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TEST CERTIFICATE

Determination of Liquid & Plastic Limits

Tested in accordance with BS 1377-2:1990: Method 4.4 & 5: One Point Method

Client:	Soiltechnics	Certificate Number:	PL1419-2/9/704
Client Address:	Cedar Barn White Lodge, Walgrave, Northampton, NN6 9PY	Client Reference:	STE1297R
		Job Number:	PL1419-2
		Date Sampled:	Unknown
Contact:	Lydia Drew	Date Received:	04.06.2008
		Date Tested:	17.06.2008
Site Name:	Richmond Upon Thames College	Sampling Certificate No.:	N/A
Site Address:		Certificate of Sampling:	N/A
		Sampled By:	Client

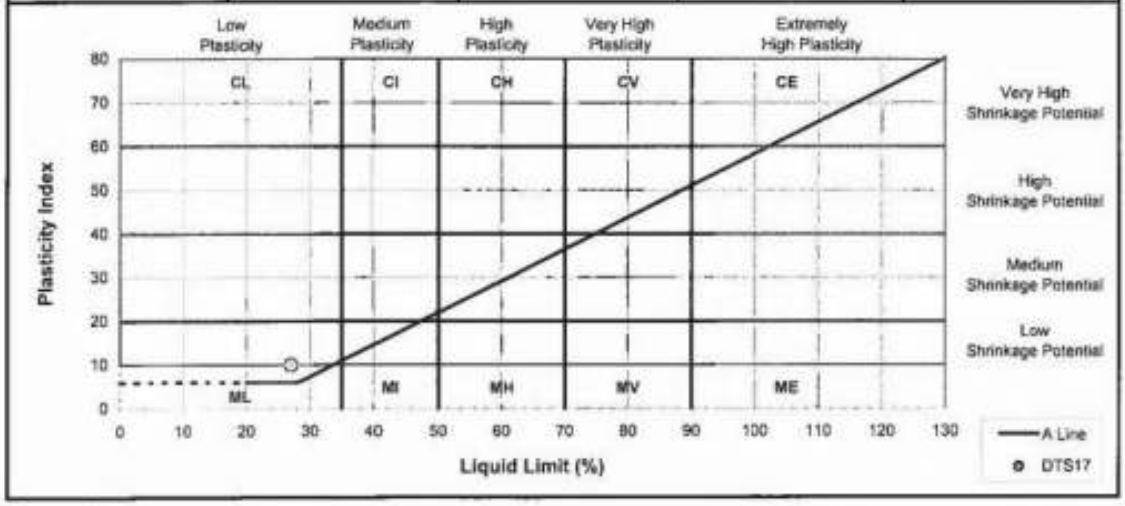
Test Results:

Laboratory Reference: PL1419-2/9
Sample Reference: Not Given

Sample Description: Stiff brown grey slightly sandy slightly gravelly CLAY
Location: DTS17 **Depth Top:** 0.50m
Sample Preparation: As Received **Depth Base:** 0.70m

Estimated % Passing 425µm BS Test Sieve

Moisture Content (%)	Liquid Limit [%]	Plastic Limit [%]	Plasticity Index	% Passing 425µm BS Test Sieve
N/A	27	17	10	96



Comments:

Approved Signatory: [ ] G. Meadows - Deputy Lab Manager
[ ] C. Reynolds - Deputy Lab Manager
[ ] J. Chapman - Team Leader

Signed:

for and on behalf of Enverity

Date Reported: 20.06.2008 Page 1 of 1
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Opinions and interpretations expressed herein are outside the scope of UKAS Accreditation

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TEST CERTIFICATE

Determination of Liquid & Plastic Limits

Tested in accordance with BS 1377-2:1990: Method 4.4 & 5: One Point Method

Client:	Soiltechnics	Certificate Number:	PL1419-2/10/704
Client Address:	Cedar Barn White Lodge, Walgrave, Northampton, NN6 9PY	Client Reference:	STE1297R
		Job Number:	PL1419-2
		Date Sampled:	Unknown
Contact:	Lydia Drew	Date Received:	04.06.2008
		Date Tested:	17.06.2008
Site Name:	Richmond Upon Thames College	Sampling Certificate No.:	N/A
Site Address:		Certificate of Sampling:	N/A
		Sampled By:	Client

Test Results:

Laboratory Reference: PL1419-2/10
Sample Reference: Not Given

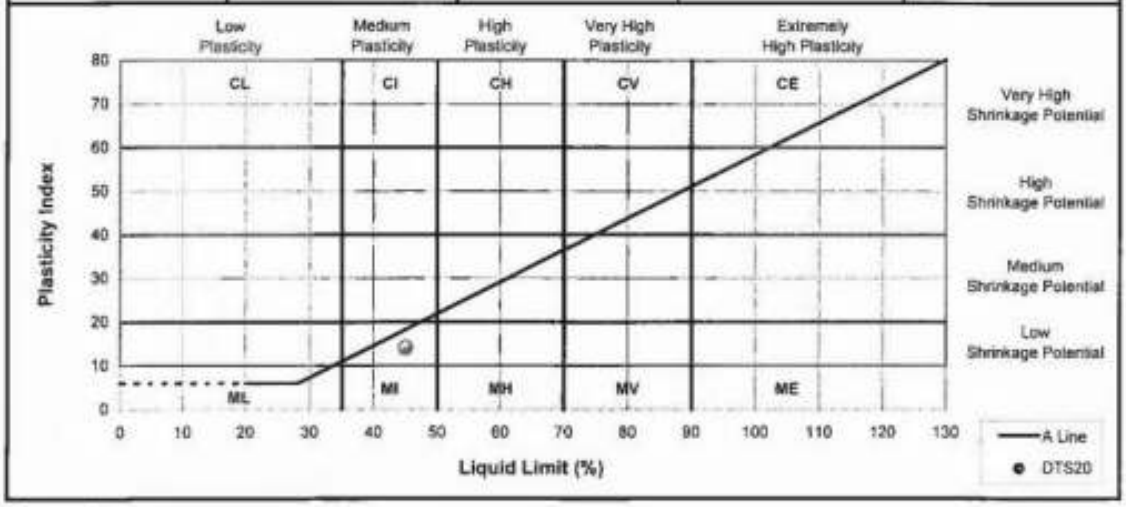
Sample Description: Dark grey brown slightly gravelly sandy SILT/CLAY

Location: DTS20 **Depth Top:** 0.40m

Sample Preparation: As Received **Depth Base:** 0.60m

Estimated % Passing 425µm BS Test Sieve

Moisture Content (%)	Liquid Limit [%]	Plastic Limit [%]	Plasticity Index	% Passing 425µm BS Test Sieve
N/A	45	31	14	77



Comments:

Approved Signatory: [ ] G. Meadows - Deputy Lab Manager
[ ] C. Reynolds - Deputy Lab Manager
[✓] J. Chapman - Team Leader

Signed:

for and on behalf of Enverity

Date Reported: 20.06.2008 Page 1 of 1
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TEST CERTIFICATE

Determination of Liquid & Plastic Limits

Tested in accordance with BS 1377-2:1990: Method 4.4 & 5: One Point Method

Client:	Soiltechnics	Certificate Number:	PL1419-2/11/704
Client Address:	Cedar Barn White Lodge, Walgrave, Northampton, NN6 9PY	Client Reference:	STE1297R
		Job Number:	PL1419-2
		Date Sampled:	Unknown
Contact:	Lydia Drew	Date Received:	04.06.2008
		Date Tested:	16.06.2008
Site Name:	Richmond Upon Thames College	Sampling Certificate No.:	N/A
Site Address:		Certificate of Sampling:	N/A
		Sampled By:	Client

Test Results:

Laboratory Reference: PL1419-2/11
Sample Reference: Not Given

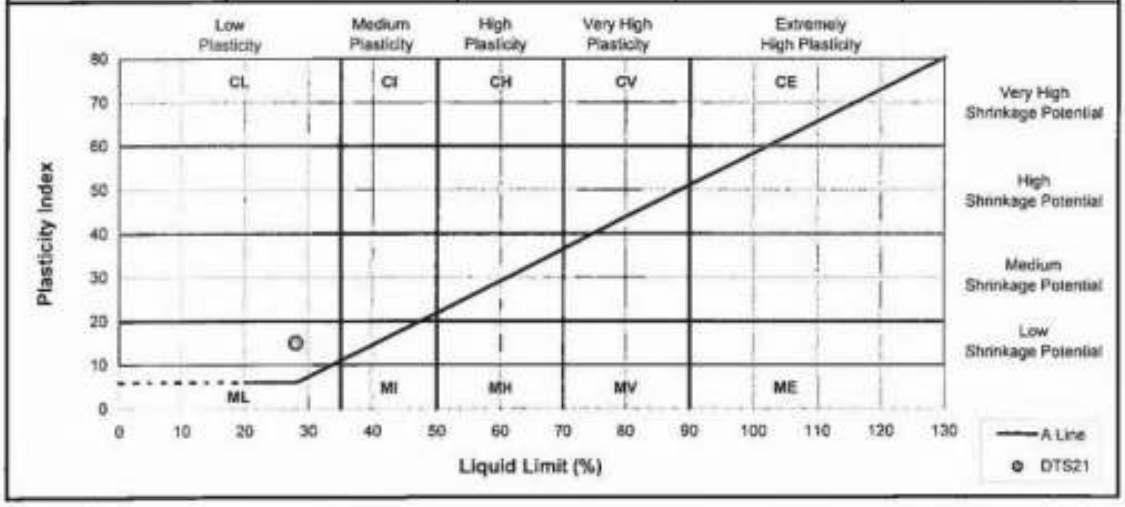
Sample Description: Brown clayey SAND and GRAVEL

Location: DTS21 **Depth Top:** 1.00m

Sample Preparation: Washed over 425µm BS Test Sieve **Depth Base:** 1.50m

Actual % Passing 425µm BS Test Sieve

Moisture Content (%)	Liquid Limit [%]	Plastic Limit [%]	Plasticity Index	% Passing 425µm BS Test Sieve
N/A	28	13	15	30



Comments:

Approved Signatory: [ ] G. Meadows - Deputy Lab Manager
[ ] C. Reynolds - Deputy Lab Manager
[✓] J. Chapman - Team Leader

Signed:

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TEST CERTIFICATE

Determination of Liquid & Plastic Limits

Tested in accordance with BS 1377-2:1990: Method 4.4 & 5: One Point Method

Client:	Soiltechnics	Certificate Number:	PL1476-1/1/704
Client Address:	Cedar Barn White Lodge, Walgrave, Northampton, NN6 9PY	Client Reference:	STE1297R
		Job Number:	PL1476-1
		Date Sampled:	Unknown
Contact:	Lydia Drew	Date Received:	25.06.2008
		Date Tested:	03.07.08
Site Name:	Richmond Upon Thames College	Sampling Certificate No.:	N/A
Site Address:		Certificate of Sampling:	N/A
		Sampled By:	Client

Test Results:

Laboratory Reference: PL1476-1/1
Sample Reference: CBR Bulk 4

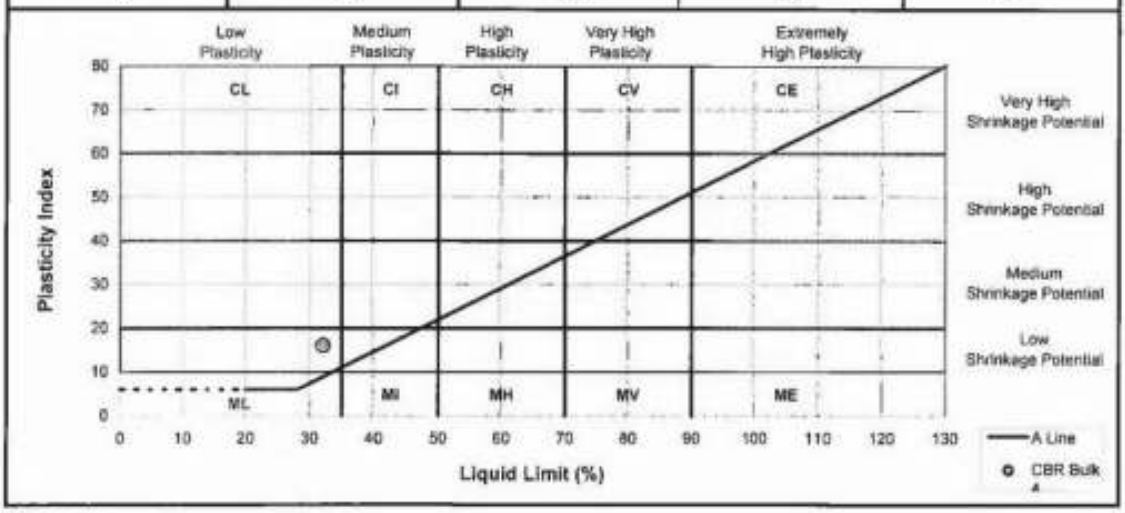
Sample Description: Soft brown orange-brown slightly gravelly sandy CLAY

Location: CBR Bulk 4 **Depth:** Not Given

Sample Preparation: As Received

Estimated % Passing 425µm BS Test Sieve

Moisture Content (%)	Liquid Limit [%]	Plastic Limit [%]	Plasticity Index	% Passing 425µm BS Test Sieve
18	32	16	16	84



Comments:

Approved Signatory: [✓] G. Meadows - Deputy Lab Manager
[ ] C. Reynolds - Deputy Lab Manager

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TEST CERTIFICATE

Determination of Liquid & Plastic Limits

Tested in accordance with BS 1377-2:1990: Method 4.4 & 5: One Point Method

Client:	Soiltechnics	Certificate Number:	PL1476-1/2/704
Client Address:	Cedar Barn White Lodge, Walgrave, Northampton, NN6 9PY	Client Reference:	STE1297R
		Job Number:	PL1476-1
		Date Sampled:	Unknown
Contact:	Lydia Drew	Date Received:	25.06.2008
		Date Tested:	03.07.2008
Site Name:	Richmond Upon Thames College	Sampling Certificate No.:	N/A
Site Address:		Certificate of Sampling:	N/A
		Sampled By:	Client

Test Results:

Laboratory Reference: PL1476-1/2
Sample Reference: CBR Bulk 5

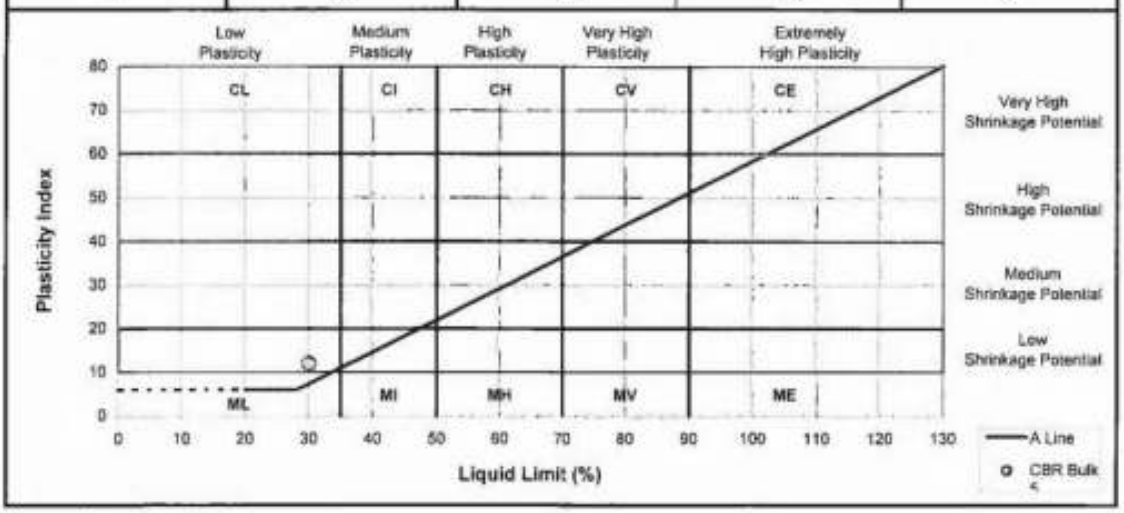
Sample Description: Soft brown orange-brown slightly gravelly sandy CLAY with rare roots < 2mm

Location: CBR Bulk 5 **Depth:** Not Given

Sample Preparation: As Received

Estimated % Passing 425µm BS Test Sieve

Moisture Content (%)	Liquid Limit [%]	Plastic Limit [%]	Plasticity Index	% Passing 425µm BS Test Sieve
19	30	18	12	97



Comments:

Approved Signatory: [✓] G. Meadows - Deputy Lab Manager
[ ] C. Reynolds - Deputy Lab Manager

Signed:

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TEST CERTIFICATE

Determination of Particle Size Distribution

Tested in Accordance with BS 1377-2: 1990: Method 9.2

Client:	Soiltechnics	Certificate Number:	PL1419-2/1/709
Client Address:	Cedar Barn White Lodge, Walgrave, Northampton, NN6 9PY	Client Reference:	STE1297R
		Lab Job Number:	PL1419-2
		Date Sampled:	Unknown
		Date Received:	04.06.2008
Contact:	Lydia Drew	Date Tested:	12.06.2008
		Certificate of Sampling:	N/A
Site Name:	Richmond Upon Thames College	Certificate of Sampling No.:	N/A
Site Address:		Sampled By:	Client

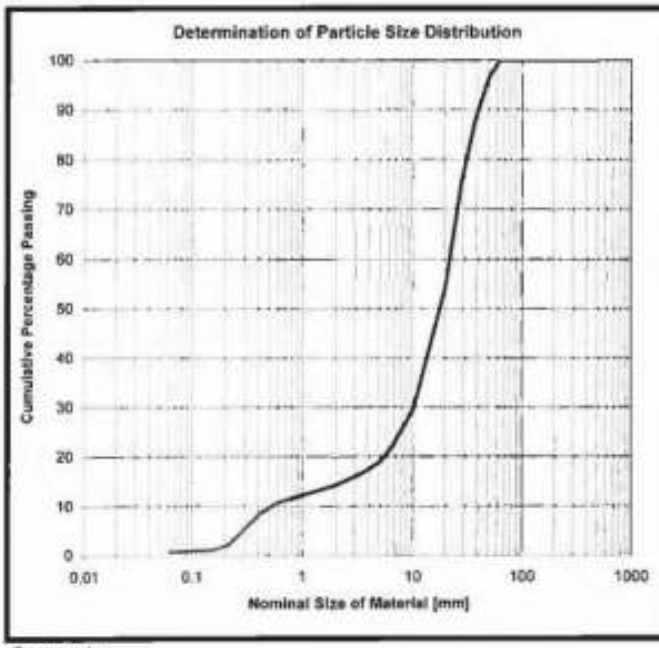
TEST RESULTS

Laboratory Reference: PL1419-2/1
Sample Reference: Not Given

Sample Description: Brown slightly silty SAND and GRAVEL
Material Specification: Not Required

Location: BH02
Supplier: Client
Source: Site

Depth Top: 2.10m
Depth Base: 2.50m



SIEVE ANALYSIS

Sieve Size [mm]	Passing [%]	Material Specification
500	100	
300	100	
200	100	
150	100	
125	100	
90	100	
75	100	
63	100	
50	97	
37.5	88	
28	75	
20	54	
14	41	
10	29	
6.3	22	
5.00	19	
3.35	16	
2.00	14	
1.18	13	
0.600	11	
0.425	9	
0.300	5	
0.212	2	
0.150	1	
0.063	1	

Comments:

Approved Signatory: [ ] G. Meadows - Deputy Lab Manager
[ ] C. Reynolds - Deputy Lab Manager
[✓] J. Chapman - Team Leader

Signed:

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TEST CERTIFICATE

Determination of Particle Size Distribution

Tested in Accordance with BS 1377-2: 1990: Method 9.2

Client:	Soiltechnics	Certificate Number:	PL1419-2/3/709
Client Address:	Cedar Barn White Lodge, Walgrave, Northampton, NN6 9PY	Client Reference:	STE1297R
		Lab Job Number:	PL1419-2
		Date Sampled:	Unknown
		Date Received:	04.06.2008
Contact:	Lydia Drew	Date Tested:	12.06.2008
		Certificate of Sampling:	N/A
Site Name:	Richmond Upon Thames College	Certificate of Sampling No.:	N/A
Site Address:		Sampled By:	Client

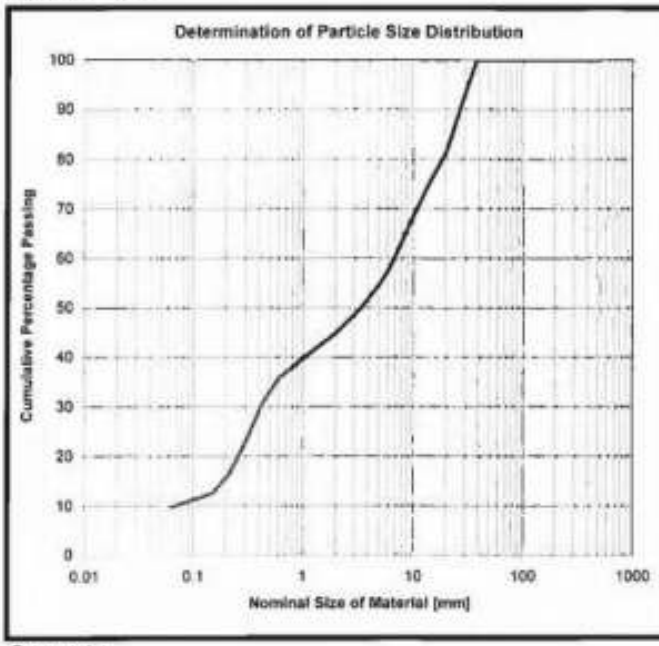
TEST RESULTS

Laboratory Reference: PL1419-2/3
Sample Reference: Not Given

Sample Description: Brown clayey SAND and GRAVEL
Material Specification: Not Required

Location: DTS03
Supplier: Client
Source: Site

Depth Top: 1.00m
Depth Base: 1.40m



SIEVE ANALYSIS

Sieve Size [mm]	Passing [%]	Material Specification
500	100	
300	100	
200	100	
150	100	
125	100	
90	100	
75	100	
63	100	
50	100	
37.5	100	
28	92	
20	82	
14	75	
10	69	
6.3	59	
5.00	55	
3.35	50	
2.00	45	
1.18	41	
0.600	36	
0.425	30	
0.300	23	
0.212	16	
0.150	13	
0.063	10	

Comments:

Approved Signatory: [ ] G. Meadows - Deputy Lab Manager
[ ] C. Reynolds - Deputy Lab Manager
[x] J. Chapman - Team Leader

Signed:

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TEST CERTIFICATE

Determination of Particle Size Distribution

Tested in Accordance with BS 1377-2: 1990: Method 9.2

Client:	Soiltechnics	Certificate Number:	PL1419-2/2/709
Client Address:	Cedar Barn White Lodge, Walgrave, Northampton, NN6 9PY	Client Reference:	STE1297R
		Lab Job Number:	PL1419-2
		Date Sampled:	Unknown
		Date Received:	04.06.2008
Contact:	Lydia Drew	Date Tested:	12.06.2008
		Certificate of Sampling:	N/A
Site Name:	Richmond Upon Thames College	Certificate of Sampling No.:	N/A
Site Address:		Sampled By:	Client

