# Arborist Associates Ltd.

## An Arboricultural Assessment on the Site Area to the Side and Rear of 'Oakvale House', Newcastle, Co. Dublin.

**Prepared for: Deane & Deane Ltd. (Planning Applicant)**

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**Date: 17th May 2022**

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## 1.0 Instructions

1.1 I have been instructed by Deane & Deane Ltd. (planning applicant) to assess the site area to the side and rear of 'Oakvale House', Newcastle, Co. Dublin and to report on the following:

**A.** To assess the present condition of the tree and hedge vegetation on these lands. See 'Appendix 2' of this report for details of our assessment and drawing No.NC001 which has been prepared as a tree constraints plan to aid the design team in finalizing the design of the development for this site area.

**B -** To assess the impact of the proposed development layout on the tree vegetation located within the site area indicating those for removal and retention. See 'Section 5.0' of our report and drawing No.NC002 for detail.

**C -** To show on this drawing the position of the tree protective fencing and other tree protection measures that need to be put in place and be maintained in place until all construction works are complete. See 'Section 6.0' or our report and drawing No.NC002 for detail.

## 2.0 Report Limitations

2.1 The inspection has been carried out from ground level only and is a preliminary report. It does not include climbing inspections or below ground investigations. Should a more detailed inspection be thought necessary on any tree/s, then this will be highlighted within my recommendations.

2.2 The assessment is based on what was visible at the time and recommendations made are subject to the knowledge and expertise of the qualified Arboriculturist that carried out the above inspections.

2.3 Trees should be inspected on a regular basis as their health and condition can change rapidly due to biotic and abiotic agents. The recommendations within this report are valid for a 12-month period only and this may be reduced in the case of any change in conditions to or in the proximity of the trees.

2.4 Before undertaking any work to these trees, it would be advisable to check whether there is any planning or tree preservation controls in operation, if they are it will then be necessary to obtain consent before undertaking any works (pruning or felling). The wildlife and forestry acts also need to be taken into consideration when deciding to carry out any tree works in order to ensure compliance with these acts.

## 3.0 Aims and Report Brief

3.1 Arborist Associates Ltd. has been commissioned to provide a condition assessment of the existing tree and hedge vegetation on this site area.

3.2 The Arboricultural data which is presented within the attached tree schedule (see Appendix 2), has been recorded in line with BS 5837:2012. The tree survey was conducted by collecting and assessing the following information on all significant trees located on site and plotted onto the land survey map provided.

- Tree Number (metal tags attached to each tree).
- Tree species both common and botanical.
- Dimensions (Trunk diameter, height, crown spread and crown clearance).
- Age Class
- Physiological Condition
- Structural Condition
- Preliminary Recommendations
- Estimated remaining contribution within their present environment
- Retention category

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** – including 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 tree's 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, commemorative value.

3.4 The trees 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 summaries each of the 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/ Management.

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.

Any category 'U' trees within this site area have been identified on our drawings Nos.NC001& NC002 with a 'Red' donut around their trunk positions.

**Category A -** Trees of high quality/value with a minimum of 40 years life expectancy. These trees would be seen as having the potential to contribute to the tree cover of these grounds for the long-term.

Any category 'A' trees within this site area have been identified on our drawings Nos.NC001& NC002 with a 'Green' donut around their trunk positions.

**Category B –** Trees of moderate quality/value with a minimum of 20 years life expectancy. These trees would be seen as having the potential to contribute to the tree cover of these grounds for the medium-term.

Any category 'B' trees within this site area have been identified on our drawings Nos.NC001& NC002 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 and they should not be seen as a considerable constraint on the development of these lands, but where viable, they should be retained.

Any category 'C' trees within this site area have been identified on our drawings Nos.NC001& NC002 with a 'Grey' donut around their trunk positions.

3.5 The bulk of the trees have been plotted onto the attached drawing (DWG. No. NC001) by a land survey company and where they haven't been plotted, they have been positioned by ourselves to the best of our ability and their positions may not be fully accurate. The tree and hedge reference 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 detailed above and recommended by BS 5837 2012.

The constraints for each tree were worked out as per the formulas in BS5837 2012 and have been shown on this drawing using an 'Orange Circle' to aid the design team in their final development layout to ensure tree vegetation proposed for retention is retained successfully. The Root Protection Area (RPA) is the minimum area around individual trees to be protected from disturbance during construction works and is 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, open 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 is located within the fields to the east and rear of 'Oakvale House', Newcastle, Co. Dublin and also includes a section of the garden of this house. The site area is square in shape and is bordered to the north by agricultural fields, to the east by a housing development, to the south by 'Athgoe Road' and 'Newcastle Village Store' and to the west by private properties. Within the gardens of 'Oakvale House' the boundaries comprise of stone walls, railings and tree lines and in the adjoining fields the boundaries comprise of hedgerows and fences.

4.2 The garden areas in 'Oakvale House' have been formally landscaped with ornamental shrub borders and trees. To the east of the main gate there are three higher-quality trees consisting of, a Lombardy Poplar (Tree No.1133), a Lime (Tree No.1134) and a Norway Maple 'Crimson King' (Tree No.1135) and these are prominent visual trees in the treescape of the area. Also on the east side of the front garden area is a Leyland Cypress tree line (Nos.1139-1147) of lower-quality but have some value for screening in this area and form the boundary between the garden area and the adjoining fields. At the eastern end of this tree line there are four trees consisting of two Norway Maples (Tree Nos.1136), a Sycamore (Tree No.1137) and an Ash (Tree No.1138) that are being recommended for removal as part of management.

Within the back garden area of 'Oakvale House' there are four shrub borders with ornamental shrubs such as Firethorns and Japanese Laurel. Hedge No.1 divides the back garden area from the farmyard buildings to the east and it is predominantly comprised of Cherry Laurel with some Bramble throughout and an upper-canopy of Sycamore, Ash and Leyland Cypress trees. There are two higher-quality tree groups within the back garden area consisting of Tree Nos.1152-1156 which are three Beech and one Sycamore and Tree Nos.1166-1168 which are three Beech. Both of these tree groups are of an early-mature age class and have the potential to provide long-term tree cover in this area. Also within this back garden area there are two higher-quality trees with good potential for the future, a Sycamore (Tree No.1140) and a Lawson Cypress cv. (Tree No.1157)

4.3 The boundaries of the adjoining fields comprise of typical agricultural type hedgerows for this area with species such as Hawthorn, Blackthorn and Bramble growing from the sides of drainage ditches. The majority of the tagged trees in this area are growing out of Hedge No.2 with tall Ash and Sycamore trees towering up over the hedge height. There is a higher-quality, large prominent Sycamore tree (Tree No.1161) within this hedgerow and there are Ash trees (Tree Nos.1158 & 1159) that require removal due to structural defects and these have been given a category grade of 'U'.

