

## **Connah's Quay Low Carbon Power**

# **Environmental Statement Volume IV Appendix 15-G: Arboricultural Impact Assessment Report**

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# 1. Introduction

## 1.1 Background

- 1.1.1 This appendix of Environmental Statement (ES) Volume 4 presents an Arboricultural Impact Assessment report to support the Development Consent Order (DCO) application for the construction, operation (including maintenance) and decommissioning of a proposed low carbon Combined Cycle Gas Turbine (CCGT) Generating Station fitted with Carbon Capture Plant (CCP) (the 'Connah's Quay Low Carbon Power (CQLCP) Abated Generating Station') and supporting infrastructure (collectively 'the Proposed Development') on land at, and in the vicinity of, the existing Connah's Quay Power Station (Kelsterton Road, Connah's Quay, Flintshire, CH6 5SJ), North Wales.
- 1.1.2 This report identifies preliminary information in relation to the nature and level of constraints posed by existing trees within the Construction and Operation Area<sup>1,2</sup> of the proposed Connah's Quay Low Carbon Power (CQLCP) Abated Generating Station, and considers the likely direct and indirect impacts of the proposed works. The Construction and Operation Area comprises the Main Development Area, construction areas and connection corridors necessary for the construction and operation of the Proposed Development. The Hardstanding Expansion at Connah's Quay North Jetty is not considered as part of this appendix.
- 1.1.3 The Tree Protection Plan (TPP) identifies trees to be removed or retained and illustrates how retained trees are to be protected.
- 1.1.4 Separate High Level Tree Constraints Plans (TCP) and Schedules of Tree Work Requirements in relation to the Accommodation Work Areas and the Hardstanding Expansion at Connah's Quay North Jetty (Hardstanding Expansion) are included as Annex A of **Appendix 5-A: Environmental Screening of Accommodation Works (EN010166/APP/6.4)** and Annex C of **Appendix 5-B: Environmental Screening of the Hardstanding Expansion at Connah's Quay North Jetty (EN010166/APP/6.4)** respectively.

## 1.2 Trees and the Planning Process

### National Policy for Electricity Networks

- 1.2.1 The Overarching National Policy Statement for Energy (EN-1) (Ref 1) and the National Policy Statement for Electricity Networks Infrastructure (EN-5) (Ref 2) set out the national policy for energy infrastructure relevant to the Proposed Development.

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<sup>1</sup> The Repurposed CO<sub>2</sub> Connection Corridor was excluded from the survey. However, there are no construction works within this extent of the Construction and Operation Area that would be authorised by this DCO application.

<sup>2</sup> The Hardstanding Expansion at Connah's Quay North Jetty is considered within **Appendix 5-B: Environmental Screening of the Hardstanding Expansion at Connah's Quay North Jetty (EN010166/APP/6.4)**.

- 1.2.2 In terms of trees, document EN-1 makes reference to ancient woodland and veteran trees. Section 5.4 details the approach towards biodiversity conservation. Policy excerpts regarding ancient woodland, ancient and veteran trees can be found in **Annex C.1**.

## Planning Policy Wales

- 1.2.3 Planning Policy Wales (PPW) (Ref 3) seeks to ensure that new development is sustainable and underlines the importance of green infrastructure, of which trees form an integral part. The primary objective of PPW is to ensure that the planning system contributes towards the delivery of sustainable development and improves the social, economic, environmental and cultural wellbeing of Wales.
- 1.2.4 PPW contains specific policies in relation to trees, woodlands and hedgerows, including in relation to compensation for tree and woodland loss, and these are set out in **Annex C.2**.

## Local Policy Context

- 1.2.5 Local Planning Authorities (LPA) in the UK have a statutory duty to consider both the protection and planting of trees when considering planning applications under the Town and Country Planning Act 1990 (Ref 4). The potential impact of development on all trees (including those not protected by a Tree Preservation Order (TPO) or other statutory designation) is a matter which the Secretary of State may consider "important and relevant" to the decision on the DCO Application. The Construction and Operation Area is located within the administrative area of Flintshire County Council (FCC).
- 1.2.6 The Flintshire Local Development Plan (LDP) 2015 – 2030, adopted 24 January 2023 (Ref 4), illustrates how important trees, woodland and hedgerows are to the character of the area and outlines the policies relevant to the protection of trees.
- 1.2.7 In addition to the LDP, FCC have a Supplementary Planning Guidance Note (SPGN) No.04 Trees and Development (Ref 6). However, this guidance related specifically to the Unitary Development Plan which pre-dated the current LDP. It is the intention for FCC to review existing SPGN(s) and other existing guidance notes but, in the interim, weight should still be attached to the existing SPGN.
- 1.2.8 Extracts from the Flintshire Local Development Plan 2015 - 2030 can be found in **Annex C.3**.

## British Standard

- 1.2.9 'BS5837:2012 Trees in relation to design demolition and construction – Recommendations (BS5837)' (Ref 7) provides a framework which sets out how trees should be considered in the context of development.
- 1.2.10 BS5837 recommends that a tree survey is undertaken to identify the quality and benefits of trees, and the spatial constraints associated with them. This is then used to produce a Tree Constraints Plan showing the above and below ground constraints associated with trees. The tree constraints

information is used to inform the design process and to allow the retention of good quality trees where appropriate.

- 1.2.11 An Arboricultural Impact Assessment is then developed to identify the likely direct and indirect impacts of the Proposed Development, and a TPP is prepared to identify trees to be removed or retained and to illustrate how retained trees are to be protected.
- 1.2.12 An Arboricultural Method Statement is often required as a condition of planning consent to detail how sensitive operations are to be achieved in proximity to retained trees.

## 1.3 Methodology

- 1.3.1 The tree survey has been based on National Tree Map Lidar data, Ordnance Survey base mapping, GPS positions, site features and publicly available aerial photography. As such, the positions of these features should be considered to be indicative only and the relative distances of features must be confirmed on-site within the Construction and Operation Area.
- 1.3.2 The fieldwork was undertaken in December 2024 and comprised a preliminary, non-intrusive, visual survey undertaken from ground level with the specific intention of evaluating the quality and benefits of trees on the Construction and Operation Area. During the fieldwork, dimensional data and observational information were collected. A diameter tape measure was used to measure stem diameters where feasible. The survey was otherwise conducted in accordance with the requirements of BS5837.
- 1.3.3 Where further inspection is deemed appropriate to ascertain the condition of the tree or other arboreal features, this has been identified within the preliminary management recommendations. Average dimensions or dimensional ranges have occasionally been used, where appropriate, to best describe features.
- 1.3.4 The Root Protection Area (RPA) is the notional extent of what is the key rooting area for tree health and function. This is generally depicted as a circle but can be amended to a polygon with an equivalent area in accordance with Section 4.6.2 of BS5837 where the RPA is likely to have developed asymmetrically. The RPA of all surveyed trees is depicted as a circle and no RPAs have been amended. The RPA of veteran or ancient trees has been amended in accordance with established best practice which requires the RPA to be a radius equivalent to 15 x stem diameter or canopy spread +5m, whichever is the greater area. This is based on standing advice from Natural England and the Forestry Commission (2022) (Ref 8) and has been specified here in the absence of any specific guidance from Natural Resources Wales (NRW).
- 1.3.5 A TCP showing the position of trees and the spatial constraints associated with them is included as **Annex A: Figures** of this report, which corresponds with the Tree Survey Schedule presented in **Annex B: Tree Survey Schedule**.
- 1.3.6 The tree categorisation process recommended by BS5837 is summarised in the table below and corresponds with the tree canopy outline shown on the

Tree Constraints Plan included as **Annex A: Figures** and the information in the Tree Survey Schedule included as **Annex B: Tree Survey Schedule**.

**Table 1: BS5837:2012 Tree Categorisation Table**

Category	Definition
A	High quality, minimum of 40+ years remaining contribution
B	Moderate quality, minimum of 20+ years remaining contribution
C	Low quality, minimum of 10+ years remaining contribution
U	Unsuitable for retention, <10 years remaining contribution
1	Arboricultural value
2	Landscape value
3	Conservation or cultural value

## 2. General Arboricultural Principles

2.1.1 This section outlines the general principles of arboriculture itself and the principles on which Arboricultural Impact Assessments, including the assessment summarised in this report, are based.

### 2.2 General Principles

2.2.1 Trees are dynamic living organisms which provide essential benefits to society and the wider environment. Any development activities with the potential to impact on trees must take into consideration the value of trees on the Construction and Operation Area; the impact of any proposed activity along with any potential future conflicts in the Construction and Operation Area. Suitable measures to safeguard retained trees or mitigate the loss of trees (to be removed) will need to be fully considered and may be subject to a condition of planning consent.

2.2.2 Tree branches and roots frequently grow across site boundaries and off-site trees can pose a significant constraint and must be carefully considered when assessing the developable space within a site.

### 2.3 Below ground constraints

2.3.1 Below ground tree roots and the soil environment in which they grow need to be protected if the tree is to be retained. Trees grow in association with fungi and other soil organisms which are of key importance to tree health. Roots are essential for anchorage, the uptake of water and nutrients, and the storage of energy (carbohydrates) for the future growth and function of the tree.

2.3.2 Roots can be damaged by physical severance or wounding (e.g. following excavation of the soil) which can lead to the development of decay and a decline in vitality and/or instability. Raising the soil level can bury tree roots at a depth where suitable conditions for growth are less available. Toxic materials discharged into the soil (such as cement based aggregates, fuel and chemicals) can lead to root death and dysfunction. Soils can be compacted to levels inhospitable to tree growth with even a single pass of machinery, regular pedestrian traffic or the storage of plant and materials. Relieving compaction can be problematic and may require costly remedial works. Changes in drainage/water levels can also have significant long-term impacts for tree health.

2.3.3 The effects of these incursions may take many years to manifest, with a resulting decline in amenity value and potentially the death or failure of the tree. It should be noted that older trees are particularly sensitive to damage and changes in conditions.

2.3.4 The RPA is a notional area considered to be the minimum zone that must be protected to avoid any adverse impacts on retained trees. This area is deemed to be particularly important for tree stability, growth, function and health. However, roots may extend far greater distances, with the distribution of the root system relating directly to the availability of suitable conditions for growth (namely oxygen, water and nutrients). It is generally accepted that

tree roots are predominantly located in the upper 1000 mm of soil; however, roots may develop at deeper levels where conditions allow.

- 2.3.5 The RPA of the existing tree stock is an important material consideration when considering site constraints and development activities within the Construction and Operation Area. The RPAs of significant trees on the Construction and Operation Area are shown on the TCP included in **Annex A: Figures**.
- 2.3.6 The default position is that all development, including any associated services, must occur outside the RPAs of retained trees. Where this is unavoidable, it may be appropriate to use special measures to install structures, services or surfacing within RPAs which allow the protection of roots and soil structure which are essential for tree growth and keep any "incursion to a minimum.
- 2.3.7 Further steps to improve or increase the useable rooting area available to the tree may also be required.

## 2.4 Above ground constraints

- 2.4.1 Tree stems and branches restrict the available space in and around the Construction and Operation Area. Damage or wounding (including excessive pruning) can significantly reduce the amenity contribution of the tree and may lead to the development of dysfunction and decay, with significant long-term implications for tree health. The future impact of existing trees should be carefully considered, including individual species characteristics (such as potential future size, fruit fall, shade etc.) and how the tree will interact with the proposed works and future land use. Annual tree growth can lead to direct damage if stems/branches come into physical contact with structures and this must also be taken into consideration.

## 2.5 Trees and Risk in the Context of Development

- 2.5.1 Tree owners/managers have a legal duty to prevent foreseeable harm. It is generally accepted that this duty can be fulfilled by undertaking proactive inspections of significant trees to identify obvious defects and by taking appropriate remedial action or gaining further advice as appropriate. Further guidance is available from the National Tree Safety Group (Ref 8).
- 2.5.2 The tree survey carried out as the basis of this report has been undertaken primarily for planning purposes and is not designed to assess the safety of trees on the Construction and Operation Area.
- 2.5.3 The Construction (Design and Management) Regulations (2015) (Ref 10) states that developers and contractors have responsibilities for health and safety as a result of their actions. Should trees be left in an unstable or hazardous condition, the Health and Safety Executive (HSE) could seek to prosecute those responsible along with the potential for further civil claims for damages.

## 2.6 Trees and Wildlife

- 2.6.1 Full consideration must be given to the presence of species protected under the Wildlife and Countryside Act 1981 - as amended (Ref 11), the Countryside Rights of Way Act 2000 (Ref 12) and the Conservation of Habitats and Species Regulations 2017 (Ref 13), in particular the presence of bats and nesting birds. It is recommended that, wherever possible, significant tree and hedge works take place outside of the typical bird nesting season of March to September. The advice of a suitably qualified ecologist is recommended in relation to any potential impacts on protected species.

## 2.7 Tree Works

- 2.7.1 Any tree surgery recommendations contained within this report are to be undertaken in accordance with BS3998:2010 Tree work – Recommendations (BS3998) (Ref 14) by suitably qualified and insured contractors. Significant pruning works are best undertaken when trees are dormant or outside periods of high functional activity to reduce the overall impact on energy available to the tree for growth and processes. In general, the optimum period for works is between November to February and July to August (subject to the presence of protected species) when the tree is less active and better placed to respond to wounding and a reduction in leaf area.

## 3. Statutory and Non Statutory Designations

### 3.1 Statutory Designations

#### Tree Preservation Orders (TPO) and Conservation Areas

- 3.1.1 AECOM (on behalf of the Applicant) viewed FCC's online TPO mapping service (Ref 15) in June 2025 and there were no TPOs or Conservation Area designations identified which could affect trees within or immediately adjacent to the Construction and Operation Area.

#### Site of Special Scientific Interest (SSSI), Special Area of Conservation (SAC), Special Protection Area (SPA), and Ramsar site

- 3.1.2 AECOM checked Datamap Wales (Ref 16) in June 2025, which confirmed that the Construction and Operation Area extends into the Dee Estuary SSSI. Trees are not listed as a protected characteristic of this SSSI: the designation relates to the protection of estuarine communities. In addition to the SSSI, the Dee Estuary is also listed as a SPA, a SAC, and a Ramsar site but, similarly to the SSSI designation, trees are not listed as a protected characteristic.

#### The Hedgerow Regulations 1997

- 3.1.3 The Hedgerow Regulations 1997 (Ref 15) protect agricultural or countryside hedgerows which meet the requirements of being an 'important hedgerow'. These include hedgerows which are a minimum age of 30 years or more and meet one of the other significant criteria listed in the Regulations, which include a wide range of other ecological and archaeological/heritage features. Advice is therefore required from qualified ecologists and heritage specialists in respect of works which could impact established hedgerows on or bordering agricultural or countryside land. Prior to the removal or destruction of a protected hedgerow an application must be made to the Local Planning Authority. Development consent is an exemption to this requirement.

#### Felling Licence

- 3.1.4 A Felling Licence may be required by NRW to fell more than 5 m<sup>3</sup> of timber in any calendar quarter (subject to relevant exemptions including tree safety works, tree works for a statutory undertaking and tree works in gardens, churchyards and designated public open space)
- 3.1.5 Full planning consent is an exemption from the need to apply for consent for works to trees protected by the Hedgerow Regulations, a TPO, the need to give notice of the intention to undertake works within a Conservation Area and the need to apply for a Felling Licence with NRW (to fell more than 5 m<sup>3</sup> per calendar quarter). TPOs can be made at any time.

- 3.1.6 Prior to any tree works the status of trees to be removed or pruned must be verified with FCC and NRW as appropriate.

## 3.2 Non-Statutory Designations:

### Ancient Woodland:

- 3.2.1 The Datamap Wales website (accessed June 2025), shows one area of ancient semi natural woodland is recorded as shown on the TCP and TPP on sheet 01 (**Annex A: Figures**).
- 3.2.2 This non-statutory designation is considered to be an irreplaceable habitat which is afforded a high priority in the planning process.

### Ancient and Veteran Trees

- 3.2.3 AECOM also checked the Woodland Trust Ancient Tree Inventory (Ref 18) for the presence of any notable, veteran or ancient trees within or immediately adjacent to the Construction and Operation Area, and none were identified.
- 3.2.4 However, a number of veteran and ancient trees were identified during the site survey. These are identified on the Tree Survey Schedule in **Annex B: Tree Survey Schedule** and both the TCP (**Annex A: Figures**) and TPP (**Annex A: Figures**).

## 4. Field Work Observations

### 4.1 The Main Development Area

- 4.1.1 The Main Development Area, within the wider Construction and Operation Area, is the location for the proposed CQLCP Abated Generating Station and the existing Connah's Quay Power Station, which is within north-east Wales approximately 0.6 kilometres north-west of Connah's Quay, within the administrative boundary of FCC. The approximate centre of the Main Development Area is at grid reference 327347, 371374.
- 4.1.2 The Main Development Area is located on the southern bank of the Dee Estuary. To the east and south-east it is bordered by the existing National Grid Electricity Transmission (NGET) 400 kV Substation, and to the south and south-west by the North Wales Main Line railway.
- 4.1.3 The Main Development Area is located on relatively flat ground and is accessed via Kelsterton Road from the main A548. The surrounding area includes agricultural land and associated buildings with residential properties of Connah's Quay directly to the south-southeast of the Main Development Area.

### 4.2 The Trees

- 4.2.1 A total of 388 tree features have been recorded as part of the survey of the Construction and Operation Area consisting of 235 individual trees, 121 tree groups, 25 hedgerow groups and seven woodland groups.
- 4.2.2 **Table 2** below summarises the number of trees in each quality category recorded within or adjacent to the Construction and Operation Area.

**Table 2: Summary of tree features in each quality category**

Quality Category	A	B	C	U
<b>Number of tree features</b>	21	135	227	5

- 4.2.3 Although individual trees have been recorded across the Construction and Operation Area, the majority of the tree features form part of larger groups/shelterbelts of trees around the boundary of the existing Connah's Quay Power Station and along the railway line and A548.
- 4.2.4 One woodland within proximity of the Construction and Operation Area is recorded on the Ancient Woodland Inventory.<sup>3</sup> This woodland provides irreplaceable habitat and contributes to the visual amenity of the rural location of this section of the Construction and Operation Area.
- 4.2.5 Nine trees surveyed have been identified as veteran and a further four are identified as ancient. Together with the ancient woodland these trees are the

<sup>3</sup> [New map | DataMapWales](#)

most valuable arboricultural features within the Construction and Operation Area.

- 4.2.6 There is no industry accepted methodology for the classification of ancient or veteran trees. This assessment has considered trees for veteran status where they are at least mature and feature extensive dead or decayed wood habitat. Veteran trees are also generally considered to be survivors. Ancient trees have been evaluated with reference to published girth criteria (such as that provided by the Ancient Tree Forum (Ref 19)(Ref 20)) for a range of species in conjunction with crown form and the presence of veteran features.
- 4.2.7 Ancient Woodland and ancient and veteran trees should be protected from development in accordance with Chapter 6 of Planning Policy Wales Edition 12 (2024): *'Ancient woodland, semi natural woodlands, individual ancient, veteran and heritage trees and ancient hedgerows are irreplaceable natural resources, and have significant landscape, biodiversity and cultural value. Such trees, woodlands and hedgerows are to be afforded protection from development which would result in their loss or deterioration unless very exceptionally there are significant and clearly defined public benefits; this protection must prevent potentially damaging operations and their unnecessary loss. In the case of a site recorded on the Ancient Woodland Inventory, authorities should consider the advice of NRW. Planning authorities should also have regard to the Ancient Tree Inventory, work to improve its completeness and use it to ensure the protection of trees and woodland and identify opportunities for more planting as part of the Green Infrastructure Assessment, particularly in terms of canopy cover.'*
- 4.2.8 Site photography across the Construction and Operation Area can be found at **Annex D: Photographs** of this report.

## 5. The Proposed Works

- 5.1.1 The Indicative Layout of the Proposed Development is detailed on the TPP included as **Annex A: Figures**.
- 5.1.2 The CQLCP Abated Generating Station would comprise up to two CCGT with CCP units (and supporting infrastructure) achieving a net electrical output capacity of more than 350 megawatts (MW; referred to as MWe for electrical output) and up to a maximum of 1,380 MWe (with CCP operational) onto the national electricity transmission network.
- 5.1.3 Through a carbon dioxide (CO<sub>2</sub>) pipeline, comprising existing and new elements, the Proposed Development would make use of CO<sub>2</sub> transport and storage networks owned and operated by Liverpool Bay CCS Limited, currently under development as part of the HyNet Carbon Dioxide Pipeline project (referred to as the 'HyNet CO<sub>2</sub> Pipeline Project'), that will transport CO<sub>2</sub> captured from existing and new industries in North Wales and North-West England, for offshore storage. The captured CO<sub>2</sub> will be permanently stored in depleted offshore gas reservoirs in Liverpool Bay.
- 5.1.4 For the purposes of the electrical connection, NGET, which builds and maintains the electricity transmission network in England and Wales, is responsible for the operation and maintenance of the existing 400 kV NGET Substation.
- 5.1.5 A description of the Proposed Development, including details of maximum parameters, is set out in **Environmental Statement Chapter 4: The Proposed Development (EN010166/APP/6.2.4)**. At this stage in the development, the design of the Proposed Development incorporates a necessary degree of flexibility, to allow for future design development. **Environmental Statement Chapter 2: Assessment Methodology (EN010166/APP/6.2.2)** provides further information on the Rochdale Envelope approach that has been applied within the Environmental Impact Assessment (EIA).

## 6. Arboricultural Impact Assessment

### 6.1 Purpose

6.1.1 This impact assessment sets out the likely principal direct and indirect impacts of the proposed works on the trees within or immediately adjacent to the Construction and Operation Area and suitable mitigation measures to allow for the successful retention of significant trees or to compensate for trees which are proposed to be removed, where appropriate.

6.1.2 The following details and assumptions have been utilised for this assessment:

- no veteran or ancient trees are to be removed;
- tree loss is assessed as a reasonable worst case (applying the Rochdale Envelope principles), excluding the retention of all veteran and ancient trees and those which are specifically identified to be retained, to allow flexibility in the final arrangement of the Proposed Development;
- ground protection measures will be utilised where access is unavoidable within the RPA of retained trees; and
- where practicable, fencing and service runs including drainage will avoid the RPA of retained trees.

6.1.3 A brief summary of the reasonable worst-case tree loss considering the Construction and Operation Area together with any potential incursions and tree works related to the Proposed Development is detailed within **Table 3**.

**Table 3: Summary of Removals, Incursions and Pruning to Facilitate the Proposed Development (Reasonable Worst Case)**

Impact	Category A	Category B	Category C	Category U
Trees expected to be removed to facilitate the Proposed Development	-	T216*, T219*, T221*, T243*, T287*, T363*, T365*, G164*, G165*; & W157*, H242* in part	T55*, T60*, T62*, T68*, T85*, T87*, T90*, T199*, T217*, T226*, T232*, T233*, T234*, T241*, T244*, T259*, T279*, T280*, T281*, T283*, T284*, T285*, T288*, T289*, T295*, T296*, T299*, T316, T329, T364*, T367*, T370*, T371*, T372*, T373*, G63*, G72*, G100*, G134*, G166*, G195*, G201*, G209*, G213*, G223*, G229*, G231*, G240*, G246*, G254*, G278*, G282*, G286*, G321*, G344*, G362*, H64*, H76*, H80*, H84*, H91*, H95*, H99*, H174*, H176*, H193*, H275*, H276*; & G5*, G61*, G92*, G127*, G220*, G238*, H4*, H156* in part	T330*
<b>Total</b>	<b>0</b>	<b>7 individual trees, 2 groups, 1 part woodland, 1 part hedgerow</b>	<b>35 individual trees, 21 groups, 6 part groups, 12 hedgerows, 2 part hedgerows</b>	<b>1 individual tree</b>
Trees which may require some incursion into their Construction Exclusion Zone (CEZ; see <b>Annex E: Outline Tree Protection Measures</b> ) to allow	T105*, T123*, T125*, T149*	T178*, T184*, T191*, T224*, T225*, T230*, T239*, T248*, T249*, T250*, T257*, T261*, T263*, T268*, T272*, T310, T311, T312, T313, T314,	T217*, T227*, T251*, T252*, T258*, T265*, T273*, T274*, T277*, T331, G61*, G116*, G154*, G204*, G207*, G208*, G214*, G235*, G237*, G255*, G264*, G267*, H150*	-

Impact	Category A	Category B	Category C	Category U
the Proposed Development.		T315, G57*, G79*, G97*, G148*, G158*, G162*, G171*, G172*, G173*, G179*, G181*, G183*, G188*, G192*, G211*, G270*, W107*, W120*, W157*, H242*		
<b>Total</b>	<b>4 individual trees</b>	<b>21 individual trees, 16 groups, 3 woodlands, 1 hedgerow</b>	<b>10 individual trees, 12 groups, 1 hedgerow</b>	<b>0</b>
Trees to be pruned to facilitate the proposed works	-	-		-
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

## 6.2 Trees to be Removed

- 6.2.1 Tree loss is assessed as a reasonable worst case (applying the Rochdale Envelope principles), excluding the retention of all veteran and ancient trees and those other trees which are specifically identified to be retained as shown on the TPPs in **Annex A: Figures**, to allow flexibility in the final design of the Proposed Development within the Construction and Operation Area.
- 6.2.2 The design of the Proposed Development has been developed to minimise loss or impacts to trees, especially those of greater quality and value. Where practicable, the detailed design will be further developed to avoid or minimise impacts to trees. The final magnitude and extent of arboricultural impacts, which are expected to be less than those identified as worst-case, will be assessed and recorded as part of an Arboricultural Method Statement to be prepared in accordance with the **Framework Construction Environmental Management Plan (CEMP) (EN010166/APP/6.5)** secured within the **Draft DCO (EN010166/APP/3.1)**.
- 6.2.3 No tree features of high quality (Category A) will be removed to facilitate the Proposed Development within the Construction and Operation Area. In total seven individual trees, two tree groups, part of one woodland and part of one hedgerow of moderate quality (Category B); and 35 individual trees, 21 tree groups, part of six tree groups, 12 hedgerows and part of two hedgerows of low quality (Category C) are likely to be removed to facilitate the Proposed Development within the Construction and Operation Area. All of the trees to be removed as described above are within the boundary of the Construction and Operation Area.
- 6.2.4 In addition, a single tree, identified as unsuitable for retention in the context of the current land use (Category U), (T330) is to be removed to facilitate the Proposed Development. It is considered that this tree feature would require removal regardless of any development proposals given its current state; as such it is not considered further within this report.
- 6.2.5 Tree removals are required due to a direct conflict with the footprint of proposed new structures which will be built as part of the Proposed Development, areas of hard surfacing, security fencing, and utility connections and the associated working space requirements to install these features. Tree removals are shown as a worst-case to allow for some flexibility in utilisation of areas of the Construction and Operation Area which is likely to result in fewer tree losses than those shown. This is of particular note in relation to areas within the operational footprint of the existing Connah's Quay Power Station which are shown to be lost to the Proposed Development (8 no. trees). These areas will not be cleared during construction of the Proposed Development, instead these areas are related to the required operational flexibility to accommodate routine operational activities associated with the existing Connah's Quay Power Station and are reserved by the operator for future use as laydown areas.
- 6.2.6 No veteran trees, ancient trees or ancient woodland are to be removed, and this commitment will be secured via the **Framework CEMP (EN010166/APP/6.5)**, the **Operation and Maintenance Mitigation Register (EN010166/APP/6.4)** and through the **Design Principles Document**

(**EN010166/APP/7.8**). Although the worst case approach identifies two Category B trees and some lower value vegetation from within two groups and a further low value tree (Category C) to be removed at the Surface Water Outfall Area, where there is an Existing and Proposed Surface Water Outfall into the River Dee within the identified SSSI, trees are not a protected characteristic and therefore their value is considered less than if they were an important feature of the designation.

- 6.2.7 The impacts of tree removals will be compensated by the proposed tree planting and associated landscaping works as detailed in the **Outline Landscape and Ecological Management Plan (LEMP)** (**EN010166/APP/6.9**) and **Off-site Net Benefit for Biodiversity and Green Infrastructure Strategy (EN010166/APP/6.14)**. These proposals represent an opportunity to enhance the quality, benefits and resilience of trees within the Order limits.

## 6.3 Partial Group Removals

- 6.3.1 The development of tree groups and woodlands facilitates shelter to individuals as the group collectively acts to reduce dynamic loading (e.g., wind) within. As such, partial removal of groups of trees and woodlands, notably at windward edges (south/south-west), increases exposure to trees which have been previously sheltered (companion shelter). Sudden increases in exposure by partial removals to tree groups, with trees otherwise un-adapted to the change may result in an increase in the likelihood for tree failure of the remaining trees. This likelihood is determined by numerous factors including the stand density, total tree height, soils, climate, aspect and topography, etc.
- 6.3.2 Where possible, tree groups and especially windward edges should be retained intact. Where partial removal of tree groups and/or woodlands is to be undertaken (as identified within **Table 2**), trees at the new edge should be assessed for retention suitability by a qualified arboriculturist to determine the final extent of tree loss (noting that this cannot generally be confirmed until initial site clearance works have been completed).

## 6.4 Incursions within the RPA or Canopy Spread

### Background

- 6.4.1 Standard construction methodologies for the installation of new hard surfacing, services and other new features within the RPAs of retained trees will require significant access and excavation. This may lead to premature tree death through the compaction of soils and the severance of roots enabling colonisation of the inner wood substrate (e.g., by wood decay fungi); a reduction of water uptake and energy storage; hydraulic dysfunction of sapwood and a potentially significant negative effect on tree stability.
- 6.4.2 Root death may occur where soil levels are increased within RPAs causing a reduction in the normal exchange of soil gases, soil water and a significant increase in mechanical resistance within the soil. Furthermore, the compaction of soil from construction access within RPAs is likely to lead to root death through the aforementioned impacts.

- 6.4.3 Mitigation for tree impacts must therefore avoid, reduce and/or mitigate against the above impacts, as outlined in the subsections below.

### Proposed Access Road Widening

- 6.4.4 The Proposed Development within the Main Development Area will require the widening of some of the existing access roads to enable construction access. Widening has been designed to have the least impact on adjacent trees which in some cases includes utilising the existing kerb alignment adjacent to existing trees of value while extending the access route width away from trees or closer to other, less valuable tree features. Where access roads cannot avoid the RPAs of retained trees specialist construction measures will be implemented.
- 6.4.5 Within RPAs, new hard surfacing will be constructed utilising a proprietary three-dimensional cellular raft system (such as Cellweb or equivalent) or equivalent, filled with washed angular stone and installed on the existing ground level and specified to the highest expected load. The raft then acts as a subbase for any new hard surfacing, mitigating the requirement for excavation and reducing compaction. This methodology is likely to increase the final level of the hard surfacing and this must be taken into consideration for the final design of the Proposed Development. Soil levels should not be increased within RPAs. Where level increases are unavoidable it may be possible to increase levels (where this would not result a change to drainage or aeration) within discrete sections of an RPA through the use of compaction resistant materials, such as sharp sand, three-dimensional cellular rafts or equivalent. Extensive level changes are less likely to be acceptable and any change in levels should avoid the area immediately surrounding the base of the tree and its buttressing.
- 6.4.6 Alternatively, hand excavated trial pits (agreed in advance with the FCC/LPA Tree Officer and supervised by an arboriculturist) may be utilised to determine the presence or absence of significant roots (>25 mm in diameter) which could justify standard construction techniques in cases where only the very outer extent of the RPA is impacted (such as for G79 and W103)
- 6.4.7 All works within RPAs must be supervised by the Project Arboriculturist.
- 6.4.8 The final specification for mitigation measures will be detailed in the Arboricultural Method Statement, preparation of which is secured via the **Framework CEMP (EN010166/APP/6.5)**.
- 6.4.9 The detailed design will seek to further reduce the impacts from proposed access roads on retained trees.
- 6.4.10 The Proposed Development will utilise a number of existing access roads. Existing access roads vary in condition from formal road surfaces to gravel tracks predominantly used for agricultural purposes and accessing the existing Connah's Quay Nature Reserve.
- 6.4.11 Where existing access roads are to be utilised for the Proposed Development but no change from the existing use is required (e.g. no change in width, height or ground loading from vehicle use) these situations are not considered to require any mitigation measures as they are unlikely to negatively impact the physiological or structural condition of the trees.

- 6.4.12 Where the use of existing roads is expected to change (such as for T191, G192 and T239) mitigation measures will be implemented to ensure that trees are not negatively impacted. Mitigation measures are likely to include the use of a three-dimensional cellular raft system or fit for purpose ground protection, specified to the highest expected load in accordance with **Annex E: Outline Tree Protection Measures**.

## Veteran and Ancient Trees

- 6.4.13 No new hard surfacing will be required within the RPA of veteran or ancient trees. However, existing access routes will be utilised by the Proposed Development within the RPA of three veteran or ancient trees (T123, T125 and T149). Existing access roads vary in condition from formal road surfaces to infrequently used gravel tracks.
- 6.4.14 Where existing access roads are to be utilised for the Proposed Development but no change from the existing use is required (e.g. no change in width, height or ground loading from vehicle use) these situations are not considered to require any mitigation measures. This is assumed to apply to trees T123 and T125.
- 6.4.15 The existing access road adjacent to T149 (ancient tree) is considered to be a less formal track and due to the anticipated use by construction traffic mitigation measures will be required. Mitigation measures are likely to include the use of either a three-dimensional cellular raft system or ground protection, suitable for the heaviest anticipated load, to prevent negative impacts to the structure of the soil within the RPA.
- 6.4.16 Where existing access roads are utilised or where appropriate mitigation measures are utilised soil structure will be maintained, resulting in no likely adverse impact on the physiological or structural condition of the trees.
- 6.4.17 The final specification for mitigation measures will be detailed in the Arboricultural Method Statement, preparation of which is secured via the **Framework CEMP (EN010166/APP/6.5)**.
- 6.4.18 These incursions will not result in any loss or deterioration of adjacent veteran trees.

## 6.5 Tree Works

- 6.5.1 Tree removals required to facilitate the Proposed Development are detailed in **Annex B: Tree Survey Schedule**.
- 6.5.2 Some trees are recommended for removal from within G188 and G211. This includes a dead alder from within G188 and a number of ash with signs of ash dieback within G211. It is recommended that these works are carried out regardless of the proposals for the Construction and Operation Area.
- 6.5.3 No additional pruning has been identified at this stage. The requirement for any pruning will be reviewed and confirmed at the detailed design stage as part of an Arboricultural Method Statement secured via the **Framework CEMP (EN010166/APP/6.5)**.
- 6.5.4 The final extent of pruning will be the minimum feasible and will be agreed on the Construction and Operation Area with the Project Arboriculturist.

- 6.5.5 Contact wounding to the stem and branch structures of retained trees can lead to structural instability, a reduction in vitality and a potential ingress for pests and pathogens, including wood decay fungi. This can result in premature limb or stem failure and may lead to premature tree loss where significant. Pruning of material in advance to mitigate against contact wounding (where avoidance cannot be secured via fenced exclusion zones) is therefore preferential.
- 6.5.6 All tree work is to follow the principles of BS3998: 2010 Treework – Recommendations and must be carried out by suitably qualified contractors. The Arboricultural Association provides a list of contractors who meet these requirements. This commitment is secured via the **Framework CEMP (EN010166/APP/6.5)**.
- 6.5.7 Should the requirement for additional tree works be identified, this will be discussed with the Project Arboriculturist and no works will be undertaken without the consent of FCC. This is secured via the **Framework CEMP (EN010166/APP/6.5)**.

