

Arborist Associates Ltd.

An Arboricultural Assessment of the Tree and Hedge Vegetation on 'SHD Lands' at Ratoath South, Co. Meath.

Prepared for: Beo Properties Ltd.

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Arboriculture

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1.0 Instructions

- 1.1 I have been instructed by Beo Properties Ltd (planning applicants) to assess the impact of the proposed development which consists of a residential development area to the north-west on the SHD Lands at 'Ratoath South', Co. Meath and to report on the following:
- A - To assess the present condition of the tree and hedge vegetation within and adjoining the site area. See 'Appendix 2' for detail of my findings and drawing No.RORR001 which I have prepared as a Tree Constraints Drawing to aid the design team.
 - B - To assess the impact of the proposed development layout on the tree and hedge vegetation located within the site area indicating those for removal and retention. See 'Section 5.0' and 'Drawing No.RORR002 for detail.
 - C - To develop this drawing as a tree protection plan to show the position of the protective fencing that needs to be erected and other tree protection measures that will need to be put in place around the tree and hedge vegetation to be retained at the very start of the works and be maintained until all construction works are complete. See 'Section 6.0' and 'Drawing No.RORR002 for detail.

2.0 Report Limitations

- 2.1 The inspection of the tree vegetation has been carried out from ground level only, is a preliminary report and does not include climbing inspections, internal investigations of the timber or below ground investigations. The assessment is based on what was visible at the time of the inspection and recommendations made are subject to the knowledge and expertise of the qualified Arboriculturist that carried out the above inspections.
- 2.2 This report only relates to factors apparent at the time of the inspection; as a result, further monitoring is imperative if potential problems/hazards are to be avoided. Recommendations made are intended to minimize or to help reduce potential hazards that may be associated with trees, but it is not possible to remove all such risks especially in the event of heavy winds or storms and as such, there is no guarantee or certainty that all hazardous conditions will be detected. The recommendations within this report are valid for a 12 month period only, unless otherwise stated within the recommendations of the attached report.
- 2.3 Before undertaking any work to this vegetation, it would be advisable to check whether any planning or tree preservation controls are in operation, if they are it will be necessary to obtain consent before undertaking any works (pruning or felling). The 'Forestry and Wild Life Acts' should also be taken into consideration when planning to carry out any tree works.

3.0 Survey Data Collection and Methodology

- 3.1 The assessment starts with the tree and hedge vegetation in the north-west corner and works in a clockwise direction around the site area. The trees within the site area were tagged with the tag reference numbers 1447-1500 & 1901-1933 inclusively and three trees and twenty hedges were numbered numerically. The tag numbers

are attached to the trees at a height of 1.5- 2m from ground level and are orientated in such a way to assist in their relocation.

- 3.2 The inspection of the trees involves a visual assessment from ground level only and does not include any invasive means of assessing the trees internally, their below ground parts or the aerial parts that are not visible from the ground. Good, fair and poor have been used to summarise the physiological and structural conditions of these trees with the comments giving more detail. Other items that may limit the assessment of a tree included Ivy cover, scrub vegetation and/or basal suckers.
- 3.3 Their retention category has been assessed and categorized according to their quality and value within the existing context (BS-4.5), and not in conjunction with any proposed development plans. In making this assessment, particular consideration was given to;

Arboricultural Value – An assessment of the trees health, structural form, life expectancy, species and its physical contribution to or effects on other features located on site.

Landscape Value – An assessment of a trees locality including its contributions to other features as well as to the site as a whole.

Cultural Value – Additional contributions made such as conservation, historical or commemorative value.

- 3.4 The tree vegetation has have been divided into one of the following categories, in accordance with the cascade chart illustrated in table 1 of BS 5837:2012. The classification process begins by determining whether the tree falls within the (U) category, if not then the process will continue by assuming that all trees are considered according to the criteria for inclusion in the high category (A). Trees that do not meet these strict criteria will then be considered in light of the criteria for inclusion in the moderate category (B) and failing this, they will be allocated a low category (C).

The following summarizes each of the categories:

Category U – Those trees in such a condition that any existing value would be lost within 10 years. These would be seen as trees that have little or no potential either due to their physiological and/or structural condition and their removal would be seen necessary either now or in the short-term as the most appropriate management option.

The category 'U' trees within the site area have been identified on our drawings (Nos.RORR001 & RORR002) with a 'Red' donut around their trunk positions.

Category A - Trees of high quality/value with a minimum of 40 years life expectancy. These would be seen as trees that have the potential to contribute to the tree cover of these grounds for the long-term and consists of trees of all age classes from semi-mature to mature.

From our assessment of the tree vegetation within this site area, no trees were categorized as 'A'.

Category B – Trees of moderate quality/value with a minimum of 20 years life expectancy. These would be seen as trees that have the potential to contribute to the tree cover of these grounds for the medium term and consists of trees of all age classes from semi-mature to mature.

The category 'B' trees within the site area have been identified on our drawings (Nos.RORR001 & RORR002) with a 'Blue' donut around their trunk positions.

Category C – Trees of low quality/value with a minimum of 10 years life expectancy

These trees would be seen as having the potential to provide tree cover for the short to medium term. As part of the future management, some of these may be removed for one reason or another. This category consists of trees of all age classes from young to mature. These trees should not be seen as a considerable constraint on the development of this site area, but should be considered for retention where viable.

The category 'C' trees within this site area have been identified on our drawings (Nos.RORR001 & RORR002) with a 'Grey' donut around their trunk positions.

- 3.5 The trees have been plotted onto the attached drawing (DWG No.RORR001) by a land survey company and their positions are assumed accurate. This drawing has been developed as a constraints drawing to aid the design team in the layout of the proposed development and the tag numbers referred to in the condition tree report have been shown on this drawing along with their crown spreads and their retention category colour coded as recommended by BS 5837 2012. The constraint (Minimum Root Protection Area) for each tree has been shown on the drawing with an 'Orange Circle' and all proposed development should be planned to be positioned outside those trees proposed for retention allowing for additional space for construction activities.

The Root Protection Area (RPA) is the minimum area around individual trees to be protected from disturbance during construction works; RPA is usually expressed as a radius in metres measured from the tree stem. Any deviation in the RPA from the original circular plot takes account of the following factors whilst still providing adequate protection for the root system:

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

4.0 Summary of Survey Findings

- 4.1 The site area included within this SHD land parcel are currently in agricultural use and are mostly in grass for grazing live stock. This parcel of land is divided up into a number of fields of varying sizes by typical type hedgerows for this area. The bulk of the hedgerows are growing on the sides of drainage ditches that drain these lands.
- 4.2 The hedges are predominately made up of Hawthorn with other species such as Elder and Privet present in smaller quantities with the undergrowth being dominated by Bramble and Dogrose and these in particular the Bramble is encroaching out of many of the hedgerows due to lapsed management to create broader hedges and scrub areas on either side.

Ash is the main tree species protruding up over the hedge heights along with some Sycamore, Crab Apple and Poplar and these are dispersed along the hedges either as individuals are in short groups/lines. These trees range in age from seedlings to those of a mature age class. Many of the trees have established themselves from old coppiced stools having been cut down previously as part of the past hedge cutting works and have now been allowed to establish as multiple-stemmed trees, either from base or near ground level. Ivy is also prevalent within the hedgerows and is growing up through the hedge plants and the trees, and in some places is causing suppression of the hedge plants and trees and may leave some of them more vulnerable to wind/storm damage.

The bulk of the Ash is showing evidence of infection by Ash Dieback (*Hymenoscyphus Fraxineus*) and this is likely to impact on their long-term potential and although some trees within their lines/group canopy structures are of some prominence with the landscape, infection or the potential for infection by 'Ash Dieback' is having an impact on their category grading due to the uncertainty associated with the disease and how it will impact on the Ash tree population in the future years. As a result, the Ash trees have been given a category grade of 'C'.

- 4.3 Within the overall site area, 87No.trees were tagged individually, with 7No.trees, six tree lines and 21No.hedges have been numbered numerically.

The following table gives a breakdown of the category grading allocation as per the cascade chart in BS5837 2012:

Category Grade	No. of trees
Category U 7 Trees	Tree Nos. 1473, 1476, 1493, 1910, 1918, 1919 & 1924
Category A 0 Trees	Tree Nos. N/A
Category B 1 Tree	Tree No. 1904
Category C 86 Trees + 6 Tree Lines + 21 Hedges	Tree Nos. 1447, 1448, 1449, 1450, 1451, 1452, 1453, 1454, 1455, 1456, 1457, 1458, 1459, 1460, 1461, 1462, 1463, 1464, 1465, 1465, 1467, 1468, 1469, 1470, 1471, 1472, 1474, 1475, 1477, 1478, 1479, 1480, 1481, 1482, 1483, 1484, 1485, 1486, 1487, 1488, 1489, 1490, 1491, 1492, 1494, 1495, 1496, 1497, 1498, 1499, 1500, 1901, 1902, 1903, 1905, 1906, 1907, 1908, 1909, 1911, 1912, 1913, 1914, 1915, 1916, 1917, 1920, 1921, 1922, 1923, 1925, 1926, 1927, 1928, 1929, 1930, 1931, 1932 & 1933 Tree Nos. 1, 2, 3, 4, 5, 6 & 7 Tree Line Nos. 1, 2, 3, 4, 5, 6 Hedge Nos. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20 & 21
Total	94 Trees + 6 Tree Lines + 21 Hedges

5.0.0 Arboricultural Implication Study

5.1.0 Introduction

- 5.1.1 The site area is located on lands to the north-west of the overall SHD lands and it is to be developed for a residential development. Within the sites red line boundary, there are 21No.hedgerows, either forming the boundary between fields within the site area or the boundaries with the adjoining lands/properties.
- 5.1.2 This section of the document is designed to assess the impact of the proposed development layout on the tree and hedge vegetation on these lands and to look at the necessary measures that will need to be undertaken to help retain the tree and hedge vegetation shown for retention free from adverse impacts for the duration of the construction period.
- 5.1.3 On drawing (No.RORR002), I have identified the tree and hedge vegetation to be removed to facilitate this proposed development with a 'Red' crown spread and those to be retained with a 'Green Hatched' crown spread.
- 5.1.4 On this drawing, I have also shown the necessary tree protective fencing and work exclusion zones with 'Orange Hatching'. This will need to be erected at the start of the works and be maintained in place until all works are completed.
- 5.1.5 The comments made within this impact assessment study are based on my understanding of the proposed works and what is required to allow for its construction.

5.2.0 Tree and Hedge Loss

- 5.2.1 See 'Appendix 2' of this report and drawing No.RORR002 which provides more details on the tree and hedge vegetation.
- 5.2.2 Based on the current layout of the proposed residential development at the north-western end of the SHD lands and its infrastructure requirements, it will be necessary to remove the following tree and hedge vegetation

1,417 linear meters of hedging made up predominantly of Hawthorn with some Elder and Privet with an undergrowth of Bramble and Dogrose. Within these sections of hedges to be removed, there are 65No.surveyed trees and c.61m of tree lines made up of 6 category 'U', 1 category 'B' and 58 category 'C' entries.

The trees for removal are predominately of Ash and these range in age from semi-mature to those of a mature age class and they range from individual trees to short groups/ lines and they consist of single-stemmed trees to those that are multiple-stemmed having most likely developed this form as a result of previous cutting into the hedgerows during their past management.

The following table gives a breakdown of the tree and hedge vegetation that will need to be removed to facilitate the proposed development and its infrastructure:

Ref No.	Category Grade	Section of Hedge to be Removed - Meters (m)	Tree Nos.
Hedge No.1	C	--	--
Hedge No.2	C	--	--
Hedge No.3	C	--	1456
Hedge No.4	C	--	--
Hedge No.5	C	--	--
Hedge No.6	C	--	--
Hedge No.7	C	c.71m	
Hedge No.8	U		1473 & 1476
	C	c.265m	1463, 1464, 1465, Tree No.1, Tree No.2, 1466, 1467, 1468, 1469, 1470, 1471, 1472, 1474, 1475, 1477,
Hedge No.9	C	c.36m	1479, 1480 & 1481
Hedge No.10	C	c.78m	None
Hedge No.11	C	c.140m	None
Hedge No.12	C	--	--
Hedge No.13	U		1493
	C	c.189m	1484, 1485, 1486, 1487, 1488, 1489 & 1494 Tree Line 4 & c.18m Tree Line No.5

Hedge No.14	C	--	--
Hedge No.15	C	c.75m	Tree No.3
Hedge No.16	C	c.76m	1495, 1496, 1497, 1498, 1499 & 1500
Hedge No.17	B		1904
	C	c.76m	1901, 1902, 1903, 1905, 1906, 1907, 1908 & 1909
Hedge No.18	C	c.106m	--
Hedge No.19	U		1918 & 1919
	C	c.75m	1910, 1911, 1912, 1913, 1914, 1915, 1916, 1917 & 1920
Hedge No.20	U		1924
	C	c.146m	1922 & 1923
Hedge No.21	C	c.84m	1928, 1929, 1930, 1931, 1932 & 1933.

5.2.3 The loss of the above tree and hedge vegetation from these lands is to be mitigated against with the planting of new trees, shrubs and hedge planting within the completed landscaped residential development within the private gardens and on the public open spaces. A range of tree sizes is being proposed from whips to form hedges and linear woodland strips to semi- mature trees. See project landscape architects plans and schedules for full details.

This planting as part of the landscaping will complement the development and its incorporation into the surrounding area. It will also help to provide good quality and sustainable long-term tree cover and as it establishes and grows in size, it will be continuously mitigating any negative impacts created with the loss of the existing tree vegetation to facilitate the proposed development. See landscape architects drawings and schedules for detail.

The design of the landscape areas within the completed development contains a strong tree and hedge planting as mitigation for the existing tree and hedge vegetation loss particularly along the boundaries. A mix of tree species, forms and sizes including the use of semi- mature trees will form a strong and unifying element to the landscape areas.

The planting strategy key factors are to:

- Create a sense of identity using tree and shrub vegetation.
- Create a robust landscape that performs all year round and is suitable for the current proposed use of these lands
- Use vegetation to screen and enhance views
- Use a more diverse mix of plant species that are good pollinators
- Plant robust species that tolerate drought and site-specific micro-climates
- Plant species that are maintenance friendly

5.3.0 Tree and Hedge Retention and Protection

- 5.3.1 The remaining tree and hedge vegetation is proposed for retention and incorporation into the completed development.

