

		(MOUNT PLEASANT POST-OFFICE)		
MLO64265	083224/00/00	FARRINGDON RD (MOUNT PLEASANT POST-OFFICE)	BUILDING, HOUSE OF CORRECTION, PRISON	Post Medieval (1540 AD to 1900 AD)
MLO64267	083225/00/00	FARRINGDON RD (MOUNT PLEASANT POST-OFFICE)	WALL, HOUSE OF CORRECTION, PRISON	Post Medieval (1540 AD to 1900 AD)
MLO75737	MLO75737	Farringdon Road	DEPOSIT UNCLASSIFIED	Medieval (1066 AD to 1539 AD)
MLO77026	MLO77026	Farringdon Road	CONSTRUCTION LAYER, DEPOSIT, DUMP LAYER	Post Medieval (1540 AD to 1900 AD)
MLO77027	MLO77027	Farringdon Road	WALL	18th Century to 19th Century (1800 AD to 1900 AD)
MLO11095	080493/00/00	FARRINGDON ROAD	DUMP	Post Medieval (1540 AD to 1900 AD)
MLO18007	082059/00/00	FARRINGDON ST	SETTLEMENT	Early Medieval/Dark Age to Medieval (410 AD to 1539 AD)
MLO16287	081633/00/00	FINSBURY	SIEGEWORK	Post Medieval (1540 AD to 1900 AD)
MLO17840	082058/00/00	FURNIVALS INN	INNS OF CHANCERY, INNS OF CHANCERY	Medieval to 19th Century (1066 AD to 1900 AD)
MLO21218	201944/00/00	GRAYS INN	INNS OF COURT, INNS OF COURT	Medieval to 19th Century (1066 AD to 1900 AD)
MLO21121	201958/00/00	GRAYS INN RD	CEMETERY	Post Medieval (1540 AD to 1900 AD)
MLO23437	082060/00/00	GRAYS INN RD	BOUNDARY MARKER	Medieval (1066 AD to 1539 AD)
MLO17782	081781/00/00	GRAYS INN RD POSSIBLY HOLBORN END	CREMATION	Roman (100 AD to 150 AD)
MLO97982	MLO97982	Hatton Place (No 13), Hatton Garden	BASEMENT	Post Medieval (1540 AD to 1900 AD)
MLO23812	082216/00/00	HAYWARD S PLACECLERKENWELL	THEATRE	Post Medieval (1540 AD to 1900 AD)
MLO17818	082021/00/00	HOLBORN	ROAD, ROAD	Medieval to 16th Century (1066 AD to 1600 AD)
MLO99237	MLO99237	Kirby Street [Nos 36-41], Camden, {site of 19th century cellars}	CELLAR, WALL	19th Century (1850 AD to 1900 AD)
MLO63101	082919/00/00	LAYSTALL ST, EC1	GARDEN	Post Medieval (1540 AD to 1900 AD)
MLO17851	082083/00/00	LEATHER LA	ROAD	Medieval (1066 AD to 1539 AD)
MLO18881	503034/00/00	MERLIN ST	BATHS	Post Medieval (1540 AD to 1900 AD)
MLO25710	082250/00/00	MOUNT PLEASANT	HOUSE	Medieval (1066 AD to 1539 AD)
MLO20125	082122/00/00	NATIONAL CAR PARK	BUILDING	Medieval (1066 AD to 1539 AD)
MLO187	082146/00/00	NATIONAL CAR PARK SANS WALK	WATER PIPE	Medieval (1066 AD to 1539 AD)
MLO20205	082147/00/00	NATIONAL CAR PARK SANS WALK	BUILDING, BUILDING	Medieval to 19th Century (1066 AD to 1900 AD)
MLO25032	082145/00/00	NATIONAL CAR PARK SANS WALK	GRAVEL PIT	Medieval (1066 AD to 1539 AD)
MLO77903	MLO77903	NEW GARDEN HOUSE, 71-80 HATTON GARDEN, EC1	WALL	17th Century to 18th Century (1601 AD to 1800 AD)

