

B. J. UNWIN FORESTRY CONSULTANCY

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NewRiver Retail Ltd.,

c/o Paul Hughes, Director

CORSTORPHINE + WRIGHT

Brook Hall,

Brook Street,

Warwick,

CV34 4BL.

t 01926 288992 m 07889 727128

1st Oct 2014

BJU/mmi



Dear Sirs,

RF19 – Red Lion, Marford Hill, Marford, LL12 8SL. BS5837 Tree Protection Method Statement.

1. Instruction.

- 1.1 Corstorphine+Wright on behalf of NewRiver Retail Ltd has instructed B J Unwin Forestry Consultancy to discharge condition 12 of permission **APP/H6955/A/2209711**

No development shall take place until an arboricultural method statement has been submitted to and approved in writing by the Local Planning Authority. The development shall subsequently be carried out in strict accordance with the scheme as approved. The arboricultural method statement shall include:

- a) Details of tree protection fencing and ground protection measures;
- b) A Tree Protection Plan showing the location of the trees to be removed and retained with their crown spreads, root protection areas and construction exclusion zones;
- c) Details of any access, driveway, path, underground services or wall foundations within retained tree root protection areas or construction exclusion zones, including any related sections;
- d) Method for protecting retained trees during construction works;
- e) Details of frequency of supervisory visits and procedures for notifying the findings of such visits to the local planning authority;
- f) Details of all proposed tree works including felling and pruning; and
- g) A Tree Planting Scheme

Notes:

Copyright: This report is copyright of BJUFC, and licensed only to the client, site and purpose(s) named above. It may not be assigned without the author's permission.

Limitation of Report: -The statements made in this Report do not take account of the effects of extremes of climate, vandalism or accident, whether physical, chemical or fire. BJUFC cannot therefore accept any liability in connection with these factors, nor where prescribed work is not carried out in a correct and professional manner in accordance with current good practice. The authority of this Report ceases at any stated time limit within it, or if none stated after two years from the date of the survey or when any site conditions change, or pruning or other works unspecified in the Report are carried out to, or affecting, the Subject Tree(s), whichever is the sooner.

**Tree and Woodland Consultancy
Woodland Valuation and Timber Sales
Landscape Management**

Visit our website: www.bjunwin.co.uk for more information



Visual Tree
Assessment

1.2 Set out below is information to discharge all.

Sections

2. Inspection.

3. The Site.

4. The Trees.

have all been dealt with in :-



Welch Landscape Design Limited,
Smaque Farm,
Crowle,
Scunthorpe, DN17 4BS.

Tree Survey; The Red Lion,
Marford,
Wrexham, LL12 8SF.

Client; KMB for Marston's Estate Ltd.

Date of Survey; October 30th 2012.

Weather at time of Survey; Fine but a little dull.

File reference Red Lion 03.

Appendices: 1. Tree location plan.

+ Addendum letter of 16th January 2013 by W.L. Anderson.

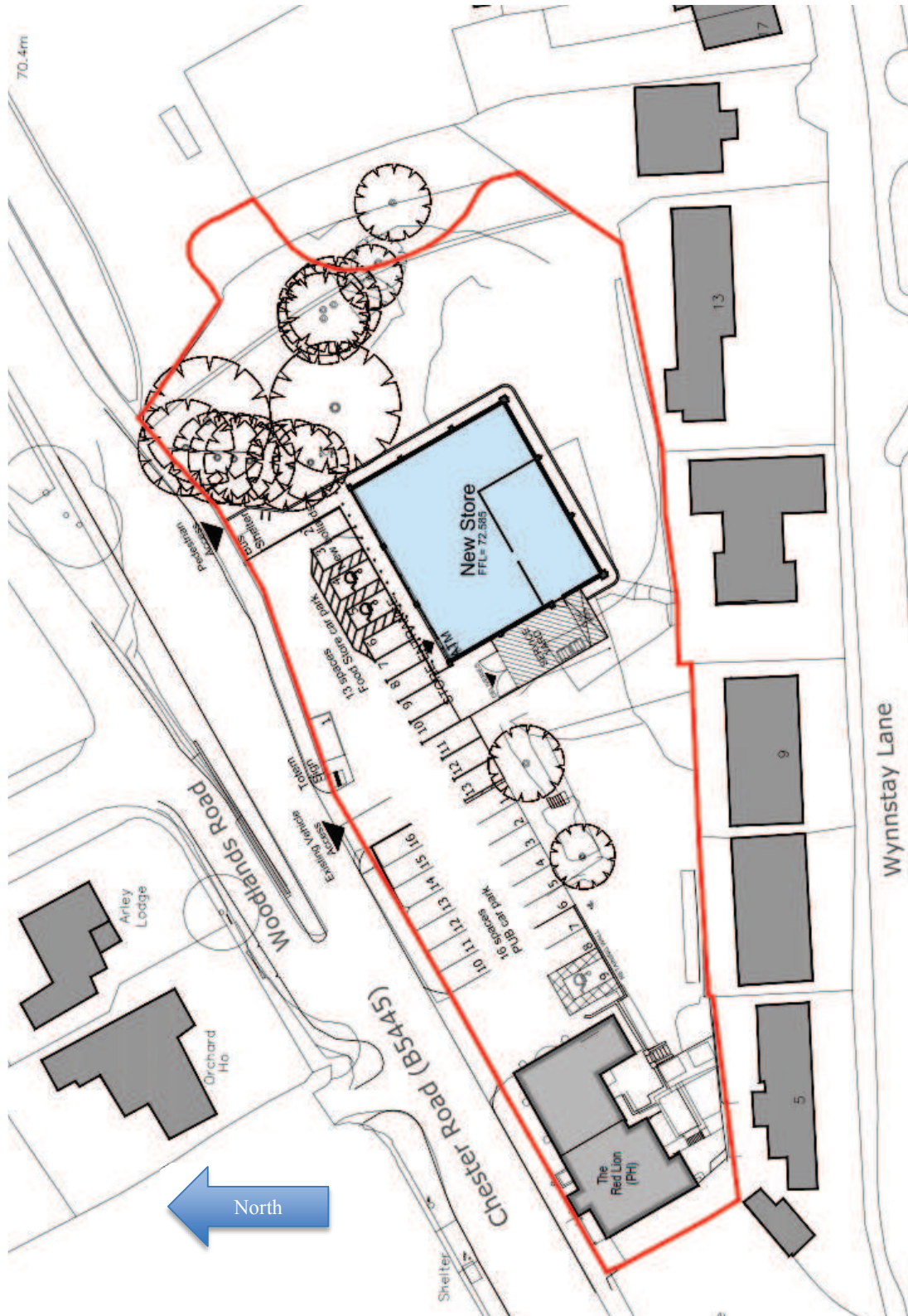
Therefore, tree descriptions are taken as read and accepted by the local authority Wrexham County Borough Council.

