

Parks & Landscape Services Section, Municipal Services Department

Proposed Development of an All-Weather Pitch at Coláiste Eoin/Íosagain PC/PKS/01/18

Appendix 3 – Tree Survey & Report



94 Ballybawn Cottages, Enniskerry, Co. Wicklow

Tel: 2742011 Mobile: 087-2629589 Email: arborist@eircom.net

Ref: CES08976788

28th March 2018

For the Attention of Mr. Eoin O'Brien

Executive Parks Superintendent Parks and Landscape Services Municipal Services Department Dùn-Laoghaire Rathdown County Council County Hall Marine Road Dùn-Laoghaire Co. Dublin

Folim Shoridan

Dear Mr. O'Brien,

<u>Re: An Arboricultural Assessment of the Trees on the Site Area for an All Weather</u> <u>Pitch at 'Colàiste Eoin', Stillorgan Road, Booterstown, Blackrock, Co. Dublin.</u>

I inspected the tree vegetation within the above site area and the proposed all weather pitch layout drawings forwarded to me as requested and I am pleased to submit the attached arboricultural assessment and tree protection measures.

If you require further information please do not hesitate to contact us, and we will do our best to be of assistance.

Yours sincerely, For Arborist Associates Ltd.

Felim Sheridan

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).

Arborist Associates Ltd.

An Arboricultural Assessment of the Trees on the Site Area for an All Weather Pitch at 'Colàiste Eoin', Stillorgan Road, Booterstown, Blackrock, Co. Dublin.

Prepared for: Dùn-Laoghaire Rathdown County Council.

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

Date: 28th March 2018

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

1.0 <u>Instructions</u>

- 1.1 I have been instructed by Dùn-Laoghaire Rathdown County Council to assess the site area for a new all weather pitch within the grounds of 'Colàiste Eoin', Stillorgan Road, Booterstown, Blackrock, Co. Dublin and report on the following:
 - A To assess the present condition of the tree vegetation within this site area. See condition tree assessment schedule within 'Appendix 1' of this report and drawing 'No.CES001' which has been prepared as a constraints drawing for details.
 - **B-** To assess the impact of the proposed development layout on the tree vegetation located within and adjoining the site area indicating those for removal and retention. See 'Section 5.0' of this report and 'Drawing No. CES002 for detail.
 - **C-** To show on this drawing (No.CES002) the line of protective fencing to be erected around the tree vegetation being retained along with other mitigation measures to aid in their successful retention.

2.0 <u>Report Limitations</u>

- 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.

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 this site area, to prepare an arboricultural implication study and to recommend tree protective measures for those trees for retention within the proposed development.
- 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 trees locality including its contributions to other features as well as to the site as a whole.
 - Cultural value additional contributions made such as conservation, historical, commemorative value.
- 3.4 The trees have been divided into one of the following categories, in accordance with the cascade chart illustrated in table 1 of BS 5837:2012. The classification process begins by determining whether the tree falls within the (U) category, if not then the process will continue by assuming that all trees are considered according to the criteria for inclusion in the high category (A). Trees that do not meet these strict criteria will then be considered in light of the criteria for inclusion in the moderate category (B) and failing this, they will be allocated a low category (C).

The following summarizes each of the categories:

Category U – Those trees in such a condition that any existing value would be lost within 10 years.

These would be seen as trees that have little or no potential either due to their physiological and/or structural condition and their removal would be seen necessary either now or in the short-term as the most appropriate management option.

The category 'U' trees have been identified on our drawings (Nos. CES001 & CES002) 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.

These would be seen as trees that have the potential to contribute to the tree cover of these grounds for the long-term and consists of trees of all age classes from semi-mature to mature.

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

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

These would be seen as trees that have the potential to contribute to the tree cover of these grounds for the medium term and consists of trees of all age classes from semi-mature to mature.

The category 'B' trees have been identified on our drawings (Nos. CES001 & CES002) with a 'Blue' donut around their trunk positions.

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

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

The category 'C' trees have been identified on our drawings (Nos. CES001 & CES002) with a 'Grey' donut around their trunk positions.

3.5 The trees have been plotted onto the attached drawing (Dwg No.CES001) by a land survey company and their positions are assumed accurate. This drawing has been developed as a constraints drawing to aid the design team in the layout of the development and the tag numbers referred to in the condition tree report have been shown on this drawing along with their crown spreads and their retention category colour coded as recommended by BS 5837 2012. The constraint (Minimum Root Protection Area) for each tree has been shown with an 'Orange Circle' and all proposed development should be planned to be positioned outside those trees proposed for retention allowing for additional space for construction activities.

The Root Protection Area (RPA) is the minimum area around individual trees to be protected from disturbance during construction works; RPA is usually expressed as a radius in metres measured from the tree stem. Any deviation in the RPA from the original circular plot takes account of the following factors whilst still providing adequate protection for the root system: a) The morphology and disposition of the roots, when influenced by past or existing site conditions (e.g. the presence of roads, structures, drainage ditches and underground apparatus);

b) Topography and drainage;

c) The soil type and structure;

d) The likely tolerance of the tree to root disturbance or damage, based on factors such as species, age, condition and past management.

4.0 <u>Summary of Survey Findings.</u>

- 4.1 The site area is broadly triangular in shape and is bounded to the north by the entrance roadway and the visitor car park to the school, along the eastern boundary by the school and staff car parking area, to the south by existing residences and along the western boundary by the 'Stillorgan Road'.
- 4.2 The northern and eastern boundaries are undefined while the southern boundary is defined by a 2.5m high concrete block wall along the residential development of 'Hampton Park', while the western part of this boundary along by 'Thornwood Apartments' development is defined by a 2.4m high weld mesh fence and the remnants of an old low wall which is in disrepair and the western boundary is defined by a 2m high concrete block wall. The site is currently maintained in grass and used as a football pitch. The tree vegetation is located along the western and southern boundaries of the site area.
- 4.3 The southern boundary consists of trees located at intervals along the boundary and most would have previously formed part of an old boundary hedge line, the bulk of which has been removed or lost over the years with some trees having been added/ planted in to the front of this to help bulk it up. Tree species include Beech, Ash, Sycamore, Lime, Hawthorn, Elder and Walnut. Many of the trees have been heavily pruned back particularly at the western end bordering with the apartments while those along the eastern end of the southern boundary may have been impacted upon by the construction of the adjacent boundary wall to the 'Hampton Park' development.
- 4.4 The western boundary consists primarily of an early -mature double row shelter belt of coniferous trees, primarily Monterey Pine and Leyland Cypress with some individual deciduous trees, consisting of Birch, Oak, Norway Maple and Horse Chestnut located on the inside of this. At the southern end, the belt ends short, before the site boundary where there are a small number of tree species such as Beech, Sycamore and Ash, some of which have established here from seed.
- 4.5 Within the overall site area, 45No. trees were tagged individually with four trees located on the adjoining properties to the south along with one tree belt having been numbered numerically.

