

# LAND PLANNING & DESIGN

CUNNANE STRATTON REYNOLDS

## TREE SURVEY

Ardrew,  
Athy,  
Co Kildare.

July 2021

CUNNANE STRATTON REYNOLDS  
LAND PLANNING & DESIGN  
[www.cslandplan.ie](http://www.cslandplan.ie)

## **CONTENTS**

Summary

1. Introduction

2. Description of Existing Trees

3. Arboricultural Impact Assessment

4. Recommendations – AMS

Limitations & References

Appendix 1: Tree Survey Schedule

## 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 the 11<sup>th</sup> June 2021 by Cunnane Stratton Reynolds arborist;

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                          Technician Member Arboricultural Association (UK)  
                          Tree Risk Assessment Qualification (International Society of Arboriculture)  
                          MA(Hons) Landscape Architecture  
                          Member of the Irish Landscape Institute  
                          Chartered Member of the Landscape Institute (UK)  
                          Diploma EIA Management

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

- New Surveys – 2D Topographic Survey Dwg 20-346-002
- COADY Architects – DWG SHB3-ATY-AR-COA-DR-0011

A full survey record is presented in Appendix 1, together with accompanying drawings Tree Constraints Dwg No 21536A\_T\_101, Arboricultural Impact Assessment Dwg No 21536A\_T\_102 and Tree Protection Plan Dwg No 21536A\_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 five individual trees and two hedgerows were recorded as part of the survey.

Where assessment takes the form of a Tree Group – any trees of particular arboricultural significance or relevance to proposed scheme within these groups may also be identified individually. 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.

The site is an arable field, (in crop at the time of survey), and there are no trees within the field itself. There are a small number of trees located on or just outside the site boundaries.

The report concludes with recommendations for protection measures to ensure the conservation of retention trees during the proposed development.

# 1. INTRODUCTION

## Terms of Reference

Cunnane Stratton Reynolds (CSR) were instructed to undertake a tree survey, to inform the planning, design and layout of a proposed residential development at lands at Ardrew, Athy, Co Kildare.

Following a site survey, CSR considered those tree and tree groups that might potentially be impacted by the 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:

- New Surveys – 2D Topographic Survey Dwg 20-346-002
- COADY Architects – DWG SHB3-ATY-AR-COA-DR-0011

## Site Inspection & Methodology

The site was surveyed over two occasions on 11<sup>th</sup> June 2021 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 existing reference number tags checked 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 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 Classification & Constraints (Dwg No 21536A/T/101).
- Arboricultural Impact Assessment (Dwg No 21536A/T/102).
- Tree Protection ((Dwg No 21536A/T/103).

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 located south-west of Athy Town Centre, a distance by road of approximately 1.3km. Access to the site will be via the local Fortbarrington Road, which feeds directly on to the N78, Athy to Kilkenny Road. The total area of undeveloped land in the ownership of Kildare County Council is approximately 8.7Ha. The site is bounded to the north by the route of the proposed Athy Southern Distributor Road, to the east by the Fortbarrington Road, to the south by the existing Andrew Halting site and an existing social housing development of Andrew Meadows constructed and managed by Respond housing association. The site is bounded to the west by the private residential development of Corran Ard.

## 2. DESCRIPTION OF EXISTING TREES

2.1 The area of trees surveyed, (approximate survey area highlighted red – Fig 1), is comprised of the agricultural arable land.



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

A total of five individual trees and two hedgerows, were recorded as part of the survey.

Their location, size and quality category may be reviewed with reference to the accompanying Tree Survey Dwg No 21536A/T/101 and the tree survey (Appendix 1).



## 2.2 Photographic Summary of Trees Surveyed



T1



T2



T3



T4



T5



H1



H2

2.3 All the trees are located along or just outside the field / site boundaries. The trees are of mixed quality varying from low to high value classification. The hedgerows are heavily pruned and sit on earth embankments.

### 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.

3.2 Category 'U' trees are recommended for immediate removal, (fell or monolith to safe height), on general management grounds, irrespective of site development – zero category "U" trees were identified during this survey.

#### Direct Loss of Trees

3.3 The proposed development is in direct conflict with the following listed trees & hedgerows;

Tag No	Tree Species	Tree Class	Number
T1	Fraxinus excelsior	B2	1

The tree proposed for removal is of moderate value.

#### Indirect Impacts

3.4 None.

#### Additional Considerations

3.5 Scrub and tree removal should take place outside the bird nesting season (March – August).

The proposed development offers an opportunity for new tree planting which will assist in mitigating against proposed losses. It is suggested that native species should form the majority of the proposed tree planting to mitigate against loss of existing native tree and their associated ecological value.

#### Summary

3.6 Table 1 illustrates trees to be removed and their classification.

Table 1.

Tree Class	Trees proposed for removal
A Class Trees	0
B Class Trees	1
C Class Trees	0
U Class Trees	0
<b>TOTAL</b>	<b>1</b>

#### Tree Protection

3.7 Not applicable.



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

##### *1. Tree Works.*

Subject to the required permissions removal / felling works as specified on Dwg No 21536A\_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).

##### *2. Hedgerows*

Protection shall be given to the existing hedgerow by placement of tree protection fencing as illustrated on Dwg No 21536A/T/103.

## **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

All 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	Diameter (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
1	Fraxinus excelsior	9	3/3/3/3	400	4.80	0m all	MA	40+	Good	Fair	Remove Ivy	B1	
2	Sambucus nigra	6	3/3/3/3	150x3	3.12	0m all	MA	10+	Good	Fair		C1	
3	Fraxinus excelsior	13	5/5/5/5	700	8.40	1m all	MA	40+	Good	Fair	Remove Ivy & Crown Clean	A1	Outside site
4	Tilia cordata	9	4/4/4/4	500	6.00	1m all	MA	40+	Good	Fair		A1	Outside site
5	Picea sitchensis	12	4/4/4/4	400	4.80	2m all	M	20+	Fair	Fair		C1	Outside site
H1	Mixed native hedgerow	1						40+	Good	Fair		B2	Heavily pruned / raised earth bank
H2	Mixed native hedgerow	1						40+	Good	Fair		B2	Heavily pruned / raised earth bank