

GROUND ENGINEERING

Newark Road Peterborough PE1 5UA
Tel: 01733 566566 Fax: 01733 315280
Email: admin@groundengineering.co.uk

solving underlying problems

Our Ref: SJF/ALM/C.10805

7 December 2006

Ellis and Moore
9th Floor
Hill House
Highgate Hill
London
N19 5NA

Attention: Mr A Boateng

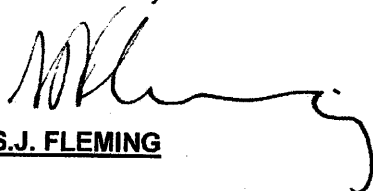
Dear Sir

Ground Investigation – Spring Place, London NW5

Please find enclosed trial pit logs and site plan for the work undertaken on 14th November 2006. Inspection of the logs shows that the PID meter did not record any concentrations of Volatile Hydrocarbons within the excavated soils in trial pits 7 to 11. The absence of such volatiles in trial pit 11, where hydrocarbon contamination was observed, indicates that the remnant hydrocarbons encountered at this location are of the non-volatile 'heavy' fraction (oils).

Samples remaining from those taken during the site works will be stored in our laboratory for one month after which time they will be disposed of unless arrangements are made to the contrary.

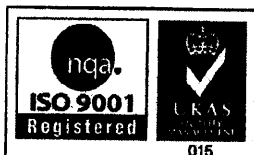
Yours faithfully



S.J. FLEMING

Director

Enc








A DIVISION OF XPLORE LIMITED
Registered in England & Wales
Registration Number 3096780
Reg Office 7 Laureate Paddocks
Newmarket Suffolk CB8 0AP

GROUND ENGINEERING Geo-Environmental Specialists 01733 566566			Site: 7 SPRING PLACE, LONDON NW5		TRIAL PIT TP7	
Date: 14/11/06			Pit Size: 1.20m L x 0.60m W x 1.00m D.		Ground Level:	
Samples and in-situ Tests			(Date)	Description of Strata	Legend	O.D. Level
Depth m	Type	Result	Water			m
0.20	D1			MADE GROUND - CONCRETE slab, removed		
0.20	PID1	(0.0)				0.20
0.40	D2			MADE GROUND - Brown clayey, sandy GRAVEL. Gravel of fine to medium crushed cobble size brick, concrete fragments with metal, plastic and tile fragments		
0.40	PID2	(0.0)				
0.50-1.00	B1					
0.60	D3					
0.60	PID3	(0.0)				
0.80	D4					
0.80	PID4	(0.0)				0.95
				MADE GROUND - Soft brown and dark brown slightly sandy, slightly gravelly CLAY. Gravel is fine to medium brick, flints, ash and shell		1.00
				Trial pit completed at 1.00m depth		



KEY	REMARKS
D - Disturbed Sample	1. Pit dry
B - Bulk Sample	2. Pit sides stable
U - Undisturbed Sample	
R - Root Sample	
W - Water Sample	
J - Jar Sample	
▽ - Water Strike	
▽ - Water Rise	
▽c - Level on completion	
MP - Mackintosh Probe	
P() - Hand Penetrometer	
Cohesion () kPa	
V - Vane Shear Test	
Cohesion () kPa	

