



**Arboricultural Report  
Trees at St Mochtas LRD Site  
Porterstown,  
Dublin 15**

**May 2025**

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## Associated Drawings

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

<u>Drawing Title</u>	<u>Development-Related</u>
1) St Mochtas LRD Tree Constraints Plan	<b>Tree Constraints Plan</b> This plan depicts the pre-development location, size, calculated constraints, and simplified tree quality category system within the context of the existing site.
2) St Mochtas LRD Tree Impacts Plan	<b>Tree Impacts Plan</b> This plan represents the effects of the proposed development works on the above tree population and depicts trees to be retained and removed.
3) St Mochtas LRD Tree Protection Plan	<b>Tree Protection Plan</b> This plan depicts the nature, location and extent of tree protection measures required for sustainable tree retention.



# **1 Report Summary**

- 1.1 This report attempts to assess and describe the likely implications of the proposed development works on the trees upon and adjoining the development site. The assessment is based on drawn architectural and engineering details provided by the design team.
- 1.2 Sustainable tree retention relies heavily on the protection and conservation of ground and particularly soil conditions near trees. Excavation works can directly sever and damage tree roots, and general site activity and vehicular and plant passage denature soil to a point where it cannot support tree roots or root function. If a tree is to be retained, then such activity must be excluded from a minimum area surrounding the tree, as defined in the tree survey table.
- 1.3 The site area is adjoined by a belt of young trees along its southeastern edge. These trees comprise a dense roadside planting. Overall, the population is of mediocre to poor quality and is dominated by category “C” specimens. This categorisation relates both to poor tree conditions and automatic “C” categorisation under BS5837-2012 relating to small stature. To date, there is no evidence of any management or population thinning. Accordingly, the review population is overly dense and has resulted in widespread coalescence and suppression of the development of growth distortions.
- 1.4 Species encountered include Wych Elm, Sycamore, Lime and Monterey Cypress. With the exception of dying Elms, all species are potentially large growing at maturity.
- 1.5 Some concern attaches to the number of Ash within the review area. Already, many of these specimens show classic signs of Ash Dieback disease (*Hymenoscyphus fraxineus*) attack. It is expected that those already showing symptoms will deteriorate further over time and that other members of the Ash population will succumb to the disease over time. Current research recommendations suggest a likely expectation of 80%-90% of Ash fatalities over the forthcoming decade. In this respect, the Ash proportion of the review population should not be regarded as sustainable and should not be relied upon for tree cover in the future.
- 1.6 Similar issues relate to the site’s Elm population. Most specimens encountered are dead through Dutch Elm Disease, and those that remain are not expected to survive beyond one or two years.
- 1.7 The proposed development will see the creation of a new residential complex together with all associated infrastructure and services. The site disturbance associated with the development proposals is expected to be substantially larger than the principal structures as they are drawn. This issue is exacerbated by changes in site finished levels and necessary excavations for services and foundations, which will require excavations larger than the drawn footprints of the various development elements. However, as the associated tree population is limited to the site’s eastern edge, then tree impacts appear

to be limited.

- 1.8 The likely development impacts on trees (retention or loss) are illustrated in the drawing “St Mochtas LRD Tree Impacts Plan” associated with this report. This drawing includes the architectural layouts and the drainage information regarding underground services and levels, intending to provide a guideline as to the likely impacts on the existing site required to achieve the proposed development outcome. While the design graphics are helpful, they do not include workspace or excavations necessarily larger than the structure that will come to occupy them.
- 1.9 Tree retention expectations are based on an ability to provide the tree protection extents illustrated in the drawing “St Mochtas LRD Tree Protection Plan”. If these cannot be achieved, then sustainable tree retention expectations may need to be amended.
- 1.10 In line with the above information, it appears that tree Nos. 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22 and 23. This amounts to a loss of 18 of the site’s 23 trees. The proposed works will also see the loss of Boundary 2, circa 75% of Boundary and circa 30% of Boundary 3.

## **2 Introduction**

- 2.1 This report was commissioned by  
**Castlethorn Construction Unlimited Company & Castlethorn Developments  
(Kellystown) Unlimited Company**

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## **Report Brief**

- 2.2 An Arboricultural report has been requested in respect of this proposed development. As “BS5837: 2012 Trees in Relation to Design, Demolition and Construction – Recommendations” is the accepted framework for such reports, this report follows the typical composition, inclusions and recommendations made in the standard.