5. Proposed Development.

5.1 The significant changes relating to trees are:-

5.1.1 Building new store within the eastern half of the site, and extending parking slightly towards the pub building.

5.1.2 Plan 131106-RF19-002, below, shows the proposal.



5.2 Tree Constraints and Impacts.

5.2.1 There are six potential arboricultural constraints to the development of the site:

- **physical contact of above-ground** parts of the tree,
- **below-ground** parts,
- **shading,**
- **over-bearing, and falling material,**
- **subsidence/heave, and root growth**
- **impact on amenity value.**

5.2.2 Trees are shown on the Tree Constraints Plan attached.

5.3 Physical contact of above-ground parts of trees.

5.3.1 General:-

Trees can be replaced by development or crown space impinged.

5.3.2 Specific above-ground impacts:-

- Sycamore T1 is replaced by extended parking.
- Scruffy ash T4, some small trees and scrub in G5 & G7 and all small trees & scrub in G6, are replaced by new store.
- T2 & T3 will benefit from minor crown lifting over parking.
- Western edge of woodland group G9 and T8 would benefit from minor clearance pruning.

5.4 Below-ground root spread.

5.4.1 General:-

BS5837 defines a tree's Root Protection Area as a disc of soil 1m deep required to maintain long-term health a full-canopied tree, of a given stem size, usually 12 x stem diameter. We show it as an idealised circle. Rooting areas are never symmetrical, but ideally there should be no ground disturbance within the RPA zone. At the discretion of an arboriculturalist, the RPA can be offset if work is proposed on one side only, and the tree can root in the opposite direction. It is not appropriate to rely on the reduced RPA where potential disturbance extends halfway or more around the tree.

Typically the structural rootplate of a tree to resist windthrow is much smaller than the RPA. Therefore tree stability should not be affected by disturbance up to RPA boundary.

5.4.2 Specific Rootzone Impacts:-

- Retaining wall cuts into theoretical RPA of T8 & G9. However, these trees are already edged by asphalt parking, so we consider rootzone impact will be minimal.

5.5 Shading.

5.5.1 General:-

The sun rises to 60° at mid-day in mid-Summer when trees are in leaf (ratio of 16m vertical height to 10m horizontal distance).

The sun only rises to 12° in mid-Winter. However, in winter deciduous trees are leafless, so shading is reduced.

Theoretical shadows of arcs equal to estimated tree height in ten-years' time is recommended in BS5837. *This is the shadow pattern for a period from May to September inclusive, from 10.00hrs to 18.00hrs daily.*

5.5.2 Specific Shading Impacts:-

- None.

5.6 Over-bearing and Falling material.

5.6.1 General:-

All trees drop flower parts, leaves, twigs and fruits throughout the year. These can block gutters. Bird droppings and honeydew can spoil car paintwork. Big trees make adjacent dwellers nervous.

5.6.2 Specific Impacts:-

- No issues.

5.7 Subsidence/heave & root growth.

5.7.1 To be assessed by an engineer based on NHBC 4.2 recommendations. However, there are no significant removed trees nor retained trees close by the proposed building.

5.8 Amenity.

5.8.1 Amenity can be visual landscape, habitat or heritage.

5.8.2 T1 is a landscape loss. See 6.11 and Tree Retention Plan for proposed new planting.

6. Arboricultural Method Statement in sequential order for proposed development at RF19 Red Lion site.

6.1 Supervision

6.1.1 The local authority might condition a pre-start site meeting between builder, Tree Officer and retained arboriculturalist to agree feasibility of tree retention, tree protection and working methods.

6.1.2 Further inspections are unlikely to be required on this small site with limited potential for tree impact from development.

6.2 Tree Management

6.2.1 Tree Work prior to ground work:-

No	Species	RPA radius m.	<u>Work for development</u>
T1	Sycamore	5.8	<u>REMOVE.</u>
T2	Ash	3.6	<u>CROWN LIFT TO 3.5M CLEARANCE OVER PARKING.</u>
T3	Ash	4.1	<u>CROWN LIFT TO 3.5M CLEARANCE OVER PARKING.</u>

T4	Ash	2.4	<u>REMOVE.</u>
G5	Mixed	2.4	<u>REMOVE SOME.</u>
G6	Mixed	1.8	<u>REMOVE ALL.</u>
G7	Mixed	1.8	<u>REMOVE SOME.</u>
T8	Sycamore	7.8	<u>MINOR CROWN LIFT / TRIM BACK ON WEST SIDE TO 4M LATERAL CLEARANCE FROM BUILDING.</u>
G9	Mixed	6.0	<u>MINOR CROWN LIFT / TRIM BACK ON WEST SIDE TO 3M DIAGONAL CLEARANCE FROM NEW WALL.</u>

End of table.

(Treework following construction see 6.10 below...)

