Arboricultural Impact Assessment and Tree Protection Plan (BS5837:2012)

Pope's Hill, Blackpool, Cork.

10-03-2026

HOLLY

ARBORICULTURE

CHAMPIONING DEVELOPMENT WITHOUT SACRIFICING CONSERVATION

DOCUMENT CONTROL SHEET

PROJECT NUMBER : 1624

PROJECT NAME: Pope's Hill Residential Development

PROJECT LOCATION: Pope's Hill , Blackpool, Cork.

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VERSION CONTROL

Project #	Report Version	Author	Checked By	Date	Changes made
1624	V1	PH	SDM	04-11-2024	
1624	V2	PH	SDM	01-09-2025	Revised layout
1624	V3	PH	SDM	10-03-2026	Revised layout

Contents

1. Introduction

1.1Instructions and Brief

1.1.1 Holly Arboriculture was commissioned by Reddy Architecture + Urbanism, via email dated 07-03-2024, to undertake the following tasks in relation to the proposed development at Pope's Hill, Blackpool, Cork

- Carry out a tree survey in accordance with *BS5837:2012 – Trees in Relation to Design, Demolition and Construction – Recommendations*;
- Prepare an Arboricultural Impact Assessment (AIA);
- Develop an Arboricultural Method Statement (AMS) outlining the measures necessary to protect retained trees during the construction process;
- Produce a Tree Protection Plan (TPP);
- Compile a Tree Survey Schedule, as per BS5837:2012.

1.1.2 This report addresses the potential impacts of the proposed development on the existing tree population. The field assessment was completed on 28-03-2024. The documents outlined in Table 1 were provided to Holly Arboriculture to inform the tree survey and this report:

Table 1: List of drawings to inform the tree survey and report

Document Title	Document / Drawing number	Originator
LANDSCAPE MASTER PLAN	24184-2	CSR LAND PLANNING & DESIGN

1.1.3 The report should be read in conjunction with the following Holly Arboriculture plans:

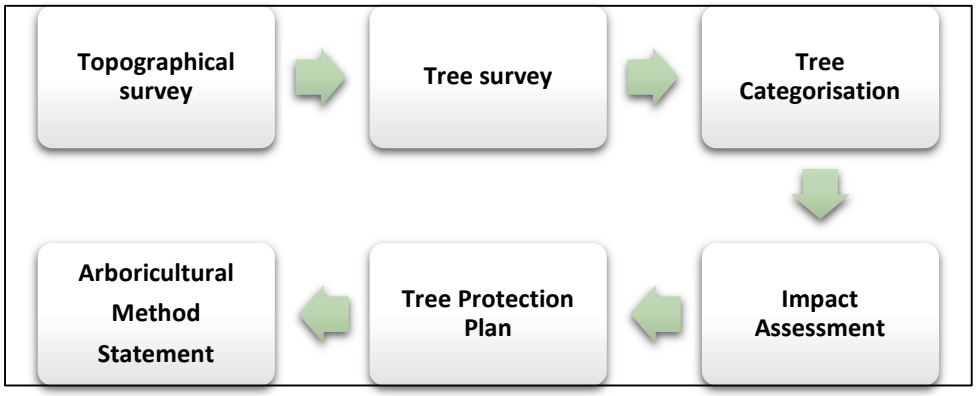
Drawing Title	Drawing Subject
1. TCP-1624	**Tree Constraints Plan**: A plan depicting the predevelopment location, size, calculated constraints, and simplified tree quality category system
2. TPP-1624	**Tree Protection Plan**; This plan depicts the nature, location and extent of tree protection measures required to provide for sustainable tree retention.

1.2 Aims and Approach

1.2.1 The aim of this report is to provide a clear assessment of the existing trees on site, and to evaluate the potential impacts of the proposed development on trees and vice versa.

1.2.2 The arboricultural impact assessment was conducted in accordance with the *British Standard BS 5837:2012 Trees in relation to design, demolition, and construction – Recommendations*. The British Standard sets out the principles and procedures to be applied to achieve a harmonious and sustainable relationship between trees and structures. The assessment process undertaken for this report is described in graph 1 below.