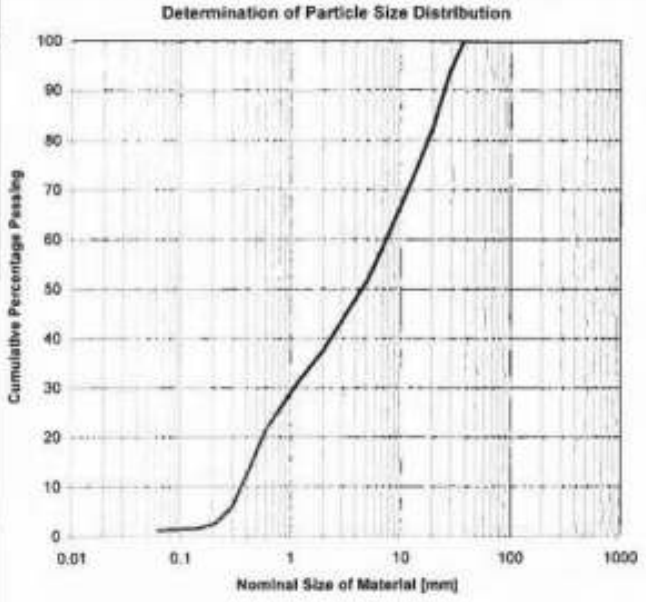
TEST RESULTS

Laboratory Reference: PL1419-2/2
Sample Reference: Not Given

Sample Description: Brown slightly silty SAND and GRAVEL
Material Specification: Not Required

Location: BH03
Supplier: Client
Source: Site

Depth Top: 1.60m
Depth Base: 2.00m



SIEVE ANALYSIS		
Sieve Size [mm]	Passing [%]	Material Specification
500	100	
300	100	
200	100	
150	100	
125	100	
90	100	
75	100	
63	100	
50	100	
37.5	100	
28	94	
20	83	
14	74	
10	67	
6.3	57	
5.00	52	
3.35	46	
2.00	38	
1.18	31	
0.600	22	
0.425	14	
0.300	6	
0.212	3	
0.150	2	
0.063	1	

Comments:

Approved Signatory: [ ] G. Meadows - Deputy Lab Manager
[ ] C. Reynolds - Deputy Lab Manager
[x] D. Chapman - Team Leader

Signed:

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Date Reported: 20.06.2008 Page 1 of 1
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TEST CERTIFICATE

Determination of Particle Size Distribution

Tested in Accordance with BS 1377-2: 1990: Method 9.2

Client:	Soiltechnics	Certificate Number:	PL1419-2/6/709
Client Address:	Cedar Barn White Lodge, Walgrave, Northampton, NN6 9PY	Client Reference:	STE1297R
		Lab Job Number:	PL1419-2
		Date Sampled:	Unknown
		Date Received:	04.06.2008
Contact:	Lydia Drew	Date Tested:	12.06.2008
		Certificate of Sampling:	N/A
Site Name:	Richmond Upon Thames College	Certificate of Sampling No.:	N/A
Site Address:		Sampled By:	Client

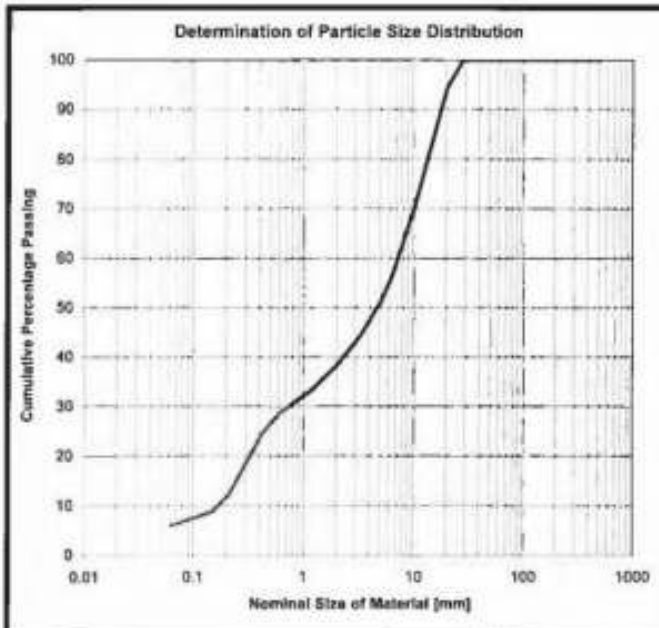
TEST RESULTS

Laboratory Reference: PL1419-2/6
Sample Reference: Not Given

Sample Description: Brown light brown clayey SAND and GRAVEL
Material Specification: Not Required

Location: DTS10
Supplier: Client
Source: Site

Depth Top: 0.80m
Depth Base: 1.00m



SIEVE ANALYSIS

Sieve Size [mm]	Passing [%]	Material Specification
500	100	
300	100	
200	100	
150	100	
125	100	
90	100	
75	100	
63	100	
50	100	
37.5	100	
28	100	
20	94	
14	82	
10	70	
6.3	56	
5.00	51	
3.35	45	
2.00	38	
1.18	33	
0.600	28	
0.425	24	
0.300	18	
0.212	12	
0.150	9	
0.063	6	

Comments:

Approved Signatory: [ ] G. Meadows - Deputy Lab Manager
[ ] C. Reynolds - Deputy Lab Manager
[✓] J. Chapman - Team Leader

Signed:

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Date Reported: 20.06.2008 Page 1 of 1
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TEST CERTIFICATE

Determination of Particle Size Distribution

Tested in Accordance with BS 1377-2: 1990: Method 9.2

Client:	Soiltechnics	Certificate Number:	PL1419-2/11/709
Client Address:	Cedar Barn White Lodge, Walgrave, Northampton, NN6 9PY	Client Reference:	STE1297R
		Lab Job Number:	PL1419-2
		Date Sampled:	Unknown
		Date Received:	04.06.2008
Contact:	Lydia Drew	Date Tested:	12.06.2008
		Certificate of Sampling:	N/A
Site Name:	Richmond Upon Thames College	Certificate of Sampling No.:	N/A
Site Address:		Sampled By:	Client

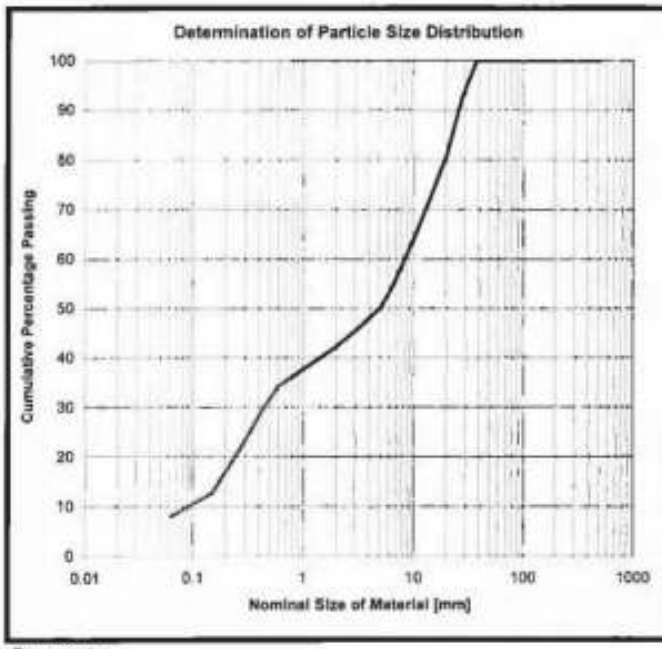
TEST RESULTS

Laboratory Reference: PL1419-2/11
Sample Reference: Not Given

Sample Description: Brown clayey SAND and GRAVEL
Material Specification: Not Required

Location: DTS21
Supplier: Client
Source: Site

Depth Top: 1.00m
Depth Base: 1.50m



SIEVE ANALYSIS

Sieve Size [mm]	Passing [%]	Material Specification
500	100	
300	100	
200	100	
150	100	
125	100	
90	100	
75	100	
63	100	
50	100	
37.5	100	
28	93	
20	81	
14	72	
10	64	
6.3	54	
5.00	50	
3.35	46	
2.00	42	
1.18	39	
0.600	34	
0.425	29	
0.300	23	
0.212	18	
0.150	13	
0.063	8	

Comments:

Approved Signatory: [ ] G. Meadows - Deputy Lab Manager
[ ] C. Reynolds - Deputy Lab Manager
[✓] J. Chapman - Team Leader

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TEST CERTIFICATE

Determination of California Bearing Ratio

Tested in accordance with BS 1377-4: 1990: Method 7.4

Client:	Soiltechnics	Certificate Number:	PL1419-2/4/736-1
Client Address:	Cedar Barn White Lodge, Walgrave, Northampton, NN6 9PY	Client Reference:	STE1297R
		Job Number:	PL1419-2
		Date Sampled:	Unknown
Contact:	Lydia Drew	Date Received:	04.06.2008
		Date Tested:	19.06.2008
Site Name:	Richmond Upon Thames College	Sampling Certificate No.:	N/A
Site Address:		Certificate of Sampling:	N/A
		Sampled By:	Client

Test Results:

Laboratory Reference: PL1419-2/4

Sample Reference: Not Given

Sample Description: Firm brown orange brown slightly gravelly sandy CLAY

Sample Location: DTS06/DTS07/CBR Bulk1

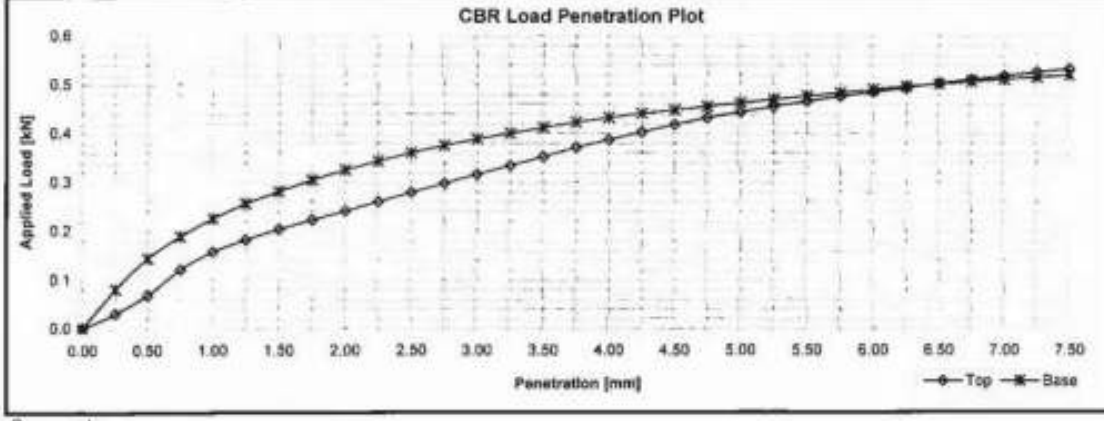
Depth Top: 0.50m

Sample Preparation: Recompacted using a 2.5kg rammer

Depth Base: 0.70m

Retained on 20mm test sieve:	7	(%)	Applied Seating Load (top):	10 N
Moisture Content (Top):	21	(%)	Applied Seating Load (base):	10 N
Moisture Content (Base):	21	(%)	Applied Surcharge:	12.0kg
Moisture Content (Mean):	21	(%)		
Initial Bulk Density:	2.03	(Mg/m³)		
Initial Dry Density:	1.67	(Mg/m³)		

CBR Top (%):	2.2	CBR Base (%):	2.7	Average CBR (%):	N/A



Comments:

Non-Standard Proctor Mould Used

Approved Signatory: [ ] G. Meadows - Deputy Lab Manager
[ ] C. Reynolds - Deputy Lab Manager
[✓] J. Chapman - Team Leader

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Date Reported: 20.06.2008 Page 1 of 1

Form Number: EN/C/736-1 Version 122

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TEST CERTIFICATE

Determination of California Bearing Ratio

Tested in accordance with BS 1377-4: 1990: Method 7.4

Client:	Soiltechnics	Certificate Number:	PL1419-2/7/736-1
Client Address:	Cedar Barn White Lodge, Walgrave, Northampton, NN6 9PY	Client Reference:	STE1297R
		Job Number:	PL1419-2
		Date Sampled:	Unknown
Contact:	Lydia Drew	Date Received:	04.06.2008
		Date Tested:	18.06.2008
Site Name:	Richmond Upon Thames College	Sampling Certificate No.:	N/A
Site Address:		Certificate of Sampling:	N/A
		Sampled By:	Client

Test Results:

Laboratory Reference: PL1419-2/7

Sample Reference: Not Given

Sample Description: Firm brown grey slightly gravelly sandy CLAY

Sample Location: DTS11/DTS14/DTS17/CBR Bulk2

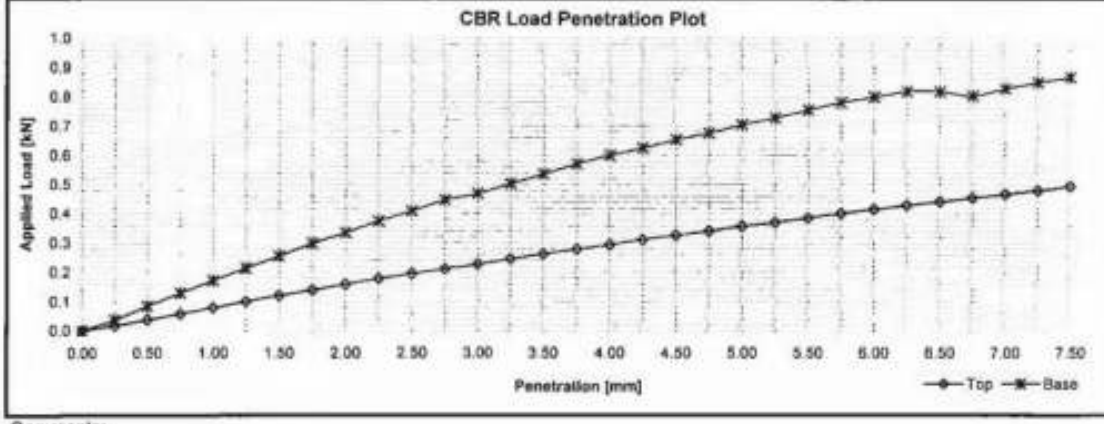
Sample Preparation: Recompacted using a 2.5kg rammer

Depth Top: 0.50m

Depth Base: 0.70m

Retained on 20mm test sieve:	9	(%)	Applied Seating Load (top):	10 N
Moisture Content (Top):	14	(%)	Applied Seating Load (base):	10 N
Moisture Content (Base):	15	(%)	Applied Surcharge:	12.0kg
Moisture Content (Mean):	15	(%)		
Initial Bulk Density:	2.18	(Mg/m³)		
Initial Dry Density:	1.90	(Mg/m³)		

CBR Top (%):	1.8	CBR Base (%):	3.5	Average CBR (%):	N/A



Comments:

Non-Standard Proctor Mould used

Approved Signatory: [ ] G. Meadows - Deputy Lab Manager
[ ] C. Reynolds - Deputy Lab Manager
[✓] D. Chapman - Team Leader

Signed:

for and on behalf of Enverity

Date Reported: 20.06.2008 Page 1 of 1

Form Number: EN/C/736-1 Version 122

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TEST CERTIFICATE

Determination of California Bearing Ratio

Tested in accordance with BS 1377-4: 1990: Method 7.4

Client:	Soiltechnics	Certificate Number:	PL1419-2/10/736-1
Client Address:	Cedar Barn White Lodge, Walgrave, Northampton, NN6 9PY	Client Reference:	STE1297R
		Job Number:	PL1419-2
		Date Sampled:	Unknown
Contact:	Lydia Drew	Date Received:	04.06.2008
		Date Tested:	18.06.2008
Site Name:	Richmond Upon Thames College	Sampling Certificate No.:	N/A
Site Address:		Certificate of Sampling:	N/A
		Sampled By:	Client

Test Results:

Laboratory Reference: PL1419-2/10

Sample Reference: Not Given

Sample Description: Dark grey brown slightly gravelly sandy SILT/CLAY

Sample Location: DTS20/CBR Bulk3

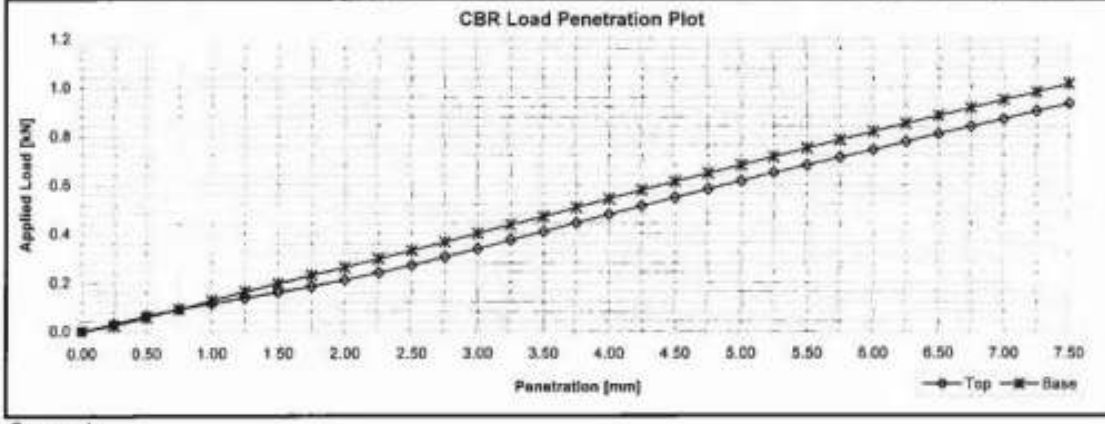
Depth Top: 0.40m

Sample Preparation: Recompacted using a 2.5kg rammer

Depth Base: 0.60m

Retained on 20mm test sieve:	1	(%)	Applied Seating Load (top):	10 N
Moisture Content (Top):	19	(%)	Applied Seating Load (base):	10 N
Moisture Content (Base):	18	(%)	Applied Surcharge:	12.0kg
Moisture Content (Mean):	18	(%)		
Initial Bulk Density:	2.02	(Mg/m³)		
Initial Dry Density:	1.70	(Mg/m³)		

CBR Top (%):	3.1	CBR Base (%):	3.4	Average CBR (%):	3.2



Comments:

Non-Standard Proctor Mould used

Approved Signatory: [ ] G. Meadows - Deputy Lab Manager
[ ] C. Reynolds - Deputy Lab Manager
[✓] J. Chapman - Team Leader

Signed:

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Date Reported: 20.06.2008 Page 1 of 1

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TEST CERTIFICATE

Determination of California Bearing Ratio

Tested in accordance with BS 1377-4: 1990: Method 7.4

Client:	Solltechnics	Certificate Number:	PL1476-1/1/736-1
Client Address:	Cedar Barn White Lodge, Walgrave, Northampton, NN6 9PY	Client Reference:	STE1297R
		Job Number:	PL1476-1
		Date Sampled:	Unknown
Contact:	Lydia Drew	Date Received:	25.06.2008
		Date Tested:	04.07.2008
Site Name:	Richmond Upon Thames College	Sampling Certificate No.:	N/A
Site Address:		Certificate of Sampling:	N/A
		Sampled By:	Client

Test Results:

Laboratory Reference: PL1476-1/1

Sample Reference: CBR Bulk 4

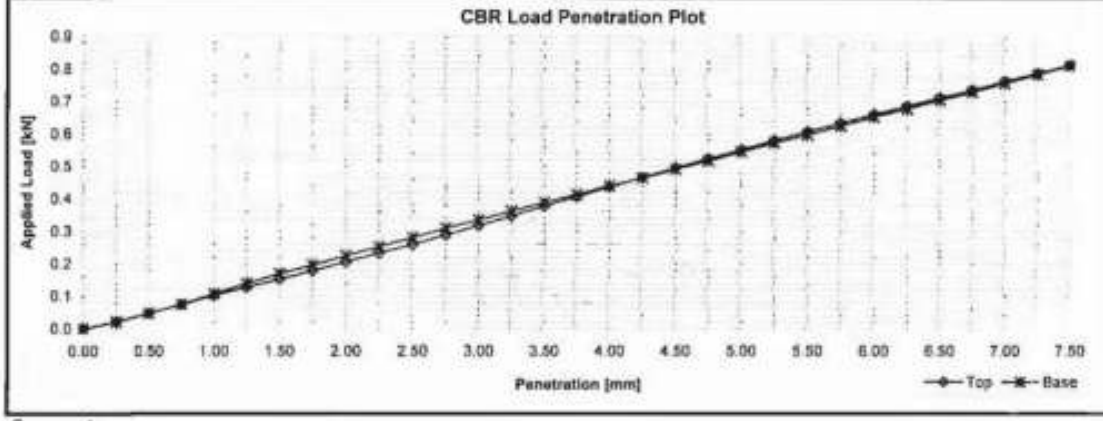
Sample Description: Soft brown orange-brown slightly gravelly sandy CLAY

Sample Location: CBR Bulk 4 **Depth:** Not Given

Sample Preparation: Recompacted at 'as received moisture content' using a 2.5kg rz

Retained on 20mm test sieve:	5	(%)	Applied Seating Load (top):	10 N
Moisture Content (Top):	18	(%)	Applied Seating Load (base):	10 N
Moisture Content (Base):	17	(%)	Applied Surcharge:	12.0kg
Moisture Content (Mean):	18	(%)		
Initial Bulk Density:	2.04	(Mg/m³)		
Initial Dry Density:	1.73	(Mg/m³)		

CBR Top (%):	CBR Base (%):	Average CBR (%):
2.8	2.7	2.7



Comments:

Approved Signatory: [ ] G. Meadows - Deputy Lab Manager
[ ] C. Reynolds - Deputy Lab Manager

Signed:

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Date Reported: 07.07.2008 Page 1 of 1

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TEST CERTIFICATE

Determination of California Bearing Ratio

Tested in accordance with BS 1377-4: 1990: Method 7.4

Client:	Soiltechnics	Certificate Number:	PL1476-1/2/736-1
Client Address:	Cedar Barn White Lodge, Walgrave, Northampton, NN6 9PY	Client Reference:	STE1297R
		Job Number:	PL1476-1
		Date Sampled:	Unknown
Contact:	Lydia Drew	Date Received:	25.06.2008
		Date Tested:	04.07.2008
Site Name:	Richmond Upon Thames College	Sampling Certificate No.:	N/A
Site Address:		Certificate of Sampling:	N/A
		Sampled By:	Client

Test Results:

Laboratory Reference: PL1476-1/2

Sample Reference: CBR Bulk 5

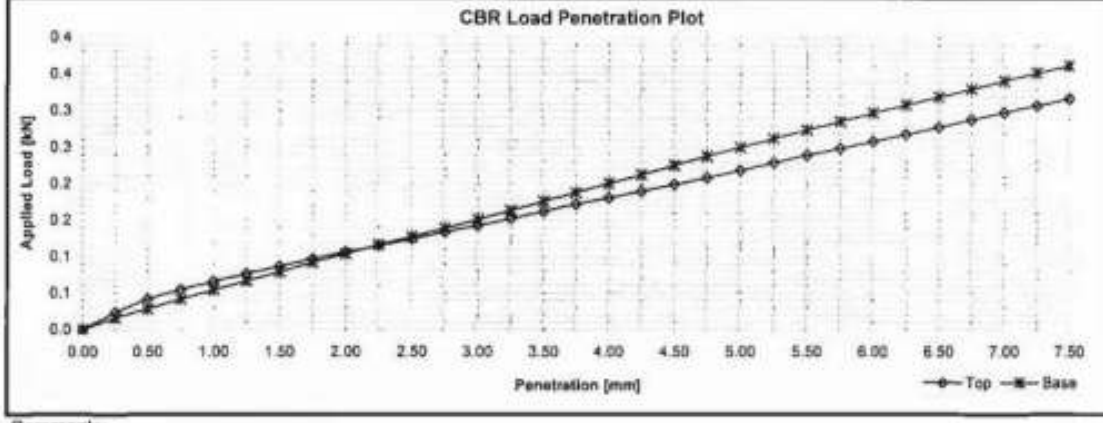
Sample Description: Soft brown orange-brown slightly gravelly sandy CLAY with rare roots < 2mm

Sample Location: CBR Bulk 5 **Depth:** Not Given

Sample Preparation: Recompacted at 'as received moisture content' using a 2.5kg ra

Retained on 20mm test sieve:	1	(%)	Applied Seating Load (top):	10 N
Moisture Content (Top):	19	(%)	Applied Seating Load (base):	10 N
Moisture Content (Base):	19	(%)	Applied Surcharge:	12.0kg
Moisture Content (Mean):	19	(%)		
Initial Bulk Density:	2.01	(Mg/m^3)		
Initial Dry Density:	1.68	(Mg/m^3)		

CBR Top (%):	CBR Base (%):	Average CBR (%):
1.1	1.3	1.1



Comments:

Approved Signatory: [✓] G. Meadows - Deputy Lab Manager
[ ] C. Reynolds - Deputy Lab Manager

Signed:

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Date Reported: 07.07.2008 Page 1 of 1

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TEST CERTIFICATE

Determination of Undrained Shear Strength in Triaxial Compression

(Single Stage Test - BS 1377:Part 7:Clause 8)

Client:	Soiltechnics	Certificate Number:	PL1419-1-1 / 713
Client	Cedar barn	Client Reference Number:	**STE1297R**
Address:	White Lodge	Date Sampled:	Unknown
	Walgrave, Northampton	Date Received:	04/06/08
Postcode:	NN6 9PY	Date Tested:	20/06/08
Contact:	Lydia Drew	Sampling Certificate No.:	N/A
Site Name:	Richmond Upon Thames College	Certificate of Sampling:	N/A
Site Address:		Sampled By:	Client

Test Results:

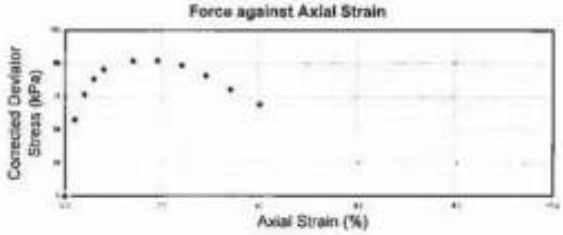
Lab Reference	PL1419-1-1	Sample Ref:	**Not Given**
Location:	**BH01**	Depth (m):	**11.50 to 11.90**
Sample Description:	Stf fiss dk gy CL		

Variations from Standard: None
Laboratory Temperature (°C): 22.0

Specimen Details

Height (mm):	199.0	Latex Membrane Thickness (mm):	0.40
Diameter (mm):	102.0	Applied Rate of Strain (%/min):	2.01
Depth within Sample (m):	11.60 to 11.80	Bulk Density (Mg/m^3):	**1.99**
Orientation within Sample:	Vertical	Moisture Content (%):	**28**
Method of Preparation :	Undisturbed (BS 1377 -1:8)	Dry Density (Mg/m^3):	**1.55**

Force against Axial Strain



Failure Sketch

Cell Pressure	**200**	kPa
Corrected Maximum Deviator Stress	**98**	kPa
Strain	**1.9**	%
Undrained Shear Strength	**49**	kPa
Mode of Failure		Brittle

Approved Signatory:
[ ] B.Wells - Laboratory Manager
[✓] G.Meadows - Deputy Lab Manager
[ ] M.Hartnup - Team Leader
[ ] J.Chapman - Team Leader

Signed:

Date Reported: 24/06/2008

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TEST CERTIFICATE

Determination of Undrained Shear Strength in Triaxial Compression

(Single Stage Test - BS 1377:Part 7:Clause 8)

Client:	Soiltechnics	Certificate Number:	PL1419-1-2 / 713
Client	Cedar barn	Client Reference Number:	**STE1297R**
Address:	White Lodge	Date Sampled:	Unknown
	Walgrave, Northampton	Date Received:	04/06/08
Postcode:	NN6 9PY	Date Tested:	20/06/08
Contact:	Lydia Drew	Sampling Certificate No.:	N/A
Site Name:	Richmond Upon Thames College	Certificate of Sampling:	N/A
Site Address:		Sampled By:	Client

Test Results:

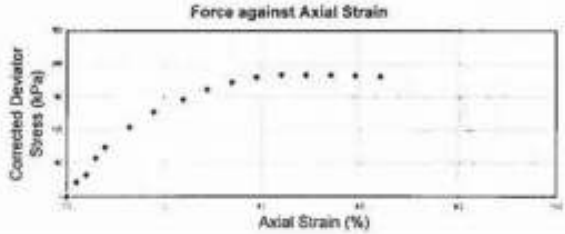
Lab Reference	PL1419-1-2	Sample Ref:	**Not Given**
Location:	**BH01**	Depth (m):	**21.60 to 20 .00**
Sample Description:	Stf dk gy CL		

Variations from Standard:	None
Laboratory Temperature (°C):	22.0

Specimen Details

Height (mm):	199.0	Latex Membrane Thickness (mm):	0.40
Diameter (mm):	102.0	Applied Rate of Strain (%/min):	1.01
Depth within Sample (m):	21.70 to 21.90	Bulk Density (Mg/m^3):	**2.00**
Orientation within Sample:	Vertical	Moisture Content (%):	**27**
Method of Preparation :	Undisturbed (BS 1377 -1:8)	Dry Density (Mg/m^3):	**1.58**

Force against Axial Strain



Failure Sketch

Cell Pressure	**380**	kPa
Corrected Maximum Deviator Stress	**220**	kPa
Strain	**4.9**	%
Undrained Shear Strength	**110**	kPa
Mode of Failure		Brittle

Approved Signatory:
[ ] B.Wells - Laboratory Manager
[✓] G.Meadows - Deputy Lab Manager
[ ] M Hartnup - Team Leader
[ ] J.Chapman - Team Leader

Signed:

Date Reported: 24/06/2008

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TEST CERTIFICATE

Determination of Undrained Shear Strength in Triaxial Compression

(Single Stage Test - BS 1377:Part 7:Clause 8)

Client:	Soiltechnics	Certificate Number:	PL1419-1-3 / 713
Client	Cedar barn	Client Reference Number:	**STE1297R**
Address:	White Lodge	Date Sampled:	Unknown
	Walgrave, Northampton	Date Received:	04/06/08
Postcode:	NN6 9PY	Date Tested:	20/06/08
Contact:	Lydia Drew	Sampling Certificate No.:	N/A
Site Name:	Richmond Upon Thames College	Certificate of Sampling:	N/A
Site Address:		Sampled By:	Client

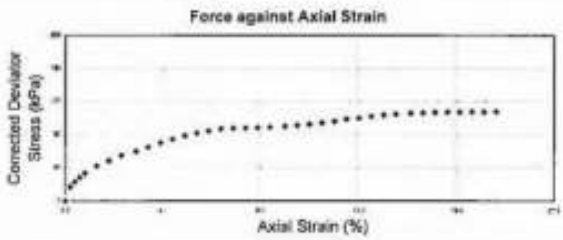
Test Results:

Lab Reference	PL1419-1-3	Sample Ref:	**Not Given**
Location:	**BH02**	Depth (m):	**6.00 to 6.40**
Sample Description:	F dk gy CL		

Variations from Standard: None
Laboratory Temperature (°C): 22.0

Specimen Details

Height (mm):	199.0	Latex Membrane Thickness (mm):	0.40
Diameter (mm):	102.0	Applied Rate of Strain (%/min):	1.01
Depth within Sample (m):	6.10 to 6.30	Bulk Density (Mg/m^3):	**1.87**
Orientation within Sample:	Vertical	Moisture Content (%):	**29**
Method of Preparation :	Undisturbed (BS 1377 -1:8)	Dry Density (Mg/m^3):	**1.45**



Failure Sketch

Cell Pressure	**110**	kPa
Corrected Maximum Deviator Stress	**108**	kPa
Strain	**17.6**	%
Undrained Shear Strength	**54**	kPa
Mode of Failure		Intermediate

Approved Signatory:
[ ] B.Wells - Laboratory Manager
[✓] G.Meadows - Deputy Lab Manager
[ ] M.Hartnup - Team Leader
[ ] J.Chapman - Team Leader

Signed:

Date Reported: 24/06/2008

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TEST CERTIFICATE

Determination of Undrained Shear Strength in Triaxial Compression

(Single Stage Test - BS 1377:Part 7:Clause 8)

Client:	Soiltechnics	Certificate Number:	PL1419-1-5 / 713
Client	Cedar barn	Client Reference Number:	**STE1297R**
Address:	White Lodge	Date Sampled:	Unknown
	Walgrave, Northampton	Date Received:	04/06/08
Postcode:	NN6 9PY	Date Tested:	20/06/08
Contact:	Lydia Drew	Sampling Certificate No.:	N/A
Site Name:	Richmond Upon Thames College	Certificate of Sampling:	N/A
Site Address:		Sampled By:	Client

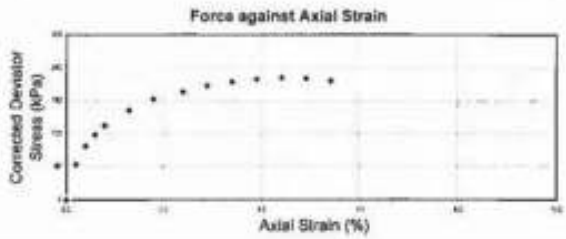
Test Results:

Lab Reference	PL1419-1-5	Sample Ref:	**Not Given**
Location:	**BH03**	Depth (m):	**17.60 to 17.90**
Sample Description:	Stf dk gy CL		

Variations from Standard: None
Laboratory Temperature (°C): 22.0

Specimen Details

Height (mm):	199.0	Latex Membrane Thickness (mm):	0.40
Diameter (mm):	102.0	Applied Rate of Strain (%/min):	1.01
Depth within Sample (m):	17.60 to 17.80	Bulk Density (Mg/m^3):	**2.02**
Orientation within Sample:	Vertical	Moisture Content (%):	**21**
Method of Preparation :	Undisturbed (BS 1377 -1:8)	Dry Density (Mg/m^3):	**1.67**



Failure Sketch

Cell Pressure	**310**	kPa
Corrected Maximum Deviator Stress	**222**	kPa
Strain	**4.4**	%
Undrained Shear Strength	**111**	kPa
Mode of Failure		Brittle

Approved Signatory:
[ ] B.Wells - Laboratory Manager
[✓] G.Meadows - Deputy Lab Manager
[ ] M.Hartnup - Team Leader
[ ] J.Chapman - Team Leader

Signed:

Date Reported: 24/06/2008

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TEST CERTIFICATE

Determination of Undrained Shear Strength in Triaxial Compression

(Single Stage Test - BS 1377:Part 7:Clause 8)

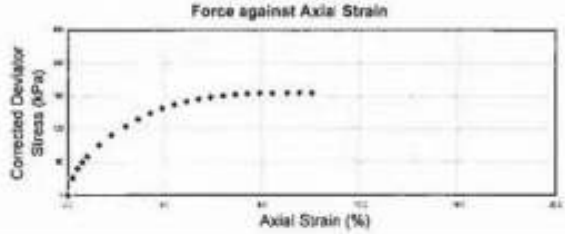
Client:	Soiltechnics	Certificate Number:	PL1419-1-6 / 713
Client	Cedar barn	Client Reference Number:	**STE1297R**
Address:	White Lodge	Date Sampled:	Unknown
	Walgrave, Northampton	Date Received:	04/06/08
Postcode:	NN6 9PY	Date Tested:	20/06/08
Contact:	Lydia Drew	Sampling Certificate No.:	N/A
Site Name:	Richmond Upon Thames College	Certificate of Sampling:	N/A
Site Address:		Sampled By:	Client

Test Results:

Lab Reference	PL1419-1-6	Sample Ref:	**Not Given**
Location:	**BH04**	Depth (m):	**7.00 to 7.40**
Sample Description:	Stf dk gy slsa CL		

Variations from Standard:	None		
Laboratory Temperature (°C):	22.0		
Specimen Details			
Height (mm):	199.0	Latex Membrane Thickness (mm):	0.40
Diameter (mm):	101.0	Applied Rate of Strain (%/min):	1.01
Depth within Sample (m):	7.10 to 7.30	Bulk Density (Mg/m^3):	**2.02**
Orientation within Sample:	Vertical	Moisture Content (%):	**28**
Method of Preparation :	Undisturbed (BS 1377 -1:8)	Dry Density (Mg/m^3):	**1.58**

Force against Axial Strain



Failure Sketch

Cell Pressure	**120**	kPa
Corrected Maximum Deviator Stress	**186**	kPa
Strain	**9.5**	%
Undrained Shear Strength	**93**	kPa
Mode of Failure		Intermediate

Approved Signatory:
[ ] B.Wells - Laboratory Manager
[ ] G.Meadows - Deputy Lab Manager
[ ] M.Hartnup - Team Leader
[ ] J.Chapman - Team Leader

Signed:

Date Reported: 24/06/2008

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TEST CERTIFICATE

Determination of Undrained Shear Strength in Triaxial Compression

(Single Stage Test - BS 1377:Part 7:Clause 8)

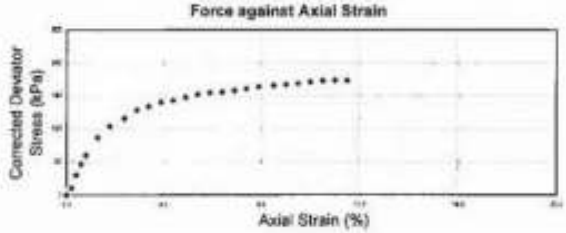
Client:	Soiltechnics	Certificate Number:	PL1419-1-7 / 713
Client	Cedar barn	Client Reference Number:	**STE1297R**
Address:	White Lodge	Date Sampled:	Unknown
	Walgrave, Northampton	Date Received:	04/06/08
Postcode:	NN6 9PY	Date Tested:	20/06/08
Contact:	Lydia Drew	Sampling Certificate No.:	N/A
Site Name:	Richmond Upon Thames College	Certificate of Sampling:	N/A
Site Address:		Sampled By:	Client

Test Results:

Lab Reference	PL1419-1-7	Sample Ref:	**Not Given**
Location:	**BH04**	Depth (m):	**14.10 to 14.50**
Sample Description:	Stf dk gy CL		

Variations from Standard:	None		
Laboratory Temperature (°C):	22.0		
Specimen Details			
Height (mm):	199.0	Latex Membrane Thickness (mm):	0.40
Diameter (mm):	102.0	Applied Rate of Strain (%/min):	1.01
Depth within Sample (m):	14.20 to 14.40	Bulk Density (Mg/m^3):	**1.94**
Orientation within Sample:	Vertical	Moisture Content (%):	**29**
Method of Preparation :	Undisturbed (BS 1377 -1:8)	Dry Density (Mg/m^3):	**1.51**

Force against Axial Strain



Failure Sketch

Cell Pressure	**250**	kPa
Corrected Maximum Deviator Stress	**209**	kPa
Strain	**11.0**	%
Undrained Shear Strength	**104**	kPa
Mode of Failure		Intermediate

Approved Signatory:
[ ] B.Wells - Laboratory Manager
[ ] G.Meadows - Deputy Lab Manager
[/] M.Hartnup - Team Leader
[ ] J.Chapman - Team Leader

Signed:

Date Reported: 24/06/2008

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TEST CERTIFICATE

Determination of Undrained Shear Strength in Triaxial Compression

(Single Stage Test - BS 1377:Part 7:Clause 8)

Client:	Soiltechnics	Certificate Number:	PL1419-1-8 / 713
Client	Cedar barn	Client Reference Number:	**STE1297R**
Address:	White Lodge	Date Sampled:	Unknown
	Walgrave, Northampton	Date Received:	04/06/08
Postcode:	NN6 9PY	Date Tested:	20/06/08
Contact:	Lydia Drew	Sampling Certificate No.:	N/A
Site Name:	Richmond Upon Thames College	Certificate of Sampling:	N/A
Site Address:		Sampled By:	Client

Test Results:

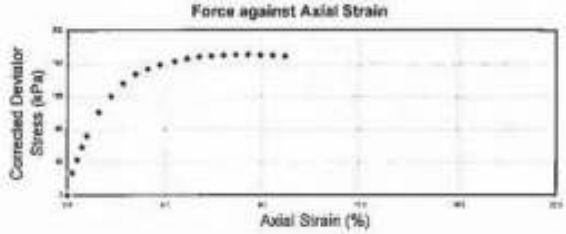
Lab Reference	PL1419-1-8	Sample Ref:	**Not Given**
Location:	**BH05**	Depth (m):	**5.50 to 5.90**
Sample Description:	Stf dk gy CL		

Variations from Standard: None
Laboratory Temperature (°C): 22.0

Specimen Details

Height (mm):	199.0	Latex Membrane Thickness (mm):	0.40
Diameter (mm):	102.0	Applied Rate of Strain (%/min):	1.01
Depth within Sample (m):	5.60 to 5.80	Bulk Density (Mg/m^3):	**2.00**
Orientation within Sample:	Vertical	Moisture Content (%):	**28**
Method of Preparation :	Undisturbed (BS 1377 -1:8)	Dry Density (Mg/m^3):	**1.57**

Force against Axial Strain



Failure Sketch

Cell Pressure	**90**	kPa
Corrected Maximum Deviator Stress	**170**	kPa
Strain	**6.9**	%
Undrained Shear Strength	**85**	kPa
Mode of Failure		Brittle

Approved Signatory:
[ ] B.Wells - Laboratory Manager
[ ] G.Meadows - Deputy Lab Manager
[✓] M.Hartnup - Team Leader
[ ] J.Chapman - Team Leader

Signed:

Date Reported: 24/06/2008

Form Number: EN/C/713 Issue 1

xplor

for and on behalf of
Enverity
A DIVISION OF XPLOR LTD
Registered in England and Wales
Registration No. 3096780
Reg Office 7 Laureate Paddocks
Newmarket Suffolk CB8 7SQ

2304

Enverity

Newark Road Peterborough
t: 01733 555525 f: 01733 315280
e: peterborough@enverity.co.uk

TEST CERTIFICATE

Determination of Undrained Shear Strength in Triaxial Compression

(Single Stage Test - BS 1377:Part 7:Clause 8)

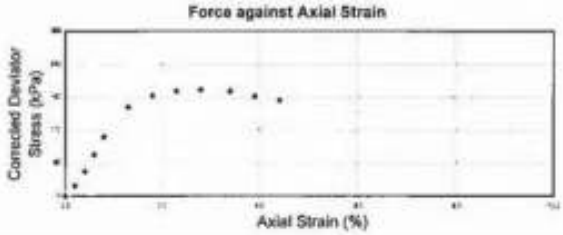
Client:	Soiltechnics	Certificate Number:	PL1419-1-10 / 713
Client	Cedar barn	Client Reference Number:	**STE1297R**
Address:	White Lodge	Date Sampled:	Unknown
	Walgrave, Northampton	Date Received:	04/06/08
Postcode:	NN6 9PY	Date Tested:	20/06/08
Contact:	Lydia Drew	Sampling Certificate No.:	N/A
Site Name:	Richmond Upon Thames College	Certificate of Sampling:	N/A
Site Address:		Sampled By:	Client

Test Results:

Lab Reference	PL1419-1-10	Sample Ref:	**Not Given**
Location:	**BH06**	Depth (m):	**20.00 to 20.40**
Sample Description:	Stf dk gy CL		

Variations from Standard:	None		
Laboratory Temperature (°C):	22.0		
Specimen Details			
Height (mm):	199.0	Latex Membrane Thickness (mm):	0.40
Diameter (mm):	102.0	Applied Rate of Strain (%/min):	1.01
Depth within Sample (m):	20.10 to 20.30	Bulk Density (Mg/m^3):	**1.99**
Orientation within Sample:	Vertical	Moisture Content (%):	**28**
Method of Preparation :	Undisturbed (BS 1377 -1:8)	Dry Density (Mg/m^3):	**1.56**

Force against Axial Strain



Failure Sketch

Cell Pressure	**360**	kPa
Corrected Maximum Deviator Stress	**193**	kPa
Strain	**2.8**	%
Undrained Shear Strength	**96**	kPa
Mode of Failure		Brittle

Approved Signatory:
[ ] B.Wells - Laboratory Manager
[ ] G.Meadows - Deputy Lab Manager
[ ] M.Hartnup - Team Leader
[ ] J.Chapman - Team Leader

Signed:

Date Reported: 24/06/2008

for and on behalf of
Enverity
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Enverity

TEST CERTIFICATE

One-Dimensional Consolidation Properties

(Tested in accordance with BS1377 : Part 5 1990)

Newark Road Peterborough
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e: peterborough@enverity.co.uk

Client:	Soiltechnics	Certificate Number:	PL1419-1-4/731
Client Address:	Cedar barn	Client Reference Number:	STE12972
	White Lodge	Date Sampled:	Unknown
	Walgrave, Northampton	Date Received:	04/06/2008
Postcode:	NN6 9PY	Date Tested:	09/06/2008
Contact:	Lydia Drew	Sampling Certificate No:	N/A
Site Name:	Richmond Upon Thames College	Certificate of Sampling:	N/A
Site Address:	London	Sampled By:	Client

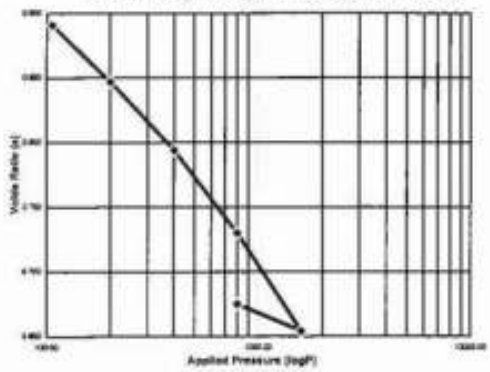
Test Details

Location:	BH03	
Sample Ref:	U1	
Sample Description:	Stiff fissured brown grey CLAY	
Particle Density (Mg/m^3):	2.74	Assumed
Mean Lab Temp. (^{o}C):	22	
Variations from Standard:	None	
Lab Reference:	PL1419-1-4	
Depth (m):	7.50 m	

