

**Arboricultural Report
BS5837:2012 Trees in Relation to
Design, Demolition and Construction
-Recommendations**

Proposed Site: Huntstown, Dublin
Client: Huntstown Power Company

Job Reference: Mooretown Substation
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Date: 21st July 2021

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- 4. Tree Constraints Plan**
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1.0 Terms of Reference

1.1 I Rik Pannett was retained by AWN Consulting on behalf of Huntstown PC, to undertake a pre-development tree survey at Huntstown, Dublin D11 in accordance with British Standards 'Trees in relation to design, demolition & construction – Recommendations (BS 5837:2012). The surveyed trees are located within the parameters and adjacent to the proposed site.

1.2 All trees have been inspected from ground level only. No climbing inspections or below ground investigations have been undertaken. Should a more detailed inspection be deemed appropriate, this will be covered under recommendations. Trees are dynamic living organisms, whose health and condition can be subject to rapid change, depending upon external and internal factors. The conclusions and recommendations contained in this report relate to the trees only at the time of inspection, and do not constitute a tree risk assessment report.

1.3 An initial tree survey and visual assessment was undertaken in November 2019 by Rik Pannett. An additional tree survey was undertaken in November 2020 to update the original findings, and to survey another field adjacent to the original site. A further visual assessment was made in July 2021.

1.4 The objective of this survey was to gather information regarding the location of trees and hedgerows on the site and how these may be impacted by construction and development of the site. The survey will detail any constraints to the proposed development. An arboricultural impact assessment addresses the likely impact of the proposed development on trees within and adjacent to the site. Recommendations for the protection of trees during construction work is based on BS 5837: 2012. An arboricultural method statement is included to provide guidance in relation to tree protection during construction. Landscape planting recommendations are also included in this report.

2.0 Survey Methodology

2.1 Unless otherwise stated tree inspections have been undertaken from ground level using non-invasive techniques only. The survey concentrated primarily on the significant trees within and adjacent to the proposed development site.

2.2 All trees, groups of trees and hedgerows surveyed have been given a number prefixed by the letters T, G and H respectively and were assessed using the 'Cascade chart for tree quality assessment' as described in Table 1 of the BS 5837:2012. Where accessible, trees were physically tagged with an individually numbered tag. The locations of trees, groups of trees and hedgerows on, and adjacent to the site are shown on the Tree Constraints Plan (TCP Appendix 4)

2.3 Tree species, height, stem diameter and crown spread were recorded for significant trees within the site, some of which may be considered to be a constraint on development based on information supplied by the client. In accordance with BS 5837: 2012 'Trees in relation to design, demolition and construction - Recommendations', only trees with a stem diameter of 75mm or greater were surveyed. As per section 4.4.2.3, trees forming obvious groups were assessed as such.

2.4 The findings of the survey are given in tabular form in Appendix 1. A full explanation of the survey headings is given in Appendix 2.

2.5 No assessment of the soil has taken place as part of this report. The BS 5837:2012 states that a soil assessment should be carried out by a competent person to establish the structure, clay content and potential volume for change of the soil. A survey of this nature is considered outside the scope of this arboricultural assessment. An arboricultural method statement is included to provide guidance in relation to tree protection during construction. For guidance on soil structure in relation to construction, advice should be sought from a Structural Engineer.



Fig 1. Shelter belt, South-Eastern corner



Fig 2. Hedgerow including ash T7

3.0 Site Overview

3.1 The survey area comprises broadly level arable land bordered and intersected by drainage ditches (Fig 4) adjoined by hedgerows of varying character. There are a number of native hedgerows (Fig 2), comprising an overstorey of Ash (*Fraxinus excelsior*), Wych Elm (*Ulmus glabra*) and Sycamore (*Acer pseudoplatanus*), with an understorey of Hawthorn (*Crataegus monogyna*), Blackthorn (*Prunus spinosa*), and Elder (*Sambucus nigra*). Bramble

(*Rubus fruticosus*), Dog Rose (*Rosa canina*) and Ivy (*Hedera helix*) proliferate in the understorey, and the Ivy climbs high into the crowns of the overstorey trees. There is a shelter belt of Birch (Fig 1) (*Betula pendula*), Beech (*Fagus sylvatica*), and Rowan (*Sorbus aucuparia*) to the South-East, and to the South-West lies another shelter belt of Scots Pine (*Pinus sylvestris*), Oak (*Quercus petraea*), Beech, and Ash. The northern boundary is a hedgerow adjacent to arable land and to The Dogs Trust facility. The eastern extent is bordered by a public road and two dwelling houses. The southern boundary is a roadway which leads to Huntstown Power Station and Huntstown Quarry. The western boundary is adjacent to the Huntstown Power Station campus.

3.2 The development proposals are for a data centre and a substation which will require significant works to the entirety of the site.

4.0 Limitations and scope of survey report

4.1 The site was originally surveyed in winter and again in summer. Most of the overstorey trees within the hedgerows are covered in ivy from ground level, far into the crowns. Ivy obscures visibility of the crown and stem and potentially prevents observation of gross structural defects and fungal fruiting bodies if present. This survey does not constitute a tree safety inspection, however, where obvious defects were observed they have been noted.

5.0 Summary of Findings & Conclusions

5.1 A total of 45 trees or groups of trees as well as 17 hedgerows have been surveyed. A breakdown of the numbers of trees in each retention category is shown in the table below as per BS 5837:2012:

	Category A	Category B	Category C	Category U
Trees	0	0	36	0
Groups	0	5	4	0
Hedgerows	0	0	17	0

5.2 Category A trees are of high quality and there should be a general presumption for retention of these trees.

5.3 Category B trees are of moderate quality. It is likely that most Category B trees should be retained and regarded as a constraint to development. Some Category B trees, particularly smaller individuals are of insufficient value to impose significant design constraints and removal of such trees can be justified in order to promote good design (usually on the basis that mitigation is provided elsewhere on the site in the form of high quality new planting).

5.4 Category C trees are of low quality. They should not impose significant constraints to design layout, and if necessary can defensibly be removed in order to facilitate good design. If Category C trees can be satisfactorily retained within the proposed layout, then consideration should be given for this.

5.5 Category U trees are unsuitable for retention, usually in such a condition that they cannot realistically be retained as living trees and should be removed for reasons of sound arboricultural practice.

6.0 Arboricultural Impact Assessment

6.1 Based on the proposed site layout drawings supplied, the arboricultural impact of the proposed development was assessed as follows:

6.2 Data Centre:

Many of the trees, tree groups and hedgerows are implicated by the current proposal for development. Several trees included in the survey offer little or no sustainability due to the scale and extent of the proposed works (refer to appendix 5: TPP). The trees and hedgerows intersecting the interior of the site will all need to be removed, whereas some of the boundary trees (T004; T005; T008-T016; T038; G039-G043) and hedgerows (H1-H3; H5; H7-H9; H14) can be satisfactorily retained within the design proposals.

6.3 Substation:

The semi-mature shelter belt (G045) at the South-West of the site, adjacent Huntstown power station campus needs to be removed to accommodate construction of the proposed substation and ancillary services, as does a section of the hedgerow (H15) and the trees therein (T018-T021).