6.2.2 Treework informatives, included for general information:-**6.2.2.1 Disturbance to wildlife.**

It is essential to check for nesting birds, bat roosts, badgers and hibernating animals such as hedgehogs under trees, before pruning or removing trees, as negligent disturbance is an offence under the EC Habitat Directive 1992, CROW Act 2000 & Protection of Badgers Act. The Habitat Regulations were amended in August 2007 to include as an offence **any** damage or destruction of a breeding site or resting place of European Protected species: mainly bats in a tree context.

In general, autumn tree work: **September, October and November** is least disruptive to bats and birds.

6.2.2.2 Permission

Trees may be protected by a TPO, and could lie within a Conservation Area.

Trees may be owned by third-parties.

Trees may be protected by planning conditions.

Therefore, a contractor must satisfy himself that all necessary permissions from the local planning authority or tree owners are in place before touching trees.

6.2.2.3 Quality of Tree Work

All off-ground tree work should be done by insured tree surgeon with certificates in aerial chainsaw use (new designations:- NPTC 020-04, 0020-05, 0020-07, 0021-01, 0021-07; LANTRA 600/5703/8, 600/5717/8, 600/5715/5, 600/5704/X, 600/5714/2), and working to BS3998:2010. (Stumps can be left to shoot again, ground out, or grubbed out, or poisoned depending on location.)

6.3 Tree Protection**6.3.1 Requirement**

The most important tree-protection measure is effective protective fencing, erected as close as possible to the Root Protection Area (RPA) boundary before any other work starts on site including demolition in the vicinity of trees.

It must be maintained until all work is completed, except final soft landscaping.

Here tree protection is proposed for retained trees, and for areas of proposed new planting where this is feasible: called landscape zones.

6.3.2 Vertical Tree Protection

6.3.2.1 Tree Protection fencing locations are shown on Tree

Retention & Protection Plan in Appendix III.

6.3.2.2 A general **specification** for suitable protective fencing is given in Appendix IV.

6.3.2.3 Within the fenced off **CEZ** Construction Exclusion Zone: there must be:-

- no construction access,
- no storage of materials, including soil,
- no ground disturbance.

6.3.2.4 Fencing to remain until all demolition, construction and hard landscaping work is completed, and removed only for final soft landscaping.

6.3.3 Temporary Ground Protection TGP within RPAs:-

6.3.3.1 IF work is required to be closer than the all-round protection zone, then the fenced off zone can be made smaller on that side, or entered temporarily, subject to permission from retained arboriculturalist.

Within such zones, temporary horizontal ground protection plus temporary fencing would be essential.

General:- **EXISTING PAVED AND ASPHALT SURFACING AROUND TREES IS RETAINED AS LONG AS POSSIBLE.**

Specific:- **construction access past G9 & T8 requires temporary ground protection, see Tree Retention & Protection Plan.**

6.3.3.2 Three obvious options for ground protection are:-

- Temporary ground protection plates such as aluminium “Eve Trakway” or plastic interlocking-plate ground protection, both on 150mm depth of woodchip or bark, shown in Appendix V.
- A layer of woven geo-textile under minimum 250mm depth of graded aggregate which is lifted after work.
- Butted scaffold boards or 22mm plyboard laid on bearers on 150mm depth woodchip or bark mulch (pedestrian only).

6.4 Construction Access.

6.4.1 General points:-

- No plant or machinery to enter RPAs without ground protection. Any other vehicle access within RPAs requires temporary ground protection as detailed in para 6.3.3 above.

6.4.2 Site huts could be placed within RPA of trees and hedges; provided they are on stilt feet, no excavation is required for temporary services, and pedestrian and vehicle access is ground protected as detailed in 6.3.3 above.

6.5 Demolition of asphalt etc within RPAs:-

6.5.1 No special measures required for buildings.

6.5.2 Parking etc. by T2 & T3, and asphalt west of T8 & G9:-

- Stand small digger and dumper on existing hard surfacing.
- Lift and tease existing kerbing and surfacing **RADIALLY** away from trees.
- Banksman to carefully cut off roots with loppers as they are revealed.
- Cover excavation in RPA immediately with wet hessian and plyboard

to reduce desiccation.

- Backfill with new kerbing & paving ASAP. See 6.9 below for details.

6.6 Foundations within RPAs:-

- No special building foundations needed to protect trees.
- No special foundations for retaining wall by T8 & G9. However, incorporate movement joints (to protect wall) if engineer is concerned about root action under wall.

6.7 Drainage.

- 6.7.1 Storm-water drainage: Any soak-away system must be designed to avoid increase or decrease of ground water in trees' rooting zones. Existing system should be used wherever possible to minimise change in trees' rootzones.
- 6.7.2 Foul Drainage: Keep away from trees.
- 6.7.3 Sustainable Urban Drainage System: Any SUDS scheme, to reduce the load on local mains drainage, must not add to the soil water in trees' root zones. There is ample space for water storage under the existing parking area.

6.8 Service Trenches.

- 6.8.1 Service trenches (electric lights, utilities, telecoms, drains etc) must be **designed** to run as far from trees as possible.
- 6.8.2 Trenches within RPA of ANY retained trees **should be avoided**, because they require this onerous, generalised, work method:-
- Hand digging* or trench-less systems must be used.
*Use an air-spade to reveal roots (Appendix VII).
 - Retain roots >15mm diameter within service trenches. Thread service pipe underneath.
 - No roots >25mm diameter must be exposed or severed without express written permission of local authority tree officer or retained arboriculturalist.
 - Any excavation within the RPA of a tree must be covered immediately after digging with damp hessian, topped by tarpaulin & plywood, to prevent root desiccation.
 - Hole must be backfilled within five days of opening.
 - Wrap exposed roots >20mm with hessian, and surround by 50mm depth sand, as part of backfill medium.
 - Tamp backfill material by hand thumper or whacker plate only.
- 6.8.3 Additionally, tree protection required during the planning and execution of service trenching is detailed in NJUG Volume 4 and BS5837.