## **Report Context**

- 2.3 This arboricultural report examines and discusses how development and construction may affect the trees on the site. The report evaluates the site’s tree population and estimates sustainable tree retention in light of the proposed development. This report reviews the proposed project specifications provided by the design team in light of the tree survey information in “Appendix 2”. A preliminary “Arboricultural Method Statement” is provided in “Appendix 1”. The drawing “St Mochtas LRD Tree Protection Plan” details the necessary tree protection to achieve the outcomes suggested in the report.

## **Report Limitations**

- 2.4 This report covers the Arborist’s interpretation of development details provided and tree survey data. “Inspection and Evaluation Limitations and Disclaimers” in “Appendix 2” limits site review data. The Arborist’s expertise informed this report’s findings and suggestions.
- 2.5 The report’s “Implication Assessment” relies on assumptions and projections regarding likely construction practice and recognises the project’s “design” stage rather than “detail design” or “construction” information. The method statement is intentionally broad and general, reflecting the “design” stage. Review is required before construction begins to accommodate changes at the “detail design” or “construction detail” stages or due to planning conditions.

- 2.6 All its aspects and suggestions underpin this assessment's results. Any design change, especially tree protection methods, might drastically affect sustainable tree retention.

### **3 Site Description**

- 3.1 The site is located between the old Porterstown Road to the west and Diswellstown Road to the east, at a position immediately south of the Dublin-Sligo rail line.
- 3.2 Much of the site comprises managed sports pitches. Much of the vegetation of arboricultural interest is associated with hedges, in turn associated with previous agricultural use.
- 3.3 The site appears broadly level, other than several raised berms to the south, an embankment ramping up to the Diswellstown Road to the east and a ditch to the Porterstown Road western boundary.

### **4 Pre-Development Arboricultural Scenario**

- 4.1 In line with its sports use, much of the site is open. The primary exceptions to this involve larger vegetation along the Porterstown Road to the west of the site, typically comprising an old agricultural boundary ditch with some emergent trees. To the east of the site there is a substantial new planting associated with the ramped embankment to the discourse town road. Running approximately north south and a little east of the site centre there is another hedge remnant from which arises more trees.
- 4.2 The site's tree population is dominated by Sycamore, Ash and Elm. Note is made that the site also supports species including Lime and Monterey Cypress.
- 4.3 It is noted that the site Elm population is typically dead, having been killed by Dutch Elm disease. A proportion of the sites Ash show evidence of early Ash Dieback Disease attack (*Hymenoscyphus fraxineus*). and accordingly raise concern regarding sustainability over time. The majority of the sites Sycamore appeared to be in reasonably good condition and would, if retained, offer notable sustainability.
- 4.4 The site supports a substantial mixed tree plantation associated with this deep ramped embankment extending up to the discourse town road to the east of the site. This plantation should be regarded as being overly dense and requires population thinning is a form of management. Nonetheless, the overall scenario in respect of these trees would be to offer substantial sustainability over time.
- 4.5 The sites northern boundary adjoining the rail line supports a substantial scrub thicket. This boundary comprises what appears to be regenerative thicket, offering limited Arboricultural worth though potentially offering ecological values. Up

### **5 Planning Scenario in Respect of Tree**

- 5.1 Planning guidance has been gained from two principal documents, including "Fingal Development Plan 2023-2029" and "The Forest of Fingal - A Tree Strategy for Fingal"



