Baseline Tree Survey Report

Prepared for:

Kildare County Council

Proposed site:

Sallins Amenity Lands

Prepared by:

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1.0 Introduction

1.1 Arbor-Care Ltd (Professional Consulting Tree Service) have been retained by Kildare County Council to undertake, a Tree Survey, Tree Constraints Plan outlining the existing trees, groups of trees or hedgerows that are located within the proposed development site (Figure 1.0 below). This survey was undertaken without prejudice to the proposed works. The objective of this initial survey was to assess and quantify the tree stock that is located within the proposed site to assess their conditions and retention potential.

1.2 The survey commenced on the 8th December 2020. The survey commenced at the northern boundary and continued in a southerly direction, finishing at the existing entrance.

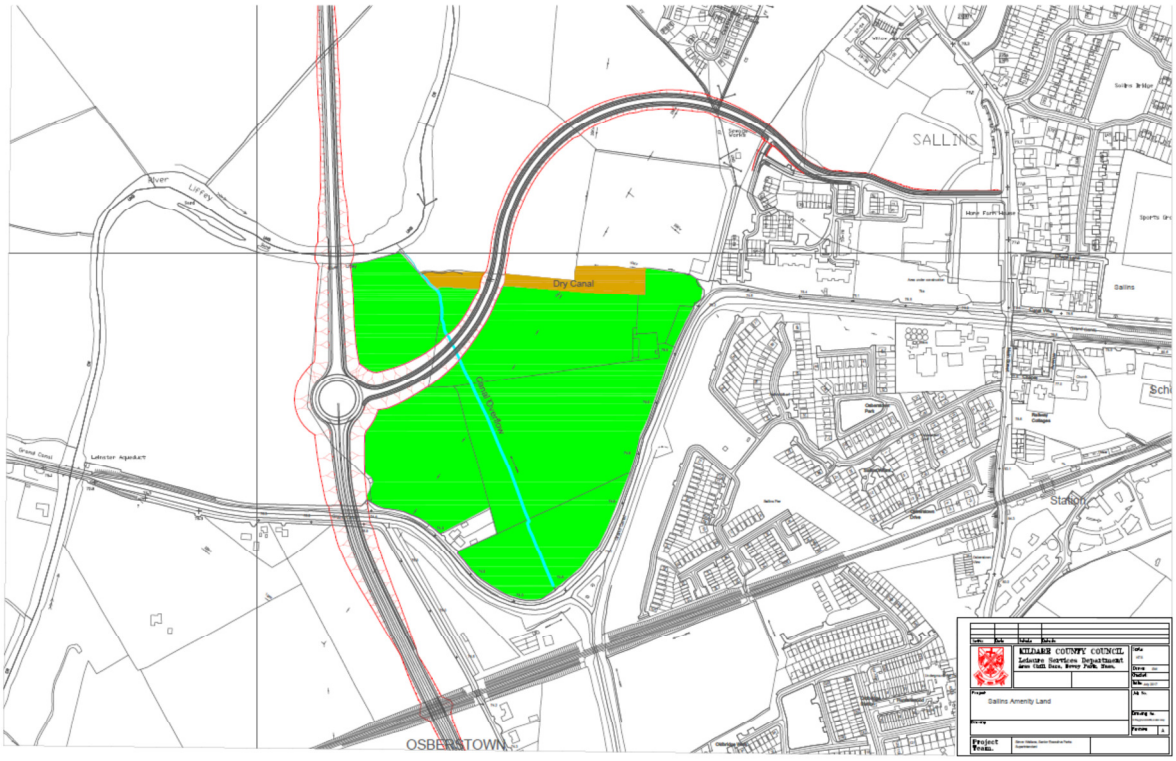
1.3 The 38 acre site located to the west of Sallins town between the Grand Canal, new Sallins bypass road and the river Liffey. The lands are to be developed to cater for the leisure and amenity organisations in the town, but also cater for informal passive and active recreation

1.4 This Tree Survey report will be accompanied by an inventory of trees/hedgerows on site and a Tree Constraints Plan. A separate Arboricultural Impact Assessment and a Tree Protection Plan will also be prepared for the site identifying trees and hedgerow impacted on by the proposed development once the final design is known.