MLO370	MLO370	NEWCASTLE ROW	TERRACED HOUSE	Post Medieval (1540 AD to 1900 AD)
MLO57328	080437/11/00	NEWCASTLE ROW	CLOISTER, CLOISTER	Medieval to 19th Century (1066 AD to 1900 AD)
MLO18036	080404/00/00	PENTONVILLE	CONDUIT	Medieval (1066 AD to 1539 AD)
MLO17852	082084/00/00	PORTPOOL LA	ROAD	Medieval (1066 AD to 1539 AD)
MLO66023	216069/00/00	RAY ST BRIDGE	TROUGH	Post Medieval (1540 AD to 1900 AD)
MLO11091	080458/00/00	RAY STREET	WEIR, WATERMILL	Medieval (1066 AD to 1539 AD)
MLO11093	080472/00/00	ROSOMAN STREET	HOUSE OF CORRECTION	Post Medieval (1540 AD to 1900 AD)
MLO17850	082082/00/00	SAFFRON HILL	ROAD	Medieval (1066 AD to 1539 AD)
MLO67929	080437/23/00	SANS WALK EC1	BEDDING TRENCH	Medieval (1066 AD to 1539 AD)
MLO67930	080437/24/00	SANS WALK EC1	RUBBISH PIT	Medieval (1066 AD to 1539 AD)
MLO67931	080437/25/00	SANS WALK EC1	PAVEMENT	Medieval (1066 AD to 1539 AD)
MLO10377	081630/00/00	SHOREDITCH	SIEGEWORK	Post Medieval (1540 AD to 1900 AD)
MLO72352	084333/00/00	SNOW HILL	AIR RAID SHELTER	Post Medieval (1540 AD to 1900 AD)
MLO57335	080437/02/00	ST JAMES WALK	WALL, WALL	Medieval to 16th Century (1066 AD to 1600 AD)
MLO43926	080436/14/00	ST JOHNS SQ	DORMITORY, DORMITORY	Medieval to 16th Century (1066 AD to 1600 AD)
MLO43935	080436/15/00	ST JOHNS SQ	ARMOURY, ARMOURY	Medieval to 16th Century (1066 AD to 1600 AD)
MLO43936	080436/17/00	ST JOHNS SQ	BUILDING RANGE, BUILDING RANGE	Medieval to 16th Century (1066 AD to 1600 AD)
MLO44372	080436/16/00	ST JOHNS SQ	COURTYARD, COURTYARD	Medieval to 16th Century (1066 AD to 1600 AD)
MLO56111	080436/17/006	ST JOHNS SQ	COUNTING HOUSE, COUNTING HOUSE	Medieval to 16th Century (1066 AD to 1600 AD)
MLO56676	080436/17/002	ST JOHNS SQ	STEPS, STEPS	Medieval to 16th Century (1066 AD to 1600 AD)
MLO56677	080436/17/004	ST JOHNS SQ	DISTILLERY, DISTILLERY	Medieval to 16th Century (1066 AD to 1600 AD)
MLO56678	080436/17/005	ST JOHNS SQ	DORMITORY, DORMITORY	Medieval to 16th Century (1066 AD to 1600 AD)
MLO56682	080436/17/008	ST JOHNS SQ	KITCHEN, KITCHEN	Medieval to 16th Century (1066 AD to 1600 AD)
MLO56720	080436/17/003	ST JOHNS SQ	BUILDING, BUILDING	Medieval to 16th Century (1066 AD to 1600 AD)
MLO57203	MLO57203	ST JOHNS SQ	RELIGIOUS HOUSE, RELIGIOUS HOUSE, PRIORY, PRIORY	Medieval to 16th Century (1066 AD to 1600 AD)
MLO75739	MLO75739	St John's Square	MADE GROUND	Medieval to 19th Century (1066 AD to 1900 AD)
MLO77030	MLO77030	St John's Square	MAKEUP LAYER, DUMP	Medieval to 19th Century (1066 AD to 1900 AD)
MLO97903	MLO97903	St John's Square, Clerkenwell	MADE GROUND	Post Medieval (1540 AD to 1900 AD)
MLO18792	080406/00/00	ST JOHNS ST	CONDUIT	Medieval (1066 AD to 1539 AD)
MLO43571	080436/01/00	ST JOHNS ST	WALL, WALL	Medieval to 16th Century (1066 AD to 1600 AD)
MLO45801	080405/09/00	ST JOHNS ST	WATER PIPE	Medieval (1066 AD to 1539 AD)
MLO46146	080405/11/00	ST JOHNS ST	DITCH	Medieval (1066 AD to 1539 AD)
MLO75757	MLO75757	The Grand Priory Church of St John of Jerusalem	CHURCH	Medieval (1066 AD to 1539 AD)
MLO24965	081765/00/00	THEOBALDS RD	ROAD	Roman (43 AD to 409 AD)
MLO6969	082347/00/00	THEOBALDS RD	CONDUIT, CONDUIT,	Medieval to 19th Century (1066 AD to 1900 AD)