6.4 Replanting:

There is limited visibility of the site from public roads. The trees are generally of small stature (Fig 4), and as such they offer minimal visual importance. The planned replanting of a wide variety of native trees and hedgerows will mitigate losses sustained during the development of the site as well as mitigating expected future losses due to ash dieback. The impact on retained trees, tree groups and hedgerows will be minimal if the development plans are carefully implemented according to the arboricultural method statement.

6.5 Tree Constraints Plan

Refer to Tree Constraints Plan (TCP) for location of trees and hedgerows (Appendix 3). The TCP has been produced as a basis for the assessment of the constraints imposed by existing trees on the proposed design.

6.6 Tree Protection Plan

The Tree Protection Plan (TPP: appendix 5) shows the indicative position of the Root Protection Area (RPA) for trees and hedgerows with a retention priority. The RPA (as described in BS5837: 2012 sec. 3.7) represents the minimum area around each tree in which the ground should remain largely undisturbed and is shown as a pink line on the TPP (refer to Tree Survey Data: appendix 1 for accurate RPA radiuses). Hedgerows close to construction should be protected at least 1 metre from the canopy edge. Tree and hedgerow protection zones are shown as an orange line on the TPP.



Fig 3. Drainage ditch



Fig 4. Ash, typical of many on site

7.0 Arboricultural Method Statement

The arboricultural method statement provides information about how to protect trees and hedgerows, their crowns, stems and root systems during the construction process. The stages described below should be used as reference by the main contractor in order to prepare a site-specific method statement for the construction works. The method statement is to be used in conjunction with the TPP which details the extent of root protection areas.

7.1 Stage 1: Pre-construction stage

The developer will appoint an Arboriculturist who will oversee tree protection measures for the duration of the project. The arboriculturist will make regular site visits to ensure continued compliance, as well as to respond to project specific issues as they arise.

7.2 Tree work

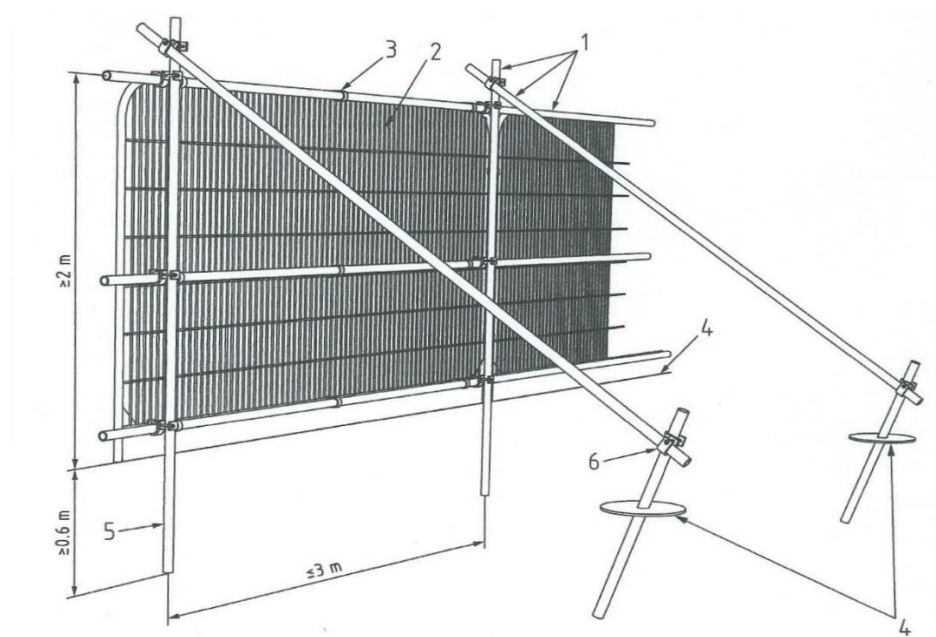
The developer will appoint a qualified arborist to undertake pruning and felling works as

specified in the tree survey recommendations (Appendix 1). All works carried out must conform to BS3998: 2010 Tree Work. Recommendations. Any damage caused to a tree during the construction phase should be reported immediately to the site manager so that inspection and/or remedial works can be undertaken.

7.3 Protective fencing

On completion of the tree works, protective fencing should be erected where required, as specified in the tree protection plan, in accordance with BS5837:2012 (fig. 5). Fencing is intended as a precaution to prevent accidental damage to the rooting area of retained trees. Hedgerows, and trees remote from construction can be protected using a lower specification of barrier such as Euromesh (fig. 6). The positioning of any fencing at the edge of the RPA is shown in the TPP as a pink line.

- Erection of protective fencing should be completed before any materials or construction machinery are brought onto site and before any construction works commence.
- Signage (fig. 7) indicating 'tree protection area, no construction access' or similar must be affixed to the protective fencing.
- Fencing is not to be removed or repositioned without approval of the project arboriculturist.



Key

- 1 Standard scaffold poles
- 2 Heavy gauge 2m tall, galvanised tube & welded mesh infill panels
- 3 Panels secured to uprights & cross members with wire ties
- 4 Ground level
- 5 Uprights driven into the ground until secure (minimum depth 0.6m)
- 6 Standard scaffold clamps

Fig. 5: Protective barrier specifications



Fig. 6: Euromesh type fencing



Fig. 7: signage to be affixed to fencing

7.4 Ground protection for construction access routes

Where construction or temporary construction access is considered necessary within the RPA, the alignment of the protective barrier may be set back, under supervision of the project arboriculturist.

Temporary ground protection within the RPA must be capable of supporting the load of any persons or traffic using the site without affecting or compacting the underlying soil.

The ground protection must comprise one of the following or similar, as described in BS5837:2012:

- For pedestrian movement, single thickness scaffold board should be laid on top of 100mm of woodchip laid on top of a geotextile membrane.
- For plant up to gross weight of 2 t, interlinked boards must be laid over a compression resistant layer such as woodchip to 150mm, over a geotextile membrane.
- For construction traffic over 2 t gross weight a proprietary system or pre-cast concrete slabs must be installed, in conjunction with arboricultural advice.

In all instances, the objective is to prevent soil compaction where possible, which can occur from the passage of a single vehicle, especially in wet conditions.

7.5 Installation of hard surfacing in proximity to trees

Construction of hard surfaces can impact the surface roots of nearby trees and prevent soil gases exchanging if porousness and load spreading is not incorporated into the design.

In order to prevent root damage, excavation, soil stripping or grading must not be conducted within the RPA of retained trees and hedgerows. Hard surfaces will need to be installed using a 'no dig' method of construction, using a cellular confinement system.

Three cardinal principles apply when avoiding damage to trees during construction:

- Roots must not be severed.
- Soil must not be compacted.
- Oxygen and water must be able to diffuse into the soil beneath the engineered surface.

Construction of hard surfaces will incorporate a cellular no-dig solution such as Cellweb tree root protection (fig. 8) which will ensure that loads placed upon it are laterally dissipated rather than being transferred to the soil and root systems below ground.

The walls of the cellular structure are perforated and must be combined with the infill of clean angular stone, preferably of a single size (20-40mm) which will enable the passage of water and oxygen to the tree roots, ensuring their continued functioning and health.