4.4 On the western side of the site area, in the adjoining field, there are some higher quality, large prominent trees such as Sycamore, Lime and Holm Oak. These trees are outside of the site area and are growing behind a fence on the opposite side of a drainage ditch and some of their crowns overhang into the site area.

4.5 On the eastern side of the site area, in the adjoining field, a large section of Hedge No.3 was removed in the past to facilitate the housing development to the east and the erection of a boundary fence. What remains is a section of hedge in the north-east corner that consists of Bramble. There are two lower-quality Ash trees (Nos.1175 & 1176) that remain along this boundary and they have been affected by the construction activities that have occurred in this area.

4.6 Within the overall site area 44 No. Trees were tagged (Nos.1133-1176) along with 3No.Trees, 3No.Tree Groups, 4No.Shrub Borders and 3No. Hedges that were all numbered numerically.

**The following table gives a breakdown of their category grading:**

| Category Grade | No. of Trees |
|---|---|
| **Category U**<br>5 Trees | **No Trees.** 1136, 1137, 1138, 1158 & 1159 |
| **Category A**<br>2 Trees | **No Trees.** 1134 & 1135 |
| **Category B**<br>14 Trees<br><br>+ 2 Tree Groups | **Tree No.** 1133, 1152, 1153, 1154, 1155, 1156, 1157, 1161, 1163, Tree No.3, 1166, 1167, 1168 & 1170<br><br>**Tree Group Nos.** 1 & 2 |
| **Category C**<br>26 Trees<br><br>+ 1 Tree Group<br>+ 3 Hedges<br>+ 4 Shrub Borders | **Tree No.** 1139, 1140, 1141, 1142, 1143, 1144, 1145, 1146, 1147, 1148, 1149, 1150, 1151, 1160, 1162, Tree No.1, Tree No.2, 1164, 1165, 1169, 1171, 1172, 1173, 1174, 1175 & 1176<br><br>**Tree Group No.**3<br>**Hedge Nos.** 1,2 & 3<br>**Shrub Border Nos.** 1, 2, 3 & 4. |
| **Totals:** | **47 Trees + 3 Tree Groups + 3 Hedges & 4 Shrub Borders.** |

# 5.0.0 Arboricultural Implication Study

## 5.1.0 Introduction

5.1.1 It is proposed to develop this site area for a new residential development of houses and it will be necessary to allow for infrastructural works such as services and a large attenuation basin is proposed at the north-western end of the site area.

5.1.2 This section of our report is designed to assess the impact of the proposed development layout on the tree vegetation within this site area and to look at the necessary measures that will need to be undertaken to help retain the tree vegetation shown for retention free from adverse impacts for the duration of the construction period.

5.1.3 On drawing No.NC002, I have shown the trees for removal due to the proposed development layout with 'Red' crown spreads and those to be retained with a 'Green Hatched' crown spread. I have also shown on this drawing the position of any necessary tree protection measures in order to protect the root zone of the tree vegetation being retained within the vicinity of where the construction works will occur. These work exclusion zones are shown on this drawing using 'Orange Hatching' and these areas will need to be cordoned off by the erection of fencing or other means at the start of the works and this will need to be maintained in place until all works are completed. This fencing is to protect the root zone of the trees and to ensure their successful integration into the development of this site area.

5.1.4 The comments made within this impact assessment study are based on my understanding of the proposed development and what is required to allow for its construction.

## 5.2.0 Impact Assessment

5.2.1 The approach taken in developing the design layout for this site area has seen the better quality trees and in particular those along the sites western boundary being retained which will help to blend this proposed development into its surroundings.

5.2.2 To accommodate the proposed development and/or as part of active management, it will be necessary to remove the following tree vegetation, which has been shown on Drawing No. NC002 with 'Red' crown spreads:

| Category Grade | No. of Trees for Removal |
|---|---|
| Category U<br>**5 Trees** | **Tree Nos.** 1136, 1137, 1138, 1158 & 1159<br>These trees, although required to be removed to facilitate the proposed development layout, are in such a condition that they will need to be removed as part of management either now or in the short-term irrespective of the development proposals for this site area. |
| Category A<br>**1 Tree** | **Tree No.** 1135 |
| Category B<br>**10 Trees** | **Tree Nos.** 1152, 1153, 1154, 1155, 1156, 1157, 1161, 1166, 1167 & 1168 |
| Category C<br>**16 Trees +**<br>**1 Tree Group +**<br>**c.110m of Hedges +**<br>**1 Shrub Border** | **Tree Nos.** 1139, 1140, 1141, 1142, 1143, 1144, 1145, 1146, 1147, 1148, 1149, 1150, 1151, 1160, 1162 & 1176<br>Tree Group No.3<br>**Hedge Nos.** 1 (c.28m), c.47m of hedge No.2 & c.35m of Hedge No.3<br>Shrub border No.3 |
| **Total** | **32 Trees + 1 Tree Group + c.110m of Hedging + 1 Shrub Border.** |

5.2.3 **In summary**, 32 of the 47No. Trees assessed and included within our condition assessment within 'Appendix 2' of this report plus c.110m of Hedging, one small Tree Group and some shrubbery are proposed for removal to facilitate the proposed development.

**The trees to be removed are made up of the following category grades:**

- 5No. category 'U' trees = 100.0%
- 1No. of the 2 Category 'A' trees = 50.0%
- 10No. of the 14 Category 'B' trees =71.4%
- 16No. of the 26 Category 'C' trees = 65.4%

The loss of the above tree vegetation is to be mitigated against within the landscaping of this completed development with new tree, shrub and hedge planting that will complement the development and will help provide good quality

and suitable long-term tree cover. See landscape architects drawings and schedules for detail.

A range of tree sizes are proposed within the finished landscape ranging from whips to semi- mature trees and as these establish and grow in size, they will be continuously mitigating any negative impacts created in the first place with the loss of the above trees, and will enhance and secure the treescape of this area into the future.

5.2.4 For the duration of the construction works, the trees being retained will need to be cordoned off by the erection of fencing to enclose the calculated root protection areas as shown on drawing No.NC002 and this is to remain in place for the duration of the works within these areas. The fencing is to be of a strong robust build capable of withstanding the works that are proposed within its vicinity. The fencing will need to be 2.3m high and constructed in accordance with figure 2 of BS 5837 2012 using vertical and horizontal scaffold bars well braced together with the verticals spaced out at a maximum of 3m centers and onto this, weld mesh panels are to be securely fixed with wire or scaffold clamps. See sample of fencing type within 'Appendix 1' of this report and on drawing No. NC002.