## 6.6 New Services within RPAs

- 6.6.1 At this stage of the development of the design of the Proposed Development, the final alignment of the pipeline connections has not been determined. Indicative areas of tree loss have been shown on the TPP as a worst case, but in practice this is likely to be a smaller area. During the detailed design phase, the final alignments and construction methodology will seek to further minimise the tree related impacts. In the case of veteran trees and G21 and G27 methodologies such as directional drilling will be utilised to ensure the retention of these features, as detailed in the **Design Principles Document (EN010166/APP/7.8)**.
- 6.6.2 The proposed drainage alignment is indicated on the TPP, although some amendments will be required to ensure the avoidance of the constraints of ancient tree T149. This is secured in the **Design Principles Document (EN010166/APP/7.8)**. Otherwise across the Construction and Operation Area the general principles outlined below will apply.
- 6.6.3 Where existing services become redundant within the RPA of a retained tree, the default position is that they will be decommissioned and left in situ. Where this is not feasible one of the following techniques will be utilised, as detailed and secured in the **Framework CEMP (EN010166/APP/6.5)**:
- Existing services to be removed by winching out from an access/inspection chamber located outside of an RPA;
  - Fill redundant pipe work with an inert material where acceptable; or
  - Undertake pipe bursting where necessary within the RPA of retained trees.
- 6.6.4 Excavation to install services has the potential to result in unacceptable root severance which could result in instability, dysfunction or the death of trees. Repeated incursions are particularly damaging and must be avoided by bundling services wherever possible. The default position will therefore be that all services be routed outside of the RPA of retained trees.

- 6.6.5 The following general principles will apply and where services must be routed within the RPA of a retained tree. This process will be subject to a detailed method statement with approval from FCC. The principles of the National Joint Utilities Group (NJUG) Volume 4 (Ref 19) guidance must be adhered to.
- 6.6.6 All services must be bundled as far as possible and installed within RPAs using hand/compressed air excavation (e.g., for shallow service runs where all roots >25 mm diameter can be retained and worked around) or trenchless techniques such as Horizontal Directional Drilling (HDD) or impact moling (thrust boring) with all access pits and inspection chambers being located outside of the RPA. The route must run as far from the main stem of a retained tree as possible and must be at a minimum depth so that the upper 2 m of the soil profile is undisturbed. The depth of the run may need to be adjusted to account for soil type and species variation and this will be determined subject to the advice of the Project Arboriculturist.
- 6.6.7 Services must be constructed so as to be resistant to ingress by tree roots (both existing trees, and newly planted trees) which could include the use of root barriers where appropriate.
- 6.6.8 This operation must take place as specified in an Arboricultural Method Statement. This will be developed post consent and is secured via the **Framework CEMP (EN010166/APP/6.5)**.

## 6.7 The Future Impacts of and to Trees

- 6.7.1 The future impacts of and to trees on and within proximity to the Construction and Operation Area must be considered in relation to any development proposals. Trees and groups to be retained must be afforded suitable space to ensure they remain viable in the long term. Trees, which are currently not fully grown, will increase in size and this must be considered in conjunction with the proposed works and future use of the Construction and Operation Area.
- 6.7.2 The retained trees will not have a significant future impact on the future use of the Construction and Operation Area. Management of the trees on and adjacent to the Construction and Operation Area will be consistent with current management.

## 6.8 Tree Planting

- 6.8.1 Existing areas of unsurfaced ground must be protected during the construction phase if they are to be re-used for new plantings. Protection can be achieved using fit for purpose ground protection measures as set out in BS5837:2012 (Section 6.2.3) or by creating a fenced exclusion zone. Where protection is not feasible, soil amelioration or replacement works will be required to ensure suitable growing conditions for new trees to fully establish.
- 6.8.2 Where new trees are to be planted, the minimum planting distances detailed in Table A.1 of BS5837:2012 must be adhered to along with offsets specific to the Proposed Development (as outlined in the **Outline LEMP**

- (**EN010166/APP/6.9**)) to prevent direct damage to services and structures from future tree growth.
- 6.8.3 New tree planting will be implemented in accordance with the guidance set out in BS8545:2014 (British Standards Institute, 2014) Trees: from nursery to establishment in the landscape – Recommendations (Ref 22) (or any equivalent guidance or standard which is in place at the time), to be detailed in the final LEMP(s).
- 6.8.4 In urban areas, it is typically recommended that no single species should form more than 10% of the total tree population, a genus more than 20% and a family more than 30%, to reduce the risk of canopy loss to an area, caused by stand level (a contiguous community of trees) mortality (such as due to causal factors such as climate change and novel pests and diseases). Although not specifically applicable to the Construction and Operation Area, it is valuable advice that will be considered as part of any new planting scheme.
- 6.8.5 The PPW states the importance of native species and suggests the ratio equivalent through replacement planting which should be achieved, as follows:
- 6.8.6 *“6.4.38 Welsh native tree and hedge species, characteristic of the local area, provide a strong ecosystem resilience function, and they provide resources for local wildlife, particularly other native plants and species. Native tree and hedge species can also complement opportunities for natural regeneration.*
- 6.8.7 *6.4.... Replacement planting shall be at a ratio equivalent to the quality, environmental and ecological importance of the tree(s) lost and this must be preferably onsite, or immediately adjacent to the site, and at a minimum ratio of at least 3 trees of a similar type and compensatory size planted for every 1 lost...”*
- 6.8.8 Details of proposed tree planting are provided in the **Outline LEMP (EN010166/APP/6.9)** and **Off-site Net Benefit for Biodiversity and Green Infrastructure Strategy (EN010166/APP/6.14)**.

## 6.9 Tree Protection

- 6.9.1 Retained trees are vulnerable to damage from construction activities which can include physical damage to stems and branches following impacts with plant, root severance following trenching, root death or dysfunction following damage to soil structure (caused by the movement of people or machinery on unsurfaced ground) or via the spillage of materials toxic to tree health. The default position is that the RPA and canopy spread of trees to be retained will form an effective CEZ, secured with robust fencing where no access will be permitted. Where access is necessary within this area special measures such as the use of ground protection and arboricultural supervision are generally required.
- 6.9.2 Outline tree protection measures are considered in **Annex E: Outline Tree Protection Measures** of this report. An Arboricultural Method Statement will be developed post consent (as secured via the **Framework CEMP (EN010166/APP/6.5)**) and this will set out the phasing of site operations, the finalised tree protection measures for the Construction and Operation Area

and to provide detail on how sensitive elements of work are to be achieved in proximity to retained trees. Issues to be addressed by the Method Statement are listed in the conclusion of this report (see Section 7).

## **6.10 Site Organisation, Storage and Use of Materials, Plant and Machinery**

- 6.10.1 All construction site facilities, including site huts, staff and contractor parking and areas for storage, will be located outside of the RPA or crown spread of retained trees, including those not specifically covered in this report. Space is likely to be constrained on the Construction and Operation Area and will need to be carefully considered. The CEZs identified on the TPP will be fully respected and their location and significance is to be highlighted to all site staff and contractors during the formal site briefing.
- 6.10.2 The use, mixing and washing of materials can lead to run off or inadvertent spillage into tree root zones. Many substances often used on construction sites can be toxic to tree roots (such as concrete, fuels, salts, builders sand and herbicides) and can result in the death of tree roots and beneficial soil organisms and can have a significant impact on the future health and appearance of the tree.
- 6.10.3 The storage of materials and arisings can result in an effective raised soil level. This buries tree roots at depths where air and water are less available and can lead to the decline or death of the tree.
- 6.10.4 For these reasons the storage of materials and any washing, mixing or refuelling will take place in agreed allocated areas at least 5 m from the edge of the RPA of retained trees.
- 6.10.5 Any slope effect must be taken into account and where there is a potential for run off, heavy duty polythene sheeting and sandbags must be in place as bunding to prevent toxic materials reaching RPAs.
- 6.10.6 Particular care is required where high sided vehicles, long reach machinery and plant with jibs, booms and counterweights are to operate with in proximity to retained trees. A banks person will be used where the movement of plant or long reach machinery occurs within 5 m of any part of a retained tree to ensure no damage is sustained.

## 7. Conclusions

- 7.1.1 The tree survey identified a total of 388 tree features around the Construction and Operation Area, formed of 235 individual trees, 121 tree groups, 25 hedgerows and seven woodland group as shown on the Tree Constraints Plan.
- 7.1.2 The most significant trees identified during the survey are the ancient woodland, the nine trees considered likely to be veteran; and the four trees considered likely ancient. Ancient woodland, veteran and ancient trees are considered to be an irreplaceable habitats and irreplaceable natural resources by the NPS EN-1 (DESNZ, 2023) and PPW (2024).
- 7.1.3 No TPOs or Conservation Area designations have been identified within or adjacent to the Construction and Operation Area, although the Main Development Area is located directly adjacent to the Dee Estuary, which is designated as a SSSI, SAC, SPA, and Ramsar site. Although these designations will be relevant and may include the consideration of trees within them, trees are not a protected characteristic relevant to these designations.
- 7.1.4 No tree features of high quality (Category A) are proposed to be removed to facilitate the Proposed Development within the Construction and Operation Area. A total of seven individual trees, two tree groups, part of one woodland and part of one hedgerow of moderate quality (Category B); and 35 individual trees, 21 tree groups, part of six tree groups, 12 hedgerows and part of two hedgerows of low quality (Category C) are expected to be removed to facilitate the Proposed Development within the Construction and Operation Area. All of the trees anticipated to be removed as described above are within the boundary of the Construction and Operation Area.
- 7.1.5 In addition, one individual tree, identified as unsuitable for retention (Category U), T330, is likely to be removed to facilitate the Proposed Development. This tree feature would require removal due to its condition, regardless of any development proposals.
- 7.1.6 Tree removals are required due to a direct conflict with the footprint of proposed new structures, areas of hard surfacing, security fencing and the associated working space requirements to install these features as part of the Proposed Development.
- 7.1.7 No veteran trees, ancient trees or ancient woodland are to be removed, and this commitment is secured via the **Framework CEMP (EN01016/APP/6.5)** and **Design Principles Document (EN01016/APP/7.8)**. However, it is possible that some trees from within the Dee Estuary SSSI, SPA, SAC, and Ramsar site at the Surface Water Outfall Area will be removed to enable the Proposed Surface Water Outfall connection into the River Dee. Tree loss will be minimised here wherever possible.
- 7.1.8 Tree loss is assessed as a reasonable worst case (applying the Rochdale Envelope principles), excluding the retention of all veteran and ancient trees and those other trees which are specifically identified to be retained as shown on the TPPs, to allow flexibility in the final design of the Proposed Development within the Order limits. Where practicable the detailed design

will be further developed to avoid or minimise impacts to trees. The final level of arboricultural impacts will be assessed and recorded as part of an Arboricultural Method Statement, delivery of which is secured via the **Framework CEMP (EN010166/APP/6.5)**.

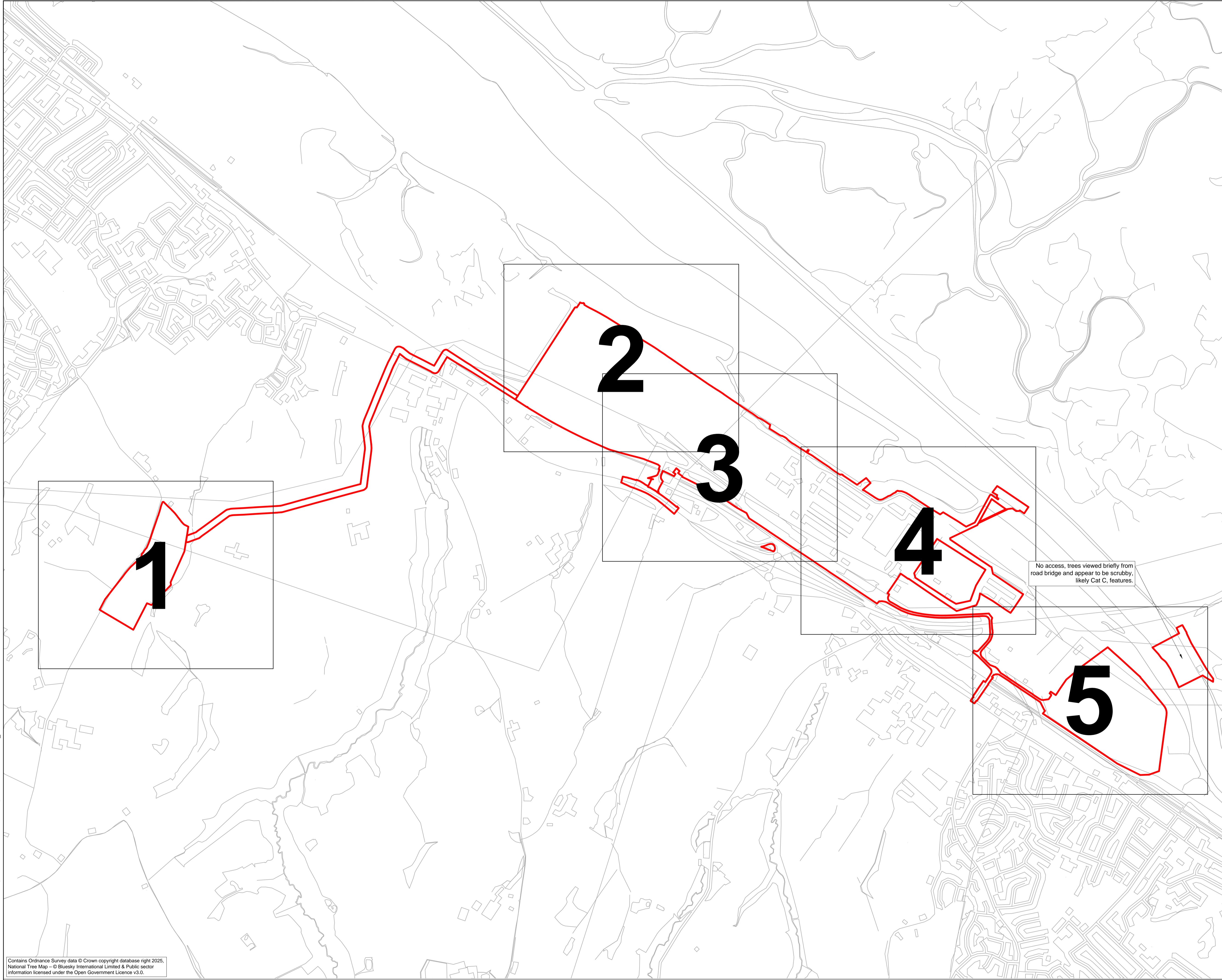
- 7.1.9 Tree loss will be compensated by a scheme of new tree planting which represents an opportunity to increase the diversity and resilience of trees within the Order limits, as detailed in the **Outline LEMP (EN010166/APP/6.9)**. Additional tree planting will be provided within land outside of the Order limits as detailed in the **Off-site Net Benefit for Biodiversity and Green Infrastructure Strategy (EN010166/APP/6.14)**.
- 7.1.10 A total of three incursions will be required within the RPAs of veteran or ancient trees to facilitate the use of existing access roads for construction traffic. Existing access roads vary in condition from formal road surfaces to infrequently used gravel tracks.
- 7.1.11 Where existing access roads are to be utilised for the Proposed Development but no change from the existing use is required (e.g. no change in width, height or ground loading from vehicle use) these situations are not considered to require any mitigation measures. This is assumed to apply to trees T123 and T125.
- 7.1.12 The existing access road adjacent to T149 (classed as ancient) is considered to be a less formal track and due to the anticipated use from construction traffic additional mitigation measures will be required. Mitigation measures are likely to include the use of either a three-dimensional cellular raft system or ground protection, suitable for the heaviest anticipated load, to prevent negative impacts to the structure of the soil within the RPA.
- 7.1.13 No works associated with the Proposed Development within the Main Development Area are considered likely to result in the loss or deterioration of ancient or veteran trees.
- 7.1.14 No pruning has been identified at this stage, this will be reviewed and developed post consent and will be addressed by the Arboricultural Method Statement, delivery of which is secured via the **Framework CEMP (EN010166/APP/6.5)**.

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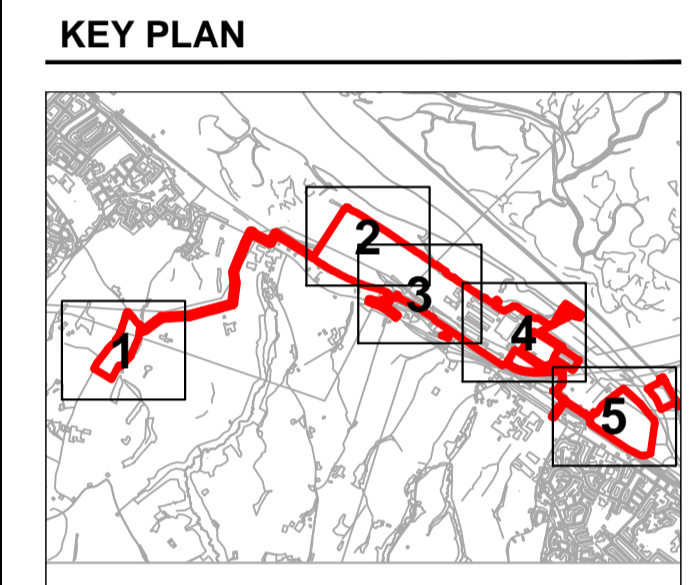
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# Annex A: Figures



No access, trees viewed briefly from road bridge and appear to be scrubby, likely Cat C, features.

- GENERAL NOTES**
1. TREE CATEGORIES AS DEFINED BY BS 5837:2012
  2. TREE LOCATIONS ARE BASED ON AERIAL IMAGERY AND GPS CO-ORDINATES FROM ON SITE WALKOVER.
  3. \* INDICATES A TREE / GROUP WHOSE POSITION IS APPROXIMATE AS BASED UPON AERIAL PHOTOGRAPHY AND ON SITE OBSERVATIONS.
  4. PLANS SHOULD BE READ IN CONJUNCTION WITH THE AECOM ARBORICULTURAL REPORT.
  5. THE ORIGINAL OF THIS DRAWING WAS PRODUCED IN COLOUR - A MONOCHROME COPY SHOULD NOT BE RELIED UPON.
  6. DRAWING REFERENCES:  
Designations.dwg  
Floods.dwg  
Connahs Quay\_31M Data.dwg



- KEY**
- RED LINE BOUNDARY
  - A CATEGORY TREE, GROUP, HEDGE, OR WOODLAND (HIGH QUALITY & VALUE)
  - B CATEGORY TREE, GROUP, HEDGE, OR WOODLAND (MODERATE QUALITY & VALUE)
  - C CATEGORY TREE, GROUP, HEDGE, OR WOODLAND (LOW QUALITY & VALUE)
  - U CATEGORY TREE, GROUP, HEDGE, OR WOODLAND (UNSUITABLE FOR RETENTION)
  - ROOT PROTECTION AREAS (RPA) (AS DEFINED BY BS 5837:2012)
  - NATIONAL TREE MAP DATA (PROVIDED BY BLUESKY INTERNATIONAL LTD)
  - ANCIENT SEMI-NATURAL WOODLAND W15M BUFFER (AREA CLASSIFIED AS AN ANCIENT SEMI-NATURAL WOODLAND)
  - TRADITIONAL ORCHARD (CLASSIFIED AS AN AREA OF TRADITIONAL ORCHARD)
  - SSSI ZONE (AREA CLASSIFIED SITE OF SPECIAL SCIENTIFIC INTEREST)

**ISSUE/REVISION**

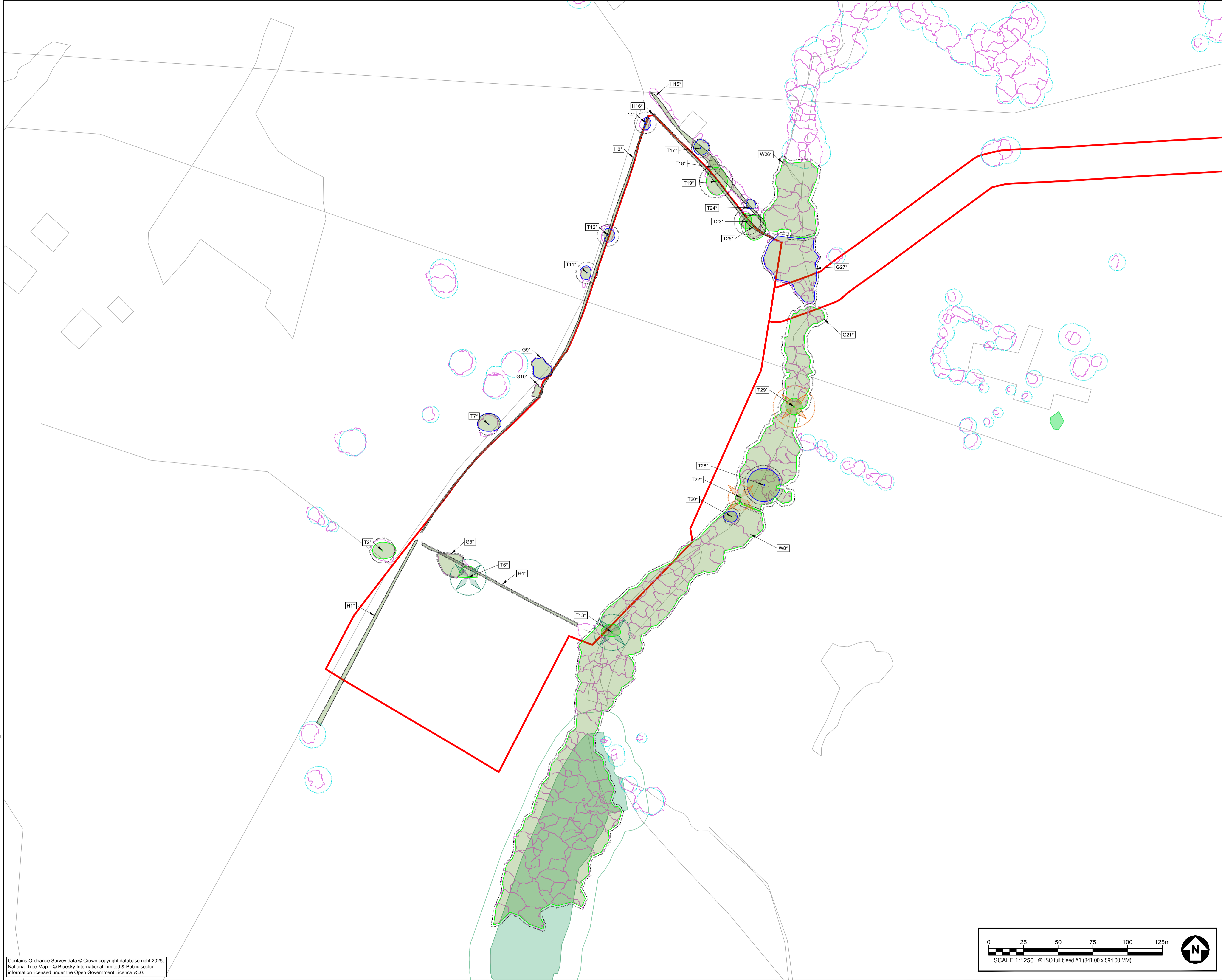
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P01	27/06/25	FIRST ISSUE
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**DRAWING STATUS**  
ISSUE

**PROJECT NUMBER**  
60717119

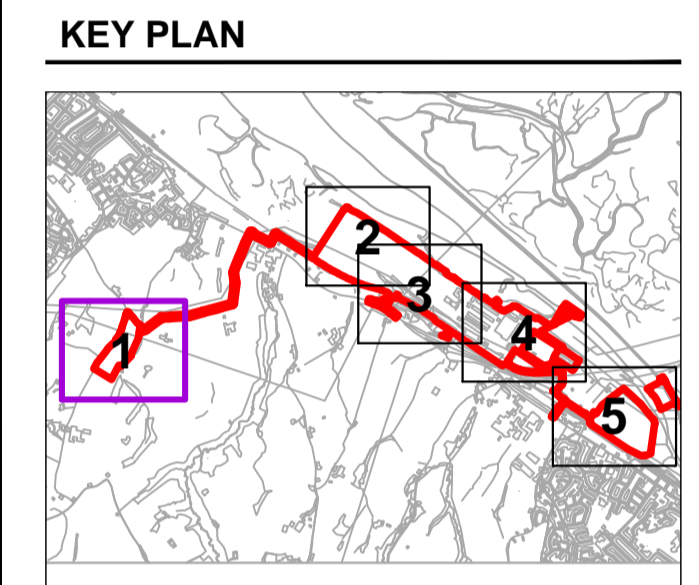
**SHEET TITLE**  
TREE CONSTRAINTS PLAN  
(SHEET 00)

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**GENERAL NOTES**

1. TREE CATEGORIES AS DEFINED BY BS 5837:2012
2. TREE LOCATIONS ARE BASED ON AERIAL IMAGERY AND GPS CO-ORDINATES FROM ON SITE WALKOVER.
3. \* INDICATES A TREE / GROUP WHOSE POSITION IS APPROXIMATE AS BASED UPON AERIAL PHOTOGRAPHY AND ON SITE OBSERVATIONS.
4. PLANS SHOULD BE READ IN CONJUNCTION WITH THE AECOM ARBORICULTURAL REPORT.
5. THE ORIGINAL OF THIS DRAWING WAS PRODUCED IN COLOUR - A MONOCHROME COPY SHOULD NOT BE RELIED UPON.
6. DRAWING REFERENCES:  
 Designations.dwg  
 Connahs\_Quay\_NTM\_Data.dwg



**KEY**

- RED LINE BOUNDARY
- A CATEGORY TREE, GROUP, HEDGE, OR WOODLAND (HIGH QUALITY & VALUE)
- B CATEGORY TREE, GROUP, HEDGE, OR WOODLAND (MODERATE QUALITY & VALUE)
- C CATEGORY TREE, GROUP, HEDGE, OR WOODLAND (LOW QUALITY & VALUE)
- U CATEGORY TREE, GROUP, HEDGE, OR WOODLAND (UNSUITABLE FOR RETENTION)
- ROOT PROTECTION AREAS (RPA) (AS DEFINED BY BS 5837:2012)
- NATIONAL TREE MAP DATA (PROVIDED BY BLUESKY INTERNATIONAL LTD)
- ANCIENT SEMI-NATURAL WOODLAND W/15M BUFFER (AREA CLASSIFIED AS AN ANCIENT SEMI-NATURAL WOODLAND)
- TRADITIONAL ORCHARD (CLASSIFIED AS AN AREA OF TRADITIONAL ORCHARD)
- SSSI ZONE (AREA CLASSIFIED SITE OF SPECIAL SCIENTIFIC INTEREST)

**ISSUE/REVISION**

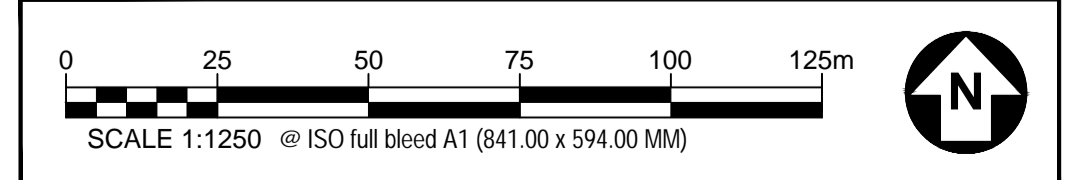
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**DRAWING STATUS**  
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**PROJECT NUMBER**  
 60717119

**SHEET TITLE**  
 TREE CONSTRAINTS PLAN  
 (SHEET 01)

**SHEET NUMBER**      **REV.**  
 60717119-ACM-XX-XX-AB-TCP-001      P01

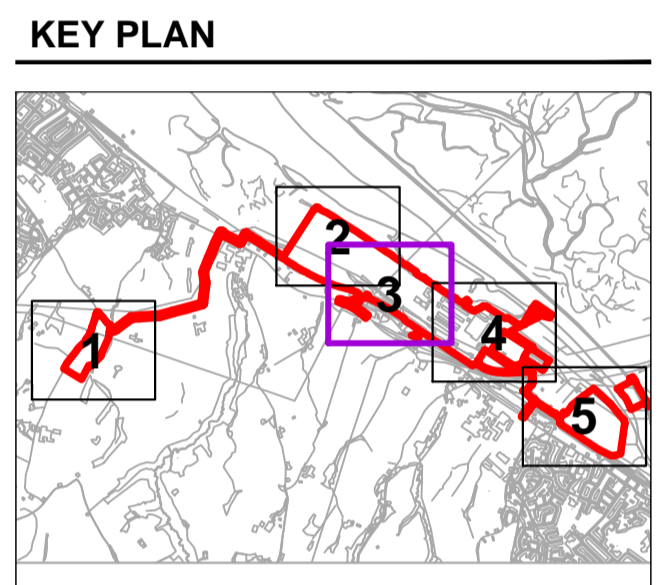


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  5. THE ORIGINAL OF THIS DRAWING WAS PRODUCED IN COLOUR - A MONOCHROME COPY SHOULD NOT BE RELIED UPON.
  6. DRAWING REFERENCES:  
Designations.dwg  
Connahs\_Quay\_021M\_Data.dwg



- KEY**
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  - U CATEGORY TREE, GROUP, HEDGE, OR WOODLAND (UNSUITABLE FOR RETENTION)
  - ROOT PROTECTION AREAS (RPA) (AS DEFINED BY BS 5837:2012)
  - NATIONAL TREE MAP DATA (PROVIDED BY BLUESKY INTERNATIONAL LTD)
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  - TRADITIONAL ORCHARD (CLASSIFIED AS AN AREA OF TRADITIONAL ORCHARD)
  - SSSI ZONE (AREA CLASSIFIED SITE OF SPECIAL SCIENTIFIC INTEREST)

**ISSUE/REVISION**

NO	DATE	DESCRIPTION
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VR		

**DRAWING STATUS**  
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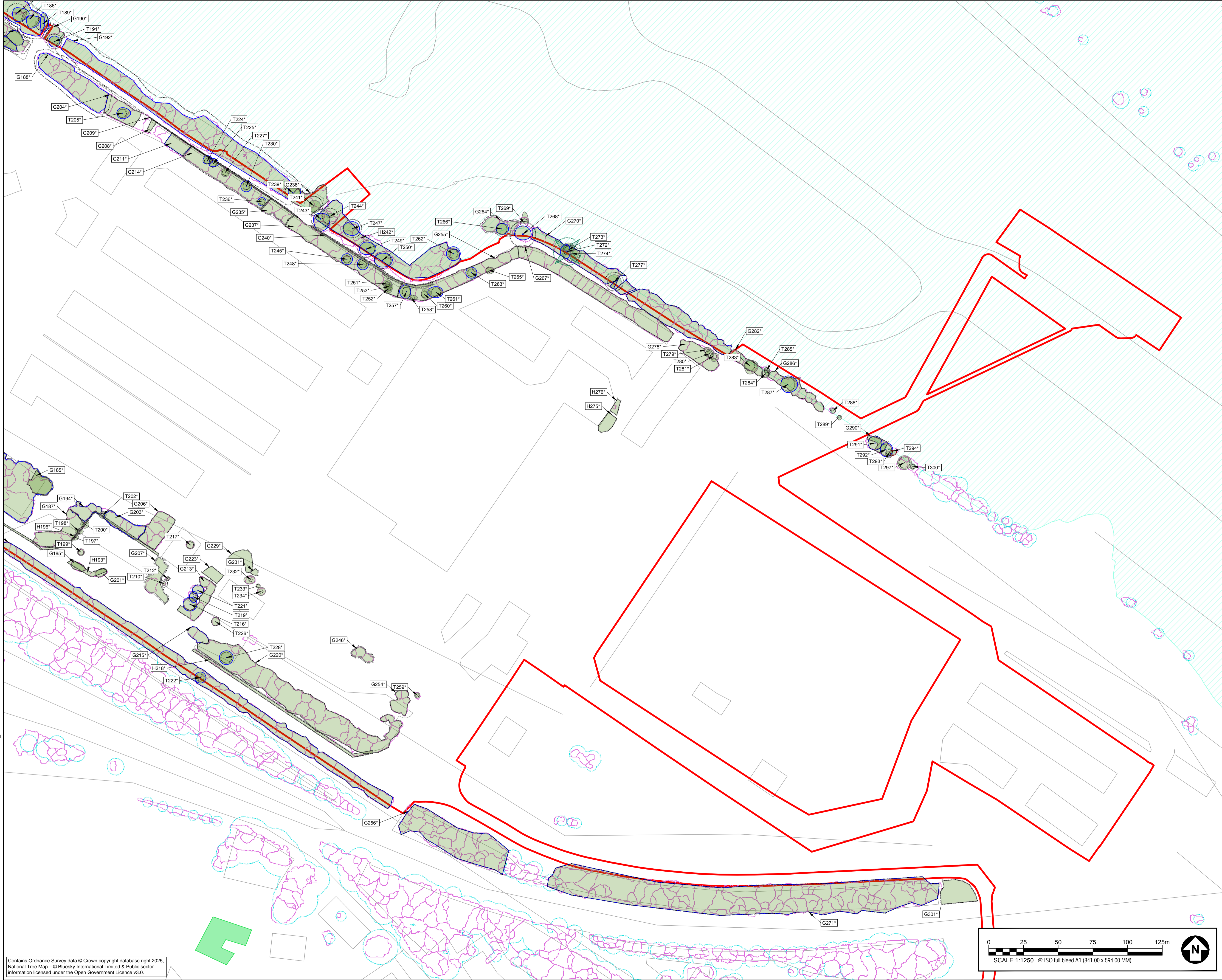
**PROJECT NUMBER**  
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**SHEET TITLE**  
TREE CONSTRAINTS PLAN  
(SHEET 03)

**SHEET NUMBER**      **REV.**  
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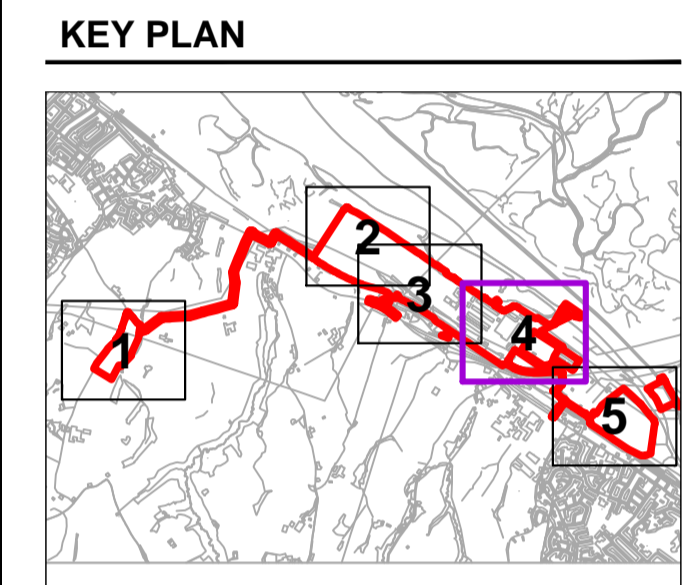
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5. THE ORIGINAL OF THIS DRAWING WAS PRODUCED IN COLOUR - A MONOCHROME COPY SHOULD NOT BE RELIED UPON.
6. DRAWING REFERENCES:  
 F:\projects\025\025.dwg  
 Connahs Quay\_025.dwg



