



Arboricultural Impact Assessment

Prepared for:

Kildare County Council

Proposed site:

Former Ambassador Site, Kill, Co. Kildare

Prepared by:

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1.0 Introduction.

1.1 Arbor-Care Ltd (Professional Consulting Tree Service) was retained by Van Dijk Architects on behalf of Kildare County Council to undertake a tree survey an Arboricultural Impact Assessment, and a Tree Protection Plan identifying the trees, groups of trees that may be impacted on by the proposed development. The surveyed trees contained within this report are located (Figure 1).

The objective of the impact assessment was to identify the areas that contained trees, groups of trees, and to ensure where possible that these areas would be retained and to identify the trees that are to be removed and or retained to facilitate the development.

1.2 The below impact assessment report is based on the British standard *BS 5837:2012 Trees in relation to design, demolition and construction recommendations*, this standard gives recommendations and guidance on the principles to be applied to achieve a satisfactory juxtaposition of trees, including shrubs, hedges and hedgerows, with structures. It sets out to assist those concerned with trees in relation to construction to form balanced judgements. This impact assessment report will be accompanied by an inventory of trees and hedgerows on site and a tree protection plan. The Arboricultural Impact Assessment and a tree protection plan was prepared for the site identifying trees that may be impacted on by the proposed development based on the proposed design.

Figure 1.0 Proposed site highlighted in red



2.0 Policy Context

- 2.1 The National Planning Framework (NPF) seeks to ensure that new development is sustainable and underlines the importance of Green Infrastructure, of which trees form an integral part. This encompasses recognition of the importance of trees in relation to the management of air, soil and water quality along with other associated ecosystem services and climate change adaption. The NPF also seeks to achieve the protection and enhancement of landscapes and a net gain in biodiversity.
- 2.2 The potential impact of development on all trees (including those not protected by a Tree Preservation Order or other statutory designation) is therefore a material consideration. I have reviewed the Kildare County Council Development Plan 2023-2029, *Existing Tree Preservation Orders (TPO's)*. There are no TPO's identified within the proposed development site.

- 2.3 'BS5837:2012 Trees in relation to design demolition and construction – Recommendations (BS5837)' provides a framework which sets out how trees should be considered in this context and also explicitly applies to development where planning consent is not required.
- 2.4 BS5837 recommends that a tree survey is undertaken to identify the quality and benefits of trees and the spatial constraints associated with them. This is then used to produce a Tree Constraints Plan showing the above and below ground constraints associated with trees. This drawing is used to inform the design process and to allow the retention of good quality trees where appropriate.
- 2.5 An Arboricultural Impact Assessment (Please refer to appendix 1) is then developed to identify the likely direct and indirect impacts of the Proposed Development, and a Tree Protection Plan is prepared to identify trees to be removed or retained and to illustrate how retained trees are to be protected. An Arboricultural Method Statement is often required as a condition of planning consent to detail how sensitive operations are to be achieved in close proximity to retained trees. These elements are the minimum normally required for a planning application and are intended to ensure both a sustainable and harmonious relationship between trees and new development.

3.0 Methodology Employed

- 3.1 An initial tree survey and visual condition assessment was on the 6th of July 2021. The purpose of this report and in accordance with *BS 5837: 2012 Trees in relation to design, demolition and construction. Recommendations* only trees with diameters of 75mm or greater were surveyed. Also in accordance with section 4.4.2.3 of the British standard document where trees formed obvious groups these were assessed and recorded as groups. All trees were individually tagged with a metal disc. This was placed on the northern side of the tree where practical. Where trees were located within private property or the tree was inaccessible a virtual tag number was used this has been denoted with the letter T in the tree schedule and protection plan.

Section 4.4.2.3 of BS 5837: 2012 states:

Trees growing as groups or woodland should be identified and assessed as such where the arboriculturist determines that this is appropriate. However, an assessment of individuals within any group should still be undertaken if there is a need to differentiate between them, e.g. in order to highlight significant variation in attributes (including physiological or structural condition).

NOTE: The term “group” 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 of each of the three subcategories.