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

Category Grade	No. of trees
Category U 8 trees	Tree Nos. 1910, 1912, 1913, 1930, 1934, 1938, 1941 & 1942
Category A 0 trees	No Trees
Category B 3 trees	Tree Nos. 1917 & 1929 Tree No. 1
Category C 38 trees + 1 tree belt	Tree Nos. 1901, 1902, 1903, 1904, 1905, 1906, 1907, 1908, 1909, 1911, 1914, 1915, 1916, 1918, 1919, 1920, 1921, 1922, 1923, 1924, 1925, 1926, 1927, 1928, 1931, 1932, 1933, 1935, 1936, 1937, 1939, 1940, 1943, 1944 & 1945 Tree Nos. 2, 3, 8, 4
	Tree Belt No. 1
Total	49Trees + 1Tree Belt

5.0.0 Arboricultural Implication Study

5.1.0 Introduction

- 5.1.1 It is being proposed to develop this section of 'Colàiste Eoin' grounds for an all weather pitch and it will be necessary to allow for services in and out of this area. This area has already been developed as a grass pitch and to facilitate this, soil alteration/disturbances have occurred.
- 5.1.2 This section of the document is designed to assess the potential impact of these proposed works on the tree vegetation within and adjoining this site area and to look at the necessary measures that will need to be undertaken to help retain the trees shown for retention free from adverse impacts for the duration of the construction period.
- 5.1.3 Great care and consideration has been given to the layout of the proposed pitch to ensure minimal impact on the overall tree vegetation. Where development works such as grade changes are required within the root zones of trees being retained; techniques and measures to minimize impact have been considered and implemented into the development strategy such as using retaining wall structures to minimize the extent of grading required.
- 5.1.4 On drawing No.CES002, I have identified the tree vegetation to be removed to facilitate these works and as part of 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. The protective fencing required around the trees to be retained has been shown on this drawing using 'Orange Hatching'. These tree protection measures will need to be scheduled into the programme of works to ensure the fencing is installed prior to the works commencing. It will be important that these fences are maintained in place until all works are completed. This fencing is to protect the root zones and where possible, the crown spreads of the trees and to ensure their successful integration into the completed development of these grounds.
- 5.1.5 The comments made within this impact assessment study are based on my understanding of the proposed development works and what is required to allow for its construction.

5.2.0 Impact Assessment

5.2.1 To accommodate the proposed works and as part of active management on these grounds, the following trees are proposed for removal:

Category Grade	No. of trees for removal
Category Grade	
Category U	Iree Nos. 1910, 1912, 1913, 1930, 1934, 1938, 1941 &
8 trees	1942.
	From this list, only two trees (Nos. 1910 & 1941) are directly affected by the proposed development with the remaining trees being recommended for removal as part of active management due to their condition physiologically and/or structurally.
Category A	No Trees
0 tree	
Category B 0 trees	No Trees
Category C 22 trees +	Tree Nos. 1911, 1914, 1924, 1925, 1943, 1944 & 1945 plus a c.22m section of tree belt No.1 at its northern end. This contains 15No. trees (No.1-15) made up of three Monterey Pines (Nos.6, 8 & 10) with the remaining trees being Leyland Cypress.
Total	30 trees

- 5.2.2 The greatest concentration of tree loss is along the western boundary at the northern end. The impact of this and any other tree loss from this site area will be mitigated with the use of new tree, shrub and hedge planting within the completed landscaped development. See landscaped drawings and schedules for detail.
- 5.2.3 In some areas particularly along the southern boundary in front of tree Nos.1907 1923, the grade change from the new finished pitch level to the existing ground levels around the trees will encroach into the calculated root zones of these trees and may have a negative impact. This will need to be reviewed on site and if required, retaining structures are to be used within this area to minimize impact on these trees to ensure their successful retention.
- 5.2.4 The remaining trees are to be retained and some will require pruning to address physiological and structural issues in order to promote safety to this pitch and the surrounding area. Some trees will require additional pruning of their side crowns to achieve a satisfactory juxtaposition with the completed pitch. It is also being recommended that the Leyland Cypress trees within tree belt No.1 be reduced in size particularly height in order to start the process of releasing the Pine trees which are the better quality trees so that they can develop their own independent crowns and this in time will allow the Leyland Cypress trees to be removed.
- 5.2.5 Within the finished pitch development, as is the current situation, trees will be positioned within close proximity to buildings and usable surfaces and 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.

