

**CUNNANE STRATTON REYNOLDS**

## **TREE SURVEY**

**North & East Housing Association  
Garristown,  
Fingal, Co Dublin.**

**July 2020**

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## SUMMARY

This report presents a record of those trees existing within or adjacent to the site area that may potentially be impacted by a proposed residential development. Trees have been surveyed as individuals or tree groups in accordance with BS 5837 (2012). The site tree survey was undertaken on 23<sup>rd</sup> July 2020 by Cunnane Stratton Reynolds arborist;

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This survey and report are based on the topographic site survey information supplied in the following drawings;

- Topographic Survey (supplied by Desuin Architects)
- Desuin Architects – Proposed Site Plan Landscaping Dwg No 2005

A full survey record is presented in Appendix 1, together with accompanying drawings Tree Constraints Dwg No 20402\_T\_101, Arboricultural Impact Assessment Dwg No 20402\_T\_102 and Tree Protection Plan Dwg No 20402\_T\_103. After introducing the terms of reference and the methodology of the survey, the report summarises the survey findings in an overview of the existing tree cover within the site.

A total of seventeen individual trees were recorded as part of the survey.

Where assessment takes the form of a Tree Group – trees of greatest arboricultural significance or relevance to proposed scheme within these groups may also be identified. Every effort has been made to access all trees for inspection, however in some instances where site conditions prevent full access, some measurements may be visually estimated.

It is noted that the site both contains trees of reasonable maturity and size – however the limited size of the site will mean that it will be difficult to retain the tree and develop the site for housing.

The proposed development will present an opportunity to implement some new tree planting, both as part of a general landscape design scheme and also as part of a tree management program aimed at maintaining high quality diverse long-term amenity tree cover, in keeping with the setting and proposed site use.

# **1. INTRODUCTION**

## **Terms of Reference**

Cunnane Stratton Reynolds (CSR) were instructed to undertake a tree survey, to inform the planning application of a proposed residential development.

CSR considered those tree and tree groups that might potentially be impacted by such a proposed development and produced a subsequent tree survey report presenting our findings, (in accordance with BS 5837:2012), together with recommendations for their best practice management in relation to the proposed development.

This involved a survey of the principal trees / tree groups concerned in accordance with BS 5837 (2012).

Documents supplied to CSR for purposes of conducting a tree survey include:

- Topographic Survey (supplied by Desuin Architects)
- Desuin Architects – Proposed Site Plan Landscaping Dwg No 2005

## **Site Inspection & Methodology**

The site was surveyed on 23rd July 2020 by a qualified Arborist. A visual inspection from the ground was performed on all relevant existing trees / tree groups on site. Where access allowed, principal individual trees were examined, and reference number tagged before critical measurements were taken and observations made.

A description was recorded of each tagged tree / group of trees, their species, age class, all relevant measured dimensions (height, stem diameter, crown spread radii and crown clearance height) and an assessment of the tree health / vitality, structural form, life expectancy and quality categorisation. Any recommended remedial works required were outlined. Hedgerows and significant tree groups within/bounding the site are subject to group description and assessment, in accordance with BS 5837 (2012).

The findings of the survey are recorded and presented in this Tree Survey Report and Tree Schedule (Appendix 1). A Tree Classification and Constraints drawing was produced to inform the master planning process. An Arboricultural Impact Assessment and Tree Protection Proposals were considered on final completion of the proposed masterplan.

This report is subject to the scope and limitations as given at the end of the report.

## **Accompanying Drawings**

The tree survey report should be read in conjunction with;

- Tree Constraints (Dwg No 20402/T/101).
- Arboricultural Impact Assessment (Dwg No 20402/T/102).

A1 size colour coded drawings accompany this report, (monochrome drawings should not be relied upon). These drawings are based upon the topographical drawings supplied to CSR.

### **Site Location**

The site is currently a wooded piece of land located on the R130 on the western edge of Garristown.

## 2. DESCRIPTION OF EXISTING TREES

2.1 The tree survey site area (approximate area highlighted red – Fig 1) is an undeveloped woodland area. One off residential development surrounds the site to the west, north and east.