- 3.2 The survey concentrated primarily on the significant trees/hedgerows and groups located within and adjacent to the proposed development area and temporary construction access route. The objective of this survey was to gather information regarding the trees location on the proposed development site and the impact the proposed development may have on the trees. **Please refer to appendix 1 for the tree inventory.**
- 3.3 Significant trees can be equated as those trees whose visual importance to the surrounding area are sufficient to justify special efforts to protect/preserve and whose loss would have an irremediable adverse impact on the local environment. Significance can also be placed depending on the trees age, another variable to imply significance can be the aesthetic merit of the tree based on its unusual size, intrinsic physical features or outstanding appearance or occurring in a unique location or context, and thus provides a special contribution as a landmark or landscape feature.
- 3.4 All above parts of the trees were visually examined. Tree diameters (DBH) were estimated at 1.5 meter above grade as per standard arboricultural practice. Tree height was measured with the use of a clinometer (Where practical). A generalised system was employed to describe the overall health of the trees. The system uses a five tier rating scale with the following descriptors:

Specimen condition 5-tier rating system

1. Very poor-1-20%
2. Poor- 21-40%
3. Fair- 41-60%
4. Good- 61-80%
5. Very good 81-100%

4.0 Trees surveyed

4.1 The survey commenced on the 6th July 2021. A total of 74 trees were surveyed. It must be noted that the site is overgrown with scrub willow and bramble. The impact of the development on the trees surveyed will be assessed in the Arboricultural Impact Assessment

4.2 A breakdown of the Tree Categories on site as per BS 5837 2012 is set out in the table below:

Category	Quantity	Category %
A-Tree of high quality	2	2.7%
B-trees of good quality	21	28.3%
C (Low quality or trees less than 75mm diameter)	43	58.1%
U (remove due to poor condition)	8	10%
Total Trees surveyed	74	100%

5.0 Arboricultural Impact Assessment

Trees to be removed on site

5.1.1 The arboricultural impact of the proposed development is unknown at this stage. 8 trees are recommended for removal based on their poor conditions. It must be noted there are few trees of quality on the site as the tree stock is mostly made up of large mature Monterey cypress and large mature Poplars both of which are exotics species of low ecological value and are not suited to a new development. The site would benefit from an extensive landscape plan that would introduce site appropriate trees that will enhance the local biodiversity and arboreal footprint of the site.

5.1.2

Table 1: Schedule of trees to be removed to accommodate the design (To be read in conjunction with Appendix 1 and the Tree Protection Plan)

Tree number	Species	Age Class	Tree category

Trees to be removed on site

5.1.1 The arboricultural impact of the proposed development on the site will be low. It is proposed to retain the surveyed trees and protect them for the duration of the development

Trees to be retained on site

5.2 It is proposed to retain all other trees on site at this stage of the development. Some trees may require minor remedial works to facilitate the development. Such works include having the lowest limbs crown raised and or to have any deadwood within the canopies removed

6.0 Tree Removal

All trees that are destined for removal shall be removed prior to any construction or demolition works on this site. Any tree/hedgerow remedial works that are required shall also be undertaken prior to any construction or demolition activity on the site. All the above shall be carried out by qualified and insured tree surgeons and in accordance with *BS 3998:2010 Tree works Recommendations*

7.0 Tree Protection

7.1 Prior to any construction or demolition works on this site all trees and hedgerows destined for retention need to be protected by the use of protective barriers and or ground protection, fit for the purpose of ensuring the successful long-term preservation of the trees. In order for the retained trees to be adequately protected on the site a construction exclusion zone needs to be identified. This zone is calculated based on the root protection area (RPA), which is the minimum area in m² which should be left undisturbed around each retained tree. The RPA should be calculated as an area equivalent to a circle with a radius 12 times the stem diameter for a single stem tree and 10 times basal diameter measured immediately above the root flare for trees with more than one stem arising below 1.5m above ground level.