5.2.6 Any new tree planting carried out will require maintenance to ensure its establishment and to encourage good growth habits and to alleviate any safety concerns that they may present as they grow in size.

ltem	Protection Measures
Tree Pruning	As part of the initiating works, the crowns of some of the trees are to be pruned to clean out dead/unstable growth, the pruning of individual limbs/branches or entire crowns to reduce size due to structural weaknesses or to improve their juxtaposition within the built environment. A list of these works is given within the condition tree assessment in 'Appendix 2' of this report.
	All tree felling and pruning work need to be carried out by qualified and experienced tree surgeons in accordance with <i>BS3998 (2010) Tree Work – Recommendations.</i>
	All trees for removal will need to be reviewed by the project ecologist for wild life and especially Bats.
	Trees are to be felled to stumps and any stumps of trees that need to be removed and in particular those which are located within the root zone of trees being retained are to be ground out using a mechanical stump grinder taking care not to cause root damage to the trees being retained.
Tree Protection	Trees being retained will need to be protected from unnecessary damage during the construction process by effective construction-proof barriers that will define the limits for machinery drivers and other construction staff.
	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.CES002) prior to any soil disturbance and excavation work starting on site.
	The construction works are only to be allowed commence once the tree protection fencing and other mitigation measures have been put in place to the satisfaction of the project Arboriculturist.
	The fencing will need to be inspected on a regular basis during the duration of the construction process and shall

5.3.0 Main items for consideration during the proposed construction process:

ltem	Protection Measures
	remain in place until heavy building and landscaping works 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 and unnecessary pressures are put on the root zones of the trees.
	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 unless authorized and supervised by the project Arboriculturist.
	Where work space 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 on site and installed to their recommendations.
	Care should be taken when planning site operations to ensure that wide or tall loads or plant with booms, jibs and counterweights can operate without coming into contact with retained trees. Such contact can result in serious damage to them and might make their safe retention impossible.
	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 are not be lit in a position where their flames can extend to within 5 m of foliage, branches or trunks. 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, material storage and contractor parking should all be outside the work exclusion zone.
Services	It is my understanding from the service drawing provided that the services entering and leaving the site area are routed so they run outside the RPA (Root protection Area) of the tree vegetation being retained. See project engineer's

ltem	Protection Measures							
	drawings for detail for service routes.							
	Prior to the installation of any services routed near trees, they are to be marked out on site for review by the project Arboriculturist and a detailed method statement is to be prepared by the installation contractor in conjunction with the project Arboriculturist on how these services are to be installed while providing protection to the tree vegetation shown for retention.							
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. Recommendations of sections 8 of BS5837 2012 are to be adhered to during the landscaping within the RPA's of these trees.							
	The following needs consideration during the final landscaping works:							
	 The finish ground levels within the root zone of the trees will need consideration and how these will be incorporated into the completed landscaped area. It will be important that existing levels within the root zone of the tree vegetation are maintained as is and any level differentiation dealt with outside these zones either using retaining walls or grade changes working out away from the trees. The machinery that is required to complete the landscaping works should not be allowed to work within the root zone of trees and where necessary for machine works, these need to be positioned outside the root zone and reach into the root zones to work. Preparation of the ground for landscaping and excavation within the root zone of the tree vegetation being retained. Where the ground needs to be prepared for landscaping such as grass seeding, a thin layer (100mm) of soil should be spread over the area within the root zones to create a seed bed for seeding. 							
Boundary	It is my understanding that the existing boundary treatments							
i reatments	within the root zones of the trees are being retained and							
	In some areas to facilitate the works to boundaries, it will be							

ltem	Protection Measures
	necessary to cut back the undergrowth. Again, this should be kept to a minimum. To allow for these works, it will be necessary to ensure that the ground required for a works area is protected from damage and compaction by the use of boarding or similar as per section 6 of BS5837 2012. All works within the root zone of the trees being retained will need to be undertaken with great care and no machinery is to be allowed to operate within the root zone of these trees.

5.4.0 Monitoring

- 5.4.1 Any construction works within close proximity to retained trees are advised to be undertaken in accordance with approved method statements prepared by the construction contractor under the direct supervision of a qualified consultant Arboriculturist. Therefore, during the construction works, a professionally qualified Arboriculturist is recommended to be retained by the principal contractor or site manager to monitor and advice on any works within the RPA of retained trees to ensure successful tree retention and planning compliance.
- 5.4.2 It is advised that tree protection fencing, any required special engineering and supervision works must be included in the main tender documents, including responsibility for the installation, cost and maintenance of tree protection measures throughout all construction phases.
- 5.4.3 Copies of the tree retention and protection plan (Dwg No. CES002) 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 carried out in accordance with these documents.
- 5.4.4 On the completion of the construction works, all trees retained are to be reviewed by the project Arboriculturist and any necessary remedial tree surgery works required to promote the health and safety of the trees 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.CES002 for the position of the protective fencing and other mitigation measures.
- 6.3 The protection of the tree vegetation shown for retention within this proposed development is divided into three main sections starting with the preconstruction stage right through to post construction and the reassessment of the retained trees.

<u>Stage 1</u>

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 client 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 client or main contractor 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 <u>must be</u> 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 client or the main contractor is to appoint a tree surgery company competent of carrying out the remedial tree surgery works and tree felling that are required on this site. The tree surgery contractor is to produce a method statement detailing how they plan to undertake the works and informing the site foreman of the process so the necessary steps can be taken to ensure the works are carried out safely and efficiently. The works are to be carried out by appropriately trained personnel taking account of the recommendations of BS3998 2010.
- 6.6.2 Tree removal Trees for removal are to be identified by the project Arboriculturist and the method of removing the stumps is to be carried out to the recommendations of the project Arboriculturist. The trees in the way of the development layout are to be removed in such a manner not to cause damage to those being retained. Where necessary to avoid damage to the trees to be retained, these are to be removed in sections by a tree surgeon (Arborist). Where necessary, the roots and stumps are to be dug or ground 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 only 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 **<u>must be</u>** erected as per Dwg. No. CES002.
- 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.CES002 & 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.CES002 & 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 <u>must be</u> identified on the work drawings prior to the construction works starting. These must be positioned outside the root protection areas around the trees being retained.

Stage 2

6.8.0 The Construction Works Stage

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

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

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

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

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

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

6.8.3 **Working within the RPA** (*Root Protection Area*) – If it becomes necessary to carry out works within the RPA of a tree/trees, these <u>must be</u> discussed and agreed with the project Arboriculturist. All works <u>must</u> be carried out in accordance with a detailed method statement prepared by the contractor taking into consideration the necessary tree protection/mitigation measures as instructed by the project Arboriculturist. This will detail the extent of works to be undertaken and the methodology and whether these works are to be undertaken

manually with limited or restricted machinery. All 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 where works need to be undertaken <u>must</u> <u>be</u> protected from damage as per the recommendations of **section 6.2.3** of BS5837 2012. See detail within 'Appendix 2' on ground protection using boarding for pedestrian loading or CellWeb construction for heavier loading such as for machinery.

