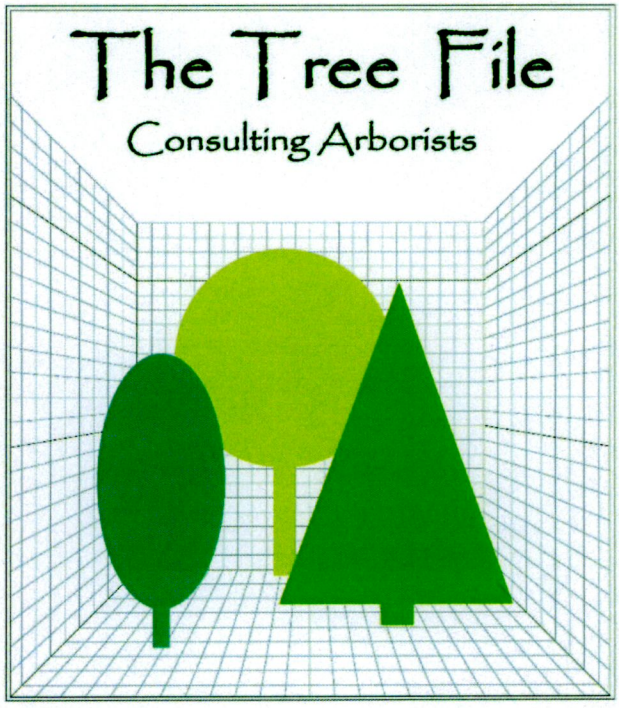

Arboricultural Report

Proposed Development
Clonburris Phase T3
Dublin 22

November 2022

The Tree File Ltd
Consulting Arborists
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D18 R2K1
086-3819011

Contents

Associated Drawings

This report is for reading in conjunction with the drawings noted below

	Drawing Title	Drawing Subject
1)	Clonburris T3 Tree Contraints Plan	**Tree Constraints Plan** A plan depicting the predevelopment location, size, calculated constraints, and simplified tree quality category system
2)	Clonburris T3 Tree Impacts Plan	**Tree Impacts Plan** This plan represents the effects of the proposed development works on the above tree population and depicts trees to be retained and removed.
3)	Clonburris T3 Tree Protection Plan	**Tree Protection Plan** This plan depicts the nature, location and extent of tree protection measures required for sustainable tree retention.

1 Report Summary

1.1 The site area consists of a lapsed agricultural landscape, dominated by rough grassland and some thorn hedges. The hedges are typically associated with ditches and embankments, that also support the small number of emergent trees.

1.2 The tree and hedge material associated with the "red line" site is often of poor quality. Many of the smaller trees are Elms, killed by Dutch Elm Disease. The thorn-based hedges are highly variable, some being suppressed by emergent trees or previously by now cleared bramble thicket.

1.3 Near the northern boundary of the site, there is a linear area of scrub thicket associated with a raised earthen mound. Much of the mound is dominated by rough grass and Nettle, though areas of Bramble thicket increase when progressing westward. The area supports a number of Buddleia, as well as sapling Sycamore, Gorse and Dog Rose

1.4 The proposed development will consume a majority of the site area. This will result in the loss of nearly all the site's vegetation. There is scope to retain the linear belt of "scrub thicket" and "Hedge 1f" to the north of the site.

1.5 The retention of "Hedge 1f" and the "scrub thicket" will be contingent upon the provision of suitable protection during the construction phase. The approximate nature, extent and location of such protection has been depicted on the tree protection plan "Clonburris T3 Tree Protection Plan" that accompanies this report.

2 Introduction

2.1 This report was commissioned by-
Cairn Homes Properties Ltd.

This report was prepared by-
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Report Brief

2.2 An Arboricultural report has been requested in respect of the proposed development. As "BS5837: 2012 Trees in Relation to Design, Demolition and Construction – Recommendations" is the accepted framework for such reports, its composition, inclusions and recommendations being followed as a general basis for such reporting.

Report Context

2.3 This report includes an Arboricultural review of the proposed development project. The report includes an assessment of the sites existing tree population within its current context. The report assesses their potential for sustainable retention in the post-development scenario. The report also describes the likely effects and repercussions of the development and construction process upon those trees. It also provides information regarding the necessary tree protection and the avoidance of damage to trees during the construction process, necessary to achieve sustainable tree retention.

2.4 This assessment summarises the Arborists findings and recommendations. These findings were developed after reviewing the proposed project details as provided by the design team, and after an evaluation of trees as defined and described in the tree survey at "Appendix 2". This report also includes a preliminary "Arboricultural Method Statement" at "Appendix 1" as well as a Tree Protection Plan. This plan illustrates the requisite conservation and protection methodologies necessary to maintain tree sustainability. This report is not intended as a critique of the proposed development but is an impartial assessment of the development implications relating to the sustainable retention of trees, whether that be any, some, or all trees. This report is for planning purposes only and may be deficient for construction phase use.

Report Limitations

2.5 This report relates the Arborists interpretation of information provided to him before the report compilation and gained by him during the undertaking of the site review and tree survey. The site review data is subject to the limitations set out under "Inspection and Evaluation Limitations and Disclaimers" in "Appendix 2" of this report. The findings and recommendations made within this report are compiled based upon the knowledge and expertise of the inspecting Arborist.

2.6 The "Implication Assessment" element of the report builds on assumptions and estimates, particularly in respect of how construction works might proceed on a day to day basis and appreciates the "design" stage of the project, as opposed to "detail design" or "construction" detail.

2.7 In line with the "design" stage of the development proposals, many elements of the "Arboricultural Method Statement" are deliberately broad and generic. They will require review, amendment and consolidation at the construction stage, for example, in respect of the size and nature of the equipment, plant and machinery that might be utilised by any potential building contractor and any details as may change at "detail design" or "construction detail" stages.

2.8 Accordingly, this assessment is premised on all its elements/recommendations, and the omission or alteration of any part of it, particularly the application of tree protection methodologies, can radically alter outcomes regarding sustainable tree retention.

3 Site Description

3.1 The site area comprises a small rectangular area of the broader Clonburris lands. The site is located immediately south of the Dublin – Cork rail line and west of the R113

3.2 The site area consists of lapsed agricultural lands. Most is dominated by rough grass field remnants, separated by thorn-based hedges.

3.3 While the site appears generally flat, it supports a number of substantial ditch features, often associated with hedges.