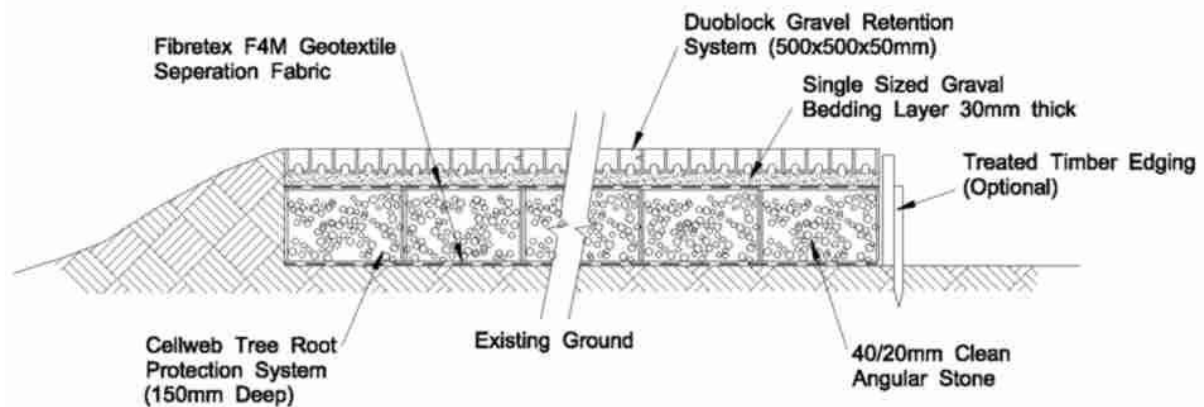


Fig. 8: example of cellular no dig construction method.

7.6 Installation of underground Services

Installation of underground cabling must comply with the National Joint Utilities Group (NJUG) 'Guidelines for the planning, installation, and maintenance of utility services in proximity to trees' and with BS 5837:2012. The excavation of open trenches by machine is unacceptable within the RPA of any of the retained trees, and wherever possible, services should be routed outside of any retained trees RPA. Where this is not possible cables should be routed together in a common duct and any inspection chambers sited outside the RPA.

Acceptable techniques for the laying of services are:

- Trenchless- by use of thrust boring or similar techniques. The pit excavations for starting and receiving the machinery should be located outside of the RPA. To avoid root damage, the mole should run at a depth of at least 600mm. Use of external lubricants on the mole other than water should be avoided.
- Broken trench- by using hand dug trench sections together with trenchless techniques. It should be limited to practical access and installation around or below the roots. The trench must be dug by hand and only be long enough to allow access for linking to the next section. The open sections should be kept as short as possible.
- Continuous trench- the trench is excavated by hand and retains as many roots as possible. The surface layer is removed carefully and hand digging of the trench takes place. No roots over 2.5cm diameter or clumps of smaller roots (including fibrous) should be severed. The bark surrounding the roots must be maintained. Cutting of roots over 2.5cm diameter should be performed under supervision of the project Arboriculturalist. If roots have to be cut, a sharp tool (defined as spade, narrow spade, fork, breaker bar, secateurs, handsaw, hand trowel) should be used.

Roots, and in particular fine roots, are vulnerable to desiccation on exposure to air. The roots are at greatest risk when there are rapid fluctuations in the air temperature around them. It is vitally important that the roots are covered with sacking whilst the trench is open.

7.7 Pre-commencement site meeting

Prior to commencement of construction works, a pre-commencement site meeting and contractor briefing will occur. Tree protection barriers are to be inspected by the project arboriculturist, and any additional protection measures to be agreed. Scope of future inspections and monitoring to be agreed between the site manager and project arboriculturist.

7.8 Landscape works

New planting of trees and hedgerows shall be undertaken in accordance with BS5837:2012 and supervised by the project arboriculturist or landscape architect. The existing ground levels within the RPA must be retained and not subjected to compaction or alteration. Manual tools should be used where possible for planting within RPAs in order to minimise root disturbance and damage.

7.9 Stage 2: Construction Works stage

7.10 Protective fencing

During the construction phase, protective fencing must be kept in place, remain upright and rigid as intended, and checked daily for any damage. The fencing must remain in place, and not be removed until all site works are completed.

7.11 Excavations

Excavation works can commence once the protective fence line is in place. In advance of excavation, the project manager, site foreman and project arboriculturist will identify and determine the extent of the impact of the proposed works and identify any additional mitigation measures to protect retained trees and hedgerows.

The project arboriculturist will supervise the pruning of roots which are exposed and damaged during excavation works. The excavated face is to be covered with soil in order to prevent drying out and death of further root material.

7.12 Working within RPAs

If any works are to take place within the RPA, the project arboriculturist must be informed so that mitigation measures are agreed upon to limit impact on root, stem and crown of tree.

7.13 Site considerations

Throughout the development stages the following must be observed:

- No materials, chemicals, machinery or vehicles are to be stored within the RPA.
- No materials are to be rested against the trunk of trees.
- Burning of rubbish is not permitted within 10m of RPA or hedgerows. Wind direction should be factored when locating a fire, and it must not be unattended.

- Attaching items to any part of a tree is not permitted.
- Washing of machinery, concrete, diesel or other contaminants are not to be discharged within 10m of RPA or hedgerows.
- Any damage caused to protective fencing, ground protection, or retained trees must be reported to the site manager without delay.
- The area around trees enclosed by protective fencing must be considered a construction exclusion zone.

7.14 Stage 3: Post Construction Works stage

On completion of construction works, retained trees are to be re-examined by the project arborist in order to identify any additional remedial works required to ensure tree health and site safety.

8.0 Recommendations

8.1 Ash Dieback Overview

Ash dieback is a fungal disease affecting the common ash tree (*Fraxinus excelsior*), as well as other *Fraxinus* species. Ash dieback has been present in Europe since the 1990s and is now widespread in Ireland. Ash is one of the dominant hedgerow and woodland trees in Ireland, and it has great visual and cultural importance, as well as being an important habitat for hundreds of species.

Ash growing in open locations, such as hedgerows, may deteriorate slowly, and some trees with few symptoms might survive for many years. A small proportion of ash will have a genetic tolerance, and these will stand out as healthy specimens among the population.

In order to minimise impact on the existing ecosystem, and for the possibility of securing any healthy Ash populations present, I am recommending the retention of Ash trees where possible on the site since 'lower levels of intervention may be appropriate where conserving environmental benefits is the (...) objective' (forestry commission, 2020).

9.0 Statutory Obligations

I am currently unaware if any trees at the site are protected by a Tree Preservation Order (TPO) or by virtue of being located within a Conservation Area. I have not been instructed to establish the TPO status of trees with the Local Planning Authority. If any trees are subject to TPOs then consent should be sought from the relevant Local Authority prior to commencement of any works.

Rik Pannett, C&G Arboriculture.

