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Proposed Part 8 Residential Development Balally Sandyford

Arboricultural Assessment

Dún Laoghaire-Rathdown County Council

February 2024

Project No.	Project name	Date	Revision
TLOT003	Balally	01/02/24	-

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Summary
This report was prepared on behalf of the National Development Finance Agency and Dún Laoghaire-Rathdown County Council with the purpose of undertaking an assessment of trees within lands to the east of the Balally Shopping Centre, Sandyford, Dublin 16. The fieldwork was undertaken on the 12th of September 2023 with a total of thirty-four trees identified and categorised.
The proposed development to build social housing will necessitate the removal of all the trees within the site. Two trees which were included within the survey but which now fall outside of the site boundary will be retained and protected during construction by site hoarding.

1. Client brief & Methodology
This report was prepared on behalf of the National Development Finance Agency and Dún Laoghaire-Rathdown County Council with the purpose of undertaking an assessment of trees within lands to the east of the Balally Shopping Centre, Sandyford, Dublin 16 (image 1). The report outlines these finding and assesses the impact on trees of the proposed development of the site.
The fieldwork was undertaken on the 12th of September 2023.
The survey methodology, supporting drawings and documentation follow the recommendations contained within BS 5837 (2012). The analysis of the trees was undertaken using the VTA methodology as developed by Mattheck and Breloer (1994).

Image 1. Redline boundary outlining site location.

2. General description of trees

The site is located to the east of the Balally Shopping Centre (Image 1). The existing trees appear to have been planted over two / three different phases and are located within the open space area (image 1), immediately to the east of the shopping centre (image 2) and to the west of the Balally Family Resource Centre (image 3).
A total of thirty-four trees were assessed (table 1 with individual tree descriptions contained within appendix i).

Category	Number	% of Total
A	0	0
B	25	74
C	9	26
U	0	0

Table 1. Tree Categories

The trees in the open space area are all early-mature Norway maple cultivars (*Acer platanoides* 'Crimson King) and form part of a larger double line planting of this cultivar (image 1). With one exception the trees are exhibiting good vigour and developing well. Chestnut scale (*Pulvinaria regalis*) is evident on most of the trees but is not a significant pest at present. All these trees have slightly congested crowns and could benefit from moderate crown thinning. It is not considered feasible to manage chestnut scale.

Image 2. Purple leaved Norway maple within open space area. Note tree #550 to left of image with early leaf loss which may indicate decline.

The tree group adjacent to the shopping centre (image 2) appear to have been planted as screening but at least some of the trees may pre-date the shopping centre. The planting is a mixed species group of birch (*Betula pendula*), Leyland cypress (*xCupressocyparis leylandii*), golden cypress cultivar (*Cupressus* cv) and sweet gum (*Eucalyptus* spp). The planting contains a number of supressed individual trees but forms an effective screen of part of the building and carpark. The longer-term management of these trees would require thinning of poorer specimens and the retention of those trees with good long-term potential. There is decay evident in the trunks of the eucalyptus toward the shopping centre which suggests damage during construction which also may suggests that these trees pre-date the shopping centre.

Image 3. Screen planting to east of shopping centre building and carpark. Note close proximity of trees creating a strongly competitive environment.

The trees which form the group to the west of the Balally Family Resource Centre appear to have been planted as screening and are effective in that regard. One large eucalyptus may have originally formed an element of the tree group to the east of the shopping centre. There has been no discernible management to date with the result that there are a number of supressed individual trees within the planting. The longer-term management of these trees would seek to select those which are poorly developed and/or in poor condition for removal.

Image 4. Tree group adjacent to Balally Family Resource Centre

3. Impact of the proposed development

The proposed development of the site for social housing will necessitate the removal of all the existing trees within the site. Two trees which were included within the survey but which now fall outside of the site boundary will be retained and protected during construction by site hoarding. The arboricultural impact is outlined within table 2 and shown on drawing TBAL001 102 Arb Impact.