A number of mature broadleaf trees exist on the site among dense understory scrub.



Figure 1: Low resolution satellite image of approximate tree survey area (courtesy of Google Earth).

A total of seventeen individual trees were recorded as part of the survey.

Their location, size and quality category may be reviewed with reference to the accompanying Tree Classification Dwg No 20402/T/101 and the tree survey (Appendix 1).



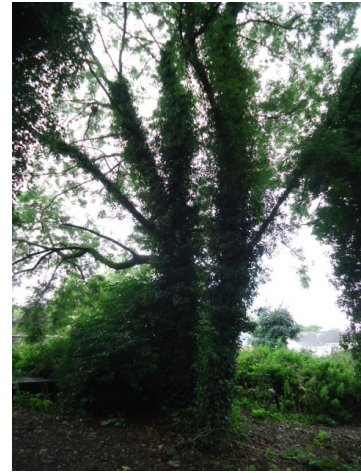
## 2.2 Photographic Summary of Trees Surveyed



T457



T458



T459 / T460



T461



T462



T463



T464-T467



T468





T469



T470-T472



T473

2.3 The trees present on and around the site are a variety of species, and ages of variable individual value from high to low. There are some trees of significant size though none are exceptionally old. The trees value increases collectively, in terms of both visual presence and ecological value.

The trees located within the site are primarily native Ash trees, with one additional Sycamore as well as Elder and Hawthorn understory trees/shrubs.

The trees have grown in close proximity to one another, with competition for light resulting in tall asymmetrical specimens. Most trees are also covered with ivy, to a degree that prevented full observation of trunk.

There is scope for selective management works to improve the quality of existing trees, such as the removal of; ivy, weak tree growth, overcrowding regenerative growth, rubbing limbs, deadwood etc. However, on the whole the trees appear to be in good health.

The existing trees make a positive contribution to the surrounding landscape setting. In addition, they provide an ecological habitat value and effective visual screening.

Trees often become more valuable as collective groups, than they might be when considered solely as individuals in isolation - a grouping or woodland being generally of significant visual and ecological value. As such it should be noted that the cumulative value of evaluated Tree Groups often reflects an increased categorised value than might be awarded to the constituent trees if they were assessed in isolation as individuals.



### 3. ARBORICULTURAL IMPACT ASSESSMENT

3.1 This section discusses the potential impact of the proposed development on the existing tree cover on site and considers the need for mitigation measures, in accordance with BS 5837 (2012), for sustainable development.

All the trees are proposed for removal to facilitate the proposed development. New tree planting is proposed as part of the scheme, which will assist to some degree in mitigating against the proposed losses.

3.2 Category 'U' trees are recommended for immediate removal, (fell or monolith to safe height), on general management grounds, irrespective of site development – none were identified during this survey.

#### Direct Loss of Trees

3.3 The following trees or a significant portion of their anticipated rootzone are in direct conflict with the proposed development and are therefore proposed for removal;

Tag No	Tree Species	Tree Class	Number of trees
T457	Fraxinus excelsior	B1	1
T458	Fraxinus excelsior	B1	1
T459	Fraxinus excelsior	B1	1
T460	Fraxinus excelsior	B1	1
T461	Fraxinus excelsior	C1	1
T462	Sambucus nigra	C1	1
T463	Crataegus monogyna	C1	1
T464	Fraxinus excelsior	B1	1
T465	Fraxinus excelsior	B1	1
T466	Fraxinus excelsior	B1	1
T467	Fraxinus excelsior	B1	1
T468	Fraxinus excelsior	A1	1
T469	Fraxinus excelsior	B1	1
T470	Fraxinus excelsior	C1	1
T471	Crataegus monogyna	C1	1
T472	Fraxinus excelsior	B1	1
T473	Acer pseudoplatanus	B1	1

This loss of these trees is inevitable when considered in the context of the site scale and the development proposals. Whilst generally of moderate to low value they do cumulatively contribute a significant visual & ecological benefit - which will be lost on their removal.

It is therefore recommended that replacement semi-mature trees, of a suitable species are incorporated into the proposed development to help mitigate against the loss. Native species should be used where possible to increase biodiversity and ecological value in this semi-rural location.

