Arboricultural Report

BS5837 Tree Survey and Impact Assessment

At

Former St Mathews Infant School
Borstal Street
Borstal
Rochester
Kent
ME1 3NN

Client
King & Johnston Homes

By
Sam Bateson

Date
25th April 2014
Site Former St Mathews Infant School
Inspection Date 4th February 2014
Inspected By Sam Bateson

Terms of Reference

• I received instructions from Mr John Pike to carry out a survey of the trees with regards a proposed development within the grounds of the above address.

• The tree survey and arboricultural impact assessment are to be produced with relevant measurements in line with British Standard BS5837: 2012 ‘Trees in Relation to Design, Demolition and Construction’ for all the trees within the boundary of the proposed dwelling.

• An Arboricultural Method Statement (AMS) has not been requested at this stage.

• To make any other observations or recommendations as required based on the survey.

Scope of Report

• This preliminary assessment did not include a detailed examination of tree root systems, aerial access, or the use of internal decay detection equipment. A further supplementary Detailed Report may be advised as a result of the findings herein.

• The inspection was carried out with the aid of the following equipment:
  o Sounding mallet
  o Metal probe
  o 30m measuring tape
  o Rounded down diameter tape (Stem diameter measured at 1.5m)
  o Compass
  o TruPulse 200 Laser Clinometer

• The tree data gathered is for the purposes of a development site survey in accordance with BS5837: 2012 and is not a detailed tree safety inspection.

• A tree owner is advised to have all trees in their ownership regularly inspected; trees are to be re-inspected after strong winds.

• The information contained in this report should be considered valid for a period of 12 months from date of issue.
Third Party Disclaimer

Any disclosure of this report to a third party is subject to this disclaimer. The report was prepared by Chartwell Tree Consultants at the instruction of, and for the use by, our client named within the report, the architect of the proposed development and the Local Authority Planning Department. This report does not in any way constitute advice to any third party who is able to access it by any means. Chartwell Tree Consultants excludes to the fullest extent lawfully permitted all liability whatsoever for any loss or damage arising from reliance on the content of this report.

Site Information

- The site consists of overgrown scrub land with areas of thick, tufted grass, bramble, self-sown and mature trees. There is a significant change in levels from southeast to northwest.

Rooting Zone

- Numerous trees are growing atop steep banks and have raised surface roots.
- There is no evidence of any recent root disturbance or radial trenching having recently taken place.

Arboricultural Impact Assessment (AIA)

- **Description of the Proposed Development**
  It is proposed to level off the land in stages and construct a range of new residential properties.

- **Legal Constraints**
  Enquiries made of the Local Planning Authority (Medway Council) confirm that some of the trees on the property are covered by a Tree Preservation Order.
**Impact of the Proposed Development on the Amenity Value of the Trees**

- **Direct Loss of Trees**

  I would recommend the removal of the Sycamores (T2, T4, T5 & T20), Ash (T6), Field Maples (T16) and Prunus (3P4) due their proximity to the proposed construction and access for maintenance vehicles to pocket park, and as **Category C** trees these should not therefore be considered as a constraint to the development.

  The poor physiological and structural condition of the Elm (T10), Field Maple (T12) and Group (G3) are such that their removal is recommended on purely arboricultural grounds regardless of whether the development is permitted or not. For the purposes of the survey, these trees have been recorded as **Category U** (BS5837: 2012, Table 1) being in a condition where they cannot be retained as living trees for longer than 10 years. These trees are extremely poor specimens with any remedial works considered unlikely to produce trees with any degree of longevity.

  The pre-application meeting has recommended the retention of the hedgerow (G3) on the SW boundary, however upon inspection this area is mostly populated with sporadic Elm trees interspersed with one Hawthorn and one Ash. In some places the trees are 5-7m apart with the rest of the area being heavily covered in bramble and ivy. With the above in mind I do not believe it possible to restore them into a natural hedge boundary.

  I have recommended the removal of the TPO’d sycamore (T1) due to its proximity to the proposed development, even if special engineering methods are used to retain it, post development pressure to prune with be a significant issue.

  It is my opinion that the loss of these trees will not have a significant detrimental impact on visual amenity.