- 5.3.2 The following are the main items for consideration during the proposed construction process:

Item	Comments
Tree Pruning	<p>As part of the initiating works, the crowns of some of the trees are to be pruned to remove dead/unstable growth, as well as the pruning of individual limbs/branches or entire crowns to reduce size due to structural weaknesses or to improve their juxtaposition within the built environment. A preliminary list of these works is given within the condition tree assessment in 'Appendix 2' of this report and these are to be reviewed on site prior to being carried out.</p> <p>The hedges being retained in most instances will require trimming to bring them back into active management and to incorporate them into the completed landscaped development. This will involve trimming in of their sides, particularly excessive spread of vegetation especially Bramble and the poorer structured sections will need trimming/pruning to address stability issues. The objective of the trimming of the hedges is to help rejuvenate them with the encouragement of lower growth development and once trimmed back; there will be an opportunity to augment poor quality sections with new hedge planting to create better structured sustainable hedges for the future suitable for their new built urban environment.</p> <p>All tree felling and pruning work should be carried out by qualified and experienced tree surgeons <i>before</i> any construction work commences; all tree work should be in accordance with <i>BS3998 (2010) Tree Work – Recommendations</i>.</p> <p>For the stumps of trees that need to be removed, particularly those which are located within the root zone of trees being retained, these are to be ground out using a mechanical stump grinder taking care not to cause root damage to the trees being retained.</p>
Tree Management	<p>Within the proposed development, as is the current situation, trees will be positioned within close proximity to buildings and usable surfaces such as roads and neighbouring properties. As a result, it will be necessary to continue to review the condition of these trees on a regular basis and to carry out any necessary remedial tree surgery works required to promote health and safety. This will involve the ongoing monitoring of the Ash trees retained for infection and decline as a result of Ash Dieback and the necessary management will need to be undertaken to address safety.</p> <p>Any new tree planting carried out will require maintenance to encourage good growth habits and to alleviate any safety concerns that they may present as they grow in size.</p>
Tree Protection	<p>The tree and hedge vegetation being retained will need to be protected from unnecessary damage during the construction process by effective construction-proof barriers that will define the limits for machinery drivers and other construction staff.</p> <p>Ground protected by the fencing will be known as the 'Work Exclusion Zone' and sturdy protective fencing will need to be erected along the points identified in the Tree Protection Plan</p>

Item	Comments
	<p>(DWG No. RORR002) prior to any soil disturbance and excavation work starting on site. This is essential to prevent any root or branch damage to the retained trees. The British Standard BS5837: <i>Trees in relation to design, demolition and construction (2012)</i> specifies appropriate fencing, see appendix 1 for details. All weather notices should be erected on the fences with words such as: "Tree Protection Fence — Keep Out".</p> <p>When the fencing has been erected, the construction work can commence. The fencing should be inspected on a regular basis during the duration of the construction process and shall remain in place until heavy building and landscaping work have finished and its removal is authorised by the project Arboriculturist.</p>
Construction	<p>It will be important that good housekeeping is in place at all times so that the site does not become congested.</p> <p>All construction works will need to be well planned in advance so as not to put pressure on the protective zone around the trees. All works are to occur from outside the protective zones.</p> <p>Where work space between the building lines and the protective fence lines is limited/ restricted, alternative work methods will need to be looked at so as to keep the work areas to their minimum in order to reduce the extent of soil and root damage occurring to the trees proposed for retention. See section 6.2.3 of BS5837 2012 for detail on working within the RPA and ground protection. For light access works within the work exclusion zone, the installation of suitable ground protection in the form of scaffold boards, woodchip mulch or specialist ground protection mats/plates may be acceptable. These are to be reviewed with the project Arboriculturist and installed to their recommendations. See detail in 'Appendix 1' of this report for sample of ground protection for light weight construction works.</p> <p>Care should be taken when planning site operations to ensure that wide or tall loads or plant machinery with booms, jibs and counterweights can operate without coming into contact with retained trees. Such contact can result in serious damage to them and might make their safe retention impossible. Materials, which can contaminate the soil, e.g. concrete mixings, diesel oil and vehicle washings, should not be discharged within 10m of a tree stem.</p> <p>Fires should not be lit in a position where their flames can extend to within 5 m of foliage, branches or trunk. This will depend on the size of the fire and the wind direction.</p> <p>Notice boards, wires and such like should not be attached to any trees. Site offices, materials storage and contractor parking should all be outside the work exclusion zone.</p>

Item	Comments
Services	<p>Services entering and leaving the site area are routed so they are located outside the root protection zones of the trees to be retained.</p> <p>Prior to the installation of any services routed near trees, these are to be marked out on site for review by the project Arboriculturist and a detailed method statement is to be prepared by the installation contractor in conjunction with the project Arboriculturist on how these services are to be installed while providing protection to the surrounding tree vegetation shown for retention.</p>
Landscaping	<p>The existing ground levels within the RPA of the trees are to be retained and incorporated into the finished landscaped development. Where changes in levels occur, these are to be either graded into the finished levels starting outside the RPA or alternatively, retaining wall structures are to be used differentiating between the different levels.</p> <p>All soft and hard landscaping within the RPA of the trees to be retained are to be carried out manually and the soil levels are not to be lowered or raised resulting in root damage to the trees. All surfaces are to be porous to allow the free movement of air and moisture to the roots below. Recommendations of sections 8 of BS5837 2012 are to be adhered to during the landscaping within the RPA's of these trees.</p> <p>In a number of places, paths/surfaces will encroach into the root zone of the tree vegetation to be retained and these sections of paths and surfacing will need to be installed using a 'No-Dig' method over the existing ground levels to avoid causing damage to the soil and roots underneath. Where it is necessary to provide extra support for heavier loading, it will be important to use a cellular confinement system such as 'CellWeb' within the construction of these sections of paths/surfaces. See 'Section 6.8.0' of our report for general detail on the installation of such product and the guidance of the Arboricultural Practice Note 12 'The use of cellular confinement systems near trees' A guide to good practice'.</p>
Boundary Treatments	<p>The boundary treatments within the root zone of the tree and hedge vegetation being retained are of a fence type structure where there will only be a need to dig small diameter holes for the uprights. These holes for the uprights are to be dug manually with no machinery allowed inside the root protection areas. Work zones within the root protection areas for these trees will need to be protected during the construction of the boundary fences by boarding as per section 6.2.3 of BS 5837 2012.</p> <p>Where it is needed to install fences along existing hedges, it will be necessary to carry out some pruning of the side vegetation to allow access. This is to be kept to a minimum and where necessary, the hedges are to be augmented with new hedge planting to fill openings and to bulk up screening.</p>

5.3.3 Monitoring

Any construction works within close proximity to retained tree and hedge vegetation are advised to be undertaken in accordance with approved method statements prepared by the construction contractor under the direct supervision of a qualified consultant Arboriculturist. Therefore, during the construction works, a professionally qualified Arboriculturist is recommended to be retained by the principal contractor or site manager to monitor and advise on any works within the RPA of retained trees and hedges to ensure their retention and planning compliance.

It is advised that protection fencing, any required special engineering and supervision works must be included in the main tender documents, including responsibility for the installation, cost and maintenance of the protection measures throughout all construction phases.

Copies of the tree protection plan (Dwg No. RORR002) a copy of BS 5837(2012) and NJUG 4 (2007) should all be kept available on site during the construction works and all works are to be in accordance with these documents.

On the completion of the construction works, all tree and hedge vegetation retained is to be reviewed by the project Arboriculturist and any necessary remedial tree surgery works required to promote the health of these trees and hedgerows, and their safety are to be implemented.

6.0 Arboricultural Method Statement/Tree Protection Strategy

- 6.1 The objective of this arboricultural method statement/tree protection strategy is to provide information for the main contractor/site manager on how the tree and hedge vegetation needs to be protected during a construction project and so that they can prepare their own site specific detailed method statement for their works.
- 6.2 It is necessary for protective fencing to be erected and all other mitigation measures required to be put in place prior to the construction works commencing on site and these are to enclose and protect the root zone of the tree and hedge vegetation proposed for retention. See drawing (Dwg No.RORR002), for the position of the protective fencing and other mitigation measures.
- 6.3 The protection of the tree and hedge vegetation shown for retention within this proposed development of these SHD lands is divided into three main sections starting with the preconstruction stage right through to post construction and its reassessment.

Stage 1:

6.4.0 Pre-Construction Works

- 6.4.1 Prior to the main construction works commencing on site the following needs to be planned:
1. The developer or main contractor needs to appoint an Arboriculturist for the duration of the project. The Arboriculturist is to make regular site visits to ensure that the protection measures are in place and adhered to.
 2. The main contractors and all sub-contractors work force are to be briefed on the protection and ensure that these measures are to be kept in place throughout the construction period.
 3. All personnel are to adhere to the recommendations of the appointed Arboriculturist.
 4. Any issues in relation to the tree and hedge vegetation shown for retention must be discussed with the appointed project Arboriculturist and the necessary mitigation measures put in place without delay and prior to the works being carried out.

6.5.0 Site meeting

- 6.5.1 Prior to any works commencing on site, it is necessary that a meeting be arranged between the project manager, site foremen, the project Arboriculturist and local authority to identify and finalize the tree and hedgerow removal and the line of the protective fencing.

6.6.0 Hedge/Tree works

- 6.6.1 The client or the main contractor is to appoint a tree surgery company competent of carrying out the remedial tree surgery works and felling that are required on this site. The tree surgery contractor is to produce a method statement detailing how he plans to undertake the works and informing the site foreman of the process so the necessary steps can be taken to ensure the works are carried out safely and efficiently. The works are to be carried out by appropriately trained personnel taking account of the recommendations of BS3998 2010.
- 6.6.2 **Hedge/Tree removal** – Hedges/trees for removal are to be identified by the project Arboriculturist and the method of removing the stumps is to be carried out to the recommendations of the project Arboriculturist. The hedges/trees in the way of the proposed development are to be removed in such a manner not to cause damage to those being retained. Where necessary to avoid damage to the hedges/trees to be retained, these are to be removed in sections by a tree surgeon (Arborist). Where necessary, the roots and stumps are to be dug out with a digger except where the stumps are located within the RPA (root protection area) of hedges/trees being retained. In this instance, the stumps are to be ground out with a mechanical stump grinder taking care not to cause damage to the roots of hedge/trees being retained.

6.6.3 **Remedial tree surgery works** - The necessary remedial tree surgery works required to promote health and safety of the hedges/trees to be retained is to be carried out. A schedule of these works is to be produced by the project Arboriculturist taking into consideration the hedges/trees within their new built environment and prior to these works being carried out; they are to be agreed with the local authority.

6.7.0 **Erection of the protective fencing**

6.7.1 Once the hedge/tree vegetation has been removed, the line of the protective fencing that is required around the hedge/tree vegetation being retained **must be** erected as per Dwg No. RORR002.

6.7.2 Where it is expected that there will be a high concentration of construction works, the fencing will need to be 2.3m high and constructed in accordance with figure 2 of BS 5837 2012 (see fencing detail within 'Appendix 1' & drawing No. RORR002) using vertical and horizontal scaffold bars well braced together with the verticals spaced out at a maximum of 3m centres and onto this, weld mesh panels are to be securely fixed with wire or scaffold clamps.

Where there is a lesser intensity of works, a three rail or chain-link fence structure 1.5m high or similar will be sufficient, (see fencing detail within 'Appendix 1').

6.7.3 Signs need to be attached to these fences warning people to 'keep out'. (See detail within 'Appendix 1').

6.7.4 Once the protective fence line is erected, then the main construction works can commence on site.

6.7.5 **Storage of Material, Work Yards and staff car parking** - These areas must be identified on the work drawings prior to the construction works starting. These must be positioned outside the root protection areas around the hedges/trees being retained

6.8.0 **Ground Protection Installation for Pathways and Working Areas**

6.8.1 The ground protection is to take the form of a product such as 'Cell Web' and this will need to be installed in the following manner under the guidance of the project Arboriculturist and engineer:

Step 1 - The existing ground cover vegetation (e.g. grass/weeds) if necessary is to be killed off using an appropriate herbicide (see Pesticides Handbook [15]). Herbicides that can leach through the soil, e.g. products containing sodium chlorate, are not to be used.

The soil surface is not to be excavated to establish a sub base for the finished surfaces.

Loose organic matter, woody vegetation and/or turf are to be removed carefully using hand tools.

If there is a delay in installing the surface following clearing, the soil surface once prepared is to be covered immediately either with hessian sacking or plastic to prevent the surface drying out until the new surface is installed.

Step 2 – Place the geotextile separation filtration layer over the prepared ground surface. Use a Fibretex F4M non-woven geotextile with dry joints overlapping by 300mm.

Step 3 – Place constraints along the edges to contain the fill material. These can be of such material as treated timber or railway sleepers.

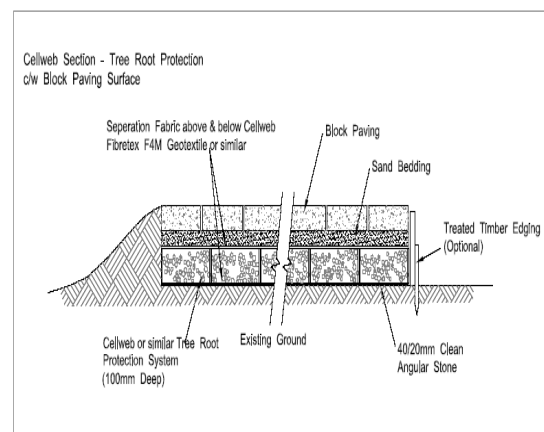
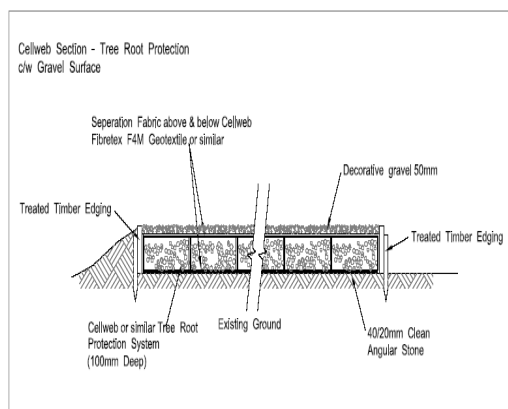
Step 4 – Place the required cellular confinement system (Cell Web 150-200mm) over the geotextile and pin/anchor the cell walls open for infilling.

Step 5 – Place the infill material of a 20-40mm clean sharp stone in the open cells of the Cell Web pushing the infill ahead of you so that the machinery is driving on the filled Cell Web. Compact the infill material to the desired density.

Step 6 – Slightly surcharge the Cell Web product with 25mm of 40/20mm clean angular stone.

Pictures show the Cell Web being installed on the ground.

The below diagram shows how the Cellular confinement system should be installed.



Stage 2:

6.9.0 The Construction Works Stage

- 6.9.1 **Protective fencing** - During the course of the works, special attention must be paid to ensure that these fences and all other protection measures are kept in place, in good order and remain upright, rigid and complete at all times. They must be checked daily by the main contractor/foreman and any damage noted must be fixed immediately.

If works need to take place inside the protective fence lines, then the project Arboriculturist must be informed in advance of the works taking place and the mitigation measures required to reduce impact on the tree and hedge vegetation agreed. These mitigation measures will include the supervisions of these works by the project Arboriculturist.

The protective fencing and all other protection measures are to remain in place throughout the construction works phase and must only be removed when all the works are complete and at this stage incorporated into the finished landscape.

- 6.9.2 **Excavations** - The excavation works are only to commence once the protective fence line and all other protection measures are in place.

The excavations need to be viewed on site once marked out with the project manager, site foreman and the project Arboriculturist in advance of excavation to determine the extent of the impact and the work space required to allow for the construction works to proceed and to assess what additional mitigation measures will be required to protect those hedge/ trees to be retained. In certain areas, it may be necessary to use an alternative method of excavating to prevent encroachment into the RPA of the hedges/trees to be retained and this may include such methods as retaining walls or similar.

Where roots of hedges/trees to be retained are exposed during the excavation works, these are to be assessed by the project Arborist and pruned back beyond damaged material. The excavated face is then to be covered with soil or with Hessian sacking to prevent further drying out and death of root material. Where the Hessian sacking is used, it will be necessary to keep this moist especially during dry periods.

- 6.9.3 **Working within the RPA (Root Protection Area)** – If it becomes necessary to carry out works within the RPA of a hedge/tree, these must be discussed and agreed with the project Arboriculturist. All works must be carried out manually. Root pruning is to be undertaken by an Arboriculturist using proprietary cutting tools such as a secateurs or hand pruning saw.

The ground within the RPA of the hedges/trees must be protected from damage as per the recommendations of **section 6.2.3** of BS5837 2012. See detail within appendix 1 on ground protection using boarding for pedestrian loading.

- 6.9.4 **Finished ground levels/Landscaping** - The existing ground levels within the RPA of hedges/trees must be retained and incorporated into the finished landscaped development. Where changes in levels occur, these are to be either graded into the finished levels starting outside the RPA or alternatively, retaining wall structures are to be used differentiating between the different levels.

All soft and hard landscaping within the RPA of the hedges/trees to be retained must be carried out manually and the soil levels must not be lowered or raised resulting in root damage to the hedges/trees. All surfaces are to be porous to allow the free movement of air and moisture to the roots below. Recommendations of sections 8 of BS5837 2012 must be adhered to during the landscaping within the RPA of the trees being retained.

6.10.0 Other items

6.10.1 The following is a list of additional activities **that are not allowed** within the RPA or within the vicinity of the hedges/trees being retained.