1.5 The tree survey and report is based on the British standard *BS 5837:2012 Trees in relation to design, demolition and construction-Recommendations* [1], this standard gives recommendations and guidance on the principles to be applied to achieve a satisfactory juxtaposition of trees, including shrubs, hedges and hedgerows, with structures. It sets out to assist those concerned with trees in relation to construction to form balanced judgements. This British standard is used in Ireland by policy makers as a guidance note to protect trees and hedgerows during development.

[1] www.bsigroup.com

Figure 1.0 Proposed development site



(Source: Kildare County Council)

2.0 Policy Context

2.1 The National Planning Framework (NPF) seeks to ensure that new development is sustainable and underlines the importance of green infrastructure, of which trees form an integral part. This encompasses recognition of the importance of trees in relation to the management of air, soil and water quality along with other associated ecosystem services and climate change adaption. The NPF also seeks to achieve the protection and enhancement of landscapes and a net gain in biodiversity.

2.2 Arbor-Care Ltd have reviewed the Kildare County Council local area plan and there are no *Tree Preservation Orders (TPO's)* identified within the proposed development site.

2.3 'BS5837:2012 Trees in relation to design demolition and construction – Recommendations (BS5837)' provides a framework which sets out how trees should be considered in this context and also explicitly applies to development where planning consent is not required.

2.4 BS5837 recommends that a tree survey is undertaken to identify the quality and benefits of trees and the spatial constraints associated with them. This is then used to produce a Tree Constraints Plan showing the above and below ground constraints associated with trees. This drawing is used to inform the design process and to allow the retention of good quality trees where appropriate.

2.5 An Arboricultural Impact Assessment is then developed to identify the likely direct and indirect impacts of the proposed development, and a Tree Protection Plan is prepared to identify trees to be removed or retained and to illustrate how retained trees are to be protected. An Arboricultural Method Statement is often required as a condition of planning consent to detail how sensitive operations are to be achieved in close proximity to retained trees. These elements are the minimum standard typically normally required for a planning application and are intended to ensure both a sustainable and harmonious relationship between trees and new development.

3.0 Methodology Employed

3.1 An initial tree survey and visual condition assessment was completed on the 8th December 2020. In accordance with '*BS 5837: 2012 Trees in relation to design, demolition and construction. Recommendations',* only trees with diameters of 75mm or greater were surveyed. Further in accordance with section 4.4.2.3 with the above British standard document where trees formed obvious groups these were assessed and recorded as groups. The survey commenced along the northern boundary and continued in a southerly direction. All trees were individually tagged with a metal disc. This was placed on the northern side of the tree where practical. Where trees were inaccessible due to site conditions such as overgrown areas, a virtual tag with a T number (For example T1) was used.

Section 4.4.2.3 of BS 5837: 2012 states:

Trees growing as groups or woodland should be identified and assessed as such where the arboriculturist determines that this is appropriate. However, an assessment of individuals within any group should still be undertaken if there is a need to differentiate between them, e.g. in order to highlight significant variation in attributes (including physiological or structural condition).

NOTE: The term "group" is intended to identify trees that form cohesive arboricultural features either aerodynamically (e.g. trees that provide companion shelter), visually (e.g. avenues or screens) or culturally, including for biodiversity (e.g. parkland or wood pasture), in respect of each of the three subcategories.

3.2 The survey concentrated primarily on the significant trees/hedgerows and groups located within and adjacent to the proposed development area. The objective of this survey was to gather information regarding the trees location on the proposed development site and the impact the proposed development may have on the trees. **Please refer to appendix 1 for the tree inventory**.

3.3 Significant trees can be equated as those trees whose visual importance to the surrounding area are sufficient to justify special efforts to protect and preserve and whose loss would have an irremediable adverse impact on the local environment. The significance of a particular tree can depend on the age/maturity of the tree, the aesthetic merit of the tree based on its unusual size, intrinsic physical features or the outstanding appearance of the tree or occurring in a unique location or context, thus providing a special contribution as a landmark or landscape feature.