- 5.2 Development plans often include Trees, hedges, and woodlands as important elements of green infrastructure, providing various environmental, social, and economic benefits. Trees, for instance, help improve air and water quality, mitigate climate change, and provide habitat for wildlife. Hedges also provide a habitat for wildlife and help prevent soil erosion. On the other hand, Woodlands provide recreational opportunities, help maintain biodiversity, and contribute to carbon sequestration. In the context of development plans, the protection, preservation, and enhancement of trees, hedges, and woodlands are often addressed through specific policies and guidelines.
- 5.3 Trees beautify and shelter wildlife. They improve air quality in cities and provide wildlife homes while beautifying a region. The Forest of Fingal - A Tree Strategy for Fingal outlines the Council's street tree planting, management, and maintenance policies. Trees are increasingly valued as green infrastructure as well as aesthetics and placemaking. Trees improve air quality and surface water management in metropolitan areas by up to 60%. Trees mitigate climate change and decarbonise cities. The Tree Strategy aims to “protect and enhance Fingal’s trees to maximise both the benefits they offer and the character they bring to the County to ensure a greener, healthier Fingal for now and future generations”. The strategy outlines policies, goals, and activities to achieve this vision.
- 5.4 Within the “Tree Strategy” document, particular protection is drawn to section 4.8, which discusses tree protection and, with particular regard to planning applications for new construction projects, to section 4.9, planning and design guidelines for trees and woodlands. Within this section, particular note is made of section 4.9.2, protection of existing trees on development site, which stipulates the application of “BS 5837 – 2012, Trees in Relation to Design, Demolition and Construction – Recommendations” for the effective preservation of trees within the development context. Also, section 4.9.3 stipulates that a “Tree bond” may be placed on trees intended for protection to guarantee successful and ongoing protection throughout the development process. The above issues are highlighted again in “Section 5” and particularly under Section 5.2, which describes an objective of – “protection and retention of existing trees”.
- 5.5 While trees are mentioned widely throughout the development plan, the emphasis is particularly broad in respect of Sections 9 “Green Infrastructure and Natural Heritage” and Section 14, “Development Management Standards”. In this section, trees, hedges and woodlands gain extensive mentioned in this particular section. Objective GI N/A H023 – policies relates the objective to implement the Forest of Fingal – a Tree Strategy for Fingal. Throughout this section, great emphasis is placed on the value of trees, woodlands and hedgerows both in their individual right but also in respect of the provision of green and ecological corridors.
- 5.6 Section 9.6.9, protection of trees and hedgerows in this section, a number of specific policies and objectives are outlined including policies GINHP 21 protection of trees and hedgerows, GINHP 22 – tree planting and objectives GINH045 hedgerow categorisation, objective GI NHO46 tree removal, Objective GI NHO47 woodland development schemes, objective GI NH048 – wildlife act and roads act
- 5.7 Section 9.6.10, protected trees (Tree Preservation Orders) stipulates the ability to apply as well as existing tree preservation orders within the county area. Specific objectives

- include GINH049 – “tree preservation order review”, outlining the desire to review existing tree preservation orders within the county. GINH050 – “tree preservation orders”, outlines the possible future use of tree preservation orders to protect other important trees or groups of trees or woodlands.
- 5.8 Section 14, “Development Management Standards”, deals with the protection of trees during construction, attention is drawn to section 14.9.7, bonds relating to the provision of a bond or cash lodgement to be used by way of guarantee of the satisfactory completion and protection of trees during construction.
- 5.9 Objective DMS031 – “infill development” also specifically mentions trees and landscaping with regard to the retention of the physical character within such developments. In respect of private open space (14.13.3.3) note is made of objective DMS070 – replacement of trees outlining the requirement for replacing trees removed from residential areas where appropriate and as soon as resources allow.
- 5.10 Section 14.18.1, “Tree Policy” acknowledges the importance and value of trees to the landscape. Section references the Forest of Fingal – Tree strategy for Fingal, which sets out the council's policies in respect of trees and woodlands. The section supports a number of tree-related objectives, including DMSO125 – management of trees and hedgerows, DMSO126 – protection of trees and hedgerows during development, DMSO128 – demarcation of town land boundaries, DMSO129 – tree selection, DMSO130 – planting of large canopy trees, DMSO131 – street tree planting plans, DMSO132 – planting along distributor roads, DMSO133 location of new trees, DMSO134 – site summary of specimen removal retention and planting, DMSO135 tree planting and subsurface archaeology, DMSO136 tree selection within developments and DMSO137 – replacement and removal of trees. Of the above, particular attention is made of DMSO126 – protection of trees and hedgerows during development that stipulates tree protection in accordance with BS 5837 – 2012, trees in relation to design, Demolition and Construction – Recommendations.
- 5.11 In respect of natural heritage and particularly biodiversity, note is made of objective DMSO140 – protection of existing landscape that includes the retention of large trees and hedgerows. Section 14.18.2.4 ecological corridors and steppingstones including trees and hedgerows also makes specific mention of trees hedges and woodlands the importance of trees is also noted with regard to any proposals relating to designed landscapes – historic gardens, domains knees and country stage as defined under section 14.19.4.
- 5.12 Elsewhere in the development plan, various mentions are made of trees, woodlands and hedges. Examples of these include:-
- Under section 2, planning for growth, core strategy, settlement strategy, note is made of numerous references to trees, hedges and woodlands. These include core strategies CS 010, CS 054 and CS 061 orientated toward the conservation of boundary feature hedges and tree lines, including the effect of new entrances. There are also numerous objectives orientated toward the retention and conservation of trees and hedges including objectives GI 9, GI 18, GI 19, GI 20, GI 21, SW 6, GI 3, GI 4, and GI 29.

