NOEL LANE
TREE CARE SERVICES

An Arboricultural Assessment of the Site Area at Adamstown Boulevard, Adamstown, Co Dublin (Phase 1)

Prepared for: Adamstown Station & Boulevard Limited (The applicant)

Prepared by: Noel Lane, Certified Arborist, MSIF National Dip in Science (Forestry)

Date: 16/02/2022

Caherpeak, Kilcolgan, Co Galway

Signature: Noel Lane

Noel Lane Nat Dip in Science (Forestry)
MSIF Certified Arborist
T: 086 2536973
E mail: noellane80@gmail.com

Prepared by:
Noel Lane
Nat Dip in Science (Forestry) MSIF
Certified Arborist

Noel Lane Tree Care
Caherpeak
Kilcolgan
Co Galway

Date: 16/02/2022

For the Attention of: Vanessa Mullen, Senior Development Manager, Quintain Ireland

Re: An Arboricultural Assessment of the Site Area at Adamstown Boulevard, Adamstown, Co Dublin (Phase 1)

I inspected the tree vegetation within the site area and the proposed masterplan drawings for Phase 1 forwarded to me as requested and I am pleased to submit the following documents:

- Arboricultural Report (A4) for Phase 1 of the Boulevard development tile.
- Schedule of Tree Care Works for Phase 1
- Drawing No. L_01300_TP – Condition Plan (Phase 1)
- Drawing No L_01300 TP – Constraints and Impact Plan (Phase 1)

Recommendations and comments made are subject to the knowledge and expertise of the qualified Arboriculturist that carried out the assessment and their understanding of the proposed development works.

If you require further information, please do not hesitate to contact us, and we will do our best to be of assistance.

Yours sincerely,

Noel Lane

Noel Lane, Certified Arborist MSIF National Dip in science (Forestry)

Table of Contents

1. Instructions

2. Report Limitations

3. Survey Data Collection & Methodology

4. Summary of Survey Findings

5. Arboriculture Implication Study

6. Arboriculture Method Statement/Tree Protection

Appendix 1 – Protective Fencing

Appendix 2 - Photographs

Appendix 3 – Drawings

Appendix 4 – Condition Tree Survey

1.0 Instructions

1.1 I have been instructed by Adamstown Station & Boulevard Ltd to prepare an arboricultural report on the tree vegetation within the site area of Phase 1 at Adamstown Boulevard (See below image) and to report the following:

A- To assess the present condition of the trees/hedgerow's vegetation within the Phase 1 site area. See condition tree/hedgerows assessment schedule within 'Appendix 4' of this report and drawing which has been prepared as a constraint drawing for details.

B- To assess the impact of the proposed development layout on the surrounding tree/hedgerow vegetation located within the site area indicating those for removal and retention. See 'Section 5.0' of this report and drawings for detail.

Proposed masterplan layout – Phase 1 (subject to planning approval)

2.0 Report Limitations

2.1 The inspection of the Trees/Hedgerow's has been carried out from ground level only, is a preliminary report and does not include climbing inspections, internal investigations of the timber or below ground investigations. The assessment is based on what was visible at the time of the inspection and recommendations made are subject to the knowledge and expertise of the qualified Arboriculturist that carried out the above inspections.

2.2 Before undertaking any work to the Trees and Hedgerow's, it would be advisable to check whether any planning or tree preservation controls are in operation, if they are it will be necessary to obtain consent before undertaking any works (pruning or felling

3.0 Survey Data Collection and Methodology

3.1 The Arboricultural data which is presented with the attached Trees and Hedgerow Schedule (see appendix 4), has been recorded in line with BS 5837:2012. The tree survey was conducted by collecting and assessing the following information on all significant trees/hedgerows located on site and plotted on the land survey map provided.

- Label Number
- Hedgerow (H1)
- Tree species both common and botanical.
- Dimensions (Trunk diameter, height, crown spread and crown clearance if required).
- Age class
- Physiological Condition
- Structural Condition
- Preliminary recommendations
- Estimated remaining contribution within their present environment
- Retention category/category grade

3.2 The inspection of the trees/hedgerows involves a visual assessment from the ground level only and does not include any invasive means of assessing the trees internally, their below ground parts or the aerial parts that are not visible from the ground. Good, fair, and poor have been used to summarize the physiological and structural conditions of these trees with the comments giving more detail. Other items that may limit the assessment of a tree include Ivy cover, scrub vegetation and/or basal suckers.

3.3 Their retention category has been assessed and categorised according to their quality and value within the existing context (BS-4.5), and not in conjunction with any proposed development plans. In making this assessment, particular consideration was given to:
Arboricultural Value: An assessment of the tree's health, structural form, life expectancy, species, and its physical contribution to or effects on other features located on site.
Landscape value: An assessment of a tree's locality including its conditions to other features as well as to the site as a whole.
Cultural Value: Additional contributions made such as conservation, historical or commemorative value.