3.4 All above parts of the trees were visually examined. Tree diameters (DBH) were estimated at 1.5 meter above grade as per standard arboricultural practice. Tree height was measured with the use of a clinometer (Where practical). A visual tree assessment from ground level was employed to describe the overall health of the trees. The system uses a five tier rating scale with the following descriptors:

Specimen condition 5-tier rating system

1. Very poor-1-20%
2. Poor- 21-40%
3. Fair- 41-60%
4. Good- 61-80%
5. Very good 81-100%

4.0 Trees surveyed

4.1 The survey commenced on the 8th December 2020. A total of 15 individual trees and 4 hedgerows and 1 tree group were surveyed. The impact of the development on the trees surveyed will be assessed in the Arboricultural Impact Assessment.

4.2 A breakdown of the Tree Categories on site as per BS 5837 2012 is set out in the table below:

In accordance with *BS 5837: 2012 Trees in relation to design, demolition and construction Recommendations.,* Category B signifies those trees *of a "moderate value and in such a condition as to be able to make a substantial contribution (A minimum life expectancy of 20 years is suggested*)." Category C signifies those trees/hedgerows *of "a low quality and value that are currently in an adequate condition to remain until new planting could be established (A minimum life expectancy of 10 years is suggested*)." *Category U signifies 'those trees that are in such a 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'.*

Category	Quantity
A-Tree/Groups of high quality	4
B-trees/hedgerows of good quality	23
C (Low quality or trees less than 75mm diameter)	1
U (remove due to poor condition)	1
Total Trees surveyed	29

5.0 Conclusion

5.1 A complete tree inventory has been provided in Appendix 1 outlining the schedule of trees and hedgerows on site in accordance with '*BS 5837: 2012 Trees in relation to design, demolition and construction Recommendations'.* An in-depth impact assessment will be undertaken when the development plans for the site are known

Appendix 1 - Tree Categorisation

Category U

This category signifies those trees that are in such a 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.

Category A.

Those trees of a high quality and value, in such a condition as to be able to make a substantial contribution. (A minimum of 40 years is suggested).

Category B

This category signifies those trees of a moderate value and in such a condition as to be able to make a substantial contribution (A minimum life expectancy of 20 years is suggested).

Category C

This category signifies those trees of a low quality and value that are currently in an adequate condition to remain until new planting could be established (A minimum life expectancy of 10yrs is suggested), or young trees with a stem diameter below 150mm. Whilst C category trees will usually not be retained where they would impose a significant constraint on development, young trees with a stem diameter of less than 150mm should be considered for relocation.

The above categories have sub-categories attached to the tree categorisation.

Sub-category 1- Mainly Arboricultural Values eg-A1

Sub-category 2- Mainly Landscape Values- eg-B2

Sub-category 3- Mainly cultural values, including conservation-eg- C2

Appendix 1 – Tree Inventory

Tree Inventory Legend

Tree Dimensions - All dimensions are in meters
Ht - Tree Height
Crown clearance - Lowest canopy height (distance from ground level to the first live branch)
Crown spread - Tree Canopy Spread measured by radii at north, east, south and west
DBH. -Stem diameter at approx. 1.50m from ground level.
RPA - Root Protection Area, as a radius measured from the tree's stem centre.

Physiological Condition
Good - A specimen of generally good form and health
Fair - A specimen with defects or ill health that can be either rectified or managed typically allowing for retention
Poor - A specimen whom through defect, disease attack or reduced vigour has a limited longevity or may be un-safe
Dead - A dead tree

Age Class - Young:	*A tree, which has been planted in the last 10 years.*
Semi -mature (SM)	*A tree that is less than 1/3 the expected height of the species in question.*
Early mature: (EM)	*A tree, which is approximately 2/3's the expected height of the species in question.*
Mature: (M)	*A tree that has reached the expected height of the species in question, but still increasing in size.*
Over mature: (OM)	*A tree at the end of its life cycle and the crown is starting to break up and decrease in size.*

Structural Condition - Information on structural form, defects, damage, injury or disease supported by the tree
PMR (Preliminary Management Recommendations) – refers to Arboricultural actions or works considered necessary at the time of the inspection and relating to the existing site context and tree condition. *Note is also made of works considered as urgent*.
Species Common name is given; botanical name is also given upon its first entry, in Italics

