Arboricultural Report

Architecture Initiative Ltd

Castle Academy

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This report has been commissioned to provide an assessment of the trees at Castle Academy, St Georges Street, Northampton, in accordance with the guidelines provided by BS5837:2012 Trees in relation to design, demolition and construction – Recommendations.

It consists of:

- A Tree Survey that records all relevant information about the trees on or adjacent to the site that may be impacted by the proposals. This includes a Tree Constraints Plan that shows the location of the trees on the site irrespective of any development considerations.
- An Arboricultural Impact Assessment to consider the impact that the development proposal may have on the trees. It provides details of how any adverse impact will be mitigated (including indicative protection measures) and includes an Arboricultural Impact Plan. This shows the location of the trees in relation to the proposed development and the above and below ground constraints posed by the trees. It will also show an illustration of the tree protection measures.

The purpose of this report is to demonstrate how the tree constraints have been considered in the design and layout of the site. It also provides the local authority Northamptonshire County Council, with the necessary information to assess the tree issues associated with the planning application.

The aim is to present the information in a manner that can easily be understood by people without specific knowledge of tree related matters.
The proposal is for the installation of temporary mobile classrooms on existing hard court play areas and parking. The removal of four low quality trees currently located between two internal fences is required. These trees are internal to the site and will have no significant impact to the wider amenity of the area.

Minor remedial pruning maybe required to prevent damage to small branches, less than 50mm in diameter, during the installation. Existing fencing, walls and hard standing will remain and will protect retained trees from damage.
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<thead>
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<th>Description</th>
<th>Reference</th>
<th>Version</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tree Schedule</td>
<td>15-2132</td>
<td>3</td>
</tr>
<tr>
<td>Tree Constraints Plan</td>
<td>D15-2133</td>
<td>2</td>
</tr>
<tr>
<td>Arboricultural Implications Plan</td>
<td>D15-2213</td>
<td>3</td>
</tr>
<tr>
<td>Tree Protection Plan</td>
<td>D15-2363</td>
<td>3</td>
</tr>
</tbody>
</table>
1. **INTRODUCTION**

**Instruction**

1.01. Written instruction was received from Rowan Parnell on 13\textsuperscript{th} November 2015 to undertake a tree survey and to prepare an Arboricultural Impact Assessment to supplement a full planning application for installation of temporary classrooms.

**Scope**

1.02. The survey has been carried out in accordance with the recommendations laid down by *BS5837:2012 Trees in relation to design, demolition and construction*.

1.03. The information collected during the survey has been used to assist in the preparation of a report to accompany a planning application. This report includes:

- A schedule of the relevant trees to include basis data and condition assessment.
- An appraisal of the impact that the proposed development may have on the trees and the resulting impact this may have on the local amenity.

**Site Description**

1.04. The site is located in the central area of Northampton, and consists of teaching accommodation, parking, playing fields and hard surfaced play areas.

1.05. The site is influenced by 11 mature trees and six young trees, located adjacent to the hard surfaced areas to be used for installation of temporary classrooms. Two trees are situated off-site in adjacent properties.

**Limitations**

1.06. The following limitations apply to this report:

- **Ecology and Archaeology**: Although trees can be a valuable ecological habitat and can grow in archeologically sensitive areas, I have no specialist expertise in these disciplines and this report does not consider those aspects.

- **Tree Safety**: Whilst every effort has been made to ensure that comments relating to the tree surveyed are accurate, it must be noted that no tree have been climbed, no internal inspections carried out and no excavation of root areas has taken place. As such this report should not be taken to mean or imply that any of the inspected trees should be considered safe. No tree can be guaranteed to be 100% safe as some defects are not detectable by visual non-
climbed, non-invasive inspection. Failure of an apparently healthy tree, either in part or totally may occur as a result of physical or physiological stress.
2. TREE SURVEY AND CONSTRAINTS

Tree Survey

2.01. A tree survey was undertaken on 24th November 2015 and a copy of the recorded data can be seen in the tree schedule attached to this report (Ref: 15-2132).

2.02. The tree survey considered all trees that have the potential to be impacted by any development proposals. This included trees that are outside the application boundary, but within influencing distance. The extent of the tree survey has been marked on the Arboricultural Impact Plan (AIP) attached to this report (Ref: D15-2213).

2.03. The purpose of the tree survey has been to provide guidance to the developer on the existing tree stock and to inform the site design and layout. The results of the survey allow the opportunity to balance the retention of significant trees against the opportunity to enhance the existing tree stock through proactive management.