Graph 1: Arboricultural Impact Assessment Process



2. The Development

2.1. General Description of the Development

3. The proposed development will consist of a Large-Scale Residential Development (LRD) on a site at Pope's Hill, Pope's Road, Blackpool, Cork City which will include the demolition of a terrace of 4no. existing dwellings, 3no. of which are derelict, and ancillary sheds and their replacement with 1no. single-storey 3-bed detached bungalow accessed via a modified private driveway; and the construction of 103no. dwellings to include 50no. townhouses and 53no. duplex apartments. A total of 104no. dwellings are proposed, accessed via Pope's Road. The proposed development will also include a creche with rear garden and front set down area; 104no. car parking spaces and 128no. cycle spaces; internal roads and pathways; hard and soft landscaping, including boundary treatments; retaining walls; 2no. pedestrian connections with Glentrasna Park to the north; and all associated site development, landscaping and boundary treatment, and drainage works, including SuDS.

Fig 1. Aerial image with red line indicative of site boundary.

3. The Trees

3.1. Description of the Trees and Site

3.1.1 The site is divided into three distinct sections: (1) the western field, (2) a central area that includes a private dwelling, and (3) the eastern field. The overall landscape reflects a lapsed farm or homestead typical of a less intensive agricultural era. Along the southern boundary, behind a row of derelict dwellings, several ageing apple trees remain from what appears to have been a traditional orchard. These are now in competition with vigorous, naturally regenerating sycamore and other vegetation, which has become established over recent years to form a developing copse in the central area. There are no notable or high-value individual specimens within this copse (see Photos 1 & 2). While the presence of these remnant apple trees and stretches of hawthorn hedgerow offer some indication of former land use and boundaries, they are now in decline due to prolonged neglect. Fragmented lengths of hawthorn hedgerow remain in a north-south orientation across the central section, though gaps are frequent.

3.1.2 The northern boundary contains the most prominent trees on site, tree numbers 0981 and 0982 (Photo 3), which appear to have been retained during previous tree removal activities, as evidenced by the presence of large stumps nearby. The remainder of the trees along this boundary have self-seeded in the absence of grazing or active management. Although currently unremarkable, with appropriate care and future management these trees have the potential to develop into landscape features of greater value (Photo 4). A lapsed hawthorn hedgerow also persists along this boundary, providing partial screening to neighbouring properties at Glentrasna Court and Glentrasna Drive (Photo 5).

3.1.3 The western boundary primarily comprises scrub vegetation interspersed with some mature hawthorn specimens (0976–0977), a pear tree, and a small group of semi-mature, naturally regenerated sycamore in the north-western corner. This section is heavily colonised by bramble.

3.1.4 The eastern boundary features another lapsed hawthorn hedgerow with very few surviving trees, much of which is now engulfed by bramble and ivy (Photo 6).

3.1.5 Along the southern boundary, sally willow dominates the scrub vegetation. No trees of arboricultural significance were identified in this area. Adjacent to the private dwelling located centrally in the site, a garden area is delineated by a lapsed privet hedge (Photo 8), with several ornamental trees of varying condition scattered throughout.

Fig 2: Proposed site layout.

4. Findings

The trees were assessed on the 28th of March 2024. The field data collected is contained within the Tree Survey Schedule in 'Appendix 1' and should be read in conjunction with the Tree Constraint Plan (TCP-1624).

Tree Survey Overview

A total of **20 No. individual trees** were assessed and tagged as part of the survey fieldwork.

The following is a breakdown of their category grading. See table 1 below for detail.

• 0 or 0% of the trees included in this assessment were classified as category 'U' (unsuitable for long-term retention under current site conditions).

