

# Arboricultural Impact Assessment

For Trees At

Wyndham Place,

Egremont



For Aldi Stores Ltd







# Document Verification

Document Title	Arboricultural Impact Assessment For Trees On Land At Wyndham Place, Egremont     For Aldi Stores Ltd
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#### 1. Introduction

- We are instructed by Aldi Stores Ltd to provide an Arboricultural Impact Assessment (AIA) for the significant trees located within a specified area at Wyndham Place, Egremont.
- 1.2 This report is produced to evaluate the proposed demolition of the existing buildings and subsequent construction of an Aldi retail store with associated infrastructure. The developments juxtaposition with the existing trees is considered.
- 1.3 We were provided with the following documents:
- Existing plan in digital AutoCAD format
- Proposed development plans in digital AutoCAD format
- 1.4 This assessment is concerned with recording the species, size and condition of the trees. Recommendations are made where appropriate to establish acceptable levels of safety for the site and also to establish a higher level of arboricultural management.
- The trees are also evaluated for the purposes of British Standard 5837–2012 Trees in relation to design, demolition & construction, with regard to their quality and value. The type and size of the root protection area is calculated and the position of the protective barriers is determined. The remaining contribution or safe useful life expectancy is estimated as an indication of the trees period of retention.
- 1.6 All observations were from ground level without detailed investigation. No invasive examination or climbing inspections were carried out to confirm visual or audible signs of defect and no tissue or soil samples were taken for laboratory analysis.
- 1.7 Trees are living organisms whose health and condition may change rapidly and all observations, recommendations and conclusions are based on the status of the tree at the time of inspection. The recommendations contained within this report are valid for a period of one year only.
- 1.7.1 Both abiotic and biotic factors can alter the health/structural integrity of trees rapidly. No liability can be accepted for any physiological or structural deterioration of the tree occurring after the date of our inspection or that was not evident on the day of inspection. Where this report is relied upon at a later date the reader should be aware that the physiological and structural condition of the surveyed trees may have changed; Re-inspection may lead to significantly different observations, recommendations and conclusions.
- 1.7.2 Any significant alteration to the site which may affect the trees (demolition activity, construction activity, alterations to infrastructure, level

changes, hydrological changes, extreme climatic events, etc) will necessitate a re- assessment of the trees.

1.8 This report was prepared for use by our client in accordance with the terms of the contract and for planning purposes only. It is not a substitute for a tree condition, insurance, or mortgage service. Information provided by third parties used in the preparation of this report is assumed to be correct. The contents are copyright and may not be duplicated or used by third parties without the written consent of AllAboutTrees Ltd.

#### Protected Status Of Trees 2.

- Trees may be legally protected, this may either be in the form of a Tree Preservation Order (TPO) or that the trees are located within a Conservation area.
- 2.2 Potentially large penalties may be enforced for illegally carrying out works on protected trees. It is recommended that checks are made before any works are undertaken and no work should commence until permission has been granted. Please note that there are a number of exemptions from the requirement to obtain a felling licence including land on which full planning permission has been granted by the local authority, however this exemption does not cover land where only outline planning permission has been granted, or on land which has been allocated for residential development within local authority urban and local development plans.
- 2.3 AllAboutTrees has been able to ascertain with Cumberland Council (the Local Planning Authority) on Monday 27th November 2023 that there are no restrictions protecting the trees on the site. The site is not within a Conservation area and there are no TPOs imposed on any trees within the site.

#### 3. Site Visit & Description

Site location – N 54° 29' 07.39 W 03° 31' 37.17 O/S Grid reference- NY 011 110 GB Grid



Figure 1 - The study area is indicated by the red boundary line as shown on the above image.

- A site visit was undertaken on Monday 27th November 2023 by Tim Archment and Andrew Watson. The weather was fine with no visibility constraints.
- The study area is located on the eastern edge of Egremont. It is bound by Wyndham Place on the east, the Egremont bypass on the west and a residential property on the south.
- 3.3 Buildings are located to the north of the plot with the mast majority of the remainder given to hardstanding. The buildings were formerly used as an Esso fuel station and a Ford car showroom.
- 3.4 A small strip of land is present along the southern boundary of the site which is not surfaced, presumably due to the steep terrain (approximately 31° or 60%). This strip of land is unused and covered with dense brambles.