- In Section 3 -Sustainable Place Making and Quality Homes, note is made of Objective SPQH039 notes the retention of features within infill development including landscape features such as trees. Objective SPQH055 requires that the design of new house access be such as to avoid the need for the removal of longer significant stretches of roadside hedging and trees. Similar relates to objective SPQH069 that stipulates the new vehicular entrances must limit the loss of hedgerows and trees and that such losses must be replaced with the same type of boundary, specifically using native species for replacement.
  - In Section 4, “Community Infrastructure and Open Space”, particular attention are drawn to Objective CI OS 052 – Trees to protect and preserve and ensure the effective management of trees in groups of trees.
  - Under section 5, “Climate Action”, sub-section 5.5.8, “Nature-based Solutions and Green Infrastructure”, trees, the planting of trees, and the value of trees with regard to carbon capture are specifically noted.
  - In Section 6, “Connectivity and Movement”, Objective CMO48 – roads and streets and green infrastructure outlines a desire for the planting of native trees, hedgerows and pollinator species in medians and on roadside verges where appropriate.
  - In Section 10, “Heritage, Culture and Arts”, trees, groups of trees and woodlands are mentioned concerning their value in respect of historically designed landscapes as well as how climate change may affect the retention of older, mature planting schemes.
  - Trees get a minor mention in Section 11, Infrastructure and Utilities, normally concerning design detail for new plantings in respect of sustainable urban drainage systems.
- 5.13 Other than the specific objectives noted throughout the development plan, it is noted that the subject site supports no specific tree-related objectives of “Tree Preservation Orders”.

## **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 exempted under Section 19. An exemption applies where trees are to be felled in line with a specific detail of a grant of planning permission.
- 6.2 Some “Section 19” exemptions do not apply 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), excluding any building built after the trees were planted.

- A public authority removes trees 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 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 the 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) and the E.U. Habitats Directive. These offer protection to animals, including Bats that often roost or even breed in trees. The protection afforded by the above legislation means that particular care must be taken in the pruning or 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 retaining a tree in situ and ensuring its future survival. Sustainable tree retention often depends on the extent and nature of protection during construction. Like all living things, trees are highly dependent on the environment in which they exist, particularly on continuity in water supplies and nutrients from the soil environment. Any long-term change in ground conditions can easily affect a tree’s metabolism, health, and sustainability.

7.2 Development and construction activities can easily damage the soil environment. Removing, disturbing or denaturing soil can damage tree roots and 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.

- 7.3 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 the affected tree is likely to be regarded as unsustainable and unsuitable for retention.
- 7.4 Sustainable tree retention must accept changing contexts and increased management in the future. Where rates of occupation and use increase, any retained trees can cause harm or damage, and the issue may increase where shelter loss and exposure occur regarding the retention of individual trees.
- 7.5 Shadow-cast, light admission, and view-blocking must be considered where retaining trees. 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 is described as:

- 8.1.1 Castlethorn Developments Luttrellstown Limited intends to apply for Permission for a development at a site (c. 4.38ha) at lands in the Townland of Porterstown.

The proposed development comprises 302no. residential units in a mix of houses, duplex and apartment units consisting of 62no. 2 storey, 3-bedroom houses and 35no. 3 storey, 4-bedroom houses; 205no. Duplex / Apartment Units (98no. 1-bed, 88no. 2-bed and 19no. 3-bed) across 4no. blocks comprising: Block D ranging in height from 5-7 storeys accommodating 57no. apartment units; Block E ranging in height from 5-7 storeys accommodating 77no. apartment units; Block F ranging in height from 4-5 storeys accommodating 39no. apartment and duplex units; Duplex Blocks G1, G2, G3 & G4 3 storeys in height accommodating 32no. apartment units; and all associated and ancillary site development and infrastructural works, hard and soft landscaping and boundary treatment works, including public open space; public lighting; surface car parking spaces; bicycle parking spaces/stores for mid-terrace units; bin stores. Vehicular access to the proposed development is provided by the road network permitted under Reg. Ref. ABP-312318-21, as amended by Reg. Ref. LRD0034-S3.

- 8.2 When considering the nature of the proposed development, many of the issues dealt with at "Construction Works and Trees" may apply, 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 that can make a tree unsuitable for retention.

## **9 Identification of Development Impacts on Trees**

- 9.1 The expected tree impacts have been represented graphically on the tree impacts drawing “St Mochtas LRD 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, allowing for simple direct comparisons between the existing site context and the development proposals regarding new structures.
- 9.2 In the drawing “St Mochtas LRD Tree Impacts Plan”, a colour-coding system is used to identify tree retention. The plan identifies trees being removed using “Broken Pink” crown outlines, while those denoted with “Continuous Green” crown outlines will be retained.
- 9.3 This review gained details of the proposed development from scaled CAD drawings provided by Doyle & O'Troithigh Landscape Architecture which included Architectural layouts and drainage engineering, overlaid with the Arboricultural information.
- 9.4 The evaluation is primarily based on minimum protection ranges 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, potentially rendering a tree wholly unsuitable for retention, unsafe or unsustainable.
- 9.5 Where applicable, this assessment considers both direct and indirect implications. The assessment is based on perceived construction requirements and how a tree will likely interact with the development works. 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.