10.0 Bibliography

Forestry Commission. (2019) *Managing ash trees affected by ash dieback: operations note 46a*: Available at: <https://www.gov.uk/government/publications/managing-ash-trees-affected-by-ash-dieback-operations-note-46a> (Accessed 20th June 2021)

Energia
 Huntstown Data Centre and Substation
 appendix 1

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Ref	Species	Full Structure	Measurements	Spread	General Observations	Retention Category	RPA	Measurements2	Recommendations
G041	Not identified (Not identified) Silver Birch (Betula pendula)	Group >10 trees	Height (m): 8 2 stems, diam(mm): 80, 80, 80, 80, 80, 80, 80, 80, 80 Spread (m): 3N, 3E, 2S, 2W	N:3 E:3 S:2 W:2	trees forming a shelter belt; growing on bank adjacent existing roadway	B2	Area: same as Group - 46 sq m.	Physiological Cond: Good Structural Cond: Good	Pre construction: Thin to remove suppressed and damaged trees. During construction: Protect trees with protective barriers - as shown on plans. Post construction: No action required.
G042	Not identified (Not identified) Silver Birch (Betula pendula)	Group >10 trees	Height (m): 7 2 stems, diam(mm): 80, 80, 80, 80, 80, 80, 80, 80, 80 Spread (m): 2N, 2E, 3S, 3W	N:2 E:2 S:3 W:3	trees forming a section of shelter belt; growing on bank adjacent existing roadway	B2	Area: same as Group - 106 sq m.	Physiological Cond: Good Structural Cond: Good	Pre construction: thin to remove suppressed and damaged trees. During construction: Protect trees with protective barriers - as shown on plans. Post construction: No action required.
G043	Not identified (Not identified) Silver Birch (Betula pendula)	Group > 10 trees	Height (m): 7 2 stems, diam(mm): 100, 100, 100, 100, 100, 100, 100, 100, 100, 100, 100 Spread (m): 3N, 2E, 3S, 3W	N:3 E:2 S:3 W:3	trees forming a shelter belt; growing on bank adjacent existing roadway, comprising birch, beech, rowan, dogwood and guelder rose.	B2	Area: same as Group - 115 sq m.	Physiological Cond: Good Structural Cond:	Pre construction: Thin to remove damaged and suppressed trees. During construction: Protect trees with protective barriers - as shown on plans. Post construction: No action required.
G044	Silver Lime (Tilia tomentosa)	Group	Height (m): 5 Spread (m): 1N, 1E, 1S, 1W Life Stage: Semi Mature Rem. Contrib.: 30+ Years	N:1 E:1 S:1 W:1	13 silver lime	C	Area: same as Group - 163 sq m.	Physiological Cond: Good Structural Cond: Good	Pre construction: No action required. During construction: No action required. Post construction: No action required.

Ref	Species	Full Structure	Measurements	Spread	General Observations	Retention Category	RPA	Measurements2	Recommendations
G045	Common Ash (Fraxinus excelsior) Pedunculate Oak (Quercus robur) Scots Pine (Pinus sylvestris) Common Beech (Fagus sylvatica)	Group 4 trees	Height (m): 10 4 stems Life Stage: Semi Mature Rem. Contrib.: 20+ Years		Shelter belt approximately 80mx30m.	C2	Area: same as Group - 3464 sq m.	Physiological Cond: Good Structural Cond: Good	Remove trees to facilitate construction.
H1	Common Hawthorn (Crataegus monogyna) Blackthorn (Prunus spinosa) Common Ash (Fraxinus excelsior) Wych Elm (Ulmus glabra)	Hedge	Height (m): 6 4 stems		Sprawling unmanaged agricultural hedge, comprising mainly hawthorn, blackthorn, bramble and ivy, with ash and dead wych elm.	C2	Area: same as Hedge - 1738 sq m.	Physiological Cond: Fair Structural Cond: Good	Pre construction: No action required. During construction: No action required. Post construction: No action required.
H10	Common Hawthorn (Crataegus monogyna) Blackthorn (Prunus spinosa)	Hedge	Height (m): 7 2 stems		Sprawling unmanaged agricultural hedge, comprising mainly hawthorn, blackthorn, bramble, dog rose and ivy	C2	Area: same as Hedge - 2403 sq m.	Physiological Cond: Good Structural Cond: Good	Remove hedgerow.

Ref	Species	Full Structure	Measurements	Spread	General Observations	Retention Category	RPA	Measurements2	Recommendations
H11	Common Hawthorn (Crataegus monogyna) Blackthorn (Prunus spinosa) Wych Elm (Ulmus glabra) Common Ash (Fraxinus excelsior)	Hedge	Height (m): 6		Sprawling unmanaged agricultural hedge, comprising mainly hawthorn, blackthorn, wych elm, ash, dog rose, bramble and ivy	C2	Area: same as Hedge - 577 sq m.	Physiological Cond: Fair Structural Cond: Good	Remove hedgerow.
H12	Not identified (Not identified)	Hedge	Height (m): 7		Sprawling unmanaged agricultural hedge, comprising mainly hawthorn, blackthorn, elder, dog rose, bramble and ivy	C2	Area: same as Hedge - 1587 sq m.	Physiological Cond: Good Structural Cond: Good	Remove hedgerow.
H13	Common Hawthorn (Crataegus monogyna) Blackthorn (Prunus spinosa)	Hedge	Height (m): 6		Sprawling unmanaged agricultural hedge, comprising mainly hawthorn, blackthorn, dog rose, bramble and ivy	C2	Area: same as Hedge - 1723 sq m.	Physiological Cond: Good Structural Cond: Good	Remove hedgerow.
H14	Common Hawthorn (Crataegus monogyna) Blackthorn (Prunus spinosa)	Hedge	Height (m): 6		Roadside agricultural hedge, unmanaged in sections, comprising mainly hawthorn, blackthorn, bramble, dog rose and ivy	C2	Area: same as Hedge - 1832 sq m.	Physiological Cond: Good Structural Cond: Good	Pre construction: No action required. During construction: Protect hedgerow with protective barriers - as shown on plans.
H15	Common Hawthorn (Crataegus monogyna) Blackthorn (Prunus spinosa) Elder (Sambucus nigra)	Hedge	Height (m): 7		Sprawling, unmanaged agricultural hedge, comprising hawthorn, blackthorn, elder, dog rose, bramble and ivy.	C2	Area: same as Hedge - 1597 sq m.	Physiological Cond: Good Structural Cond: Good	Remove hedgerow.

Ref	Species	Full Structure	Measurements	Spread	General Observations	Retention Category	RPA	Measurements2	Recommendations
H16	Common Hawthorn (Crataegus monogyna) Blackthorn (Prunus spinosa)	Hedge	Height (m): 6		sprawling agricultural hedge, comprising hawthorn and blackthorn.	C2	Area: same as Hedge - 774 sq m.	Physiological Cond: Good Structural Cond: Good	Remove hedgerow.
H17	Common Hawthorn (Crataegus monogyna) Blackthorn (Prunus spinosa)	Hedge	Height (m): 5		Sprawling hedge, mainly blackthorn, hawthorn, bramble and ivy.	C2	Area: same as Hedge - 247 sq m.	Physiological Cond: Good Structural Cond: Good	Remove hedgerow.
H2	Not identified (Not identified)	Hedge	Height (m): 5		Sparse hedge, hawthorn and elder to 5 metres and sections of bramble.	C2	Area: same as Hedge - 1636 sq m.	Physiological Cond: Fair Structural Cond: Fair	Pre construction: No action required. During construction: Protect hedgerow with protective barriers - as shown on plans. Post construction: No action required.
H3	Common Hawthorn (Crataegus monogyna) Blackthorn (Prunus spinosa)	Hedge	Height (m): 6		Sprawling unmanaged agricultural hedge, comprising mainly hawthorn, blackthorn, bramble and ivy	C2	Area: same as Hedge - 615 sq m.	Physiological Cond: Good Structural Cond: Good	Pre construction: No action required. During construction: Protect hedgerow with protective barriers - as shown on plans. Post construction: No action required.
H4	Common Hawthorn Blackthorn	Hedge	Height (m): 4		Sprawling unmanaged agricultural hedge, comprising mainly hawthorn, blackthorn, elder, bramble and ivy	C2	Area: same as Hedge - 729 sq m.	Physiological Cond: Good Structural Cond: Good	Remove hedgerow.