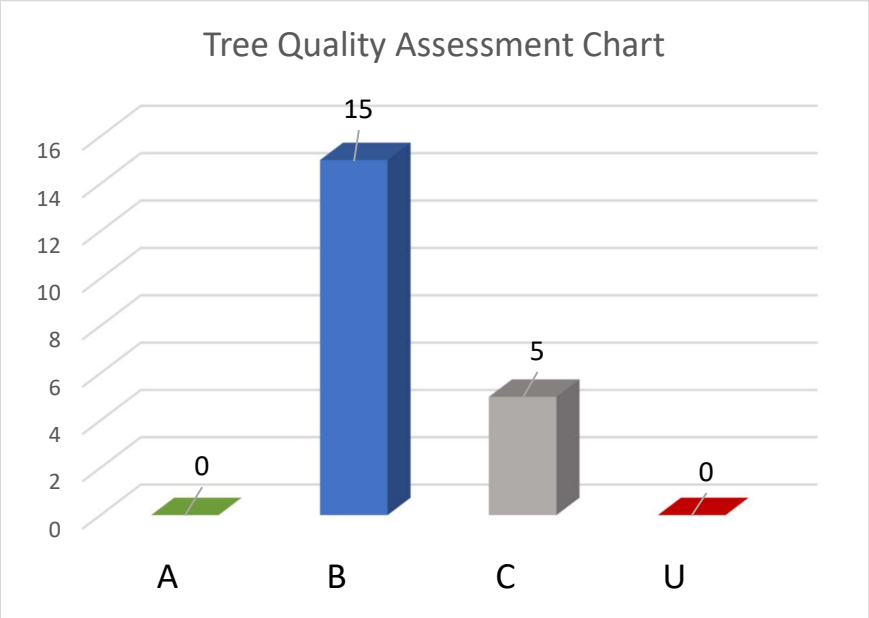
• 0 or 0% of the trees included in this assessment were classified as category 'A' trees (high value)

• 15 or 75% of the trees included within this assessment were classified as category 'B' trees (moderate value)

• 5 or 25% of the trees included within this assessment were classified as category 'C' trees (low value)

Table 1: INDIVIDUAL TREE QUALITY ASSESSMENT SUMMARY

Tree Species	A2	B2	C2	U2	Grand Total
Apple sp. (Malus sp.)		5			**5**
Elder (Sambucus nigra)			1		**1**
Hawthorn (Crataegus monogyna)		1	2		**3**
Holly (Ilex aquifolium)		1			**1**
Laburnum sp. (Laburnum sp.)			1		**1**
Pear sp. (Pyrus sp.)		1			**1**
Sycamore (Acer pseudoplatanus)		7	1		**8**
Grand Total	**0**	**15**	**5**	**0**	**20**



[A total of 20 trees were individually tagged on site.]

A total of **8 No. Tree Groups** were recorded as part of the survey fieldwork.

The following is a breakdown of their category grading. See table 3 below for detail.

• 0 or 0% of the trees included in this assessment were classified as category 'U' (unsuitable for long-term retention under current site conditions).

• 0 or 0% of the trees included in this assessment were classified as category 'A' trees (high value)

• 5 or 62% of the trees included within this assessment were classified as category 'B' trees (moderate value)

• 3 or 38% of the trees included within this assessment were classified as category 'C' trees (low value)

Table 2: TREE GROUP QUALITY ASSESSMENT SUMMARY

Tree Group No.	A	B	C	U	Grand Total
1			1		1
2			1		1
3		1			1
4			1		1
5		1			1
6		1			1
7		1			1
8			1		
Grand Total	**0**	**5**	**3**	**0**	**8**

5. Arboricultural Impact Assessment

5.1 Impact Assessment of the Proposed Scheme

5.1.1 This section states the impacts of the proposed scheme on trees and also assesses the likelihood and significance of the impacts on trees.

5.1.2 This section also states the impacts of the trees on the proposed development and assesses the likelihood and significance of these impacts.

5.2 Potential impacts of development on the vegetation.

Tree no's. 0975, 0986-91 & Tree group No's 5-8: The proposed development footprint, including building locations and access routes, directly conflicts with or significantly encroaches upon the root protection areas (RPAs) of several trees, thereby necessitating their removal. This will result in a localised loss of habitat and a minor reduction in site biodiversity.
The most substantial tree group identified for removal (Group 8) is of low arboricultural value and is dominated by a single species (Sycamore). Other tree groups scheduled for removal are of moderate quality but are smaller in scale relative to G8. The individual trees proposed for removal are also of moderate quality. While the removal of these trees will result in some habitat loss, the associated visual impact is considered negligible due to their limited size when compared to the more prominent trees being retained along the northern boundary.
Overall, the significance of this impact is assessed as moderate to low, with the likelihood of occurrence rated as likely to certain. In mitigation, a comprehensive landscape plan has been developed by CSR Land & Planning, which includes proposals for replacement planting and is available for review.

Tree Group 3: The proposed footpath linking the development with Gleantrasna Avenue directly conflicts with a section of TG3 (approx. 144m²), thereby necessitating partial removal. This will result in a localised loss of habitat and a minor reduction in site biodiversity. The visual impact shall be minor as these trees represent a ~10% portion of the tree group and are relatively small in size compared to the mature retained sycamore trees.