1 - Storage of equipment, fuel, construction material, or the stockpiling of soil or rubble.

2 - Burning rubbish

3 -The washing of machinery

4 - Attaching notice boards, cables or other services to any part of the tree.

5 - Using neighbouring trees as anchor points.

6 - Care is required when using machinery such as Tele-porters, cranes or other equipment close to trees so as not to damage the crown or any other parts.

Stage 3:**6.11.0 Post Construction Works**

6.11.1 This project is not to be considered complete until all retained tree and hedge vegetation have been re-examined by the project Arboriculturist and the remedial works necessary to ensure the health of the hedges/trees and the immediate safety of the end user of this development are implemented.

This report has been produced as part of a planning application for these lands and is for the sole use of the above named client and refers to only those hedges/ trees identified within. Its use by any other person(s) in attempting to apply its contents for any other purpose renders the report invalid for that purpose.

Signed *Felim Sheridan*

Date 20th April 2022

Felim Sheridan

F. Arbor. A, RFS Dip, Nat. Dip & NCH in Arboriculture

Felim Sheridan's qualifications:

Fellow of the Arboricultural Association (F. Arbor. A), Professional diploma Arboriculture (RFS), National diploma Arboriculture (ND) and National certificate Horticulture (NCH).

Appendix 1

- 1.1 Sample of Temporary Tree Protection Fencing Detail.**
- 1.2 Sample of Ground Protection within Root Zone.**
- 1.3 Sample of Trunk Protection**
- 1.4 Sample of Toolbox Talk Sheet**
- 1.5 Sample of Site Monitoring Sheet**

Appendix 1.1

Type 1 Protective Fence

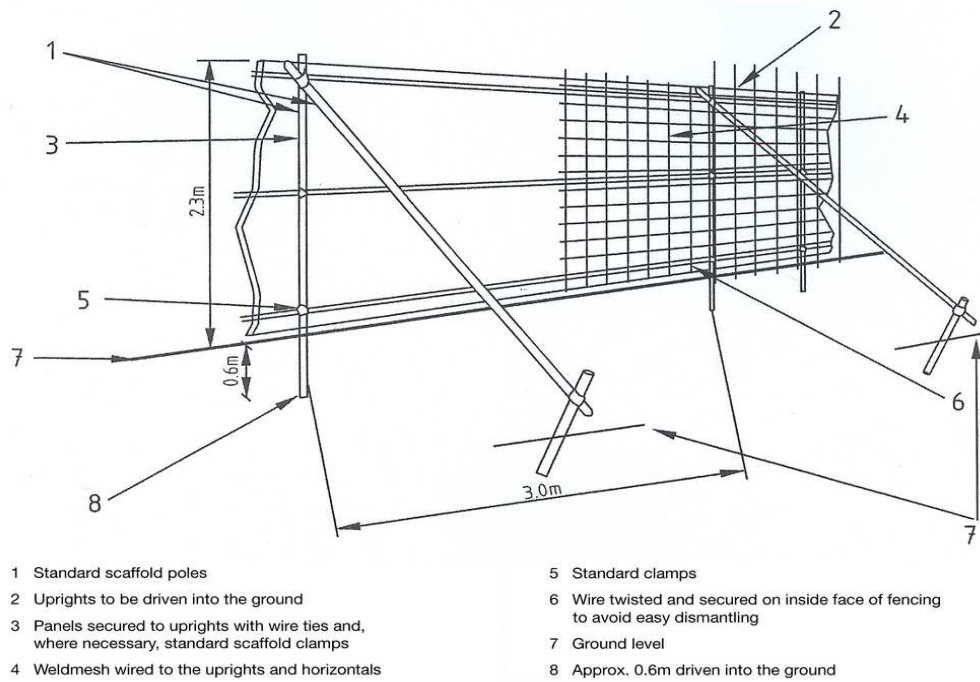
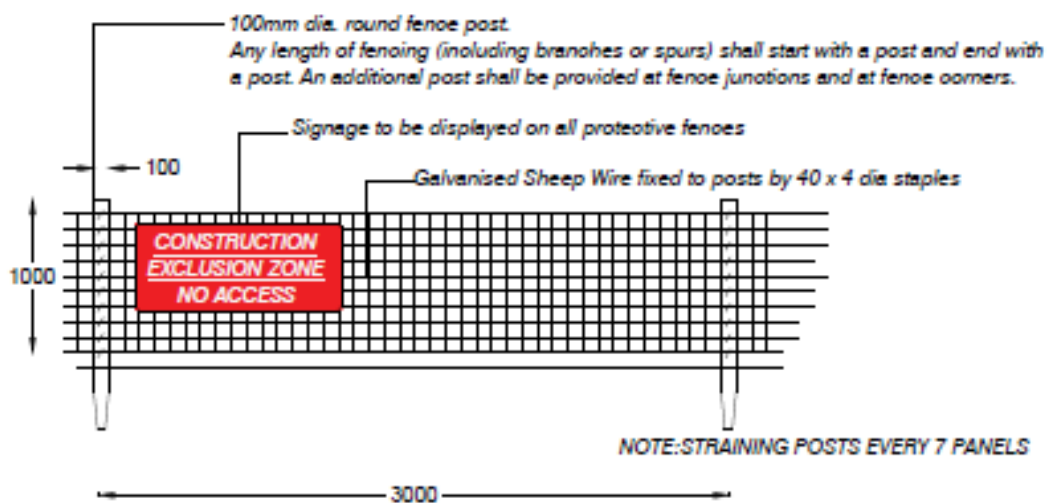
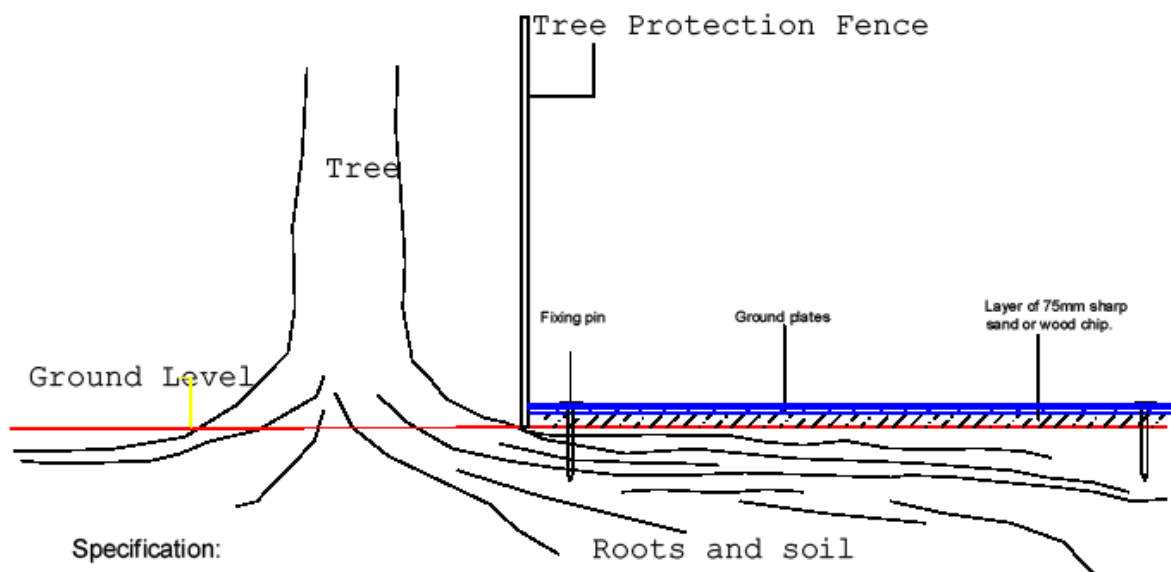
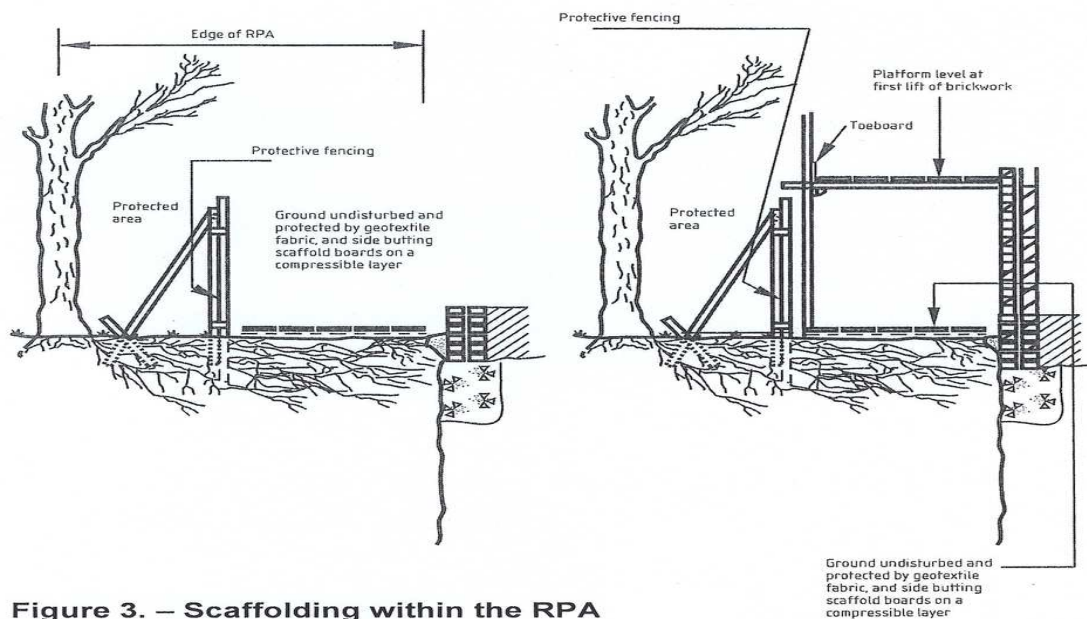


Figure 2. – Protective fencing for RPA

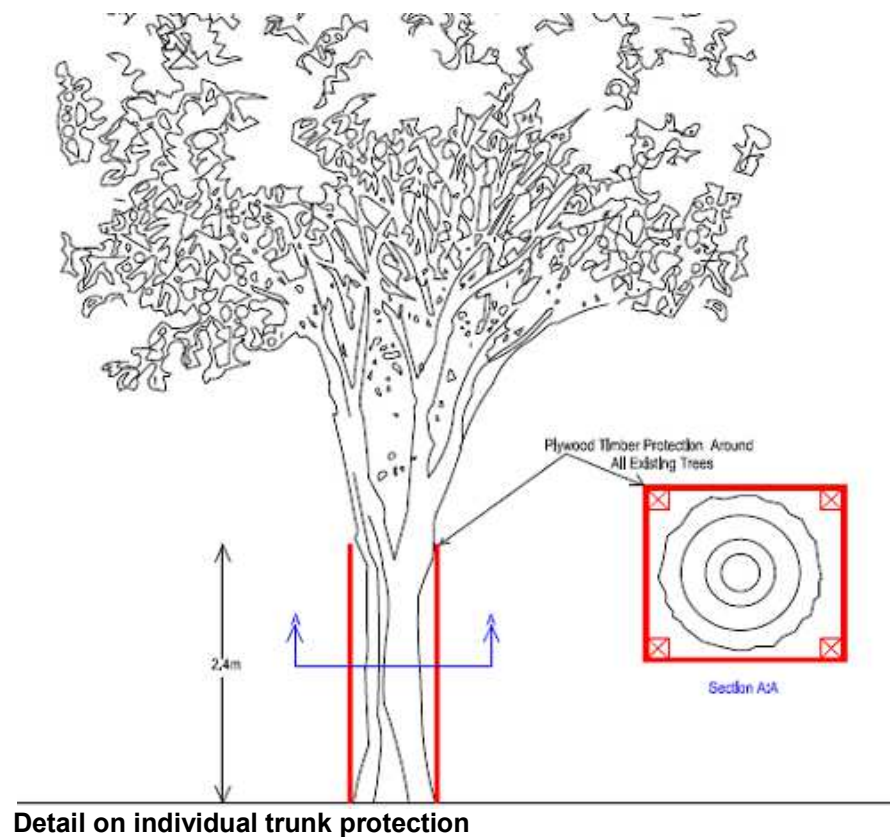
Fence Type 2 - Detail of Tree protection fencing for lower intensity work areas.



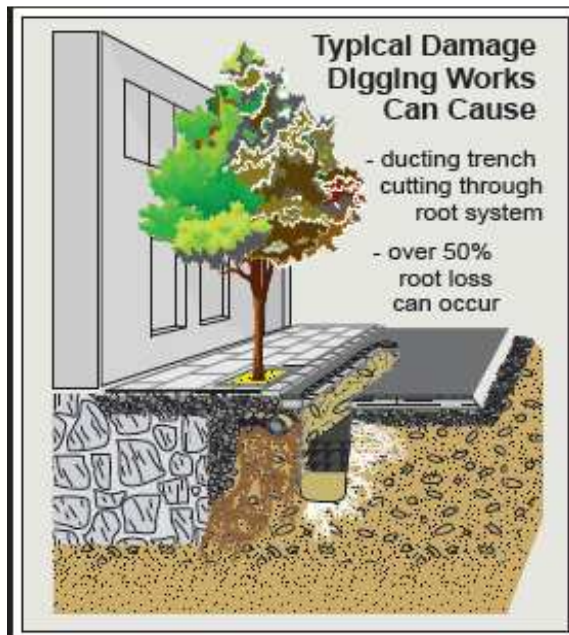
Appendix 1.2 – Samples of ground protection within root zones



1. Lay min. 75mm depth of sharp sand/wood chip over identified ground area
2. Lay side-butting scaffold boards/15mm poly propylene road plate over sand/wood chip
3. Fix ground protection cover into place with pins/pegs
4. Erect protection fence (where feasible).
5. Remove ground protection upon completion/landscaping only.

Appendix 1.3 – Sample of trunk protection.

Appendix 1.4 – Sample of Toolbox talk.



Don't

- ✘ Dig near any trees without asking the foreman or site engineer for the correct procedures
- ✘ Use an digger/excavator or hand dig within 10m of a tree on the street
- ✘ Excavate near trees without having the tree specialist on site to monitor the works
- ✘ Leave trees roots uncovered or dried out

Do

- ✓ when excavations are to be carried out within 10m of a tree ask a foreman or site engineer for the correct procedures
- ✓ report any signs of trees roots to your foreman or site engineer
- ✓ always have the tree specialist on site when excavations are in close proximity to urban trees
- ✓ always use a vacuum extractor or air spade for excavations under or near urban trees even if the trees are located on the pavement
- ✓ cover any exposed tree roots with hessian matting and soak matting throughout the period of excavation
- ✓ backfill excavations near trees with similar soils that were originally excavated

Appendix 1.5 – Sample of site monitoring sheet**Protected Tree Monitoring Form
Site Inspection Report****Zone:****Location:****Tree Group / Number****Tree Protection Checked By:****Date:****Status of tree protection:****Remedial measures / comments:****Copied to:****Project Manager****Yes / No****Project Manager's Arboricultural Consultant:****Yes / No****Copied To Project Manager:****Yes / No****Contact Name****Signed:****Date**

Appendix 2

Condition Tree and Hedgerow Assessment

on 'SHD Lands' at Ratoath South, Co. Meath.

Date: 20th April 2022

Survey Notes

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

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

Reference to age class is as follows:

Young: A tree, which has been planted in the last 10 years.

Semi Mature A tree that is less than 1/3 the expected height of the species in question.

Early Mature: A tree, which is between a 1/3 and 2/3's the expected height of the species in question.

Mature: A tree that has reached the expected height of the species in question, but still increasing in size.

Over Mature: A tree at the end of its life cycle and the crown is starting to break up and decrease in size.

Reference to Physiological, Structural Condition and other comments:

Physiological Condition

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

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

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

Structural condition and other comments –

This records noted visual defects and other information about the trees health and structure.

Estimated Remaining Contribution in years

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

Less than (<) 10 years remaining contribution

10 + years remaining contribution

20 + years remaining contribution

40 + years remaining contribution.