Ref	Species	Full Structure	Measurements	Spread	General Observations	Retention Category	RPA	Measurements2	Recommendations
H5	Blackthorn (Prunus spinosa) Elder (Sambucus nigra) Common Hawthorn (Crataegus monogyna)	Hedge	Height (m): 3		Roadside hedge, comprising hawthorn, blackthorn and elder.	C	Area: same as Hedge - 801 sq m.	Physiological Cond: Good Structural Cond: Good	Pre construction: No action required. During construction: Protect hedgerow with protective barriers - as shown on plans. Post construction: No action required.
H6	Common Hawthorn (Crataegus monogyna) Blackthorn (Prunus spinosa) Common Ash (Fraxinus excelsior)	Hedge	Height (m): 8		Sprawling unmanaged agricultural hedge, 10 metres deep in sections, adjacent dwelling houses on east, comprising mainly hawthorn, blackthorn, ash, bramble and ivy	C2	Area: same as Hedge - 4245 sq m.	Physiological Cond: Good Structural Cond: Good	Remove hedgerow, retaining sections adjacent dwelling houses.
H6 section retain	Not identified (Not identified)	Hedge				NotRecorded	None - no Retention Category specified.		Retain section adjacent dwelling as shown on TPP
H7	Common Beech (Fagus sylvatica) Common Hawthorn (Crataegus monogyna)	Hedge	Height (m): 7 2 stems		Beech and hawthorn hedge, planted adjacent dwelling.	C2	Area: same as Hedge - 440 sq m.	Physiological Cond: Good Structural Cond: Good	Pre construction: Remove trees. Post construction: .

Ref	Species	Full Structure	Measurements	Spread	General Observations	Retention Category	RPA	Measurements2	Recommendations
H8	Common Hawthorn (Crataegus monogyna) Sycamore (Acer pseudoplatanus)	Hedge	Height (m): 2		Hedgerow bordering road, Hawthorn and sycamore.	C2	Area: same as Hedge - 1206 sq m.	Physiological Cond: Fair Structural Cond: Good	Pre construction: Remove section for site access. During construction: Protect hedgerow with protective barriers - as shown on plans. Post construction: No action required.
H8 section removal	Not identified (Not identified)	Group				NotRecorded	None - no Retention Category specified.		Remove for access as shown on TPP
H9	Common Hawthorn (Crataegus monogyna) Blackthorn (Prunus spinosa) Common Ash (Fraxinus excelsior)	Hedge	Height (m): 5		Sprawling unmanaged agricultural hedge, comprising mainly hawthorn, blackthorn, bramble, dog rose and ivy	C2	Area: same as Hedge - 655 sq m.	Physiological Cond: Good Structural Cond: Good	Pre construction: No action required. During construction: Protect hedgerow with protective barriers - as shown on plans. Post construction: No action required.
T001	Common Ash (Fraxinus excelsior)	Tree	Height (m): 9 Spread (m): 5N, 4E, 3S, 4W Life Stage: Early Mature Rem. Contrib.: 10+ Years	N:5 E:4 S:3 W:4	Multi stemmed tree growing from bank of drainage ditch	C2	Radius: 3.6m. Area: 41 sq m.	Physiological Cond: Good Structural Cond: Good	Remove tree to facilitate construction.
T002	Common Ash (Fraxinus excelsior)	Tree 7 stems	Height (m): 9 7 stems, diam(mm): 90, 90, 90, 90, 80, 100, 100 Spread (m): 2N, 5E, 6S, 3W Life Stage: Early Mature Rem. Contrib.: 10+ Years	N:2 E:5 S:6 W:3	Multi stemmed tree adjacent to drainage ditch	C2	Radius: 2.9m. Area: 26 sq m.	Physiological Cond: Fair Structural Cond:	Remove tree to facilitate construction.

Ref	Species	Full Structure	Measurements	Spread	General Observations	Retention Category	RPA	Measurements2	Recommendations
T003	Common Ash (Fraxinus excelsior)	Tree	Height (m): 10 Spread (m): 3N, 3E, 3S, 3W Life Stage: Early Mature Rem. Contrib.: 10+ Years	N:3 E:3 S:3 W:3	Ivy suppressing crown; multi stemmed tree growing from bank of drainage ditch	C2	Radius: 3.8m. Area: 45 sq m.	Physiological Cond: Fair Structural Cond: Fair	Remove tree to facilitate construction.
T004	Common Ash (Fraxinus excelsior)	Tree	Height (m): 10 Stem Diam (mm): 640 Spread (m): 6N, 2E, 3S, 4W Life Stage: Early Mature Rem. Contrib.: 10+ Years	N:6 E:2 S:3 W:4	Ivy in crown, growing from bank, dead wood on branch tips, has been pruned on south to accommodate overhead cables.	C2	Radius: 7.7m. Area: 186 sq m.	Physiological Cond: Fair Structural Cond: Fair	Pre construction: Crown reduction by 20%. During construction: Protect trees with protective barriers - as shown on plans. Post construction: No action required.
T005	Common Ash (Fraxinus excelsior)	Tree 3 stems	Height (m): 8 3 stems, diam(mm): 80, 80, 80 Spread (m): 3N, 2E, 1S, 3W Life Stage: Early Mature Rem. Contrib.: 10+ Years	N:3 E:2 S:1 W:3	Ivy in crown, growing from bank of ditch,	C2	Radius: 1.7m. Area: 9 sq m.	Physiological Cond: Fair Structural Cond: Fair	Pre construction: No action required. During construction: Protect trees with protective barriers - as shown on plans. Post construction: No action required.
T006	Common Ash (Fraxinus excelsior)	Tree	Height (m): 13 Stem Diam (mm): 800 Spread (m): 5N, 5E, 5S, 5W Life Stage: Early Mature Rem. Contrib.: 10+ Years	N:5 E:5 S:5 W:5	Ivy climbing far into crown. dead stem present.	C2	Radius: 9.6m. Area: 290 sq m.	Physiological Cond: Good Structural Cond: Good	Remove tree to facilitate construction
T008	Common Ash (Fraxinus excelsior)	Tree 2 stems	Height (m): 8 2 stems, diam(mm): 300, 200 Spread (m): 3N, 3E, 2S, 3W Life Stage: Semi Mature Rem. Contrib.: 10+ Years	N:3 E:3 S:2 W:3	ivy in crown, growing from bank of drainage ditch.	C	Radius: 4.3m. Area: 58 sq m.	Physiological Cond: Fair Structural Cond: Good	Pre construction: No action required. During construction: Protect trees with protective barriers - as shown on plans. Post construction: No action required.