Number of Stems	Calculation
Single Stem Tree	$\text{RPA (m}^2\text{)} = \frac{\{\text{stem diameter (mm) @ 1.5m x 12}\}^2 \times 3.142}{1000}$
Tree with more than one Stem arising below 1.5m above Ground level	$\text{RPA (m}^2\text{)} = \frac{\{\text{Basal Dia. (mm) x 10}\}^2 \times 3.142}{1000}$

Note: The Calculated RPA should be capped to 707m² e.g. which is the equivalent to a circle with a radius of 15m or a square with approximately 26 m sides.

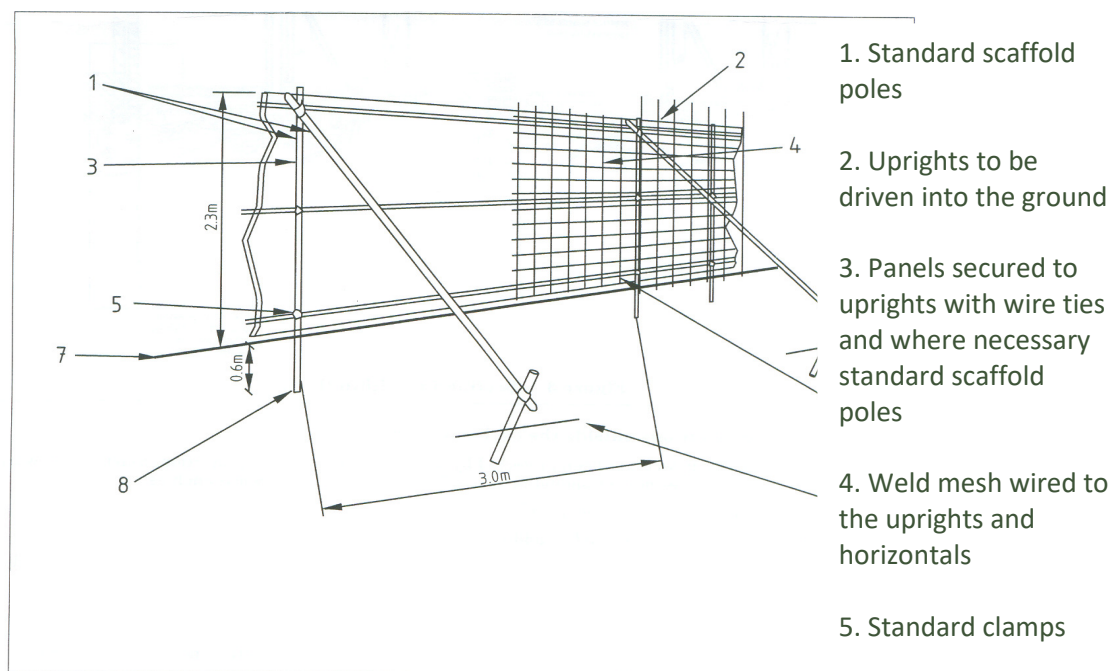
Protective Barriers

7.2 Trees and hedgerows that are indicated to be retained must be protected by barriers, signage and/or ground protection prior to any materials or machinery being brought on site and prior to any development, demolition or soil stripping takes place. Areas that are designated for new plantings should be similarly protected. Barriers should be fit for the purpose of excluding construction activity. In most cases barriers should consist of a scaffold framework (Refer to fig. 4 below) comprising a vertical and horizontal framework, well braced to resist impacts. To ensure the protective barriers are respected, clear concise signage must be affixed to the barrier in an unrestricted easily viewed location. The signage must state the following;

- No construction activity is to take place within the R.P.A. (unless pre-agreed the arborist)
- No materials of any kind are to be stored within the R.P.A.
- No “Spilling out” of materials shall take place within the R.P.A.
- No fires are to be lit within the R.P.A.

The protective barriers shall remain in an undisturbed condition and only removed on completion of all construction activity finished grading and sodding. Any breach of the protective fence shall be reported to the consulting arborist.

Fig 3. Protective Barrier



* The above displays an example of a suitable protective barrier as recommended by *BS. 5837 2012 Trees in Relation to Construction. Recommendations.*

Fig. 4 Signage to be placed on all protective fencing



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- No materials of any kind are to be stored within the R.P.A.
- No “Spilling out” of materials shall take place within the R.P.A.
- No fires are to be lit within the R.P.A.