Specimen Details

	INITIAL	FINAL
Height (mm):	18.99	16.82
Bulk Density (Mg/m^3):	1.92	2.12
Moisture Content (%):	32	29
Dry Density (Mg/m^3):	1.45	1.64
Voids Ratio:	0.891	0.675
Degree of Saturation (%):	98.9	119.7
Diameter (mm):	74.93	N/A
Swelling Pressure (kPa):	106	N/A
Method of time fitting used:	Log Time	N/A

Voids Ratio against logarithm of Applied Pressure



Applied Pressure (kPa)	Coefficient of Compressibility m_v (m^2/MN)	Coefficient of Consolidation c_v (m^2/year)
106		
200	0.25	0.48
400	0.14	0.53
800	0.09	0.48
1600	0.05	0.45
800	0.02	---

Comments:

Approved Signatory:
[ ] B.Wells - Laboratory Manager
[ ] G.Meadows - Deputy Lab Manager
[ ] J.Chapman - Team Leader
[✓] M.Hartnup - Team Leader

Signed:

Date Reported: 18/06/2008

Form Number: EN/C/731 Issue 1

for and on behalf of Enverity
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Newmarket Suffolk CB8 7SQ

Enverity

TEST CERTIFICATE

One-Dimensional Consolidation Properties

(Tested in accordance with BS1377 : Part 5 1990)

Newark Road Peterborough
t:01733 555525 f:01733 315280
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Client:	Soiltechnics	Certificate Number:	PL1419-1-9/731
Client Address:	Cedar barn	Client Reference Number:	STE1297R
	White Lodge	Date Sampled:	Unknown
	Walgrave, Northampton	Date Received:	04/06/2008
Postcode:	NN6 9PY	Date Tested:	09/06/2008
Contact:	Lydia Drew	Sampling Certificate No:	N/A
Site Name:	Richmond Upon Thames College	Certificate of Sampling:	N/A
Site Address:	London	Sampled By:	Client

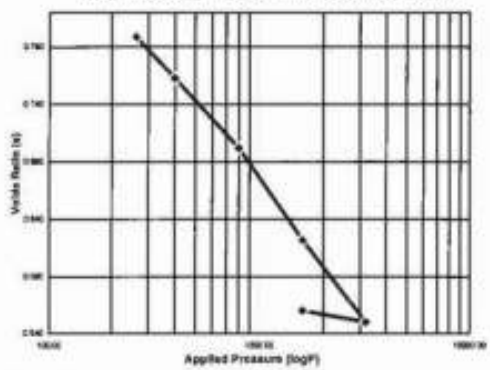
Test Details

Location:	BH05	
Sample Ref:	U2	
Sample Description:	Very Stiff fissured brown CLAY	
Particle Density (Mg/m^3):	2.74	Assumed
Mean Lab Temp. ($^{\circ}$C):	22	
Variations from Standard:	None	
Lab Reference:	PL1419-1-9	
Depth (m):	15.70 m	

Specimen Details

	INITIAL	FINAL
Height (mm):	18.53	16.07
Bulk Density (Mg/m^3):	1.95	2.21
Moisture Content (%):	28	26
Dry Density (Mg/m^3):	1.52	1.76
Voids Ratio:	0.799	0.560
Degree of Saturation (%):	95.6	126.3
Diameter (mm):	75.02	N/A
Swelling Pressure (kPa):	261	N/A
Method of time fitting used:	Log Time	N/A

Voids Ratio against logarithm of Applied Pressure



Applied Pressure (kPa)	Coefficient of Compressibility m_v (m^2/MN)	Coefficient of Consolidation c_v (m^2/year)
261		
400	0.14	0.50
800	0.09	0.62
1600	0.06	1.45
3200	0.03	2.60
1600	0.00	---

Comments:

Approved Signatory:
[ ] B.Wells - Laboratory Manager
[ ] G.Meadows - Deputy Lab Manager
[ ] J.Chapman - Team Leader
[✓] M.Hartnup - Team Leader

Signed:

Date Reported: 18/06/2008

for and on behalf of Enverity

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ALcontrol Laboratories

Heron Drive, Langley, Slough SL3 8XP
tel: 01753 212500 fax: 01753 212501
email: langley@alcontrol.com

Lydia Drew
Soiltechnics
Cedar Barn
White Lodge
Walgrave
Northampton
NN6 9PY

12 June 2008

TEST REPORT

Our Report Number: 08-50996

Your Order Reference: 8983

2 soil samples received on 04/06/2008

Final instructions received on 04/06/2008 (CoC No. 38963)

Project Name: Richmond-upon-Thames College

Project Code: STE1297R

Laboratory analysis started on 04 June 2008
All laboratory analysis completed by 12 June 2008

Sharon Googh
Project Co-Ordinator
ALCONTROL LABORATORIES

Daljit Jandu
Project Co-Ordinator
ALCONTROL LABORATORIES

ALcontrol Laboratories
Sample Description

Job Number: 06-50996
Client: Soiltechnics
Project Code: STE1297R

Matrix: Soil
Project Name: Richmond-upon-Thames College

Laboratory Reference No	Sample Reference	Sample Depth (m)	Date Sampled	Sample Description
320381	TP09	0.1-0.2	-	Dark brown sandy clay
320382	TP14	0.4	-	Dark brown sandy clay with vegetation

ALcontrol Laboratories
Table Of Results

Job Number : 08-50996
Matrix : Soil
Project Code: STE1297R

Project Name: Richmond-upon-Thames College
Client : Soiltechnics

Sample Reference	TP09	TP14				Method No	Units	LOD
Sample Depth (m)	0.1-0.2	0.4						
Date Sampled	-	-						
Date Scheduled	04/06/08	04/06/08						
Laboratory Reference No	320381	320382						
Analysis								
Moisture Content (Dry Weight)	31.0	13.3					%	0.1
Moisture Content (Wet Weight)	23.6	11.8					%	0.1
Organic Matter	5.1	4.5				092[1]	%	0.2
Organic Carbon	2.9	2.6				092[1M]	%	0.1

[1] ISO 17025 accredited.
[M] MCERTS accredited for sand, loam and clay.

ALcontrol Laboratories
Table Of Results

Job Number : 08-50996
Matrix : Soil
Project Code: STE1297R

Project Name: Richmond-upon-Thames College
Client : Soiltechnics

Sample Reference	TP09	TP14				Method No	Units	LOD
Sample Depth (m)	0.1-0.2	0.4						
Date Sampled	-	-						
Date Scheduled	04/06/08	04/06/08						
Laboratory Reference No	320381	320382						
Analysis								
* * PAH SUITE * *								
Naphthalene	0.10	0.15				022S[1M]	mg/kg	0.1
Acenaphthylene	< 0.1	0.45				022S[1M]	mg/kg	0.1
Acenaphthene	< 0.1	19				022S[1M]	mg/kg	0.1
Fluorene	< 0.1	12				022S[1M]	mg/kg	0.1
Phenanthrene	0.17	41				022S[1M]	mg/kg	0.1
Anthracene	< 0.1	10				022S[1M]	mg/kg	0.1
Fluoranthene	0.38	19				022S[1M]	mg/kg	0.1
Pyrene	0.34	12				022S[1M]	mg/kg	0.1
Benzo(a)anthracene	0.16	2.8				022S[1M]	mg/kg	0.1
Chrysene	0.22	2.5				022S[1M]	mg/kg	0.1
Benzo(b)fluoranthene	0.21	1.8				022S[1M]	mg/kg	0.1
Benzo(k)fluoranthene	< 0.1	0.62				022S[1M]	mg/kg	0.1
Benzo(a)pyrene	0.16	1.0				022S[1M]	mg/kg	0.1
Indeno(1,2,3-cd)pyrene	< 0.1	0.34				022S[1M]	mg/kg	0.1
Dibenzo(a,h)anthracene	< 0.1	< 0.1				022S[1M]	mg/kg	0.1
Benzo(g,h,i)perylene	0.12	0.40				022S[1M]	mg/kg	0.1
PAH (Sum of EPA 16)	1.86	123.11				022S[1]	mg/kg	1.6

[1] ISO 17025 accredited.
[M] MCERTS accredited for sand, loam and clay.

ALcontrol Laboratories
Table Of Results

Job Number : 08-50996
Matrix : Soil
Project Code: STE1297R

Project Name: Richmond-upon-Thames College
Client : Soiltechnics

Sample Reference	TP09	TP14				Method No	Units	LOD
Sample Depth (m)	0.1-0.2	0.4						
Date Sampled	-	-						
Date Scheduled	04/06/08	04/06/08						
Laboratory Reference No	320381	320382						
Analysis								
* * CWG SUITE * *								
Aliphatic C5-C6	0.02	0.02				CWGS	mg/kg	0.01
Aliphatic >C6-C8	0.01	0.02				CWGS	mg/kg	0.01
Aliphatic >C8-C10	0.05	0.02				CWGS	mg/kg	0.01
Aliphatic >C10-C12	0.13	0.09				CWGS	mg/kg	0.01
Aliphatic >C12-C16	26	28				CWGS[1]	mg/kg	1
Aliphatic >C16-C21	4.2	40				CWGS[1]	mg/kg	1
Aliphatic >C21-C35	9.7	52				CWGS[1]	mg/kg	5
Aromatic C6-C7	< 0.01	< 0.01				CWGS	mg/kg	0.01
Total Aliphatics (C5-C35)	40	120				CWGS	mg/kg	5
Aromatic >C7-C8	< 0.01	< 0.01				CWGS	mg/kg	0.01
Aromatic >C8-C10	0.07	0.04				CWGS	mg/kg	0.01
Aromatic >C10-C12	0.20	0.13				CWGS	mg/kg	0.01
Aromatic >C12-C16	16	140				CWGS[1]	mg/kg	1
Aromatic >C16-C21	3.7	240				CWGS[1]	mg/kg	1
Aromatic >C21-C35	18	220				CWGS[1]	mg/kg	5
Total Aromatics (C5-C35)	38	600				CWGS	mg/kg	5
Volatile Hydrocarbons (C5-C12)	0.48	0.32				CWGS	mg/kg	0.01
Extractable Hydrocarbons (C12-C35)	78	720				CWGS	mg/kg	5
Total Hydrocarbons (C5-C35)	78	720				CWGS	mg/kg	5
MTBE	< 0.010	< 0.010				CWGS[1]	mg/kg	0.01
Benzene	< 0.010	< 0.010				CWGS[1]	mg/kg	0.01
Toluene	< 0.010	< 0.010				CWGS[1]	mg/kg	0.01
Ethylbenzene	< 0.010	< 0.010				CWGS[1]	mg/kg	0.01
m,p-Xylenes	< 0.010	< 0.010				CWGS[1]	mg/kg	0.01
o-Xylene	< 0.010	< 0.010				CWGS[1]	mg/kg	0.01
1,3,5-Trimethylbenzene	< 0.010	< 0.010				CWGS[1]	mg/kg	0.01
1,2,4-Trimethylbenzene	< 0.010	< 0.010				CWGS[1]	mg/kg	0.01

[1] ISO 17025 accredited.
[*] MCERTS accredited for sand, loam and clay.

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Table Of Results - Appendix

Job Number : 08-50996

Project Code: STE1297R

Project Name: Richmond-upon-Thames College
Client : Soiltechnics

Method No.	Reference	Description	
022S	In-house method	Determination of PAH compounds in soil samples by hexane / acetone extraction followed by GC-MS detection [Note: this method does not separate benzo(j)fluoranthene, and this PAH will be included in the sum of benzo(b)fluoranthene & benzo(k)fluoranthene]	W
CWGS	In-house method based on "Total Petroleum Hydrocarbon Criteria Working Group" series, 1998-9	Determination of "CWG" banded petroleum hydrocarbons in soil samples using a combination of headspace GC-FID (C5-C12) and hexane:acetone extraction / silica-alumina aliphatic - aromatic split / GC-FID (C12-C35) techniques with banding by comparison to alkane standards	W
092	In-house method	Determination of organic matter in soil samples by combustion analyser	D

Appendix

Code	Description
[redacted]	
*	Detection limit(s) raised due to matrix interference
¥	Detection limit(s) raised due to reduced amount of sample available for analysis
‡	Dilution factor applied due to nature of sample
NAD	No asbestos detected
§	Analysis sub-contracted
U/S	Analysis unsuitable for sample due to its matrix or properties
I/S	Insufficient sample
M/S	Sample cannot be located within the laboratory
ND	Not detected (below relevant analytical detection limit)
^	Sample filtered prior to analysis
^^	Please note product present, therefore this result is for indicative purpose only
[redacted]	
†	Sample type outside the scope of our MCERTS accreditation since matrix not included in method validation
¢	Unsuitable for analysis due to asbestos content
[redacted]	
≈	Please note TOCs & LOIs have been repeated and the apparently anomalous results confirmed
¶	UKAS and/or MCERTS accreditation removed due to duration of sample in laboratory prior to testing
≠	The BOD analysis was carried out prior to the COD analysis and included an oily layer, which is the likely cause of the anomalous results
Note:	Analysis carried out for organic compounds on water samples containing free product is on a "best endeavour" basis
Note:	All results calculated from organic carbon on a dry weight basis
Note:	Fe(II) and dissolved Fe are analysed by different methods; sometimes leading to slight discrepancy between results
Note:	"Total" results calculated by summing individual components are not rounded
Note:	The reporting limit stated in the LOD column is the standard method reporting limit, derived statistically from validation data, however it is occasionally necessary to raise reporting limits due to matrix interference or limited sample availability
Note:	During soil preparation, best efforts are made to produce analytical subsamples representative of the entire submitted sample, without exclusion of stones

ALcontrol Laboratories

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email: langley@alcontrol.com

Lydia Drew
Soiltechnics
Cedar Barn
White Lodge
Walgrave
Northampton
NN6 9PY

17 June 2008

TEST REPORT

Our Report Number: 08-51154

Your Order Reference: 8990

18 soil samples received on 06/06/2008

Final instructions received on 06/06/2008

Project Name: Richmond-upon-Thames College

Project Code: STE1297R

Laboratory analysis started on 06 June 2008
All laboratory analysis completed by 17 June 2008

[redacted]

Sharon Googh
Project Co-Ordinator
ALCONTROL LABORATORIES

[redacted]

Rhys Ashton
Project Co-Ordinator
ALCONTROL LABORATORIES

ALcontrol Laboratories
Sample Description

Job Number: 06-51154
Client: Soiltechnics
Project Code: STE1297R

Matrix: Soil
Project Name: Richmond-upon-Thames College

Laboratory Reference No	Sample Reference	Sample Depth (m)	Date Sampled	Sample Description
321091	DTS10	0.1-0.3	-	Brown sandy clay with gravel
321092	DTS08	1.2-1.5	-	Brown sandy clay with gravel
321093	DTS06	0.05-0.2	-	Dark brown sandy clay with gravel and vegetation
321094	DTS01	0.4-0.55	-	Brown sandy clay with gravel and vegetation
321095	DTS03	0.2-0.4	-	Brown sandy clay with gravel and coal / coke
321096	DTS11	0.9-1.0	-	Brown sandy clay with gravel
321097	DTS16	0.1-0.25	-	Brown sandy clay with gravel and vegetation
321098	DTS12	0.5-0.6	-	Dark brown sandy clay with gravel and coal / coke
321099	DTS13	0.2-0.3	-	Dark brown sandy clay with gravel and coal / coke
321100	DTS05	0.2-0.35	-	Grey & brown sandy clay with gravel and coal / coke
321101	DTS19	0.2-0.4	-	Dark brown sandy clay with gravel and coal / coke
321102	DTS18	0.2-0.4	-	Brown sandy clay with gravel and vegetation
321103	DTS07	2.3-2.5	-	Brown sandy clay with gravel
321104 †	BH03	3.7	-	Grey & brown gravel with sand
321105	BH02	5.4	-	Grey clay
321106	BH03	8	-	Grey clay
321107	BH02	5.2	-	Brown sand with gravel
321108	BH05	9.5	-	Grey clay

ALcontrol Laboratories
Table Of Results

Job Number : 08-51154
Matrix : Soil
Project Code: STE1297R

Project Name: Richmond-upon-Thames College
Client : Soiltechnics

Sample Reference	DTS10	DTS08	DTS06	DTS01	DTS03	Method No	Units	LOD
Sample Depth (m)	0.1-0.3	1.2-1.5	0.05-0.2	0.4-0.55	0.2-0.4			
Date Sampled	-	-	-	-	-			
Date Scheduled	06/06/08	06/06/08	06/06/08	06/06/08	06/06/08			
Laboratory Reference No	321091	321092	321093	321094	321095			
Analysis								
Moisture Content (Wet Weight)	13.0	8.7	19.6	13.3	23.0		%	0.1
Moisture Content (Dry Weight)	15.0	9.6	24.3	15.3	29.8		%	0.1
Arsenic	13	12	20	11	15	069S[M]	mg/kg	3
Beryllium	3.4	< 0.5	1.2	0.7	0.9	069S[M]	mg/kg	0.5
Cadmium	0.7	< 0.5	0.8	< 0.5	0.5	069S[M]	mg/kg	0.5
Chromium	20	15	23	24	26	069S[M]	mg/kg	10
Lead	130	< 10	300	78	290	069S[M]	mg/kg	10
Mercury	< 0.6	< 0.6	1.7	0.7	< 0.6	069S[M]	mg/kg	0.6
Nickel	15	22	21	12	13	069S[M]	mg/kg	4
Selenium	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	069S[M]	mg/kg	2.5
Sulphate (Total Acid Soluble) as SO4	2800	< 200	700	320	9700	025a[M]	mg/kg	200
W/S Sulphate as SO4	0.72	< 0.02	0.02	0.02	1.5	074[M]	g/l	0.02
Sulphur (Total)	2400	< 100	540	200	3700	069S	mg/kg	100
Vanadium	55	26	42	37	36	069S[M]	mg/kg	3
Free Cyanide	< 1	< 1	< 1	< 1	< 1	061S[M]	mg/kg	1
Complex Cyanide	2.7	< 1	< 1	< 1	< 1	061S[1]	mg/kg	1
Total Cyanide	3.0	< 1	< 1	< 1	< 1	061S[M]	mg/kg	1
Organic Matter	1.9	< 0.2	8.5	2.6	0.85	092[1]	%	0.2
Organic Carbon	1.0	< 0.1	4.9	1.5	0.49	092[M]	%	0.1
pH	10.2	7.5	6.6	6.7	10.1	084S[M]	pH Units	1
Elemental Sulphur	760	< 100	< 100	< 100	< 100	032[M]	mg/kg	100

[1] ISO 17025 accredited.
[M] MCERTS accredited for sand, loam and clay.

ALcontrol Laboratories
Table Of Results

Job Number : 08-51154
Matrix : Soil
Project Code: STE1297R

Project Name: Richmond-upon-Thames College
Client : Soiltechnics

Sample Reference	DTS11	DTS16	DTS12	DTS13	DTS05	Method No	Units	LOD
Sample Depth (m)	0.9-1.0	0.1-0.25	0.5-0.6	0.2-0.3	0.2-0.35			
Date Sampled	-	-	-	-	-			
Date Scheduled	06/06/08	06/06/08	06/06/08	06/06/08	06/06/08			
Laboratory Reference No	321096	321097	321098	321099	321100			
Analysis								
Moisture Content (Wet Weight)	13.1	10.3	20.9	14.0	8.5		%	0.1
Moisture Content (Dry Weight)	15.1	11.5	26.4	16.2	9.3		%	0.1
Arsenic	11	16	20	24	8.8	069S[M]	mg/kg	3
Beryllium	0.8	0.7	1.6	4.4	0.6	069S[M]	mg/kg	0.5
Cadmium	< 0.5	< 0.5	0.7	0.9	< 0.5	069S[M]	mg/kg	0.5
Chromium	27	21	24	34	13	069S[M]	mg/kg	10
Lead	17	84	300	400	75	069S[M]	mg/kg	10
Mercury	< 0.6	< 0.6	0.9	1.9	< 0.6	069S[M]	mg/kg	0.6
Nickel	22	15	23	30	13	069S[M]	mg/kg	4
Selenium	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	069S[M]	mg/kg	2.5
Sulphate (Total Acid Soluble) as SO4	< 200	320	540	540	680	025a[M]	mg/kg	200
W/S Sulphate as SO4	< 0.02	< 0.02	0.03	0.03	0.05	074[M]	g/l	0.02
Sulphur (Total)	< 100	190	400	580	440	069S	mg/kg	100
Vanadium	43	34	48	58	23	069S[M]	mg/kg	3
Free Cyanide	< 1	< 1	< 1	< 1	< 1	061S[M]	mg/kg	1
Complex Cyanide	< 1	< 1	< 1	< 1	< 1	061S[1]	mg/kg	1
Total Cyanide	< 1	< 1	< 1	< 1	< 1	061S[M]	mg/kg	1
Organic Matter	0.35	1.9	10	8.6	5.8	092[1]	%	0.2
Organic Carbon	0.20	1.1	5.8	5.0	3.4	092[M]	%	0.1
pH	6.9	7.1	6.0	7.1	9.1	084S[M]	pH Units	1
Elemental Sulphur	< 100	< 100	< 100	< 100	890	032[M]	mg/kg	100

[1] ISO 17025 accredited.
[M] MCERTS accredited for sand, loam and clay.

ALcontrol Laboratories
Table Of Results

Job Number : 08-51154
Matrix : Soil
Project Code: STE1297R

Project Name: Richmond-upon-Thames College
Client : Soiltechnics

Sample Reference	DTS19	DTS18	DTS07	BH03	BH02	Method No	Units	LOD
Sample Depth (m)	0.2-0.4	0.2-0.4	2.3-2.5	3.7	5.4			
Date Sampled	-	-	-	-	-			
Date Scheduled	06/06/08	06/06/08	06/06/08	06/06/08	06/06/08			
Laboratory Reference No	321101	321102	321103	321104 †	321105			
Analysis								
Moisture Content (Wet Weight)	19.6	13.6	11.8	6.3	21.3		%	0.1
Moisture Content (Dry Weight)	24.5	15.8	13.4	6.7	27.1		%	0.1
Arsenic	43	21	-	-	-	069S[M]	mg/kg	3
Beryllium	4.8	1.2	-	-	-	069S[M]	mg/kg	0.5
Cadmium	1.4	0.8	-	-	-	069S[M]	mg/kg	0.5
Chromium	37	42	-	-	-	069S[M]	mg/kg	10
Lead	1100	390	-	-	-	069S[M]	mg/kg	10
Mercury	< 0.6	1.3	-	-	-	069S[M]	mg/kg	0.6
Nickel	65	23	-	-	-	069S[M]	mg/kg	4
Selenium	< 2.5	< 2.5	-	-	-	069S[M]	mg/kg	2.5
Sulphate (Total Acid Soluble) as SO4	860	560	< 200	320	500	025a[M]	mg/kg	200
W/S Sulphate as SO4	0.05	0.09	< 0.02	0.10	0.32	074[M]	g/l	0.02
Sulphur (Total)	900	360	< 100	840	6800	069S	mg/kg	100
Vanadium	100	45	-	-	-	069S[M]	mg/kg	3
Free Cyanide	< 1	< 1	-	-	-	061S[M]	mg/kg	1
Complex Cyanide	< 1	< 1	-	-	-	061S[1]	mg/kg	1
Total Cyanide	< 1	< 1	-	-	-	061S[M]	mg/kg	1
Organic Matter	11	5.1	-	-	-	092[1]	%	0.2
Organic Carbon	6.4	3.0	-	-	-	092[M]	%	0.1
pH	6.5	5.9	7.5	7.3	7.6	084S[M]	pH Units	1
Elemental Sulphur	< 100	< 100	-	-	-	032[M]	mg/kg	100

[1] ISO 17025 accredited.
[M] MCERTS accredited for sand, loam and clay.