#### Indirect Impacts

3.4 Cognisance must also be given to indirect impacts - in particular care must be taken to ensure the proposed development and ancillary works do not represent an

unacceptable conflict with the calculated 'Root Protection Area' of the existing trees outside of the site whose root zones may extend into the site area.

Disturbance of 'Root Protection Area' may just as readily kill or destabilise a tree over time, by means of root damage/severance and or earth compaction/covering preventing essential transfer of water, air and nutrients to roots.

As no trees are proposed for retention this will not be an issue – however care should still be taken during works such as tree felling, to avoid physical damage to trees in adjoining property.

### **Additional Considerations**

3.5 There are existing trees located in the adjoining property to the north, however their relative youth in conjunction with their set back distance means that their 'Root Protection Area' is unlikely to have extended into the proposed development site.

### **Summary of Trees to be Removed**

3.6 (As per section 3.3 above).

<b>Tree Class</b>	<b>Quantity</b>
A Class Trees	1
B Class Trees	11
C Class Trees	5
U Class Trees	0
<b>TOTAL</b>	<b>17</b>

It is noted that four replacement trees (Sorbus aucuparia 10-12cm/clearstem rootballed trees are proposed within the landscape scheme by way of replacement planting.

### **Tree Protection**

3.7 Not applicable.

### **Services**

3.9 (Any services that are planned as part of this project must also avoid designated 'Root Protection Area' of tree / tree groups for retention).

#### **4. RECOMMENDATIONS – Arboricultural Method Statement**

Recommendations for the specific measures advised regarding management of the trees in relation to this development are detailed within Appendix 1. These recommendations should inform, and be referred to in, the method statements submitted for approval prior to commencement by the responsible building/engineering and landscape contractors whose works (subject to grant of permission) will affect retained trees and the Tree Protection Areas.

##### *1. Tree Works\_*

Subject to the required permissions removal / felling works as specified on Dwg No No20402\_T\_102, should be performed prior to project commencement, by reputable contractors in accordance with BS 3998:2010 and current best practice. (Removal of scrub vegetation and ivy clearance should preferably be performed in winter outside of the bird nesting season. Tree felling should be preceded by a competent assessment as to the presence of any protected wildlife species, where required specialist advice should be sought if necessary).

## **Limitations and Scope of this Survey Report**

This report covers only those trees individually inspected, (shown on the 'Tree Survey Drawings' and described in the 'Schedule'), reflecting the condition of those trees at the time of inspection. Inspection is limited to visual examination of the subject trees from the ground without; test boring, use of tomographic equipment, dissection, probing, coring, ivy removal or excavation to establish structural integrity.

The trees were not climbed and dimensions are approximate, but considered a reasonable reflection of the trees measurements. A number of trees were visually obscured by heavy ivy and or epicormic growth, which could potentially hide from view existing faults or weaknesses, as such they would benefit from re-inspection upon removal of such growth. This survey can only therefore be regarded as a preliminary assessment.

There is no warranty or guarantee, expressed or implied, that problems or deficiencies of the subject trees may not arise in the future. The currency of this survey report and its recommendations is one year.

The accompanying drawings are illustrative and based on the land (topographical) survey information supplied; CSR Ltd accept no legal liability or responsibility for any errors in the information contained in the supplied drawings.

CSR Ltd accept no responsibility for the performance of trees subject to pruning or other site works (including construction activities) not performed in strict accordance with recommendations as specified in this report and/or in accordance with BS 3998:2010 and BS 5837:2012

Any retained trees mentioned in this report should be subject to expert re-inspection within 12 months and prior to completion of development works and public occupancy of the site.

This report was produced as a part of a planning application for the scheme; the author accepts no responsibility or liability for actions taken by reason of this report by the client or their agents unless subsequent contractual arrangements are agreed. Public disclosure or submission of any part of this report without title, or permission from the author, renders this report invalid and legally inadmissible.

## **References/Bibliography**

BS 5837 (2012). *Trees in Relation to Design, Demolition and Construction - Recommendations*. British Standards Institution. TSO, London.

