Arborist Associates Ltd.

An Aboricultural Assessment on the Site Area for the 'Edmondstown SHD Application', Whitechurch Road, Rathfarnham, Dublin 16.

Prepared for: BCDK Holdings Ltd. & Coill Avon Ltd.

Prepared by: Felim Sheridan F. Arbor. A, RFS Dip, Nat. Dip & NCH in Arboriculture

Date: 10th December 2021

94 Ballybawn Cottages, Enniskerry, Co. Wicklow. Tel: 2742011
Mobile: 087 2629589
Email: arborist@eircom.net

1.0 Instructions

1.1 Arborist Associates Ltd. have been commissioned to provide an assessment of the existing tree vegetation on lands around 'Kilmashogue House' on the site area at 'Whitechurch Road', Rathfarnham, Dublin 16 and report on the following:

a. To assess the present condition of the tree and hedge vegetation on these lands. See 'Appendix 2' and drawing 'No.WCR001' which has been produced as a constraints plan for detail.

b. To assess the impact of the proposed development layout on the tree vegetation indicating on a drawing those for removal and retention. See 'Section 5' of our report and drawing 'No.WCR002' for detail.

c. To prepare a tree protection plan showing the lines of tree protection fencing to be erected around the tree vegetation being retained along with other mitigation measures to aid in their successful retention. See 'Section 6' of our report and drawing 'No.WCR003' 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 are in operation, if they are it will be necessary to obtain consent before undertaking any works (pruning or felling).

3.0 Aims and Report Brief

3.1 Arborist Associates Ltd. has been commissioned to provide a condition assessment of the existing tree vegetation on lands around 'Kilmashogue House' on the site area at 'Whitechurch Road', Rathfarnham, Dublin 16.

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 affects 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).

3.5 For the purpose of considering the proposed development layout and design, the trees included in categories (A and B) are those which most merit retention. While those in category (C) should also be considered for retention, they are not considered to be of sufficient value to be worthy of representing a constraint to the development design or site layout.

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.

Any category 'U' trees identified have been shown on our drawings (Nos.WCR001 & WCR002) with a 'Red' donut around their trunk positions. Due to the condition of these trees, they should not be considered a constraint on the design layout of the proposed development of this site area.

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

Any category 'A' trees within this site area have been identified on our drawings (Nos.WCR001 & WCR002) with a 'Green' donut around their trunk positions.

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

Any category 'B' trees within this site area have been identified on our drawings (Nos.WCR001 & WCR002) with a 'Blue' donut around their trunk positions. These trees would be seen as having the potential to contribute to the tree cover of these grounds for the medium-term.

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

Any category 'C' trees within this site area have been identified our drawings (Nos.WCR001 & WCR002) with a 'Grey' donut around their trunk positions. 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. Where viable, they should be retained.

3.6 The trees have been plotted onto the attached drawing (DWG No.WCR001) by a land survey company. The tree 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 meters 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 **Area 1** which forms the subject site area is located at 'Kilmashogue House', which forms part of the overall application lands at 'Kilmashogue House & Coill Avon House', Whitechurch Road, Rathfarnham, Dublin 16. This part of the site area is bounded to the north by agricultural lands, to the south by the M50 Motorway, to the east by the 'Whitechurch Stream / Road' and to the west by agricultural lands.

It is a large, irregular shaped site of c.4.3ha (10.7 acres), extending in a broadly east to west direction. The site is accessed off the 'Whitechurch Road' and a short entrance road leads to a derelict house with associated outbuildings that are located on the eastern part of the site. The lands are currently in agricultural use for grazing and are broken into a number of fields by hedgerows.

The trees on the site are primarily located in the vicinity of the house with the remainder located within the field boundary hedgerows. The trees consist of a range of species including Oak, Willow, Cypress, Sycamore, Ash, Monterey Cypress, Lawson Cypress, Leyland Cypress and Elm. While many of the trees are of a mature age category, some of the tree planting is relatively recent, in particular, the Oaks located on the eastern boundary with the 'Whitechurch Stream', tree / hedge planting along the southern boundary with the M50 and the short tree belt of mixed species, including Birch, Alder, Beech, Larch, Field Maple and Sycamore, which extends from the entrance gates westwards along the southern boundary with the M50. These recent plantings may have been carried out as part of the accommodation works associated with the M50 construction / upgrade.

Within this main site area, 34No.Trees were tagged individually with 10No. Trees, 10No.Hedges and 1No.Tree Belt numbered numerically.

From our assessment of this vegetation, the following summarizes our category grading for the tree vegetation on this part of the site area:

Category U – 7 Trees
Category A – 3 Trees
Category B – 5 Trees plus 1 Tree Belt
Category C – 29 Trees plus 1 Tree Group & 10 Hedges.

4.2 **Area 2** consists of the vegetation along 'College Road' from the Marlay Park entrance down to the junction with 'Whitechurch Road'. It consists of two public roads with associated footpaths and roadside margins.

There is a footpath on the north side of 'College Road' with no tree planting and on the southern side, there is a narrow grass verge between the roadside kerb and the boundary wall with the M50 Motorway where there is a line of young / semi-mature age class Rowan trees planted at irregular intervals. It is likely the line was originally more complete, with trees evenly spaced out along it length, but some of the original planting has failed or has been removed and no infill planting appears to have taken place.

At the junction of College Road with Whitechurch Road, there are two planted areas located on either side of the junction. These have been landscaped with a mix of trees and shrubs planted at close centers. The landscaped area on the north side of the junction extends eastwards along College Road, which terminates in a short grass margin with standard tree planting, before merging with the footpath. The main tree species on this side of the road consists of Scots Pine, Monterey Cypress, Leyland Cypress, Oak, Alder and Larch. They are located behind a low plinth concrete wall and have been closely planted and are now growing up together forming a closed group canopy. An understory of Bramble, Ivy and coarse weeds has developed with some grass where light levels permit.

On the southern side of this junction, there is a small group of three trees consisting of Rowan and Scots Pine and they have an understory of shrubs growing on the side of a steep embankment next to the M50 Motorway bridge.

Within this part of the site area, 51No.Trees were numbered numerically.

From our assessment of this vegetation, the following summarizes our category grading for this tree vegetation:

Category U – 2 Trees
Category A – 0 Trees
Category B – 11 Trees plus 1 Tree Group
Category C – 38 Trees

4.3 **The following tables gives a breakdown of the category grading allocation as per the cascade chart in BS5837 2012 for each of the site areas:**

Area 1

Category Grade	No. of Trees
Category U Trees = 7	**Tree Nos**. 1946, 1947, 1955, 1958, 1959, 1969 & Tree No. 6
Category A Trees = 3	**Tree Nos**. Tree No. 10, 1977 & 1978
Category B Trees = 5 Tree Belts = 1	**Tree Nos**. Tree No. 3, Tree No. 4, 1964, 1973 & 1975 Tree Belt No. 1
Category C Trees = 29 + 1Tree Group + Hedges = 10	**Tree Nos.** Tree No.1, 1943, 1944, Tree No.2, 1948, 1949, 1950, 1951, 1952, 1953, 1954, 1956, 1957, 1961, Tree No. 5, 1962, 1963, 1965, 1966, 1967, 1968, 1970, 1971, 1972, 1974, Tree No. 7, Tree No. 8, Tree No. 9 & 1976 Tree Group No.1 **Hedge Nos.** Hedge No. 1, Hedge No. 2, Hedge No. 3, Hedge No. 4, Hedge No. 5, Hedge No. 6, Hedge No. 7, Hedge No. 8, Hedge No. 9 & Hedge No.10
Total	**44 Trees + 1 Tree Group + 1 Tree Belt + 10 Hedges**

Area 2

Category Grade	No. of Trees
Category U Trees = 2	**Tree Nos**. 31 & 32
Category A Trees = 0	**Tree Nos**. –
Category B Trees = 10	**Tree Nos**. 35, 40, 41, 43, 48, 49, 50, 52, 53 &54
Category C Trees = 39	**Tree Nos.** 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 33, 34, 36, 37, 38, 39, 42, 44, 45, 46, 47, 51, 55, 56, 57, 58, 59, 60 & 61
Total	**51 No. Trees**

5.0.0 Arboricultural Implication Study

5.1.0 Introduction

5.1.1 The proposed development on the site area at 'Kilmashogue House & Coill Avon House' Whitechurch Road, Rathfarnham, Dublin 16 extends to 7.12 hectares and includes the derelict Kilmashogue House (southern lands) and Coill Avon house (northern lands), adjacent roads in the control of South-Dublin County and Dun-Laoghaire Rathdown County Councils and the proposed development will consist of the following elements: -

