

ARBORICULTURAL ASSESSMENT & IMPACT REPORT

Transitional Care Facility,
Unit 21 First Avenue,
Cookstown Industrial Estate,
Dublin 24

Project No.	Project name	Date	Revision
T00002	Cookstown	13/09/22	-

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1. Client Brief & Methodology

This tree survey report was commissioned by Bartra Property (Cookstown) Limited. The purpose of the report is to provide details on the nature and condition of existing trees within the site of a proposed care facility at Cookstown, Dublin 24 (image 1) and the potential impact on trees of these works.

The fieldwork was undertaken on the 25th of August 2022 and represents an update of the trees by CMK Hort & Arb Ltd undertaken in August 2022.

This report is supported by the following drawings:

- TCOO002 101 Arboricultural Assessment & Constraints
- TCOO002 102 Arboricultural Impact
-

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. Survey boundary (illustrative purposes only)
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2. General description of trees

The site is a former industrial unit located within Cookstown, Dublin 24 with trees located on the boundaries. The primary species is Italian poplar (*Populus nigra italica*) with very occasional birch (*Betula pendula*). The poplar which were presumably planted as part of the original landscape treatment for the site and are now reaching the end of their potential as boundary trees. They are most likely even aged clones therefore given the relatively short-lived nature of the species and their current condition it suggests that the removal of the poorer specimens within categories C & U would inevitably lead to the necessary removal of the remaining trees as gaps occur in the structure of the planting. Chart 1 illustrates the lower categories C & U making up 76% of the trees present. Image 2 also illustrates the nature of the canopy form of some of the trees as it opens up from a more compact shape. This often leads to branch failure as limbs become end-weighted and more exposed to the elements.

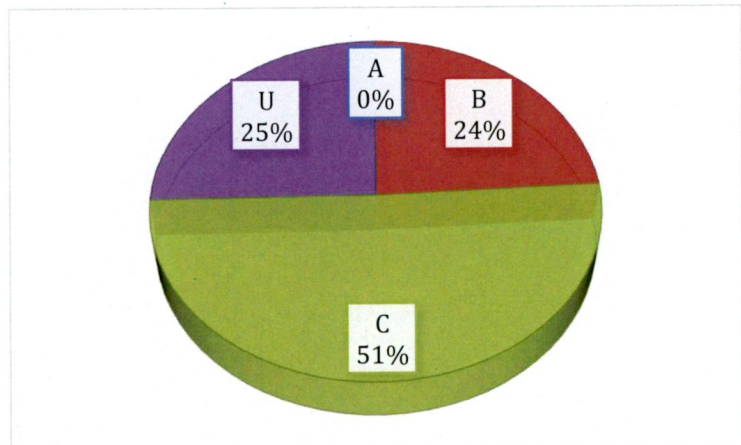


Chart 1. Percentage breakdown of categories of trees



Image 2. Typical view of poplar trees on northern boundary. Note the poor quality of canopies and variable growth rates.



Image 3. Typical view of poplar trees on Cookstown Road boundary. Note partial collapse of some specimens

3. Impact of the proposed development

3.1 Project description

Bartra Property Cookstown Limited intend to apply for permission for development at a site of c.1.67ha at Unit 21, First Avenue, Cookstown Industrial Estate, Dublin 24. The development will consist of the following:

- Demolition of all existing 1-3 storey industrial/commercial structures and small café on site totalling c.5,500sqm in area;
- Construction of a 1-5 storey Transitional Care Facility (step-up/step-down) providing 131 no. bedspaces over partial basement (total floor area c.6,743sqm) with central courtyard (c.519sqm);
- The basement consists of a sprinkler tank and pump rooms, water tank room, plant room and workshop;
- Provision of dining and kitchen areas, sitting/family rooms, activity rooms, coffee dock, hair salon, oratory, lobbies/reception areas, ancillary offices and staff areas, stores, toilets, shower/changing facilities, ESB substation, generator, switchroom, service yard and waste areas serving the facility;
- Lobbies, stair/lifts, photovoltaic panels and green roofs throughout;
- Partial provision of the pocket park identified in the Tallaght LAP (c.1,286sqm);
- New vehicular access from First Avenue and egress onto Cookstown Road via a one-way system through the subject site;

- Entrance signage on the eastern elevation of the proposed facility;
- All associated site development works, services provision, connection to the water supply, foul and surface water networks on First Avenue and Cookstown Road including partial diversion of the foul line to the north east of the site at First Avenue, attenuation/bioretention systems, vehicular and pedestrian access including internal road and footpaths, public realm upgrade works, landscape and boundary treatment works, tree removal, bicycle storage (68 no. spaces), car parking (32 no. spaces), set-down parking spaces, 1 no. ambulance set-down space serving the facility and delivery/loading areas to First Avenue.

3.2 Impact on existing trees

The proposed development of the site will necessitate the removal of all the existing trees. The loss of trees will be significant in terms of numbers and the impact to the streetscape in this area. However, it is considered that the removal of even the better-quality trees will be inevitable in the short to medium term therefore it is considered that the loss of trees due to the proposed development of the site should be viewed in this context.