Ground Protection

- 7.3 Although works within the RPA are not recommended should essential works be required within the RPA. The installation of ground protection in the form of a single thickness of scaffold boards on top of a compressible layer laid onto a geotextile may be acceptable. For wheeled or tracked movements within the R.P.A. the ground protection should be designed by an engineer to accommodate the likely loading. Any works within the RPA must be undertaken with prior consultation with the arborist.

Tree Protection Plan

- 7.4 A site specific Tree Protection Plan has been undertaken please refer to Appendix 2

8.0 Arboricultural Method Statement/Tree Protection Strategy

- 8.1 The objective of this arboricultural method statement/tree protection plan is to provide information for the building contractor/site manager on how the trees or hedgerows on the site need to be protected pre., during and post development works so that they can prepare their own site specific detailed method statement for their works
- 8.2 It is necessary for the protective fencing to be erected and all other mitigation measures required to be put in place prior to any development works commencing on site to ensure all retained trees and their critical rooting zone are protected for the duration of the works. Refer to tree protection plan (for the position of root protection areas and additional mitigation measures
- 8.3 The protection for trees and hedgerows shown for retention will occur in three stages known as *pre, during and post development*.

Table 2. Arboricultural Method Statement/Tree Protection Strategy – Management Stages

Arboricultural Method Statement/Tree Protection Strategy – Management Stages		
Stage 1 – Pre development works	Stage 2 - The construction works stage	Stage 3-Post Development Works
1. Consultation with Arborist and developer	1. Protective Fencing – management and maintenance	1. Site inspection by arborist to ensure plan adhered to and trees protected
2. Site meeting - consultation with Arborist, developer, main contractor and sub-contractor	2. Excavations – works only commence when protective fencing in place	
3. Tree works – Appointment of professional tree surgeon	3. Working within the RPA – All works within the RPA to be discussed and agreed with the arborist	
4. Erection of protective fencing/Mitigation measures	4. Finished ground levels/Landscaping – All works to ensure the integrity of tree/s Protected.	

Stage 1 - Pre development works

8.4 Prior to works commencing on site the following needs to be agreed and implemented:

1. The developer may need to appoint an arboriculturist (If requested by the Local authority) for the duration of the project. The arborist is to make regular site visits to ensure that the protection measures are in place and are being adhered too.
2. The main contractor and sub-contractors are to be briefed on the tree protection plan and ensure all measures are kept in place for the duration of the project
3. All personnel are to adhere to the recommendations of the appointed arborist
4. Any issues in relation to trees shown for retention must be discussed with the appointed arborist and the necessary mitigation measures put in place without delay and prior to the works taking place.

Site meeting

8.5 Prior to any works on site, it may be necessary that a meeting be arranged between the project manager, site foreman, the project landscape architect, the project arborist and the local authority to identify and finalise the trees for removal and the line of protective fencing and any other mitigation measures

Tree works

8.6 The developer or the main contractor is to appoint a professional tree surgery company to undertake any tree removal or surgery works identified. The works are to be undertaken in accordance with *BS 3998 2010*.

Erection of protective fencing/Mitigation measures

8.7 The erection of protective fencing is to be erected to the fence line shown in tree protection plan. The fencing must adhere with BS 5837: 2012 (Figure 3 and Figure 4 above). Signage must be placed on the fence to highlight its importance. Once the fencing is erected works can commence on-site.

9.0 Stage 2 - The construction works stage

Protective Fencing

9.1 During the course of the construction works the integrity of the fencing must be respected and remain in place at all times. No building materials or soil heaps are to be stored within this area. Should essential works need to take place within the root protection area the project arborist must be informed in advance and any mitigation measures are to be put in place. The protective fencing must remain in situ for the duration of the project and must only be removed upon completion of all works.

Excavations

9.2 Excavation works are only to commence once the protective fence line is in place. The excavations need to be viewed on site once marked out with the project manager, site foreman and the project arborist in advanced of excavation to determine the extent of the impact and the works space required to allow the construction works proceed and to assess any additional mitigation measures that may be required to protect the retained trees. In certain areas it may be necessary to use alternative methods of excavation to prevent encroachment into the RPA of the trees to be retained and this may include such methods as retaining walls, no dig technique etc.