## **10 Design Iterations and Arboricultural Considerations**

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

## **11 Construction-Related Issues and Arboricultural Concerns**

- 11.1 The greatest issues affecting trees is the consumption of site space and encroachment on otherwise retainable trees and hedges. This particularly applies to the eastern part of the site, where the tree belt is associated with a combination of ditch and embankment features.
- 11.2 The effects of construction on trees extend beyond the space consumed by finished structures and include areas where damage to and denaturing of ground and soil by construction and access-related activities occurs.
- 11.3 While much of the site will be cleared, it is intended to retain the young roadside planting to the east of the site, and much of the hedgerow adjoining Porterstown Road to the west of the site. There are works, including the creation of pedestrian surfaces, bike stands and the installation of mains water, in close proximity to the hedge. This will require particular care and attention at construction stage.
- 11.4 This means that successful tree retention will be limited to areas where existing ground conditions can be conserved during the construction process. This must be achieved by the provision of suitable tree protection during the construction phase. Where this cannot be achieved, then any trees affected may prove unsuitable for retention.

## **12 Tree Retention and Loss**

- 12.1 The drawing “St Mochtas LRD 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.
- 12.2 As noted within the survey data, the review area, which includes trees both within and directly adjoining the red line site, supports a total of 23No. individually described trees. These have been categorised as:
- No category “A” items
  - 8no, category “B” items
  - 2No. category “C” items
  - 13No. category “U” item
- 12.3 As category “U” trees are considered broadly unsustainable or even potentially dangerous, most of those identified in the survey would be removed on sound site management grounds. In this case, this would include tree numbers 8, 11, 12, 13, 14, 15, 17, 18, 19, 20, 21, 22 and 23.
- 12.4 The site’s better quality “B” trees often offer substantial. in this instance, the proposed works will result in the loss of tree numbers 6, 7, 9 and 10.

- 12.5 The site's poorer quality "C" trees offer less sustainability and might require higher degrees of intervention and management, but their retention can contribute to interim tree cover. In this instance, the proposed works will result in the loss of tree number 16.
- 12.6 The tree loss breakdown for the proposed development will be-
- 4No. category "B" items
  - 1No. category "C" items
  - 13No. category "U" trees
- 12.6.1 Total development-related tree loss – 18No. trees
- 12.7 In addition to tree losses, the development will require the removal of
- Circa 75% of Boundary 1 (Category C)
  - Boundary 2 (Category C)
  - Circa 30% of Boundary 3 (Category C)

### **13 Tree Protection within the Scope of a Development**

- 13.1 The design and management recommendations in "BS5837:2012" are considered "best practice" regarding selecting, retaining, protecting, and managing trees within the scope of new developments.
- 13.2 Concerning 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 "St Mochtas LRD Tree Protection Plan".
- 13.4 In the drawing, the "Construction Exclusion Zone" is defined by orange hatching with bold "Orange" lines representing the proposed location of the primary protective "Construction Exclusion Fencing".
- 13.5 The above drawing only represents the protection locations and extent 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 all site works are completed.

### **14 Preliminary Management Recommendations**

- 14.1 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. Examples include where the felling of trees or other specific works are necessary to facilitate development requirements.

- 14.2 Many of the concerns raised in the tree survey relate to evidence suggesting mechanical failure to trees, ill-health or contextual issues. These may continue to a point where the suitability of a tree for retention may change over time.
- 14.3 Additionally, any development-related loss of trees can result in exposure and shelter loss issues. Therefore all retained trees must be reviewed immediately after the primary site clearance works. A review will allow for the updating and amending of the “preliminary management recommendations” of the primary survey. Such amendments would address issues that may arise and include additional structural pruning works. Regular reviews of all retained trees must be maintained so that early and prompt intervention and action can be applied as required.

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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 with respect to tree protection on a development site. It is deliberately broad and prescriptive, intending to provide general advice and guidance in respect of trees and tree protection on a typical development site.
- 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 relies.

