

**ERECTION OF SPORTS HALL FACILITY AND  
RE - ARRANGEMENT OF TENNIS COURTS AT  
CLITHEROE ROYAL GRAMMAR SCHOOL**

**320120277P**

**PLANNING, DESIGN AND ACCESS STATEMENT**

**on behalf of**

**Clitheroe Royal Grammar School**

**prepared by**

**CA PLANNING**

*chartered town planners + environmental consultants*

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**PRESTON**

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**March 2012**

**Ref. C/3330**

**1.0 INTRODUCTION**

- 1.1 This Planning, Design and Access Statement has been prepared on behalf of the Clitheroe Royal Grammar School, to accompany a planning application for the erection of a new sports hall and re-orientation of existing tennis courts.
- 1.2 With a few notable exceptions, planning applications submitted after 10 August 2006 are required to be accompanied by a design and access statement. There is no set format for the statement but this submission follows the general guidance for the preparation of such statements (CABE, March 2010).
- 1.3 This statement describes the site and its surroundings before setting out the planning policy context under which the application should be considered. The design proposals, solutions and planning merits are then examined. The conclusion is reached that the development conforms with planning policy and that there are no material considerations which indicate that planning permission should not be granted.

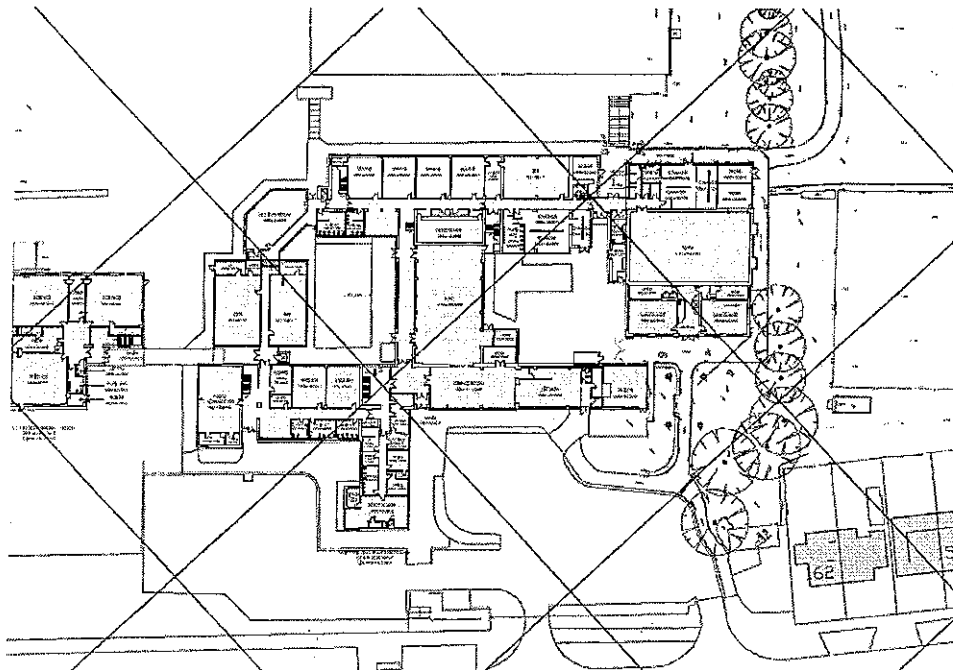
## 2.0 SITE CONTEXT

### 2.1 Site location

2.1.1 Clitheroe Royal Grammar School is located to the north of Clitheroe town centre to the east of Chatburn Road. It is situated within a predominantly residential area and is bounded to the east by the schools playing fields and an area of woodland.

2.1.2 The application site lies to the south of the existing school buildings, adjacent to a modern building which houses the schools languages department and existing gymnasium. The proposed development will be situated on an area of land which in part is currently taken up by the schools existing 4 no. concrete tennis courts.

2.1.3 Access to the school is via Chatburn Road leading to both turning, and car parking areas.



Existing Site Plan

## 2.2 Planning History

2.2.1 An internet based search has revealed the following planning history:

3/1992/0471

2.2.2 Planning permission was granted erection of a single storey flat roof classroom unit on 9<sup>th</sup> September 1992.

3/1994/0200

2.2.3 Planning permission was refused on 21<sup>st</sup> June 1994 for an additional driveway / entrance to serve existing hardstanding area to provide parking facilities for out of school activities.

3/1995/0012

2.2.4 Planning permission was granted on 27<sup>th</sup> April 1995 for an additional driveway / entrance to serve existing hardstanding area.

## 2.3 Background

2.3.1 This application demonstrates the schools on-going commitment to improving its facilities which has become more difficult since the scrapping of the Building schools for the Future (BSF) programme in July 2010.

2.3.2 However the school is now applying for Academy Capital Maintenance Funding (ACMF) in order to support its future works, in addition to other fundraising schemes. One potential funding source also being explored is the release of surplus school land for other purposes. The applicant is participating in on-going discussion with the Council regarding future options for some school land which may be sold to fund the Sports Hall, should other funding sources not provide sufficient revenue.

2.3.3 The above measures demonstrate both the schools commitment to improvement works and in securing the necessary capital for these works to be undertaken

### 3.0 PLANNING POLICY

#### 3.1 Planning Policy Context

3.1.1 The statutory development plan for the application site consists of 'saved' policies in the Ribble Valley Districtwide Local Plan (1998). Section 38[6] of the Planning and Compulsory Purchase Act 2004 requires that when determining planning applications, local planning authorities must determine the application in accordance with the development plan unless material considerations indicate otherwise.

#### 3.2 Designation

3.2.1 An extract from the Ribble Valley Districtwide Local Plan Proposals map is included below. The site lies within the development boundary of Clitheroe. However, there are no specific designations applicable to it. The schools open plays fields to the east are covered by Policy G6. However the application site does not intrude into this area.



Extract from Ribble Valley Local Plan Proposals Map (Application site marked in red)

### 3.3 National Planning Guidance

3.3.1 The Town and Country Planning (Development Management Procedure) (England) Order 2010 (DMPO) provides the following definition of a playing field in Paragraph (k) as:

- i) "playing field" means the whole of a site which encompasses at least one playing pitch;
- ii) "playing pitch" means a delineated area which, together with any run-off area, is of 0.2 hectares or more, and which is used for association football, American football, rugby, cricket, hockey, lacrosse, rounders, baseball, softball, Australian football, Gaelic football, shinty, hurling, polo or cycle polo.

3.3.2 As an existing tennis court, the site therefore does not constitute a playing field as defined in the DMPO.

3.3.3 PPG17 Planning for open space, sport and recreation (2002) sets out the Government's priorities for open spaces, sport and recreation. PPG17 states [para 20.] that:

*In identifying where to locate new areas of open space, sports and recreational facilities, local authorities should:*

- *Promote accessibility by walking, cycling and public transport, and ensure that facilities are accessible for people with disabilities;*
- *Locate more intensive recreational uses in sites where they can contribute to town centre vitality and viability;*
- *Avoid any significant loss of amenity to residents, neighbouring uses or biodiversity;*
- *Improve the quality of public realm through good design;*
- *Look to provide areas of open space in commercial and industrial areas;*
- *Add to and enhance the range and quality of existing facilities;*
- *Carefully consider security and personal safety, especially for children;*
- *Meet the regeneration needs of areas, using brownfield in preference to greenfield sites;*
- *Consider the scope for using any surplus land for open space, sport or recreational use, weighing this against alternative uses;*

- *Assess the impact of new facilities on social inclusion; and*
- *Consider the recreational needs of visitors and tourists.*

3.3.4 PPS1 Delivering Sustainable Development (2005) promotes high quality inclusive design in the layout of new developments and individual buildings in terms of function and impact, not just for the short term but over the lifetime of the development.

3.3.5 PPG13 Transport (2011) has the objective of delivering a safe, efficient and integrated transport system to support a strong and prosperous economy. A key planning objective is to ensure that jobs, shopping, leisure facilities and services are accessible by public transport, walking and cycling. It states that this is important for all, but especially for those who do not have regular use of a car, and to promote social inclusion.

### **3.4 Local Planning Policy**

3.4.1 The site lies within the development boundary of Clitheroe. However there are no site specific designations applicable to the site. The following 'saved' policies of the Ribble Valley Districtwide Local Plan (1998) are therefore relevant to the application:

#### Policy G1

3.4.2 Policy G1 requires all development proposals to provide a high standard of building design and landscape quality.

#### Policy G2

3.4.3 Within the plan area developments will be mainly directed towards land within the main settlement boundaries. These are defined on the proposals map. The following scale of development will be approved:

- Clitheroe – consolidation and expansion of development and rounding off development. In all cases this must be on sites wholly within the settlement boundary and must be appropriate to the town's size and form.

Policy G6: Essential Open Spaces

- 3.4.4 Development will not be permitted on land which is designated as essential open space on the Proposals Map unless it does not compromise the visual quality and value of general openness or the recreational value of the site or unless warranted by overriding material considerations in the public interest.

**3.5 Conclusion**

- 3.5.1 Planning Policy supports the sustainable use of previously developed land within existing urban areas. Proposals for outdoor and indoor sports facilities will be supported. Any such development should be compatible with surrounding land uses and be of an appropriate design.



#### 4.0 PLANNING MERITS

- 4.1 The starting point for the consideration of this application is the development plan and the policies contained there in. The application should be determined in accordance with the development plan unless material considerations indicate otherwise. In this case it is considered that there are no overwhelming material considerations that indicate that the application should be determined other than in accordance with the strict policies of the development plan.
- 4.2 The proposed development site is currently used (in part) as an all weather concrete tennis court. As such it is not classed as a playing field in the DMPO. Therefore this application does not seek to replace an existing playing field, but simply improve upon and re-organise the schools existing sports facilities.



**Aerial photograph of site**

- 4.3 The majority of the schools existing sports facilities are located to the rear of the school, and east of the school buildings. These consist of a number of outdoor grassed playing pitches, in addition to the 4 no. concrete tennis courts to the south, and a small indoor gymnasium behind the languages block.
- 4.4 For some time the school has lacked the type of quality indoor sports facilities expected by its pupils and parents. The proposed development is therefore urgently needed to support a wider range of sporting activities for existing and future pupils attending the school. Improved

facilities would enable the school to offer a more diverse range of sports and activities to all pupils throughout the year, particularly during the winter months; this would in turn increase sports participation rates and positively impact upon pupil's health and general wellbeing.

- 4.5 The proposals consists of the development of a high quality new sports hall and re-orientation of existing tennis courts. The sports hall will facilitate a wider range of indoor sporting activities including 5-a-side football, tennis, mini-tennis, badminton, netball and a basketball court or cricket practise nets.
- 4.6 In terms of policy guidance, the principle of development is supported at national level through PPG17. As discussed, tennis courts are not classified as 'playing field' land within the DMPO, therefore building upon these is acceptable. In any case the tennis courts will be retained; simply being moved further south and rotated within the site. Furthermore the addition of a new sports hall will greatly improve the provision of sports facilities offered by the school.
- 4.7 As such the principle of the proposed development is fully consistent with national guidance. Therefore the development should be considered against site specific and local planning policy guidance set out in the Districtwide Ribble Valley Local Plan.
- 4.8 In this respect the only relevant policies are G1 and G2. Policy G6 has been listed for reference as the application falls adjacent to an area of 'essential open space', however the development will not affect this area.
- 4.9 In accordance with Policy G2 the site is within the development boundary of Clitheroe and is appropriate in scale to the surrounding development. In respect of Policy G1, the design is of a high quality, as set out in the proceeding section of this statement.

## **5.0 DESIGN PRINCIPLES AND CONCEPTS**

### **5.1 Key Principles**

5.1.1 Based on the site context and broad principles developed above, the following design solutions have been produced.

### **5.2 Amount and use of development**

5.2.1 The scheme is for a new sports hall with a total gross external floorspace of 1,002m<sup>2</sup>. This will increase the total overall floorspace of the school buildings on site from 5,885m<sup>2</sup> to 6,887m<sup>2</sup>. The proposed works also incorporate 2 no. attached stores to the rear of the building (included within the proposed floorspace) and the re-orientation of existing tennis courts to the south.

5.2.2 The sports hall has been designed as a double height space in order to incorporate a large gymnasium at its centre, capable of being utilised for a wide range of sports. The overall amount of proposed floorspace is considered the minimum in order to adequately provide the required facilities for the number of pupils attending the school.

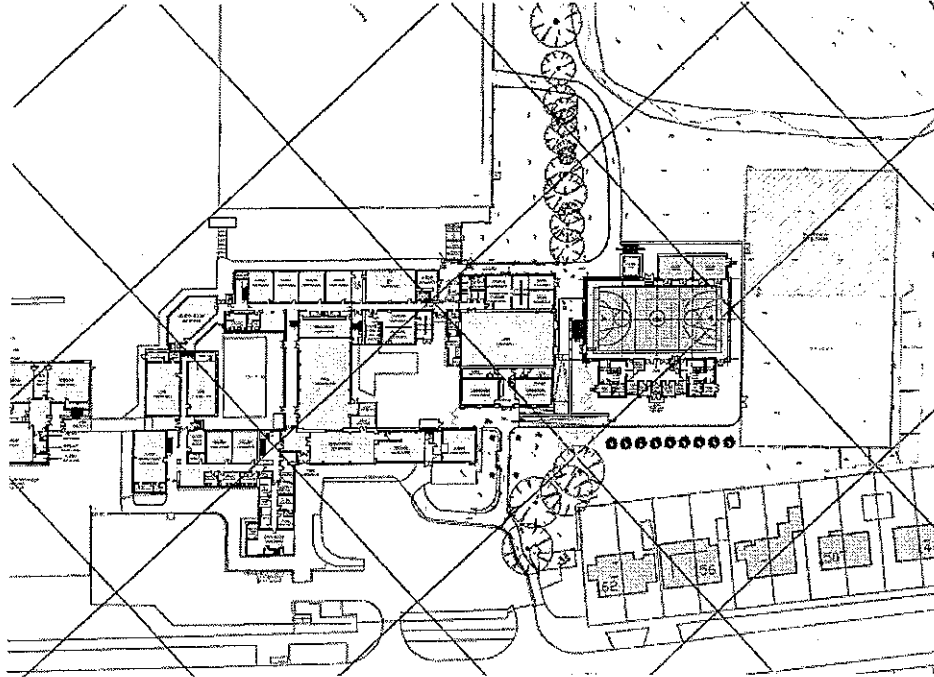
5.2.3 The sports hall will be used for a wide range of indoor sporting activities such as 5-a-side football, tennis, mini-tennis, badminton, netball and a basketball court or cricket practise nets.