6.8.4 **Finished ground levels/Landscaping -** The existing ground levels within the RPA of trees <u>must</u> 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 <u>must</u> be carried out manually and the soil levels <u>must not</u> be lowered or raised resulting in root damage to the trees. All surfaces are to be porous to allow the free movement of air and moisture to the roots below. Recommendations of sections 8 of BS5837 2012 must be adhered to during the landscaping within the RPA of the trees being retained.

6.9.0 Other items

6.9.1 The following is a list of additional activities <u>that are not allowed</u> within the RPA or within the vicinity of the trees being retained.

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

- 2 Burning rubbish
- 3 -The washing of machinery
- 4 Attaching notice boards, cables or other services to any part of the tree.
- 5 Using neighbouring trees as anchor points.

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

Stage 3

6.10.0 Post Construction Works

6.10.1 This project is not to be considered complete until all retained trees have been re-examined by the project Arboriculturist and the remedial works necessary to ensure the health of the trees and the immediate safety of the end user of this pitch are implemented.

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

Signed Felim Sheridan

Date 28/03/2018

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

Samples of Temporary Tree Protection Fencing Detail.



Fence Type 1 - Detail of tree protection fencing for high intensity work areas



Appendix 2

<u>A Condition Tree Assessment</u> of the Trees for the Site Area at 'Colàiste Eoin', Stillorgan, Co. Dublin.</u>

Date: 28th March 2018

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)

Tree No.	Tree Species	Ht. (m)	Stem Dia. (mm)	Branch Spread (m)	C-Ht. (m)	Age Class	Phys. Con.	Structural Condition Other Comments	Preliminary Recommendation	Remain Contribute in years	Cat. Grade
								N-north S-south E-east W- west	A- average		
		A Co	ondition	Assessm	ent of th	le trees w					
		'Cola	àiste Eo	in', Stillor	gan, Co.	Dublin.					
		The	survey o	commence	es in the	e north-ea	stern corne	er of the site and proceeds in an anti-			
		cloc	kwise di	rection fir	ishing a	at the site	entrance of	off the 'Stillorgan Road'.		1	
Tree No. 1	Lime Tilia sp.	11	480	4N 5S 5E 5W	2.5	Early Mature	Good	Fair It is growing just off the southern boundary on the adjacent property and is a single-stemmed tree to c. 1.8 from where the crown develops. There are acute union formations with included bark present. The tree has been pruned in the past on the west side to clear the adjacent boundary wall and also on the east side to clear the adjacent house.	Management is outside the control of this site.	20+	B1
Tree No. 2	Silver Birch Betula pendula	11	210	3N 1S 2E 3W	3	Semi mature	Good	Fair It is growing just off the southern boundary on the adjacent property and is a single-stemmed tree. The branches on the south side have been pruned up to provide clearance over the adjacent house / wall resulting in an asymmetric crown.	Management is outside the control of this site.	20+	C2
		Thes cons	e trees a truction	re on the s of this wall	ite side o which n	of this bou nay, in tim	indary wall r e, have an ir	nay have been impacted upon by the npact on its health and stability.	These trees will require ongoing monitoring to ensure safety.		
1901	Ash Fraxinus excelsior	11	270/ 310/ 230/ 330/ 150	7N 8S 3E 8W	2	Early Mature	Fair	Fair A multi-stemmed tree from ground level, the stems divide again at c.1m with acute union formations with included bark present. Decay pockets are developing where lower limbs/branches have been	Remove suckers and prune deadwood and branch stubs back to proper target pruning points.	10-20	C1

Tree No.	Tree Species	Ht. (m)	Stem Dia. (mm)	Branch Spread (m)	C-Ht. (m)	Age Class	Phys. Con.	Structural Condition Other Comments	Preliminary Recommendation	Remain Contribute in years	Cat. Grade
								N-north S-south E-east W- west Physphysiological.	A- average		
								removed in the past. A large stem has been removed in the past on the south side, most likely to facilitate construction of the adjacent boundary wall. The construction of this wall may have adversely impacted the root zone of the tree.			
1902	Sycamore Acer pseudoplatanus	9	270/ 250/ 360/ 260/ 280	4N 5S 4E 4W	2	Early Mature	Fair	Fair A multi-stemmed tree from c.1m up where the stems divide again with acute union formations. The root zone may have been impacted adversely by the construction of the adjacent boundary wall. There is light deadwood throughout the crown. It has been pruned in the past to provide clearance over the boundary wall and to provide ground clearance. It has also been topped in the past at a height of c.7m and is re-growing from the cut points.	No works required at the present time.	10-20	C2
1903	Elder Sambucus nigra	5	150	1N 1S 1E 2W	2	Mature	Fair	Fair/Poor It is growing on a low mound, most likely a hedgerow remnant. It may have been impacted by construction of the adjacent boundary wall. Heavy Ivy growth is extending up the main stem into its crown.	Cut Ivy at ground level.	10+	C1
1904	Elder Sambucus nigra	5	130/ 100	1N 2S 1E 1W	2	Mature	Fair	Fair/Poor A twin-stemmed tree from ground level which is growing on a low mound, most likely a hedgerow remnant. Part of the tree has collapsed. Ivy cover is extending up the main stems.	No works required at the present time.	10+	C1