A number of trees are located within an area of no man's land on the western boundary.

The quality of the trees is very poor. However, as it is not in the gift of the applicant to show these trees for removal based on their condition the arboricultural impact drawing TCOO002 102 presents them as being retained with green canopies whilst outlining their category by stem colour. It is considered possible to construct the proposed development without impacting on their roots as they are currently located on a raised area with root spread confined by a retaining wall. There will be a need to reduce canopy spread over the site which will reduce the quality of the trees further.

It is advised that the owner of these trees addresses their management as a matter of urgency as a number have been identified for removal based on their condition with the remaining trees of poor quality overall.

Replacement tree planting is outlined within the Landscape masterplan accompanying this submission.

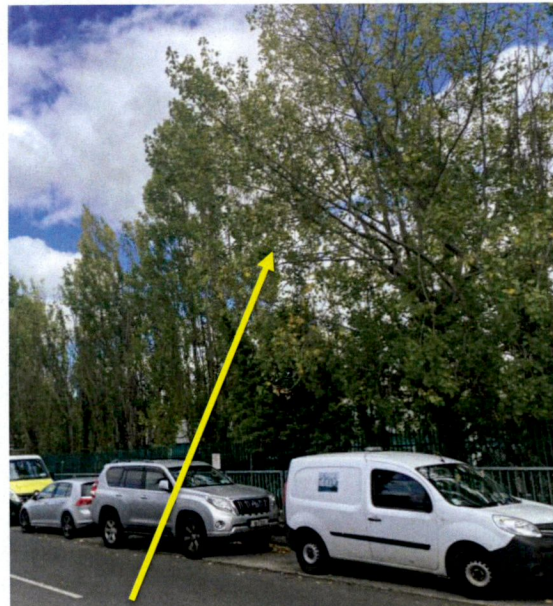


Image 4. Typical view of poplar trees on northern boundary. Opening of canopy and limb exposure arrowed.

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.
 - 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.

Terminology cont.

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 Survey & 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	Clear stem m
2379	Italian poplar Populus nigra Italica	Early Mature	Very Poor	In decline	Fell	U	<10	220	5	0,0,0,0	NA
2380	Italian poplar Populus nigra Italica	Early Mature	Very Poor	A poor quality sub-dominant specimen	Fell	U	<10	220	5	1,0,1,1	NA
2381	Italian poplar Populus nigra Italica	Mature	Fair	A tall slender specimen. Sub-dominant to neighbouring tree. Large dominant specimen. Very heavy ivy obscuring view for assessment. No	No action necessary	C2	15-20	420	21	1,0,1,1	8n
2382	Black poplar Populus nigra	Mature	Good		Cut ivy and re-assess	B2	20-30	820	23	6,4,6,2	3n
2384	Italian poplar Populus nigra Italica	Early Mature	Very Poor	In decline	Fell	U	<10	220	9	0,3,0,0	NA
2385	Italian poplar Populus nigra Italica	Mature	Good	Relatively well developed. No visible defects.	No action necessary	B2	20-30	400	17	2,2,1,1	2n
2387	Italian poplar Populus nigra Italica	Mature	Good	Relatively well developed. No visible defects.	Cut ivy	B2	20-30	400	16	1,0,5,1,1	2n
2388	Italian poplar Populus nigra Italica	Mature	Very Poor	In a state of decline.	Fell	U	<10	380	10	2,1,1,1	NA
2389	Italian poplar Populus nigra Italica	Mature	Fair	Non fastigate type. Crown may have suffered storm damage in the past. Vertical	No action necessary	C2	15-20	430	18	5,5,7,5	2s

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Tag number	Species	Age Class	Vigour	Comments	Preliminary Recommendations	Category	Long-term potential (years)	Dbh mm	Height m	Spread m N,E,S,W	Clear stem m
2390	Italian poplar Populus nigra Italica	Mature	Very Poor	In a state of decline.	Fell	U	<10	200	8	1,1,1,1	NA
2391	Italian poplar Populus nigra Italica	Mature	Dead		Fell	U	0	230	8	0,0,0,0	
2392	Italian poplar Populus nigra Italica	Mature	Good	Tall slender specimen. No visible defects.	Cut ivy	B2	15-20	240	14	1,1,1,1	2s
2393	Italian poplar Populus nigra Italica	Mature	Good	Relatively well developed. Basal suckers present.	Remove basal suckers.	B2	15-20	320	16	1,1,2,1	0
2394	Italian poplar Populus nigra Italica	Mature	Good	Multi-stemmed from base. Deadwood in lower crown.	Dead wood	B2	15-20	360	14	1,2,2,2	0
2395	Italian poplar Populus nigra Italica	Mature	Fair	Multi-stemmed from base. Deadwood in lower crown to north.	Dead wood	C2	10-15	350	16	1,1,1,1	0
2396	Italian poplar Populus nigra Italica	Mature	Poor	Extensive deadwood in crown to west. In decline.	Fell	U	<10	340	12	1,2,2,1	NA
2397	Italian poplar Populus nigra Italica	Mature	Very Poor	In decline	Fell	U	<10	310	11	2,1,2,1	NA

