

Arborist Associates Ltd.

An Arboricultural Assessment of the Tree Vegetation within and Adjoining the Site Area Known as 'Rockbrook', Carmanhall Road, Sandyford, Dublin 18.

Prepared for: Ires Residential Properties Ltd

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

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94 Ballybawn Cottages, Enniskerry, Co. Wicklow.

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

Summary

The site area is known as “Rockbrook”, Carmanhall Road, Sandyford, Dublin 18. It consists of the western half of an existing site area which had been partly developed and has now lain derelict for some years.

The site area is rectangular in shape and runs between the ‘Carmanhall Road’ to the south and the existing completed residential / commercial development containing the ‘Aldi Store’ to the north. It is adjoined on its east side by the other half of this overall site area which is currently under construction and on the western side by a commercial and residential development that has already been completed.

The tree vegetation associated with this site area is located along the southern boundary and consists of a line of early-mature Leyland Cypress (Tree Line No.1) located on the site side of the southern boundary and outside this on the public grass verge running along ‘Carmanhall Road’ is a line of ten trees (Tree Line No.2) made up of eight Norway Maple and two London Plane trees all of a semi-mature age class. Located west of this is a short section of Griselinia hedging (Hedge No.1) on the road side of the site hoarding and west of this again is a small group planting of Birch (Tree Group No.1) of a young age class. Located along the north-western boundary within the adjoining completed development is a linear shrub border (No.1) with some small young trees and one larger specimen feature tree (tree No.11).

A condition tree assessment report has been carried out by us to the recommendations of BS5837:2012. See ‘Appendix 1’ and drawing No.RBSF001 which has been prepared as a constraints plan for details of our findings.

The following table gives a breakdown of the category grading for the tree vegetation on this site area:

Category Grade	Tree Nos.
U	Tree Line No.1
A	--
B	Tree Nos.1, 2, 3, 5, 6, 8, 9 & 11
C	Tree Nos. 4, 7 & 10 Hedge No.1 Tree Group No.1. Shrub Border No.1

Following the production of this assessment and the constraints drawing, I have assessed the proposed development layout and prepared an arboricultural impact assessment based on my understanding of the proposed development for this site area.

Due to the proposed development layout, it is necessary to remove all the tree, hedge and shrub vegetation from this site area. On drawing No.RBSF002, I have shown this vegetation for removal with ‘Red Hatched’ crown spreads.

The greatest impact will be the loss of the street trees numbered 1-10, but this is an opportunity to redesign this area and this will include the planting of a new line of trees within specifically built planting pits that will mitigate the loss of the trees in the first place and will help secure suitable long-term tree cover along this road. See landscape architects drawings and schedules for detail on tree selection and tree planting pit design.

The impact of the loss of the tree, shrub and hedge vegetation is minimal on the treescape of the greater area and this is to be mitigated and improved with the use of new tree, hedge and shrub planting within the completed landscaped development. See landscape architects drawings and schedule for detail.

1.0 Instructions

1.1 I have been instructed by Murray Associates (project landscape architects) to assess the tree vegetation on and adjoining the site area known as 'Rockbrook', Carmanhall Road, Sandyford, Dublin 18 and report on the following:

- A:** To assess the present condition of the tree vegetation within and adjoining this site area. See 'Appendix '1 and drawing No.RBSF001 which has been produced as a constraints plan for detail
- B:** To assess the impact of the proposed development layout on the tree vegetation indicating on a drawing those for removal and retention. See 'Section 5' of our report and drawing No.RBSF002 for detail.

2.0 Report Limitations

- 2.1 The inspection has been carried out from ground level only and is a preliminary report. It does not include climbing inspections or below ground investigations. Should a more detailed inspection be thought necessary on any tree/s, then this will be highlighted within my recommendations.
- 2.2 The assessment is based on what was visible at the time and recommendations made are subject to the knowledge and expertise of the qualified Arboriculturist that carried out the above inspections.
- 2.3 Trees should be inspected on a regular basis as their health and condition can change rapidly due to biotic and abiotic agents. The recommendations within this report are valid for a 12-month period only and this may be reduced in the case of any change in conditions to or in the proximity of the trees.
- 2.4 Before undertaking any work to these trees, it would be advisable to check whether there is any planning or tree preservation controls in operation, if they are it will be necessary to obtain consent before undertaking any works (pruning or felling).