### **5.3 Layout**

5.3.1 The site has been set out to make the most efficient use of space, and continue the existing line of development of school buildings. Access from existing buildings has been a key consideration and in this respect a covered area will facilitate a smooth transition for pupils and staff between existing and proposed areas.

5.3.2 The sports hall has been set out on a general north east to south west axis, with the main double height gymnasium space occupying the majority of the floorspace. To the front elevation a foyer, small office and changing areas are located. Two storage rooms are located to the rear of the building.

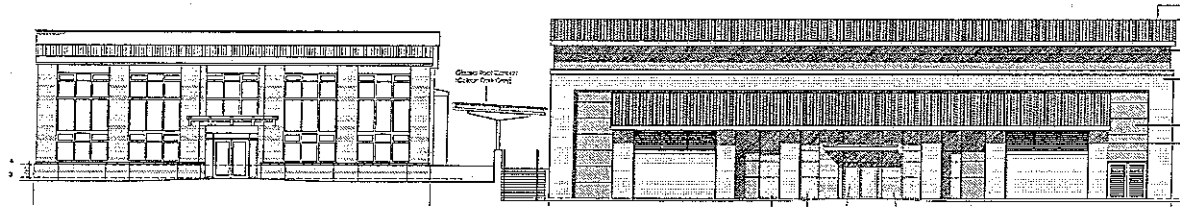
- 5.3.3 The proposed building is a significant distance from the nearest residential dwellings on Chatburn Road and as such there will be no adverse impacts upon residential amenity.



**Proposed site layout**

#### **5.4 Scale**

- 5.4.5 The scale of the development has been determined by the uses required to be accommodated within the scheme, together with the size of the plot and the nature of the surrounding built development.
- 5.4.6 The sports hall will rise to a maximum of 12.53 metres in height and is designed with a double height space to enable it to be utilised for a wide range of indoor sporting activities. The height of the building is somewhat offset by the fact that (due to the topography of the land) it shall sit lower than those existing school buildings to the north. Therefore (and as shown in the proposed North West elevation of drawing no. 7999 L116) the building will only appear marginally taller than that adjacent.



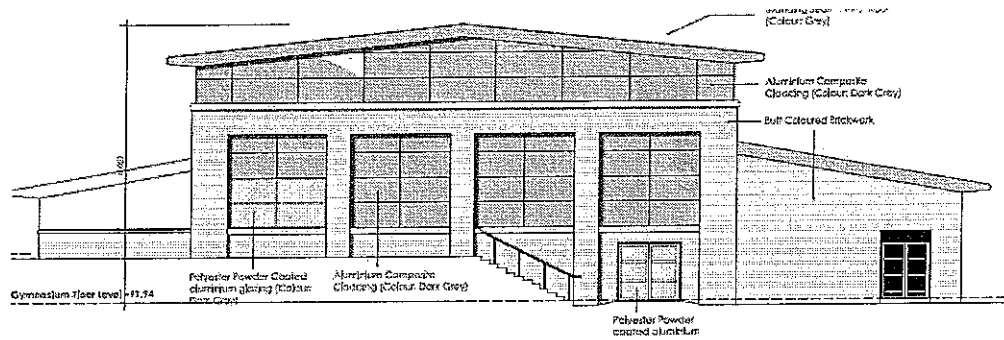
**Proposed North West Elevation (existing building to right)**

## **5.5 Landscaping**

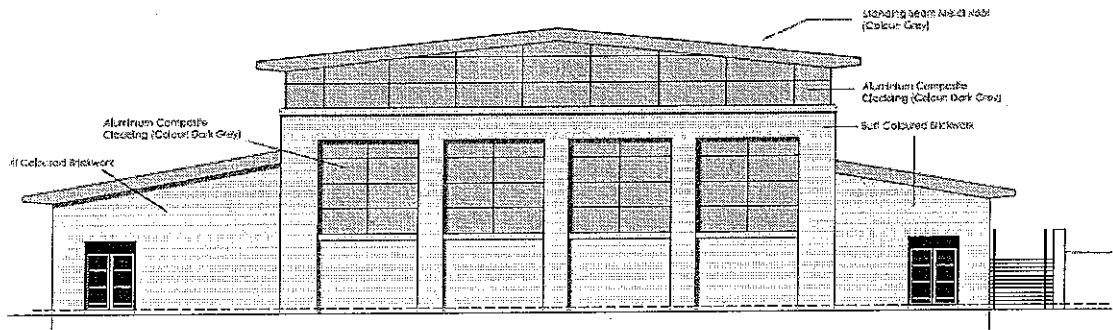
- 5.5.1 In order to accommodate the works a number of existing trees shall be removed. These trees are not protected. However as a matter of good practice compensatory planting at a ratio of 3:1 will be proposed to the west of the sports hall.
- 5.5.2 Details of such planting will be secured by condition requiring full details to be submitted before work begins.

## **5.6 Appearance**

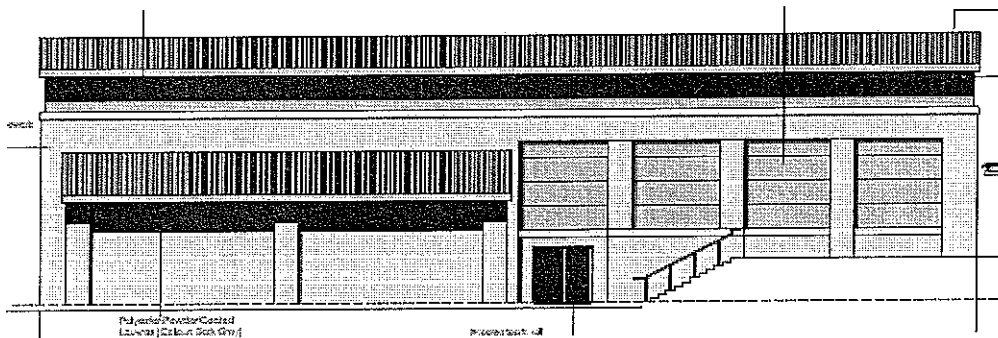
- 5.6.1 The design of the sports hall incorporates a range of materials and finishes which allow it to sit comfortably in this location. A mix of buff coloured brickwork, aluminum cladding and glazing form the majority of external wall space. This compliments both the existing school buildings whilst providing a modern building which is fit for use.
- 5.6.2 The principle elevation of the sports hall will face North West towards Chatburn Road and will sit alongside the existing languages building to the north. The entrance incorporates some glazing in order to maximise natural light levels.
- 5.6.3 Two small single storey stores / equipment rooms form part of the rear of the building and are shown in the south east elevation.
- 5.6.4 Access between the purposed building and the existing school site made possible though a combination of steps, ramps and a covered canopy area.



**Proposed North East Elevation**



**Proposed South West Elevation**



**Proposed South East Elevation**

**5.7 Flood Risk**

5.7.1 As the site falls outside any recognised flood zone and is less than 1 hectare in size, the submission of a Flood Risk Assessment is therefore not required.

**6.0 Access****6.1 Access considerations**

- 6.1.1 The access considerations that have been followed in the design of this application are drawn from PPG13, The Regional Spatial Strategy, the South Ribble Local Plan and By Design (DCLG publication). Account has also been taken of the relevant building regulations and the Disability and Equality Act 2010 which has been incorporated, as appropriate, in design of the buildings.

**6.2 Access Arrangements**

- 6.2.1 Access to the school is via Chatburn Road, which leads to a turning area and car park.
- 6.2.2 This application does not seek permission to alter the existing access arrangements from Chatburn Road, which is considered appropriate to support the sports hall development.

**7.0 CONCLUSION**

7.1 The proposals present an opportunity to provide significantly improved sports facilities for Clitheroe Royal Grammar School. This will enable the school to offer a much wider and more diverse range of sports and activities to pupils throughout the year, complimenting its existing provision. The proposals have been designed to a high standard and developed in response to the context of the surrounding area.

7.2 Accordingly, the development meets all relevant planning policy, design and access criteria and it is considered that planning permission should be granted.



320120277P

Clitheroe Royal  
Grammar School

**Pre-development Arboricultural Report**

Prepared for  
CASSIDY ASHTON LTD.

On  
2 April 2012

By  
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Checked by  
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Treescaping Consultancy Ltd.

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# SUMMARY

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Treescaples Consultancy Ltd. have been instructed by Cassidy Ashton Ltd., on behalf of Clitheroe Royal Grammar School (CRGS), to inspect the significant trees that may be affected by proposals to construct a new Sports Hall at the School and reconfigure some sports pitches. We have been asked to provide a pre-development report in which we assess whether or not trees may be affected by the proposals and, if so, the potential level of disturbance and suggest ways the proposals could be implemented to limit this to an acceptable level.

I visited Clitheroe Royal Grammar School on 29 March 2012. Currently the area where it is proposed to construct the Sports Hall and reconfigure some sports pitches is open grass with occasional trees and tennis courts on hard standing.

The species, size and condition of the trees, and my tree management recommendations, are listed in the schedule included as Appendix 6. Plan 1 shows the existing site layout, the locations of the trees, their canopies and root protection areas (RPAs) calculated using the guidance contained in the British Standard: *Trees in relation to construction – Recommendations* (BS 5837, 2005). Plan 2 shows the footprint of the proposed Sports Hall as well as the tree information.

Three trees will have to be removed to allow the implementation of the development proposals. These have been assessed to be in Retention Category C and therefore should not be constraints to development. I also recommend that one tree should be pruned to allow the proposed sports hall to be constructed. Finally, I recommend that three trees, all assessed to be in Retention Category R, should be removed to abate safety concerns.

I recommend that a temporary tree protection barrier should be erected in the locations shown on Plan 3 to protect retained trees from potential damage caused by construction activity.

Based on the information presented in this report, and provided that all the technical recommendations contained in it are followed, I consider the proposals can be implemented in accordance with the guidance contained in the British Standard: *Trees in relation to construction – Recommendations* (BS 5837, 2005).

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# **1 INTRODUCTION**

## **1.1 Instruction**

Treescaping Consultancy Ltd. have been instructed by Cassidy Ashton Ltd., on behalf of Clitheroe Royal Grammar School (CRGS), to inspect the significant trees that may be affected by proposals to construct a new Sports Hall and reconfigure some sports pitches. We have been asked to provide a pre-development arboricultural report in which we assess whether or not they may be affected by the proposals and, if so, the potential level of disturbance and suggest ways the proposals could be implemented to limit this to an acceptable level.

## **1.2 Qualifications and Experience**

I am Ross Cannon and this report is based on my site observations and the provided information. My arboricultural experience and qualifications are detailed in Appendix 1.

This report has been checked by Luke Steer and Appendix 2 contains details of his arboricultural experience and qualifications.

## **1.3 Documents and Provided Information**

Cassidy Ashton Ltd supplied us with plans of the existing and proposed site layouts as Autocad files.

## **1.4 Development Proposals**

It is proposed to construct a new Sports Hall and reconfigure some sports pitches to the south west of the existing school buildings in an area that is currently open grass and tennis courts. Plan 1 shows the existing site layout and the proposals are shown on Plans 2 and 3.

## **1.5 Report Limitations**

This report is only concerned with assessing the condition of the trees and whether or not they may be affected by the proposals to construct a new Sports Hall and reconfigure some sports pitches at CRGS. It includes an assessment based on the site visit and the provided plans.

This report takes no account of whether the trees could affect the soil in the area in such a way as to cause the proposed development, or other structures, to suffer tree related subsidence or heave damage.

This report contains work recommendations that should be carried out to manage identified risks posed to and by the trees responsibly and reduce them to an acceptable level. Even after the recommended work has been carried out some trees could still fail.

but it is unlikely that they will cause significant harm unless the weather conditions are extreme and/or there are major hidden defects

This report does not take into account extreme weather events not normally expected in this locality. Such events could include, but are not restricted to, severe windstorms, floods or drought. This report also does not take into account potential outbreaks of tree pests or diseases.

Operations carried out in the vicinity of the trees, either in the past or future, could affect their health and stability; such operations could include, but are not restricted to, trenches excavated for the installation or repair of utilities.

No decay detection equipment was used to help obtain the data presented in this report

## **2 SITE VISIT AND OBSERVATIONS**

### **2.1 Site Visit**

I carried out the site visit on 29 March 2012. All my observations were from ground level without detailed investigations and I estimated all dimensions unless otherwise indicated.

The weather at the time of inspection was clear, still and dry, with good visibility.