Tree no's 0979-80: There is the potential for root severance/damage due to soil compaction due to plant machinery and the excavation required for the installation of Soakaway Facility 1. The potential impact which is possible can result in dieback of shoots within the crowns of these trees. Mitigation measures to avoid this is the appropriate erection of protective fencing set out as per TPP1624.

Tree No's. 0976-84: Roots may be damaged where construction traffic or the storage of materials occurs within the Root Protection Area (RPA). This type of soil compaction is likely, with the severity ranging from moderate to high. Such damage can reduce water and nutrient uptake, which may result in crown dieback or gradual decline over time. This impact can be minimised by installing protective fencing around the RPA to prevent access and create a construction exclusion zone.

5.3 Issues to be addressed at the Arboricultural Method Statement (AMS)

1. Service installation to site;
2. Protective fencing;
3. Ground protection for retained trees where construction activity is unavoidable;
4. Construction exclusion zones.
   *AMS to be prepared as a condition of planning approval.

Signed

Paul Holly
Independent Consultant Arboriculturist

Date: 10-03-2026

HOLLY ARBORICULTURE

Arboricultural ASSOCIATION Professional Member

Appendix 1. Tree Survey Schedule

Survey Notes

All codes referred to in this report are approximate and serve as a general guide only.

Reference to Numbers: The trees have metal tags attached and these correspond with the numbers in this report.

Reference to age class is as follows:

Y - Young: A tree, which has been planted in the last 10 years.
SM- Semi Mature A tree that is less than 1/3 the expected height of the species in question.
EM - Early Mature: A tree, which is between a 1/3 and 2/3's the expected height of the species in question.
M - Mature: A tree that has reached the expected height of the species in question, but still increasing in size.
V- Veteran, A tree which considering its growing conditions and environment, may bear the 'scars' of age such as decay in the trunk, branches or roots, fungal fruiting bodies, or dead wood. A veteran is not necessarily old but possesses features of older or ancient trees.
Reference to Physiological, Structural Condition and other comments:

Phys Cond - Physiological Condition & **Struct Cond** - Structural condition

G - Good: A tree with no major defects, but possibly including some small defects.

F - Fair: A tree with some minor defects such as bark Wounds, isolated decay pockets or structure affected due to overcrowding.

P - Poor: A tree with more serious defects such as extensive deadwood, decay or effective to the point of being dangerous.

Recommendations/Comments – These record noted visual defects and other information about the tree's health and structure as well as recommendations for work to be carried out.

ULE - Estimated Remaining Contribution in years. This is based on an Arboricultural assessment of the tree and is estimated based of the findings noted at time. Trees still need to be reviewed on a regular basis, preferably annually.

Less than (<) 10 years remaining contribution
10 + years remaining contribution
20 + years remaining contribution
40 + years remaining contribution.
Ret Cat - Retention Categories

The purpose of the tree categorization method is to identify the quality and value of the existing tree stock, allowing informed decisions to be made concerning which trees should be removed or retained should development occur.
It is carried out in accordance with section 4.5 (Tree Categorization Method) of BS 5837 2012.

The terms 'Group, woodland or tree line' 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 to each of the three subcategories.

Reference to Crown spread, Height, and Trunk Diameter: This gives a guide to the area taken up by the tree.
SD – 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)

Height - records the overall height of the tree and is given in meters (m).

Crown Spread - records the extent of the branches normally in a north, south, east, and west direction from the base of the tree and is given in meters (m).

Root Protection Area - (RPA) –Root Protection radius from the base of the tree measured in meters (m).
The Root Protection Area (RPA) is the minimum area around individual trees to be protected from disturbance during construction works; RPA is usually expressed as a radius in metres measured from the tree stem.

