ARBORICULTURAL REPORT

to BS 5837:2012 at:

Todber Valley Caravan Park,
Burnley Road,
Clitheroe,
Lancashire,
BB7 4JJ

Prepared For:
GVA: Retail, Hotels and Leisure,
3 Brindleyplace,
Birmingham,
B1 2JB

July 2015
Contents

1. Introduction .................................................................................................................................................. 3
   1.1 Instructions and Brief............................................................................................................................... 3
   1.2 Survey Details......................................................................................................................................... 3

2. The Site ....................................................................................................................................................... 4
   2.1 Location.................................................................................................................................................. 4
   2.2 Site Description...................................................................................................................................... 4

3. The Trees ................................................................................................................................................... 5
   3.1 Legal .................................................................................................................................................... 5
   3.2 Summary of Results ............................................................................................................................... 5
   3.3 Arboricultural Impact Assessment ......................................................................................................... 6
   3.4 Protection of the Retained Trees ............................................................................................................ 7

4. Signature .................................................................................................................................................... 8

Appendix 1: Authors Qualifications & Experience ......................................................................................... 10
Appendix 2: Survey Methodology and Limitations of Report ........................................................................ 11
Appendix 3: Explanation of Tree Descriptions .............................................................................................. 12
Appendix 4: Tree Data .................................................................................................................................... 13
Appendix 5: Tree Constraints Plan .............................................................................................................. 14
Appendix 6: Tree Impacts Plan .................................................................................................................... 15
1. **Introduction**

1.1 **Instructions and Brief**

1.1.1 I am instructed by Rachel Whaley, Associate at Retail, Hotels and Leisure, GVA, on behalf of Park Resorts Ltd, to visit the site and prepare my findings in a report.

1.1.2 The report is required in accordance with BS 5837:2012 *Trees in relation to design, demolition and construction –Recommendations*, to provide detailed, independent, arboricultural advice on the trees present, in the context of potential development.

1.2 **Survey Details**

1.2.1 The survey took place during May 2015 by Adam Winson, Chartered Arboriculturist, MSc, BSc (Hons) MICFor, AIEEM (the author’s qualifications and experience are included within Appendix 1).

1.2.2 The trees were surveyed visually from the ground using “Visual Tree Assessment” techniques and in accordance with the guiding principles of British Standard 5837:2012 (explanatory details regarding the survey methodology are included within Appendix 2).

1.2.3 A full explanation of the tree data can be found at Appendix 3. Full details of all the trees surveyed are found in Appendix 4. For tree locations please refer to the Tree Constraints Plan at Appendix 5 and for detail on the impact of the development on the trees refer to Appendix 6.
2. The Site

2.1 Location

2.1.1 The site is located near to Clitheroe, a town and civil parish in the Borough of Ribble Valley in Lancashire, England.

2.1.2 The tree survey was limited to the area within and adjacent to the blue line, shown in the (2003) image below:

2.2 Site Description

2.2.1 The site currently consists of an open grassed area, adjacent to an existing caravan site, with associated access tracks.
3. **The Trees**

3.1 **Legal**

3.1.1 Due to the large potential penalties for illegally carrying out work to protected trees, before authorising any tree works a check should be made with the Local Planning Authority to see if the trees are covered by a Tree Preservation Order or if they are within a Conservation Area. If either applies, then statutory permission is required before any works can take place.

3.1.2 When appointing a tree surgeon, only properly qualified and experienced companies should be used, who have adequate Public Liability and Employer’s Liability Insurance. All tree work should be carried out according to British Standard 3998: 2010 *Tree Work - Recommendations*.

3.2 **Summary of Results**

3.2.1 The tree survey revealed 23 items of vegetation, comprised of 16 individual trees, and 7 groups of trees and hedges.

3.2.2 Of the surveyed vegetation: 1 tree is retention category ‘A’; 9 trees or groups are retention category ‘B’, and the remaining 13 trees or groups are retention category ‘C’ (explanatory details regarding the retention categories are included within Appendix 3).

