Gladman Developments

North Road, Glossop

Arboricultural Assessment

November 2013

FPCR Environment and Design Ltd
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-	Draft	NJG / 26.11.12	NJG / 06.12.12
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1.0 INTRODUCTION

1.1 This report has been prepared by FPCR Environment and Design Limited on behalf of Gladman Developments to present the findings of an arboricultural assessment and survey of trees located at North Road, Glossop (hereafter referred to as the site). The survey boundary is shown in Figure 1 and the survey was carried out on 9th November 2012.

1.2 The tree survey and assessment of existing trees has been carried out in accordance with British Standard 5837:2012 *'Trees in Relation to Design, Demolition and Construction - Recommendations'* (hereafter referred to as BS5837). The guidelines give recommendations on the relationship between trees and design, demolition and construction processes to achieve a harmonious and sustainable relationship between trees and structures.

1.3 The purpose of the report is to present the results of an assessment of the existing trees' arboricultural value, based on their current condition and quality in accordance with the recommendations, to accompany a planning application. The tree survey has therefore focused on any trees present within or bordering the site that may potentially be affected by the future proposals or will pose a constraint to any proposed development.

1.4 The site comprised of three field parcels and was bounded to the south by housing and to the west by North Road. Situated on the northern boundary was an area of dense trees, mainly English oak *Quercus robur*, which surrounded a fishing pond. The tree stock assessed was nearly all restricted to the boundaries of the site and fields. The site was positioned on a hillside and as such was exposed to the prevailing winds. The tree stock reflected the exposed nature of the site.

1.5 It is understood that there is a Tree Preservation Order, namely Derbyshire County Council Tree Preservation Order No.61, which applies to a number of trees present within the assessment and therefore statutory constraints apply to the development in respect of trees. The Local Planning Authority for the site is High Peak Borough Council.

1.6 The report comprises the following:

- Chapter 1 provides an introduction to the assessment work, its purpose and background details.
- Chapter 2 briefly describes the methodology by which the tree survey and assessment has been undertaken.
- Chapter 3 presents a summary of the results of a tree survey.
- Chapter 4 evaluates the findings of the survey and assessment in respect of the development proposals in the form of an Arboricultural Impact Assessment and also provides principle recommendations for mitigation planting, specific tree protection measures including pruning.
- Chapter 5 presents an indication of the tree protection measures to be required from a general viewpoint such as typical fencing requirements.
- Chapter 6 provides a conclusion to the findings of the assessment.

1.7 It must be understood should any specific tree protection be required, this would need to be separately considered where needs arise prior to the commencement of construction activity following approval. This would be in the form of an arboricultural method statement produced in accordance with guidance in BS5837 and is beyond the scope of this arboricultural assessment.

2.0 METHODOLOGY

2.1 The survey of trees has been carried out in accordance with the criteria set out in Chapter 4 of BS5837. The survey has been undertaken by a suitably qualified and experienced arboriculturist and recorded information relating to all those trees within the site and those adjacent to the site which may be of influence to any proposals. Trees were assessed for their arboricultural quality and benefits within the context of proposed development in a transparent, understandable and systematic way.

2.2 Trees have been assessed as groups or woodlands where it has been determined appropriate. The term group has been applied where trees form cohesive arboricultural features either aerodynamically, visually or culturally including biodiversity or habitat potential for example parkland or wood pasture. An assessment of individual trees within the groups or woodlands has been made where there has been a clear need to differentiate between them for example. in order to highlight significant variation between attributes including physiological or structural condition or where a potential conflict may arise.

2.3 Trees have been divided into one of four categories based on Table 1 of BS5837, *'Cascade chart for tree quality assessment'*. For a tree to qualify under any given category it should fall within the scope of that category's definition (see below). Category U trees are those which would be lost in the short term for reasons connected with their physiology or structural condition. They are, for this reason not considered in the planning process on arboricultural grounds. Categories A, B & C are applied to trees that should be material considerations in the development process. Each category also having one of three further sub-categories (i, ii, iii) which are intended to reflect arboricultural, landscape and cultural or conservation values accordingly.

2.4 **Category (U) – (Dark Red):** Trees which are unsuitable for retention and are 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 within this category are:

- Trees that have a serious irremediable structural defect such that their early loss is expected due to collapse and includes trees that will become unviable after removal of other category U trees.
- Trees that are dead or are showing signs of significant, immediate or irreversible overall decline.
- Trees that are infected with pathogens of significance to the health and or/safety of other trees nearby trees or are very low quality trees suppressing adjacent trees of better quality.
- Certain category U trees can have existing or potential conservation value which may make it desirable to preserve.

2.5 **Category (A) – (Light Green):** Trees that are considered for retention and are of high quality with an estimated remaining life expectancy of at least 40 years with potential to make a lasting contribution. Such trees may comprise:

- Sub category (i) trees that are particularly good examples of their species, especially if rare or unusual, or are essential components of groups such as formal or semi-formal arboricultural features for example the dominant and/or principal trees within an avenue.
- Sub category (ii) trees, groups or woodlands of particular visual importance as arboricultural and / or landscape features.
- Sub category (iii) trees, groups or woodlands of significant conservation, historical, commemorative or other value for example veteran or wood pasture.

2.6 **Category (B) – (Blue):** Trees that are considered for retention and are of moderate quality with an estimated remaining life expectancy of at least 20 years with potential to make a significant contribution. Such trees may comprise:

- Sub category (i) trees that might be included in category A but are downgraded because of impaired condition for example the presence of significant though remediable defects, including unsympathetic past management and storm damage.
- Sub category (ii) 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.
- Sub category (iii) trees with material conservation or other cultural value.