Category	Number	% of Total
A	0	0
B	23	68
C	9	26
U	0	0

Table 2. Arboricultural Impact

4. Limitations of Survey

This survey should be regarded as a preliminary assessment of the trees and deals with the current condition as identified during this survey only. Every attempt was made to identify hazardous trees in this report; however, this survey was carried out from the ground and therefore cannot be held to have identified elements of decay, which may be hidden out of sight within the crown or beneath ivy or other obstructions. To counter this limitation in the survey process it is vital that during tree works any additional defects found by the climbing arborist are communicated to the consulting arborist to allow appropriate action to be taken.
The details within this survey are based on the condition of the trees during the survey period only. The findings in this survey cannot be held to be valid after any site disturbance, man-made or natural, which may have an adverse effect on any trees present.

5. Terminology

Tree categories

A	Trees of high quality and value due to their size, age, condition, historical/visual merit and/or conservation potential (a minimum of 40 years).
A1	Mainly arboricultural values. Particularly good examples of species, essential components of groups or of formal or semi-formal arboricultural features.
A2	Mainly landscape values. Trees, groups or woodlands which provide a definite screening or softening effects to the locality in relation to views into or out of site, or those of particular visual importance.
A3	Mainly cultural values, including conservation. Trees, groups or woodlands of significant conservation, historical, comparative or other value (e.g. veteran trees or wood-pasture).
B	Trees of moderate quality and value (a minimum of 20 years).
B1	Mainly arboricultural values. Trees that might be included in high categories but are downgraded because of impaired condition (e.g. presence of remedial defects including unsympathetic past management and minor storm damage).
B2	Mainly landscape values. Trees present in numbers, usually as groups or woodlands, such that they form distinct landscape features, thereby attracting a higher collective rating than they might as individuals, but which are not, individually, essential components of formal or semi-formal features (e.g. trees of moderate quality within an avenue that includes better A category specimens) or trees situated internally to the site, therefore individually having little visual impact on the wider locality.
B3	Mainly cultural values including conservation. Trees with clearly identifiable conservation or other cultural benefits.
C	Trees of low quality and value (a minimum of 10 years).
C1	Not qualifying in higher categories.

Terminology cont.

C2 Trees present in groups or woodlands but without conferring on them greater landscape value and/or trees offering low or only temporary screening benefit.

C3 Trees with very limited conservation or other cultural benefits.

U Trees in such 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. Trees that are dead, dying or showing immediate and irreversible decline.

Comments: Refers to the tree's condition and suitability for the site.

Common name: Most widely used non-botanical name.

Co-dominant: Two branches assuming the role of leading shoots. When growing close together may form a weak attachment (included bark) at their point of contact. Trees with this defect may be in danger of splitting at this weak attachment.

Crown Spread: Measured in meters north, south, east and west.

Decay fungi: Refers to those species of fungi which degrade living wood and which may, depending on the degree of degradation, render the tree structurally unsound.

Defects: Refers to cracks, storm damage and any other damage mechanical or biological.

Diameter: Diameter of the trunk (millimetres) at 1.5m. M.S. after the measurement refers to the tree being multi-stemmed.

Genus & Species: Refers to the botanical names for the tree.

Height: Measured in meters.

Monitor: Refers to trees which need to be re-surveyed on a yearly basis to assess their condition. This timescale may be sooner where works or adverse weather conditions have impacted negatively on the trees.

Overhaul: A reference to standard tree surgery work which consists of the removal of deadwood, crossing branches and balancing where appropriate.

Recommendations: Indicates surgery work necessary for the retention or, where necessary, removal of the tree.

Tree No. Refers to numbered tag fixed to tree during survey.