- 3.5 Beyond the brambles, there is very little in the way of vegetation within the site. A small shrub group (group 3) is located against the former car showroom with all remaining surveyed vegetation beyond the site boundary (groups 1, 2 & 4).
- The site slopes downhill to the south. There were no apparent 3.6 drainage problems at the time of the survey.

#### 4. Appraisal

4.1 The trees have been surveyed on site and plotted on the topographical survey as groups. Details can be found in appendix 1 of this report.

#### 4.2 **Root Protection Areas (RPAs)**

4.2.1 The Root Protection Areas (RPAs) for the groups are indicated by the red lines adjacent to the group outlines. The RPA is based on the size of the stems within the group as well as surrounding infrastructure which will contain and shape root spread.

#### 4.4 **Tree Removals**

- 4.4.1 It will be necessary to remove some of the existing trees to facilitate the proposed development and to establish a higher level of arboricultural management for the site.
- 4.4.2 Group 3C will need to be removed due to direct conflict with the scheme - it is within an area identified for disabled parking adjacent to the store front.
- 4.4.3 There is a Goat willow within group 3 which has failed at ground level and is leaning towards the site. Due to poor structural condition it is recommended that this individual is coppiced at ground level and allowed to regenerate. Arisings from the operation can be left within the group as deadwood habitat.



Figure 2 - Group 3C, low value shrubs positioned against the existing building

4.4.3 Any planting implemented to complement the proposed development should be carefully considered to ensure the trees can grow fully into maturity without requiring major or regular pruning works. New specimens should not be positioned in close proximity to buildings, windows or utility services.

#### 4.5 **Retained Trees**

- 4.5.1 Groups 1, 2 and 4 will be retained. Group 4 does not require any protection as it is on the opposite side of the road running down the eastern flank of the site - this group will not be affected by the development proposals.
- 4.5.2 Groups 1 and 2 are positioned beyond the existing site fence which will afford them protection during demolition of the site. As the existing fences are removed they must be replaced with a protective barrier as per the specification which forms section 5.1 of this report and in the position indicated by the blue line on the TPP.
- 4.5.3 The proposed plans indicate a 2.0m weldmesh fence will be erected along the site boundary – this will require removal of the protective barrier to facilitate access. Consequently, the erection of the boundary fence should be left until the final stages of the project when all other construction activity has finished and tree protection requirements are lower.

#### 4.6 **Ground Level**

- 4.6.1 There should be no alteration of the ground level within the RPA of any retained tree. This includes the lowering of the ground level via the excavation of existing material or the raising of the ground level via the importation of additional material.
- 4.6.2 Lowering of the ground level results in the inevitable severance of roots. As the majority of feeding roots are located towards the surface of the soil, lowering the ground level by even a few centimetres can have a drastic effect on the trees physiological health, greatly limiting the trees ability to uptake nutrients. A more significant reduction in ground level is likely to sever larger supporting roots resulting in immediate loss of structural integrity, predisposing the tree to failure.
- 4.6.3 Raising the ground level encourages anaerobic conditions, resulting in reduced gaseous exchange, a necessary part of the respiration process. Water penetration to the underlying root system is also limited. The roots are slowly suffocated leading to decline. Symptoms are likely to include wilting foliage, poor shoot elongation, late bud break, early leaf abscission, crown thinness, followed by dieback and eventually death.
- 4.6.4 Any level changes, installation of retaining structures etc, should take place outside of the RPA of retained trees.

#### 4.7 Wildlife Habitats

4.7.1 As part of the survey the significant trees were inspected from ground level for signs of wildlife habitation, in particular birds and bats.

## **Bats**

- 4.7.2 All UK bats and their roosts are protected by law. The legislation protecting bats are:
- The Wildlife & Countryside Act 1981 (WCA)
- Conservation of Habitats and Species Regulations 2017

For all countries of the UK, the legal protection for bats and their roosts may be summarised as follows:

You will be committing a criminal offence if you:

- 1. Deliberately\* capture, injure or kill a bat
- 2. Intentionally or recklessly disturb a bat in its roost or deliberately disturb a group of bats
- Damage or destroy a bat roosting place (even if bats are not 3. occupying the roost at the time)

- 4. Possess or advertise/sell/exchange a bat (dead or alive) or any part of a bat
- 5. Intentionally or recklessly obstruct access to a bat roost

\*In a court, 'deliberately' will probably be interpreted as someone who, although not intending to capture/injure or kill a bat, performed the relevant action, being sufficiently informed and aware of the consequence his/her action will most likely have.)

