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# TREE SURVEY AND REPORT

FOR

**RINGSEND CBC**

OCTOBER 2016

COMMISSIONED BY

**AECOM**

Dr Philip Blackstock

### TREE SURVEY AND REPORT

On trees growing in the grounds of

**Ringsend CBC**

For

**AECOM**

# Terms of reference

This report was commissioned to establish the approximate location, species and category of tree growing along proposed bus routes

Methodology

**Trees growing on the above site were subject to a visual inspection carried out from the ground. No other methods for establishing the condition of these trees were used.**

Site surveyed on

**16th October 2016**

**(It is recommended that the trees reported on here are re-surveyed within five years of this report, or where significant deterioration has become evident, whichever is sooner)**

Survey carried out and report compiled by

**Dr Philip Blackstock, 26 Tullynahinnion Road, Portglenone BT44 8EL**

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**Email** **philip.blackstock@dnet.co.uk****.**

**ARBORICULTURAL METHOD STATEMENTS**

**Protection of trees**. A protective barrier, 2.3m high and comprising a vertical and horizontal framework of scaffolding, well braced to resist impacts and securely supporting weldmesh panels, (as illustrated in Figs 2 & 3 of BS5837:2012) shall be erected around the base of all trees to be retained on site. The line of this fence shall be at least the distance defined in the attached plan, or as otherwise directed by Dr Philip Blackstock. No construction traffic, materials or debris will be permitted within this zone of protection.

**Temporary surfaces within zone of protection**. Where temporary access is to be established within the 'zone of protection' surrounding retained trees, (for example, during demolition of existing buildings), ground surfaces will be protected by a layer of sharp sand, approx. 50 mm thick, overlaid with a geotextile membrane on which a temporary surface of no fines granular material, at least 150 mm thick, (as detailed by a competent Civil or Structural Engineer) is laid. Where traffic is turning on these surface, stout planks will be laid over the geotextile membrane and below the granular material. The trunks of adjacent trees shall be suitably protected as indicated on site by Dr Philip Blackstock.

**Scaffolding within zone of protection**. Where scaffolding is to be established within the ‘zone of protection’ surrounding retained trees, the existing undisturbed ground surfaces shall be protected by a layer of sharp sand, approx. 50 mm thick, overlaid with a geotextile membrane. Stout planks, such as closely side-butted scaffold boards, will be laid over the geotextile membrane and scaffolding will be constructed on these planks with additional stays, as directed by a competent person. Adequate protective fencing, as Illustrated in Figs 2 & 3 of BS5837:2012, will be maintained between scaffolding and adjacent trees.

**Construction of hard surfaces close to retained trees**. Where permanent surfaces are to be constructed close to retained trees, within the zone of protection as defined by BS5837: 2012, carefully remove accumulated organic material and loose soil, leaving existing topsoil in situ. Protect root zone with a layer of sharp sand and, on this, establish a firm sub-base of no-fines granular material supported on a geotextile membrane and a three-dimensional cell product (as defined by a competent Civil or Structural Engineer). Construct the paved area on this sub-base using established design guidelines (and no-fines granular material) with a porous surface finish such as pavers or porous bitmac.

**HEALTH AND SAFETY**

Working with trees is a hazardous occupation. It is important that competent tree surgery contractors are employed to carry out the tree works recommended in the attached tree survey report sheets. These contractors should carry all relevant insurance cover and should comply with the recommendations outlined below.

Notwithstanding the following recommendations, all tree surgeons and accompanying staff should comply with all the requirements contained in the Safety, Health and Welfare at Work Act 1989 (SHWW Act, 1989) and the Safety, Health and Welfare at Work (General Applications) Regulations, 1993 (GAR Regs, 1993) for forestry operations, the Code of Practice for Managing Safety and Health in Forestry Operations and all subsequent legislation made thereunder.

**Staff qualifications, experience and training**

Only skilled operatives should be employed for all the work specified in the attached tree survey report sheets. These skilled operatives should have a proven expertise and experience in the areas of work specified and should hold all relevant certificates of competence.

Operatives using chain saws to fell trees must have National Proficiency Test Council (NPTC) certificate of competence Units CS 30, 31\*, 32\*, 33\* (\* whichever is appropriate for the size of tree being felled) if they are working from the ground and, in addition, Units CS 38, 39, 40 & 41 if they are climbing.

All operatives undertaking work near underground or overhead electric cables must have attended an Electricity Safety Awareness course. They must comply with the guidelines laid down in FASTCo Safety Guide 804: Electricity at work; Forestry and Arboriculture. Where there is a risk of a climber, equipment or parts of a tree touching or coming close to overhead cables, the advice of ESB must be sought, and adhered to, before work commences.

**Work wear**

All operatives should wear the appropriate safety clothing for the task being performed as specified in the relevant safety codes. Where operatives are employed on tree work near public roads, or when the available lighting is poor, they should wear high visibility 'florescent' jackets or waistcoats

**Tools and Equipment**

Tree surgeons should use such tools and equipment deemed suitable to complete the specified task. All bladed tools should be sharp and in a serviceable condition. All plant and machinery operated by the tree surgeon should be tested and certified to comply with all current legislation. All vehicles should be taxed and roadworthy. Machinery and vehicles should carry operational fire extinguishing equipment to the standards required by insurers.

All machinery should be used in accordance with the manufacturers' instructions. These machines should carry warning notices as specified by the relevant Health and safety guide.

