ARBORICULTURAL IMPLICATIONS

ASSESSMENT

PROPOSED RE-DEVELOPMENT, THE MANSE, GLOBE ROAD, BLOFIELD, NORWICH, NORFOLK

CLIENT:

RURAL MINISTRIES
c/o Lewis & Tyrrell Architects
10 Stepping Lane
NORWICH
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Prepared By:

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Survey carried out on: 19/05/2016
LOCATION

The site consists of an occupied house, the existing Manse and neighbouring Chapel. It is situated at the end of Globe Road, Blofield, the site has joint access off Globe Road with several trees on the frontage and within the site.

TREES

There are 27 No trees listed in the grounds of the Manse and Chapel. Some growing on an eroded bank on the frontage of Globe Road, the rest within the site.

Details of all affected trees have been recorded and listed on the attached schedule, Appendix 1. Please refer to key to Categories (Appendix 2) and BS 5837: 2012 Cascade Grading Chart (Appendix 3) and Tree Location Plan (Appendix 5).

The Root Protection Area (R.P.A.) of these trees is shown on the accompanying Tree Protection Plan (Appendix 6).

These trees have been assessed from ground level only and recorded in accordance with BS 5837: 2012.

TREE PROTECTION

1. During the course of construction, trees will be protected as listed in BS 5837: 2012– Protective Barrier (Appendix 4), with suitable protection fencing being erected along the line of the R.P.A. of the tree. The Construction Exclusion Zone (C.E.Z) is marked in red on the plan on the outer edge of the R.P.A.

2. During the course of construction it is proposed to use and upgrade the existing entrance which services the Manse and extends into the site between the Manse and the Chapel. Trees T3, T4 and T5 are growing on a much eroded bank adjacent to the entrance, the roots are exposed and these trees have faults and decay which in conjunction with the eroded soil makes their removal necessary.
3. The proposed access route passes over the R.P.A. of T14, a mature Yew, this tree is growing on an elevated bank in front of the chapel. This bank is 0.5 metres higher than the proposed new access road, but roots will be present at this lower level so the new access road will be constructed taking this into account, using a Cellular Confinement System. To be agreed and installed to manufacturer’s specifications for traffic use requirement.

4. Temporary access will be required across the R.P.A.s of T2 and T4, this will be pedestrian access, 2 metres wide with scaffold boards or other ground protection interlocking boards.

### TREATMENT OF EXISTING TREES

1. It is proposed to remove T3, T4, T5, G1, T11, T22, T23 and T27.

2. T3, T4 and T5 are to be removed due to their condition and position on the badly eroded bank.

3. G1 a group of Leylandii and self-set Willow, will also be removed.

4. T23 and T22, Leylandii and Goat Willow, will be removed.

5. T27 and T11 Leylandii will also be removed.

6. These trees are of low amenity value and will greatly out-grow their position if allowed to mature fully.

All other trees listed are scheduled to remain as they offer visual screening.
MITIGATION & SUMMARY

1. The proposed development will involve the removal of 7 No trees and G1 a group of Leylandii. The site has been derelict for some time and the Leylandii have been allowed to grow out of control, as too has the Goat Willow which as collapsed as a coppice.

2. The 3 trees adjacent to the entrance have a much shortened lifespan due to the extreme erosion of the bank on which they are rooted. Their proposed removal will allow the entrance vision splay to be altered and new shrub planting to take place. In addition to this, 3 No replacement trees will be planted post construction in positions to be agreed with L.P.A. Tree Officer.

3. T1, T2 and T14 are prominent trees on the frontage of the site along with T15, T16, T18 and T19; it is proposed to retain these trees. Some minor remedial works are required mainly dead wooding and raising of crowns over highway to give clearance to traffic.

4. T6, T7, T8, T9, T10 and T12 are all trees which are growing on the boundary behind the existing Chapel; it is proposed to remove the rear extension to the Chapel, this also removes any potential conflict with T6. These trees will form part of the garden of one of the new build dwellings and will provide a visual screen between neighbouring properties. Future management and remedial works will be necessary on this group of trees to ensure their continued health and structural safety.

5. T24 and T25, a Pine and Birch respectively, both have structural faults but are young trees and will form part of the other new dwellings garden and give some visual screening.

6. The trees within the grounds of the Manse itself are proposed to be retained, there are many young newly planted trees which provide good screening and are sufficient distance from the Manse.

7. The Roadway where it crosses the R.P.A. of T14 – Yew – will need to be a no dig engineered road using a cellular confinement system and porous fill. Refer to Appendix 7 - CellWeb Construction – example of Manufacturer Specification for details of suitable products and construction.