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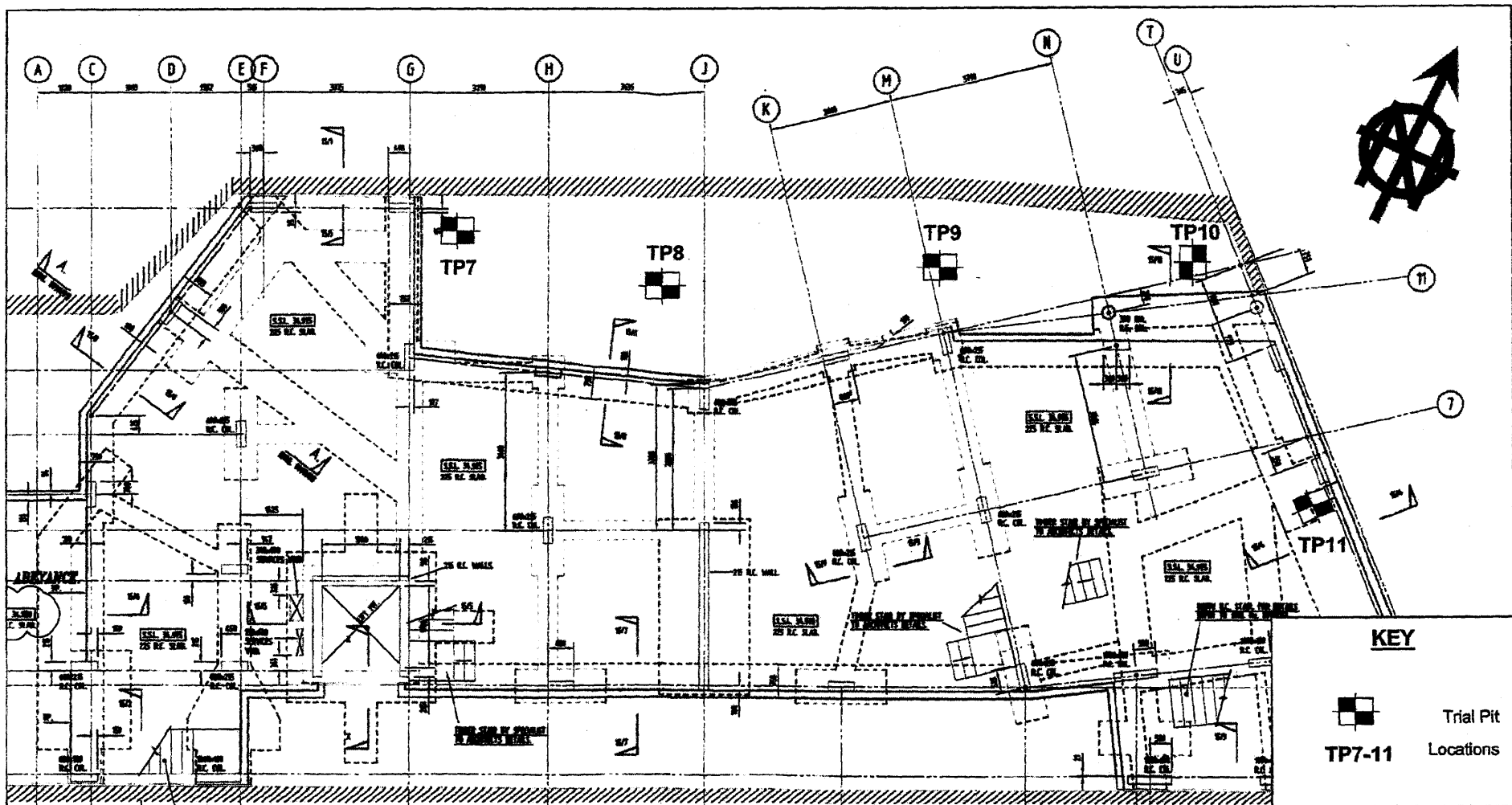
GROUND ENGINEERING Geo-Environmental Specialists 01733 566566			Site: 7 SPRING PLACE, LONDON NW5			TRIAL PIT TP8			
Date: 14/11/06			Pit Size: 1.30m L x 0.60m W x 1.00m D.			Ground Level:			
Samples and In-situ Tests			(Date) Water	Description of Strata	Legend	Depth m	O.D. Level m		
Depth m	Type	Result							
0.10 0.10	D1 PID1	(1.4)		MADE GROUND - CONCRETE slab, removed		0.20			
0.30 0.30	D2 PID2	(0.0)		MADE GROUND - Brown clayey, sandy GRAVEL with some brick and concrete cobbles. Gravel consists of fine to medium crushed brick, concrete, ash and tile fragments					
0.50-1.00	B1								
0.70 0.70	D3 PID3	(0.0)							
0.90 0.90	D4 PID4	(0.0)		MADE GROUND - Firm brown and orange brown mottled slightly sandy CLAY		0.90 1.00			
				Trial pit completed at 1.00m depth					
KEY D - Disturbed Sample B - Bulk Sample U - Undisturbed Sample R - Root Sample W - Water Sample J - Jar Sample ∇ - Water Strike ∇ - Water Rise ∇c - Level on completion MP - Mackintosh Probe P() - Hand Penetrometer Cohesion () kPa V - Vane Shear Test Cohesion () kPa			REMARKS 1. Pit dry 2. Pit sides stable					Project No 10805 <hr/> Scale Page 1:25 1/1	