6. References

BS 5837 (2012). Trees in Relation to Design Demolition and Construction

Mattheck and Breloer (1994). The body language of trees

APPENDIX i. TREE CONDITION ANALYSIS AND PRELIMINARY RECOMMENDATIONS

Tag number	Species	Age Class	Vigour	Comments	Preliminary Recommendations	Category	Long-term potential (years)	Dbh mm	Height m	Spread m N, E, S, W
549	Norway maple cultivar Acer platanoides 'Crimson King'	Early mature	Good	Relatively well developed with a slightly congested crown. No visible defects	Undertake formative pruning	B2	40	260	10	4,3,2,3
550	Norway maple cultivar Acer platanoides 'Crimson King'	Early mature	Fair	Early upper canopy leaf loss may be an indication of decline. No visible indication why	Monitor	C2	10-15	270	10	2,3,3,3
551	Norway maple cultivar Acer platanoides 'Crimson King'	Early mature	Good	Slightly congested crown. No visible defects. Chestnut scale present	No action necessary	B2	40	330	12	4,4,4,4
551A	Norway maple cultivar Acer platanoides 'Crimson King'	Early mature	Good	Slightly congested crown. No visible defects. Chestnut scale present	No action necessary	B2	40	300	12	3,3,3,3
551B	Norway maple cultivar Acer platanoides 'Crimson King'	Early mature	Good	Slightly congested crown. No visible defects. Chestnut scale present	No action necessary	B2	40	300	12	3,3,3,3
552	Norway maple cultivar Acer platanoides 'Crimson King'	Early mature	Good	Slightly congested crown. No visible defects. Chestnut scale present	No action necessary	B2	40	270	11	3,4,3,3

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553	Norway maple cultivar Acer platanoides 'Crimson King'	Early mature	Good	Well developed with no visible defects. Chestnut scale throughout lower branch framework.	No action necessary	B2	40	260	9	3,3,3,3
554	Silver birch Betula pendula	Mature	Good	Slightly subdominant to neighbouring tree. Canopy suppressed toward north as a result. Tight unions between stems at 1m but unlikely to be significant at present	No action necessary	C2	10	300	11	1,3,2,3
555	Silver birch Betula pendula	Mature	Good	Slightly subdominant to neighbouring tree. Canopy suppressed toward north as a result. No visible defects	No action necessary	C2	10	180	11	1,3,2,3
556	Sweet gum Eucalyptus spp	Mature	Good	Decay in trunk at 0.5m to west. Unlikely to be significant at present but reduces longevity. Trunk lean toward north vertical from 3m. Upper canopy relatively well developed	Monitor decay	B2	30	550	17.5	3,7,5,2

Tag number	Species	Age Class	Vigour	Comments	Preliminary Recommendations	Category	Long-term potential (years)	Dbh mm	Height m	Spread m N, E, S, W
557	Leyland cypress xCupressocyparis leylandii	Mature	Good	Forming an element of under canopy with crown suppressed toward south due to competition from neighbouring tree. Light suppressed deadwood in canopy	Deadwood	B2	40	560	12	2,7,2,3
558	Sweet gum Eucalyptus spp	Mature	Good	Trunk co dominant from 1m with a sound union. Union at 2m to north tight with included bark. Unlikely to be significant at present. Light suppressed deadwood in crown. Bark loss and associated decay in trunk at 0.5m to west. Not significant at present.	Deadwood	B2	20-30	910	18	6,7,2,3
559	Silver birch Betula pendula	Early mature	Fair	A slightly sub dominant specimen with limited longevity due to competition from neighbouring trees.	No action necessary	C2	10	120	6	1,2,1,3
561	Leyland cypress xCupressocyparis leylandii	Mature	Poor	A poorly developed sub dominant specimen with canopy limited to east.	No action necessary	C2	10	280	12.5	0,5,1,1

Tag number	Species	Age Class	Vigour	Comments	Preliminary Recommendations	Category	Long-term potential (years)	Dbh mm	Height m	Spread m N, E, S, W
560	Monterey cypress Cupressus macrocarpa	Mature	Good	A relatively well developed dominant specimen with a strong vertical form. Light suppressed deadwood in canopy.	Deadwood	B2	18	810	18	4,5,5,4
562	Sweet gum Eucalyptus spp	Mature	Fair	Crown restricted toward south due to competition from neighbouring tree.	Reduce over extended limbs to north and east	B2	20-30	700	17	10,9,4,4
563	Silver birch Betula pendula	Early mature	Fair	A sub-dominant specimen. Crown suppressed to south.	No action necessary	C2	10-15	180	6	4,2,2,2
564	Lawsons cypress cultivar Cupressus lawsoniana cv	Mature	Good	A well-developed specimen though crown suppressed to north due to competition from neighbouring tree. Light suppressed deadwood in crown.	Deadwood	B2	40	690	13	2,5,6,4
565	Sweet gum Eucalyptus spp	Mature	Good	A relatively well-developed specimen though canopy restricted toward north and south due to competition from neighbouring trees. No visible defects	No action necessary	B2	40	610	16	2,5,4,5