3.4 There is much evidence of scrub and thicket clearance across the site area.

4 Pre-Development Arboricultural Scenario

4.1 The site is dominated by a historic agricultural format and a large proportion of the vegetation reviewed relates to Thorn based hedges. These are presumed to have been installed to create stock-proof barriers for a historic farmed context. The location of these hedges often coincides with a drainage system ditches, embankments or other contextual boundaries such as townland boundaries. These hedges have, over time, been invaded by other, more modern recent additions. Many hedges have been usurped and are being dominated by emergent thicket and tree growth. For this reason, the remaining hedges are often highly variable in respect of condition and continuity.

4.2 Much of the vegetation across the site is associated with specific ground features. The most encountered features are ditch and embankment profiles. Much of the site's vegetation is associated with the edge of, or the raised embankment adjoining a ditch or drainage feature. All such plant material is intrinsically linked with these ground features, and the sustainability of the plants will be linked with the conservation and preservation of such features.

4.3 In respect of design and the consideration of tree impacts, topographical and ground features may have acted as physiological barriers to root development. An example of this would relate to trees or shrubbery arising from embankment adjoined by a ditch. Where the ditch has historically, persistently and is currently supporting an active watercourse, then it is unlikely that tree roots will pass beneath such a feature. Such features commonly distort root growth pattern, limiting root material to the side of the feature upon which they arise. This issue will have occurred to many of the hedge alignments reviewed. It is appreciated that latterly and particularly within the last decade or two, many of the drainage systems appear to have been disturbed and are currently defunct and dry. In such instances, there may have been some redevelopment of root material,

4.4 Across the broader site, there are obvious issues with the Ash and Elm populations. All sapling Wych Elm found on the site are dead or affected by Dutch Elm disease. This

issue is widespread across the east coast region at present. It is unreasonable to expect the survival of any of the Elms, and their retention is unlikely to prove sustainable.

4.5 A similar issue appears to be developing in respect of the site's Ash population. Many trees show signs of ill-health, early discolouration, decline and dieback. These symptoms are highly suggestive of Ash Dieback (*Hymenoscyphus fraxineus*), a virulent pathogen currently affecting many Ash trees across the country. Throughout the survey, many trees have been recommended for re-review during the 2022 growing season to better evaluate their sustainability. However, it is advised that there is a large risk that many, if not all Ash across this and neighbouring site could be lost to Ash Dieback in the coming years (Teagasc 2021)(Woodland Trust 2021).

5 Planning Scenario in Respect of Tree

5.1 In respect of trees as they relate to planning within the **South Dublin County Council** area, note is made of two areas of guidance including - **The South Dublin County Council Development Plan 2022-2028** and **South Dublin County Council's Tree Management Policy 'Living with Trees' (2021-2026).**

5.2 In their development plan, **South Dublin County Council** have made numerous references to trees in respect pf planting, retention and protection.

5.3 Within Section 3 "**Natural, Cultural and Built** Heritage", trees gain specific mention in section 3.3.6 "Protection of Trees and Hedgerows". Specifically, note is made of Policy NCBH11: Tree Preservation Orders and Other Tree / Hedgerow Protections, and NCBH11 Objectives 1 to 5 inclusive that deal with tree preservation orders, the value of trees and hedges within the landscape as well as the general objective to retain, preserve and protect trees, woodlands and hedges.

5.4 Note is made of the importance of trees in the landscape and for their environmental values (e.g. carbon sequestration). Note is made of an intent to incorporate new plantings within Section 4 "Green Infrastructure" and as incorporated in objective GI1 Objective 1, that emphasises the use of trees (including street trees) and woodlands as a core element of the Green Infrastructure" policy. Objective GI2.2, further enshrines the importance of trees and tree groups in new developments, with requirements for new planting being noted in Objective GI2.7. In respect of Policy GI5: Climate Resilience, note is made of policies GI5 3 and 6 that specifically deal with an intent to increase tree cover across the county.

5.5 Particular note is made of the South Dublin County Council "Tree Management Policy 2021 – 2026", "Living With Trees". This document outlines and enshrines the broader development plan objectives, but provides more detain in respect of ecological, environmental and amenity background. Particular note is made of Section 7 "Tree and Development". This section includes and overriding policy objective of "The Council will use its powers to ensure that where it is conducive with the objectives of the County

Development Plan, and other planning objectives, there is maximum retention of trees on new development sites". It is also this section that stipulated the use of "British Standard 5837 (2012): Trees in Relation to Design, Demolition and Construction – Recommendations" in respect of trees on construction sites. In this respect and in line with Section 7.2, particular note is made of the Policy: "Where there are trees within a proposed planning application site or on land adjacent to it that could influence or be affected by proposed development, including street trees in the ownership or management of the Council, the planning application must include a detailed submission prepared by a suitably qualified Arboriculturist in accordance with British Standard 5837: 2012 'Trees in Relation to Design, Demolition and Construction – Recommendations"

5.6 Other than the specific objectives noted throughout the development plant, it is noted that the subject site supports no specific "Tree Preservation Orders". However, and in respect of the broader site and as defined within the Clonburris Strategic Development Zone, Planning Scheme (2019), there are proposed conservation zones (ecological corridors) associated with the Grand Canal pNHA and the Dublin Cork railway corridor.

6 Other Legislative and Legal Constraints

6.1 Under the Forestry Act 2014, the felling of a tree standing in a county area requires a felling license unless the trees are exempted under Section 19 of the Act. An exemption applies where trees are being felled in line with a specific detail of a grant of planning permission.

6.2 Some "Section 19" exemptions are not applicable to the development scenario, for example, those applying to fire control, forest survey or gene pool protection relating to horticultural use or Christmas tree production.

6.3 Some exemptions are pertinent to the development scenario, particularly Section 19(1)(M)(ii), where "the removal of which is specified in a grant of planning permission".

6.4 Other non-specific exemptions may also be applicable, including-

- Trees standing in an urban area.
- Trees within 30 metres of a building (other than a wall or temporary structure), but excluding any building built after the trees were planted.
- Trees removed by a public authority in the performance of its statutory functions.
- A tree that is, in the opinion of the planning authority, dangerous on account of its age, condition or location.
- A tree within 10 metres of a public road and which, in the opinion of the owner (being an opinion formed on reasonable grounds), is dangerous to persons using the public road on account of its age or condition.