Working within the RPA

9.3 If it becomes necessary to undertake works within the RPA of tree/trees, these must be discussed and agreed with the project arborist. All works must be carried out manually root pruning is to be undertaken by an arborist using hand held equipment such as a handsaw.

For pedestrian movements within the R.P.A. the installation of ground protection in the form of a single thickness of scaffold boards on top of a compressible layer laid onto a geotextile may be acceptable. For wheeled or tracked movements within the R.P.A. the ground protection should be designed by an engineer to accommodate the likely loading.

Finished ground levels/Landscaping

9.4 The existing ground levels within the RPA of the retained trees must be retained and incorporated into the finished landscaped development. Where changes in level occurs 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 RPAs must be carried out manually and the soil levels must not be lowered or raised resulting in root damage to the trees. All finished surfaces are to be porous to allow the free movement of water and gaseous exchange to the roots.

10.0 Stage 3-Post Development Works

10.1 The project is not to be considered complete until the arborist has inspected the site and is satisfied that all retained trees have been protected in accordance with the site specific Tree Protection Plan and there has been no negative impact on the retained trees on site as a result of the development.

Appendix 1 - Tree Categorisation

Category U

This category signifies those trees that are in such a condition that any existing value would be lost within 10 years and which should, in the current context, be removed for reasons of sound arboricultural management.

Category A.

Those trees of a high quality and value, in such a condition as to be able to make a substantial contribution. (A minimum of 40 years is suggested)

Category B

This category signifies those trees of a moderate value and in such a condition as to be able to make a substantial contribution (A minimum life expectancy of 20 yrs is suggested)

Category C

This category signifies those trees of a low quality and value that are currently in an adequate condition to remain until new planting could be established (A minimum life expectancy of 10yrs is suggested), or young trees with a stem diameter below 150mm. 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.

The above categories have sub-categories attached to the tree categorisation.

Sub-category 1- Mainly Arboricultural Values eg-A1

Sub-category 2- Mainly Landscape Values- B2

Sub-category 3- Mainly cultural values, including conservation C2

Appendix 1 – Tree Inventory

Tree Inventory Legend

Tree Dimensions - All dimensions are in meters.

Ht - Tree Height

Crown clearance - Lowest canopy height (distance from ground level to the first live branch)

Crown spread - Tree Canopy Spread measured by radii at north, east, south and west

DBH - Stem diameter at approx. 1.50m from ground level.

RPA - Root Protection Area, as a radius measured from the tree's stem centre.

Physiological Condition

Good - A specimen of generally good form and health

Fair - A specimen with defects or ill health that can be either rectified or managed typically allowing for retention

Poor - A specimen whom through defect, disease attack or reduced vigour has a limited longevity or may be unsafe

Dead - A dead tree

Age Class - 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 approximately 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.

Structural Condition - Information on structural form, defects, damage, injury or disease supported by the tree

PMR (Preliminary Management Recommendations) – refers to Arboricultural actions or works considered necessary at the time of the inspection and relating to the existing site context and tree condition. *Note is also made of works considered as urgent.*

Species Common name is given; botanical name is also given upon its first entry, in I

Appendix 1

Kill, Co. Kildare

Tree #	Species Botanical Name	Age class	Size (mm)	Height (M)	Crown Sp. (M)	Crown Cl.(M)	Condition	Structural/Physiological Observations	Impact of the development	PMR	Category	R.P.A. Meters
20	<i>Cupressus macrocarpa</i> Monterey Cypress	M	650	18	N=3 S=3 E=3 W=2	2	Good	A large mature cypress that provides screening between the site and private housing estate	Unknown	No works required	B2	7.5m
21	Monterey Cypress	M	650	18	N=3 S=3 E=3 W=2	2	Good	A large mature cypress that provides screening between the site and private housing estate	Unknown	No works required	B2	7.5m
22	Monterey Cypress	M	650	18	N=3 S=3 E=3 W=2	2	Good	A large mature cypress that provides screening between the site and private housing estate	Unknown	No works required	B2	7.5m
23	Monterey Cypress	M	350	18	N=3 S=3 E=3 W=2	2	Good	A large mature cypress that provides screening between the site and private housing estate	Unknown	No works required	B2	4.5m
24	Monterey Cypress	M	350	18	N=3 S=3 E=3 W=2	2	Good	A large mature cypress that provides screening between the site and private housing estate	Unknown	No works required	B2	3.5m