### **Drawings**

- A1.4 This Arboricultural Method Statement must be read with the associated “Tree Protection Plan” drawing, “St Mochtas LRD 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 on 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 the commencement of any site works, site clearance or construction/demolition related works or access, or the binging onto site of any machinery or vehicles, this method statement will be addressed and discussed by all members of the construction team management by way of a “tool-box talk”.
- 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 All tree protection must be in place and signed-off by the project Arborist prior to the commencement of any site works.
- 1.4 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.
- 1.5 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 (including site clearance) 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, comprising the “Construction Exclusion Zone” based upon drawing “St Mochtas LRD Tree Protection Plan” (Construction Stage version). No amendment, alteration, relocation, or removal of the tree protection fencing shall occur without prior liaison and approval from the Project Arborist. If entry into the “RPA” (Root Protection Area) zones becomes unavoidable, ground protection systems (as per section 4 below) agreed with the project Arborist, will be utilised.
- 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. The fence should be affixed with notification signs such as “TREE PROTECTION AREA - KEEP OUT”
- 3.5 Structures such as “lock-ups”, offices or other temporary site building, not requiring excavation or underground ducting, excavation or foundations, 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.

#### **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. New access will be strictly limited to the area of the new protection structure.
- 4.3 Any system utilised must effectively spread load/weight, avoid compaction, maintain drainage/percolation/aeration, and be installed to avoid these issues. 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 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. Only works and construction practices, agreed with the Project Arborist prior to commencement, will be allowed in the “RPA” area.
- 5.2 Preference must be given to manual labour and techniques within the fenced “RPA” zone.
- 5.3 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 Care will be taken to avoid damage/disturbance to soil volumes beneath and adjoining demolished structures that may contain tree root material.
- 8.3 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. 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).
- 8.4 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. 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. Large loads accessing the site must be reviewed regarding clearance and potential tree damage. 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. No fires can be lit within 5 metres of any tree canopy extent. No tree will be used for support regarding cables, signs etc.
- 9.4 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.
- 9.5 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.
- 9.6 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 “St Mochtas LRD 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 “St Mochtas LRD 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 This survey was compiled in December of 2024. This survey portion of the overall report is not an Implication Assessment but provides 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 purposes 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**

<b>Species</b>	Refers to the specific tree species
<b>Age</b>	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.
<b>Ht.</b>		Tree Height
<b>CH</b>		Lowest canopy height
<b>N, E, S, W</b>		Tree Canopy Spread measured by radii at north, east, south, and west
<b>Dia.</b>		Stem diameter at approx. 1.50m from ground level.
<b>RPA</b>		Root Protection Area, as a radius measured from the tree's stem centre.
<b>Con</b>		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
<b>Structural Condition</b>		Information on structural form, defects, damage, injury, or disease supported by the tree
<b>PMR – Preliminary Management Recommendations</b>		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.
<b>Retention Period</b>		
S – Short		Typically, 0 -10 years
M – Medium		Typically, 10 -20 years
L – Long		Typically, 20 – 40 years
L+		Typically, more than 40 years
<b>Category System</b>		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.	C.H.	N	E	S	W	Stm	Dia.	RPA	Structural Condition	PMR	Yrs.	Cat
1	Sycamore ( <i>Acer pseudoplatanus</i> )	E/M	G/F	12.00	0.00	5.50	6.00	5.50	5.50	4	592	7.10	A relatively young, vigorous multi-stem specimen.	Cleanout.	L	B2
2	Sycamore ( <i>Acer pseudoplatanus</i> )	S/M	G/F	6.00	2.00	2.50	1.50	2.25	2.50	1	197	2.37	Young and vigorous but slightly suppressed and unbalanced to west.		L	C2
3	Sycamore ( <i>Acer pseudoplatanus</i> )	E/M	G/F	9.00	2.00	5.00	5.00	4.50	5.00	2	522	6.26	Multi-stem from low level and maintaining reasonable vigour and vitality. Primary stems support extensive Ivy cover.	Cut Ivy.	L	B2
4	Sycamore ( <i>Acer pseudoplatanus</i> )	E/M	G/F	12.00	2.50	4.00	4.50	5.00	4.00	3	525	6.30	Multi-stem from ground level and apparently maintaining good vigour and vitality. Primary stems support extensive Ivy cover.	Cut Ivy and review.	L	B2
5	Sycamore ( <i>Acer pseudoplatanus</i> )	E/M	G/F	12.00	2.00	4.50	5.00	4.50	4.50	1	567	6.80	Apparently vigorous though exhibiting evidence of early life damage and occluded wound.	Cleanout.	L	B2
6	Ash ( <i>Fraxinus excelsior</i> )	E/M	F	13.00	1.00	5.00	5.00	4.00	5.00	2	493	5.92	Appears be maintaining reasonable vigour and vitality though review accuracies diminished by out of leaf review period. Central crown is obscured by dense Ivy cover.	Review 2025.	L	B2
7	Ash ( <i>Fraxinus excelsior</i> )	E/M	F	13.00	1.00	5.00	5.00	5.00	5.00	1	477	5.73	Appears be maintaining reasonable vigour and vitality though review accuracies diminished by out of leaf review period. Central crown is obscured by dense Ivy cover.	Review 2025.	L	B2