Retention Categories

The purpose of the tree categorization method is to identify the quality and value of the existing tree stock, allowing informed decisions to be made concerning which trees should be removed or retained should development occur.

It is carried out in accordance with section 4.5 (Tree Categorization Method) of BS 5837 2012.

Summary

Main categories

Category U – Those trees in such a condition that any existing value would be lost within 10 Years. Most of these will be recommended for removal for reasons of sound Arboricultural practice.

Category A - Trees of high quality/value with a minimum of 40 years life expectancy.

Category B – Trees of moderate quality/value with a minimum of 20 year life expectancy.

Category C – Trees of low quality/value with a minimum of 10 years life expectancy

Sub categories

- 1 – Mainly Arboricultural Values
- 2 – Mainly Landscape values
- 3- Mainly Cultural and conservation value

Note: Whilst C category trees will usually not be retained where they would impose a significant constraint on development, young trees with a stem diameter of less than 150mm should be considered for relocation.

If a layout design places Category U trees in an inaccessible location such that concerns over public safety are reduced to an acceptable level, it may be preferable or possible to defer the recommendation to fell.

The terms 'Group, woodland or tree line' is intended to identify trees that form cohesive Arboricultural features either aerodynamically (e.g. trees that provide companion shelter), visually (e.g. avenues or screens) or culturally including for biodiversity (e.g. parkland or wood pasture), in respect to each of the three subcategories.

Reference to Crown spread, Height and Trunk Diameter:

This gives a guide to the area taken up by the tree.

Trunk diameter is the diameter of the main trunk taken at a height of 1.5m and is recorded in millimeters (mm).

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

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

Clear crown height records the distance between the ground and the first branch from the base of the tree and is given in meters (m).

Root Protection Area (RPA)

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

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

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

a) For trees with two to five stems, the combined stem diameter should be calculated as follows:


$$\sqrt{((\text{stem diameter } 1)^2 + (\text{stem diameter } 2)^2 \dots + (\text{stem diameter } 5)^2)}$$

b) For trees with more than five stems (not illustrated in Annex C), the combined stem diameter should be calculated as follows:

$$\sqrt{((\text{mean stem diameter})^2 \times \text{number of stems})}$$


The RPA for each tree is plotted on the Tree Constraints Plan (No.ASC001); any deviation in the RPA from the original circular plot takes account of the following factors whilst still providing adequate protection for the root system:

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

Tree No.	Tree Species	Ht. (m)	Stem Dia. (mm)	Branch Spread (m)	C-Ht. (m)	Age Class	Phys. Con.	Structural Condition Other Comments	Preliminary Recommendation	Remain Contribute in years	Cat. Grade
								N-north S-south E-east W- west Phys.-physiological.	A- average		
A Condition Assessment of the trees on lands at 'Ratoath' Co. Dublin.											
Hedge No. 1	Hawthorn <i>Crataegus monogyna</i> Bramble <i>Rubus fruticosus</i> Dogrose <i>Rosa canina</i> Ash <i>Fraxinus excelsior</i>	It extends north to south along the road frontage, from the boundary with a field. It is of a mature age class in fair condition physiologically and structurally. It consists of clumps Hawthorn, Bramble and Dogrose with the Ash trees mixed throughout forming the upper canopy formation. Due to lapsed management the hedge vegetation has become very sparse with Bramble and Dogrose dominating the undergrowth and encroaching out, in particular on the field side, creating scrub areas. It has been kept trimmed on the road side due to its close proximity to the road. I suspect that this hedge has been impacted upon by the previous road works and possibly the filling in of the original field drainage ditch.							Cut in all encroaching hedge species and cut back the poor structured hedge plants to encourage lower growth development and to improve structure.	-	C2
		The following trees are located within Hedge No. 1. The assessment of the trees works from south to north in direction.									
1447	Ash	14	280	N3	7	Mature	Fair	Fair	Remove dead/ unstable	10+	C2


Tree No.	Tree Species	Ht. (m)	Stem Dia. (mm)	Branch Spread (m)	C-Ht. (m)	Age Class	Phys. Con.	Structural Condition Other Comments	Preliminary Recommendation	Remain Contribute in years	Cat. Grade
								N -north S -south E -east W - west Phys. -physiological.	A - average		
	<i>Fraxinus excelsior</i>			S4 E4 W5				It forms part of the group canopy formation with the neighbouring trees and has been drawn up for the light as a result. Heavy Ivy cover on the main trunk is causing suppression. It forms a twin-stemmed tree from base.	growth. Cut Ivy at ground level.		
1448	Sycamore <i>Acer pseudoplatanus</i>	13	320	N4 S4 E3 W3	5	Early Mature	Fair	Fair Multiple-stemmed from base and forms part of the understory. There is heavy Ivy cover on the main stems.	Retain as part of the hedge bulking and cut Ivy at ground level.	20+	C2
1449	Ash <i>Fraxinus excelsior</i>	15	370	N4 S3 E4 W3	6	Mature	Fair	Fair Multiple-stemmed from base and is growing up within a group environment and forms part of the upper canopy formation. It contains deadwood within its crown. Heavy Ivy cover on some stems is beginning to extend up into its crown.	Remove dead/ unstable growth. Cut Ivy at ground level.	10+	C2
1450	Ash <i>Fraxinus excelsior</i>	16	490	N6 S4 E5 W5	7	Mature	Fair	Fair It is growing up within a group environment with a secondary stem developing from its base. Heavy Ivy cover on the main trunk is beginning to extend up into its crown. It contains small to medium size deadwood throughout its crown and its crown overhang towards the road has been cut back in the past with stubs remaining.	Remove dead/ unstable growth. Prune stubs back to proper pruning points.	10+	C2
1451	Ash <i>Fraxinus excelsior</i>	14	580	N7 S5 E6 W4	6	Mature	Fair	Fair It is growing up with Tree No. 1450 and forms part of a combined canopy formation with an asymmetrical crown due to its growing environment. It contains small to medium size deadwood within its crown. Heavy Ivy cover on the main trunk is	Remove dead/ unstable growth. Cut Ivy at ground level.	10+	C2


Tree No.	Tree Species	Ht. (m)	Stem Dia. (mm)	Branch Spread (m)	C-Ht. (m)	Age Class	Phys. Con.	Structural Condition Other Comments	Preliminary Recommendation	Remain Contribute in years	Cat. Grade	
								N -north S -south E -east W - west Phys. -physiological.	A- average			
								extending up into its crown and is beginning to cause suppression.				
1452	Ash <i>Fraxinus excelsior</i>	14	400	N2 S4 E4 W5	5	Early Mature	Fair/ Poor	Fair It is located on the left-hand side (north side) of the field entrance and forms part of the group canopy formation with Tree No.1453. Heavy Ivy cover on the main trunk is extending up into its crown with stress/ decline evident throughout with deadwood present.	Remove dead/ unstable growth. Cut Ivy at ground level.	10+	C2	
1453	Ash <i>Fraxinus excelsior</i>	15	530	N2 S3 E4 W6	3	Early Mature	Fair	Fair It forms part of the group canopy formation with an asymmetrical crown formation as a result. It is becoming more isolated and open/exposed due to the storm damage occurring within the neighbouring trees. Heavy Ivy cover on the main trunk is extending up into its crown. It has possibly suffered soil and root damage, in particular on the north side due to the drainage ditch.	Cut Ivy at ground level and tidy up the area around its base to allow for a more detailed assessment.	10+	C2	
Hedge No. 2	Hawthorn <i>Crataegus monogyna</i> Elder <i>Sambucus nigra</i> Dog Rose <i>Rosa canina</i> Bramble <i>Rubus fruticosus</i>	It runs at ninety degrees to Hedge No. 1 and extends in an east to west direction along the northern boundary of the site area with the main hedge line located on the adjoining landside of a deep wet drainage ditch.						It is of a mature age class in fair condition physiologically and structurally. It consists of Hawthorn, Elder, Bramble and Dogrose with Ash and Goat Willow forming the upper canopy. As a result of the field being out of active management, the hedge species, in particular the Bramble and scrub species have encroached out creating scrub areas on the site side. The upper canopy contains some mature Ash trees with a lot of them showing signs of decline due to infection by Ash Dieback (<i>Hymenoscyphus Fraxineus</i>).		Trim in all encroaching hedge species in order to tidy up the hedge structure. The Ash trees will need to be managed and those at an advanced stage of decline with decay will need to be removed to address health and safety.	-	C2

Tree No.	Tree Species	Ht. (m)	Stem Dia. (mm)	Branch Spread (m)	C-Ht. (m)	Age Class	Phys. Con.	Structural Condition Other Comments	Preliminary Recommendation	Remain Contribute in years	Cat. Grade
								N-north S-south E-east W- west Phys.-physiological.	A- average		
	Ash <i>Fraxinus excelsior</i> Goat Willow <i>Salix caprea</i>										
		The following trees are located on the site side of the drainage ditch.									
1454	Ash <i>Fraxinus excelsior</i>	11	390	N2 S4 E2 W3	1	Semi Mature	Fair	Fair Self-seeded and is growing up on the site side of the drainage ditch and is establishing up over the surrounding vegetation. Secondary stems have been cut back from its base in the past.	Tidy up the undergrowth at the present time.	10+	C1
1455	Ash <i>Fraxinus excelsior</i>	12	210/ 180	N3 S4 E4 W3	2	Semi Mature	Fair	Fair It forms a twin-stemmed tree from base with an acute union formation between stems. Self-seeded into this area and is growing on the site side of the wide drainage ditch/ stream. It has a slightly asymmetrical crown formation due to competition from the neighbouring trees.	Tidy u the undergrowth at the present time.	10+	C1


Tree No.	Tree Species	Ht. (m)	Stem Dia. (mm)	Branch Spread (m)	C-Ht. (m)	Age Class	Phys. Con.	Structural Condition Other Comments	Preliminary Recommendation	Remain Contribute in years	Cat. Grade
								N-north S-south E-east W- west Phys.-physiological.	A- average		
Hedge No. 3	Hawthorn <i>Crataegus monogyna</i> Crab Apple <i>Malus sylvestris</i> Elder <i>Sambucus nigra</i> Privet <i>Ligustrum sp.</i> Goat Willow <i>Salix caprea</i>	<p>It runs at ninety degrees to Hedge No. 2 and runs in a north to south direction.</p> <p>The main hedge line is located on the adjoining landside of a deep drainage ditch which is wet in some places. It is of a mature age class in fair condition both physiologically and structurally. It consists of predominately Hawthorn with Crab Apple, Elder and Privet mixed throughout with Bramble and Dogrose dominating the lower vegetation. Seedling Goat Willow is developing on the site side of the drainage ditch, with Bramble and Blackthorn mainly on the site side which have encroached out from the hedge. It has not received trimming in order to contain and has been allowed grow up into a high hedge with some sections becoming tall and top-heavy as a result. It is being heavily suppressed by Ivy with storm damage occurring.</p>						<p>Trim in all encroaching hedge species in order to tidy up the hedge structure.</p> <p>Cut back the poorly structured sections in order to address stability and structural issues.</p> <p>Cut Ivy at ground level where it is heavy on the hedge plants in order to reduce wind sail and lessen further wind damage.</p>	-	C2	
		<p>The following trees are located within Hedge No. 3.</p>									
1456	Ash <i>Fraxinus excelsior</i>	12	340	N3 S3 E4 W2	4	Semi Mature	Fair	Fair It is growing on the site side of the drainage ditch and has been drawn up and out for the light due to competition and is beginning to establish its crown	Requires no work at the present time.	10-20	C1



Tree No.	Tree Species	Ht. (m)	Stem Dia. (mm)	Branch Spread (m)	C-Ht. (m)	Age Class	Phys. Con.	Structural Condition Other Comments	Preliminary Recommendation	Remain Contribute in years	Cat. Grade
								N -north S -south E -east W - west Phys. -physiological.	A- average		
								above the height of the hedge. There is Ivy cover on the main trunk.			
1457	Ash <i>Fraxinus excelsior</i>	20	1200	N7 S7 E8 W7	7	Mature	Fair	Fair It is growing on the soil bank on the adjoining landside of the boundary drainage ditch and is protruding up above the height of the hedge. It forms a twin-stemmed tree from base with an acute union formation between stems. It contains small to medium size deadwood throughout its crown and is showing signs of stress/ decline throughout, most likely associated with Ash dieback. There is light Ivy cover on the main trunk.	Make safe large size dead/ unstable growth. Monitor its condition.	10+	C2
Hedge No. 4	Hawthorn <i>Crataegus monogyna</i> Elder <i>Sambucus nigra</i> Bramble <i>Rubus fruticosus</i> Dogrose <i>Rosa canina</i> Ash <i>Fraxinus excelsior</i>	It runs at ninety degrees to Hedge No. 3 and runs in a north to south direction along the site boundary with the adjoining field. It is of a mature age class in fair condition both physiologically and structurally. It consists of predominately Hawthorn with some Elder, Bramble and Dogrose dominating the lower vegetation and are encroaching out due to lapsed management. It is growing on a high soil bank with no defined boundary ditch on either side of this hedge line. There are young seedling Ash trees forming part of the bulking within this hedge.							Trim in all encroaching hedge species in order to tidy up the hedge structure. The poorly structured sections of hedge would benefit from being cut back in order to encourage lower growth development and to help improve its stability and structure.	-	C2


Tree No.	Tree Species	Ht. (m)	Stem Dia. (mm)	Branch Spread (m)	C-Ht. (m)	Age Class	Phys. Con.	Structural Condition Other Comments	Preliminary Recommendation	Remain Contribute in years	Cat. Grade
								N-north S-south E-east W- west Phys.-physiological.	A- average		
Hedge No. 5	Hawthorn <i>Crataegus monogyna</i> Crab Apple <i>Malus sylvestris</i> Elder <i>Sambucus nigra</i> Privet <i>Ligustrum sp.</i> Goat Willow <i>Salix caprea</i>	<p>It runs at ninety degrees to Hedge No. 4 and extends in a north-south direction along the western boundary of the site area and on the boundary with the adjoining linear open space belonging to the existing residential development to the west.</p> <p>It consists of predominately Hawthorn with Elder, Bramble and Dogrose encroaching out onto the lands, in particular on the site side due to lapsed management creating scrub areas. It has been trimmed back on the open space side to maintain a tidy appearance. It has been allowed to grow up tall with the lower vegetation being impacted upon due to overcrowding. It has been cut back at the northern end behind the rear gardens of the neighbouring houses.</p>							<p>Make safe large size dead/ unstable growth and prune back the poor quality sections of hedging in order to address stability and to encourage lower growth development.</p> <p>Trim in all encroaching hedge species in order to tidy up the hedge structure. Cut Ivy at ground level where it is heavy on the hedge plants in order to reduce wind sail and further wind damage.</p>	-	C2
1458	Ash <i>Fraxinus excelsior</i>	14	200/ 140/ 180/ 160	N5 S7 E6 W7	2	Mature	Fair	Fair Multiple-stemmed from base and is located at the southern end of the hedge line and towers over the surrounding hedge. Ivy cover on the main stems is beginning to extend up into its crown. It contains	Requires no work at the present time.	10-20	C2