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25	Monterey Cypress	M	450	18	N=3 S=3 E=3 W=2	2	Good	A large mature cypress that provides screening between the site and private housing estate	Unknown	No works required	B2	5.5m
26	Monterey Cypress	M	450	18	N=3 S=3 E=3 W=2	2	Good	A large mature cypress that provides screening between the site and private housing estate	Unknown	No works required	B2	5.5m
27	Monterey Cypress	M	450	18	N=3 S=3 E=3 W=2	2	Good	A large mature cypress that provides screening between the site and private housing estate	Unknown	No works required	B2	5.5m
28	Monterey Cypress	M	320	14	N=3 S=3 E=3 W=2	2	Good	A large mature cypress that provides screening between the site and private housing estate	Unknown	No works required	B2	4.2m
29	Monterey Cypress	M	1100	24	N=4 S=4 E=4 W=4	2	Good	A large mature cypress that provides screening between the site and private housing estate	Unknown	No works required	B2	12m

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26	Monterey Cypress	M	450	18	N=3 S=3 E=3 W=2	2	Good	A large mature cypress that provides screening between the site and private housing estate	Unknown	No works required	B2	5.5m
27	Monterey Cypress	M	450	18	N=3 S=3 E=3 W=2	2	Good	A large mature cypress that provides screening between the site and private housing estate	Unknown	No works required	B2	5.5m
28	Monterey Cypress	M	320	14	N=3 S=3 E=3 W=2	2	Good	A large mature cypress that provides screening between the site and private housing estate	Unknown	No works required	B2	4.2m
29	Monterey Cypress	M	1100	24	N=4 S=4 E=4 W=4	2	Good	A large mature cypress that provides screening between the site and private housing estate	Unknown	No works required	B2	12m
30	Monterey Cypress	M	1100	24	N=4 S=4 E=4 W=4	2	Good	A large mature cypress that provides screening between the site and private housing estate	Unknown	No works required	B2	12m

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31	<i>Fraxinus excelsior</i> Ash	EM	260	6	N=1 S=1 E=1 W=1	2	poor	An early mature ash in advanced decline	Unknown	Remove	U	
32	<i>Fraxinus excelsior</i> Ash	EM	260	6	N=1 S=1 E=1 W=1	2	poor	An early mature ash in advanced decline	Unknown	Remove	U	
33	<i>Fraxinus excelsior</i> Ash	EM	260	6	N=1 S=1 E=1 W=1	2	poor	An early mature ash in advanced decline	Unknown	Remove	U	
34	<i>Fraxinus excelsior</i> Ash	EM	260	6	N=1 S=1 E=1 W=1	2	poor	An early mature ash in advanced decline	Unknown	Remove	U	
35	Monterey Cypress	M	1100	20	N=4 S=4 E=4 W=4	1	Good	A large mature cypress that provides screening between the site and private housing estate	Unknown	No works required	B2	12m

