

ARBORICULTURAL ASSESSMENT & IMPACT REPORT

BUVINDA HOUSE
NAVAN
CO. MEATH

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TBUV001

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- i Tree condition analysis & preliminary recommendations**
- ii TBUV001 101 Arboricultural Assessment & Constraints drawing**
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1. Client brief & Methodology

CMK Hort + Arb Ltd. were commissioned by Meath County Council to provide base-line data on the composition and condition of trees at Buvinda House, Navan, Co. Meath (image 1) and to assess the impact on trees of the proposed development of the site. The fieldwork was undertaken over several occasions between the 3rd of November 2022.

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. Site location (redline indicative only)

2. General description of trees

The subject site is a parcel of land (image 1) which encompasses screen planting to the Dublin Road and more occasional trees within carpark verges at Buvinda House. The trees are contemporary with Buvinda House and range from young to early-mature. The quality of the trees is generally good (table 1) though there appears to have been very limited direct maintenance of the trees since planting. As a result, stakes and tree ties are in place long past the recommended retention period and some of the trees could benefit from formative pruning.

Tree Categories	Number	% of Total
A	0	0
B	27	69
C	8	21
U	4	10

Table 1. Tree Categories

Ash dieback is prevalent within this species and is likely to spread throughout the remaining unaffected trees in the near future.

The species mix is mainly native with occasional non-native species and cultivars (chart 1) with shrub species which form the base layer to the screen planting and carpark verges generally non-native.

The impact of the proposed development is outlined within section 3 of this report with individual tree assessments and preliminary recommendations contained within Appendix I Tree Survey & Preliminary Assessments. The locations of trees are shown on drawing TBUV001 101 Tree Survey & Constraints.

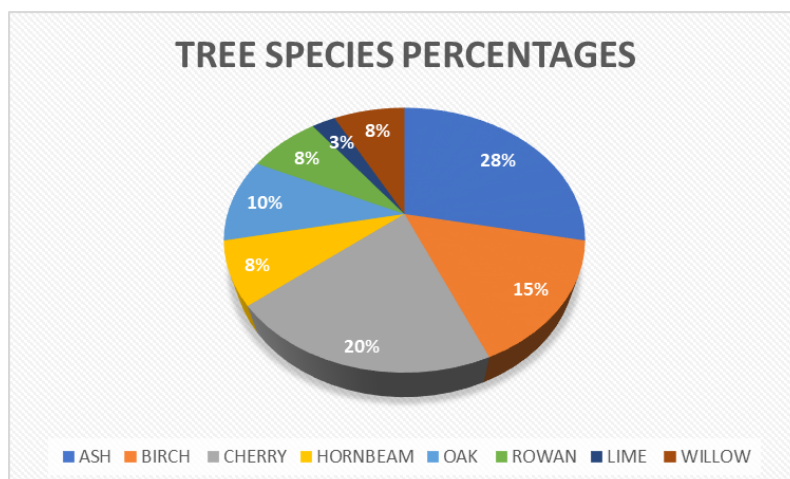


Chart 1. Tree species and percentages recorded



Image 2. Birch trees within shrub planting between carpark bays. Note relatively young nature of trees.



Image 3. Clipped box and laurel hedging with lime tree to right and birch to rear of image. Note relatively young nature of trees.

3. Impact of the proposed development

The proposed development will necessitate the removal of the majority of the trees and shrubs on the northern boundary where the footprint of the proposed development is located. Trees toward the main entrance to the business park will be unaffected as will a group of trees toward the southern boundary of the site.

A new landscape zone along the northern is shown on the Landscape Masterplan provided by Bucholz McEvoy Architects. This will be narrower than the existing planting but is designed to provide a screen to the proposed building. The impact on trees of the proposed development is shown on drawing TBUV001 102 Arboricultural Impact.

Tree protection measures recommended for retained trees are shown on drawing TBUV001 103 Tree Protection.

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).

Terminology cont.

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.

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.

Terminology cont.