3.4 The trees/hedgerows have been divided into one of the following categories, in accordance with the cascade chart illustrated in table 1 of BS 5837:2012. The classification process begins by determining whether the tree/hedgerow falls within the (U) category, if not then the process will continue by assuming that all trees/hedgerows are considered according to the criteria for inclusion in the high category (A). Trees/hedgerows that do not meet these strict criteria will then be considered in light of the criteria for inclusion in the moderate category (B) and failing this, they will be allocated in a low category (C).

The following summarizes each of the categories:

Category U - Those trees in such a condition that any existing value would be lost within 10 years.

These would be seen as trees that have little or no potential either due to their physiological and/or structural condition and their removal would be seen as necessary either now or in the short-term as the most appropriate management option.

The category 'U' trees have been identified on our drawing No L 01 300 TP_CONDITION with a 'Red' donut around their trunk positions. Due to the condition of these trees, they should not be considered a constraint on the design layout of the proposed development of this site area.

Category A- Trees of high quality/value with a minimum of 40 years life expectancy

These trees would be seen as trees that have the potential to contribute to the tree cover of these grounds for the ling-term and consists of trees of all age classes from semi-mature to mature.

The category 'A' trees have been identified on our Drawing No L 01 300 TP_CONDITION with a 'Green' donut around their trunk positions

Category B- Trees of moderate quality/value with a minimum of 20 years life expectancy.

These would be seen as trees that have the potential to contribute to the tree cover of these grounds for the medium term and consists of all age classes from semi-mature to mature.

The category 'B' trees have been identified on our Drawing No L 01 300 TP_CONDITION with a 'Blue' donut around their trunk positions

Category C- Trees of low quality/value with a minimum of 10 years life expectancy.

These trees would be seen as having the potential to provide tree cover for the short to medium term. As part of the future management, most of these trees would

probably be removed for one reason or another. This category consists of trees of all age classes from young to mature. These trees should not be seen as a considerable constraint on the development of these lands but should be considered for retention where viable.

The category 'C' trees have been identified on our Drawing No L01300 TP_CONDITION with a 'Brown' donut around their trunk positions

3.5 The trees have been plotted onto the attached drawing (Drawing No L_01300_TP_CONSTRAINTS) by a land survey company and their positions are assumed accurate. This drawing has been developed as a constraint drawing to aid the design team in the layout of the development and the Tree and Hedgerow numbers referred to in the condition tree report have been shown on this drawing along with their crown spreads and their retention category colour coded as recommended by BS 5837 2012. The constraint (Minimum Root Protective Area) for each tree has been shown with an 'Yellow Circle' and all proposed development should be planned to be positioned outside those trees proposed for retention allowing for additional space for construction activities.

Explanation of Terms – Tree Survey Schedule Notes

Reference to Tree Nos:
Trees have metal tags attached and these correspond with the numbers on this report. (For group surveys only one tree is tagged).

Reference to Tree Species:
The genus and species of each tree is given

Height:
The approximate tree height to the nearest .5m above ground is given (where appropriate)

DBH:
This is the trunk diameter measured at a height of 1.2m above ground level (where appropriate)

Branch Spread:
This is the measurement taken from the base of the tree to the outer tip of the lateral branches. It records average branch spread (where appropriate)

Age:
The approximate age of the tree - **Referred to in generalized categories including:**

Young
A tree which has been planted in the last 10 years or is less than 1/3 expected height of the species in question.

Semi-mature
A young tree, having attained dimensions that allow it to be regarded independently of its neighbours and approximately 50% of its ultimate size

Early Mature
A specimen 50 – 100% of its ultimate dimensions but with capacity for mass increase remaining.

Mature
A specimen having attained dimensions typical of a full-grown specimen of its species with potential for little if any dimensional increase.

Over- Mature
An old specimen of a species having already attained or exceeded its naturally expected longevity.

Senile
An extremely old specimen of a species, usually of low vigour and typically subject to rapid decline and deterioration - usually of very limited future longevity or approaching death

Condition:
Tree condition is based on a 3-tier rating system, and constitutes a general assessment of the physiological of the tree where the rating of:

Good = represents good health and vigour

Fair = Healthy and reasonable vigour, canopy slightly sparse, some defects and deadwood

Poor = Showing signs of decline, disease or decay and at the point of being dangerous

Dead = A tree that is dead or showing signs of significant an irreversible overall decline

Retention Category: BS 5837:2012 determines four categories following assessment

(1) **Category A.** Trees whose retention is most desirable: Those of high quality and in such a condition to make a substantial contribution for up to 40 years

(2) **Category B.** Trees whose retention is desirable: Those of moderate quality and value so as to make a significant contribution for up to 20 years

(3) **Category C.** Trees which could be retained: Those of low quality and value, but can make a contribution until new planting is established

(4) **Category U.** Trees for removal. Trees that should be removed for reasons of sound arboricultural management

NWR: No Work required at this time

Comments - Typically, the comments provide a commentary relating to the reason a tree has been evaluated in such a way as to provide information relating to actions required for maintenance.