		(OPPOSITE NO 26)	WATER PIPE, WATER PIPE	
MLO22996	080501/00/00	VINEYARD MEWS	VINEYARD	Medieval (1066 AD to 1539 AD)
MLO100510	MLO100510	Woodbridge Street (No 15)[Rosemary School and Sensory Gardens], EC1R 0ET {Post medieval occupation}	GULLY, PIT, QUARRY PIT, FOUNDATION, WALL, LEVELLING LAYERS, BUILDING, FLOOR, VAULT, BUTTRESS, OVEN, DEMOLITION LAYER, DRAIN, KILN?, PATH, BASEMENT, FIREPLACE, PORCH?, CULVERT, SCHOOL, GRAVEL PIT	17th Century to 19th Century (1601 AD to 1900 AD)

Other

MonUID	Pref. Ref.	Name	Monument Types	Date Range
MLO74167	084781/00/000	23 CLERKENWELL CLOSE CLERKENWELL LONDON E1	NEGATIVE EVIDENCE	Unknown (Unknown)
MLO22993	080465/00/00	48 CLERKENWELL CLO	FINDSPOT	Medieval (1066 AD to 1539 AD)
MLO61482	082761/00/00	49 DOUGHTY ST	FINDSPOT	Medieval (1066 AD to 1539 AD)
MLO1822	080352/00/00	CLERKENWELL	FINDSPOT, FINDSPOT	Palaeolithic (500000 BC to 10001 BC)
MLO359	080443/00/00	CLERKENWELL	FINDSPOT	Early Medieval/Dark Age (410 AD to 1065 AD)
MLO11076	080344/00/00	CLERKENWELL ROAD, [NEAR SESSIONS HOUSE]	FINDSPOT, FINDSPOT	Palaeolithic (500000 BC to 10001 BC)
MLO1665	080434/00/00	FARRINGDON RD	FINDSPOT, FINDSPOT	Medieval to 16th Century (1066 AD to 1600 AD)
MLO1682	080369/00/00	FARRINGDON RD	FINDSPOT	Roman (43 AD to 409 AD)
MLO71745	084201/00/00	FARRINGDON RD	FINDSPOT	Roman (43 AD to 409 AD)
MLO71746	084202/00/00	FARRINGDON RD	FINDSPOT	Roman (43 AD to 409 AD)
MLO1666	080553/00/00	FLEET RIVER	FINDSPOT	15th Century to 16th Century (1485 AD to 1600 AD)
MLO17848	082077/00/00	FOX CT	NEGATIVE EVIDENCE	Unknown (Unknown)
MLO17777	081773/00/00	GOUGH ST	FINDSPOT	Roman (43 AD to 409 AD)
MLO17696	081712/00/00	GRAYS INN RD	FINDSPOT	Mesolithic (10000 BC to 4001 BC)
MLO17697	081713/00/00	GRAYS INN RD	FINDSPOT	Neolithic (4000 BC to 2201 BC)
MLO23431	081711/00/00	GRAYS INN RD	FINDSPOT, FINDSPOT	Palaeolithic (500000 BC to 10001 BC)
MLO71747	084203/00/00	GRAYS INN RD	FINDSPOT	Roman (43 AD to 409 AD)
MLO59307	202943/00/00	Gray's Inn Square, [Gray's Inn Gardens], WC1	GARDEN	16th Century to Modern (1501 AD to 2050 AD)
MLO71755	084208/00/00	HATTON GDNS	FINDSPOT	Medieval (1066 AD to 1539 AD)
MLO5829	082345/00/00	HOLBORN	FINDSPOT, FINDSPOT	Medieval (1066 AD to 1539 AD)
MLO77982	MLO77982	LEATHER LANE,	NEGATIVE EVIDENCE	Unknown (Unknown)