  As a compromise to the loss of G3 and T1 I would recommend a new double row hedge containing Hawthorn, Blackthorn and Field Maples be planted along the SW boundary. I would also recommend this hedge be interspersed with 10-12 Oak standards that will soon form a wildlife and landscape asset.

- **Retained Trees**

  Providing that adequate tree protection and special engineering measures are implemented, the amenity value of the trees on the site will be preserved. Retained trees will be protected from soil compaction and impact damage where necessary by protective barriers and / or systems and methods of ground protection. Protective barriers will be fit for purpose, complying with BS5837: 2012 unless otherwise agreed with the Local Planning Authority (LPA). Such alternatives may include the use of temporary buildings or existing hard surfaces as part of tree protection or alternative fencing specification for areas of lower risk e.g. areas for future planting.
Above and Below Ground Constraints

- The British Geological Survey indicates the underlying geology to be Lewes Nodular Chalk Formation. This is generally considered not to contain any shrinkable soil. It is recommended that a geotechnical specialist / structural engineer undertake a detailed soil investigation to determine the actual underlying geology and Plasticity Index which may then inform the foundation design.

The design of any new planting and landscape proposals should be based upon a soil analysis which considers the pH and any nutrient deficiencies or imbalances.

- No significant incursion into the RPA’s of any retained trees has been proposed.
- As the access to pocket park is now to go via the public footpath on the south west border it will not be necessary to install an access route in between the TPO’d Field Maples.
- It is my professional opinion the development will not result in the significant loss of rooting area and will not result in any significant root damage. This is based upon:
  - Precautions (e.g. manual excavation) and site supervision to ensure that any roots encountered are dealt with appropriately.
  - Leaf fall in the autumn months can be mitigated by the use of non-slip paving areas and guards/grilles on the gutters and gullies.
  - Sufficient distances (in accordance with BS5837: 2005 Table 3) should be allowed between young trees / new planting and built structures to minimize the impact of future growth.

Construction of the Proposed Development

- **Ground Level Changes**
  There are no proposed ground level changes.

- **Planning of Construction Operations**
  The proposed design layout makes allowance for the following:
  - Access for underground utilities without the need to enter any RPA’s
  - Location for delivery and storage of materials, welfare facilities and contractors’ car parking
  - A low intensity, low impact build programme

- **End Use of the Space**
  The proposed layout offers a reasonable degree of space for the intended use of the site. The retained trees should not result in any conflicts with the use of the site and so will avoid post development pressure to remove further trees.

- **Mitigation of Tree Removal**
  The space available and the number of trees currently surrounding the site allows for the planting of new trees.
**Conclusion**

The adoption of a detailed Arboricultural Method Statement should ensure there are no adverse effects as the result of any excavations and construction operations.

**Arboricultural Method Statement (AMS)**

**Purpose**

An Arboricultural Method Statement (AMS) will be required where any demolition or construction operations, including access, are proposed within the RPA (or crown spread where this is greater) of any retained trees. This applies to trees within the scope of the proposed development.

The intention of the method statement is to minimise the risk of any adverse impact on the trees to be retained (especially damage caused by excavation and soil compaction) and to clearly demonstrate how relevant operations will be undertaken. It should also specify appropriate tree and ground protection measures in accordance with BS5837 which will be detailed on a Tree Protection Plan (TPP).

**Heads of Terms**

Areas of relevance to the proposed development to be addressed in the detailed Arboricultural Method Statement include:

**Pre-development tree works**

All works will be carried out in accordance with BS3998: 2010 ‘Recommendations for Tree Work’ and in line with a schedule of works agreed by the Local Planning Authority as part of any approved planning permission.

**Tree protective barriers and ground protection measures (specification, location and dimensions)**

Protective fencing will be fit for purpose, complying with Figures 2-4 in BS5837:2012 or any other specification agreed in writing with the Local planning Authority. For example, site huts or temporary buildings may be used as part of the protective barriers (BS5837 section 6.2.2.3). They shall be erected prior to any demolition or construction (excluding pre-development tree works) taking place at distances specified within the approved plans and remain in place until completion of the construction phase. Removal is only to take place following the approval of the Local Planning Authority / Local Authority Tree Officer.