6.5 The above derogations do not apply where-

- The tree is within the curtilage or attendant grounds of a protected structure under Chapter 1 of Part IV of the Act of 2000.
- The tree is within an area subject to a special amenity area order
- The tree is within a landscape conservation area under section 204 of the Act of 2000.
- The tree is within a monument or place recorded under section 12 of the National Monuments (Amendment) Act 1994, a historic monument or archaeological area entered in the Register of Historic Monuments under section 5 of the National Monuments (Amendment) Act 1987, or a national monument in the ownership or guardianship of the Minister for the Arts, Heritage and the Gaeltacht under the National Monuments Acts 1930 to 1994 or is within a European Site or a natural heritage area within the meaning of Regulation 2(1) of the European Communities (Birds and Natural Habitats) Regulations 2011 (S.I. No. 477 of 2011)

6.6 For further clarification, contact should be made with Forest Service (Department of Agriculture, Fisheries and Food). The Felling Section of the Forest Service is based in Johnstown Castle, Co. Wexford

6.7 Other legislation may affect tree cutting and felling. Particular note should be made of the "Wildlife Act 1976 (as amended), as well as the EU Habitats Directive. These offer protection to animals, including Bats that often root or even breed in trees. The protection afforded by the above legislation means that particular care must be taken in the pruning of felling of trees that may contain Bats. For this reason, specific specialist advice should be sought.

7 Construction Activities and their Effect on Trees

7.1 Retaining trees requires space. There is a big difference between physically preserving a tree and ensuring its future survival. Sustainable tree retention often depends on the extent and nature of construction protection.

7.2 Like all living things, trees are highly dependent on the environment in which they exist, including continuity in water supplies and soil nutrients. Any long-term change in ground conditions can easily affect a tree's metabolism, health, and sustainability.

7.3 Particularly, development and construction activities can easily damage the soil environment. Removing, disturbing or denaturing soil can irreparably damage tree roots and can render the soil incapable of supporting plant root function. Most modern construction requires large plants, equipment, and vehicles. Such machinery causes soil profile destruction and compaction that denatures the soil.

7.4 The sustainability of a tree's health and safety can be compromised where the above issues occur within the minimum "root protection area" defined by "BS5837-2012", then

7.5 Sustainable tree retention must accept changing contexts and increased management in the future. Where rates of occupation and use increase, then any retained trees have the potential to cause harm or damage. This issue may be exacerbated where shelter loss and exposure occur regarding the retention of individual trees.

7.6 Retained trees should be considered in respect of shadow-cast, light admission, and view-blocking. Wind patterns can affect leaf shedding, causing drifts and accumulations, creating management issues around drains and gullies, or creating slippery surfaces.

8 Nature of Project Works

8.1 The development will consist of the construction of 157 residential units in apartments and houses in the Clonburris South West Development Area CSW-S3 of the Clonburris SDZ Planning Scheme 2019 as follows:

- 81 houses in two-storey terraced buildings, comprising 4 two-bedroom houses, 65 three-bedroom houses and 12 four-bedroom houses, all with associated private open space and parking
- 76 apartments in four storey high Block 1, consisting of 26 one-bedroom and 50 two-bedroom units
- Vehicular access will be provided from the permitted street under SDZ21A/0022 and the permitted Clonburris Southern Link Street (SDZ20A/0021) and the Fonthill Road R113 to the east
- All ancillary site development works including footpaths, landscaping boundary treatments, public, private open space areas, 170 car parking spaces and 170 bicycle parking spaces, single-storey ESB sub-stations, bin and bicycle stores and all ancillary site development/construction works.

8.2 Considering the scope and scale of the proposed development, then many of the issues dealt with at "Construction Works and Trees" above could apply if trees are not protected during construction works, including-

a) Direct conflict with proposed structures, thus requiring tree removal.
b) A partial conflict where the "Root Protection Area" is encroached upon by works or ground amendments and cannot be preserved/protected in full.
c) Environmental damage e.g. compaction, capping, sealing – changing the existing ground environment to one that can no longer support tree root function.
d) Construction activity and the use of large plant and machinery that can denature the ground.

e) A change in site context or a change in occupation or use which makes a tree unsuitable for retention.

9 Development Related Issues and Arboricultural Concerns

9.1 The greatest issues affecting trees has been the consumption of site space and encroachment on trees ostensibly retainable trees and hedges.

9.2 This means that successful tree retention will be subject to the limitation of construction related disturbance and the provision of suitable tree protection during the construction phase.

10 Design Iterations and Arboricultural Considerations

10.1 This report relates to clause 4.4.2.1 of BS5837-2012 in that its finding relate to a predefined concept that was issued for review. Accordingly, the report assesses Arboricultural implications and impacts of the proposals, making recommendations in respect of tree protection relating to those trees that might be retained and as outlined below.

10.2 Though this report relates specifically to the assumed effects of the proposed development works, it appreciated that these works relate to the broader development of the Clonburris lands. The arboricultural impacts outlined in this report may be added to by future and adjoining works and the ultimate sustainability of trees might relate to issues relating to future development works not know or considered during the compilation in this report.

11 Identification of Development Impacts to Trees

11.1 The expected tree impacts have been represented graphically on the tree impacts drawing "**Clonburris T3 Tree Impacts Plan**" and within the narrative of this report. This drawing combines the tree constraints plan information with the current stage development details, including the architectural and services layouts below, thereby allowing for simple direct comparisons between the existing site context and the development proposals regarding new structures.

11.2 In this drawing, trees denoted with "Broken Pink" crown outlines are to be removed, and those denoted with "Continuous Green" crown outlines are to be retained.

11.3 Detail of the development proposals where gained from drawings provided by-

- DBFL Consulting Engineers – Drainage and Engineering information overlaid on Masterplan
- Cunnane Stratton Reynolds Landscape Architects - Architectural Design

11.4 The evaluation is primarily based on minimum protection ranges as defined in paragraphs 4.6.1, 4.6.2 and 4.6.3 of BS5837:2012. Any structure, action or apparent

need to enter or otherwise disturb/convert the "root protection area" of a site tree has been considered likely to have a negative impact, with the potential to render a tree wholly unsuitable for retention, unsafe or unsustainable.

11.5 Where applicable, this assessment attempts to consider both direct and indirect implications. The assessment is based on perceived construction requirements and how a tree will likely interact with the development. The assessment appreciates issues including growth, hazard development, light blockage and other social concerns regarding the changing context, including its effect on tree amenity value.

12 Tree Retention and Loss

12.1 Within the "red line" area, only a small proportion of vegetation will be retained. This includes a hedge like alignment to the north and two areas of an existing roadside amenity planting to the east.

12.2 The drawing "Clonburris T3 Tree Impacts Plan" comprises the tree survey drawings overlaid by the development drawings, thus providing a graphic representation of the relationship between tree constraints and the development elements. In this drawing, the trees that will be removed, are highlighted in "pink dashed" outlines.

12.3 There are circa 20no. trees within or directly adjoining the "red line" as well as 3no. hedges. The trees have been categorised as-

- No category "A" trees
- 6no, category "B" tree
- 8no category "C" trees
- 6no. category "U" trees

12.4 The 3no. hedges and the Amenity Tree plantation have been categorised as being of "C" grade condition.

12.5 Normally, all category "U" trees (6 in total across survey area) identified in the survey would be removed. Most such material should be removed regardless of development works. In this instance, this would apply to tree nos. 108, 111, 115, 118, 916 and 920.