- 4.7.3 Penalties on conviction the maximum fine is £5,000 per incident or per bat (some roosts contain several hundred bats), up to six months in prison, and forfeiture of items used to commit the offence, e.g. vehicles, plant, machinery.
- 4.7.4 No visual signs were found to confirm the presence of bats in the surveyed trees.
- 4.7.5 When carrying out tree works it is essential that the contractor or other competent person carriers out a specific 'bats in trees risk assessment' which can be obtained from the 'Arboricultural Association' or the 'Bat Conservation Trust' (BCT). If evidence of bats is found work must stop immediately we should be contacted so that our licenced Ecologist can advise further.

### **Birds**

4.7.6 In the UK, all wild birds, their nests and their eggs are protected by law.

In England, Scotland and Wales the legislation that protects wild birds is:

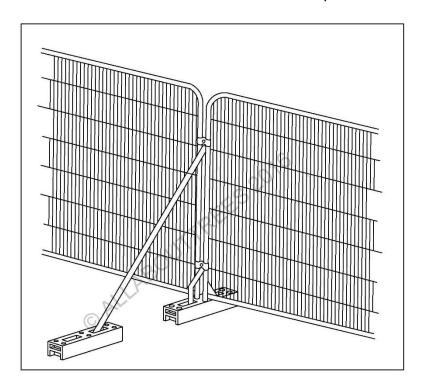
- The Wildlife and Countryside Act 1981
- The Countryside (or CRoW) Act 2000
- 4.7.7 No nesting birds were present at the time of inspection though given the scope of the site, and the extent of vegetation, potential exists for birds to nest and as such caution must be exercised.
- 4.7.8 As with bats the contractor has an obligation to carry out visual checks prior to works. Where possible tree works should be carried out in the period from August to the end of February in order to avoid the bird nesting season.

#### 5. Tree Protection Measures

#### 5.1 **Root Protection Area & Barrier Specification**

- 5.1.1 Trees on development sites are prone to damage during the course of demolition and construction works. Retained trees need to be protected in line with British Standard 5837–2012 Trees in relation to design, demolition & construction.
- 5.1.2 This usually involves identifying a construction exclusion zone around the tree which should remain undisturbed with appropriate protective barriers preventing access to this Root Protection Area for the duration of the project.
- 5.1.3 The minimum root protection areas (measured in a radius from the centre of the tree to the protective barrier) are outlined for each individual tree and the barrier layout is indicated on the plan.
- 5.1.4 The exact root spread of an individual tree is difficult to quantify, but in general, the bulk of a trees roots are situated in the upper 600mm of the soil with the finer absorbing roots prevalent in the upper 250mm.
- 5.1.5 Dependant on soil conditions and the species of the tree, the root plate may extend radially for distances in excess of the height of the tree.
- 5.1.6 In the case of development sites, the root protection area is designed to prevent any significant long-term damage to the tree by protecting the root plate and to some extent the lower branches of the tree.
- 5.1.7 The barriers must be erected immediately following removal of the existing boundary fences and remain in place until the erection of the 2.0m weldmesh boundary fence. The root protection area is considered essential and the barrier should not be removed or altered without prior recommendation by an Arboriculturalist and approval of the local planning authority.
- 5.1.8 The barrier should consist of proprietary 2m tall welded mesh panels mounted on rubber or concrete feet. The panels must be joined together with a minimum of two anti-tamper couplings situated at least 1m vertically apart and installed uniformly throughout the barrier so that they can only be removed from inside the barrier. The panels must be supported by stabiliser struts on a block tray. They may be further secured with the use of ground pins if required.
- 5.1.9 No fixing shall be made to any tree and all possible care must be taken to prevent damage to tree roots when locating the posts.
- 5.1.10 All types of barriers must be firmly attached to prevent movement by site personnel or vehicles and all-weather signs with the wording

"Construction exclusion zone- keep out" should be attached.



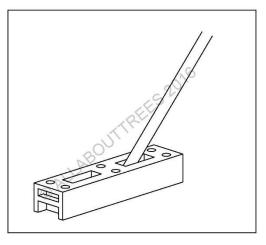


Figure 3 - Stabiliser strut mounted on block tray.