**Site access, parking and site facilities**

To be in accordance with the plans agreed by the Local Planning Authority and outside of the Root Protection Areas of any retained trees unless appropriate ground protection measures are in place and approved by the LPA.

**Works programme / phasing**

The phasing and timing of any works likely to impact on the Root Protection Area of any retained trees is to be clearly identified to ensure that adequate protection, precautions and supervision are in place.
Storage of spoil and building materials
No spoil or building materials are to be stored with the Root Protection Areas of any retained tree unless specifically agreed by the Local Planning Authority. Details of the Construction Exclusion Zones can be seen on the Tree Protection Plan.

Demolition of the existing building(s) and removal of hard surfacing
In accordance with detailed method statement to avoid unauthorised incursions into the Root Protection Areas of any retained trees.

Changes to ground levels
Changes to ground levels are only to be made in accordance with the approved plans and where a detailed method statement has been produced to minimise the impact on the rooting systems of the retained trees. Where this necessitates the lowering of existing ground levels then this should only be undertaken with the use of hand tools and care taken not to damage any structural roots. Treatment of any exposed roots is to be in accordance with BS5837:2012.

Details of construction works within the Root Protection Areas
As per ‘Changes to ground levels’.

Details of ‘Special Engineering’ methods
Where relevant, specifications relating to special engineering methods will be included as an annex to the Arboricultural Method Statement.

Location and installation method for drainage and other utilities
The use of overhead utilities is not anticipated for this development. Where possible, existing underground utility runs will be re-used. Where new services runs are required, these will be routed outside of the Root Protection Area of any retained trees unless specifically agreed by the Local Planning Authority and subject to a detailed method statement.

Upgrade or installation of new hard surfacing within Root Protection Areas
In order to minimise the impact on the rooting area and tree root function the design and construction of a new surface should adequately consider and allow for the following factors:
- Allow gaseous exchange (horizontally and vertically)
- Water permeable
- Preserves the soil structure at a suitable bulk density
- Prevention of contaminants entering the rooting area
- Allows for future growth of the root system
- Prevents damage to the roots during demolition or construction
- Recognises that the majority of roots are found in the top 600mm of soil

New surfaces should be installed with ‘low invasive’ techniques using hand tools and the utilization of a cellular confinement system as part of the sub-base.
Removal of boundary / retaining walls and installation of new fencing within Root Protection Areas
To be accompanied by a detailed method statement to ensure minimal damage to existing roots.

Site responsibilities and the role of the pre-commencement meeting
Unless otherwise agreed in writing, it will be the responsibility of the Site Manager to ensure that the content of the Arboricultural Method Statement is adhered to. The main contractor and any sub-contractors are to be briefed by the Site Manager on the relevant sections of this prior to commencing any work. The Site Manager is responsible for contacting the LPA at any time issues relating to the trees on site are raised.

Prohibited activities and general precautions
In line with BS5837:2012.

Arboricultural Supervision, reporting and audit process
Day-to-day supervision will be the responsibility of the Site Manager. Supervision by a qualified arboriculturist at key stages of the development is to be coordinated by the Site Manager and comments forwarded to the Local Planning Authority.

Emergency procedures
Clearly defined emergency procedures e.g. for fuel spillages or unauthorised incursions into Construction Exclusion Zones to be prepared and communicated to all site personnel.
**TREE SURVEY SCHEDULE**

Client: King & Johnston Homes  
Site: Former St Matthews Infant School  
Date of Survey: 4th February 2014  
Arboricultural Consultant / Surveyor: S Bateson  
Weather: Clear  
Tagged: No