		CLERKENWELL, EC1		
MLO67928	083665/00/00	SANS WALK EC1	FINDSPOT	Iron Age (700 BC to 42 AD)
MLO11079	080383/00/00	ST JOHN'S SQUARE	FINDSPOT, FINDSPOT, FINDSPOT, FINDSPOT	Palaeolithic (500000 BC to 10001 BC)
MLO62885	082887/00/00	TOPHAM ST	NEGATIVE EVIDENCE	Unknown (Unknown)

Cgms

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Cgms

SITE INVESTIGATION SURVEY

Thorne Hiley Limited

*24-28 Warner Street,
Camden*



British Society of Soil Science



Institute of Professional
Soil Scientists

Our Ref: SES/TH/WS/1#1

Date: 8th August 2011

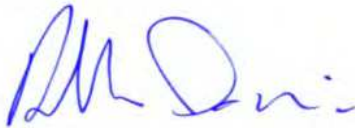
Client:

Thorne Hiley Limited
10 Furnival Street
London
EC4A 1 YH

SITE INVESTIGATION SURVEY

*24-28 Warner Street,
Camden*

A report prepared on behalf of *Soil Environment Services* by:



Dr Robin S Davies BSc PhD MISoilSci CSci PGC *Contaminated Land Management*
Chartered Scientist



INSTITUTE OF PROFESSIONAL SOIL SCIENTISTS

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Soil Environment Services

Agricultural Land Classification, Contaminated Land
Risk Assessment, Mineral Extraction Soil Planning
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5.1 Groundwater	8
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APPENDIX A	Engineers borehole log/s

1. SCOPE OF WORKS

Soil Environment Services Ltd was instructed by Thorne Hiley Limited to conduct a factual ground investigation at:

24-28 Warner Street
Camden
London
EC1R 5EX

(Drawing SS/1)

The planned works include soil survey to provide a factual assessment of soil and ground water conditions for the required ground-works and/or building construction. The site investigation was in general accordance with BS5930 and BS1377.

The site investigation was carried out on the 27-28th July 2011.

The planned scope of works as per detailed and specified within the agreed quotation comprised:

4 x boreholes to a maximum depth of 6.00 metres below ground level (m bgl)
Groundwater assessment
1 x factual report to BS5930

Variation to the above scope of works may be needed and beneficial given the ground conditions encountered during the site investigation. This will be detailed in **Section 3.1 – Completed Works**.

The accuracy of the geotechnical report is restricted to the initial scope of works and then the completed works. Also, variation in soil strength and composition may subsequently be encountered across the site during site works operations and/or ground preparation.

2. SITE SETTING

The site assessed for this investigation currently comprises 266 sq m. area of land located on the southern side of Warner Street, Camden (Drawing 1). The site is surrounded by commercial properties and offices.

2.1 Surface conditions

At the time of survey the site area was within the buildings of Latchfords Timber Merchants office and warehouse. The ground surface was concrete and the site was in general level. However the surrounding land had an approximate 1.5 m drop from north to south.

2.2 BGS mapped Geology and drift

The site is located on Alluvium: mainly sand, silt and clay from Flandrian, Holocene era, bordering London Clay Formation from the Thames Group; consisting of clay, silty in part, lower part sandy in east from Eocene, Palaeogene era. Surrounded by Hackney Gravel- post diversionary River Terrace Deposits; gravel, sandy and clayey in part from Anglian to Devensian, Pleistocene era. (BGS Map 256: 1:50000).