### **2.2 Site Description**

Clitheroe Royal Grammar School (CRGS) is located at Ordnance Survey grid reference SD 7510 4268 and is about 1km to the north-east of Clitheroe town centre.

The main school building fronts on to the A671. There are playing fields and sports pitches to the north-east, south-east and south-west of the main school building. There is a group of trees to the west of the school building that were probably planted at the same time that the school was constructed. There is an older line of trees to the south-west of the school that extends into the south-eastern corner of the site. This older group of trees appears to be the remains of an old hedge with occasional younger trees planted within it.

There is an old quarry in the south of the site that has scrub and young trees growing around its perimeter.

There are residential properties to the north-east, north-west and south-west of the school grounds.

### **2.3 Tree Identification and Location**

The approximate locations of the significant trees are shown on Plans 1, 2 and 3. These plans were provided by Cassidy Ashton Ltd and are based on Ordnance Survey plans of the area that have been enhanced with a topographic land survey. We added to this plan the tree numbers, canopies and root protection areas (RPAs).

All tree locations were plotted on the plans provided by Cassidy and Ashton Ltd except Trees 1.01, 1.02, the trees in Group 3 and Trees 4.09 and 4.10. I plotted the locations of these trees using metal tape measures and a laser rangefinder to triangulate them from known features. I am not a professionally qualified Land Surveyor and therefore I cannot guarantee the accuracy of these trees on Plans 1, 2 and 3. However, I believe that they are accurate enough for the purpose of this report.

These plans are for illustrative purposes only and should not be used for directly scaling measurements. All the relevant information on them is contained within this report and the provided documents.

### **2.4 Tree Observations**

I visually inspected the significant trees and groups of trees and information on their species, dimensions and condition, as well as my management recommendations, are included in Appendix 6.



### 3 REFERENCES, PLANNING POLICY AND GUIDANCE

#### 3.1 National Policy

Section 197 in the Town and Country Planning Act 1990 makes it the duty of local planning authorities, 'in the interests of amenity,' to protect trees, when granting planning permission, either by the imposition of conditions or serving TPOs. Planning Policy Statements (PPS) also provide guidance on the acceptability of proposed development.

The newly adopted National Planning Policy Framework (NPPF) may have to be taken into account.

#### 3.2 Ribble Valley District wide Local Plan, Adopted June 1998

##### 3.2.1 Landscape Protection Policy ENV13

*The Borough Council will refuse development proposals which harm important landscape features including traditional stone walls, ponds, characteristic herb rich meadows and pastures, woodlands, copses, hedgerows and individual trees other than in exceptional circumstances where satisfactory works of mitigation or enhancement would be achieved, including rebuilding, replanting and landscape management.*

##### 3.2.2 Supplementary Planning Policy for Trees

*Detailed tree survey indicating the following:*

- a position of individual trees, woodlands and hedgerows;*
- b accurate scale plan, for example 1/200, 1/500 or 1/1250;*
- c species, either common or full botanical name;*
- d dimensions actual or estimated in metres;*
- e crown spread, trunk circumference or diameter;*
- f condition of the trees;*
- g amenity valuation'*

#### 3.3 British Standard: Trees in Relation to Construction – Recommendations (BS 5837, 2005)

The British Standard: *Trees in relation to construction – Recommendations* (BS 5837, 2005) contains guidance on how to assess trees in or close to proposed development sites and the information that should be included in pre-development arboricultural reports to be submitted with applications for planning consent. Appendix 3 contains relevant extracts from BS 5837 (2005)

## **4 TREE CONSTRAINTS**

### **4.1 Tree Quality**

The retention categories of the trees have been assessed using the guidance contained in Table 1 of BS 5837 (2005). A copy of Table 1 of BS 5837 (2005) is included as Appendix 4. The retention categories of the trees is recorded in the schedule included as Appendix 6 and shown on Plans 1, 2 and 3 by the colours used to depict them:

Green: Category A – a good quality tree that should be retained where possible;

Blue: Category B – a tree of reasonable quality that could be retained;

Grey: Category C – a tree that could be retained for a time but shouldn't be considered a constraint to development; and

Red: Category R – a tree that should be removed unless it is in a little frequented area and it is desired to retain it for wildlife.

### **4.2 Tree constraints – Above Ground**

Plan1 shows the existing site layout, the locations of the trees, their canopies and root protection areas (RPAs). The canopies of retained trees are vertical constraints to development. Pruning in accordance with good arboricultural practice can sometimes provide adequate clearance to implement development proposals.

### **4.3 Tree constraints – Below Ground**

Plan1 shows the existing site layout, the locations of the trees, their canopies and root protection areas (RPAs). The RPAs of retained trees are the areas of soil required to maintain healthy growth and should be considered constraints to development.

## **5 ARBORICULTURAL IMPLICATION ASSESSMENT**

### **5.1 Trees to be Removed to Implement the Proposals**

Trees 1.07, 1.08 and 1.09, three Retention Category C hawthorns, will have to be removed to allow the proposals to be implemented.

### **5.2 Trees to be Pruned to Implement the Proposals**

The crown of Tree 2.01, Retention Category B1 lime, may have to be pruned to allow the implementation of the proposals. Limes are tolerant of pruning.

### **5.3 Visual Impact & Amenity Value**

Trees 1.07, 1.08 and 1.09, hawthorns will have to be removed to implement the proposals. These trees are relatively small, in poor condition and, if the proposals are not implemented, will probably have to be removed within the next five to ten years. These trees are distant from public places and their loss will not have a significant impact on the visual character of the area. Trees planted after the completion of the development will compensate for the loss of these trees.

I also consider that trees 2.05, 2.09 and 2.13, two ash trees and a hawthorn, are in poor condition and may also have to be removed or pruned within the next one to five years as part of a tree risk management strategy.

Other risk abatement tree work will be required in the future.

### **5.4 Site Access**

Vehicles and plant operating or parking on unprotected soil within the RPAs of retained trees could compact or contaminate it and this could have a detrimental effect on their condition and longevity.

Site access for contractors to carry out the proposed development could be in the western corner of the site. It will pass a number of low quality trees that could be retained for a time.

### **5.5 Storage of Materials and Equipment**

Materials, fuel and equipment stored close to trees could have a detrimental effect on their health, condition and longevity if their requirements aren't catered for.

## 6 RECOMMENDATIONS

### 6.1 General Precautions

The following general precautions should ensure the health and longevity of retained trees. They should be enforced within their RPAs and under their canopies during the construction phase and in locations where new trees are to be established unless the soil is to be suitably remediated.

- No storage of materials or fuel.
- No bonfires within 10m of the outer edge of the crown or RPA of a retained tree.
- No refuelling of mechanical equipment
- No mixing of cement
- No washing of cement mixers
- No raising the soil level without the agreement of the Local Planning Authority (LPA).
- No excavations without the agreement of the LPA.
- Only operate or park vehicles and plant if the soil is suitably protected, as recommended by Treescapes Consultancy Ltd and agreed by the LPA
- Only operate or park vehicles and plant in areas where new trees will be established if the soil is suitably protected, as recommended by Treescapes Consultancy Ltd and agreed by the LPA. Alternatively, soil compaction should be relieved prior to the establishment of the trees once the construction phase has been completed.
- The guidance contained within the National Joint Utilities Group Volume 4 (Guidelines For The Planning, Installation And Maintenance Of Utility Apparatus In Proximity To Trees (Issue 2, 2007); <http://www.njug.org.uk/> accessed 02/04/2012) should be followed when installing underground services within the RPAs of retained trees
- No surface water runoff should be redirected into or out of the RPA of a retained tree
- No materials should be dumped or stored in the RPA of a tree, whether in a skip or directly on the ground.

### 6.2 Temporary Tree Protection Barriers

Temporary tree protection barriers should be erected in the locations shown on Plan 3. No plant or vehicles should operate inside the protected areas unless the trees and ground are suitably protected. These barriers must be robust enough to withstand impacts from machinery and plant that will operate close to them. If relatively small plant is to be used I recommend that the barriers should be constructed using:

- 75-100mm diameter, by 1.8m long, wooden posts firmly inserted 300mm into the ground 2m apart;

- the posts should be spanned by 30mm x 100mm x 2m wooden rails between their tops and bottoms; and
- 1.5m high chestnut paling should be attached to both the top and bottom rails at 300-500mm intervals.

If large machines will operate on site I recommend the barrier design depicted in BS 5837 (2005).

The protective barriers should be erected prior to any other development activity taking place and remain in-situ for the duration of the construction phase.

### 6.3 Poor Quality Trees – Trees in Retention Category ‘R’

Using the guidance contained in BS 5837(2005), I have assessed Trees 2.05, 2.09 and 2.13, two ash trees and a hawthorn, to be in retention category R. These trees are in declining health and contain significant mechanical defects. As they are growing in the grounds of a school they may have to be removed to abate safety concerns within the next one to five years.

### 6.4 Constructing the Sports Hall – Tree Work

Some of the lower lateral branches of Tree 2.01, a lime, are growing towards the proposed sports hall and may have to be pruned to provide sufficient clearance to implement the proposals; I suggest 1-2m.

### 6.5 Constructing the Sports Hall – Tree Work

Trees 1.07, 1.08 and 1.09, three hawthorns, are growing in an area to be developed and will have to be removed to implement the proposals.

### 6.6 Tree safety work

Tree risk abatement work is listed in Appendix 7 as Category 1 and should be carried out in the timescale indicated by its priority.

#### 6.6.1 Tree work priority

The recommended risk abatement work has been prioritised as:

- High priority – carry out this work as soon as possible;
- Medium priority – this work doesn't need to be carried out straight away but these trees should be inspected every two years and after adverse weather conditions. If it is decided not to carry out this work straight away, I recommend that provision is made in future budgets to have it carried out at a later date.

- Low priority – this work doesn't need to be carried out straight away but these trees have notable defects that could develop over time. I therefore recommend that they should be inspected every two years and after adverse weather conditions.

### 6.6.2 Tree work category

- Category 1 work is necessary to manage identified risks posed by the trees and has been prioritised as described above.
- Category 2 work is recommended to establish high levels of arboricultural and silvicultural management and is not necessary to abate safety concerns and therefore hasn't been prioritised

### 6.6.3 Management options

For some of the trees I have recommended that there are a number of options for managing them. Each option will make the tree safe for the short to medium term but one of the options may suit the management objectives of the site better than the others. Often the final choice of work option depends on the comparative costs of implementing them. I am able to provide tree work pricing sheets that ask prospective contractors for prices for each option. The site manager is then able to make a fully informed decision about which option to choose for managing a particular tree. I can then provide a schedule of work for the chosen management options.

## 6.7 Implementing the Tree Work

A suitably qualified, competent, experienced, and insured contractor should carry out the recommended tree work. They should carry out their work in accordance with the recommendations contained in the British Standard: *Tree Work – Recommendations* (BS 3998, 2010)

## 6.8 Tree Management – Future Inspections

Due to the size of a number of the trees, and their locations within the grounds of a school, I recommend they should be inspected every two years and after strong winds or tree altering weather events by a suitably qualified, experienced and insured Arboricultural Consultant.

## 7 LEGAL CONSIDERATIONS

### 7.1 Protected Trees

If these trees are protected by a tree preservation order (TPO), located in a conservation area or protected by planning conditions, it will be necessary to obtain permission from the local planning authority (LPA) before any work, other than certain exempted operations, can be carried out to them. The work specified in this report is necessary for their reasonable management and should be acceptable to the LPA but tree owners should appreciate that they may take an alternative point of view and have the option to refuse to grant consent.

I understand that work to trees protected by a TPO, that is necessary to implement consented development, does not require separate permission under the TPO.

### 7.2 Forestry Legislation

A felling licence is required from the Forestry Commission to fell more than a small amount of timber in any calendar quarter unless the trees fall into one of the exempted categories. Information about felling licences is available from the Forestry Commission website ([www.forestry.gov.uk](http://www.forestry.gov.uk) accessed 02/04/2012). A felling licence may be required if more than 2m<sup>3</sup> of timber is to be felled and sold, or more than 5m<sup>3</sup> is to be removed and used for personal use.

### 7.3 Wildlife Conservation Legislation

The nests of most birds are legally protected while they are in use. Bats are also legally protected and their roosts are protected whether or not they are in use. Tree surgeons should be aware of their duties under the legislation enacted to protect wildlife and carry out their site assessment and work accordingly. If bats are suspected Natural England should be consulted.

The Forestry Commission and others produced a leaflet called: *Woodland Management for Bats* (2005) which contains some useful advice and is free to download from: <http://www.forestry.gov.uk/forestry/INFD-6K3CXY> (accessed 02/04/2012).