Tree No.	Tree Species	Ht. (m)	Stem Dia. (mm)	Branch Spread (m)	C-Ht. (m)	Age Class	Phys. Con.	Structural Condition Other Comments	Preliminary Recommendation	Remain Contribute in years	Cat. Grade
								N-north S-south E-east W- west Phys.-physiological.	A- average		
								deadwood in crown, generally of a small to medium size.			
Tree Line No.1	Ash <i>Fraxinus excelsior</i>	A 14	200 x 4 Stems	A N4 S4 E4 W4	A 2	Mature	Fair	Fair It protrudes up out over Hedge No. 5 and they are growing at close spacing to one another, forming part of the one group canopy formation. As a tree line feather they are of some prominence within the treescape of this area. Ivy cover on most trees is heavy and is beginning to extend up into its crown. A lot of these trees are multiple-stemmed from base and some are showing early signs of infection by Ash Dieback (<i>Hymenoscyphus Fraxineus</i>).	Make safe all large size dead/ unstable growth. Cut Ivy at ground level where it is heavy on the trees.	10-20	C2
Hedge No. 6	Hawthorn <i>Crataegus monogyna</i> Bramble <i>Rubus fruticosus</i> Dogrose <i>Rosa canina</i> Privet <i>Ligustrum sp.</i> Ash <i>Fraxinus excelsior</i>	It runs at ninety degrees to Hedge No.5 and extends in an east to west direction and forms the boundary of the site area with the rear gardens of the houses to the north. The main hedge line would appear to be located on the site side of the open drainage ditch, which is wet in places. The main hedge species consists of Hawthorn, Bramble, Dogrose and Privet. It is a broad hedge and has received some tidying and trimming works on the garden side but has been allowed to grow more unmanaged on the site side with scrub Bramble in particular, which is encroaching out creating a broader hedge. The Ash trees form part of the upper canopy formation either as individuals or in groups. The overhead utility line runs parallel with the hedge on the northern side and some trimming has been carried out in order to maintain clearance. The old original drainage ditch would appear to have been filled in along some sections and the soil levels have been altered around the base of this hedge and the trees within.						Make safe all large size dead/ unstable growth. Cut Ivy at ground level where it is heavy on the trees. Continue to monitor for infection by Ash Dieback (<i>Hymenoscyphus Fraxineus</i>).	-	C2	


Tree No.	Tree Species	Ht. (m)	Stem Dia. (mm)	Branch Spread (m)	C-Ht. (m)	Age Class	Phys. Con.	Structural Condition Other Comments	Preliminary Recommendation	Remain Contribute in years	Cat. Grade
								N-north S-south E-east W- west Phys.-physiological.	A- average		
											
Tree Line No. 2	Ash <i>Fraxinus excelsior</i>	A 12	200 X 3 Stems	A N4 S4 E4 W4	A 2	Mature	Fair	Fair It is located at the western end of Hedge No. 6 and those located at the very western end have received pruning in the past in order to reduce their size and their overhang to the north has been cut back in the past due to the overhead utility lines. Heavy lvy cover on some trees is extending up into their crowns.	They would benefit from general tidying works within this area in order to open up this area and to allow for a more detailed assessment to be carried out. Cut lvy at ground level where it is heavy on trees. They will require ongoing pruning in order to maintain clearance with the overhead utility lines.	10-20	C2
1459	Ash <i>Fraxinus excelsior</i>	17	450	N6 S5 E5 W6	3	Early Mature	Fair	Fair It forms a twin-stemmed tree from base and is growing up through the hedge line. Heavy lvy cover on the main trunk is beginning to extend up into its	Cut lvy at ground level and tidy up the area around its base to allow a more detailed assessment of its base and	10-20	C2

Tree No.	Tree Species	Ht. (m)	Stem Dia. (mm)	Branch Spread (m)	C-Ht. (m)	Age Class	Phys. Con.	Structural Condition Other Comments	Preliminary Recommendation	Remain Contribute in years	Cat. Grade
								N-north S-south E-east W- west Phys.-physiological.	A- average		
								crown.	lower trunk.		
Tree Group	Leyland Cypress <i>Cupressus × leylandii</i> Lawson Cypress <i>Chamaecyparis lawsoniana</i>	-	-	-	-	Early Mature	Fair	Fair They are located behind Tree No. 1460 within the garden and are growing up along the hedge and provide extra screening/ bulking within this area.	Management is outside of the site area control.	10- 20	C2
1460	Ash <i>Fraxinus excelsior</i>	13	520	N4 S5 E6 W6	4	Early Mature	Fair	Fair It is establishing above the height of the hedge with heavy Ivy cover on the main trunk. The visual assessment has been limited due to dense undergrowth.	Tidy up the area around its base and cut Ivy at ground level to allow for a more detailed assessment.	10-20	C2
Tree Line No. 3	Ash <i>Fraxinus excelsior</i>	A 12	240 X 3 Stems	A N4 S4 E4 W4	A 2	Early Mature	Fair	Fair It is located within Hedge No. 6 at the eastern end with the bulk of them located on the adjoining landside of the boundary ditch. They form part of the higher bulking within the hedge line. They are located on the adjoining landside of the boundary fence, so ownership would be taken to be located outside the control of this site area. The Ivy cover on some trees has been cut at ground level and is heavy on other trees. The overhead utility lines run on its north side and they have received pruning/ cutting back in order to maintain clearance.	They would require a more detailed assessment.	10-20	C2

Tree No.	Tree Species	Ht. (m)	Stem Dia. (mm)	Branch Spread (m)	C-Ht. (m)	Age Class	Phys. Con.	Structural Condition Other Comments	Preliminary Recommendation	Remain Contribute in years	Cat. Grade
								N -north S -south E -east W - west Phys. -physiological.	A- average		
1461	Ash <i>Fraxinus excelsior</i>	16	270/ 160/ 310	N7 S6 E7 W5	0	Mature	Fair	Fair It is growing up within a group environment. The Ivy has been cut at ground level in the past and it now dead on the main trunk and within its crown. There are secondary stems/ suckers growing from its base.	Requires no work at the present time.	10-20	C2
---	Lawson Cypress <i>Chamaecyparis lawsoniana</i>	-	-	-	-	Early Mature	Fair	Fair They are located between Tree Nos. 1461 & 1462 and are located on the garden side of the boundary fence and add to the bulking/ tree cover to this boundary.	Management is outside of the site area control.	10-20	C2
1462	Ash <i>Fraxinus excelsior</i>	13	160/ 240/ 280	N6 S4 E3 W3	3	Mature	Fair	Fair Multiple-stemmed from base and forms part of the group canopy formation. The Ivy has been cut at ground level in the past and is now dead. It contains small to medium size deadwood in crown.	Requires no work at the present time.	10-20	C2
Hedge No. 7	Hawthorn <i>Crataegus monogyna</i> Privet <i>Ligustrum sp.</i> Gorse <i>Ulex europaeus</i> Bramble <i>Rubus fruticosus</i> Dogrose <i>Rosa canina</i>	It runs at ninety degrees from Hedge No. 6 in a north-south direction and forms the boundary between two fields within this site area. It is of a mature age class, in a fair condition physiologically and structurally. The main hedge line is located on the west side of a deep wet drainage ditch and consists of mainly Hawthorn with some Privet, Gorse, Bramble, Dogrose and Elder with Ash ranging in age from seedlings to early-mature trees forming part of the upper canopy formation. Due to lapsed management, the hedge species, in particular Bramble and Gorse have encroached out onto the surrounding lands to the east and west and have created a broader hedge. It has been allowed to grow up tall and is losing its hedge structure with some sections of the hedge plants becoming poorly structured and prone to storm damage with some sections being suppressed by Ivy.						Fair	It would benefit from general tidying works and trim in encroaching hedge species and cut back poorly structured sections of the hedge to aid stability and to encourage lower growth development. Cut Ivy at ground level where it is heavy on the hedge plants to lessen the risk of wind damage.	-	C2

Tree No.	Tree Species	Ht. (m)	Stem Dia. (mm)	Branch Spread (m)	C-Ht. (m)	Age Class	Phys. Con.	Structural Condition Other Comments	Preliminary Recommendation	Remain Contribute in years	Cat. Grade
								N-north S-south E-east W- west Phys.-physiological.	A- average		
	Elder <i>Sambucus nigra</i>										
The following trees are located within Hedge No. 7 working from north to south.											
1463	Ash <i>Fraxinus excelsior</i>	10	220	N4 S5 E3 W3	2	Early Mature	Fair / Poor	Fair It is growing on the hedgerow bank and forms part of the hedge bulking. Its crown is showing signs of reduced vigour / decline most likely due to infection by Ash Dieback (<i>Hymenoscyphus Fraxineus</i>). There is heavy Ivy cover on the main trunk.	Cut Ivy at ground level and monitor its condition on an annual basis.	10+	C2
1464	Ash <i>Fraxinus excelsior</i>	13	120/ 300/ 150	N5 S4 E5 W2	5	Early Mature	Fair/ Poor	Fair Multiple-stemmed from base and is growing up forming part of the higher hedge bulking. Its crown is showing signs of reduced vigour most likely due to infection by Ash Dieback (<i>Hymenoscyphus Fraxineus</i>).	Monitor its condition on an annual basis.	10+	C2


Tree No.	Tree Species	Ht. (m)	Stem Dia. (mm)	Branch Spread (m)	C-Ht. (m)	Age Class	Phys. Con.	Structural Condition Other Comments	Preliminary Recommendation	Remain Contribute in years	Cat. Grade
								N -north S -south E -east W - west Phys. -physiological.	A - average		
1465	Ash <i>Fraxinus excelsior</i>	9	280	N6 S7 E5 W5	3	Early Mature	Fair / Poor	Fair It is growing off the bank of the boundary ditch and is multiple-stemmed from low down. Its crown is showing signs of reduced vigour and decline, possibly associated with infection by Ash Dieback (<i>Hymenoscyphus Fraxineus</i>).	Retain as part of the hedge bulking at the present time. Monitor its condition on an annual basis.	10+	C2
Tree No.1	Ash <i>Fraxinus excelsior</i>	10	360	N5 S6 E6 W5	3	Early Mature	Fair	Fair It is located on the east side of the drainage ditch and out from the main hedge line. It has a dense undergrowth of Bramble around its base with no access. There is light Ivy cover on the main trunk. It is well structured with minor signs of infection by Ash Dieback (<i>Hymenoscyphus Fraxineus</i>).	Tidy up the area around its base.	10+	C2
Tree No. 2	Ash <i>Fraxinus excelsior</i>	14	390	N5 S4 E5 W5	4	Early Mature	Fair	Fair It is located on the adjoining landside of the drainage ditch and consists of a group of self-seeded stems, located out from the main hedge line. They form part of the bulking within this area.	Tidy up the undergrowth.	10-20	C2
Hedge No. 8	Hawthorn <i>Crataegus monogyna</i> Privet <i>Ligustrum sp.</i> Bramble <i>Rubus fruticosus</i> Dogrose <i>Rosa canina</i>	It runs at ninety degrees to Hedge No. 7 and runs in an east to west direction. The bulk of the main hedge vegetation would appear to be located on the northern-side of a wet drainage ditch with some hedge species, such as Hawthorn clumps developing on the south side. The main hedge species is Hawthorn and Privet with Bramble and Dogrose dominating the lower vegetation with some Ash trees forming part of the bulking within this area and they are also forming part of the upper canopy formation and protrude above the height of the hedge. Due to lapsed management, Bramble in particular has encroached out onto the adjoining lands to the north and south creating large scrub areas and making access difficult. The hedge has been allowed to grow up tall with no management and is top-heavy and poorly structured, consequently becoming increasingly prone to storm damage as a result. A lot of the hedge plants are being suppressed by Ivy which is increasing their wind loading. Some of the hedge encroachment on the northern side has been trimmed						Trim in all encroaching hedge species and make safe large size dead/ unstable growth. Trim in the poorly structured hedge sections to address stability and structure and to encourage lower growth development. Cut Ivy at ground level where	-	C2	

Tree No.	Tree Species	Ht. (m)	Stem Dia. (mm)	Branch Spread (m)	C-Ht. (m)	Age Class	Phys. Con.	Structural Condition Other Comments	Preliminary Recommendation	Remain Contribute in years	Cat. Grade	
								N-north S-south E-east W- west Phys.-physiological.	A- average			
		back in recent times.								it is heavy on the hedge plants in order to improve their wind sail.		
												
		<p>The following trees are located within Hedge No. 8. They are growing within an open tree line with an overall combined canopy which is of some prominence within the treescape of this area.</p>										
1466	Ash <i>Fraxinus excelsior</i>	17	470	N7 S6 E6 W6	5	Mature	Fair	Fair It is a tall tree beginning to be heavily suppressed by Ivy. It is located on the north side of the drainage ditch and is twin-stemmed from base with other smaller stems present. It forms part of the upper canopy formation with a slightly asymmetrical crown formation.	Cut Ivy at ground level and tidy up the area around its base.	10-20	C2	
1467	Ash <i>Fraxinus excelsior</i>	17	430	N7 S6 E5	5	Mature	Fair	Fair/Poor Twin-stemmed from base, with some stems growing off the drainage ditch bank. It forms part of the	Cut Ivy at ground level and tidy up the area around its base.	10-20	C2	



Tree No.	Tree Species	Ht. (m)	Stem Dia. (mm)	Branch Spread (m)	C-Ht. (m)	Age Class	Phys. Con.	Structural Condition Other Comments	Preliminary Recommendation	Remain Contribute in years	Cat. Grade
								N -north S -south E -east W - west Phys. -physiological.	A - average		
				W4				upper canopy formation and is being heavily suppressed by Ivy.			
1468	Ash <i>Fraxinus excelsior</i>	17	480/ 520/ 260	N7 S5 E7 W6	6	Mature	Fair	Fair It forms part of the upper canopy formation and is multiple-stemmed from base. Heavy Ivy cover on some stems is beginning to extend up into its crown. It contains small to medium size deadwood in crown.	Make safe dead/ unstable growth. Cut Ivy at ground level where it is heavy on stems and tidy up the area around its base.	10-20	C2
1469	Ash <i>Fraxinus excelsior</i>	15	440	N6 S8 E5 W6	5	Early Mature	Fair	Fair It forms part of the overall group canopy formation and towers up above the hedge line. It is growing off the base of the hedgerow bank on the ditch side. Ivy cover on the main trunk is beginning to extend up into its crown. There are a few smaller secondary stems developing on the southern side of the drainage ditch.	The Ivy will require management in the short-medium term.	10-20	C2
1470	Ash <i>Fraxinus excelsior</i>	14	560/ 360/ 300	N8 S7 E6 W6	7	Mature	Fair	Fair Multiple-stemmed from base and forms part of the upper canopy formation. Ivy cover on the main trunk is becoming heavy on some stems. It is showing signs of reduced vigour and contains deadwood in crown.	Remove large size dead/ unstable growth. Tidy up the undergrowth and cut Ivy at ground level.	10-20	C2
1471	Ash <i>Fraxinus excelsior</i>	16	400	N6 S7 E7 W5	8	Mature	Fair	Fair It is growing up within a group environment and is located on the southern side of the wet drainage ditch with an asymmetrical crown weighed out to the south. There is light Ivy cover on the main trunk. It is sheltered within its present group environment.	Remove dead/ unstable growth.	10-20	C2
1472	Ash	16	390/	N7	5	Mature	Fair	Fair	Remove dead/ unstable	10-20	C2



Tree No.	Tree Species	Ht. (m)	Stem Dia. (mm)	Branch Spread (m)	C-Ht. (m)	Age Class	Phys. Con.	Structural Condition Other Comments	Preliminary Recommendation	Remain Contribute in years	Cat. Grade
								N -north S -south E -east W - west Phys. -physiological.	A - average		
	<i>Fraxinus excelsior</i>		460	S7 E5 W6				It is located on the hedgerow bank and forms part of the group canopy formation. Multiple-stemmed from low down with an acute union formation between some stems. It contains deadwood in crown with light Ivy cover on the main trunk.	growth from within its crown.		
1473	Ash <i>Fraxinus excelsior</i>	12	450/ 360	N5 S6 E3 W5	7	Mature	Poor	Fair/ Poor It is located on the south side of the drainage ditch and its crown is showing signs of reduced vigour with stress/ decline evident throughout, and I suspect that this decline will lead to its death. It is beginning to be heavily suppressed by Ivy. Twin-stemmed from base.	I would recommend its removal as the most appropriate management option.	<10	U
1474	Ash <i>Fraxinus excelsior</i>	16	700	N5 S6 E3 W6	3	Mature	Fair	Fair It is a large, prominent tree beginning to be suppressed by Ivy. It is growing on the north bank of the ditch with minor dieback evident throughout its crown along with some deadwood.	Cut Ivy at ground level at the present time.	10-20	C2
1475	Ash <i>Fraxinus excelsior</i>	14	470	N8 S5 E5 W5	5	Mature	Fair / Poor	Fair/Poor It is growing close to Tree No. 1474 with a very asymmetrical crown weighed out to the north-east. It is growing on the bank of the ditch and there may be some undermining, stability issues as a result. It is beginning to be heavily suppressed by Ivy. It has suffered storm damage within its upper crown in the past, most likely due to heavy Ivy growth.	Cut Ivy at ground level and remove to a height of 2m from the lower trunk to allow for a more detailed assessment and tidy up the area around its base. Carry out pruning to address imbalance in the crown.	10+	C2
1476	Ash <i>Fraxinus excelsior</i>	15	370/ 250/ 240	N6 S7 E4 W5	1	Early Mature	Poor	Poor It is growing from the base of the hedgerow bank within the drainage ditch. Twin-stemmed from base with decay present where limbs were cut off in the	I would recommend its removal as part of management as it deteriorates in condition.	<10	U