3.0 Aims and Report Brief

- 3.1 Arborist Associates Ltd. have been commissioned to provide a condition assessment of the existing tree vegetation within and adjoining this site area, to prepare an arboricultural implication study on the current proposed site layout and to recommend tree protective measures for those trees for retention within the vicinity of the proposed development.
- 3.2 The Arboricultural data which is presented within the attached tree schedule (see Appendix 1), 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 on the land survey map provided.
 - Tree Number (trees numbered numerically).
 - 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 – An assessment of the trees 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 or 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.

Any category 'U' trees identified within this site area have been shown on our drawings (Nos. RBSF001& RBSF002) 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 trees within this site area, no trees have been identified within this category.

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.

Any category 'B' trees identified within this site area have been shown on our drawings (Nos. RBSF001 & RBSF002) 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 would be removed for one reason or another. This category consists of trees of all age classes from young to mature. These trees should not be seen as a considerable constraint on the proposed works on these grounds, but should be considered for retention where viable.

Any category 'C' trees identified within this site area have been shown on our drawings (Nos. RB001 & RB002) with a 'Grey' donut around their trunk positions.

- 3.5 The trees have been plotted onto the attached drawing (Dwg No.RBSF001) by a land survey company. This drawing has been developed as a constraints drawing to aid the design team in the layout of the proposed development and the tree 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 works 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.

3.6 Based on the proposed development layout, this drawing has been developed as a Tree Removal/Plan (RBSF002) where the trees that are to be removed due to the proposed works or condition/ management have been shown with a hatched 'Red' crown spread.

4.0 Summary of Survey Findings.

4.1 The site area consists of the western half of an existing site area that had been partially developed and has now lain derelict for some years. The site area is rectangular in shape and runs between the 'Carmanhall Road' to the south and the existing completed development containing the 'Aldi Store' to the north. It is adjoined on its east side by the other half of this overall site area which is currently being developed and on the western side by a commercial and residential development that has previously been completed.

4.2 The tree vegetation associated with this site area is located along the southern boundary partly within the site area and partly on the adjoining public road (Carmanhall Road) and at the western end of the site added as part of the landscaping of the adjoining sites to the west and north. The following gives detail of this vegetation:

Tree Line No.1 consists of a line of early- mature Leyland Cypress located on the inside of the boundary wall railing which is currently cordoned off from the road by hoarding. They had initially been cut in the past at a height of c.4m and maintained more so as a high hedge structure, but have since been allowed to grow up with tall upright stems. Excavations and construction activities have occurred on the site side (northern side) quite close to the base of these trees which has resulted in soil and root damage that will have compromised their stability and left them more prone to storm damage. Their crown overhang into the site area has also been cut back, particularly on lower branches further impacting on their crown structure. On the road side, they have been allowed to grow out wide and are causing some overcrowding/competition with the street trees and are starting to impact on their development.

Tree Line No.2 consists of a line of trees located on the edge of the road side grass verge (c.2m wide) outside the site hoarding and are cordoned off from the roadside kerb by the public footpath. It consists of a line of 9No.Norway Maple cv. with 1No. London Plane tree (No.5). They are establishing well and are currently of a semi-mature age class in fair condition physiologically. They are of some value to the treescape of this road and this tree line extends east in front of the adjoining site area. They are growing within hostile growing conditions with potential to cause structural damage to the public footpath as they grow in size. These trees are being overcrowded/ suppressed out on their northern side by 'Tree Line No.1' with slightly asymmetrical crowns weighed towards the road as a result. They have received pruning in the past, particularly on the lower branches in order to maintain clearance with the road and some limbs/branches have been broken or pruned back with stubs remaining. These trees would benefit from the

cutting back or removal of those trees that make up 'Tree Line No.1' to give them more space to develop their crowns.