3.2.3 The central areas of the site contain little of arboricultural significance. The majority of the surveyed vegetation is situated along or beyond the main development site boundary. Any additional off-site trees that could have an effect on a new development design have been included in the tree survey parameters.

3.2.4 The most significant trees surveyed are formed by 3 mature Oaks situated along the western boundary (T1, T3 and T4). Collectively these trees form an important part of the landscape and should be retained and incorporated into any new development.

3.2.5 Much of the vegetation is comprised of Hawthorn shrubs under varying forms of historical management. This ranges from naturalistic regeneration, previously managed hedges that have now reverted into occasional shrubby trees and more intensively managed boundary hedges.
3.2.6 When considered as a larger network, the Hawthorn groups do provide some moderate landscape value. However, as smaller groups or individual trees they are generally of low or average quality and value. Opportunities exist for replanting the boundary groups and improving the structure of the unmanaged hedge groups.

3.2.7 Limited access or dense ivy prevented some trees to be fully inspected (as detailed in appendix 4), and as such the measurements were estimated and the condition values are indicative only.

3.3 Arboricultural Impact Assessment

3.3.1 It is proposed to develop the site as a caravan park with associated hard-standing, access drives, footpaths and other facilities.

3.3.2 The proposals for the new development have been provided by my client and inform this arboricultural impact assessment and the tree impact plan at Appendix 6.

3.3.3 From assessing the new development proposals, no significant trees will require removal to facilitate the new development. The better value trees and groups have been incorporated into the development design and so the proposals have no significant negative arboricultural impacts.

3.3.4 New footpaths are proposed close to the higher value Oak trees (T3 & T4) and the Ash tree (T8). The location and route of these footpaths have been informed by the trees on site and avoid the trees detailed root protection areas. If required, special construction methods could be used for any drives or paths between existing trees, employing ‘no-dig’ type construction methods with a porous final surface so as to avoid root damage.

3.3.5 The development proposals require the removal of T15, a low value Hawthorn. While it may be possible to retain the hawthorn shrubs adjacent to T15, it is recommended to use the development as an opportunity to remove the low value hawthorn G12, T14, T15 and T16 as they have very limited long term prospects and would be unsuitable for retention as part of the new development.
3.3.6 A lack of management to the eastern and southern groups has led to degeneration. The vegetation within these groups are forming into lines of separated individual shrubby trees, and so losing value as a linear group feature. As such, the new development at this site provides the opportunity to undertake management and restoration planting of the groups and so improve the quality and long term value.

3.3.7 The new development includes extensive soft landscaping proposals including additional tree planting, as such the development will improve the sites long term tree cover.

3.4 Protection of the Retained Trees

3.4.1 Most retained trees will require protection by fencing in accordance with BS 5837: 2012, during the development phase. The protective fencing should protect the Root Protection Area (RPA) of the trees as highlighted on the plan at Appendix 5.

3.4.2 If required by the Local Planning Authority, an associated Arboricultural Method Statement, detailing protective fencing specifications can be provided.
4. Signature

I trust this report provides all the required information.

Signed

[Signature]

Adam Winson, Chartered Arboriculturist, MSc, BSc (Hons), MICFor, AIEEM.

29th July 2015

AWA Tree Consultants Limited
Union Forge
27 Mowbray Street
Sheffield
S3 8EN
Appendices

Appendix 1: Authors Qualifications and Experience
Appendix 2: Survey Methodology and Limitations
Appendix 3: Explanation of Tree Descriptions
Appendix 4: Tree Data
Appendix 5: Tree Constraints Plan
Appendix 6: Tree Impacts Plan
Appendix 1: Authors Qualifications & Experience

Mr Adam Winson Chartered Arboriculturist, MSc, BSc (Hons), ND, MICFor, AIEEM.