6.9 Minimal-dig construction for new access drives, parking & paths

- 6.9.1 If roads, footpaths, cycle-ways, yards or parking are required near trees, they can be constructed in two ways:-
Conventional construction:- If outside a tree's RPA.
Minimal-dig construction:- If within a tree's RPA.
- 6.9.2 No special measures required, but appendices show Cellweb etc to create thin but strong and porous pavements to allow roads over rootzones.

6.10 Tree work following construction

- 6.10.1 Trees should be re-inspected. This inspection would reveal the need for remedial tree work for the following reasons:-
- to rectify damage occurring during construction (regrettable but possible),
 - to allow additional clearance,
 - or complete tree removal if trees were considered too close for safe retention.
- 6.10.2 All additional work subject to further local authority agreement if trees are protected by TPO or planning conditions, or stand within a Conservation Area.

6.11 New Landscaping

- 6.11.1 The proposal requires minor tree removal.
- 6.11.2 We would advocate new planting:-
- In the open area south of T2 & T3.
 - 2 x Scots pine *Pinus sylvestris* 1.5-2m tall in 45litre pots.
 - 1 x silver birch *Betula pendula* 12-14cm stem circumference in a 45litre pot.
 - In the open area west of the service yard.
 - 2 x Scots pine *Pinus sylvestris* 1.5-2m tall in 45litre pots.
 - 1 x silver birch *Betula pendula* 12-14cm stem circumference in a 45litre pot.
 - In the open area west of the new service yard.
 - 3 x silver birch, 3 x field maple, 3 x common hazel, 5 x common hawthorn, all 20-120cm transplants, species intimately mixed, planted at 1.5m centres.
- 6.11.3 Trees to be planted and maintained as per BS8545:2014:
- Backfill holes with 75% native soil, 25% TPMC.
 - Stake each larger tree with three 1.5m stakes and rubber belting ties. Smaller trees and shrubs in 0.6m shrub shelter and one stake.
 - Add strimmer guard to base of each larger tree.
 - Create 1.5m diameter x 100mm thick woodchip (>3 months old) or bark mulch around each larger tree. Same but minimum 1m diam around smaller trees and shrubs.
 - Maintain by watering 50 litres per big tree and 20 litres per small tree & shrub weekly in first summer (May to August), stake & tie maintenance and top up mulch annually in years 0-5 to achieve full establishment by year five.

7.0 Conclusions

- 7.1 Proposed development at the Red Lion site requires minor tree and scrub removal.
- 7.2 Retained trees could be damaged by new construction. They can be protected by careful construction methods.
- 7.3 New planting of three new trees and some shrubs will replace some of the lost soft landscaping.

Please contact us for further information.

Yours sincerely,



B J Unwin Forestry Consultancy.

References:

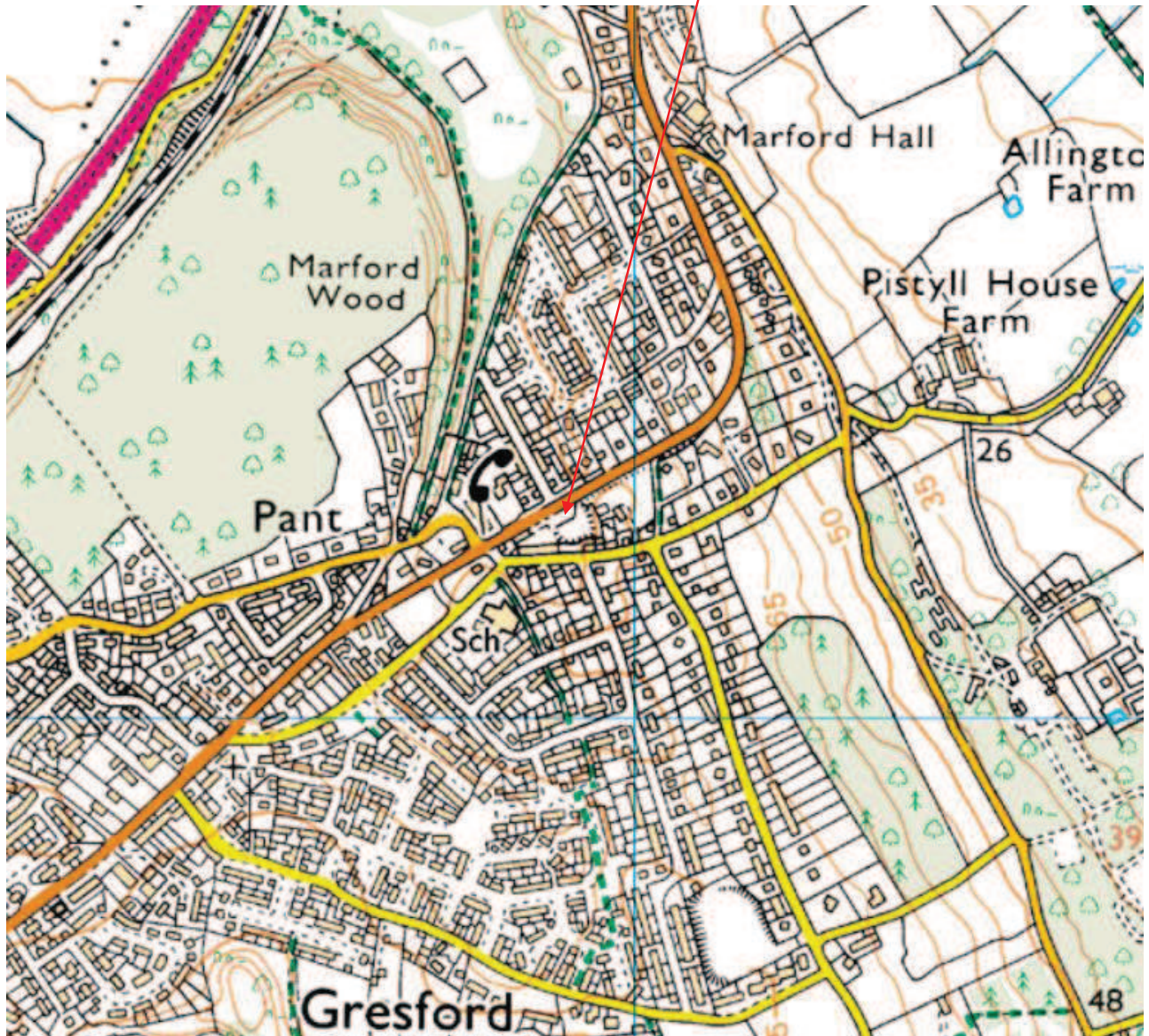
- "The Body Language of Trees"*. Claus Mattheck and Helge Breloer. HMSO 1994.
"Principles of Tree Hazard Assessment and Management". David Lonsdale. HMSO 1999.
BS 3998: 2010 *"British Standard Recommendations for Treework"*.
BS 5837: 2012 *"Trees in Relation to Design, Demolition & Construction"*.
BS 8545 *"Trees: from nursery to independence in the landscape – Recommendations"*. BSI 2014.
NJUG Volume 4 2007 *"Guidelines for the Planning, Installation and Maintenance of Utility Services in Proximity to Trees"*. NJUG, 30 Millbank, London, SW1P 4RD.
"Trees and Development". Nelda Matheny and James R Clark. ISA. 1998.
BS 8206:1992 *"Lighting for buildings"*.
BRE guide 209 (2002) *"Site Layout planning for daylight and sunlight"*.
NHBC Chapter 4.2, *Building Near Trees*. National House Building Council, 2013.
"Tree Roots in the Built Environment". J Roberts, N Jackson & M Smith. R.A.T.8, TSO (The Stationary Office), London, 2006.