8. 3 No. 12 – 14 cm Pyrus Chanticleer will be planted on site post construction in positions suitable to allow their full growth/development in accordance with BS 8545: 2014. Positions to be agreed with Broadland District Council Tree Officer.
ARBORICULTURAL METHOD STATEMENT
FOR TREE PROTECTION THROUGHOUT DURATION
OF CONSTRUCTION WORKS

Arboricultural Method Statement (AMS) includes a Tree Protection Plan (TPP) to identify:

- Trees to be retained – identified with a continuous black line
- Protective fence positions - therefore the Construction Exclusion Zones (CEZ)
- Measurements to identify fence positioning in relation to centre of tree

1.0 Construction Exclusion Zone

1.1 The Construction Exclusion Zone (CEZ) required by the current edition (2012) BS 5837 Trees in Relation to Construction relates to the stem diameter of each tree when measured at a height of 1.5m from ground level. The CEZs are to be afforded protection at all times and will be protected by fencing. No works will be undertaken within any CEZ that causes compaction to the soil or severance of tree roots.

2.0 Protective Fences

2.1 A protective fence will be erected prior to the commencement of any site works e.g. before any materials or machinery are brought on site, development or the stripping of soil commences. The fence will have signs attached to it stating that this is a Construction Exclusion Zone and that NO WORKS are Permitted within the fence. The protected fence may only be removed following completion of all construction works.

2.2 The fence is required to be sited in accordance with the Tree Protection Plan attached as Appendix 7. They must ideally be constructed as per figure 2 in BS 5837 2012 and be fit for the purpose of excluding any construction activity (See Appendix 4). Any other fence/barrier used must be fit for the purpose.

2.3 There are no new areas of planting to be protected during the construction phase, planting will be carried out after construction has finished.
3.0 **Precautions in respect of temporary works**

3.1 If temporary access is required to a CEZ then access may only be gained after consultation with the Local Planning Authority and following placement of materials such as concrete slabs or geo-textile fabrics that will spread the weight of any vehicular load and prevent compaction to the soil. For pedestrian movements within any CEZ then a single thickness scaffold board on top of a compressible layer laid onto a geo-textile fabric may be acceptable.

4.0 **Contractors car parking**

4.1 Not within CEZ.

5.0 **Site Huts and Toilets**

5.1 Not within any C.E.Z.

6.0 **Storage Space**

6.1 Not within any C.E.Z.

7.0 **Additional Precautions**

7.1 The installation of services near any tree will be undertaken in accordance with the National Joint Utilities Group Guidance note 10 recommendations in relation to trees.

7.2 No storage of materials, lighting of fires will take place within the CEZ. No mixing or storage of materials will take place up a slope where they may leak into a CEZ.

7.3 No fires will be lit within 20 metres of any tree stem and will take into account fire size and wind direction so that, no flames come within 5m of any foliage.

7.4 No high-sided vehicles or cranes have access to the site therefore their movement on the site is not an issue.

7.5 No notice boards, cables or other services will be attached to any tree.

7.6 Materials which may contaminate the soil will not be discharged within 10m of any tree stem. When undertaking the mixing of materials it is essential that, any slope of the ground does not allow contaminates to run towards a tree root area.
8.0 Site Gradients

8.1 No alterations of soil levels will take place within the CEZ of the protected trees.

9.0 Demolition

9.1 Demolition of rear extension on Chapel encroaches on R.P.A. of T6. Temporary Access to allow this with excavations in C.E.Z. taking place by hand.

10.0 Hard Surfaces

10.1 New Access road passes over R.P.A. of T14. No dig Cellular Confinement System road to be constructed so as not to damage roots of T14. Road to be constructed prior to construction of dwelling.

11.0 Soft landscaping

11.1 3 No 12 – 14 cm Pyrus Chanticleer to be planted in positions agreed with L.P.A. Tree Officer post construction in accordance with BS 8545: 2014.

12.0 Use of Herbicides

12.1 Not Applicable.

13.0 On site Monitoring Regime

13.1 All operations will be monitored by the main contractor.

14.0 Use of subcontractors

14.1 The main contractor will be responsible for ensuring sub-contractors do not carryout any process or operation that is likely to adversely impact upon any tree on sit

15.0 Contingency Plan

15.1 Water is readily available on site and will be used to flush spilt materials through the soil and avoid contamination to tree roots. At the time of any spillage the main contractor will contact an arboriculturist for advice.

16.0 Remedial Tree Works

16.1 Tree felling as listed in treatment of existing trees, remedial tree works as listed on inspection sheets.
17.0 **Responsibilities**

17.1 It will be the responsibility of the main contractor to ensure that the planning conditions attached to planning consent are adhered to at all times and that a monitoring regime in regards to tree protection is adopted on site.