Tree No.	Tree Species	Ht. (m)	Stem Dia. (mm)	Branch Spread (m)	C-Ht. (m)	Age Class	Phys. Con.	Structural Condition Other Comments	Preliminary Recommendation	Remain Contribute in years	Cat. Grade
								N-north S-south E-east W- west Physphysiological.	A- average		
1905	Hawthorn Crataegus monogyna	4	150	2N 2S 0E 5W	1.5	Early Mature	Fair	Fair/Poor It is growing on a slight bank at the base of the adjacent boundary wall and it has a pronounced lean to the west. It may have been impacted upon by the construction of the boundary wall.	No works required at the present time.	10+	C1
1906	Ash Fraxinus excelsior	15	230/ 330/ 180	5N 2S 2E 6W	2	Early Mature	Fair	Fair/Poor It is growing on a low soil bank and the root zone may have been impacted by the construction of the adjacent boundary wall. It has been heavily pruned on the east side to provide clearance over the wall / garden area and it is re-growing at the cut points. There is light deadwood in the crown and it is infected on the lower trunk by "Bacteria Canker of Ash". Ivy growth is extending up the main stem into its crown.	No works required at the present time.	10-20	C1
1907	Sycamore Acer pseudoplatanus	6	120	1N 1S 1E 1W	1.8	Young	Fair/ Good	Fair Most likely self-seeded, it is being suppressed by the adjacent larger trees (nos. 1906 & 1908) and is being drawn up for light. There is damage to the base of the main stem on the west side.	No works required at the present time.	20-40	C1
1908	Ash Fraxinus excelsior	16	540	5N 5S 3E 6W	3	Early Mature	Fair/ Good	Fair A single-stemmed tree to c.1.6m where it divides in two and again at c1.8m with very acute union formations between stems. It is growing on a low soil bank and may have been impacted during construction of the boundary wall. It has been pruned on the east side to clear the	No works required at the present time.	10-20	C1

Tree No.	Tree Species	Ht. (m)	Stem Dia. (mm)	Branch Spread (m)	C-Ht. (m)	Age Class	Phys. Con.	Structural Condition Other Comments	Preliminary Recommendation	Remain Contribute in years	Cat. Grade
								N-north S-south E-east W- west Physphysiological.	A- average		
1909	Ash Fraxinus excelsior	15	200/ 450	3N 5S 1E 7W	2	Early Mature	Fair	wall and reduce crown overhang.Fair / PoorIt is growing on a low bank and dividesnear ground level into two stems. It hasbeen heavily pruned on the east side toclear the adjacent wall which may haveimpacted the tree during construction.Heavy Ivy growth has been partiallycontrolled. There are signs of past pruningat the base and the remains of an oldbarbed wire fence are presently	Cut Ivy to ground level. Prune back decaying stumps to proper target pruning points.	10+	C1
1910	Walnut Juglans sp Hawthorn Crataegus monogyna	6	170	2N 3S 1E 5W	2	Semi Mature	Fair	Poor It is growing with a pronounced lean to the west away from the boundary wall. There is a significant wound to the main stem on the north side from ground level up to c.1.2m. A branch of an adjacent, distorted Hawthorn has been incorporated into the union of the tree.	It will most likely need to be removed in the short- term as part of management.	<10	U
1911	Walnut Juglans sp	4	80	1N 2S 1E 1W	2	Young	Fair	Fair A recently planted tree. It is growing with a twisted main stem. There is bark wounding to the base of the tree on both the east and west sides, most likely caused by mowing machinery.	Carry out formative pruning and remove lower branch on south side.	20+	C1
1912	Sycamore Acer pseudoplatanus	7	180	3N 2S 2E 2W	2	Semi Mature	Fair	Poor It is growing out from the base of the boundary wall and is quite distorted growing along the ground before turning vertical. This may leave this tree prone to failure. The main stem has been	I would recommend its removal as part of management.	<10	U

Tree No.	Tree Species	Ht. (m)	Stem Dia. (mm)	Branch Spread (m)	C-Ht. (m)	Age Class	Phys. Con.	Structural Condition Other Comments	Preliminary Recommendation	Remain Contribute in years	Cat. Grade
								N-north S-south E-east W- west Physphysiological.	A- average		
1913	Ash Fraxinus excelsior	12	180/ 280/ 410/ 110	5N 5S 2E 6W	2	Early Mature	Fair	Poor A multi-stemmed tree growing on a small bank against the boundary wall. It has been pruned on the east side to clear the adjacent wall and is growing into the ball stop net. Basal decay is present which will impact on its stability. The remains of an old barbed wire fence has been incorporated into the main stem. A fifth stem is dying back.	I would recommend its <u>removal</u> as part of management.	<10	U
1914	Walnut Juglans regia	7	160/ 100	3N 3S 3E 4W	2	Semi Mature	Fair/ Good	Fair / Good It is growing behind the ball stop net. The second stem is developing with an acute union formation with included bark present at a height of c.0.5m. Roots are exposed at the base of the tree and some have been damaged. Lower branches have been pruned to provide ground clearance.	Cut out minor stem back to main stem.	20+	C1
1915	Ash Fraxinus excelsior	14	350 320 290	4N 4S 3E 5W	2	Early Mature	Fair	Fair / Poor It divides near ground level into three stems. It has been cut back on the east side to provide clearance over the adjacent wall. There is re-growth at cut points with weak union formations. There is deadwood and branch stubs in the crown. The tree is growing into the ball stop net.	Prune back by 2m on the west side to clear the ball stop net.	10-20	C1
1916	Ash Fraxinus excelsior	12	260	3N 1S 0E 5W	2	Early Mature	Fair	Fair / Poor It is growing at the north end of a low bank with a pronounced lean to the north west. It is growing into the ball stop net. Ivy	Prune back by 2m on the west side to clear the ball stop net.	10+	C1