Attached:

Appendices 1 to VIII.

Appendix I

Location



Google Earth aerial. Taken 2009, summer mid-day.



Appendix II

Constraints plan was included in previous report. :-

- **Tree Crowns**

Retention categories, based on BS 5837 Table 1:-

A = High quality & Value (>40yrs life): Green.

B = Moderate quality & Value (>20yrs life): Blue.

****C = Low quality & Value (>10yrs life): Grey.**

U = Trees to be removed (<10yrs life): Red.

****PLEASE NOTE. FOR CLARITY, C-CATEGORY TREES MAY NOT BE COLOURED.**

+

- **Root Protection Areas**

RPA = circles.

See Tree Table for dimensions.

+

- **Theoretical Shading**

= quadrant of tree height in ten years' time from north west (mid-morning) to due east (evening). This is a shadow pattern for 1 x tree height from 10.00-18.00hrs from May to September.

Appendix III

Tree retention and Tree Protection Plan

Plan insert here in paper copy.

Appendix IV

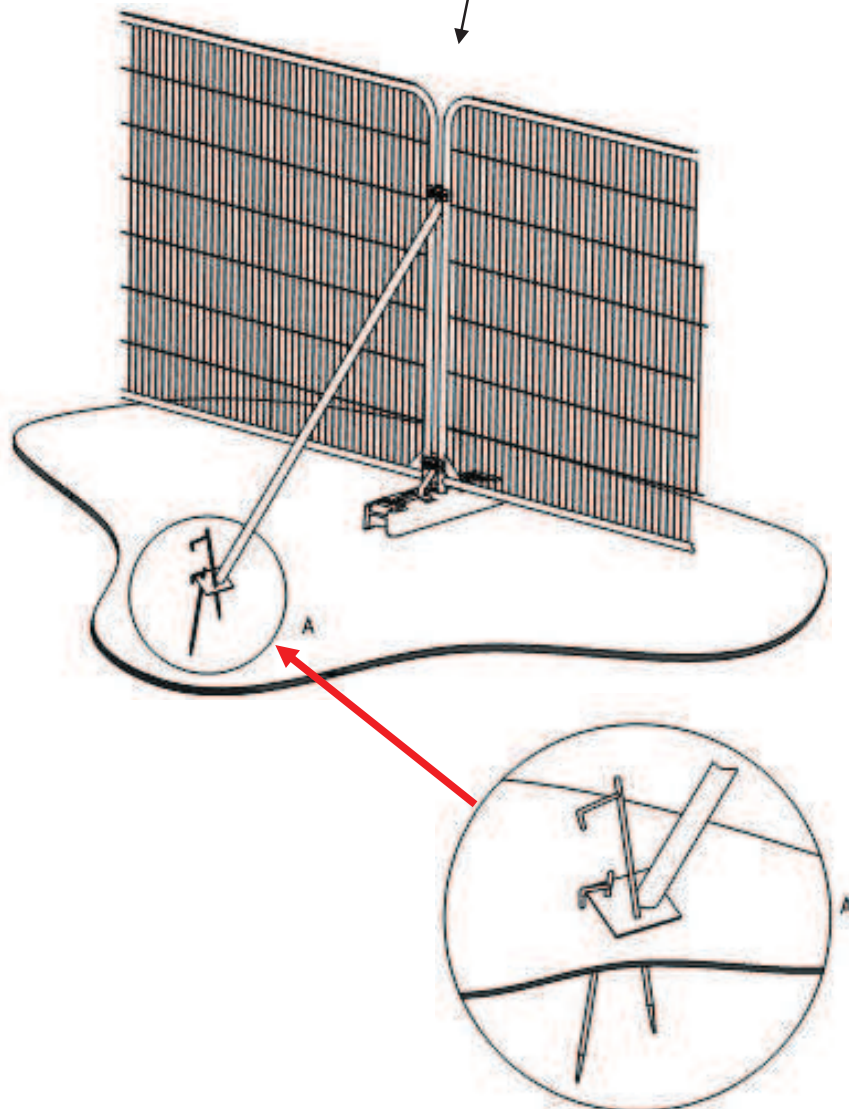
Vertical Tree Protection Fencing, from BS5837.