- Demolition of Kilmashogue House and outbuildings and demolition of Coill Avon house and outbuildings;
- The refurbishment and re-use of 2 no. stone outbuildings for community use, to be incorporated into an area of public open space on the southern lands;
- The construction of a mixed-use development comprising neighbourhood centre and 178 no. residential units comprising 72 no. houses, 38 no. apartments and 68 no. duplex apartments;
- The 72 no. houses will comprise 2, 2.5 and 3-storey detached, semi-detached and terraced units;
- A section of link street with footpath and cycle path (approx. 438 linear meters) extending from the junction of Whitechurch Road and College Road on an alignment parallel to the M50, to provide access to the southern development lands and incorporating a bus turning circle;
- Upgrade works to College Road including a new two-way cycle track and relocated footpath from the Whitechurch Road junction to provide connectivity to the Slang River pedestrian/cycle Greenway;
- A new signalized crossroads junction to connect the proposed link street with Whitechurch Road and College Road;
- Upgrade to the existing vehicular access at the entrance to Coill Avon house on Whitechurch Road;
- Foul sewer drainage works along Whitechurch Road from the Kilmashogue junction to the existing junction at Glinbury housing estate;
- All landscaping, surface car parking, boundary treatments, infrastructure works, ESB substation, and associated site works and services.

5.1.2 This report only deals with the section of the site area on the lands around 'Kilmashogue House' with a separate Arboricultural consultant addressing the site area made up of the lands around 'Coill Avon House'.

5.1.3 This section of our document 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.

5.1.4 On drawing 'No.WCR002', I have identified the tree vegetation to be removed to facilitate this development and management with 'Red' hatched crown spreads and those to be retained to form part of the long-term tree cover on these grounds with a 'Green Hatched' crown spread.

5.1.5 A separate tree protection drawing (No.WCR003) has been prepared using 'Orange Hatching' to identify the tree protection fencing and work exclusion zones around the trees being retained. These tree protection fences and other tree protection measures will need to be put in place at the start of the works and be maintained in place until all works are completed. This fencing is to protect the root zones and crown spreads of the trees and to ensure their successful integration into the completed development of these lands.

5.1.6 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 Design Rational

5.2.1 The current site layout for this part of the overall site area has been finalized and modified based on the information provided in the initial condition tree assessment of the site area and the creation of the tree constraints plan (DWG. No.WCR001) which has resulted in changes in the layout of buildings and services and its construction plan to ensure that any impact on the trees to be retained have been kept to a minimum.

5.2.2 The objective of the proposed development layout was such as to try and retain as much of the important tree lines, groups and belts as possible and to incorporate these into the completed development where they will be an asset to the completed landscaped development and the surrounding area.

5.3.0 Tree Loss

5.3.1 Area 1

To accommodate the proposed development on this part of the overall site area or as part of active management, it will be necessary to remove the following vegetation:

Category Grade	No. of Trees for Removal
Category U **6 Trees**	**Tree Nos.**1946, 1947, 1955, 1958, 1959 & 1969 These trees, although most of them need to be removed directly due to the development layout, are in such a condition that they will need to be removed as part of management now or in the short-term irrespective of the development proposals for this site area.
Category A **0 Trees**	**Tree Nos.** --
Category B **2 Trees + 20m^2 of Tree belt**	**Tree Nos.** Tree No.3 & Tree No.4. c.20m^2 at eastern end of Tree Belt No.1
Category C **23 Trees** **+ 3 full Hedges & c.90m of other hedges**	**Tree Nos.** Tree No.1, 1943, 1944, Tree No.2, 1948, 1949, 1950, 1951, 1952, 1953, 1954, 1956, 1957, Tree No.5, 1962, 1963, 1965, 1966, 1967, 1968, 1970, 1971 & 1972 **Hedge Nos.** Hedge No. 1, Hedge No. 2, c.22m hedge No.5, c.36m hedge No.6, c.32m hedge No.8 & Hedge No.9
Total	**31 Trees + 3 Hedges & c.90m of other hedges**

In summary, 31 (70.4%) of the 44No. trees assessed and included within our condition assessment within 'Appendix 2' are proposed for removal along with 3 full hedges and c.90m of other hedges.

The trees for removal are made up of the following category grades:

- 6No. of the 7 category 'U'. trees = 85.7%
- 0No. of the 3 Category 'A' trees = 0%
- 2No. of the 5 Category 'B' trees = 40.0%
- 23No. of the 29 Category 'C' trees = 79.3%

5.3.2 Area 2

This area includes the construction of a new two way cycle path along 'College Road' which will require the realignment of the road towards the boundary wall with the M50 Motorway. To accommodate these proposed works, it will be necessary to remove the following vegetation:

Category Grade	No. of Trees for Removal
Category U **2 Trees**	**Tree Nos.** 31 & 32
Category A **0 Trees**	**Tree Nos.** --
Category B **Trees +**	**Tree Nos.**
Category C **18 Trees**	**Tree Nos.** 13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29 & 30.
Total	**20 Trees**

In summary, 20 (39.2%) of the 51 No. Trees assessed and included within our condition assessment within 'Appendix 2' are proposed for removal.

The trees for removal are made up of the following category grades:

- 2No. of the 2 category 'U' Trees = 100%
- 0No. of the 0 Category 'A' Trees = 0%
- 0No. of the 10 Category 'B' Trees = 0 %
- 18No. of the 37 Category 'C' Trees = 46.1%

5.3.3 The loss of the above listed tree vegetation from both areas of the site is being mitigated against with the planting of trees, shrub and hedging as part of the landscaping of the completed development which 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 this 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 planting strategy key factors are to:

- Create a sense of identity using trees, shrub and hedge planting.
- Create a robust landscape that performs all year round and is suitable for the current proposed use of this site area.
- Use vegetation to screen and enhance views.
- Use a more diverse mix of plant species that will create forage for pollinators.
- Plant robust species that tolerate drought and site-specific micro-climates
- Plant species that are maintenance friendly

5.4.0 Tree Retention

5.4.1 In the design layout, great efforts have been made to retain as many of the better quality trees as possible and in particular the trees which are of most visual value to the treescape of this area and to incorporate these into its main open space areas. This includes the following two trees in particular:

Tree No.1964 a large mature Monterey Cypress which has been retained on the central open space and the development has been designed around this tree. The existing ground levels within its root zone have been retained as much as possible and this has been achieved by the use of retaining walls and steps to reduce the extent of grading that otherwise would be required to address level changes which would otherwise encroach considerably into the root zone of this tree. The path surfaces within its root zone will also be constructed above the existing ground levels using a 'No-Dig' methodology which will bring the paths and other surfaces over the existing levels avoiding the need to dig down to facilitate these.

Tree No.1975 a large mature Sycamore has also been retained on an open space and the changes in ground levels around this tree have also been addressed by the use of retaining walls to retain the existing levels within its root zone and any surfacing required for paths or surface areas have been designed to be built up over the existing ground levels using a 'No-Dig' methodology.

The above items have been discussed with the project landscape architects and have been designed with this in mind. See project landscape architects drawings and sections through these areas, which demonstrate how these trees are being incorporated into the completed landscaped development.

5.4.2 Those trees proposed for retention, all necessary mitigation measures will need to be put in place at the start of the works in order to prevent or reduce impact to its very minimum. Mitigation measures used will need to include the erection of protective fencing at the very start of the works, ground protection installation within root zones where fencing cannot be erected to enclose the entire root zones, monitoring of the site works by the project Arboriculturist throughout the construction process and the use of tree friendly techniques and products for the construction process.

5.4.3 **Main items for consideration during the proposed construction process:**

Item	Comments
Tree Pruning	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. 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. The future management of these hedges will see them being cut back on a three to four year cycle to contain their structure and quality. All tree felling and pruning works should 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.* 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.
Tree Management	Within the proposed development, as is the current situation, trees will be positioned within close proximity to buildings and usable surfaces such as roads, footpaths 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. 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.
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.

