future context of the site).	
Works to facilitate the development	Tree works identified as necessary to facilitate the Proposed Development following a desk top analysis of the proposals in relation to tree constraints.	

Appendix A-Tree Schedule

Tree #	Species Name	Age class	Size (mm)	Height (M)	Crown Sp.(M)	Crown Cl.(M)	Condition	Structural/Physiological Observations	Impact of the development	PMR	Category	R.P.A. Meters
3380	Red oak	M	500	12	N=6 S=6 E=6 W=6	4	Fair	A large mature oak. The tree is in decline this is evident by the extensive die-back in the upper canopy	No impact	Consider for removal	C2	6m
3381	Hawthorn	M	240	6	N=2 S=2 E=2 W=2	1	Good	A mature hawthorn in good condition	No impact	Retain	B2	3.4m
3382	Red oak	M	460	10	N=4 S=4 E=4 W=4	3	Good	A large mature oak in good condition, due to its location it has a high amenity value	No impact	Retain	A2	5.6m
3383	Holly	EM	150	4	N=1 S=1 E=1 W=1	.5	Good	An early mature holly	No impact	Retain	C2	2.5m
T1	Hornbeam	SM	75	3	N=1 S=1 E=1 W=1	1	Good	A semi-mature hornbeam planted as a street tree	No impact	Retain	C2	1.75m

Appendix 1-Angelsea Terrace

Tree #	Species Name	Age class	Size (mm)	Height (M)	Crown Sp.(M)	Crown Cl.(M)	Condition	Structural/Physiological Observations	Impact of the development	PMR	Category	R.P.A. Meters
T2	Hornbeam	SM	75	3	N=1 S=1 E=1 W=1	1	Good	A semi-mature hornbeam planted as a street tree	No impact	Retain	C2	1.75m
T3	Lime	EM	260	5	N=2 S=2 E=2 W=2	2	Good	An early mature lime planted as a street tree	No impact	Retain	B2	3.6m
T4-T5 x 10	Hornbeam	EM	180	6	N=2 S=2 E=2 W=2	2	Good	A row of 10 hornbeams planted as street trees	No impact	Retain	B2	2.8m
T6	Lime	M	300	12	N=3 S=3 E=3 W=3	3	Good	A mature Lime tree in good condition	No impact	Retain	B2	4m
3384	Grey Alder	M	400	10	N=3 S=3 E=3 W=3	2	Good	A mature alder in good condition	No impact	Retain	B2	5m

Tree #	Species Name	Age class	Size (mm)	Height (M)	Crown Sp.(M)	Crown Cl.(M)	Condition	Structural/Physiological Observations	Impact of the development	PMR	Category	R.P.A. Meters
3385	Whitebeam	EM	140	6	N=1 S=1 E=1 W=1	2	Fair	An early mature whitebeam that is being suppressed	No impact	Retain	C2	2.4m
3386 x 2	Ash	M	380	10	N=3 S=3 E=3 W=3	2	Good	Two large mature ash	No impact	Retain	B2	4.8m
3387	Ash	M	280	8	N=2 S=2 E=2 W=2	2	Good	A mature ash in good condition	No impact	Retain	B2	3.8m
3388	Alder	M	400	10	N=3 S=3 E=2 W=2	2	Good	A mature alder	No impact	Retain	B2	5m
3389 x 2	Ash	M	340	10	N=2 S=2 E=2 W=2	2	Good	Two large mature ash	No impact	Retain	B2	4.4m

Tree #	Species Name	Age class	Size (mm)	Height (M)	Crown Sp.(M)	Crown Cl.(M)	Condition	Structural/Physiological Observations	Impact of the development	PMR	Category	R.P.A. Meters
3390	Alder	M	300	12	N=2 S=2 E=2 W=2	2	Good	A mature alder	No impact	Retain	B2	4m
3391	Alder	M	400	8	N=2 S=2 E=2 W=2	2	Fair	A mature alder that is in decline	No impact	Retain	C2	5m

Appendix B: Arboricultural Method Statement

Introduction

This report has been prepared in accordance with British Standard 5837: Trees in relation to design, demolition and construction – Recommendations (2012) which provides a methodology for the assessment and protection of trees and other significant vegetation on development sites.

Sequence of Operations

- Carry out the proposed tree works.
- Installation of tree protection measures.
- Enabling works.
- Construction of proposal and the installation of drainage and services.
- Landscaping.

