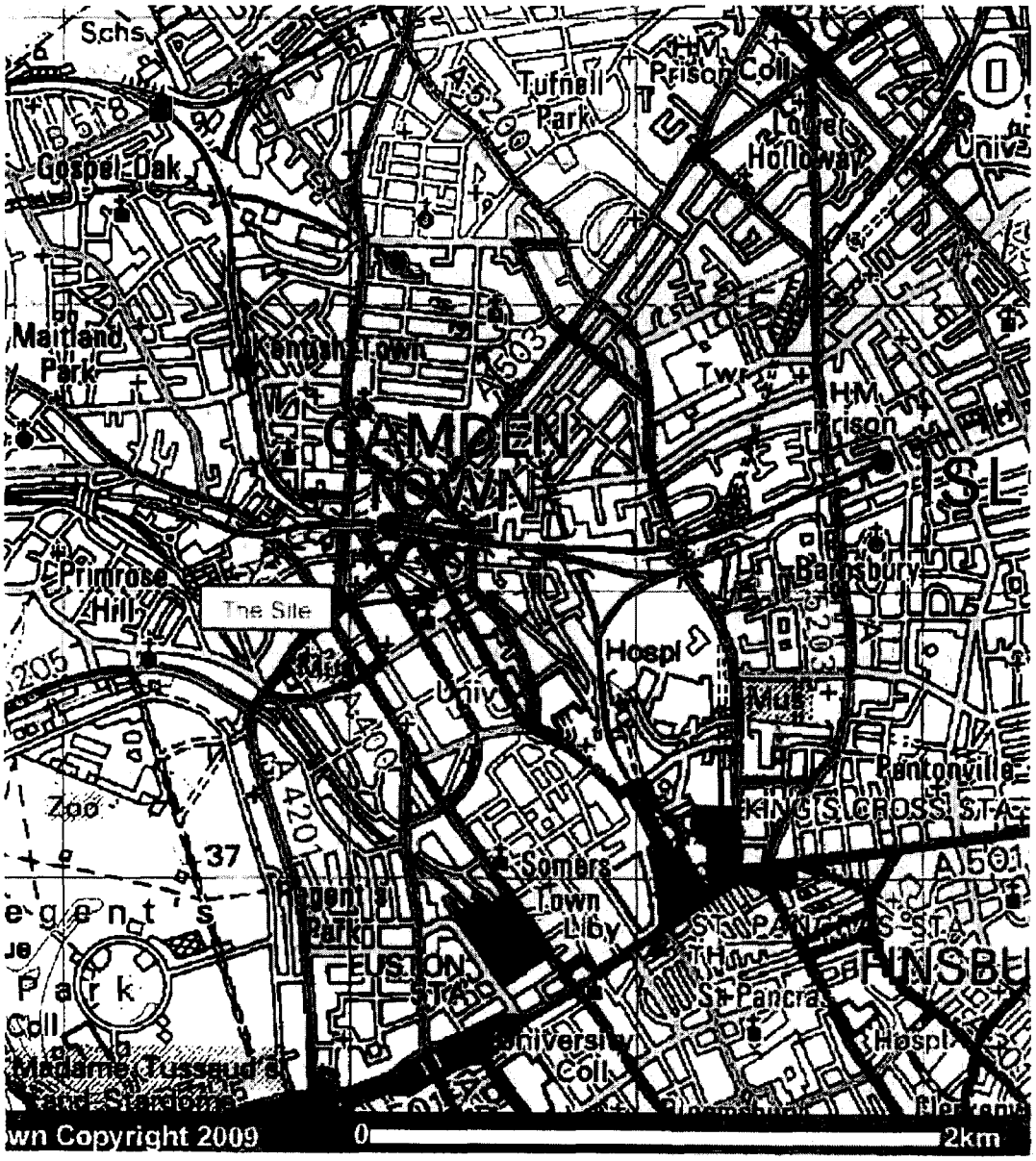
Figures 1 & 2

Site Location Plan

Figure 1

N



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Project : Elm Village, Camden, London NW1 **Client : Wynne Williams Associates Limited**	**GROUND ENGINEERING LTD** Peterborough Tel : 01733 566566	**Project No.** **C11779**

Exploratory Hole Location Plan

Figure 2

25m

KEY

Trial Pits TP1 to TP5

Project : Elm Village, Camden, London NW1 **Client : Wynne Williams Associates Limited**	**GROUND ENGINEERING LTD** Peterborough Tel : 01733 566566	**Project No.** **C11779**

Appendix 1

Records
of

Trial Pits TP1 to TP5

C11779

GROUND
ENGINEERING
Geo-Environmental Specialists
01733 566566

Site: ELM VILLAGE, CAMDEN, LONDON

TRIAL PIT
TP1

Date: 19/08/09

Pit Size: 0.50m L x 0.50m W x 1.00m D.

Ground Level: 50.50m. O.D.