Tree No.	Tree Species	Ht. (m)	Stem Dia. (mm)	Branch Spread (m)	C-Ht. (m)	Age Class	Phys. Con.	Structural Condition Other Comments	Preliminary Recommendation	Remain Contribute in years	Cat. Grade
								N-north S-south E-east W- west Phys.-physiological.	A- average		
								past. The upper crown is showing signs of decline and it has limited future potential.			
1477	Ash <i>Fraxinus excelsior</i>	16	600	N4 S6 E5 W6	4	Early Mature	Fair	Fair It is reasonably well structured and is establishing up above the height of the hedge. It leans slightly off the hedgerow bank. There is light Ivy cover on the main trunk.	Requires no work at the present time.	10-20	C2
1478	Ash <i>Fraxinus excelsior</i>	10	260	N3 S2 E3 W 3	4	Mature	Fair	Fair It is growing over the height of the hedge with some secondary stems developing from its base. It is growing off the hedgerow bank with light Ivy cover on the main trunk.	Requires no work at the present time.	10-20	C2
Hedge No. 9	Hawthorn <i>Crataegus monogyna</i> Privet <i>Ligustrum sp.</i> Elder <i>Sambucus nigra</i> Ash <i>Fraxinus excelsior</i>	It runs at ninety degrees to Hedge No. 8 and runs in a north-south direction, forming the boundary between fields within the site area. It is of a mature age class, in fair condition both physiologically and structurally. The main hedge species is Hawthorn and Privet with Elder throughout along with some Ash trees forming part of the upper canopy formation. It is located on the east side of a deep wet drainage ditch and is a reasonably continuous hedge. The hedge species are encroaching out on the west side and are being dominated by Dogrose and Bramble. It has been allowed to grow up tall and a lot of the hedge plants are being suppressed by Ivy which is increasing its wind loading and some are of poor structure due to lapsed management and are prone to storm damage.						Trim in all encroaching hedge species and remove large size dead/ unstable growth. Cut back the poorly structured sections to address safety and to encourage lower growth development. Cut Ivy at ground level where it is heavy on the hedge plants in order to improve their wind sail.	-	C2	


Tree No.	Tree Species	Ht. (m)	Stem Dia. (mm)	Branch Spread (m)	C-Ht. (m)	Age Class	Phys. Con.	Structural Condition Other Comments	Preliminary Recommendation	Remain Contribute in years	Cat. Grade
								N-north S-south E-east W- west Phys.-physiological.	A- average		
											
				<p>The following trees are located within Hedge No. 9. The assessment works from south to north in direction.</p>							
1479	Ash <i>Fraxinus excelsior</i>	9	410	N2 S6 E5 W4	3	Mature	Fair	Fair/Poor It is growing up within a sheltered group environment and is located on the edge of the entrance between two fields. It has suffered soil and root damage with soil and debris piled into this area. It has also suffered a large size bark wound on the lower trunk allowing for the entry of decay. Heavy Ivy cover on the main trunk is extending up into its crown. Its crown is showing signs of stress/decline throughout.	Cut Ivy at ground level and tidy up the area around its base.	10+	C2
1480	Ash <i>Fraxinus excelsior</i>	17	670	N6 S5 E7 W9	5	Mature	Fair/ Poor	Fair It is a large size, central tree within a group of three trees and is of value to the group canopy structure. Heavy Ivy cover on the main trunk is extending up into its crown. Its crown is showing some signs of reduced vigour and contains deadwood throughout. Soil and debris has been piled in around its base.	Make safe large pieces of deadwood. Cut Ivy at ground level.	10-20	C2

Tree No.	Tree Species	Ht. (m)	Stem Dia. (mm)	Branch Spread (m)	C-Ht. (m)	Age Class	Phys. Con.	Structural Condition Other Comments	Preliminary Recommendation	Remain Contribute in years	Cat. Grade
								N -north S -south E -east W - west Phys. -physiological.	A- average		
1481	Ash <i>Fraxinus excelsior</i>	14	380	N6 S2 E4 W4	7	Early Mature	Fair	Fair It is growing up within the canopy of Tree No. 1480 with an asymmetrical crown drawn up and out for the light in a northerly direction as a result. It is sheltered within its present environment with light lvy cover on the main trunk.	Requires no work at the present time.	10-20	C2
1482	Ash <i>Fraxinus excelsior</i>	14	590	N5 S4 E5 W4	2	Semi Mature	Fair	Fair It is growing off the bank of the ditch and is twin-stemmed from base with both stems fusing together at a height of 1.5m up. It is beginning to establish up over the height of the hedge. There is light lvy cover on the main trunk.	Retain as part of the hedge bulking at the present time.	10-20	C2
1483	Ash <i>Fraxinus excelsior</i>	12	290	N3 S4 E5 W3	3	Mature	Fair	Fair It is growing on the hedgerow bank and is beginning to be heavily suppressed by lvy. It leans out to the west with some secondary stems/ suckers growing from its base.	Cut lvy at ground level at the present time.	10-20	C2
Hedge No. 10	Ash <i>Fraxinus excelsior</i> Sycamore <i>Acer pseudoplatanus</i> Hawthorn <i>Crataegus monogyna</i> Privet <i>Ligustrum sp.</i> Bramble <i>Rubus</i>	It extends east to west along the northern boundary of the site area and is bordering with the adjoining lane (Glascarn lane). It is of a mature age class in fair condition both physiologically and structurally. It consists of Ash, Sycamore, Hawthorn, Privet, Bramble, Dogrose and Elder. It has been cut / maintained as a low hedge from the roadside with the field side being allowed to grow up more unmanaged with scrub species, in particular Bramble encroaching. There is no defined boundary ditch.						Continue present maintenance. Trim on the field side to contain its width and structure.	-	C2	

Tree No.	Tree Species	Ht. (m)	Stem Dia. (mm)	Branch Spread (m)	C-Ht. (m)	Age Class	Phys. Con.	Structural Condition Other Comments	Preliminary Recommendation	Remain Contribute in years	Cat. Grade
								N-north S-south E-east W- west Phys.-physiological.	A- average		
	<i>fruticosus</i> Dogrose <i>Rosa canina</i> Elder <i>Sambucus nigra</i>										
Hedge No. 11	Hawthorn <i>Crataegus monogyna</i> Elder <i>Sambucus nigra</i> Ash <i>Fraxinus excelsior</i> Sycamore <i>Acer pseudoplatanus</i> Bramble <i>Rubus fruticosus</i> Dog Rose <i>Rosa canina</i>							<p>It runs at ninety degrees to Hedge No. 10 and extends in a north-south direction along the east boundary of the site area and is bordering with the lane.</p> <p>It is of a mature age class and in fair condition both physiologically and structurally. It is located on the field side (west side) of a deep drainage ditch cordoning if off from the laneway. The main hedge species consist of Hawthorn, Elder, Ash and Sycamore.</p> <p>It has been cut, clipped and maintained from the lane way which has helped to maintain a good structured hedge. It has been allowed to grow more unmanaged on the field side with scrub species, in particular Bramble encroaching out onto the lands with Ivy dominating some of the hedge plants.</p>	<p>Continue present maintenance.</p> <p>Trim on the field side to contain its width and structure.</p>	-	C2
											

Tree No.	Tree Species	Ht. (m)	Stem Dia. (mm)	Branch Spread (m)	C-Ht. (m)	Age Class	Phys. Con.	Structural Condition Other Comments	Preliminary Recommendation	Remain Contribute in years	Cat. Grade
								N-north S-south E-east W- west Phys.-physiological.	A- average		
Hedge No. 12	Ash <i>Fraxinus excelsior</i> Sycamore <i>Acer pseudoplatanus</i> Hawthorn <i>Crataegus monogyna</i> Privet <i>Ligustrum sp.</i> Bramble <i>Rubus fruticosus</i> Dogrose <i>Rosa canina</i> Elder <i>Sambucus nigra</i>	<p>It runs parallel to Hedge No.10 on the northern side of the lane and forms the boundary between the laneway and the adjoining field to the north.</p> <p>It is of a mature age class in fair condition both physiologically and structurally. It has been clipped and maintained as a low tidy hedge and is located on the field side (north side) of the drainage ditch separating it from the road.</p>							Continue present maintenance.	-	C2
Hedge No. 13	Hawthorn <i>Crataegus monogyna</i> Elder <i>Sambucus nigra</i> Bramble <i>Rubus fruticosus</i> Dogrose <i>Rosa canina</i>	<p>It runs north-south along the eastern side of the lane and is located on the field side of the drainage ditch that cordons it off from the road.</p> <p>It is of a mature age class in fair condition both physiologically and structurally. The main hedge species include Hawthorn, Elder, Bramble, Dogrose and Privet with Gorse on the field side and Ash trees forming part of the upper canopy formation. There is evidence of where it was cut in the past including a lot of the Ash trees that form part of the upper canopy formation at a height of 1.5m up and have since been allowed to grow up tall, with a lot of the Ash trees forming multiple-stemmed trees from the previous cut points. Some sections of the hedge are being heavily suppressed by Ivy. It has been trimmed on the roadside in order to maintain clearance with the road, but has been allowed to grow more unmanaged on the field side. It has also been allowed to grow up tall in recent years, which has impacted on the lower vegetation and its structure.</p>							<p>It would benefit from the trimming in of encroaching hedge species.</p> <p>The poorly structured sections of Hedge should be cut back in order to address stability and safety issues.</p> <p>Where Ivy is suppressing the sections of hedge, this needs to be cut at ground level.</p>	-	C2



Tree No.	Tree Species	Ht. (m)	Stem Dia. (mm)	Branch Spread (m)	C-Ht. (m)	Age Class	Phys. Con.	Structural Condition Other Comments	Preliminary Recommendation	Remain Contribute in years	Cat. Grade
								N-north S-south E-east W- west Phys.-physiological.	A- average		
	Privet <i>Ligustrum sp.</i> Gorse <i>Ulex europaeus</i> Ash <i>Fraxinus excelsior</i>										


Tree No.	Tree Species	Ht. (m)	Stem Dia. (mm)	Branch Spread (m)	C-Ht. (m)	Age Class	Phys. Con.	Structural Condition Other Comments	Preliminary Recommendation	Remain Contribute in years	Cat. Grade
								N-north S-south E-east W- west Phys.-physiological.	A- average		
											
		<p>The following are the more prominent trees within this hedge. The assessment works from north to south.</p>									
1484	Ash <i>Fraxinus excelsior</i>	15	490	N7 S4 E5 W6	8	Mature	Fair	Fair It has an independent crown towering over the hedge. It is showing some signs of minor stress/ decline throughout due to infection by 'Ash Dieback (<i>Hymenoscyphus Fraxineus</i>). Heavy Ivy cover on the main trunk is beginning to extend up into its crown. It contains deadwood throughout its crown.	Remove dead/ unstable growth. Cut Ivy at ground level. Monitor its condition on an annual basis.	10+	C2
1485	Ash <i>Fraxinus excelsior</i>	14	380	N2 S4 E6	5	Early Mature	Fair	Fair It is a tall tree growing up within a sheltered group environment. Its crown is showing early signs of	Remove dead/ unstable growth at the present time. The Ivy will require	10+	C2

Tree No.	Tree Species	Ht. (m)	Stem Dia. (mm)	Branch Spread (m)	C-Ht. (m)	Age Class	Phys. Con.	Structural Condition Other Comments	Preliminary Recommendation	Remain Contribute in years	Cat. Grade
								N -north S -south E -east W - west Phys. -physiological.	A- average		
				W5				decline, most likely due to infection by Ash Dieback (<i>Hymenoscyphus Fraxineus</i>). Ivy cover on the main trunk is becoming heavy.	management in the short-medium term.		
1486	Ash <i>Fraxinus excelsior</i>	13	400	N4 S5 E5 W4	2	Early Mature	Fair	Fair It is growing from the base of the drainage ditch and is growing up forming part of the group canopy formation. Its crown is showing early signs of decline due to infection by Ash Dieback (<i>Hymenoscyphus Fraxineus</i>). Ivy cover on the main trunk is beginning to suppress its crown.	Remove dead/ unstable growth. Cut Ivy at ground level.	10+	C2
1487- 1488	Ash <i>Fraxinus excelsior</i>	A 13	A 370	A N3 S4 E6 W6	A 3	Early Mature	Fair	Fair It consists of a group of stems forming part of the higher bulking within this hedge. They are growing up together and the larger stems have been tagged. The bulk of them are developing from where they were cut/ coppiced into the hedge during past management. Ivy cover on some stems is becoming heavy. There is evidence of decline/ reduced vigour in some stems due to infection by 'Ash Dieback', in particular Tree No. 1488.	Cut Ivy at ground level. Tree No. 1488 will most likely need to be removed in the short-term as part of management.	10+	C2
1489	Ash <i>Fraxinus excelsior</i>	15	480	N5 S4 E5 W6	5	Mature	Fair	Fair It has a relatively independent crown formation with minor signs of infection by 'Ash Dieback'. There is Ivy cover on the main trunk.	Remove dead/ unstable growth. Cut Ivy at ground level.	10-20	C2
1490- 1492	Ash <i>Fraxinus excelsior</i>	A 14	420	N4 S4 E6 W4	5			Fair They are growing up together forming part of the one group/ canopy formation. They are all showing some signs of reduced vigour/ decline due to	Make safe dead/ unstable growth. Cut Ivy at ground level.	10-20	C2

Tree No.	Tree Species	Ht. (m)	Stem Dia. (mm)	Branch Spread (m)	C-Ht. (m)	Age Class	Phys. Con.	Structural Condition Other Comments	Preliminary Recommendation	Remain Contribute in years	Cat. Grade
								N -north S -south E -east W - west Phys. -physiological.	A- average		
								infection by 'Ash Dieback'. Ivy cover on their main trunks is beginning to establish up into their crowns. Tree No. 1492 has had a lower limb removed in the past with a decay wound at this point.			
Tree Line No. 4	Ash <i>Fraxinus excelsior</i> Elm <i>Ulmus glabra</i>	A 13	A 300	N6 S6 E6 W6	3	Early Mature	Fair	Fair It runs within Hedge No. 13 and consists of mostly multiple-stemmed Ash trees developing from where they were cut/ coppiced into the hedge during past management and they now form part of the upper canopy formation of this hedge along with some Elm trees. Some trees are showing signs of decline/ infection due to infection by 'Ash Dieback'. Ivy cover on some stems is becoming heavy and is extending up into their crowns.	Make safe dead/ unstable growth and the trees that are infected by 'Ash Dieback'. Cut Ivy at ground level where it is heavy on trees. Monitor their condition and manage accordingly. The Elm trees will need to be monitored for infection by 'Dutch Elm' disease.	10-20	C2
1493	Elm <i>Ulmus glabra</i>	9	110	N1 S2 E3 W4	5	Early Mature	Poor	Poor It consists of a group of stems growing out of the hedgerow bank, and some are dead due to infection by 'Dutch Elm;' disease and others are in declining health as a result. There is heavy Ivy cover on the main stems.	Cut all stems back into the hedge as part of management.	<10	U
1494	Ash <i>Fraxinus excelsior</i>	14	580	N8 S7 E9 W6	3	Mature	Fair	Fair It has a broad, spreading crown formation and is growing out of the old drainage ditch on the base of the hedgerow bank. There is a utility line that runs through the centre of its crown and it has received pruning in the past in order to maintain clearance	Remove dead/ unstable growth. Monitor its condition on an annual basis.	10-20	C2