Tree No.	Tree Species	Ht. (m)	Stem Dia. (mm)	Branch Spread (m)	C-Ht. (m)	Age Class	Phys. Con.	Structural Condition Other Comments	Preliminary Recommendation	Remain Contribute in years	Cat. Grade
								N-north S-south E-east W- west Physphysiological.	A- average		
								growth is extending up the main stem although cut previously. It may have been impacted by construction of the nearby boundary wall in the past.			
1917	Sycamore Acer pseudoplatanus	15	340/ 340/ 340/ 390	3N 3S 2E 5W	3	Early Mature	Fair/ Good	Fair It is growing on a low bank and is multi- stemmed from near ground level. It has been heavily pruned on the east side to provide clearance over the grounds of the adjoining property. A minor stem is developing on the south side. Heavy lvy growth is extending up into the crown.	Cut Ivy at ground level.	20+	B1
1918	Ash Fraxinus excelsior	15	450	9N 3S 4E 2W	2	Early Mature	Fair	Fair/Poor It is growing out of a low bank and is single-stemmed to c.2m, where it divides in two. The two stems are growing in a co- dominant manner. There are areas of dead bark at its base exposing the underlying timber and this will impact on its health and stability. Ivy growth is extending up the main stems.	Prune back branches on the north side of the crown by 1-2m to clear the ball stop net. Monitor areas of dead bark on its lower trunk.	10+	C1
1919	Ash Fraxinus excelsior	15	300/ 250/ 170	6N 4S 4E 0W	4	Early Mature	Fair	Fair/Poor It is growing out of a low bank and is multi-stemmed from near ground level. The union formations are acute but appear sound. It is growing up in a group environment and is sheltered at present. It has been pruned on the south side to clear the grounds of the adjoining property. There is light deadwood in the crown	Remove dead/unstable growth and prune in exposed/end loaded side branches by 1-2m.	10+	C1
1920	Ash	15	200/	6N	6	Early	Fair	Fair	Remove dead/unstable	10-20	C2

Tree No.	Tree Species	Ht. (m)	Stem Dia. (mm)	Branch Spread (m)	C-Ht. (m)	Age Class	Phys. Con.	Structural Condition Other Comments	Preliminary Recommendation	Remain Contribute in years	Cat. Grade
								N-north S-south E-east W- west Physphysiological.	A- average		
	Fraxinus excelsior		200/ 220/ 190/ 300	3S 2E 2W		Mature		It is growing out of a low bank and has been drawn out for light due to competition. It is multi-stemmed from near ground level with broad union formations between the stems. It has been pruned on the south side to clear the grounds of the adjoining property. There are branch stubs and deadwood in the lower crown.	growth.		
1921	Ash Fraxinus excelsior	15	260/ 240/ 250	6N 4S 2E 3W	4	Early mature	Fair	Fair A multi-stemmed tree from near ground level with acute union formations between the stems. It has been drawn up for light due to competition. It has been pruned on the south side to clear the adjacent building. There are branch stubs and light deadwood in the crown. Ivy cover is beginning to extend up the main stems.	No works required at the present time.	10-20	C2
1922	Sycamore Acer pseudoplatanus	16	350/ 330	4N 2S 2E 2W	2	Early Mature	Fair	Fair/Poor A twin-stemmed tree from near ground level where it is growing on top of a low stone retaining wall. The rope of an old ball stop net is being incorporated into the west stem. It has been heavily pruned on the south side to clear the adjacent building / grounds and regrowth is taking place at the cut points.	No works required at the present time.	10-20	C2
1923	Lime Tilia sp.	16	#700	7N 4S 6E 6W	1.8	Mature	Fair/ Good	Fair / Poor It has been heavily topped/pruned in the past at c.7m and has re-grown to its current height. The regrowth is large with weak unions to the cut stems and are prone to future failure. There is very heavy	Reduce height of large regrowth by c.2m. Remove old ball stop net.	10-20	C2

Tree No.	Tree Species	Ht. (m)	Stem Dia. (mm)	Branch Spread (m)	C-Ht. (m)	Age Class	Phys. Con.	Structural Condition Other Comments	Preliminary Recommendation	Remain Contribute in years	Cat. Grade
								N-north S-south E-east W- west Physphysiological.	A- average		
								sucker growth around the base of the tree with decay pockets developing at the sites of past pruning. An old ball stop net is tangled in the crown of the tree.			
1924	Sycamore Acer pseudoplatanus	12	260	7N 0S 3E 2W	2	Early Mature	Fair/ Good	Fair/Poor It is growing with a pronounced lean to the north and has been drawn out for light due to competition from trees to the south. The crown is being suppressed by larger trees to the south and east. Suckers are developing around the base and lvy growth is extending up the main stem.	Maintain basal suckers.	10+	C1
1925	Sycamore Acer pseudoplatanus	12	190/ 210	7N 0S 1E 4W	2	Early Mature	Fair/ Good	Fair / Poor A twin-stemmed tree from near ground level, with an acute union formation. It has been drawn out to the north for light due to larger trees to the south. There is damage to the base of both stems on the south side with an area of decay beginning to develop.	No works at the present time	10-20	C1
1926	Sycamore Acer pseudoplatanus	15	600	8N 1S 2E 4W	5	Mature	Fair/ Good	Fair/Poor Originally a multi-stemmed tree from near ground level. It has been reduced to a height of c.14m in the past and is re- growing from these cut points. Ivy growth is extending up into the crown. Two of the stems have been cut away and decay is starting to develop at the cut points.	Remove basal suckers at present.	10-20	C2
1927	Sycamore Acer pseudoplatanus	13	600	8N 2S 3E 3W	3	Mature	Fair/ Good	Fair It has been heavily pruned on the south side in the past to clear the adjacent building. It has also been reduced to a	Remove basal suckers at present.	20+	C2

Tree No.	Tree Species	Ht. (m)	Stem Dia. (mm)	Branch Spread (m)	C-Ht. (m)	Age Class	Phys. Con.	Structural Condition Other Comments	Preliminary Recommendation	Remain Contribute in years	Cat. Grade
								N-north S-south E-east W- west Physphysiological.	A- average		
								height of c.12m and is re-growing from the cut points. Heavy Ivy cover is extending up the main stem.			
1928	Beech Fagus sylvatica	13	740	5N 2S 2E 5W	2	Mature	Fair/ Good	Fair It has been heavily pruned on the south side in the past to clear the adjacent building. It has also been pruned again at a height of c.12m but is re-growing from the cut points. Heavy Ivy cover is extending up the main stem.	No works at the present time	10-20	C2
1929	Beech Fagus sylvatica	12	540	4N 6S 4E 5W	1.5	Mature	Fair/ Good	Fair A single-stemmed tree to c.5m. It has been pruned in the past to clear the adjacent boundary wall. It is being slightly overcrowded by the adjacent trees. Ivy growth is extending up the main stem. It has potential to form a good tree at this location.	Prune small size branches on the lower crown up to a height of c.3m.	20-40	B1
Tree No. 3	Eucalyptus Eucalyptus sp.	13	#450	3N 3S 1E 1W	7	Early Mature	Good	Fair It is growing on the neighbouring property, just off the boundary. It is a single- stemmed tree to c.6m where it divides in two. It is developing a new crown of growth as a result of being heavily pruned back in the recent past.	Management is outside the control of this site.	10-20	C2
Tree No. 4	Eucalyptus Eucalyptus sp.	12	#450	6N 11S 4E 8W	4	Early Mature	Good	Fair Located on the adjoining property side of the boundary fence. It has been pruned in the past most likely to provide clearance to the nearby building. A large limb has been removed on the east side and its crown size has been reduced. It is	Management is outside the control of this site.	10-20	C2