Ref	Species	Full Structure	Measurements	Spread	General Observations	Retention Category	RPA	Measurements2	Recommendations
T009	Sycamore (Acer pseudoplatanus)	Tree	Height (m): 9 Stem Diam (mm): 300 Spread (m): 4N, 3E, 2S, 3W Life Stage: Early Mature Rem. Contrib.: 20+ Years	N:4 E:3 S:2 W:3	Ivy suppressing crown; growing from bank of drainage ditch	C2	Radius: 3.6m. Area: 41 sq m.	Physiological Cond: Good Structural Cond: Good	Pre construction: No action required. During construction: Protect trees with protective barriers - as shown on plans. Post construction: No action required.
T010	Wych Elm (Ulmus glabra)	Tree	Height (m): 6 Stem Diam (mm): 200 Spread (m): 3N, 3E, 3S, 2W Life Stage: Semi Mature Rem. Contrib.: 20+ Years	N:3 E:3 S:3 W:2	Ivy present in crown.	C2	Radius: 2.4m. Area: 18 sq m.	Physiological Cond: Structural Cond:	Pre construction: No action required. During construction: Protect trees with protective barriers - as shown on plans. Post construction: No action required.
T011	Sycamore (Acer pseudoplatanus)	Tree	Height (m): 7 Stem Diam (mm): 400 Spread (m): 3N, 3E, 3S, 3W Life Stage: Early Mature Rem. Contrib.: 20+ Years	N:3 E:3 S:3 W:3	Ivy present, growing from drainage ditch.	C2	Radius: 4.8m. Area: 72 sq m.	Physiological Cond: Good Structural Cond: Good	Pre construction: No action required. During construction: Protect trees with protective barriers - as shown on plans. Post construction: No action required.
T012	Sycamore (Acer pseudoplatanus)	Tree	Height (m): 6 Stem Diam (mm): 200 Life Stage: Semi Mature Rem. Contrib.: 30+ Years	N:3 E:3 S:2 W:2	Small spreading tree	C2	Radius: 2.4m. Area: 18 sq m.	Physiological Cond: Good Structural Cond: Good	Pre construction: No action required. During construction: Protect trees with protective barriers - as shown on plans. Post construction: No action required.

Ref	Species	Full Structure	Measurements	Spread	General Observations	Retention Category	RPA	Measurements2	Recommendations
T013	Wych Elm (Ulmus glabra)	Tree 2 stems	Height (m): 7 2 stems, diam(mm): 300, 200 Spread (m): 3N, 3E, 3S, 4W Life Stage: Early Mature Rem. Contrib.: 20+ Years	N:3 E:3 S:3 W:4	Ivy in crown	C2	Radius: 4.3m. Area: 58 sq m.	Physiological Cond: Good Structural Cond: Good	Pre construction: No action required. During construction: Protect trees with protective barriers - as shown on plans. Post construction: No action required.
T014	Sycamore (Acer pseudoplatanus)	Tree	Height (m): 11 Stem Diam (mm): 400 Spread (m): 4N, 4E, 4S, 4W Life Stage: Early Mature Rem. Contrib.: 20+ Years	N:4 E:4 S:4 W:4	growing from bank of drainage ditch.	C2	Radius: 4.8m. Area: 72 sq m.	Physiological Cond: Good Structural Cond: Good	Pre construction: No action required. During construction: Protect trees with protective barriers - as shown on plans. Post construction: No action required.
T015	Wych Elm (Ulmus glabra)	Tree	Height (m): 8 Stem Diam (mm): 200 Spread (m): 3N, 3E, 3S, 3W Life Stage: Early Mature Rem. Contrib.: 20+ Years	N:3 E:3 S:3 W:3	Growing from bank of drainage ditch.	C2	Radius: 2.4m. Area: 18 sq m.	Physiological Cond: Good Structural Cond: Good	Pre construction: No action required. During construction: Protect trees with protective barriers - as shown on plans. Post construction: No action required.
T016	Common Ash (Fraxinus excelsior)	Tree 3 stems	Height (m): 13 3 stems, diam(mm): 400, 300, 300 Spread (m): 6N, 6E, 4S, 6W Life Stage: Early Mature Rem. Contrib.: 10+ Years	N:6 E:6 S:4 W:6	Multi stemmed tree, spreading habit, ivy present.	C2	Radius: 7.0m. Area: 154 sq m.	Physiological Cond: Good Structural Cond: Good	Pre construction: No action required. During construction: Protect trees with protective barriers - as shown on plans. Post construction: No action required.
T017	Common Ash (Fraxinus excelsior)	Tree	Height (m): 15 Stem Diam (mm): 500 Spread (m): 5N, 2E, 2S, 3W Life Stage: Early Mature Rem. Contrib.: 10+ Years	N:5 E:2 S:2 W:3	Ivy in crown, storm damage to leader, growing from bank of ditch.	C	Radius: 6.0m. Area: 113 sq m.	Physiological Cond: Fair Structural Cond: Fair	Remove tree.

Ref	Species	Full Structure	Measurements	Spread	General Observations	Retention Category	RPA	Measurements2	Recommendations
T018	Common Ash (Fraxinus excelsior)	Tree	Height (m): 12 Stem Diam (mm): 500 Spread (m): 5N, 4E, 4S, 4W Life Stage: Early Mature Rem. Contrib.: 10+ Years	N:5 E:4 S:4 W:4	Ivy dominating crown.	C2	Radius: 6.0m. Area: 113 sq m.	Physiological Cond: Fair Structural Cond: Fair	Remove tree.
T019	Common Ash (Fraxinus excelsior)	Tree 3 stems	Height (m): 14 3 stems, diam(mm): 300, 200, 300 Spread (m): 6N, 6E, 5S, 6W Life Stage: Early Mature Rem. Contrib.: 10+ Years	N:6 E:6 S:5 W:6	Ivy in crown, growing from bank of drainage ditch.	C2	Radius: 5.6m. Area: 99 sq m.	Physiological Cond: Fair Structural Cond: Good	Remove tree
T020	Wych Elm (Ulmus glabra)	Tree 2 stems	Height (m): 8 2 stems, diam(mm): 200, 200 Spread (m): 3N, 3E, 3S, 3W Life Stage: Semi Mature Rem. Contrib.: 20+ Years	N:3 E:3 S:3 W:3	Growing from bank of ditch, twisting growth habit.	C2	Radius: 3.4m. Area: 36 sq m.	Physiological Cond: Good Structural Cond: Good	Remove tree.
T021	Sycamore (Acer pseudoplatanus)	Tree 2 stems	Height (m): 9 2 stems, diam(mm): 300, 200 Spread (m): 5N, 3E, 3S, 3W Life Stage: Semi Mature Rem. Contrib.: 20+ Years	N:5 E:3 S:3 W:3	growing from bank of drainage ditch.	C2	Radius: 4.3m. Area: 58 sq m.	Physiological Cond: Good Structural Cond: Good	Remove tree.
T022	Common Ash (Fraxinus excelsior)	Tree 2 stems	Height (m): 12 2 stems, diam(mm): 400, 400 Spread (m): 5N, 5E, 4S, 5W Life Stage: Early Mature Rem. Contrib.: 10+ Years	N:5 E:5 S:4 W:5	growing from bank of ditch, .	C2	Radius: 6.8m. Area: 145 sq m.	Physiological Cond: Fair Structural Cond: Good	Remove tree.
T023	Common Ash (Fraxinus excelsior)	Tree 2 stems	Height (m): 9 2 stems, diam(mm): 200, 200 Spread (m): 5N, 3E, 3S, 3W Life Stage: Early Mature Rem. Contrib.: 10+ Years	N:5 E:3 S:3 W:3	Ivy in crown.	C2	Radius: 3.4m. Area: 40 sq m.	Physiological Cond: Fair Structural Cond: Good	Remove tree.