12.6 All six of the site's good quality category "B" trees will be removed, including Nos.109, 116, 117, 914, 915 and 919.

12.7 The tree loss breakdown for the proposed developemnt will be-

- 6 Category "B" item
- 8 category "C" trees
- 6 category "U" trees
- 3no. category Hedges (small part of Hedge "1g" will remain)

12.8 Total development related vegetation loss –

- 20No. trees
- Circa 420 metres of hedges

13 Tree Protection within the Scope of a Development

13.1 The design and management recommendations as set out in "BS5837:2012" are considered as "best practice" regarding the selection, retention, protection, and management of tree within the scope of new developments.

13.2 In respect of tree protection, whether vertical or horizontal, all must conform or equate to the recommendations of Section 6, BS5837: 2012, must be fit for purpose and commensurate with the nature of development and the expected day-to-day activities of the site works.

13.3 This report provides a "Preliminary Arboricultural Method Statement" at "Appendix 1" to this report, as well as the associated "Tree Protection Plan" drawing "Clonburris T3 Tree Protection Plan".

13.4 In the drawing, the "Construction Exclusion Zone" is defined by an orange hatching with bold "Orange" lines representing the proposed location of the primary protective "Construction Exclusion Fencing".

13.5 The above drawing provides only a representation of the protection locations and extents that must be located, positioned and erected under the guidance of the project Arborist. This drawing may require referral to a figured and dimensioned, "construction stage" version of the "Tree Protection Plan" drawing. All recommended protection measures will be installed before the commencement of any site works and must remain in situ (unless under the guidance of the site Arborist) until the completion of all site works.

14 Preliminary Management Recommendations

14.1 Within the “red line” area, only a small proportion of vegetation will be retained. This includes a hedge like alignment to the north and two areas of an existing roadside amenity planting to the east.

14.2 Provided in the tree survey table (Table 1) are “Preliminary Management Recommendations”. These recommendations relate to the trees as they existed at the time of the tree review. Therefore and in line with the changing context of the site, such recommendations may no longer apply or may need to be adapted.

14.3 Many of the concerns raised in the tree survey relate to evidence suggesting mechanical and contextual issues, such as the apparent suppression affecting young trees within the amenity planting areas. These may continue to a point where a tree’s suitability for retention may change over time.

15 Bibliography

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A1 Appendix 1 - Arboricultural Method Statement (and Tree Protection Plan)

Method Statement Outline

A1.1 This method statement intends to provide guidance in respect of tree protection on a development site. This is a broad and prescriptive method statement, intended to provide general advice and guidance in respect of trees and tree protection on a typical development site, dealing with issues known at planning stage.

A1.2 Any inability to conform to the recommendations of this method statement or the associated tree protection plan could readily change the sustainability of trees and/or their suitability for retention.

A1.3 This method statement addresses, amongst others, two primary issues, those being –

a) The avoidance/prevention of physical damage to a tree to be retained.

b) The avoidance/prevention of physical damage or disturbance to the ground/earth upon which a tree is reliant.

Drawings

A1.4 This Arboricultural Method Statement must be read with the associated "Tree Protection Plan" drawing, "Clonburris T3 Tree Protection Plan". The "planning stage" drawing must be updated for "Construction" stage purposes, to include tree protection ranges/dimensions as defined for that tree within the tree survey table or unless otherwise defined by the project Arborist.

Method Statement Use

A1.5 This Method Statement should be used under the direct guidance of the project Arborist. As limited "construction stage" detail was available at planning stage, it may require amendment and adjustment to address construction stage issues.

Amendments and Modifications to Tree Protection Plan

A1.6 Any amendment to the tree protection plan must be agreed with the project Arborist, including the adoption of specific methodologies and/or procedures and structures for access into/use of certain parts of the above defined "Construction Exclusion Zones". Such procedures, including the provision of suitable ground protection may allow for the relocation of the "Construction Exclusion Fencing" to provide access to and across the previously protected areas.

Works Related Impacts

A1.7 In respect of any necessary and unavoidable structures/works required within or entry into the "RPA" zone, all efforts must be made to minimise impacts. Aerial issues may

require "access facilitation pruning" or clearance pruning. Subterranean works that require excavation must, by design, location, and action, minimise impacts to trees.

Tree Works Specification Updates

A1.8 Many of the tree management recommendations stipulated within the "Preliminary Management Recommendation" section of the primary tree survey, relate to the "as was" site scenario. Because of changing site contexts, these may no longer apply and may require modification to account for the changes that the built project will cause.

General Method Statement

1.0) Overview and Implementation

1.1 **Prior to any site works or construction/demolition related works or access, this method statement will be addressed and discussed by all member of the construction team management.**

1.2 The project Arborist or another suitably qualified person will oversee the application of all tree protection measures and any necessary modifications to this Method Statement (any issues as may have arisen in respect of planning conditions or details as may have changed between the design stage) to provide a basis upon which tree protection will be managed on the construction site.

1.3 Any situation that requires entry into the "root protection zones" of a tree intended for retention must be brought to the attention of the Project Arborist regarding the adoption/amendment of suitable tree protection measures.

1.4 As unforeseen tree losses may compromise project planning permissions, it is imperative that issues relating to tree protection and/or tree damage be brought to the immediate attention of the project Arborist for review and possible discussion with the relevant planning authority.

2.0) Works Sequence

2.1 No construction related works or mechanised site access will occur until the agreed level of tree protection, in accordance with the "Tree Protection Plan", is completed.

2.2 The only exception to the above will relate to the undertaking of tree works and felling as defined in the Arboricultural report and/or grant of permission.

2.3 On completion of tree felling/site clearance works, the tree management plan will be reviewed, accounting for (if necessary) the updating of the "preliminary Management Recommendations" stipulated in the original Tree Survey.

2.4 Any revised pruning/cutting works will be agreed with the local authority and applied at the earliest possible opportunity.

2.5 After the completion of primary tree clearance, but prior to the commencement of construction works, all "Construction Exclusion" and "Protective" fencing must be erected and "signed-off" as complete, by the Project Arborist.

2.6 Only on completion of all construction works will any/all tree protective measures be removed, and only then in a manner, that does not compromise the "Protection Zones". Such works must be agreed and overseen by Project Arborist.

2.7 At construction works completion stage, all retained trees will be reviewed regarding their condition and longer-term management recommendations and regarding site hand-over,

3.0) Tree Protection

3.1 All tree protection measures and locations must be agreed, overseen, and verified by the Project Arborist prior to works commencement.