On page 14 this publication states:

*'The Wildlife and Countryside Act 1981 makes it an offence to disturb, damage or destroy bats or their roosts (even if bats are not present in the roost at the time of any incident). The Act applies in both England and Wales, and requires consultations with the appropriate Statutory Nature Conservation Organisation [Natural England or The Countryside Council for Wales] before carrying out activities which might harm or disturb bats or their roosts (even if unoccupied).'*

*'The Act is amended by the Countryside and Rights of Way Act 2000 in England and Wales. This adds 'reckless' to the offence of damaging or destroying a place a bat uses for shelter or rest, or disturbing a bat while using a roost. Under EU Regulations damaging or destroying a breeding site or resting place is an absolute offence, regardless of whether the act of doing so may be considered reckless or deliberate.'*

## 8 CONCLUSIONS

Based on the above discussions, and provided all the technical recommendations contained in this report are followed, I consider that the proposals can be implemented in accordance with the guidance contained in the British Standard: *Trees in relation to construction – Recommendations* (BS 5837, 2005)

To implement the proposals I recommend three trees will have to be removed and one pruned

I consider that risk abatement tree work will be required in the next few years on Trees 2.04, 2.05, 2.09 and 2.13 whether or not the proposals are implemented

Ross Cannon ND (Urb For), Tech Cert (Arbor A), Tech Arbor A

Checked by

Luke Steer BSc (Hons), Dip Arb (RFS), F Arbor A MICFor

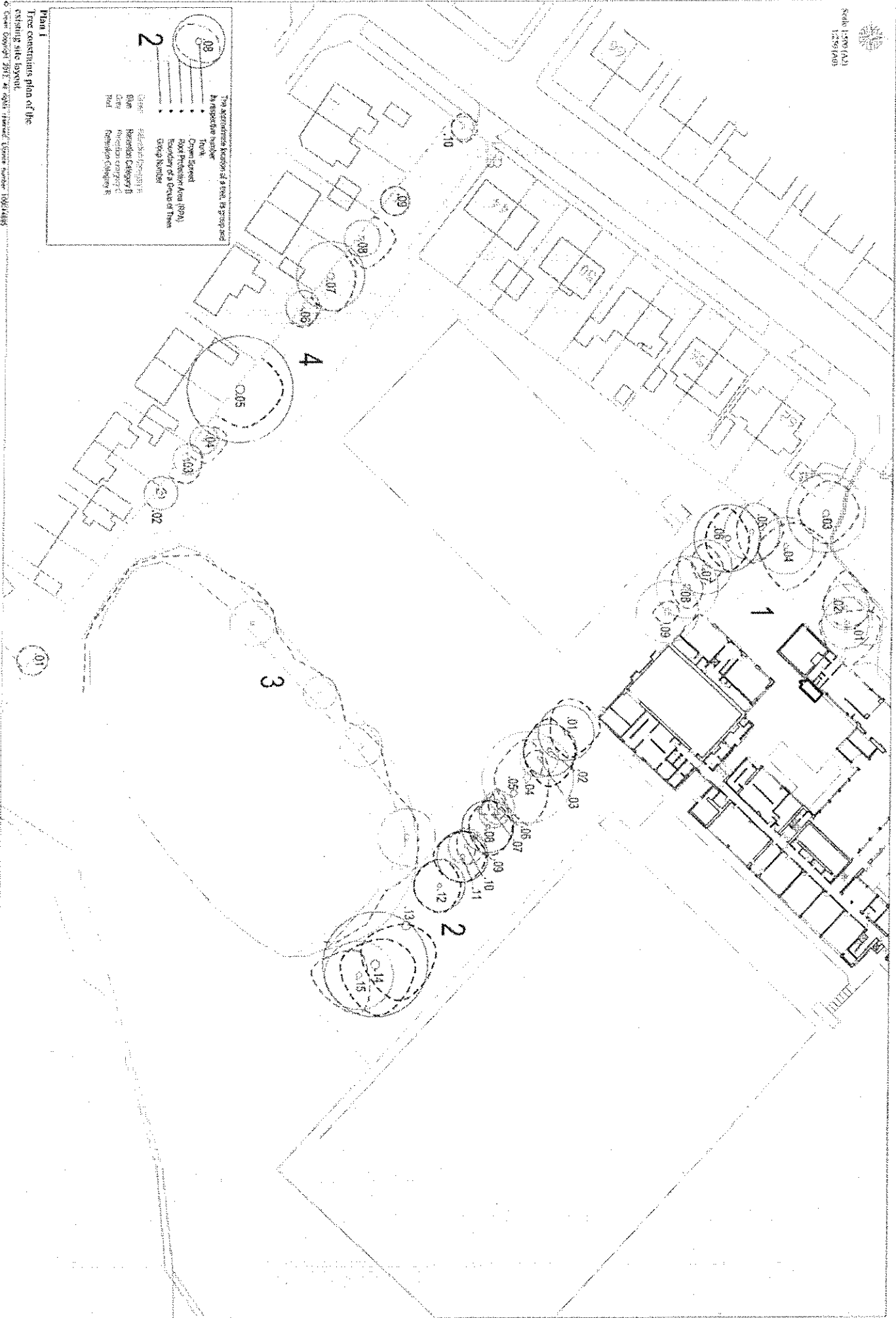


## 9 REFERENCES

- Anon, 2005. *Woodland Management for Bats*. Forestry Commission, Wetherby. 15 pp
- Ellison, M.J. 2005. Quantified Tree Risk Assessment used in the Management of Amenity Trees. *Journal of Arboriculture*. 31(2), 57-64
- Lonsdale, D. 1999. *Principles of Tree Hazard Assessment and Management*. The Stationary Office, London. 388 pp.
- Matheny, N.P. & Clark, J.R. 1994. *A Photographic Guide to the Evaluation of Hazard Trees in Urban Areas*. 2nd Edition. International Society of Arboriculture, Urbana, USA. 84 pp.
- Pepper, H.W. 2006. *Trees, Hedges and the Law – they won't go away!* Tree Damage Alert No 108, Arboricultural Advisory and Information Service, Farnham, Surrey, UK

# Clitheroe Royal Grammar School

Scale: 1:200 (A3)  
1:250 (A0)

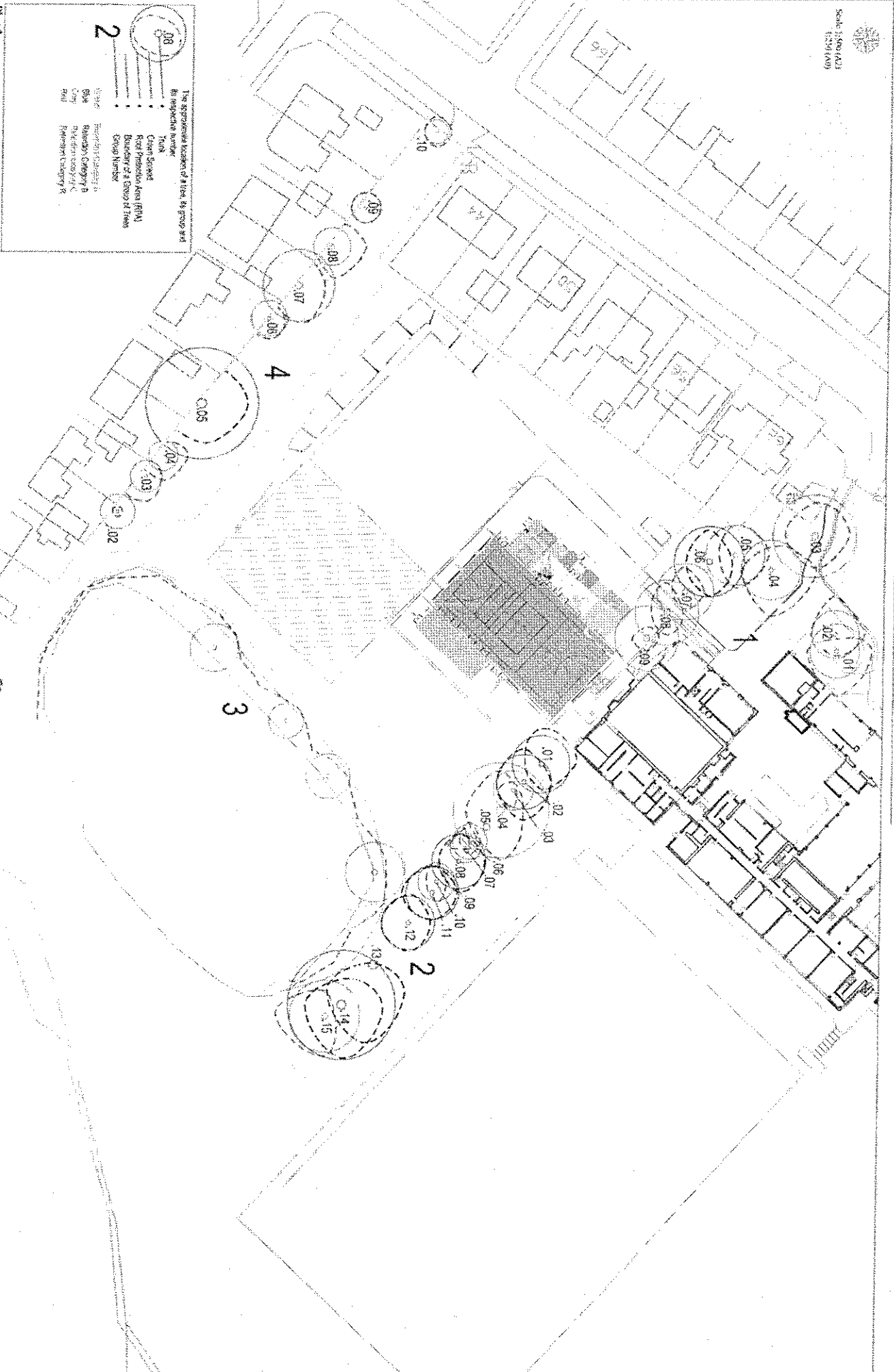


Plan 1  
Tree constraints plan of the existing site layout

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Clitheroe Royal Grammar School

Scale: 1:500 (A3)  
 15/01/09

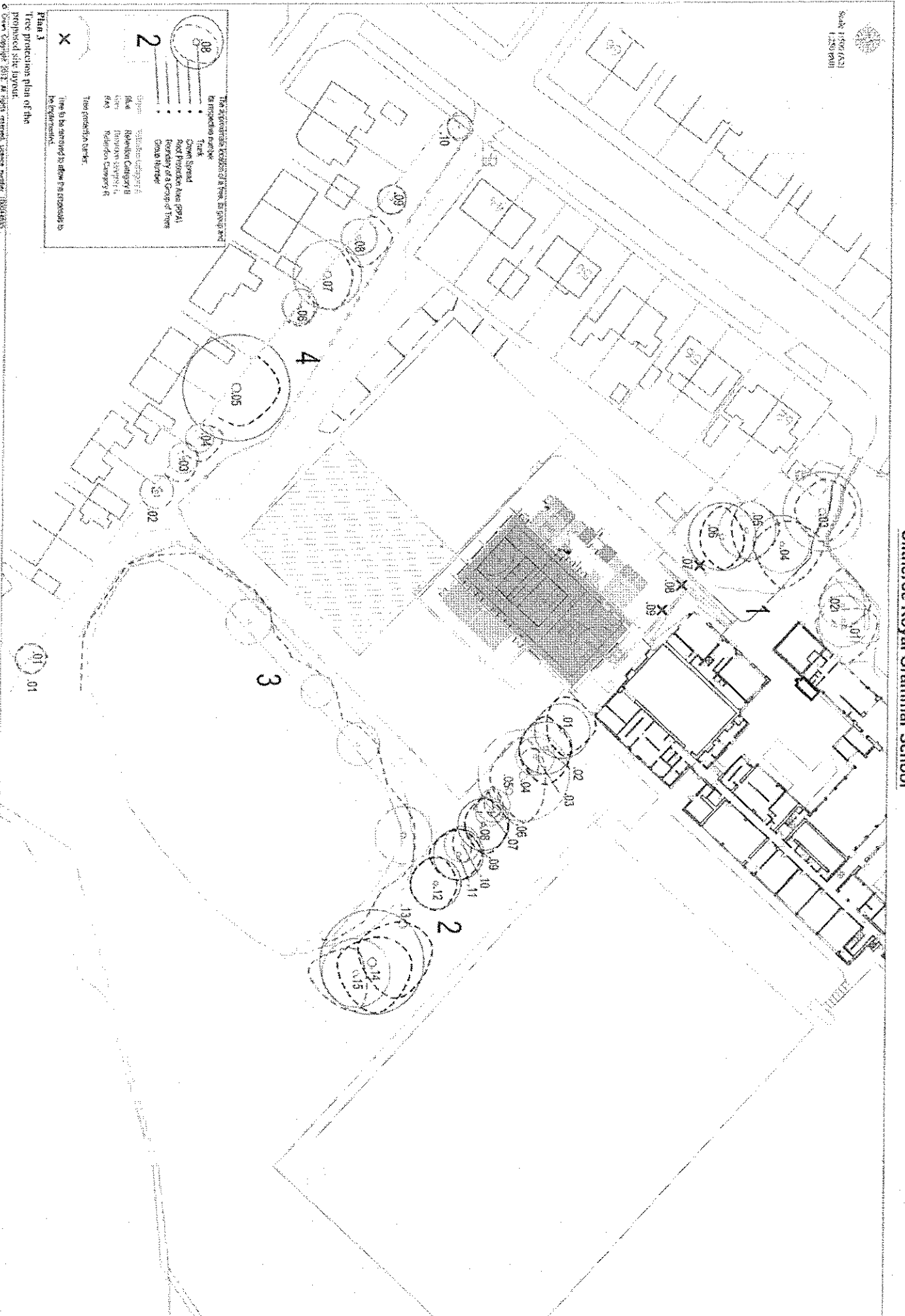


Plan 2  
 Tree constraints plan of the  
 proposed site layout

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# Clitheroe Royal Grammar School

Scale 1:500 (AS)  
1:250 (PH)



**Plan 3**  
Tree protection plan of the  
proposed site layout.

The approximate location of trees to be preserved is indicated by the following symbols:

- Tree
- Open Space
- Footpath
- Footpath Area (PFA)
- Footway of a Group of Trees
- Open Space

Tree protection zones are indicated by the following symbols:

- Zone 1
- Zone 2
- Zone 3
- Zone 4

Trees to be removed are indicated by an 'X'.