Tree Survey Schedule

Tree No	Tree Species	Height (m)	SD (mm)	Crown Spread N/S/E/W	Age Class	Phys Cond.	Struct Cond.	Recommendations/ Comments	RPA	Ret Cat ULE
0975	Elder (Sambucus nigra)	5	200	2/2/2/2	Mature	Good	Good	No work required Forming a large shrub following cyclical hard pruning to allow clearance for overhead utility line.	2.4	C2 (10+)
0976	Hawthorn (Crataegus monogyna)	5	200	2/4/2/1	Mature	Good	Poor	No work required Partially collapsed east, becoming engulfed in bramble and elder growing up through the canopy.	2.4	C2 (10+)
0977	Hawthorn (Crataegus monogyna)	5	200	1/1/1/2	Mature	Good	Fair	No work required Previously cut back to 1m, exhibiting vigorous regrowth. Upright stems forming a dense crown albeit suppressed by neighbouring trees.	2.4	C2 (10+)
0978	Pear sp. (Pyrus sp.)	9	250	2/1/1/2	Mature	Good	Fair	No work required Significant wound and associated decay present at base east. Unknown extent of decay. Co-dominant stems from 1m, tight bark included union. Dense crown with abundance of live shoots.	3	B2 (20+)
0979	Sycamore (Acer pseudoplatanus)	11	200	4/1/4/4	Early Mature	Good	Good	No work required Co-dominant upright stems from base. Good vitality with no obvious abnormalities observed.	4.8	B2 (20+)

Tree No	Tree Species	Height (m)	SD (mm)	Crown Spread N/S/E/W	Age Class	Phys Cond.	Struct Cond.	Recommendations/ Comments	RPA	Ret Cat ULE
0980	Sycamore (Acer pseudoplatanus)	11	200	5/5/5/1	Early Mature	Good	Good	No work required Upright stems, good branch framework. Good vitality with no obvious abnormalities observed.	3.7	B2 (20+)
0981	Sycamore (Acer pseudoplatanus)	14	640	5/1/6/6	Mature	Good	Good	No work required Forked at 5m, good unions, upright principal stems with arching limbs north, south, and west. Good vitality with abundance of live shoots. Crown suppressed on east side by neighbouring tree.	7.6	B2 (20+)
0982	Sycamore (Acer pseudoplatanus)	15	720	6/2/5/2	Mature	Good	Good	No work required Forked at 4m, upright central leader bifurcates at 7 and 8m. Arching limb north at 4m, good union. Abundance of live shoots. Crown developing well on east side following the removal of a large neighbouring tree.	8.6	B2 (20+)
0983	Sycamore (Acer pseudoplatanus)	12	240	2/1/4/2	Early Mature	Good	Good	No work required Co-dominant stems from 4m, bark included union. Stems bifurcate again at 5m. Lightweight crown with no obvious abnormalities observed. Good vitality with abundance of live shoots.	2.8	B2 (20+)

Tree No	Tree Species	Height (m)	SD (mm)	Crown Spread N/S/E/W	Age Class	Phys Cond.	Struct Cond.	Recommendations/ Comments	RPA	Ret Cat ULE
0984	Sycamore (Acer pseudoplatanus)	14	300	3/3/4/1	Early Mature	Good	Good	No work required Epicormic limbs extending south at base. Trunk colonised by ivy, obscuring view of stem and branch unions. Good vitality with abundance of live shoots.	3.6	B2 (20+)
0985	Hawthorn (Crataegus monogyna)	5	200	2/2/2/2	Mature	Good	Good	No work required Good vitality with no obvious abnormalities observed. High habitat value.	2.4	B2 (20+)
0986	Sycamore (Acer pseudoplatanus)	12	180	3/2/3/2	Early Mature	Good	Good	No work required Upright stem with lightweight branch framework. Good vitality with abundance of live shoots.	2.1	B2 (20+)
0987	Apple sp. (Malus sp.)	6	340	5/2/2/1	Mature	Fair	Fair	No work required A limb forming a section of the crown west has been removed. Competing for light with vigorous privet.	4	B2 (20+)
0988	Apple sp. (Malus sp.)	7	250	2/1/3/3	Mature	Good	Fair	No work required Arching principal limbs south and west. Competing for light with regenerative scrub vegetation.	3	B2 (20+)
0989	Apple sp. (Malus sp.)	8	350	3/2/4/2	Mature	Good	Good	No work required Good vitality with no obvious abnormalities observed.	4.2	B2 (20+)