Signs will need to be attached to these fences warning people to 'keep out' that this is the root protection area of the trees and that no works are allowed within these fenced off areas without prior consultation and agreement with the project Arboriculturist. See sign detail within 'Appendix 1' and drawing No.NC002.

## 5.3.0 Main areas for consideration during the proposed construction process:

| Item | Comments |
|---|---|
| **Tree Pruning** | As part of the initiating works, the crowns of some of the trees being retained are to be pruned to remove dead/unstable growth, 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.<br><br>All tree felling and pruning work will need to be carried out by qualified and experienced tree surgeons *before* any construction work commences; all tree work should be in accordance with *BS3998 (2010) Tree Work – Recommendations.*<br><br>All trees for removal will need to be felled to stumps taking care not to cause damage during the process to the trees being retained and all stumps, in particular those which are located within the root zone of trees being retained that need to be removed are to be ground out using a mechanical stump grinder taking care not to cause root damage to the trees being retained. |
| **Tree Protection** | Trees 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.<br><br>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 (DWG No.NC002) **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: *Trees in relation to design, demolition and construction (2012)* specifies appropriate fencing, see 'Appendix 1' for details.<br><br>The fencing will need to be 2.3m high and constructed in accordance with figure 2 of BS 5837 2012 (see 'Appendix 1' for detail) 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.<br><br>All weather notices will need to be erected on the fences with |

| Item | Comments |
|---|---|
| | words such as: "Tree Protection Fence — Keep Out".<br><br>When the fencing has been erected, then 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 authorized by the project Arboriculturist. |
| **Construction** | It will be important that good housekeeping is in place at all times so that the site does not become congested.<br><br>All construction works are 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.<br><br>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.<br><br>For light weight work areas such as for the storage of work material and pedestrian paths, this protection could be provided by the use of boarding and for heavier loading, these areas will need protection with the use of Cell Web of similar product.<br><br>Where this occurs, the tree protective fence lines are not to be moved to accommodate these works until such time as the required ground protection is signed off by the project engineers and arborist and put in place to the recommendations of section 6 of BS5837 2012.<br><br>Care will need to be taken when planning site operations to ensure that wide or tall loads or plant 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.<br><br>Materials, which can contaminate the soil, e.g. concrete mixings, diesel oil and vehicle washings, are not to be discharged within 10m of a tree stem.<br><br>Fires are not to 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.<br><br>Notice boards, wires and such like are not to be attached to |

| Item | Comments |
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| | any trees. Site offices, material storage and contractor parking will need to be located outside the work exclusion zones of the tree vegetation being retained. |
| **Services** | See project engineer's drawings for detail for service routes. We have overlaid the surface water and foul pipe layouts onto our tree protection plan to assess impacts.<br><br>Prior to the installation of any services routed near trees or hedges being retained, they 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 tree vegetation shown for retention. |
| **Boundary Treatments** | It is my understanding that all boundary treatments where required along by the trees being retained are to be of a fence type structure where there will only be a need to excavate small diameter holes for the fence uprights and these will need to be dug manually or with an augur with no machinery allowed to operate within the work exclusion zones fenced off by the tree protection fencing. The working ground area required during these works will need to be protected from impacts/damage by a suitable ground protection such as scaffold planks laid butt jointed on a bed of woodchip in accordance with Section 6.2.3 of BS5837 2012. |
| **Landscaping** | 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. See landscape architects drawings and sections for detail.<br><br>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.<br><br>It will be important within these areas that all works are carried out manually with minimal intervention with machinery and where machinery is required; this will need to be of a small light |

| Item | Comments |
|---|---|
| | weight type and all works will need to be supervised by the project arborist. Where this machinery needs to transverse the root protection areas of trees, the route for this will need to be protected by boarding or other means to meet the requirements of Section 6.2.3 of BS5837 2012. |

## 5.4.0 Monitoring

5.4.1 Any construction works within close proximity to retained trees 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 advice on any works within the RPA of retained trees to ensure successful tree retention and planning compliance.

5.4.2 It is advised that tree 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 tree protection measures throughout all construction phases.

5.4.3 Copies of the tree retention and protection plan (DWG No. NC002) 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.

5.4.4 On the completion of the construction works, all trees retained are to be reviewed by the project Arboriculturist and any necessary remedial tree surgery works required to promote the health of the trees and 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 building contractor/site manager on how trees need 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 tree protective fencing to be erected and all other mitigation measures required to be put in place prior to the development works commencing on site and these are to enclose and protect the root zone of the tree vegetation proposed for retention. See drawing DWG No.NC002, for the position of the protective fencing and other mitigation measures.

6.3 The protection of the tree vegetation shown for retention within this proposed development is divided into three main sections starting with the preconstruction stage right through to post construction and the reassessment of the retained trees.

## 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 tree protection measures are in place and adhered to.
2. The main contractors and all sub-contractors work force are to be briefed on the tree 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 trees 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 trees for removal and the line of the protective fencing.

### 6.6.0 Tree works

6.6.1 The developer or the main contractor is to appoint a tree surgery company competent of carrying out the remedial tree surgery works and tree felling that are required on this site. The tree surgery contractor is to produce a method statement detailing how they plan 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 **Tree removal -** 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 trees in the way of the development layout are to be removed in such a manner not to cause damage to those being retained. Where necessary to avoid damage to the 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 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 trees being retained.

6.6.3 **Remedial tree surgery works -** The necessary remedial tree surgery works required to promote health and safety of the 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 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 trees have been removed, the line of the protective fencing that is required around the trees being retained **must be** erected as per DWG No. NC002.

6.7.2 The fencing needs to be 2.3m high and constructed in accordance with figure 2 of BS 5837 2012 (see fencing detail on drawing No.NC002 & Appendix 1) using vertical and horizontal scaffold bars well braced together with the verticals spaced out at a maximum of 3m centres. Onto this, weld mesh panels are to be securely fixed with wire or scaffold clamps.

6.7.3 Signs need to be attached to these fences warning people to 'keep out'. See detail within drawing No.NC002 & 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 trees being retained.

## Stage 2:

### 6.8.0 The Construction Works Stage

6.8.1 **Protective fencing -** During the course of the works, special attention must be paid to ensure that these fences and all other tree 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 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.

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

The excavations in the vicinity of the tree vegetation being retained will 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 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 trees to be retained and this may include such methods as retaining walls or similar.