2.7 **Category (C) – (Grey):** Trees that are considered for retention and are of low quality with an estimated remaining life expectancy of at least 10 years or young trees with a stem diameter below 150mm. Such trees may comprise:

- Sub category (i) unremarkable trees of very limited merit or such impaired condition that they do not qualify in higher categories.
- Sub category (ii) trees present in groups or woodlands, but without this conferring on them significantly greater collective landscape value or trees offering low or only temporary / transient screening benefits.
- Sub category (iii) trees with no material conservation or other cultural value.

Tree Schedule

2.8 Appendix A presents details of the individual trees and groups including heights, diameters at breast height, crown spread (given as a radial measurement from the stem), age class, comments as to the overall condition at the time of inspection, BS5837 category of quality and suitability for retention and the root protection area.

2.9 General observations particularly of structural and physiological condition for example the presence of any decay and physical defect and preliminary management recommendations have also been recorded where appropriate.

Conditions of Tree Survey

2.10 The survey was completed from ground level only and from within the boundary of the site. Aerial inspection of trees was not undertaken at this stage. Investigations as to the internal condition of a tree have also not been undertaken being beyond the scope of this assessment. Evaluation of tree condition given within this assessment applies to the date of survey and cannot be assumed to remain unchanged. It may be necessary to review these within 12 months, in accordance with sound arboricultural practice.

Site Plans

2.11 The individual positions of trees and groups have been shown on the Tree Survey Plan, Figure 2 (Drawing no. 5376-A-02). The positions of trees are based on a topographical / land survey, as far as possible, supplied by the client. The crown spread, root protection area and shade pattern (where appropriate) are indicated on this plan.

2.12 As part of the Arboricultural Impact Assessment a Draft Tree Retention and Removals Plan (drawing no. 5376-A-03A) has been prepared this shows those trees for retention and for removal to facilitate the proposed site layout.

Tree Constraints and Indicative Root Protection Area (RPA)

2.13 Below ground constraints to future development are represented by the area surrounding the tree that contains sufficient rooting volume for the specimen to have the best chance of survival in the long term this is known as the root protection area (RPA). The RPA has been calculated in accordance with section 4.6 of BS5837 and requires suitable protection in order for the tree to be incorporated into any future scheme. Where applicable the shape of the RPA has been altered to take into account the presence of surrounding obstacles which may have restricted root growth.

2.14 Where groups of trees have been assessed, the RPA has been shown based on the maximum sized tree in any one group and so may exceed the RPA required for some of the individual specimens within the group.

3.0 RESULTS

3.1 A total of sixteen individual trees and eleven groups of trees were surveyed as part of the arboricultural assessment. Refer to Figure 2 – Tree Survey Plan and Appendix A – Tree Schedule for full details of the trees included in the assessment. The analysis page within Appendix A also provides a summary to identify the overall quality maturity of the tree cover. The table below summarises the trees in each category. Several of the trees have been discussed in more detail owing to their physical condition or arboricultural significance.

Results Summary

3.2 The site was exposed being positioned on a south facing hillside resulting in noticeably small and squat tree forms being present across the site. The surveyed tree cover was mainly located on the site's southern and northern boundaries. The limited tree cover within the site comprised mainly of holly and hawthorn hedgerow groups.

Table 1: Summary of trees by Category

	Individual Trees	Total	Groups of Trees	Total
Category U - Unsuitable	T13, T14	2		0
Category A (High Quality / Value)	T8, T9, T10	3	TG5, TG6	2
Category B (Moderate Quality / Value	T4, T12	2	TG2, TG8, TG10	3
Category C (Low Quality / Value)	T1, T2, T3, T5, T6, T7, T11, T15, T16	9	TG1, TG3, TG4, TG7, TG9, TG11	6

3.3 Three category A specimens, all English Oak, were positioned either on the site's boundary or just offsite. These trees included T8, T9 and T10 and TG5 were considered to be of high arboricultural quality due to their age and good condition. Within the context of their surroundings these trees were large and significant specimens.

Photograph 1: TG5, oak group around pond



Photograph 2: T8 and T9 on northern boundary



3.4 Three tree groups were present on the southern boundary of the site, namely TG2, TG8 and TG10, which were considered category B. All three groups were situated offsite but have been included within the assessment as their rooting area will extend within the site and their crowns will cast shade within the site.

3.5 An unusual feature within the site were three groups or outgrown boundaries which comprised mainly of holly *Ilex aquifolium*, the three groups being TG3, TG4 and TG7. The groups were considered category C due to their diminutive size and limited arboricultural value.

3.6 Only two specimens were considered category U within the assessment. The first of these being T13, a beech *Fagus sylvatica* which displayed signs of extensive crown dieback and decay at the base of the main stem. The second being T14, a sycamore *Acer pseudoplatanus* which was mostly dead. Both trees were considered to have a very limited life expectancy.

4.0 ARBORICULTURAL IMPACT ASSESSMENT

4.1 The following paragraphs presents a summary of the tree survey and offers discussion of particular trees and groups recorded in the context of any proposed development in the form of an Arboricultural Impact Assessment in accordance with section 5.4 of BS5837. Any final tree retentions will need to be reconciled with the advice contained within this report. An overlay of the above layout has been incorporated in the Tree Retention Plan (Figure 3) to assist in identifying potential conflicts with the existing trees.