2.04. The tree survey has been undertaken without influence of the proposed site layout and prior to any works being undertaken on the site.

Tree Constraints

2.05. The results of the tree survey are graphically presented on the Tree Constraints Plan.

2.06. The above ground constraints posed by canopy spread are plotted as a continuous line around the tree.

2.07. The below ground constraints posed by the root protection area (RPA) have been plotted as a magenta line with the text RPA inscribed.

2.08. A summary of my assessment of the quality of trees, hedges and woodlands that have been identified on the site is summarised in Table 1.

Table 1 - An overview of tree quality in the surveyed area

<table>
<thead>
<tr>
<th>Category</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>8</td>
</tr>
<tr>
<td>B</td>
<td>9</td>
</tr>
<tr>
<td>C</td>
<td>None</td>
</tr>
<tr>
<td>U</td>
<td>17</td>
</tr>
</tbody>
</table>

2.09. Full details of the assessment criteria for the tree survey can be found in Appendix 1.
3. ARBORICULTURAL IMPACT ASSESSMENT

Development Proposal

3.01. The proposal is to install temporary mobile classrooms in areas of existing hard standing.

Impact Assessment

3.02. The impact assessment has been graphically presented by the Arboricultural Impact Plan (AIP) that is attached to this report (Ref: D15-2213).

3.03. The purpose of the AIP is to identify:

- Trees that are to be retained and protection measures that will be required to ensure they are sustainable post-development
- Trees that are to be removed
- Trees that require facilitation pruning
- The impacts have been considered (where possible) in terms of arboricultural impact, ecological impacts, and landscape and visual impacts.

Arboricultural Impacts

3.04. Tree removal and pruning has been limited to that which is necessary and unavoidable to the development of the site. Consideration has been given to species attributes and the tolerance of individual trees to disturbance. Consideration has also been given to the presence of surrounding trees and features of the site which may have an influence on retained trees.

3.05. Table 2 provides a detailed assessment of those trees being removed.

Table 2 - Detailed Assessment of Tree Removals

<table>
<thead>
<tr>
<th>Tree Number (Species)</th>
<th>Reason for removal</th>
<th>Evaluation of arboricultural impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>T9 Elder</td>
<td>Tree located in proposed footprint of Temporary mobile classrooms.</td>
<td>Trees are low quality currently growing between two internal fences. Their removal will have negligible visual impact to the wider area.</td>
</tr>
<tr>
<td>T10 Sycamore</td>
<td></td>
<td></td>
</tr>
<tr>
<td>T11 Sycamore</td>
<td></td>
<td></td>
</tr>
<tr>
<td>T12 Sycamore</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3.06. Table 3 provides a detailed assessment of the requirement for facilitation pruning on retained trees:
Table 3 - Detailed Assessment of Remedial Pruning Works

<table>
<thead>
<tr>
<th>Tree Number (Species)</th>
<th>Reason for remedial works</th>
<th>Evaluation of arboricultural impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>T4-T8 Limes</td>
<td>Minor pruning maybe required to prevent damage to branches during installation of mobile classrooms.</td>
<td>Minimal pruning to shorten back branches by a maximum of 1-2m will have an negligible impact.</td>
</tr>
<tr>
<td>T16 Apple</td>
<td></td>
<td></td>
</tr>
<tr>
<td>T17 Sorbus</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3.07. All pruning works will be undertaken by a suitably qualified arboricultural contractor in accordance with BS3998:2010 *Tree Works – Recommendations*. This will ensure that the pruning cuts are carried out correctly and will not cause any structural or physiological defects in the future.

*Ecological Impacts*

3.08. An extended phase one ecological assessment of the site has been undertaken (Ref: 15-2202). The impact assessment considered in this report relates specifically to potential loss of habitat and biodiversity through tree removal.

*Landscape and Visual Impacts*

3.09. The proposal requires the removal of four trees internal to the site. The impact on the wider area will be negligible.

*Mitigation through Landscape and Replacement Planting*

3.10. Mitigation replacement planting will be carried out as part of the full application for 55 Barrack Road.

*Protection of Retained Trees*

3.11. The successful retention of those trees that will remain on the site will be dependent upon the quality and maintenance of any protection system that is put in place. Indicative tree protection measures have been considered within this report.

3.12. The exiting fencing around the hard court area is to be retained and will provide protection to retained trees. A small number of overhanging branches may require pruning back to prevent contact damage.