No roots greater that 25mm in diameter are to be severed by the construction works without prior approval by the project Arboriculturist. Where roots are encountered, the project Arboriculturist is to assess these prior to cutting and these are to be pruned back to appropriate pruning points beyond the excavation line. Where roots cannot be cut; alternative methods of construction will need to be considered. The excavated face is then to be covered with soil or with Hessian sacking to prevent further drying out and the death of root material. Where the Hessian sacking is used, it will be necessary to keep this moist especially during dry periods.

6.8.3 **Working within the RPA** *(Root Protection Area)* – If it becomes necessary to carry out works within the RPA of a tree/trees, 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 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.

6.8.4 **Finished ground levels/Landscaping -** The existing ground levels within the RPA of 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 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 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.

**6.9.0 Other items**

6.9.1 The following is a list of additional activities ***that are not allowed*** within the RPA or within the vicinity of the 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:**

### 6.10.0 Post Construction Works

6.10.1 This project is not to be considered complete until all retained trees have been re-examined by the project Arboriculturist and the remedial works necessary to ensure the health of the 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 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.

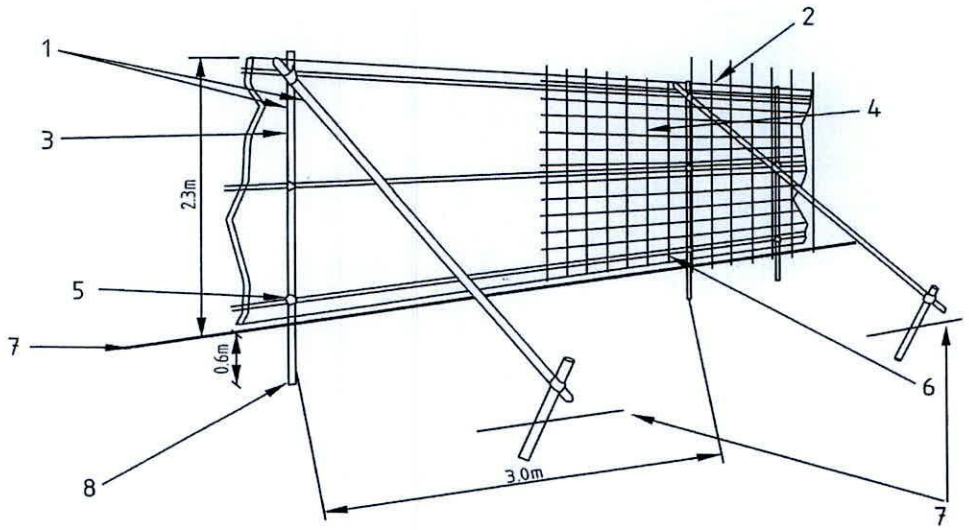
Signed *Felim Sheridan* Date 17/05/2022

**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

## Sample of Temporary Tree Protection Fencing Detail and Ground Protection.




1 Standard scaffold poles
2 Uprights to be driven into the ground
3 Panels secured to uprights with wire ties and, where necessary, standard scaffold clamps
4 Weldmesh wired to the uprights and horizontals
5 Standard clamps
6 Wire twisted and secured on inside face of fencing to avoid easy dismantling
7 Ground level
8 Approx. 0.6m driven into the ground

**Figure 2. – Protective fencing for RPA**


**Sample of signage to be placed on fence pannels.**

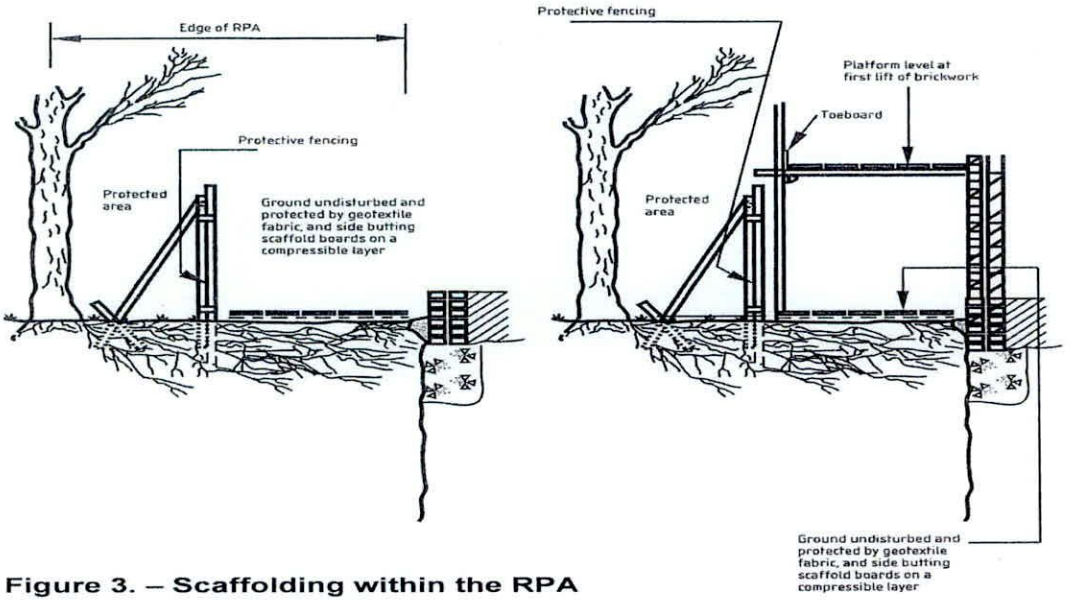



**Figure 3. – Scaffolding within the RPA**

# Appendix 2

## Tree Survey on the Site Area to the Side & Rear of 'Oakvale House', Newcastle, Co. Dublin.

**Date: 8th April 2021**

## 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 defective 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 10Years. 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 millimetres (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 form the base of the tree and is given in meters (m).

**Recommended Works**
All tree works are to be performed to BS3998 and ANSI A300 pruning guidelines may also be referred to.

Pruning is defined as the selective removal of branches from the tree for specific results. All pruning is to be as specified in the schedule and all pruning cuts are to be made in accordance with 'natural target pruning' methods. All final cuts to be made outside the branch collar and at an angle equal but opposite to that of the branch bark ridge.

If during climbing works, a climber (tree surgeon) discovers any defects not noted in the Arborist report, he should inform and consult the Arborist in question. If it is a minor defect, it would be expected that the tree surgeon would deal with it as part of his contract. If it is deemed a serious problem, then there will be a need to consult with the client/owner and to carry out the agreed works at an additional cost. This problem may arise for example as a result of additional storm damage since the last inspection and it must be borne in mind that the survey is a visual inspection from ground level only and problems in the aerial part of the tree may not be visible from ground level or be hidden under Ivy.