Tree No.	Tree Species	Ht. (m)	Stem Dia. (mm)	Branch Spread (m)	C-Ht. (m)	Age Class	Phys. Con.	Structural Condition Other Comments	Preliminary Recommendation	Remain Contribute in years	Cat. Grade
								N-north S-south E-east W- west Physphysiological.	A- average		
								developing a new crown of growth from this pruning.			
1930	Horse Chestnut Aesculus sp.	8	210/ 220/ 300	0N 4S 3E 3W	1.5	Early Mature	Fair/ Poor	Poor It is multi-stemmed from near ground level; it is growing at the base of the boundary wall. The union formations between the stems is acute with included bark present. The centre stem is broken and is decaying back. Heavy Ivy growth is extending up the main stem. It has poor structure and no long-term potential at this location.	I would recommend its <u>removal</u> as part of management.	<10	U
1931	Pine Pinus sp.	8	320	1N 2S 2E 1W	5	Early Mature	Fair	Fair This tree has been drawn up for light due to competition and has become more open due to the limb failure in tree no. 1930. Ivy growth is extending up the main stem and there are branch stubs present on the lower stem.	Remove debris from around the base of the tree. Cut branch stubs back to proper target pruning points.	10+	C1
1932	Lawson Cypress Chamaecyparis lawsoniana	15	260	1N 2S 2E 1W	3	Early Mature	Fair	Fair / Poor This tree has been drawn up for light due to competition. The lower crown contains deadwood and branch stubs. There is damage to the root flare on the east side. No long-term potential at this location.	Retain at present and monitor its condition.	10+	C1
1933	Sycamore Acer pseudoplatanus Ash Fraxinus excelsior	12	180 130	0N 2S 0E 4W	2	Semi Mature	Fair	Fair / Poor Two trees most likely self-seeded and growing up as a pair with a combined crown. They are being drawn up for light and Ivy is extending up the stems. It has no long-term potential at this location	I would recommend the <u>removal</u> of the Ash stem as part of management.	10-20	C1

Tree No.	Tree Species	Ht. (m)	Stem Dia. (mm)	Branch Spread (m)	C-Ht. (m)	Age Class	Phys. Con.	Structural Condition Other Comments	Preliminary Recommendation	Remain Contribute in years	Cat. Grade
								N-north S-south E-east W- west Physphysiological.	A- average		
1934	Ash Fraxinus excelsior	12	100	0.5N 0.5S 0.5E 0.5W	3	Semi Mature	Fair	Fair / Poor Most likely self-seeded into this area and is being drawn up for light due to competition. It has no long-term potential at this location	I would recommend <u>removal</u> as part of management/selective thinning.	<10	U
1935	Sycamore Acer pseudoplatanus	12	220	0N 2S 2E 0W	2	Early Mature	Fair	Fair / Poor Most likely self-seeded into this area and is being drawn up for light. It is being suppressed by the larger conifers to the north. It has no long-term potential at this location	Retain as bulking at present.	10+	C1
1936	Ash Fraxinus excelsior	12	170	0N 1S 0E 1W	6	Semi Mature	Fair	Fair / Poor Most likely self-seeded and is being drawn up for light which is affecting its structure. It is growing close to the boundary wall and is being suppressed by the larger conifers trees to the north. It has no long- term potential at this location.	Retain as bulking at present.	10+	C1
1937	Sycamore Acer pseudoplatanus	12	230/ 260	0N 3S 0E 4W	2	Early Mature	Fair	Fair A twin-stemmed tree from near ground level with an acute union formations between the stems. It is being drawn up for light due to competition particularly by the larger conifers trees to the north.	Retain as bulking at present.	10+	C1
1938	Sycamore Acer pseudoplatanus	5	140	2N 2S 2E 1W	1	Semi Mature	Fair	Poor It is growing along the ground before turning upwards which gives this tree poor structure. There is damage to the base and up along the stem. It has no long-term potential.	I would recommend its <u>removal</u> as part of management.	<10	U

Tree No.	Tree Species	Ht. (m)	Stem Dia. (mm)	Branch Spread (m)	C-Ht. (m)	Age Class	Phys. Con.	Structural Condition Other Comments	Preliminary Recommendation	Remain Contribute in years	Cat. Grade
								N-north S-south E-east W- west Physphysiological.	A- average		
Tree Belt No.1	Monterey Pine Pinus radiata Leyland Cypress X Cuppressus leylandii	This with the second se	tree belt the 'Still isually pr dary. The dary. The tion struct Leyland sional bro es. Within age with s of the tr ent footb ning to e tree belt f cularly the op their o	extends al organ Road ominent in t e trees are o cturally. It co Cypress ar oadleaf trees in the line of come showin ees along the all pitch. The xtend up the forms a den- per a den- pown indeper	most the d'. the local a of an earl onsists of ad the inn s that are Leyland ng eviden ne easter e lower c e stems o se screer have goo ndent crov	area and po y mature a f a double of er line beir being over Cypress tro- nice of past n side have rowns con- of some of barrier all d potential wns.	h of the wes rovides good ge class, in fa row of trees w ng Monterey F rcrowded by f ees, it is evide root moveme e been prune tain naturally the trees. ong this boun if released fre	tern boundary inside the boundary wall screening to the school grounds along this air/good condition physiologically and in fair vith the line closest to the boundary wall Pine. Located on the inside of this are some the larger faster growing conifer tree ent that some trees have suffered storm ent. d back to improve clearance with the suppressed deadwood and Ivy growth is dary and some of the individual trees om the tree belt canopy and allowed to	Reduce the Leyland Cypres height by 30% to release th allow them the space to dev time would allow them to be the Leyland Cypress trees to	s trees in e Pines to velop which in e isolated and emoved.	C2
1939	Birch Betula sp. Birch Betula sp.	20	350	2N 3S 4E 0W 4N 2S 3E 0W	2	Mature	Fair	Fair It is being suppressed on the west side by the larger coniferous trees and has been pruned back on the east side to provide clearance over the football pitch. Ivy growth is extending up the main stem. Fair / Poor It is being suppressed on the west side by the larger coniferous trees and has been pruned back on the east side to provide clearance over the football pitch. Ivy	No works required at the present time. No works required at the present time.	10+	C1 C1