Appendix 1. **Sallins.**

Tag #	Species	HT (m)	DBH (mm)	CR. Sp. N	Cr. Sp. S	Cr. Sp. E	Cr. Sp. W	Cr clearance & Dir.	Physiological/ Structural condition	Condition comments	Life stage	PMR	Impact of the dev.	Cat.	RPA Radius m	Est. Remaining yrs
7648	*Aesculus hippocastanum* Horse chestnut	24	800	5	3	3	3	2m South	Good	A large mature chestnut in good overall condition	M	Retain	Unknown	A2	9m	40+yrs
7649	*Quercus robur* Common oak	18	550	2	2	2	2	2m South	Fair	A large mature oak, in decline however it maintains a significant ecological value	M	Retain, remove all deadwood	Unknown	B2	6.5m	20+ yrs
7650	Horse chestnut	22	700	3	5	3	5	1m South	Good	A large mature chestnut in good overall condition	M	Retain	Unknown	A2	8m	40 + yrs
7651	*Fraxinus excelsior* Ash	18	1100	6	6	4	4	1m South	Poor	A large mature ash that is in advanced decline	OM	Consider for removal	Unknown	C2	12m	<10yrs
Tree group 1	Beech, ash, silver birch	18	400	4	4	4	4	1 north	Good	A group of mixed deciduous trees contained along the dry canal, they are in good condition and have significant amenity and ecological value	M	Retain	Unknown	A2	5m	40+ years
7652	Ash	22	500	5	5	5	5	1m east	Good	A large mature ash located at the edge of tree group 1	M	Retain	Unknown	B2	6m	20+
7653	Ash	24	450	5	5	3	3	2 South	Good	A large mature ash located at the edge of tree group 1	M	Retain	Unknown	B2	5.5m	20+
7654	Ash	22	500	5	5	5	5	1m east	Good	A large mature ash located at the edge of tree group 1	M	Retain	Unknown	B2	6m	20+
7655	Ash x 2	12	320	3	3	3	3	2m east	Good	Represents two ash trees in good overall condition	EM	Retain	Unknown	B2	4.2m	20+
T1	Ash	20	600	2	2	2	2	4m east	Poor	A large mature ash in decline and its engulfed with ivy	M	Remove	Unknown	U		>10 years
T2	Ash	12	320	3	3	3	3	2m east	Good	A mature ash trees in good overall condition	EM	Retain	Unknown	B2	4.2m	20+