**Terms used in explaining this work:**

Deadwooding
This is the removal of deadwood (>5cm) without attempting to remove it from the branch tips or green foliage areas as in conifers.
It is expected that major deadwood is removed from all trees that are climbed, even if it is not stated on the survey.
Crown Clean
This includes the removal of deadwood, diseased and dying wood, broken or split branches, epicormic growth, and basal suckers if requested and crossing or rubbing branches.

Crown Thinning (%)
This includes overhauling the crown and the thinning out of the crown in order to allow the wind to travel more freely through the crown and to reduce its wind sail. This mainly involves the removal of secondary branches in the inner crown. This is normally expressed as a percentage of the whole crown volume, which should be considered as an approximate guideline.

Reduction (m)
This includes overhauling the crown and the reduction (careful shortening) of the entire crown or an individual limb in length in all directions to leave a balance branch structure. The finished pruning cuts should not exceed one-third the size of the branch or stem that

it is located on. The reduction works are normally expressed as in meters (m) from the outer canopy edge of the crown or branch end and should be considered as an approximate guideline.

Lightening (m)

This technique is a combination of selective thinning together with moderate length reduction of a section or entire crown. The main objective is to reduce the end weight on potentially hazardous crown sections, individual limbs or individual branches. Crown appearance should not be altered greatly by this pruning.

Crown Raising

The removal of the lowest branches that effectively increase the height of the main crown above ground level.

**Felling**

Trees to be felled shall be cut as low as possible to ground level, unless otherwise specified.

Trees for felling should be dismantled (section- felled) wherever necessary using appropriate rigging techniques to avoid damage to adjacent trees/ structures and other potentially vulnerable landscape features.

**Stumps**

Generally, stumps of felled trees may be left cut level above ground level. Any stumps in areas of access shall be left at a height that does not present a trip hazard. Conifer stumps are to be treated with urea in accordance with the forestry commission guidelines.

Alternatively, if requested, the stumps are to be ground out using a mechanical stump grinder taking care not to cause damage to neighbouring tree.

| 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<br>Phys- physiological C-Ht- crown height | A- average Cat.- category<br>Dia- diameter | | |
| | | **A condition assessment carried out on the trees within the site area to the side and rear of 'Oakvale House' Newcastle, Co. Dublin.** | | | | | | | | | |
| | | **The following trees (Nos. 1133 – 1136) are located inside the boundary wall with the road to the east of the entrance to 'Oakvale House'.** | | | | | | | | | |
| 1133 | **Lombardy Poplar**<br>*Populus nigra 'Italica'* | 24 | 680 | 2N<br>2S<br>4E<br>2W | 3 | Mature | Fair/ Good | Fair<br>It is a tall tree protruding above the height of the surrounding trees. Heavy Ivy cover on the main trunk is extending up into its crown and it also contains small deadwood throughout its crown. There is an acute union formation between stems at a height of c.7m and I suspect this union is becoming weak and in danger of splitting, but Ivy cover is limiting the visual assessment. | Cut Ivy at ground level.<br>Carry out an aerial inspection of the acute union formation, this tree may need remedial work based on this inspection. | 20+ | B1 |
| 1134 | **Lime**<br>*Tilia sp.* | 15 | 520 | 5N<br>4S<br>4E<br>4W | 2 | Mature | Good | Fair/ Good<br>It is growing up within a group environment with a slightly asymmetrical crown formation as a result. The lower branches have received pruning in the past; particularly those extending out over the road and there is multiple-stemmed re-growth occurring from these pruning points. Basal suckers are present and Ivy cover is extending into its crown. It has suffered a small bark wound at its base and there is good callous growth around this. | Remove basal suckers.<br>Cut Ivy at ground level | 40+ | A1 |