Hedge No.1 extends along the site boundary west of 'Tree Line Nos. 1 & 2'. It is located on the edge of the public footpath outside the site hoarding. It consists of Griselinia of an early-mature age class and it has been maintained as a low formal hedge that receives regular trimming to contain.

Tree Group No.1 consists of a small group of recently planted Birch which have been placed at 3m centers into an area of soft landscape surrounded by hard landscaping/surfacing. They are starting to establish, some better than others with a number of trees in decline due to the drought of this spring/summer.

Shrub Border No.1 consists of a linear shrub border extending east-west along the northern boundary of the site area and would have been planted as part of the landscaping of the completed development containing the 'Aldi' store to the north of the site area. It consists of a mix of ornamental shrubs with some young trees protruding up over the height of the shrubs and the shrubs have received regular trimming/cutting to contain as a low formal shrub border. Tree No.11 a young Red Oak (*Quercus rubra*) is of prominence within this landscaped area and was planted in here as a feature tree and is establishing well.

- 4.3 The following table gives a breakdown of the category grading for the tree vegetation on this site area:

Category Grade	Tree Nos.
U	Tree Line No.1
A	--
B	Tree Nos.1, 2, 3, 5, 6, 8, 9 & 11
C	Tree Nos. 4, 7 & 10 Hedge No.1 Tree Group No.1. Shrub Border No.1

5.0 Impact Assessment

- 5.1 The proposed development on this site area consists of a new high rise development over basement and it will be necessary to allow for infrastructural works such as services.
- 5.2 Due to the proposed development layout, it is necessary to remove all the tree, hedge and shrub vegetation from this site area including the line of street trees (tree line No.2). On drawing 'No.RB002', I have shown this vegetation for removal with 'Red Hatched' crown spreads.
- 5.3 The bulk of this vegetation is either of a small size and is only visual from within the site area or is of poor quality with the exception of Tree Line No.2 which consists of 10No. street trees and tree No.11 which is a planted feature specimen tree.

The loss of the street trees numbered 1-10 will have some immediate impact on the streetscape, but this is an opportunity to redesign this area and will include the planting of a new line of trees within specifically built planting pits that will mitigate the loss of these trees in the first place and will help secure suitable long-term tree cover along this road. See landscape architects drawings and schedules for detail on tree selection and tree planting pit design.

- 5.4 The impact of the loss of the remaining tree, shrub and hedge vegetation within this site area is minimal on the treescape of the greater area and this is to be mitigated and improved upon with the use of new tree, hedge and shrub planting within the completed landscaped development. See landscape architects drawings and schedule for detail.

This report has been produced as part of a planning application for this site area and is for the sole use of the above named client and refers to only those trees 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*
Felim Sheridan
 F. Arbor. A, RFS Dip, Nat. Dip & NCH in Arboriculture

Date 5th December 2018

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

Condition Tree Assessment

**On the Site Area Known as “Rockbrook”, Carmanhall
Road, Sandyford, Dublin 18.**

Date: 5th December 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 effective to the point of being dangerous.

Structural condition and other comments –

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

Estimated Remaining Contribution in years

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

- Less than (<) 10 years remaining contribution
- 10 + years remaining contribution
- 20 + years remaining contribution
- 40 + years remaining contribution.

Retention Categories

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

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

Main categories

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

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

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

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

Sub categories

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

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

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

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

Reference to Crown spread, Height and Trunk Diameter:

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

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

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

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

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

Root Protection Area (RPA)

RPA Rad – Root Protection radius from the base of the tree measured in meters (m).

RPA Area – Overall Root Protection Area measured in square meters.

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.