## Appendix 1

### The Experience and Qualifications of Ross Cannon

#### 1. Qualifications

- Ross Cannon was awarded a National Diploma in Urban Forestry in 2001.
- In 2006 Ross Cannon was awarded the Arboricultural Associations Technicians Certificate.
- In 2011 Ross Cannon became a Technical Member of the Arboricultural Association.

#### 2. Practical experience

Ross has been working and studying within the field of arboriculture since 1999, first as a tree surgeon and latterly in an advisory capacity. Between 2001 and November 2007 Ross was a tree climber for a large local authority. Between November 2007, and December 2008 Ross worked as a Tree Surveyor and then Arboricultural Officer for Leeds City Council. This involved various large-scale tree condition and management surveys and carrying out detailed tree inspections. Between December 2008 and December 2011 Ross was a Trees & Woodlands Officer for the Yorkshire Dales National Park Authority administering tree preservation orders, trees in conservation areas and providing advice to the development control section on matters relating to trees in relation to proposed development. From December 2011 Ross has been an Arboricultural Consultant with Treescapes Consultancy Ltd. and has been involved with a number of commissions covering a variety of different aspects of arboriculture including:

- surveying and making management recommendations for trees on residential sites in Yorkshire & Cumbria; and
- evaluating tree quality on development sites, assessing the impacts of development proposals on trees to be retained, making recommendations about protecting retained trees and outlining mitigation measures

#### 3. Continuing professional development

Ross Cannon attends conferences, seminars and workshops run by forestry and arboricultural organisations, colleges and universities

#### 4. Relevant experience

Ross Cannon has spent many years working with trees, some of which were considered to pose a high level of risk. This included judging the level of risk posed by trees and the work required to make them safe.

## Appendix 2

### The Experience and Qualifications of Luke Steer

#### 1. Qualifications

- Luke Steer was awarded a National Diploma in Arboriculture in 1989.
- In 1998 he graduated with an honours degree in Arboriculture and Amenity Forestry from the Forestry Department of the University of Aberdeen
- In 1999 he passed the Royal Forestry Society's Professional Diploma in Arboriculture.
- In 2001 he passed the final examination of the Institute of Chartered Foresters and became a member of that institute in January 2002.
- In 2001 his application to become a Fellow of the Arboricultural Association was assessed to fulfil all the necessary requirements and he became a Fellow of the association later on that year.

#### 2. Practical experience

Luke Steer has been working and studying within the field of arboriculture since 1984, first as a tree surgeon and latterly in an advisory capacity. In September 1998 he started work on a short term contract reviewing Tree Preservation Orders for Chelmsford Borough Council. He stayed in this post until May 2000 after which time he became a Lecturer in Arboriculture and Forestry at Askham Bryan College, York. Between July 2002 and March 2006 Luke Steer was practicing part time as an arboricultural consultant and between January 2003 and March 2006 he was also working part time for the Lake District National Park Authority as one of their Landscape and Woodland Advisors responsible for all types of forestry and arboricultural issues within the national park. Since March 2006 Luke Steer has been working fulltime as an arboricultural consultant for his company Treescapes Consultancy Ltd. While acting as an arboricultural consultant he has completed a number of commissions covering a variety of different aspects of arboriculture:

- Carrying out an inspection of over 3000 street trees within a borough and making recommendations about their safety and management requirements;
- Inspecting all the trees and the risks they pose within a busy tourist venue in Lake District and making recommendations about how to manage those risks responsibly;
- Putting tree work out to tender and managing the resulting contracts;
- Developing proposals to bring back into management a neglected woodland garden in a popular part of the Lake District;
- Assessing whether trees may be affected by proposed construction work, and if so making recommendations about how to mitigate against such damage.
- Compiling arboricultural reports to advise both property owners and prospective property buyers about any risks which trees may pose to a property.

**3. Continuing professional development**

Luke Steer attends many conferences, seminars and workshops run by forestry and arboricultural organisations, colleges or universities.

**4. Relevant experience**

During his career Luke Steer has worked a lot with trees that are thought to be dangerous, firstly by judging how much of a risk the trees may pose, then how to make a tree safe and lastly by either carrying out the work or instructing others to carry out the required work.

**5. Membership of professional organisations**

In addition to the Arboricultural Association and the Institute of Chartered Foresters Luke Steer is also a Professional Member of the International Society of Arboriculture. He is a member of the Continuous Cover Forestry Group and the Royal Forestry Society of England, Wales and Northern Ireland.

## Appendix 3

### Extracts from the British Standard: BS 5837 Trees In Relation To Construction – Recommendations (2005)

#### Tree categorisation

The trees have been categorised as recommended in Section 4.3, Tree categorization method and Table 1 of the standard (BS 5837, 2005). A copy of Table 1 is included as Appendix 3.

#### Tree constraints

Section 5 of BS 5837 recommends that a Tree Constraints Plan (TCP) should be produced showing the trees and an area around them referred to as the Root Protection Area (RPA). The RPA should be large enough to provide sufficient water and nutrients for the tree to ensure its survival. For single stemmed trees the RPA is equal to the area of a circle with a radius twelve times the diameter of the trunk measured 1.5m above the ground. For multi-stemmed trees the RPA is equal to the area of a circle with a radius equal to ten times their trunk diameter measured at ground level.

In Section 5.2.4 the Standard goes on to say:

*“The RPA, for each tree as determined in Table 2 [of the standard], should be plotted on the Tree Constraints Plan (TCP) taking full account of the following factors, as assessed by an arboriculturist, which may change its shape but not reduce its area whilst still providing adequate protection for the root system*

- a) *The likely tolerance of the tree to root disturbance or damage, based on factors such as species, age and condition and presence of other trees. (For individual open grown trees only, it may be acceptable to offset the distance by up to 20% in one direction)*
- b) *The morphology and disposition of the roots, when known to be influenced by past or existing site conditions (e.g. the presence of roads, structures and underground services).*
- c) *The soil type and structure*
- d) *Topography and drainage*
- e) *Where any significant part of a tree's crown overhangs the provisional position of tree protection barriers, these parts may sustain damage during the construction period. In such cases, it may be necessary to increase the extent of tree protection barriers to contain and thereby protect the spread of the crown. Protection may also be achieved by access facilitation pruning. The need for such measures, including the precise extent of pruning, should be assessed by an arboriculturist.”*

#### Tree protection

A construction exclusion zone is based on the RPA and should be protected during development by the use of barriers and/or ground protection fit for purpose to ensure the successful long-term retention of the trees. Section 9.1.1 of the standard states:



*“All trees which are being retained on site should be protected by barriers and or ground protection, as recommended in Clause 7 [of the standard]. Vertical barriers should be erected and ground protection installed before any materials or machinery are brought onto the site and before any demolition, development or stripping of soil commences. Areas of new or retained structure planting should be similarly protected, based on the extent of the soft landscaping as shown on the approved drawings. Once erected, barriers and ground protection should be regarded as sacrosanct, and should not be removed or altered without prior recommendation by an arboriculturist and approval of the local planning authority.”*

### **Tree protection fences**

With regard to barriers erected to protect trees Section 9.2.1 of the standard states:

*“Barriers should be fit for the purpose of excluding construction activity and appropriate to the degree and proximity of the work taking place around the retained tree(s). On all sites, special attention should be paid to ensuring that barriers remain rigid and complete*

And Section 9.2.2 states:

*“In most cases, barriers should consist of a scaffold framework in accordance with Figure 2 [of the standard] comprising a vertical and horizontal framework, well braced to resist impacts, with vertical tubes spaced at a maximum interval of 3m. Onto this, weldmesh panels should be securely fixed with wire to scaffold clamps. Weldmesh panels on rubber or concrete feet are not resistant to impact and should not be used.*

Appendix 7 of this report is a diagram of a tree protection barrier based on the one shown in BS 5837 (2005). The weldmesh panels allow the trees to be inspected without having to dismantle the barrier.

### **Ground protection**

With regard to protecting the soil within the RPA from compaction caused by wheeled or tracked vehicles Section 9.3.3 of BS 5837 (2005) states:

*“For wheeled or tracked construction traffic movements within the RPA the ground protection should be designed by an engineer to accommodate the likely loading and may involve the use of proprietary systems or reinforced concrete slabs”*

### **Construction within the RPAs of Trees to be Retained**

#### **Section 11.6.1**

*“The insertion of structures within the root protection areas may be justified if this allows the retention of a good quality tree (category A or B, see Table 1 of BS 5837, 2005). However, it is essential that careful consideration is given to foundation design (see 11.6.2). In such cases, the use of traditional strip footings, in particular those constructed tangentially across the root zone, can result in severe damage to tree roots and should be avoided.”*

#### Section 11.6.2

*“Root damage can be minimised by using a combination of the following:*

- *piles or radial strip footings both of which should be located to avoid major tree roots;*
- *beams, slabs, suspended floors, where all should be laid at or above ground level, and cantilevered as necessary to avoid tree roots.”*

*In order to arrive at a suitable solution, site specific and specialist advice regarding foundation design should be sought from an arboriculturist and an engineer.”*

#### Section 11.6.3

*“Where piling is to be installed near to trees, the smallest practical pile diameter should be used as this reduces the possibility of striking major roots, and reduces the size of the rig required to sink the piles. The latter is particularly important where piling within the branch spread is proposed, as mini-rigs reduce the need for access facilitation pruning. Sheathed piles protect the soil and adjacent roots from the potential toxic effects of concrete.”*

#### Hard Surfaces Within the RPAs of Retained Trees

Section 11.8.1 of BS 5837 (2005) states:

*“Where the construction of hard surface access cannot be avoided within the RPA, a no-dig design should be used to avoid root loss due to excavation. In addition the structure of the hard surface should be designed to avoid localized compaction, by evenly distributing the carried weight over the track width and wheelbase of any vehicles that will use the access. Such designs might include the use of a three dimensional cellular confinement system as an integral component of the sub-base, to act as a load suspension layer. Driveways and roadways constructed according to this principle can be designed to be suitable for most types of traffic. Where this type of access is proposed, site-specific and specialist advice should be sought from an engineer and an arboriculturist in order to ensure that it is fit for purpose.”*

*“NOTE: The use of two dimensional load suspension systems is not recommended.”*

## Appendix 4

### British Standard: BS 5837 Trees In Relation To Construction – Recommendations (2005): Tree Categorisation Table

TREES TO BE CONSIDERED FOR RETENTION		Criteria – Subcategories		
Category and Definition	1. Mainly Arboricultural Values	2. Mainly Landscape values	3. Mainly cultural values, including conservation	4. Mainly cultural values, including conservation
<p>Category A Those trees which are of high quality and which are of high value to the site and its surroundings. They should be given the highest priority for retention and protection.</p>	<p>Trees that are particularly good examples of their species, especially if rare or unusual, or essential components of groups, or of formal or semi-formal arboricultural features (e.g. the dominant and/or principal trees within an avenue)</p>	<p>Trees, groups or woodlands which provide a definite screening or softening effect to the locality in relation to views into or out of the site, or those of particular visual importance (e.g. avenues or other arboricultural features assessed as groups)</p>	<p>Trees, groups or woodlands of significant conservation, historical, commemorative or other value (e.g. veteran trees or wood pasture)</p>	<p>Trees with clearly identifiable conservation or other cultural benefits</p>
<p>Category B Those trees which are of moderate quality and value to the site and its surroundings. They should be given a high priority for retention and protection.</p>	<p>Trees that might be included in the high category, but are downgraded because of impaired condition (e.g. presence of remediable defects including unsympathetic past management and minor storm damage)</p>	<p>Trees present in numbers, usually as groups or woodlands, such as they form distinct landscape features, thereby attracting a higher value than they might as individuals but which are not, individually, essential components of formal or semi formal arboricultural features (e.g. trees of moderate quality within an avenue that includes better A category specimens), or trees situated mainly internally to the site, therefore individually having little visual impact on the wider locality.</p>	<p>Trees with very limited conservation or cultural benefits</p>	<p>Trees with clearly identifiable conservation or other cultural benefits</p>
<p>Category C Those of low quality and value, currently in adequate condition to remain until new planting could be established (a minimum of 10 years suggested), or young trees with a stem diameter below 150mm.</p>	<p>Trees not qualifying in higher categories</p>	<p>Trees present in groups or woodlands, but without this conferring on them significantly greater landscape value, and/or trees offering low or only temporary screening benefit</p>	<p>Trees with very limited conservation or cultural benefits</p>	<p>Trees with very limited conservation or cultural benefits</p>

Trees that have a serious, irremediable, structural defect, such as their early loss is expected due to collapse, including those that will become unviable after removal of other R category trees, i.e. where, for whatever reason, the loss of companion shelter cannot be mitigated by pruning)

Trees that are dead or are showing signs of significant, immediate, and irreversible overall decline.

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.

NOTE: Habitat reinstatement may be appropriate. (e.g. R category tree used as a bat roost: Installation of a bat box in nearby tree)

Criteria – Subcategories

TREES TO BE CONSIDERED FOR RETENTION

Category and Definition

1. Mainly Arboricultural Values

2. Mainly Landscape values

3. Mainly cultural values, including conservation

4. Mainly cultural values, including conservation

Trees that are particularly good examples of their species, especially if rare or unusual, or essential components of groups, or of formal or semi-formal arboricultural features (e.g. the dominant and/or principal trees within an avenue)

Trees, groups or woodlands which provide a definite screening or softening effect to the locality in relation to views into or out of the site, or those of particular visual importance (e.g. avenues or other arboricultural features assessed as groups)

Trees, groups or woodlands of significant conservation, historical, commemorative or other value (e.g. veteran trees or wood pasture)

Trees that might be included in the high category, but are downgraded because of impaired condition (e.g. presence of remediable defects including unsympathetic past management and minor storm damage)

Trees present in numbers, usually as groups or woodlands, such as they form distinct landscape features, thereby attracting a higher value than they might as individuals but which are not, individually, essential components of formal or semi formal arboricultural features (e.g. trees of moderate quality within an avenue that includes better A category specimens), or trees situated mainly internally to the site, therefore individually having little visual impact on the wider locality.