Tree No.	Tree Species	Ht. (m)	Stem Dia. (mm)	Branch Spread (m)	C-Ht. (m)	Age Class	Phys. Con.	Structural Condition Other Comments	Preliminary Recommendation	Remain Contribute in years	Cat. Grade
								N -north S -south E -east W - west Phys. -physiological.	A- average		
								with this utility line. Its crown is showing signs of reduced vigour and contains deadwood throughout, possibly due to infection by 'Ash Dieback'. It has received pruning on the roadside in the past. There is light Ivy cover on the main trunk.			
Tree Line No. 5	Ash <i>Fraxinus excelsior</i> Elm <i>Ulmus glabra</i>	A 14	A 350	N 5 S5 E5 W5	4	Early Mature	Fair	Fair It extends southwards from Tree No. 1494. It consists of predominately Ash with some Elm mixed throughout. It is establishing above the height of the hedge line and the bulk of their stems have been cut/ coppiced into the hedge during past management, but have since been allowed to grow up tall forming multiple-stemmed trees from the old cut points. Some of the Ash trees are showing signs of infection by 'Ash Dieback' with decline evident and some of the Elm trees showing signs of infection by 'Dutch Elm' disease. The Ivy cover on some trees is becoming heavy.	Make safe dead/ unstable growth. Cut Ivy at ground level where it is heavy on stems.	10-20	C2
Hedge No. 14	Leyland Cypress 'Castlewella gold' <i>Cupressus x leylandii</i> 'Castlewella gold'	It runs at ninety degrees to Hedge No.13 and extends in an east to west direction along the northern boundary of the site area and forms the boundary with the adjoining residential property. It is of a mature age class in fair to good condition both physiologically and structurally and is located on the adjoining landside of the boundary fence. It has been trimmed/ maintained as a low formal hedge, in particular from the garden side with some Brambles establishing on the field side. Located within the garden, behind this hedge is a broken line of ornamental trees consisting of predominately Birch with some upright Poplar trees. They provide the higher bulking/ screening along this boundary.						It would benefit from ongoing trimming, in particular additional trimming on the field side in order to maintain. Remove scrub species.	-	C2	

Tree No.	Tree Species	Ht. (m)	Stem Dia. (mm)	Branch Spread (m)	C-Ht. (m)	Age Class	Phys. Con.	Structural Condition Other Comments	Preliminary Recommendation	Remain Contribute in years	Cat. Grade
								N-north S-south E-east W- west Phys.-physiological.	A- average		
											
Hedge No. 15	Hawthorn <i>Crataegus monogyna</i> Gorse <i>Ulex europaeus</i> Elder <i>Sambucus nigra</i> Privet <i>Ligustrum sp.</i> Bramble <i>Rubus fruticosus</i> Dogrose <i>Rosa canina</i>	<p>It runs in a north-south direction and forms the boundary between the two fields.</p> <p>The main hedge line is located on the west side of a deep wet drainage ditch with some vegetation located on the east side. It consists of predominately Hawthorn with Gorse, Elder, Privet, Bramble and Dogrose dominating some sections. The lower vegetation has been impacted upon and is being grazed off by the livestock sheltering/ grazing within this area. The hedge plants have been allowed to grow up tall with some sections being suppressed by Ivy.</p>							<p>Make safe large size dead/ unstable growth.</p> <p>Cut Ivy at ground level where it is heavy and trim in all encroaching hedge species.</p>	-	C2

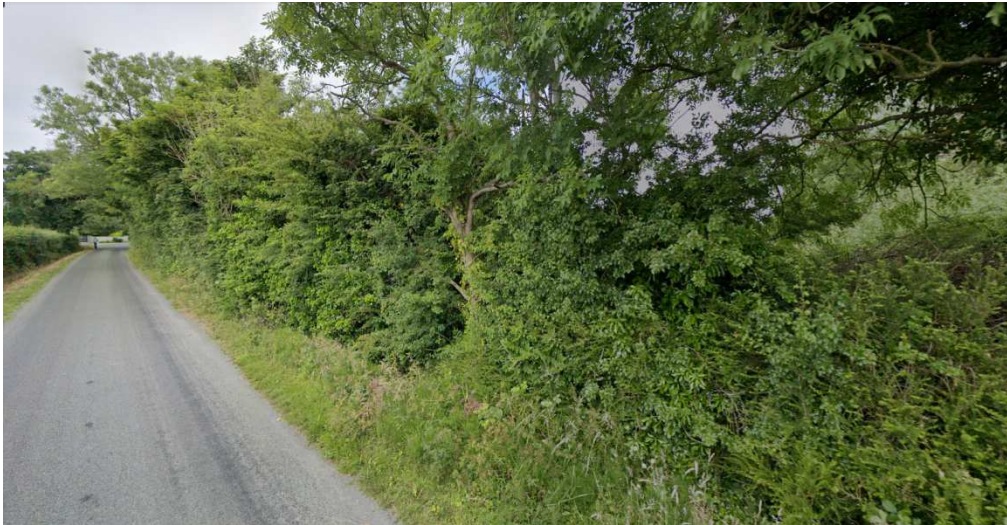
Tree No.	Tree Species	Ht. (m)	Stem Dia. (mm)	Branch Spread (m)	C-Ht. (m)	Age Class	Phys. Con.	Structural Condition Other Comments	Preliminary Recommendation	Remain Contribute in years	Cat. Grade
								N-north S-south E-east W- west Phys.-physiological.	A- average		
The following trees form part of this hedge.											
Tree No. 3	Ash <i>Fraxinus excelsior</i>	15	460	N4 S6 E4 W5	4	Mature	Fair	Fair It is located on the east side of the hedge, on the adjoining landside of the drainage ditch. Multiple-stemmed from base with a lot of soil erosion and compaction being caused around its base by the livestock sheltering/ grazing within this area. Its crown is showing some signs of reduced vigour throughout. There is Ivy cover on the main trunk.	Requires no work at the present time.	10-20	C2
Hedge No. 16	Hawthorn <i>Crataegus monogyna</i> Elder <i>Sambucus nigra</i> Bramble <i>Rubus fruticosus</i> Dogrose <i>Rosa canina</i> Crab Apple <i>Malus sylvestris</i>	It runs in an east to west direction and forms the boundary between the fields running from the southern end of hedge No.15. The main hedge line is located on the north-side of a dry drainage ditch and the main hedge species include Hawthorn with some Elder and Privet, Bramble and Dogrose with some vegetation establishing on the south side of the ditch, consisting predominately of Bramble. Due to lapsed management the scrub species such as Bramble is encroaching out onto the surrounding fields. The upper canopy contains Ash and Crab Apple. As a result of this hedge being allowed to grow up tall and livestock being allowed to graze in this area, it has been left very sparse in lower vegetation and the hedge plants have been allowed to become tall and top-heavy, with some of them prone to failure in winds due to structural issues. It has been reinforced in some places with fencing wire.							Make safe large size dead/ unstable growth. Trim in encroaching hedge species and cut the poorly structured sections of hedge back to help stabilize and to encourage lower growth development. It would benefit from general tidying works.	-	C2
											



Tree No.	Tree Species	Ht. (m)	Stem Dia. (mm)	Branch Spread (m)	C-Ht. (m)	Age Class	Phys. Con.	Structural Condition Other Comments	Preliminary Recommendation	Remain Contribute in years	Cat. Grade
								N-north S-south E-east W- west Phys.-physiological.	A- average		
		The following trees are located within this hedge and the assessment works from east to west in direction.									
Tree Nos. 4 – 7 & 1495-1496	Ash <i>Fraxinus excelsior</i>	A 11	A 190/180	A N7 S4 E8 W5	A 5	Mature	Fair	Fair It consists of a short line of Ash and they are all growing up together at close spacing's and form part of the one group/ canopy formation and they provide support/ shelter to one another. They have suffered bark wounding on their lower trunks and surface roots caused by the livestock sheltering/ grazing within this area. Some of these trees are showing early signs of infection by 'Ash Dieback' and contain deadwood throughout their crowns. There is light Ivy cover on most stems and it is beginning to extend up into the crowns of some trees. There is evidence of infection by 'Bacteria Canker' of Ash.	Make safe large size dead/ unstable growth. Cut Ivy at ground level where it is heavy on the trees.	10-20	C2
1497	Ash <i>Fraxinus excelsior</i>	18	410/ 450/ 340	N7 S6 E10 W9	5	Mature	Fair	Fair Three-stemmed from base with fencing wire attached to the lower trunk. It has suffered bark wounding and soil erosion caused by the livestock sheltering/ grazing within this area. It forms part of the outer canopy formation of the previous line of trees. It contains deadwood in crown.	Requires no work at the present time.	10-20	C2
1498-1499	Crab Apple <i>Malus sylvestris</i>	11	200	N3 S3 E3 W3	3	Mature	Fair	Fair/ Poor They are growing up through the hedge and have been allowed to grow up tall. They form part of the higher hedge bulking and some stems have been broken off over the years.	They would benefit from general tidying works. Cut Ivy and Bramble from around their bases.	10-20	C2

Tree No.	Tree Species	Ht. (m)	Stem Dia. (mm)	Branch Spread (m)	C-Ht. (m)	Age Class	Phys. Con.	Structural Condition Other Comments	Preliminary Recommendation	Remain Contribute in years	Cat. Grade
								N-north S-south E-east W- west Phys.-physiological.	A- average		
1500	Ash <i>Fraxinus excelsior</i> Crab Apple <i>Malus sylvestris</i>	A 12	A 280/ 210	A N5 S3 E9 W6	A 3	Mature	Fair	Fair They are growing from the same base and form part of the bulking within this hedge. The Ash tree is twin-stemmed from base and protrudes up above the height of the hedge. It is showing signs of dieback, possibly due to infection by 'Ash Dieback'. Fencing wire has been embedded into the lower trunk of the Ash tree. The Crab Apple is becoming heavily suppressed by Ivy.	Cut Ivy at ground level.	10-20	C2
1901	Crab Apple <i>Malus sylvestris</i>	13	300	N4 S3 E5 W5	5	Mature	Fair	Fair It forms part of the higher bulking within this hedge. Multiple-stemmed from base and is of a large size for this species. Ivy cover on some stems is becoming heavy.	Make safe dead/ unstable growth. Cut Ivy at ground level where it is heavy.	10-20	C2
Hedge No. 17	Hawthorn <i>Crataegus monogyna</i> Elder <i>Sambucus nigra</i> Privet <i>Ligustrum sp.</i> Bramble <i>Rubus fruticosus</i> Dogrose <i>Rosa canina</i> Sycamore <i>Acer pseudoplatanus</i>	It runs at ninety degrees to Hedge No. 16 in a north-south direction. It is of a mature age class in fair condition both physiologically and structurally. The main hedge line is located on the east side of a dry drainage ditch and it consists of Hawthorn, Elder, Privet, Bramble and Dogrose with the upper canopy containing some Ash and Sycamore trees. It has been allowed to grow up tall with limited maintenance allowing scrub species, in particular Bramble to encroach out on either side creating a broad scrub hedge on either side. It is a double sided hedge with vegetation growing on both sides of the drainage ditch, however the main hedge would appear to be more continuous and located on the eastern side.						Make safe large size dead/ unstable growth. Trim in encroaching hedge species and cut the poorly structured sections of hedge back to help stabilize, to address structural issues and to encourage lower growth development. It would benefit from general tidying works.	-	C2	

Tree No.	Tree Species	Ht. (m)	Stem Dia. (mm)	Branch Spread (m)	C-Ht. (m)	Age Class	Phys. Con.	Structural Condition Other Comments	Preliminary Recommendation	Remain Contribute in years	Cat. Grade
								N-north S-south E-east W- west Phys.-physiological.	A- average		
	Ash <i>Fraxinus excelsior</i>										
The following trees are located within this hedge.											
1902-1903	Ash <i>Fraxinus excelsior</i>	A 14	A 340	A N4 S4 E5 W5	A 3	Early Mature	Fair	Fair They form part of the group canopy formation and are tall, multiple-stemmed trees from base, possibly from where they were cut/ coppiced back into the hedge in the past. They form part of the upper canopy formation with Ivy cover on some stems.	The Ivy will require management in the future.	10-20	C2
1904	Sycamore <i>Acer pseudoplatanus</i>	14	120/ 300/ 340	N5 S6 E7 W6	3	Mature	Fair / Good	Fair Multiple-stemmed from base and forms part of the group canopy formation. There is light Ivy cover on the main trunk with suckers developing from its base.	Requires no work at the present time.	20+	B1
1905	Ash <i>Fraxinus excelsior</i>	14	280	N3 S2 E4	3	Mature	Fair	Fair It is growing up within a group environment and is a tall, sheltered tree. Ivy cover on the main trunk is	Requires no work at the present time. The Ivy will require	10-20	C2

Tree No.	Tree Species	Ht. (m)	Stem Dia. (mm)	Branch Spread (m)	C-Ht. (m)	Age Class	Phys. Con.	Structural Condition Other Comments	Preliminary Recommendation	Remain Contribute in years	Cat. Grade
								N -north S -south E -east W - west Phys. -physiological.	A - average		
				W6				beginning to extend up into its crown.	management in the future.		
1906	Ash <i>Fraxinus excelsior</i>	13	900/ 510	N6 S8 E5 W4	2	Mature	Fair	Fair It is growing on the hedgerow bank and is multiple-stemmed from base. Heavy Ivy cover on the main trunk is extending up into its crown. It contains deadwood in crown and I suspect that it is infected by 'Ash Dieback'.	Cut Ivy at ground level at the present time.	10-20	C2
1907	Ash <i>Fraxinus excelsior</i>	12	210/ 180	N3 S4 E5 W5	1	Early Mature	Fair/ Poor	Fair It forms part of the higher bulking within this hedge and is multiple-stemmed from base. Ivy cover on the main trunk is becoming heavy. Its crown is showing signs of decline/ dieback as a result of infection by 'Ash Dieback'.	Cut Ivy at ground level at the present time. Monitor its condition on an annual basis.	10+	C2
1908	Ash <i>Fraxinus excelsior</i>	13	380	N7 S6 E4 W5	1	Mature	Fair/ Poor	Fair/ Poor Its crown is showing signs of decline/ dieback throughout as a result of infection by 'Ash Dieback'. Heavy Ivy cover on the main trunk is extending up into its crown and is causing suppression.	Cut Ivy at ground level at the present time. Monitor its condition on an annual basis.	10+	C2
1909	Ash <i>Fraxinus excelsior</i>	13	320	N3 S2 E5 W5	3	Mature	Fair/ Poor	Fair It consists of a group of Poplar stems establishing up above the height of the hedge. Some has suffered bark wounds on their lower trunks with some localized decay present with signs of reduced vigour throughout their crown due to infection by 'Ash Dieback'.	Cut Ivy at ground level at the present time.	10+	C2
Hedge No. 18	Hawthorn <i>Crataegus monogyna</i> Elder	It runs at ninety degrees to Hedge No.17 to connect up with hedge No.13 and is located on the southern side of a section of 'Glascarn Lane'. It is located on the field side of a drainage ditch which has been partially filled in during the previous road works. It is of a mature age class in fair condition physiologically and structurally. The main hedge species include Hawthorn, Elder, Bramble and Dogrose along with some Ash and Sycamore trees forming part of the hedge							Make safe large size dead/ unstable growth. Trim in encroaching hedge species.	-	C2

