ARBORICULTURAL IMPACT ASSESSMENT

Keats House Fence Line 16/09/2020

1. Proposal

- **1.1** Replacement of existing wooden panel fence line with new boundary fence wall including brick wall and metal fence.
- **1.2** Image of existing perimeter fence line along Keats Grove.



Existing wooden panel fence

2. Trees located in area of proposal

- 2.1 (Arbortrack Id number) 2819 Lime, 2820 Mulberry, 2821 London plane, 2822 Cherry plum, 2823 Pyracantha, 2824 Pyracantha, 2825 Cherry plum, 2828 Lime.
- 2.2 (Arbortrack tree plan) Appendix 1

3. Constraints

- **3.1** (based on document BS 5837: 2012 Trees in relation to design, demolition and construction Guidance.
- **3.2** Root Protection Area table indicates identification number, species, diameter at breast height, Root Protection Area.
- **3.3** RPA table indicates protection distances for trees and their roots affected by the proposal.

3.4 RPA table indicates tree quality assessment categories.

3.5 RPA table.

Keats House Fence Line				
Tree Id	Species	DBH mm	RPA mm	Category
2819	Lime	690	8280	C1
2820	Mulberry	550	6600	A3
2821	London plane	1300	15600	A2
2822	Cherry plum	130	1560	B2
2823	Pyracantha	150	1800	B2
2824	Pyracantha	220	2640	B2
2825	Cherry plum	310	3720	B2
2828	Lime	685	8220	B2

3.6 (Root Protection Area Plan) Appendix 2

- **3.7** Conservation Area Status. The trees sited within Keats House garden will be subject to Conservation Area status protection. (London Borough of Camden)
- **3.8** Shrinkable soils. The foundation design should take account of the risks of indirect damage (i.e. subsidence and/or heave brought about by changes in moisture content of the soil due to remaining vegetation.

4. Impacts

- 4.1 The foundations of the proposed wall will be within the RPA's of trees 2819 Lime, 2821
 London plane, 2822 Cherry plum, 2823 Pyracantha, 2824 Pyracantha, 2828 Lime. The proposed foundations will not impact the RPA's of trees 2820 - Mulberry, 2825 - Cherry plum.
- **4.2** Below surface disturbance within the indicated areas may result in damage or impact on the roots of the identified trees.
- **4.3** All trees to be retained.
- **4.4** Crown lifting of existing trees for purpose of construction not required.

5. Recommendations

- **5.1** Location and depth of live roots below and within the proposed linear wall foundation should be identified to instruct the design and construction method.
- **5.2** Ground Penetrating Tree Root Radar is a non-invasive specialist option which can identify tree roots via linear scanning along the proposed line of construction. It can pick up on live roots above 20mm. It will provide a virtual trench in a series of top down scaled views.

6. Observations

6.1 Services of Consultant Tree Root Radar procured

- 6.2 Ian Lee (Tree Radar UK) attended the site on 02nd September 2020A series of 6 linear scans were undertaken in both the inside and outside of the property to assess for evidence of live roots within the soil volume.
- **6.3** Roots from the linear Yew Hedge are abundant. There is a proposal for removing and replacing this hedge.
- **6.4** Roots from the three largest trees (T2819, T2821, T2828) are shown to be throughout the soil horizon in various sizes and congregations apart from in the top 200-400mm. The scans show gaps in the root density where the proposed wall foundations can be designed and located on piles.
- 6.5 The Tree Radar plan and scans are attached in Annexes

7. Conclusions

- **7.1** Yew hedge is to be removed entirely (above ground material cut and stump/root balls to be removed providing the opportunity to excavate the soil carefully and assess the condition, depth and location of the roots of trees (T2819, T2821, T2828)
- **7.2** Wall foundations to be located in areas of spaces between the root clusters shown in the tree radar plan and additionally in the soil excavation.
- **7.3** Lintels to be used to span the distance where there are root clusters.
- **7.4** City of London Corporation Arboriculturist to be present during hedge removal and root excavation.

8. Contact details

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Annexe 1; Arbortrack Tree Plan



Annexe 2; Root Protection Area Plan



Annexe 3; Tree Radar Scan Lines and Root Location Plan