Trees with clearly identifiable conservation or other cultural benefits

Category C

Those of low quality and value, currently in adequate condition to remain until new planting could be established (a minimum of 10 years suggested), or young trees with a stem diameter below 150mm.

Trees not qualifying in higher categories

Trees present in groups or woodlands, but without this conferring on them significantly greater landscape value, and/or trees offering low or only temporary screening benefit

Trees with very limited conservation or cultural benefits

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.

## Appendix 5

### Explanatory notes for some of the terms used in Appendixes 6 and 7

- **Mathematical abbreviations:** > = Greater than; < = Less than
- **Compass Bearing:** N = north; S = south; E = east; W = west; NE = north-east; NW = north-west; SE = south-east; SW = south-west; NNE = north, north-east; NNW = north, north-west; ENE = east, north-east; WNW = west, north-west; SSE = south, south-east; SSW = south, south-west; ESE = east, south-east; WSW = west, south-west
- **Tree Number:** This is the number used to indicate the trees approximate position on Plans 1 and 2. This number is also used to identify the trees in Appendixes 5 and 6.
- **Species:** The species identification is based on visual observations and the common English name of what the tree appeared to be
- **Height:** The height of the tree measured with a Sunto clinometer or a Truepulse 360b laser rangefinder.
- **Trunk Ø:** These figures relate to the diameter of the trunk 1.5m above ground level and are recorded in centimetres measured with a diameter tape. If, for whatever reason, the height was measured at a different height above the ground the height will be mentioned. More than one figure indicates that the individual has a number of stems. Many stems are indicated with a 'M'. If the DBH has been estimated 'est' will appear in the column
- **Age Class:** Assessed as either:
  - Sapling or newly established = a size which could be easily transplanted;
  - Semi-mature = prior to seed bearing age and could be transplanted with care;
  - Juvenile Mature = young and if healthy growing rapidly, not yet achieved full mature height;
  - Young Mature = early maturity, not fully grown but of seed bearing age and may have achieved mature height;
  - Mature = fully grown, annual growth is much reduced;
  - Old Mature = old for the species, possibly starting to decline;
  - Ancient = exceptionally old for the species, the crown may be retrenching, provides many opportunities for wildlife and is likely to be an important habitat.
- **Life Expectancy:** The estimated life expectancy of the tree in its current state
- **Health:**
  - Normal Vitality = normal growth and twig extension;
  - Moderate Vitality = reduced twig extension but other than that few signs of ill-health;
  - Early Decline = reduced twig extension and some dead twigs in the outer canopy;
  - Mid-decline = small internodes, the canopy may be thinning and contain dead twigs and/or branches in the outer canopy, older branch wounds that haven't occluded may be decaying and forming cavities;

- Severe Decline = sparse crown, numerous dead twigs and branches in the outer canopy, older branch wounds likely to be decaying and forming cavities;
- Dead
- **Crown Radius:** The measured or estimated distance from the tree trunk to the outer extents of its canopy.
- **Radius of the RPA:** The radius of a circular Root Protection Area (RPA) in metres as specified using the guidance contained in BS 5837 (2005).
- **Area of the RPA:** The area of the Root Protection Area (RPA) in square metres as specified using the guidance contained in BS 5837 (2005).
- **Observations:** Other observations are listed in this column.
- **Defects:** This is the column where any of the trees defects are listed
- **Severity of defect:** A subjective assessment of a combination of the likelihood of failure occurring. The defect shall be categorised as either: Minor, of little significance; Moderate, of some significance; or Major, a major defect that could cause the tree to fail at any time.
- **Recommended Tree Work:** General description of recommended work.
- **Details:** Elaboration of the Remedial action
- **Work Priority:**
  - High priority work should be carried out as soon as possible;
  - Medium priority work need not be carried out straight away but the trees should be inspected every twelve to eighteen months and after strong winds. If this work is not carried out straight away I recommend that provision is made in future budgets to have it carried out at a later date.
  - Low priority work need not be carried out straight away but defects have been noted that could develop over time; these trees should be inspected every twelve to eighteen months and after strong winds
- **Work Category:**
  - Category 1 work is required to establish acceptable levels of safety for the site and should be carried out in the time scale indicated by the priority attached to the recommendation;
  - Category 2 work is advisory to establish high levels of arboricultural and silvicultural management of the existing trees and is not necessary for safety reasons.
- **Retention category:** The retention category assessed using the guidance in Table 1 of BS 5837, 2005 [see Appendix 3]
  - A) (light green) Trees of high quality and value: in such condition as to be able to make a substantial contribution (a minimum of 40 years is suggested);
  - B) (mid blue) Trees of moderate quality and value: those in such a condition as to make a significant contribution (a minimum of 20 years is suggested);
  - C) (grey) Trees of low quality and value: currently in adequate condition to remain until a new planting could be established (a minimum of 10 years is suggested), or young trees with a stem diameter below 150mm;

- R) (dark red) Trees in such a condition that any existing value would be lost within 10 years and which should, in the current context be removed for reasons of sound arboricultural management

## Appendix 6

### Tree Data Schedule

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**Clitheroe Royal Grammar School, to the west of the school building**

Id No.	Species	Height (m)	Trunk Ø (cm)	Age Class	Crown Radius (m)								RPA Radius Area
					N	E	S	W	NE	SE	SW	NW	
1.01	Birch	13	45 @ 1.5m	Mature 5-20 years	7	9	6	2.4					5.4 m <sup>2</sup>
													92 m <sup>2</sup>

Clear Stem (m): 2      Height to Lowest Part of Crown (m): 2

Notes:

Defects			Severity	Retention Category
Location of Defect	Type of Defect	Description of Defect		
• Crown	Weight biased	To E	Minor	C1
• Root plate	Potential root damage caused by excavation	To SE due to construction of concrete based storage area	Moderate	
• Lateral branches	Dead, throughout	<5cm x 1m	Minor	
• Crown	Reduced vitality		Moderate	
• Base of trunk	Grafted at 0.4m	Appears sound	Minor	

Recommended Tree Work	Details	Work Priority	Category
• Inspect after gales		When appropriate	1
• Remove dead branches		Medium	1

Id No.	Species	Height (m)	Trunk Ø (cm)	Age Class	Crown Radius (m)								RPA Radius Area
					N	E	S	W	NE	SE	SW	NW	
1.02	Birch	13	40 @ 1.5m	Mature 5-20 years	6	4.3	5	7.7					4.8 m <sup>2</sup>
													72 m <sup>2</sup>

Clear Stem (m): 2      Height to Lowest Part of Crown (m): 3

Notes:

Defects			Severity	Retention Category
Location of Defect	Type of Defect	Description of Defect		
• Base of trunk	Fungal fruiting bodies (saprophyte)	To W	Minor	C1
• Root plate	Potential root damage caused by excavation to W	To install footpath	Moderate	
• Crown	Weight biased	To W	Minor	
• Lateral branches	Dead	<3cm x 1m	Minor	
• Crown	Reduced vitality		Moderate	
• Base of trunk	Grafted at 0.4m	Appears sound	Minor	

Recommended Tree Work	Details	Work Priority	Category
• Inspect after gales		When appropriate	1
• Remove dead branches		Medium	1



# Clitheroe Royal Grammar School, to the west of the school building

Id No.	Species	Height (m)	Age Class	Crown Radius (m)				RPA Radius Area
				N	E	S	W	
1.03	Sorbus sp.	11	Mature	7	6.5	5.8	6.6	8.3 m <sup>2</sup>
				NE	SE	SW	NW	
		69 @	1m	Vitality				215 m <sup>2</sup>
				5-20 years				

Clear Stem (m): 1      Height to Lowest Part of Crown (m): 2

Notes:

Defects				Retention Category
Location of Defect	Type of Defect	Description of Defect	Severity	
• Lateral branches	Touching sub station roof		Minor	C1
• Crown (inner)	Dead branches	To W	Minor	
•	Acute stem union (stable at time of inspection)	<5cm x 3m	Minor	
• Root plate	Excavations may have been carried out that may have damaged some roots on the W	At 1.5m, S	Minor	
• Lateral branches to N	Bark wounds (occluding, little apparent decay)	To install footpath	Moderate	
• Lateral branch to N	Acute branch union (stable at time of inspection)	3cm x 40cm on base of branch	Minor	
		at 3.5m along its length	Moderate	

Recommended Tree Work	Details	Work Priority	Category
• Inspect after gales		When appropriate	1
• Reduce	Lateral branch to N by 2 to 3m	Medium	1
• Remove branch(es)	To provide 1m clearance from the electricity sub-station		2
• Remove dead branches		Medium	1

## Clitheroe Royal Grammar School, to the west of the school building

Id No.	Species	Height (m)	Age Class	Crown Radius (m)				RPA Radius Area
				N	E	S	W	
1.04	Willow	13 50 @ 1.5m	Mature 5-20 years	9	9.3	6	4.6	6.0 m 113 m <sup>2</sup>
				NE	SE	SW	NW	
				Health	Vitality			

Clear Stem (m): 2.5    Height to Lowest Part of Crown (m): 0.7

Notes:

		Defects		Severity	Retention Category
Location of Defect	Type of Defect	Description of Defect			
• Crown	Weight biased	To N	Moderate		C1
• Branch Stubs		At 3m, to NE & S	Minor		
• Lateral branches	Dead throughout crown	<5cm x 2m	Minor		
• Lateral branches	Poorly tapered	To N	Moderate		
• Base of trunk to 2m	Ribs of compensatory growth	Forming, possibly due to weight biased crown	Minor		
• Surface roots	Damage, probably caused by grass cutting equipment		Minor		

Recommended Tree Work	Details	Work Priority	Category
• Inspect after gales		When appropriate	1
• Remove dead branches		Medium	1
• Reduce branch(es)	To N by 2 to 3m to reduce effect of stem taper	Medium	1

1.05	Norway Maple	12 50 @ 1.5m	Mature 5-20 years	6.8	6.5	3	6	6.0 m 113 m <sup>2</sup>
				NE	SE	SW	NW	
				Health	Vitality			

Clear Stem (m): 2    Height to Lowest Part of Crown (m): 2.5

Notes:

		Defects		Severity	Retention Category
Location of Defect	Type of Defect	Description of Defect			
• Lateral branches	Dead	<5cm x 3m	Minor		C1
• Lateral branches	Storm damaged	To W	Minor		
• Stem (lower 1/3) at 4.5m	Acute stem union (stable at time of inspection)		Minor		
• Crown	Weight biased	To N	Minor		
• Stem (lower 1/3)	Branch wounds (occluding, little apparent decay)	<5cm diameter	Minor		
• Base of trunk	Bleeding bark cankers (inactive)	To S at base and E at 75cm	Moderate		
• Surface roots	Damage, probably caused by grass cutting equipment		Minor		
• Former girdling foot	Broken to N	Possibly by grass cutting machinery	Minor		

Recommended Tree Work	Details	Work Priority	Category
• Inspect after gales		When appropriate	1
• Remove dead branches		Low	1

# Clitheroe Royal Grammar School, to the west of the school building

Id No.	Species	Height (m)	Age Class	Crown Radius (m)				RPA Radius Area
				N	E	S	W	
1.06	Norway Maple	13 59 @ 1.5m	Mature 20-40 years	4.7	6.9	4.7	6.3	7.1 m <sup>2</sup> 157 m <sup>2</sup>

Clear Stem (m): 2      Height to Lowest Part of Crown (m): 3

Notes:

1.07	Hawthorn	8 57 @ 0m	Old Mature 5-20 years	3.8	3.5	2.6	4.9	5.7 m <sup>2</sup> 102 m <sup>2</sup>
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Clear Stem (m): 1      Height to Lowest Part of Crown (m): 1.5

Notes:

Defects			Severity	Retention Category
Location of Defect	Type of Defect	Description of Defect		
• Trunk	Moss growing up this tree may be obscuring mechanical defects		Minor	B1
• Trunk at 1.5m, W	Bark wounds (occluding, little apparent decay)	4 cm x 9cm	Minor	
• Crown	Dead twigs		Minor	
• Structural branches	Branch wounds (excluding, little apparent decay)	<10cm diameter to W	Minor	
• Branch Stubs		<5cm to SE	Minor	
• Roots	Girdling over buttress	To N	Minor	

Recommended Tree Work	Details	Work Priority	Category
• Inspect after gales		When appropriate	1

• Crown	Reduced vitality		Moderate	C1
• Stems (middle 1/3)	Crossing	Mid crown	Minor	
• Base of trunk	Decaying cavity		Moderate	
• Stem (lower 1/3)	Decaying cavities	On S stem at 0.3, 0.7, 1, and 1.3m	Moderate	
• Stem (lower 1/3)	Branch wounds (decaying)	On N stem at 1m, 1.0cm x 40cm	Moderate	
• Co-dominant stems	Acute stem union (stable at time of inspection)	From base to 1m	Minor	
• Buttresses	Basal damage, probably caused by grass cutting equipment		Moderate	