ALcontrol Laboratories
Table Of Results

Job Number : 08-51154
Matrix : Soil
Project Code: STE1297R

Project Name: Richmond-upon-Thames College
Client : Soiltechnics

Sample Reference	BH03	BH02	BH05			Method No	Units	LOD
Sample Depth (m)	8	5.2	9.5					
Date Sampled	-	-	-					
Date Scheduled	06/06/08	06/06/08	06/06/08					
Laboratory Reference No	321106	321107	321108					
Analysis								
Moisture Content (Wet Weight)	21.1	7.4	21.4				%	0.1
Moisture Content (Dry Weight)	26.7	8.0	27.3				%	0.1
Arsenic	-	-	-			069S[M]	mg/kg	3
Beryllium	-	-	-			069S[M]	mg/kg	0.5
Cadmium	-	-	-			069S[M]	mg/kg	0.5
Chromium	-	-	-			069S[M]	mg/kg	10
Lead	-	-	-			069S[M]	mg/kg	10
Mercury	-	-	-			069S[M]	mg/kg	0.6
Nickel	-	-	-			069S[M]	mg/kg	4
Selenium	-	-	-			069S[M]	mg/kg	2.5
Sulphate (Total Acid Soluble) as SO4	350	< 200	390			025a[M]	mg/kg	200
W/S Sulphate as SO4	0.27	0.05	0.28			074[M]	g/l	0.02
Sulphur (Total)	3600	620	4100			069S	mg/kg	100
Vanadium	-	-	-			069S[M]	mg/kg	3
Free Cyanide	-	-	-			061S[M]	mg/kg	1
Complex Cyanide	-	-	-			061S[1]	mg/kg	1
Total Cyanide	-	-	-			061S[M]	mg/kg	1
Organic Matter	-	-	-			092[1]	%	0.2
Organic Carbon	-	-	-			092[M]	%	0.1
pH	7.7	7.4	7.9			084S[M]	pH Units	1
Elemental Sulphur	-	-	-			032[M]	mg/kg	100

[1] ISO 17025 accredited.
[*] MCERTS accredited for sand, loam and clay.

ALcontrol Laboratories
Table Of Results

Job Number : 08-51154
Matrix : Soil
Project Code: STE1297R

Project Name: Richmond-upon-Thames College
Client : Soiltechnics

Sample Reference	DTS10	DTS08	DTS06	DTS01	DTS03	Method No	Units	LOD
Sample Depth (m)	0.1-0.3	1.2-1.5	0.05-0.2	0.4-0.55	0.2-0.4			
Date Sampled	-	-	-	-	-			
Date Scheduled	06/06/08	06/06/08	06/06/08	06/06/08	06/06/08			
Laboratory Reference No	321091	321092	321093	321094	321095			
Analysis								
* * PAH SUITE * *								
Naphthalene	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	022S[1M]	mg/kg	0.1
Acenaphthylene	0.92	< 0.1	0.20	< 0.1	< 0.1	022S[1M]	mg/kg	0.1
Acenaphthene	3.7	< 0.1	< 0.1	< 0.1	0.21	022S[1M]	mg/kg	0.1
Fluorene	4.6	< 0.1	< 0.1	< 0.1	0.14	022S[1M]	mg/kg	0.1
Phenanthrene	61	< 0.1	0.47	< 0.1	2.0	022S[1M]	mg/kg	0.1
Anthracene	18	< 0.1	0.17	< 0.1	0.52	022S[1M]	mg/kg	0.1
Fluoranthene	89	< 0.1	1.4	0.21	2.9	022S[1M]	mg/kg	0.1
Pyrene	68	< 0.1	1.5	0.18	2.4	022S[1M]	mg/kg	0.1
Benzo(a)anthracene	30	< 0.1	0.60	0.10	1.1	022S[1M]	mg/kg	0.1
Chrysene	26	< 0.1	0.99	0.12	1.2	022S[1M]	mg/kg	0.1
Benzo(b)fluoranthene	23	< 0.1	1.1	0.18	1.5	022S[1M]	mg/kg	0.1
Benzo(k)fluoranthene	9.9	< 0.1	0.32	< 0.1	0.56	022S[1M]	mg/kg	0.1
Benzo(a)pyrene	18	< 0.1	0.66	0.13	0.97	022S[1M]	mg/kg	0.1
Indeno(1,2,3-cd)pyrene	6.4	< 0.1	0.25	< 0.1	0.51	022S[1M]	mg/kg	0.1
Dibenzo(a,h)anthracene	1.6	< 0.1	< 0.1	< 0.1	0.13	022S[1M]	mg/kg	0.1
Benzo(g,h,i)perylene	6.7	< 0.1	0.31	< 0.1	0.58	022S[1M]	mg/kg	0.1
PAH (Sum of EPA 16)	365.66	ND	7.98	ND	14.59	022S[2]	mg/kg	1.6

[1] ISO 17025 accredited.
[2] MCERTS accredited for sand, loam and clay.

ALcontrol Laboratories
Table Of Results

Job Number : 08-51154
Matrix : Soil
Project Code: STE1297R

Project Name: Richmond-upon-Thames College
Client : Soiltechnics

Sample Reference	DTS11	DTS16	DTS12	DTS13	DTS05	Method No	Units	LOD
Sample Depth (m)	0.9-1.0	0.1-0.25	0.5-0.6	0.2-0.3	0.2-0.35			
Date Sampled	-	-	-	-	-			
Date Scheduled	06/06/08	06/06/08	06/06/08	06/06/08	06/06/08			
Laboratory Reference No	321096	321097	321098	321099	321100			
Analysis								
* * PAH SUITE * *								
Naphthalene	< 0.1	< 0.1	< 0.1	< 0.1	2.2	022S[1M]	mg/kg	0.1
Acenaphthylene	< 0.1	< 0.1	< 0.1	< 0.1	16	022S[1M]	mg/kg	0.1
Acenaphthene	< 0.1	< 0.1	< 0.1	< 0.1	23	022S[1M]	mg/kg	0.1
Fluorene	< 0.1	< 0.1	< 0.1	< 0.1	24	022S[1M]	mg/kg	0.1
Phenanthrene	< 0.1	0.18	0.81	0.77	130	022S[1M]	mg/kg	0.1
Anthracene	< 0.1	< 0.1	0.21	0.16	52	022S[1M]	mg/kg	0.1
Fluoranthene	< 0.1	0.32	1.5	2.0	200	022S[1M]	mg/kg	0.1
Pyrene	< 0.1	0.29	1.3	1.7	150	022S[1M]	mg/kg	0.1
Benzo(a)anthracene	< 0.1	0.12	0.64	0.90	68	022S[1M]	mg/kg	0.1
Chrysene	< 0.1	0.12	0.71	1.1	64	022S[1M]	mg/kg	0.1
Benzo(b)fluoranthene	< 0.1	0.14	0.80	1.5	74	022S[1M]	mg/kg	0.1
Benzo(k)fluoranthene	< 0.1	< 0.1	0.29	0.51	28	022S[1M]	mg/kg	0.1
Benzo(a)pyrene	< 0.1	0.10	0.72	1.1	58	022S[1M]	mg/kg	0.1
Indeno(1,2,3-cd)pyrene	< 0.1	< 0.1	0.32	0.50	26	022S[1M]	mg/kg	0.1
Dibenzo(a,h)anthracene	< 0.1	< 0.1	< 0.1	0.12	6.4	022S[1M]	mg/kg	0.1
Benzo(g,h,i)perylene	< 0.1	< 0.1	0.34	0.58	26	022S[1M]	mg/kg	0.1
PAH (Sum of EPA 16)	ND	ND	7.72	10.88	940.56	022S[2]	mg/kg	1.6

[1] ISO 17025 accredited.
[M] MCERTS accredited for sand, loam and clay.

ALcontrol Laboratories
Table Of Results

Job Number : 08-51154
Matrix : Soil
Project Code: STE1297R

Project Name: Richmond-upon-Thames College
Client : Soiltechnics

Sample Reference	DTS19	DTS18				Method No	Units	LOD
Sample Depth (m)	0.2-0.4	0.2-0.4						
Date Sampled	-	-						
Date Scheduled	06/06/08	06/06/08						
Laboratory Reference No	321101	321102						
Analysis								
*** * PAH SUITE * ***								
Naphthalene	< 0.1	< 0.1				022S[1M]	mg/kg	0.1
Acenaphthylene	< 0.1	< 0.1				022S[1M]	mg/kg	0.1
Acenaphthene	< 0.1	0.17				022S[1M]	mg/kg	0.1
Fluorene	< 0.1	0.10				022S[1M]	mg/kg	0.1
Phenanthrene	0.51	1.7				022S[1M]	mg/kg	0.1
Anthracene	< 0.1	0.36				022S[1M]	mg/kg	0.1
Fluoranthene	1.3	2.5				022S[1M]	mg/kg	0.1
Pyrene	1.3	2.3				022S[1M]	mg/kg	0.1
Benzo(a)anthracene	0.61	1.0				022S[1M]	mg/kg	0.1
Chrysene	0.75	1.3				022S[1M]	mg/kg	0.1
Benzo(b)fluoranthene	0.80	1.3				022S[1M]	mg/kg	0.1
Benzo(k)fluoranthene	0.29	0.49				022S[1M]	mg/kg	0.1
Benzo(a)pyrene	0.61	0.98				022S[1M]	mg/kg	0.1
Indeno(1,2,3-cd)pyrene	0.34	0.43				022S[1M]	mg/kg	0.1
Dibenzo(a,h)anthracene	< 0.1	0.10				022S[1M]	mg/kg	0.1
Benzo(g,h,i)perylene	0.41	0.51				022S[1M]	mg/kg	0.1
PAH (Sum of EPA 16)	6.91	13.32				022S[1]	mg/kg	1.6

[1] ISO 17025 accredited.
[M] MCERTS accredited for sand, loam and clay.

ALcontrol Laboratories
Table Of Results - Appendix

Job Number : 08-51154

Project Code: STE1297R

Project Name: Richmond-upon-Thames College
Client : Soiltechnics

Summary of methods contained within report :

Method No.	Reference	Description	Wet/Dry Analysis
061S	In-house method based on Method 4500-CN, "Standard Methods for the Examination of Water and Waste Water", APHA AWWA WEF, Edition 18, 1992	Determination of cyanides and thiocyanate in soil samples by continuous flow colorimetry (Skalar)	W
022S	In-house method	Determination of PAH compounds in soil samples by hexane / acetone extraction followed by GC-MS detection [Note: this method does not separate benzo(j)fluoranthene, and this PAH will be included in the sum of benzo(b)fluoranthene & benzo(k)fluoranthene]	W
084S	In-house method referencing BS1377: Part 3: 1990 and Second Site Property: Environmental Assessment Guidance Version 3: March 2003	Determination of pH by addition of water followed by electrometric measurement	D
074	In-house method based on BS1377 Part 3, "Chemical and Electrochemical Tests", 1990	Determination of 2:1 water soluble sulphate in soil samples by Inductively Coupled Plasma - Optical Emission Spectrometry (ICP-OES)	D
069S	In-house method based on MEWAM "Methods for the Determination of Metals in Soil", HMSO, 1986	Determination of metals in soil samples by aqua-regia digestion followed by ICP-OES detection	D
032	In-house method	Determination of elemental sulphur (with simultaneous PAH screening) by dichloromethane extraction followed by HPLC-UV detection	D
025a	In-house method based on BS1377 Part 3, "Chemical and Electrochemical Tests", 1990	Determination of hydrochloric acid soluble sulphate in soil samples by Inductively Coupled Plasma - Optical Emission Spectrometry (ICP-OES)	D
092	In-house method	Determination of organic matter in soil samples by combustion analyser	D

Soil results are expressed on a dry weight basis. Where the test uses as-received sample, a moisture correction factor is applied to the wet weight result. This factor is determined gravimetrically using weight loss on drying at 30º (+/-5) C.

Appendix

Code	Description
[redacted]	
*	Detection limit(s) raised due to matrix interference
¥	Detection limit(s) raised due to reduced amount of sample available for analysis
‡	Dilution factor applied due to nature of sample
NAD	No asbestos detected
§	Analysis sub-contracted
U/S	Analysis unsuitable for sample due to its matrix or properties
I/S	Insufficient sample
M/S	Sample cannot be located within the laboratory
ND	Not detected (below relevant analytical detection limit)
^	Sample filtered prior to analysis
^^	Please note product present, therefore this result is for indicative purpose only
[redacted]	
†	Sample type outside the scope of our MCERTS accreditation since matrix not included in method validation
¢	Unsuitable for analysis due to asbestos content
[redacted]	
ae	Please note TOC's & LOI's have been repeated and the apparently anomalous results confirmed
ff	UKAS and/or MCERTS accreditation removed due to duration of sample in laboratory prior to testing
x	The BOD analysis was carried out prior to the COD analysis and included an oily layer, which is the likely cause of the anomalous results
Note:	Analysis carried out for organic compounds on water samples containing free product is on a "best endeavour" basis
Note:	All results calculated from organic carbon on a dry weight basis
Note:	Fe(II) and dissolved Fe are analysed by different methods; sometimes leading to slight discrepancy between results
Note:	"Total" results calculated by summing individual components are not rounded
Note:	The reporting limit stated in the LOD column is the standard method reporting limit, derived statistically from validation data, however it is occasionally necessary to raise reporting limits due to matrix interference or limited sample availability
Note:	During soil preparation, best efforts are made to produce analytical subsamples representative of the entire submitted sample, without exclusion of stones

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08 July 2008

TEST REPORT

Our Report Number: 08-51972

Your Order Reference: 9054

6 water samples received on 27/06/2008

Final instructions received on 27/06/2008 (CoC No. 41242)

Project Name: Richmond- Upon- Thames College

Project Code: STE1297R

Laboratory analysis started on 27 June 2008
All laboratory analysis completed by 08 July 2008

Rexona Rahman
Analytical Reporting Manager
ALCONTROL LABORATORIES

Sharon Gdogh
Project Co-Ordinator
ALCONTROL LABORATORIES

ALcontrol Laboratories
Table Of Results

Job Number : 08-51972
Matrix : Water
Project Code: STE1297R

Project Name: Richmond- Upon- Thames College
Client : Soiltechnics

Sample Reference	BH01	BH02	BH03	BH04	BH05	Method No	Units	LOD
Sample Depth (m)	-	-	-	-	-			
Date Sampled	-	-	-	-	-			
Date Scheduled	27/06/08	27/06/08	27/06/08	27/06/08	27/06/08			
Laboratory Reference No	324614	324615	324616	324617	324618			
Analysis								
Arsenic (Dissolved)	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	080W[1]	mg/l	0.005
Barium (Dissolved)	0.035	0.045	0.044	0.062	0.045	080W[1]	mg/l	0.005
Beryllium (Dissolved)	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	080W[1]	mg/l	0.001
Boron (Dissolved)	0.30	0.48	0.14	0.23	0.072	080W[1]	mg/l	0.005
Cadmium (Dissolved)	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	080W[1]	mg/l	0.001
Chromium (Dissolved)	0.007	0.006	< 0.005	< 0.005	< 0.005	080W[1]	mg/l	0.005
Copper (Dissolved)	0.006	< 0.005	< 0.005	< 0.005	< 0.005	080W[1]	mg/l	0.005
Lead (Dissolved)	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	080W[1]	mg/l	0.005
Magnesium (Dissolved)	-	14	-	-	-	062W[1]	mg/l	0.1
Mercury (Dissolved)	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	080W[1]	mg/l	0.00005
Nickel (Dissolved)	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	080W[1]	mg/l	0.005
Selenium (Dissolved)	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	080W[1]	mg/l	0.005
Vanadium (Dissolved)	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	080W[1]	mg/l	0.005
Zinc (Dissolved)	0.010	0.007	< 0.005	< 0.005	< 0.005	080W[1]	mg/l	0.005
Ammoniacal Nitrogen as NH4	-	0.13	-	-	-	057W[1]	mg/l	0.065
Ammoniacal Nitrogen as N	-	0.10	-	-	-	057W[1]	mg/l	0.05
Free Cyanide	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	061W[1]	mg/l	0.02
Total Cyanide	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	061W[1]	mg/l	0.02
Nitrate as N	5.5	2.4	2.7	< 0.5	< 0.5	086W[1]	mg/l	0.5
pH	7.3	7.1	7.2	7.2	7.0	084W[1]	pH Units	1
Sulphide	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	055W[1]	mg/l	0.05
Sulphate as SO4	40	79	66	300	18	086W[1]	mg/l	10

[1] ISO 17025 accredited.
[*] MCERTS accredited for sand, loam and clay.

ALcontrol Laboratories
Table Of Results

Job Number : 08-51972
Matrix : Water
Project Code: STE1297R

Project Name: Richmond- Upon- Thames College
Client : Soiltechnics

Sample Reference	BH06					Method No	Units	LOD
Sample Depth (m)	-							
Date Sampled	-							
Date Scheduled	27/06/08							
Laboratory Reference No	324619							
Analysis								
Arsenic (Dissolved)	< 0.005					080W[1]	mg/l	0.005
Barium (Dissolved)	0.075					080W[1]	mg/l	0.005
Beryllium (Dissolved)	< 0.001					080W[1]	mg/l	0.001
Boron (Dissolved)	0.30					080W[1]	mg/l	0.005
Cadmium (Dissolved)	< 0.001					080W[1]	mg/l	0.001
Chromium (Dissolved)	< 0.005					080W[1]	mg/l	0.005
Copper (Dissolved)	< 0.005					080W[1]	mg/l	0.005
Lead (Dissolved)	< 0.005					080W[1]	mg/l	0.005
Magnesium (Dissolved)	11					062W[1]	mg/l	0.1
Mercury (Dissolved)	< 0.00005					080W[1]	mg/l	0.00005
Nickel (Dissolved)	0.007					080W[1]	mg/l	0.005
Selenium (Dissolved)	< 0.005					080W[1]	mg/l	0.005
Vanadium (Dissolved)	< 0.005					080W[1]	mg/l	0.005
Zinc (Dissolved)	0.006					080W[1]	mg/l	0.005
Ammoniacal Nitrogen as NH4	0.22					057W[1]	mg/l	0.065
Ammoniacal Nitrogen as N	0.17					057W[1]	mg/l	0.05
Free Cyanide	< 0.02					061W[1]	mg/l	0.02
Total Cyanide	< 0.02					061W[1]	mg/l	0.02
Nitrate as N	2.9					086W[1]	mg/l	0.5
pH	7.3					084W[1]	pH Units	1
Sulphide	< 0.05					055W[1]	mg/l	0.05
Sulphate as SO4	180					086W[1]	mg/l	10

[1] ISO 17025 accredited.
[*] MCERTS accredited for sand, loam and clay.

ALcontrol Laboratories
Table Of Results

Job Number : 08-51972
Matrix : Water
Project Code: STE1297R

Project Name: Richmond- Upon- Thames College
Client : Soiltechnics

Sample Reference	BH01	BH02	BH03	BH04	BH05	Method No	Units	LOD
Sample Depth (m)	-	-	-	-	-			
Date Sampled	-	-	-	-	-			
Date Scheduled	27/06/08	27/06/08	27/06/08	27/06/08	27/06/08			
Laboratory Reference No	324614	324615	324616	324617	324618			
Analysis								
* * PAH SUITE * *								
Naphthalene	< 0.0001	< 0.0001	< 0.0001	0.0012	< 0.0001	022W[1]	mg/l	0.0001
Acenaphthylene	< 0.0001	< 0.0001	< 0.0001	0.0001	< 0.0001	022W[1]	mg/l	0.0001
Acenaphthene	< 0.0001	< 0.0001	< 0.0001	0.0010	< 0.0001	022W[1]	mg/l	0.0001
Fluorene	< 0.0001	< 0.0001	< 0.0001	0.0007	< 0.0001	022W[1]	mg/l	0.0001
Phenanthrene	< 0.0001	< 0.0001	< 0.0001	0.0012	< 0.0001	022W[1]	mg/l	0.0001
Anthracene	< 0.0001	< 0.0001	< 0.0001	0.0003	< 0.0001	022W[1]	mg/l	0.0001
Fluoranthene	< 0.0001	< 0.0001	< 0.0001	0.0003	< 0.0001	022W[1]	mg/l	0.0001
Pyrene	< 0.0001	< 0.0001	< 0.0001	0.0002	< 0.0001	022W[1]	mg/l	0.0001
Benzo(a)anthracene	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	022W[1]	mg/l	0.0001
Chrysene	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	022W[1]	mg/l	0.0001
Benzo(b)fluoranthene	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	022W[1]	mg/l	0.0001
Benzo(k)fluoranthene	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	022W[1]	mg/l	0.0001
Benzo(a)pyrene	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	022W[1]	mg/l	0.0001
Indeno(1,2,3-cd)pyrene	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	022W[1]	mg/l	0.0001
Dibenzo(a,h)anthracene	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	022W[1]	mg/l	0.0001
Benzo(g,h,i)perylene	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	022W[1]	mg/l	0.0001
PAH (Sum of EPA 16)	ND	ND	ND	0.0051	ND	022W[1]	mg/l	0.0001

[1] ISO 17025 accredited.
[*] MCERTS accredited for sand, loam and clay.

ALcontrol Laboratories
Table Of Results

Job Number : 08-51972
Matrix : Water
Project Code: STE1297R

Project Name: Richmond- Upon- Thames College
Client : Soiltechnics

Sample Reference	BH06					Method No	Units	LOD
Sample Depth (m)	-							
Date Sampled	-							
Date Scheduled	27/06/08							
Laboratory Reference No	324619							
Analysis								
* * PAH SUITE * *								
Naphthalene	< 0.0001					022W[1]	mg/l	0.0001
Acenaphthylene	< 0.0001					022W[1]	mg/l	0.0001
Acenaphthene	< 0.0001					022W[1]	mg/l	0.0001
Fluorene	< 0.0001					022W[1]	mg/l	0.0001
Phenanthrene	< 0.0001					022W[1]	mg/l	0.0001
Anthracene	< 0.0001					022W[1]	mg/l	0.0001
Fluoranthene	< 0.0001					022W[1]	mg/l	0.0001
Pyrene	< 0.0001					022W[1]	mg/l	0.0001
Benzo(a)anthracene	< 0.0001					022W[1]	mg/l	0.0001
Chrysene	< 0.0001					022W[1]	mg/l	0.0001
Benzo(b)fluoranthene	< 0.0001					022W[1]	mg/l	0.0001
Benzo(k)fluoranthene	< 0.0001					022W[1]	mg/l	0.0001
Benzo(a)pyrene	< 0.0001					022W[1]	mg/l	0.0001
Indeno(1,2,3-cd)pyrene	< 0.0001					022W[1]	mg/l	0.0001
Dibenzo(a,h)anthracene	< 0.0001					022W[1]	mg/l	0.0001
Benzo(g,h,i)perylene	< 0.0001					022W[1]	mg/l	0.0001
PAH (Sum of EPA 16)	ND					022W[1]	mg/l	0.0001

[1] ISO 17025 accredited.
[*] MCERTS accredited for sand, loam and clay.