Experience
I have worked within the tree care profession for 18 years. I am a Chartered Arboriculturist and a Registered Consultant with the Institute of Chartered Foresters. My work ranges from individual expert tree inspections to managing trees on major multimillion pound housing and park developments and highway and infrastructure projects. My work often involves trees with Preservation Orders, insurance claims, subsidence claims and litigation. In 2010 I obtained an MSc in Arboriculture and Urban Forestry (with distinction), also gaining the top student award, and have had articles published in industry magazines and have original research published by the UK Forestry Commission.

Membership of Professional Bodies
Professional Member and Registered Consultant of the Institute of Chartered Foresters
Associate of the Institute of Ecology and Environmental Management

Education and Qualifications
MSc Arboriculture and Urban Forestry (Distinction) University of Central Lancashire - Myerscough College. 2006 -2009
BSc (Hons) Environmental Conservation 2:1. Sheffield Hallam University. 2002 2005
National Diploma in Arboriculture University of Lincoln/ Riseholme.1996-1998

Previous Experience
Consulting Arboriculturist at JCA Ltd. Halifax, Yorkshire 2005 to 2012
Freelance Arborist for various companies. Sheffield, South Yorkshire 2002 - 2005
Arborist for AAA Arbor /Sydney City Council Australia 2001- 2002
Arborist for The Tree Surgeon, Brisbane, Australia 2000- 2001
Groundsman/Climber at Lindsey Tree Services, Grimsby, Lincolnshire 1998 -2000
Groundsman/Climber at Freelance Baumpflege, Frankfurt, Germany 1998
Freelance Groundsman/Climber for various companies, Lincoln Area 1996-1998

Training, Awards & Qualifications
MSc Top Student Award University of Central Lancashire 2010
Bats and Bat Surveys- a foundation course for ecological consultants. BCT 2007
CPRE: Prize for best BSc dissertation on the theme of land management 2006
Appendix 2: Survey Methodology and Limitations of Report

The survey was undertaken in accordance with British Standard 5837 (2012) *Trees in relation to design, demolition and construction –Recommendations*. The trees were assessed objectively and without reference to any proposed site layout. The trees were surveyed from the ground using ‘Visual Tree Assessment’ (VTA) methodology. VTA is appropriate and is endorsed by industry guidance. It is used by arboriculturists to evaluate the structural integrity of a tree, relying on observation of trees biomechanical and physiological features. Measurements are obtained using a diameter tape, clinometer, distometer and loggers tape. Where this is not practical measurements are estimated. Tree groups have been identified in instances as defined in BS 5837 (2012). Shrubs and insignificant trees may have been omitted from the survey.

This report represents a BS5837 tree survey and should not accepted as a detailed tree safety inspection report; however, tree related hazards are recorded and commented upon where observed, yet no guarantee can be given as to the absolute safety or otherwise of any individual tree. All recommended tree work must be to BS 3998: 2010 - ‘Tree Work: Recommendations’.

The findings and recommendations contained within this report are valid for a period of twelve months from the date of survey. The author shall not be responsible for events which happen after this time due to factors which were not apparent at the time, and the acceptance of this report constitutes an agreement with these guidelines and terms.
Appendix 3: Explanation of Tree Descriptions

HEIGHT of the tree is measured from the stem base in metres. Where the ground has a significant slope the higher ground is selected.

CROWN HEIGHT is an indication of the average height at which the crown begins and includes information of the first significant branch and direction of growth.

STEM DIAMETER is measured at 1.5 metres above (higher) ground level. Where the tree is multi-stemmed at this point; the diameter is measured close to ground level or else a combined stem diameter is calculated.

CROWN SPREAD is measured from the centre of the stem base to the tips of the branches in all four cardinal points.

AGE CLASS of the tree is described as young, semi-mature, early-mature, mature, or over-mature.

PHYSIOLOGICAL CONDITION is classed as good, fair, poor, or dead. This is an indication of the health of the tree and takes into account vigour, presence of disease and dieback.