<table>
<thead>
<tr>
<th>Tree ID #</th>
<th>Species</th>
<th>Height (m)</th>
<th>Branch spread N</th>
<th>S</th>
<th>E</th>
<th>W</th>
<th>Diameter at breast height (mm)</th>
<th>Root Protection Area Radius (m)</th>
<th>Root Protection Area (m²)</th>
<th>Age class</th>
<th>Physiological Condition</th>
<th>Structural Condition</th>
<th>Preliminary Management Recommendations</th>
<th>Remaining Contribution (Years)</th>
<th>Category Grading</th>
</tr>
</thead>
<tbody>
<tr>
<td>T1</td>
<td>Sycamore (Acer pseudoplatanus)</td>
<td>13.5</td>
<td>5</td>
<td>4</td>
<td>5.5</td>
<td>4</td>
<td>600</td>
<td>7.2</td>
<td>162.9</td>
<td>M</td>
<td>Good</td>
<td>Heavily covered in ivy - unable to properly assess for defects. Epicormic growth at base. Minor deadwood. No significant defects visible. Remove and re-plant as part of landscape design for the development.</td>
<td>20+</td>
<td>B</td>
<td></td>
</tr>
<tr>
<td>T2</td>
<td>Sycamore (Acer pseudoplatanus)</td>
<td>11.5</td>
<td>4</td>
<td>4</td>
<td>0</td>
<td>4</td>
<td>300</td>
<td>3.6</td>
<td>40.7</td>
<td>MA</td>
<td>Good</td>
<td>Heavily covered in ivy - unable to properly assess for defects. Epicormic growth at base. No significant defects visible. Remove and re-plant as part of landscape design for the development.</td>
<td>10+</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td>T3</td>
<td>Sycamore (Acer pseudoplatanus)</td>
<td>15</td>
<td>5</td>
<td>5.5</td>
<td>2</td>
<td>3</td>
<td>400</td>
<td>4.8</td>
<td>72.4</td>
<td>MA</td>
<td>Good</td>
<td>Heavily covered in ivy - unable to properly assess for defects. Epicormic growth at base. No significant defects visible. Canopy raise to 5m for access facilitation pruning (BS: 5837, 8.8.1.2 c)</td>
<td>10+</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td>T4</td>
<td>Sycamore (Acer pseudoplatanus)</td>
<td>11.5</td>
<td>3</td>
<td>4</td>
<td>4</td>
<td>2</td>
<td>425</td>
<td>5.1</td>
<td>81.7</td>
<td>MA</td>
<td>Good</td>
<td>Twin stemmed at base. Heavily covered in ivy - unable to properly assess for defects. Epicormic growth at base. Stem to east has been ring barked and is in terminal decline. Remove and re-plant as part of landscape design for the development.</td>
<td>10+</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td>T5</td>
<td>Sycamore (Acer pseudoplatanus)</td>
<td>14.5</td>
<td>5</td>
<td>5</td>
<td>4.5</td>
<td>4.5</td>
<td>550</td>
<td>6.6</td>
<td>136.9</td>
<td>MA</td>
<td>Good</td>
<td>Triple stemmed at base with included bark. Previously canopy raised. Minor trunk wounds. On raised bank - causing retaining wall to lean. No significant defects visible. Remove and re-plant as part of landscape design for the development.</td>
<td>10+</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td>T6</td>
<td>Ash (Fraxinus excelsior)</td>
<td>14.5</td>
<td>7</td>
<td>4.5</td>
<td>5.5</td>
<td>5.5</td>
<td>600</td>
<td>7.2</td>
<td>162.9</td>
<td>MA</td>
<td>Good</td>
<td>Multi stemmed at base with included bark. On raised bank - causing direct damage to retaining wall. No significant defects visible. Remove and re-plant as part of landscape design for the development.</td>
<td>10+</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td>3P1</td>
<td>Ash (Fraxinus excelsior)</td>
<td>10</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>300</td>
<td>3.6</td>
<td>40.7</td>
<td>Y</td>
<td>Good</td>
<td>No significant defects visible. No works required.</td>
<td>10+</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td>T7</td>
<td>Elder (Sambucus nigra)</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>150</td>
<td>1.8</td>
<td>10.2</td>
<td>MA</td>
<td>Good</td>
<td>Minor deadwood. No significant defects. No works required.</td>
<td>10+</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td>T8</td>
<td>Elder (Sambucus nigra)</td>