Figure 4 – An example of a barrier erected on a site

#### 5.2 Service Runs

- 5.2.1 It is assumed that the existing service runs will be exploited where possible, but if new works are required it is important that they comply with the National Joint Utilities Group (NJUG) 'Guidelines for the planning, installation, and maintenance of utility services in proximity to trees' and BS 5837:2012. The excavation of open trenches by machine will be unacceptable within the protective zone of any of the retained trees.
- 5.2.2 Acceptable techniques (fuller details in the appendices) for the laying of services in order of preference are:
- Trenchless- by using thrust boring or similar techniques
- Broken Trench- to be dug by hand
- Continuous trench- to be dug by hand
- 5.2.3 Wherever possible, services should be routed outside of any retained trees RPA. When this is not possible apparatus should be routed together in a common duct and any inspection chambers sited outside the RPA.
- 5.2.4 When underground apparatus is to pass within the RPA of a retained tree, trenchless insertion methods should be used (see table below) with entry and retrieval pits sited outside the RPA.
- 5.2.5 Shallow services runs may be dug with hand tools if appropriate and preferably by compressed air soil displacement. Roots, whilst exposed, should immediately be wrapped or covered to prevent desiccation and to protect them from rapid temperature changes. Any wrapping should be removed prior to backfilling, which should take place as soon as possible.

Trenchless Solutions For Installation Of Underground Services						
Method	Accuracy (MM)	Bore <sup>(A)</sup> diameter (MM)	Maximum subterranean length (M)	Applications	Not suitable for	
Micro tunnelling	<20	100 to 300	40	Gravity-fall pipes, deep apparatus, watercourse/ roadway under crossings	Low-cost projects due to relative expense	
Surface- launched directional drilling	≈100	25 to 1200	150	Pressure pipes, cables including fibre optic	Gravity fall pipes, e.g. drains and sewers (B)	
Pipe ramming	≈150	150 to 2000	70	Any large-bore pipes and ducts	Rocky and other heavily obstructed soils	
Impact moling (C)	≈50 <sup>(D)</sup>	30 to 180	40	Gas, water and cable connections, e.g. from street to property	Any application that requires accuracy over distances in excess of 5m.	



- (A) Dependent upon strata encountered
- (B) Pit-launched directional drilling can be used for gravity fall pipes up to 20m in subterranean length
- (C) Impact moling (also known as thrust-bore) generally requires soft, cohesive soils.
- (D) Substantial inverse relationship between accuracy and distance
- (E) Figures given relate to single pass: up to 300mm bore achievable with multiple passes

#### 6. Conclusion

- As with any construction exercise near trees, there are potential areas of conflict where damage could be caused to retained trees.
- By using the protective elements dictated by British Standard 5837, no significant damage should take place during the demolition or construction phase and the tree cover should flourish in the longer term.
- It is anticipated that all of the retained trees can be incorporated into 6.3 the site design; however, it is vital that the ultimate size and spread of the trees should be considered when retaining trees near to the building and that shading and light penetration should also be considered when positioning the windows in the building.
- All tree works must conform rigorously to BS 3998 (2010) 'Tree Work - Recommendations'. The contractors undertaking tree work must comply with the legal obligations to wildlife as outlined in both the AIA and AMS.

For and on behalf of AllAboutTrees Ltd

Andrew Watson FLS MICFor CBiol MRSB FArborA CEnv LCGI -Chartered Arboriculturalist & Registered Consultant

## Appendix 1

## **Group 1C**

### Comment:

Tree group located on the west boundary of the site between the study area and the Egremont bypass. The group is outside of the site boundary.

Trees are scattered along the bankside (sloping uphill to the west) and have reached a maximum height of 4.3m. The trees have been coppiced/low pollarded in the past, presumably to allow passers by to see the car showroom.

Tree species present include goat willow (*Salix caprea*), Oak (*Quercus sp.*), Ash (*Fraxinus excelsior*), Hawthorn (*Crataegus monogyna*), Field Maple (*Acer campestre*) and Silver birch (*Betula pendula*) with dense brambles beneath (*Rubus fruticosus*).

The ash saplings within the group have symptoms indicative of ash dieback. They are small enough that they can be left to die and decay in situ.

Access to the group is limited due to the terrain and brambles. The largest stems in the group are in the region of 200mm which gives an RPA of 2.4m. The RPA is indicated on the site plan by the red line adjacent to the group and is shown at the interface between the soft ground and hard standing.

The group consists of young to middle aged specimens with a life expectancy in excess of 20 years.

## Recommendations:

This group is retainable and will be adequately protected by the existing fence during demolition. Following removal of the existing fence, a protective barrier must be immediately erected in the position indicated by the blue line on the TPP and as per the specification in section 5.1 of this report. At the end of the project when all other construction activity has been completed the barrier may be removed and the 2.0m weldmesh fence erected.