Item	Comments
	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.WCR003) **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. All weather notices should be erected on the fences with words such as: "Tree Protection Fence — Keep Out". 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.
Construction	It will be important that good housekeeping is in place at all times so that the site does not become congested. 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. 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. 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. 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. Notice boards, wires and such like should not be attached to any trees. Site offices, materials storage and contractor parking should all be

Item	Comments
	outside the work exclusion zone.
Services	Services entering and leaving the site area are routed so they are located outside the root protection zones of the trees to be retained. This has been discussed with the project engineers in order to achieve this. 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. Any cabling for the lights along the paths where they come within the root zone of trees being retained will need to be installed in ducting within the buildup of these paths to ensure no soil or root damage is caused.
Boundary Treatments	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. Where it is needed to install fences along existing hedges, it will be necessary to carry out some pruning of the lower 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.
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. 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. In a number of places, paths/surfaces will encroach into the root zone of the tree and hedge vegetation to be retained, in particular within the root zone of **Tree No.1964** the central large mature Monterey Cypress tree and **Tree No.1975** a mature Sycamore and these sections of paths and surface areas 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

Item	Comments
	'CellWeb' within the construction of these sections of paths/surfaces. See 'Section 6.8' of our report for detail on the installation of such surfaces within the root zone of trees. To address level changes within the root zone of **Tree Nos.1964 & 1975**, it has been designed to use retaining walls to minimize encroachment into the root zones of these trees. The above items have been discussed with the project landscape architects and have been designed with this in mind. See project landscape architects drawings and sections through these areas, which demonstrate how these trees are being incorporated into the completed landscaped development.

5.5.0 Monitoring

5.5.1 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 advise on any works within the RPA of retained trees to ensure successful tree retention and planning compliance.

5.5.2 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.

5.5.3 Copies of the tree retention and protection plan (DWG Nos.WCR002 & WCR003) 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.

5.5.4 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.WHR003, for the position of the protective fencing and other mitigation measures.

6.3 The protection of the tree vegetation shown for retention 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 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 **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 works 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. WCR003.

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.WCR003 & 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.WCR003 & 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.

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 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.

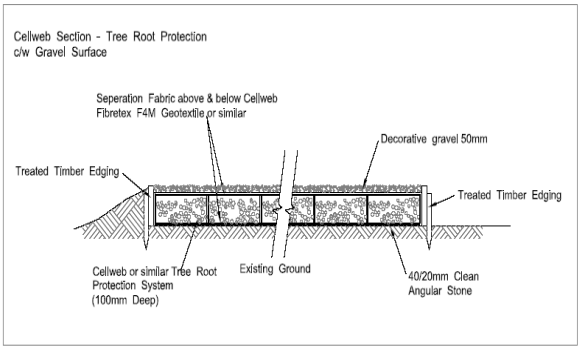
Step 3 – Place constraints along the edges to contain the fill material. These can be of such material as treated timber or railway sleepers.

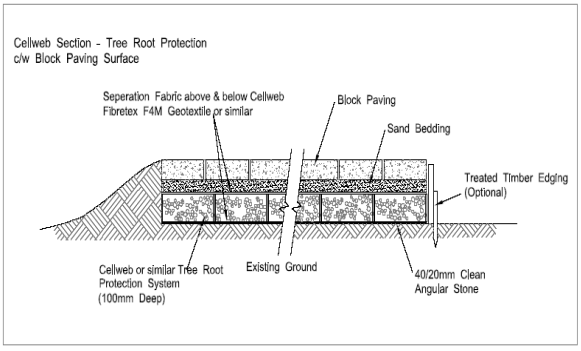
Step 4 – Place the required cellular confinement system (Cell Web150-200mm) over the geotextile and pin/anchor the cell walls open for infilling.

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 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.

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

The excavations 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 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.

6.9.3 **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.

6.9.4 **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.

6.10.0 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 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 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 this site area and is for the sole use of the above named client and refers to only those trees and hedgerows 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.

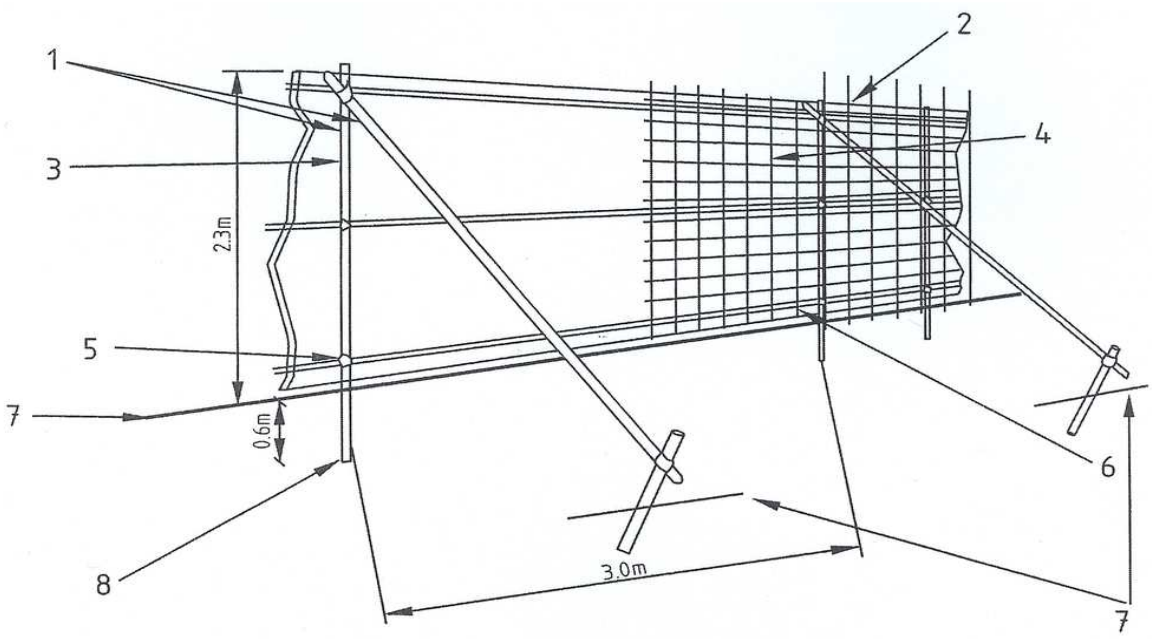
Signed Felim Sheridan Date 10th December 2021

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

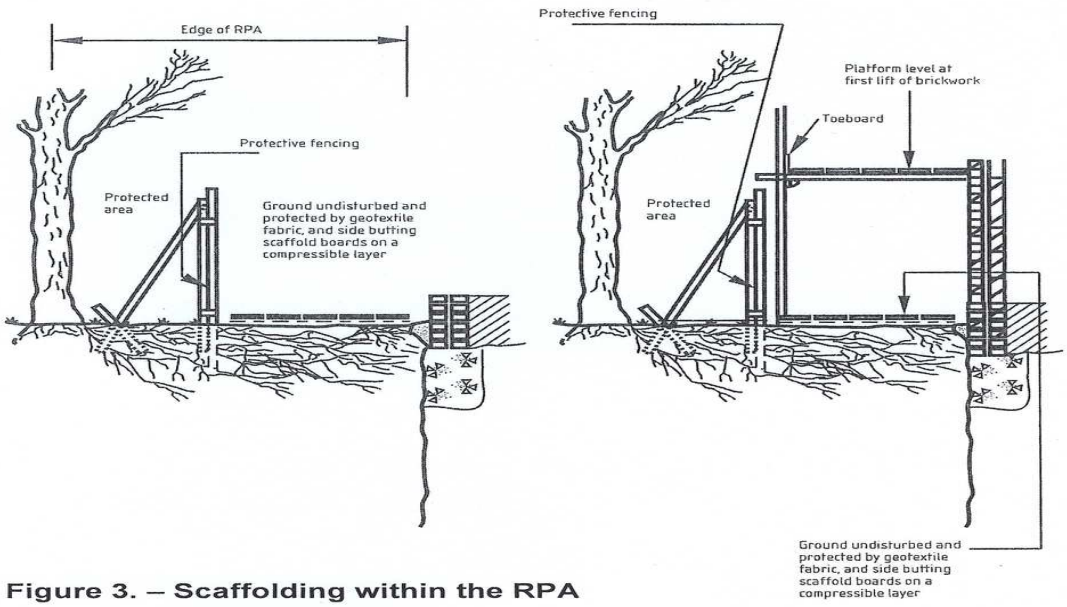


Figure 3. – Scaffolding within the RPA

Appendix 2

Condition Tree Assessment

On the Site Area for the 'Edmondstown SHD Application', Whitechurch Road, Rathfarnham, Dublin 16.

Date: 11th October 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 trees.