Climbing equipment for tree work is subject to the Provision and Use of Work equipment regulations (NI) 1998 (PUWER), the Lifting Operations and Lifting Equipment Regulations (NI) 1998 (LOLER) and is also subject to the Personal Protective Equipment at Work regulations (NI) 1992 (PPE Regs). Operatives using climbing equipment should be familiar with, and comply with, these and all other relevant regulations.

**First aid**

All chain saw operatives should have a current First Aid Certificate. No chain saw operative should be left working on site without an additional first aider present. These operatives should be familiar with FASTCo Safety Guide 802: Emergency Planning and First Aid.

All operatives should have immediate access to a first aid kit conforming to SI 1981 No 917 and FSC 34, and, in addition, carry a personal first aid kit which includes a large sterile wound dressing.

**Site Organisation**

Tree surgeons should ensure that a team of at least three people carry out all tree climbing, pruning and tree felling operations. When undertaking tree climbing work, one of the grounds staff must be competent to perform aerial rescue and be conversant with FASTCo Safety Guide 401: Aerial Tree Rescue. In addition, one of the ground staff must be made responsible for ensuring that there is no trespass into the working zone when tree pruning or felling operations are taking place. Adequate staff should be available during tree work operations to ensure that no unauthorised persons or livestock enter the working area.

Tree surgeons should provide and constantly maintain all necessary warning and direction notices, cones and barriers when carrying out tree works that are adjacent to a road or footpath used by the public. These should conform to the recommendations and directions given in;

* Chapter 8 of the Traffic Signs Manual 1993, published by DRD
* Section 174 of the NI orders of the Highways Act
* Section 65 & 142 of the New Roads and Street Works Act
* Safety at Street Works and Road Works code of practice 1993
* Any other relevant legislation

Where tree works are to be carried out over, or adjacent to, public roads, the contractor should arrange the work to avoid traffic congestion and public inconvenience. They should make arrangements with the Garda Siochana and the local county council as may be found necessary.

**KEY TO SURVEY SHEETS**

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| **TITLE** | **DESCRIPTION** |
| Tree No | The identification number of the tree, as indicated on site by a nylon identification tag attached to the tree and defined with the prefixes; **'T'** (tree), **'G'** (group of trees) and **'W'** (area of wood) |
| Species | The common English name of the tree, as used by Alan Mitchell in ‘A field Guide to the trees of Britain and Northern Europe’ (Collins, London, 1974) |
| Age | The life-cycle age of the tree, described as **Y** = young (vigorous growth, non-flowering), **YM** = young-mature (vigorous growth, some flowering, maturing crown), **M** = mature (slowing growth, full crown, flowering) and **OM** = over-mature (Little growth, heavy flowering, thinning crown or dieback) |
| Condition | The condition of the tree, as assessed by a visual inspection on site and described as **Good** (near perfect form and condition), **Fair** (normal form, often requiring remedial works), **Poor** (significant weakness or rot, requiring substantial remedial works or felling) and **Dead** (dead standing tree or stump) |
| Height | The height of the tree, given in metres |
| Crown spread | The radial crown spread of the tree for each of the four cardinal points, given in metres |
| DBH | The diameter of the tree trunk, measured at approximately 1.3 metres above ground level and given in centimetres |
| Notes | Observations on the position or obvious condition of the tree |
| Category | The category of the tree, based on a BS5837:2012 evaluation and denoting **A** (Tree of high quality), **B** (tree of moderate quality), **C** (small tree or tree or low quality) and **R** (unsuitable for retention) |

**Statement of truth**

**I Dr Philip Blackstock confirm that I have made clear which facts and matters referred to in this report are within my own knowledge and which are not. Those that are within my own knowledge I confirm to be true. The opinions I have expressed represent my true and complete professional opinions on the matters to which they refer.**

Signed:



Date:

28th October 2016

**QUALIFICATIONS**National Diploma of Horticulture (R.H.S) Inter.

Diploma in Industrial Management

M.Sc. in Environmental Management (A Field Survey of Unmanaged Roadside Cuttings in South Antrim)

D.Phil in Forestry (Broad-Leaved Tree and Shrub Invasion of Conifer Plantations in Ireland)

Professional member of the Arboricultural Association

Registered Forestry Consultant with the Irish Forest Service

**EMPLOYMENT**

1996 to present

Arboricultural and Woodland Consultant

Duties include carrying out tree and vegetation surveys and providing tree and woodland management plans, completing reports and liaising with clients, providing court appearances etc. for public and private clients.

**ARBORICULTURAL AND FORESTRY EXPERIENCE AND EXPERTISE**

I have carried out surveys and produced reports on the health, condition, amenity value and landscape value of more than 250,000 trees since 1983. Since 1996 I have been fully employed as an Arboricultural and Forestry Consultant. Clients have now included most of the Local Authorities, Health Trusts and Government Departments within Northern Ireland. Private clients have included Solicitors, Architects and Developers. I have also lectured, to foundation degree level, on arboriculture and forestry.

I have provided expert opinion (including Court appearances) for a large number of clients involved in litigation or in planning appeals since 1996. Topics covered by these opinions have included the predictability of failure in trees, amenity and financial evaluation of damage to trees, evidence of subsidence caused by trees, evidence of unsafe tree surgery practices leading to injury, and tree related evidence in boundary and planning disputes.

I have maintained a research interest in the effects of environmental influences on tree and shrub regeneration in Ireland and on the development of woody biodiversity in recently planted woods. I have also a research interest in the distribution of and environmental influences on deciduous tree diseases, tree stability and in the incidence of dangerous roadside trees.

**Dr Philip Blackstock**