Tree No	Tree Species	Height (m)	SD (mm)	Crown Spread N/S/E/W	Age Class	Phys Cond.	Struct Cond.	Recommendations/ Comments	RPA	Ret Cat ULE
0990	Apple sp. (Malus sp.)	8	360	2/1/4/3	Mature	Good	Good	No work required Co-dominant stems from 0.5m, good unions. Abundance of live shoots in upper crown.	4.3	B2 (20+)
0991	Apple sp. (Malus sp.)	8	350	2/3/4/4	Mature	Good	Fair	No work required Arching limbs south and west, upright central stems. Competing for light with regenerative scrub vegetation.	4.2	B2 (20+)
0992	Holly (Ilex aquifolium)	7	180	1/1/2/3	Mature	Good	Good	No work required Crown suppressed by neighbouring trees on north and east side. Good vitality with no obvious abnormalities observed.	2.1	B2 (20+)
0993	Sycamore (Acer pseudoplatanus)	9	200	2/1/2/2	Early Mature	Good	Good	No work required Co-dominant stems from 1m, tight v-shaped union. Good vitality.	2.4	C2 (10+)
0994	Laburnum sp. (Laburnum sp.)	5	150	2/2/1/3	Mature	Good	Fair	No work required Co-dominant stems from base, tight unions. Minor deadwood in principal limbs west. Good vitality.	2.4	C2 (10+)

Tree Group Schedule

Tree Group no.	Tree Species	Approx Tree No	Height (m)	Age Class	Phys Cond.	Struct Cond.	Recommendations/ Comments	Ret Cat ULE
1	Sycamore (Acer pseudoplatanus)	5	10	Semi Mature	Good	Good	No work required Regenerative sycamore growing along boundary wall.	C2 (10+)
2	Sycamore (Acer pseudoplatanus)	6	8-12	Semi Mature	Good	Good	No work required Regenerative sycamore growing along boundary wall.	C2 (10+)
3	Sycamore (Acer pseudoplatanus),Hawthorn (Crataegus monogyna)	45	6-14	Early Mature	Good	Good	Most sycamore are regenerative multi-stemmed semi mature species. The hawthorn and privet form a mature dense lapsed hedgerow. This group provides an excellent natural screen to the private dwellings north and a green corridor for habitat.	B2 (20+)
4	Hawthorn (Crataegus monogyna),Elder (Sambucus nigra)	15	5-9	Mature	Good	Fair	No work required The remaining trees of a lapsed hedgerow. Most trees becoming engulfed in bramble and ivy. Some trees are at the base of the stone wall with more growing on top of the wall.	B2 (20+)
5	Hawthorn (Crataegus monogyna),Elder (Sambucus nigra)	7	5	Mature	Good	Good	No work required Remains of a lapsed hedgerow.	B2 (20+)

Tree Group no.	Tree Species	Approx Tree No	Height (m)	Age Class	Phys Cond.	Struct Cond.	Recommendations/ Comments	Ret Cat ULE
6	Blackthorn (Prunus spinosa),Hawthorn (Crataegus monogyna)	2	5	Mature	Good	Good	No work required Remains of lapsed hedgerow.	B2 (20+)
7	Blackthorn (Prunus spinosa),Hawthorn (Crataegus monogyna),Privet sp. (Ligustrum sp.)	9	8-11	Mature	Good	Good	No work required Remains of lapsed hedgerow.	B2 (20+)
8	Hawthorn (Crataegus monogyna),Elder (Sambucus nigra),Sycamore (Acer pseudoplatanus),Privet sp. (Ligustrum sp.),Apple sp. (Malus sp.)	60	6-15	Early Mature	Good	Fair	No work required Regenerative sycamore dominating a large section centrally in the group. Upright stems, many from coppiced stumps. Mature hawthorn (lapsed hedgerow) in a linear orientation to the east, in fair-poor condition. Privet surrounding garden of private dwelling, overgrown, poor condition.	C2 (10+)

Tree Works Schedule

Tree No	No. / Species	Purpose of works	Recommended works	BS 5837 Category	Status
0975, 0986-91 inclusive	Elder, Apple x5, Sycamore	**To facilitate development**	**Remove**	**C, B**	**Proposed**
Tree Group: 5-8 inclusive	Mixed	**To facilitate development**	**Remove**	**C, B**	**Proposed**
Tree Group 3	Sycamore, Hawthorn	**To facilitate development**	**Partially Remove (~144m²)**	**B**	**Proposed**

Appendix 2. Survey Data Collection and Methodology

The arboricultural data which is presented within the attached tree schedule (Appendix 1), has been recorded in line with BS 5837:2012. The tree survey was conducted by collecting and assessing the following information on all significant trees located on the proposed development site and adjacent lands to the north and plotted on the land survey map provided.