**KEY**

- RED LINE BOUNDARY
- A CATEGORY TREE, GROUP, HEDGE, OR WOODLAND (HIGH QUALITY & VALUE)
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- U CATEGORY TREE, GROUP, HEDGE, OR WOODLAND (UNSUITABLE FOR RETENTION)
- ROOT PROTECTION AREAS (RPA) (AS DEFINED BY BS 5837:2012)
- NATIONAL TREE MAP DATA (PROVIDED BY BLUESKY INTERNATIONAL LTD)
- ANCIENT SEMI-NATURAL WOODLAND W/15M BUFFER (AREA CLASSIFIED AS AN ANCIENT SEMI-NATURAL WOODLAND)
- TRADITIONAL ORCHARD (CLASSIFIED AS AN AREA OF TRADITIONAL ORCHARD)
- SSSI ZONE (AREA CLASSIFIED AS SITE OF SPECIAL SCIENTIFIC INTEREST)

**ISSUE/REVISION**

NO	DATE	DESCRIPTION
P01	27.06.25	FIRST ISSUE
1/R		

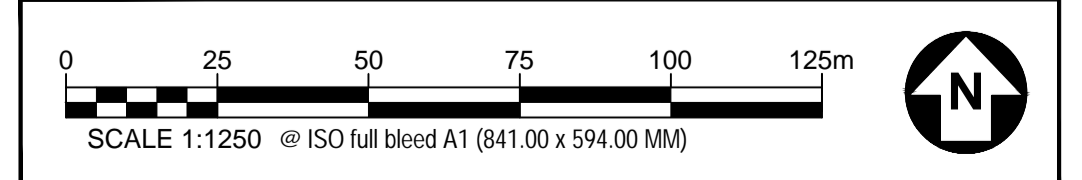
**DRAWING STATUS**  
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**PROJECT NUMBER**  
 60717119

**SHEET TITLE**  
 TREE CONSTRAINTS PLAN  
 (SHEET 04)

**SHEET NUMBER** 60717119-ACM-XX-XX-AB-TCP-004 **REV.** P01

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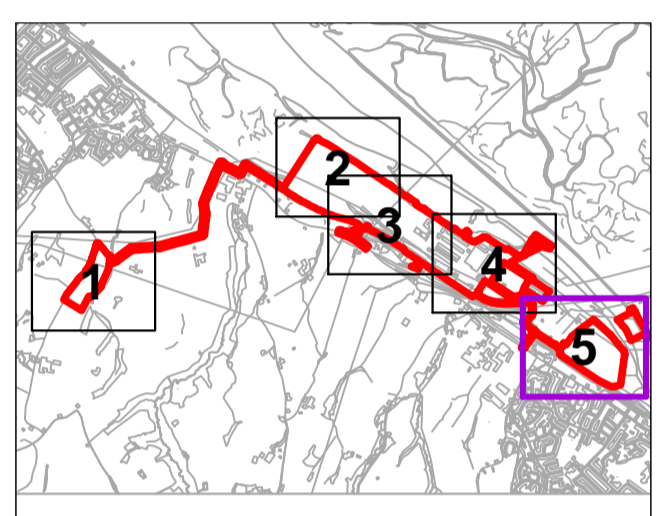


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5. THE ORIGINAL OF THIS DRAWING WAS PRODUCED IN COLOUR - A MONOCHROME COPY SHOULD NOT BE RELIED UPON.
6. DRAWING REFERENCES:  
Designations.dwg  
Connahs\_Quay\_ATM\_Data.dwg

**KEY PLAN**



**KEY**

- RED LINE BOUNDARY
- A CATEGORY TREE, GROUP, HEDGE, OR WOODLAND (HIGH QUALITY & VALUE)
- B CATEGORY TREE, GROUP, HEDGE, OR WOODLAND (MODERATE QUALITY & VALUE)
- C CATEGORY TREE, GROUP, HEDGE, OR WOODLAND (LOW QUALITY & VALUE)
- U CATEGORY TREE, GROUP, HEDGE, OR WOODLAND (UNSUITABLE FOR RETENTION)
- ROOT PROTECTION AREAS (RPA) (AS DEFINED BY BS 5837:2012)
- NATIONAL TREE MAP DATA (PROVIDED BY BLUESKY INTERNATIONAL LTD)
- ANCIENT SEMI-NATURAL WOODLAND W15M BUFFER (AREA CLASSIFIED AS AN ANCIENT SEMI-NATURAL WOODLAND)
- TRADITIONAL ORCHARD (CLASSIFIED AS AN AREA OF TRADITIONAL ORCHARD)
- SSSI ZONE (AREA CLASSIFIED SITE OF SPECIAL SCIENTIFIC INTEREST)

**ISSUE/REVISION**

NO	DATE	DESCRIPTION
P01	27.06.25	FIRST ISSUE
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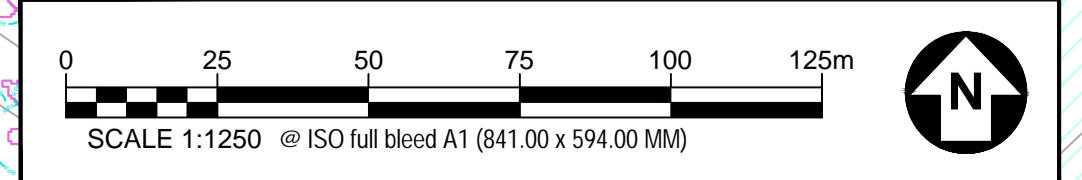
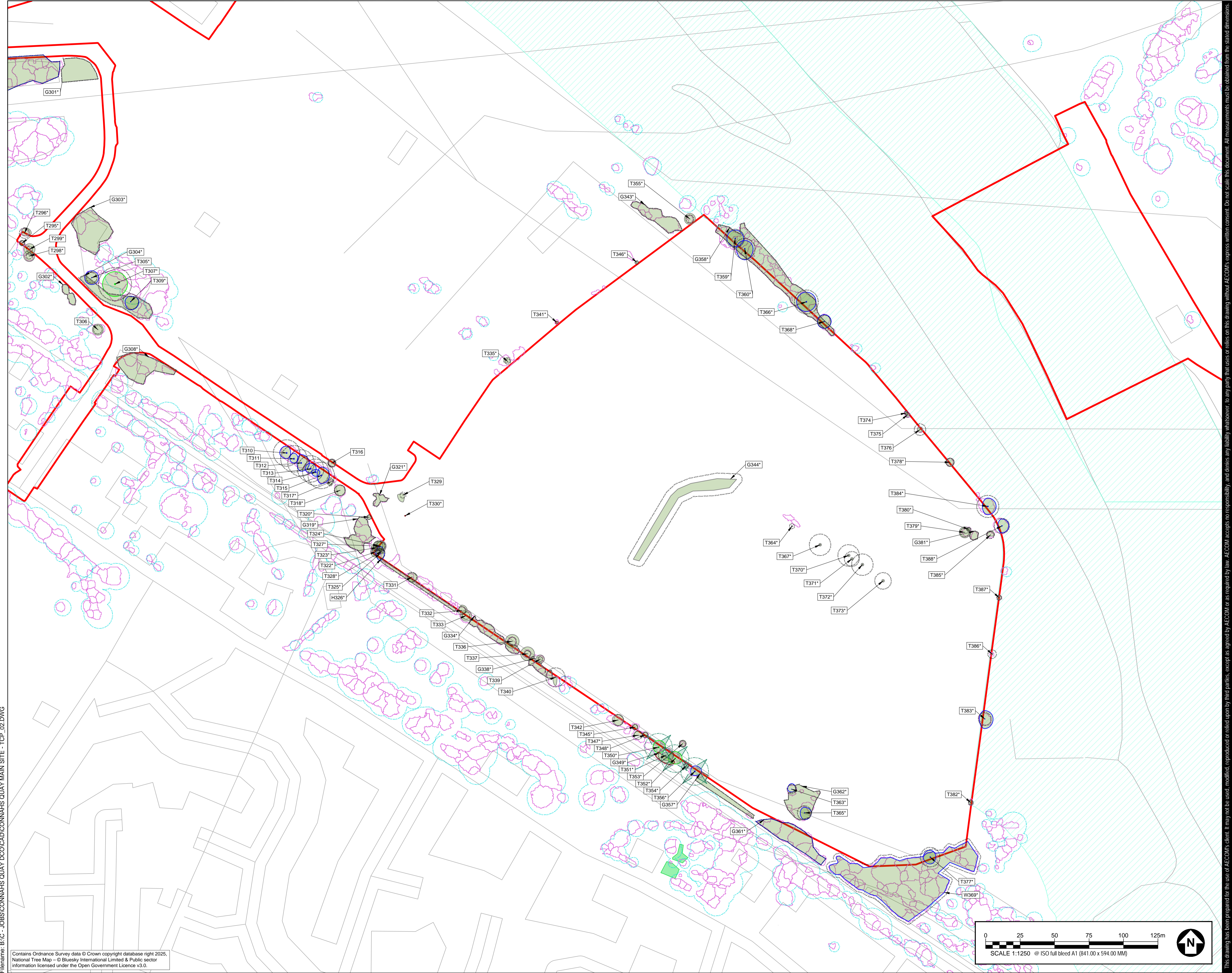
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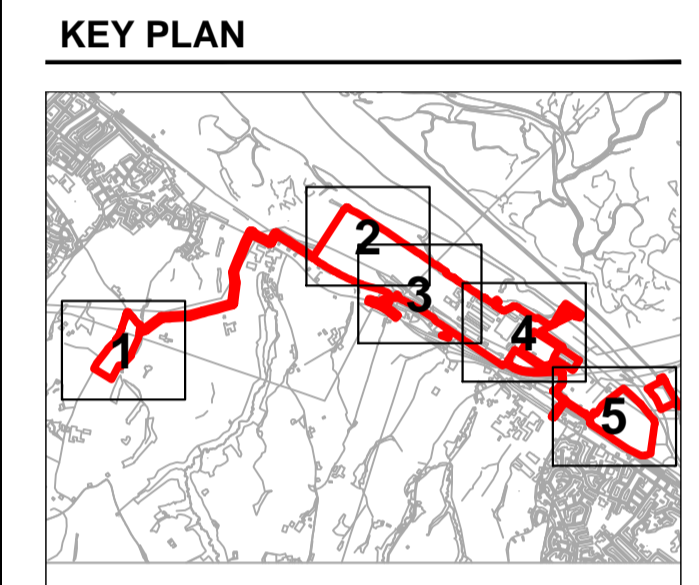
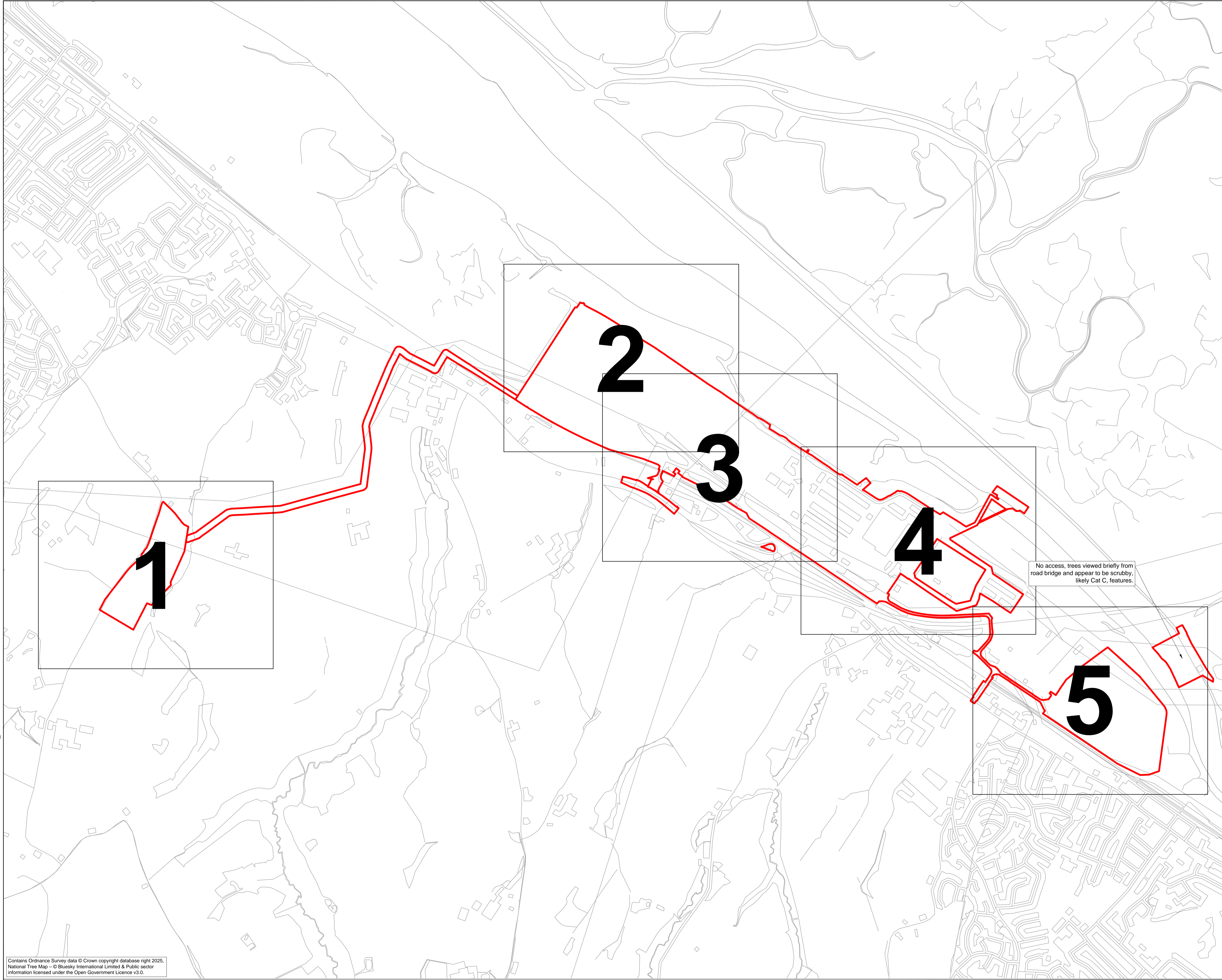
**PROJECT NUMBER**  
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**SHEET TITLE**  
TREE CONSTRAINTS PLAN  
(SHEET 05)

**SHEET NUMBER**      **REV.**  
60717119-ACM-XX-XX-AB-TCP-005      P01



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**KEY**

- RED LINE BOUNDARY
- EXISTING TREE, GROUP, WOODLAND, OR HEDGE TO BE RETAINED
- EXISTING TREE, GROUP, WOODLAND, OR HEDGE TO BE REMOVED
- ROOT PROTECTION AREA OF RETAINED TREES (AS DEFINED BY BS 5837:2012)
- TREE PROTECTION FENCING
- CONSTRUCTION EXCLUSION ZONE (TRACKING OF PLANT, MATERIALS STORAGE, EXCAVATION AND ALL OTHER CONSTRUCTION ACTIVITIES ARE EXCLUDED WITHIN THESE AREAS FOR THE PURPOSES OF PROTECTING TREE HEALTH)
- CONSTRUCTION WORKING ZONE (DAMAGED CONSTRUCTION PROCESSES PERMITTED IN ACCORDANCE WITH THE PRINCIPLES SET OUT WITHIN THE ARBORICULTURAL IMPACT ASSESSMENT)
- VETERAN TREE MARKER (INDICATES POSITION OF A TREE OF VETERAN STATUS)
- ANCIENT TREE MARKER (INDICATES POSITION OF A TREE OF ANCIENT STATUS)
- NATIONAL TREE MAP DATA (PROVIDED BY BLUESKY INTERNATIONAL LTD)
- PROPOSED DESIGNS (VARIED DESIGN PROPOSALS, REFER TO REFERENCES FOR LIST OF SOURCE MATERIALS)
- ANCIENT SEMI-NATURAL WOODLAND W15M BUFFER (AREA CLASSIFIED AS AN ANCIENT SEMI-NATURAL WOODLAND)
- TRADITIONAL ORCHARD (CLASSIFIED AS AN AREA OF TRADITIONAL ORCHARDS)
- SSSI ZONE (AREA CLASSIFIED SITE OF SPECIAL SCIENTIFIC INTEREST)
- CULVERT

**ISSUE/REVISION**

NO	DATE	DESCRIPTION
P01	27/06/25	FIRST ISSUE
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**DRAWING STATUS**  
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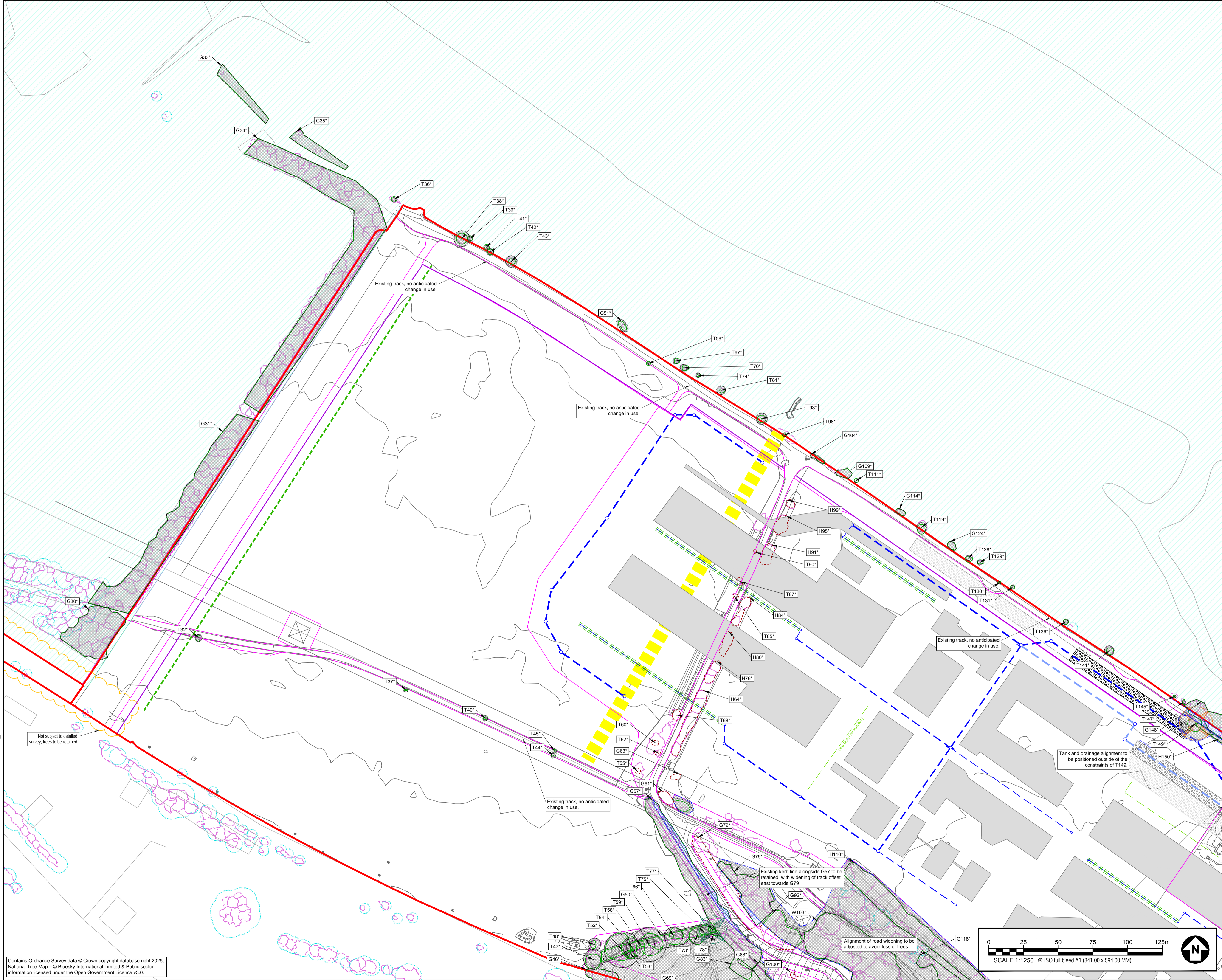
**PROJECT NUMBER**  
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**SHEET TITLE**  
 TREE PROTECTION PLAN  
 (SHEET 00)

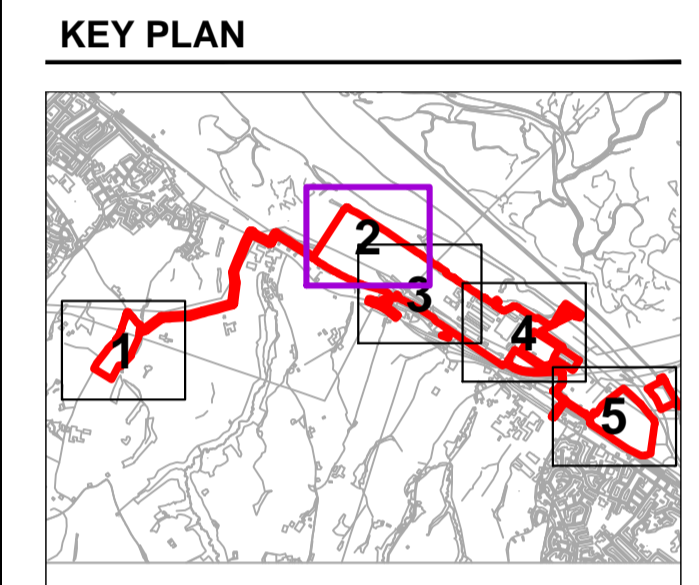
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  5. THE ORIGINAL OF THIS DRAWING WAS PRODUCED IN COLOUR - A MONOCHROME COPY SHOULD NOT BE RELIED UPON.
  6. DRAWING REFERENCES:  
 Designation.dwg  
 H&L\_ACM\_Construction\_Noise\_Barrier\_pl.dwg  
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- KEY**
- RED LINE BOUNDARY
  - EXISTING TREE, GROUP, WOODLAND, OR HEDGE TO BE RETAINED
  - EXISTING TREE, GROUP, WOODLAND, OR HEDGE TO BE REMOVED
  - ROOT PROTECTION AREA OF RETAINED TREES (AS DEFINED BY BS 5837:2012)
  - TREE PROTECTION FENCING
  - CONSTRUCTION EXCLUSION ZONE (TRACKING OF PLANT, MATERIALS STORAGE, EXCAVATION AND ALL OTHER CONSTRUCTION ACTIVITIES ARE EXCLUDED WITHIN THESE AREAS FOR THE PURPOSES OF PROTECTING TREE HEALTH)
  - CONSTRUCTION WORKING ZONE (UNMANAGED CONSTRUCTION PROCESSES PERMITTED IN ACCORDANCE WITH THE PRINCIPLES SET OUT WITHIN THE ARBORICULTURAL IMPACT ASSESSMENT)
  - VETERAN TREE MARKER (INDICATES POSITION OF A TREE OF VETERAN STATUS)
  - ANCIENT TREE MARKER (INDICATES POSITION OF A TREE OF ANCIENT STATUS)
  - NATIONAL TREE MAP DATA (PROVIDED BY BLUESKY INTERNATIONAL LTD)
  - PROPOSED DESIGNS (UNMADE DESIGN PROPOSALS; REFER TO REFERENCES FOR LIST OF SOURCE MATERIALS)
  - ANCIENT SEMI-NATURAL WOODLAND WISM BUFFER (AREA CLASSIFIED AS AN ANCIENT SEMI-NATURAL WOODLAND)
  - TRADITIONAL ORCHARD (CLASSIFIED AS AN AREA OF TRADITIONAL ORCHARD)
  - SSSI ZONE (AREA CLASSIFIED SITE OF SPECIAL SCIENTIFIC INTEREST)
  - CULVERT

**ISSUE/REVISION**

NO	DATE	DESCRIPTION
P01	27.06.25	FIRST ISSUE
1/R		DATE DESCRIPTION

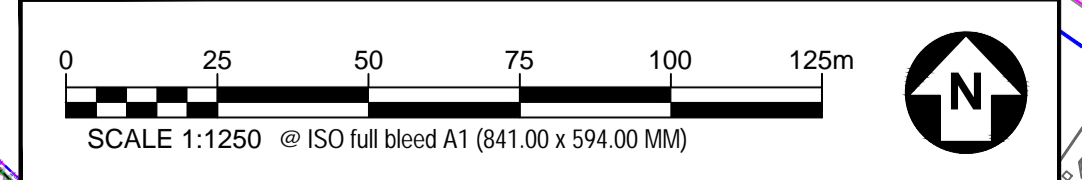
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**PROJECT NUMBER**  
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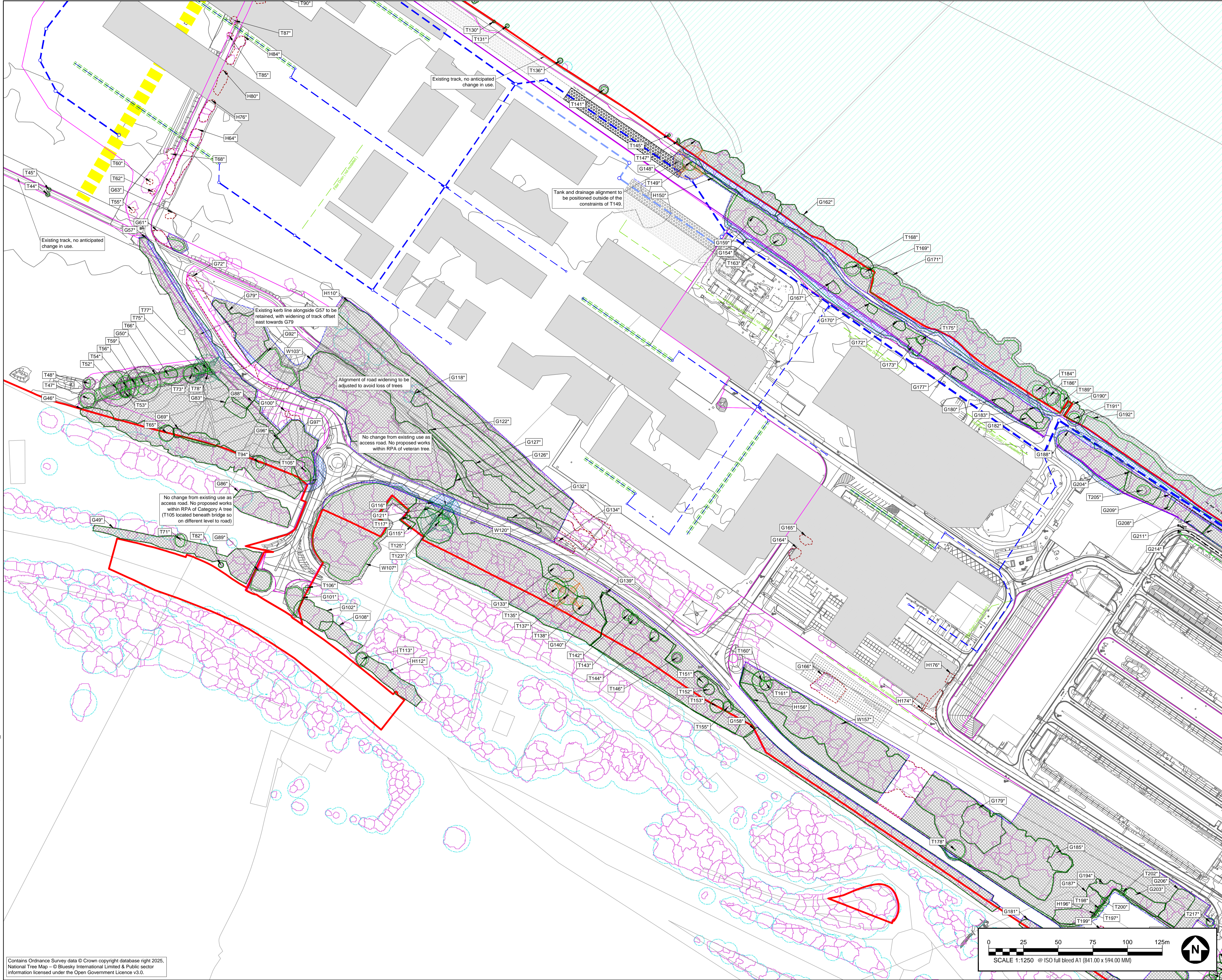
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TREE PROTECTION PLAN  
(SHEET 02)

**SHEET NUMBER** 60717119-ACM-XX-XX-AB-TPP-002 **REV.** P01

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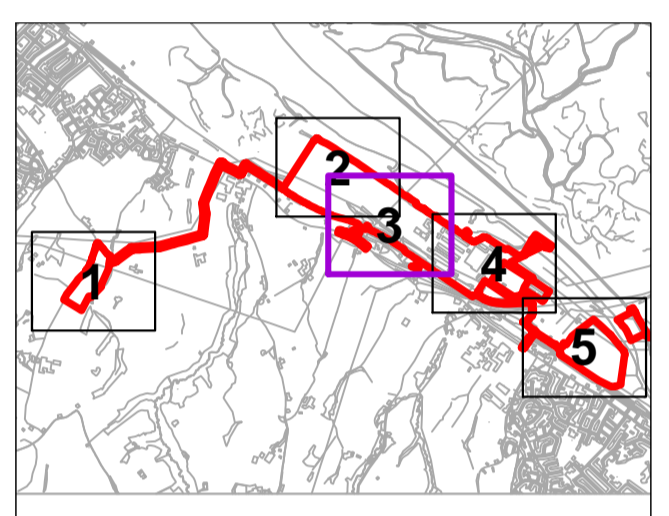
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5. THE ORIGINAL OF THIS DRAWING WAS PRODUCED IN COLOUR - A MONOCHROME COPY SHOULD NOT BE RELIED UPON.
6. DRAWING REFERENCES:  
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Contours.dwg  
CONNAHS QUAY DCO  
CONNAHS QUAY DCO  
CONNAHS QUAY DCO  
CONNAHS QUAY DCO  
CONNAHS QUAY DCO

**KEY PLAN**



**KEY**

- RED LINE BOUNDARY
- EXISTING TREE, GROUP, WOODLAND, OR HEDGE TO BE RETAINED
- EXISTING TREE, GROUP, WOODLAND, OR HEDGE TO BE REMOVED
- ROOT PROTECTION AREA OF RETAINED TREES (AS DEFINED BY BS 5837:2012)
- TREE PROTECTION FENCING
- CONSTRUCTION EXCLUSION ZONE (TRACKING OF PLANT MATERIALS STORAGE, EXCAVATION AND ALL OTHER CONSTRUCTION ACTIVITIES ARE EXCLUDED WITHIN THESE AREAS FOR THE PURPOSES OF PROTECTING TREE HEALTH)
- CONSTRUCTION WORKING ZONE (MANAGED CONSTRUCTION PROCESSES PERMITTED IN ACCORDANCE WITH THE PRINCIPLES SET OUT WITHIN THE ARBORICULTURAL IMPACT ASSESSMENT)
- VETERAN TREE MARKER (INDICATES POSITION OF A TREE OF VETERAN STATUS)
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- NATIONAL TREE MAP DATA (PROVIDED BY BLUESKY INTERNATIONAL LTD)
- PROPOSED DESIGNS (VARIED DESIGN PROPOSALS; REFER TO REFERENCES FOR LIST OF SOURCE MATERIALS)
- ANCIENT SEMI-NATURAL WOODLAND W15M BUFFER (CLASSIFIED AS AN AREA OF TRADITIONAL ORCHARD)
- TRADITIONAL ORCHARD (CLASSIFIED AS AN AREA OF TRADITIONAL ORCHARD)
- SSSI ZONE (AREA CLASSIFIED SITE OF SPECIAL SCIENTIFIC INTEREST)
- CULVERT

**ISSUE/REVISION**

NO	DATE	DESCRIPTION
P01	27.06.25	FIRST ISSUE
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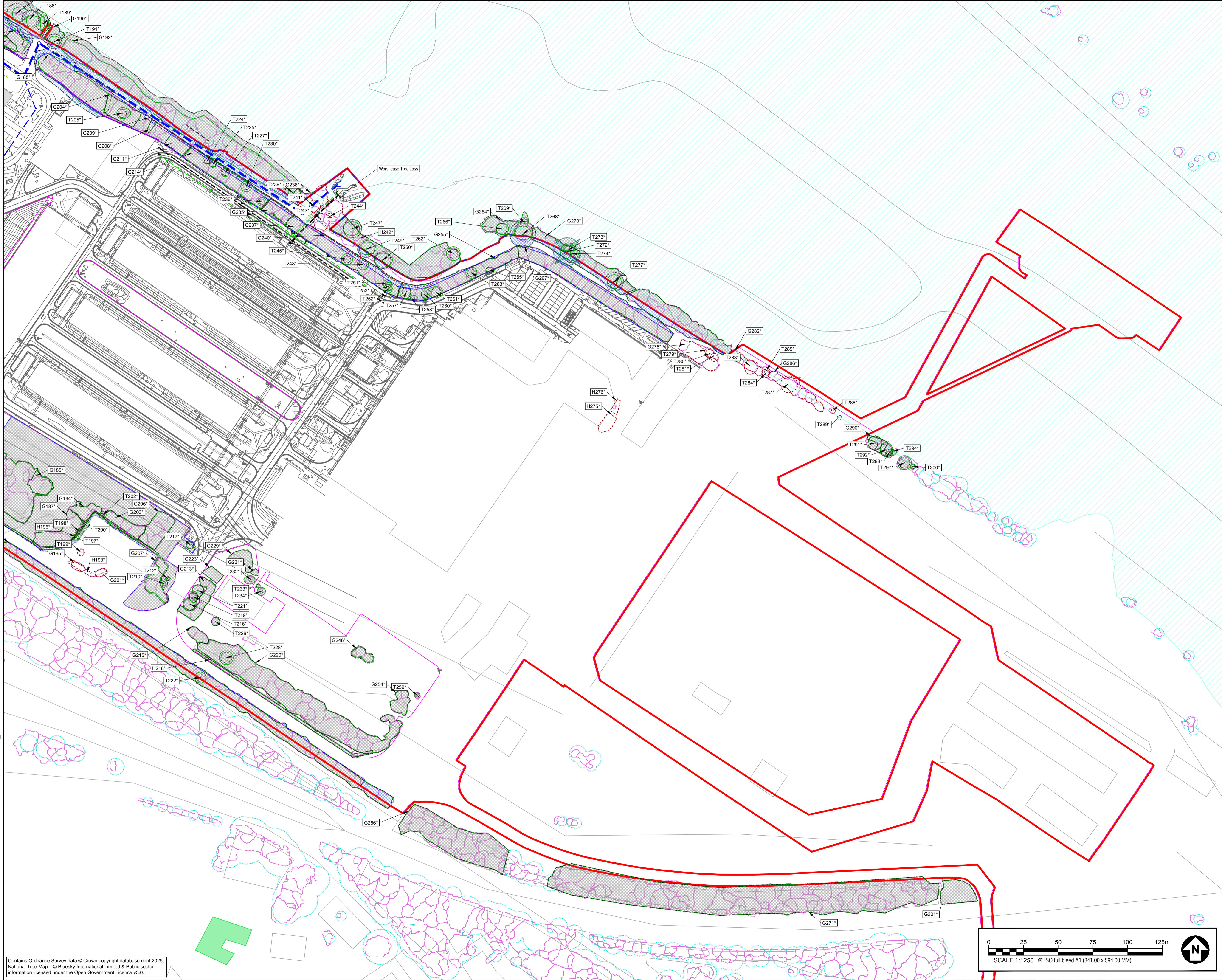
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**SHEET TITLE**  
TREE PROTECTION PLAN (SHEET 03)