Samples and in-situ Tests			(Date) Water	Description of Strata	Legend	Depth m	O.D. Level m
Depth m	Type	Result					
0.05	D1			MADE GROUND - Dark brown, locally black, very gravelly, clayey, silty SAND. Gravel of angular brick, concrete and flint.			
0.20	D2						
0.40	D3					0.40	50.10
				MADE GROUND - Stiff, friable, gravelly, slightly sandy CLAY/ SILT. Gravel of angular brick, flint and rounded quartz.			
0.60	D4						
0.80	D5						
1.00	D6						
				CONCRETE obstruction.		1.00	49.50
				Pit abandoned 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 abandoned at 1.00m depth
2. Pit dry
3. Pit sides stable

Project No 11779

Scale 1:25

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ENGINEERING

Geo-Environmental Specialists
01733 566566

Site: **ELM VILLAGE, CAMDEN, LONDON**

TRIAL PIT TP2

Date: 19/08/09

Pit Size: 0.50m L x 0.50m W x 1.00m D.

Ground Level: 48.40m. O.D.

Samples and in-situ Tests			(Date) Water	Description of Strata	Legend	Depth m	O.D. Level m
Depth m	Type	Result					
0.05	D1			MADE GROUND - Stiff, friable, dark brown, slightly sandy, gravelly, organic CLAY with dead roots. Gravel of angular glass, concrete and flint.		0.20	48.20
0.20	D2			MADE GROUND - Brown, gravelly, silty fine SAND. Gravel of angular concrete, flint and rounded quartz.			
0.40	D3						
0.60	D4						
0.80	D5						
1.00	D6					1.00	47.40
				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 11779

Scale 1:25

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GROUND
ENGINEERING
Geo-Environmental Specialists
01733 566566

Site: ELM VILLAGE, CAMDEN, LONDON

TRIAL PIT
TP3

Date: 19/08/09

Pit Size: 0.50m L x 0.50m W x 1.20m D.

Ground Level: 48.50m. O.D.

Samples and in-situ Tests			(Date) Water	Description of Strata	Legend	Depth m	O.D. Level m
Depth m	Type	Result					
0.20-0.50	B1			MADE GROUND -Brown, gravelly, clayey, silty fine SAND with roots and occasional cobbles. Gravel and cobbles of angular to rounded chalk, concrete, flint and quartz.			
						1.20	47.30
				Pit completed at 1.20m 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 11779

Scale 1:25

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ENGINEERING

Geo-Environmental Specialists
01733 566566

Site: **ELM VILLAGE, CAMDEN, LONDON**

Date: 19/08/09

Pit Size: 0.50m L x 0.50m W x 1.20m D.

TRIAL PIT TP4

Ground Level: 48.50m. O.D.

Samples and in-situ Tests			(Date) Water	Description of Strata	Legend	Depth m	O.D. Level m
Depth m	Type	Result					
0.20-0.50	B1			MADE GROUND - Brown, very gravelly, silty SAND. Gravel of angular brick, concrete, flint, pottery and rounded quartz.			
						1.20	47.30
				Pit completed at 1.20m 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 11779

Scale 1:25

Page 1/1

GROUND ENGINEERING

Geo-Environmental Specialists
01733 566566

Site: ELM VILLAGE, CAMDEN, LONDON

TRIAL PIT
TP5

Date: 19/08/09

Pit Size: 1.00m L x 0.50m W x 0.30m D.

Ground Level: 45.00m. O.D.

Samples and in-situ Tests			(Date) Water	Description of Strata	Legend	Depth m	O.D. Level m
Depth m	Type	Result					
				MADE GROUND - CONCRETE.		0.04	44.96
				MADE GROUND - Lean mix concrete.		0.10	44.90
				MADE GROUND - CONCRETE slab obstruction.		0.30	44.70
				Pit completed at 0.30m 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 abandoned at 0.10m depth
2. Pit dry
3. Pit sides stable