2.3 Drainage and hydrogeology

Flow to groundwater will be restricted by the concrete and clay soils.

Surface water flow may find a possible route via surface water drains and runoff to the south east towards the River Thames 1310 m south of the site.

The culverted River Fleet runs from west to east and is located approximately 4 m south of the site (Drawing 2). The land then rises to the 15 m contour south of the site.

The site is located on what would have been the north bank of the River Fleet with land rising to the north and falling to the south. The original ground below the site has an approximate 1.5 m fall from north to south over the site length.

3. GEOTECHNICAL SOIL SURVEY

3.1 Completed works

Site works

BHs, were located as in Drawing 1.

3 x boreholes to a maximum depth of 6.00 metres below ground level (m bgl)

2 x boreholes to a maximum depth of 1.50 metres below ground level (m bgl)

Laboratory analysis and reporting

1 x factual report to BS5930

3.2 General soil descriptions (full borehole log/s in Appendix A)

BH1 terminated at 1.5 m over possible metal infill from the historical bomb damaged building. This borehole was re-located but terminated again on metal infill material.

Soils in general consisted of over 3 m of sandy gravel made ground over a dark grey organic silty clay layer of up to 1 m over grey firm silty clay.

BH2 had a stratum of soft organic silt from 4 to 4.75 m bgl. This is likely to be part of the bank or edge of the former River Fleet.

3.3 In-situ testing

Testing on-site included water depth assessment.

3.4 Groundwater

Groundwater was detected in BHs 2 and 4 on the south side of the site. In BH 2, slight water seepage was noted at 4.5 m bgl and in BH4 slight seepage at 5.5 m bgl. No water was detected in BH3 on the north side of the site.

The water levels noted are not likely to indicate a east to west hydraulic gradient as the drop in river height will be in west to east direction with corresponding hydraulic gradient. The water seepage is considered therefore to be from water which may entered the yard at the rear of the building and passed to depth or water from the various culverts (including the River Fleet) and channels at depth below the site and which has passed through fissures in the clay.

4. LABORATORY TESTING

Samples have been retained with currently no laboratory testing commissioned.

5. SUMMARY AND CONCLUSIONS

This report and the survey have been undertaken with the intention of establishing the potential for adverse impact upon the existing below ground conditions. Consideration has been given to the Appendix E of the recent Arup's Report for the site and equally stages 1-4 of the BIA outlined in COG24 2011 in arriving at the conclusions reached in this report. From the findings, there is no reason to believe that the proposed scheme will affect the below ground geo-hydrological conditions.

5.1 General ground conditions

Soils consisted of over 3 m of sandy gravel made ground over a dark grey organic silty clay layer of up to 1 m over grey firm silty clay. BH2 had a stratum of soft organic silt from 4 to 4.75 m bgl. This is likely to be part of the bank or edge of the former River Fleet.

5.2 Groundwater

No significant groundwater was detected. The water in BH2 was likely to be that related to the River Fleet and as such will probably be the water passing down the hydraulic gradient in the former bank side or river edge sediments. The culverted river is likely to be approximately 4-6 m south of BH2 and possibly at a slightly (0.5 m) lower elevation.

BHs 3 and 4 did not exhibit significant water up-gradient of BH2.

The development would not be expected to have any significant effect on groundwater as:

- 1 very little water ingress was detected and
- 2 BHs up gradient of BH2 demonstrated no significant water which could be impacted by basement location.

The proposed scheme is likely to have no adverse impact on the current below ground geo-hydrological conditions.

In light of the proposed plans/developments and specifically the proposed basement level and following the completion of the below ground survey, the findings do not warrant (and we do not warrant the need for) any further investigations/works at this stage.