Ref	Species	Full Structure	Measurements	Spread	General Observations	Retention Category	RPA	Measurements2	Recommendations
T024	Common Ash (Fraxinus excelsior)	Tree	Height (m): 12 Stem Diam (mm): 400 Spread (m): 4N, 1E, 5S, 4W Life Stage: Early Mature Rem. Contrib.: 10+ Years	N:4 E:1 S:5 W:4	Early dieback, ivy dominating crown.	C2	Radius: 4.8m. Area: 72 sq m.	Physiological Cond: Fair Structural Cond: Good	Remove tree.
T025	Common Ash (Fraxinus excelsior)	Tree	Height (m): 13 Stem Diam (mm): 600 Spread (m): 4N, 6E, 3S, 6W Life Stage: Early Mature Rem. Contrib.: <10 years	N:4 E:6 S:3 W:6	Ivy in crown, cavity in stem at 2m on north. Early dieback.	C2	Radius: 7.2m. Area: 163 sq m.	Physiological Cond: Fair Structural Cond: Fair	Remove tree.
T026	Common Ash (Fraxinus excelsior)	Tree	Height (m): 11 Stem Diam (mm): 400 Spread (m): 3N, 3E, 3S, 3W Life Stage: Early Mature Rem. Contrib.: <10 years	N:3 E:3 S:3 W:3	Ivy in crown.	C2	Radius: 4.8m. Area: 72 sq m.	Physiological Cond: Fair Structural Cond: Good	Remove tree.
T027	Wych Elm (Ulmus glabra)	Group	Height (m): 9		Elm disease present throughout crown.	C2	Area: same as Group - 40 sq m.	Physiological Cond: Poor Structural Cond: Fair Bat	Remove tree.
T028	Common Ash (Fraxinus excelsior)	Tree	Height (m): 8 Stem Diam (mm): 300 Spread (m): 3N, 4E, 3S, 4W Life Stage: Semi Mature Rem. Contrib.: <10 years	N:3 E:4 S:3 W:4	Ivy dominating crown. dieback present.	C2	Radius: 3.6m. Area: 41 sq m.	Physiological Cond: Fair Structural Cond: Fair	Remove tree.
T030	Common Ash (Fraxinus excelsior)	Tree	Height (m): 9 Stem Diam (mm): 300 Spread (m): 3N, 3E, 3S, 3W Life Stage: Semi Mature Rem. Contrib.: <10 years	N:3 E:3 S:3 W:3	Ivy present throughout crown.	C2	Radius: 3.6m. Area: 41 sq m.	Physiological Cond: Fair Structural Cond: Good	Remove tree.

Ref	Species	Full Structure	Measurements	Spread	General Observations	Retention Category	RPA	Measurements2	Recommendations
T031	Common Ash (Fraxinus excelsior)	Tree	Height (m): 10 Stem Diam (mm): 300 Spread (m): 5N, 3E, 5S, 4W Life Stage: Early Mature Rem. Contrib.: <10 years	N:5 E:3 S:5 W:4	Ivy dominating crown.	C2	Radius: 3.6m. Area: 41 sq m.	Physiological Cond: Fair Structural Cond: Fair	Remove tree.
T032	Common Ash (Fraxinus excelsior)	Tree	Height (m): 7 Stem Diam (mm): 200 Spread (m): 4N, 3E, 4S, 3W Life Stage: Early Mature Rem. Contrib.: <10 years	N:4 E:3 S:4 W:3	Ivy in crown. Early dieback.	C2	Radius: 2.4m. Area: 18 sq m.	Physiological Cond: Poor Structural Cond: Fair	Remove tree.
T033	Common Ash (Fraxinus excelsior)	Tree	Height (m): 11 Stem Diam (mm): 400 Spread (m): 4N, 4E, 4S, 4W Life Stage: Early Mature Rem. Contrib.: <10 years	N:4 E:4 S:4 W:4	Growing from bank, ivy spreading far into crown. Early dieback.	C2	Radius: 4.8m. Area: 72 sq m.	Physiological Cond: Fair Structural Cond: Fair	Remove tree.
T034	Common Ash (Fraxinus excelsior)	Tree	Height (m): 14 Stem Diam (mm): 700 Spread (m): 4N, 6E, 4S, 5W Life Stage: Early Mature Rem. Contrib.: 10+ Years	N:4 E:6 S:4 W:5	Ivy far into crown, Early dieback.	C	Radius: 8.4m. Area: 222 sq m.	Physiological Cond: Fair Structural Cond: Good	Remove tree.
T035	Common Ash (Fraxinus excelsior)	Tree 2 stems	Height (m): 10 2 stems, diam(mm): 200, 200 Spread (m): 3N, 3E, 3S, 3W Life Stage: Semi Mature Rem. Contrib.: 10+ Years	N:3 E:3 S:3 W:3	Growing from drainage ditch.	C2	Radius: 3.4m. Area: 36 sq m.	Physiological Cond: Fair Structural Cond: Fair	Remove tree.
T036	Common Ash (Fraxinus excelsior)	Tree	Height (m): 11 Stem Diam (mm): 400 Spread (m): 2N, 4E, 4S, 2W Life Stage: Early Mature Rem. Contrib.: 10+ Years	N:2 E:4 S:4 W:2	dead branch tips. early dieback.	C	Radius: 4.8m. Area: 72 sq m.	Physiological Cond: Fair Structural Cond: Fair	Pre construction: No action required. During construction: No action required. Post construction: No action required.

