# Arboricultural Method Statement

## Darland Barn, Darland, Rossett

Prepared for:

LISTER CARTER
C/o Radm

Our Ref: 18/AMS/WXM/236

September 2018

**Tree Solutions Ltd**

**T: 01244 389114**
**E: info@tree-solutions.co.uk**
**W: www.tree-solutions.co.uk**

## 1.0 INSTRUCTION

1.1 Tree Solutions Ltd has been instructed by Lister Carter to provide an Arboricultural Method Statement (AMS) in support of Planning Consent at Darland Barn, Darland as requested by Wrexham County Borough Council.

1.2 This Method Statement sets out the methodology and protection measures for all works within close proximity to trees located on and adjoining the site boundary indicated on the Tree Protection Plan at ***Appendix 2***. All trees have been surveyed and are detailed within the tree survey schedule sheet at ***Appendix 1***. Compliance with this method statement will be a requirement of all relevant contracts associated with the approved development. Copies of this document will be made available for inspection on site.

1.4 Trees to be retained and details including the designated Root Protection Area (RPA) and location of tree protective fencing are clearly indicated on the Tree Protection Plan Ref 18/AMS/WXM/236, Drawing No 1 which is at ***Appendix 1*** to this report.

1.5 The purpose of the AMS is to provide information on protection and control measures affecting the existing tree stock. The works, with applicable methodology, are divided into the sequence of operations at paragraph 5.0:

## 2.0 STATUTORY CONTROLS & PLANNING POLICY

2.1 In terms of impacts on trees, the planning application will be assessed against Policy EC4 of the Wrexham County Borough Council Unitary Development Plan (2005) and Local Planning Guidance Note 17 'Trees & Development' (2010).

2.1.2 We have not been able to establish if any trees on or adjoining the site are subject to a Tree Preservation Order. You are therefore advised to seek confirmation from WCBC prior to undertaking any remedial tree surgery work not granted consent under this planning proposal.

## 3.0 SITE PLAN

3.1 The observations and recommendations contained in this document relate to the approved site layout plan Ref: RA1733, Drawing No: L(81) 001 provided by RADM Architects.

3.2 The method statement should be read in conjunction with the enclosed Tree Protection Plan, which is based upon the above drawings.

## 4.0 DEVELOPMENT IMPACT TO TREES

4.1 The proposed parking area encroaches marginally within the RPA of tree number 1 by a maximum of 1m which is less than the acceptable 20% tolerance specified at para. 7.4.2.3 of BS5837: 2012. As this is a young healthy and vigorous open grown tree we are confident that it will tolerate some root disturbance if necessary with no adverse impact to its future health.

4.2 The proposed parking area has been amended to allow for an open pit to be retained around the base of tree number 1. This area will remain as existing with no alterations to levels other than a 30mm deep composted bark mulch layer.

4.3 The surface dressing to the car park will be a porous material such as Marshals Blocks or similar to be agreed with the LPA.

**P1 - Proposed parking area adjacent to T1 Lime**

## 5.0 SEQUENCE OF OPERATIONS

From commencement of the above development, the following methodology shall be implemented in the manner and sequence described:

1. Erect temporary tree protective fencing
2. Main construction phase
3. Removal of temporary fencing
4. Landscaping within RPA of tree

### 1. Erect Temporary Tree Protective Fencing

1. Prior to commencement of any construction, preparation, excavation or material deliveries the main contractor shall erect the temporary protective fencing as detailed in the 'Tree Protection Specification' and in the location indicated on the Tree Protection Plan.
2. An inspection report will be completed and returned to the LPA Tree Officer for approval. Any damage occurring to protective fencing during the demolition or construction phase shall be made good by the main contractor

### 2. Main Construction Phase

1. There shall be no storage of construction material, site parking, site accommodation or equipment in any area designated as the Root Protection Area (RPA) and Construction Exclusion Zone (CEZ) and enclosed by Temporary Protective Fencing
2. No materials that are likely to have an adverse effect on tree health such as oil, bitumen or cement will be stored or discharged within 10 metres of the trunk of a tree that is to be retained. No fires will be lit
3. The site agent shall supervise deliveries by self-loading crane, with vehicles positioned in such a manner that retained hedge is not at risk of damage

**Cement Mixing**

- The cement mixer will be laid on top of plywood boards in a position located outside the RPA of the tree. The mixer will be kept in this position throughout the development work.