3.13. Existing hard standing is to be retained in all areas where mobile classrooms are to be installed; therefore there will be no impact on the Root Protection Areas (RPAs) of retained trees.
3.14. It is anticipated that an Arboricultural Method Statement will be required as a condition of any planning consent to provide detail of how the necessary tree protection can be implemented.

3.15. The processes of construction are highly unlikely to have a detrimental effect upon the health of the retained trees assuming recommendations made in this report are adhered to at all times by the contractors.
4. **SUMMARY OF THE ARBORICULTURAL IMPACTS BY THIS DEVELOPMENT PROPOSAL**

4.01. The development proposal is for installation of temporary mobile classrooms.

4.02. This development will require the removal of four trees. The impact that the loss of these trees will have on the wider community has been considered in arboricultural, ecological and landscape terms. The design proposal has considered these impacts and where necessary mitigation measures have been proposed to ensure that there is no loss to the amenity of the locality.

4.03. Tree loss has been limited to that which is necessary to enable the development to take place. Replacement tree planting will be provided as part of the full application for 55 Barrack Road. The long term impact of this replacement planting will be for a net increase in canopy cover, providing additional habitat and ensuring that the development blends into the local character of the landscape setting.
5. APPENDICES

Appendix 1 - Tree Survey Criteria (BS5837:2012)

5.01. The assessment of the trees has been carried out in accordance with the guidance provided in Annexe C of BS5837. In summary this requires that any tree on the site with a stem diameter of over 75mm at 1.5m above ground level is recorded.

5.02. All observations were made from ground level, without detailed investigation with regard to the general condition of the tree.

5.03. Trees that are located outside of the site have been considered as part of this survey, and have been annotated on the accompanying plan as such.

5.04. Stem diameter measurements were taken using a girding tape and in accordance with Annexe D of BS5837. Where access to the base of the tree was not possible for any reason, the diameter has been estimated.

5.05. Height, crown spread and canopy clearance measurements are recorded in accordance with the measurement convention detailed in paragraph 4.4.2.6 of BS5837.

5.06. The trees are categorised in an order defined in Table 1 of BS5837, a copy of which can be seen in below in Figure 1, but which can be summarised as:

- **A Category**   Trees of high quality and value in such a condition as to be able to make a substantial contribution for a minimum of 40 years.
- **B Category**   Trees of moderate quality and value in such a condition as to make a significant contribution for a minimum 20 years.
- **C Category**   Trees of low quality and value currently in adequate condition able to remain until new planting can be established. These trees are expected to remain for a minimum of 10 years. It also includes young trees with a stem diameter less than 150mm measured at 1.5 metres above ground level.
- **U Category**   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 or forestry management.

5.07. Additionally, BS5837:2012 provides subcategories 1-3 within the category system outlined above which indicate the area(s) in which a tree or group retention value lies.

- Mainly arboricultural.
- Mainly landscape.
Table 1 Cascade chart for tree quality assessment

<table>
<thead>
<tr>
<th>Category and definition</th>
<th>Criteria (including subcategories where appropriate)</th>
<th>Intfitation on plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trees unsuitable for retention (see Note)</td>
<td>Trees that have a serious, immediate, structural defect, such that their early loss is expected due to collapse.</td>
<td>See Table 2</td>
</tr>
<tr>
<td>Category A</td>
<td>Including those that will become unsuitable after removal of other category A trees (e.g. where, for whatever reason, the loss of companion shelter cannot be mitigated by pruning)</td>
<td></td>
</tr>
<tr>
<td>Trees in such condition that they can at realistically be retained as living trees in the context of the current land use for longer than 10 years</td>
<td>Trees that are dead or are showing signs of significant, immediate and irreversible overall decline</td>
<td></td>
</tr>
<tr>
<td>Trees infected with pathogens of significance to the health and/or safety of other trees nearby, or very low quality trees suppressing adjacent trees of better quality</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Note:** Category U trees can have existing or potential conservation value which it might be desirable to preserve; see 4.2.7.