4.2 The AIA has been based upon the Development Framework Plan and seeks to outline the potential impact that the proposals would have on the existing trees. The above drawing outlines the proposals for a moderate residential development with access from North Road. To facilitate the proposals a small section of TG1 and TG3 will need to be removed. Both of these groups were considered category C and the mitigation planting will more than adequately replace the loss.

4.3 The eastern portion of the site is to be improved and an area of public open space created. This area will receive most replacement tree planting within the scheme and should be of benefit to the local area.

Mitigation for Tree Losses

4.4 New tree planting should form an integral part of any new development and be considered at the design stages of the detailed layout. Proposals for new tree planting should be appropriate for the future use of the site and not only improve and enhance the existing tree population, but to be complementary to the local landscape character and being suited to the sites surroundings.

4.5 Future landscaping schemes should consider the use of both native tree species (for their low maintenance requirements and nature conservation value) and ornamental species (for their contribution to urban design and amenity value). Species choices should be selected on the basis of their suitability for the final site use. Careful consideration would need to be given to the following: ultimate height and canopy spread, form, habit, density of crown, potential shading effect, colour and maintenance requirements in relation to both the built form of the new development and the retained landscape features. Species choices should therefore carefully be selected to be suitable to the new environment for example using small to medium sized species in restricted spaces and larger trees where space permits i.e. in areas of open space and areas of structural landscape buffer planting.

STATUTORY CONSTRAINTS

4.6 The following table details which trees are covered by the Derbyshire County Council Tree Preservation Order, No.61. The trees covered within the TPO are protected by law from felling or uprooting, pruning including 'topping/lopping' and willful damage or destruction. Were planning permission to be granted for development this would override the protection afforded by the tree preservation order to those trees required for removal to facilitate the proposals.

Table 2: Tree preservation order details

Tree No, taken from FPCR	TPO reference no.
T13	Area 7
T14	Area 7

4.7 It should be noted that both specimens were considered to be category U due to their poor physical condition and likelihood of imminent failure. Both T13 and T14 would fall into the dead, or dangerous exemption category and their removal could still be carried out without planning permission. For more information regarding conservation areas and tree preservation orders it is advised that contact is made with the local planning authority's arboricultural officer, or other such relevant person.

Tree Management

4.8 Once a layout for the development has been finalised and a review of the relationship between the layout with the retained trees has been undertaken, a qualified arboriculturalist should prepare a schedule of tree works listing all the trees requiring work (making use of reference numbers), accompanied by a plan showing the location of each tree.

4.9 All retained trees should be subjected to sound arboricultural management as recommended within section 8.8.3 of BS5837 *Post Development Management of Existing Trees,* where there is a potential for public access in order to satisfy the landowners' duty of care. Additionally inspections annually and following major storms should be carried out by an experienced arboriculturist or arborist to identify any potential public health and safety risks and to agree remedial works as required.

4.10 All tree works undertaken should comply with British Standard 3998:2010 and should therefore be carried out by skilled tree surgeons. It would be recommended that quotations for such work be obtained from Arboricultural Association Approved Contractors as this is the recognised authority for certification of tree work contractors.

4.11 All vegetation and, particularly, woody vegetation proposed for clearance should be removed outside of the bird-breeding season (March - September inclusive) as all birds are protected under the Wildlife and Countryside Act, 1981 (as amended) whilst on the nest. Where this is not possible, vegetation should be checked for the presence of nesting birds prior to removal by an experienced ecologist.

General Design Principles in Relation to Retained Trees

4.12 At the detailed design stages closer assessment of the distance of proposed development in relation to the calculated root protection area of retained trees should be made and modifications to the layout made where necessary. Should there be areas where it is not possible to modify the layout the use of no-dig construction methods will need to be considered prior to decisions being made as to the removal of each tree concerned. Such construction methods ban is used particularly in the case of footways, driveways and other light use access roads.

4.13 When considering layouts an important element of detailed design is the consideration of the eventual positioning of any utility services. As recommended by the guidance given in section 7.7 of BS5837 services, where possible, should not encroach within the root protection areas of retained trees. If below-ground services are proposed within a root protection area modifications to the alignment of the service route may need to be made in order to minimise adverse effects on root stability and overall tree-health.

4.14 Consideration may also need to be given to the potential for tree roots of newly planted trees and hedgerows to affect or compromise the future services. As far as feasible, it would be preferable that proposed services near both the existing and any new planting should be ducted for ease of access and maintenance and grouped together to minimise any future disturbance.

5.0 TREE PROTECTION MEASURES

5.1 Retained trees will be adequately protected during works ensuring that the calculated RPA for all retained trees can be appropriately protected through the erection of the requisite tree protection barriers. Measures to protect trees should follow the guidance in BS5837 and should be applied where necessary for the purpose of protecting trees within the site whilst allowing sufficient access for the implementation of the proposed layout. These have been broadly summarised below.

General Information and Recommendations

5.2 All trees retained on site will be protected by barriers or ground protection around the calculated RPA or other defined constraints of this assessment as detailed by section 6 and 7 of BS5837.

5.3 Barriers will be erected prior to commencement of any construction work and before demolition including erection of any temporary structures. Once installed, the area protected by fencing or other barriers should be regarded as a construction exclusion zone. Fencing and barriers should not be removed or altered without prior consultation with the project arboriculturalist.

5.4 Any trees that are not to be retained as part of the proposals should be felled prior to the erection of protective barriers. Particular attention needs to be given by site contractors to minimise damage or disturbance to retained specimens.