3.2 All construction, works or access areas must be enclosed and defined by protective fencing, this comprising the "Construction Exclusion Zone" based upon drawings "Clonburris T3 Tree Protection Plan" (Construction Stage version).

3.3 Unless specifically stipulated by the project Arborist, the default minimum range of the protective fencing from a tree is the range stipulated for that tree within the "RPA" (root protection area) column of the original survey.

3.4 Such a fence must be fit for purpose and commensurate with the nature of activity expected upon the site and should comply with "Section 6.2" of BS5837: 2012.

3.5 The fence should be affixed with notification signs such as "TREE PROTECTION AREA - KEEP OUT"

3.6 Structures such as "lock-ups", offices or other temporary site building, not requiring excavation or underground ducting, might be positioned such as to comprise part of the "Construction Exclusion Zone" fencing. All remaining fencing must be continuous with such features and effectively prevents access to protected ground.

3.7 If entry into the "RPA" (Root Protection Area) zones becomes unavoidable, ground protection systems agreed with the project Arborist, will be utilised.

3.8 No amendment, alteration, relocation, or removal of the tree protection fencing shall occur without prior liaison and approval from the Project Arborist.

4.0) Provision of Ground Protection (If Required)

4.1 No vehicular/mechanised access whatsoever will be allowed onto unprotected "Construction Exclusion Area" ground.

4.2 Ground protection can comprise the use of proprietary materials/structures (installed to manufacturer's specifications and recommendations) or procedures that avoid ground damage/disturbance/compaction, or the use of procedures that avoid such effects e.g. manual/pedestrian installation procedures.

4.3 Any system utilised must effectively spread load-weight, avoid compaction, maintain drainage/percolation/aeration, and be installed in a manner that avoids these issues.

4.4 Newly provided access will be strictly limited to the area of the new protection structure.

4.6 Protection installation will require a progressive laying down of ground protection, with previously laid material providing vehicular access to the next zone will be accepted as an approved methodology.

5.0) Works within "RPA" Zone

5.1 Only works and construction practices, agreed with the Project Arborist prior to commencement, will be allowed in the "RPA" area.

5.2 All works will be undertaken under the supervision and guidance of the Project Arborist who will have the authority to stop works if activities are considered such as to have the potential to damage trees.

5.3 Preference must be given to manual labour and techniques within the fenced "RPA" zone.

5.4 On completion of the required works, the area will be inspected by the Project Arborist regarding the reinstatement of the original protection and the relocation of the protective fencing to a position relating to the original "RPA" area.

6.0) Service Installation

6.1 The "Project Arborist" must be consulted for advice and procedural recommendations, in respect of any installation of services within or requiring entry into the "Root Protection Area" of any tree intended for retention.

6.2 Any such works found to be unavoidable, must be undertaken with special care, incorporating the recommendations of both "BS5837: 2012 and the National joint utility groups, guidelines for the planning, installation and maintenance of utility services in proximity to trees (NJUG 10)

6.3 Preference must be given to trench-less techniques including Mole-piping, Directional-drilling manual hydro-trenching (high-pressure water), "Air-Spade" or broken-trench techniques.

7.0) Tree Management and Works

7.1 All tree works should be undertaken under the guidance of the project Arborist

7.2 The primary site clearance and felling should be undertaken at the earliest stage of the overall development works, to enable the re-assessment of all ostensibly retainable trees and the updating of the "Preliminary Management Recommendations" to account for context changes and construction access and/or other issues coming to light.

7.3 All Tree Works must adopt safe work procedures and must be undertaken by staff suitably trained for the purpose at hand and compliant with all legislative, safety and insurance requirements.

7.5 All additional works will be agreed with the local authority and/or other stakeholders and applied at the earliest possible opportunity.

7.6 On completion of site works, the retained tree population will be reviewed and re-evaluated regarding its ongoing condition and the likely requirements of any ongoing or future monitoring or management needs.

8.0) Demolition

8.1 All demolition procedures must be agreed and overseen by the Project Arborist or other suitably skilled staff to monitor for damage and to protect exposed roots/cut-trim exposed roots/oversee backfilling of exposed roots.

8.2 Where access into unprotected "RPA" zone becomes unavoidable then suitable ground protection, provided in accordance with an engineer's direction and agreed with the Project Arborist will be installed.

8.3 Care will be taken to avoid damage to soil volumes beneath and adjoining demolished structures that may contain tree root material.

8.4 Whilst existing foundations/structures may provide temporary protected access to areas within the "RPA" zone, preference must be given to the location of demolition plant outside of the "RPA" zone.

8.5 Where tree(s) exist near a structure to be demolished then the demolition should be undertaken inwards within the footprint of the existing building (top down, pull back).

8.6 Underground structures (services etc.) within the "RPA" zone should be reviewed with regards to decommissioning and retention in situ in the interest of avoiding tree damage.

8.7 Preference should be given to the retention existing sub-bases where hard surfaces are removed, particularly if the hard surface is to be replaced.

9.0) Ancillary Precautions

9.1 The methodologies as set out in this document apply to all undertakers of work upon or adjoining the site as may require access to the "Construction Exclusion Zone" or the "RPA" area of any tree.

9.2 This document will be disseminated to all persons requiring access to the work site, with all persons undertaking works either before or after the principal development (site investigation works, Landscape Contractors) are subject to the above requirements

9.3 Works outside the "Construction Exclusion Zone" must be controlled to create no potential secondary hazard to tree health.

9.4 Large loads accessing the site must be reviewed regarding clearance and potential tree damage.

9.5 Care must be taken regarding materials that may contaminate the ground. No concrete mixings, diesel or fuel, washings or any other liquid material may be discharged within 10 metres of a tree.

9.6 No fires can be lit within 5 metres of any tree canopy extent.

9.7 No tree will be used for support regarding cables, signs etc.

9.8 The trees should be reviewed on a regular basis throughout the development process and on completion. At that time, additional recommendations regarding tree management may be required.

9.9 Any issue that has the potential to affect site trees must be brought to the attention of the Project Arborist for review and comment.

9.10 Any circumstances that become known whilst the development project is ongoing that either involves trees or access to/works within the construction exclusion zone must be brought to the attention of the Project Arborist for evaluation and advice regarding approach and methodology.

9.11 It is possible that liaison/agreement will be required with the Local Planning Authority regarding compliance with, as well as the verification of the required tree protection measures.

A2 Appendix 2 - Tree Survey

Nature of Survey

A2.1 The criteria put forward in "BS5837:2012 – Trees in Relation to Design, Demolition and Construction – Recommendations" have provided a basis for this report.