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32	<i>Fraxinus excelsior</i> Ash	EM	260	6	N=1 S=1 E=1 W=1	2	poor	An early mature ash in advanced decline	Unknown	Remove	U	
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35	Monterey Cypress	M	1100	20	N=4 S=4 E=4 W=4	1	Good	A large mature cypress that provides screening between the site and private housing estate	Unknown	No works required	B2	12m
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37	<i>Acer platanoides</i> Norway Maple	EM	280	8	N=2 S=2 E=2 W=2	2	Good	An early large mature Norway maple	Unknown	No works required	C2	3.8m
38	<i>Populus nigra x 'Italica'</i> Lombardy Poplar	M	780	26	N=4 S=4 E=4 W=4	2	Fair	A large mature Poplar its retention viability is low as this species is susceptible to wind damage and its aggressive root systems	Unknown	Consider for removal	C2	8.8m
39	Lombardy Poplar	M	780	26	N=4 S=4 E=4 W=4	2	Fair	A large mature Poplar its retention viability is low as this species is susceptible to wind damage and its aggressive root systems	Unknown	Consider for removal	C2	8.8m
40	Lombardy Poplar	M	780	26	N=4 S=4 E=4 W=4	2	Fair	A large mature Poplar its retention viability is low as this species is susceptible to wind damage and its aggressive root systems	Unknown	Consider for removal	C2	8.8m
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45	Lombardy Poplar	M	780	26	N=4 S=4 E=4 W=4	2	Fair	A large mature Poplar its retention viability is low as this species is susceptible to wind damage and its aggressive root systems	Unknown	Consider for removal	C2	8.8m
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48	Lombardy Poplar	M	780	26	N=4 S=4 E=4 W=4	2	Fair	A large mature Poplar its retention viability is low as this species is susceptible to wind damage and its aggressive root systems	Unknown	Consider for removal	C2	8.8m
49	Lombardy Poplar	M	780	26	N=4 S=4 E=4 W=4	2	Fair	A large mature Poplar its retention viability is low as this species is susceptible to wind damage and its aggressive root systems	Unknown	Consider for removal	C2	8.8m
50	Lombardy Poplar	M	780	26	N=4 S=4 E=4 W=4	2	Fair	A large mature Poplar its retention viability is low as this species is susceptible to wind damage and its aggressive root systems	Unknown	Consider for removal	C2	8.8m
51	Lombardy Poplar	M	780	26	N=4 S=4 E=4 W=4	2	Fair	A large mature Poplar its retention viability is low as this species is susceptible to wind damage and its aggressive root systems	Unknown	Consider for removal	C2	8.8m

Tree #	Species Botanical Name	Age class	Size (mm)	Height (M)	Crown Sp. (M)	Crown Cl.(M)	Condition	Structural/Physiological Observations	Impact of the development	PMR	Category	R.P.A. Meters
52	Lombardy Poplar	M	780	26	N=4 S=4 E=4 W=4	2	Fair	A large mature Poplar its retention viability is low as this species is susceptible to wind damage and its aggressive root systems	Unknown	Consider for removal	C2	8.8m
53	Lombardy Poplar	M	780	26	N=4 S=4 E=4 W=4	2	Fair	A large mature Poplar its retention viability is low as this species is susceptible to wind damage and its aggressive root systems	Unknown	Consider for removal	C2	8.8m
54	Lombardy Poplar	M	780	26	N=4 S=4 E=4 W=4	2	Fair	A large mature Poplar its retention viability is low as this species is susceptible to wind damage and its aggressive root systems	Unknown	Consider for removal	C2	8.8m
55	Lawson cypress x 6	EM	280	8	N=1 S=1 E=1 W=1	2	Good	A row of early mature cypress a tree of low ecological value	Unknown	Consider for removal	C2	3.8m
56	<i>Betula pendula</i> Silver birch	EM	280	8	N=1 S=1 E=1 W=1	2	Fair	An early mature birch that has been suppressed by the larger cypress	Unknown	Retain	C2	3.8m

Tree #	Species Botanical Name	Age class	Size (mm)	Height (M)	Crown Sp. (M)	Crown Cl.(M)	Condition	Structural/Physiological Observations	Impact of the development	PMR	Category	R.P.A. Meters
57	Lawson cypress	M	360	12	N=2 S=2 E=2 W=2	2	Fair	A mature cypress a tree of low ecological value and of negligible amenity value	Unknown	Consider for removal	C2	4.6m
58	Silver birch	M	300	12	N=1 S=1 E=1 W=1	2	Good	A mature silver birch in good condition	Unknown	Retain	B2	4m
59	Lawson cypress	M	280	12	N=2 S=2 E=2 W=2	2	Fair	A mature cypress a tree of low ecological value and of negligible amenity value	Unknown	Consider for removal	C2	3.8m
54	Lawson cypress	M	280	12	N=2 S=2 E=2 W=2	2	Fair	A mature cypress a tree of low ecological value and of negligible amenity value	Unknown	Consider for removal	C2	3.8m
T1	Norway maple	SM	100	4	N=1 S=1 E=1 W=1	2	Good	A self seeded semi-mature maple	Unknown	Consider for removal	C2	2m