**SHEET NUMBER**      **REV.**  
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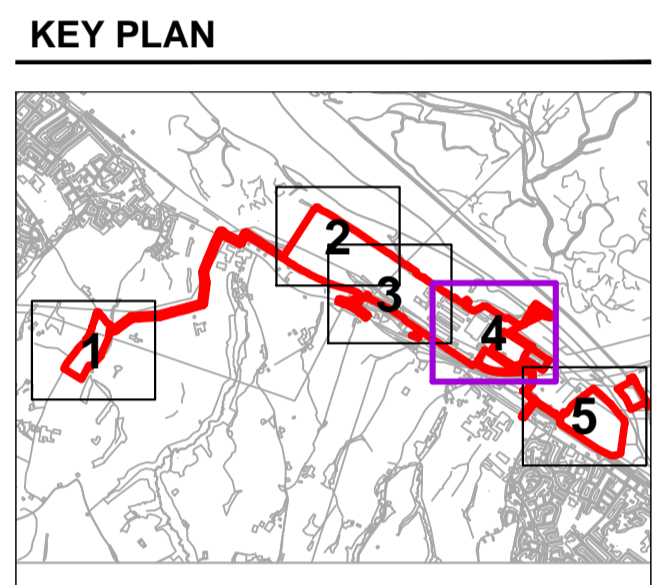
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6. DRAWING REFERENCES:  
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- KEY**
- RED LINE BOUNDARY
  - EXISTING TREE, GROUP, WOODLAND, OR HEDGE TO BE RETAINED
  - EXISTING TREE, GROUP, WOODLAND, OR HEDGE TO BE REMOVED
  - ROOT PROTECTION AREA OF RETAINED TREES (AS DEFINED BY BS 5837:2012)
  - TREE PROTECTION FENCING
  - CONSTRUCTION EXCLUSION ZONE (TRACKING OF PLANT, MATERIALS STORAGE, EXCAVATION AND ALL OTHER CONSTRUCTION ACTIVITIES ARE EXCLUDED WITHIN THESE AREAS FOR THE PURPOSES OF PROTECTING TREE HEALTH)
  - CONSTRUCTION WORKING ZONE (DAMAGED CONSTRUCTION PROCESSES PERMITTED IN ACCORDANCE WITH THE PRINCIPLES SET OUT WITHIN THE ARBORICULTURAL IMPACT ASSESSMENT)
  - VETERAN TREE MARKER (INDICATES POSITION OF A TREE OF VETERAN STATUS)
  - ANCIENT TREE MARKER (INDICATES POSITION OF A TREE OF ANCIENT STATUS)
  - NATIONAL TREE MAP DATA (PROVIDED BY BLUESKY INTERNATIONAL LTD)
  - PROPOSED DESIGNS (HATCHED DESIGN PROPOSALS; REFER TO REFERENCES FOR LIST OF SOURCE MATERIALS)
  - ANCIENT SEMI-NATURAL WOODLAND W15M BUFFER (AREA CLASSIFIED AS AN ANCIENT SEMI-NATURAL WOODLAND)
  - TRADITIONAL ORCHARD (CLASSIFIED AS AN AREA OF TRADITIONAL ORCHARD)
  - SSSI ZONE (AREA CLASSIFIED SITE OF SPECIAL SCIENTIFIC INTEREST)
  - CULVERT

**ISSUE/REVISION**

NO	DATE	DESCRIPTION
P01	27.06.25	FIRST ISSUE
1/R		

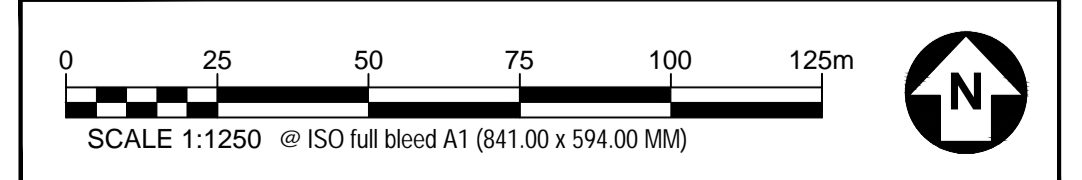
**DRAWING STATUS**  
 ISSUE

**PROJECT NUMBER**  
 60717119

**SHEET TITLE**  
 TREE PROTECTION PLAN  
 (SHEET 04)

**SHEET NUMBER** 60717119-ACM-XX-XX-AB-TPP-004 **REV.** P01

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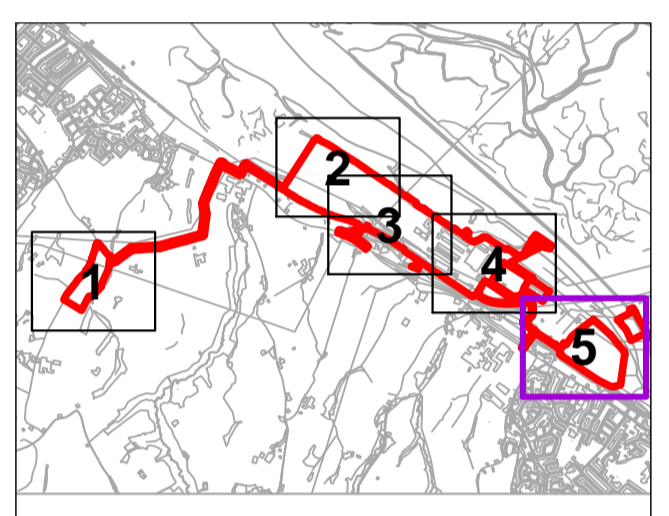


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**GENERAL NOTES**

1. TREE CATEGORIES AS DEFINED BY BS 5817:2012
2. TREE LOCATIONS ARE BASED ON AERIAL IMAGERY AND GPS CO-ORDINATES FROM ON SITE WALKOVER.
3. \* INDICATES A TREE / GROUP WHOSE POSITION IS APPROXIMATE AS BASED UPON AERIAL PHOTOGRAPHY AND ON SITE OBSERVATIONS.
4. PLANS SHOULD BE READ IN CONJUNCTION WITH THE AECOM ARBORICULTURAL REPORT.
5. THE ORIGINAL OF THIS DRAWING WAS PRODUCED IN COLOUR - A MONOCHROME COPY SHOULD NOT BE RELIED UPON.
6. DRAWING REFERENCES:  
Designation.dwg  
NACI\_ACOI\_Construction\_Noise\_Barrier\_pl.dwg  
Habitat\_Loss\_Areas\_pl.dwg  
CONNAHS\_QUIAY\_TPP.dwg  
CONNAHS\_QUIAY\_TPP.dwg  
CONNAHS\_QUIAY\_TPP.dwg  
CONNAHS\_QUIAY\_TPP.dwg  
CONNAHS\_QUIAY\_TPP.dwg  
CONNAHS\_QUIAY\_TPP.dwg

**KEY PLAN**



**KEY**

- RED LINE BOUNDARY
- EXISTING TREE, GROUP, WOODLAND, OR HEDGE TO BE RETAINED
- EXISTING TREE, GROUP, WOODLAND, OR HEDGE TO BE REMOVED
- ROOT PROTECTION AREA OF RETAINED TREES (AS DEFINED BY BS 5817:2012)
- TREE PROTECTION FENCING
- CONSTRUCTION EXCLUSION ZONE (TRACKING OF PLANT, MATERIALS STORAGE, EXCAVATION AND ALL OTHER CONSTRUCTION ACTIVITIES ARE EXCLUDED WITHIN THESE AREAS FOR THE PURPOSES OF PROTECTING TREE HEALTH)
- CONSTRUCTION WORKING ZONE (UNMANAGED CONSTRUCTION PROCESSES PERMITTED IN ACCORDANCE WITH THE PRINCIPLES SET OUT WITHIN THE ARBORICULTURAL IMPACT ASSESSMENT)
- VETERAN TREE MARKER (INDICATES POSITION OF A TREE OF VETERAN STATUS)
- ANCIENT TREE MARKER (INDICATES POSITION OF A TREE OF ANCIENT STATUS)
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**ISSUE/REVISION**

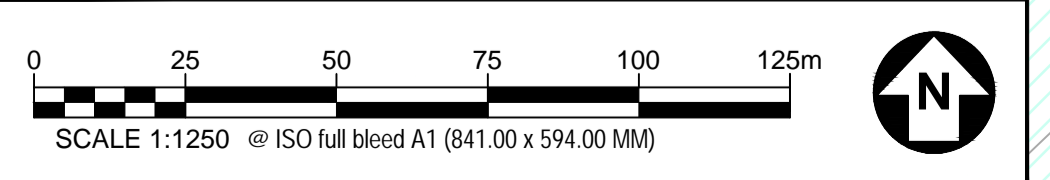
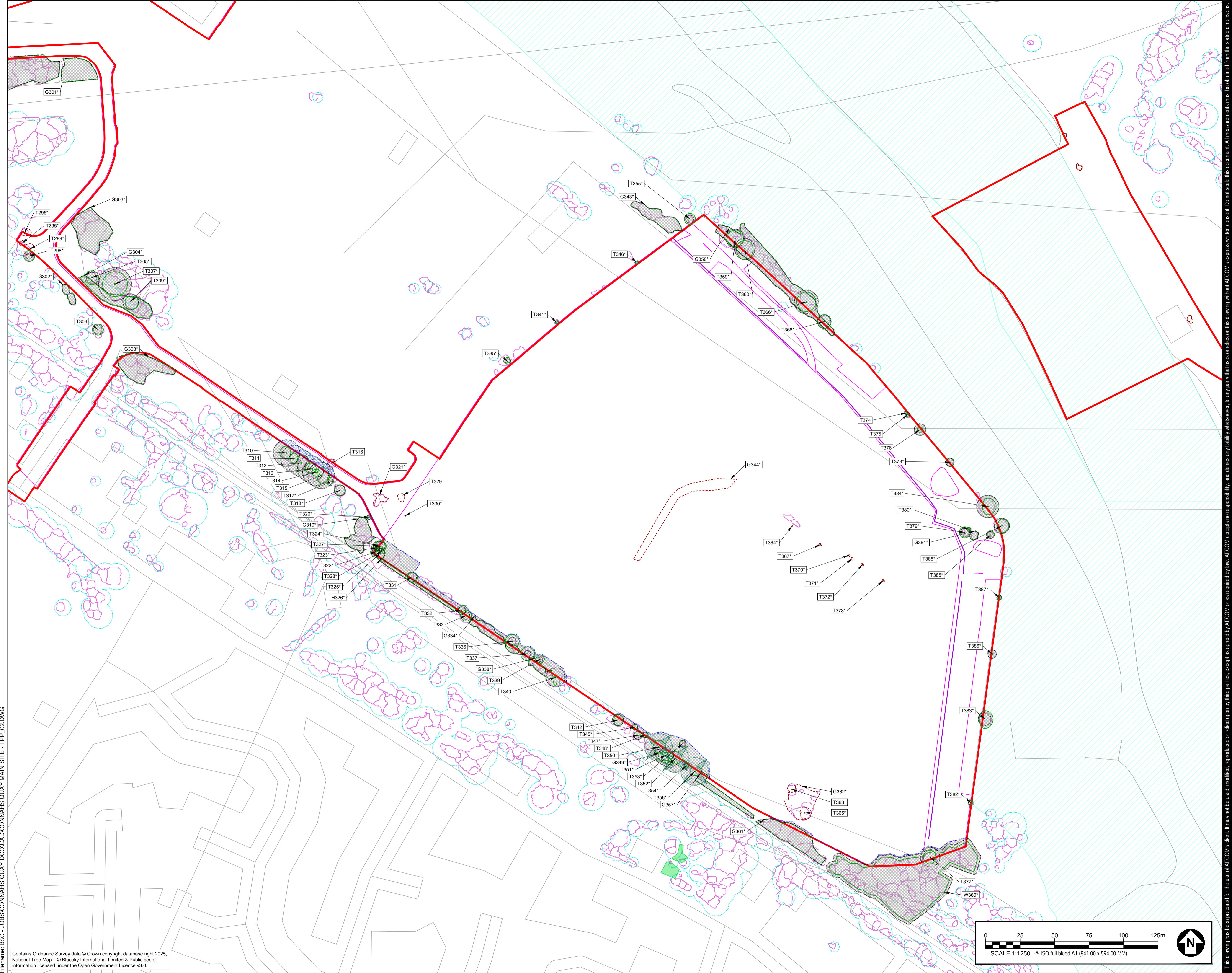
NO	DATE	DESCRIPTION
P01	27.06.25	FIRST ISSUE
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**DRAWING STATUS**  
ISSUE

**PROJECT NUMBER**  
60717119

**SHEET TITLE**  
TREE PROTECTION PLAN  
(SHEET 05)

**SHEET NUMBER**      **REV.**  
60717119-ACM-XX-XX-AB-TPP-005      P01



## Key to Abbreviations

Ref No	Specific identification number given to each tree or group. T=Tree/H=Hedge/G=Group/W=Woodland	
Species	Common name followed by botanical name shown in italics	
RPA	Root Protection Area (As defined by BS5837)	
Stem diameter	Diameter of main stem, measured in millimetres at 1.5 m above ground level. (MS = Multi-stem tree measured in accordance with BS5837 Annexe C)	Av / Average:  indicates an average representative measured dimension for the group or feature
Spread	The width and breadth of the crown. Estimated on the four compass points in metres.	
Crown clearance	The estimated height (in metres) above ground level of the lowest significant branch attachments.	
#	Estimated dimensions	
*	Indicates estimated position of tree (not indicated on topographical survey).	
Category	Categorisation of the quality and benefits of trees on the Construction and Operation Area as per Table 1 and 2 of BS5837. 1=Arboricultural quality/value 2=Landscape quality/value 3=Cultural quality/value (including conservation)	
	A=High quality/value 40yrs+ (light green). B=Moderate quality/value 20yrs+ (mid blue) C=Low quality/value min 10yrs/stem diameter less than 150mm (grey). U=Unsuitable for retention (dark red).	
Life stage	<p><b>Young (Y):</b> Newly planted tree 0-10 years.</p> <p><b>Semi-Mature (SM):</b> Tree in the first third of its normal life expectancy for the species (significant potential for future growth in size).</p> <p><b>Early Mature (EM):</b> Tree in the second third of its normal life expectancy for the species (some potential for future growth in size)</p> <p><b>Mature (M):</b> Tree in the final third of its normal life expectancy for the species (having typically reached its approximate ultimate size).</p> <p><b>Over Mature (OM):</b> Tree beyond the normal life expectancy for the species.</p>	

	<b>Veteran (V):</b> Tree which is of interest biologically, aesthetically or culturally because of its condition, size or age.
Structural condition	<b>Good:</b> No significant structural defects <b>Fair:</b> Structural defects which can be resolved via remedial works. <b>Poor:</b> Structural defects which cannot be resolved via remedial works. <b>Dead:</b> Dead.
Physiological condition	<b>Good:</b> Normal vitality including leaf size, bud growth, density of crown and wound wood development. <b>Fair:</b> Lower than normal vitality, reduced bud development, reduced crown density, reduced response to wounds. <b>Poor:</b> Low vitality, low development and distribution of buds, discoloured leaves, low crown density, little extension growth for the species. <b>Dead:</b> Dead <b>Fair/Good</b> = Indicates an intermediate condition <b>Fair – Good</b> = Indicates a range of conditions (e.g. within a group)
Preliminary management recommendations	Works identified during the tree survey as part of sound arboricultural management, based on the current context of the Construction and Operation Area (where relevant reference has been made to tree management based on the potential future context of the site).
Works to facilitate the development	Tree works identified as necessary to facilitate the proposed works following a desk top analysis of the proposals in relation to tree constraints.

## Annex B: Tree Survey Schedule

Ref. No	Species Common Name (Scientific name)	Estimated Height (m)	Stem Diameter (mm)	Canopy Spread (m)				First Significant Branch & direction (m)	Canopy Clearance Height (m)	Physiological Condition	Life Stage	Structural Condition	Observations	Preliminary Management Recommendations	Works to Facilitate the Proposed Development	Estimated Remaining Contribution (yrs)	Category	RPA Radius (m)	Canopy Cover (m <sup>2</sup> )
				N	S	E	W												
H1*	Blackthorn ( <i>Prunus spinosa</i> ), Hazel ( <i>Corylus avellana</i> ), Holly ( <i>Ilex aquifolium</i> )	1	<50#	0.5	0.5	0.5	0.5	n/a	0	Good	SM	Good	Dense and regularly pruned to current height and spread.			10+	C1,2	0.6	326.4
T2*	Common Oak ( <i>Quercus robur</i> )	10	750#	6	6	10	7	2.0/E	1	Good	M	Good	Located off-site beyond highway. No access to base. Good form although canopy biased to east.			40+	A1,2	9	159.7
H3*	Blackthorn ( <i>Prunus spinosa</i> ), Hazel ( <i>Corylus avellana</i> ), Holly ( <i>Ilex aquifolium</i> )	1	<50#	0.5	0.5	0.5	0.5	n/a	0	Good	SM	Good	Dense and regularly pruned to current height and spread.			10+	C1,2	0.6	407.6
H4*	Blackthorn ( <i>Prunus spinosa</i> ), Hazel ( <i>Corylus avellana</i> )	1	<80#	0.5	0.5	0.5	0.5	n/a	0	Good	SM-EM	Good	Dense and regularly pruned to current height and spread.		Fell in part as shown on TPP.	10+	C1,2	0.96	122.6
G5*	Goat Willow ( <i>Salix caprea</i> ), Elder ( <i>Sambucus nigra</i> ), Ash ( <i>Fraxinus excelsior</i> )	10	<390	4	1	2	2	n/a	0	Good - Fair	SM-EM	Good - Fair	Dense group around wet ditch. Some cut back with flail. Typical, scrubby, wild area with ground compacted by cattle.		Fell in part as shown on TPP.	10+	C1,2	4.68	240.6
T6*	Goat Willow ( <i>Salix caprea</i> )	5	450, 390	8	0.2	7	7	0.5/N	0	Fair	V	Poor	Significant habitat in the form of active decay in two main stems and primary limbs which have partially collapsed towards the north. New shoots developing vertically. Flail damage to south and close to stem base to south.			40+	A3	13	89.9
T7*	Common Oak ( <i>Quercus robur</i> )	9	650#	8	5	9	8	4.0/E	2	Good	EM	Good	Located in hedge on opposite side of road to site. Low limb circa 4 m over road.			20+	B1,2	7.8	173

Ref. No	Species Common Name (Scientific name)	Estimated Height (m)	Stem Diameter (mm)	Canopy Spread (m)				First Significant Branch & direction (m)	Canopy Clearance Height (m)	Physiological Condition	Life Stage	Structural Condition	Observations	Preliminary Management Recommendations	Works to Facilitate the Proposed Development	Estimated Remaining Contribution (yrs)	Category	RPA Radius (m)	Canopy Cover (m <sup>2</sup> )
				N	S	E	W												
W8*	Common Oak ( <i>Quercus robur</i> ), Ash ( <i>Fraxinus excelsior</i> ), Goat Willow ( <i>Salix caprea</i> ), Common Alder ( <i>Alnus glutinosa</i> ), Hazel ( <i>Corylus avellana</i> ), Elder ( <i>Sambucus nigra</i> )	12	<450 #	4	4	4	4	n/a	0	Good - Fair	SM-M	Good - Fair	Woodland along east side of stream on upward sloping banking. Mostly alder with little understory. More varied with some larger specimens adjacent to stream. Occasional goat willow to west of stream of limited individual value.			40+	A1,2	5.4	12532.8
G9*	Ash ( <i>Fraxinus excelsior</i> ), Common Oak ( <i>Quercus robur</i> )	10	<450 #	5	5	5	5	n/a	1	Good - Fair	SM-EM	Good - Fair	On other side of road beyond hedge but with some low canopy over road circa 4 m clearance.			20+	B1,2	5.4	153.6
G10*	Ash ( <i>Fraxinus excelsior</i> )	7	<260 #	4	4	4	4	n/a	2	Fair	SM	Fair	Clump of stems with blackthorn, black bryony, ivy and bramble around bases.			10+	C1,2	3.12	43.9
T11*	Common Oak ( <i>Quercus robur</i> )	7	650#	5	5	3	5	2.0/S	2	Good - Fair	EM	Good - Fair	Located in hedge and covered in dense, mature ivy.			20+	B1,2	7.8	62.6
T12*	Common Oak ( <i>Quercus robur</i> )	7	650#	5	5	5	3	4.0/N	2	Good - Fair	EM	Good - Fair	Located in hedge and covered in dense ivy. Small crown. Central leader removed in past presumably when under power cables since removed. Some stubs and torn wounds towards the road including hazard beam. Minor deadwood.			20+	B1,2	7.8	62.6
T13*	Common Oak ( <i>Quercus robur</i> )	12	720#	6	3	6	8	n/a	0	Fair	V	Fair	No access to stem located on other side of stream. Partially collapsed over field into site with torn stub evident. Dense ivy into crown. Collapsed section showing significant decay/habitat.			40+	A2,3	13	98.6
T14*	Common Oak ( <i>Quercus robur</i> )	6	650#	4	5	4	1	4.0/N	2	Good - Fair	EM	Good - Fair	Located in hedge and covered in dense ivy. Small crown.			20+	B1,2	7.8	35.2

Ref. No	Species Common Name (Scientific name)	Estimated Height (m)	Stem Diameter (mm)	Canopy Spread (m)				First Significant Branch & direction (m)	Canopy Clearance Height (m)	Physiological Condition	Life Stage	Structural Condition	Observations	Preliminary Management Recommendations	Works to Facilitate the Proposed Development	Estimated Remaining Contribution (yrs)	Category	RPA Radius (m)	Canopy Cover (m <sup>2</sup> )
				N	S	E	W												
H15*	Holly ( <i>Ilex aquifolium</i> ), Hazel ( <i>Corylus avellana</i> ), Elder ( <i>Sambucus nigra</i> ), Blackthorn ( <i>Prunus spinosa</i> )	4	<60#	3	3	3	0.5	n/a	0	Good	EM	Good - Fair	Regularly flailed to current spread towards track, left in height and to the east.			10+	C1,2	0.72	354.7
H16*	Holly ( <i>Ilex aquifolium</i> ), Hazel ( <i>Corylus avellana</i> ), Elder ( <i>Sambucus nigra</i> ), Blackthorn ( <i>Prunus spinosa</i> )	1	<60#	0.5	0.5	0.5	0.5	n/a	0	Good	SM	Good - Fair	Regularly flailed to current height and spread.			10+	C1,2	0.72	175.7
T17*	Common Oak ( <i>Quercus robur</i> )	7	550#	6	5	6	5	2.5/E	3	Good	EM	Good - Fair	Located beyond hedge. No access to base. Some stubs in lower crown.			20+	B1,2	6.6	94.7
T18*	Goat Willow ( <i>Salix caprea</i> )	5	280, 220, 280#	8	2	4	3	1.0/N	1	Good	EM	Fair	Multi-stemmed from base with some decay to stubbed stems. Some flail damage to smaller limbs.			10+	C1,2	5.44	54.8
T19*	Common Oak ( <i>Quercus robur</i> )	14	1000 #	10	10	8	7	3.0/SE	2	Good	M	Good	Located in hedge on steep banking up from adjacent track. Dense canopy. Previously pruned back from field leaving some stubs.			40+	A1,2	12	234.9
T20*	Common Alder ( <i>Alnus glutinosa</i> )	12	500#	4	4	4	6	3.0/N W	1	Good	M	Good	To west of stream. Dense ivy covering stem up to top of crown. No access to base. Minor deadwood.			20+	B1,2	6	62.6
G21*	Crack Willow ( <i>Salix fragilis</i> ), Common Alder ( <i>Alnus glutinosa</i> ), Ash ( <i>Fraxinus excelsior</i> ), Common Oak ( <i>Quercus robur</i> )	12	<500 #	4	4	4	4	n/a	0	Good - Fair	SM-M	Good - Fair	Continuation of woodland along east side of stream on upward sloping banking.			40+	A1,2	6	3239.2
T22*	Elder ( <i>Sambucus nigra</i> )	7	360, 260	2	2	0.2	4	3.0/W	1	Good	A	Good	Located to west of stream and beneath willow. Dense ivy into crown. Some deadwood.			40+	A1,2	9	13.2

Ref. No	Species Common Name ( <i>Scientific name</i> )	Estimated Height (m)	Stem Diameter (mm)	Canopy Spread (m)				First Significant Branch & direction (m)	Canopy Clearance Height (m)	Physiological Condition	Life Stage	Structural Condition	Observations	Preliminary Management Recommendations	Works to Facilitate the Proposed Development	Estimated Remaining Contribution (yrs)	Category	RPA Radius (m)	Canopy Cover (m <sup>2</sup> )
				N	S	E	W												
T23*	Common Oak ( <i>Quercus robur</i> )	12	800#	6	5	3	6	4.0/S	2	Good	M	Good	On elevated side of track. Stem with burrs developing. Some major deadwood circa 2 units. One sided due to adjacent tree.			40+	A1,2	9.6	77.5
T24*	Common Oak ( <i>Quercus robur</i> )	12	500#	6	1	5	2	4.0/E	2	Good	EM	Good - Fair	Located in hedge elevated in slope above track.			20+	B1,2	6	38.4
T25*	Common Oak ( <i>Quercus robur</i> )	12	720#	8	10	9	6	4.0/S	2	Good	M	Good	At edge of track on elevated position. Minor typical deadwood and one stubbed limb towards field.			40+	A1,2	8.64	211.4
W26*	Common Alder ( <i>Alnus glutinosa</i> ), Willow ( <i>Salix sp</i> ), Hazel ( <i>Corylus avellana</i> ), Common Oak ( <i>Quercus robur</i> )	18	<500 #	4	4	4	4	n/a	0	Good - Fair	SM-M	Good - Fair	Woodland area to north of track and along edge of stream. Good understory of hazel. Ivy also present.			40+	A1,2	6	1534.8
G27*	Common Alder ( <i>Alnus glutinosa</i> ), Willow ( <i>Salix sp</i> ), Hazel ( <i>Corylus avellana</i> )	18	<450 #	4	4	4	4	n/a	0	Good - Fair	SM-M	Good - Fair	Mostly multi-stemmed alder in wetland area with stream running through. Some hazel and small willow on the west and northern edges.			20+	B1,2	5.4	1253.5
T28*	Crack Willow ( <i>Salix fragilis</i> )	16	1180	12	12	12	12	4.0/SE	0	Good	M	Fair	Large tree with collapsed stems adjacent, rotting and regrowing, considered to be a different tree. Tight union on primary limb to south-east collapsed with section still attached but resting on ground. Decay into resulting wound. Typical stubs and deadwood.			20+	B1,2,3	14.16	450.9

Ref. No	Species Common Name ( <i>Scientific name</i> )	Estimated Height (m)	Stem Diameter (mm)	Canopy Spread (m)				First Significant Branch & direction (m)	Canopy Clearance Height (m)	Physiological Condition	Life Stage	Structural Condition	Observations	Preliminary Management Recommendations	Works to Facilitate the Proposed Development	Estimated Remaining Contribution (yrs)	Category	RPA Radius (m)	Canopy Cover (m <sup>2</sup> )
				N	S	E	W												
T29*	Common Alder ( <i>Alnus glutinosa</i> )	10	1000 #	6	6	6	6	3.0/S W	2	Good - Fair	A	Good - Fair	At edge of stream with silt built up to east of stem. Overflow channel to west with buttress roots visible. Large bole with section collapsed out to north with small section of decayed wood on the ground. Possible internal decay of stem from this wound but unable to see / get full access. Dense ivy in crown. Crown appears to have retrenched in distant past but now with new upright growth in some areas of the crown.			40+	A1,2, 3	15	112.7
G30*	Crack Willow ( <i>Salix fragilis</i> )	14	<400 #	6	6	6	6	n/a	2	Good - Fair	SM	Good - Fair	Group of willow with understory of blackthorn.			20+	B1,2	4.8	1050. 6
G31*	Blackthorn ( <i>Prunus spinosa</i> ), Goat Willow ( <i>Salix caprea</i> ), Elder ( <i>Sambucus nigra</i> ), Guelder Rose ( <i>Viburnum opulus</i> ), Ash ( <i>Fraxinus excelsior</i> ), Wild Rose ( <i>Rosa sp.</i> ), Gorse ( <i>Ulex sp.</i> )	6	<350 #	4	4	4	4	n/a	0	Good - Fair	Y- EM	Good - Fair	Dense low-level vegetation along mound. Pruned back from footpath along field edge. Occasional ash.			10+	C1,2	4.2	2897. 9
T32*	Hawthorn ( <i>Crataegus monogyna</i> )	5	160, 90, 90#	2	3	1	2	n/a	0	Good	EM	Good	At edge of access track. Slightly one-sided to south with dense small diameter growth around lower stem.			10+	C1,2	2.45	11.7

Ref. No	Species Common Name (Scientific name)	Estimated Height (m)	Stem Diameter (mm)	Canopy Spread (m)				First Significant Branch & direction (m)	Canopy Clearance Height (m)	Physiological Condition	Life Stage	Structural Condition	Observations	Preliminary Management Recommendations	Works to Facilitate the Proposed Development	Estimated Remaining Contribution (yrs)	Category	RPA Radius (m)	Canopy Cover (m <sup>2</sup> )
				N	S	E	W												
G33*	Whitebeam species ( <i>Sorbus sp.</i> ), Crack Willow ( <i>Salix fragilis</i> ), Hawthorn ( <i>Crataegus monogyna</i> ), Holly ( <i>Ilex aquifolium</i> ), Gorse ( <i>Ulex sp.</i> ), Yew ( <i>Taxus baccata</i> )	4	<75#	1	1	1	1	n/a	0	Good	Y	Good	Planted with guards. Some of the willow has been twisted into arches.			10+	C1,2	0.9	295.8
G34*	Elder ( <i>Sambucus nigra</i> ), Goat Willow ( <i>Salix caprea</i> ), Gorse ( <i>Ulex sp.</i> ), Alder ( <i>Alnus sp.</i> ), Guelder Rose ( <i>Viburnum opulus</i> ), Wild Cherry ( <i>Prunus avium</i> ), Whitebeam species ( <i>Sorbus sp.</i> ), Wild Rose ( <i>Rosa sp.</i> ), Hawthorn ( <i>Crataegus monogyna</i> )	6	<350 #	4	4	4	4	n/a	0	Good - Fair	Y-EM	Good - Fair	Dense low-level vegetation along mound. Pruned back from footpath along field edge.			10+	C1,2	4.2	4196
G35*	Wild Rose ( <i>Rosa sp.</i> ), Butterfly bush ( <i>Buddleja sp.</i> ), Apple ( <i>Malus sp.</i> ), Elder ( <i>Sambucus nigra</i> )	3	<85#	1	1	1	1	n/a	0	Good	Y-SM	Good	Scrubby group of rose and buddleia.			10+	C1,2	1.02	285.1
T36*	Elder ( <i>Sambucus nigra</i> )	2	120#	2	2	2	2	n/a	0	Good	SM	Good	Low quality specimen swamped by bramble.			10+	C1,2	1.44	12.5
T37*	Hawthorn ( <i>Crataegus monogyna</i> )	2	90, 90#	0.5	0.5	1.5	1.5	n/a	0	Good	SM	Good	Low value specimen located at edge of access track.			10+	C1,2	1.53	2.3

Ref. No	Species Common Name (Scientific name)	Estimated Height (m)	Stem Diameter (mm)	Canopy Spread (m)				First Significant Branch & direction (m)	Canopy Clearance Height (m)	Physiological Condition	Life Stage	Structural Condition	Observations	Preliminary Management Recommendations	Works to Facilitate the Proposed Development	Estimated Remaining Contribution (yrs)	Category	RPA Radius (m)	Canopy Cover (m <sup>2</sup> )
				N	S	E	W												
T38*	Goat Willow ( <i>Salix caprea</i> )	5	280, 300, 200, 120#	4	4	4	4	n/a	0	Good	EM	Fair	Growing out of embankment and lifting tarmac to road. Tight unions at base.			10+	C1,2	5.66	50.1
T39*	Elder ( <i>Sambucus nigra</i> )	3	80, 80, 60#	2	2	2	2	n/a	0	Fair	SM	Fair	Multi-stemmed specimen.			10+	C1,2	1.54	12.5
T40*	Hawthorn ( <i>Crataegus monogyna</i> )	2	120, 90#	1	1	1.5	1.5	0.5/N W	0	Good	SM	Good				10+	C1,2	1.8	4.7
T41*	Elder ( <i>Sambucus nigra</i> )	3	80, 40, 40#	2	2	2	2	n/a	0	Good	EM	Good				10+	C1,2	1.18	12.5
T42*	Elder ( <i>Sambucus nigra</i> )	3	120, 100, 90, 90#	2	2	2.5	2	n/a	0	Good	EM	Good	Multi-stemmed from base.			10+	C1,2	2.42	14.1
T43*	Elder ( <i>Sambucus nigra</i> )	4	220, 160, 140, 120, 90#	2	2	3	2	n/a	1	Fair	M	Fair	Multi-stemmed from base. Significant deadwood although lots of healthy growth.			10+	C1,2	4.09	15.7
T44*	Hawthorn ( <i>Crataegus monogyna</i> )	1	100, 90#	0.5	1	1.5	1.5	n/a	0	Good	SM	Good				10+	C1,2	1.61	3.5
T45*	Blackthorn ( <i>Prunus spinosa</i> )	2	100, 90#	1	0.2	1.5	0.2	0.5/N W	0	Good	SM	Good	Swamped in bramble			10+	C1,2	1.61	1.6
G46*	Sycamore ( <i>Acer pseudoplatanus</i> ), Elder ( <i>Sambucus nigra</i> ), Blackthorn ( <i>Prunus spinosa</i> ), Hawthorn ( <i>Crataegus monogyna</i> )	12	<250 #	4	4	4	4	n/a	0	Good - Fair	Y-EM	Good - Fair	Beyond wall on railway land/cutting.			20+	B2	3	2233.1