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

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

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

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

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

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

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

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

Tree No.	Tree Species	Ht. (m)	Stem Dia. (mm)	Branch Spread (m)	C-Ht. (m)	Age Class	Phys. Con.	Structural Condition Other Comments	Preliminary Recommendation	Remain Contribute in years	Cat. Grade								
								N-north S-south E-east W- west Phys.-physiological.	MS- multi-stemmed A- average										
		A Condition Assessment of the tree vegetation within and adjoining the site area known as 'Rockbrook', Carmanhall Road, Sandyford, Dublin 18.																	
Tree Line No.1	Leyland Cypress <i>Cupressocyparis leylandii</i>	<p>It is located on the inside of the boundary railing with 'Carmanhall Road' and is currently cordoned off from the road by hoarding.</p> <p>They are of an early-mature age class in fair condition physiologically and in fair/ poor condition structurally. They had initially been cut / managed in the past at a height of c.4meters (m) but have since been allowed to grow up with tall upright stems from these cut positions. Excavations and construction activities have occurred on the northern side within close proximity and have resulted in soil and root damage to the point that their stability could be undermined at their current size. Their crown overhang into the site area has also been cut back, particularly on lower branches.</p> <table border="1" data-bbox="427 791 1167 890"> <thead> <tr> <th>Ht. (m)</th> <th>Stem Dia.(mm)</th> <th>Branch Spread (m)</th> <th>C-Ht. (m)</th> </tr> </thead> <tbody> <tr> <td>A 15</td> <td>A 400</td> <td>A 5N/5S/2E/2W</td> <td>A 0</td> </tr> </tbody> </table>							Ht. (m)	Stem Dia.(mm)	Branch Spread (m)	C-Ht. (m)	A 15	A 400	A 5N/5S/2E/2W	A 0	<p>They will either need to be reduced in height by 3-4m to help improve their stability or be removed completely to allow for more appropriate planting within this area.</p> <p>Their retention would only be seen as a short-term solution and their removal will be necessary as part of active management.</p>		U
Ht. (m)	Stem Dia.(mm)	Branch Spread (m)	C-Ht. (m)																
A 15	A 400	A 5N/5S/2E/2W	A 0																
																			

Tree No.	Tree Species	Ht. (m)	Stem Dia. (mm)	Branch Spread (m)	C-Ht. (m)	Age Class	Phys. Con.	Structural Condition Other Comments	Preliminary Recommendation	Remain Contribute in years	Cat. Grade		
								N-north S-south E-east W- west Phys.-physiological.	MS- multi-stemmed A- average				
Tree Line No.2	Norway Maple <i>Acer platanoides</i> London Plane <i>Platanus xhispanica</i>	<p>The following trees are growing on a linear grass verge (c.2m wide) between the public footpath and the site boundary and are located within c.0.5m of the footpath edge.</p> <p>It consists of 9No. Norway Maple cultivars and 1No. London Plane and they are of a semi-mature age class. They are of some prominence within this area and they extend beyond the site boundary in an eastwards direction. They are growing within hostile growing conditions with potential to cause structural damage to the path surface and roadside kerb as they grow in size which is becoming evident in some locations. It is evident that services run within this grass verge with some junction boxes located between the trees. These trees are being overcrowded/ suppressed on their northern side by Tree Line No.1 and have slightly asymmetrical crowns weighed towards the road as a result. They have received pruning in the past, particularly on lower branches in order to maintain clearance with the road and public footpath.</p>						<p>They would benefit from the cutting back of Tree Line No.1 to allow them more space to develop their crowns and to reduce competition.</p> <p>They would also benefit from the pruning of lower branches in order to improve clearance over the surrounding surfaces. Prune branch stubs back to proper target pruning points.</p> <p>Monitor the adjoining footpath surface for structural damage and carry out the necessary repairs.</p>	--				
				<p>The following gives details on these trees working from east to west.</p>									
Tree No.1	Norway Maple <i>Acer platanoides</i>	9.5	290	3N 2S 4E	3	Semi Mature	Fair/ Good	Fair It has a slightly asymmetrical crown as a result of competition from Tree Line No.1. It subdivides	Prune lower crown in order to improve clearance over the surrounding surfaces.	20+	B1		