5.5 Where it has been agreed, construction access may take place within the RPA if suitable ground protection measures are in place. This may comprise single scaffold boards over a compressible

layer laid onto geo-textile materials for pedestrian movements. Vehicular movements over the RPA will require the calculation of expected loading and the use of proprietary protection systems.

5.6 Confirmation that tree protective fencing or other barriers have been set out correctly should be gained prior to the commencement of site activity.

Tree Protection Barriers

5.7 Tree protection fencing should be fit for the purpose of excluding any type of construction activity and suitable for the degree and proximity of works to retained trees. Barriers must be maintained to ensure that they remain rigid and complete for the duration of construction activities on site.

5.8 In most situations fencing should comprise a scaffold framework comprising a vertical and horizontal framework, well braced to resist impacts. For particular areas where construction activity is anticipated to be of a more intense nature higher fencing may be necessary. Where site circumstances and the risk to retained trees do not necessitate the default level of protection an alternative will be specified. The standard fencing specification as recommended in BS5837 has been illustrated in Appendix B.

5.9 It may be appropriate on some sites to use temporary site offices as components of the protection barriers.

Protection outside the exclusion zone

5.10 Once the areas around trees have been protected by the barriers, any works on the remaining site area may be commenced providing activities do not impinge on protected areas.

5.11 All weather notices should be attached to the protective fencing to indicate that construction activities are not permitted within the fenced area the area within to be a construction exclusion zone.

5.12 Wide or tall loads etc should not come into contact with retained trees. Banksman should supervise transit of vehicles where they are in close proximity to retained trees.

5.13 Oil, bitumen, cement or other material that is potentially injurious to trees should not be stacked or discharged within 10m of a tree bole. No concrete mixing should be done within 10m of a tree. Allowance should be made for the slope of ground to prevent materials running towards the tree.

5.14 No fires will be lit where flames are anticipated to extend to within 5m of tree foliage, branches or trunk, taking into consideration wind direction and size of fire.

5.15 Notice boards, telephone cables or other services should not be attached to any part of a retained tree.

5.16 Any trees which need to be felled adjacent to or are present within a continuous canopy of retained trees must be removed with due care (it may be necessary to remove such trees in sections).

Protection of Trees Close to the Site

5.17 There were a number of trees located on the boundaries of the site. The root protection area of these trees will need to be protected in the same way as all the retained trees within the site. All

trees located outside the boundaries of the assessment site yet within close proximity to works should be adequately protected during the course of the development by barriers or ground protection around the calculated RPA.

5.18 Any trees which are to be retained and whose RPAs may be affected by the development should be monitored to identify any alterations in quality with time and to assess and undertake any remedial works required as a result.

5.19 In the event of having caused any branch or limb damage to retained trees it is strongly recommended that suitable tree surgery be carried out, in accordance with British Standard 3998:2010 to correct the damage, upon completion of development.

6.0 CONCLUSION

6.1 The site was positioned on a hillside and as such was exposed to the prevailing winds in the area. The tree stock reflected the exposed nature of the site and was on the whole restricted to the boundaries of the site. A section of the site was covered by a 1947 Area TPO. Two trees covered within the tree preservation order were considered category U and would therefore fall under the dead and dangerous exemption within the legislation.

6.2 The proposed development is for residential housing to be built on the majority of the site. To facilitate the proposals a small section of TG1 and TG3 will need to be removed. Both of these groups were considered category C and the mitigation planting will more than adequately replace the loss.

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Assessment Boundary

Gladman Ltd

Land off North Road
Glossop

SITE LOCATION PLAN

1:25000 @ A4 HR 13.11.2012

Figure 1

5376-A-01

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J:\5300\5376\Arboriculture\Site Location Plan-Figure 1.cdr