STRUCTURAL CONDITION is classed as good, fair or poor. This is an indication of the structural integrity of the tree and takes into account significant wounds, decay and quality of branch junctions.

LIFE EXPECTANCY is classed as; less than 10 years, 10-20 years, 20-40 years, or more than 40 years. This is an indication of the number of years before removal of the tree is likely to be required.

Retention Categories

A (marked green on Appendix 5) = retention most desirable. These trees are of very high quality and value with a good life expectancy.

B (marked in blue on Appendix 5) = retention desirable. These trees are of good quality and value with a significant life expectancy.

C (marked in grey on Appendix 5) = trees which could be retained. These trees are of low or average quality and value, and are in adequate condition to remain until new planting could be established.

U (marked in red on Appendix 5) = trees for removal. These trees are in such a condition that any existing value would be lost within 10 years.
Appendix 4: Tree Data
<table>
<thead>
<tr>
<th>Tree ID</th>
<th>Tree Species</th>
<th>Common Name</th>
<th>Latin Name</th>
<th>Measurements</th>
<th>Crown (m)</th>
<th>Tree Condition</th>
<th>Comments</th>
<th>Value</th>
<th>Management</th>
</tr>
</thead>
<tbody>
<tr>
<td>T1</td>
<td>Oak</td>
<td><em>Quercus cerris</em></td>
<td>Mature 12</td>
<td>1 650 No 2e 1 7 11 9 6</td>
<td>Situated along boundary area on beck banking; land drops to east; Soil erosion; Waterlogged; Exposed roots</td>
<td>Single stemmed; Twin stemmed at 2m; Slight lean; Metal on stem causing minor bark damage</td>
<td>Normal; Minor deadwood; Crown overhanging road</td>
<td>Situated in hedge shrubs - stem diameter estimated</td>
<td>Good</td>
</tr>
<tr>
<td>H2</td>
<td>Hawthorn</td>
<td><em>Crataegus monogyna</em></td>
<td>Early-mature 1.5</td>
<td>1 80 No 0 0 See Plan</td>
<td>No visual defects</td>
<td>Multiple stemmed; Old pruning wounds</td>
<td>Normal</td>
<td>Well managed hedge feature along boundary - occasional gaps. Occasional blackthorn &amp; holly</td>
<td>Good</td>
</tr>
<tr>
<td>T3</td>
<td>Oak</td>
<td><em>Quercus robur</em></td>
<td>Mature 16</td>
<td>1 870 No 3w 4 10 14 8 8</td>
<td>Historical movement around rooting area, yet appears stable. Soil erosion</td>
<td>Single stemmed; Multiple stemmed at 3m; Slight lean into site - away from road; Ivy covered; Minor cavities</td>
<td>Normal; Slightly unbalanced; Minor deadwood</td>
<td>Situated along boundary area. Ivy prevented detailed inspection</td>
<td>Good</td>
</tr>
<tr>
<td>T4</td>
<td>Oak</td>
<td><em>Quercus cerris</em></td>
<td>Mature 16</td>
<td>1 750 No 3w 5 5 12 12 8</td>
<td>No visual defects</td>
<td>Single stemmed; Vertical; Ivy covered; Minor cavity</td>
<td>Normal; Minor deadwood; Overhanging road</td>
<td>Situated along boundary area in hedge. Ivy prevented detailed inspection</td>