Ref. No	Species Common Name (Scientific name)	Estimated Height (m)	Stem Diameter (mm)	Canopy Spread (m)				First Significant Branch & direction (m)	Canopy Clearance Height (m)	Physiological Condition	Life Stage	Structural Condition	Observations	Preliminary Management Recommendations	Works to Facilitate the Proposed Development	Estimated Remaining Contribution (yrs)	Category	RPA Radius (m)	Canopy Cover (m <sup>2</sup> )
				N	S	E	W												
T47*	Hawthorn ( <i>Crataegus monogyna</i> )	8	330, 260, 170, 250, 130, 130, 160, 210, 100, 170	4	7	5	6	1.0/N & W	0	Good	EM	Good	Multi-stemmed and slightly one sided. Possibly a number of trees from ground level but forming one crown.			20+	B1,2	7.25	94.7
T48*	Hawthorn ( <i>Crataegus monogyna</i> )	8	270, 210, 160	3	3	1	3	2.0/N	0	Good	EM	Good	Multi-stemmed and slightly one sided.			20+	B1,2	4.53	18.8
G49*	Hazel ( <i>Corylus avellana</i> ), Ash ( <i>Fraxinus excelsior</i> ), Grey willow ( <i>Salix cinerea</i> ), Common Lime ( <i>Tilia X europaea</i> )	5	<250 #	3	3	3	3	n/a	0	Good - Fair	Y- SM	Good - Fair	Dense thicket with a few ash and lime beginning to grow out from understory. Mostly hazel. Clipped back at edges. Includes some birch to 15 m to back of group.			10+	C1,2	3	1097.5
G50*	Hawthorn ( <i>Crataegus monogyna</i> ), Elder ( <i>Sambucus nigra</i> )	5	<250 #	2	2	2	2	n/a	0	Good - Fair	Y- SM	Good - Poor	Mostly young elder and early mature hawthorn located on steep slope between two fences. Varying in height and condition but no targets.			10+	C1,2	3	563.1
G51*	Hawthorn ( <i>Crataegus monogyna</i> ), Elder ( <i>Sambucus nigra</i> )	3	<250 #	2	2	2	2	n/a	0	Good	Y- EM	Good	Multi stemmed and dense. Two elder one with a young hawthorn growing through it.			10+	C1,2	3	23.9
T52*	Common Oak ( <i>Quercus robur</i> )	18	880, 500, 350#	12	8	6	12	1.0/W	1	Good	M	Fair	On slope. Thick main bole. Stubbed and decayed limb to north from base. Central upper canopy missing due to limb failure with torn stubs around 5 m above ground level to east. Some deadwood.			40+	A1,2	12.85	281.8

Ref. No	Species Common Name (Scientific name)	Estimated Height (m)	Stem Diameter (mm)	Canopy Spread (m)				First Significant Branch & direction (m)	Canopy Clearance Height (m)	Physiological Condition	Life Stage	Structural Condition	Observations	Preliminary Management Recommendations	Works to Facilitate the Proposed Development	Estimated Remaining Contribution (yrs)	Category	RPA Radius (m)	Canopy Cover (m <sup>2</sup> )
				N	S	E	W												
T53*	Hawthorn ( <i>Crataegus monogyna</i> )	5	140, 120, 140, 90, 90, 120, 90#	2	4	5	3	n/a	0	Fair	EM	Fair	Multi stemmed stunted and one sided beneath oak.			10+	C1,2	3.58	37.6
T54*	Sycamore ( <i>Acer pseudoplatanus</i> )	15	550#	8	8	3	8	n/a	1	Good	M	Good - Fair	On slope. Likely topped at 2.5 m in distant past.			20+	B1,2	6.6	137.8
T55*	Elder ( <i>Sambucus nigra</i> )	4	150#	2	2	2	2	n/a	0	Good	SM	Good	Dense bramble at base.		Fell	10+	C1,2	1.8	12.5
T56*	Sycamore ( <i>Acer pseudoplatanus</i> )	15	670, 520	3	9	3	7	5.0/E	1	Good	M	Good	Twin stemmed from ground level. Positioned on sloped ground.			40+	A1,2	10.18	93.9
G57*	Common Lime ( <i>Tilia X europaea</i> ), Hawthorn ( <i>Crataegus monogyna</i> ), Field Maple ( <i>Acer campestre</i> ), Blackthorn ( <i>Prunus spinosa</i> ), Wild Rose ( <i>Rosa sp.</i> ), Sycamore ( <i>Acer pseudoplatanus</i> )	12	<300 #	4	4	4	4	n/a	0	Good	Y-EM	Good	A line of trees along field fence line with more shrubby and hedgerow like trees towards access track. Some maintained by regular pruning to side up and top. Little access due to dense understory and bramble. Max stem diameter approx. 400 mm but mostly a collection of smaller stems. Some previous pruning to provide clearance to high voltage cables at either end of group.			20+	B1,2	3.6	1678.7
T58*	Hawthorn ( <i>Crataegus monogyna</i> )	2	60, 40#	1.5	1.5	1.5	1.5	n/a	0	Good	Y	Good				10+	C1,2	0.87	7
T59*	Sycamore ( <i>Acer pseudoplatanus</i> )	16	900, 500#	8	8	10	6	1.0/N	0	Good	M	Good	Thick main bole with secondary stem extending west. On sloped ground.			40+	A1,2	12.35	200.4
T60*	Elder ( <i>Sambucus nigra</i> )	3	100#	2	2	2	3	n/a	0	Good	SM	Good	Dense bramble at base.		Fell	10+	C1,2	1.2	15.7

Ref. No	Species Common Name (Scientific name)	Estimated Height (m)	Stem Diameter (mm)	Canopy Spread (m)				First Significant Branch & direction (m)	Canopy Clearance Height (m)	Physiological Condition	Life Stage	Structural Condition	Observations	Preliminary Management Recommendations	Works to Facilitate the Proposed Development	Estimated Remaining Contribution (yrs)	Category	RPA Radius (m)	Canopy Cover (m <sup>2</sup> )
				N	S	E	W												
G61*	Hawthorn ( <i>Crataegus monogyna</i> )	4	<450 #	4	4	4	4	n/a	0	Good - Fair	Y-EM	Good - Fair	One large hawthorn with other younger ones. Very dense area of bramble swamping blackthorn and hawthorn.		Fell in part as shown on TPP.	10+	C1,2	5.4	144.6
T62*	Hawthorn ( <i>Crataegus monogyna</i> )	3	75#	1.5	1.5	1.5	3	n/a	0	Good	Y	Good	Dense bramble at base.		Fell	10+	C1,2	0.9	10.6
G63*	Hawthorn ( <i>Crataegus monogyna</i> )	2	<100 #	1.5	1.5	1.5	1.5	n/a	0	Good	SM	Good			Fell	10+	C1,2	1.2	25.9
H64*	Hawthorn ( <i>Crataegus monogyna</i> ), Elder ( <i>Sambucus nigra</i> )	3	<220 #	2	2	2	2	n/a	0	Good	EM	Good - Fair	Dense hedgerow with sections covered in bramble. Flailed back from access track.		Fell	10+	C1,2	2.64	336.4
T65*	Common Oak ( <i>Quercus robur</i> )	12	450#	6	6	5	6	5.0/N	4	Good	SM	Good	Beyond wall. Ivy in crown.			20+	B1,2	5.4	103.3
T66*	Hawthorn ( <i>Crataegus monogyna</i> )	8	550#	6	2	7	3	1.0/E	1	Good	M	Good				20+	B1,2	6.6	62.6
T67*	Elder ( <i>Sambucus nigra</i> )	3	140, 90#	2	2	3	1	n/a	0	Fair	EM	Fair	Some deadwood.			10+	C1,2	2	12.5
T68*	Elder ( <i>Sambucus nigra</i> )	4	100, 90	4	4	3	3	n/a	0	Good	EM	Good			Fell	10+	C1,2	1.61	37.6
G69*	Hawthorn ( <i>Crataegus monogyna</i> )	7	<450 #	5	5	5	5	n/a	0	Good - Fair	EM	Good - Fair	On field side of wall (on site). Some with dense ivy. Mostly multi-stemmed. Stem diameter is an estimated combined max figure. Most easterly tree with snapped but hanging / partially attached limb. Main target would be livestock.			20+	B1,2	5.4	182.1
T70*	Elder ( <i>Sambucus nigra</i> )	3	120, 100, 90, 90#	2	2	4	1	n/a	0	Good	EM	Fair	Some deadwood.			10+	C1,2	2.42	15.7
T71*	Silver Birch ( <i>Betula pendula</i> )	15	410	4	5	3	4	6.0/All	2	Good	EM	Good	Twin stem but union hidden by ivy.			20+	B1,2	4.92	49.3

Ref. No	Species Common Name ( <i>Scientific name</i> )	Estimated Height (m)	Stem Diameter (mm)	Canopy Spread (m)				First Significant Branch & direction (m)	Canopy Clearance Height (m)	Physiological Condition	Life Stage	Structural Condition	Observations	Preliminary Management Recommendations	Works to Facilitate the Proposed Development	Estimated Remaining Contribution (yrs)	Category	RPA Radius (m)	Canopy Cover (m <sup>2</sup> )
				N	S	E	W												
G72*	Common Oak ( <i>Quercus robur</i> ), Hazel ( <i>Corylus avellana</i> ), Birch ( <i>Betula sp</i> ), Guelder Rose ( <i>Viburnum opulus</i> )	1	<75#	0.5	0.5	0.5	0.5	n/a	0	Good - Fair	Y-SM	Good - Fair	Scrub of limited value. Dense areas of bramble.		Fell	10+	C1,2	0.9	610
T73*	Sycamore ( <i>Acer pseudoplatanus</i> )	10	560	5	7	5	6	1.0/N	0	Good	M	Good	On slope with sheep netting attached and absorbed into stem. Stubbed branch at 3 m south-east.			20+	B1,2	6.72	103.3
T74*	Elder ( <i>Sambucus nigra</i> )	3	100, 90#	1	1	2	1	1.0/N W	0	Good	EM	Fair				10+	C1,2	1.61	4.7
T75*	Hawthorn ( <i>Crataegus monogyna</i> )	8	250, 250, 250#	5	2	5	3	1.0/E	1	Good	M	Good				20+	B1,2	5.2	43.8
H76*	Hawthorn ( <i>Crataegus monogyna</i> ), Elder ( <i>Sambucus nigra</i> )	4	<250 #	2	2	2	2	n/a	0	Good	EM	Good - Fair	Dense hedgerow with sections covered in bramble. Flailed back from access track.		Fell	10+	C1,2	3	107.5
T77*	Hawthorn ( <i>Crataegus monogyna</i> )	6	280, 280#	5	2	2	3	1.0/N	1	Poor	V	Fair - Poor	Multi stemmed from base with significant decay to two of three stems. Quite a sparse crown with deadwood and dieback.			20+	B3	10	27.4
T78*	Cherry Plum ( <i>Prunus cerasifera</i> )	5	260	4	0.2	5	0.2	n/a	0	Fair	EM	Poor	Partially collapsed and twisted stem with canopy one sided to north-east. Potential to collapse fully but little target.			<10	U1	3.12	17.1
G79*	Silver Birch ( <i>Betula pendula</i> )	14	200 Avg. 340 Max.	3	3	3	3	n/a	2	Good	SM	Good	Predominantly birch with occasional ash and lime.			20+	B1,2	2.4	758
H80*	Hawthorn ( <i>Crataegus monogyna</i> ), Elder ( <i>Sambucus nigra</i> )	4	<250 #	2	2	2	2	n/a	0	Good	EM	Good - Fair	Dense hedgerow.		Fell	10+	C1,2	3	98.4

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				N	S	E	W												
T81*	Elder ( <i>Sambucus nigra</i> )	3	100, 100, 100, 100, 100, 90, 90#	1	2	3	1	n/a	0	Fair	EM	Poor	Multi-stemmed from base. Significant deadwood, some with jelly ear fungus.			10+	C1,2	3.08	9.4
T82*	Common Lime ( <i>Tilia X europaea</i> )	4	140	2	2	2	2	1.0/N	0	Good	Y	Good			10+	C1,2	1.68	12.5	
G83*	Blackthorn ( <i>Prunus spinosa</i> )	2	<50#	0.5	0.5	0.5	0.5	n/a	0	Good	Y	Good	Scrub blackthorn.			10+	C1,2	0.6	149.4
H84*	Hawthorn ( <i>Crataegus monogyna</i> ), Elder ( <i>Sambucus nigra</i> )	4	<250 #	2	2	2	2	n/a	0	Good	EM	Good - Fair	Dense hedgerow with sections covered in bramble. Flailed back from access track.	Fell		10+	C1,2	3	109.7
T85*	Elder ( <i>Sambucus nigra</i> )	4	100, 90	2	1	3	1	n/a	0	Good	SM	Good	Dense bramble at base.	Fell		10+	C1,2	1.61	9.4
G86*	Sycamore ( <i>Acer pseudoplatanus</i> ), Silver Birch ( <i>Betula pendula</i> ), Hawthorn ( <i>Crataegus monogyna</i> ), Common Oak ( <i>Quercus robur</i> )	14	<250 #	4	4	4	4	n/a	0	Good - Fair	Y-EM	Good - Fair	Viewed only from bridge. Growing on railway cutting. Predominantly sycamore with ivy into crowns.			20+	B1,2	3	648.6
T87*	Hawthorn ( <i>Crataegus monogyna</i> )	4	100, 90	3	3	2	3	n/a	0	Good	SM	Good		Fell		10+	C1,2	1.61	23.5
G88*	Hawthorn ( <i>Crataegus monogyna</i> ), Field Maple ( <i>Acer campestre</i> ), Common Lime ( <i>Tilia X europaea</i> )	6	<260 #	3	3	3	3	n/a	0	Fair	SM	Good - Poor	Clearance pruning with some topped and others felled beneath overhead cables.			10+	C1,2	3.12	156.9

Ref. No	Species Common Name (Scientific name)	Estimated Height (m)	Stem Diameter (mm)	Canopy Spread (m)				First Significant Branch & direction (m)	Canopy Clearance Height (m)	Physiological Condition	Life Stage	Structural Condition	Observations	Preliminary Management Recommendations	Works to Facilitate the Proposed Development	Estimated Remaining Contribution (yrs)	Category	RPA Radius (m)	Canopy Cover (m <sup>2</sup> )
				N	S	E	W												
G89*	Hazel ( <i>Corylus avellana</i> ), Grey willow ( <i>Salix cinerea</i> ), Hawthorn ( <i>Crataegus monogyna</i> ), Wild Cherry ( <i>Prunus avium</i> ), Ash ( <i>Fraxinus excelsior</i> ), Holly ( <i>Ilex aquifolium</i> )	7	<250 #	2	2	2	2	n/a	0	Good - Fair	Y-SM	Good - Poor	The main central grey willow has collapsed with stems leaning into surrounding trees which are mainly hawthorn and hazel. Ivy covering uneven ground with topped rubbish beneath.			10+	C1,2	3	166.6
T90*	Grey willow ( <i>Salix cinerea</i> )	3	75	2.5	1	0.5	2	n/a	0	Good	SM	Fair	Flailed back from road.		Fell	10+	C1,2	0.9	6.9
H91*	Hawthorn ( <i>Crataegus monogyna</i> ), Elder ( <i>Sambucus nigra</i> )	4	<220 #	2	2	2	2	n/a	0	Good	EM	Good - Fair	Dense hedgerow with sections covered in bramble. Flailed back from access track.		Fell	10+	C1,2	2.64	106.9
G92*	Holly ( <i>Ilex aquifolium</i> )	12	<250 #	2	2	2	2	n/a	0	Good - Fair	Y-SM	Good - Poor	Low quality group of drawn up single stemmed trees with a lot of ivy into crowns. Some topped or coppiced beneath cables. No trees of individual value.		Fell in part as shown on TPP.	10+	C1,2	3	522.9
T93*	Elder ( <i>Sambucus nigra</i> )	4	220, 160, 140, 120, 90#	2.5	3	3	3	n/a	1	Fair	M	Fair	Multi-stemmed from base. Significant deadwood although lots of healthy sections.			20+	B1,2	4.09	25.8
T94*	Common Oak ( <i>Quercus robur</i> )	9	350, 280#	4	4	4	2	3.0/N	0	Good	SM	Good	Beyond wall. Twin stemmed. Ivy in crown.			20+	B1,2	5.38	37.6
H95*	Hawthorn ( <i>Crataegus monogyna</i> ), Elder ( <i>Sambucus nigra</i> )	4	<220 #	2	2	2	2	n/a	0	Good	EM	Good - Fair	Dense hedgerow with sections covered in bramble. Flailed back from access track.		Fell	10+	C1,2	2.64	105.2
G96*	Blackthorn ( <i>Prunus spinosa</i> )	2	<50#	0.5	0.5	0.5	0.5	n/a	0	Good	Y	Good	Scrub blackthorn.			10+	C1,2	0.6	61.3

Ref. No	Species Common Name ( <i>Scientific name</i> )	Estimated Height (m)	Stem Diameter (mm)	Canopy Spread (m)				First Significant Branch & direction (m)	Canopy Clearance Height (m)	Physiological Condition	Life Stage	Structural Condition	Observations	Preliminary Management Recommendations	Works to Facilitate the Proposed Development	Estimated Remaining Contribution (yrs)	Category	RPA Radius (m)	Canopy Cover (m <sup>2</sup> )
				N	S	E	W												
G97*	Sycamore ( <i>Acer pseudoplatanus</i> ), Common Oak ( <i>Quercus robur</i> ), Field Maple ( <i>Acer campestre</i> ), Horse Chestnut ( <i>Aesculus hippocastanum</i> ), Lime ( <i>Tilia sp.</i> ), Hawthorn ( <i>Crataegus monogyna</i> )	14	<260 #	3	3	3	3	n/a	0	Good - Fair	SM	Good - Fair	Mostly drawn up trees mostly single stemmed.			20+	B1,2	3.12	603.8
T98*	Elder ( <i>Sambucus nigra</i> )	2	75, 60, 60#	1.5	1.5	1.5	1.5	1.0/N W	0	Dead	SM	Dead	Barely visible, swamped by bramble.			10+	C1,2	1.36	7
H99*	Hawthorn ( <i>Crataegus monogyna</i> ), Elder ( <i>Sambucus nigra</i> )	4	<220 #	2	2	2	2	n/a	0	Good	EM	Good - Fair	Dense hedgerow with sections covered in bramble. Flailed back from access track.		Fell	10+	C1,2	2.64	28.2
G100*	Horse Chestnut ( <i>Aesculus hippocastanum</i> ), Grey willow ( <i>Salix cinerea</i> )	5	<120 #	2	2	2	2	n/a	0	Good	Y	Good	Young trees, differing from main group surveyed separately.		Fell	10+	C1,2	1.44	35.5
G101*	Common Alder ( <i>Alnus glutinosa</i> ), Hawthorn ( <i>Crataegus monogyna</i> ), Wild Cherry ( <i>Prunus avium</i> ), Dogwood ( <i>Cornus sp.</i> ), Grey willow ( <i>Salix cinerea</i> )	4	<250 #	2	2	2	2	n/a	0	Good - Fair	Y-SM	Good - Fair	Dense, scrubby group with ivy. Deadwood.			10+	C1,2	3	162.9
G102*	Ash ( <i>Fraxinus excelsior</i> )	8	<300 #	5	5	5	5	n/a	1	Good - Fair	SM	Good - Fair	A line of individual trees along the back fence of a residential property.			20+	B1,2	3.6	390

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				N	S	E	W												
W103*	Silver Birch ( <i>Betula pendula</i> ), Hazel ( <i>Corylus avellana</i> ), Hawthorn ( <i>Crataegus monogyna</i> ), Sycamore ( <i>Acer pseudoplatanus</i> ), Elder ( <i>Sambucus nigra</i> ), Pine ( <i>Pinus sp</i> ), Cherry Laurel ( <i>Prunus laurocerasus</i> ), Yew ( <i>Taxus baccata</i> ), Scots Pine ( <i>Pinus sylvestris</i> ), Common Oak ( <i>Quercus robur</i> )	12	<500 max <250 # typically	3	3	3	3	n/a	0	Good - Fair	Y-EM	Good - Fair	Cut back from track beneath cables and from cables. Dense understory and quite wet in the lower sections. Lots of ivy as ground cover and into some trees. Steep banking down from roundabout. An area used to tip garden waste with mixed ornamental species. Some larger sycamore with stem diameters of 500 mm but generally most trees are <250 mm.			20+	B1,2	3	4242.6
G104*	Elder ( <i>Sambucus nigra</i> ), Hawthorn ( <i>Crataegus monogyna</i> )	1	<80#	1	1	1	1	n/a	0	Good - Fair	Y-SM	Good - Fair			10+	C1,2	0.96	27.6	
T105*	Common Oak ( <i>Quercus robur</i> )	14	1260	10	7	7	10	3.0/E	3	Good	M	Good	Large bole morphing around stones in wall. Measured at narrowest point, chest height, with bole widening above, where pollarded in past. Three main live sections from this point producing a wide spreading crown. Two stubbed sections also from pollard point with decay and deadwood but not significant. Sounding hammer suggests typical sound wood.			40+	A1,2,3	15	226.2
T106*	Common Lime ( <i>Tilia X europaea</i> )	4	150#	0.2	5	2	3	n/a	0	Good	Y	Poor	Leaning at 45 degrees with corrected crown. Seems stable.			10+	C1,2	1.8	20.4

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				N	S	E	W												
W107*	Sycamore ( <i>Acer pseudoplatanus</i> ), Ash ( <i>Fraxinus excelsior</i> ), Hazel ( <i>Corylus avellana</i> ), Beech ( <i>Fagus sylvatica</i> ), Snowberry ( <i>Symphoricarpos sp.</i> ), Dogwood ( <i>Cornus sp.</i> ), Horse Chestnut ( <i>Aesculus hippocastanum</i> ), Common Oak ( <i>Quercus robur</i> )	18	<550	4	4	4	4	n/a	0	Good - Fair	Y-M	Good - Fair	Woodland mainly consisting of sycamore. Has ivy ground cover extending into the canopies of some trees. One large oak adjacent to the road bridge with low branches extending out towards the road. Minor clearance pruning may be required.			20+	B1,2	6.6	2851.3
G108*	Blackthorn ( <i>Prunus spinosa</i> )	4	<100 #	2	2	2	2	n/a	0	Good - Fair	SM	Good - Fair	Pruned back. Dense thicket hedge type group.			10+	C1,2	1.2	283.9
G109*	Elder ( <i>Sambucus nigra</i> )	3	<180 #	4	4	4	4	n/a	0	Good - Fair	SM-EM	Good - Fair	One larger specimen with smaller tree to east. Both multi-stemmed.			10+	C1,2	2.16	55.3
H110*	Field Maple ( <i>Acer campestre</i> ), Hazel ( <i>Corylus avellana</i> ), Blackthorn ( <i>Prunus spinosa</i> )	12	<300 #	4	4	4	4	n/a	0	Good	SM-EM	Good - Fair	Appears to have been planted as a hedgerow with a dominance of field maple. Some previously topped during line clearance works.			20+	B1,2	3.6	2381.5
T111*	Elder ( <i>Sambucus nigra</i> )	2	75, 60, 60#	1.5	1.5	1.5	1.5	1.0/N W	0	Good	SM	Good	Multi stemmed. Typical form with deadwood and stubs.			10+	C1,2	1.36	7
H112*	Hazel ( <i>Corylus avellana</i> ), Ash ( <i>Fraxinus excelsior</i> ), Blackthorn ( <i>Prunus spinosa</i> ), Holly ( <i>Ilex aquifolium</i> )	4	<150 #	2	2	2	2	n/a	0	Good - Fair	Y-SM	Good - Fair	Dense hedgerow.			10+	C1,2	1.8	474.3
T113*	Common Alder ( <i>Alnus glutinosa</i> )	14	280, 280	4	6	3	4	5.0/All	3	Good	SM	Good - Fair	Dense ivy on stems, no view of union.			20+	B1,2	4.75	54.8
G114*	Elder ( <i>Sambucus nigra</i> )	2	<150 #	2	2	2	2	n/a	0	Good - Poor	Y-SM	Good - Poor	2 individuals in a line. Typical form with deadwood. One in quite a poor condition.			10+	C1,2	1.8	22.7

Ref. No	Species Common Name (Scientific name)	Estimated Height (m)	Stem Diameter (mm)	Canopy Spread (m)				First Significant Branch & direction (m)	Canopy Clearance Height (m)	Physiological Condition	Life Stage	Structural Condition	Observations	Preliminary Management Recommendations	Works to Facilitate the Proposed Development	Estimated Remaining Contribution (yrs)	Category	RPA Radius (m)	Canopy Cover (m <sup>2</sup> )
				N	S	E	W												
G115*	Cherry Laurel ( <i>Prunus laurocerasus</i> )	1	<75#	0.5	0.5	0.5	0.5	n/a	0	Good	EM	Stump	Dense thicket appears to be regrowing from coppice stools.			10+	C1,2	0.9	38.4
G116*	Dogwood ( <i>Cornus sanguinea</i> Dogwood)	2	<50#	0.5	0.5	0.5	0.5	n/a	0	Good - Fair	SM-EM	Good - Fair	Shrubby. Dense. With ivy extending over fence towards road and clipped as a hedge along pavement.			10+	C1,2	0.6	230.9
T117*	Viburnum ( <i>Viburnum tinus</i> )	3	75, 75, 75, 75#	1	2	2	2	n/a	0	Good	EM	Good - Fair	Multi-stemmed. Minor deadwood. Dense.			10+	C1,2	1.8	9.4
G118*	Hazel ( <i>Corylus avellana</i> ), Dogwood ( <i>Cornus sanguinea</i> Dogwood), Willow ( <i>Salix sp</i> )	4	<100 #	2	2	2	2	n/a	0	Good - Fair	Y-SM	Good - Fair	Beneath high voltage cables. Inaccessible due to ground water. Dense bramble in places.			10+	C1,2	1.2	920.7
T119*	Elder ( <i>Sambucus nigra</i> )	4	120, 120, 80, 120, 80, 80, 75, 75, 80, 75#	2	5	3	3.5	1.0/N W	0	Good	M	Good - Fair	Multi stemmed. Typical form with deadwood and stubs.			10+	C1,2	3.43	35.6

Ref. No	Species Common Name ( <i>Scientific name</i> )	Estimated Height (m)	Stem Diameter (mm)	Canopy Spread (m)				First Significant Branch & direction (m)	Canopy Clearance Height (m)	Physiological Condition	Life Stage	Structural Condition	Observations	Preliminary Management Recommendations	Works to Facilitate the Proposed Development	Estimated Remaining Contribution (yrs)	Category	RPA Radius (m)	Canopy Cover (m <sup>2</sup> )
				N	S	E	W												
W120*	Common Oak ( <i>Quercus robur</i> ), White Poplar ( <i>Populus alba</i> ), Scots Pine ( <i>Pinus sylvestris</i> ), Hazel ( <i>Corylus avellana</i> ), Silver Birch ( <i>Betula pendula</i> ), Ash ( <i>Fraxinus excelsior</i> ), Beech ( <i>Fagus sylvatica</i> ), Hawthorn ( <i>Crataegus monogyna</i> ), Blackthorn ( <i>Prunus spinosa</i> )	18	<360	4	4	4	4	n/a	0	Good - Fair	SM-EM	Good - Fair	Woodland group along flat area inside site from railway boundary. Mainly consisting of tall and drawn up beech, birch, ash and pine. Woodland continues down railway cutting but seems to consist of sycamore predominantly. A more scrubby group along slope down towards road with lots of blackthorn scrub and bramble.			20+	B1,2,3	4.32	4699
G121*	Sycamore ( <i>Acer pseudoplatanus</i> )	18	<540	6	8	8	8	n/a	1	Good - Fair	M	Good - Fair	Twin and single stem trees.			20+	B1,2	6.48	449.3
G122*	Hazel ( <i>Corylus avellana</i> ), Dogwood ( <i>Cornus sanguinea</i> )	4	<75	2	2	2	2	n/a	0	Good - Fair	Y-SM	Good - Fair	Scrubby growth along edge of access track. Very wet to north. Covered in dense bramble.			10+	C1,2	0.9	80.5
T123*	Common Oak ( <i>Quercus robur</i> )	12	860	3	3	8	0.2	4.0/E	2	Good - Fair	V	Poor	Thick bole covered in ivy. Torn out wounds with significant cubical rot behind. Stem not fully assessed due to ivy. Stubs and deadwood. Leaning significantly towards east. One stem forming upper crown with significant lower crown formation.			40+	A1,2,3	13	38.5
G124*	Elder ( <i>Sambucus nigra</i> )	3	<110	2	2	2	2	n/a	0	Good - Fair	Y-SM	Good - Fair	Three individuals in a line. Typical form with deadwood.			10+	C1,2	1.32	27.6

Ref. No	Species Common Name (Scientific name)	Estimated Height (m)	Stem Diameter (mm)	Canopy Spread (m)				First Significant Branch & direction (m)	Canopy Clearance Height (m)	Physiological Condition	Life Stage	Structural Condition	Observations	Preliminary Management Recommendations	Works to Facilitate the Proposed Development	Estimated Remaining Contribution (yrs)	Category	RPA Radius (m)	Canopy Cover (m <sup>2</sup> )
				N	S	E	W												
T125*	Common Oak ( <i>Quercus robur</i> )	14	730	5	5	8	0.2	1.5/E	1	Good - Fair	V	Good - Fair	Wound to stem from base up through to primary limb which is partially stubbed with decay back into stem. Fungal fruiting body approx. 300 mm above ground level. One stem forming upper crown with significant lower crown formation.			40+	A1,2,3	13	64.2
G126*	Hawthorn ( <i>Crataegus monogyna</i> ), Blackthorn ( <i>Prunus spinosa</i> )	2	<50#	0.5	0.5	0.5	0.5	n/a	0	Good - Fair	Y-SM	Good - Fair	Scrub growth on banking. Limited value.			10+	C1,2	0.6	202.2
G127*	Dogwood ( <i>Cornus sp.</i> ), Willow ( <i>Salix sp.</i> ), Hazel ( <i>Corylus avellana</i> ), Silver Birch ( <i>Betula pendula</i> )	6	<160 #	2	2	2	2	n/a	0	Good	Y-SM	Good	Dense shrubby group. Generally low growing species in area beneath power cables. Wet area covered with yellow dogwood with a few individual trees	Fell in part as shown on TPP.	10+	C1,2	1.92	1177.2	
T128*	Elder ( <i>Sambucus nigra</i> )	3	80, 75, 60, 60, 60#	1	3	3	2.5	1.0/NW	0	Good	SM	Fair	Multi stemmed. Typical form with deadwood and stubs.			10+	C1,2	1.81	17.2
T129*	Elder ( <i>Sambucus nigra</i> )	3	75, 60, 60, 60, 60#	2	1	3	2	1.0/NW	0	Good	SM	Fair	Multi stemmed. Typical form with deadwood and stubs.			10+	C1,2	1.7	11.7
T130*	Hawthorn ( <i>Crataegus monogyna</i> )	2	75#	1	1	1	1	n/a	0	Good	Y	Good				10+	C1,2	0.9	3.1
T131*	Elder ( <i>Sambucus nigra</i> )	2	75, 75#	1.5	1.5	1.5	1.5	n/a	0	Good	SM	Fair				10+	C1,2	1.27	7
G132*	Hazel ( <i>Corylus avellana</i> )	4	<75#	2	2	2	2	n/a	0	Good	SM	Good	Growing at the base of the gabions.			10+	C1,2	0.9	123.9

Ref. No	Species Common Name (Scientific name)	Estimated Height (m)	Stem Diameter (mm)	Canopy Spread (m)				First Significant Branch & direction (m)	Canopy Clearance Height (m)	Physiological Condition	Life Stage	Structural Condition	Observations	Preliminary Management Recommendations	Works to Facilitate the Proposed Development	Estimated Remaining Contribution (yrs)	Category	RPA Radius (m)	Canopy Cover (m <sup>2</sup> )
				N	S	E	W												
G133*	Silver Birch ( <i>Betula pendula</i> ), Guelder Rose ( <i>Viburnum opulus</i> ), Holly ( <i>Ilex aquifolium</i> ), Dogwood ( <i>Cornus sanguinea</i> Dogwood)	12	<340 #	4	4	4	4	n/a	0	Good - Fair	SM	Good - Fair	Three individual birch forming an attractive group. Dense guelder, rose and some holly beneath. Blackthorn scrub also beginning to encroach.			20+	B1,2	4.08	145.1
G134*	Hazel ( <i>Corylus avellana</i> ), Hawthorn ( <i>Crataegus monogyna</i> ), Dogwood ( <i>Cornus sanguinea</i> Dogwood)	3	<75	1	1	1	1	n/a	0	Good	Y	Good		Fell	10+	C1,2	0.9	81	
T135*	Goat Willow ( <i>Salix caprea</i> )	15	750	7	7	7	7	5.0/W	2	Good	M	Fair	Cut back to a 1 m stump in the distant past. Six main new sections forming upright and dense crown. Much older than rest of woodland.			20+	B1,2	9	153.4
T136*	Elder ( <i>Sambucus nigra</i> )	3	75, 60, 60, 60, 60#	2	2	2	2	1.0/N W	0	Good	SM	Fair				10+	C1,2	1.7	12.5
T137*	Goat Willow ( <i>Salix caprea</i> )	15	640	7	7	7	7	n/a	2	Good	A	Fair	Cut back to circa 1.4 m stump in the distant past. New sections forming upright and dense crown. Much older than rest of woodland.			20+	B1,2	7.68	153.4
T138*	Goat Willow ( <i>Salix caprea</i> )	15	570	7	7	7	7	n/a	2	Good	M	Fair	Likely its natural form. Multi stemmed and wide spreading crown. Much older than rest of woodland.			20+	B1,2	6.84	153.4

Ref. No	Species Common Name (Scientific name)	Estimated Height (m)	Stem Diameter (mm)	Canopy Spread (m)				First Significant Branch & direction (m)	Canopy Clearance Height (m)	Physiological Condition	Life Stage	Structural Condition	Observations	Preliminary Management Recommendations	Works to Facilitate the Proposed Development	Estimated Remaining Contribution (yrs)	Category	RPA Radius (m)	Canopy Cover (m <sup>2</sup> )
				N	S	E	W												
G139*	Hawthorn ( <i>Crataegus monogyna</i> ), Dogwood ( <i>Cornus sanguinea</i> Dogwood), Holly ( <i>Ilex aquifolium</i> ), Hazel ( <i>Corylus avellana</i> ), Guelder Rose ( <i>Viburnum opulus</i> ), Birch ( <i>Betula sp.</i> ), Butterfly bush ( <i>Buddleja sp.</i> ), Blackthorn ( <i>Prunus spinosa</i> )	10	<150 #	2	2	2	2	n/a	0	Good - Fair	Y-SM	Good - Fair	Continuation of group but dominated by shrubby species with few of narrow, upright form. Blackthorn scrub and bramble and rose on slope in areas without trees. Some ground ivy and dense moss. The woodland on the top of the slope differs to that on slope.			10+	C1,2	1.8	3400.4
G140*	Dogwood ( <i>Cornus sanguinea</i> Dogwood), Guelder Rose ( <i>Viburnum opulus</i> ), Holly ( <i>Ilex aquifolium</i> ), Hazel ( <i>Corylus avellana</i> ), Silver Birch ( <i>Betula pendula</i> ), Butterfly bush ( <i>Buddleja sp.</i> ), Blackthorn ( <i>Prunus spinosa</i> ), Hawthorn ( <i>Crataegus monogyna</i> )	8	150	2	2	2	2	n/a	0	Good - Fair	Y-SM	Good - Fair			10+	C1,2	1.8	3361	
T141*	Elder ( <i>Sambucus nigra</i> )	5	150, 100, 120, 120, 100, 90, 90#	2	3	3	2	n/a	0	Fair	EM	Fair	Multi-stemmed from base. Significant deadwood, some with jelly ear fungus.			10+	C1,2	3.49	19.6
T142*	Silver Birch ( <i>Betula pendula</i> )	10	230	4	4	4	4	n/a	2	Good	SM	Good	One of bigger trees within the front area.			20+	B1,2	2.76	50.1