- Tree Number (metal tags attached to each tree).
- Tree species both common name and botanical.
- Dimensions (Trunk diameter, height, crown spread).
- Age Class.
- Physiological Condition.
- Structural Condition.
- Preliminary Recommendations.
- Estimated remaining contribution within their present environment.
- Retention category.

Each tree included within this assessment has been marked with a small aluminium tag with a reference number that relates to the main condition report. The tree tag numbers used in this report range from **0975 - 0994** inclusively and are orientated in such a way to assist in their relocation on site. The compilation of this survey was guided by the recommendations of BS 5837: 2012. This survey typically includes trees of stem diameters exceeding 150mm at 1.5 metres from ground level. The survey relates to current site conditions, setting and context.

The trees have been divided into one of the following categories, in accordance with the cascade chart illustrated in Table 1 of BS 5837:2012 and Table 2 below.

The classification process begins by determining whether the tree falls within the (**U**) category, if not then the process will continue by assuming that all trees are considered according to the criteria for inclusion in the high category (**A**).

Trees that do not meet these strict criteria will then be considered in light of the criteria for inclusion in the moderate category (**B**) and failing this,

they will be allocated a low category (**C**).

The above categories can be further subdivided regarding the nature of their values or qualities–

• Sub-category 1 - Arboricultural qualities : the trees influence as a good example of its species, it's health and structure

• Sub-category 2 - Landscape qualities : the trees importance within and as landscape features

• Sub-category 3 - Cultural qualities : trees of an age that have a significant conservation and historical value.

TREES UNSUITABLE FOR RETENTION		
Category and Definition	**Criteria**	**Identification on Plan**
Category U 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.	• 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 (eg, where, for whatever reason, the loss of companion shelter cannot be mitigated by pruning). • Trees that are dead or are showing signs of significant, immediate, and irreversible overall decline. • 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. *NOTE: Category U trees can have existing or potential conservation value which it might be desirable to preserve; see 4.5.7.*	

TREES TO BE CONSIDERED FOR RETENTION				
Category and Definition	**Criteria**			**Identification on Plan**
	1. Mainly arboricultural qualities	2. Mainly landscape qualities	3. Mainly cultural values, including conservation	
Category A Trees of high quality with an estimated remaining life expectancy of at least 40 years.	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 (eg, the dominant and/or principal trees within an avenue.	Trees, groups or woodlands of particular visual importance as arboricultural and/or landscape features.	Trees, groups or woodlands of significant conservation, historical, commemorative or other value (e, veteran trees or wood-pasture).	
Category B Trees of moderate quality with an estimated remaining life expectancy of at least 20 years.	Trees that might be included in category A, but are downgraded because of impaired condition (eg, 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.	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.	Trees with material conservation or other cultural value.	
Category C Trees of low quality with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150mm.	Unremarkable trees of very limited merit or such impaired condition that they do not qualify in higher categories.	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.	Trees with no material conservation or other cultural value.	

Table 2: Cascade Chart for Tree Quality Assessment.

The trees have been plotted as part of a topographical survey of the site and can be seen on the Tree Constraints Plan (TCP-1624). The tag numbers referred to in the 'Tree Survey Schedule' have been shown on this drawing along with their crown spreads and their retention category colour coded as recommended by BS 5837 2012. This drawing has been developed as a plan of tree constraints (Minimum Root Protection Areas) and has been prepared for the design team to aid in the detail design for the construction activity. It is of the upmost importance that further discussion takes place regarding the final design including locating underground utilities. Including the author of this report as part of this design team is critical to avoid unnecessary tree loss or windthrow.

The Root Protection Area (RPA) is the minimum area around individual trees to be protected from disturbance during construction works; RPA is usually expressed as a radius in metres measured from the tree stem.

For single stem trees, the root protection area (RPA) has been calculated as an area equivalent to a circle with a radius 12 times the stem diameter.