Note should be made of the fact that maintenance suggestions relate to the current site conditions and will require updating and reassessment regarding environmental changes pertaining to the individual site.

Tree Inspections

Priority Management Work Recommendations:

Specification of advised priority management work options, to be undertaken by approved contractors in accordance with BS 3998 (BSI, 2010).

Priority: Suggested priority for recommended works is given as high, moderate, or low. High priority works are advised to be undertaken as soon as reasonably practical. Moderate priority works are advised to be undertaken within c 12 months. Low priority works are advised for general good management but may at present, be considered non-priority/optional.

Priority A – High - Trees/hedgerows require urgent attention

Priority B – Moderate - Tree/hedgerows require attention within 2 years

Priority C – Low - Trees/hedgerows require attention within 3 to 5 years – non-priority/optional

Glossary of Arboricultural Terms:

Codominant stem: Forked branches or stems nearly the same size in diameter, arising from a common junction and lacking a normal branch union.

Crown: Upper part of a tree, measured from the lowest branch, including all the branches and foliage.

Crown cleaning: In pruning, the selective removal of dead, dying, diseased and broken branches from the tree crown

Crown raising/lifting: The removal of lower branches of trees to raise the crown to facilitate access and or avoid damage to structures such as walls

Crown Thinning: The systematic removal of living branches in a balanced manner/form throughout the tree crown, intending to reduce crown weight, wind resistance, to admit light and air circulation

Deadwooding/Remove Deadwood: The pruning out of all dead, disease affected limbs and branches throughout the canopy. All pruning involves removal back to a suitable pruning point i.e., nearest growing point. Deadwooding leads to good aesthetic, biological, pest control, economic and safety reasons for why the practice is undertaken, but some of those reasons are more compelling than others. Deadwooding can keep the plant health and mechanically safe.

Decline: Gradually diminishing health or condition of a tree

Crown Reduction: The shortening back of canopy limbs and branches to bring about a reduction in crown dimensions

Dieback: condition in which the branches in the tree crown die from the tips towards the centre

Failure: Breakage of stem, branch or roots, or loss of mechanical support in the root system.

Hanger: Broken branch hung up in the main crown

Lean: Angle of the trunk

Pruning: Removing branches from a tree using approved practices, to achieve a desired objective

Root Crown: Area where the main roots join the plant/tree stem

Root Protection Area (RPA): Area of tree root zone to be protected from construction damage, the size of which is based on the size of the tree to be protected

Stem: Woody structure bearing foliage and buds

Scope of Work: The defined project objective and requirements

Structural Defect: Feature, condition or deformity of a tree that indicates a weak structure or instability that could contribute to a tree failure

Target: Person, object, or structure that could be harmed (damaged or injured) by a tree or tree part in the event of failure.

4.0 Summary of Survey Findings

4.1 The subject site is Phase 1 of the Development Area No 10 under the Adamstown SDZ. The site is close to the Adamstown Train Station, is irregular in shape adjoining the public road, site access road, agricultural lands, and new development sites. The site is on good quality agricultural land, that is zoned for residential development. The area is broadly devoid of vegetation other than the hedgerow shown H1 and trees within this hedgerow. The hedgerow is located on top of a raised ditch with a deep drain adjacent. A thicket of bramble and blackthorn have invaded this hedgerow which is by enlarge unkept and in poor condition overall. Extensive ivy is also present mainly on the hawthorn trees as well as the ash and black poplar (*Populus. nigra* subsp. *Betulifolia)* trees present on site.

The ash trees have ash dieback disease and in decline. It is inevitable that those ash will continue to deteriorate and eventually die completely within a few years.

A small number of black poplar trees are present in fair condition but are extremely exposed with fair stability and a moderate lifespan remaining. Several of those black poplar trees were topped and lowered in the past with new coppice growth ongoing.

One good quality high amenity and landscape value oak tree – label number 1529 - will be retained.

4.2 Notwithstanding prior access and construction related activity, the area can be regarded as being broadly level though notably disturbed.

4.3 It is imperative that a tree/hedgerow enhancement plan with suitable size and species of trees, preferably native, are planted within the overall site area to mitigate any potential loss of the existing trees and hedgerow.