Alternative sequences can be discussed and agreed with the local authority and project manager if required.

Supervision

All key / critical activities that will affect trees during construction will be inspected and monitored by the approved arboricultural consultant *if so requested by the local authority.*

- Pre-commencement meeting with site manager and local authority to confirm location of tree protection measures.
- Inspection of all tree works and tree protection measures prior to the commencement of works.
- Supervision during the excavation works within the RPAs of retained trees.
- Supervision during the installation of all services within tree RPAs.
- Supervision during any other works that may affect retained trees.
- Inspection upon completion.

Arboricultural Method Statement	
Scope	**Methodology**
Pre-commencement meeting	Prior to the commencement of works, a meeting between the arboriculturalconsultant, local authority and the site manager will be held in order to discuss the tree protection measures and proposed works required in closeproximity to trees. (if requested) Contact details of all parties will be circulated to ensure all team members are able to communicate correctly. The site manager will be responsible for the protection of all retained trees for the duration of the project. Whenever necessary, the site manager will engage the arboricultural consultant to ensure trees are adequately protected. The appointed arboricultural consultant will be available for verbal advice throughout site works.
Tree Works	Please refer to the Tree Work Schedule at Appendix A for a list of all proposed tree works. The location of trees to be removed are highlighted on the Tree Removals Plan It is the responsibility of the Site Manager to ensure all tree works have been approved by the local planning authority. All tree works will be carried out by a reputable arboricultural contractor inaccordance with the recommendations given in BS 3998:2010 – Tree Work Recommendations. All tree works should be carried out in accordance with Section 40 of the Wildlife Act 1976 and Section 46 of the Wildlife (Amendment) Act 2000. It is the responsibility of the arboricultural contractor to ensure that no protected species are harmed whilst carrying out site clearance or tree surgery works.
Tree Protection	The position of protective fencing for construction is shown on the Tree Protection Plan. Protective fencing will be constructed and installed using fencing in accordance with BS5837:2012, please refer to the attached Tree Protection Plan for the specification. Alternatives to those shown must be agreed in advance by the client approved, arboricultural consultant.

	Any machinery / site operative within tree RPAs must operate on the appropriate ground protection at all times, this will include the installation and removal of ground protection. Ground protection measures must be installed in accordance with industrybest practice guidance as stated within Section 6.2.3.3 of BS 5837:2012. They must be fit for purpose and capable of supporting any traffic entering or using the site without being distorted or causing compaction of underlying soil. No materials or equipment other than those required to erect protective fencing will be delivered to the site before the fencing is installed. Signs will be fixed to every third panel stating, '*Tree Protection Area Keep Out – Any incursion into the protected area must be with the agreement of the local authority or arboricultural consultant'*. The main contractor will inform the local authority and the arboricultural consultant that tree protection is in place before site clearance works commence. No alteration, removal or repositioning of the tree protection will take placeduring construction without the prior consent of the arboricultural consultant.
Compound Area	The proposed site compound area has not yet been designed; however, the considerations below must be followed: The site compound must be located outside the designated TPZs as highlighted on the Tree Protection Plan at Appendix B. No excavation works within tree RPAs are permitted to install temporary services for site cabins and facilities. Any temporary services within tree RPAs must be above ground and protected accordingly. No operating generators or toxic liquids will be stored within the RPAs of retained trees during construction. Overhanging tree canopies must be taken into consideration when transporting, installing and removing site cabins near tree crowns. A banksman will be present during this process to ensure that all operations are carried out in a controlled manner and no part of the cabin meets overhanging tree crowns.

Installation of fencing within RPAs	The installation of fencing within the RPAs of retained trees will be carriedout using the following methodology: Post holes will be carefully positioned as far away from the stem of trees as possible (minimum 50 cm) to minimise contact with tree stems and significant tree roots. Holes will be manually excavated with the use of hand tools only and where roots greater than 25mm in diameter or large fibrous roots are present, theposition of the hole will be slightly altered to avoid potential root damage. If the position of the hole cannot be altered, roots greater than 25mm in diameter or large fibrous roots will be protected with flexible plastic pipes and retained within the pit. In some cases, individual roots less than 25mm in diameter may be pruned, making a clean cut with a suitable sharp sterile tool (e.g. secateurs or hand saw). Once the required depth has been excavated, the hole will be lined using 1000-gauge polythene and filled with the appropriate concrete mix.
Landscape Operations	All landscape operations within the protected area will be carried out by hand, using hand tools only, unless otherwise agreed with by the arboricultural consultant.
	No dumping of spoil or rubbish, parking of vehicles or plant, storage ofmaterials or temporary accommodation will be undertaken within the TPZs. All tree roots within the RPAs greater than 25mm diameter will be retainedand worked around. Soil levels will not be increased or reduced within the RPAs of trees without prior agreement from the arboricultural consultant.