## **Group 2B**

### Comment:

Tree group located on the west boundary of the site between the study area and the Egremont bypass. The group is outside of the site boundary.

The trees are growing along a bankside, rising to the west.

The group connects with group 1 though has not been coppiced or pollarded allowing the trees to grow to larger sizes. The largest tree in the group was measured at 10.5m with a stem diameter of 380mm. This gives a maximum RPA of 4.6m. The RPA is indicated on the site plan by the red line adjacent to the group and is shown at the interface between the soft ground and hard standing.

Tree species present include goat willow (*Salix caprea*), English Oak (*Quercus robur*), Ash (*Fraxinus excelsior*), Hazel (*Corylus avellana*), Sycamore (*Acer pseudoplatanus*), Corsican pina (*Pinus nigra var. maritima*) Hawthorn (*Crataegus monogyna*), Field Maple (*Acer campestre*) and Silver birch (*Betula pendula*). Dogwood (*Cornus alba*) and brambles (*Rubus fruticosus*) are present in the understorey. Ivy (*Hedera helix*) is present within the group and climbing some individuals.

The ash within the group have symptoms indicative of ash dieback though seasonal constraints limit my ability to provide significant comment on this. It is assumed the landowner has an active management plan in place and will deal with the ash trees as required.

There is a single goat willow within the group which has been windthrown. It now leans towards the site and the root plate has lifted.

The group consists of young to middle aged specimens with a life expectancy in excess of 40 years.

### Recommendations:

Coppice failed goat willow at ground level. Stack arisings in woodland and retain as deadwood habitat.

This group is retainable and will be adequately protected by the existing fence during demolition. Following removal of the existing fence, a protective barrier must be immediately erected in the position indicated by the blue line on the TPP and as per the specification in section 5.1 of this report. At the end of the project when all other construction activity has been completed the barrier may be removed and the 2.0m weldmesh fence erected.

## **Group 3C**

### Comment:

A small shrub group located against the wall of the car showroom.

Consists of Rockspray (Cotoneaster horizontalis) and Skimmia (Skimmia japonica).

The shrubs have reached a height of approximately 2.0m with stems below 100mm. This gives an RPA of 1.2m though the roots are likely restricted to the planting bed in which the group grows. The RPA has been drawn on the site plan to the limits of the planting bed.

The shrubs have not been managed in some time, consequently they are messy and overgrown. The extend outwards beyond the limit of the bed and are obscuring the windows of the building.

The group consists of young to middle aged specimens with a life expectancy in excess of 10 years.

### Recommendations:

This group is in conflict with the proposed design and will need to be removed to facilitate the development.

## **Group 4B**

### Comment:

Tree group adjacent to the east boundary of the site, on the opposite side of Wyndham Place. The road is 4.2m wide, rising to 6.3m at the passing place. The group is outside of the site boundary.

The trees are growing along a steep bank, falling to the east. The group has been surveyed remotely from Wyndham Place.

The group is linear and follows the alignment of Wyndham Place. A range of species are present including Cherry laurel (*Prunus laurocerasus*), Hawthorn (*Crataegus monogyna*), Lawson cypress (*Chamaecyparis lawsoniana*), Western red cedar (*Thuja plicata*), Holly (*Ilex aquifolium*), Elder (*Sambucus nigra*), Beech (*Fagus sylvatica*), Silver birch (*Betula pendula*), Rhododendron (*Rhododendron ponticum*), Norway spruce (*Picea abies*), Privet (*Ligustrum ovalifolium*), Rose (*Rosa sp.*), Sycamore (*Acer pseudoplatanus*), Ash (*Fraxinus excelsior*) and Wild Cherry (*Prunus avium*).

Brambles (*Rubus fruticosus*) are present in the understorey. Ivy (*Hedera helix*) is present within the group and climbing some individuals.

The ash within the group have symptoms indicative of ash dieback though seasonal constraints limit my ability to provide significant comment on this. It is assumed the landowner has an active management plan in place and will deal with the ash trees as required.

Multiple bird boxes have been mounted on the trees within the group.

The largest trees in the group are in the region of 15.0m tall with stems of 400mm. This gives an RPA of up to 4.8m. The RPA is indicated on the site plan by the red line adjacent to the group and is shown at the interface between the soft ground and hard standing.

The group consists of young to middle aged specimens with a life expectancy in excess of 40 years.