1. **Mainly arboricultural qualities**
2. **Mainly landscape qualities**
3. **Mainly cultural values, including conservation**

Category A

- Trees of high quality with an estimated remaining life expectancy of at least 40 years
- Trees that are particularly good examples of their species, especially if rare or unusual; or those that are essential components of groups of formal or semi-formal arboricultural features (e.g. the dominant and/or principal trees within an avenue)
- Trees, groups or woodlands of particular visual importance as arboricultural and/or landscape features

Category B

- Trees of medium quality with an estimated remaining life expectancy of at least 20 years
- Trees that might be included in category A, but are downgraded because of impaired condition (e.g. presence of significant though remediable defects, including unassymptotic post management, and storm damage), such that they are unlikely to be suitable for retention for beyond 40 years or trees lacking the special quality necessary to merit the category A designation
- Trees present in numbers, usually growing as groups or woodlands, such that they attract a higher collective meaning than they might as individuals; or trees occurring as collectives but isolated so as to make little visual contribution to the wider locality

Category C

- Trees of low quality with an estimated remaining life expectancy of at least 16 years, or young trees with a stem diameter below 150 mm
- Unremarkable trees of very limited merit or such impaired condition that they do not qualify in higher categories
- Trees present in groups or woodlands, but without this conferring on them significantly greater collective landscape value, and/or trees offering little or only temporary transient landscape benefits