**Avoiding Damage to Stems and Branches**

- Care shall be taken when planning site operations in proximity to the hedge to ensure that wide or tall loads or plant with booms, jibs and counterweights can operate without coming into contact with retained trees. Such contact can result in serious injury resulting in safe retention impossible

**On Site Storage of Spoil and Building Materials**

- Prior to and during all site construction works no spoil will be stored and no cement mixing will take place within the Root Protection Area of any tree on or adjacent to the site even if proposed site work is to be within the crown spread. Any encroachment within this protected area will only be with the prior agreement of the LPA Arboricultural Officer

**3. Remove all Temporary Tree Protective Fencing**

1. Tree Protective fencing will only be removed upon completion of all construction work and once all machinery associated with the works has left site.
2. The tree protection fencing shall not be removed until written confirmation has been received from the Local Planning Authority that it is acceptable to do so.

**4. Landscaping within RPA of Tree**

1. There shall be **no rotovation** of ground within any area designated as a Root Protection Area (RPA) and Construction Exclusion Zone (CEZ)
2. Any undulation of land within the RPA shall be filled with a 50-50 mix of sharp sand and imported topsoil in accordance with land BS 3882 (2015). Fill level must not exceed 75mm and must be spread by hand
3. Movement of material/soil shall be by hand using wheelbarrows. The use of any mechanical excavator or dumper within the RPA of trees is strictly prohibited
4. No hard landscaping works or excavation for cables or any other service should be installed within the Root Protection Area (RPA) and Construction Exclusion Zone (CEZ) without the written consent of the LPA

**Useful Contacts**

**Arboricultural Consultant**

Name: Alistair Henderson

Tel: 01244 389114

Mobile: 07766 774508
Email: alistair@tree-solutions.co.uk

**LPA Arboricultural Officer**

Name: Jon Brewin

Tel: 01978 298763

Email: jon.brewin@wrexham.gov.uk

# TREE PROTECTIVE FENCING

1 Before the commencement of any site excavations and subsequent construction works (other than those set out in the schedule of tree works contained in this document), protective fencing will be erected as detailed on the Tree Protection Plan and as specified below. The LPA Tree Officer will be given 5 days notice upon completion of the fencing in order to inspect and approve prior to the commencement of any site works.

2 The fencing will consist of a scaffold framework in accordance with Figure 2 of BS 5837 – 2012 (illustration below) comprising a metal framework, both vertical and horizontal, well braced to resist impacts. Vertical tubes will be spaced at a maximum interval of 3m. Onto this, weldmesh panels shall be securely fixed with wire or scaffold clamps. Weldmesh panels on rubber or concrete feet are not considered resistant to impact and for this reason will not be used. The site manager or other suitably qualified appointed person will be responsible for inspecting the protective fencing on a daily basis; any damage to the fencing or breaches of the fenced area will be rectified immediately.

3 Clearly legible weatherproof signage, stating “Protected Trees – Exclusion Zone” shall be attached to the fencing 1.5m from the ground, facing out of the Tree Protection Zone located at regular intervals along the fence line

4 The fencing will remain in place until completion of all site works and then only removed when all site traffic is removed from site
5 Other than works detailed within this method statement or approved in writing by the Local Planning Authority (LPA), no works including storage or dumping of materials shall take place within the exclusion zones defined by the protective fencing.

## Protective Fencing Detail

The fence types are shown on the Tree Protection Plan with the following colour key:-

1. Magenta - 2.0M high heavy duty rhino panels (with extra central support bar) mounted on scaffold poles (driven in to the ground) and secured with anti tamper bolts – as illustrated below.

**Tree Protective Fencing Specification**

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## Appendix One

## Tree Survey Schedule

Tree Solutions

Arboricultural Consultants

# TREE SURVEY SCHEDULE (BS5837: 2012)

| | |
|---|---|
| **SITE:** | LAND AT DARLAND BARN, DARLAND, WREXHAM |
| **CLIENT:** | LISTER CARTER |
| **BRIEF:** | ARBORICULTURAL METHOD STATEMENT |

| | |
|---|---|
| **SURVEYOR:** | A. HENDERSON |
| **ASSESSMENT DATE:** | 17/08/2018 |
| **VIEWING CONDITIONS:** | GOOD |
| **JOB REFERENCE:** | 18/AMS/WXM/236 |



| TREE NO. T - Tree G - Group H- Hedge | SPECIES (COMMON NAME) | AGE | HEIGHT (m) + CROWN CLEARANCE/ DIRECTION OF GROWTH (N.S.E.W) | RADIAL CROWN SPREAD (m) N | S | E | W | STEM/ MULTI-STEM* DIA.(mm) | VITALITY | COMMENTS | MANAGEMENT | CATEGORY & SUB-CATEGORY GRADING BS 5837 | BS 5837 RADIUS (m) RPA ($m^2$) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| T1 | Lime | SM | 4.5 | 2 | 2 | 2.5 | 2 | 180 | G | • Small well established tree with no visual defects<br>• E.R.C 20+ | • Lift lower canopy to allow access beneath crown | C3 | 2.1m<br>15$m^2$ |