Project No 11779

Scale 1:25

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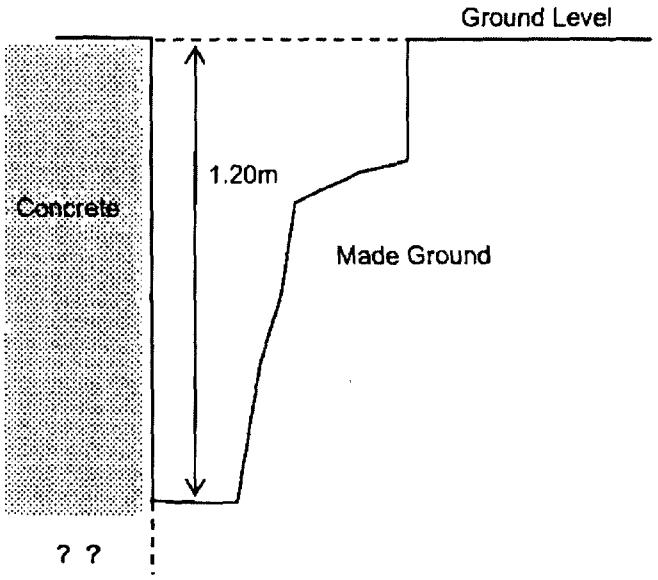
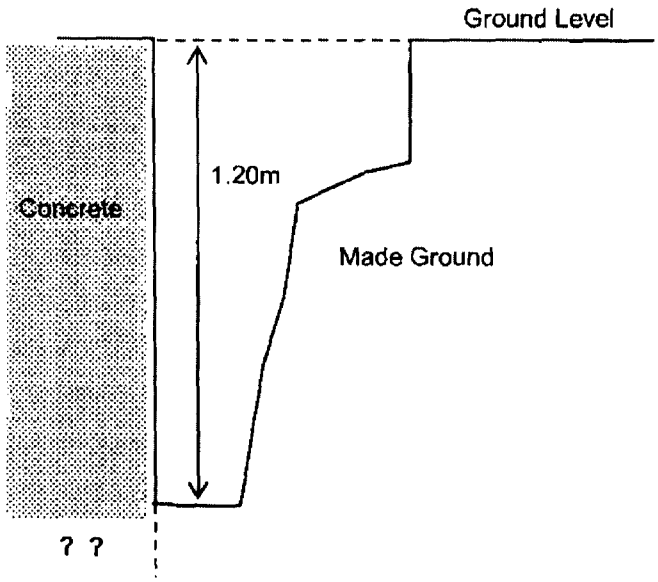
Cross Sections of Trial Pits TP3 and TP4

Trial pit TP3



Trial pit TP4



Not To Scale

Project : Elm Village, Camden, London NW1 **Client : Wynne Williams Associates Limited**	**GROUND ENGINEERING LTD** Peterborough Tel : 01733 566566	**Project No.** **C11779**

Appendix 2

CBR Results
(1 Page)

LABORATORY TEST RESULTS

CONTRACT ELM VILLAGE, CAMDEN, LONDON

Trial-pit	Sample	Depth m	Classification				Density		Triaxial Compression					Sulphate testing				C.B.R.		Remarks
			Liquid Limit %	Plastic Limit %	Plasticity Index %	Moisture Content %	Bulk Mg/m^3	Dry Mg/m^3	Type	Principal Stress Difference kPa	Cell Pressure kPa	Shear Strength kPa	Angle of Shear Resistance degrees	Soil Total % Dry Wt.	Soil Aqueous Extract mg/l	Water mg/l	pH	Top %	Base %	
TP3	B1	0.20 - 0.50				14	1.82	1.59										18	17	16% retained on 20mm sieve
TP4	B1	0.20 - 0.50				10	1.86	1.69										31	30	16% retained on 20mm sieve

U - UNDISTURBED SAMPLE
D - DISTURBED SAMPLE
B - BULK SAMPLE
W - WATER SAMPLE

C.U. - CONSOLIDATED UNDRAINED
C.D. - CONSOLIDATED DRAINED
Q. - IMMEDIATE UNDRAINED
Q.M. - IMMEDIATE UNDRAINED MULTISTAGE

Aqueous Extract 2:1 Water:Soil

C.B.R. - CALIFORNIA BEARING RATIO

11779

GROUND ENGINEERING PETERBOROUGH

Appendix 3

Laboratory Chemical Test Results and Topsoil Analysis

(9 Pages)

C11779

Chemtest
The right chemistry to deliver results

Depot Road
Newmarket
CB8 0AL
Tel: 01638 606070

Ground Engineering
Newark Road
Peterborough

PE1 5UA

FAO John Gibb
16 September 2009

Dear John Gibb

Test Report Number **57784**
Your Project Reference **Elm Village, Camden, London**

Please find enclosed the results of analysis for the samples received 7 September 2009.

All soil samples will be retained for a period of one month and all water samples will be retained for 7 days following the date of the test report. Should you require an extended retention period then please detail your requirements in an email to customerservices@chemtest.co.uk. Please be aware that charges may be applicable for extended sample storage.

If you require any further assistance, please do not hesitate to contact the Customer Services team.

Yours sincerely

KT Jones

Authorised Signatory

☐ Darrell Hall	Laboratory Manager
☐ Phil Hellier	Operations Director
☑ Keith Jones	Technical Development Manager
☐ John Crawford	Quality Manager
☐ Malcolm Avis	Technical Director

UKAS TESTING
2183

Notes to accompany report:

- *The sign < means 'less than'*
- *Tests marked 'U' hold UKAS accreditation*
- *Tests marked 'M' hold MCertS (and UKAS) accreditation*
- *Tests marked 'N' do not currently hold UKAS accreditation*
- *Tests marked 'S' were subcontracted to an approved laboratory*
- *n/s means 'not evaluated'*
- *i/s means 'insufficient sample'*
- *u/s means 'unsuitable sample'*
- *Comments or interpretations are beyond the scope of UKAS accreditation*
- *The results relate only to the items tested*