17.2 The main contractor will be responsible for contacting the Local Planning Authority at any time issues are raised related to the trees on site.

17.3 If at any time pruning works are required permission must be sought from the Local Planning Authority first and then carried out in accordance with BS 3998 Recommendations for Tree Works 2010.

17.4 The main contractor will ensure the build sequence is appropriate to ensure that no damage occurs to the trees during the construction processes. Protective fences will remain in position until completion of ALL construction works on the site.

17.5 The fencing and signs must be maintained in position at all times and checked on a regular basis by an on site person designated that responsibility.

P. J. ANDERSON
Appendices

Appendix 1 – Tree Survey Schedule
Appendix 2 – Categories
Appendix 3 – BS 5837: 2012 Table 1 Cascade Chart Tree Quality Assessment
Appendix 4 – BS 5837: 2012 – Protective Barrier
Appendix 5 – Tree Location Plan
Appendix 6 - Tree Protection Plan
Appendix 7 - CellWeb Construction – example of Manufacturer Specification
### Table 1 Cascade chart for tree quality assessment

<table>
<thead>
<tr>
<th>Category and definition</th>
<th>Criteria (including subcategories where appropriate)</th>
<th>Identification on plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trees unsuitable for retention (see Note)</td>
<td></td>
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</tr>
<tr>
<td><strong>Category U</strong></td>
<td>Those in such a condition that they cannot realistically be retained as living trees in the context of the current land use for longer than 10 years.</td>
<td>See Table 2</td>
</tr>
<tr>
<td></td>
<td>• Trees that have a serious, irreparable, structural defect, such that their early loss is expected due to collapse including those that will become unable after removal of other category U trees (e.g. where, for whatever reason, the loss of comparison shelter cannot be mitigated by pruning)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Trees that are dead or are showing signs of significant, immediate, and irreversible overall decline</td>
<td></td>
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<tr>
<td></td>
<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>
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<tr>
<td></td>
<td><strong>Note:</strong> Category U trees can have existing or potential conservation value which it might be desirable to preserve. See 4.5.2.</td>
<td></td>
</tr>
<tr>
<td>Trees to be considered for retention</td>
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<td></td>
</tr>
<tr>
<td><strong>Category A</strong></td>
<td>Trees of high quality with an estimated remaining life expectancy of at least 40 years.</td>
<td>See Table 2</td>
</tr>
<tr>
<td></td>
<td>Trees that are particularly good examples of their species, especially if rare or unusual; or those that are essential components of groups or formal or semi-formal arboreal features (e.g. the dominant and/or principal trees within an avenue).</td>
<td></td>
</tr>
<tr>
<td><strong>Category B</strong></td>
<td>Trees of moderate quality with an estimated remaining life expectancy of at least 20 years.</td>
<td>Trees present in numbers, usually growing as groups or woodlands, such that they attract a higher collective rating than they might as individuals; or trees occurring as collectives but situated so as to make little visual contribution to the wider locality.</td>
</tr>
<tr>
<td></td>
<td>Trees that might be included in Category A, but are downgraded because of impaired condition (e.g. presence of significant though remediable defects including unsympathetic 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.</td>
<td></td>
</tr>
<tr>
<td><strong>Category C</strong></td>
<td>Trees of low quality with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150 mm.</td>
<td>Trees present in groups or woodlands, but without this conferring on them significantly greater collective landscape value and/or trees offering low or only temporary/transient landscape benefits.</td>
</tr>
<tr>
<td></td>
<td>Trees of very limited merit or such impaired condition that they do not qualify in higher categories.</td>
<td>See Table 2</td>
</tr>
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<td></td>
<td>Trees with material conservation or other cultural value.</td>
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</tbody>
</table>
on retained hard surfacing or it is otherwise unfeasible to use ground pins, e.g., due to the presence of underground services, the stabilizer struts should be mounted on a block tray (Figure 3b).

NOTE 1 Examples of configurations for steel mesh perimeter fencing systems are given in BS 1722-18.

NOTE 2 It might be feasible on some sites to use temporary site office buildings as components of the tree protection barriers, provided these can be installed and removed without damaging the retained trees or their rooting environment.

6.2.2.4 All-weather notices should be attached to the barrier with words such as: "CONSTRUCTION EXCLUSION ZONE – NO ACCESS".

Figure 2 Default specification for protective barrier

Key
1. Standard scaffold poles
2. Heavy gauge 2 m tall galvanized tube and welded mesh infill panels
3. Panels secured to uprights and cross-members with wire ties
4. Ground level
5. Uprights driven into the ground until secure (minimum depth 0.6 m)
6. Standard scaffold clamps

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