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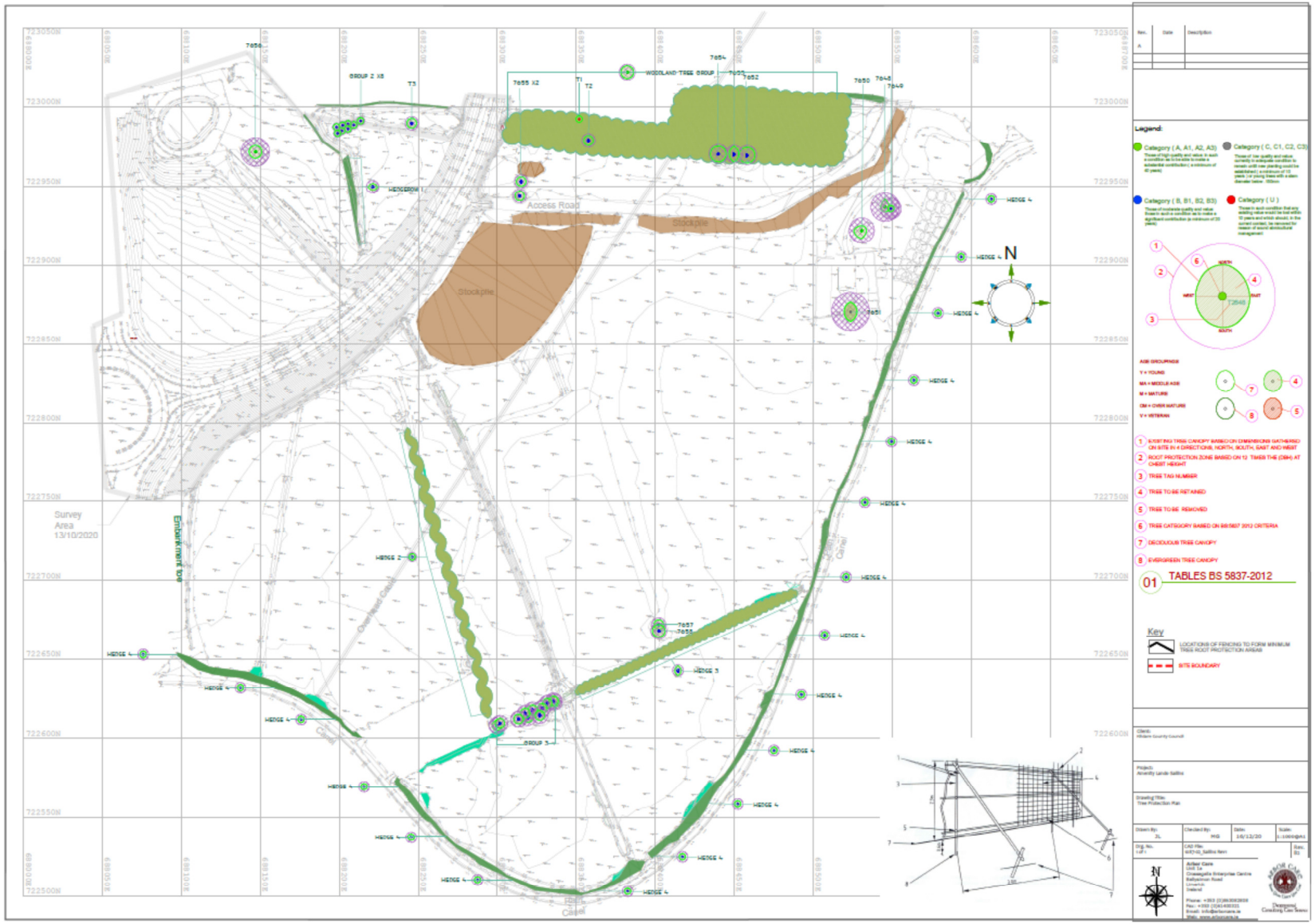
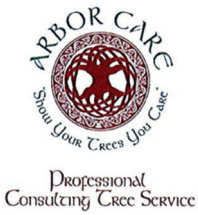
Tag #	Species	HT (m)	DBH (mm)	CR. Sp. N	Cr. Sp. S	Cr. Sp. E	Cr. Sp. W	Cr clearance & Dir.	Physiological/ Structural condition	Condition comments	Life stage	PMR	Impact of the dev.	Cat.	RPA Radius m	Est. Remaining yrs
Group 2 X 8	Ash(3), oak(5),	12	150	2	2	2	2	1m south	Good	A group of 8 semi-mature trees, these are good future potential tree of the site	M	Retain	Unknown	B2	2.5m	40+yrs
T3	Ash	14	320	3	3	3	3	2m South	Good	A mature ash in good condition	M	Retain	Unknown	B2	4.2m	20+ yrs
Hedgerow 1	Hawthorn , Ash	12	300	2	2	3	3	1m South	Good	A mature hedgerow of ash and hawthorn	M	Retain	Unknown	B2	4m	20+
7656	Apple	16	800	4	4	4	4	1m South	Good	A large mature apple, fantastic specimen of size and character	M	Retain	Unknown	A2	9m	20+
Hedge 2	Hawthorn	6	180	2	2	2	2	1 north	Good	A mature hawthorn hedgerow of good ecological and amenity value	M	Retain	Unknown	B2	2.8m	40+ years
7657	Ash	14	340	3	3	3	3	1m east	Good	A large mature ash	M	Retain	Unknown	B2	4.4m	20+
7658	Apple	8	400	4	4	4	4	1m east	Good	A large mature apple	M	Retain	Unknown	B2	5m	20+
Hedge 3	Alder, ash hawthorn	8	250	3	3	2	2	1m east	Good	A mature hedgerow of alder and hawthorn	M	Retain	Unknown	B2	3.5m	20+
Group 3	Alder , ash sycamore	18	400	3	3	3	3	2m east	Good	Represents a group of 6 mature trees in good overall condition	M	Retain	Unknown	B2	5	20+
Hedge4	Ash, hawthorn	12	240	2	2	2	2	4m east	Good	This hedgerow bounds the site and the towpath. It has be heavily maintained in certain areas. It provides good screening between the site and the tow path	M	Retain	Unknown	B2	3.4m	20+

Figure 2. Tree Constraints Plan





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Yours in Conservation,
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