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	Remaining Contribute in years	Cat. Grade
								N-north **S**-south **E**-east **W**-west **C-Ht.-**crown height **Phys.-**physiological	**Cat.-**Category **-A-**average		
Area 1		**A Condition Assessment of the trees on the Site Area for the 'Edmondstown SHD Application', Whitechurch Road, Rathfarnham, Dublin 16.**									
		The survey commences at the eastern end of the site area at the entrance and proceeds in a broadly anti-clockwise direction around the site, finishing back at the site area entrance.									
Tree Belt No. 1	**Birch** *Betula pendula* **Sycamore** *Acer pseudoplatanus* **Field Maple** *Acer campestre* **Larch** *Larix sp.* **Alder** *Alnus sp.* **Beech** *Fagus sylvatica*	**It extends from the site area entrance in an east west direction along the southern boundary with the motorway.** It consists of mixed species planting of a semi mature age category in fair/ good condition physiologically and structurally. It has an understorey of Hawthorn, with Bramble and Ivy developing, which will require management in the future. It provides screening between the site area and adjoining the M50 motorway. A8 | A. 150 | A2 | A.1							No works required at the present time but will require management in the future.		B2
Hedge No. 1	**Golden Lawson Cypress cv.** *Chamaecyparis lawsoniana cv.*	**It extends from the western end of Tree Belt No. 1 in north west direction, bordering with the entrance driveway.** It is of an early mature age category in fair condition physiologically and structurally. The northern side of the hedge has been cut back in the past to maintain clearance along the entrance driveway and this has exposed lower deadwood and impacted structure. It has been allowed to grow unmanaged for some time and Bramble, Elder, Dogrose and Ivy growth have colonised the base along the southern side and are now beginning to dominate sections of the hedge line. A6 | --- | A4 | --- **The following trees are located along this hedge line.**							Cut back top and sides to contain height and spread. Cut Ivy at ground level and remove scrub species such as Bramble.		C2
Tree No. 1	**Golden Leyland Cypress** *Cupressus x leylandii* cv.	13	300	5N 5S 4E 3W	4	Early Mature	Good	Fair A single-stem tree growing on a small bank adjacent to the motorway boundary. Bramble growth is developing on the northern side at the base which restricts access.	Cut Bramble at ground level.	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	Remaining Contribute in years	Cat. Grade
								N-north **S**-south **E**-east **W**-west **C-Ht.**-crown height **Phys.**-physiological	**Cat.**-Category **-A-**average		
1943	**Golden Leyland Cypress** *Cupressus x leylandii* cv.	13	220/ 350/ 350	5N 5S 5E 5W	3	Early Mature	Good	Fair A multi-stem tree from near ground level, with an acute union formation between the stems which are growing in a co-dominant manner. The two western stems have fused together from ground level to a height of c.1.5m creating a point of structural weakness. Ivy growth is beginning to extend up into the crown and the crown contains some naturally suppressed deadwood.	Ivy growth will require management in the future.	20+	C2
1944	**Golden Lawson Cypress cv.** *Chamaecyparis lawsoniana cv.*	13	280/ 270/ 360/ 500	4N 5S 5E 4W	2	Early Mature	Good	Fair/ Good A multi-stem tree from c.1.5m with an acute union formation between the stems. The crown is quite well balanced and contains naturally suppressed deadwood. Lower foliage has been affected due to competition/ overcrowding.	No works required at the present time.	20+	C2
1945	**Leyland Cypress** *Cupressus x leylandii*	This tree has failed from base and is lying dead on the ground.							Remove fallen tree.	--	--
Tree No. 2	**Sycamore** *Acer pseudoplatanus*	11	340/ 210/ 180/ 90	3N 2S 3E 3W	2	Early Mature	Fair/ Good	Fair It is growing next to the derelict building and it has an undergrowth of Bramble. It is multiple-stemmed from base and there is an acute union formation between two stems that may develop into a structural weakness as the tree grows in size.	Remove the smallest stem that is forming the acute union formation as it may create a structural weakness in the future.	20+	C1
1946	**Purple Plum** *Prunus cerasifera 'Pissardii'.*	7	500	5N 2S 1E 2W	1.8	Mature	Fair/ Poor	Poor A single stem tree to c1.8m from where the crown develops. The eastern side of the tree has collapsed and is lying on the ground. There is extensive decay and stem damage	I would recommend **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	Remaining Contribute in years	Cat. Grade
								N-north **S**-south **E**-east **W**-west **C-Ht.**-crown height **Phys.**-physiological	**Cat.**-Category **-A-**average		
								present on the remaining tree. It has no long-term potential.			
Hedge No. 2	**Cherry Laurel** *Prunus laurocerasus* **Lawson Cypress cultivar** *Chamaecyparis lawsoniana cv.*	**It extends westwards along the southern boundary with the M50 motorway.** It is of an early mature age category in fair/ poor condition physiologically and structurally. It consists of a line of Cherry Laurel interplanted at c.5m centres with a Lawson Cypress cultivar. The Cherry laurel is tall, leggy and poorly structured. The Lawson Cypress' are in fair / poor condition with a number of them having failed and fallen out of the line. There is also an area of water logging, I suspect due to a leaking water pipe. The plants in the hedge line are waterlogged and have failed as a result. The lower vegetation has been grazed off by livestock, affecting its structure.							Cut back Cherry Laurel by 1-2m to rejuvenate and thicken them up. Address water logging. Replace dead plants with similar species. Fence off hedge from grazing livestock.		C2
		A4	---	A4	---						
1947	**Apple** *Malus sp.*	6	280/ 230	3N 5S 2E 5W	1.8	Mature	Fair	Poor Originally a three-stem tree from c.1m, the stem on the eastern side has broken out and decay is developing. It divides at c.1.2m and the northern stem has also broken out c.1m above the union. It is decaying back at this point and is infected by the fungus '*Inonotus hispidus'*. It has an asymmetrical crown weighed out to the south and west. It has no long-term potential.	I would recommend its **removal** as part of management. It could be retained at present. If chosen to retain, crown pruning could be carried out to address/ current structural issues.	<10	U
Tree Group 1948 – 1954	**Sycamore** *Acer pseudoplatanus* **Ash** *Fraxinus excelsior* **Leyland Cypress** *Cupressus x leylandii* **Purple Plum** *Prunus cerasifera 'Pissardii'*	A.10	A.230	A. 2N 3S 2E 2W	1.8	Semi Mature / Early Mature	Fair	Fair These trees are located to the south of the existing house. This is a mixed species group of mainly single stem trees that have mostly self-seeded in this area due to it being derelict. They are growing up in a sheltered environment with a combined group canopy. They have been drawn up for light due to competition/ overcrowding and most would not isolate well. There is an understorey of Laurel and sapling trees	Prune deadwood and branch stubs back to target pruning points. Tidy up undergrowth	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	Remaining Contribute in years	Cat. Grade
								N-north **S**-south **E**-east **W**-west **C-Ht.**-crown height **Phys.**-physiological	**Cat.**-Category **-A-**average		
	Laurel *Laurus nobilis* **Elder** *Sambucus nigra*							developing. Tree No. 1953 is a Purple Plum.			
1955	**Sycamore** *Acer pseudoplatanus*	7	180/ 200	1N 3S 3E 1W	1.8	Semi Mature	Fair/ Good	Fair / Poor Self-seeded and growing out from the base of the adjacent wall. It has potential to cause structural damage to wall as it grows in size. It is a twin stem tree from ground level. There is a very acute union formation between the stems. There is also some damage/ bark wounding from grazing animals.	Retain for now as part of the bulking of this area. I would consider its removal in the short-term as part as management or	<10	U
1956	**Pear** *Pyrus communis*	7	260	2N 2S 4E 2W	1.5	Mature	Fair	Fair / Poor Growing up at the base of the adjacent wall with an Elder growing up through its crown. There is extensive damage to the main stem from ground level to c.1.4m, with decay of hard wood taking place. There are branch stubs and deadwood throughout is crown. It has no long-term potential.	Remove the Elder bush and carry out pruning to reduce size and to contain.	10+	C1
1957	**Pear** *Pyrus communis*	8	300	2N 2S 4E 2W	1.5	Mature	Fair/ Poor	Poor Growing up at the base of the adjacent wall, with an Elder growing up through its crown causing overcrowding/ competition. There is damage to the main stem from ground level to c.1.0m, possibly caused by grazing animals. There is deadwood throughout the crown. It has no long-term potential.	Remove the Elder bush and carry out pruning to reduce size and to contain.	10+	C1