**HEADINGS & ABBREVIATIONS**

| | |
|---|---|
| **TREE NO.** | REFERENCE NUMBER. REFER TO PLAN OR NUMBERED TAGS WHERE APPLICABLE (T = TREE, G = GROUP, H = HEDGE) |
| **SPECIES:** | COMMON NAME (LATIN NAMES AVAILABLE ON REQUEST) |
| **AGE RANGE/LIFE STAGE:** | Y = YOUNG, SM = SEMI MATURE, EM = EARLY MATURE, M = MATURE, PM = POST MATURE |
| **HEIGHT:** | ESTIMATED AND RECORDED IN METRES. APPROXIMATELY 1 IN 10 TREES ARE MEASURED USING A CLINOMETER AND THE REMAINDER ESTIMATED AGAINST THE MEASURED TREES |
| **CROWN SPREAD:** | MAXIMUM CROWN RADIUS MEASURED TO THE FOUR CARDINAL COMPASS POINTS FOR SINGLE SPECIMENS ONLY (MEASUREMENT FOR TREE GROUPS - MAXIMUM RADIUS OF THE GROUP) |
| **CROWN CLEARANCE & DIRECTION OF GROWTH:** | HEIGHT IN METERS OF CROWN CLEARANCE ABOVE ADJACENT GROUND LEVEL (TO INFORM ON GROUND CLEARANCE, CROWN/STEM RATIO AND SHADING) |
| **STEM DIA/MULTI-STEM DIA:** | STEM DIAMETER - MEASURED AT APPROXIMATELY 1.5 METRES ABOVE GROUND LEVEL OR A COMBINATION OF STEMS FOR MULTI-STEMMED TREES |
| **VITALITY:** | A MEASURE OF PHYSIOLOGICAL CONDITION. D = DEAD, MD = MORIBUND, P = POOR, M = MODERATE, G = GOOD |
| **E.R.C. = ESTIMATED REMAINING CONTRIBUTION:** | RELATIVE USEFUL LIFE EXPECTANCY (YEARS) |
| **BS 5837CATEGORY & SUB-CATEGORY GRADING:** | A = HIGH QUALITY AND VALUE, B = MODERATE QUALITY AND VALUE, C = LOW QUALITY AND VALUE, U = UNSUITABLE FOR RETENTION (SUB-CATEGORY REFERS TO ARBORICULTURAL., LANDSCAPE AND CULTURAL/CONSERVATION VALUES) |
| **BS 5837 RADIUS & BS 5837 RPA:** | PROTECTIVE DISTANCE - RADIUS FROM THE CENTRE OF THE STEM TO THE LINE OF TREE PROTECTION (CONSTRUCTION EXCLUSION ZONE - CEZ) AND PROTECTIVE BARRIER ROOT PROTECTION AREA - BS 5837 (2012) ANNEX D (THE RECOMMENDATIONS STATE THAT THE RPA SHOULD BE CAPPED AT 707 $M^2$) NOTE – ALL CALCULATIONS ROUNDED TO NEAREST DECIMAL |

Table 1 **Cascade chart for tree quality assessment**

| Category and definition | Criteria (including subcategories where appropriate) | | | Identification on plan |
|---|---|---|---|---|
| **Trees unsuitable for retention** (see Note) | | | | |
| **Category U**<br>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)<br>• Trees that are dead or are showing signs of significant, immediate, and irreversible overall decline<br>• 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<br>*NOTE Category U trees can have existing or potential conservation value which it might be desirable to preserve; see **4.5.7**.* | | | See Table 2 |
| | **1 Mainly arboricultural qualities** | **2 Mainly landscape qualities** | **3 Mainly cultural values, including conservation** | |
| **Trees to be considered for retention** | | | | |
| **Category A**<br>**Trees of high quality** with an estimated remaining life expectancy of at least 40 years | 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) | Trees, groups or woodlands of particular visual importance as arboricultural and/or landscape features | Trees, groups or woodlands of significant conservation, historical, commemorative or other value (e.g. veteran trees or wood-pasture) | See Table 2 |
| **Category B**<br>**Trees of moderate quality** with an estimated remaining life expectancy of at least 20 years | 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 | 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 | Trees with material conservation or other cultural value | See Table 2 |
| **Category C**<br>**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 | Unremarkable trees of very limited merit or such impaired condition that they do not qualify in higher categories | 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 | Trees with no material conservation or other cultural value | See Table 2 |