| 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1135 | **Norway Maple cv.** *Acer platanoides* 'Crimson King' | 15 | 620 | 6N 6S 6E 2W | 2.5 | Middle Age | Fair/ Good | Fair/Good It is growing up within a group environment with a slightly asymmetrical crown formation as a result. It divides into a multiple-stemmed tree at a height of c.1.2m, with an acute union formation between two of the main stems with included bark present, this may develop into a potential weakness as the tree grows in size. Lower branches extending out over the road and lawn area have received pruning in the past in order to raise up its crown and there is multiple-stemmed re-growth occurring from these pruning points. The main trunk leans at a slight angle and I suspect that it may have moved/heaved at the root plate when younger. Ivy cover is beginning to extend into its crown. | Cut Ivy at ground level. | 40+ | A1 |
| 1136 | **Norway Maple cv.** (2 in total) *Acer platanoides* | A4 | A90 | A3N 3S 2E 1W | A1.5 | Young | Poor | Poor They are growing up within a group environment and they are being overcrowded/ suppressed and their crown structures have been affected. They are being suppressed by Ivy and the tagged tree is dead while the other tree is in advanced decline. | I would recommend their **removal** as part of management. There is space to replant in this area with healthy new tree stock. | <10 | U |
| | | **The following trees are located along the eastern boundary of the front garden area with the adjoining farm entrance road.** | | | | | | | | | |
| 1137 | **Sycamore** *Acer pseudoplatanus* | 13 | 270/ 380/ 250 | 3N 6S 4E 3W | 3 | Early Mature | Fair | Fair/ Poor It forms a multiple-stemmed tree from its base and has most likely self-seeded into this area. It is growing tight to the base of the boundary wall with cracks visible on the wall which would indicate towards damage being caused by this tree. Due to its proximity to the wall | I would recommend its **removal** to prevent further damage occurring to the wall. | <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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | this is likely to worsen as it grows in size. Ivy cover on some stems is beginning to extend up into its crown. There is an acute union formation between some stems which may become problematic as it grows larger in size. | | | |
| 1138 | **Ash** *Fraxinus excelsior* | 13 | 140/ 220/ 290 | 3N 2S 4E 2W | 4 | Mature | Fair | Fair/Poor It forms a multiple-stemmed tree from its base with an acute union formation between stems. It has most likely self-seeded into this area and is growing tight to the base of the boundary wall. One of its stems is pushing against the wall which is likely to lead to structural damage to the wall. | I would recommend its **removal** as part of management and to prevent structural damage to the wall. | <10 | U |
| **Tree Line** 1139-1147 | **Leyland Cypress** *x Cupressocyparis leylandii* | A 13 | A 400 | 3N 3S 7E 8W | 0 | Mature | Fair | Fair They are growing along on the boundary to the east of the house and the adjoining entrance road to the farm buildings. They have an undergrowth of Elder and ornamental shrubs with Ivy cover on their main trunks extending up into their crowns. Some of them are being overcrowded by larger neighbouring trees and Tree Nos. 1139-1141 are smaller than the rest. They provide some screening along this boundary and the lower branches have been removed on the trees at the northern end to provide clearance over the driveway. There is storm damage and deadwood within in their crowns. | Remove dead/ unstable growth. Cut back competing scrub vegetation and cut Ivy at ground level where heavy on trees. | 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | **The assessment continues to the back garden area of 'Oakvale House'.** | | | | | | | | | |
| **Shrub Border No.1** | **Contoneaster** *Contoneaster sp.* **Japanese barberry** *Berberis thunbergii* **Viburnum** *Viburnum davidii* **Weigela** *Weigela sp.* | **It extends across the top of the back lawn area cordoning it off from the surfaced parking area to the rear of the house.** It is of a mature age class in fair condition both physiologically and structurally. It contains a mix of ornamental shrubs and it has been formally maintained. A2.5 ---- A3 ---- | | | | | | | Continue present maintenance. | | C2 |
| **Shrub Border No.2** | **Hawthorn** *Crataegus monogyna* **Ash** *Fraxinus excelsior* | **It is located on the back lawn area surrounding the manhole/septic tank and it is becoming overgrown with weeds.** It consists generally of low growing shrubs. A2 ---- A3 ---- | | | | | | | It would benefit from general maintenance. | | C2 |
| **Hedge No.1** | **Cherry laurel** *Prunus laurocerasus* **Elder** *Sambucus nigra* **Bramble** *Rubus fruticosus* **Sycamore** *Acer pseudoplatanus* | **It extends down from the garage down along the boundary between the farmyard and the formal gardens to the rear of the house.** It is of a mature age class in fair condition both physiologically and structurally. It consists of a mix of ornamental shrubs with scrub species such as Elder and Bramble developing throughout along with some self-seeding Sycamore making up the upper-canopy. It has been allowed to grow tall and wide. It has value for screening off the adjoining farmyard buildings from the formal gardens. A6 ---- A7 ---- **The following trees are located within hedge No.1.** | | | | | | | Cut back height and width to contain and create a more structured hedge. | | C2 |
| 1148 | **Sycamore** *Acer pseudoplatanus* | 9 | 180 (8 stems) | 4N 4S 5E 4W | 0 | Early Mature | Fair | Fair/ Poor It is multiple-stemmed from base and I suspect it is growing from a decaying stump. Ivy cover is beginning to extend into its crown and its lower branches have been removed to raise up its crown and provide clearance in this | Cut Ivy at ground level. | 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | area. It forms part of the upper-canopy of Hedge No.1. | | | |
| 1149 | **Ash** *Fraxinus excelsior* | 8 | 190/ 140/ 140 | 2N 2S 3E 3W | 2 | Early Mature | Fair | Fair/ Poor It is multiple-stemmed from base with further subdivisions above this and I suspect it is growing from a decaying stump. It forms part of the upper-canopy of Hedge No.1 and Ivy cover is beginning to extend into its crown | Cut Ivy at ground level. | 20+ | C1 |
| 1150 & 1151 | **Leyland Cypress** *x Cupressocyparis leylandii* | A1 3 | A 420 (2 stems) | A 4N 6S 6E 5W | 0 | Mature | Fair | Fair/Poor They have been planted on the garden side of this boundary hedge and have been allowed to grow up unmanaged. They are likely to eventually outgrow this location. They have some screening value with the adjoining farmyard sheds and their crowns are overhanging/ touching these sheds. | Tidy up undergrowth and prune crowns back from the adjoining fields. | 10-20 | C2 |
| | | **The following trees are located in the open lawn area at the back of 'Oakvale House'.** | | | | | | | | | |
| **Tree Group 1152-1156** | **Beech** *Fagus sylvatica* **Sycamore** *Acer pseudoplatanus* | A 15 | A 400 | A 5N 6S 4E 6W | 0 | Early Mature | Fair/ Good | Fair They are located in front of the boundary fence with the adjoining field. Tree Nos. 1152-1155 are Beech and Tree No.1156 is a self-seeded Sycamore into this group. They have undergrowth consisting of ornamental shrubs and self-seeding scrub such as Elder and Ivy growth is extending into their crowns. They are growing up within a group and they have been allowed to grow up with limited management. Most trees have secondary limbs developing, affecting their structure. Tree No.1154 has had these secondary limbs removed leaving pruning wounds that are | Cut Ivy at ground level where heavy and tidy up undergrowth. Remove broken fence resting on the trunk of Tree No.1156. | 40+ | B2 |

| 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | susceptible to decay and multiple-stemmed regrowth is occurring from this point. Tree No.1156 has broken the boundary fence as it is growing through it and Bramble is growing into its lower-crown. | | | |
| **Shrub Border No.3** | **Honeysuckle** *Lonicera nitida* **Cherry laurel** *Prunus laurocerasus* | **It is located out on the open lawn area to the rear of the house surrounding a seating area.** It is of a mature age class in fair condition both physiologically and structurally. It consists of a mix of ornamental shrubs and it has been clipped/ maintained formally.<br>A2.5 \| ---- \| A4 \| ----<br>**The following tree is located on the edge of this shrub border.** | | | | | | | Continue present maintenance. | | C2 |
| 1157 | **Lawson Cypress cv.** *Chamaecyparis lawsoniana 'columnaris'* | 9 | 440 | 3N 2S 2E 2W | 0 | Early Mature | Fair/ Good | Fair/Good It is located in the centre of the lawn area and it has a good conical habit. | Requires no work at the present time. | 20-40 | B1 |
| **Hedge No.2** | **Hawthorn** *Crataegus monogyna* **Blackthorn** *Prunus spinosa* **Elder** *Sambucus nigra* **Bramble** *Rubus fruticosus* | **It continues north from Hedge No.1 and creates the boundary between two fields.** It is of a mature age class in poor condition both physiologically and structurally. It is located on the side of an open ditch and consists of a few isolated clumps of Hawthorn, Blackthorn and Elder with large openings with no vegetation or infill areas of Bramble and this is encroaching out on either side.<br>A3 \| ---- \| A7 \| ----<br>**The following trees are located within Hedge No.2.** These have been impacted upon by livestock sheltering/ standing within their root zones causing root damage and soil erosion. | | | | | | | Cut back encroaching hedge species and make safe any dead/ unstable growth. | | C2 |
| 1158 | **Ash** *Fraxinus excelsior* | 19 | 1100 | 6N 7S 8E | 3 | Mature | Fair/ Poor | Poor It is a large tree with a reasonably symmetrical crown formation. It contains large deadwood | I would recommend its **removal** as part of management. | <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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | 5W | | | | throughout its crown and it has also suffered storm damage. There is evidence of infection throughout its crown by "Bacterial Canker of Ash". Swelling on its lower trunk would indicate towards internal decay and the fungus '*Ganoderma australe*' is present at a height of c.2m on its west side. It has a slightly open crown due to past storm damage. | | | |
| 1159 | **Ash** *Fraxinus excelsior* | 18 | 610 | 4N 4S 7E 5W | 2 | Mature | Fair/ Poor | Poor It has suffered storm damage in the past and this has left the remaining crown open /exposed to winds. Heavy Ivy cover on the main trunk is extending up into its crown increasing its crowns windsail. Decay is present at the base of this tree and its stability is questionable as a result. | I would recommend its **removal** as part of management. | <10 | U |
| 1160 | **Sycamore** *Acer pseudoplatanus* | 15 | 450 | 1N 7S 8E 3W | 0 | Early Mature | Fair | Fair/ Poor It is growing on the outer canopy edge of Tree No.1161 with a very asymmetrical crown formation as a result. It leans out for the light due to overcrowding / competition from neighbouring trees and Ivy is beginning to extend into its crown. Due to structure, it would not isolate well as in individual tree. | Remove dead/ unstable growth and prune to address exposure and imbalance in crown. Cut Ivy at ground level. | 10-20 | C1 |
| 1161 | **Sycamore** *Acer pseudoplatanus* | 22 | 1240 | 9N 9S 9E 8W | 3 | Mature | Fair | Fair It is a large, prominent, visual tree within this area. It has a reasonably symmetrical crown formation and it contains deadwood and storm damage throughout. Light Ivy cover on the main trunk is extending up into its crown increasing its crowns windsail. The area | Remove dead/ unstable growth. Remove rope and timber attached to trunk. | 20+ | B1 |