1958	**Sycamore** *Acer*	9	140	0N 3S	2	Semi Mature	Fair/ Poor	Poor A young tree developing from an old stump	I would recommend **removal** as part of	<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	Remaining Contribute in years	Cat. Grade
								N-north **S**-south **E**-east **W**-west **C-Ht.**-crown height **Phys.**-physiological	**Cat.**-Category **-A-**average		
	pseudoplatanus			0E 3W				at the base of the adjacent wall. The stem has been extensively damaged from ground level to a height of c.2m as a result of damage caused by fire. The leader has also been lost at c.4m. It is being suppressed by Tree No. 1959 and it has no potential.	management.		
1959	**Sycamore** *Acer pseudoplatanus*	10	330/ 500	4N 4S 5E 4W	2	Mature	Fair	Poor It is growing up from base of the wall, causing structural damage. Originally a multi-stem tree from near ground, it divides at c.1m with two of the stems fused together. There are decay pockets present with a large decay pocket at the base where a previous stem may have failed in the past. There is extensive decay in the centre of the tree. It has no potential.	I would recommend **removal** as part of management.	<10	U
1960	**-**	-	-	-	-	-	-	Tag Missing	-	-	-
Hedge No. 3	**Ash** *Fraxinus excelsior* **Bramble** *Rubus fruticosus* **Dogrose** *Rosa canina* **Clematis** *Clematis sp.*	**It extends west from the end of Hedge No. 2 along the southern boundary with the M50 to the eastern end of Hedge No. 4.** It is of an early mature age class in fair condition physiologically and poor condition structurally. It forms part of the southern boundary with the M50 motorway. It has been allowed to grow unmanaged for some time and Bramble, Dogrose and Clematis have heavily colonised the line. A3 | --- | A2 | ---							Cut Bramble and Dogrose back into the hedge line. Clear out poor quality sections and carryout infill planting of similar hedge species to bulk up and improve its structure.		C2
Hedge No. 4	**Ash** *Fraxinus excelsior* **Sycamore** *Acer pseudoplatanus* **Birch** *Betula pendula* **Elder**	**It extends west from the end of Hedge No. 3 along the southern boundary to the south western end of the Hedge No. 5.** It is a planted hedge of a semi mature age class in fair/ good condition physiologically and fair/ poor condition structurally. It forms part of the southern boundary with the M50 motorway. It has been allowed to grow unmanaged for some time and Bramble has heavily colonised parts of the line. The Bramble is also encroaching out into the field due to lapsed management.							Trim in encroaching hedge species and tidy up Bramble to reduce competition with planted hedge.		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	Remaining Contribute in years	Cat. Grade
								N-north **S**-south **E**-east **W**-west **C-Ht.**-crown height **Phys.**-physiological	**Cat.**-Category **-A-**average		
	Sambucus nigra **Bramble** *Rubus fruticosus* **Dogrose** *Rosa canina*	A4	---	A4	---						
Hedge No. 5	**Hawthorn** *Crataegus monogyna* **Elder** *Sambucus nigra* **Goat Willow** *Salix caprea* **Bramble** *Rubus fruticosus* **Dogrose** *Rosa canina*	**It extends north-east from the end of Hedge No. 4 along the western boundary of the site area to the north-western end of the Hedge No. 6.** It is of a mature age category in fair condition physiologically and structurally. It forms the western boundary of the site area and it is a short hedge with a few gaps along the line. It has been allowed to grow unmanaged for some time and Bramble has heavily colonised parts of the line. The Bramble is also encroaching out into the field due to lapsed management. A5 --- A4 --- **The following trees are located along this hedge line.**							Cut Bramble and other encroaching hedge species back into the hedge line to contain width and improve structure.		C2
Tree No. 3	**Ash** *Fraxinus excelsior*	11	#250	4N 4S 3E 3W	3	Early Mature	Fair/ Good	Fair Located just off the M50 boundary. Heavy undergrowth has limited access and the visual inspection of the base. It has a well-balanced crown and It has the potential to form part of the long-term cover in this area.	No works required at the present time.	20-40	B1
Tree No. 4	**Ash** *Fraxinus excelsior*	10	#250	4N 5S 3E 4W	2	Early Mature	Fair /Good	Fair Growing up over the hedge line with a large spreading crown. Heavy undergrowth has limited access and the visual inspection of the base. It has the potential to form part of the long-term cover in this area.	No works required at the present time.	20-40	B1
Hedge No. 6	**Blackthorn** *Prunus spinosa* **Elder** *Sambucus nigra* **Bramble**	**It runs at ninety degrees to Hedge No.5 in a south-east direction to the junction of Hedge Nos. 3 & No. 4. The western part forms a site boundary with the adjoining field, while the eastern part forms an internal site boundary between two fields within the site area.** It is of a mature age class in fair condition physiologically and structurally. It is not continuous over its length, especially around Tree No. 1961. It has been allowed to grow unmanaged for some time and							Cut back top and sides to contain height/ spread and to improve structure. Cut Ivy at ground level.		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	Remaining Contribute in years	Cat. Grade
								N-north **S**-south **E**-east **W**-west **C-Ht.**-crown height **Phys.**-physiological	**Cat.**-Category **-A-**average		
	Rubus fruticosus **Dogrose** *Rosa canina*	Bramble has colonised and is now dominating sections of the hedge line. A3 --- A4 --- **The following trees are located along this hedge line.**									
1961	**Ash** *Fraxinus excelsior*	10	550	5N 5S 6E 5W	2	Early Mature	Fair/ Good	Fair A single stem tree growing up out of the hedge bank and there are signs of past storm damage in the crown with broken branches and branch stubs present. It has also suffered considerable bark damage from grazing animals on the northern side of the main stem. Heavy Ivy growth extends up into the crown increasing the crowns windsail.	Retain for now as part of the bulking of the area. Cut Ivy at ground level. Remove dead Bramble from around base.	10 – 20	C2
Tree No. 5	**Ash** *Fraxinus excelsior*	12	400	4N 7S 4E 5W	2	Early Mature	Fair	Fair A single stem tree growing up out of the hedge bank. There is a Hawthorn growing up at the base. Heavy understorey of Bramble and Hawthorn has restricted access and the visual inspection of the base. There is dieback present on the north side of the tree and the crown contains deadwood throughout.	Cut back vegetation at the base of this tree to allow access and to carry out further inspection. Remove large size dead/ unstable growth	10-20	C2
Hedge No. 7	**Ash** *Fraxinus excelsior* **Blackthorn** *Prunus spinosa* **Hawthorn** *Crataegus monogyna* **Elder** *Sambucus nigra*	**It runs at ninety degrees from the middle of Hedge No. 6 in a north-east direction to Hedge No. 8. It forms part of the western boundary of the site area.** It is of a mature age class in fair / good condition physiologically and structurally. It consists of clumps of Hawthorn sticking up over the remaining hedge vegetation which is being dominated by Bramble and Dogrose. It has been allowed to grow unmanaged for some time and Bramble has colonised and is now dominating large sections of the hedge line. A4 --- A4 ---							Cut back top and sides to contain height/ spread and to improve structure. Cut Ivy where it is heavy on hedge plants at ground level.		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	Remaining Contribute in years	Cat. Grade
								N-north **S**-south **E**-east **W**-west **C-Ht.**-crown height **Phys.**-physiological	**Cat.**-Category **-A-**average		
	Bramble *Rubus fruticosus* **Dogrose** *Rosa canina*										
Hedge No. 8	**Ash** *Fraxinus excelsior* **Blackthorn** *Prunus spinosa* **Hawthorn** *Crataegus monogyna* **Elder** *Sambucus nigra* **Bramble** *Rubus fruticosus* **Dogrose** *Rosa canina*	**It runs at ninety degrees from the northern end of Hedge No. 7 in a south-east direction. It forms part of the northern boundary of the site area.** It is of a mature age class in fair / poor condition physiologically and structurally. It has been allowed to grow unmanaged for some time and Bramble and Ivy have colonised and are now dominating the hedge line. The hedge has been broken back on the southern side during past clearance works and this has impacted on the hedge structure. A3 --- A4 --- **The following trees are located along this hedge line.**								Cut back top and sides of hedge to contain height/ spread and to improve structure. Cut Ivy at ground level.		C2
