

### Site: 28 Belsize Lane, Hampstead, London NW3 5AB

Date: 19.07.17

### **Project Contacts:**

Council Tree Officer:	Nick Bell (NB) (LB Camden)	020 7974 5939	Arboriculturist:	Chris Sheldon (CS) (OMC Associates)	07713 137025
Managing agent:	Martin Liechti (ML) (Oakhill Management Ltd.)	07768 598115	Architect:	Ross McDonald (RMD) (Alison Brooks Architects)	020 7267 9777
Airspade Excavations:	Robert Tooze (RT) (Harris Calnan)	07947 734629	Structural Engineer:	David Akera (DA) (Akera Engineers)	07799 262659

INSPECTION	DATE(S)	PERSONNEL		REMOTE	OBSERVATIONS
		PRESENT	INSP.	- PHOTO	
			REQ'D?	BASED	
Airspade trenches on side (western) boundary and site frontage for foundation pads of boundary wall	11.07.17 17.07.17	CS/RT/ RMD	Y	Ν	<ul> <li>This report summarizes the findings of two site visits, carried out on 11.07.17 and 17.07.17.</li> <li>The existing trench (A) at the western corner of the frontage has been excavated to the full depth (650mm), and elongated slightly along the site frontage. A trench opened to the east of the tree (B) previously inspected on 11.07.17 has also been elongated, and excavated to the full required depth. A new trench (C) of 1.2 meters length and 650mm depth has been opened on the western boundary, back to the footing of the existing brick boundary wall.</li> <li>Trench A:</li> <li>Three roots have been completely uncovered: two smaller roots of 30 and 35mm diameter at approximately 500mm depth, and another larger root partially uncovered in the base of the trench of 65mm diameter.</li> <li>Trench B:</li> <li>Numerous roots ranging between 30-35mm diameter have been completely uncovered, at depths ranging between 10 – 40cm. As was seen in trench A, larger roots (60 &amp; 90mm diameter) exist at 650mm depth; these remain partially uncovered in the base of the</li> </ul>

INSPECTION	DATE(S)	PERSONNEL	FURTHER	REMOTE	OBSERVATIONS
		PRESENT	INSP.	- PHOTO	
			REQ'D?	BASED	
					trench. A dense collection of roots of $35 - 40$ mm diameter exists approximately $1.5 - 2$ m from the tree's trunk, in the vicinity of the road name sign.
					Trench C:
					Two roots of 25-30mm diameter exist in shallower depths, no deeper than 10cm. A single large root measuring 70mm diameter also exists at 600mm depth, growing in parallel with the site boundary.
					All exposed roots were continually dampened and were wrapped in damp hessian upon completion of the inspection.

#### Notes and discussions:

- In every trench, large diameter roots (between 60mm 90mm diameter) are present at depths of 600 650mm. Notwithstanding this and with the exception of the dense collection of roots in trench B in the vicinity of the road sign, the smaller diameter roots encountered at shallower depths are not deemed significant enough to warrant retention and may be pruned back to the edge of the trench.
- Given the absence of any large diameter roots above 250mm depth, the possibility of ground beams mounted on more numerous, smaller diameter piles was agreed in principle, subject to consultation with the structural engineer (DA). RMD expressed a preference for the ground beams to be concealed, with the top surface at, or just below ground level; this would be dependent on DA's concrete requirements and whether a sufficient void exists above the roots to be retained to accommodate the structure.
- The current depth of the piles (1300mm) has been determined on the assumption that deeper excavations would be more damaging, due to increased root volume at greater depth this is not the case. If smaller diameter piles are feasible, they could penetrate deeper into the soil if this would promote greater rigidity.