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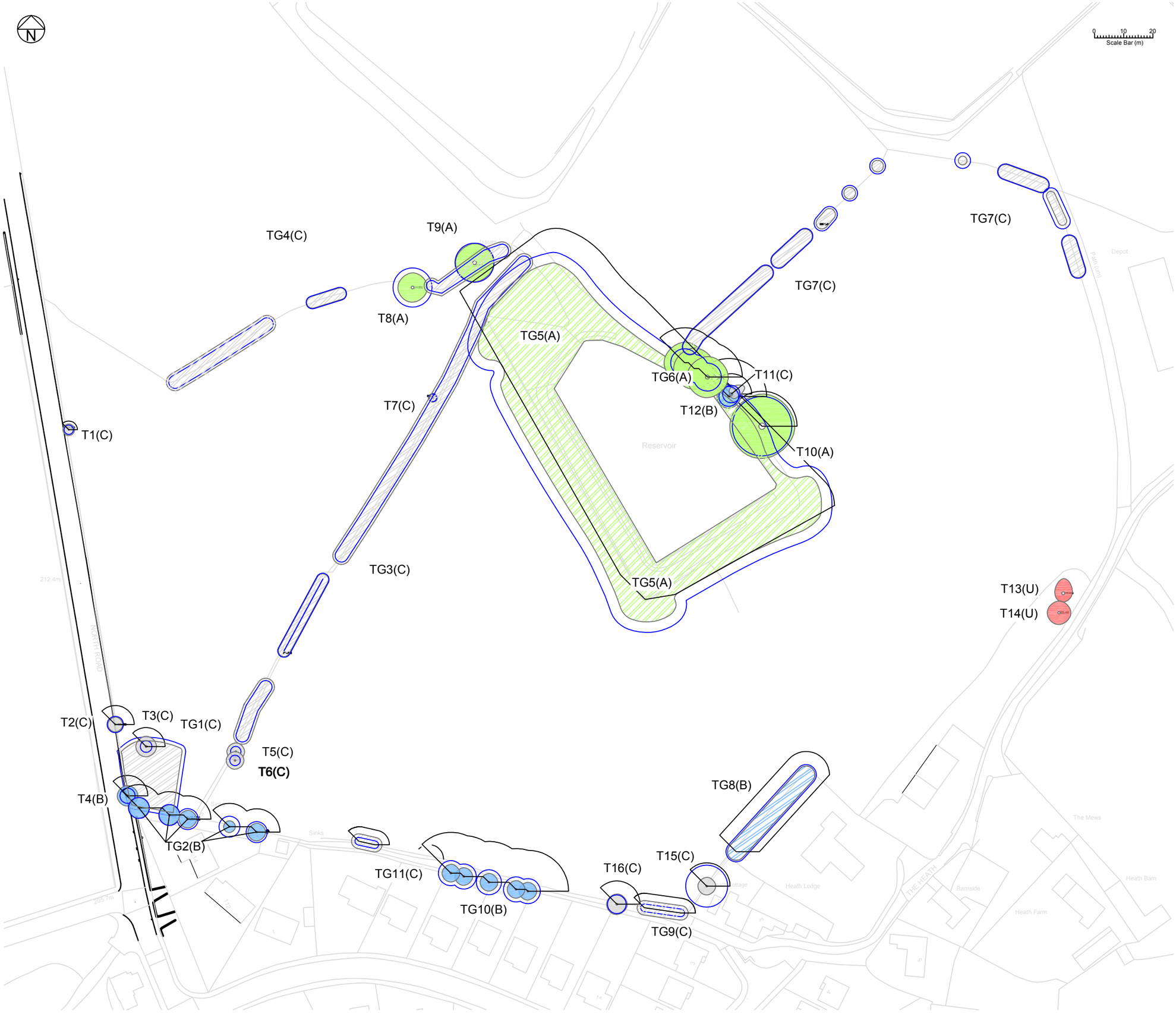

KEY

- Category U - Unsuitable for Retention (BS 5837:2012)
- Category A - Trees of High Quality (BS 5837:2012)
- Category B - Trees of Moderate Quality (BS 5837:2012)
- Category C - Trees of Low Quality (BS 5837:2012)
- Group hatching (Colour indicates BS Category)
- Root Protection Area (the RPA circle has been altered where appropriate to reflect underground constraints)
- T1 (A) TG1 (A) — Individual / Group Number and BS Category

NOTES

All dimensions to be verified on site. Do not scale this drawing. All discrepancies to be clarified with project Arboriculturalist. Drawing to be read in conjunction with Arboricultural Assessment and Appendix A - Tree Schedule .

Drawing produced in colour, a monochrome copy should not be relied upon, and is based on digital information supplied by the client in dwg format. The exact position of trees are to be checked and verified on site prior to construction.

Trees are living organisms that change over time, the condition of all trees illustrated herein, are to be checked by a qualified arboriculturalist or tree surgeon should works commence 12 months after the time of this survey. Please note that no works should be undertaken to any trees illustrated herein without first obtaining the proper authorisation to do so.

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project
Land Off North Road
Glossop

drawing title
TREE SURVEY PLAN
FIGURE 2

scale	drawn	date
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drawing number
5376-A-02

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KEY

- Tree or Group to be Retained
- Tree or Group to be removed to facilitate the proposals
- Category U - Recommended for removal on arboricultural grounds
- Root Protection Area (Shown for retained trees only)
- T1 (A) TG1 (A) — Individual / Group Number and BS Category

N

NOTES

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-	26.11.12	First Issue	NJG
A	25.01.13	Amend to latest layout	NJG
B	23.05.13	Amended to latest Development Framework Plan	NJG
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master planning
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project
North Road
Glossop