General Principals to Avoid Damage to Trees	All tree works will be carried out in accordance with the recommendationsgiven in BS 3998 (2010). No fires will be permitted within 20m of the crown of any tree. No materials, vehicles, plant or personnel will be permitted into the tree protection zones at any time without the prior consent of the arboriculturalconsultant. Any liquid materials spilled on site will be immediately cleared up and removed from the site. If liquid fuel or cement products are spilled within 2m of the tree protection zone, the contractor will report the incident to thearboricultural consultant immediately. The contractor will report any damage to trees or shrubs, whether caused by construction activities or from any other cause, to the arboricultural consultant immediately.

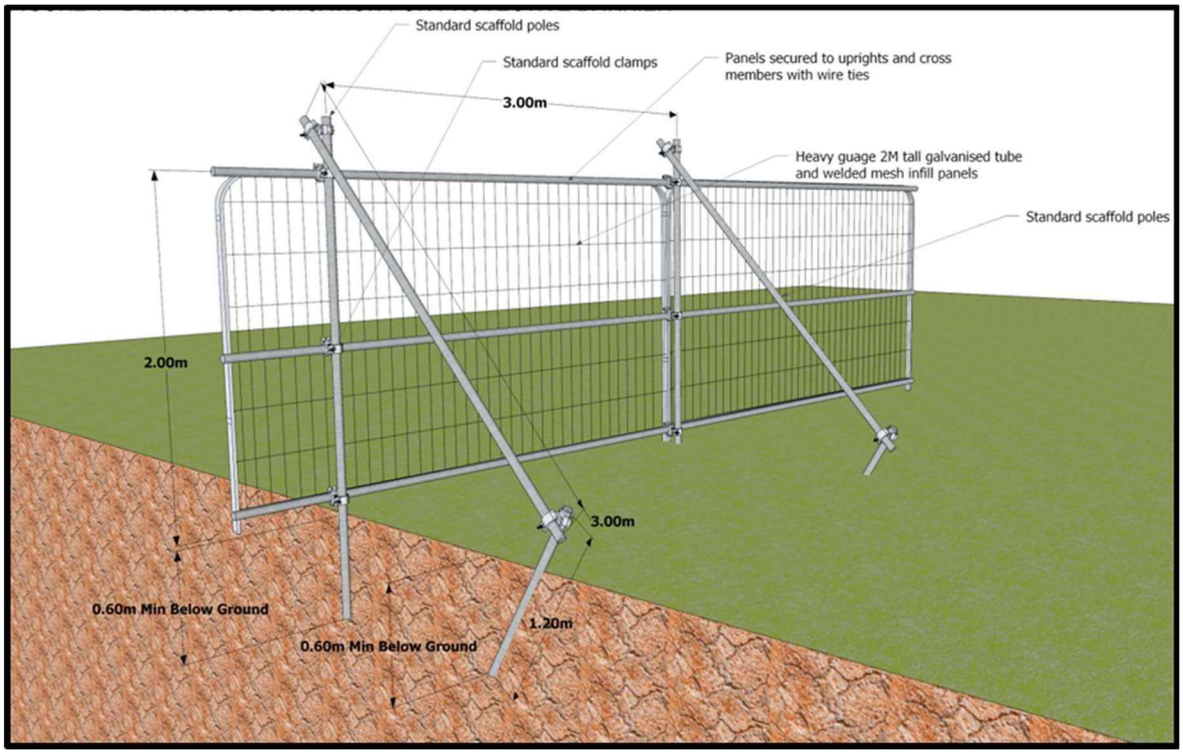


Figure 3 Default specification for tree protection barrier in accordance with BS5837:2012

This report was prepared by:

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Yours in Conservation,
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