1962	**Ash** *Fraxinus excelsior*	15	600/ 580/ 560	4N 7S 7E 7W	2	Mature	Fair	Fair/ Poor A multi-stem tree from near ground level with an acute union formation between the stems creating a structural weakness. Heavy Ivy cover extends high into the crown increasing the crowns windsail of the crown and leaving it more prone to storm damage. There is light deadwood throughout the crown.	Cut Ivy at ground level at present Remove dead/ unstable growth.	10-20	C2
1963	**Ash** *Fraxinus excelsior*	17	390/ 400	5N 5S 5E 5W	3	Mature	Fair	Fair / Poor A twin-stem tree with an acute union formation from near ground level creating a weak union formation. The bark on the northern side of the stems has been extensively damaged by grazing animals. This has resulted in damage to the crown which is quite light and open with deadwood	Cut Ivy at ground level at present and monitor condition.	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	Remaining Contribute in years	Cat. Grade
								N-north **S**-south **E**-east **W**-west **C-Ht.**-crown height **Phys.**-physiological	**Cat.**-Category **-A-**average		
								throughout. Heavy Ivy cover is extending up into the crown increasing the crowns windsail.			
1964	**Monterey Cypress** *Cupressus macrocarpa*	22	2050	12N 11S 12E 10W	1.8	Mature	Fair	Fair A very large, prominent, visually significant tree in the local treescape. Multi-stem from c.1m, with several very large stems and an acute union formation between stems creating a structural weakness. A scaffold limb has broken out on the northern side leaving a tear wound. There is a large stub on the south side at c.2m where a large limb failed in the past leaving wood exposed to decay. There is some bark damage on the western side due to grazing animals. Some buttress roots have been exposed by soil erosion around the base and the crown contains naturally suppressed deadwood.	Restrict access to the base of the tree by grazing animals. This tree would require a large open space to allow for its retention. Make safe large size deadwood and lighten in heavy side limbs/ branches, particularly those left open / exposed by past storm damage. Remove failed limb lying on the ground.	20+	B2
Hedge No. 9	**Leyland Cypress** *Cupressus leylandii*	**Located to the north of the house, it extends in an east – west direction for a short distance.** It is of an early-mature age class in fair condition physiologically and structurally. Most likely planted as a short hedge in the past, it has been allowed to grow unmanaged for some time. A13 --- A4 ---							Reduce the height by 2-3 m and cut back the sides by 1m to contain.		C2
1965	**Sycamore** *Acer pseudoplatanus*	12	560/ 220/ 240	4N 6S 5E 6W	1.8	Early Mature	Fair	Fair A multi stem tree from near ground level, it is growing on the remnants of an old stone wall. It is growing up under the larger tree No. (1966) and the crown is somewhat suppressed on the northern side with an	No works required at the present time.	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	Remaining Contribute in years	Cat. Grade
								N-north **S**-south **E**-east **W**-west **C-Ht.-**crown height **Phys.-**physiological	**Cat.-**Category **-A-**average		
								asymmetrical crown as a result. There are a few small sites of decay present.			
1966	**Monterey Cypress** *Cupressus macrocarpa*	20	1800	8N 8S 7E 9W	1.5	Mature	Fair/ Poor	Fair A large, visible, single stem tree in this area. It divides at c.0.5m. There are signs of storm damage with broken branches and hangers present in the crown. There is a lot of material dumped around the base which should be removed. There is a lot of tip die-back throughout the crown as a result of the infection by 'Coryneum Canker' Monterey Cypress.	Remove storm damaged material and large size deadwood. Remove materials from around the base of the tree.	10-20	C2
1967	**Sycamore** *Acer pseudoplatanus*	12	460	6N 0S 6E 2W	1.8	Early Mature	Fair	Poor Growing up underneath Tree No. 1966, the crown is being suppressed on the south / west side and structure is poor and weighed out to the north and east for light as a result. There are broken branches from Tree No. 1966 resting in the crown. There is decay present at the base on the southern side extending some distance into the main stem.	Retain as bulking at present and remove hangers from the crown.	10+	C1
1968	**English Elm** *Ulmus procera*	9	230	7N 0S 3E 0W	1.8	Early Mature	Fair	Poor A self-sown seedling growing out of a small bank. It is being suppressed by the larger Tree Nos. 1967 and 1966 and is being drawn up and to the north for light. This has resulted in an unbalance crown and poor structure.	Retain for now as part of the bulking of this area.	10+	C1
1969	**Elm** *Ulmus glabra*	10	230/ 250	6N 0S 1E 5W	1.8	Early Mature	Dead	Poor It is standing dead as a result of "Dutch Elm Disease" and will become decayed and unstable.	I would recommend **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	Remaining Contribute in years	Cat. Grade
								N-north **S**-south **E**-east **W**-west **C-Ht.**-crown height **Phys.**-physiological	**Cat.**-Category **-A-**average		
1970	**Elm** *Ulmus glabra*	7	220	3N 2S 3E 3W	2	Early Mature	Fair	Fair A single stem tree to c.2.5m from where it divides into a number of stems with a reasonably well-balanced crown. The main stem has a slight lean to the south at the base before turning vertical.	Retain for now as part of the bulking of this area.	10+	C1
1971	**Sycamore** *Acer pseudoplatanus*	16	700	3N 5S 3E 6W	2	Mature	Fair	Fair/ Poor It is growing up with Tree No. 1972 with a combined canopy. There is an overhead power line located immediately to the west and it has been pruned back in the past to clear the power line, leaving the crown more asymmetrical and it will require pruning again in the near future to maintain clearance. Very heavy Ivy growth extends high into the crown increasing the crowns windsail. There is decay present at the base on the southern side extending into the main stem.	Cut Ivy at ground level. Clear vegetation from the base and review basal decay.	10-20	C2
1972	**Sycamore** *Acer pseudoplatanus*	16	1000/ 480	4N 8S 8E 3W	1.8	Mature	Fair	Fair/ Poor Growing up with Tree No. 1971 with a combined canopy, there is an overhead power line located immediately to the west and the stem on the west side has been cut back in the recent past, leaving crown more asymmetrical. It is growing on a low bank / stone wall with a lean to the east. There is a large scaffold limb extending c.4m to the east which is resting on the top of the stone wall before turning vertical.	Cut Ivy at ground level. Retain for now as part of the bulking of the area.	10-20	C2
1973	**Sycamore** *Acer pseudoplatanus*	16	1060	8N 7S 7E	2	Mature	Fair / Good	Fair A large prominent tree growing on the boundary fence / wall, which has been	No works required at the present time.	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	Remaining Contribute in years	Cat. Grade
								N-north **S**-south **E**-east **W**-west **C-Ht.**-crown height **Phys.**-physiological	**Cat.**-Category **-A-**average		
				5W				displaced by the tree. It divides at c.1.8m into several large stems which are growing in a co-dominant manner. The barbed wire fence attached to the main stem has become embedded on the south and west sides of the lower trunk. There is light deadwood present in the crown.			
1974	**Sycamore** *Acer pseudoplatanus*	6	220	3N 3S 3E 3W	2	Early Mature	Fair / Good	Fair / Poor A single stem tree growing out of the base of the stone wall with a lean to the north before turning vertical. Heavy Ivy growth is extending up into the crown increasing the crowns windsail and it is beginning to interfere with the overhead utility line.	Cut Ivy at ground level. Retain for now as part of the bulking of the area. It will require ongoing pruning to maintain clearance with the overhead utility line.	10+	C2
Tree No. 6	**Sycamore** *Acer pseudoplatanus*	12	400	4N 4S 4E 4W	2	Early Mature	Fair / Good	Fair/ Poor Self-seeded and growing on top of the boundary wall causing structural damage to the wall. It is being suppressed by Ivy and is possibly located outside the site area.	It will need to be removed to prevent further structural damage to the boundary wall.	<10	U
1975	**Sycamore** *Acer pseudoplatanus*	14	860	7N 6S 6E 7W	2	Mature	Fair/ Good	Fair It single stem tree growing on a small soil mound in a somewhat sheltered position. It has a well-balanced crown.	No works required at the present time.	20+	B2
Tree Group No.1	**Sycamore** *Acer pseudoplatanus*	A14	A400	A4N 4S 4E 4W	A2	Early Mature	Fair	Fair Located on the adjoining property side of the stone boundary wall and have a crown overhang into the site area. It consists of a group of most likely self-seeded trees growing up together to form part of the one group canopy formation. Some stems are	Management is outside the control of the site area.	10-20	C2