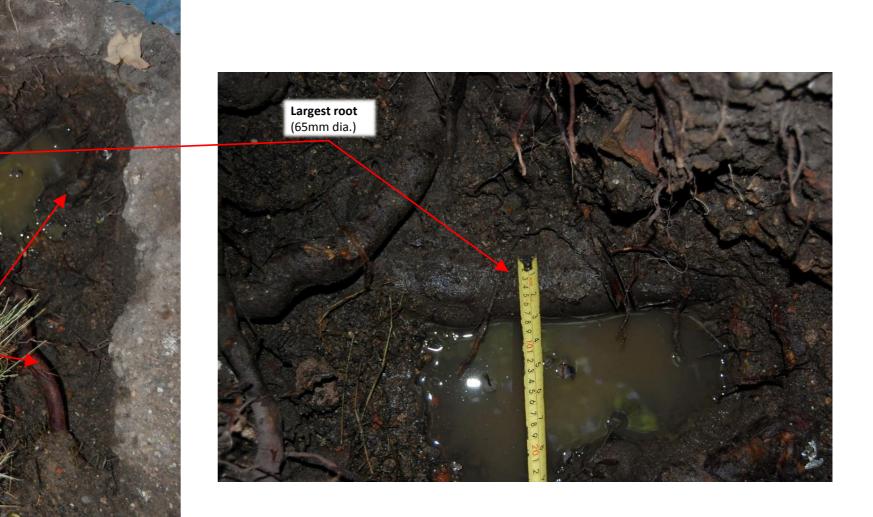
#### Further actions:

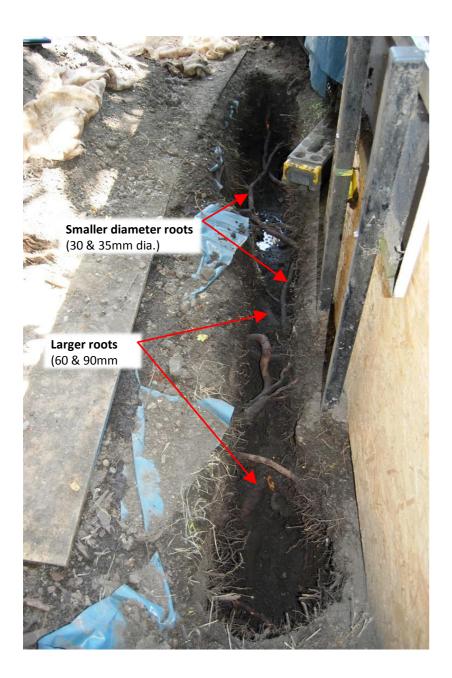
• The next meeting has yet to be agreed. The need for further explorative excavation will be informed by further discussions with the Council and David Akera.

# Photographs

Smaller diameter roots between 30 – 40mm dia.