ALcontrol Laboratories
Table Of Results - Appendix

Job Number : 08-51972

Project Code: STE1297R

Project Name: Richmond- Upon- Thames College
Client : Soiltechnics

Summary of methods contained within report :

Method No.	Reference	Description	Wet/Dry Analysis
086W	In-house method	Determination of anion content in aqueous samples using ion chromatographic determination with electrical conductivity detector	
084W	In-house method	Determination of pH in aqueous samples by direct electrometric measurement	
080W	In-house method based on MEWAM "Inductively Coupled Plasma Spectrometry", HMSO, 1996	Determination of metals in aqueous samples by nitric acid digestion followed by Inductively Coupled Plasma - Mass Spectrometry detection (ICP-MS)	
062W	In-house method based on MEWAM "Inductively Coupled Plasma Spectrometry", HMSO, 1996	Determination of metals in aqueous samples by nitric digestion followed by ICP-OES detection	
061W	In-house method based on Method 4500-CN, "Standard Methods for the Examination of Water and Waste Water", APHA AWWA WEF, Edition 18, 1992	Determination of cyanides and thiocyanate in aqueous samples by continuous flow colorimetry (Skalar)	
057W	In-house method based on Method 18.13 "Environmental Assessment Guidance" Version 3, Second Site Property, March 2003	Determination of ammoniacal nitrogen in aqueous samples by ion selective electrode	
055W	In-house method based on MEWAM "Sulphide in Waters and Effluents", HMSO, 1983	Determination of sulphide in aqueous samples by direct colourimetry	
022W	In-house method	Determination of PAH compounds in aqueous samples by pentane extraction followed by GC-MS detection [Note: this method does not separate benzo(j)fluoranthene, and this PAH will be included in the sum of benzo(b)fluoranthene & benzo(k)fluoranthene]	

Appendix

Code	Description
[illegible]	
*	Detection limit(s) raised due to matrix interference
¥	Detection limit(s) raised due to reduced amount of sample available for analysis
‡	Dilution factor applied due to nature of sample
NAD	No asbestos detected
§	Analysis sub-contracted
U/S	Analysis unsuitable for sample due to its matrix or properties
I/S	Insufficient sample
M/S	Sample cannot be located within the laboratory
ND	Not detected (below relevant analytical detection limit)
^	Sample filtered prior to analysis
^^	Please note product present, therefore this result is for indicative purpose only
[illegible]	
†	Sample type outside the scope of our MCERTS accreditation since matrix not included in method validation
¢	Unsuitable for analysis due to asbestos content
[illegible]	
≈	Please note TOC's & LOI's have been repeated and the apparently anomalous results confirmed
¶	UKAS and/or MCERTS accreditation removed due to duration of sample in laboratory prior to testing
≠	The BOD analysis was carried out prior to the COD analysis and included an oily layer, which is the likely cause of the anomalous results
Note:	Analysis carried out for organic compounds on water samples containing free product is on a "best endeavour" basis
Note:	All results calculated from organic carbon on a dry weight basis
Note:	Fe(II) and dissolved Fe are analysed by different methods; sometimes leading to slight discrepancy between results
Note:	"Total" results calculated by summing individual components are not rounded
Note:	The reporting limit stated in the LOD column is the standard method reporting limit, derived statistically from validation data, however it is occasionally necessary to raise reporting limits due to matrix interference or limited sample availability
Note:	During soil preparation, best efforts are made to produce analytical subsamples representative of the entire submitted sample, without exclusion of stones

Statistical analysis of test data in relation to concentrations of inorganic chemical contaminants

Receptor: End user
Assessment criteria: Industrial/Commercial

Contaminant	Maximum value test									Mean value test				
	Number of test results (sample size, n)	Outlier test statistics (T)	Critical Values 5%	Critical Values 10%	Number of samples considered outliers	Outlier sample location: Exploration point	Outlier sample location: Sample depth (m)	Outlier sample location: Concentration of outlier (mg/kg)	Further investigation suggested from test result alone (see note 3)	95th Percentile value (mg/kg)	Soil Guideline value (mg/kg)	Generic Assessment Criteria (mg/kg)	Guideline exceeded by 95th percentile value?	95th percentile value (all tests) (mg/kg)
Arsenic	12	2.234	2.29	2.13	1	DTS19	0.2-0.4	43	Y					
Arsenic	11	1.471	2.25	2.1	1					18.3	500	-	N	22.7
Beryllium	12	1.690	2.29	2.13	0					2.5	-	1950	N	2.5
Cadmium (pH - 5.9)	12	2.298	2.29	2.13	1	DTS19	0.2-0.4	1.4	Y					
Cadmium (pH - 5.9)	11	1.619	2.25	2.1	1					0.7	1400	-	N	0.8
Chromium (tot)	12	1.610	2.29	2.13	0					29.9	5000	-	N	29.9
Cyanide (free)	12	0.000	2.29	2.13	0					1.0	-	n/a	N	1.0
Cyanide (total)	12	3.175	2.29	2.13	1	DTS10	0.1-0.3	3	Y					
Cyanide (total)	11	0.000	2.25	2.1	1					1.0	-	n/a	N	1.5
Lead	12	1.519	2.29	2.13	0					419.5	750	-	N	419.5
Mercury	12	1.937	2.29	2.13	0					1.1	480	-	N	1.1
Nickel	12	2.491	2.29	2.13	1	DTS19	0.2-0.4	65	Y					
Nickel	11	1.838	2.25	2.1	1					22.1	5000	-	N	30.3
Selenium	12	0.957	2.29	2.13	0					2.5	8000	-	N	2.5
Sulfur	12	2.235	2.29	2.13	1	DTS05	0.2-0.35	890	Y					
Sulfur	11	3.015	2.25	2.1	2	DTS10	0.1-0.3	760	Y					
Sulfur	10	0.000	2.18	2.04	2					100.0	-	n/a	N	367.8
Vanadium	12	2.230	2.29	2.13	1	DTS19	0.2-0.4	100	Y					
Vanadium	11	1.363	2.25	2.1	1					46.6	-	4250	N	56.0

Notes
1. Maximum value and mean value test carried out on number of test results available (refer to Contaminated Land report no 7 (CLR7))
2. Outlier samples identified by maximum value test are removed from sample population to carry out mean value test.
3. Further investigations suggested by statistical analysis may not necessarily be required. Refer to report for discussion.
4. Measured concentrations that are below the analytical detection limit, are assigned a value equal to the detection limit for the purposes of carrying out the above statistical analysis (in accordance with A8 of CLR7).
5. Generic Assessment Criteria (GAC) as presented in "Generic Assessment Criteria for Human Health Risk Assessment" published by Land Quality Management (LQM) and the Chartered Institute of Environmental Health (CIEH).

Outlier test statistic lies between critical values

Outlier test statistic is zero

Project
Richmond-Upon-Thames College, Egerton Road, Twickenham

SOILTECHNICS

Statistical analysis of test data in relation to concentrations of organic chemical contaminants

Receptor: End user
Assessment criteria: Industrial/Commercial

Contaminant	Maximum value test									Mean value test				
	Number of test results (sample size, n)	Outlier test statistics (T)	Critical Values 5%	Critical Values 10%	Number of samples considered outliers	Outlier sample location: Exploration point	Outlier sample location: Sample depth (m)	Outlier sample location: Concentration of outlier (mg/kg)	Further investigation suggested from test result alone (see note 3)	95th Percentile value (mg/kg)	Soil Guideline value (mg/kg)	Generic Assessment Criteria (mg/kg)	Guideline exceeded by 95th percentile value?	95th percentile value (all tests) (mg/kg)
Benzo(a)pyrene	15	2.394	2.4	2.25	1	DTS05	0.2-0.35	58	Y					
Benzo(a)pyrene	14	2.508	2.37	2.21	2	DTS10	0.1-0.3	18	Y					
Benzo(a)pyrene	13	1.122	2.32	2.175	2					0.7	-	29.7	N	12.4
Dibenzo(a,h)anthracene	15	2.962	2.4	2.25	1	DTS05	0.2-0.35	6.4	Y					
Dibenzo(a,h)anthracene	14	3.453	2.37	2.21	2	DTS10	0.1-0.3	1.6	Y					
Dibenzo(a,h)anthracene	13	2.682	2.32	2.175	3	DTS03	0.2-0.4	0.13	Y					
Dibenzo(a,h)anthracene	12	3.175	2.29	2.13	4	DTS13	0.2-0.3	0.12	Y					
Dibenzo(a,h)anthracene	11	0.000	2.25	2.1	4					0.1	-	29.7	N	1.4
Fluorene	15	2.304	2.4	2.25	1	DTS05	0.2-0.35	24	Y					
Fluorene	14	2.645	2.37	2.21	2	TP14	0.4	12	Y					
Fluorene	13	3.315	2.32	2.175	3	DTS10	0.1-0.3	4.6	Y					
Fluorene	12	3.175	2.29	2.13	4	DTS03	0.2-0.4	0.14	Y					
Fluorene	11	0.000	2.25	2.1	4					0.1	-	59000	N	5.8
Naphthalene	15	3.584	2.4	2.25	1	DTS05	0.2-0.35	2.2	Y					
Naphthalene	14	3.474	2.37	2.21	2	TP14	0.4	0.15	Y					
Naphthalene	13	0.000	2.32	2.175	2					0.1	-	290	N	0.5

Notes
1. Maximum value and mean value test carried out on number of test results available (refer to Contaminated Land report no 7 (CLR7))
2. Outlier samples identified by maximum value test are removed from sample population to carry out mean value test.
3. Further investigations suggested by statistical analysis may not necessarily be required. Refer to report for discussion.
4. Measured concentrations that are below the analytical detection limit, are assigned a value equal to the detection limit for the purposes of carrying out the above statistical analysis (in accordance with A8 of CLR7).
5. Generic Assessment Criteria (GAC) as presented in "Generic Assessment Criteria for Human Health Risk Assessment" published by Land Quality Management (LQM) and the Chartered Institute of Environmental Health (CIEH).

Outlier test statistic lies between critical values

Outlier test statistic is zero

Project
Richmond-Upon-Thames, Egerton Road, Twickenham
STE1297R

SOILTECHNICS

Summary of petroleum hydrocarbon test results

Indicators (Red highlights indicate exceedance of guideline value)

Indicator	unit	Guideline value	Concentration	
			TP09	TP14
			0.1-0.2	0.4
Toluene	mg/kg	350	< 0.010	< 0.010
Ethylbenzene	mg/kg	48000	< 0.010	< 0.010
Naphthalene	mg/kg	720	0.1	0.15
Benzo(a)pyrene	mg/kg	29.7	0.16	1
Dibenz(a,h)anthracene	mg/kg	29.7	< 0.1	< 0.1

Hydrocarbon banding (Red highlights indicate exceedance of GAC value)

Fraction	unit	GAC	Concentration	
			TP09	TP14
			0.1-0.2	0.4
Aliphatic				
EC 5 - 6	mg/kg	168	0.02	0.02
EC >6 - 8	mg/kg	535	0.01	0.02
EC >8 - 10	mg/kg	160	0.05	0.02
EC >10 - 12	mg/kg	30600	0.13	0.09
EC >12 - 16	mg/kg	30600	26	28
EC >16 - 35	mg/kg	631000	13.9	92
EC >35 - 44	mg/kg			
Aromatic				
EC 5 - 7 (benzene)	mg/kg	62.1	< 0.01	< 0.01
EC >7 - 8 (toluene)	mg/kg	71.1	< 0.01	< 0.01
EC >8 - 10	mg/kg	263	0.07	0.04
EC >10 - 12	mg/kg	1450	0.2	0.13
EC >12 - 16	mg/kg	12500	16	140
EC >16 - 21	mg/kg	9400	3.7	240
EC >21 - 35	mg/kg	9460	18	220
EC >35 - 44	mg/kg			

Soil organic matter 4.5 %

Notes:

1. Generic Assessment Criteria (GAC) as presented in "Generic Assessment Criteria for Human Health Risk Assessment" published by Land Quality Management (LQM) and the Chartered Institute of Environmental Health (CIEH).

Project
Richmond-Upon-Thames College
STE1297R

SOILTECHNICS

Date/Time	Location	Atmos-pheric pressure (mB)	Temper-ature (°C)	Methane, CH_4 (%v/v) *Chg*		Carbon Dioxide, CO_2 (%v/v) *Chg*		Oxygen, O_2 (%v/v)			Balance	Lower Explosive Limit	Gas Flow (q)	Peak hazardous gas flow rate *Qhgs*		Steady hazardous gas flow rate *Qhgs*		NHBC Guideline	NHBC Guideline	Characteristic gas situation	Potentially Explosive	Water Level (m)
				Peak	Steady	Peak	Steady	Minimum	Average		(%v/v)	(% LEL)	(l/Hr)	CH_4	CO_2	CH_4	CO_2	(Peak)	(Steady)			
20/06/2008 12:10	BH01	1013		16.0	0.0	0.0	2.0	2.0	18.5	18.5	79.5	0.0	0.0	0.00	0.00	0.00	0.00	GREEN	GREEN	ONE	NO	1.4
20/06/2008 12:14	BH02	1013		16.0	0.0	0.0	2.0	0.1	18.8	20.5	79.4	0.0	0.0	0.00	0.00	0.00	0.00	GREEN	GREEN	ONE	NO	1.33
20/06/2008 10:56	BH03	1013		16.0	0.1	0.0	5.2	5.2	6.7	6.6	88.2	0.0	0.0	0.00	0.00	0.00	0.00	AMBER 1	AMBER 1	TWO	NO	1.4
20/06/2008 11:41	BH04	1013		16.0	0.0	0.0	0.5	0.4	19.3	19.5	80.1	0.0	0.0	0.00	0.00	0.00	0.00	GREEN	GREEN	ONE	NO	1.6
20/06/2008 11:22	BH05	1013		16.0	0.0	0.0	5.0	5.0	0.3	0.3	94.7	0.0	0.0	0.00	0.00	0.00	0.00	GREEN	GREEN	TWO	NO	2.37
20/06/2008 11:10	BH06	1013		16.0	0.0	0.0	4.7	4.2	7.4	7.4	88.4	0.0	0.0	0.00	0.00	0.00	0.00	GREEN	GREEN	ONE	NO	2.4
08/07/2008 12:32	BH01	1003		18.0	0.0	0.0	0.1	0.0	20.2	20.4	79.6	0.0	0.0	0.00	0.00	0.00	0.00	GREEN	GREEN	ONE	NO	1.36
08/07/2008 12:40	BH02	1004		18.0	0.0	0.0	0.0	0.0	0.0	20.3	79.7	0.0	0.0	0.00	0.00	0.00	0.00	GREEN	GREEN	ONE	NO	1.33
08/07/2008 12:56	BH03	1004		18.0	0.0	0.0	5.0	5.0	10.4	10.4	84.6	0.0	0.0	0.00	0.00	0.00	0.00	GREEN	GREEN	TWO	NO	1.44
08/07/2008 13:10	BH04	1005		18.0	0.0	0.0	1.0	1.0	17.2	17.3	81.7	0.0	0.0	0.00	0.00	0.00	0.00	GREEN	GREEN	ONE	NO	1.62
08/07/2008 13:21	BH05	1005		18.0	0.0	0.0	6.1	6.1	0.2	0.2	93.7	0.0	0.0	0.00	0.00	0.00	0.00	AMBER 1	AMBER 1	TWO	NO	2.38
08/07/2008 13:41	BH06	1005		18.0	0.0	0.0	4.6	4.6	14.9	14.9	80.5	0.0	0.0	0.00	0.00	0.00	0.00	GREEN	GREEN	ONE	NO	2.54
				0.1	0.0	0.0	6.1	6.1	0.0	0.2	94.7	0.0	0.1	0.00	0.01	0.00	0.01	AMBER1	AMBER 1	TWO		Worst case scenario
				0.0	0.0	0.0	3.0	2.8	11.2	13.0	84.2	0.0	0.1	0.00	0.00	0.00	0.00	GREEN	GREEN	ONE		Average site scenario

Additional Considerations

Notes:
Gas Screening Value (GSV) derived by multiplying the peak gas concentration (%) by the peak flow rate (l/h).

The gas analyser is capable of measuring flow to an accuracy of 0.1l/h. Below this value the analyser records zero flow. Adopting a precautionary approach we have used a flow rate of 0.1l/h when the analyser records zero with this flow rate used to determine the gas screening value.

SOILTECHNICS

Record of in-situ gas and water level monitoring results

Project
Richmond-Upon-Thames College, Twickenham

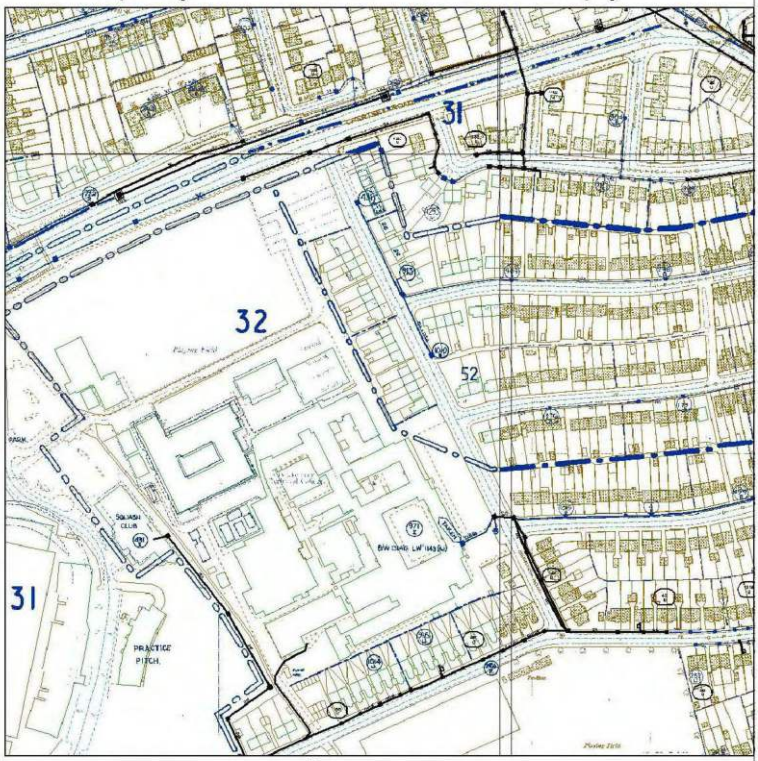
Project Reference
STE1297R

Location Plan or Drawing No.
D-STE1297R-02

Draft
Preliminary

Appendix
K

Maps by email Plant Information Reply



IMPORTANT WARNING

Information regarding the location of BT apparatus is given for your assistance and is intended for general guidance only. No guarantee is given of its accuracy.
It should not be relied upon in the event of excavations or other works being made near to BT apparatus which may exist at various depths and may deviate from the marked route.

DIAL BEFORE YOU DIG

FOR PROFESSIONAL ON SITE ASSISTANCE PRIOR TO COMMENCEMENT OF EXCAVATION WORKS

ADVANCE NOTICE REQUIRED
(Office hours: Monday-Friday 08.00 to 17.00)

Tel: 0800 9173993
E-mail: dbyd@openreach.co.uk
Website: www.dialbeforeyoudig.com

KEY TO BT SYMBOLS

UNDERGROUND PLANT	POLE
A/C, D/W or W OVERHEAD PLANT	CABINET
JOINT BOX	BURIED JOINT
DP OR DP DISTRIBUTION POINT	J JOINTING POST
DP 72 MANHOLE	PROPOSED U/G
DP BOUNDARY	A/C, D/W or W PROPOSED O/H
OTHER BT BOUNDARY	PROPOSED BOX

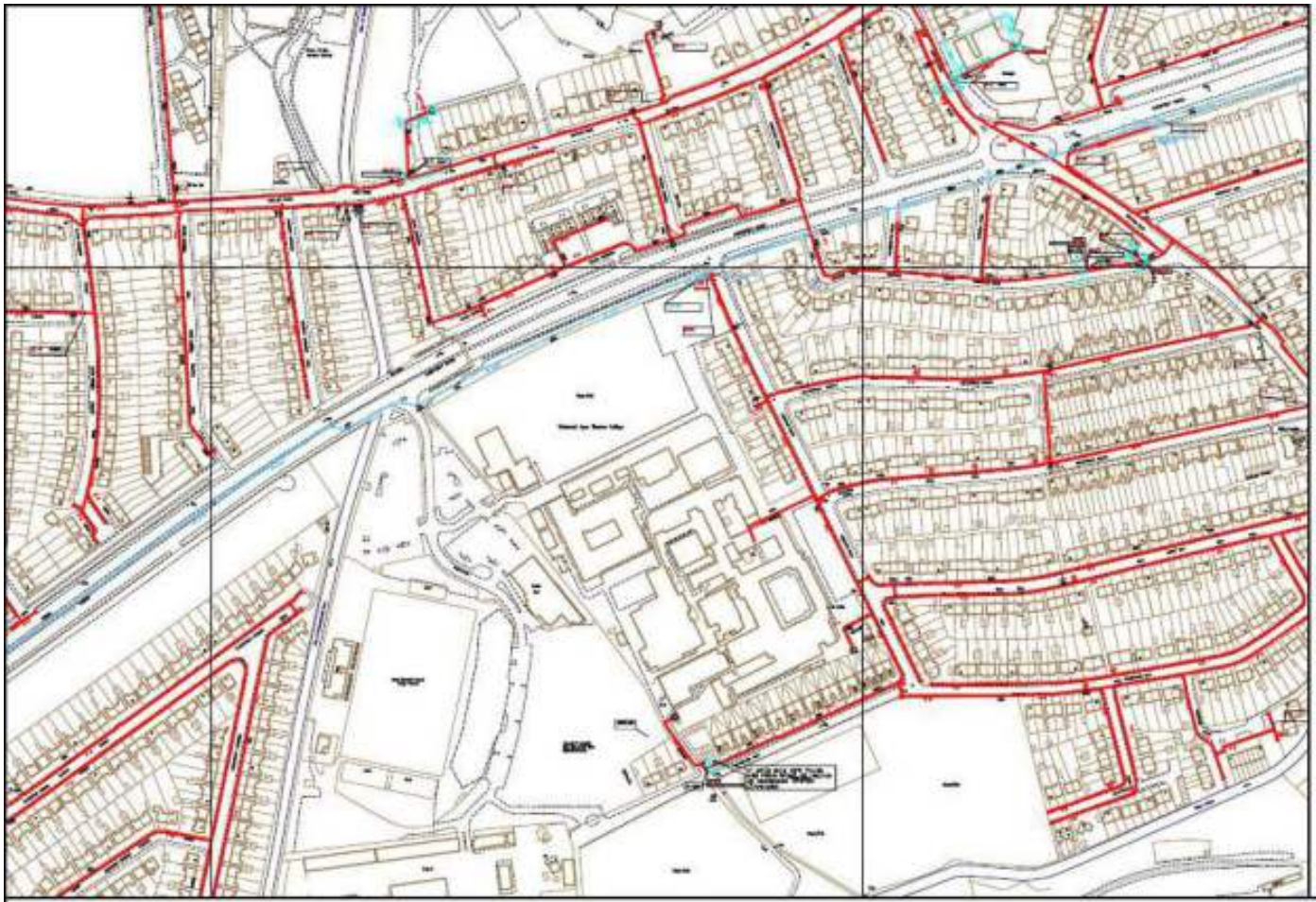
Other proposed plant is shown using dashed lines. BT symbols not listed above may be disregarded. Existing BT plant may not be recorded. Information valid at the time of preparation.

openreach
a BT Group business

BT ref: FFT12340B

Map reference (centre): TQ1542073848

Issued: 12/05/08 12:37:09



SCALE: Not to scale	
USER ID: mikeb	
DATE: 17/06/2008	
EXTRACT DATE: 11/03/2008	
MAP REF: TQ1573	
CENTRE: 515342, 173859	

LP MAINS
MP MAINS
IP MAINS
LHP MAINS
MHP MAINS

Some examples of Plant Items

Valve | Depth of Cover | Syphon | Diameter Change | Material Change

This plan shows those pipes owned by National Grid Gas plc in their role as a Licensed Gas Transporter (GT). Gas pipes owned by other GTs, or otherwise privately owned, may be present in this area. Information with regard to such pipes should be obtained from the relevant owners. The information shown on this plan is given without warranty, the accuracy thereof cannot be guaranteed. Service pipes, valves, syphons, stub connections, etc. are not shown but their presence should be anticipated. No liability of any kind whatsoever is accepted by National Grid Gas plc or their agents, servants or contractors for any error or omission. Safe digging practices, in accordance with HS(G)47, must be used to verify and establish the actual position of mains, pipes, services and other apparatus on site before any mechanical plant is used. It is your responsibility to ensure that this information is provided to all persons (either direct labour or contractors) working for you on or near gas apparatus. The information included on this plan should not be referred to beyond a period of 28 days from the date of issue. Further information on all DR4s can be determined by calling the DR4 hotline on 01455 892426 (9am-5pm) A DR4 is where a potential error has been identified within the asset record and a process is currently underway to investigate and resolve the error as appropriate.