Tree No.	Tree Species	Ht. (m)	Stem Dia. (mm)	Branch Spread (m)	C-Ht. (m)	Age Class	Phys. Con.	Structural Condition Other Comments	Preliminary Recommendation	Remain Contribute in years	Cat. Grade
								N-north S-south E-east W- west Phys.-physiological.	A- average		
	<p><i>Sambucus nigra</i> Privet <i>Ligustrum sp.</i> Bramble <i>Rubus fruticosus</i> Dogrose <i>Rosa canina</i> Ash <i>Fraxinus excelsior</i> Poplar</p>	<p>bulking with most having been cut/coppiced into the hedge as part of past management and they are now developing with multiple- stems from these past cut points. Most of the Ash is showing signs of decline/dieback as a result of Ash Dieback. It is a reasonably continuous hedge of good stock proof quality and it has been cut over the years in order to contain.</p>									
Hedge No. 19	<p>Hawthorn <i>Crataegus monogyna</i> Elder <i>Sambucus nigra</i> Privet <i>Ligustrum sp.</i> Bramble</p>	<p>It runs at ninety degrees to Hedge No.8 and runs in a north-south direction. It is of a mature age class in fair condition physiologically and structurally. The main hedge species consist of Hawthorn with some Elder, Privet, Bramble, Dogrose and Gorse on the outer edges with Ash trees forming the upper canopy, along with some Elm and Poplar. The main hedge line is located on the west side of a deep wet boundary ditch. Due to lapsed management, the hedge species, in particular the Bramble and Gorse have encroached out to create a broad hedge line and scrub areas. Some sections of this hedge have been reinforced with fencing wire.</p>						<p>Make safe large size dead/ unstable growth. Trim in encroaching hedge species.</p>	-	C2	

Tree No.	Tree Species	Ht. (m)	Stem Dia. (mm)	Branch Spread (m)	C-Ht. (m)	Age Class	Phys. Con.	Structural Condition Other Comments	Preliminary Recommendation	Remain Contribute in years	Cat. Grade
								N-north S-south E-east W- west Phys.-physiological.	A- average		
	<i>Rubus fruticosus</i> Dogrose <i>Rosa canina</i> Gorse <i>Ulex europaeus</i> Ash <i>Fraxinus excelsior</i> Poplar							 			
								<p>The following trees are located within Hedge No. 18. The assessment works from north to south in direction.</p>			


Tree No.	Tree Species	Ht. (m)	Stem Dia. (mm)	Branch Spread (m)	C-Ht. (m)	Age Class	Phys. Con.	Structural Condition Other Comments	Preliminary Recommendation	Remain Contribute in years	Cat. Grade
								N -north S -south E -east W - west Phys. -physiological.	A- average		
1910	Elm <i>Ulmus glabra</i>	14	350	N6 S5 E7 W6	3	Early Mature	Dead	Poor It consists of two stems growing up together and they are becoming decayed and unstable. I suspect that death is due to infection by 'Dutch Elm' disease.	I would recommend its removal as the most appropriate management option.	<10	U
1911	Ash <i>Fraxinus excelsior</i>	12	220/ 340	N7 S3 E4 W5	6	Early Mature	Fair	Fair It is growing up forming part of the upper canopy formation. There is light Ivy cover on the main trunk.	Requires no work at the present time.	10-20	C2
1912	Ash <i>Fraxinus excelsior</i>	12	220/ 340	N6 S7 E5 W5	3	Mature	Fair	Fair Multiple-stemmed from base and forms part of the group canopy formation with an asymmetrical crown as a result. There is evidence of reduced vigour, most likely due to infection by 'Ash Dieback'. The Ivy cover is becoming heavy.	Cut Ivy at ground level at the present time.	10-20	C2
1913	Ash <i>Fraxinus excelsior</i>	11	590	N4 S6 E6 W4	2	Mature	Fair	Fair It was initially twin-stemmed from base; however one stem has broken out leaving a decaying stump and its crown asymmetrical. It is growing up within a sheltered, group environment.	Requires no work at the present time.	10-20	C2
1914	Ash <i>Fraxinus excelsior</i>	13	390	N6 S5 E3 W4	4	Mature	Fair	Fair It forms part of the upper canopy formation and is being sheltered by the surrounding trees. There is light Ivy cover on the main trunk.	Requires no work at the present time.	10-20	C2
1915	Ash <i>Fraxinus excelsior</i>	12	230/ 260	N5 S4 E6 W5	3	Early Mature	Fair	Fair It consists of two stems growing up together forming part of the middle canopy of the hedge line.	Requires no work at the present time.	10-20	C2
1916	Ash	14	420/ 220	N6	6	Mature	Fair	Fair	Cut Ivy at ground level at the	10+	C2

Tree No.	Tree Species	Ht. (m)	Stem Dia. (mm)	Branch Spread (m)	C-Ht. (m)	Age Class	Phys. Con.	Structural Condition Other Comments	Preliminary Recommendation	Remain Contribute in years	Cat. Grade
								N -north S -south E -east W - west Phys. -physiological.	A- average		
	<i>Fraxinus excelsior</i>			S5 E6 W8				It consists of two stems growing up together forming part of the one group, canopy formation. Its crown is showing signs of reduced vigour/ decline, most likely due to infection by 'Ash Dieback'. Ivy cover on the main stems is becoming heavy.	present time.		
1917	Ash <i>Fraxinus excelsior</i>	14	450	N4 S6 E5 W4	4	Mature	Fair	Fair It forms part of the group canopy formation and its crown is showing signs of reduced vigour, possibly due to infection by 'Ash Dieback'. There is Ivy cover on the main trunk.	Remove large pieces of deadwood. The Ivy will require management in the future.	10+	C2
1918-1919	Elm <i>Ulmus glabra</i>	A 9	300	N3 S3 E3 W3	4	Early Mature	Poor/ Dead	Poor/ Dead It consists of a short group of trees and most of them are standing dead, most likely due to infection by 'Dutch Elm Disease'.	The dead stems will need to be removed as part of management. Coppice back any live stems in the hedge, as part of management.	<10	U
1920-1921	Poplar <i>Populus tremula</i>	15	380	N6 S6 E5 W6	3	Early Mature	Fair	Fair They are growing in the hedge line and are suckering out on the east and west of the hedge line creating a broader area. They provide height and a diversity of species within this hedge line.	Manage the basal suckers.	20+	C2
Hedge No. 20	Privet <i>Ligustrum sp.</i> Hawthorn <i>Crataegus monogyna</i> Elder <i>Sambucus nigra</i>	It runs in an east to west direction and forms the boundary between two fields. It is of a mature age class in fair condition both physiologically and structurally. It contains clumps of Hawthorn, Privet and Elder, Raspberry and Gorse with Ash trees ranging in age from seedlings to mature trees forming the upper canopy. It has been allowed to grow up tall with limited maintenance. The main hedge line would appear to be located on the north-side of a wet drainage ditch. The scrub species, in particular Bramble is encroaching out onto the surrounding lands on the north and south sides due to lapsed management.							Make safe large size dead/ unstable growth. Trim in encroaching hedge species.	-	C2

Tree No.	Tree Species	Ht. (m)	Stem Dia. (mm)	Branch Spread (m)	C-Ht. (m)	Age Class	Phys. Con.	Structural Condition Other Comments	Preliminary Recommendation	Remain Contribute in years	Cat. Grade
								N-north S-south E-east W- west Phys.-physiological.	A- average		
	<p>Gorse <i>Ulex europaeus</i> Raspberry <i>Rubus idaeus</i> Ash <i>Fraxinus excelsior</i> Bramble <i>Rubus fruticosus</i> Dogrose <i>Rosa canina</i></p>							 			
								<p>The following trees are located within this hedge. The assessment works from east to west.</p>			

Tree No.	Tree Species	Ht. (m)	Stem Dia. (mm)	Branch Spread (m)	C-Ht. (m)	Age Class	Phys. Con.	Structural Condition Other Comments	Preliminary Recommendation	Remain Contribute in years	Cat. Grade
								N -north S -south E -east W - west Phys. -physiological.	A- average		
1922	Ash <i>Fraxinus excelsior</i>	11	110/ 230/ 260	N6 S6 E5 W4	3	Early Mature	Fair/ Poor	Fair Multiple-stemmed from base due to being cut/ coppiced back into the hedge in the past. Its crown is showing signs of reduced vigour with decline/ dieback evident throughout, most likely due to infection by 'Ash Dieback'. It is beginning to be suppressed by Ivy.	Cut Ivy at ground level. Monitor its condition on an annual basis.	10+	C2
1923	Ash <i>Fraxinus excelsior</i>	8	210	N2 S3 E4 W3	3	Semi Mature	Fair/ Poor	Fair It is beginning to establish above the height of the hedge with evidence of reduced vigour/ decline within its crown due to infection by 'Ash Dieback'. There is Ivy cover on the main trunk.	Tidy up the undergrowth.	10+	C2
1924	Ash <i>Fraxinus excelsior</i>	13	340	N7 S5 E5 W7	4	Mature	Poor	Fair/ Poor Multiples-stemmed from base and is protruding above the height of the hedge. It is in declining health with a lot of dieback evident throughout its crown. It is beginning to be suppressed by Ivy and has limited future potential.	I would recommend its removal as the most appropriate management option.	<10	U
Tree Line No. 6	Ash <i>Fraxinus excelsior</i> Sycamore <i>Acer pseudoplatanus</i>	A 13	A 300	A N4 S4 E4 W4	3	Mature	Fair	Fair It is located at the western end of hedge No. 19. It consists of predominately Ash with some Sycamore mixed throughout. It is growing on the adjoining landside of the open drainage ditch and is taken to be located outside the control of this site area. The open wet ditch would have cordoned off / restricted its root growth into the site area. As a tree line, they are of some prominence within the treescape of this immediate area. A lot of these trees are growing	Make safe dead/ unstable growth. Cut Ivy at ground level in order to improve the wind sail of their crowns where it is heavy.	10-20	C2

Tree No.	Tree Species	Ht. (m)	Stem Dia. (mm)	Branch Spread (m)	C-Ht. (m)	Age Class	Phys. Con.	Structural Condition Other Comments	Preliminary Recommendation	Remain Contribute in years	Cat. Grade
								N -north S -south E -east W - west Phys. -physiological.	A- average		
								within groups and are dependent on one another for support/ shelter. Some trees are being to be suppressed by Ivy. The trees located next to the power lines at the eastern end have been cut back in the past.			
		The following trees are located on the site side (southern side) of the drainage ditch and form part of Tree Line No.6.								-	
1925	Ash <i>Fraxinus excelsior</i>	12	290	N4 S4 E4 W4	2	Early Mature	Fair	Fair It is growing on the site side of the drainage ditch with the trees to the north within Tree Line No.6 and forms part of the bulking. There are secondary stems developing from its base with heavy Ivy cover on the main trunk.	Cut Ivy at ground level at the present time.	10-20	C2
1926	Ash <i>Fraxinus excelsior</i>	12	330	N2 S4 E4 W3	2	Early Mature	Fair	Fair It forms part of the upper canopy of Tree Line No.6 and is self-seeded on the bank of the ditch on the site side. Ivy cover on the main trunk is beginning to extend up into its crown.	Requires no work at the present time.	10-20	C2
1927	Ash <i>Fraxinus excelsior</i>	14	340	N3 S4 E5 W4	6	Early Mature	Fair	Fair Self-seeded into this area and is growing on the site side of the drainage ditch and is growing up with the trees to its north, within Tree Line No. 6. It forms part of the upper canopy formation.	Requires no work at the present time.	10-20	C2
Hedge No. 21	Hawthorn Crataegus monogyna Privet <i>Ligustrum sp.</i> Bramble	It extends from hedge No.20 in a north-south direction on the western boundary of the site area bordering with the 'Fairy House' Road. It is of a mature age class in fair condition both physiologically and structurally. The main hedge species consist of Hawthorn, Privet, Bramble and Dogrose with Ash and Sycamore trees which have been cut / coppiced back into the hedge in the past. Six individual trees have been allowed to establish above the height of this hedge. It has been trimmed and cut into a low hedge, in particular from the roadside which has helped to maintain its							It would benefit from trimming on the field side in order to contain its width and structure.	-	C2

Tree No.	Tree Species	Ht. (m)	Stem Dia. (mm)	Branch Spread (m)	C-Ht. (m)	Age Class	Phys. Con.	Structural Condition Other Comments	Preliminary Recommendation	Remain Contribute in years	Cat. Grade
								N-north S-south E-east W- west Phys.-physiological.	A- average		
	<i>Rubus fruticosus</i> Dogrose <i>Rosa canina</i> Ash <i>Fraxinus excelsior</i> Sycamore <i>Acer pseudoplatanus</i>	<p>stock proof quality, with Bramble and other species being allowed to encroach out on the field side creating a broad hedge. Fencing wire has been erected within this hedge line in the past. There is an overhead utility line running on the centre line of this hedge and the trees within have been pruned back in order to maintain clearance with the utility line.</p>				<p>The following trees are located within this hedge working from north to south.</p>					
1928	Ash <i>Fraxinus excelsior</i>	11	280	N5 S4 E2 W2	4	Early Mature	Fair/ Poor	Fair/ Poor It is located on the roadside of the boundary hedge and has suffered bark wounding on the lower trunk during the hedge cutting works with decay developing into these wounds. Its crown development/ structure has been affected due to cutting back from the overhead utility lines on the east side. There is 'Bacteria Canker' of Ash evident within its crown with reduced vigour as a result.	Monitor its condition on an annual basis.	10+	C1

Tree No.	Tree Species	Ht. (m)	Stem Dia. (mm)	Branch Spread (m)	C-Ht. (m)	Age Class	Phys. Con.	Structural Condition Other Comments	Preliminary Recommendation	Remain Contribute in years	Cat. Grade
								N -north S -south E -east W - west Phys. -physiological.	A - average		
1929	Ash <i>Fraxinus excelsior</i>	11	290	N6 S3 E3 W4	4	Early Mature	Fair	Fair It is located more centrally within the hedge and has received heavy cutting back on the east side in order to maintain clearance with the overhead utility lines and this has impacted on its crown structure. It is showing signs of reduced vigour within its crown. There is Ivy cover on the main trunk.	Monitor its condition on an annual basis.	10-20	C1
1930	Ash <i>Fraxinus excelsior</i>	10	320	N5 S3 E4 W3	4	Early Mature	Fair	Fair It is located on the roadside of the hedge and has received cutting back on the east side to maintain clearance with the overhead utility lines and this has impacted on its crowns development/ structure. Its crown is showing signs of reduced vigour.	Monitor its condition on an annual basis.	10-20	C1
1931	Ash <i>Fraxinus excelsior</i>	11	310	N6 S4 E3 W3	4	Early Mature	Fair	Fair/ Poor It is located on the edge of the hedge and has been heavily cut back on the east side due to the overhead utility lines and this has impacted on its crown development/ structure. Its crown is showing signs of reduced vigour.	Monitor its condition on an annual basis.	10-20	C1
1932	Ash <i>Fraxinus excelsior</i>	10	280	N5 S4 E3 W4	3	Early Mature	Fair	Fair It has been cut back on the east side due to the overhead utility line. It is growing within the hedge line with light Ivy cover on the main trunk. The lower branch on the roadside has broken / hanging. It is showing signs of reduced vigour within its crown.	Remove the broken branch at the present time. It will require further pruning from time to time in order to maintain clearance with the road and overhead utility lines.	10-20	C1

Tree No.	Tree Species	Ht. (m)	Stem Dia. (mm)	Branch Spread (m)	C-Ht. (m)	Age Class	Phys. Con.	Structural Condition Other Comments	Preliminary Recommendation	Remain Contribute in years	Cat. Grade
								N -north S -south E -east W - west Phys. -physiological.	A - average		
1933	Ash <i>Fraxinus excelsior</i>	11	380	N4 S3 E4 W5	3	Early Mature	Fair	Fair It is growing within the hedge line and has received pruning due to the overhead utility lines on the east side and this has impacted on its crown structure. There is light lvy cover on the main trunk. The lower branches on the roadside have also been cut off in the past in order to raise up its crown.	It will require further pruning to maintain clearance with the road and the overhead utility lines.	10-20	C1
Notes:											