drawing title
TREE RETENTION PLAN
FIGURE 3

scale	drawn	date
1:1250 @ A3	NJG	May 2013

drawing number
5376-A-03

rev
C

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Appendix A - Tree Schedule

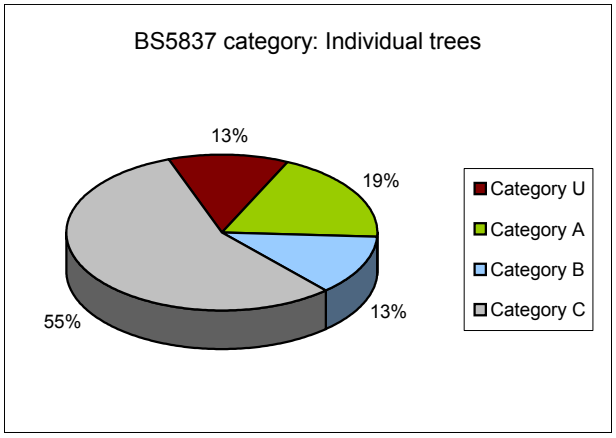
<table>
<tr><th>Measurements</th><th>Age Class</th><th>Overall Condition</th><th>Root Protection Area (RPA)</th></tr>
<tr><td>Height - estimated from ground level (m).</td><td>YNG: Young trees up to ten years of age.</td><td>G - Good: Trees with only a few minor defects and in good overall health needing little, if any attention.</td><td rowspan="4">• The RPA column gives the required area (m²).
• The RPA Radius column gives the radius (m) of an equivalent circle.
• The RPA is calculated using the formulae described in paragraph 4.6.1 of British Standard 5837: 2012 and is indicative of the required rooting area in order for a tree to be retained.</td></tr>
<tr><td>Stem Dia. - Diameter measured (mm) in accordance with Annex C of the BS5837.</td><td>SM: Semi-mature, trees less than 1/3 life expectancy.</td><td>F - Fair: Trees with minor, but rectifiable, defects or in the early stages of stress from which it may recover.</td></tr>
<tr><td>Crown - crown spread estimated radially from the main stem (m).</td><td>EM: Early mature, trees 1/3 – 2/3 life expectancy.</td><td>P - Poor: Trees with major structural and/or physiological defects such that it is unlikely the tree will recover in the long term.</td></tr>
<tr><td rowspan="2">Abbreviations
Est - Estimated stem diameter
Avg - Average stem diameter
Max - Maximum stem diameter</td><td>M: Mature trees, over 2/3 life expectancy.</td><td>D - Dead: Trees no longer alive. This could also apply to trees that are dying and unlikely to recover.</td></tr>
<tr><td>OM: Over mature, declining or moribund trees of low vigour.</td><td colspan="2" rowspan="2">In the assessment, of the BS category, particular consideration has been given to the following
• The health, vigour and condition of each tree
• The presence of any structural defects in each tree and its future life expectancy
• The size and form of each tree and its suitability within the context of a proposed development
• The location of each tree relative to existing site features e.g. its screening value or landscape features
• Age class
• Life expectancy</td></tr>
<tr><td></td><td>V: Veteran, tree possessing certain attributes relating to veteran trees.</td></tr>
</table>

Structural Condition
The following has been considered when inspecting structural condition: • The presence of fungal fruiting bodies around the base of the tree or on the stem, as they could possibly indicate the presence of possible internal decay. • Soil cracks and any heaving of the soil around the base. • Any abrupt bends in branches and limbs resulting from past pruning. • Tight or weak 'V' shaped forks and co-dominant stems. • Hazard beam formations and other such biomechanical related defects (as described by Claus Mattheck, Body Language of Trees HMSO Research for Amenity Trees No. 4 1994). • Cavities as a result of limb losses or past pruning. • Broken branches or storm damage. • Canker formations. • Loose or flaking bark. • Damage to roots. • Basal, stem or branch / limb cavities. • Crown die-back or abnormal foliage size and colour. • Any changes to the timing of normal leaf flush and leaf fall patterns.

Quality Assessment of Retention Category
Category U - Trees 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.
Category A - Trees of high quality with an estimated remaining life expectancy of at least 40 years.
Category B - Trees of moderate quality with an estimated remaining life expectancy of at least 20 years.
Category C - Trees of low quality with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150mm.
Sub-categories: (i) - Mainly arboricultural value (ii) - Mainly landscape value (iii) - Mainly cultural or conservation value

Appendix A - Summary

Trees/Groups in each Category	Individual Trees	Totals	Groups of Trees	Totals
Category U	T13, T14	2		0
Category A	T8, T9, T10	3	TG5, TG6	2
Category B	T4, T12	2	TG2, TG8, TG10	3
Category C	T1, T2, T3, T5, T6, T7, T11, T15, T16	9	TG1, TG3, TG4, TG7, TG9, TG11	6
	Total	16	Total	11



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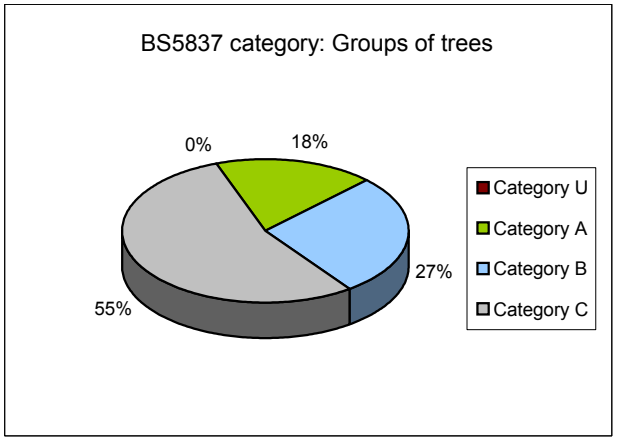