Ref. No	Species Common Name (Scientific name)	Estimated Height (m)	Stem Diameter (mm)	Canopy Spread (m)				First Significant Branch & direction (m)	Canopy Clearance Height (m)	Physiological Condition	Life Stage	Structural Condition	Observations	Preliminary Management Recommendations	Works to Facilitate the Proposed Development	Estimated Remaining Contribution (yrs)	Category	RPA Radius (m)	Canopy Cover (m <sup>2</sup> )
				N	S	E	W												
T143*	Silver Birch ( <i>Betula pendula</i> )	10	270	4	4	4	4	n/a	2	Good	SM	Good	One of bigger trees within the front area. Works as an individual.			20+	B1,2	3.24	50.1
T144*	Silver Birch ( <i>Betula pendula</i> )	15	200, 220	6	3	3	3	n/a	2	Good	SM	Good	One of bigger trees within the area. Twin stemmed from base.			20+	B1,2	3.57	42.3
T145*	Elder ( <i>Sambucus nigra</i> )	3	75#	1	1	1	1	1.0/N W	0	Fair	SM	Fair	Swamped by bramble. Crown barely visible.			10+	C1,2	0.9	3.1
T146*	Silver Birch ( <i>Betula pendula</i> )	7	250	4	4	4	4	n/a	2	Good	SM	Fair	Forked at 1.4 m. Possibly topped in past but stem covered in dense ivy.			20+	B1,2	3	50.1
T147*	Elder ( <i>Sambucus nigra</i> )	3	60, 40, 40#	2	2	1	1	n/a	0	Fair	SM	Poor	Multi-stemmed from base. Some deadwood.			10+	C1,2	0.99	6.3
G148*	White Poplar ( <i>Populus alba</i> )	15	<500 #	6	6	6	6	n/a	0	Good - Fair	SM-EM	Good - Fair	Some pruning in upper crowns in past. Weakly attached limbs adjacent to poor stubs.	Reinspect annually.		20+	B1,2	6	1147.9
T149*	Goat Willow ( <i>Salix caprea</i> )	8	800	4	6	4	6	1.0/S	1	Good	A	Good - Fair	Likely ancient. Crown reduced to around 4 m with vigorous growth forming current crown. However, recent extension growth, particularly in lower crown appears reduced for species. Some deadwood and minor bark wounds but no significant veteran features.			40+	A1,2,3	12	78.3
H150*	White Poplar ( <i>Populus alba</i> )	1	<60#	0.5	0.5	0.5	0.5	n/a	0	Good	Y	Fair	Flailed as a hedge. Suckers encroaching into field to south.			10+	C1,2	0.72	103.9
T151*	Silver Birch ( <i>Betula pendula</i> )	10	340#	4	4	4	4	n/a	2	Good	SM	Good	One of bigger trees within the front area. Works as an individual.			20+	B1,2	4.08	50.1
T152*	Silver Birch ( <i>Betula pendula</i> )	14	320#	4	4	4	4	n/a	2	Good	SM	Good	One of bigger trees within the front area. Works as an individual.			20+	B1,2	3.84	50.1
T153*	Common Oak ( <i>Quercus robur</i> )	12	400#	5	5	5	5	2.0/S	2	Good	EM	Fair	Located between chain link fence and wall.			20+	B1,2	4.8	78.3

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				N	S	E	W												
G154*	Hazel ( <i>Corylus avellana</i> ), Elder ( <i>Sambucus nigra</i> ), Aspen ( <i>Populus tremula</i> ), Silver Birch ( <i>Betula pendula Youngii</i> ), Rowan ( <i>Sorbus aucuparia</i> ), Hawthorn ( <i>Crataegus monogyna</i> ), Blackthorn ( <i>Prunus spinosa</i> ), Alder ( <i>Alnus sp</i> ), Willow ( <i>Salix sp</i> )	9	<250 #	1	1	1	1	n/a	0	Good - Fair	Y-SM	Good - Fair	Growing on embankment forming screen. Dense in some areas but more sparse in others. Rose, bramble and blackthorn understory. Clipped back from fence line and access track.			10+	C1,2	3	4561.5
T155*	Birch ( <i>Betula sp</i> )	12	280	4	4	4	4	n/a	2	Good	SM	Good	Forked at 2 m with included union.			20+	B1,2	3.36	50.1
H156*	Hawthorn ( <i>Crataegus monogyna</i> ), Elder ( <i>Sambucus nigra</i> ), Holly ( <i>Ilex aquifolium</i> ), Viburnum ( <i>Viburnum sp.</i> )	1	<50#	0.5	0.5	0.5	0.5	n/a	0	Good	SM	Good	Regularly pruned to current height and spread. Dense with foliage to base.	Fell in part as shown on TPP.		10+	C1,2	0.6	294
W157*	Hazel ( <i>Corylus avellana</i> ), Hawthorn ( <i>Crataegus monogyna</i> ), Silver Birch ( <i>Betula pendula</i> ), Dogwood ( <i>Cornus sanguinea</i> Dogwood), Elder ( <i>Sambucus nigra</i> ), Alder ( <i>Alnus sp</i> )	14	<200 #	2	2	2	2	n/a	0	Good - Dead	Y-SM	Good - Dead	Scrub/woodland area. Mostly below 150 mm diameter but some birch slightly larger although generally drawn up and spindly. Some understory of snowberry, dogwood, rose. Some pruned back from overhead power cables in recent past and historically. A few dead and dying young alder/unknown trees in central area of group. Low target.	Fell in part as shown on TPP.		20+	B1,2	2.4	7634.1

Ref. No	Species Common Name (Scientific name)	Estimated Height (m)	Stem Diameter (mm)	Canopy Spread (m)				First Significant Branch & direction (m)	Canopy Clearance Height (m)	Physiological Condition	Life Stage	Structural Condition	Observations	Preliminary Management Recommendations	Works to Facilitate the Proposed Development	Estimated Remaining Contribution (yrs)	Category	RPA Radius (m)	Canopy Cover (m <sup>2</sup> )
				N	S	E	W												
G158*	Hazel ( <i>Corylus avellana</i> ), Silver Birch ( <i>Betula pendula</i> ), Ash ( <i>Fraxinus excelsior</i> ), Goat Willow ( <i>Salix caprea</i> ), Willow ( <i>Salix sp.</i> ), Common Oak ( <i>Quercus robur</i> ), Guelder Rose ( <i>Viburnum opulus</i> ), Elder ( <i>Sambucus nigra</i> )	6	<140 #	2	2	2	2	n/a	0	Good - Fair	SM-EM	Good - Fair	Dense vegetation between access road and railway. Some formal shrub planting towards road regularly pruned. Some young, planted oak with good potential as individuals. Formal shrubs within group pruned from road edge including cotoneaster, box elder, Spirea, Phillyrea, berberis, snowberry, Viburnum tinus, Olearia			20+	B2	1.68	1969.9
G159*	Scots Pine ( <i>Pinus sylvestris</i> )	9	<320	4	4	4	4	n/a	1	Good	SM	Good	On top of banking. Four individual trees.			20+	B1,2	3.84	119.1
T160*	Silver Birch ( <i>Betula pendula</i> )	14	420, 350	7	4	2	7	1.5/N	1	Good	M	Good	Two main sections from short bole. Ivy into crown. Low limb to north.			20+	B1,2	6.56	77.5
T161*	Silver Birch ( <i>Betula pendula</i> )	12	400	2	5	4	4.5	1.0/S	1	Good	M	Good				20+	B1,2	4.8	46.6
G162*	Silver Birch ( <i>Betula pendula</i> ), Hazel ( <i>Corylus avellana</i> ), Goat Willow ( <i>Salix caprea</i> ), Ash ( <i>Fraxinus excelsior</i> ), Elder ( <i>Sambucus nigra</i> ), Wild Rose ( <i>Rosa sp.</i> ), Sycamore ( <i>Acer pseudoplatanus</i> )	12	<300 #	4	4	4	4	n/a	0	Good	Y-EM	Good - Fair	Strip along edge of access track. Clipped back from track. Mostly birch along this section. Some poor-quality willow with collapsed stems into reserve but no significant target.			20+	B1,2	3.6	1004.4
T163*	Silver Birch ( <i>Betula pendula</i> )	14	320	5	4	6	6	1.5/W	1	Good	EM	Good	On top of banking with slight lean to north-east.			20+	B1,2	3.84	84.5
G164*	Himalayan birch ( <i>Betula utilis</i> )	12	<240	4	4	4	4	n/a	0.5	Good	SM	Good	Three trees in a group with shrub understory. One circa 6 m in height. Viburnum and holly beneath.	Fell		20+	B1,2	2.88	56.3

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				N	S	E	W												
G165*	Himalayan birch ( <i>Betula utilis</i> )	12	<240	4	4	4	4	n/a	0.5	Good	SM	Good	Three trees in a group with shrub understory. Ivy on stems, only minor on two but quite significant on two. Berberis, Viburnum and holly beneath.		Fell	20+	B1,2	2.88	46.3
G166*	Elder ( <i>Sambucus nigra</i> ), Dogwood ( <i>Cornus sp.</i> ), Wild Rose ( <i>Rosa sp.</i> )	3	<50#	0.5	0.5	0.5	0.5	n/a	0	Good	SM	Fair	Dense scrub area. Previously topped at 1.5 m in past. Swamped by bramble.		Fell	10+	C1,2	0.6	307.3
G167*	Scots Pine ( <i>Pinus sylvestris</i> )	9	<320	4	4	4	4	n/a	1	Good	EM	Good	On top of banking. Three individual trees, one twin stemmed.			20+	B1,2	3.84	56.7
T168*	Silver Birch ( <i>Betula pendula</i> )	12	380	34	6	6	6	3.0/S	0	Good	EM	Good				20+	B1,2	4.56	375.8
T169*	Silver Birch ( <i>Betula pendula</i> )	8	330	3	5	6	4	1.0/W	1	Good	EM	Fair	Located outside hide. Leaning to east.			20+	B1,2	3.96	62.6
G170*	Silver Birch ( <i>Betula pendula</i> )	14	<320 #	5	5	5	5	n/a	0	Good	SM	Good	Two individuals planted adjacent to each other and forming a small group.			20+	B1,2	3.84	36.5
G171*	Hazel ( <i>Corylus avellana</i> ), Holly ( <i>Ilex aquifolium</i> ), Silver Birch ( <i>Betula pendula</i> ), Alder ( <i>Alnus sp.</i> ), Gorse ( <i>Ulex sp.</i> ), Wild Rose ( <i>Rosa sp.</i> ), Sycamore ( <i>Acer pseudoplatanus</i> ), Blackthorn ( <i>Prunus spinosa</i> ), Holly ( <i>Ilex aquifolium</i> ), Hawthorn ( <i>Crataegus monogyna</i> ), Scots Pine ( <i>Pinus sylvestris</i> ), Goat Willow ( <i>Salix caprea</i> )	12	<500 #	4	4	4	4	n/a	0	Good - Fair	Y-EM	Good - Fair	Generally dense strip of vegetation along edge of access track. Pruned back from track, hedge like. Some areas less dense but collectively providing a good screen along the edge of the reserve.			20+	B1,2	6	3210.1

Ref. No	Species Common Name (Scientific name)	Estimated Height (m)	Stem Diameter (mm)	Canopy Spread (m)				First Significant Branch & direction (m)	Canopy Clearance Height (m)	Physiological Condition	Life Stage	Structural Condition	Observations	Preliminary Management Recommendations	Works to Facilitate the Proposed Development	Estimated Remaining Contribution (yrs)	Category	RPA Radius (m)	Canopy Cover (m <sup>2</sup> )
				N	S	E	W												
G172*	Scots Pine ( <i>Pinus sylvestris</i> )	9	<350	4	4	4	4	n/a	0	Good	SM	Good	Three individuals planted adjacent to each other and forming a small group. One stem failed at 2 m. Two slightly one-sided canopies remaining.			20+	B1,2	4.2	45.8
G173*	Scots Pine ( <i>Pinus sylvestris</i> )	9	<360	4	4	4	4	n/a	0	Good	SM	Good	Three individual planted adjacent to each other and forming a small group.			20+	B1,2	4.32	85
H174*	Juniper ( <i>Juniperus sp.</i> ), Dogwood ( <i>Cornus sp.</i> ), Cotoneaster ( <i>Cotoneaster sp.</i> ), Viburnum ( <i>Viburnum sp.</i> ), Wild Rose ( <i>Rosa sp.</i> ), Whitebeam species ( <i>Sorbus sp.</i> )	1	<75#	0.5	0.5	0.5	0.5	n/a	0	Good	SM	Good	Regularly pruned as a dense shrub group.		Fell	10+	C1,2	0.9	201.5
T175*	Silver Birch ( <i>Betula pendula</i> )	12	240#	3	3	3	4	4.0/N	3	Good	SM	Good	No access to base. Potential as individual.			20+	B1,2	2.88	32.9
H176*	Juniper ( <i>Juniperus sp.</i> ), Dogwood ( <i>Cornus sp.</i> ), Barberry ( <i>Berberis sp.</i> ), Viburnum ( <i>Viburnum sp.</i> ), Wild Rose ( <i>Rosa sp.</i> )	1	<75#	0.5	0.5	0.5	0.5	n/a	0	Good	SM	Good	Regularly pruned as a dense shrub group.		Fell	10+	C1,2	0.9	29.5
G177*	Scots Pine ( <i>Pinus sylvestris</i> )	9	<320 #	4	4	4	4	n/a	0	Good	EM	Good	Five individuals planted adjacent to each other and forming a small group.			20+	B1,2	3.84	85.4
T178*	Sycamore ( <i>Acer pseudoplatanus</i> )	12	490, 420	7	7	7	7	2.0/NE & SE	2	Good	M	Fair	Twin stemmed from base. Crown lifted and pruned back from the road in the past.			20+	B1,2	7.74	153.4

Ref. No	Species Common Name (Scientific name)	Estimated Height (m)	Stem Diameter (mm)	Canopy Spread (m)				First Significant Branch & direction (m)	Canopy Clearance Height (m)	Physiological Condition	Life Stage	Structural Condition	Observations	Preliminary Management Recommendations	Works to Facilitate the Proposed Development	Estimated Remaining Contribution (yrs)	Category	RPA Radius (m)	Canopy Cover (m <sup>2</sup> )
				N	S	E	W												
G179*	White Poplar ( <i>Populus alba</i> ), Aspen ( <i>Populus tremula</i> )	20	<490	8	8	8	8	n/a	3	Good	SM-EM	Good - Poor	Two of the largest trees with stem canker almost girdling some primary limbs. Some of the smaller trees with pockets of decay at base but very low targets. Dense poplar group within scrub/woodland area.			20+	B2	5.88	749.2
G180*	Scots Pine ( <i>Pinus sylvestris</i> ), Silver Birch ( <i>Betula pendula Youngii</i> )	9	<320 #	4	4	4	4	n/a	0	Good	SM-EM	Good	Two clusters planted adjacent to each other and forming a small group. Ivy on stems of pine.			20+	B1,2	3.84	81
G181*	Hazel ( <i>Corylus avellana</i> ), Silver Birch ( <i>Betula pendula</i> ), Ash ( <i>Fraxinus excelsior</i> ), Goat Willow ( <i>Salix caprea</i> ), Willow ( <i>Salix sp.</i> ), Common Oak ( <i>Quercus robur</i> ), Guelder Rose ( <i>Viburnum opulus</i> ), Elder ( <i>Sambucus nigra</i> )	6	<140 #	2	2	2	2	n/a	0	Good - Fair	SM-EM	Good - Fair	Dense vegetation between access road and railway. Some formal shrub planting towards road regularly pruned. Some young, planted oak with good potential as individuals. Formal shrubs within group pruned from road edge including cotoneaster, box elder, Spirea, Phillyrea, Berberis, snowberry, Viburnum tinus, Olearia			20+	B2	1.68	2876.3
G182*	Scots Pine ( <i>Pinus sylvestris</i> )	9	<360 #	4	4	4	4	n/a	0	Good	EM	Good	Five individual trees planted adjacent to each other and forming a small group.			20+	B1,2	4.32	66.9
G183*	Silver Birch ( <i>Betula pendula</i> )	16	<300	4	4	4	4	n/a	1	Good	SM	Good	One tree of 300 mm stem diameter. Other four trees of less than 220 mm. Minor stubs and deadwood.			20+	B1,2	3.6	88.3
T184*	White Poplar ( <i>Populus alba</i> )	16	500, 300#	4	6	9	3	5.0/W	4	Good	EM	Fair	Viewed from track only. Twin stemmed from base. Minor deadwood.			20+	B1,2	7	93.9
G185*	White Poplar ( <i>Populus alba</i> )	12	<170	2	2	2	2	n/a	2	Good	Y-SM	Good - Fair	A cluster of stems of similar size. All slender forms.			10+	C1,2	2.04	190.8
T186*	Ash ( <i>Fraxinus excelsior</i> )	15	500#	2	7	7	3	4.0/S	2	Good	EM	Fair	No access to stem, viewed from access track.			20+	B1,2	6	70.5

Ref. No	Species Common Name (Scientific name)	Estimated Height (m)	Stem Diameter (mm)	Canopy Spread (m)				First Significant Branch & direction (m)	Canopy Clearance Height (m)	Physiological Condition	Life Stage	Structural Condition	Observations	Preliminary Management Recommendations	Works to Facilitate the Proposed Development	Estimated Remaining Contribution (yrs)	Category	RPA Radius (m)	Canopy Cover (m <sup>2</sup> )
				N	S	E	W												
G187*	Dogwood ( <i>Cornus sanguinea</i> Dogwood)	2	<50#	1	1	1	1	n/a	0	Good	SM	Good	Dense scrub group.			10+	C1,2	0.6	424.6
G188*	Scots Pine ( <i>Pinus sylvestris</i> ), Aspen ( <i>Populus tremula</i> ), Dogwood ( <i>Cornus sanguinea</i> Dogwood), Elder ( <i>Sambucus nigra</i> ), Wild Rose ( <i>Rosa sp.</i> ), Blackthorn ( <i>Prunus spinosa</i> ), Hawthorn ( <i>Crataegus monogyna</i> ), Silver Birch ( <i>Betula pendula</i> )	10	<310	1	1	1	1	n/a	0	Good - Dead	Y-EM	Good - Dead	Dense cluster of aspen to south-east of group. Pine along top of group A dead, semi-mature alder with poor quality alder adjacent to very north-west of group.			20+	B1,2	3.72	868.1
T189*	Silver Birch ( <i>Betula pendula</i> )	15	300, 300, 120#	8	6	4	2	2.0/N	2	Good	EM	Fair	Close to hide. Vertical bark wounds up stem			20+	B1,2	5.29	65.8
G190*	Elder ( <i>Sambucus nigra</i> ), Hawthorn ( <i>Crataegus monogyna</i> ), Whitebeam species ( <i>Sorbus sp.</i> ), Dogwood ( <i>Cornus sanguinea</i> Dogwood), Silver Birch ( <i>Betula pendula</i> ), Hazel ( <i>Corylus avellana</i> )	15	<250 #	3	3	3	3	n/a	0	Good	Y-SM	Good - Fair	Mostly less than 5 m in height, just birch taller.			10+	C1,2	3	128.5
T191*	Silver Birch ( <i>Betula pendula</i> )	15	450#	4	4	4	4	4.0/All	2	Good	EM	Good				20+	B1,2	5.4	50.1

Ref. No	Species Common Name (Scientific name)	Estimated Height (m)	Stem Diameter (mm)	Canopy Spread (m)				First Significant Branch & direction (m)	Canopy Clearance Height (m)	Physiological Condition	Life Stage	Structural Condition	Observations	Preliminary Management Recommendations	Works to Facilitate the Proposed Development	Estimated Remaining Contribution (yrs)	Category	RPA Radius (m)	Canopy Cover (m <sup>2</sup> )
				N	S	E	W												
G192*	Hazel ( <i>Corylus avellana</i> ), Holly ( <i>Ilex aquifolium</i> ), Silver Birch ( <i>Betula pendula</i> ), Alder ( <i>Alnus sp.</i> ), Gorse ( <i>Ulex sp.</i> ), Wild Rose ( <i>Rosa sp.</i> ), Sycamore ( <i>Acer pseudoplatanus</i> ), Blackthorn ( <i>Prunus spinosa</i> ), Holly ( <i>Ilex aquifolium</i> ), Hawthorn ( <i>Crataegus monogyna</i> )	12	<500 #	2	2	2	2	n/a	0	Good - Fair	Y-EM	Good - Fair	Generally dense strip of vegetation along edge of access track. Pruned back from track, hedge like. Some areas less dense but collectively providing a good screen along the edge of the reserve. On mounded ground. With snowberry and bramble.			20+	B1,2	6	2510.5
H193*	Blackthorn ( <i>Prunus spinosa</i> ), Other, Common Oak ( <i>Quercus robur</i> )	1	<50#	0.5	0.5	0.5	0.5	n/a	0	Good	SM	Good	Dense hedge of mostly blackthorn with some small oak, Viburnum tinus and Skimmia. Regularly pruned to current height and spread.		Fell	10+	C1,2	0.6	93
G194*	Birch ( <i>Betula sp.</i> )	9	<240 #	4	4	4	4	n/a	0	Good - Fair	SM	Good - Fair	Group of informal birch with some shrubs beneath.			20+	B1,2	2.88	164.4
G195*	Common Oak ( <i>Quercus robur</i> )	4	<140	3	3	3	3	n/a	2	Good	SM	Fair	Two individual trees in hedge. Good potential although lower crown pruned as part of hedge.		Fell	10+	C1,2	1.68	45.5
H196*	Evergreen spindle ( <i>Euonymus japonicus</i> )	1	<50#	0.5	0.5	0.5	0.5	n/a	0	Good	SM	Good	Dense and regularly pruned with foliage to base.			10+	C1,2	0.6	78.6
T197*	Himalayan birch ( <i>Betula utilis</i> )	5	110#	2	2	3	2	n/a	2	Good	SM	Fair	Growing through hedge. No view of lower stem. Two lower branches badly stubbed back with new growth. Minor crossing branches.			10+	C1,2	1.32	15.7
T198*	Himalayan birch ( <i>Betula utilis</i> )	6	120#	2	2	3	3	n/a	2	Good	SM	Fair	Growing through hedge. No view of lower stem.			10+	C1,2	1.44	18.8

Ref. No	Species Common Name (Scientific name)	Estimated Height (m)	Stem Diameter (mm)	Canopy Spread (m)				First Significant Branch & direction (m)	Canopy Clearance Height (m)	Physiological Condition	Life Stage	Structural Condition	Observations	Preliminary Management Recommendations	Works to Facilitate the Proposed Development	Estimated Remaining Contribution (yrs)	Category	RPA Radius (m)	Canopy Cover (m <sup>2</sup> )
				N	S	E	W												
T199*	Rowan ( <i>Sorbus aucuparia</i> )	4	160	2.5	2.5	2.5	2.5	2.5/All	2	Good - Fair	SM	Good - Fair	Dense canopy from 2 m with tight unions and crossing branches. Minor bark wounds at base.		Fell	10+	C1,2	1.92	19.6
T200*	Himalayan birch ( <i>Betula utilis</i> )	6	120#	3	3	3	3	4.0/N W	2	Good	SM	Fair	Growing through hedge. No view of lower stem.			10+	C1,2	1.44	28.2
G201*	Himalayan birch ( <i>Betula utilis</i> )	6	<140	4	4	4	4	n/a	2	Good	SM	Good	Two individual trees in hedge. Good potential.		Fell	10+	C1,2	1.68	36.3
T202*	Aspen ( <i>Populus tremula</i> )	6	90#	2.5	2.5	2.5	2.5	n/a	2	Good	Y	Good	Individual tree growing through hedge. Even crown.			10+	C1,2	1.08	19.6
G203*	Birch ( <i>Betula sp.</i> ), Swedish Whitebeam ( <i>Sorbus intermedia</i> ), Common Alder ( <i>Alnus glutinosa</i> ), Whitebeam ( <i>Sorbus aria</i> )	7	<280 #	3	3	3	3	n/a	0	Good - Fair	SM-EM	Good - Fair				20+	B1,2	3.36	262.1
G204*	Silver Birch ( <i>Betula pendula</i> ), Hawthorn ( <i>Crataegus monogyna</i> ), Elder ( <i>Sambucus nigra</i> )	9	<100 #	2	2	2	2	n/a	0	Fair	Y-SM	Fair	Dense scrubby area with a few hawthorn and one young birch.			10+	C1,2	1.2	322
T205*	Common Oak ( <i>Quercus robur</i> )	9	250#	4	4	6	4	2.0/E	2	Good	SM	Good	No access or view of stem due to dense bramble over 2 m in height.			20+	B1,2	3	62.6
G206*	Hawthorn ( <i>Crataegus monogyna</i> )	4	<100 #	2	2	2	2	n/a	0	Good - Fair	SM	Good - Fair	A dense thicket area sided up towards building. Some shrubs including dogwood to rear of group.			10+	C1,2	1.2	371.8
G207*	Viburnum ( <i>Viburnum sp.</i> ), Dogwood ( <i>Cornus sp.</i> ), Cherry Laurel ( <i>Prunus laurocerasus</i> )	3	<100 #	0.5	0.5	0.5	0.5	n/a	0	Good	Y-SM	Good	Includes mock privet (Phillyrea) V. tinus and hypericum. Dense shrub area with most shrubs maintained circa 1.2 m.			10+	C1,2	1.2	239.8

Ref. No	Species Common Name (Scientific name)	Estimated Height (m)	Stem Diameter (mm)	Canopy Spread (m)				First Significant Branch & direction (m)	Canopy Clearance Height (m)	Physiological Condition	Life Stage	Structural Condition	Observations	Preliminary Management Recommendations	Works to Facilitate the Proposed Development	Estimated Remaining Contribution (yrs)	Category	RPA Radius (m)	Canopy Cover (m <sup>2</sup> )
				N	S	E	W												
G208*	Hazel ( <i>Corylus avellana</i> ), Hawthorn ( <i>Crataegus monogyna</i> )	3	<80#	1	1	1	1	n/a	0	Good	Y-SM	Good	Surrounded by dense bramble. Gabions extent from here, east.			10+	C1,2	0.96	28.9
G209*	Wild Rose ( <i>Rosa sp.</i> ), Hazel ( <i>Corylus avellana</i> )	3	<10#	0.5	0.5	0.5	0.5	n/a	0	Good	SM	Good	Dense rose along southern side of track to the north of the gabions. Regularly clipped back from track, hedge like. Some bramble and one hazel noted.		Fell	10+	C1,2	0.12	62.5
T210*	Common Pear ( <i>Pyrus communis</i> )	6	220	1.5	1.5	1.5	1.5	n/a	1	Good	SM	Poor	Topped at 1.2 m with vigorous new growth for dense, upright, multi-stemmed crown.			10+	C1,2	2.64	7
G211*	Common Oak ( <i>Quercus robur</i> ), Silver Birch ( <i>Betula pendula</i> ), Ash ( <i>Fraxinus excelsior</i> ), Hawthorn ( <i>Crataegus monogyna</i> )	10	<150 #	4	4	4	4	n/a	0	Good - Poor	SM	Good - Poor	Mostly in good condition but ash with signs of ADB.			20+	B1,2	1.8	156.4
T212*	Common Pear ( <i>Pyrus communis</i> )	5	120	1	1	2	1	2.0/E	2	Good	SM	Good	High crown.			10+	C1,2	1.44	4.7
G213*	Elder ( <i>Sambucus nigra</i> ), Cotoneaster ( <i>Cotoneaster sp.</i> ), Dogwood ( <i>Cornus sp.</i> ), Other	4	<100 #	1	1	1	1	n/a	0	Good	SM-EM	Good - Fair	Dense shrub group including Hypericum, Cordyline, Spirea, Euonymus, Photinia, box elder, Ceanothus		Fell	10+	C1,2	1.2	250.6

Ref. No	Species Common Name ( <i>Scientific name</i> )	Estimated Height (m)	Stem Diameter (mm)	Canopy Spread (m)				First Significant Branch & direction (m)	Canopy Clearance Height (m)	Physiological Condition	Life Stage	Structural Condition	Observations	Preliminary Management Recommendations	Works to Facilitate the Proposed Development	Estimated Remaining Contribution (yrs)	Category	RPA Radius (m)	Canopy Cover (m <sup>2</sup> )
				N	S	E	W												
G214*	Hazel ( <i>Corylus avellana</i> ), Hawthorn ( <i>Crataegus monogyna</i> ), Blackthorn ( <i>Prunus spinosa</i> ), Elder ( <i>Sambucus nigra</i> ), Ash ( <i>Fraxinus excelsior</i> ), Silver Birch ( <i>Betula pendula</i> ), Common Oak ( <i>Quercus robur</i> )	9	<140 #	1	1	1	1	n/a	0	Good	Y-SM	Good	Hazel, hawthorn and elder mix with clumps of ash, birch and oak.			10+	C1,2	1.68	682.1
G215*	Himalayan birch ( <i>Betula utilis</i> )	9	<220 #	4.5	4.5	4.5	4.5	n/a	0.5	Good	SM	Good	Two main trees with a smaller individual to the west.			20+	B1,2	2.64	109.8
T216*	Common Pear ( <i>Pyrus communis</i> )	7	370#	5	5	5	5	2.0/All	2	Good	EM	Fair	Crown reduced to around 5 m in height and 4 m spread in past resulting in lots of vigorous new shoots forming dense outer canopy.		Fell	20+	B1,2	4.44	78.3
T217*	Rowan ( <i>Sorbus aucuparia</i> )	5	200#	3	3	3	3	n/a	2	Good	EM	Good	In centre of a dense shrub group.		Fell	10+	C1,2	2.4	28.2
H218*	Hawthorn ( <i>Crataegus monogyna</i> ), Elder ( <i>Sambucus nigra</i> ), Holly ( <i>Ilex aquifolium</i> )	1	<50#	0.5	0.5	0.5	0.5	n/a	0	Good	EM	Good	Regularly pruned to form dense feature with foliage to base.			10+	C1,2	0.6	270
T219*	Swedish Whitebeam ( <i>Sorbus intermedia</i> )	8	250#	4	4	3	3	2.0/All	2	Good	EM	Fair	Slightly suppressed form due to two adjacent pear. Minor pruning wounds in lower crown.		Fell	20+	B1,2	3	37.6

Ref. No	Species Common Name (Scientific name)	Estimated Height (m)	Stem Diameter (mm)	Canopy Spread (m)				First Significant Branch & direction (m)	Canopy Clearance Height (m)	Physiological Condition	Life Stage	Structural Condition	Observations	Preliminary Management Recommendations	Works to Facilitate the Proposed Development	Estimated Remaining Contribution (yrs)	Category	RPA Radius (m)	Canopy Cover (m <sup>2</sup> )
				N	S	E	W												
G220*	Hawthorn ( <i>Crataegus monogyna</i> ), Elder ( <i>Sambucus nigra</i> ), Hazel ( <i>Corylus avellana</i> ), Dogwood ( <i>Cornus sp.</i> )	5	<100 #	1	1	1	1	n/a	0	Good	SM-EM	Good	Dense shrub group. No access, viewed from road. No individual trees other than those picked up individually.		Fell in part as shown on TPP.	10+	C1,2	1.2	2434.1
T221*	Common Pear ( <i>Pyrus communis</i> )	8	350#	4	2.5	4	4	2.0/All	2	Good	EM	Fair	Crown reduced to around 6 m in height and 3 m spread in past resulting in lots of vigorous new shoots forming dense outer canopy.		Fell	20+	B1,2	4.2	40.7
T222*	Silver Birch ( <i>Betula pendula</i> )	12	220	4	4	4	4	n/a	2	Good	SM	Good	Potential as individual.			20+	B1,2	2.64	50.1
G223*	Snowberry ( <i>Symphoricarpos sp.</i> ), Dogwood ( <i>Cornus sp.</i> ), Elder ( <i>Sambucus nigra</i> ), Cotoneaster ( <i>Cotoneaster sp.</i> )	2	<50#	0.5	0.5	0.5	0.5	n/a	0	Good	Y-SM	Good	Managed as dense shrub group.		Fell	10+	C1,2	0.6	91.6
T224*	Common Oak ( <i>Quercus robur</i> )	10	160#	4	2	4	3	n/a	2	Good	SM	Good				20+	B1,2	1.92	32.9
T225*	Common Oak ( <i>Quercus robur</i> )	10	200#	4	2	4	3	n/a	2	Good	SM	Good				20+	B1,2	2.4	32.9
T226*	Elder ( <i>Sambucus nigra</i> )	4	250#	3	3	3	3	n/a	0	Good	SM	Good	Dense multi stemmed tree.		Fell	10+	C1,2	3	28.2
T227*	Silver Birch ( <i>Betula pendula</i> )	10	180#	3	3	3	3	n/a	2	Good	SM	Fair	Twisted form. Within area of smaller birch.			10+	C1,2	2.16	28.2
T228*	Himalayan birch ( <i>Betula utilis</i> )	10	240, 180, 140#	5	5	5	5	4.0/All	1	Good	EM	Good	Viewed from the access road. Multi-stemmed with even canopy.			20+	B1,2	3.97	78.3