Tree No.	Tree Species	Ht. (m)	Stem Dia. (mm)	Branch Spread (m)	C-Ht. (m)	Age Class	Phys. Con.	Structural Condition Other Comments	Preliminary Recommendation	Remain Contribute in years	Cat. Grade
								N-north S-south E-east W- west Physphysiological.	A- average		
1941	Horse Chestnut Aesculus sp.	8	230	2N 3S 5E 0W	3	Early Mature	Fair	Poor It is being suppressed by the larger coniferous trees on the west side. There is significant damage to the main stem in several places, most likely due to infection by "Bleeding Canker of Horse Chestnut". It is of poor structure with no long-term potential.	I would recommend its removal as part of management.	<10	U
1942	Sycamore Acer pseudoplatanus	8	210	0N 0S 0E 4W	3	Semi Mature	Fair	Poor It is self-seeded and is growing against the boundary wall. It is being suppressed by the larger conifers affecting its structure. It has no long-term potential at this location.	I would recommend its removal as part of management.	<10	U
1943	Oak Quercus robur	20	530	5N 6S 7E 0W	3	Early Mature	Fair/ Good	Fair It is being suppressed on the west side due to the larger conifers and has been heavily pruned on the east side to provide clearance over the playing pitch. The crown contains some light deadwood and there is new growth developing on the branch stubs. There is lvy extending up the main stem.	No works at the present time	10-20	C1
1944	Horse Chestnut Aesculus sp.	9	210 180	3N 4S 5E 0W	1.5	Early Mature	Fair	Fair/Poor The main stem divides in two near ground level with an acute union formation which appears sound. It is somewhat suppressed by the larger conifers on the west side and there are signs of past pruning of lower branches on the pitch side.	Prune lower branches on east side up to 2m to improve ground clearance.	20+	C1
1945	Norway Maple	12	380	6N	1.8	Mature	Fair/	Fair	Lift crown on east and	20+	C1

Tree No.	Tree Species	Ht. (m)	Stem Dia. (mm)	Branch Spread (m)	C-Ht. (m)	Age Class	Phys. Con.	Structural Condition Other Comments	Preliminary Recommendation	Remain Contribute in years	Cat. Grade
								N-north S-south E-east W- west Physphysiological.	A- average		
	Acer platanoides			4S 6E 3W			Good	The crown has been heavily pruned on the west and north sides to improve clearance over the entrance pathway and entrance sign. This has resulted in a somewhat unbalanced crown. It is also extending towards adjacent street light.	south side to re balance lower crown. Prune back branches on north side by 1-2m to clear the street light.		
Notes:										•	



DATE:	Site :	TITLE :	
Dwg No.CES001	All Weather Pitch at Col. Stillorgan, Co. Dublin.	Tree Constraints Plan	EL. 01-27420117007-20230
Scale 1:500 @ A1	aiste Eoin,		ų

ARBORIST ASSOCIATES LTD. 94 BALLYBAWN COTTAGES, ENNISKERRY, CO. WICKLOW TEL: 01-2742011 / 087-2629589



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

0

Category U Trees-Trees in such a condition that any existing value would be lost within 10 years or being recommended for removal sound arboricultural practice.

BS5837: 2012 - Category Retention Rating

0439

—Tree Constraints —Tag Number

Actual Crown Spread

Category grade

Notes:

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



Category C Trees Trees of low quality/value with a min. of 10 years life expectancy. Sub Categories 1- Mainly Arboricultural values 2 - Mainly Landscape valus 3 - Mainly cultural and conservation values.







BS5837: 2012 - Category Retention Rating



Category U Trees-Trees in such a condition that any existing value would be lost within 10 years or being recommended for removal sound arboricultural practice.

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



Category B Trees Trees of moderate quality/value life expectancy. with а min. of 20 years



Category C Trees Trees of low quality/value with a min. of life expectancy. Sub Categories 1- Mainly Arboricultural values 2 - Mainly Landscape valus 3 - Mainly cultural and conservation value of 10 years

- <al



Tree & hedge vegetation being retained



Trees & Hedge Vegetation being removed.

Schedule of events

Once all works are complete.	Tree Review and Certification
Once all the main construction works are completed and in order to incorporate the area into the finished development.	Removal of Tree P rotection
Ongoing throughout the construction works.	Site Monitoring
After tree removal and pruning is complete and prior to any construction works commencing. The erection and removal of the protective fencing is to be scheduled in accordance with the phasing of the construction works.	Tree Protection
Prior to any construction works commencing.	Tree Works – Felling & Pruning
Prior to any works commencing.	Site Meeting
Schedule	Works

ARBORIST ASSOCIATES LTD. 94 BALLYBAWN COTTAGES, ENNISKERRY, CO. WICKLOW TEL: 01-2742011 / 087-2629589

DATE:	Site :		TITLE :
	Stillor	All W	Tre
Dwg No.CES002	·gan, Co. Dublin.	eather Pitch at Col	e Protection Plan
Scale 1:500 @ A1		aiste Eoin,	