<td>6</td>
<td>2.5</td>
<td>2.5</td>
<td>2.5</td>
<td>2.5</td>
<td>200</td>
<td>2.4</td>
<td>18.1</td>
<td>MA</td>
<td>Good</td>
<td>Heavily covered in ivy - unable to properly assess for defects. Minor deadwood. No significant defects. No works required.</td>
<td>10+</td>
<td>C</td>
<td></td>
</tr>
</tbody>
</table>
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<tbody>
<tr>
<td>T9</td>
<td>Sycamore (Acer pseudoplatanus)</td>
<td>11</td>
<td>5 5 5 4</td>
<td>375</td>
<td>4.5</td>
<td>63.6</td>
<td>MA</td>
<td>Good</td>
<td>Heavily covered in Ivy - unable to properly assess for defects. No significant defects visible.</td>
<td>No works required.</td>
<td>10+</td>
<td>C</td>
</tr>
<tr>
<td>T10</td>
<td>Elm (Ulmus Procera)</td>
<td>9</td>
<td>3 3 2 2</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>Y</td>
<td>Poor</td>
<td>Heavily covered in Ivy - unable to properly assess for defects. Tree is succumbing to Dutch Elm disease.</td>
<td>Remove</td>
<td>&lt;10</td>
<td>U</td>
</tr>
<tr>
<td>T11</td>
<td>Field Maple (Acer campestre) TPO</td>
<td>11</td>
<td>6 6 6 4</td>
<td>650</td>
<td>7.8</td>
<td>191.2</td>
<td>M</td>
<td>Good</td>
<td>Growing on steep slope with raised surface roots. Minor trunk wounds. Minor deadwood. Some small cavities present in crown. No significant defects visible.</td>
<td>Canopy raise to 5m for access facilitation pruning (BS: 5837, 8.8.1.2 c)</td>
<td>20+</td>
<td>B</td>
</tr>
<tr>
<td>T12</td>
<td>Field Maple (Acer campestre)</td>
<td>6</td>
<td>1 4 0 3</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>MA</td>
<td>Poor</td>
<td>Heavily covered in Ivy - unable to properly assess for defects. Significant trunk wound over 20% of trunk at base. Top has snapped out at 2m.</td>
<td>Remove</td>
<td>&lt;10</td>
<td>U</td>
</tr>
<tr>
<td>T13</td>
<td>Sycamore (Acer pseudoplatanus)</td>
<td>12</td>
<td>6 2 3 4</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>MA</td>
<td>Good</td>
<td>Twin stemmed at base. Moderate deadwood. No significant defects visible.</td>
<td>No works required.</td>
<td>10+</td>
<td>C</td>
</tr>
<tr>
<td>T14</td>
<td>Sycamore (Acer pseudoplatanus)</td>
<td>12</td>
<td>4 5 4 4</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>MA</td>
<td>Good</td>
<td>Heavily covered in Ivy - unable properly to assess for defects. Large cavity at base to south. Epicormic growth present.</td>
<td>No works required.</td>
<td>10+</td>
<td>C</td>
</tr>
<tr>
<td>T15</td>
<td>Field Maple (Acer campestre) TPO</td>
<td>10</td>
<td>7 6 5 5</td>
<td>575</td>
<td>6.9</td>
<td>149.6</td>
<td>M</td>
<td>Good</td>
<td>Growing on steep slope with raised surface roots. Twin stemmed at 2.5m with minor included bark. Minor trunk wounds. Minor deadwood. Some small cavities present in crown. No significant defects visible.</td>
<td>Canopy raise to 5m for access facilitation pruning (BS: 5837, 8.8.1.2 c)</td>
<td>20+</td>
<td>B</td>
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<tr>
<td>T16</td>
<td>Group of 3 Field Maples (Acer campestre)</td>
<td>5</td>
<td>1 4 4 4</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>Y</td>
<td>Good</td>
<td>No significant defects visible.</td>
<td>Remove</td>
<td>10+</td>
<td>C</td>
</tr>
<tr>
<td>T17</td>
<td>Hawthorn (Crataegus monogyna)</td>
<td>7</td>
<td>4 1 2 2</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>MA</td>
<td>Fair</td>
<td>Heavily covered in Ivy - unable to properly assess for defects. No significant defects.</td>
<td>No works required.</td>
<td>10+</td>
<td>C</td>
</tr>
<tr>
<td>T18</td>
<td>Elder (Sambucus nigra)</td>
<td>4</td>
<td>2 2 2 2</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>MA</td>
<td>Good</td>
<td>No significant defects.</td>
<td>No works required.</td>
<td>10+</td>
<td>C</td>
</tr>
</tbody>
</table>
**TREE SURVEY SCHEDULE**