Ref. No	Species Common Name (Scientific name)	Estimated Height (m)	Stem Diameter (mm)	Canopy Spread (m)				First Significant Branch & direction (m)	Canopy Clearance Height (m)	Physiological Condition	Life Stage	Structural Condition	Observations	Preliminary Management Recommendations	Works to Facilitate the Proposed Development	Estimated Remaining Contribution (yrs)	Category	RPA Radius (m)	Canopy Cover (m <sup>2</sup> )
				N	S	E	W												
G229*	Snowberry ( <i>Symphoricarpos sp.</i> ), Dogwood ( <i>Cornus sp.</i> ), Osier ( <i>Salix viminalis</i> ), Cotoneaster ( <i>Cotoneaster sp.</i> ), Cordyline ( <i>Cordyline sp.</i> )	3	<50#	0.5	0.5	0.5	0.5	n/a	0	Good	Y-SM	Good	Managed as dense shrub group.		Fell	10+	C1,2	0.6	147.4
T230*	Common Oak ( <i>Quercus robur</i> )	10	200#	4	4	4	4	n/a	2	Good	SM	Good			20+	B1,2	2.4	50.1	
G231*	Other	3	<50#	0.5	0.5	0.5	0.5	n/a	0	Good	SM-EM	Good	Managed as a large dense shrub group at end of 1 m hedge.		Fell	10+	C1,2	0.6	17
T232*	Other	3	100#	3	3	3	5	n/a	0	Good	EM	Good	Dense, multi-stemmed feature with wide spreading crown with foliage to base.		Fell	10+	C1,2	1.2	37.6
T233*	Other	2	100#	1.5	1.5	1.5	1.5	n/a	0	Good	EM	Good	Dense foliage from base, no central leader evident.		Fell	10+	C1,2	1.2	7
T234*	Other	3	100#	3	3	3	3	n/a	0	Good	EM	Good	Dense, multi-stemmed feature with wide spreading crown with foliage to base.		Fell	10+	C1,2	1.2	28.2
G235*	Wild Rose ( <i>Rosa sp.</i> ), Elder ( <i>Sambucus nigra</i> ), Blackthorn ( <i>Prunus spinosa</i> )	4	<90#	0.5	0.5	0.5	0.5	n/a	0	Good - Fair	Y-SM	Good - Fair	Scrub area of mostly rose and bramble with some elder.			10+	C1,2	1.08	186.5
T236*	Silver Birch ( <i>Betula pendula</i> )	10	160#	3	3	3	3	n/a	2	Good	SM	Good				20+	B1,2	1.92	28.2

Ref. No	Species Common Name (Scientific name)	Estimated Height (m)	Stem Diameter (mm)	Canopy Spread (m)				First Significant Branch & direction (m)	Canopy Clearance Height (m)	Physiological Condition	Life Stage	Structural Condition	Observations	Preliminary Management Recommendations	Works to Facilitate the Proposed Development	Estimated Remaining Contribution (yrs)	Category	RPA Radius (m)	Canopy Cover (m <sup>2</sup> )
				N	S	E	W												
G237*	Hazel ( <i>Corylus avellana</i> ), Hawthorn ( <i>Crataegus monogyna</i> ), Wild Rose ( <i>Rosa sp.</i> ), Dogwood ( <i>Cornus sanguinea Dogwood</i> ), Goat Willow ( <i>Salix caprea</i> ), Silver Birch ( <i>Betula pendula</i> ), Common Oak ( <i>Quercus robur</i> ), Blackthorn ( <i>Prunus spinosa</i> ), Whitebeam ( <i>Sorbus aria</i> )	4	<140 #	2	2	2	2	n/a	0	Good	Y-EM	Good	Growing on banking with gabions to north so no RPA north-east. A few large goat willow stems approx 1 m in height and recently pruned to remove all growth, measured just below pruning height and up to 500 mm est. Clusters of birch and oak along length of the group which are all less than circa 150 mm stem diameter.			10+	C1,2	1.68	993.8
G238*	Hazel ( <i>Corylus avellana</i> ), Blackthorn ( <i>Prunus spinosa</i> ), Silver Birch ( <i>Betula pendula</i> ), Elder ( <i>Sambucus nigra</i> ), Gorse ( <i>Ulex sp.</i> )	6	<150 #	2	2	2	2	n/a	0	Good	Y-SM	Good - Fair	Continuation of other groups but appears younger and collectively of lower value than remainder of group.	Fell in part as shown on TPP.	10+	C1,2	1.8	327	
T239*	Crack Willow ( <i>Salix fragilis</i> )	12	450#	8	3	6	3	n/a	1	Good	EM	Fair	Forked at 2 m. One sided and slight lean to north. Deadwood and decaying stubs. Snapped hanging tip of crown to west but no target.		20+	B1,2,3	5.4	77.5	
G240*	Wild Rose ( <i>Rosa sp.</i> ), Hazel ( <i>Corylus avellana</i> ), Hawthorn ( <i>Crataegus monogyna</i> ), Dogwood ( <i>Cornus sanguinea Dogwood</i> )	4	<80#	0.5	0.5	0.5	0.5	n/a	0	Good	SM	Good	Dense shrubs along southern side of track to the north of the gabions. Regularly clipped back from track, hedge like. Some bramble and one hazel noted. Some stems very close to gabions left to grow up with group beyond.	Fell	10+	C1,2	0.96	102.7	

Ref. No	Species Common Name (Scientific name)	Estimated Height (m)	Stem Diameter (mm)	Canopy Spread (m)				First Significant Branch & direction (m)	Canopy Clearance Height (m)	Physiological Condition	Life Stage	Structural Condition	Observations	Preliminary Management Recommendations	Works to Facilitate the Proposed Development	Estimated Remaining Contribution (yrs)	Category	RPA Radius (m)	Canopy Cover (m <sup>2</sup> )
				N	S	E	W												
T241*	Crack Willow ( <i>Salix fragilis</i> )	6	450, 350#	4	5	5	3	n/a	1	Good	M	Fair	Topped at 3-3.5 m. Vigorous new growth. Hazard beam fracture along stubbed limb to east. Smaller stem from ground level to west.		Fell	10+	C1,2,3	6.84	56.4
H242*	Hazel ( <i>Corylus avellana</i> ), Elder ( <i>Sambucus nigra</i> ), Guelder Rose ( <i>Viburnum opulus</i> ), Dogwood ( <i>Cornus sanguinea</i> Dogwood), Gorse ( <i>Ulex sp.</i> ), Wild Rose ( <i>Rosa sp.</i> ), Hawthorn ( <i>Crataegus monogyna</i> ), White Poplar ( <i>Populus alba</i> ), Holly ( <i>Ilex aquifolium</i> )	6	<150 #	2	2	2	2	n/a	0	Good - Fair	Y-EM	Good - Fair	Generally dense strip of vegetation along edge of access track. Pruned back from track, hedge like. On mounded ground. With snowberry and bramble. Some vigorous white poplar up to 260 stem diameter and 14 m in height but of limited individual value.		Fell in part as shown on TPP.	20+	B1,2	1.8	1414.3
T243*	White Poplar ( <i>Populus alba</i> )	16	560	4	9	7	5	4.0/E	2	Good	EM	Fair	Forked at 2 m with 200 mm of included bark to north.		Fell	20+	B1,2	6.72	122.1
T244*	Crack Willow ( <i>Salix fragilis</i> )	5	320, 350	2	1	3	3	n/a	2	Good	EM	Fair	Topped at 2.5 m. Twin stemmed. Vigorous new growth. Some deterioration of stubbed stems. Bird box present.		Fell	10+	C1,2,3	5.69	14.1
T245*	Silver Birch ( <i>Betula pendula</i> )	10	220#	4	4	4	4	n/a	2	Good	SM	Good				20+	B1,2	2.64	50.1
G246*	Elder ( <i>Sambucus nigra</i> ), Dogwood ( <i>Cornus sanguinea</i> Dogwood)	4	<300 #	3	3	3	3	n/a	0	Good	EM	Good	Three multi-stemmed elder and one Dogwood. Nettles and brambles beneath.		Fell	10+	C1,2	3.6	90.1
T247*	Crack Willow ( <i>Salix fragilis</i> )	10	550#	5	5	5	7	n/a	0	Good	EM	Good	Surveyed from track. Forked crown and one-sided north and west.			20+	B1,2	6.6	93.9
T248*	Silver Birch ( <i>Betula pendula</i> )	10	220#	4	4	4	4	n/a	2	Good	SM	Good				20+	B1,2	2.64	50.1
T249*	White Poplar ( <i>Populus alba</i> )	16	500#	5	4	7	5	n/a	4	Good	EM	Fair				20+	B1,2	6	84.5

Ref. No	Species Common Name (Scientific name)	Estimated Height (m)	Stem Diameter (mm)	Canopy Spread (m)				First Significant Branch & direction (m)	Canopy Clearance Height (m)	Physiological Condition	Life Stage	Structural Condition	Observations	Preliminary Management Recommendations	Works to Facilitate the Proposed Development	Estimated Remaining Contribution (yrs)	Category	RPA Radius (m)	Canopy Cover (m <sup>2</sup> )
				N	S	E	W												
T250*	Goat Willow ( <i>Salix caprea</i> )	12	500	5	5	7	6	n/a	2	Good	M	Fair	Deadwood and stubs. Multi-stemmed from 1 m with tight unions.			20+	B1,2	6	101.8
T251*	Silver Birch ( <i>Betula pendula</i> )	10	140#	3	3	3	3	n/a	2	Good	SM	Good				10+	C1,2	1.68	28.2
T252*	Rowan ( <i>Sorbus aucuparia</i> )	9	140#	3	3	3	3	n/a	2	Good	SM	Good				10+	C1,2	1.68	28.2
T253*	Silver Birch ( <i>Betula pendula</i> )	10	140#	3	3	3	3	n/a	2	Good	SM	Good				10+	C1,2	1.68	28.2
G254*	Elder ( <i>Sambucus nigra</i> )	3	<75	2	2	2	2	n/a	0	Good - Fair	SM	Good - Fair	Some swamped with dense bramble.		Fell	10+	C1,2	0.9	169
G255*	Hazel ( <i>Corylus avellana</i> ), Hawthorn ( <i>Crataegus monogyna</i> ), Wild Rose ( <i>Rosa sp.</i> ), Dogwood ( <i>Cornus sanguinea</i> Dogwood), Goat Willow ( <i>Salix caprea</i> ), Cherry Laurel ( <i>Prunus laurocerasus</i> ), Snowberry ( <i>Symphoricarpos sp.</i> ), Rowan ( <i>Sorbus aucuparia</i> ), Shrub Rose ( <i>Rosa rugosa</i> )	4	<140 #	2	2	2	2	n/a	0	Good	Y-EM	Good	Growing on banking with gabions to north so no RPA north-east. A few large goat willow stems approx 1 m in height and <500 mm recently pruned to remove all growth. Mostly native deciduous species planted but with some invasive fronting towards the fencing including laurel and snowberry.			10+	C1,2	1.68	839.8

Ref. No	Species Common Name (Scientific name)	Estimated Height (m)	Stem Diameter (mm)	Canopy Spread (m)				First Significant Branch & direction (m)	Canopy Clearance Height (m)	Physiological Condition	Life Stage	Structural Condition	Observations	Preliminary Management Recommendations	Works to Facilitate the Proposed Development	Estimated Remaining Contribution (yrs)	Category	RPA Radius (m)	Canopy Cover (m <sup>2</sup> )
				N	S	E	W												
G256*	Hazel ( <i>Corylus avellana</i> ), Crack Willow ( <i>Salix fragilis</i> ), Ash ( <i>Fraxinus excelsior</i> ), Hawthorn ( <i>Crataegus monogyna</i> ), Holly ( <i>Ilex aquifolium</i> ), Birch ( <i>Betula sp.</i> ), Blackthorn ( <i>Prunus spinosa</i> )	10	<250	4	4	4	4	n/a	0	Good - Fair	Y-EM	Good - Fair	Group along embankment. Some willow stems growing on fence with barbed wire into stems.			20+	B1,2	3	1585
T257*	Silver Birch ( <i>Betula pendula</i> )	9	220, 140#	5	5	3	5	3.0/S	2	Good	SM	Good			20+	B1,2	3.13	62.6	
T258*	Rowan ( <i>Sorbus aucuparia</i> )	6	160#	2	1.5	4	1	n/a	0	Good	SM	Good - Fair	Slight lean to east.		10+	C1,2	1.92	13.7	
T259*	Elder ( <i>Sambucus nigra</i> )	3	100#	2	2	2	2	n/a	0	Fair	SM	Fair	Dense multi stemmed tree swamped in bramble.	Fell	10+	C1,2	1.2	12.5	
T260*	Whitebeam ( <i>Sorbus aria</i> )	6	140, 120#	4	3	5	2	n/a	0	Good	SM	Poor	Twin stemmed from base with east section collapsed east although with corrected crown. Low target.		10+	C1,2	2.21	38.4	
T261*	Silver Birch ( <i>Betula pendula</i> )	12	240, 140#	4	4	5	6	1.0/W	2	Good	SM	Good	Forked at 0.5 m with one section swept to west before correcting.		20+	B1,2	3.33	68.9	
T262*	Silver Birch ( <i>Betula pendula</i> )	12	270	5	5	5	5	n/a	1	Good	EM	Good	Open grown individual with bird box at <2 m on stem.		20+	B1,2	3.24	78.3	
T263*	Silver Birch ( <i>Betula pendula</i> )	12	220#	4	4	4	4	n/a	2	Good	SM	Good			20+	B1,2	2.64	50.1	
G264*	Hazel ( <i>Corylus avellana</i> ), Ash ( <i>Fraxinus excelsior</i> ), Blackthorn ( <i>Prunus spinosa</i> ), Alder ( <i>Alnus sp.</i> )	6	<250 #	2	2	2	2	n/a	0	Good - Fair	Y-EM	Good - Fair	Large Hazel with scrubby blackthorn and snowberry.		10+	C1,2	3	222.1	
T265*	Silver Birch ( <i>Betula pendula</i> )	12	160#	2	3	4	2	n/a	1	Good	SM	Good - Fair	Leaning single stem.		10+	C1,2	1.92	23.5	

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				N	S	E	W												
T266*	Ash ( <i>Fraxinus excelsior</i> )	9	320	4	4	5	4	2.0/E	1	Fair	SM	Fair	Some possible signs of ADB but appears quite healthy.			20+	B1,2	3.84	56.4
G267*	Hazel ( <i>Corylus avellana</i> ), Hawthorn ( <i>Crataegus monogyna</i> ), Wild Rose ( <i>Rosa sp.</i> ), Dogwood ( <i>Cornus sanguinea</i> Dogwood), Goat Willow ( <i>Salix caprea</i> )	4	<140 #	2	2	2	2	n/a	0	Good	Y-EM	Good	Growing on banking with gabions to north so no RPA north-east. A few large goat willow stems approx. 1 m in height and recently pruned to remove all growth. Up to 500 mm stem diameter est.			10+	C1,2	1.68	1233.1
T268*	White Poplar ( <i>Populus alba</i> )	14	780	6	4	6	6	2.5/N	1	Good - Fair	M	Fair	Pruned back from south, possibly access facilitation pruning for HGV. Small cavity opening at 1.2 m to east with some decay behind although sounding hammer suggests localised. Dead and decaying stem above with woodpecker holes. Five units of deadwood.			20+	B1,3	9.36	93.9
T269*	White Poplar ( <i>Populus alba</i> )	6	240#	8	0.2	3	2	n/a	0	Good	SM	Fair	Growing almost horizontal out of banking towards estuary. Minor deadwood. Suppressed by large poplar adjacent.			10+	C1,2	2.88	32.1

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				N	S	E	W												
G270*	Hawthorn ( <i>Crataegus monogyna</i> ), Silver Birch ( <i>Betula pendula</i> ), Hazel ( <i>Corylus avellana</i> ), Sycamore ( <i>Acer pseudoplatanus</i> ), Elder ( <i>Sambucus nigra</i> ), Goat Willow ( <i>Salix caprea</i> ), White Poplar ( <i>Populus alba</i> ), Guelder Rose ( <i>Viburnum opulus</i> )	9	<300 #	4	4	4	4	n/a	0	Good - Dead	Y-EM	Good - Dead	Strip of planting along embankment forming a wide hedgerow with occasional upright trees extending above the average height of 5 m.			20+	B1,2	3.6	1686.3
G271*	Ash ( <i>Fraxinus excelsior</i> ), Pine ( <i>Pinus sp</i> ), Willow ( <i>Salix sp</i> ), Silver Birch ( <i>Betula pendula</i> ), Blackthorn ( <i>Prunus spinosa</i> ), Common Alder ( <i>Alnus glutinosa</i> ), Goat Willow ( <i>Salix caprea</i> )	12	<300 #	4	4	4	4	n/a	0	Good - Fair	Y-SM	Good - Fair	On highway embankment. Dense ivy across ground and up some stems. Tall, drawn up ash adjacent to fence with site.			20+	B1,2	3.6	5667.7
T272*	Goat Willow ( <i>Salix caprea</i> )	11	500#	5	5	2	5	n/a	1	Good	V	Poor	Badly topped at 1.3 m in distant past. Weakly attached stems forming crown. Stem to east collapsed revealing decaying heartwood. Additional decaying stub. Unlikely to be long-lasting.			20+	B1,3	10	54.8
T273*	Goat Willow ( <i>Salix caprea</i> )	7	310	5	0.5	5	5	n/a	1	Good	M	Fair	Badly topped at 1.2 m in distant past. Weakly attached stems forming crown.			10+	C1,2	3.72	43.1

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				N	S	E	W												
T274*	Goat Willow ( <i>Salix caprea</i> )	11	510	5	5	5	0.5	n/a	1	Good	M	Fair	Badly topped at 1.6 m in distant past. Numerous upright stems forming crown. Torn tertiary branches towards track.			10+	C1,2	6.12	43.1
H275*	Snowberry ( <i>Symphoricarpos sp.</i> ), Wild Rose ( <i>Rosa sp.</i> )	2	<50#	0.5	0.5	0.5	0.5	n/a	0	Good	SM	Good	Managed as a dense shrub group.		Fell	10+	C1,2	0.6	108.1
H276*	Snowberry ( <i>Symphoricarpos sp.</i> ), Wild Rose ( <i>Rosa sp.</i> )	2	<50#	0.5	0.5	0.5	0.5	n/a	0	Good	SM	Good	Managed as a dense shrub group.		Fell	10+	C1,2	0.6	41.7
T277*	Goat Willow ( <i>Salix caprea</i> )	11	560	5	5	5	5	n/a	1	Good	M	Fair	Badly topped at 1.6 m in distant past. Numerous upright stems forming crown. Torn tertiary branches towards track.			10+	C1,2	6.72	78.3
G278*	Hazel ( <i>Corylus avellana</i> ), Elder ( <i>Sambucus nigra</i> ), Wild Rose ( <i>Rosa sp.</i> ), Hawthorn ( <i>Crataegus monogyna</i> )	4	<140 #	2	2	2	2	n/a	0	Good	Y-SM	Good	Growing on banking with gabions to north so no RPA north-east. Rabbit warrens throughout group.		Fell	10+	C1,2	1.68	289.8
T279*	Elder ( <i>Sambucus nigra</i> )	5	120#	2	4	4	0.5	n/a	0	Good	SM	Good			Fell	10+	C1,2	1.44	21.1
T280*	Sycamore ( <i>Acer pseudoplatanus</i> )	9	160	3	3	3	3	n/a	1	Good	Y	Good			Fell	10+	C1,2	1.92	28.2
T281*	Sycamore ( <i>Acer pseudoplatanus</i> )	9	180#	2	4	4	2	n/a	1	Good	Y	Good			Fell	10+	C1,2	2.16	28.2
G282*	Sycamore ( <i>Acer pseudoplatanus</i> ), Hawthorn ( <i>Crataegus monogyna</i> ), Goat Willow ( <i>Salix caprea</i> ), Wild Rose ( <i>Rosa sp.</i> ), Hazel ( <i>Corylus avellana</i> )	4	<90#	1	1	1	1	n/a	0	Good	Y-SM	Good	Hedgerow planting on top of banking. One multi-stemmed sycamore within of little value with bark wounds and stubs towards fencing.		Fell	10+	C1,2	1.08	167.2

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				N	S	E	W												
T283*	Goat Willow ( <i>Salix caprea</i> )	9	300#	4	6	6	4	4.0/E	1	Good	EM	Fair	Tight, multi-stemmed form from 1 m.		Fell	10+	C1,2	3.6	78.3
T284*	Sycamore ( <i>Acer pseudoplatanus</i> )	7	200	3	3	3	3	n/a	0	Good	SM	Good			Fell	10+	C1,2	2.4	28.2
T285*	Ash ( <i>Fraxinus excelsior</i> )	7	150	2	4	2	1.5	2.0/S	0	Poor	Y	Fair	Showing signs of ADB.		Fell	10+	C1,2	1.8	16.4
G286*	Elder ( <i>Sambucus nigra</i> )	3	<150 #	2	2	2	2	n/a	0	Good - Fair	Y-EM	Good - Fair	With deadwood, nettles and brambles.		Fell	10+	C1,2	1.8	307.3
T287*	White Poplar ( <i>Populus alba</i> )	9	420	6	6	7	5	1.0/E	0	Good	EM	Fair	Slightly butt-swept out from banking towards east. Significant secondary stem from ground level extending east.		Fell	20+	B1,2	5.04	112.7
T288*	Elder ( <i>Sambucus nigra</i> )	2	150#	1.5	2	2	1	n/a	0	Good	SM	Good			Fell	10+	C1,2	1.8	8.2
T289*	Elder ( <i>Sambucus nigra</i> )	2	100#	1.5	2	2	1	n/a	0	Good	SM	Good			Fell	10+	C1,2	1.2	8.2
G290*	Elder ( <i>Sambucus nigra</i> )	3	<90#	2	2	2	2	n/a	0	Good - Fair	Y-SM	Good - Fair	Scrub with deadwood, nettles and brambles.			10+	C1,2	1.08	80.9
T291*	Sycamore ( <i>Acer pseudoplatanus</i> )	9	300, 300	5	5	5	5	2.5/W	1	Good	SM	Good - Fair	Tight union at main fork at 1 m.			20+	B1,2	5.09	78.3
T292*	Sycamore ( <i>Acer pseudoplatanus</i> )	9	350	5	5	5	4	3.0/N	1	Good	SM	Good	Large secondary stem to south-west. Uneven ground around base.			20+	B1,2	4.2	70.5
T293*	Elder ( <i>Sambucus nigra</i> )	2	150, 120#	0.5	4	2	3	n/a	0	Good	SM	Good				10+	C1,2	2.31	17.6
T294*	Elder ( <i>Sambucus nigra</i> )	2	100, 60#	0.5	3	3	2	n/a	0	Poor	SM	Poor	Lots of dead sections. No target.			<10	U1,2	1.4	13.7
T295*	Ash ( <i>Fraxinus excelsior</i> )	4	140#	2	2	2	2	n/a	1	Good	SM	Good	On site. Dense bramble around base.		Fell	10+	C1,2	1.68	12.5
T296*	Ash ( <i>Fraxinus excelsior</i> )	7	310#	4	2	5	2	n/a	2	Good	SM	Good - Fair	On site.		Fell	10+	C1,2	3.72	32.9
T297*	Sycamore ( <i>Acer pseudoplatanus</i> )	7	150, 120, 90, 120, 120, 80, 140, 120	5	5	5	5	n/a	0	Good	SM	Fair	Multi-stemmed from ground level with some tight unions.			10+	C1,2	3.99	78.3

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				N	S	E	W												
T298*	Ash ( <i>Fraxinus excelsior</i> )	6	180#	4	4	4	4	n/a	2	Good	SM	Good	Off site. Dense bramble around base.			10+	C1,2	2.16	50.1
T299*	Ash ( <i>Fraxinus excelsior</i> )	6	180#	4	4	4	4	n/a	2	Good	SM	Good	On site. Dense bramble around base.		Fell	10+	C1,2	2.16	50.1
T300*	Elder ( <i>Sambucus nigra</i> )	2	120#	2	2	2	2	n/a	0	Good	SM	Good				10+	C1,2	1.44	12.5
G301*	Gorse ( <i>Ulex sp.</i> ), Silver Birch ( <i>Betula pendula</i> )	3	<60#	0.5	0.5	0.5	0.5	n/a	0	Good	Y-SM	Good	Mostly gorse with some self-sown birch. Dense bramble to west.			10+	C1,2	0.72	352
G302*	Ash ( <i>Fraxinus excelsior</i> )	6	<200#	3	3	3	3	n/a	1	Good - Fair	Y-SM	Good - Fair	Beyond fencing.			10+	C1,2	2.4	67.4
G303*	Willow ( <i>Salix sp.</i> ), Blackthorn ( <i>Prunus spinosa</i> )	6	<180#	2	2	2	2	n/a	0	Good - Fair	Y-SM	Good - Fair	Dense willow and blackthorn mostly beyond fence. One small scrubby blackthorn at edge of group in site.			10+	C1,2	2.16	592.9
G304*	Silver Birch ( <i>Betula pendula</i> ), Elder ( <i>Sambucus nigra</i> )	6	<120#	1	1	1	1	n/a	0	Good - Fair	Y-SM	Good - Fair	Scrubby area.			10+	C1,2	1.44	441.1
T305*	Silver Birch ( <i>Betula pendula</i> )	7	240, 220#	5	5	5	5	n/a	0	Good	SM	Good	Twin stemmed. Beyond fence.			20+	B1,2	3.91	78.3
T306	Sycamore ( <i>Acer pseudoplatanus</i> )	6	260#	4	4	4	4	n/a	0	Good	SM	Good	Slightly lower position to road.			10+	C1,2	3.12	50.1
T307*	Common Oak ( <i>Quercus robur</i> )	16	1000#	9	9	9	9	n/a	2	Good	M	Good	Off site.			40+	A1,2	12	253.6
G308*	Ash ( <i>Fraxinus excelsior</i> )	16	<400#	5	5	5	5	n/a	0	Good - Fair	Y-EM	Good - Fair	Self-sown ash in brown field area. Limited long-term value.			10+	C1,2	4.8	507.9
T309*	Silver Birch ( <i>Betula pendula</i> )	14	340, 330	4	6	6	4	n/a	0	Good	EM	Good	Two stems from ground level. May be two trees but forming one crown.			20+	B1,2	5.69	78.3
T310	Monterey Cypress ( <i>Cupressus macrocarpa</i> )	15	800#	5	4	3	5	n/a	0	Good - Fair	M	Good - Fair	Large specimen. Multi-stemmed from base although all pressed together. Basal measurement of 800 mm taken. Topped at current height beneath overhead cables.			20+	B1,2	9.6	56.4

Ref. No	Species Common Name ( <i>Scientific name</i> )	Estimated Height (m)	Stem Diameter (mm)	Canopy Spread (m)				First Significant Branch & direction (m)	Canopy Clearance Height (m)	Physiological Condition	Life Stage	Structural Condition	Observations	Preliminary Management Recommendations	Works to Facilitate the Proposed Development	Estimated Remaining Contribution (yrs)	Category	RPA Radius (m)	Canopy Cover (m <sup>2</sup> )
				N	S	E	W												
T311	Monterey Cypress ( <i>Cupressus macrocarpa</i> )	15	800#	4	3	3	3	n/a	0	Good - Fair	M	Good - Fair	Large specimen. Multi-stemmed from base although all pressed together. Basal measurement of 800 mm taken. Topped at current height beneath overhead cables.			20+	B1,2	9.6	32.9
T312	Monterey Cypress ( <i>Cupressus macrocarpa</i> )	15	800#	6	6	6	3	2.0/E	0	Good	M	Good - Fair	Large specimen. Multi-stemmed from base although all pressed together. Basal measurement of 800 mm taken.			20+	B1,2	9.6	84.5
T313	Monterey Cypress ( <i>Cupressus macrocarpa</i> )	7	800#	4	3	4	4	n/a	0	Good - Fair	M	Good - Fair	Large specimen. Multi-stemmed from base although all pressed together. Basal measurement of 800 mm taken. Topped at current height beneath overhead cables.			20+	B1,2	9.6	43.8
T314	Monterey Cypress ( <i>Cupressus macrocarpa</i> )	7	800#	2	3	3	3	n/a	0	Good - Fair	M	Good - Fair	Large specimen. Multi-stemmed from base although all pressed together. Basal measurement of 800 mm taken. Topped at current height beneath overhead cables.			20+	B1,2	9.6	23.5
T315	Monterey Cypress ( <i>Cupressus macrocarpa</i> )	7	800#	6	6	6	3	2.0/E	0	Good - Fair	M	Good - Fair	Large specimen. Multi-stemmed from base although all pressed together. Basal measurement of 800 mm taken. Topped at current height beneath overhead cables.			20+	B1,2	9.6	84.5
T316	Common Oak ( <i>Quercus robur</i> )	5	220	3	3	3	3	1.0/S	1	Good	Y	Fair	Growing within raised bed impacting root development.		Fell	10+	C1,2	2.64	28.2
T317*	Sycamore ( <i>Acer pseudoplatanus</i> )	4	155	3	3	1	3	0.5/N	0	Good	Y	Fair				10+	C1,2	1.86	18.8

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				N	S	E	W												
T318*	Wild Cherry ( <i>Prunus avium</i> )	9	320	4	4	4	4	3.0/W	0	Fair	SM	Fair	Topped at 4 m with weakly attached new shoots. Deterioration of wound. Young ash growing through crown.			10+	C1,2	3.84	50.1
G319*	Wild Cherry ( <i>Prunus avium</i> )	6	<420	6	6	6	6	n/a	0	Good - Fair	EM	Good - Fair	Swamped by bramble and with suckers, and saplings.			10+	C1,2	5.04	284.6
T320*	Silver Birch ( <i>Betula pendula</i> )	6	135#	1.5	1.5	1.5	1.5		1	Good	SM	Good				10+	C1,2	1.62	7
G321*	Sycamore ( <i>Acer pseudoplatanus</i> ), Ash ( <i>Fraxinus excelsior</i> ), Hawthorn ( <i>Crataegus monogyna</i> ), Wild Rose ( <i>Rosa sp.</i> )	9	<120 #	4	4	4	4	n/a	0	Good - Fair	Y-SM	Good - Fair	Multi-stemmed and single stemmed trees. Sporadic. None of particular value.	Fell		10+	C1,2	1.44	54.9
T322*	Hawthorn ( <i>Crataegus monogyna</i> )	7	135, 105, 130, 70	2.5	4	2	4	n/a	2	Good	SM	Fair	Multi stemmed. Old pruning wounds and stubs.			10+	C1,2	2.71	30.5
T323*	Sycamore ( <i>Acer pseudoplatanus</i> )	9	185	2	3	2	4	3.0/N	2	Good	SM	Good	Single stemmed.			10+	C1,2	2.22	23.5
T324*	Sycamore ( <i>Acer pseudoplatanus</i> )	10	275	3.5	4	5	3.5	n/a	2	Good	SM	Fair	Single stemmed, close to chain link fence with a primary limb and smaller limbs growing through the fence. Recently cut but stem and branches left hanging through fence.			10+	C1,2	3.3	49.9
T325*	Wild Cherry ( <i>Prunus avium</i> )	6	300	5	5	3	3	2.0/N	2	Good	SM	Fair	Recently crown lifted leaving stub at 2 m to south-west.			20+	B1,2	3.6	47
H326*	Cherry Laurel ( <i>Prunus laurocerasus</i> ), Butterfly bush ( <i>Buddleja sp.</i> )	3	<60#	0.5	0.5	0.5	0.5	n/a	0	Good - Fair	SM	Good - Fair	Mainly a dense line of laurel pruned back to leave access route to back of network rail fence line. Occasional buddleja and sycamore sapling within.			10+	C1,2	0.72	120.3
T327*	Sycamore ( <i>Acer pseudoplatanus</i> )	10	170, 150, 140	4	4	4	4	n/a	2	Good	SM	Fair	Three stems from base. Recently crown lifted leaving small pruning wounds.			10+	C1,2	3.2	50.1

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				N	S	E	W												
T328*	Laburnum ( <i>Laburnum anagyroides</i> )	3	105	2	2	2	2	n/a	1	Good	SM	Good	Single stemmed.			10+	C1,2	1.26	12.5
T329	Cherry ( <i>Prunus sp</i> )	1	155, 82	1	5	1	4	n/a	2	Fair	SM	Fair	Second leader removed at fork.		Fell	10+	C1,2	2.1	23.5
T330*	White Willow ( <i>Salix alba</i> )	1	650#	0.2	0.2	0.2	0.2	n/a	0	Stump	OM	Stump	Recently felled and poisoned.		Fell	<10	U1,2	7.8	0.1
T331	Sycamore ( <i>Acer pseudoplatanus</i> )	8	90, 85, 95, 85, 110, 150, 90, 80, 75	3	4	4	3	n/a	1	Good	Y	Fair	Multi-stemmed from base.			10+	C1,2	3.44	38.4
T332	Sycamore ( <i>Acer pseudoplatanus</i> )	8	105, 115, 120, 80, 110	4	2	4	2	n/a	1	Good	Y	Fair	Multi-stemmed from base.			10+	C1,2	2.87	28.2
T333	Sycamore ( <i>Acer pseudoplatanus</i> )	6	85, 90, 125, 90, 105	4	4	4	4	n/a	1	Good	Y	Fair	Multi-stemmed from base.			10+	C1,2	2.69	50.1
G334*	Cherry Laurel ( <i>Prunus laurocerasus</i> ), Butterfly bush ( <i>Buddleja sp.</i> ), Elder ( <i>Sambucus nigra</i> )	3	<60#	0.5	0.5	0.5	0.5	n/a	0	Good - Fair	SM	Good - Fair	Mainly a dense line of laurel pruned back to leave access route to back of network rail fence line. Buddleia and other self-sown scrub including elder and dense bramble.			10+	C1,2	0.72	224.5
T335*	Grey willow ( <i>Salix cinerea</i> )	4	80, 80, 80, 80#	3	1	2	3	n/a	0	Good	SM	Fair	Poor formed growing through chain link fence.			10+	C1,2	1.92	15.7

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				N	S	E	W												
T336	Sycamore ( <i>Acer pseudoplatanus</i> )	6	85, 125, 100, 90, 105, 115	5	5	5	5	n/a	1	Good	Y	Fair	Multi-stemmed from base.			10+	C1,2	3.04	78.3
T337	Sycamore ( <i>Acer pseudoplatanus</i> )	6	80, 90, 100, 85, 85	5	5	5	5	n/a	1	Good	Y	Fair	Multi-stemmed from base.			10+	C1,2	2.37	78.3
G338*	Cherry Laurel ( <i>Prunus laurocerasus</i> ), Butterfly bush ( <i>Buddleja sp.</i> ), Elder ( <i>Sambucus nigra</i> )	3	<60#	0.5	0.5	0.5	0.5	n/a	0	Good - Fair	SM	Good - Fair	Mainly a dense line of laurel pruned back to leave access route to back of network rail fence line. Buddleja and other self-sown scrub including elder and dense bramble			10+	C1,2	0.72	93.9
T339	Sycamore ( <i>Acer pseudoplatanus</i> )	6	105, 85	3	3	3	3	n/a	1	Good	Y	Fair	Multi-stemmed from base. With eight stems <70 mm.			10+	C1,2	1.62	28.2
T340	Leyland Cypress (X <i>Cupressocyparis leylandii</i> )	4	580#	0.5	6	1	2	n/a	0	Fair	M	Poor	Main stems topped at 2.5 m leaving dead stubs. Live crown from base extending north from large sweeping limbs.			10+	C1,2	6.96	15.3
T341*	Silver Birch ( <i>Betula pendula</i> )	3	80, 75#	1	1	1	1	n/a	1	Stump	M	Poor	Stump with one stem growing through chain link fence and upright between fences.			<10	U1,2	1.32	3.1
T342	Apple ( <i>Malus sp</i> )	2	205, 175, 175, 110	4	4	4	3	n/a	1	Good	EM	Fair	Recently pruned leaving stubs. One sided low crown towards west.			10+	C1,2	4.08	43.8
G343*	Swedish Whitebeam ( <i>Sorbus intermedia</i> ), Goat Willow ( <i>Salix caprea</i> ), Butterfly bush ( <i>Buddleja sp.</i> )	5	<300 #	4	4	4	4	n/a	0	Good - Fair	Y-EM	Good - Fair				10+	C1,2	3.6	301.8