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)	Height m	DBH mm	Spread m N, E, S, W
123	Fastigate hornbeam Carpinus betulus 'Fastigiata'	Early Mature	Good	Mower impact damage at base but unlikely to be significant at present. Well-developed overall with no structural issues.	No action necessary	B2	40	8	240	2,2,2,2
124	Fastigate hornbeam Carpinus betulus 'Fastigiata'	Mature	Good	A well-developed specimen with no visible defects	No action necessary	B2	40	8	220	2,2,2,2
125	Fastigate hornbeam Carpinus betulus 'Fastigiata'	Early Mature	Good	A well-developed specimen with no visible defects	No action necessary	B2	40	8	220	2,2,2,2
126	Pedunculate oak Quercus robur	Early Mature	Good	A well-developed specimen with no visible defects	No action necessary	B2	40	9	220	3,3,3,3
127	Pedunculate oak Quercus robur	Early Mature	Good	A well-developed specimen with no visible defects	No action necessary	B2	40	9	230	3,3,3,3
128	Pedunculate oak Quercus robur	Early Mature	Good	A well-developed specimen with no visible defects.	No action necessary	B2	40	9	230	4,3,3,3

Tag number	Species	Age Class	Vigour	Comments	Preliminary Recommendations	Category	Long-term potential (years)	Height m	DBH mm	Spread m N, E, S, W
129	Birch <i>Betula pendula</i>	Early Mature	Good	A well-developed specimen within shrubbery. No visible defects.	No action necessary	B2	40	120		2,2,2,2
130	Birch <i>Betula pendula</i>	Early Mature	Good	Well developed with no visible defects	No action necessary	B2	40	8	130	3,3,3,3
132	Small leaved lime cultivar <i>Tilia cordata</i> cv	Early Mature	Good	A well-developed specimen with no visible defects	No action necessary	B2	40	7	180	3,3,3,3
133	Birch <i>Betula pendula</i>	Over Mature	Good	A well-developed specimen with no visible defects	No action necessary	B2	40	7.5	170	3,3,3,3
134	Willow <i>Salix alba</i>	Early Mature	Good	A well-developed specimen with no visible defects	No action necessary	B2	40	9	230	4,4,4,4
135	Rowan cultivar <i>Sorbus aucuparia</i> cv	Early Mature	Fair	A well-developed specimen with no visible defects	No action necessary	B2	40	7.5	170	2,3,2,2
136	Birch <i>Betula pendula</i>	Early Mature	Good	A well-developed specimen with no visible defects.	No action necessary	B2	40	8	160	2,2,2,2
137	Pedunculate oak <i>Quercus robur</i>	Early Mature	Good	A well-developed specimen with no visible defects. Could benefit from formative pruning.	raise canopy to 2m	B2	40	5	150	2,2.2,2,2

Tag number	Species	Age Class	Vigour	Comments	Preliminary Recommendations	Category	Long-term potential (years)	Height m	DBH mm	Spread m N, E, S, W
138	Willow Salix alba	Early Mature	Good	A well-developed specimen with no visible defects	No action necessary	B2	40	11.5	280	5,5,5,5
139	Birch Betula pendula	Early Mature	Good	A well-developed specimen with no visible defects	No action necessary	B2	40	8.5	150	2,2,2,2
140	Birch Betula pendula	Early Mature	Good	A well-developed specimen with no visible defects	No action necessary	B2	40	10.5	210	3,3,3,3
141	Ash Fraxinus excelsior	Young	Poor	Though seasonal leaf loss has occurred the tree appears to be infected by early-stage ash dieback.	Monitor for ash dieback	C2	10	6	100	1,1,1,1
142	Ash Fraxinus excelsior	Young	Very Poor	Though seasonal leaf loss has occurred appears to be infected with ash dieback	Fell	U	0	4.25	150	1,1,1,1
143	Cherry Prunus avium	Young	Good	One of three trees in close proximity. Canopy restricted toward west as a result. Could benefit from formative pruning.	No action necessary	B2	30-40	6	150	3,2,2,1,2,2
144	Cherry Prunus avium	Young	Fair	One of three trees planted in close proximity. Crown restricted toward south as a result.	No action necessary	B2	30-40	6	130	3,3,1,2
145	Cherry Prunus avium	Early Mature	Good	One of three trees planted in close proximity. No visible defects	No action necessary	B2	30-40	6	160	3,4,3.5,3.5