Tree No.	Tree Species	Ht. (m)	Stem Dia. (mm)	Branch Spread (m)	C-Ht. (m)	Age Class	Phys. Con.	Structural Condition Other Comments	Preliminary Recommendation	Remain Contribute in years	Cat. Grade
								N-north S-south E-east W- west Phys.-physiological.	MS- multi-stemmed A- average		
				3W				into twin-stems at a height of c.2.5m. The lower branches have been pruned back in the past in order to raise up its crown, however it still has a low crown formation. It is growing close to the edge of the footpath within a hostile growing environment and has suffered bark wounds on surface roots. It has also suffered a bark wound on the lower trunk which has calloused over. It would benefit from more space to grow/develop.			
Tree No.2	Norway Maple <i>Acer platanoides</i>	11	250	1N 4S 4E 3W	3	Semi Mature	Fair/ Good	Fair It is growing up on the outer canopy edge of Tree Line No.1 with an asymmetrical crown weighed slightly out towards the road as a result. It forms a twin-stemmed tree from c.2m up with a slightly acute union formation between stems at this point. It would benefit from more space to grow / develop. It has suffered bark wounding on surface roots.	Carry out formative pruning to deal with co-dominant leaders. Carry out pruning on lower crown in order to improve clearance over the surrounding surfaces.	20+	B1
Tree No.3	Norway Maple <i>Acer platanoides</i>	10	290	1N 4S 5E 4W	2	Semi Mature	Fair/ Good	Fair It is growing up within a line on the outer canopy edge of Tree Line No.1 with a slightly asymmetrical crown as a result. The lower branches have been pruned / broken back with some stubs remaining. There is an acute union formation between the two lower branches on the main trunk with included bark present. It has suffered bark wounding on surface roots.	It would benefit from some formative pruning to address crown structure. Prune lower crown in order to improve clearance over the surrounding surfaces, in particular over the road.	20+	B1
Tree No.4	Norway Maple <i>Acer</i>	9.5	230	1N 4S 4E	3	Semi Mature	Fair	Fair It is growing on the outer canopy edge of Tree Line No.1 with an asymmetrical crown weighed	It would benefit from some formative pruning to deal with structural issues.	10-20	C1

Tree No.	Tree Species	Ht. (m)	Stem Dia. (mm)	Branch Spread (m)	C-Ht. (m)	Age Class	Phys. Con.	Structural Condition Other Comments	Preliminary Recommendation	Remain Contribute in years	Cat. Grade
								N-north S-south E-east W- west Phys.-physiological.	MS- multi-stemmed A- average		
	<i>platanoides</i>			4W				towards the road as a result. It has a low crown formation and some lower branches have been broken off by passing high sided vehicles. It has suffered bark wounds on the lower trunk and these wounds have calloused over. It would benefit from more space to develop.	Prune lower crown in order to improve clearance over the surrounding surfaces.		
Tree No.5	London Plane <i>Platanus xhispanica</i>	11.5	270	2N 5S 5E 4W	3	Semi Mature	Fair/ Good	Fair It is growing on the edge of the footpath with some surface roots evident. Its crown structure has been affected due to competition from Tree Line No.1. The lower branches have been pruned back in the past in order to raise up its crown. It crown is beginning to encroach in onto the public lighting to its east.	Carry out some formative pruning to deal with structural issues and crown development. Prune lower crown in order to improve clearance over the surrounding surfaces and prune back from the public lighting.	20+	B1
Tree No.6	Norway Maple <i>Acer platanoides</i>	9.5	230	2N 4S 4E 3W	3	Semi Mature	Fair/ Good	Fair It is growing up on the edge of tree line No.1 with a slightly asymmetrical crown as a result. Some lower branches have been pruned back in the past in order to raise up its crown and there is some epicormic growth developing on the main trunk. It has suffered bark wounding on the lower trunk and on surface roots with good callous growth around these wounds.	It would benefit from some formative pruning to address structural issues and habit. Prune stubs back to proper target pruning points. Carry out pruning on lower branches in order to improve clearance over the surrounding surfaces.	20+	B1
Tree No.7	London Plane <i>Platanus xhispanica</i>	10	200	2N 3S 3E 3W	2	Semi Mature	Fair	Fair It is located within a confined space between the footpath and a junction box located on its northern side within c.0.5m of its base. It was initially twin-stemmed from c.2.5m up and the stem on the roadside has been broken back leaving a stub	It would benefit from some formative pruning to address structural issues and to improve its growth habit. Prune lower branches in order to maintain clearance over the	10+	C1