## **Recommendations:**

This group will not be affected by the development proposals. Given the group is on the opposite side of the road protective measures will not be required.

## Appendix 2(1)

## Glossary of Terms

Reference number: An individual identifying number

Species: Species identification is based on visual field observations and lists the common

name. In some cases, the botanical name will be used where there is no common alternative. On in-depth surveys the botanical name only may be used

Height: Height is estimated to the nearest metre. On computerised surveys this may be 3

within a range of heights. When measured height is required, a clinometer is used

to measure to the nearest metre

Diameter: Trunk diameter measured at 1.5 metres from ground level and recorded in

millimetres. In some surveys this is indicated as a range

Measurement of canopy from the trunk to the nearest metre in four directions, Spread:

North, South, East, and West in metres

Lower crown Clearance:

Height in metres of crown clearance above adjacent ground level

Either an estimate (or statement if accurately known) of the age of the tree, 7 Age:

classified as:

Υ = Young tree, established tree usually up to one third of expected ultimate height &

spread

MΑ = middle aged, usually between one third and two thirds of ultimate height &

= Mature, more or less at full height but still increasing in girth & spread М

OM = Over mature, grown to full size and becoming senescent,

= Veteran tree, individuals surviving beyond the typical age range for the species

**Physiological** 

Good = Healthy tree with good vitality, Condition:

Fair = Moderate health and vitality normal or slightly less for species and age

Poor = Poor shape or form - signs of decline in crown, may have structural

weakness.

Dead = dead or dying tree

Structural Good = No visible structural defects

Condition: Fair = Only minor structural defects

Poor = Defects which may need to be rectified or regularly monitored Remove = Severe defects which may result in immanent failure or collapse

10 Management General comments on the condition of the tree or group and any action required.

Recommendations: potential for wildlife habitats

11 Estimated Safe Useful Life Expectancy (SULE): in some cases the age ranges are modified

Remaining Short: 0 - 10 years Medium: 10-20 Years Intermediate: 20-40 Contribution: Long: 40 + years

12 Tree Quality: Assessment of tree quality see following cascade chart for details

13 Priority: A - Works to achieve an acceptable level of safety or required to facilitate

the development

B - Works to achieve higher levels of arboricultural management.

C - To improve the aesthetic appearance.

14 Ultimate Size: Based on site specific features and the individual specimen in its surroundings.

Measured to nearest metre (m)

**Root Protection** 

Area:

The distance at which the protective barrier should be erected measured in a radii

from the centre of the trunk in metres.

16 Pruning: Pruning shall be defined as the removal of living or dead parts of a plant by the

Contractor. Such parts may be soft growth, twigs, branches, limbs or sections of the

tree trunk. The cut material may vary from small to large in size.



17 Crown Cleaning:

Cleaning out is defined as the removal of dead, dying or diseased branchwood, broken branches or stubs left from previous tree surgery operations (see also 16 Deadwooding) together with all unwanted objects, which may include ivy (if specified) and/or other climbing plants, nails, redundant cable bracing, rope swings, tree houses and windblown rubbish from the tree, and any such debris from any cavities within the tree.

18 Deadwood Removal: Dead-wooding shall be defined as the removal of all dead and dying branches and limbs from the tree.

19 Crown Lifting:

Crown lifting shall be defined as the removal of all soft growth and branches or parts thereof which are below or which extend below the height specified in the tender documents. It is recognised that the resultant canopy base might not be one single level but might be stepped to allow for different clearances, for example where a tree overhangs both the footway and the road where different height clearances are required.

20 Crown Reduction:

Crown reduction shall be defined as the reduction of the complete outline dimension of the canopy, from the tips of limbs and branches to the main trunk, by pruning growth to an acceptable branch, twig or but to leave a flowing silhouette.

# Appendix 2(11) Cascade Chart For Assessing Tree Quality

Category and definition	Criteria – Subcategories				
Trees to be considered for retention	1. Mainly arboricultural values	2. Mainly landscape values	3. Mainly cultural values, including conservation	on plan	
Category High = A  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 of formal or semiformal 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)	Green	
Category Moderate = B  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	Blue	
Category Low = C  Trees of low quality with an estimated	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 benefits	Yellow	
remaining life expectancy of at least 10 years; or young trees with a stem diameter below 150mm	NOTE 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				
Category = U Trees unsuitable for retention	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 U category trees (i.e. where, for whatever reason, the loss of companion shelter cannot be mitigated by pruning)			Red	
Those of 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	<ul> <li>Trees that are dead or are showing signs of significant, immediate and irreversible overall decline</li> <li>Trees infected with pathogens of significance to the health and/or safety of other trees nearby (e.g. Dutch elm disease) or very low quality trees suppressing adjacent trees of better quality</li> </ul>				
Habitat reinstatement may be appropriate (e.g. U category trees used as a bat roost- installation of bat box in nearby tree)					