Tag number	Species	Age Class	Vigour	Comments	Preliminary Recommendations	Category	Long-term potential (years)	Height m	DBH mm	Spread m N, E, S, W
146	Ash Fraxinus excelsior	Young	Fair	Though seasonal leaf loss has occurred there is slight evidence of early-stage ash dieback in crown.	Monitor for ash dieback and remove stake	C2	<10	6.5	120	2,2,2,2
147	Cherry Prunus avium	Early Mature	Good	Crown restricted toward south due to competition from neighbouring tree. No visible defects	No action necessary	B2	30-40	5.5	130	2,3,1,2
148	Ash Fraxinus excelsior	Young	Good	A relatively well-developed specimen with no visible evidence of ash dieback infection at present. Stake still and tie still in place.	Remove stake and monitor for ash dieback	C2	10	6.5	130	1,1,1,1
149	Ash Fraxinus excelsior	Young	Fair	Stake still in place. Early-stage infection by bacterial canker evident. Potential ash die back also possible.	Remove stake and monitor for ash dieback	C2	10	7.5	130	3,2,2,2
150	Ash Fraxinus excelsior	Young	Very Poor	Canopy dieback present.	Fell	U	0	5.5	150	2,1,1,1
151	Ash Fraxinus excelsior	Young	Very Poor	Canopy exhibiting extensive dieback	Fell	U	<10	110	150	1,1,1,1
152	Ash Fraxinus excelsior	Young	Fair	Seasonal leaf loss has occurred with no visible evidence of presence of ash dieback. Crown limited in extent.	Remove stake and monitor for ash dieback	C2	10	6.5	90	0.5,0.5,0.5, 0.5
154	Cherry Prunus avium	Early Mature	Good	A relatively well-developed specimen with crown restricted toward west due to competition from neighbouring tree. No visible defects	Cut ivy	B2	30-40	6.5	130	2,2,2,1

Tag number	Species	Age Class	Vigour	Comments	Preliminary Recommendations	Category	Long-term potential (years)	Height m	DBH mm	Spread m N, E, S, W
155	Ash Fraxinus excelsior	Young	Poor	Early-stage bacterial canker evident with decline inevitable. Ash die back not discernible at present. Stake still in place.	Fell	U	<10	6	90	1,1,0.5,0.5
156	Ash Fraxinus excelsior	Early Mature	Fair	Although relatively well-developed seasonal leaf loss has occurred crown retrenchment may indicate early stage ash dieback.	Monitor for ash dieback	C2	10	8.5	170	1.5,1.5,1.5, 1.5
157	Cherry Prunus avium	Mature	Fair	Crown windswept and slightly restricted toward south. Minor pockets of decay at pruning points	No action necessary	B2	20-30	4.25	170	1.25,1.25,1.15,1.5
158	Cherry Prunus avium	Early Mature	Good	A relatively well-developed specimen with a windswept crown. Crown restricted toward south as a result.	No action necessary	B2	20-30	4	120	1,1,0.5,1
159	Ash Fraxinus excelsior	Young	Poor	Crown appears to exhibit retrenchment and early-stage ash dieback though a definitive	Monitor for ash dieback	C2	10	5.5	140	2,2,2,2
160	Cherry Prunus avium	Early Mature	Good	A well-developed specimen with no visible defects.	No action necessary	B2	40	6	270	4,4,4,4
161	Rowan cultivar Sorbus aucuparia cv	Mature	Fair	Canopy windswept and restricted toward south. Tight unions between stems forming canopy but unlikely to be significant at present.	No action necessary	B2	15-20	4.25	160	1,1,0.5,1

Tag number	Species	Age Class	Vigour	Comments	Preliminary Recommendations	Category	Long-term potential (years)	Height m	DBH mm	Spread m N, E, S, W
162	Rowan cultivar <i>Sorbus aucuparia</i> cv	Mature	Fair	Extensive bark damage and associated decay present in trunk at 1m reducing long-term potential. Canopy relatively well developed with no visible defects.	Monitor decay	C2	1015	5	140	1,1,1,1
163	Willow <i>Salix alba</i>	Early Mature	Fair	A well-developed specimen with no visible defects.	No action necessary	B2	30-40	8	300	4,4,4,4