Tree No.	Tree Species	Ht. (m)	Stem Dia. (mm)	Branch Spread (m)	C-Ht. (m)	Age Class	Phys. Con.	Structural Condition Other Comments	Preliminary Recommendation	Remain Contribute in years	Cat. Grade
								N-north S-south E-east W- west Phys.-physiological.	MS- multi-stemmed A- average		
								which is sprouting with some decay present. This has also impacted on its crown structure. Its crown development on the northern side has been impacted upon due to its close proximity to tree line No.1. It is located within close proximity to tree No.6.	surrounding surfaces. It may be considered for removal as part of the selective thinning/ management within this area. Monitor the utility junction box for structural damage.		
Tree No.8	Norway Maple cv. <i>Acer platanoides cv.</i>	10	240	1N 3S 2E 3W	3	Semi Mature	Fair	Fair It has an upright crown habit and has been drawn up and out for the light due to competition. It is located on the outer canopy edge of tree Line No.1 and is three-stemmed from base with an acute union formation between stems. The lower branches have been pruned/ removed in the past in order to raise up its crown. It has suffered a bark wound on the lower trunk and surface roots.	It would benefit from some formative pruning to correct structural issues and to improve its growth habit.	20+	B1
Tree No.9	Norway Maple cv. <i>Acer platanoides cv.</i>	9.5	200	1N 3S 3E 2W	3	Semi Mature	Fair/ Good	Fair It has a narrow upright crown with an acute union formation between some stems. It has suffered a large linear bark wound on the lower trunk exposing the underlying timber to decay. It is located c.3m east of the public light pole.	Requires no work at the present time.	20+	B1
Tree No.10	Norway Maple <i>Acer platanoides</i>	9	200	1N 3S 4E 3W	2	Semi Mature	Fair	Fair It is growing on the outer canopy edge of tree line No.1 with an asymmetrical crown weighed towards the road. The lower branches have been cut / pruned or broken back in order to raise up its crown over the road with some stubs remaining.	Carry out pruning on lower branches in order to improve clearance over the surrounding surfaces and prune stubs back to proper 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 Phys.-physiological.	MS- multi-stemmed A- average											
								It has suffered a large bark wound on the lower trunk on the footpath side extending up to a height of c.1.2m with decay developing into the underlying timber; however there is good callous growth around this wound. 'Horse Chestnut Scale' is present throughout its crown. It is located c.6m west of the lamp pole.	Monitor its condition on a twelve monthly basis.											
Hedge No.1	Griselinia <i>Griselinia littoralis</i>	<p>Located on the public footpath side of the current site hoarding running from Tree Line No.2 westwards.</p> <p>It is an early-mature age class in fair/ good condition physiologically and in fair condition structurally. It has been clipped/ maintained as a low formal hedge with some gaps where sections have died or have been removed.</p> <table border="1" data-bbox="427 852 1167 951"> <thead> <tr> <th>Ht. (m)</th> <th>Stem Dia.(mm)</th> <th>Branch Spread (m)</th> <th>C-Ht. (m)</th> </tr> </thead> <tbody> <tr> <td>A 1.5</td> <td>--</td> <td>A 0.5N/0.5S</td> <td>A 0</td> </tr> </tbody> </table>								Ht. (m)	Stem Dia.(mm)	Branch Spread (m)	C-Ht. (m)	A 1.5	--	A 0.5N/0.5S	A 0	Continue present maintenance.		C2
Ht. (m)	Stem Dia.(mm)	Branch Spread (m)	C-Ht. (m)																	
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								N-north S-south E-east W- west Phys.-physiological.	MS- multi-stemmed A- average									
Tree Group No.1	Birch <i>Betula pendula</i>	<p>Located along the western boundary of the site area and is on a triangular shaped open grass area surrounded by surfaces.</p> <p>The trees are of a young age class in fair condition both physiologically and structurally although some trees have been impacted upon by the drought of spring/summer this year and are most likely dead or dying as a result. They have been planted as a group at c.3m centres and have been planted into an area of soft landscape. The bulk of them are still attached to their tree ties and stakes. Some of these trees do not appear to have anchored successfully. Changes in the ground levels would appear to have occurred within this area since these trees were planted.</p> <table border="1" data-bbox="427 715 1167 810"> <thead> <tr> <th>Ht. (m)</th> <th>Stem Dia.(mm)</th> <th>Branch Spread (m)</th> <th>C-Ht. (m)</th> </tr> </thead> <tbody> <tr> <td>A 5</td> <td>A 60</td> <td>A 1N/1S/1E/1W</td> <td>A 2</td> </tr> </tbody> </table>						Ht. (m)	Stem Dia.(mm)	Branch Spread (m)	C-Ht. (m)	A 5	A 60	A 1N/1S/1E/1W	A 2	<p>They would benefit from their tree ties and stakes being adjusted where necessary or removed where no longer required.</p> <p>Remove those trees that are dead or at an advanced stage of decline.</p> <p>The changes in ground levels will need to be investigated further and works may need to be carried out in order establish the original ground levels.</p>		C2
Ht. (m)	Stem Dia.(mm)	Branch Spread (m)	C-Ht. (m)															
A 5	A 60	A 1N/1S/1E/1W	A 2															
																		