Recommended Tree Work	Details	Work Priority	Category
• Fell	To allow the proposals to be implemented	if permission is granted	
• Inspect after gales		When appropriate	1

**Clitheroe Royal Grammar School, to the west of the school building**

Id No.	Species	Height (m)	Crown Radius (m)				RPA Radius Area
			N	E	S	W	
1.08	Hawthorn	9 65 @ 0m	NE	SE	SW	NW	6.5 m 133 m <sup>2</sup>
			3.2	4.4	3.2	6	
		Age Class	Health				Vitality
		Old Mature	Moderate				
		5-20 years	Vitality				

Clear Stem (m): 0      Height to Lowest Part of Crown (m): 2

Notes:

1.09	Hawthorn	6 65 @ 0m Est.	NE	SE	SW	NW	6.5 m 133 m <sup>2</sup>
			2.5	2.5	3	2	
		Age Class	Health				Vitality
		Old Mature	Moderate				
		5-20 years	Vitality				

Clear Stem (m): 0      Height to Lowest Part of Crown (m): 0

Notes:

Defects			Severity	Retention Category
Location of Defect	Type of Defect	Description of Defect		
• Crown	Reduced vitality		Moderate	CI
• Crown	Weight biased	To E and W	Moderate	
• Lateral branch	Dead	>5cm x 1.5m, to W	Minor	
• Trunk at 1m	Decaying cavity	To SW	Moderate	
• Co-dominant stems	Acute stem union (started to fail)	At 0.6m	Major	
• Trunk	Weight biased	To W	Moderate	
• Buttresses	Basal damage, probably caused by grass cutting equipment		Minor	

Recommended Tree Work	Details	Work Priority	Category
• Fell	To allow the proposals to be implemented	If permission is granted	1
• Inspect after gales		When appropriate	1
• Reduce crown all round by	5m	Medium	1

Recommended Tree Work	Details	Work Priority	Category
• Crown	Previously pollarded at 3m & now 1.5m of re-growth	Minor	CI
• Crown	Low over footpath	Moderate	
• Base of trunk to 1m	Decaying cavity	Moderate	

Recommended Tree Work	Details	Work Priority	Category
• Fell	To allow the proposals to be implemented	If permission is granted	1
• Reduce branch(es)	Over path to provide 2.5m height clearance	Medium	1
• Inspect after gales		When appropriate	1

**Clitheroe Royal Grammar School, to the south of the school building**

Id No.	Species	Height (m)	Age Class	Crown Radius (m)				RPA	
				N	E	S	W		Radius
2.01	Lime	Trunk Ø (cm)	Life Expectancy	Health	NE	SE	SW	NW	Area
				Normal	7	5.3	3.2	7	
		48 @ 1.5m	Mature	Vitality					104 m <sup>2</sup>

Clear Stem (m): 2.5    Height to Lowest Part of Crown (m): 2

Notes:

2.02	Lime	12	Mature	Normal	5.3	7.6	5.4	6.5	5.5 m
					46 @ 1.5m				
			20-40 years	Vitality					

Clear Stem (m): 0    Height to Lowest Part of Crown (m): 2

Notes:

Defects		Location of Defect	Type of Defect	Description of Defect	Severity	Retention Category
Recommended Tree Work	Details					
• Lateral branches	Touching building to N				Minor	B1
• Crown	Weight biased		To N		Moderate	
• Lateral branches	Crossing		At 5m on the NW		Minor	
• Buttresses	Basal damage, probably caused by grass cutting equipment				Minor	
• Root plate	Excavations may have damaged some roots to N		To install path		Minor	
Recommended Tree Work		Details		Work Priority	Category	
• Remove the smallest	Of the two crossing branches growing to the NW at 5m			Low	1 & 2	
• Reduce branch(es)	To provide 2m clearance from proposed building			If permission is granted		
• Crown	Weight biased		To E & W		Moderate	B1
• Lateral branch	Broken and hanging branch(es)		To W at 5m		Moderate	
• Trunk at 2m, W	Branch wounds (excluding little apparent decay)		<10cm diameter		Minor	
•	Acute stem union (stable at time of inspection)		At 2m		Moderate	
• Buttresses	Basal damage, probably caused by grass cutting equipment		Some decay to E		Minor	
Recommended Tree Work		Details		Work Priority	Category	
• Inspect after gales			On the W at 5m	When appropriate	1	
• Remove broken branches				Medium	1	

**Clitheroe Royal Grammar School, to the south of the school building**

Id No.	Species	Height (m)	Trunk Ø (cm)	Age Class	Crown Radius (m)				RPA Radius Area
					N	E	S	W	
2.03	Hawthorn	5	40 @ 0m	Old Mature	0	3.5	3	1.5	4.0 m 50 m <sup>2</sup>
					Health	Vitality			

Clear Stem (m): 0      Height to Lowest Part of Crown (m): 0

Notes:

2.04	Ash	19	80 @ 1.5m	Old Mature	Moderate	4.6	10	7	8	9.6 m 290 m <sup>2</sup>
					Vitality					

Clear Stem (m): 4.5      Height to Lowest Part of Crown (m): 3

Notes:

Defects		Severity	Retention Category
Location of Defect	Type of Defect		
• Crown	Weight biased	Moderate	CI
• Trunk; between its base & 3m	Ivy growing up this tree may be obscuring mechanical defects	Moderate	
• Branch Stubs	Decaying	Minor	
• Battresses	Basal damage, probably caused by grass cutting equipment	Moderate	
• Base of trunk	Decaying cavities	Moderate	

Recommended Tree Work	Details	Work Priority	Category
• Inspect after gales		When appropriate	1
• Crown (upper 1/3)	Dead branches	<5cm x 2m	Minor
• Stem (middle 1/3)	Branch wounds (occluded)	<10cm diameter	Minor
• Lateral branch to W at 10m	Decaying cavity	10cm x 2m, from torn out branch, occluding well	Moderate
• Trunk; between its base & 5m	Potential occluded crack	On W, tension side of tree	Moderate
• Trunk at 4.5m	Decaying cavity	Occluding well. 30 x 40 cm.	Moderate
• Trunk	Weight biased	To E	Moderate
• Surface roots	Basal damage, probably caused by grass cutting equipment		Minor
• Base of trunk	Girdling roots		Minor

Recommended Tree Work	Details	Work Priority	Category
• Inspect after gales		When appropriate	1
• Reduce crown all round by	2-3m	Medium	1
• Remove dead branches		Medium	1

**Clitheroe Royal Grammar School, to the south of the school building**

Id No.	Species	Height (m)	Trunk Ø (cm)	Age Class	Crown Radius (m)				RPA Radius Area
					N	E	S	W	
2.05	Ash	17	69 @ 1.5m	Old Mature	NE	SE	SW	NW	8.3 m 215 m <sup>2</sup>
					2.3	5.7	5.8	3.8	
					Life Expectancy	Health			
					0-5 years	Decline			

Clear Stem (m): 2.5    Height to Lowest Part of Crown (m): 3

Notes:

2.06	Hawthorn	8	35 @ 0m	Old Mature	Moderate	2	2.5	2	4	3.5 m 38 m <sup>2</sup>
					Vitality					

Clear Stem (m): 0    Height to Lowest Part of Crown (m): 1.5

Notes:

Location of Defect	Type of Defect	Description of Defect	Severity
Structural branches	Fungal fruit body of Inonotus hispidus	Found at base of this tree, presumably fallen from wound above.	Major
Crown	Dead branches	<5cm x 2m	Moderate
Crown	Weight biased	To E	Moderate
Trunk at 2.5m, W	Branch wounds (not occluding)	25cm diameter	Moderate
Trunk at 2.5m	Decaying cavity	20cm diameter, occluding well	Moderate
Trunk	Weight biased	To E	Moderate
Buttresses	Basal damage, probably caused by grass cutting equipment		Minor

Recommended Tree Work	Details	Work Priority	Category
• Fell		High	1

Recommended Tree Work	Details	Work Priority	Category
• Crown	Reduced vitality	Moderate	C1
• Crown	Weight biased	To W	Moderate
• Trunk	Weight biased	To W	Moderate
• Base of trunk	Decaying cavity	Base to 1.5m	Moderate
• Buttresses	Basal damage, probably caused by grass cutting equipment		Moderate

Recommended Tree Work	Details	Work Priority	Category
• inspect after gales		When appropriate	1

**Clitheroe Royal Grammar School, to the south of the school building**

Id No.	Species	Height (m)	Trunk Ø (cm)	Age Class	Crown Radius (m)				RPA Radius Area
					N	E	S	W	
2.07	Hawthorn	8 30 @ 0m		Old Mature 5-20 years	NE	SE	SW	NW	3.0 m 28 m <sup>2</sup>
					1	0	3.5	4	
					Health		Vitality		
					Moderate		Moderate		

Clear Stem (m): 0      Height to Lowest Part of Crown (m): 0.7

Notes:

2.08	Lime	14 46 @ 1.5m		Early mature 20-40 years	NE	SE	SW	NW	5.5 m 96 m <sup>2</sup>
					5.3	6.2	4	5.4	
					Health		Vitality		
					Normal		Vitality		

Clear Stem (m): 0      Height to Lowest Part of Crown (m): 1.5

Notes:

2.09	Hawthorn	8 49 @ 0m		Old Mature 0-5 years	NE	SE	SW	NW	4.9 m 75 m <sup>2</sup>
					5.3	6.2	4	5.4	
					Health		Vitality		
					Severe		Decline		

Clear Stem (m): 1      Height to Lowest Part of Crown (m): 3

Notes:

		Defects			Retention Category
Id No.	Species	Location of Defect	Type of Defect	Description of Defect	
2.07	Hawthorn	• Crown	Reduced vitality		Moderate
		• Trunk, between its base & 3m	Branch wounds (decaying)	<10cm diameter	Moderate
		• Whole Tree	Weight biased	To SW	Moderate
		• Base of trunk to 1m	Decaying cavity		Moderate
		• Buttresses	Basal damage, probably caused by grass cutting equipment		Moderate

Recommended Tree Work	Details	Work Priority	Category
• Inspect after gales		When appropriate	1

Recommended Tree Work	Details	Work Priority	Category
• Whole Tree	Weight biased	To E	Moderate
• Buttresses	Basal damage, probably caused by grass cutting equipment		Minor

Recommended Tree Work	Details	Work Priority	Category
• Inspect after gales		When appropriate	1

Recommended Tree Work	Details	Work Priority	Category
• Buttresses	Basal damage, probably caused by grass cutting equipment		Moderate
• Base of trunk	Decaying cavity		Moderate
• Whole Tree	50 % Dead		Major

Recommended Tree Work	Details	Work Priority	Category
• Fell		Medium	1



## Clitheroe Royal Grammar School, to the south of the school building

Id No.	Species	Height (m)	Age Class	Crown Radius (m)				RPA Radius Area
				N	E	S	W	
2.1	Hawthorn	8	Old Mature	2	4	2	4	3.8 m <sup>2</sup>
		38 @ 0m	5-20 years					45 m <sup>2</sup>

Clear Stem (m): 1.3    Height to Lowest Part of Crown (m): 3

Notes:

2.11	Lime	14	Early mature	Crown Radius (m)				RPA Radius Area
				5	5.5	6.1	5.2	
		45 @ 1.5m	20-40 years					5.4 m <sup>2</sup>
								92 m <sup>2</sup>

Clear Stem (m): 0    Height to Lowest Part of Crown (m): 1.5

Notes:

2.12	Lime	9	Early mature	Crown Radius (m)				RPA Radius Area
				4.5	5.7	5.4	5.6	
		45 @ 1.5m	20-40 years					5.4 m <sup>2</sup>
								92 m <sup>2</sup>

Clear Stem (m): 3    Height to Lowest Part of Crown (m): 2

Notes:

Defects		Location of Defect	Type of Defect	Description of Defect	Severity	Retention Category
•	Crown (inner)					
•	Co-dominant stems	Acute stem union (started to fail)	At 1m	Moderate		
•	Base of trunk	Decaying cavity		Major		
•	Buttresses	Basal damage, probably caused by grass cutting equipment		Moderate		

Recommended Tree Work	Details	Work Priority	Category
• Remove dead branches		Low	1
• Inspect after gales		When appropriate	1

Recommended Tree Work	Details	Work Priority	Category
• Crown (inner)	Broken twigs	Minor	B1
• Root plate	Soil level may have been raised over some of the rooting area	Moderate	
	2m to 3 a footpath has been constructed		

Recommended Tree Work	Details	Work Priority	Category
• Inspect after gales		When appropriate	1

Recommended Tree Work	Details	Work Priority	Category
• Trunk	Weight biased	Minor	B1
• Trunk at 2m	Branch wounds (occluding, little apparent decay)	Minor	
• Base of trunk	Lacking buttresses on the N	Observation	
• Root plate	Soil level may have been raised over some of the rooting area	Moderate	
	A new path has been installed 2m to the N		

Recommended Tree Work	Details	Work Priority	Category
• Inspect after gales		When appropriate	1

**Clitheroe Royal Grammar School, to the south of the school building**

Id No.	Species	Height (m)	Age Class	Crown Radius (m)				RPA
		Trunk Ø (cm)	Life Expectancy	N	E	S	W	Radius Area
2.13	Ash	20-25m 92 @ 1.5m Circumf	Old Mature 0-5 years	NE	SE	SW	NW	11.0 m 383 m²
			Health					
			Early					
			Decline					

Clear Stem (m): 3      Height to Lowest Part of Crown (m): 2.5

Notes:

Id No.	Species	Height (m)	Age Class	Crown Radius (m)				RPA
		Trunk Ø (cm)	Life Expectancy	N	E	S	W	Radius Area
2.14	Sycamore	20-25m 92 @ 1.5m Circumf	Mature 20-40 years	8.4	10.7	7.4	8	11.0 m 383 m²
			Health					
			Normal					
			Vitality					

Clear Stem (m): 0      Height to Lowest Part of Crown (m): 2.5

Notes:

Defects			
Location of Defect	Type of Defect	Description of Defect	Severity
• Crown (outer)	Reduced vitality		Moderate
• Whole Tree	Weight biased	To E	Moderate
• Structural branch	Branch wounds (not occluding, little apparent decay)	6m, W	Moderate
• Base of trunk to 10m	Branch wounds (occluded, little apparent decay)	<10cm diameter	Minor
• Base of trunk	Decaying cavities	There is the fungal bracket of a wood decay fungus in the Ganoderma genus on the W	Major

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Retention Category

R

Recommended Tree Work	Details	Work Priority	Category
• Fell		High	1
• Pollard	At around 6m but retain the lower epicormic shoots	High	1

Recommended Tree Work	Details	Work Priority	Category
• Lateral branches	Torn leaving stubs	At 9m, E	Minor
• Trunk: between its base & 3m	ivy growing up this tree may be obscuring mechanical defects		Minor
• Crown	Weight biased	To E	Moderate

B1

Recommended Tree Work	Details	Work Priority	Category
• Sever ivy	To enable a thorough inspection in the future	Medium	1
• Inspect after gales		When appropriate	1

### Clitheroe Royal Grammar School, to the south of the school building

Id No.	Species	Height (m)	Trunk Ø (cm)	Age Class	Crown Radius (m)				RPA Radius Area
					N	E	S	W	
2.15	Ash	15-20m	60 @ 1.5m	Old Mature	2	8	10	5	7.2 m <sup>2</sup>
				5-20 years					163 m <sup>2</sup>

Clear Stem (m): 0      Height to Lowest Part of Crown (m): 2

Notes:

Location of Defect	Type of Defect	Description of Defect	Severity	Retention Category
• Lateral branches	Torn off, leaving stubs	At 10m	Minor	C1
• Trunk	Weight biased	To SE	Major	
• Trunk at 2m	Branch wounds (occluding, some decay)	On the E. One is 10cm in diameter, another is 25x 35cm and 30cm deep. Branch sockets decaying	Moderate	
• Trunk at 1m	Bark wounds (occluding, little apparent decay)	40cm x 70cm, NW	Moderate	
• Base of trunk	Cavity	To W.	Minor	

Recommended Tree Work	Details	Work Priority	Category
• Inspect after gales		When appropriate	1

### Clitheroe Royal Grammar School, in the south corner of the school grounds

Id No.	Species	Height (m)	Trunk Ø (cm)	Age Class	Crown Radius (m)				RPA Radius Area
					N	E	S	W	
3	Group	10-15m	48 @ 105	Juvenile mature					0.9 m <sup>2</sup>
	Ash x 0			20-40 years				5	60 m <sup>2</sup>
	Hawthorn x 0								

Clear Stem (m): 0      Height to Lowest Part of Crown (m): 0

Notes:

Group of individually poor specimens growing within rocky scrubland. As a group they provide reasonable amenity value.

Location of Defect	Type of Defect	Description of Defect	Severity	Retention Category
• Root plate	Soil level may have been raised over some of the roosting area	To SE	Moderate	B2

Recommended Tree Work	Details	Work Priority	Category
• Inspect after gales		When appropriate	1

**Clitheroe Royal Grammar School, on the south west boundary of the school grounds**

Id No.	Species	Height (m)	Age Class	Crown Radius (m)				RPA Radius Area	Defects		Retention Category		
				N	E	S	W		Location of Defect	Description of Defect		Severity	
4.01	Birch	10-15m 27 @ 1.5m	Mature 5-20 years	Moderate Vitality	3.5	3	3	3	3.2 m 33 m <sup>2</sup>	<ul style="list-style-type: none"> <li>Lateral branches</li> <li>Root plate</li> </ul>	<ul style="list-style-type: none"> <li>&lt;5cm x 2m on trunk at 3m</li> <li>To NE 4m from the base of the tree there is an access track from previous development</li> </ul>	Minor Moderate	C1

Clear Stem (m): 2      Height to Lowest Part of Crown (m): 2

Notes:

4.02	Malus	2 35 @ 0m	Early Mature 5-20 years	Moderate Vitality	1	1	1	1	3.5 m 38 m <sup>2</sup>	<ul style="list-style-type: none"> <li>Previously pollarded at 1.5m &amp; 1m of re-growth</li> </ul>	Minor	C1
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Clear Stem (m): 0      Height to Lowest Part of Crown (m): 0

Notes:

4.03	Malus	5-10m 27 @ 1m	Early mature 5-20 years	Moderate Vitality	3	5	5	3.5	3.2 m 33 m <sup>2</sup>	<ul style="list-style-type: none"> <li>Cankered stems</li> <li>Tree stake still in place</li> </ul>	Moderate Minor	C2
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Clear Stem (m): 0      Height to Lowest Part of Crown (m): 0

Notes:

4.04	Malus	5-10m 30 @ 0m Est	Early mature 5-20 years	Moderate Vitality	5	5	5	1.5	3.0 m 28 m <sup>2</sup>	<ul style="list-style-type: none"> <li>Cankered stems</li> <li>Tree stake still in place</li> </ul>	Moderate Minor	C2
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Clear Stem (m): 0      Height to Lowest Part of Crown (m): 0

Notes:

Recommended Tree Work	Details	Work Priority	Category
<ul style="list-style-type: none"> <li>Inspect after gales</li> </ul>	When appropriate	1	
<ul style="list-style-type: none"> <li>Remove the stake</li> </ul>		2	

## Clitheroe Royal Grammar School, on the south west boundary of the school grounds

Id No.	Species	Height (m)	Trunk Ø (cm)	Age Class	Crown Radius (m)				RPA Radius Area
					N	E	S	W	
4.05	Sycamore	14	93 @ 1.5m	Mature	9	8	5.7		11.2 m
					Normal	Vitality			391 m <sup>2</sup>

Clear Stem (m): 0      Height to Lowest Part of Crown (m): 0

Notes:

4.06	Sycamore	5-10m	Juvenile mature	3	4	4		3.6 m
		30 @ 1m	5-20 years					41 m <sup>2</sup>

Clear Stem (m): 1      Height to Lowest Part of Crown (m): 0.5

Notes:

4.07	Norway Maple	5-10m	Mature	5.3	7.6	5.6		7.2 m
		72 @ 0m	5-20 years					163 m <sup>2</sup>

Clear Stem (m): 2      Height to Lowest Part of Crown (m): 3

Notes: Heavy pruning in the past has limited the life expectancy of this tree.

Location of Defect	Type of Defect	Description of Defect	Severity	Defects	
				Retention Category	BS 5837
• Root plate	Soil level may have been altered over some of the rooting area	Access track 10m to E, from previous development	Moderate	B1	
• Crown	Weight biased	To E	Moderate		
• Trunk: between its base 6m	Branch wounds (occluding, some decay)	To W where branches removed over adjacent gardens	Moderate		
• Base of trunk	Epicormic growth may be obscuring mechanical defects		Minor		

Recommended Tree Work	Details	Work Priority	Category
• Remove epicormic shoots	To enable a thorough inspection in the future	Medium	1

• Co-dominant stems	Acute stem union (stable at time of inspection)	At 1.3m	Moderate	C1
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Recommended Tree Work	Details	Work Priority	Category
• Fell		Low	1 & 2
• Inspect after gales		When appropriate	1

• Previously pollarded at 7m; their is now about 2m of re-growth	Failed branches on the floor indicate regrowth poorly attached	Moderate	C1
• Co-dominant stems	Acute stem union (stable at time of inspection)	At 1m	Moderate

Recommended Tree Work	Details	Work Priority	Category
• Fell		Low	1 & 2
• Inspect after gales		When appropriate	1

## Clitheroe Royal Grammar School, on the south west boundary of the school grounds

Id No.	Species	Height (m)	Age Class	Crown Radius (m)					RPA Radius Area
				N	E	S	W	NW	
4.08	Cherry	5-10m 38 @ 0m	Mature 5-20 years	7	6.3	3			3.8 m 45 m <sup>2</sup>

Clear Stem (m): 0      Height to Lowest Part of Crown (m): 1

Notes:

4.09	Cherry plum	0-5m 30 @ 0	Mature 5-20 years	3	3	3	3		3.0 m 28 m <sup>2</sup>
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Clear Stem (m): 0      Height to Lowest Part of Crown (m): 0

Notes:

4.1	Birch	5-10m 20 @ 1.5	Mature 5-20	3	3	2.5	3	3.5	2.4 m 18 m <sup>2</sup>
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Clear Stem (m): 2      Height to Lowest Part of Crown (m): 2

Notes:

Defects		Retention Category
Location of Defect	Type of Defect	
• Root plate	Soil level may have been altered over some of the rooting area	CI
• Branch Stubs	To W	
• Crown	To N	

Recommended Tree Work	Details	Work Priority	Category
• None			

• Base of trunk	Acute stem union (stable at time of inspection)	Moderate	CI
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Recommended Tree Work	Details	Work Priority	Category
• Inspect after gales	When appropriate	1	

• Whole Tree	Weight biased to NW	Moderate	CI
• Crown (lower 1/3)	Low over footpath <2m To NW	Moderate	

Recommended Tree Work	Details	Work Priority	Category
• Crown raise above footpath to 2.5m		Medium	1 & 2

## Appendix 7

### Recommended Tree Work

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## RECOMMENDED TREE WORK

### Clitheroe Royal Grammar School, to the west of the school building

ID No.	Species	Remedial Action	Details	Priority	Category
1 01	Birch	Remove dead branches		Medium	1
		Inspect after gales		When appropriate	1
1 02	Birch	Remove dead branches		Medium	1
		Inspect after gales		When appropriate	1
1 03	Sorbus sp	Remove dead branches		Medium	1
		Remove branch(es)	To provide 1m clearance from the electricity sub-station		2
		Inspect after gales		When appropriate	1
1 04	Willow	Reduce	Lateral branch to N by 2 to 3m	Medium	1
		Inspect after gales		When appropriate	1
1 05	Norway Maple	Reduce branch(es)	To N by 2 to 3m to reduce effect of stem taper	Medium	1
		Remove dead branches		Medium	1
		Inspect after gales		When appropriate	1
1 06	Norway Maple	Remove dead branches		Low	1
		Inspect after gales		When appropriate	1
1 07	Hawthorn	Inspect after gales		When appropriate	1
		Fell	To allow the proposals to be implemented	If permission is granted	
1 08	Hawthorn	Fell	To allow the proposals to be implemented	If permission is granted	
		Reduce crown all round by	5m	Medium	1
		Inspect after gales		When appropriate	1
1 09	Hawthorn	Fell	To allow the proposals to be implemented	If permission is granted	
		Inspect after gales		When appropriate	1
		Reduce branch(es)	Over path to provide 2.5m height clearance	Medium	1



## RECOMMENDED TREE WORK

### Clitheroe Royal Grammar School, to the south of the school building

ID No.	Species	Remedial Action	Details	Priority	Category
2 01	Lime	Reduce branch(es)	To provide 2m clearance from proposed building	If permission is granted	
		Remove the smallest	Of the two crossing branches growing to the NW at 5m	Low	1 & 2
2 02	Lime	Inspect after gales		When appropriate	1
		Remove broken branches	On the W at 5m	Medium	1
2 03	Hawthorn	Inspect after gales		When appropriate	1
2 04	Ash	Reduce crown all round by	2-3m	Medium	1
		Remove dead branches		Medium	1
		Inspect after gales		When appropriate	1
2 05	Ash	Fell		High	1
2 06	Hawthorn	Inspect after gales		When appropriate	1
2 07	Hawthorn	Inspect after gales		When appropriate	1
2 08	Lime	Inspect after gales		When appropriate	1
2 09	Hawthorn	Fell		Medium	1
2 1	Hawthorn	Inspect after gales		When appropriate	1
		Remove dead branches		Low	1
2 11	Lime	Inspect after gales		When appropriate	1
2 12	Lime	Inspect after gales		When appropriate	1
2 13	Ash	Pollard	At around 6m but retain the lower epicormic shoots	High	1
		Fell		High	1
2 14	Sycamore	Inspect after gales		When appropriate	1
		Sever ivy	To enable a thorough inspection in the future	Medium	1
2 15	Ash	Inspect after gales		When appropriate	1

## RECOMMENDED TREE WORK

### Clitheroe Royal Grammar School, in the south corner of the school grounds

ID No.	Species	Remedial Action	Details	Priority	Category
3	Group	Inspect after gales		When appropriate	1

### Clitheroe Royal Grammar School, on the south west boundary of the school grounds

ID No.	Species	Remedial Action	Details	Priority	Category
4 01	Birch	Inspect after gales		When appropriate	1
4 03	Malus	Remove the stake			2
4 04	Malus	Remove the stake			2
4 05	Sycamore	Remove epicormic shoots	To enable a thorough inspection in the future	Medium	1
4 06	Sycamore	Inspect after gales		When appropriate	1
		Fell		Low	1 & 2
4 07	Norway Maple	Inspect after gales		When appropriate	1
		Fell		Low	1 & 2
4 09	Cherry plum	Inspect after gales		When appropriate	1
4 1	Birch	Crown raise above footpath to 2.5m		Medium	1 & 2

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