<td>Good</td>
</tr>
<tr>
<td>T5</td>
<td>Sycamore</td>
<td><em>Acer pseudoplatanus</em></td>
<td>Semi-mature 8</td>
<td>1 300 No 4n 4 4 4 4 4</td>
<td>No visual defects</td>
<td>Single stemmed; Vertical; Ivy covered</td>
<td>Normal</td>
<td>Situated along boundary area in hedge. Ivy prevented detailed inspection. Reasonable prospects</td>
<td>Good</td>
</tr>
<tr>
<td>Tree ID</td>
<td>Common Name</td>
<td>Latin Name</td>
<td>Maturity</td>
<td>Height (m)</td>
<td>Stems</td>
<td>Est. Stem Dia (mm)</td>
<td>Ave Height</td>
<td>N</td>
<td>E</td>
</tr>
<tr>
<td>--------</td>
<td>-------------</td>
<td>-----------------------------</td>
<td>----------</td>
<td>------------</td>
<td>-------</td>
<td>-------------------</td>
<td>------------</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>G6</td>
<td>Hawthorn</td>
<td>Crataegus monogyna</td>
<td>Mature</td>
<td>4.5</td>
<td>1</td>
<td>300</td>
<td>Yes</td>
<td>2n</td>
<td>2</td>
</tr>
<tr>
<td>G7</td>
<td>Holly</td>
<td>Ilex aquifolium</td>
<td>Mature</td>
<td>3</td>
<td>1</td>
<td>200</td>
<td>Yes</td>
<td>1n</td>
<td>1</td>
</tr>
<tr>
<td>T8</td>
<td>Ash</td>
<td>Fraxinus excelsior</td>
<td>Mature</td>
<td>14</td>
<td>1</td>
<td>650</td>
<td>No</td>
<td>3n</td>
<td>4</td>
</tr>
<tr>
<td>G9</td>
<td>Hawthorn</td>
<td>Crataegus monogyna</td>
<td>Early-mature</td>
<td>3.5</td>
<td>1</td>
<td>200</td>
<td>No</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>G10</td>
<td>Hawthorn</td>
<td>Crataegus monogyna</td>
<td>Mature</td>
<td>4</td>
<td>1</td>
<td>270</td>
<td>No</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Tree ID</td>
<td>Common Name</td>
<td>Latin Name</td>
<td>Maturity</td>
<td>Height (m)</td>
<td>Stems</td>
<td>Stem Dia (mm)</td>
<td>Ave Height</td>
<td>Estimated First Branch</td>
<td>N</td>
</tr>
<tr>
<td>--------</td>
<td>-------------</td>
<td>-----------------</td>
<td>----------</td>
<td>------------</td>
<td>-------</td>
<td>--------------</td>
<td>------------</td>
<td>------------------------</td>
<td>---</td>
</tr>
<tr>
<td>T11</td>
<td>Alder</td>
<td>Alnus glutinosa</td>
<td>Mature</td>
<td>9</td>
<td>1</td>
<td>450</td>
<td>Yes</td>
<td>2s</td>
<td>2.5</td>
</tr>
<tr>
<td>G12</td>
<td>Hawthorn</td>
<td>Crataegus</td>
<td>Semi-mature</td>
<td>2</td>
<td>1</td>
<td>180</td>
<td>No</td>
<td>1s</td>
<td>1</td>
</tr>
<tr>
<td>G13</td>
<td>Birch</td>
<td>Betula pendula</td>
<td>Young</td>
<td>3.5</td>
<td>1</td>
<td>80</td>
<td>No</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>T14</td>
<td>Hawthorn</td>
<td>Crataegus</td>
<td>Mature</td>
<td>3.5</td>
<td>1</td>
<td>350</td>
<td>No</td>
<td>1s</td>
<td>1</td>
</tr>
<tr>
<td>T15</td>
<td>Hawthorn</td>
<td>Crataegus</td>
<td>Mature</td>
<td>4</td>
<td>7</td>
<td>80</td>
<td>No</td>
<td>1s</td>
<td>1</td>
</tr>
<tr>
<td>T16</td>
<td>Hawthorn</td>
<td>Crataegus</td>
<td>Mature</td>
<td>5</td>
<td>1</td>
<td>300</td>