See Table 2
<table>
<thead>
<tr>
<th>Tree No.</th>
<th>Tag No.</th>
<th>Species</th>
<th>Botanical Name</th>
<th>H (m)</th>
<th>Stem Dia.</th>
<th>No of Stems</th>
<th>Branch Spread (m)</th>
<th>CC (m)</th>
<th>LB (m)</th>
<th>DBH (m)</th>
<th>Age</th>
<th>PC</th>
<th>SC</th>
<th>Comments</th>
<th>Recommendations</th>
<th>ULE</th>
<th>RPA (m2)</th>
<th>RPA Radial distance (m)</th>
<th>Direct Removal?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>N/A</td>
<td>Lime</td>
<td>Tilia <em>pseudoplatanus</em></td>
<td>9</td>
<td>530</td>
<td>1</td>
<td>5</td>
<td>51</td>
<td>52</td>
<td>4</td>
<td>North M</td>
<td>Fair</td>
<td>Fair</td>
<td>Previously pollarded at 4m, epimpricums restricting inspection of base of tree.</td>
<td>Visually important trees, Reduce overhanging branches to prevent damage. Could be managed as pollards. Remove epimpricums.</td>
<td>20-40</td>
<td>B2</td>
<td>125</td>
<td>6</td>
</tr>
<tr>
<td>2</td>
<td>N/A</td>
<td>Sycamore</td>
<td><em>Acer pseudoplatanus</em></td>
<td>7</td>
<td>495</td>
<td>1</td>
<td>8</td>
<td>91</td>
<td>82</td>
<td>6</td>
<td>2</td>
<td>East M</td>
<td>M</td>
<td>M</td>
<td>Numerous surface roots</td>
<td>Visually important trees, Reduce overhanging branches to prevent damage. Could be managed as pollards. Remove epimpricums.</td>
<td>20-40</td>
<td>B2</td>
<td>113</td>
</tr>
<tr>
<td>3</td>
<td>N/A</td>
<td>Lime</td>
<td>Tilia <em>pseudoplatanus</em></td>
<td>10</td>
<td>600</td>
<td>1</td>
<td>3</td>
<td>51</td>
<td>52</td>
<td>4</td>
<td>West M</td>
<td>M</td>
<td>M</td>
<td>Previously pollarded at 4m, epimpricums restricting inspection of base of tree.</td>
<td>Visually important trees, Reduce overhanging branches to prevent damage. Could be managed as pollards. Remove epimpricums.</td>
<td>20-40</td>
<td>B2</td>
<td>163</td>
<td>7</td>
</tr>
<tr>
<td>4</td>
<td>N/A</td>
<td>Lime</td>
<td>Tilia <em>pseudoplatanus</em></td>
<td>9</td>
<td>630</td>
<td>1</td>
<td>5</td>
<td>51</td>
<td>52</td>
<td>5</td>
<td>West M</td>
<td>M</td>
<td>M</td>
<td>Previously pollarded at 4m, epimpricums restricting inspection of base of tree.</td>
<td>Visually important trees, Reduce overhanging branches to prevent damage. Could be managed as pollards. Remove epimpricums.</td>
<td>20-40</td>
<td>B2</td>
<td>177</td>
<td>8</td>
</tr>
<tr>
<td>5</td>
<td>N/A</td>
<td>Lime</td>
<td>Tilia <em>pseudoplatanus</em></td>
<td>10</td>
<td>610</td>
<td>1</td>
<td>5</td>
<td>51</td>
<td>52</td>
<td>5</td>
<td>West M</td>
<td>M</td>
<td>M</td>
<td>Previously pollarded at 4m, epimpricums restricting inspection of base of tree.</td>
<td>Visually important trees, Reduce overhanging branches to prevent damage. Could be managed as pollards. Remove epimpricums.</td>
<td>20-40</td>
<td>B2</td>
<td>163</td>
<td>7</td>
</tr>
<tr>
<td>6</td>
<td>N/A</td>
<td>Lime</td>
<td>Tilia <em>pseudoplatanus</em></td>
<td>10</td>
<td>630</td>
<td>1</td>
<td>5</td>
<td>51</td>
<td>52</td>
<td>5</td>
<td>West M</td>
<td>M</td>
<td>M</td>
<td>Previously pollarded at 4m, epimpricums restricting inspection of base of tree.</td>
<td>Visually important trees, Reduce overhanging branches to prevent damage. Could be managed as pollards. Remove epimpricums.</td>
<td>20-40</td>
<td>B2</td>
<td>177</td>
<td>8</td>
</tr>
<tr>
<td>7</td>
<td>N/A</td>
<td>Lime</td>
<td>Tilia <em>pseudoplatanus</em></td>
<td>10</td>
<td>500</td>
<td>1</td>
<td>5</td>
<td>51</td>
<td>52</td>
<td>5</td>
<td>West M</td>
<td>M</td>
<td>M</td>
<td>Previously pollarded at 4m, epimpricums restricting inspection of base of tree.</td>
<td>Visually important trees, Reduce overhanging branches to prevent damage. Could be managed as pollards. Remove epimpricums.</td>
<td>20-40</td>
<td>B2</td>
<td>163</td>
<td>6</td>
</tr>
<tr>
<td>8</td>
<td>N/A</td>
<td>Lime</td>
<td>Tilia <em>pseudoplatanus</em></td>
<td>10</td>
<td>640</td>
<td>1</td>
<td>5</td>
<td>51</td>
<td>52</td>
<td>5</td>
<td>West M</td>
<td>M</td>
<td>M</td>
<td>Previously pollarded at 4m, epimpricums restricting inspection of base of tree.</td>
<td>Visually important trees, Reduce overhanging branches to prevent damage. Could be managed as pollards. Remove epimpricums.</td>
<td>20-40</td>
<td>B2</td>
<td>191</td>
<td>8</td>
</tr>
<tr>
<td>9</td>
<td>N/A</td>
<td>Elder</td>
<td>Sambucus nigra</td>
<td>4</td>
<td>330</td>
<td>1</td>
<td>2</td>
<td>21</td>
<td>22</td>
<td>2</td>
<td>South M</td>
<td>Poor</td>
<td>Fair</td>
<td>Disestimated as tree growing between two boundary fences. Not plotted on top/indicative position.</td>
<td>Low quality trees, easily mitigated with replacement planting. Remove due to proximity of fencing.</td>
<td>10-20</td>
<td>C2</td>
<td>48</td>
<td>4</td>
</tr>
<tr>
<td>10</td>
<td>N/A</td>
<td>Sycamore</td>
<td><em>Acer pseudoplatanus</em></td>
<td>5</td>
<td>130</td>
<td>1</td>
<td>2</td>
<td>21</td>
<td>22</td>
<td>2</td>
<td>South Y</td>
<td>Fair</td>
<td>Fair</td>
<td>Disestimated as tree growing between two boundary fences. Not plotted on top/indicative position.</td>
<td>Low quality trees, easily mitigated with replacement planting. Remove due to proximity of fencing.</td>
<td>10-20</td>
<td>C2</td>
<td>7</td>
<td>2</td>
</tr>
<tr>
<td>11</td>
<td>N/A</td>
<td>Sycamore</td>
<td><em>Acer pseudoplatanus</em></td>
<td>5</td>
<td>227</td>
<td>2</td>
<td>3</td>
<td>31</td>
<td>32</td>
<td>2</td>
<td>South Y</td>
<td>Fair</td>
<td>Fair</td>
<td>Disestimated as tree growing between two boundary fences, causing minor surface damage to hard standing. Not plotted on top/indicative position.</td>
<td>Low quality trees, easily mitigated with replacement planting. Remove due to proximity of fencing.</td>
<td>10-20</td>
<td>C2</td>
<td>23</td>
<td>3</td>
</tr>
<tr>
<td>12</td>
<td>N/A</td>
<td>Sycamore</td>
<td><em>Acer pseudoplatanus</em></td>
<td>5</td>
<td>170</td>
<td>1</td>
<td>3</td>
<td>31</td>
<td>32</td>
<td>2</td>
<td>South Y</td>
<td>Fair</td>
<td>Fair</td>
<td>Disestimated as tree growing between two boundary fences. Not plotted on top/indicative position.</td>
<td>Low quality trees, easily mitigated with replacement planting. Remove due to proximity of fencing.</td>
<td>10-20</td>
<td>C2</td>
<td>14</td>
<td>2</td>
</tr>
<tr>
<td>13</td>
<td>N/A</td>
<td>Prunus</td>
<td>Prunus sp.</td>
<td>4</td>
<td>90</td>
<td>1</td>
<td>1</td>
<td>11</td>
<td>11</td>
<td>1</td>
<td>North Y</td>
<td>Fair</td>
<td>Fair</td>
<td>Young planting, still staked. Not plotted on top/indicative position.</td>
<td>Easily replaced, could be transplanted if possible.</td>
<td>20-40</td>
<td>C2</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>14</td>
<td>N/A</td>
<td>Apple</td>
<td>Malus sp.</td>
<td>4</td>
<td>85</td>
<td>1</td>
<td>1</td>
<td>11</td>
<td>11</td>
<td>1</td>
<td>North Y</td>
<td>Fair</td>
<td>Fair</td>
<td>Young planting, still staked. Not plotted on top/indicative position.</td>
<td>Easily replaced, could be transplanted if possible.</td>
<td>20-40</td>
<td>C2</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>15</td>
<td>N/A</td>
<td>Apple</td>
<td>Malus sp.</td>
<td>4</td>
<td>105</td>
<td>1</td>
<td>1</td>
<td>11</td>
<td>11</td>
<td>1</td>
<td>North Y</td>
<td>Fair</td>
<td>Fair</td>
<td>Young planting, still staked. Not plotted on top/indicative position.</td>
<td>Easily replaced, could be transplanted if possible.</td>
<td>20-40</td>
<td>C2</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>16</td>
<td>N/A</td>
<td>Apple</td>
<td>Malus sp.</td>
<td>5</td>
<td>180</td>
<td>1</td>
<td>4</td>
<td>41</td>
<td>42</td>
<td>3</td>
<td>North M</td>
<td>Fair</td>
<td>Fair</td>
<td>Mature tree off site</td>
<td>10-20</td>
<td>C2</td>
<td>64</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>N/A</td>
<td>Berberis</td>
<td>Berberis sp.</td>
<td>5</td>
<td>200</td>
<td>1</td>
<td>3</td>
<td>31</td>
<td>32</td>
<td>3</td>
<td>North M</td>
<td>Fair</td>
<td>Fair</td>
<td>Mature tree off site</td>
<td>10-20</td>
<td>C2</td>
<td>45</td>
<td>4</td>
<td></td>
</tr>
</tbody>
</table>