Heras panels on rubber feet, pinned braces.

Vertical protective fence: location on plan:

Apply signs at 20m spacing:

**TREE PROTECTION -
Construction Exclusion
Zone.
NO ACCESS**



Horizontal Ground Protection x 2 examples

Example of aluminium temporary ground protection.

EVE TRAKWAY



Roadways - Medium Duty Trakpanel

The Medium Duty Trakpanel, or 'Box' panel, is ideal for where both pedestrian and vehicle access is required. This versatile panel can be laid with either a smooth or corrugated surface uppermost. The smoother surface finish provides excellent support underfoot, whilst the construction of the panel maintains a high load bearing capacity. Due to the way these panels fit together, a smooth joint is created therefore reducing trip hazards.

The Benefits

Pedestrian friendly upper surface

Suitable for heavy vehicles

Ideal for where both pedestrians and vehicles require safe passage

Technical Specifications	
Dimensions	2.5 x 3m (when installed 2.44m x 3m due to overlap)
Weight	274.7 kg
Carrying Capacity	A more pedestrian friendly roadway, this system is capable of taking any road going loads.

The following Roadways are available. Please select an item to view more information:

Other Roadways products
- Heavy Duty Trakpanel
- LD20
- Roadway Ramps
- Multi-Directional Trakpanel

Example of plastic temporary ground protection.

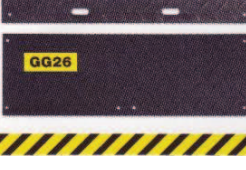
GROUND-GUARDS

A Totally Versatile Access System for Instant Roadways, Car Parks & Ground Protection

- Helps to prevent ground damage and bogged down vehicles
- Guaranteed unbreakable by vehicles up to 50 tonnes!
- Lightweight and easy to handle
- Nationwide hire available
- Clips together without tools
- Orders dispatched within 24 hours
- Totally versatile – Keep some available at all times!

HIRE OR BUY
Phone 0113 267 6000

MANUFACTURED FROM 100% RECYCLED MATERIALS

GG48 	GG48 Size: 8' x 4' Surface: Standard/Standard Standard/Smooth Smooth/Smooth Standard/Walk
GG38 	GG38 Size: 8' x 3' Surface: Standard/Standard Standard/Smooth Smooth/Smooth Standard/Walk
GG28 	GG28 Size: 8' x 2' Surface: Standard/Standard Standard/Smooth Smooth/Smooth
GG36 	GG36 Size: 6' x 3' Surface: Standard/Standard Standard/Smooth
GG26 	GG26 Size: 6' x 2' Surface: Standard/Standard Standard/Smooth

OUTRIGGER PAD




Appendix VI

Shallow trays for strengthening gravelled or grassed areas.

GRB Plus

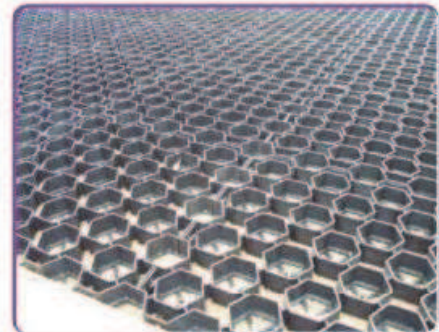
GRB Plus is a new and revolutionary development in ground stabilisation and reinforcement.

Introduction:

Manufactured in the UK from 100% recycled material directed from landfill, GRB Plus is the environmental and sustainable solution to prevent ground erosion. The honeycomb design provides an interlocking system that can be laid at ground level, filled with stone, gravel or soil and then seeded. GRB Plus creates maintenance-free areas without detracting from the scenery, qualities that make it perfect for green car parks and construction projects.

Specification:

Grid Area	500 x 500 x 40mm
Wall Thickness	4mm
Wall Depth	40mm
Weight/m ²	4.56kg/m ²
Number of tiles per m ²	4
Load Capacity	Up to 250 tonnes/m ²
Material	100% Recycled UV Stable Polyolefin



Application:

- Construction sites
- Green parking areas
- Access roads & Private lanes
- Pathways & drives
- Golf courses
- Landscaping projects
- Equestrian & livestock facilities
- Green roof & roof top gardens
- Towpaths
- River & road embankment
- Embankment stabilisation
- Emergency access routes
- Helicopter landing pads
- Cycle routes
- Private Airfields

Green-tech Ltd.

Sweethills Park, Nun Monkton, York, YO26 8ET

Tel: 01423 332 100. Fax: 01423 332 101. Email: sales@green-tech.co.uk. Web: www.green-tech.co.uk

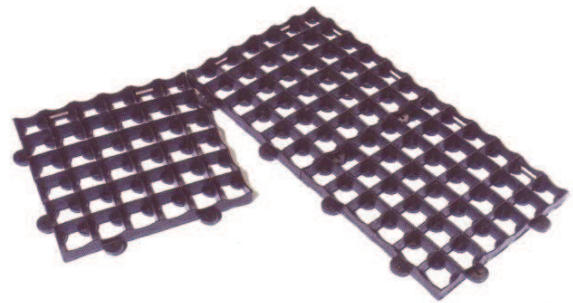
Slightly deeper (50mm or 80mm trays for strengthening gravelled or grassed areas.

DuoBlock

Grass Protection System



Using grass or gravel infill, DuoBlock 750 and 500 give architects, consulting engineers, landscape contractors and developers the ultimate in load-bearing performance combined with aesthetic appearance.



Porous paving systems have been available since the early 1990's and provide a durable yet aesthetically pleasing alternative to traditional surfacing solutions. Increased awareness of the need to manage storm water runoff in new developments and the advent of Sustainable Urban Drainage Systems (SUDS) has led to an increase in popularity.