For trees with more than one stem, the calculation method below has been used. The calculated RPA for each tree should be capped to 707 m2.

a) For trees with two to five stems, the combined stem diameter has been calculated as follows: √ ((stem diameter 1)2 + (stem diameter 2)2 ... + (stem diameter 5)2)

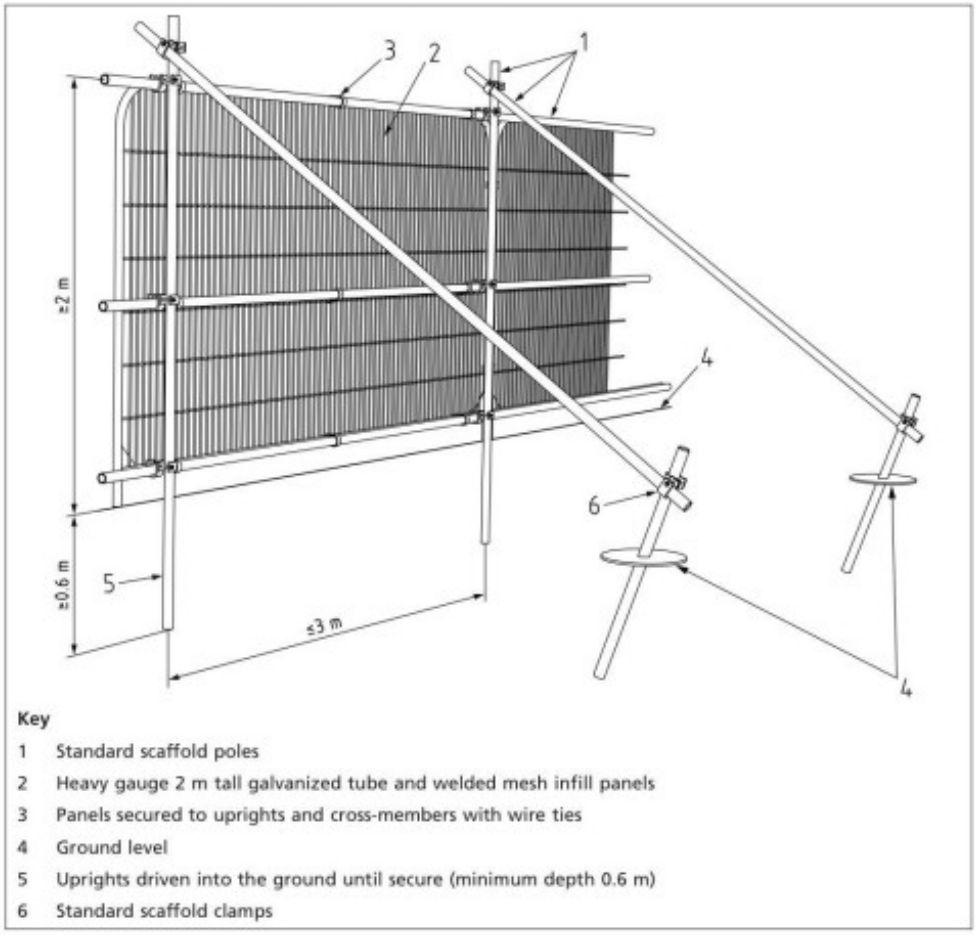
The RPA for each tree is plotted on the drawings Tree Constraints Plan (TCP-1624), any deviation in the RPA from the original circular plot takes account of the following factors whilst still providing adequate protection for the root system:

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

Appendix 3. Tree Protective Fencing

Below are illustrations as recommended in BS 5837. These illustrations provide a visual representation of possible options for the construction of the protective fencing.

Figure 2 **Default specification for protective barrier**



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
4 Ground level
5 Uprights driven into the ground until secure (minimum depth 0.6 m)
6 Standard scaffold clamps

Sample Fencing signage

Appendix 4. Photographs

[Photo 1: Regenerative sycamore copse in central area (TG8), View south]

[Photo 2: Regenerative sycamore copse.]

[Photo 3: Tree No's 0981 & 0982, view west.]

[Photo 4: Naturally regenerating trees along northern boundary.]

[Photo 5: Lapsed hawthorn hedgerow along northern boundary, view northeast.]

[Photo 6: Eastern boundary vegetation, Tree No 0985 centre of photo, view east.]

[Photo 7: Southern boundary vegetation, mostly scrub willow, bramble, and ivy.]

[Photo 8: Garden area demarcated by overgrown privet hedgerow.]