BS 3998 (2010) *Tree Work - Recommendations*. British Standards Institution. TSO, London.

NJUG 4 (2007) *Guidelines for the Planning, Installation and Maintenance of Utility Apparatus in Proximity to Trees (Issue 2)*. National Joint Utilities Group.



## TREE SURVEY KEY

Information in the attached schedule is given under the following headings:

### Tree No.

Individual trees have been numbered and tagged on site with corresponding survey tag or treated as a group where appropriate (e.g. Woodlands/hedgerows) and illustrated on accompanying tree survey drawing.

### Species

Common & Latin names of species are provided

### Height

Overall estimated height given in meters (measured using Truplus 200 Laser Rangefinder).

### Stem Diameter

The diameter of the main trunk taken at a height of 1.5m on a single stem tree, or, on each branch of multi-stemmed (MS) trees.

### Crown Spread

The largest radius of branch spread is provided in meters for North / East / South and West directions.

### Height of lowest branch

The distance between ground level and first significant branch or canopy (and direction of growth) given in meters (m).

Any measurement or dimension that has been estimated (for offsite or otherwise inaccessible trees where accurate data cannot be recovered) is identified by the suffix #.

### Life stage

The tree's age is defined as:

Y = Young, in first third of life (tree which has been planted in the last 10 years or is less than 1/3 the expected height of the species in question).

MA = Middle Age, in second third of life (tree, which is between a 1/3 and 2/3's the expected height of the species in question).

M = Mature, in final third of life (tree that has reached the expected height of the species in question, but still increasing in size).

OM = Over mature (tree at the end of its life cycle and the crown is starting to break up and decrease in size).

V = Veteran Tree (exceptionally old tree).

### Physiological Condition

The tree's physiological condition is defined as:

**Good** - Good vitality: normal bud growth, leaf size, crown density and wound closure

**Fair** - Average to below average vitality: reduced bud growth, smaller leaf size, lower crown density and reduced wound closure

**Poor** - Low vitality: limited bud growth, small chlorotic leaves, sparse crown, poor wound closure

**Dead** - No longer living.

### Structural Condition

The trees structural condition is defined as:

**Good** - No major structural defects observed (possibly some minor defects)

**Fair** - Minor defects present, (such as bark wounds, isolated decay pockets or structure affected due to overcrowding), that could be alleviated by tree surgery/management

**Poor** - Major structural defects present such as extensive deadwood, decay or defective to the point of being dangerous. (Significant defects are noted e.g. decay, collapsing etc).

### Preliminary Management Recommendations & Timescale

Recommendations actions based on limitations of survey – (may include further investigation and or assessment of suspected defects by means and or methods not undertaken / within the remit of this survey).

### Estimated Remaining contribution (Years)

Life of the tree is given as;

- 10 < less than 10 years remaining
- 10 + in excess of 10 years remaining
- 20 + in excess of 20 years remaining
- 40 + in excess of 40 years remaining

### Tree Quality Assessment Category

**U** Those in such a condition that they cannot realistically be retained as living trees in the context of the current land use for longer than 10 years.

- Trees that have a serious, irremediable, structural defect, such that their early loss is expected due to collapse, including those that will become unviable after removal of other category U trees (e.g. where, for whatever reason, the loss of companion shelter cannot be mitigated by pruning)
- Trees that are dead or are showing signs of significant, immediate, and irreversible overall decline

- Trees infected with pathogens of significance to the health and/or safety of other trees nearby, or very low quality trees suppressing adjacent trees of better quality

(NOTE: Category U trees can have existing or potential conservation value which it might be desirable to preserve).

## **A High quality**

*Trees of high quality with an estimated remaining life expectancy of at least 40 years*

A1 Trees that are particularly good examples of their species, especially if rare or unusual; or those that are essential components of groups or formal or semi-formal arboricultural features (e.g. the dominant and/or principal trees within an avenue)

A2 Trees, groups or woodlands of particular visual importance as arboricultural and/or landscape features

A3 Trees, groups or woodlands of significant conservation, historical, commemorative or other value (e.g. veteran trees or wood-pasture)

## **B Moderate quality**

*Those trees of moderate quality with an estimated remaining life expectancy of at least 20 years.*

B1 Trees that might be included in category A, but are downgraded because of impaired condition (e.g. presence of significant though remediable defects, including unsympathetic past management and storm damage), such that they are unlikely to be suitable for retention for beyond 40 years; or trees lacking the special quality necessary to merit the category A designation.