Tag number	Species	Age Class	Vigour	Comments	Preliminary Recommendations	Category	Long-term potential (years)	Dbh mm	Height m	Spread m N, E, S, W
566	Lawsons cypress cultivar Cupressus lawsoniana cv	Mature	Good	A well-developed multi stemmed specimen. Light suppressed deadwood in crown with canopy slightly suppressed toward south due to competition from neighbouring tree.	No action necessary	B2	40	820	16	6,6,3,5
567	Silver birch Betula pendula	Mature	Good	Relatively well developed but crown suppressed toward south due to competition from neighbouring tree	No action necessary	B2	20	210	11	6,3,2,4
568	Silver birch Betula pendula	Mature	Good	A relatively well-developed twin stemmed specimen forming an element of upper canopy in tree group. No visible defects	No action necessary	B2	30	260	11	3,2,3,4
569	Beech Fagus sylvatica	Young	Fair	A tall slender specimen forming an element of upper canopy within tree group. Canopy mainly oriented toward north	No action necessary	C2	20	210	9	3,0.5,0.5,0.5

Tag number	Species	Age Class	Vigour	Comments	Preliminary Recommendations	Category	Long-term potential (years)	Dbh mm	Height m	Spread m N, E, S, W
570	Beech Fagus sylvatica	Young	Poor	A poorly developed sub dominant specimen forming an element of under canopy within tree group	No action necessary	C2	10-15	200	6	0.5,1,2, 1.5
571	Beech Fagus sylvatica	Young	Good	A tall slender relatively well developed specimen forming an element of upper canopy within tree group. Very strong ivy growth up trunk	No action necessary	B2	20	200	12	1,1,3,1
572	Beech Fagus sylvatica	Young	Good	A tall slender relatively well developed specimen forming an element of upper canopy within tree group. Very strong ivy growth up trunk	No action necessary	B2	20	230	12	3,2,2,2
573	Beech Fagus sylvatica	Young	Good	A tall slender relatively well developed specimen forming an element of upper canopy within tree group. Very strong ivy growth up trunk	No action necessary	B2	20	230	12	3,2,2,3

Tag number	Species	Age Class	Vigour	Comments	Preliminary Recommendations	Category	Long-term potential (years)	Dbh mm	Height m	Spread m N, E, S, W
574	Silver birch Betula pendula	Young	Poor	Forming an element of under canopy within tree group. Becoming swamped by neighbouring trees	Cut ivy and reduce competition	C2	10	190	6	2,1,1,3
575	Sycamore Acer pseudoplatanus	Early mature	Good	A relatively well developed dominant specimen within tree group, Limited canopy cover to north	No action necessary	B2	40	320	13	3,4,5,3
576	Beech Fagus sylvatica	Early mature	Good	A well developed dominant specimen within tree group. No visible defects	No action necessary	B2	40	310	13	5,3,2,2
577	Silver birch Betula pendula	Early mature	Fair	A tall slender specimen with canopy mainly oriented toward north. Forming an element of upper canopy in tree group.	No action necessary	B2	15-20	200	12	4,1,1,2
578	Beech Fagus sylvatica	Young	Fair	A tall slender specimen with canopy mainly oriented toward north. Forming an element of upper canopy in tree group.	No action necessary	B2	20-30	210	12	5,4,1,2

Tag number	Species	Age Class	Vigour	Comments	Preliminary Recommendations	Category	Long-term potential (years)	Dbh mm	Height m	Spread m N, E, S, W
579	Sweet gum Eucalyptus spp	Mature	Good	A large well developed specimen within tree group, Very strong ivy growth up trunk obscuring view for assessment. Light suppressed deadwood in lower crown	Deadwood	B2	40	620	16.5	8,6,5,8
580	Beech Fagus sylvatica	Young	Good	Forming an element of upper canopy and edge to planting. Very strong ivy up trunk, No visible defects	No action necessary	B2	20-30	200	11	1,4,2,1