A2.2 The data collected has been represented in table form as "Table 1" within "Appendix 1" to this report. This appendix includes a Survey Methodology, Survey Key, Survey Abbreviations, Condition Category Definitions and a brief resume of the typical application of Tree Protection measures as defined within the above standard and as relates to the "RPA" zones defined both within the survey table and on the "TCP" drawing.

A2.3 The survey, its findings and management recommendations relate to the site and the conditions thereon at the time of the survey. It relates to a "do nothing" or "as is" scenario and intends to provide an impartial representation of the site's tree population, regardless of any possible development works. It is likely that changes in site usage, development or other environmental changes will require an amendment of any tree's potential retention status and its preliminary management recommendations, and in some instances, may require the re-classification of a tree's suitability for retention.

Drawing References

A2.4 The survey must be read with the "Tree Constraints Plan" drawing "Clonburris T3 Tree Constraints Plan" regarding the representation of tree positions, crown forms, "RPA" extents and colour reference to category systems. Trees omitted from the supplied drawing may be "sketched in" to "Clonburris T3 Tree Constraints Plan". Any such trees should be located and plotted by professional means to identify the constraints such trees have upon the site.

A2.5 A green coloured outline represents each tree crown. It is scaled to represent the north, east, south, and west crown radii as denoted in the survey table. Each tree (categories A-green, B-blue, and C-grey only) have been apportioned a "Root Protection Area" (RPA see below) denoted as a dashed orange circle.

A2.6 The development of a Tree Constraints Plan (TCP) provides a design tool regarding tree retention. Such a plan combines the topographical land survey drawing with additional information as provided by the tree survey. The aspects of the tree's existence recorded on the "TCP" are, firstly, the tree canopies, represented by the four cardinal compass point radii (Sp: R in survey Table 1). Secondly, and following paragraphs 4.6.1, 4.6.2 and 4.6.3 of BS5837: 2012, we represent each tree's "Root Protection Area" (RPA). For design purposes, it approximates the position of the tree protection fencing to be erected before the commencement of any site works, thus excluding all site

activities other than those dealt with by way of the "Arboricultural Implication Assessment" and "Arboricultural Method Statement".

A2.7 The "Tree Constraints Plan" (TCP) depicts the extent and location of constraints, placed upon the site by the trees. The "TCP" represents both the true canopy form (north, east, south, and west radii) but also the "RPA" as defined above. These constraints are provided to advise regarding the design and layout of a proposed development.

Survey Intent and Context

A2.8 This document intends to highlight the extent and nature of the material of Arboricultural interest on the site in question.

Survey Data Collection and Methodology

The Survey

A2.9 An earlier survey was reviewed and updated in September of 2022. This survey portion of the overall report is not an Implication Assessment though but provided some of the basic information regarding its compilation. 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 approximately 1.50 metres from ground level. The survey relates to current site conditions, setting and context.

A2.10 Each tree in the survey has a consecutive number that relates directly to the survey text. Measurements are metric and defined in metres and millimetres. All trees referred to in the survey text have been measured to provide information regarding canopy height and canopy spread (north, east, south, and west radii), level of canopy base and stem diameter at 1.50 meters from ground level. The dimensions provided are intended to provide a reasonable representation of a tree's size and form. While efforts are made to maintain accuracy, visual obstruction, especially regarding trees in groups, requires that some tree dimensions be estimated only.

Inspection and Evaluation Limitations and Disclaimers

A2.11 The information set out in this report relates to the review of a tree population on the site in question. As such, the information provided is based on a general review of trees and does not constitute a detailed review of any one of the individual specimens. Such an evaluation (tree report) would require the gathering of substantially more information than that dealt with in this survey.

A2.12 The survey is not a safety assessment and the parameters reviewed within this survey context would be substantially deficient in extent to provide for a reliable safety assessment. The survey is intended to provide a general and qualitative review to assist

in gauging the suitability of an individual tree for retention within a development context. All trees are subject to impromptu failure and damage. The assessment of risk as may be presented by a tree requires the review of numerous factors more than those noted herein and as such, remains outside the scope of this document and any attempt to use the information herein for such proposes will render the information invalid.

A2.13 A competent and experienced Arborist has completed all inspection and tree assessment. The inspection involves visual tree assessment (Mattheck and Breloer 1994) only, which has been carried out from ground level. No below ground, internal, invasive, or aerial (climbing) inspection has been carried out.

A2.14 Trees are living organisms whose health, condition and safety can change rapidly. All trees should be re-evaluated regarding their condition on an annual basis or after substantial trauma such a storm event, other damage, or injury. The results and recommendations of this survey will require review and reassessment after one year from the date of execution. This survey does not constitute a review of tree or site safety. Attempts to use the contents herein for such purposes will render the contents invalid.

A2.15 Several factors acted against the tree inspector, contriving to reduce the accuracy of the survey. Particularly, the survey have been completed during specific seasons. Some of the signs, typically symptomatic of ill-health or defect within a tree, may not have been available to view at the time of the survey or may have been obscured by seasonality related factors. Some of the fruiting bodies of various fungi, parasitic upon or causing decay or disease in trees, may have been out of season and unavailable to view. This survey can only comment upon symptoms of ill-health or defects visible at the time of the inspection.

Survey Key

Species	Refers to the specific tree species
Age	Referred to in generalised categories including: -
Y - Young	A young and typically small tree specimen.
S/M - Semi-Mature	A young tree, having attained dimensions that allow it to be regarded independently of its neighbours but typically, would be less than 50% of its ultimate size.
E/M - Early-Mature	A specimen, typically 50% - 100% of ultimate dimensions but with substantial capacity for mass and dimensional increase remaining.
M - Mature	A specimen of dimensions typical of a full-grown specimen of its species. Future growth would tend to be extremely slow with little if any dimensional increase.
O/M - Over-Mature	An old specimen of a species having already attained or exceeded its naturally expected longevity.
V - Veteran	An extremely old, veteran specimen of a species, usually of low vigour and typically subject to rapid decline and deterioration or of very limited future longevity.