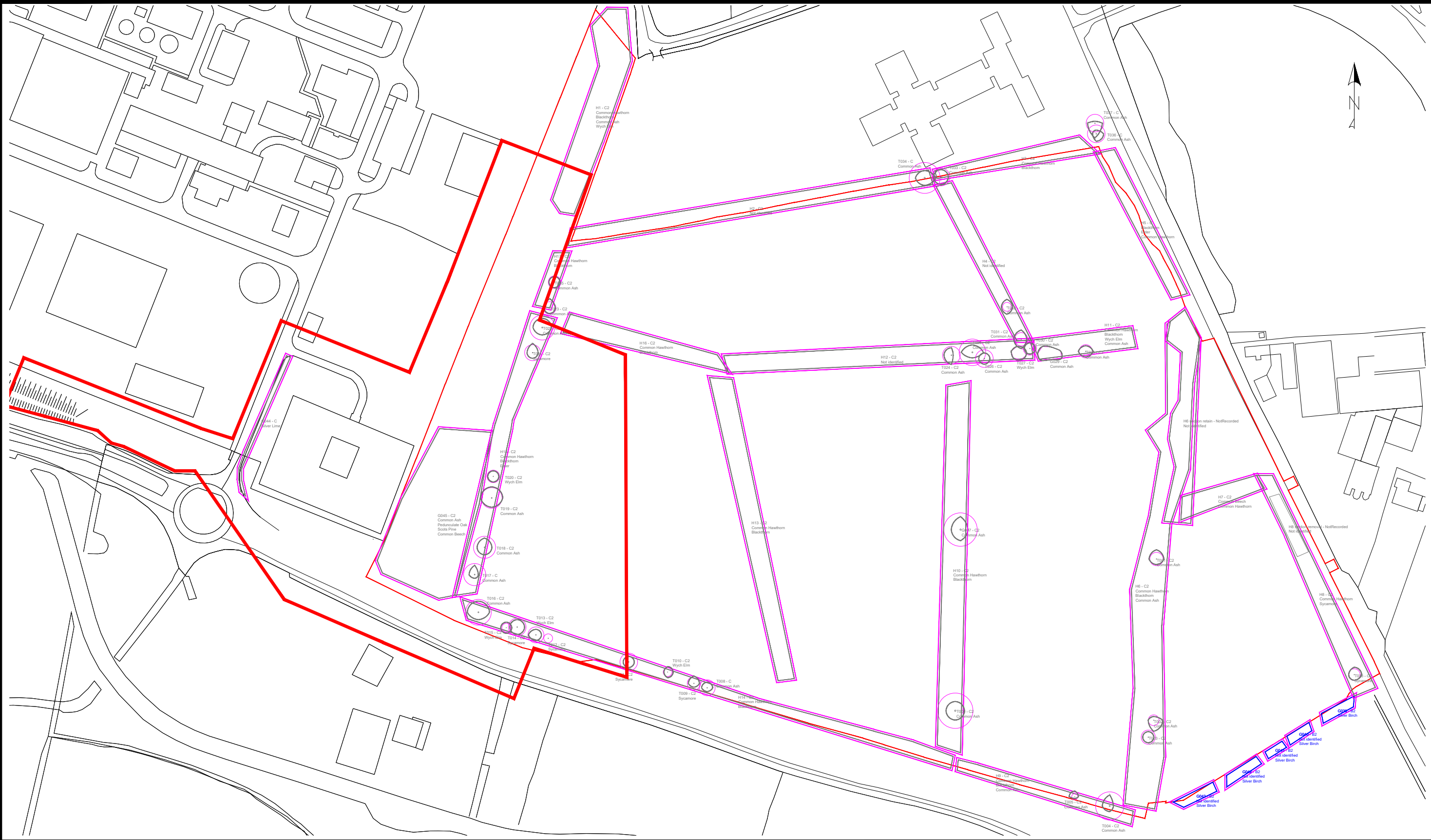
Ref	Species	Full Structure	Measurements	Spread	General Observations	Retention Category	RPA	Measurements2	Recommendations
T037	Common Ash (Fraxinus excelsior)	Tree	Height (m): 10 Stem Diam (mm): 400 Spread (m): 1N, 4E, 8S, 4W Life Stage: Early Mature Rem. Contrib.: <10 years	N:1 E:4 S:8 W:4	Sprawling growth habit, suppressed by neighbouring tree.	C	Radius: 4.8m. Area: 72 sq m.	Physiological Cond: Good Structural Cond: Fair Bat	Pre construction: No action required. During construction: No action required. Post construction: No action required.
T038	Sycamore (Acer pseudoplatanus)	Tree 7 stems	Height (m): 10 7 stems, diam(mm): 100, 100, 100, 100, 100, 100, 100 Spread (m): 4N, 4E, 3S, 3W Life Stage: Early Mature Rem. Contrib.: 20+ Years	N:4 E:4 S:3 W:3	Multi stemmed tree, densely ivy covered.	C2	Radius: 3.2m. Area: 32 sq m.	Physiological Cond: Good Structural Cond: Fair	Pre construction: Sever ivy at base. During construction: Protect trees with protective barriers - as shown on plans. Post construction: No action required.

Key to Tree Survey Schedule Criteria & Headings

Tree No.	This number identifies the trees & corresponds with the provided plans.
Species	The common name is given for each tree.
Height	Estimated in metres.
Stem Diameter	Measured at 1.5m above ground level, recorded in millimetres.
Number of Stems	Recorded from ground level or base of tree.
Crown Spread	Estimated in metres & given at cardinal compass points.
Age	Refers to the age of the individual tree & recorded as: Y = Young; SM = Semi-mature; EM = Early-mature; M = Mature; OM = Over-mature; V = Veteran; D = Dead
General Observations	Comments relating to trees' previous & possible future management.
Recommended Works	To mitigate issues with the trees' condition & vitality or as part of pre-development works.
ERC (Estimated Remaining Contribution)	Estimated by subtracting the current age from the life expectancy of a tree in same location & condition. Each tree is given a retention category according to BS 5837: 2012: <10 years; 10+; 20+; 40+
Retention Category	Based upon the categories in Table 1 of BS 5827: 2012 regarding tree quality assessment and suitability for retention.
RPA	Root protection area measured in metres from centre of tree.

Cascade Chart for Tree Quality Assessment

TREES UNSUITABLE FOR RETENTION					
Category and Definition		Criteria			Identification on Plan
	Category U Those in such a condition that they cannot realistically be retained as living trees in the context of the current land use for longer than 10 years.	<ul style="list-style-type: none">Trees that have a serious, irremediable, structural defect, such that their early loss is expected due to collapse, including those that will become unviable after removal of other Category U trees (eg, where, for whatever reason, the loss of companion shelter cannot be mitigated by pruning).Trees that are dead or are showing signs of significant, immediate, and irreversible overall decline.Trees infected with pathogens of significance to the health and/or safety of other trees nearby, or very low quality trees suppressing adjacent trees of better quality. <p><i>NOTE: Category U trees can have existing or potential conservation value which it might be desirable to preserve; see 4.5.7.</i></p>			
	TREES TO BE CONSIDERED FOR RETENTION				
Category and Definition		Criteria			Identification on Plan
		1. Mainly arboricultural qualities	2. Mainly landscape qualities	3. Mainly cultural values, including conservation	
	Category A Trees of high quality with an estimated remaining life expectancy of at least 40 years.	Trees that are particularly good examples of their species, especially if rare or unusual; or those that are essential components of groups or formal or semi-formal arboricultural features (eg, the dominant and/or principal trees within an avenue.	Trees, groups or woodlands of particular visual importance as arboricultural and/or landscape features.	Trees, groups or woodlands of significant conservation, historical, commemorative or other value (e, veteran trees or wood-pasture).	
	Category B Trees of moderate quality with an estimated remaining life expectancy of at least 20 years.	Trees that might be included in category A, but are downgraded because of impaired condition (eg, presence of significant though remediable defects, including unsympathetic past management and storm damage), such that they are unlikely to be suitable for retention for beyond 40 years; or trees lacking the special quality necessary to merit the category A designation.	Trees present in numbers, usually growing as groups or woodlands, such that they attract a higher collective rating than they might as individuals; or trees occurring as collectives but situated so as to make little visual contribution to the wider locality.	Trees with material conservation or other cultural value.	
	Category C Trees of low quality with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150mm.	Unremarkable trees of very limited merit or such impaired condition that they do not qualify in higher categories.	Trees present in groups or woodlands, but without this conferring on them significantly greater collective landscape value, and/or trees offering low or only temporary/transient landscape benefits.	Trees with no material conservation or other cultural value.	



CONTRACTOR: Rik Pannett : Consultant Arborist Retained by Energia	LEGEND		DRAWING No	RP-007A		STATUS	DRAWN BY	DATE	SCALE	ENG CHECK	DATE
			REV SUFFIX	REVISION DETAILS		DATE	WD	23/07/21	1:2000	RP	23/07/21
	<div>Root Protection Area</div> <div>Actual Crown Spread</div> <div>Tag Number - Category Grade</div> <div>T032 - C2</div> <div>CATEGORY GRADE</div> <div>CATEGORY U</div> <div>CATEGORY A</div> <div>CATEGORY B</div> <div>CATEGORY C</div>		A	Sub Station Red line area		23/08/2021	PROJECT		HUNTSTOWN		SHEET SIZE
							DRAWING TITLE		TREE CONSTRAINTS PLAN		A3