| 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | around its base has been impacted upon by livestock sheltering and grazing in this area. There is rope and a piece of timber attached to the trunk. | | | |
| 1162 | **Sycamore** *Acer pseudoplatanus* | 14 | 630 | 8N 2S 9E 5W | 0 | Mature | Fair | Fair/ Poor<br>A secondary limb has either been removed or has failed from its base with a decay cavity developing at its root plate as a result; this may have an impact on its stability in the future. Its crown structure has been impacted upon due to overcrowding from neighbouring trees and, as a result, it has an asymmetrical crown formation and forms part of the group canopy formation with Tree No.1161. Due to structure, it would not isolate well as an individual tree. There is rope and a piece of timber attached to the trunk. | Remove deadwood and unstable growth and reduce end weight on heavy side limbs/ branches by up to 2m. Remove rope and timber attached to trunk. | 10+ | C1 |
| | | **The following trees are located along the western boundary of the site area.**<br>Some of these trees are located in the adjoining property and they were not accessible for a full assessment and they have been numbered numerically. | | | | | | | | | |
| 1163 | **Sycamore** *Acer pseudoplatanus* | 18 | 1000 (multi-stem) | 6N 5S 6E 8W | 0 | Mature | Fair/ Good | Fair<br>The visual assessment has been limited to the site side only. It is located on the adjoining land side of the open stream that extends along the western boundary. Two large limbs that extended into the site area have been removed in the past leaving large size pruning wounds that are susceptible to decay and there is multiple-stemmed regrowth occurring from these pruning points. It forms a multiple-stemmed tree from its base and its main stem | It is in need of management, such as removing dead/ unstable growth and cutting the Ivy at ground level. | 20+ | B2 |

| 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | is beginning to be suppressed by Ivy. It contains deadwood throughout its crown and there is an acute union formation between stems on its west side. | | | |
| **Tree No.1** | **Leyland Cypress** *Cupressocyparis leylandii* | 18 | 450 | 5N 4S 6E 4W | 4 | Mature | Fair | Fair<br>The visual assessment has been limited to the site side only. It is located on the adjoining land side of the boundary fence with a crown overhang into the site area. Its lower branches have been removed in order to raise up its crown and to allow for the erection of the boundary fence which is rubbing off the main trunk and a limb has been removed on its north side leaving a pruning wound that is susceptible to decay. It provides bulking within this area at present. | Requires no work at the present time. | 10-20 | C1 |
| **Tree No.2** | **Ash** *Fraxinus excelsior* | 18 | 300/ 230 | 4N 5S 6E 4W | 8 | Mature | Fair | Fair/Poor<br>The visual assessment has been limited to the site side only. It is located on the adjoining landside of the boundary fence and it forms a twin-stemmed tree from low down. It has an open crown formation with decay cavities developing where limbs/branches have broken out or were removed in the past. It has a small crown overhang into the site area and it contains deadwood throughout its crown. | Management is outside the control of this site area.<br>It is in need of management in order to promote health and safety. | 10-20 | C1 |
| 1164-1165 | **Cherry Laurel** *Prunus laurocerasus* | A 7 | A 300 | A 3N 2S 6E | A 2 | Mature | Fair | Fair/ Poor<br>These trees are growing from the base of the boundary fence. The lower vegetation has either been grazed off by animals or pruned. | Prune height and width to reduce encroachment and encourage later growth. This will also help address | 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | 2W | | | | They have asymmetrical crown formations weighed out over the site area and they are becoming top heavy; as a result, they may be prone to storm damage. They have some screening value along the boundary. | structural issues. | | |
| **Tree No.3** | **Sycamore** *Acer pseudoplatanus* | 20 | 440/ 360/ 380 | 4N 5S 7E 5W | 3 | Mature | Fair/ Good | Fair<br>The visual assessment has been limited to the site side only. It is a large prominent visual tree located on the adjoining landside of the boundary fence. It forms part of a group environment with an asymmetrical crown formation as a result. A large portion of its crown extends out into the site area. It contains deadwood and storm damage throughout its crown. It divides into a multiple-stemmed tree from low down and its lower branches have been removed to raise up its crown. | Management is outside the control of this site area. | 20+ | B2 |
| **Tree Group 1166-1168** | **Beech** *Fagus sylvatica* | A 15 | A 400 | A 4N 6S 6E 4W | 0 | Early Mature | Fair/ Good | Fair<br>They are located in front of the boundary fence with the adjoining field. They are growing up within a group and they are beginning to overcrowd one another. Their crown structures are being impacted upon by the overhang from Tree Group No.1 and they have slightly asymmetrical crown formations as a result, particularly Tree No.1167 which is growing with a lean on the main trunk and would not isolate well as an individual. Ivy cover on their main trunks is extending up into their crowns increasing their crowns windsail. | Cut Ivy at ground level. | 40+ | B2 |