Tree Dimensions	All dimensions are in meters. See notes regarding limitation of accuracy.
Ht.	Tree Height
CH	Lowest canopy height
N, E, S, W	Tree Canopy Spread measured by radii at north, east, south, and west
Dia.	Stem diameter at approx. 1.50m from ground level.
RPA	Root Protection Area, as a radius measured from the tree's stem centre.
Con	Physical Condition
G Good	A specimen of generally good form and health
G/F Good/Fair	
F Fair	A specimen with defects or ill health that can be either rectified or managed typically allowing for retention
F/P Fair/Poor	
P Poor	A specimen whom through defect, disease attack or reduced vigour has limited longevity or maybe un-safe
D Dead	A dead tree
Structural Condition	Information on structural form, defects, damage, injury, or disease supported by the tree
PMR – Preliminary Management Recommendations	Recommendation for Arboricultural actions or works considered necessary at the time of the inspection and relating to the existing site context and tree condition. Works considered as urgent will be noted.
Retention Period	
S – Short	Typically, 0 -10 years
M – Medium	Typically, 10 -20 years
L – Long	Typically, 20 – 40 years
L+	Typically, more than 40 years
Category System	The Category System is intended to quantify a tree regarding its Arboricultural value as well as a combination of its structural and physical health.
Category U	Particularly poor quality, dangerous or diseased trees that offer no realistic sustainability
Category A	A typically a good quality specimen, which is considered to make a substantial Arboricultural contribution
Category B	Typically including trees regarded as being of moderate quality
Category C	Typically including generally poor-quality trees that may be of only limited value.
	The above categories are further subdivided regarding the nature of their values or qualities.
Sub-Category 1	Values such as species interest, species context, landscape design or prominent aspect.
Sub-Category 2	Mainly cumulative landscape values such as woods, groups, avenues, lines.
Sub-Category 3	Mainly cultural values such as conservation, commemorative or historical links.

Table 1 – Tree Data Table

No.	Species	Age	Con	Ht	CH	N	E	S	W	Stm	Dia	RPA	Structural Condition	PMR	Yrs	Cat
106	Wych Elm *(Ulmus glabra)*	E/M	D	12.00	2.00	4.50	5.00	5.00	3.00	1	337	4.05	Completely dead, killed by Dutch Elm disease.	Remove.	N/A	U
107	Ash *(Fraxinus excelsior)*	S/M	F/P	9.00	1.50	3.00	4.00	3.00	2.50	1	274	3.29	Slightly unbalanced to east. Vigour is impaired with twiggy decline in evidence about higher crown.	Review annually regarding Chalara canker.	M	C2
108	Wych Elm *(Ulmus glabra)*	S/M	D	7.00	2.50	2.00	2.00	2.00	2.00	1	242	2.90	Completely dead, killed by Dutch Elm disease.	Remove.	N/A	U
109	Ash *(Fraxinus excelsior)*	S/M	G/F	7.00	2.50	2.50	2.50	2.50	2.50	1	229	2.75	Tree is currently in good condition though evidence of Chalara canker elsewhere about site suggests dubious sustainability.	Review regularly.	L	B2
110	Beech Group *(Fagus sylvatica)*	S/M	F/P	6.00	2.50	2.50	2.50	2.50	2.50	1	175	2.10	Comprises part of the hedge thicket as opposed to an individual tree.		L	C2
111	Wych Elm *(Ulmus glabra)*	S/M	F	8.00	3.50	1.00	1.50	2.00	2.00	1	197	2.37	Maintaining good vigour but has suffered chronic prior damage with evidence of higher crown dieback. Exhibit evidence of higher crown dieback.	Remove.	N/A	U
112	Ash *(Fraxinus excelsior)*	S/M	P	8.00	3.00	2.50	2.50	2.50	2.50	1	204	2.44	Higher crown shows evidence of decline that suggest minimal sustainability.		S	C2
113	Ash *(Fraxinus excelsior)*	S/M	F	9.00	2.00	2.50	2.50	2.50	1.50	1	261	3.13	Still vigorous but is adjoined by ash exhibiting evidence of decline.	Review annually.	M	C2
114	Ash *(Fraxinus excelsior)*	S/M	F/P	11.00	2.00	3.00	4.00	3.50	3.00	3	398	4.77	Mostly vigorous but is already showing evidence of twiggy decline about higher crown.	Re-review summer 2022.	M	C2

No.	Species	Age	Con	Ht	CH	N	E	S	W	Stm	Dia	RPA	Structural Condition	PMR	Yrs	Cat
115	Ash *(Fraxinus excelsior)*	S/M	P	11.00	2.50	3.00	3.00	3.00	2.00	1	296	3.55	Exhibiting widespread evidence of higher crown decline. Appears ill-suited for retention.	Remove.	N/A	U
116	Ash *(Fraxinus excelsior)*	S/M	G/F	10.00	3.00	3.00	3.50	3.50	2.50	1	347	4.16	Appears be keeping reasonable vigour and vitality but is adjoined by other Ash showing signs of decline.	Re-review, summer 2022.	M	B2
117	Ash *(Fraxinus excelsior)*	S/M	G/F	10.00	3.00	2.50	2.50	2.50	2.50	1	239	2.86	Currently shows no signs of decline but should be reviewed in summer 2022.		M	B2
118	Ash *(Fraxinus excelsior)*	S/M	P	12.00	2.00	3.00	3.00	3.00	3.00	1	350	4.20	Exhibiting classic signs of decline and deterioration associated with Chalara canker.	Consider early removal.	N/A	U
119	Ash *(Fraxinus excelsior)*	S/M	G/F	10.00	3.00	2.50	2.50	2.50	2.50	1	239	2.86	Currently shows no signs of decline but should be reviewed in summer 2022.		M	B2
120	Wych Elm *(Ulmus glabra)*	S/M	D	8.00	1.75	2.00	2.00	2.00	2.00	1	229	2.75	Killed by Dutch Elm disease.	Remove.	N/A	U
121	Ash Group *(Fraxinus excelsior)*	S/M	F	9.00	1.50	3.50	3.50	3.50	3.50	1	337	4.05	Twin stems adjoined to create singular crown form. Crown vigour and vitality is reduced suggesting possible onset of disease. Tree appears to offer limited sustainability.		M	C2
913	Sycamore (Acer pseudoplatanus)	S/M	F	6.00	0.00	2.50	2.50	2.50	2.50	2	261	3.13	Young and vigorous arising from ditch bank to east of substantial watercourse. Is naturally arising with substantial sucker. Is naturally arising and multi-stem.		M	C2
914	Oak (Quercus robur)	M	G/F	17.00	5.00	4.00	5.50	5.50	4.00	1	716	8.59	Is of apparently good vigour though much of middle crown principal stem is obscured from by dense Ivy cover. Tree arises from high banking above large water bearing ditch.	Cut Ivy and rereview.	L	B2