**Client:** King & Johnston Homes  
**Site:** Former St Mathews Infant School  
**Arboricultural Consultant / Surveyor:** S Bateson  
**Date of Survey:** 4th February 2014  
**Notes:** See attached KEY

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<th>Age class</th>
<th>Physiological Condition</th>
<th>Structural Condition</th>
<th>Preliminary Management</th>
<th>Remaining Contribution (Years)</th>
<th>Category Grading</th>
</tr>
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<tbody>
<tr>
<td>T19</td>
<td>Field Maple (Acer campestre) TPO</td>
<td>10</td>
<td>7 5 5 5 5</td>
<td>500</td>
<td>6</td>
<td>113.1</td>
<td>M</td>
<td>Good</td>
<td>Growing on steep slope with raised surface roots. Heavily covered in ivy - unable to properly assess for defects - plant is now suppressing upper crown. Minor trunk wounds. Minor deadwood. Some small cavities present in crown. No significant defects visible.</td>
<td>Canopy raise to 5m for access facilitation pruning (BS: 5837, 8.8.1.2 c) and remove ivy.</td>
<td>20+</td>
<td>B</td>
</tr>
<tr>
<td>3P2</td>
<td>Field Maple (Acer campestre)</td>
<td>10</td>
<td>4 2 4 4 4</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>MA</td>
<td>Good</td>
<td>Co-dominant stems. No significant defects.</td>
<td>No works required.</td>
<td>10+</td>
<td>C</td>
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<tr>
<td>3P3</td>
<td>Field Maple (Acer campestre)</td>
<td>10</td>
<td>4 2 3 3 3</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>MA</td>
<td>Good</td>
<td>Co-dominant stems. Minor trunk wounds. No significant defects.</td>
<td>No works required.</td>
<td>10+</td>
<td>C</td>
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<tr>
<td>3P4</td>
<td>Cherry (Prunus kazan)</td>
<td>11</td>
<td>3 3 3 3 3</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>MA</td>
<td>Good</td>
<td>Minor deadwood. Minor trunk wounds. No significant defects.</td>
<td>Remove</td>
<td>10+</td>
<td>C</td>
</tr>
<tr>
<td>G1</td>
<td>Group of Sycamore and Ash in Pocket Park TPO</td>
<td>13 (Av)</td>
<td>5 5 5 5 5</td>
<td>400 (Av)</td>
<td>4.8</td>
<td>72.4</td>
<td>MA</td>
<td>Good</td>
<td>Heavily covered in ivy - unable to properly assess for defects. No significant defects.</td>
<td>No works required.</td>
<td>10+</td>
<td>C</td>
</tr>
<tr>
<td>G2</td>
<td>Group of Pines in Pocket Park TPO</td>
<td>11 (Av)</td>
<td>4 4 4 4 4</td>
<td>375 (Av)</td>
<td>4.5</td>
<td>63.6</td>
<td>MA</td>
<td>Good</td>
<td>No significant defects.</td>
<td>No works required.</td>
<td>20+</td>
<td>B</td>
</tr>
<tr>
<td>G3</td>
<td>Predominantly Elm interspersed with Hawthorn, Ash and Elder</td>
<td>7 (Av)</td>
<td>2 2 2 2 2</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>Y</td>
<td>Poor</td>
<td>Area is infested with dense bramble and ivy. Numerous fallen dead ivy covered trees. Elms with succumb to Dutch Elm Disease.</td>
<td>Remove</td>
<td>&lt;10</td>
<td>U</td>
</tr>
<tr>
<td>T20</td>
<td>Sycamore (Acer pseudoplatanus)</td>
<td>4</td>
<td>4 4 4 4 4</td>
<td>275</td>
<td>3.3</td>
<td>34.2</td>
<td>Y</td>
<td>Good</td>
<td>On boundary with footpath. No significant defects visible.</td>
<td>Remove and re-plant as part of landscape design for the development.</td>
<td>10+</td>
<td>C</td>
</tr>
</tbody>
</table>

