Report contents

1. Brief

1.1 This site supervision report has been commissioned by Taylor Wimpey to provide advice on the implications of the proposed excavations required for the manhole / access to the existing main sewer.

1.2 The site supervision is detailed as a requirement in the Arboricultural Method Statement (DPA69635 AMS) submitted for the release of Condition 6 of Planning Application Ref: 2011/2072/P.

1.3 The site visit is in accordance with the AMS site supervision requirements and has been requested by Tom Little - Tree and Landscape Officer, Camden Council.

2. Scope

2.1 This report focuses on the excavations required to facilitate the construction of the approved development, Ref: 2011/2072/ and its effect on the retained tree T1.

2.2 Since the submission of the previous AMS (DPA69635 AMS v2) for the release of Condition 6 that the access manhole to the sewer within the RPA of the retained tree (T1, London Plane), will require a greater level of excavation than previously detailed and in a different position to the trial pit previously opened to ascertain potential root loss.

3. Site Visit

3.1 The site visit was undertaken on the afternoon of Monday 1st October 2012.

3.2 In attendance:

Tom Little – Tree and Landscape Officer, LB Camden
Graham Hook – Taylor Wimpey
Derrick Bowyer – Greater London Demolition
Jon Ryan – Ashmore Arboricultural Services Ltd.

3.3 The site is currently in the process of being developed with the previous structure, Twyman House having been demolished and cleared from site.

3.4 A mature London Plane (T1) has been retained on the frontage with Camden Road. This tree is situated in an area with level access to Camden road, with the rooting area constrained by the original foundations of Twyman House on the northern side, the retaining wall adjacent to the canal on the eastern side and Camden road to the south.

3.5 A visual tree assessment (VTA) was not carried out for T1 as part of this site visit.

3.6 T1 has been recently crown reduced as permitted by Camden Council.

3.7 Tree protection in line with 1.2 of the Site specific Arboricultural Method Statement (AMS) to discharge planning conditions (DPA69635 AMS v2) and detailed in DPA-69635-02 was not in situ during the site visit.

3.8 The ground protection outlined in DPA-69635-02 of the AMS was also absent during the site visit. The existing hard surface had been removed, the soil disrupted and damaged roots were apparent.

3.9 The documentation supplied for the compilation of this report can be found in *Appendix A*.

4. Discussion

4.1 The preferred outcome of the meeting was established, in order of preference:

1. Retention of T1 at its current canopy size with an engineering solution minimising further root loss to T1.

2. Retention of T1 with further crown reduction works to mitigate any unavoidable root loss.

3. Removal of T1.

4.2 For the retention of T1 at its current canopy size an engineering solution either removing the need for the manhole in it its proposed location or reducing the size of excavation is required.

4.3 Thames Water, as statutory undertakers, have outlined the position of the manhole and been in discussion with Taylor Walker and Greater London Demolition over possible solutions. The exact engineering solutions proffered are not included within this report but were summarised as:

- Repositioning of the manhole within the site is not feasible due to constraints of the building footprint and the access requirements of Thames Water.
- Reducing the size of access manhole required. The access requirements are set by Thames Water as a minimum.
- Reducing the level of excavation having the access to the sewer at an angle, this was not acceptable to Thames Water.

4.4 The required depth of the excavation to join the sewer is approximately 6m, the width required to facilitate the safe installation of the cylindrical precast concrete manhole sections is approximately 2.5m. The proposed excavation will be approximately 2m from the stem of the tree.

4.5 This level of excavation in close proximity to T1 will in all probability require the removal of large number structural roots. The presence of roots may be established by the opening of a new trial pit along the line of the closest point of the excavation to T1.

4.6 It was agreed that T1 has a limited rooting volume and incursions into this would have a greater effect than if the tree were open grown.

4.7 The previous recommendation for the use of NJUG vol. 4 – *Guidelines for the planning, installation and maintenance of utility apparatus in proximity to trees* does not take into account the level of excavation now required. NJUG vol. 4 was written as guidance for the installation of services in footpaths.

4.8 The position of the tree adjacent to the highway footpath and canal present a high target area. The importance of preserving structural roots in order to maintain the health and stability of the tree was discussed and agreed.

4.9 The further restrictions and incursions into the RPA where also discussed:

- Excavations for the approved basement to the eastern frontage curtailing the available rooting volume.
- Removal of the existing retaining wall/ foundations at the front elevation of the development my mechanical means will require a minimum of 0.5m incursion into the RPA along this boundary.
- The new sheet piling adjacent to the retaining wall on the canal side to allow the access stairway to the tow path will require an additional 0.5m to 1m incursion into the RPA along this boundary
- Damage has been caused to the existing surface rooting area to approximately .5m depth.

4.10 The effects of the above are cumulative and may lead to the retention of the tree at its current size becoming unfeasible.

4.11 With the rooting area having been deflected by the retaining walls it is reasonable to envision that significant roots will be following the line of these boundaries.

4.12 Incursions adjacent to the boundary walls may result in further significant root loss.

4.13 The remedial works to ensure the safe retention of T1 following the level of root loss proposed would be at the very least a heavy crown reduction/ pollard.

4.14 Further tree pruning will have a negative effect on the amenity provided by this tree.

4.15 Loss of amenity could be mitigated by the replanting of suitable replacement trees.

4.16 Replacement planting needs to acknowledge the rooting volume available. It may be acceptable to Camden if the mitigating planting was continued outside of the site to achieve the desired replacement canopy cover.

4.17 It was agreed that no works to the T1 other than those previously permitted may be carried out without further application to and permission from Camden Council. This includes the pruning of the trees roots which are as protected by the Tree Preservation Order as the above ground parts of the tree.

5. Recommendations

5.1 Another trial pit needs to be dug to establish the quantity and dimensions of roots in the area for proposed manhole and sheet piling adjacent to the canal side retaining wall.

5.2 The trial pits to be hand dug to 1.5m.

5.3 A further site visit to be arranged once the trial pits opened.

6. Appendices

Appendix A: References and supporting documentation

1. BS5837 : 2005 Trees in relation to construction
2. BS 3998 : 2010 Tree works - recommendations
3. BS 5837: 2012 Trees in relation to demolition, design and construction
4. NJUG vol. 4 – Guidelines for the planning, installation and maintenance of utility apparatus in proximity to trees
5. Site specific Arboricultural method statement to discharge planning conditionsDPA69635 AMS v2 (August 2012)
6. Arboricultural report DPA69635 (April 2011)
7. Decision notice for planning application Ref: 2011/2072/.