B2 Trees present in numbers, usually growing as groups or woodlands, such that they attract a higher collective rating than they might as individuals; or trees occurring as collectives but situated so as to make little visual contribution to the wider locality.

B3 Trees with material conservation or other cultural value

## **C Low quality**

*Trees of low quality with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150 mm.*

C1 Unremarkable trees of very limited merit or such impaired condition that they do not qualify in higher categories.

C2 Trees present in groups or woodlands, but without this conferring on them significantly greater collective landscape value; and/or trees offering low or only temporary/transient landscape benefits.

C3 Trees with no material conservation or other cultural value.

# APPENDIX 1

Tag	Species	Height (m)	Crown Spread (m) N/S/E/W	Dia' (mm)@ 1.5m	RPA circle radius (m)	Ht of lowest branch (m) & direction of growth	Life Stage	Estimated remaining contribution (years)	Physiological Condition	Structural Condition	Preliminary management recommendations	Category of retention + sub- category	Notes
457	Fraxinus exclesior	12	6/2/5/5	620	7.44	4m all	MA	40+	Good	Fair	Remove Ivy	B1	heavily obscured
458	Fraxinus exclesior	16	6/3/0/5	340	4.08	4m e	MA	40+	Good	Fair	Remove Ivy	B1	
459	Fraxinus exclesior	17	6/3/3/3	500	6.00	4m all	MA	40+	Good	Fair	Remove Ivy	B1	heavily obscured
460	Fraxinus exclesior	16	5/6/0/7	630	7.56	4m all	MA	40+	Good	Fair	Remove Ivy	B1	Heavily obscured/ Jap' knotweed
461	Fraxinus exclesior	10	0/4/4/2	420	5.04	5m all	MA	20+	Fair	Poor	Remove Ivy	C1	exposed heartwood
462	Sambucus nigra	6	4/4/4/4	300x4	7.20	2m all	MA	20+	Fair	Fair	Remove Ivy	C1	heavily obscured
463	Crataegus monogyna	7	2/3/3/4	300/150	4.02	0m all	MA	20+	Poor	Fair	Remove Ivy	C1	heavily obscured
464	Fraxinus exclesior	16	2/4/3/3	540	6.48	2m e/w	MA	40+	Good	Fair	Remove Ivy	B1	
465	Fraxinus exclesior	15	5/1/0/3	340	4.08	10m all	MA	40+	Good	Fair	Remove Ivy	B1	heavily obscured
466	Fraxinus exclesior	15	5/1/4/0	350	4.20	10m all	MA	40+	Good	Fair	Remove Ivy	B1	heavily obscured
467	Fraxinus exclesior	17	3/3/3/0	310/340	5.52	11m all	MA	40+	Good	Fair	Remove Ivy	B1	heavily obscured
468	Fraxinus exclesior	15	8/4/6/3	370/450/4 7	9.00	1m e/w	MA	40+	Good	Good	Remove Ivy	A1	exposed heartwood
469	Fraxinus exclesior	14	4/4/4/3	360	4.32	3m n/s	MA	40+	Good	Good	Remove Ivy	B1	
470	Fraxinus exclesior	10	3/2/2/2	380	4.56	4m all	MA	40+	Poor	Fair	Remove Ivy	C1	heavily obscured
471	Crataegus monogyna	6	3/1/1/1	250	3.00	2m all	MA	20+	Fair	Fair	Remove Ivy	C1	heavily obscured
472	Fraxinus exclesior	12	3/2/2/2	420	5.04	4m all	MA	40+	Good	Fair	Remove Ivy	B1	heavily obscured
473	Acer pseudoplatanus	11	4/3/4/4	310/470	6.76	1m e/w	MA	40+	Good	Fair		B1	