No.	Species	Age	Con	Ht.	C.H.	N	E	S	W	Stm	Dia.	RPA	Structural Condition	PMR	Yrs.	Cat
8	Ash ( <i>Fraxinus excelsior</i> )	E/M	P	13.00	2.50	4.50	5.00	3.50	4.00	3	462	5.54	In a state of obvious decline and deterioration with widespread dieback throughout higher crown. Tree appears to offer minimal sustainability.	Consider removal or substantial cutting back.	N/A	U
9	Lime ( <i>Tilia europea</i> )	M	G/F	14.00	0.00	5.00	5.00	5.00	5.00	6	602	7.22	Apparently vigorous though lower crown is obscured by combination of ivy and epicormic growth.		L	B2
10	Monterey Cypress ( <i>Cupressus macrocarpa</i> )	S/M	G/F	9.00	0.00	4.00	4.00	4.00	4.00	1	430	5.16	Young and vigorous, arising as an apparent garden escape.	Review regarding retention context.	M	B2
11	Wych Elm ( <i>Ulmus glabra</i> )	S/M	D	7.00	3.00	2.00	2.00	2.00	2.00	1	191	2.29	In a state of collapse and currently caught in cables.	Remove.	N/A	U
12	Wych Elm ( <i>Ulmus glabra</i> )	S/M	D	10.00	4.00	2.00	2.00	2.00	2.00	1	207	2.48	Completely dead and in state ongoing collapse.	Remove immediately.	N/A	U
13	Wych Elm ( <i>Ulmus glabra</i> )	S/M	D	9.00	3.00	4.00	1.00	1.00	4.50	1	229	2.75	In a state of collapse and unbalanced towards roadway.	Remove immediately.	N/A	U
14	Wych Elm ( <i>Ulmus glabra</i> )	S/M	D	8.00	2.50	1.50	1.50	1.50	1.50	1	207	2.48	Dead and in state ongoing collapse.	Remove immediately	N/A	U
15	Wych Elm ( <i>Ulmus glabra</i> )	E/M	D	12.00	2.50	3.00	3.00	3.00	2.50	1	334	4.01	In a state of ongoing collapse and deterioration.	Remove.	N/A	U
16	Ash ( <i>Fraxinus excelsior</i> )	E/M	F/P	13.00	3.00	3.00	1.50	4.50	3.00	1	331	3.97	Appears to be in state ongoing decline and deterioration with much of canopy obscured by dense Ivy cover. Concerns exist regarding sustainability.	Cut Ivy and rereview summer 2025.	S	C2
17	Wych Elm ( <i>Ulmus glabra</i> )	S/M	D	12.00	3.00	2.50	2.50	2.50	2.50	1	264	3.17	Completely dead and in state of ongoing collapse.	Remove.	N/A	U
18	Wych Elm ( <i>Ulmus glabra</i> )	S/M	D	12.00	3.00	2.50	2.50	2.50	2.50	1	255	3.06	Completely dead and in state of ongoing collapse.	Remove.	N/A	U

No.	Species	Age	Con	Ht.	C.H.	N	E	S	W	Stm	Dia.	RPA	Structural Condition	PMR	Yrs.	Cat
19	Wych Elm ( <i>Ulmus glabra</i> )	S/M	D	8.00	3.00	3.00	1.00	0.00	1.00	1	175	2.10	Appears to be in state ongoing collapse and deterioration.	Remove.	N/A	U
20	Wych Elm ( <i>Ulmus glabra</i> )	S/M	D	12.00	3.00	2.50	2.50	2.50	2.50	1	251	3.02	Completely dead and in state of ongoing collapse.	Remove.	N/A	U
21	Wych Elm ( <i>Ulmus glabra</i> )	E/M	D	14.00	5.00	4.50	4.00	4.00	4.50	2	497	5.96	Completely dead and in state of deterioration and partial collapse.	Remove immediately.	N/A	U
22	Ash ( <i>Fraxinus excelsior</i> )	E/M	P	10.00	2.00	4.50	2.00	2.00	2.50	1	261	3.13	Appears to be in a state of decline and has lost much of upper north-eastern crown. Is considered unsuitable for attention.	Remove.	N/A	U
23	Ash ( <i>Fraxinus excelsior</i> )	E/M	P	14.00	3.00	5.50	5.00	3.00	5.50	1	455	5.46	Large specimen with notable overhang of roadway. Crown is in a state of ongoing decline and deterioration. Pruning out of deadwood will lead to loss of much of remaining canopy.	Tree should be removed or cut to stump.	N/A	U