No.	Species	Age	Con	Ht	CH	N	E	S	W	Stm	Dia	RPA	Structural Condition	PMR	Yrs	Cat
915	Sycamore (Acer pseudoplatanus)	S/M	F	8.50	2.00	3.00	3.00	3.00	3.00	1	290	3.48	Young and vigorous arising from position high on bank above large ditch.		L	B2
916	Sycamore Group (Acer pseudoplatanus)	M	P	14.00	2.00	5.00	6.50	5.50	5.00	1	910	10.92	A large multi-stemmed specimen where entire stems are subject to decline and dieback. Cause of decline is not apparent.		N/A	U
917	Sycamore (Acer pseudoplatanus)	E/M	F/P	13.00	2.25	4.50	4.50	3.50	4.00	1	465	5.58	A young specimen showing Twiggy decline about crown apex.	Review growing season 2021.	M	C2
918	Ash (Fraxinus excelsior)	E/M	F/P	13.00	2.00	3.00	5.00	3.00	4.50	1	592	7.10	A once larger tree has been decapitated with current crown comprising pole wood emerging from circa 2.25 m. Middle crown is partially obscured by Ivy cover. Concerns exist regarding shell error canker attack and mechanical integrity.	Cut Ivy and rereview.	M	C2
919	Sycamore (Acer pseudoplatanus)	M	F	15.00	1.75	5.00	5.00	3.50	4.50	1	579	6.95	Apparently vigorous, supporting minor imbalance to north. Middle crown and primary stem are obscure by dense Ivy cover.	Cut Ivy and rereview.	L	B2
920	Ash (Fraxinus excelsior)	E/M	P	13.00	3.00	3.00	3.50	3.00	3.00	1	411	4.93	A relatively young tree showing classic signs of decline deterioration and dieback about higher crown. Is unsuitable for attention.	Remove.	N/A	U
921	Ash (Fraxinus excelsior)	S/M	F/P	7.00	2.00	1.00	1.50	2.00	2.00	1	185	2.22	A young but distorted specimen arising from hedgerow thicket.		M	C2

Tree Lines and Hedges

No.	Species	Age	Con	Ht	CH	Description	Yrs	Cat
H1f	Hedge 1f Hawthorn *(Crataegus monogyna)* Blackthorn *(Prunus spinosa)* Sycamore *(Acer pseudoplatanus)* Goat Willow *(Salix caprea)* Gorse *(Ulex europaeus)* Bramble *(Rubus fruticosus)* Elder *(Sambucus nigra)* Wych Elm *(Ulmus glabra)*	E/M	F/P	2.00-5.00	5.00-7.00	There is much evidence to illustrate a planted "thorn" hedge arising from the northern bank of a substantial ditch and to the south of the railway lens palisade railing. This Hawthorne hedge is now interspersed with additional species, most notably Goat Willow, Sycamore and Ash but also with a small number of Spindle. The belt is broadly contiguous and continuous though variable. Note is made that adjoining and contiguous with the canopy of this hedge, there is additional growth associated with the southern bank of the ditch. This comprises almost exclusively naturally arising Goat Willow.	n/a	C2

ST	Scrub Thicket Grass (various) Bramble *(Rubus fruticosus)* Gorse *(Ulex europaeus)* Dog Rose *(Rosa canina)* Sycamore *(Acer pseudoplatanus)* Buddleia *(Buddleia davidii)* Nettle *(Urtica dioica)*	E/M	F/P	0.00-2.00	0.00	Much of this zone comprises a raised earthen berm, dominated by rough grass together with Bramble and Nettle. Bramble cover is variable and discontinuous. The area supports a particularly small number of larger shrubby plants including Hawthorn, Buddleia and Dog Rose and Gorse together with a number of sapling Sycamore. While rough grass dominates in the eastern half of this hedge, Bramble begins to dominate but is not contiguous to the west.	n/a	C2
H7	Hedge 7 Hawthorn *(Crataegus monogyna)* Ash *(Fraxinus excelsior)* Blackthorn *(Prunus spinosa)* Bramble *(Rubus fruticosus)* Ivy *(Hedera helix)* Elder *(Sambucus nigra)*	M	F/P	6.00-8.00 (Trees to 18.00m)	6.00-8.00m	A broadly variable hedge alignment where Hawthorne still retains a substantial proportion of the overall population however, it is now often suppressed and has lost its dominance. The broader alignment now comprises a more thicket like and mixed profile including a notable population of emergent Ash. The original and dominant vegetation arises from the northern side of a substantial ditch profile. This vegetation is added to both the north and south of the original profile and ditch by spurious thicket development, typically dominated by goat willow and Bramble. The alignment remains strong and except for a small number of specific punctuations is broadly continuous. Eradication of invasive species appears likely to allow for the retention of a still broadly contiguous alignment. Note is made that several Elms located at the north-western end of the alignment are already in poor condition with all exhibiting evidence of early Dutch Elm disease attack. Accordingly, such material is considered unsustainable. Though none of the emergent Ash from this alignment have been deliberately planted, a clear majority appear to be in broadly good condition and might offer some degree of sustainability. This is particularly the case in respect of 7b where in comparison to 7a, the Ash becomes progressively more and more dominant in respect of the broader alignment.	n/a	C2

H8	Hedge 8 Hawthorn *(Crataegus monogyna)* Oak *(Quercus robur)* Wych Elm *(Ulmus glabra)* Ash *(Fraxinus excelsior)* Sycamore *(Acer pseudoplatanus)* Blackthorn *(Prunus spinosa)* Bramble *(Rubus fruticosus)* Ivy *(Hedera helix)* Elder *(Sambucus nigra)* Guelder Rose *(Viburnam opulus)* Hazel *(Corylus avellana)*	M	F/P	5.00-8.00 (Trees to 18.00m)	6.00-8.00m	This alignment differs greatly from previous alignments in that it supports and obviously more mature tree population. The underlying Hawthorn hedge appears quite like others noted elsewhere upon the site and will be typical of agricultural field boundaries. The hedge as with all significant vegetation in this area is located arising from the eastern side of a substantial drainage ditch, descending to circa 1.50 metres below field levels. The Hawthorn is becoming recessive with continuity within the lower-level hedge being provided more by a combination of species as opposed to a true Hawthorne alignment. In this respect, there are substantial variability with some elements of the hedge comprising little more than Bramble and elder thicket. The biggest difference in this instance relates the tree population including a number of significant Ash, Sycamore and, towards the north-western end of the alignment, and Oak. The age profile of these trees is significantly different from any others noted elsewhere on the site (exempting Beech at northern end of hedge 1d) thus suggesting a different context and history. The paragraph the trees vary greatly in condition. The larger Sycamore exhibits classic signs of decline and stag heading as do adjoining trees including some ash towards the centre of the alignment. Other tree is a pity maintaining reasonable vigour and vitality. The underlying hedge profile is of questionable suitability for attention in light of its variability and the fact that the eradication of invasive scrub thicket species would greatly undermine any degree of continuity. Similar comment would apply to the trees however, proportion of the trees would appear suitable for retention.	n/a	C2