DuoBlock is a permanent grass protection / gravel retention porous paving system. It is extremely versatile and may be used in a wide range of applications including:

Applications:

- Overspill car parking
- Emergency access and service roads
- Caravan hardstanding
- Verge hardening
- Service Roads
- Pedestrian walkways and towpaths
- Bridle ways
- Helipads
- Golf course pathways / Tee reinforcement

DuoBlock systems are uniquely designed to ensure the ultimate in load bearing performance and aesthetic appearance and have numerous benefits over traditional and first generation plastic systems such as:

Benefits:

- 90% surface area available for infill
- Reduces surface water runoff
- Increases water Filtration
- Interconnecting cell walls
- High Load Performance
- Unique surface design for greater aesthetic appeal
- Positive interlock System

**NEXT DAY
DELIVERY**
from stock

Deeper Cellweb 3-D grid for strengthening tracks.



Access road for the National Lake District Parks Authority.

Site before construction pictured above.



CellWeb during installation.



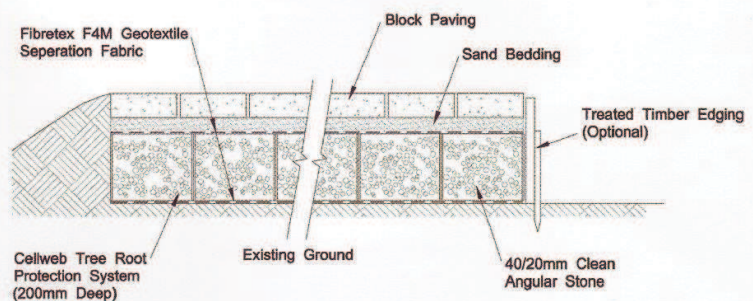
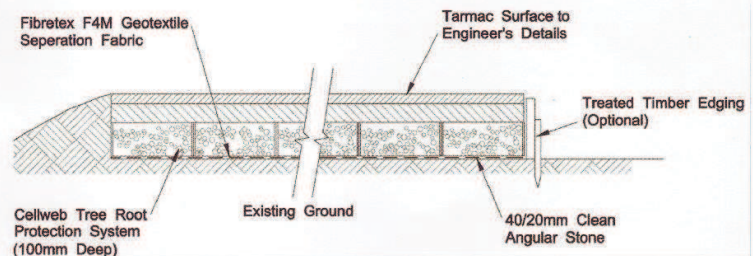
Final surfacing.

Final surfacing

The CellWeb Tree Root Protection is totally confined within the clean stone sub base, therefore you can choose whichever surface materials are most appropriate for your installation. Some materials are more suitable than others and serious consideration should be given to the porosity of the surface for continued healthy growth of the tree. An ideal surfacing are DuoBlocks: a grass reinforcement and gravel retention system. Geosynthetics can supply these systems for a visually attractive surface that also has the advantage of being fully porous.

Loose or bonded gravels can be used as an alternative hard landscaping and CellWeb can also be used with block paviors whose porous joints will permit moisture and air transfer to the roots. Where planning allows, porous asphalt is yet another possible surfacing treatment.

Call our sales office on 0870 850 1018 for more information.



butor of geosynthetic materials in the UK

Design
service

Onsite
support

See all products
online at
geosyn.co.uk



Appendix VII

Example of Air-spade.

HANDLE VIBRATION TEST

Product type – MBW Soil Pick SP125

Manufacturer of testing apparatus – Castle

Accelerometer was affixed to the rear of the handle on the Soil Pick and all three axes were tested.

Accelerometer position:

X axis = 0.0M/S²

Y axis = 0.0M/S²

Z axis = 0.0M/S²

Hand/arm vibration = 0.0M/S²

TREE CARE

MBW's Soil Pick provides a multi-functional air tool for a variety of applications in the tree care industry including:

Radial Trenching

Radial trenching is a process which involves aerating the soils around a tree root in a pattern resembling a wagon wheel. The Soil Pick provides a safe and damage free means of utilizing a high air pressure to loosen tightly compacted soils.

Aeration & Excavation

Root Locating for Utility Line Installation or Pruning

Investigating Root Structure and Damage

Transplanting or Bare Rooting

Reducing Soil Compaction



Appendix VIII

B J UNWIN FORESTRY CONSULTANCY,

Head office: **Parsonage Farm, Longdon, Tewkesbury, Gloucestershire. GL20 6BD.**

Tel / Fax: 01684 833538. Home Tel: 01684 833795. Mob: 07860376527. E-mail: Jim@bjunwin.co.uk

Associate office: **1 Market Place Mews, Henley-on-Thames, Oxfordshire, RG9 2AH.**

Principal: **Jim Unwin BScFor, MICFor, FArborA, AARC, CEnv.**

Chartered Forester,

ICF Registered Consultant,

Fellow of the Arboricultural Association,

Arboricultural Association Registered Consultant

Chartered Environmentalist.

<i>From:</i>	Jim Unwin	<i>To:</i>	Prospective Client
<i>Date:</i>	July 2014	<i>No. of pages:</i>	2
<i>Subject:</i>	<u>Professional CV</u>		

Below are set out **B J Unwin Forestry Consultancy's** competences and experience.

Insurance:-

£5m Public Liability & £2m Professional Indemnity (renewed June).

Personnel:-

B J Unwin (born 1956) started his forestry career as a tree surgeon and landscape contractor in 1975. He studied forestry at Aberdeen University from 1977 to 1981, worked for Unilever as a Forestry Manager in the Solomon Islands from 1981 to 1983. Since then he has been based in Gloucestershire assisting clients to manage their woodland, trees and vegetation throughout Southern Britain, and occasionally in northern England, Scotland and Northern Ireland.

In the mid-1980s to mid-1990s for a period of about ten years he taught chainsaw, tree felling and tree surgery courses at Worcestershire Agricultural College on a part-time basis. He was assessed and passed as a LANTRA assessor in these skills, and held NPTC certificates of competence in chainsaw use on the ground and up trees.