Please note the root protection areas and crown spreads for some trees have not been included due to more dominant larger trees being closer to the proposed development - these trees will denote the position of any protective fencing.
**KEY TO SURVEY**

**T1, T2 etc.** = Individual tree identification numbers (not TPO reference numbers)

**G1, G2** = Grouped trees, hedges or shrub areas.

**3P1, 3P2** = Third party owned trees

**Age Class:**

Y = Young (<1/3 life expectancy)

MA = Middle Aged (1/3 – 2/3 life expectancy)

M = Mature (2/3 – full life expectancy)

**Work Priority:** (informed by risk rating based on observed defect(s), probability of failure, severity of impact and targets)

Urgent = <1 Month (unless stated otherwise)

High = <3 Months

Medium = < 6 Months

Low = < 12 Months

Routine = As part of regular grounds maintenance
Other Comments:

- **NESW** = North, East, South, West

- **Physiological Condition** = based upon the performance of the biological processes of the tree and its overall 'health'. Good = normal vigour, Fair = moderately reduced vigour, Poor = low vigour/decline.

- **Occluded wound** = where a wound has been progressively closed by the formation of new wood and bark around it.

- **Non-occluded wound** = where a wound has not closed (or is in the process of being closed) by the formation of new wood and bark.

- **Est.** = estimated measurement.

- **Av.** = average measurement.

- **Basal** = in or around the base of the trunk.

- **Epicormic** = growth arising from adventitious or dormant buds. In the case of European Lime trees this frequently occurs around the base of the tree.

- **Deadwood** = Minor (<25mm), Moderate (25mm-150mm) and Major (>150mm).

- **Self-set** = naturally established i.e. not intentionally planted tree.

Survey Range & Limitations:

1. The survey was carried out in the form of a visual assessment from ground level; a rubber mallet and simple probe were used to assess the extent of any decay found. Defects (including potential severity of impact), targets and potential ('likelihood') of failure have been considered and used to inform the risk rating and thereby the recommendations and priorities along with appropriate timescales.

2. Only the trees in the Former St Mathews School site and close to the boundary have been inspected as per instructions received. It is recommended that the owners of any adjacent trees likely to affect the site have their trees inspected by a qualified and competent arborist.
3. This survey expressly excludes any liability for indirect or direct structural damage that the trees may cause to property including any structural movement, subsidence and heave. Where necessary, the opinion of a structural engineer should be sought e.g. where trees are in close proximity to built structures. With regards drains, the advice of a drainage engineer should be sought.

4. As this is survey is preliminary in nature, should any further investigation be required (e.g. using specialist decay detection equipment) then this will be highlighted in the recommendations.

5. All measurements are estimated and tree locations on the maps are approximate.

6. It should be noted that trees are dynamic, living organisms that are subject to an ever-changing environment and that there is no such thing as a ‘safe tree’ i.e. “…there can be no absolute guarantee of safety” (Mattheck ‘The Body Language of Trees’, p. 197) where failure can occur without defect or in excessive weather conditions.

7. The Local Planning Authority (Medway) must be consulted prior to any works being carried out to establish whether any Tree Preservation Orders (TPO’s) or Conservation Areas apply to the site. No works should be carried out until any necessary permissions have been obtained. Trees marked as ‘TPO’ on any maps are for information purposes only and should not be considered authoritative.

8. Full consideration must be given to current legislation by anyone proposing to carry out works to trees, particularly with regards to the presence of European Protected Species (including bats). Arboricultural (‘tree surgery’) contractors should be adequately trained, experienced and carry adequate insurance. All works should be carried out to the current edition of British Standard BS3998 ‘Tree Work – Recommendations 2010’.

9. The information contained in this report should be considered valid for a period of 1 year from date of issue (unless otherwise specified in the survey) assuming that any recommendations are carried out. Additional inspection is recommended following exposure to extreme weather, significant wounding or damage (e.g. incursion into rooting zones, impacts, new fungal fruiting bodies, etc.) or any other event giving cause for concern.