## Appendix 2(111)

Guidelines for the Planning, installation and Maintenance of utility services in proximity to trees-Based on information from National Joint Utilities Group (NJUG)

Ideally all services should be placed outside of the trees root protection area, but in some situations this is not feasible due to the confines of the site. If services must be laid within the root protection area acceptable techniques are detailed below in order of preference.

- Trenchless- by use of thrust boring or similar techniques. The pit excavations for starting and receiving the machinery should be located outside of the root protection area.
   To avoid root damage, the mole should run at a depth of at least 600mm.
   Use of external lubricants on the mole other than water (e.g. oil or bentonite) should be avoided.
- **Broken trench** by using hand dug trench sections together with trenchless techniques. It should be limited to practical access and installation around or below the roots. The trench must be dug by hand (see following comments re continuous trenching) and only be long enough to allow access for linking to the next section. The open sections should be kept as short as possible.
- Continuous trench- the trench is excavated by hand and retains as many roots as possible. The surface layer is removed carefully and hand digging of the trench takes place. No roots over 2.5cm diameter or clumps of smaller roots (including fibrous) should be severed. The bark surrounding the roots must be maintained. Cutting of roots over 2.5cm diameter should not be attempted without the advice of a qualified Arboriculturalist.

  If roots have to be cut, a sharp tool (defined as spade, narrow spade, fork, breaker bar, secateurs, handsaw, post hole shoveller, hand trowel) should be used.

### Backfilling

Reinstatement of street works must comply with the code of practice New Roads and Streetworks Act 1991 (Specification for the reinstatement of openings in highways), but where tree roots are involved backfilling should be carefully carried out to avoid direct damage to retained roots and excessive compaction of the soil around them.

The backfill should incorporate an inert granular material mixed with top soil or sharp sand (not builders sand) around the retained roots. This will allow a measure of compaction for resurfacing whilst creating an aerated zone around the roots.

Roots and in particular fine roots, are vulnerable to desiccation on exposure to air. The roots are at greatest risk when there are rapid fluctuations in the air temperature around them (especially winter diurnal temperatures). It is vitally important that the roots are covered with sacking whilst the trench is open. The sacking should be removed once the trench is backfilled.

## Planning of services

When laying new or replacement services it is wise to plan ahead to prevent future direct damage to the services from root growth by placing the services within a duct.

If roots have grown into a drain or duct and proliferated to cause a blockage, removal of the root mass will only have a temporary affect and the root will regrow. The fault is in the pipe or duct, not the tree roots and the only answer is to repair or replace the damaged area. Particular problems occur with old salt glazed pipes where clay has been used to seal the joints and has subsequently dried out leaving a gap for the roots to infiltrate.

A popular myth has arisen that tree roots are attracted to water or nutrients within piped systems, this is not so. Roots are adventitious and grow in all directions proliferating in areas where moisture or nutrients are present. They tend to grow near to the pipe to make use of the condensation or moisture build up on the outside of the pipe but will enter the pipe through any crack or damaged joint. They are not capable of breaking into sound pipes.



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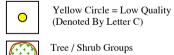
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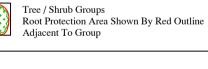
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Blue Circle = Moderate Quality (Denoted By Letter B)