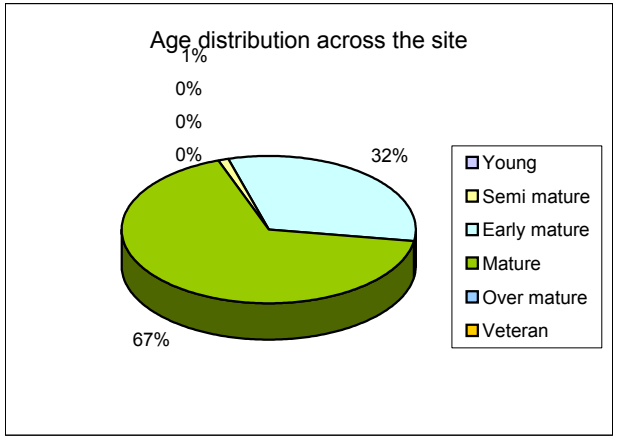

Tree No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
INDIVIDUAL TREES										
T1	English Oak Quercus robur	3	130	2	SM	G	No major defects	8	1.6	C (i)
T2	Sycamore Acer pseudoplatanus	6.5	180 150	2.5	EM	P	Set off site on the road side Pruning wounds to the west side Twin-stemmed at ground level with a tight bark union	25	2.8	C (i)
T3	Common Ash Fraxinus excelsior	6.5	170	3.5	EM	G	Single stemmed with a good species form No major defects	13	2.0	C (i)
T4	Common Ash Fraxinus excelsior	7	220	3.5	EM	G	Set on the road verge off the site Occasional pruning wounds on the road side No major defects	22	2.6	B (i)
T5	Common Ash Fraxinus excelsior	7	150	3	EM	G	No major defects	10	1.8	C (i)
T6	Common Ash Fraxinus excelsior	7	150	3	EM	G	No major defects	10	1.8	C (i)
T7	English Oak Quercus robur	4	110	1.5	SM	G	No major defects	5	1.3	C (i)
T8	English Oak Quercus robur	8	470 190 230	5	M	G	Multi-stemmed form at ground level A low and spreading crown formation Some minor deadwood within the crown No major defects	140	6.7	A (i)

Tree No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
T9	English Oak Quercus robur	10	480	6.5	M	G	Minor dead wood and occasional broken branches 1st branch t 3m A good species form No major defects	104	5.8	A (i)
T10	English Oak Quercus robur	12	Est 850	11	M	G	Set on the bank of a pond just off the site Occasional pruning wounds No major defects	327	10.2	A (i)
T11	English Oak Quercus robur	7	Est 250	N - 2 S - 2 E - 5 W - 0	EM	P	Set off site by 1m Bark stripped off the main stem from ground level to 2m on the east side, possibly by live stock Die back within the crown One sided crown growth	28	3.0	C (i)
T12	Silver Birch Betula pendula	13	Est 280	4	EM	F	Set off site by 2m Occasional pruning wounds No major defects	35	3.4	B (i)
T13	Beech Fagus sylvatica	12	630	N - 5 S - 3 E - 3 W - 3	M	P	Die back of the upper crown Broken branches and stubs throughout A woodpecker hole is visible on the north side at 3m Missing bark on the main stem with white rot present The main stem is leaning to the south	N/A	N/A	U
T14	Sycamore Acer pseudoplatanus	8	280	4	EM	D	Major dead wood All of the upper crown has died	N/A	N/A	U
T15	Common Walnut Juglans regia	8	Est 600	3	M	P	Previously 'topped' at 5m with pruning wounds throughout Set off site behind a boundary wall obscuring the base Damage to the main stem at 1.5m to the north side	163	7.2	C (i)
T16	English Oak Quercus robur	8	270	3.5	SM	P	Set off site in a public right of way Missing bark from ground level to 1m with exposed heart wood and decay, possibly browsing damage	33	3.2	C (i)

Tree No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
GROUPS OF TREES										
TG1	Salix specimen Common Ash Fraxinus excelsior Sycamore Acer pseudoplatanus	4.5	100	2 - 3	M	F	The willow has scrub like form with layered dense vegetative branches Occasional ash and sycamore saplings within the group	5	1.2	C (ii)
TG2	Common Ash Fraxinus excelsior Holly Ilex aquifolium Hawthorn Crataegus monogyna	Max 8	Max 300	2 - 3.5	SM / EM	F	Some specimens with multi-stemmed forms from ground level The coppice is set off site in the public right of way Browsing damage and the occasional broken branch within the crown	41	3.6	B (ii)
TG3	Holly Ilex aquifolium Hawthorn Crataegus monogyna	Max 6	100 150	2 - 3	EM / M	G	No major defects Set on the edge of a ditch in a broken line The holly are multi-stemmed at ground level Dense crowns	15	2.2	C (i)
TG4	Holly Ilex aquifolium Hawthorn Crataegus monogyna	Max 6	100 150	2 - 3	EM / M	G	No major defects Set on the edge of a ditch in a broken line The holly are multi-stemmed at ground level Dense crowns	15	2.2	C (i)
TG5	English Oak Quercus robur Sycamore Acer pseudoplatanus Holly Ilex aquifolium Silver Birch Betula pendula	Max 12	Ave 300	7	M	G	Group set off site around a fishing lake with a crown clearance of 1.5m Occasional dead specimen and dead limb hanging over the site	41	3.6	A (ii)
TG6	3 x English Oak Quercus robur	Max 12	400	7	M	G	Set off site by 1m with the crowns overhanging Occasional pruning wounds and dead branches No major defects	72	4.8	A (ii)

Tree No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
TG7	Common Ash Fraxinus excelsior Holly Ilex aquifolium Hawthorn Crataegus monogyna Elder Sambucus nigra	Max 5	100 200	1 - 2.5	EM	F / P	One section showing die back with no obvious cause A broken line of growth set on the boundary	23	2.7	C (ii)
TG8	Wild Cherry Prunus avium Silver Birch Betula pendula Aspen Populus tremula Lawson Cypress variety Chamaecyparis lawsoniana Deodar Cedar Cedrus deodara	Max 8	Ave 250	2 - 3	EM	F	Garden groups Set off site by 2m	28	3.0	B (ii)
TG9	Holly Ilex aquifolium Hawthorn Crataegus monogyna	Max 5	100 50	1 - 2.5	EM	F	Set off site in a public right of way	6	1.3	C (ii)
TG10	Downy Birch Betula pubescens Silver Birch Betula pendula	7 - 14	200 300	3	EM	G	Set off site in neighbouring gardens Overhanging the site by 1m No major defects	59	4.3	B (ii)
TG11	Holly Ilex aquifolium Hawthorn Crataegus monogyna	Max 5	100 50	1 - 2.5	EM	F	Set off site in a public right of way	6	1.3	C (ii)