MAPS Viewer Version 5.6.0.1

Local Machine

Asset Location Search

Andy Keeler
Soiltechnics Limited
Cedar Barn
White Lodge
NORTHAMPTON
NN6 9PY

Search address supplied Richmond-upon-Thames College
Egerton Road
Twickenham
London
TW2 7JS

Your reference STE1297R
Our reference ALS/ALS Standard/2008_1162211

Search date 12 May 2008

Thames Water Utilities Ltd

Property Insight
PO Box 3189
Slough SL1 4WW

DX 151280 Slough 13

T 0118 925 1504
F 0118 923 6655/57
E searches@thameswater.co.uk
I www.twpropertyinsight.co.uk

Registered in England and Wales
No 2366661 Registered office
Clearwater Court, Vastern Road
Reading RG1 8DB

Asset Location Search

Search address supplied: Richmond-upon-Thames College, Egerton Road, Twickenham, London, TW2 7JS

Dear Sir / Madam

An Asset Location Search is recommended when undertaking a site development. It is essential to obtain information on the size and location of clean water and sewerage assets to safeguard against expensive damage and allow cost-effective service design.

This search provides maps showing the position, size of Thames Water assets close to the proposed development and also manhole cover and invert levels, where available.

Please note that none of the charges made for this report relate to the provision of Ordnance Survey mapping information. The replies contained in this letter are given following inspection of the public service records available to this company. No responsibility can be accepted for any error or omission in the replies.

You should be aware that the information contained on these plans is current only on the day that the plans are issued. The plans should only be used for the duration of the work that is being carried out at the present time. Under no circumstances should this data be copied or transmitted to parties other than those for whom the current work is being carried out.

Thames Water do update these service plans on a regular basis and failure to observe the above conditions could lead to damage arising to new or diverted services at a later date.

Contact Us

If you have any further queries regarding this enquiry please feel free to contact a member of the team on 0118 925 1504, or use the address below:

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Fax: 0118 923 6657

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Asset Location Search

Waste Water Services

Please provide a copy extract from the public sewer map.

Enclosed is a map showing the approximate lines of our sewers. Our plans do not show sewer connections from individual properties or any sewers not owned by Thames Water unless specifically annotated otherwise. Records such as "private" pipework are in some cases available from the Building Control Department of the relevant Local Authority.

Where the Local Authority does not hold such plans it might be advisable to consult the property deeds for the site or contact neighbouring landowners.

This report relates only to sewerage apparatus of Thames Water Utilities Ltd, it does not disclose details of cables and or communications equipment that may be running through or around such apparatus.

The sewer level information contained in this response represents all of the level data available in our existing records. Should you require any further information, please refer to the relevant section within the 'Further Contacts' page found later in this document.

For your guidance:

- The Company is not generally responsible for rivers, watercourses, ponds, culverts or highway drains. If any of these are shown on the copy extract they are shown for information only.
- Sewers indicated on the extract of the public sewer map as being subject to an agreement under Section 104 of the Water Industry Act 1991 are not an 'as constructed' record. It is recommended that these details are checked with the developer.

Clean Water Services

Please provide a copy extract from the public water main map.

Enclosed is a map showing the approximate positions of our water mains and associated apparatus. Please note that records are not kept of the positions of individual domestic supplies.

For your information, there will be a pressure of at least 10m head at the outside stop valve. If you would like to know the static pressure, please contact our Customer Centre on 0845 920 0800. The Customer Centre can also arrange for a full flow and pressure test to be carried out for a fee.

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Asset Location Search

For your guidance:

- Assets other than vested water mains may be shown on the plan, for information only.
- If an extract of the public water main record is enclosed, this will show known public water mains in the vicinity of the property. It should be possible to estimate the likely length and route of any private water supply pipe connecting the property to the public water network.

Payment for this Search

An invoice is enclosed. Please send remittance to Thames Water Utilities Ltd., PO Box 223, Swindon, SN38 2TW.

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Asset Location Search

Further contacts:

Waste Water queries

Should you require verification of the invert levels of public sewers, by site measurement, you will need to approach the relevant Thames Water Area Network Office for permission to lift the appropriate covers. This permission will usually involve you completing a TWOSA form. For further information please contact our Customer Center on Tel: 0845 920 0800. Alternatively, a survey can be arranged, for a fee, through our Customer Centre on the above number.

If you have any questions regarding sewer connections, building over issues or any other questions regarding operational issues please direct them to our service desk. Which can be contacted by writing to:

Developer Services (Waste Water)
Thames Water
Clear Water Court
Vastern Road
Reading
RG1 8DB

Tel: 0845 850 2777
Fax: 0118 923 6613
Email: developer.services@thameswater.co.uk

Should you require any further information regarding budget estimates, diversions or stopping up notices then please contact:

DevCon Team
Asset Investment
Thames Water
Maple Lodge STW
Denham Way
Rickmansworth
Hertfordshire
WD3 9SQ

Tel: 01923 898 072
Fax: 01923 898 106
Email: devcon.team@thameswater.co.uk

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Reading RG1 8DB

Asset Location Search

Clean Water queries

Should you require any advice concerning clean water operational issues or clean water connections, please contact our Kew Service Desk by writing to:

Clean Water Design
Thames Water Utilities
1 Kew Bridge Road
Brentford
Middlesex
TW8 0EF

Tel: 0845 850 2777
Fax: 0208 213 8833
Email: developer.services@thameswater.co.uk

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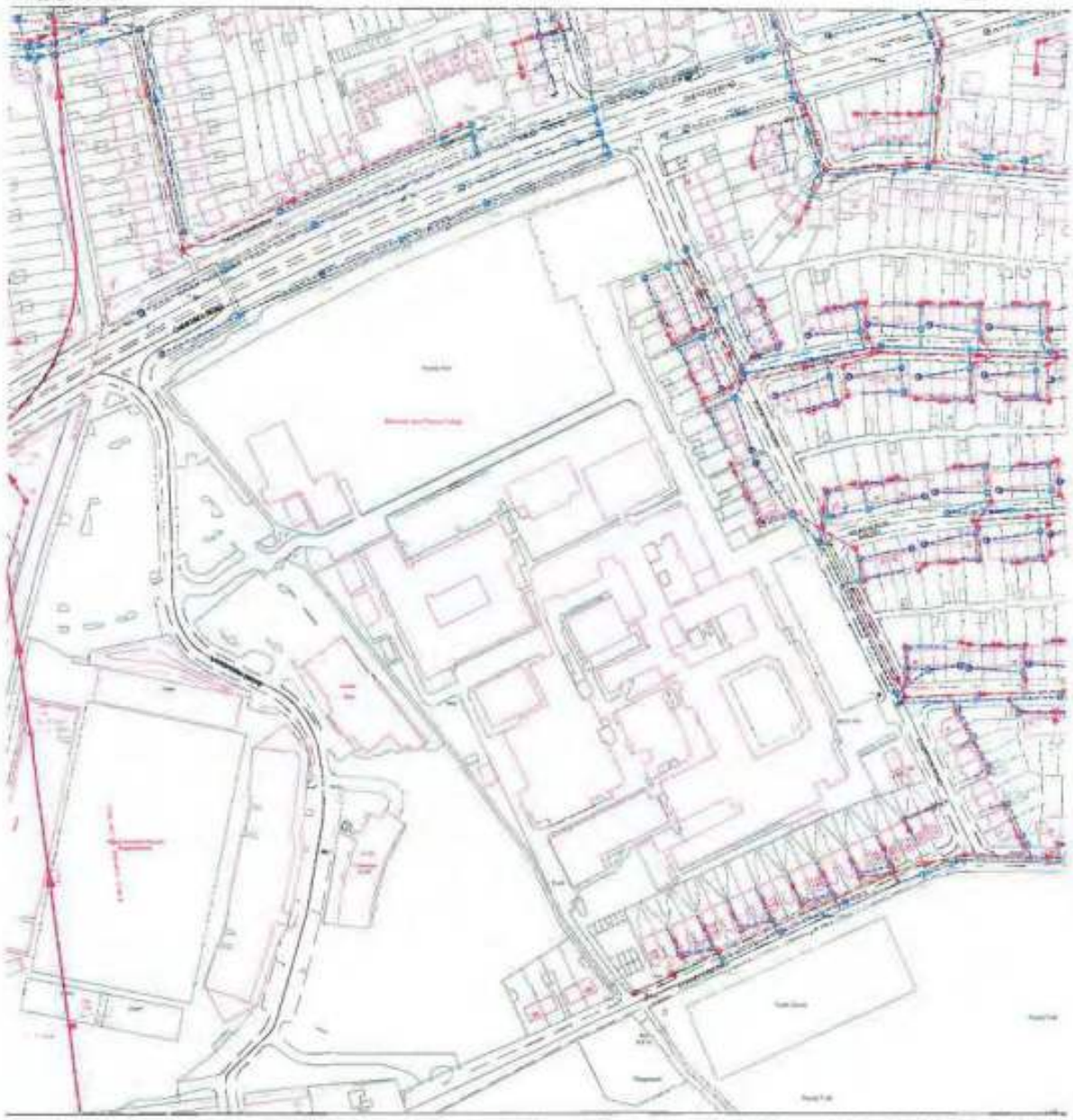

position of the apparatus shown on this plan is given without obligation and warranty, and the accuracy cannot be guaranteed. Service pipes are not shown but their presence should be anticipated. No liability of any kind soever is accepted by Thames Water for any error or omission. The actual position of mains and services must be verified and established on site before any works are undertaken.

metre intervals

OLE hardcopy facility - Normal Map.
s plan is centred on (515338 , 173813), which is in TQ1573NW. Printed on 12 May 2008 at 15:52:58 by RIMISSON.

ouments:
our plan

inibox (515084,173559) -> (515592,174067)
'entral Mapsheet : TQ1573NW
ser : RIMISSON
'me : Mon May 12 15:53:10 2008

position of apparatus shown on this plan is given without obligation and warranty, and the accuracy cannot be guaranteed. Service pipes are not shown but their presence should be anticipated. No liability of any kind whatsoever is accepted by Thamter for any error or omission. The actual position of mains and services must be verified and established on site before any works are undertaken.

. Levels quoted in metres Ordnance Newlyn Datum. The value -9999.00 indicates no survey information is available

(515524,174052)	there is a MANHOLE with SHORT NUMBER=5006	COVER=	8.64	INVERT=	7.13
(515514,174066)	there is a MANHOLE with SHORT NUMBER=5008	COVER=	8.60	INVERT=	7.33
(515521,174048)	there is a MANHOLE with SHORT NUMBER=5009	COVER=	8.61	INVERT=	7.40
(515545,174057)	there is a MANHOLE with SHORT NUMBER=5010	COVER=	8.45	INVERT=	7.54
(515579,174067)	there is a MANHOLE with SHORT NUMBER=5011	COVER=	8.46	INVERT=	7.42
(515592,174061)	there is a MANHOLE with SHORT NUMBER=5012	COVER=	8.52	INVERT=	7.01
(515582,173754)	there is a MANHOLE with SHORT NUMBER=5702	COVER=	-9999.00	INVERT=	-9999.00
(515580,173752)	there is a MANHOLE with SHORT NUMBER=5704	COVER=	-9999.00	INVERT=	-9999.00
(515592,173837)	there is a MANHOLE with SHORT NUMBER=5801	COVER=	-9999.00	INVERT=	-9999.00
(515589,173839)	there is a MANHOLE with SHORT NUMBER=5804	COVER=	-9999.00	INVERT=	-9999.00
(515578,173908)	there is a MANHOLE with SHORT NUMBER=5902	COVER=	-9999.00	INVERT=	-9999.00
(515588,173992)	there is a MANHOLE with SHORT NUMBER=5903	COVER=	-9999.00	INVERT=	-9999.00
(515575,173911)	there is a MANHOLE with SHORT NUMBER=5905	COVER=	-9999.00	INVERT=	-9999.00
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(515564,173760)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
(515564,173776)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
(515569,173902)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
(515565,173890)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
(515570,173889)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
(515571,173920)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
(515571,173828)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
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(515572,173816)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
(515476,173887)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
(515476,173886)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
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(515572,174054)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
(515569,174053)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
(515568,174042)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
(515568,174039)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
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(515592,173778)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
(515591,173777)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
(515591,173765)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
(515580,173845)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
(515580,173770)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
(515579,173861)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
(515576,173847)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
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(515576,173860)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
(515577,173778)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
(515578,173745)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
(515578,173741)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00

ended GIS print

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Vinibox (515084,173559) -> (515592,174067)
Central Mapsheet : TQ1573NW
User : RIMISSON
Time : Mon May 12 15:53:10 2008

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(515528,173836) there is a MANHOLE with SHORT NUMBER=5803 COVER= -9999.00 INVERT= -9999.00
(515521,173998) there is a MANHOLE with SHORT NUMBER=5901 COVER= -9999.00 INVERT= -9999.00
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(515515,173933) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515515,173921) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
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(515517,173813) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515539,173905) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
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(515543,173815) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515543,173933) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515543,173917) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
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(515560,173933) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515558,173933) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515558,173889) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
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(515562,173745) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515561,173859) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
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(515545,173858) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515527,173888) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
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(515496,173913) there is a MANHOLE with SHORT NUMBER=4909 COVER= -9999.00 INVERT= -9999.00

Minibox (515084,173559) -> (515592,174067)
Central Mapsheet : TQ1573NW
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(515507,173751)	there is a MANHOLE with SHORT NUMBER=5701	COVER=	-9999.00	INVERT=	-9999.00
(515505,173748)	there is a MANHOLE with SHORT NUMBER=5703	COVER=	-9999.00	INVERT=	-9999.00
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(515579,173684)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
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(515586,173684)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
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(515484,174020)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
(515481,173890)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
(515489,173805)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
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(515487,173815)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
(515487,173805)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
(515487,173920)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
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(515485,173932)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
(515485,173820)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
(515484,173850)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
(515509,173774)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
(515509,173765)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
(515509,173760)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
(515532,173745)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
(515532,173933)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
(515531,173814)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
(515531,173858)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
(515508,173775)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
(515507,173891)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
(515514,173810)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
(515534,173858)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
(515534,173777)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
(515533,173746)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
(515513,173889)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
(515507,173892)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
(515506,173903)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
(515504,173853)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
(515501,173852)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
(515491,173838)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
(515490,173850)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
(515490,173917)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
(515489,173933)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
(515479,173904)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
(515493,174020)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
(515503,174020)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
(515509,174020)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
(515514,174020)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
(515545,174000)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
(515547,174000)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
(515097,174061)	there is a MANHOLE with SHORT NUMBER=0005	COVER=	11.01	INVERT=	8.76
(515119,174068)	there is a MANHOLE with SHORT NUMBER=1001	COVER=	10.46	INVERT=	-8.44

'ninbox (515084,173559) -> (515592,174067)
'ntral Mapsheet : TQ1573NW
ser : RIMISSON
'me : Mon May 12 15:53:10 2008

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(515102,174044)	there is a MANHOLE with SHORT NUMBER=1002	COVER=	10.71	INVERT=	6.98
(515113,174060)	there is a MANHOLE with SHORT NUMBER=1002	COVER=	11.08	INVERT=	5.69
(515114,174055)	there is a MANHOLE with SHORT NUMBER=1003	COVER=	10.99	INVERT=	5.70
(515114,174050)	there is a MANHOLE with SHORT NUMBER=1003	COVER=	11.09	INVERT=	7.85
(515118,174002)	there is a MANHOLE with SHORT NUMBER=1004	COVER=	-9999.00	INVERT=	-9999.00
(515114,174045)	there is a MANHOLE with SHORT NUMBER=1004	COVER=	10.64	INVERT=	6.97
(515153,174057)	there is a MANHOLE with SHORT NUMBER=1005	COVER=	10.24	INVERT=	6.93
(515102,174052)	there is a MANHOLE with SHORT NUMBER=1006	COVER=	10.95	INVERT=	8.26
(515149,174059)	there is a MANHOLE with SHORT NUMBER=1007	COVER=	10.32	INVERT=	6.12
(515137,174061)	there is a MANHOLE with SHORT NUMBER=1008	COVER=	10.62	INVERT=	7.61
(515136,174065)	there is a MANHOLE with SHORT NUMBER=1009	COVER=	10.60	INVERT=	7.75
(515111,174063)	there is a MANHOLE with SHORT NUMBER=1011	COVER=	11.09	INVERT=	8.86
(515347,174059)	there is a MANHOLE with SHORT NUMBER=3001	COVER=	9.12	INVERT=	7.95
(515344,174063)	there is a MANHOLE with SHORT NUMBER=3002	COVER=	9.08	INVERT=	7.86
(515363,174022)	there is a MANHOLE with SHORT NUMBER=3003	COVER=	9.43	INVERT=	7.67
(515366,174010)	there is a MANHOLE with SHORT NUMBER=3004	COVER=	-9999.00	INVERT=	-9999.00
(515480,173656)	there is a MANHOLE with SHORT NUMBER=4602	COVER=	8.90	INVERT=	7.94
(515406,173957)	there is a MANHOLE with SHORT NUMBER=4907	COVER=	-9999.00	INVERT=	-9999.00
(515405,173951)	there is a MANHOLE with SHORT NUMBER=4910	COVER=	-9999.00	INVERT=	-9999.00
(515502,173670)	there is a MANHOLE with SHORT NUMBER=5601	COVER=	-9999.00	INVERT=	-9999.00
(515536,173679)	there is a MANHOLE with SHORT NUMBER=5602	COVER=	-9999.00	INVERT=	-9999.00
(515535,173676)	there is a MANHOLE with SHORT NUMBER=5603	COVER=	-9999.00	INVERT=	-9999.00
(515405,173631)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
(515449,173912)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
(515563,173687)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
(515563,173683)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
(515561,173687)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
(515556,173702)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
(515554,173702)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
(515521,173701)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
(515521,173700)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
(515510,173690)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
(515508,173695)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
(515507,173695)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
(515502,173673)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
(515501,173673)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
(515487,173669)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
(515487,173668)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
(515483,173676)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
(515498,173682)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
(515450,173914)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
(515083,174042)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
(515086,174001)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
(515409,173898)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
(515408,173900)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
(515446,173648)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
(515447,173648)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
(515088,173862)	there is a MANHOLE with SHORT NUMBER=0809	COVER=	11.06	INVERT=	5.70
(515124,173600)	there is a MANHOLE with SHORT NUMBER=1601	COVER=	11.24	INVERT=	-7.24
(515106,173756)	there is a MANHOLE with SHORT NUMBER=1701	COVER=	10.42	INVERT=	-7.66

Minibox (515084,173559) -> (515592,174067)
Central Mapsheet : TQ1573NW
User : RIMISSON
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(515164,173908)	there is a MANHOLE with SHORT NUMBER=1901	COVER=	10.99	INVERT=	9.35
(515154,173927)	there is a MANHOLE with SHORT NUMBER=1902	COVER=	11.38	INVERT=	8.53
(515174,173964)	there is a MANHOLE with SHORT NUMBER=1903	COVER=	-9999.00	INVERT=	-9999.00
(515173,173956)	there is a MANHOLE with SHORT NUMBER=1904	COVER=	-9999.00	INVERT=	-9999.00
(515238,173945)	there is a MANHOLE with SHORT NUMBER=2901	COVER=	-9999.00	INVERT=	-9999.00
(515234,173968)	there is a MANHOLE with SHORT NUMBER=2902	COVER=	-9999.00	INVERT=	-9999.00
(515218,173976)	there is a MANHOLE with SHORT NUMBER=2903	COVER=	-9999.00	INVERT=	-9999.00
(515382,173614)	there is a MANHOLE with SHORT NUMBER=3601	COVER=	9.43	INVERT=	8.24
(515314,173978)	there is a MANHOLE with SHORT NUMBER=3901	COVER=	-9999.00	INVERT=	-9999.00
(515303,173985)	there is a MANHOLE with SHORT NUMBER=3904	COVER=	-9999.00	INVERT=	-9999.00
(515432,173897)	there is a MANHOLE with SHORT NUMBER=4901	COVER=	-9999.00	INVERT=	-9999.00
(515433,173900)	there is a MANHOLE with SHORT NUMBER=4908	COVER=	-9999.00	INVERT=	-9999.00
(515427,173894)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
(515086,173913)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
(515427,173859)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
(515087,173999)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
(515091,173959)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
(515093,173942)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
(515098,173914)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
(515401,173639)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
(515442,173931)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
(515400,173914)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
(515442,173831)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
(515441,173934)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
(515440,173832)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
(515398,173969)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
(515398,173918)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
(515395,173925)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
(515404,173632)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
(515403,173912)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
(515442,173658)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
(515439,173908)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
(515394,173927)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
(515437,173995)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
(515387,173944)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
(515436,173995)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
(515436,173908)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
(515435,173843)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
(515434,173845)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
(515432,173644)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
(515432,173643)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
(515089,173971)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
(515089,173986)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
(515428,173651)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
(515429,173855)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
(515429,173889)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
(515083,173898)	there is a MANHOLE with SHORT NUMBER=0801	COVER=	10.25	INVERT=	8.98
(515084,173872)	there is a MANHOLE with SHORT NUMBER=0807	COVER=	10.60	INVERT=	-8.12
(515084,173856)	there is a MANHOLE with SHORT NUMBER=0809	COVER=	10.20	INVERT=	-8.00
(515435,174044)	there is a MANHOLE with SHORT NUMBER=4004	COVER=	8.65	INVERT=	7.51

rintbox (515084,173559) -> (515592,174067)
entral Mapsheet : TQ1573NW
ser : RIMISSON
ime : Mon May 12 15:53:10 2008