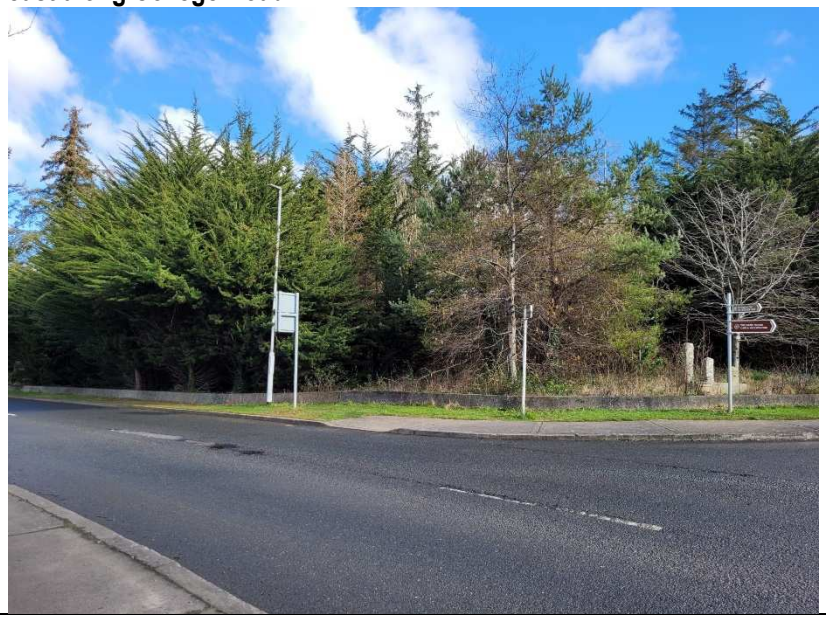
Tree No.	Tree Species	Ht. (m)	Stem Dia. (mm)	Branch Spread (m)	C-Ht. (m)	Age Class	Phys. Con.	Structural Condition Other Comments	Preliminary Recommendation	Remaining Contribute in years	Cat. Grade
								N-north **S**-south **E**-east **W**-west **C-Ht.-**crown height **Phys.-**physiological	**Cat.-**Category **-A-**average		
								growing from the base of the boundary wall and may cause structural damage long term.			
Hedge No.10	**Blackthorn** *Prunus spinosa* **Hawthorn** *Crataegus monogyna* **Elder** *Sambucus nigra* **Bramble** *Rubus fruticosus* **Dogrose** *Rosa canina*	**It extends eastwards along the northern boundary with the adjoining property with the bulk of the hedge vegetation located on the site side of the low stone boundary wall.** It is of a mature age class in fair / poor condition physiologically and structurally. It has been allowed to grow unmanaged for some time and Bramble and Ivy have colonised and are now dominating the hedge line and encroaching out to create a broader hedge. A4 --- A6 ---								Cut back top and sides of hedge to contain height/ spread and to improve structure. Cut Ivy at ground level.		C2
		The following trees are located along the front boundary wall with Whitechurch Road. This area is marshy/wet and has a stream running through it with the bank dominated by scrub predominantly Bramble with some establishing trees. On the inside of the boundary wall, some tree planting with Oak has been added in recent years as part of an upgrade of the Whitechurch Road.									
Tree No. 7	**Willow** *Salix sp.*	9	700	8N 0S 3E 4W	1	Mature	Fair	Poor A large tree which has broken out and the branches are resting out to the north on the ground, yet, continuing to grow. It is also sprouting from the point where it has broken out. Ivy cover on the stem has restricted the visual inspection and this area is waterlogged.	Retain as part of the bulking of this area Cut Ivy at ground level.	10+	C2
Tree No. 8	**Sycamore** *Acer pseudoplatanus*	8	200	2N 1S 1E 2W	4	Early Mature	Fair	Fair It has grown up between Tree No. 6 and Tree No. 8 and has been drawn up for light due to competition. There is very heavy Ivy growth extending up into the crown which is somewhat suppressed by the surrounding trees. This area is waterlogged.	Cut Ivy at ground level. Retain for now as part of the bulking of this area.	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	Remaining Contribute in years	Cat. Grade
								N-north **S**-south **E**-east **W**-west **C-Ht.**-crown height **Phys.**-physiological	**Cat.**-Category **-A-**average		
Tree No. 9	**Willow** *Salix sp.*	13	800	1N 9S 4E 9W	1.8	Mature	Fair	Fair/Poor A large tree which has partially collapsed out over the stream. Very heavy Ivy growth extends up into the crown, limiting the visual assessment and increasing the crowns windsail. It will require management to ensure that it does not cause an obstruction to the stream. This area is waterlogged.	It will require management to ensure that it does not cause an obstruction to the stream.	10+	C2
1976	**Ash** *Fraxinus excelsior*	8	320	3N 3S 0E 5W	1.8	Early Mature	Fair / Good	Fair A single stem tree, it has been somewhat suppressed by the adjacent, larger trees. There is heavy Ivy growth extending up into the crown, increasing the crowns wind sail.	Cut Ivy at ground level.	10-20	C2
Tree No. 10	**Oak** *Quercus robur*	11	280	3N 3S 3E 2W	2	Semi Mature	Good	Good Planted in the recent past, it is a single stem tree growing on the eastern side of the stream. It has the potential to form part of the long-term cover of the site.	No works required at the present time	40+	A1
1977	**Oak** *Quercus robur*	12	280	4N 4S 4E 4W	2	Semi Mature	Good	Good It is a single stem tree planted in the recent past. It has the potential to form part of the long-term cover of the site area.	No works required at the present time	40+	A1
1978	**Oak** *Quercus robur*	12	280	4N 4S 4E 4W	2	Semi Mature	Good	Good It is a single stem tree planted in the recent past. There is a broken branch on the east side, most likely recent storm damage. It has potential to form part of the long-term cover of the site area.	Prune back damaged branch on east side to target pruning point.	40+	A1
Notes:											