**Key to Notations:**
- **Tag No.**: Unique identifier for each tree.
- **Species**: Scientific name of the tree species.
- **Botanical Name**: Common name of the tree species.
- **H (m)**: Height of the tree in meters.
- **Stem Dia.**: Diameter of the tree stem.
- **No of Stems**: Number of stems for a multiple-stemmed tree.
- **Branch Spread (m)**: Width of the branch spread.
- **CC (m)**: Crown clearance above ground level.
- **LB (m)**: Lowest branch height in meters.
- **Age**: Age of the tree in years.
- **PC**: Physiological condition.
- **SC**: Structural condition.
- **Comments**: Additional comments on the tree.
- **Recommendations**: Recommendations for tree management.
- **ULE**: Useful Life Expectancy of tree in years.
- **RPA (m2)**: RPA Radial distance in meters.
- **RPA Radial distance (m)**: Radial distance from the tree to the property boundary.
- **Direct Removal?**: Whether the tree is to be removed immediately.

**Survey Data:**
- **Surveyor**: Shaun Phillips
- **Date of survey**: 24/11/2015
- **Client**: Architecture Initiative Ltd
- **Location**: Castle Academy

**Tree Survey:**
BS5837: 2012 Tree Survey
Arboricultural Impacts Plan
Castle Academy
Architecture Initiative Ltd
3614/12/D15-2213

Tree Survey for Castle Academy

Area of Proposed Development

Legend:
- Category A trees
- Category B trees
- Category C trees
- Category D trees or trees for removal
- Root Protection Area
- Tree Crown Spread
- Proposed Temporary Works
- Indicative application area

- Arboricultural Consultants
- Site Surveyor
- Client
- Architect
- Structural Engineer
- Quantity Surveyor
- Planner

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