| 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Tree Group No.1** | **Holm Oak** *Quercus ilex* **Sycamore** *Acer pseudoplatanus* **Norway Maple** *Acer platanoides* | A 16 | A 700 | A 9N 9S 9E 9W | A 3 | Mature | Fair | Fair They are located on the adjoining property side of the boundary fence. They are prominent visual trees with value to the treescape of this area. Two of these trees crowns overhang into the site area and some of the overhang, particularly the lower branches, have been pruned back in order to raise up their crowns. | Management is outside the control of this site area. | 20+ | B2 |
| 1169 | **Flowering Cherry** *Prunus avium* | 9 | 270 (2 stems) | 2N 5S 7E 2W | 2 | Mature | Fair | Fair/Poor It has an asymmetrical crown formation due to its group growing environment and it has been forced out for the light as a result. It divides into two stems at a height of c.1m. There is a lot of liquid exudations visible on the main trunk and this would indicate towards infection by "Bacteria Canker of Cherry". A branch has broken out on its east side leaving a tear wound that is susceptible to decay and a limb extending to the east is cracked. | Make safe cracked limb on east side. | 10+ | C1 |
| 1170 | **Sycamore** *Acer pseudoplatanus* | 10 | 150/ 190/ 200 | 4N 4S 4E 4W | 2 | Early Mature | Fair/ Good | Fair It is self-seeded into this area and is multiple-stemmed from base. Its crown overhangs the property to the west. | Requires no work at the present time. | 40+ | B1 |
| **Orchard Trees 1171-1174** | **Apple** *Malus domestica* **Pear** *Pyrus communis* | A 6 | A 210 | A 2N 2S 3E 2W | 1 | Mature | Fair/ Poor | Poor Tree Nos. 1171-1173 are Apple and Tree No.1174 is a Pear. They are located on the western boundary and have not received much maintenance/ management and have been allowed to grow up tall as a result. Ivy cover is extending into the crowns of Tree | Cut Ivy at ground level on Tree Nos.1172 & 1173. They would benefit from further pruning/trimming in order to contain and to encourage better fruiting. | 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | Nos.1172 & 1173 and is increasing the windsail of their crowns. | | | |
| **Shrub Border No.4** | **Firethorns** *Pyracantha sp.* **Elder** *Sambucus nigra* **Viburnum** *Viburnum davidii* **Redclaws** *Escallonia sp.* **Blue Lawson Cypress** *Chamaecyparis lawsoniana* 'Pembury Blue' **Japanese Laurel** *Aucuba japonica* | **It is located in front of Tree Group No.2 along part of the western boundary.** It consists of a mix of ornamental shrubs and they have been allowed to grow up tall providing higher screening along this boundary. Their sides have received trimming in order to prevent encroachment out onto the lawn area. A5 ---- ---- ---- | | | | | | | Continue present maintenance. | | C2 |
| **Tree Group No.2 (2 trees)** | **Lime** *Tilia sp.* | A 22 | A 650 | A 4N 4S 4E 4W | A 6 | Mature | Fair | Fair They are located on the adjoining landside of the boundary wall and the visual assessment of these trees has been limited to the site side only. They are large prominent trees with visual value to the treescape of the area. Dieback and storm damage is evident within their crowns and they have received pruning to reduce crown size with multiple-stemmed regrowth from these pruning points. | Management is outside the control of this site area. They would benefit from a more detailed assessment and pruning to remove any dead/ unstable growth and address structural issues. | 20+ | B2 |
| | | **The survey now continues out into the surrounding fields that make up the site area. The following tree group is located behind Hedge No.1 at the corner of the farmyard building.** | | | | | | | | | |
| **Tree Group No.3** | **Sycamore** *Acer pseudoplatanus* | A 10 | A 200 | A 3N 3S 3E | A 2 | Semi Mature | Fair/ Good | Fair It consists of a group of self-seeded Sycamore trees growing up together with a combined group canopy formation. They depend on | Tidy up undergrowth. Selectively thin out the group by removing the trees that have the potential to cause | 40+ | 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | 3W | | | | each other for support/ shelter and they would not isolate well as individuals due to structure. They are growing within close proximity to the building and they have the potential to cause structural damage to the walls of this building as they grow in size. There is an undergrowth of Bramble in this area. | structural damage to the farm building and any other surrounding surfaces and structures. | | |
| | | **The following trees are located down along the western boundary of this site area.** The original field boundary hedge has been removed to allow for boundary treatment and fencing wire is attached to the lower trunks of all of these trees. Grazing animals have been allowed to shelter/stand in around their bases causing soil erosion and compaction. | | | | | | | | | |
| 1175 | **Ash** *Fraxinus excelsior* | 11 | 900 | 5N 5S 4E 4W | 1 | Mature | Fair | Fair / Poor It used to be part of the hedge which has since been removed. Heavy Ivy cover on the main trunk is extending up into its crown increasing its crowns windsail. The visual assessment has been limited due to dense Ivy cover. It would appear to have established from a cut stump and the regrowth is likely to become problematic as it grows in size. It has lost a large size limb on its east side and decay is developing into the underlying timber. | Remove deadwood and unstable growth. Cut Ivy at ground level. | 10+ | C1 |
| 1176 | **Ash** *Fraxinus excelsior* | 11 | 200/ 160/ 150 | 4N 1S 3E 4W | 0 | Mature | Fair | Fair/ Poor It forms a multiple-stemmed tree from base and is developing from an old cut stump, resulting in a poorly structured tree. A limb has been removed on its east side to facilitate the boundary fence, leaving a pruning wound that is susceptible to decay. It forms part of the bulking within this hedge. Ivy cover on the main trunk is beginning to extend up into its crown. | Reduce crown size by up to 2m to address structural issues. Cut Ivy at ground level. | 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Hedge No.3** | **Hazel** *Corylus avellana* **Bramble** *Rubus fruticosus* **Poplar** *Populus sp.* | **It extends north east along part of the eastern boundary, dividing the site area from the housing development.** It is of a mature age class in fair condition physiologically and fair/ poor condition structurally. The majority of this hedge has been removed to facilitate the boundary fence that has been erected as part of the housing development to the east. The remaining section is located in the north-east corner of the site area and consists of predominantly Bramble that is encroaching out into the site area, with some Hazel and an upper canopy of Poplar trees. | | | | | | | Cut back encroachment onto site area. | -- | C2 |
| | | A3 | ---- | A5 | ---- | | | | | | |
| **Notes:** | | | | | | | | | | | |
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