Shrub Border	Mixed Ornamental Shrubs	<p>Planted as part of the landscaping of the existing building to the north and consists of a linear shrub border of varying widths along its length running in an east-west direction.</p> <p>The shrubs have received regular trimming/cutting to contain as a low formal shrub border contained along a</p>						Continue present maintenance.		C2								

Tree No.	Tree Species	Ht. (m)	Stem Dia. (mm)	Branch Spread (m)	C-Ht. (m)	Age Class	Phys. Con.	Structural Condition Other Comments	Preliminary Recommendation	Remain Contribute in years	Cat. Grade														
								N-north S-south E-east W- west Phys.-physiological.	MS- multi-stemmed A- average																
No.1	Fastigate Oak <i>Quercus fastigiata</i> Sorbus <i>Aucuparia cv.</i> Birch <i>Betula pendula</i> Pine <i>Pinus sp.</i>	boundary fence. It has some value for low screening between existing buildings and the site area that has only been partially developed.						Within this shrub border there are 14No. trees of a young age class that have been planted into it to give extra height. These include 6No. Sorbus, 7No. Fastigated Oak, 4No. Birch and 2No. Pines. Some trees are showing stress/decline and struggling to establish due to the drought period of spring/summer.																	
<table border="1"> <thead> <tr> <th></th> <th>Ht. (m)</th> <th>Stem Dia.(mm)</th> <th>Branch Spread (m)</th> <th>C-Ht. (m)</th> </tr> </thead> <tbody> <tr> <td>Shrubs</td> <td>A 2</td> <td>--</td> <td>2 - 4</td> <td>--</td> </tr> <tr> <td>Trees</td> <td>A6</td> <td>A60</td> <td>A 1N, 1S, 1E, 1W</td> <td>A 2</td> </tr> </tbody> </table>			Ht. (m)	Stem Dia.(mm)	Branch Spread (m)	C-Ht. (m)	Shrubs	A 2	--	2 - 4	--	Trees	A6	A60	A 1N, 1S, 1E, 1W	A 2									
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Tree No.11	Red Oak <i>Quercus rubra</i>	10	240	3N 3S 3E 3W	3	Young	Fair	Fair It is located on the edge of a hard landscape area. This tree was most likely planted as an extra-heavy standard feature tree and seems to be establishing itself well.	Requires no work at the present time.	20-40	B2
											
Notes:											