<td>Yes</td>
<td>2s</td>
<td>2</td>
</tr>
<tr>
<td>Tree No.</td>
<td>Tree Species</td>
<td>Common Name</td>
<td>Latin Name</td>
<td>Measurements</td>
<td>Crown (m)</td>
<td>Tree Condition</td>
<td>Value</td>
<td>Management</td>
<td>Priority (Mths)</td>
</tr>
<tr>
<td>----------</td>
<td>--------------</td>
<td>-------------</td>
<td>------------</td>
<td>--------------</td>
<td>-----------</td>
<td>----------------</td>
<td>-------</td>
<td>------------</td>
<td>----------------</td>
</tr>
<tr>
<td>T17</td>
<td>Sycamore</td>
<td>Acer</td>
<td>pseudoplatanus</td>
<td>Mature</td>
<td>16 1 600 Yes</td>
<td>3s</td>
<td>2.5 5 5 7 5</td>
<td>No visual defects</td>
<td>Single stemmed; Vertical</td>
</tr>
<tr>
<td>T18</td>
<td>Sycamore</td>
<td>Acer</td>
<td>pseudoplatanus</td>
<td>Mature</td>
<td>16 1 500 Yes</td>
<td>3n</td>
<td>5 6 5 4 4</td>
<td>No visual defects</td>
<td>Single stemmed; Vertical; Stubs; Minor cavities</td>
</tr>
<tr>
<td>T19</td>
<td>Ash</td>
<td>Fraxinus</td>
<td>excelsior</td>
<td>Semi-mature</td>
<td>10 1 300 Yes</td>
<td>3n</td>
<td>3 5 4 3 3</td>
<td>No visual defects</td>
<td>Single stemmed; Slight lean</td>
</tr>
<tr>
<td>T20</td>
<td>Horse Chestnut</td>
<td>Aesculus</td>
<td>hippocastanum</td>
<td>Mature</td>
<td>16 1 500 Yes</td>
<td>3w</td>
<td>3 6 5 5 6</td>
<td>No visual defects</td>
<td>Single stemmed; Vertical; Bark damage</td>
</tr>
<tr>
<td>T21</td>
<td>Oak</td>
<td>Quercus</td>
<td>robur</td>
<td>Semi-mature</td>
<td>4.5 1 150 No</td>
<td>2n</td>
<td>2 3 2 2 2</td>
<td>No visual defects</td>
<td>Single stemmed; Vertical</td>
</tr>
<tr>
<td>T22</td>
<td>Willow</td>
<td>Salix</td>
<td>caprea</td>
<td>Early-mature</td>
<td>9 7 150 No</td>
<td>3s</td>
<td>3 6 6 5 5</td>
<td>No visual defects; Soil compaction</td>
<td>Multiple stemmed at base; Tight union</td>
</tr>
<tr>
<td>Tree ID</td>
<td>Common Name</td>
<td>Latin Name</td>
<td>Tree Species</td>
<td>Measurements</td>
<td>Crown (m)</td>
<td>Tree Condition</td>
<td>Value</td>
<td>Management</td>
<td></td>
</tr>
<tr>
<td>---------</td>
<td>-------------</td>
<td>------------</td>
<td>--------------</td>
<td>--------------</td>
<td>-----------</td>
<td>----------------</td>
<td>-------</td>
<td>------------</td>
<td></td>
</tr>
<tr>
<td>T23</td>
<td>Willow</td>
<td>Salix caprea</td>
<td>Early-mature</td>
<td>Height (m) 8</td>
<td>Diameter (mm) 8</td>
<td>Estimated Height 130</td>
<td>No visual defects; Soil compaction</td>
<td>Normal</td>
<td>Fair</td>
</tr>
</tbody>
</table>
Appendix 5: Tree Constraints Plan

Todber Valley Holiday Park, Gisburn Ref: AWA1325

CATEGORY A: HIGH VALUE RETENTION MOST DESIRABLE

CATEGORY B: MODERATE VALUE RETENTION DESIRABLE

CATEGORY C: LOWER VALUE COULD BE RETAINED

CATEGORY U: FOR REMOVAL

RPA: ROOT PROTECTION AREA

BRITISH STANDARD 5837:2012 RETENTION CATEGORIES

Definitions of these categories can be found in Appendix 2 of the report.

N O R T H