### Trench A



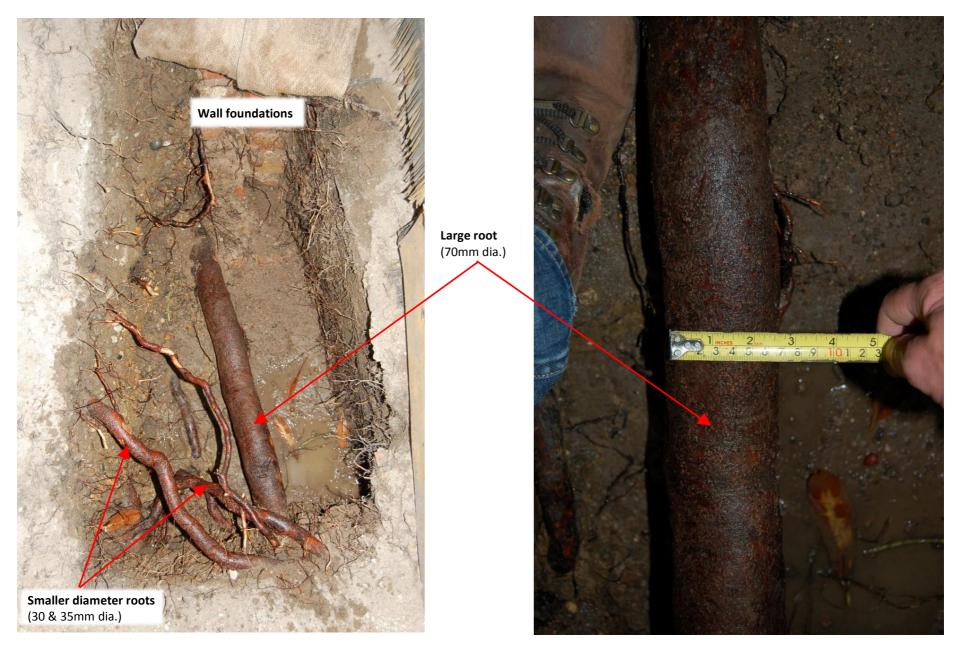


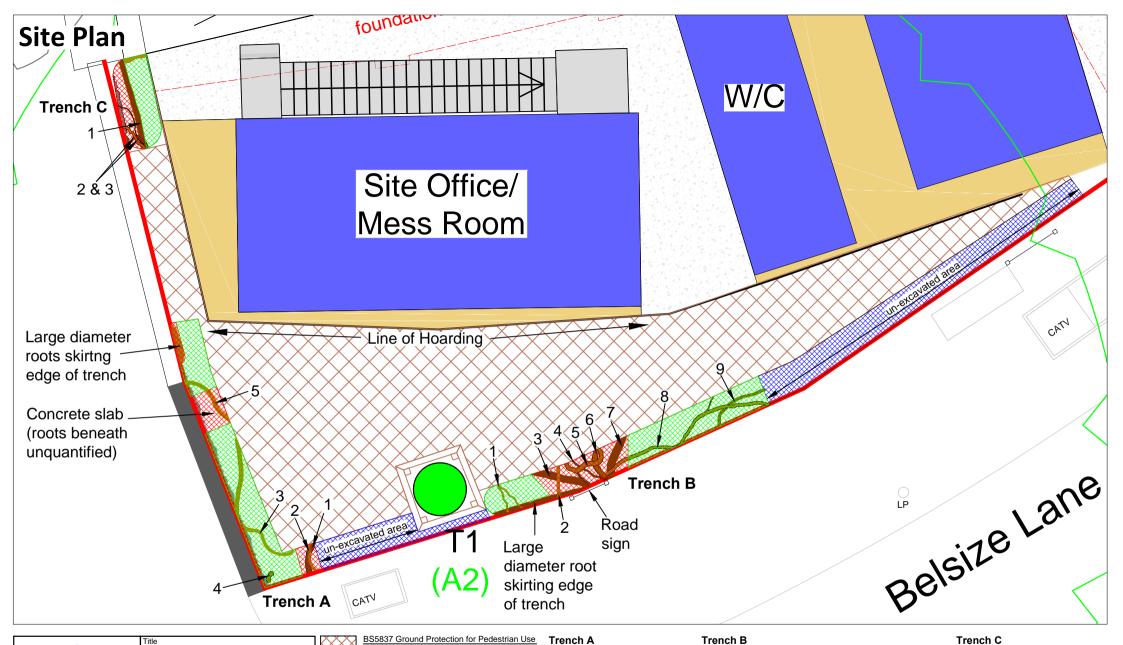


# Trench B (Cont.)



# Trench C





No.

1

2

3

4

5



2	BS5837 Ground Protection for Pedestrian Use
	(refer to section 5.2 and Appendix 4 of the
	Arboricultural Method Statement for
2	description and specification)
2	Areas where root presence precludes

excavation

Areas available for excavation

Root Dia.	Depth	No.	Root Dia.	Depth	No.	Root Dia.	
65mm	650mm	1	<25mm	50mm	6	40mm	
30mm	500mm	2	30mm	100mm	7	90mm	
35mm	100mm	3	80mm	650mm	8	30mm	
40mm	600mm	4	<25mm	150mm	9	35mm	
40mm	100mm	5	40mm	100mm			-

Trench	С
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Depth

600mm

650mm

400mm

450mm

No.	Root Dia.	Depth
1	70mm	600mm
2	35mm	100mm
3	30mm	100mm