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	S	E	W				**N**=North **S**=South **E**=East **W**= West **Phys Con**. = Physiological Condition.	**A**= Average **C-Ht**= Crown Height		
Area 2			**A Condition Assessment of the trees and vegetation along College Road, 'Taylorsgrange', Co. Dublin.** **The survey commences at the entrance to 'Marlay Park' and proceeds west along the southern side of College Road to the Whitechurch Road junction.**											
Tree Line	**Rowan** *Sorbus aucuparia*	**It extends in a broadly east to west direction on the grass verge between college road and the boundary wall, with the M50 Motorway.**   It consists of a line of trees, I suspect initially planted at regular intervals into the grass verge along the boundary wall to the M50 Motorway. But, some of the trees have failed or have been removed, creating wider spacing between some trees. While there are signs of some replacement planting, with planting stakes and ties present, there are quite large gaps between some of the trees. **The following trees are located along this tree line.**									Remove or adjust planting stakes and ties where present. They will require repeat pruning to maintain clearance over the surrounding surface and structures.		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	**S**	**E**	**W**				**N**=North **S**=South **E**=East **W**= West **Phys Con**. = Physiological Condition.	**A**= Average **C-Ht**= Crown Height		
Tree Nos. 11 – 30	**Rowan cv.** *Sorbus aucuparia cv.* *(20 trees)*	A4	A120	A1	A1	A2	A1	A2	Young/ Semi Mature	Fair	Fair The trees are single stemmed to c.2m from where the crowns develop. Most of the trees have developed a lean to the east due to exposure to the prevailing wind. There are signs of mechanical damage to the base of some trees, most likely caused by mowing machinery. There are also tree ties and stakes present on some of the trees.	Adjust tree ties and stakes as appropriate.	10-20	C1
Tree Nos. 31 & 32	**Willow** *Salix sp* *(2 trees)*	A4	A70	A2	A1	A3	A1	A1	Young	Fair	Poor A pair of trees growing out of the base of the boundary wall. Most likely self-sown seedlings, they have a distorted structure. They have no long-term potential in this location.	I would recommend their **removal** as part of management.	<10	U
Tree Group (3 trees)	**Rowan** *Sorbus aucuparia* **Scots Pine** *Pinus sylvestris* **Griselinia** *Griselinia litoralis*	**This group is located on the southern side of the junction of College Road with the Whitechurch Road.**										Adjust tree ties and stakes as appropriate. Carry out pruning to lower crowns to maintain clearance over the adjoining surfaces and structures. They would also benefit from selective thinning and pruning of the	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	**S**	**E**	**W**				**N**=North **S**=South **E**=East **W**= West **Phys Con**. = Physiological Condition.	**A**= Average **C-Ht**= Crown Height		
		 It consists of a number of standard trees under-planted with large shrubs, planted on a steep embankment to a motorway bridge. **The following trees are located within this tree group.**										undergrowth, to reduce density and allow trees better quality space to develop. The undergrowth would also benefit from cutting back, to tidy and open up the area under the trees, reducing competition.		
Tree Nos. 33 & 34	**Rowan** *Sorbus aucuparia (2 trees)*	A. 3.5	A.80	A1	A1	A1	A1	A 1.8	Young	Fair	Fair Originally a short line of three trees, the central tree has failed. The planting stakes and ties are still attached.	Adjust / remove tree ties and stakes as appropriate.	10-20	C1
Tree No. 35	**Scots Pine** *Pinus sylvestris*	8	210	3	3	3	3	1	Semi Mature	Fair / Good	Fair A single stem tree that has established and is growing well.	No works required at the present time.	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
				N	**S**	**E**	**W**				**N**=North **S**=South **E**=East **W**= West **Phys Con**. = Physiological Condition.	**A**= Average **C-Ht**= Crown Height		
		The survey commences on the northern side of 'College Road' and works from east to west.												
Tree Nos. 36 – 38	**Rowan** *Sorbus aucuparia (3 trees)*	A4	A.100	A1	A 1.5	A1	A 1.5	A 1.8	Semi mature	Fair	Fair A short line of three trees planted into a short grass margin on the north side of College road near the Whitechurch Road junction. There are signs of damage at the base, most likely due to mowing machinery. The planting stakes and ties are still present on the central tree.	Adjust / remove tree tie and stake as appropriate	10-20	C1
Tree Group	**Scots Pine** *Pinus sylvestris* **Monterey Cypress** *Cupressus macrocarpa* **Larch** *Larix sp.* **Oak** *Quercus sp.* **Alder** *Alnus sp.*	**It is located on the northern side of the junction of College Road with the Whitechurch Road and extends to the east along College Road.** 										It would benefit from the tidying up of the undergrowth and some selective thinning, to reduce density to allow the better quality trees adequate space to develop and grow. Prune lower branches to open up the area and maintain clearance over the surrounding surfaces and structures.		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
				N	**S**	**E**	**W**				**N**=North **S**=South **E**=East **W**= West **Phys Con**. = Physiological Condition.	**A**= Average **C-Ht**= Crown Height		
		The planting is located behind a low concrete wall and consists of a mix of tree species planted at close centers. They have grown up together and share a group canopy formation, providing support and shelter to one another. Bramble and Ivy have established as an understorey. Sycamore and Alder seedlings are developing near the edges of the group. Collectively, they form an attractive landscape feature at this location. **The following trees form part of the outer canopy edge, bordering with the road.**											
Tree No. 39	**Scots Pine** *Pinus sylvestris*	6	230	0	2	3	3	0	Semi Mature	Fair	Fair It has been drawn up and out to the south for light due to competition from larger trees to the north, affecting structure. There is some bark wounding to the main stem.	Tidy up around the base. I would consider it for **removal**, as part of selective thinning of the group.	10+	C2
Tree No. 40	**Scots Pine** *Pinus sylvestris*	6	150	1	1.5	1	1	0	Semi Mature	Fair	Fair It has been drawn up and out to the south for light due to competition from larger trees to the north, affecting structure.	No works required at the present time.	20+	B2
Tree No. 41	**Scots Pine** *Pinus sylvestris*	7	170/ 90	0	2	2	2	1.5	Semi Mature	Fair / Good	Fair It divides low down with an acute union formation between the stems. This may affect the structure of this tree as it develops.	No works required at the present time.	20+	B2
Tree No. 42	**Monterey Cypress** *Cupressus macrocarpa*	6	180/ 180	1	4	1	3	1.5	Semi Mature	Fair/ Good	Fair / Poor It has been drawn out to the south for light, affecting its structure, and the crown extends out over the footpath. It divides at the base with an acute union formation between stems.	I would consider its **removal**, as part of selective thinning of the group.	10+	C2
Tree No. 43	**Scots Pine** *Pinus sylvestris*	9	260	1	4	2	1	0	Semi Mature	Fair / Good	Fair Branches are developing from low down	It would benefit from formative pruning to lift	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
				N	**S**	**E**	**W**				**N**=North **S**=South **E**=East **W**= West **Phys Con**. = Physiological Condition.	**A**= Average **C-Ht**= Crown Height		
											affecting the structure.	the crown.		
Tree No. 44	**Monterey Cypress** *Cupressus macrocarpa*	9	260	1	4	2	1	0	Semi Mature	Fair / Good	Fair It is a single stem tree feathered to ground level.	I would consider it for **removal**, as part of selective thinning of the group. If retained, it will require pruning to maintain clearance over surfaces.	10+	C2
Tree No. 45	**Monterey Cypress** *Cupressus macrocarpa*	9	380	1	5	2	3	0	Semi Mature	Fair / Good	Fair It is a single stem tree feathered to ground level. It has been drawn out to the south for light, due to overcrowding and competition.	I would consider it for **removal**, as part of selective thinning of the group.	10+	C2
Tree No. 46	**Monterey Cypress** *Cupressus macrocarpa*	10	600	3	2	2	1	0	Semi Mature	Fair / Good	Fair/ Poor Originally a twin stem tree from low down, the stems have grown up together to c.1.8m where they separate with a very acute union formation. This is a point of structural weakness. The stems are growing in a co-dominant manner.	I would consider it for **removal**, as part of selective thinning of the group.	10+	C2
Tree No. 47	**Scots Pine** *Pinus sylvestris*	7	250	1	3	2	3	0	Semi Mature	Fair / Good	Fair It has heaved at the base in the past but has re-stabilised.	It will require pruning in the future to maintain clearance over the footpath.	10-20	C2
Tree No. 48	**Larch** *Larix sp.*	7	150	1	1	1	0	0	Semi Mature	Fair / Good	Fair It has been drawn up for light, affecting the structure.	It will require pruning to maintain clearance over the footpath.	20+	B2
Tree No. 49	**Scots Pine** *Pinus sylvestris*	7	200	1	4	2	1	0	Semi Mature	Fair / Good	Fair It divides at c.3m into two co-dominant stems.	It will require pruning to maintain clearance over	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
				N	S	E	W				**N**=North **S**=South **E**=East **W**= West **Phys Con**. = Physiological Condition.	**A**= Average **C-Ht**= Crown Height		
												the footpath.		
Tree No. 50	**Scots Pine** *Pinus sylvestris*	7	200	1	3	2	2	0	Semi Mature	Fair / Good	Fair It has been drawn up for light, affecting the structure.	It will require pruning to maintain clearance over the footpath.	20+	B2
Tree No. 51	**Monterey Cypress** *Cupressus macrocarpa*	10	460	2	4	1	4	0	Semi Mature	Fair / Good	Fair A single stem tree with a minor stem beginning to develop. This will affect the structure in the future.	I would consider it for **removal**, as part of selective thinning of the group.	10+	C2
Tree No. 52	**Scots Pine** *Pinus sylvestris*	7	220	1	1	0	1	0	Semi Mature	Fair	Fair It has been drawn up for light, affecting its structure.	No works required at the present time.	20+	B2
Tree No. 53	**Oak** *Quercus sp.*	6	200	2	4	1	2	1.6	Semi Mature	Fair / Good	Fair / Good It divides at c.2.4m from where a number of stems develop into the crown. It has potential to form part of the long-term cover in this area.	No works required at the present time.	20+	B2
Tree No. 54	**Scots Pine** *Pinus sylvestris*	10	380	3	4	3	2	0	Early Mature	Fair / Good	Fair It divides at c.4m into two stems with an acute union formation between the stems. Ivy is starting to develop on the main stem.	No works required at the present time.	20+	B2
Tree No. 55	**Alder** *Alnus sp.*	10	260	2	4	1	2	0	Semi Mature	Fair / Good	Fair A single stem tree growing up on the edge of the group.	No works required at the present time.	20+	C2
Tree No. 56	**Scots Pine** *Pinus sylvestris*	9	360	1	1	0	3	0	Semi Mature	Fair / Good	Fair It has been drawn up for light due to competition and this has affected its structure.	No works required at the present time.	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	**S**	**E**	**W**				**N**=North **S**=South **E**=East **W**= West **Phys Con**. = Physiological Condition.	**A**= Average **C-Ht**= Crown Height		
Tree Nos. 57 -61	**Monterey Cypress** *Cupressus macrocarpa*	A10	A360	A4	A4	A4	A4	A1	Semi Mature	Fair / Good	Fair A short line of trees extending along the road side boundary of this tree group behind the low plinth wall. They are growing up forming part of the overall group canopy formation and provide support shelter to one another. Their crowns extend out towards the road and pruning has been carried out on the lower branches to maintain clearance with the road and public footpath.	They will require ongoing pruning to maintain clearance with the public footpath and road. I would consider their **removal** as part of selective thinning of the group. The surrounding trees will need to be reviewed for wind exposure and additional trees may need to be removed or pruned to address this as part of the management of this overall group.	10+	C2
Notes:														