He now works as a tree consultant / manager / contract manager to a range of clients listed below.

He works with two self-employed Level-3 arboriculturalists of 35 combined years' experience:-

Jasper Fulford-Dobson Professional Member of the Arboricultural Association - Associate Member of the Institute of Chartered Foresters - Professional member of the International Society of Arboriculture - Technicians Certificate (ArborA) 2005, now regarded as NQF "level 4" - Professional Tree Inspection Certificate (LANTRA) 2013, &

David Shephard BSc Rural Environmental Science - AA Tech Cert AA PTI - Professional Tree Inspection Certificate (LANTRA) 2013) and Arb Assoc Approved Contractor.

plus a secretary/technician; calling in extra help as required (eg ecologist or arboricultural assistant. On bigger projects he regularly works as a part of a multi-disciplinary team.

Current BJUFC qualifications are:-

BSc Forestry Hons 1st Class, Aberdeen 1981.

Chartered Forester, 1986.

Fellow of the Arboricultural Association, 1995.

Licensed Subsidence Risk Assessor, 1997-2001 (scheme closed in 2001).

Completed Training in September 2002 to Prepare Native Woodland Plans for CCW and FC in Wales.

Arboricultural Association Registered Consultant, 2004.

LANTRA certificate for Arboriculture and Bats, BJU in 2005.

Examined and approved to submit Welsh WGS as Management Planner and PAWS Assessor, 2006.

Joined Utilities Vendor DataBase, Supplier No: 88101 in Feb 2006 (left 2010).

Training and Certification in basic CAD operation 2006.

Chartered Environmentalist April 2008.

Woodfuel Production and Supply : LANTRA Certificate of Training Dec 2008.

Training in CAVAT amenity tree asset valuation October 2010.

SPA Quarry Safety Passport, current: BJU & JF-D.

Company Safety Policy:- We have been successfully assessed by Safety Management Advisory Services (SMAS) as meeting CDM Regs Core Criteria Stage 1, as a **Worksafe Consultant No. 31901**. Dated 07/07/2014 expiry 09/07/2015.

First-aid at work June 2013.

Current clients and typical work include:-

English Heritage	Tree safety inspection contract 2007-2013 for East Midlands, East Anglia, London and SE England. Tree safety inspection contract for West of England & Midlands 2013-2019.
Amey Mouchel Ltd	Overseeing Amey Tree Officer on motorway and trunkroad tree inspections throughout Midlands and Marches. Amey Mouchel are agents for Highways Agency.
Tarmac Ltd, Midland Quarry Products & Quarryplan (in Northern Ireland).	Since 1990 working with Estates staff, quarry managers and Landscape / ecological consultancies organising and managing contracts for tree and woodland planting both pre- and post- quarrying. Also preparing landscape restoration schemes for straightforward sites plus landscape management on sites throughout southern England, East Anglia and south and south-west Wales. (Commendations for Land Restoration and Environmental improvements from Spelthorne Borough Council 2003.) Also in Northern Ireland ongoing tree consultancy for Quarryplan.
English Heritage	Appointed Tree Inspector for all EH sites in SE England, London, Eastern England and East Anglia, for five years from April 2007.
Bruton Knowles	Assisting BK clients with woodland management and other tree issues since 1984.
Tarmac Central Ltd	Since 1988 woodland management of Hopwas Hays Wood, Tamworth.
Planning Inspectorate (PINS) & Dept for Communities and Local Government.	Arboricultural Inspecting Officer in South-West England, South East England, West Midlands and East Midlands; advising the First Secretary of State on TPO appeals since 2000. Contract with DCLG expired April 2008. Contract continues with PINS, as Arboricultural Decision Officer .
Rural estates in Herefordshire, Worcestershire and Gloucestershire, plus private woodland owners in southern England and Wales.	Since 1983 woodland management, tree management, hedgerow management. Many are Ancient woodlands and SSSI's requiring detailed ecological management plans produced in consultation with ecologists. About forty Farm Woodland Premium Schemes and about twenty Native Woodland Plans prepared to date in England and Wales. On-going EWGS grant applications. Input into Tir Gofal (and its successor) and Stewardship schemes. Better Woods for Wales (BWW) applications.
British Waterways	Ten-year Tree and Vegetation Management Plans along canals and around reservoirs in London, Hertfordshire, Berkshire, Birmingham, Staffordshire, Worcestershire, Gloucestershire, Shropshire, Llangollen Canal, etc: plus help in dispute with riparian owners. This work is ongoing over the past twenty years.
Stroud District Council	Management of 49Ha woodland since 1989 on FC schemes plus grassland on DEFRA Stewardship Schemes, including HLS. Retired Nov07.
One-off clients	Since 1983 assisting tree owners, developers, lawyers etc throughout southern or midland Britain, including Wales, on a wide range of tree-related issues including planning, planning appeals, subsidence, health & safety, disputes, vegetation control, expert witness, valuation of woodlands, standing and felled timber, Christmas trees etc, and tree and landscape planting schemes. Recently High Hedge issues and BS5837 are hot topics.
Architects / Developers / Planning Appeals	Complete Arboricultural Impact Assessments on simple sites: and working with other professionals to input arboriculture into more complex development schemes. Recent assignments from Liverpool to Wiltshire, Kent and Norfolk, London. All using BS5837:2012. FULL CAD CAPABILITY.
Malvern Hills District Council. South Oxfordshire District Council	BJU Stand-in part-time Consultant Tree Officer Summer 2003. JF-D stand in Consultant Tree Officer summer 2009 to spring 2010.
Golf course & leisure facilities	Assistance with development of Carden Park golf course in Cheshire. Management advice for trees on other golf courses: Eg Ross Golf Club, Swindon Golf Club .

Please do not hesitate to ask for further information. B J Unwin END.