Tree #	Species Botanical Name	Age class	Size (mm)	Height (M)	Crown Sp. (M)	Crown Cl.(M)	Condition	Structural/Physiological Observations	Impact of the development	PMR	Category	R.P.A. Meters
T2	Ash	SM	110	4	N=1 S=1 E=1 W=1	1	Fair	A self-seeded multi-stemmed ash	Unknown	Retain	C2	2.1m
17	Norway maple 'Crimson King;	M	400	16	N=3 S=3 E=3 W=3	2	Good	A large mature maple	Unknown	Retain	A2	5m
12	Lombardy Poplar	M	1000	24	N=4 S=4 E=4 W=4	2	Fair	A large mature Poplar its retention viability is low as this species is susceptible to wind damage and its aggressive root systems	Unknown	Consider for removal	C2	12m
T3	Lawson cypress	M	280	12	N=2 S=2 E=2 W=2	2	Dead	A dead tree	Unknown	Remove	U	
11	Lombardy Poplar	M	650	24	N=4 S=4 E=4 W=4	2	Fair	A large mature Poplar its retention viability is low as this species is susceptible to wind damage and its aggressive root systems	Unknown	Consider for removal	C2	7.5m

Tree #	Species Botanical Name	Age class	Size (mm)	Height (M)	Crown Sp. (M)	Crown Cl.(M)	Condition	Structural/Physiological Observations	Impact of the development	PMR	Category	R.P.A. Meters
10	Lombardy Poplar	M	650	24	N=4 S=4 E=4 W=4	2	Fair	A large mature Poplar its retention viability is low as this species is susceptible to wind damage and its aggressive root systems	Unknown	Consider for removal	C2	7.5m
9	Lombardy Poplar	M	650	24	N=4 S=4 E=4 W=4	2	Fair	A large mature Poplar its retention viability is low as this species is susceptible to wind damage and its aggressive root systems	Unknown	Consider for removal	C2	7.5m
8	Lombardy Poplar	M	650	24	N=4 S=4 E=4 W=4	2	Fair	A large mature Poplar its retention viability is low as this species is susceptible to wind damage and its aggressive root systems	Unknown	Consider for removal	C2	7.5m
7	Lombardy Poplar	M	650	24	N=4 S=4 E=4 W=4	2	Fair	A large mature Poplar its retention viability is low as this species is susceptible to wind damage and its aggressive root systems	Unknown	Consider for removal	C2	7.5m
6	Lombardy Poplar	M	650	24	N=4 S=4 E=4 W=4	2	Fair	A large mature Poplar its retention viability is low as this species is susceptible to wind damage and its aggressive root systems	Unknown	Consider for removal	C2	7.5m

Tree #	Species Botanical Name	Age class	Size (mm)	Height (M)	Crown Sp. (M)	Crown Cl.(M)	Condition	Structural/Physiological Observations	Impact of the development	PMR	Category	R.P.A. Meters
T4	Beech	M	700	20	N=4 S=4 E=4 W=4	2	Good	A large mature beech located off site	Unknown	Retain	A2	8m
T5	Ash	M	340	20	N=3 S=3 E=3 W=3	2	Good	A large mature ash	Unknown	Retain	C2	4.4m
T6	Hawthorn	M	300	10	N=2 S=2 E=2 W=2	2	Good	A large mature hawthorn	Unknown	Retain	B2	4m
T7	Ash	M	340	20	N=3 S=3 E=3 W=3	2	Good	A large mature ash	Unknown	Retain	C2	4.4m
T8	Ash cluster x 4	M	240	8	N=2 S=2 E=2 W=2	2	Fair	An ash cluster	Unknown	Consider for removal	C2	3.4m



This report was prepared by:

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Yours in Conservation,

Michael Garry.

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figure 2. Tree Protection Plan.