Drawing 1

Site plan and borehole locations

NOTES:



Borehole and LDP

Soil Environment Services

Tel.: 0191 243 0686

www.soilenvironmental.com

Drawing Title: Site plan and borehole locations

Drawing No.: 1

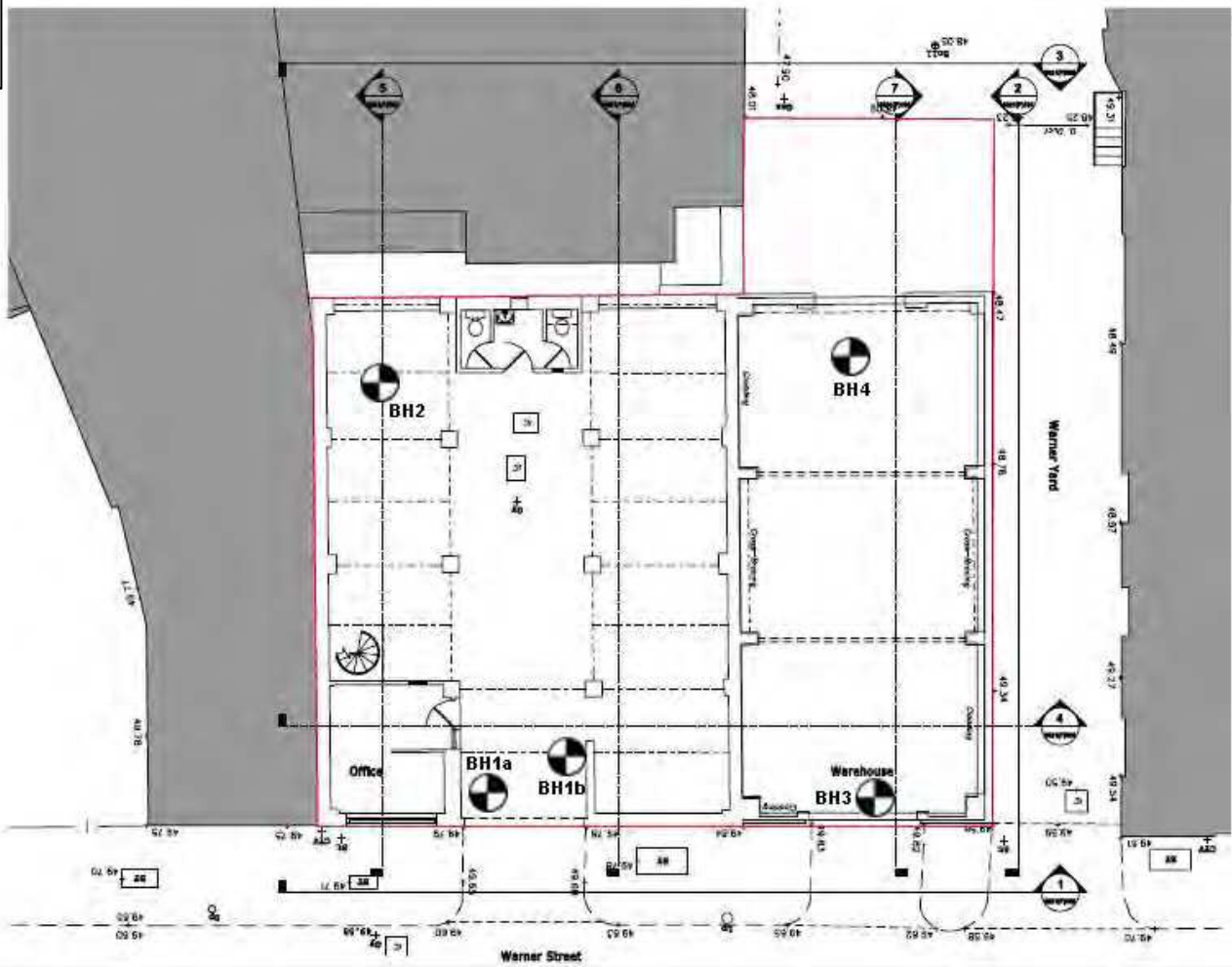
Client: Thorne Hiley Ltd

Project: 24-28 Warner Street

Scale: n/a

Date: 27-28th July 2011

S



Drawing 2

River Fleet location

NOTES:

Soil Environment Services

Tel.: 0191 243 0686

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Drawing Title: River Fleet location

Drawing No.: 2

Client: Thorne Hiley Ltd

Project: 24-28 Warner Street

Scale: n/a

Date: 27-28th July 2011



APPENDIX A

Engineers borehole log/s

Soil Environment Services

Borehole/ Testpit Log

Date

27/07/11

Excavation type and method: Borehole/Window Sampler

Client

Thorne Hiley Limited

Site

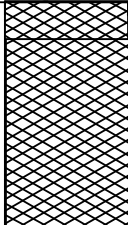
24-28 Warner Street

BH/Pit Ref.

BH 1a and 1b

Surface (m OD)

20 m

Depth (m BGL)	Symbol	Description	Installations	Notes
1.0		MADE GROUND Concrete with large flint inclusions		
2.0		MADE GROUND Crushed brick, rock, ash with some flint inclusions with loose gravel and light brown sand.		Terminated at 1.80 m suspected large metal grid. No groundwater was detected
3.0				
4.0				
5.0				
6.0				
7.0				
8.0				
9.0				

Soil Environment Services

Borehole/ Testpit Log

Date

27/07/11

Excavation type and method:

Borehole/Window Sampler

Client

Thorne Hiley Limited

Site

24-28 Warner Street








BH/Pit Ref.

BH 2

Surface (m OD)

20 m

Depth (m BGL) Symbol Description Installations Notes

1.0		MADE GROUND Concrete with large flint inclusions		
2.0		MADE GROUND Brown/grey, loose sandy gravel with crushed brick and rock.		
3.0		MADE GROUND brown, medium dense sandy clay, with gravel, brick and ash.		
4.0		MADE GROUND Very dark brown, firm, silty clay with brick		
4.5		Dark grey, soft, organic SILT		Slight water seepage at 4.50 m
5.0		Dark grey, soft to firm, silty CLAY		
6.0				
7.0				
8.0				
9.0				

Soil Environment Services

Borehole/ Testpit Log

Date

27/07/11

Excavation type and method: Borehole/Window Sampler

Client

Thorne Hiley Limited

Site

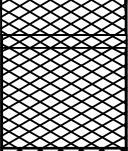
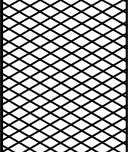
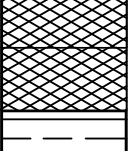
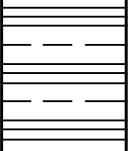

24-28 Warner Street

BH/Pit Ref.

BH 3

Surface (m OD)

20 m

Depth (m BGL)	Symbol	Description	Installations	Notes
1.0		MADE GROUND Concrete with large flint inclusions MADE GROUND orange, clayey sandy, gravel MADE GROUND Brown/grey, loose sandy gravel with crushed brick, rock, flint and glass.		
2.0		MADE GROUND Black/brown, loose, sandy gravel and ash.		
3.0		MADE GROUND Brown, soft, silty organic clay with brick		
4.0		Grey, firm to stiff, silty CLAY		
5.0		Light brown/ grey mottled, firm to stiff, silty CLAY		
6.0				No groundwater was detected
7.0				
8.0				
9.0				

Soil Environment Services

Borehole/ Testpit Log

Date

27/07/11

Excavation type and method: Borehole/Window Sampler

Client

Thorne Hiley Limited

Site

24-28 Warner Street

BH/Pit Ref.

BH 4

Surface (m OD)

20 m

Depth (m BGL)	Symbol	Description	Installations	Notes
1.0		MADE GROUND Concrete with large flint inclusions		
2.0		MADE GROUND Brown/grey, loose sandy gravel with crushed brick, rock and ash.		
3.0				
4.0				
5.0		Dark grey, firm to stiff, silty CLAY		Slight water seepage at 5.50 m
6.0		Grey, firm, silty clay over brown mottled, firm silty CLAY		
7.0				
8.0				
9.0				