The reader should refer to the accompanying Ecological Impact Assessment Report and the NMP Landscape Architect report for further details.

4.4 Saplings of the black poplar trees (Trees 1522 – 1528) will be translocated to a new hedgerow as appropriate. The reader should refer to the accompanying Ecological Impact Assessment Report and the Landscape package for further details.

5.0.0 Arboricultural Implication Study

5.1.0 Introduction

5.1.1 It is being proposed to develop this site area for dwelling accommodation and it will also be necessary to allow for infrastructure works such as services.

5.1.2 This section of the document is designed to assess the impact of the proposed development layout on the trees and hedgerow's within and adjoining this site area.

5.1.3 On our Constraints Plan – Drawing No L 01300 TP_CONSTRAINTS we have identified the trees and Hedgerow's to be retained with a "Green" hatched crown spread and those to be removed to facilitate the development or as part of management with 'Red' hatched crown spread.

`5.1.4 The comments made within this impact assessment study are based on my understanding of the proposed development layout and what is required to allow for its construction. Any errors or omissions in my understanding of this project should be brought to my attention by the project team.

5.2.0 Implications of Proposed Development

1. **Direct Loss of Trees**

   To construct the proposed development, it will be necessary to remove sections of Hedgerow number H1 and tree numbers 1512, 1513 and 1521. Refer to the accompanying drawings on the hedgerow.

2. **Indirect Impacts**

   It is recommended to remove the remaining ash trees due to ash dieback disease including 1514, 1515, 1516, 1517, 1518, 1519 and 1520

6.0.0 Arboricultural Method Statement

6.1.0 Introduction

This document sets out the methodology for all proposed works that affect trees/hedgerows on and adjacent to the site. Compliance with this method statement will be a requirement of all relevant contractors associated with the development proposals.

All works to trees/hedgerows and all operations adjacent to trees/hedgerows being retained should be undertaken in accordance with the method statement. The contractor shall undertake no works to tree/hedgerows unless instructed by the Contract Administrator.

6.1.2 Root Protection Area (RPA)

The RPA of label number 1529 must be fully adhered to as specified above.

6.2.0 Prior Notice and Hedgerow Removal

All necessary hedgerow works are to be undertaken prior to the commencement of any other works on site.

Note: Note that under the Forestry Act 2014 – no felling licence will be required on receipt of planning permission.

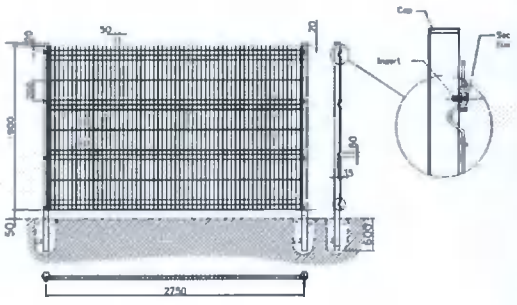
Any proposed tree work should be carried out to *BS3998:2010 Tree Work – Recommendations.* The works shall only be carried out by a competent, professional, fully insured, and certified Tree Surgery firm. The contracting firm shall adhere to the Safety, Health and Welfare at work act 2005 and other relevant Safety legislation. All remedial works specified should be carried out in the interest of safety to public and property.
The client and contractor should agree arrangements regarding the processing and disposal of arising debris, including timber.

The felling works should be preceded by a competent assessment as to the presence of any protected wildlife species such as bats or nesting birds. Appropriate precautions should be taken to minimise, as far as practical, disturbance to resident wildlife, and specialist advice should be sought where required.

Appendix 1

Protective Fencing

Permeable to Biodiversity, reduced set back



PROCTER FENCING SYSTEMS
2.0M HIGH PRO-MESH PANEL SYSTEM

Appendix 2

Photographs

Hedgerow - H1

Section of Hedgerow H1 with blackthorn, ivy, and bramble

Some hawthorn trees heavily laden with ivy

Ash trees along H1 with ash dieback disease are in decline and dying

Typical ash tree with ash dieback disease and laden with ivy

Group of black poplar trees along H1

Black poplar trees in fair condition

Section of Hi with blackthorn and bramble

Black polar trees with stems topped and lowered in the past

Label 1527 – Black poplar tree with cavity and decay at base of main stem - typical of poplar trees at this location

Label 1529 – Oak tree in fair condition – some minor roots damaged during previous ground clearance operations but should be retained and protected as per attached method statement.

Appendix 3

Drawings

Appendix 4

A Condition Assessment of the Hedgerow Vegetation within the site area

at

Adamstown Boulevard Phase 1, Adamstown, Lucan

Co Dublin