GROUND ENGINEERING Geo-Environmental Specialists 01733 566566			Site: 7 SPRING PLACE, LONDON NW5			TRIAL PIT TP9		
			Date: 14/11/06	Pit Size: 1.30m L x 0.60m W x 1.00m D.		Ground Level:		
Samples and in-situ Tests			(Date)	Description of Strata	Legend	Depth m	O.D. Level m	
Depth m	Type	Result	Water					
0.20 0.20	D1 PID1	(0.0)		MADE GROUND - CONCRETE slab, removed		0.20		
0.40 0.40 0.50-1.00	D2 PID2 B1	(0.0)		MADE GROUND - Dark brown and dark grey sandy GRAVEL. Gravel consists of gravel size brick, concrete, ash and clinker				
0.70 0.70	D3 PID3	(0.0)						
0.90 0.90	D4 PID4	(0.0)						
				Trial pit completed at 1.00m depth				
KEY D - Disturbed Sample B - Bulk Sample U - Undisturbed Sample R - Root Sample W - Water Sample J - Jar Sample  Water Strike  Water Rise  Level on completion MP - Mackintosh Probe P() - Hand Penetrometer Cohesion () kPa V - Vane Shear Test Cohesion () kPa			REMARKS 1. Pit dry 2. Pit sides stable					
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GROUND ENGINEERING Geo-Environmental Specialists 01733 566566			Site: 7 SPRING PLACE, LONDON NW5		TRIAL PIT TP11					
			Date: 14/11/06	Pit Size: 1.70m L x 0.60m W x 1.50m D.		Ground Level:				
Samples and In-situ Tests			(Date) Water	Description of Strata	Legend	Depth m				
Depth m	Type	Result								
0.30 0.30	D1 PID1	(0.0)		MADE GROUND - Soft brown and dark brown gravelly, sandy CLAY. Gravel consists of fine to medium brick, concrete, ash, clinker, pottery and brick fragments		1.20				
0.60 0.60	D2 PID2	(0.0)								
0.80-1.20 0.90 0.90	B1 D3 PID3	(0.0)								
1.20 1.20 1.30	D4 PID4 W1	(0.0)	1.20	MADE GROUND - Dark grey clayey, sandy GRAVEL. Gravel consists of brick, concrete, ash, tile and pottery fragments		1.50				
			Trial pit completed at 1.50m depth							
KEY D - Disturbed Sample B - Bulk Sample U - Undisturbed Sample R - Root Sample W - Water Sample J - Jar Sample ∇ - Water Strike ∇ - Water Rise ∇c - Level on completion MP - Mackintosh Probe P() - Hand Penetrometer Cohesion () kPa V - Vane Shear Test Cohesion () kPa			REMARKS 1. Water met at 1.30m depth 2. Pit sides unstable 3. Water level on completion, 1.30m below ground level 4. Strong hydrocarbon odour below 1.20m depth 5. Slight hydrocarbon sheen on standing water							
			<table border="1"> <tr> <td colspan="2"> Project No 10805 </td> </tr> <tr> <td> Scale 1:25 </td> <td> Page 1/1 </td> </tr> </table>				Project No 10805		Scale 1:25	Page 1/1
Project No 10805										
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Trial Pit Location Plan



NOT TO SCALE

Project : 7 Spring Place, London NW5

Client : CHA Ventures Limited

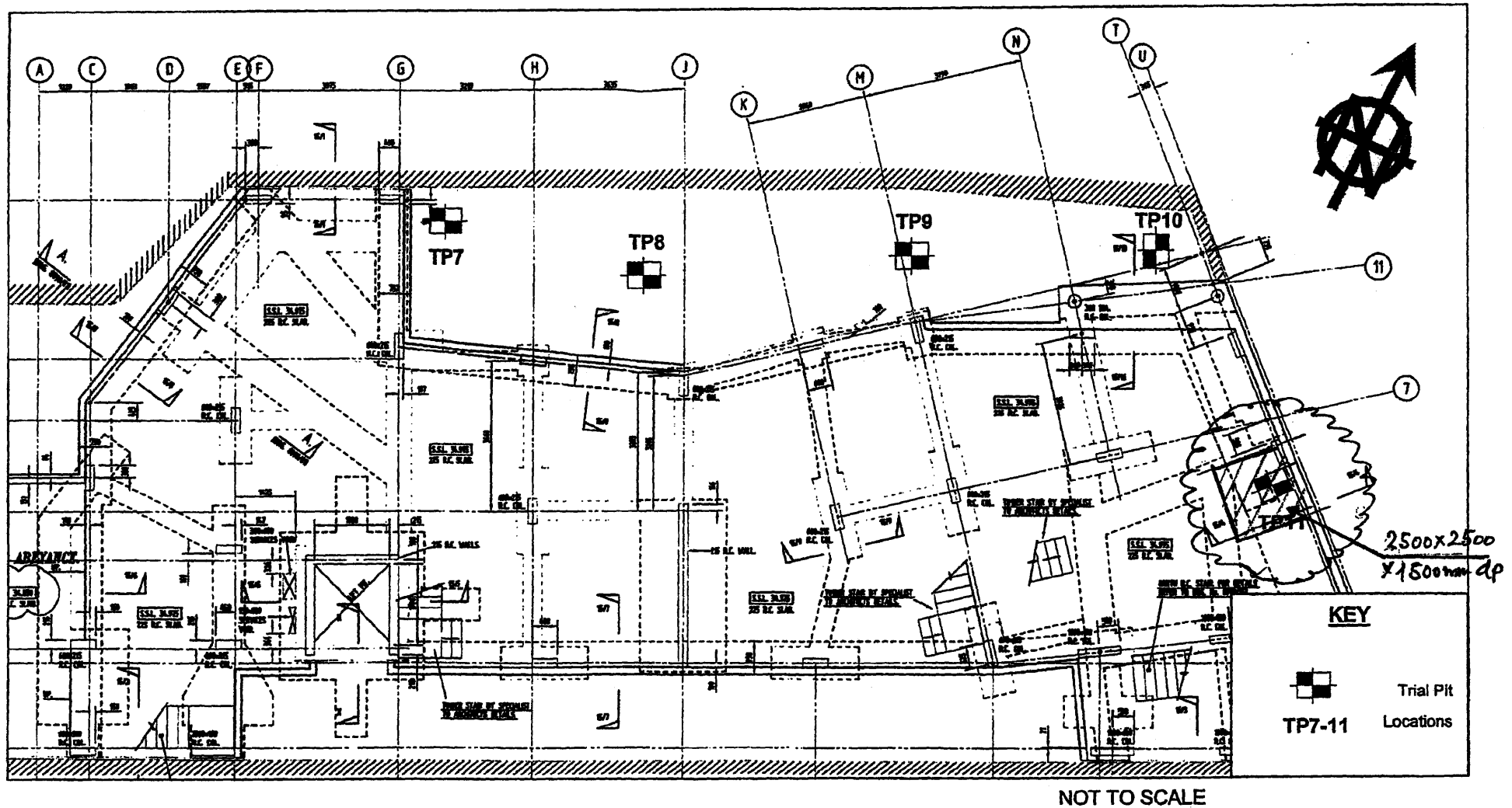
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Peterborough Tel: 01733 566566