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## Appendix Two

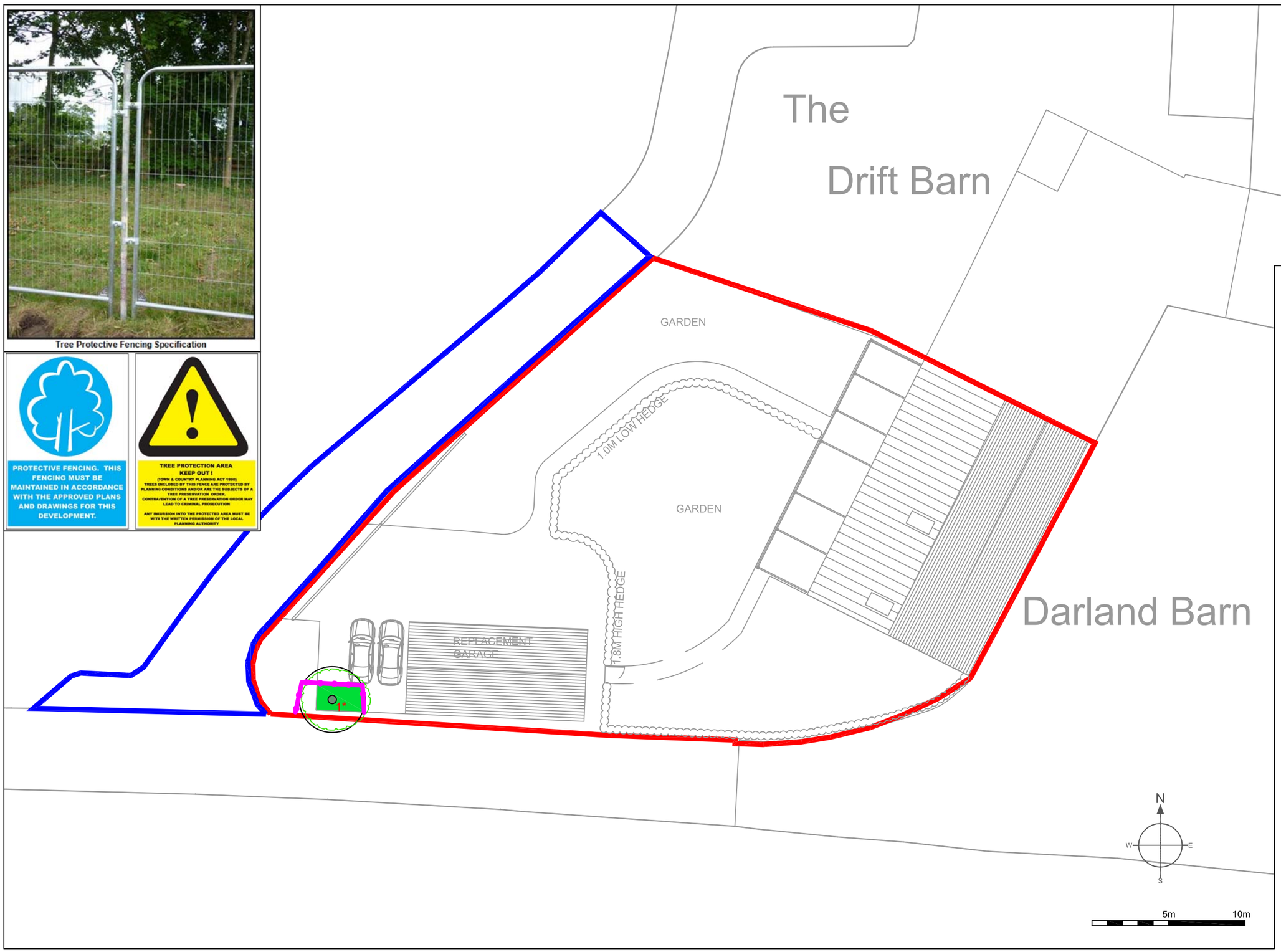
## Tree Protection Plan

Tree Protective Fencing Specification










## Legend

Root Protection Area Modified to Account for Site Features

Category
Crown Spread
Tree Number
Root Protection Area
13

- Category A (High Quality)
- Category B (Moderate Quality)
- Category C (Low Quality)
- Category U (Dead/Dying/In Decline)

2.0M high heavy duty rhino panels (with extra central support bar) mounted on scaffold poles (driven in to the ground) and secured with anti tamper bolts – as illustrated.

Area of land to be left in situ - i.e. open pit with bark mulch added

| | |
|---|---|
| Client: Lister Carter | |
| Project: Darland Barn, Darland Lane, Rossett | |
| Title: Tree Protection Plan | |
| Scale: 1:250 @ A3 | Date: August 2018 |
| Drawn By: NB | Revision: - |
| Job Ref: 18/AMS/WXM/236 | Drawing No: 01 |

Do not scale from this drawing all dimensions to be checked on site.

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Tree Solutions
E: info@tree-solutions.co.uk
W: www.tree-solutions.co.uk
T: 01244 389114
Company Registration No: 04548951