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Mr Barry Mallon
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Date: 06.02.2015
 Your Ref:
 Our Ref: L-STL2926D-SD-002

Dear Barry

Re: 95 Hillway, Highgate, London

Following receipt of recent comments from the Holly Lodge Estate Committee via LBC Planning Department, we would like to offer the following response.

We understand the lane to the rear of 95 Hillway, running from Holly Lodge Gardens to Robin Grove is a former carriageway cutting which is subject to surface water flow with a spring being present within the lane. The lane is approximately 2m below the rear garden level of 95 Hillway. Ground levels across the footprint of 95 Hillway vary by approximately 2.73m from front to back (ref attached topographical survey).

Ground water monitoring has been undertaken at the site and the table below summarises the groundwater levels (to mAOD) in comparison to the proposed formation depth of the new basement.

Date	Borehole	Approximate ground level (mAOD)	Water depth (mbgl)	Water level (mAOD)	Water depth below basement formation level (m)
03/11/14	DTS01	107.34	4.6	102.75	1.67
10/11/14			4.49	102.85	1.56
14/11/14			4.48	102.86	1.55
03/11/14	DTS03	105.35	Dry	-	-
10/11/14			1.97*	103.38*	1.03*
14/11/14			1.96*	103.39*	1.02*
03/11/14	DTS05	105.83	Dry	-	-
10/11/14			Dry	-	-
14/11/14			Dry	-	-

Table 1 – Summary of groundwater monitoring data

Note –Basement formation level of **104.41mAOD** utilised, as provided by structural engineer

* Water level recorded in DTS03 considered reflective of water inundation from surface, though data has been utilised in our analysis as it represents a worst case scenario.

In view of the above, groundwater levels were recorded to be in excess of 1m below the proposed basement formation depth and thus construction of the basement is not considered to present a 'dam' in the groundwater flow, with formation located above the groundwater table. In addition, ground conditions to the rear of the property, in the location of the proposed basement, comprised predominantly sands which are considered to be permeable (as demonstrated by soil infiltration testing within the unsaturated zone). Formation of the basement and foundations for 95 Hillway will therefore be located on predominantly sand deposits rather than clay, as suggested.

Summary and conclusion

Based on the data obtained to date and in consideration of the spring, cutting, groundwater levels and development proposals at 95 Hillway, the proposed basement will be constructed above the existing groundwater table and thus will not present a 'dam' or diversion and will not impact the localised groundwater flow direction.

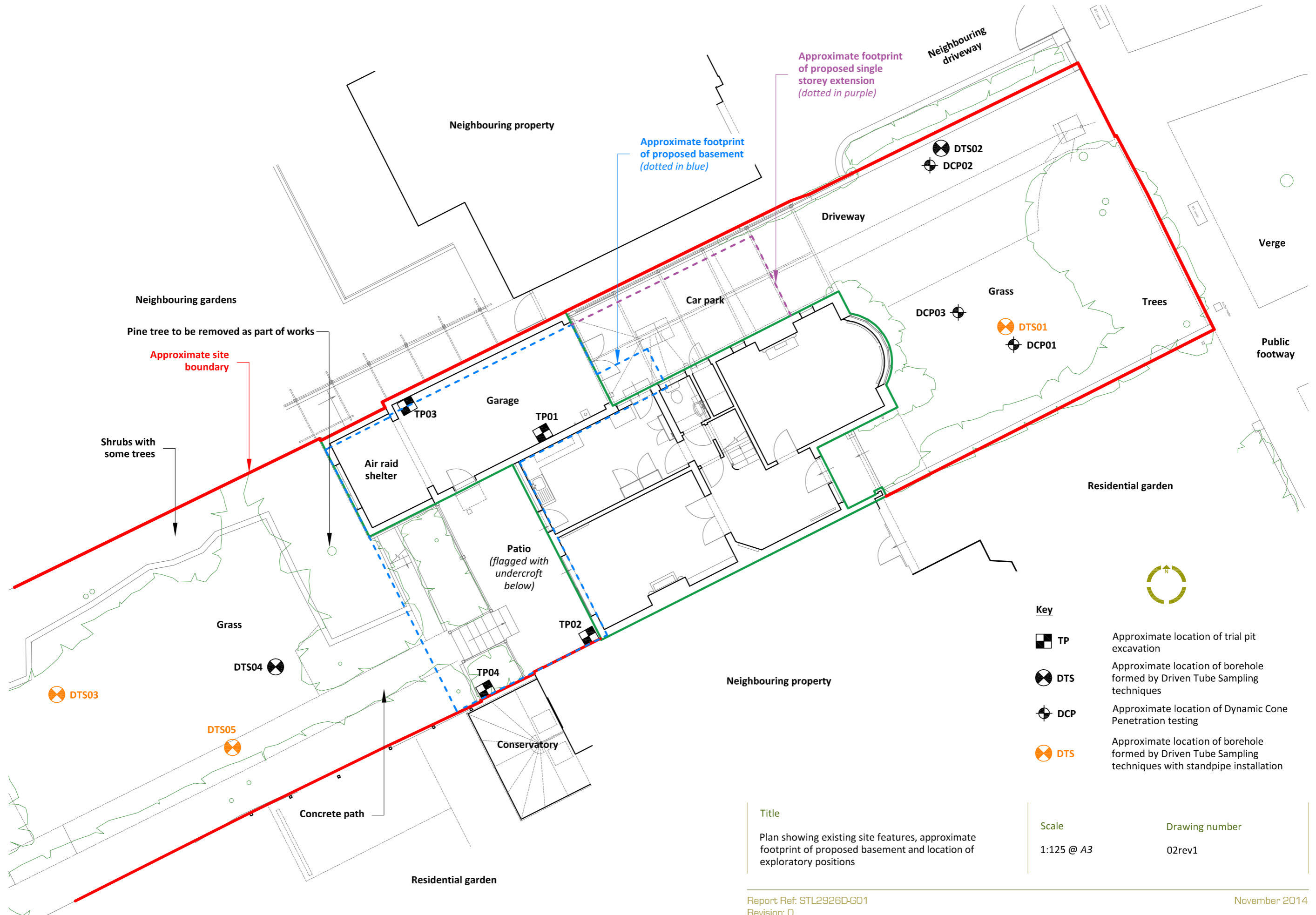
Kind Regards



Sarah Drage
Senior Geoenvironmental Engineer for Soiltechnics Limited

Encs

Drawing 02 rev 1 - Topographical survey including location of groundwater monitoring positions.



Key	
	TP Approximate location of trial pit excavation
	DTS Approximate location of borehole formed by Driven Tube Sampling techniques
	DCP Approximate location of Dynamic Cone Penetration testing
	DTS Approximate location of borehole formed by Driven Tube Sampling techniques with standpipe installation

Title	Scale	Drawing number
Plan showing existing site features, approximate footprint of proposed basement and location of exploratory positions	1:125 @ A3	02rev1