Arboricultural Impact Assessment

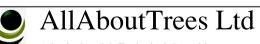
Existing Trees Shown On Existing Layout

Wyndham Place,

Egremont

For

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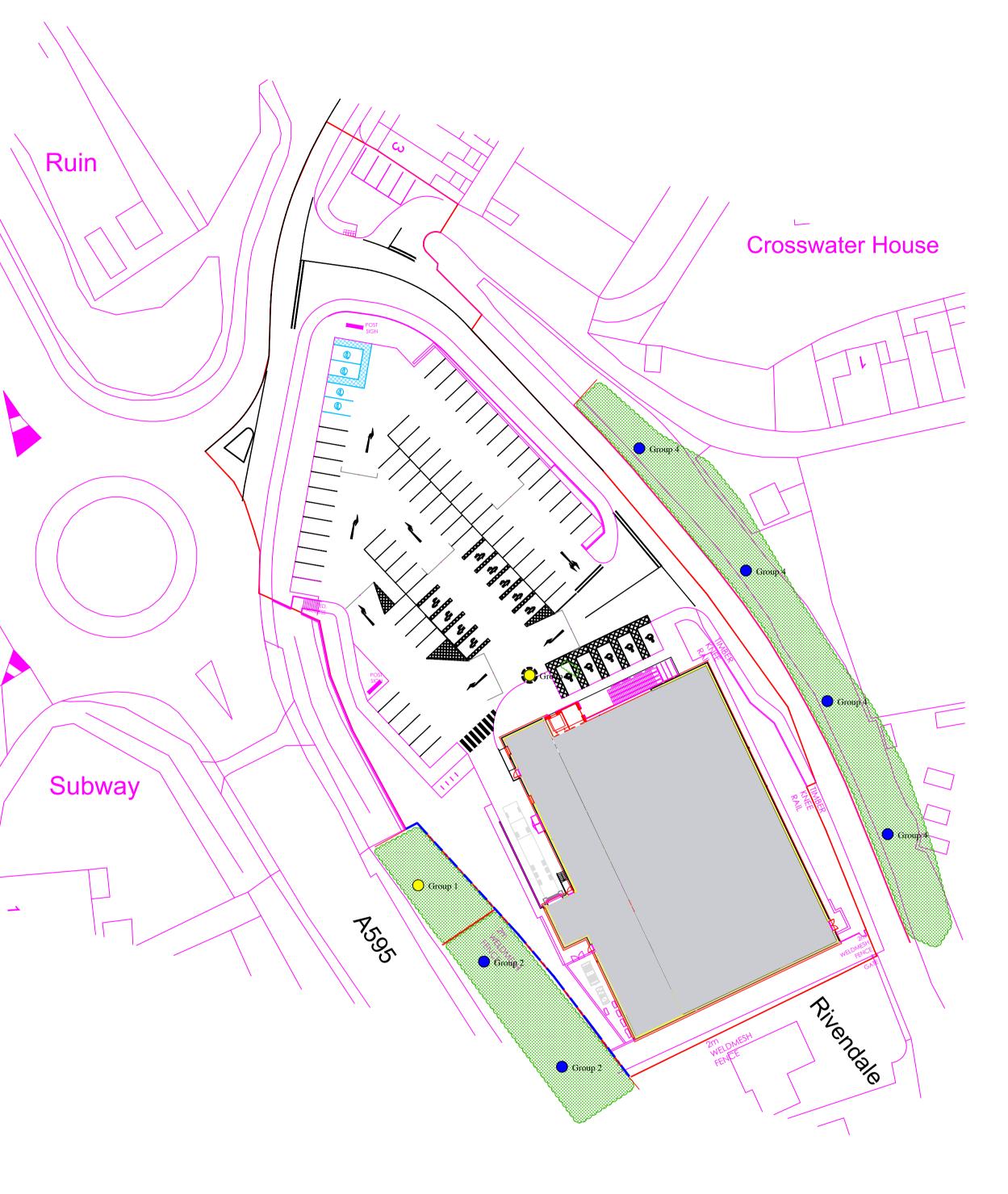
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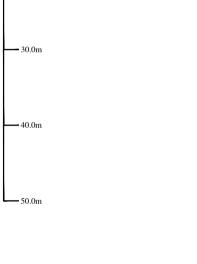
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-Ecological Consultants

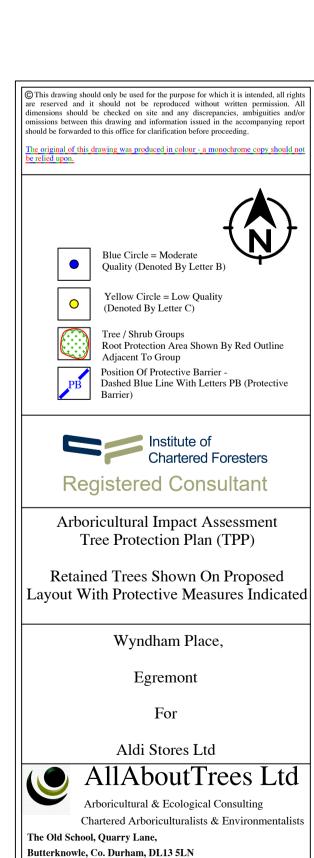
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