### Tree Lines, Groups and Hedges

No.	Species	Age	Con	Ht	CH	Spread	Stm	Dia.	RPA	Structural Condition	PMR	Yrs.	Cat
B1	Boundary 1 Bramble ( <i>Rubus fruticosus</i> ) Elder ( <i>Sambucus nigra</i> ) Ivy ( <i>Hedera helix</i> ) Winter Heliotrope ( <i>Petasites pyrenaicus</i> ) Dog Rose ( <i>Rosa canina</i> ) Privet ( <i>Ligustrum ovalifolium</i> ) Hawthorn ( <i>Crataegus monogyna</i> )	E/M	F/P	1.00-5.00	0.00	Contiguous	m/s	n/a	2.50	An element of regenerative thicket arising through non-management and adjoining the palisade rails boundary to the adjoining Railway lands. Vegetation encountered supports minimal material of Arboricultural interest but may be of ecological value. Note is made that western section has been recently cut.		N/A	C2



No.	Species	Age	Con	Ht	CH	Spread	Stm	Dia.	RPA	Structural Condition	PMR	Yrs.	Cat
B2	Boundary 2 Hawthorn ( <i>Crataegus monogyna</i> ) Elder ( <i>Sambucus nigra</i> ) Dog Rose ( <i>Rosa canina</i> ) Bramble ( <i>Rubus fruticosus</i> ) Ivy ( <i>Hedera helix</i> ) Privet ( <i>Ligustrum ovalifolium</i> ) Blackthorn ( <i>Prunus spinosa</i> )	M	F	6.00-8.00	0.00	Contiguous 6-8.00m	m/s	n/a	2.50	Appears to comprise a contiguous hedge alignment in conjunction with a partially eroded ditch and embankment scenario. Hedge contents would suggest an original Thorn based hedge, now invaded by multiple additional species. Continuity is reasonable. If retained, the hedge would require minimal management.		L	C2
B3	Boundary 3 Hawthorn ( <i>Crataegus monogyna</i> ) Blackthorn ( <i>Prunus spinosa</i> ) Bramble ( <i>Rubus fruticosus</i> ) Ivy ( <i>Hedera helix</i> ) Elder ( <i>Sambucus nigra</i> ) Dog Rose ( <i>Rosa canina</i> )	M	F	2.50-6.00	0.00	Contiguous 4-6.00m	m/s	n/a	2.50	Appears to comprise a mature hawthorn based hedge in association with a ditch and embankment scenario. The remaining in notable numbers, the Hawthorn whilst often still dominant within the alignment, continuity is reduced with some gaps now remain good by elder and bramble thicket alone. Re-establishment of a long-term hedgerow would likely require the installation of new Thorn plants. Emergent from the hedge of numerous dead or declining trees. Most Elm Completely dead and in state of collapse with the Ash being in a state of decline at present.		L	C2

No.	Species	Age	Con	Ht	CH	Spread	Stm	Dia.	RPA	Structural Condition	PMR	Yrs.	Cat
B4	Boundary 4 Roadside Plantation Oak ( <i>Quercus robur</i> ) Common Alder ( <i>Alnus glutinosa</i> ) Ash ( <i>Fraxinus excelsior</i> ) Wild Cherry ( <i>Prunus avium</i> ) Goat Willow ( <i>Salix caprea</i> ) Holly ( <i>Ilex aquifolium</i> ) Silver Birch ( <i>Betula pendula</i> )	S/M	F	5.00-8.00	0.00-1.00	Cpntiguous	m/s	n/a	2.50	A high proportion of the Ash encountered within the alignment show signs of ash dieback disease and thereby raise concerns with regard to ongoing sustainability. Other trees, in respect of growth potential raise concerns with regard to population density, growth potential and mature sizes. Many trees exist at less than 1.00 m separation from their neighbours, with complete canopy coalescence having occurred already. Such densities cannot be maintained with the population requiring thinning, potentially to the extent of 50% of the existing population with an additional review in circa 5 – 10 years. Growth related concerns also related to proximity to existing structures. Note is made that much of the western end of the group, closest to the bridge structure exist behind a retaining wall. Additionally, the eastern edge of the woodland belt directly adjoins a footpath. Considering the species encountered and their potential for growth proximity to such structures would, in line with “Table A1 BS:5837”, suggest a high likelihood of growth related damage and disturbance over time. This factor should be considered and consideration given to population thinning and reduction that includes a removal of trees to deliberately provide a greater setback from such structures.		L	B2