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				N	S	E	W												
G344*	Grey willow ( <i>Salix cinerea</i> ), Goat Willow ( <i>Salix caprea</i> )	3	<500 #	2	2	2	2	n/a	0	Fair	SM-M	Stump	Regrowth from stumps.		Fell	10+	C1,2	6	564
T345*	Elder ( <i>Sambucus nigra</i> )	3	150	2	2	2	2	n/a	0	Good	SM	Fair	Multi-stemmed. Scrubby.			10+	C1,2	1.8	12.5
T346*	Elder ( <i>Sambucus nigra</i> )	2	100#	1	1	1	1	n/a	0	Good	EM	Fair	Growing through perimeter fence.			10+	C1,2	1.2	3.1
T347*	Elder ( <i>Sambucus nigra</i> )	4	100, 75, 135, 70, 70, 70, 70, 70, 70	3	0.5	3	3	n/a	0	Good	SM	Fair	Multi stemmed from base. Stubs to south.			10+	C1,2	3.04	16.4
T348*	Elder ( <i>Sambucus nigra</i> )	3	150	2	2	2	2	n/a	0	Good	SM	Fair	Multi-stemmed. Scrubby.			10+	C1,2	1.8	12.5
G349*	Sycamore ( <i>Acer pseudoplatanus</i> )	9	<250	1	1	1	1	n/a	0	Good - Fair	SM	Poor	Growing through rail fence. Limited value.			<10	U1,2	3	55.1
T350*	Swedish Whitebeam ( <i>Sorbus intermedia</i> )	8	540	5	4	5	4	n/a	1	Fair	V	Fair	Large cavity opening on stem base to west. Hollow trunk with opening at old branch collar at circa 2 m.			40+	A1,3	10	63.4
T351*	Sycamore ( <i>Acer pseudoplatanus</i> )	1	290, 260, 210, 120	2	4	5	3	n/a	0	Fair	SM	Fair	Poorly formed from base. Topped in past at 8 m under overhead cables.			10+	C1,2	5.5	37.6
T352*	Swedish Whitebeam ( <i>Sorbus intermedia</i> )	8	650	5	4	5	5	2.0/W	1	Fair	V	Fair	Small cavity opening to north-east circa 0.5 m above ground level with hollowing internally above and beyond. Likely significant. Possible cavity opening at main stem			40+	A1,3	10	70.5
T353*	Swedish Whitebeam ( <i>Sorbus intermedia</i> )	6	190	2.5	2.5	2.5	2.5	1.5/W	1	Good	SM	Fair	Reasonable form although rubber tied around base.			10+	C1,2	2.28	19.6

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				N	S	E	W												
T354*	Elder ( <i>Sambucus nigra</i> )	3	100, 100#	1.5	1.5	1.5	1.5	n/a	0	Good	SM	Good			10+	C1,2	1.7	7	
T355*	Silver Birch ( <i>Betula pendula</i> )	8	160, 160, 80	4	4	4	4	0.5/W	1	Good	EM	Good	Multi-stemmed.		10+	C1,2	2.88	50.1	
T356*	Swedish Whitebeam ( <i>Sorbus intermedia</i> )	8	670	4	3	5	3	n/a	1	Fair	V	Fair	Covered in dense mature ivy preventing inspection of stem and form.		20+	B1,3	10.05	43.8	
G357*	Sycamore ( <i>Acer pseudoplatanus</i> ), Elder ( <i>Sambucus nigra</i> )	4	<75#	1	1	1	1	n/a	0	Good - Poor	Y-SM	Fair - Poor	Low quality with many growing through railway fence.		10+	C1,2	0.9	182.4	
G358*	Sycamore ( <i>Acer pseudoplatanus</i> ), Ash ( <i>Fraxinus excelsior</i> ), Elder ( <i>Sambucus nigra</i> ), Silver Birch ( <i>Betula pendula</i> ), Willow ( <i>Salix sp</i> )	8	<150 #	2	2	2	2	n/a	0	Good - Fair	Y-SM	Good - Fair			10+	C1,2	1.8	1218.3	
T359*	Ash ( <i>Fraxinus excelsior</i> )	12	250, 220, 340, 160, 220, 180	6	6	6	6	n/a	1	Good	EM	Fair	Multi-stemmed from base.		20+	B1,2	6.71	112.7	
T360*	Ash ( <i>Fraxinus excelsior</i> )	12	380, 160, 260, 235, 230, 210, 180	6	8	6	6	n/a	1	Good	EM	Fair	Multi-stemmed from base. Bramble around base.		20+	B1,2	7.51	131.5	
G361*	Sycamore ( <i>Acer pseudoplatanus</i> )	14	<340	5	5	5	5	n/a	1	Good - Fair	SM-EM	Good - Fair	Covered in dense ivy so not fully surveyed. Some minor deadwood.		20+	B1,2	4.08	535.9	
G362*	Sycamore ( <i>Acer pseudoplatanus</i> )	9	<170	2	2	2	2	n/a	0	Good - Fair	Y-SM	Good - Fair	Multi-stemmed trees.	Fell	10+	C1,2	2.04	406.4	
T363*	Sycamore ( <i>Acer pseudoplatanus</i> )	8	220, 170	4	2	3	3	1.0/N	0	Good	SM	Fair	Multi-stemmed from base.	Fell	20+	B1,2	3.34	28.2	

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				N	S	E	W												
T364*	Elder ( <i>Sambucus nigra</i> )	3	150#	0.5	0.5	0.5	0.5	n/a	0	Good	SM	Poor	Dense and multi stemmed from base. Cut down to stubs and regrown.		Fell	10+	C1,2	1.8	0.8
T365*	Sycamore ( <i>Acer pseudoplatanus</i> )	8	225, 220, 285	4	5	5	3	3.0/N	0	Good	SM	Fair	Twin stemmed from base. Multi-stemmed crown.		Fell	20+	B1,2	5.09	56.4
T366*	Sycamore ( <i>Acer pseudoplatanus</i> )	12	360, 290, 290, 150, 240, 200, 140, 160, 160, 290	7	7	7	7	n/a	0	Good	EM	Fair	Sprawling multi stemmed form from base. Wire cabling wrapped through crown.			20+	B1,2	8.65	153.4
T367*	Goat Willow ( <i>Salix caprea</i> )	1	650#	1	1	1	1	n/a	0	Stump	M	Stump	0.5 m tall stump with vigorous new shoots. One stem with diameter of 240 mm growing through fence.		Fell	10+	C1,2	7.8	3.1
T368*	Sycamore ( <i>Acer pseudoplatanus</i> )	12	180, 350	5	5	5	5	2.0/S	0	Good	SM	Good				20+	B1,2	4.72	78.3
W369*	Grey willow ( <i>Salix cinerea</i> ), Sycamore ( <i>Acer pseudoplatanus</i> ), Apple ( <i>Malus sp</i> ), Whitebeam species ( <i>Sorbus sp</i> )	16	<500 #	4	4	4	4	n/a	0	Good - Poor	SM-M	Good - Poor	Beyond security fencing so not fully surveyed. One collapsed mature willow to rear of fence with decay to stems. Dense ivy into crown. Recently cut back from site. Mostly consisting of multi stemmed sycamore.			20+	B1,2	6	2718.4
T370*	Sycamore ( <i>Acer pseudoplatanus</i> )	1	650#	1	1	1	1	n/a	0	Stump	M	Stump	0.5 m tall stump with vigorous new shoots.		Fell	10+	C1,2	7.8	3.1
T371*	Swedish Whitebeam ( <i>Sorbus intermedia</i> )	1	450#	1	1	1	1	n/a	0	Stump	M	Stump	0.3 m stump with vigorous new shoots.		Fell	10+	C1,2	5.4	3.1
T372*	Swedish Whitebeam ( <i>Sorbus intermedia</i> )	1	650#	1	1	1	1	n/a	0	Stump	M	Stump	1 m stump with vigorous new shoots.		Fell	10+	C1,2	7.8	3.1

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				N	S	E	W												
T373*	Grey willow ( <i>Salix cinerea</i> )	2	500#	1	1	1	1	n/a	0	Stump	EM	Stump	Stump with some fungal fruiting bodies and vigorous new growth.		Fell	10+	C1,2	6	3.1
T374	Elder ( <i>Sambucus nigra</i> )	2	75, 75#	1	1	1	1	n/a	0	Good	SM	Good				10+	C1,2	1.27	3.1
T375	Elder ( <i>Sambucus nigra</i> )	3	120, 75#	1	1	1	1	n/a	0	Good	SM	Good				10+	C1,2	1.7	3.1
T376	Elder ( <i>Sambucus nigra</i> )	3	350#	2	2	2	2	n/a	0	Good	SM	Good				10+	C1,2	4.2	12.5
T377*	Sycamore ( <i>Acer pseudoplatanus</i> )	14	550, 80, 200#	5	5	4	5	n/a	2	Good	EM	Good	Located between two fences potentially in site. Multi-stemmed.			20+	B1,2	7.09	70.5
T378*	Elder ( <i>Sambucus nigra</i> )	5	120, 120, 90, 90, 90, 90#	3	3	3	3	n/a	0	Good	SM	Good	Dense and multi stemmed from base.			10+	C1,2	2.94	28.2
T379*	Ash ( <i>Fraxinus excelsior</i> )	7	160, 150, 150	4	4	4	4	n/a	1	Good	SM	Good	Located adjacent to rubble and pylon. Reduced life expectancy due to location.			10+	C1,2	3.19	50.1
T380*	Ash ( <i>Fraxinus excelsior</i> )	4	100	1.5	1.5	1.5	1.5	n/a	1	Good	Y	Good	Located adjacent to rubble and pylon. Reduced life expectancy due to location.			10+	C1,2	1.2	7
G381*	Butterfly bush ( <i>Buddleja sp.</i> )	3	<75#	2	2	2	2	n/a	0	Good	SM	Good	Growing in rubble.			10+	C1,2	0.9	32.1
T382*	Elder ( <i>Sambucus nigra</i> )	5	150#	1.5	1.5	1.5	1.5	n/a	2	Good	SM	Fair	Growing through fence beyond chain-link fence.			10+	C1,2	1.8	7
T383*	Ash ( <i>Fraxinus excelsior</i> )	14	250, 300#	6	7	6	4	n/a	1	Fair	EM	Fair	Minor deadwood. Some signs of dieback and epicormic shoots.			20+	B1,2	4.69	101.8
T384*	Ash ( <i>Fraxinus excelsior</i> )	12	170, 320, 280, 490	6	6	6	4	n/a	0	Good	EM	Fair	Twisted form from base. Minor stubs and deadwood.			20+	B1,2	8.05	93.9
T385*	Sycamore ( <i>Acer pseudoplatanus</i> )	5	165, 115, 85	3	1	3	3	1.0/N	0	Good	SM	Fair	Some branches to south badly hacked leaving stubs.			10+	C1,2	2.62	18.8

Ref. No	Species Common Name (Scientific name)	Estimated Height (m)	Stem Diameter (mm)	Canopy Spread (m)				First Significant Branch & direction (m)	Canopy Clearance Height (m)	Physiological Condition	Life Stage	Structural Condition	Observations	Preliminary Management Recommendations	Works to Facilitate the Proposed Development	Estimated Remaining Contribution (yrs)	Category	RPA Radius (m)	Canopy Cover (m <sup>2</sup> )
				N	S	E	W												
T386*	Elder ( <i>Sambucus nigra</i> )	2	200, 90, 90, 100#	0.5	0.5	0.5	0.5	n/a	0	Poor	EM	Poor	Dieback and deadwood. Limited value.			10+	C1,2	3.09	0.8
T387*	Elder ( <i>Sambucus nigra</i> )	2	150#	1.5	1.5	1.5	1.5	n/a	0	Good	SM	Good			10+	C1,2	1.8	7	
T388*	Common Oak ( <i>Quercus robur</i> )	10	350, 160, 200, 160, 120, 110, 110#	5	5	5	3	0.5/N & S	0	Good	SM	Fair	Multi stemmed from base. Some included bark between two stems. One main leader to east. Stubs towards site.			20+	B1,2	5.49	62.6

# Annex C: Planning Policy Extracts

## C.1 National Policy

- C.1.1 The Overarching National Policy Statement for Energy (EN-1) (2023) and the National Policy Statement for Electricity Networks Infrastructure (EN-5) (2023) set out the national policy for energy infrastructure relevant to the Proposed Development.
- C.1.2 EN-1 sets out policy relating to Ancient Woodland and Veteran Trees in Section 5.4, which also details the approach towards biodiversity conservation. With specific reference to ancient woodland, ancient and veteran trees EN-1 states the following:

### **Ancient woodland, veteran trees and other irreplaceable habitats**

- C.1.3 *"5.4.14 Irreplaceable habitats are habitats which would be technically very difficult (or take a very significant time) to restore, recreate or replace once destroyed, taking into account their age, uniqueness, species diversity or rarity.*
- C.1.4 *5.4.15 Ancient woodland is a valuable biodiversity resource both for its diversity of species and for its longevity as woodland. [Redacted sentence for Keepers of Time policy, England-only.] Ancient or veteran trees found outside ancient woodland are also particularly valuable. Other types of irreplaceable habitats include blanket bog, limestone pavement, sand dunes, salt marsh and lowland fen."*
- C.1.5 *"5.4.32 Applicants should include measures to mitigate the direct and indirect effects of development on ancient woodland, ancient and veteran trees or other irreplaceable habitats during both construction and operational phase."*

### **Protection and enhancement of habitats and other species**

- C.1.6 *"5.4.33 Applicants should consider any reasonable opportunities to maximise the restoration, creation, and enhancement of wider biodiversity, and the protection and restoration of the ability of habitats to store or sequester carbon as set out under Section 4.6 [of EN-1].*
- C.1.7 *5.4.34 Consideration should be given to improvements to, and impacts on, habitats and species in, around and beyond developments, for wider ecosystem services and natural capital benefits, beyond those under protection and identified as being of principal importance. This may include considerations and opportunities identified through Local Nature Recovery Strategies, and national goals and targets set through the Environment Act 2021 and the Environmental Improvement Plan 2023."*

## Mitigation

- C.1.8 *“5.4.35 Applicants should include appropriate avoidance, mitigation, compensation and enhancement measures as an integral part of the proposed development. In particular, the applicant should demonstrate that:*
- during construction, they will seek to ensure that activities will be confined to the minimum areas required for the works[sic]*
  - the timing of construction has been planned to avoid or limit disturbance[sic]*
  - during construction and operation best practice will be followed to ensure that risk of disturbance or damage to species or habitats is minimised, including as a consequence of transport access arrangements[sic]*
  - habitats will, where practicable, be restored after construction works have finished[sic]*
  - opportunities will be taken to enhance existing habitats rather than replace them, and where practicable, create new habitats of value within the site landscaping proposals. Where habitat creation is required as mitigation, compensation, or enhancement the location and quality will be of key importance. In this regard habitat creation should be focused on areas where the most ecological and ecosystems benefits can be realised.*
  - mitigations required as a result of legal protection of habitats or species will be complied with.*
- C.1.9 *5.4.36 Applicants should produce and implement a Biodiversity Management Strategy as part of their development proposals. This could include provision for biodiversity awareness training to employees and contractors so as to avoid unnecessary adverse impacts on biodiversity during the construction and operation stages.”*
- C.1.10 *5.4.53 The Secretary of State should not grant development consent for any development that would result in the loss or deterioration of any irreplaceable habitats, including ancient woodland, and ancient and veteran trees unless there are wholly exceptional reasons [Footnote: For example where the public benefits (including need) of the nationally significant energy infrastructure would clearly outweigh the loss or deterioration of the habitat.] and a suitable compensation strategy exists.”*

## 5.11 Land Use, Including Open Space, Green Infrastructure, and Green Belt

- C.1.11 These paragraphs outline how tree losses should be mitigated:
- C.1.12 *“5.11.27 Existing trees and woodlands should be retained wherever possible. [Redacted sentence covers target for England only.] The applicant should assess the impacts on, and loss of, all trees and woodlands within the project boundary and develop mitigation measures to minimise adverse impacts and any risk of net deforestation as a result of the scheme. Mitigation may include, but is not limited to, the use of buffers to enhance resilience, improvements to connectivity, and improved woodland management. Where woodland loss is unavoidable, compensation schemes*

*will be required, and the long-term management and maintenance of newly planted trees should be secured[sic]”*

- C.1.13 EN-5 is focused predominantly on overhead transmission and the Holford Rules. While there are existing overhead transmission lines within the Construction and Operation Area, there are no overhead transmission lines (other than potential elevated cables within the extent of the CQLCP Abated Generating Station itself) proposed as part of the Proposed Development and therefore these are considered not relevant to the Proposed Development.

## C.2 Planning Policy Wales

- C.2.1 PPW (Edition 12, 2024) seeks to ensure that new development is sustainable and underlines the importance of Green Infrastructure, of which trees form an integral part. The primary objective of PPW is to ensure that the planning system contributes towards the delivery of sustainable development and improves the social, economic, environmental and cultural wellbeing of Wales.
- C.2.2 PPW contains specific policies in relation to trees, woodlands and hedgerows, which are as follows :
- C.2.3 *“6.4.37 Trees, hedgerows, groups of trees and areas of woodland are of great importance for biodiversity. They are important connecting habitats for resilient ecological networks and make an essential wider contribution to landscape character, culture, heritage and sense of place, air quality, recreation and local climate moderation. They also play a vital role in tackling the climate emergency by locking up carbon, and can provide shade, shelter and foraging opportunities, wider landscape benefits such as air and diffuse pollution interception, natural flood management, and building materials. The importance of trees, in particular urban trees, in creating distinctive and natural places which deliver health and well-being benefits to communities, now and in the future should be promoted as part of plan making and decision taking [Footnote: Tree Cover in Wales’ towns and cities see [www.naturalresources.wales/media/4123/tree-cover-in-wales-towns-and-cities-2014-study.pdf](http://www.naturalresources.wales/media/4123/tree-cover-in-wales-towns-and-cities-2014-study.pdf)]. Planning authorities must promote the planting of new trees, hedgerows, groups of trees and areas of woodland as part of new development.*
- C.2.4 *6.4.38 Welsh native tree and hedge species, characteristic of the local area, provide a strong ecosystem resilience function, and they provide resources for local wildlife, particularly other native plants and species. Native tree and hedge species can also complement opportunities for natural regeneration. Alongside broader woodland habitat types, such as wood pasture, parkland and traditional orchards, native tree and hedge species help to define our cultural heritage and landscape, creating a strong sense of place and connection to the past.*
- C.2.5 *6.4.39 Planning authorities must protect trees, hedgerows, groups of trees and areas of woodland where they have ecological value, contribute to the character or amenity of a particular locality, or perform a beneficial green infrastructure function [Footnote: British Standard – BS5837:2012 Tree in relation to design, demolition, and Constructions [sic] – Recommendations.]*

*Planning authorities should consider the importance of trees and woodland, particularly native woodland and valued trees, and should have regard to local authority tree strategies or SPG and the Green Infrastructure Assessment. Planning authorities should adopt appropriate, locally relevant, time sensitive, minimum tree canopy cover targets for their authority area to guide the protection and where appropriate the expansion of canopy cover. The Green Infrastructure Assessment and tools such as NRW's Tree Cover in Wales' Towns and Cities study and Forest Research's i-Tree Eco tool will help establish a baseline of canopy cover and guide the identification of appropriate and measurable canopy targets [Footnote: [www.naturalresources.wales/about-us/what-we-do/our-roles-and-responsibilities/green-spaces/urban-trees/?lang=en](http://www.naturalresources.wales/about-us/what-we-do/our-roles-and-responsibilities/green-spaces/urban-trees/?lang=en)]. Tools to help with design and species choice in urban areas are also available [Footnote: [www.naturalresources.wales/urbantrees?lang=en](http://www.naturalresources.wales/urbantrees?lang=en); [www.naturalresources.wales/guidance-and-advice/environmental-topics/woodlands-and-forests/?lang=en](http://www.naturalresources.wales/guidance-and-advice/environmental-topics/woodlands-and-forests/?lang=en); [www.naturalresources.wales/about-us/what-we-do/our-roles-and-responsibilities/green-spaces/?lang=en](http://www.naturalresources.wales/about-us/what-we-do/our-roles-and-responsibilities/green-spaces/?lang=en); [www.tdag.org.uk/our-guides.html](http://www.tdag.org.uk/our-guides.html)].*

- C.2.6 6.4.40 *Where trees, woodland and hedgerows are present, their retention, protection and integration should be identified within planning applications. Where surveys identify trees, hedgerows, groups of trees and areas of woodland capable of making a significant contribution to the area, these trees should be retained and protected. The provision of services and utilities infrastructure to the application site should also avoid the loss of trees, woodlands or hedges and must be considered as part of the development proposal; where such trees are lost, they will be subject to the replacement planting ratios set out below.*
- C.2.7 6.4.41 *Whilst most focus within the planning system is targeted at urban trees, planning authorities should recognise the importance of trees within the countryside, either as woodlands, within hedgerows and hedgebanks, or free-standing trees in fields, or as wood pasture. This is particularly important as the effects of climate change are leading towards pests and diseases that are damaging many of our native species in the rural landscape. Positive mechanisms of rural tree retention should be considered, and measures taken to replace them in an effective and economic manner, either with new planting or by allowing them to grow to their full potential.*
- C.2.8 6.4.42 *Permanent removal of trees, woodland and hedgerows will only be permitted where it would achieve significant and clearly defined public benefits. Where individual or groups of trees and hedgerows are removed as part of a proposed scheme, planning authorities must first follow the step wise approach as set out in paragraph 6.4.15. Where loss is unavoidable developers will be required to provide compensatory planting (which is proportionate to the proposed loss as identified through an assessment of green infrastructure value including biodiversity, landscape value and carbon capture). Replacement planting shall be at a ratio equivalent to the quality, environmental and ecological importance of the tree(s) lost and this must be preferably onsite, or immediately adjacent to the site, and at a minimum ratio of at least 3 trees of a similar type and compensatory size planted for every 1 lost. Where a woodland or a shelterbelt area is lost as part of a proposed*

*scheme, the compensation planting must be at a scale, design and species mix reflective of that area lost. In such circumstances, the planting rate must be at a minimum of 1600 trees per hectare for broadleaves, and 2500 trees per hectare for conifers. The planting position for each replacement tree shall be fit to support its establishment and health, and ensure its unconstrained long term growth to optimise the environmental and ecological benefits it affords.*

- C.2.9 *6.4.43 Ancient woodland, semi-natural woodlands, individual ancient, veteran and heritage trees and ancient hedgerows are irreplaceable natural resources, and have significant landscape, biodiversity and cultural value. Such trees, woodlands and hedgerows are to be afforded protection from development which would result in their loss or deterioration unless very exceptionally there are significant and clearly defined public benefits; this protection must prevent potentially damaging operations and their unnecessary loss [Footnote: Further advice in relation to ancient woodland is available on NRW's website.]. In the case of a site recorded on the Ancient Woodland Inventory, authorities should consider the advice of NRW. Planning authorities should also have regard to the Ancient Tree Inventory, work to improve its completeness and use it to ensure the protection of trees and woodland and identify opportunities for more planting as part of the Green Infrastructure Assessment, particularly in terms of canopy cover.*
- C.2.10 *6.4.44 The protection and planting of trees and hedgerows should be delivered, where appropriate, through locally specific strategies and policies, through imposing conditions when granting planning permission, and/or by making Tree Preservation Orders (TPOs) [Footnote: Local authorities have a general power to make TPOs if it appears it is expedient to do so in the interests of amenity. They can make a provisional TPO which takes effect immediately, and it can remain effective for six months or until the TPO is confirmed]. They should also be incorporated into Green Infrastructure Assessments and plans."*

## **C.3 Local Policy Context**

- C.3.1 The potential impact of development on all trees (including those not protected by a TPO or other statutory designation) is a matter which the Secretary of State may consider "important and relevant" to the decision on the DCO Application. The Construction and Operation Area is located within the administrative area of FCC.
- C.3.2 The Flintshire Local Development Plan 2015 – 2030, adopted 24 January 2023, illustrates how important trees, woodland and hedgerows are to the character of the area and outlines the policies with regards to the protection of trees.
- C.3.3 Relevant extracts from the Flintshire Local Development Plan 2015 - 2030 are set out below:

### **EN7: Development Affecting Trees, Woodlands and Hedgerows**

- C.3.4 "Development proposals that will result in significant loss of, or harm to, trees, woodlands or hedgerows of biodiversity, historic, and amenity value will not be permitted.

- C.3.5 *Where the impact of development affecting trees, woodlands or hedgerows is considered acceptable, development will only be permitted where:*
- a. *the development maximises their retention through sensitive design measures; and*
  - b. *where the removal of trees is considered necessary, suitable replacements shall be provided elsewhere within the site; and*
  - c. *it results in a net benefit in biodiversity.”*
- C.3.6 *“9.29 Trees, woodlands and hedgerows are a vital part of the urban and rural landscape and form an essential part of wider ecosystems and green infrastructure networks. They provide wildlife habitats and shelter, shade and recreational and tourism opportunities. Hedgerows, particularly older hedgerows, often contain a great diversity of plant and animal species and have an important role in conserving and enhancing biodiversity. Some trees and hedgerows are protected by Tree Preservation Orders or Hedgerow Regulations, but many aren't and therefore need protection, which is the intention of this policy.*
- C.3.7 *9.30 Within Flintshire there are also a number of ancient woodlands which are areas that have had woodland cover for centuries, been relatively undisturbed by human activity and contain precious woodland habitats. Each one is unique and irreplaceable and requires protection. Semi-natural woodlands are also important and should be protected from development.*
- C.3.8 *9.31 Native hedgerows are a distinctive feature of the countryside which contribute to the character and interest of the landscape. Many date back to the first enclosure of the land and are therefore also of historic interest. The Hedgerow Regulations 1997, which came into force on the 1st June 1997, conferred new powers on Local Planning Authorities to protect important hedgerows in the countryside through the application of a series of criteria. The Council will seek to prevent and where necessary refuse development proposals which would lead to significant loss or damage to such hedgerows. Where the removal of a hedgerow is essential, a suitable replacement must be provided. The policy will also seek to protect hedgerows which do not qualify for protection under the Hedgerow Regulations, but can still form a valuable part of the landscape character of the County and make an important contribution to biodiversity. The Council will therefore ensure that, wherever possible, native hedgerows are retained and sympathetically managed.*
- C.3.9 *9.32 The incorporation of existing trees and hedgerows into new development can help its integration into the landscape and provide visual, nature conservation and biodiversity interests. Conditions and planning obligations will be applied to ensure their protection and retention during the construction period and in the long term.*
- C.3.10 *9.33 Further guidance on Trees and Development is contained in a Supplementary Planning Guidance Note.”*

## Annex D: Photographs



**Photograph 1 Looking south into the woodland (W8) identified as Ancient Woodland.**



**Photograph 2 Collapsed veteran goat willow (T6)**



**Photograph 3 A veteran common oak (T13) located at the northern end of the ancient woodland. Partially collapsed towards the Construction and Operation Area with significant decay in collapsed sections.**



**Photograph 4 T22 an ancient elder located adjacent to a stream.**



**Photograph 5 An alder with a particularly large stem diameter. Considered ancient.**



**Photograph 6 Mature hawthorn (T77) considered to be veteran due to the significant decay in two of three stems.**



**Photograph 7 Mature veteran oak (T123).**



**Photograph 8 A mature and veteran common oak (T125).**



**Photograph 9 Ancient goat willow (T137) previously cut back to 1.4m with a regrown canopy.**



**Photograph 10 Ancient goat willow (T149) showing evidence of previous pruning and crown regrowth.**



**Photograph 11 A mature, veteran goat willow (T272) with significant decay to its main bole.**



**Photograph 12 A mature, veteran Swedish whitebeam (T350) with significant internal decay evident through large cavity opening at base.**



**Photograph 13 T356 A mature potential veteran Swedish whitebeam covered in dense ivy.**



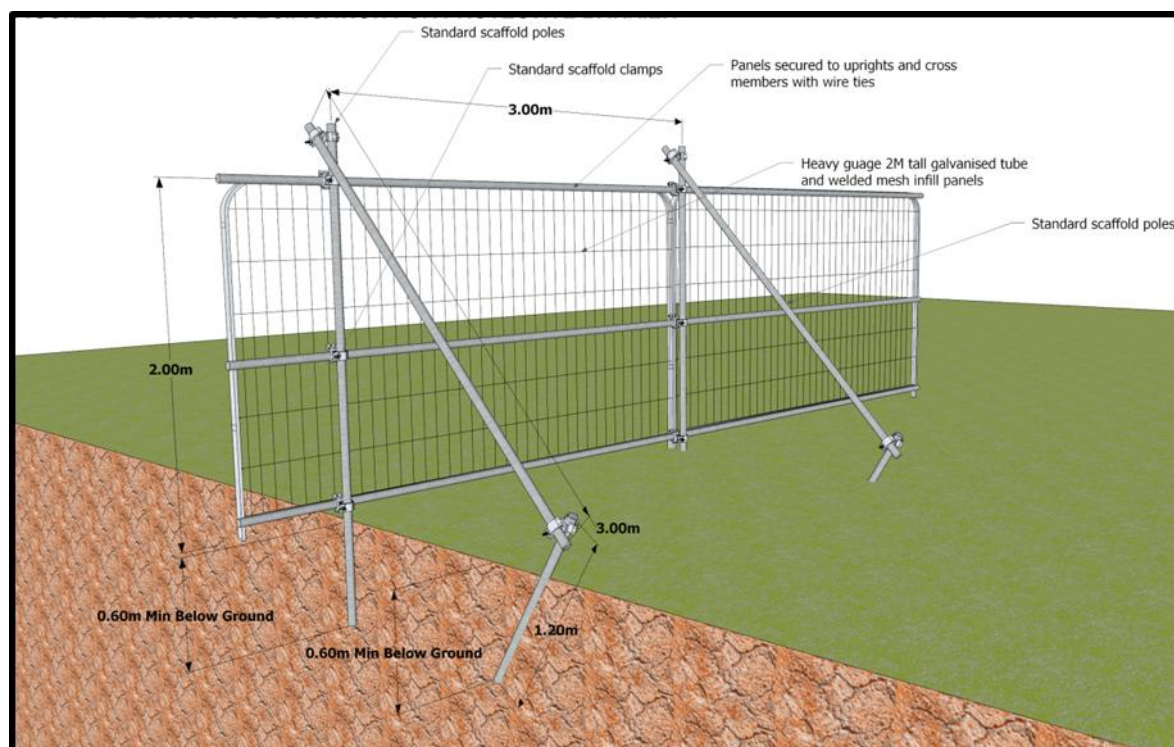
**Photograph 14 A mature high quality common oak (T105)**

# Annex E: Outline Tree Protection Measures

## E.1 Outline Tree Protection Measures

1. The default position as set out by BS 5837:2012 is that retained trees must be protected from construction operations with the erection of robust protective fencing positioned on the outer edge of the RPA or crown spread (whichever is greatest). All site operations will be restricted to the area outside of tree protection fencing and this area will form a Construction Exclusion Zone (CEZ) unless agreed otherwise. Protection measures will be installed as set out in the TPP included in **Annex A: Figures** of this report.
2. The area inside the fence and any additional tree protection measures will be sacrosanct and must not be removed or altered without the prior approval of the Project Arboriculturist. Any damage to tree protection measures must be reported immediately.
3. Fencing shall be constructed with robust vertical and horizontal scaffold framework with weldmesh panels firmly attached as per BS 5837:2012 shown in Plate 1. Vertical support poles and bracing poles must be located with care to avoid underground utility services and will be sited to avoid the structural roots of retained trees.
4. Alternative equivalent robust and immovable fencing specification including site hoarding will also be appropriate.
5. Suitable all weather signage will be fixed to fencing to notify site staff and visitors of the CEZ and its purpose (example included as Annex F).

### Plate 1: Default specification for protective barrier



6. When entering and exiting the Construction and Operation Area the fencing contractor must avoid the production of ruts on the unprotected surface of the ground.
7. Protective fencing and ground protection shall stay in place until all development operations have been completed and the prior consent of the Project Arboriculturist has been obtained.

## E.2 Ground Protection

- E.2.1 Should access be unavoidable within the RPA of a retained tree, fit for purpose ground protection must be in place which is sufficient to protect the structure of the soil from damage based on the heaviest anticipated load.
- E.2.2 As set out in section 6.2.3.3 of BS5837:2012 the following ground protection measures will be appropriate:
  - suitable ground protection for pedestrian only access will comprise a single thickness of scaffold boards set on a compressible layer of 100 mm of woodchip on a geotextile separation layer.
  - pedestrian operated plant up to two tonnes in weight would require the use of a proprietary ground protection system (such as Ground Guards or Eve Trakway or equivalent) set on a minimum depth of 150 mm woodchip or sharp sand.
  - heavier loads will require ground protection to an engineering specification in conjunction with arboricultural advice.
- E.2.3 As a guide the threshold beyond which root development is significantly affected is a bulk density ranging from 1.4 g per cm<sup>3</sup> for clay soils, to 1.75 g per cm<sup>3</sup> for sandy soils.

E.2.4 Tree protective measures shall stay in place until all construction operations are completed and removal is agreed with the Project Arboriculturist.

## E.3 General Guidance for the Management of Exposed Roots

E.3.1 Excavation must only take place within the RPA of a retained tree with the prior agreement of the Project Arboriculturist. All excavation must be undertaken using hand tools or compressed air (such as an air spade).

E.3.2 The following general principles will apply:

- individual or small groups of roots less than 25 mm in diameter will be retained where possible but can be severed with a sharp tool such as secateurs or pruning saws to leave a clean cut end (ideally 100 mm back from the face of the excavation to account for future regrowth) where they pose an obstruction.
- where roots are encountered which are larger than 25 mm in diameter or where significant groups of smaller roots are found, the advice of an arboriculturist must be sought to decide an appropriate course of action (following consultation with the Local Authority Tree Officer where appropriate).
- roots must only be exposed for the minimum period possible. In the interim period any exposed roots must be completely covered with dampened hessian sacking (which may require ongoing re wetting) to avoid drying out and exposure to light (which can result in the death of roots). Backfill for excavations should utilise the parent material and must not be significantly compacted.

## E.4 Storage, Use and Mixing of Materials

E.4.1 The use, mixing and washing of materials can lead to run off or inadvertent spillage into tree root zones. Many substances often used on construction sites can be toxic to tree roots (such as concrete, fuels, salts, builders sand and herbicides), can result in the death of tree roots and beneficial soil organisms; and have a significant impact on the future health and appearance of trees.

E.4.2 The storage of materials can result in an effective raised soil level. This buries tree roots at depths where air and water are less available and can lead to the decline or death of the tree.

E.4.3 For these reasons the storage of materials and any washing, mixing or refuelling must take place in agreed allocated areas at least 5 m from the edge of the RPA of retained trees.

E.4.4 Any slope effect must be taken into account and where there is a potential for run off, heavy duty polythene sheeting and sandbags must be in place as bunding to prevent toxic materials reaching RPAs.

## Annex F : Tree Protection Signage