Project Reference
No.

C10805

Trial Pit Location Plan



Project : 7 Spring Place, London NW5

Client : CHA Ventures Limited

**GROUND
ENGINEERING**

Peterborough Tel: 01733 566566

Project Reference
No.

C10805/1

8990/lam/ej/mi-007

Darren Beesley
Environmental Health Team
London Borough of Camden Town Hall
Argyle Street, London
WC1H 8EQ

30 March 2009

RE: 7 SPRING PLACE, NW5-VALIDATION REPORT

Following the completion of the above project in September 2008 we now enclose our Validation Report for the remediation strategy together with the additional backup documents including the site investigation by Ground Engineering, architect's landscape and engineer's ground floor general arrangement drawings showing the garden areas that have been concreted.

We believe we have answered all the questions that were raised through previous correspondence and that the Planning Conditions have been fulfilled.

If you have any comments on the information provided then please contact us as soon as possible.

Yours sincerely

Anthony Boateng

Cc

Judith Raymond - Community Housing Group
Louisa Loizou - Solicitor for and on behalf of One Housing Group
Simon Britton - AppleyardsDWB
Mark Blythen - Monahan Blythen Architects
Frank Lennon - Sandwood Construction

8990/lam/ab/mi-020

7 SPRING PLACE, LONDON, NW5

30 March 2008

RE: VALIDATION REPORT

Your ref: E&CP/7 Spring Place

Site Remediation

As contained in our report ref: 8990/lam/ej/cl007, the remediation proposals for the above site were as follows:

- Remove 1m of soil in all the gardens which are private and replace the soil with 200mm of gap-graded aggregate with a geo-textile top and bottom and 800mm of clean top soil up to the finished levels.
- Locally remove the soil in the areas where there were elevated levels of TPH.
- Under the building it will not be necessary to undertake any remediation apart from the removal of TPH.

Changes in Remediation Strategy

Further to our previous correspondence the following changes were made and agreed with you during the works on site:

- Hard surfacing of the private garden areas at ground floor with 150mm Reinforced Concrete Slab and paving to reduce site excavation and soil removal from site.
- Local removal of soil to a depth of 1.50m under the building and replacement with clean soil.

Drawings

Attached are copies of our ground floor general arrangement drawing No. 8990/03/F and the Architect's landscape detail drawing No. SP/86/A.

Site Monitoring

Enclosed is a copy of the Ground Engineering site investigation report during the construction work for your information.

Conclusions

We confirm that the above development was completed in September 2008 and that the remediation objectives have been met and no future monitoring is required.

There is no exposed soil on site as the existing which remains is either covered by the new building. Where there are open spaces these have been covered in a reinforced concrete hardstand.

The remediation work has been successfully undertaken and there are no future problems with contaminants for the lifetime of the building.

Enc.: Remediation Report ref: 8990/lam/ej/cl007
Ellis & Moore GA Drawing No. 8990/03/F
Monahan Blythen Architect's Drawing No. SP/86/A
Ground Engineering Investigation Report Ref: SJF/ALM/C.10805