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Tag number	Species	Age Class	Vigour	Comments	Preliminary Recommendations	Category	Long-term potential (years)	Dbh mm	Height m	Spread m N, E, S, W	Clear stem m
2398	Italian poplar Populus nigra Italica	Mature	Fair	Extensive deadwood throughout lower crown.	Fell	U	<10	320	12	2,1,2,1	0.3n
2435	Italian poplar Populus nigra Italica	Mature	Fair	Deadwood in lower crown. Extended limb to east.	No action necessary	C2	10-15	275	16	2,4,2,3	0
2436	Italian poplar Populus nigra Italica	Mature	Fair	Tall slender No visible defects.	No action necessary	C2	10-15	340	16	1,1,1,1	3e
2437	Italian poplar Populus nigra Italica	Mature	Fair	Relatively well developed. Crown restricted toward east.	No action necessary	C2	10-15	320	16	1,3,1,1	0.5s
2438	Italian poplar Populus nigra Italica	Mature	Poor	Open crown. In decline	No action necessary	U	10	420	16	2,2,1,1	2n
2439	Italian poplar Populus nigra Italica	Mature	Fair	Relatively well developed. Crown restricted toward south and west.	Cut ivy	C2	10-15	320	16	3,2,1,0	4n
2440	Italian poplar Populus nigra Italica	Mature	Fair	Extended limbs to south with potential or failure. Very heavy ivy growth up trunk.	Fell	U	10	290	15	0,3,5,0,0	5e
2441	Italian poplar Populus nigra Italica	Mature	Good	Tall slender specimen. Lower limb lost to north	Remove hanger	C2	10-15	320	17	1,2,2,1	12e

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Tag number	Species	Age Class	Vigour	Comments	Preliminary Recommendations	Category	Long-term potential (years)	Dbh mm	Height m	Spread m N, E, S, W	Clear stem m
2442	Italian poplar Populus nigra Italica	Mature	Fair	Tall slender specimen. Potential vulnerability to failure.	No action necessary	C2	10-15	210	17	1,1,1,1	9e
2443	Italian poplar Populus nigra Italica	Mature	Very Poor	In decline	Fell	U	<10	340	10	3,2,0,0	5e
2444	Italian poplar Populus nigra Italica	Mature	Fair	Relatively well developed. No visible defects.	No action necessary	C2	10-15	420	17	2,4,1,1	3e
2445	Italian poplar Populus nigra Italica	Mature	Fair	Tall slender	No action necessary	C2	10-15	320	17	1,3,1,1	4.5n
2446	Italian poplar Populus nigra Italica	Mature	Fair	Tall slender relatively well developed.	No action necessary	C2	10-15	290	17	1,2,1,1	4n
2447	Italian poplar Populus nigra Italica	Mature	Fair	Tall slender	No action necessary	C2	10-15	290	17	2,2,0,1	6n
2448	Italian poplar Populus nigra Italica	Mature	Fair	Open crown	No action necessary	C2	10-15	420	17	1,4,0,3	3e
2449	Italian poplar Populus nigra Italica	Mature	Fair	Open cr. Minor deadwood present. deadwood present.	No action necessary	C2	10-15	250	17	4,4,0,3	2n

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Tag number	Species	Age Class	Vigour	Comments	Preliminary Recommendations	Category	Long-term potential (years)	Dbh mm	Height m	Spread m N, E, S, W	Clear stem m
2450	Italian poplar Populus nigra Italica	Mature	Fair	Open crown. Minor deadwood present.	No action necessary	C2	10-15	320	17	0,1,1,3	4w
2451	Italian poplar Populus nigra	Mature	Fair	Relatively well developed. No visible defects. all	No action necessary	B2	10-15	320	18	2,2,0,2	4n
2452	Italian poplar Populus nigra Italica	Mature	Fair	Tall slender specimen. Potential vulnerability to failure.	No action necessary	C2	15-20	210	18	1,1,1,1	2ne
2453	Italian poplar Populus nigra Italica	Mature	Fair	Tall slender specimen. Potential vulnerability to failure.	No action necessary	C2	10-15	320	18	1,1,1,1	4s
2454	Italian poplar Populus nigra	Mature	Fair	Trunk lean north. Crown restricted toward south.	No action necessary	C2	10	230	18	1,4,0,4	2n
2455	Italian poplar Populus nigra	Mature	Fair	Open crown vulnerable to wind damage.	No action necessary	C2	10-15	230	18	2,3,0,3	2w
2456	Italian poplar Populus nigra	Mature	Fair	Deadwood in lower crown. Open crown vulnerable to	No action necessary	C2	10-15	250	17	1,3,0,3	3s
2457	Italian poplar Populus nigra	Mature	Good	Relatively well developed. No visible defects.	No action necessary	B2	15-20	420	18	1,4,1,3	3s