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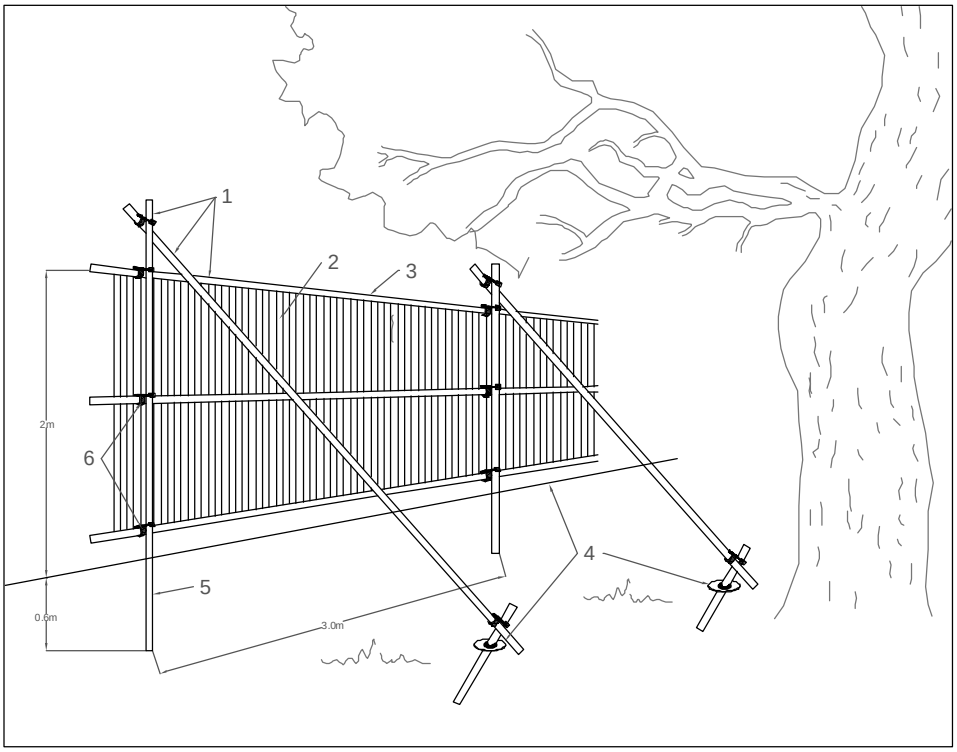
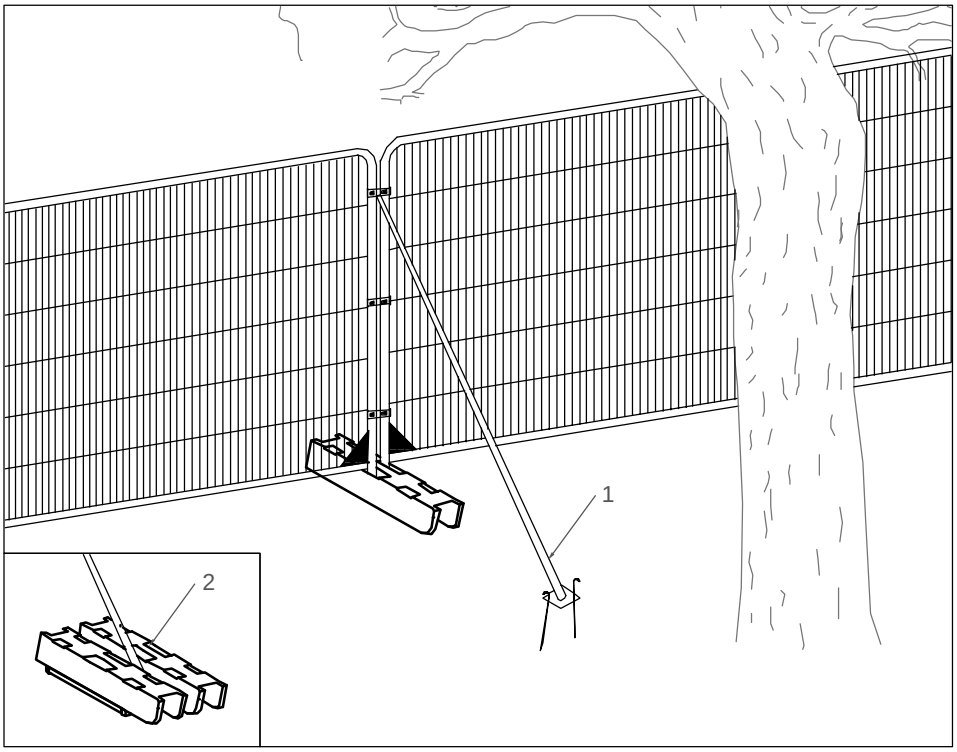


Default specification for protective barrier

1. Standard scaffold poles
2. Heavy gauge 2m tall galvanised tube and welded mesh panels
3. Panels secured to scaffold frame with wire ties
4. Ground level
5. Uprights driven into the ground until secure (min depth of 0.6m)
6. Standard scaffold clamps



Above ground stabilising systems

1. Stabiliser strut with base plate secured with ground pins
2. Stabiliser strut mounted on block tray

masterplanning
environmental assessment
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APPENDIX B
PROTECTIVE FENCING SPECIFICATIONS

CAD file: S:\Arb resources\Basic Templates\NEW ARB\Appendix B - Protective Fencing.dwg

NOTES

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