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(515449,174049) there is a MANHOLE with SHORT NUMBER=4006 COVER= -9999.00 INVERT= -9999.00
(515456,174028) there is a MANHOLE with SHORT NUMBER=4007 COVER= -9999.00 INVERT= -9999.00
(515421,173633) there is a MANHOLE with SHORT NUMBER=4601 COVER= 9.19 INVERT= 7.58
(515424,173630) there is a MANHOLE with SHORT NUMBER=4603 COVER= 8.95 INVERT= 8.14
(515469,173829) there is a MANHOLE with SHORT NUMBER=4802 COVER= -9999.00 INVERT= -9999.00
(515468,173823) there is a MANHOLE with SHORT NUMBER=4803 COVER= -9999.00 INVERT= -9999.00
(515470,173994) there is a MANHOLE with SHORT NUMBER=4901 COVER= -9999.00 INVERT= -9999.00
(515467,173992) there is a MANHOLE with SHORT NUMBER=4902 COVER= -9999.00 INVERT= -9999.00
(515420,173920) there is a MANHOLE with SHORT NUMBER=4911 COVER= -9999.00 INVERT= -9999.00
(515330,174036) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515334,174054) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515456,173837) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515414,173917) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515458,173970) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515463,173883) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515419,173635) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515462,173977) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515417,173883) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515460,173655) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515416,173883) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515460,173656) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515415,173645) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515414,173921) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515085,173999) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515084,173912) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515083,173942) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515475,173831) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515475,173660) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515474,173660) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515473,173899) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515472,173846) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515472,173835) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515471,173930) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515471,173847) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515470,173838) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515470,173670) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515466,173884) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515420,173635) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515414,173888) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515456,173664) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515456,173835) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515453,174017) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515439,174013) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515338,174054) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515343,174056) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515370,174001) there is a MANHOLE with SHORT NUMBER=3005 COVER= 9.07 INVERT= 7.72
(515310,174001) there is a MANHOLE with SHORT NUMBER=3006 COVER= 9.46 INVERT= 7.91
(515307,174014) there is a MANHOLE with SHORT NUMBER=3007 COVER= 9.27 INVERT= 8.00
(515301,174014) there is a MANHOLE with SHORT NUMBER=3008 COVER= 9.23 INVERT= 7.71
(515406,174056) there is a MANHOLE with SHORT NUMBER=4001 COVER= 9.04 INVERT= 7.77

Tinibox (515084,173559) -> (515592,174067)
Central Mapsheet : TQ1573NW
User : RIMISSON
Time : Mon May 12 15:53:10 2008

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(515323,174068) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515422,174067) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515329,174040) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515326,174051) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515410,173920) there is a MANHOLE with SHORT NUMBER= COVER= 0.00 INVERT= 0.00
(515463,173918) there is a MANHOLE with SHORT NUMBER= COVER= 0.00 INVERT= 0.00
(515423,173893) there is a MANHOLE with SHORT NUMBER= COVER= 0.00 INVERT= 0.00
(515437,173865) there is a MANHOLE with SHORT NUMBER= COVER= 0.00 INVERT= 0.00
(515439,173859) there is a MANHOLE with SHORT NUMBER= COVER= 0.00 INVERT= 0.00
(515448,173890) there is a MANHOLE with SHORT NUMBER= COVER= 0.00 INVERT= 0.00
(515482,173899) there is a MANHOLE with SHORT NUMBER= COVER= 0.00 INVERT= 0.00
(515490,173923) there is a MANHOLE with SHORT NUMBER= COVER= 0.00 INVERT= 0.00
(515511,173820) there is a MANHOLE with SHORT NUMBER= COVER= 0.00 INVERT= 0.00
(515514,173899) there is a MANHOLE with SHORT NUMBER= COVER= 0.00 INVERT= 0.00
(515534,173766) there is a MANHOLE with SHORT NUMBER= COVER= 0.00 INVERT= 0.00
(515517,173822) there is a MANHOLE with SHORT NUMBER= COVER= 0.00 INVERT= 0.00
(515517,173844) there is a MANHOLE with SHORT NUMBER= COVER= 0.00 INVERT= 0.00
(515538,173765) there is a MANHOLE with SHORT NUMBER= COVER= 0.00 INVERT= 0.00
(515519,173923) there is a MANHOLE with SHORT NUMBER= COVER= 0.00 INVERT= 0.00
(515522,173846) there is a MANHOLE with SHORT NUMBER= COVER= 0.00 INVERT= 0.00
(515545,173900) there is a MANHOLE with SHORT NUMBER= COVER= 0.00 INVERT= 0.00
(515546,173824) there is a MANHOLE with SHORT NUMBER= COVER= 0.00 INVERT= 0.00
(515547,173922) there is a MANHOLE with SHORT NUMBER= COVER= 0.00 INVERT= 0.00
(515552,173847) there is a MANHOLE with SHORT NUMBER= COVER= 0.00 INVERT= 0.00
(515566,173767) there is a MANHOLE with SHORT NUMBER= COVER= 0.00 INVERT= 0.00
(515575,173921) there is a MANHOLE with SHORT NUMBER= COVER= 0.00 INVERT= 0.00
(515576,173827) there is a MANHOLE with SHORT NUMBER= COVER= 0.00 INVERT= 0.00
(515576,173898) there is a MANHOLE with SHORT NUMBER= COVER= 0.00 INVERT= 0.00
(515580,173851) there is a MANHOLE with SHORT NUMBER= COVER= 0.00 INVERT= 0.00

ALS Sewer Map Key

Public Sewer Types (Operated & Maintained by Thames Water)

Foul: A sewer designed to convey waste water from domestic and industrial sources to a treatment works.

Surface Water: A sewer designed to convey surface water (e.g. rain water from roofs, yards and car parks) to rivers or watercourses.

Combined: A sewer designed to convey both waste water and surface water from domestic and industrial sources to a treatment works.

- Joint
- Trunk Surface Water
- Storm Relief
- Vent Pipe
- Proposed Thames Surface Water Sewer
- Gallery
- Surface Water Rising Main
- Sludge Rising Main
- Vacuum
- Trunk Foul
- Trunk Combined
- Bio-solids (Sludge)
- Trade Effluent
- Proposed Thames Water Foul Sewer
- Foul Rising Main
- Combined Rising Main
- Proposed Thames Water Rising Main
- Syphon

Sewer Fittings

A feature in a sewer that does not affect the flow in the pipe. Example: a vent is a fitting as the function of a vent is to release excess gas.

- AV Air Valve
- BS Blind Shaft
- CP Catch Pit
- DC Dam Chase
- DF Double Flushing Tank / Chamber
- SF Single Flushing Tank / Chamber
- HB Hitch Box
- Other (specified on plan)
- LH Lamp Hole
- LS Lifting Shaft
- ME Meter
- RE Rodding Eye
- VC Vent Column
- VT Vent
- WO Washout

Operational Controls

A feature in a sewer that changes or diverts the flow in the sewer. Example: A hydrobrake limits the flow passing downstream.

- BD Backdrop Manhole
- BV Butterfly Valve
- CL Cough
- DB Dam Board
- DP Drop Pipe
- DS Drop Shaft
- FL Flume
- FV Flap Valve
- HW Headwall
- HY Hydrobrake
- IR Petrol Interceptor
- PS Penstock
- RV Reflux Valve
- ST Step
- SV Sluice Valve
- TA Tank
- WW Weir
- Other (specified on plan)

End Items

End symbols appear at the start or end of a sewer pipe. Examples: an Undefined End at the start of a sewer indicates that Thames Water has no knowledge of the position of the sewer upstream of that symbol. Outfall on a surface water sewer indicates that the pipe discharges into a stream or river.

- EFW Effluent Discharge
- SA/ SA Soakaway
- Outfall
- Undefined End
- GU Gulley
- Inlet

Other Symbols

Symbols used on maps which do not fall under other general categories

- Public/ Private Pumping Station
- Change of characteristic indicator (C.O.C.I.)
- Sewage Treatment Works
- IL Invert Level
- Summit

Areas

Lines denoting areas of underground surveys, etc.

- Building over Case (BOC No.) or Low Lying Land (LLL No.)
- Sewage Treatment Works or Pumping Station
- Area under Adoption Agreement
- Survey Area
- Drawing Area or chamber
- Licence Area
- Area pending Adoption Agreement
- Other Area (specified on plan)

Other Sewer Types (Not Operated or Maintained by Thames Water)

- Foul Sewer
- Combined Sewer
- Culverted Watercourse
- Status Unknown
- Surface Water Sewer
- Highway Drain
- Proposed
- Abandoned Sewer

Notes:

1) All levels associated with the plans are to Ordnance Datum Newlyn.

2) All measurements on the plans are metric.

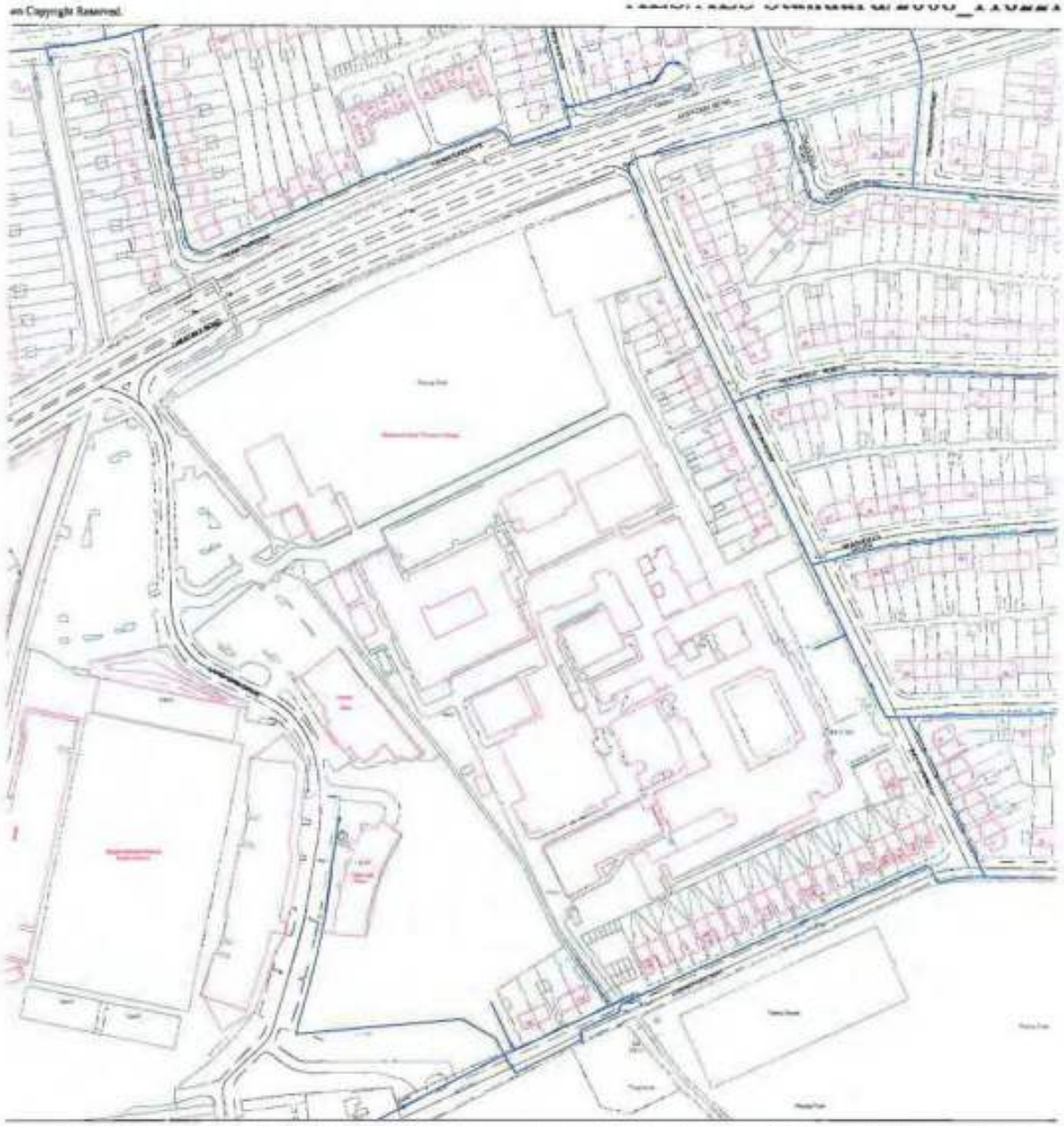
3) Arrows (on gravity fed sewers) or flecks (on rising mains) indicate direction of flow.

4) For symbols referred to as "Other" on this key, please see the plan for further information.

5) Most private pipes are not shown on our plans, as in the past, this information has not been recorded.

6) -9999.00 or 0 on a manhole level indicates that data is unavailable.

7) The text appearing alongside a sewer line indicates the internal diameter of the pipe in millimetres. Text next to a manhole indicates the manhole reference number and should not be taken as a measurement. When cover and invert levels appear on a plan they are clearly prefixed by 'CL' and 'IL'. If you are unsure about any text or symbology present on the plan, please contact a member of Property Insight on 0118 925 1504.



position of the apparatus shown on this plan is given without obligation and warranty, and the accuracy cannot be guaranteed. Service pipes are not shown but their presence should be anticipated. No liability of any kind soever is accepted by Thames Water for any error or omission. The actual position of mains and services must be verified and established on site before any works are undertaken.

metre intervals

GLE hardcopy facility - Normal Map
s plot is centred on (515330 , 173813), which is in TQ1573NW. Printed on 12 May 2008 at 15:32:25 by RIMISSON.

nments:
r plan

ALS Water Map Key

Water Pipes (Operated & Maintained by Thames Water)

Distribution Main: The most common pipe shown on water maps. With few exceptions, domestic connections are only made to distribution mains.

Trunk Main: A main carrying water from a source of supply to a treatment plant or reservoir, or from one treatment plant or reservoir to another. Also a main transferring water in bulk to smaller water mains used for supplying individual customers.

Supply Main: A supply main indicates that the water main is used as a supply for a single property or group of properties.

Fire Main: Where a pipe is used as a fire supply, the word FIREwill be displayed along the pipe.

Metered Pipe: A metered main indicates that the pipe in question supplies water for a single property or group of properties and that quantity of water passing through the pipe is metered even though there may be no meter symbol shown.

Transmission Tunnel: A very large diameter water pipe. Most tunnels are buried very deep underground. These pipes are not expected to affect the structural integrity of buildings shown on the map provided.

Raw Water Main: A main that carries untreated water rather than water that is safe to drink. These mains are usually found near reservoirs where their purpose is to link reservoirs or to feed untreated water from a reservoir into a water treatment works.

Other (Specified on plan)

Proposed Main: A main that is still in the planning stages or in the process of being laid. More details of the proposed main and its reference number are generally included near the main.

Depth of Water Pipes (Normal Cover)

PIPE DIAMETER	DEPTH BELOW GROUND
Up to 300mm (12")	900mm (3')
300mm - 600mm (12" - 24")	1100mm (3' 8")
600mm and bigger (24" plus)	1200mm (4')

Hydrants

Single Hydrant
Double Hydrant

The abbreviations below indicate the use of the hydrant symbols above.

FH Fire Hydrant
WO Washout
RWH Raw Water Hydrant
P Private Hydrant

Meters

Meter

The abbreviations below indicate the use of the meter symbol above. Meter symbols without an abbreviation should be taken as revenue meters.

ZM Zonal
DM District
WM Waste

Valves

Open General Purpose Valve

The abbreviations below indicate the type of the valve symbol above.

BF Butterfly
BP Bypass
EV Emptying
SV Sluice

Closed General Purpose Valve

The abbreviations below indicate the use of the valve symbol above.

DBV District Boundary Valve
DPV District Pressure Valve
PBV Pressure Boundary Valve
SSV Stand Shut Valve
ZBV Zonal Boundary Valve
ZZ Other (specified on plan)

Air Valve

The abbreviations below indicate the use of the valve symbol above.

AV Air Valve
AC Air Cock (manual air valve)
AAV Automatic Air Valve

The abbreviations below indicate the use of the valve symbol above.

PS Pressure Sustaining
PC Pressure Controlling

Pressure Reducing
Reflux Non-Return Valve (NRA)
Stopcock

End Items

Symbol indicating what happens at the end of a water main.

Blank Flange
Capped End
Emptying Pit
Undefined End
Manifold
Customer Supply
Fire Supply

Supply Assets

The abbreviations below indicate the use of the supply asset symbol above.

BS Booster Station
PS Pumping Station
SI Inspection Shaft
SP Pumping Shaft
SR Service Reservoir
TO Tower
TW Treatment Works
XX Other (specified on plan)

Other Symbols

Protection Test Point
Protection Point / Anode
Pressure Transducer / Critical Pressure Point
Data Logger
Telemetry Pit / Chamber
Other (specified on plan)

Other Water Pipes (Not Operated or Maintained by Thames Water)

Other Water Company Main: Occasionally other water company water pipes may overlap the border of our clean water coverage area. These mains are denoted in purple and in most cases have the owner of the pipe displayed along them.

Private Main: Indiates that the water main in question is not owned by Thames Water. These mains normally have text associated with them indicating the diameter and owner of the pipe.

Terms and Conditions

All sales are made in accordance with Thames Water Utilities Limited (TWUL) standard terms and conditions unless previously agreed in writing.

1. All goods remain in the property of Thames Water Utilities Ltd until full payment is received.
2. Provision of service will be in accordance with all legal requirements and published TWUL policies.
3. All invoices are strictly due for payment 14 days from due date of the invoice. Any other terms must be accepted/agreed in writing prior to provision of goods or service, or will be held to be invalid.
4. Thames Water does not accept post-dated cheques-any cheques received will be processed for payment on date of receipt.
5. In case of dispute TWUL's terms and conditions shall apply.
6. Penalty interest may be invoked by TWUL in the event of unjustifiable payment delay. Interest charges will be in line with UK Statute Law 'The Late Payment of Commercial Debts (Interest) Act 1998'.
7. Interest will be charged in line with current Court Interest Charges, if legal action is taken.
8. A charge may be made at the discretion of the company for increased administration costs.

A copy of Thames Water's standard terms and conditions are available from the Commercial Billing Team (TW.cashoperations@npower.com).

We publish several Codes of Practice including a guaranteed standards scheme. You can obtain copies of these leaflets by calling us on 0845 9200 800.

If you are unhappy with our service you can speak to your original goods or customer service provider. If you are not satisfied with the response, your complaint will be reviewed by the Customer Services Director. You can write to him at: Thames Water Utilities Ltd. PO Box 492, Swindon, SN38 8TU.

If the Goods or Services covered by this invoice falls under the regulation of the 1991 Water Industry Act, and you remain dissatisfied you can refer your complaint to WaterVoice Thames on 0845 758 1658 (it will cost you the same as a local call) or write to them at 4th Floor (South), High Holborn House, 52-54 High Holborn, London WC1V 6RL.

Ways to pay your bill

By Post – Cheque only, made payable to 'Thames Water Utilities Ltd' writing your Thames Water account number on the back. Please fill in the payment slip below and send it with your cheque to Thames Water Utilities Ltd., PO Box 223, Swindon SN38 2TW	**By BACS Payment** direct to our bank on account number 90478703, sort code 60-00-01 may be made. A remittance advice must be sent to Thames Water Utilities Ltd., PO Box 223, Swindon SN38 2TW. Or fax to 01793 424599 or email: cashoperations@thameswater.co.uk	**Telephone Banking** By calling your bank and quoting your invoice number and the Thames Water's bank account number 90478703 and sort code 60-00-01	**By Swift Transfer** You may make your payment via SWIFT by quoting **NWBKGB2L** together with our bank account number 90478703, sort code 60-00-01 and invoice number

Mr. Andy Keeler
Soiltechnics Ltd
Cedar Barn
White Lodge
Walgrave
Northampton
NN6 9PY

Our Ref: 2008/2007851
Your Ref: STE1297R
13/05/2008

Dear Sir/Madam

RICHMOND UPON THAMES COLLEGE, EGERTON ROAD, TWICKENHAM TW2 7JS

Thank you for your letter of 12/05/2008 in which you asked if there are any electric lines and/or electrical plant belonging to EDF Energy (SPN) plc ("EDF Energy") within the land identified by your enquiry.

EDF Energy operates the electricity distribution system in three regions: London, the South East, and the East. The map affixed to this letter shows the extent of these regions.

Where 33,000/132,000 volt overhead/underground lines and/or plant are present a site meeting will be required between your contractor and a representative of EDF Energy Networks Limited in order that you may satisfy EDF Energy's representative that you will carry out your works in such a manner as will not cause damage to its electric lines and or plant.

Subject to the above, I enclose a copy of EDF Energy's record of its electric lines and/or electrical plant at the site. If the records provided do not relate to the land to which you had intended to refer please resubmit your enquiry.

This information is made available to you on the terms set out in the numbered paragraphs below.

1. EDF Energy does not warrant that the information provided to you is correct. You rely upon it at your own risk.

2. EDF Energy does not exclude or limit its liability if it causes the death of any person or causes personal injury to a person where such death or personal injury is caused by its negligence.

3. Subject to paragraph 2 EDF Energy has no liability to you in contract, in tort (including negligence), for breach of statutory duty or otherwise how for any loss, damage, costs, claims, demands, or expenses that you or any third party may suffer or incur as a result of using the information provided whether for physical damage to property or for any economic loss (including without limitation loss of profit, loss of opportunity, loss of savings, loss of goodwill, loss of business, loss of use) or any special or consequential loss or damage whatsoever.

4. The information about EDF Energy's electrical plant and/or electric lines provided to you belongs to and remains EDF Energy's property. You must not alter it in any respect.

5. The information provided to you about the electrical plant and/or electric lines depicted on the plans may NOT be a complete record of such apparatus belonging to EDF Energy. The information provided relates to electric lines and/or electrical plant belonging to EDF Energy that it believes to be present but the plans are NOT definitive: other electric lines and/or electrical plant may be present and that may or may not belong to EDF Energy.

6. Other apparatus not belonging to EDF Energy is not shown on the plan. It is your responsibility to make your own enquiries elsewhere to discover whether apparatus belonging to others is present. It would be prudent to assume that other apparatus is present.

7. You are responsible for ensuring that the information made available to you is passed to those acting on your behalf and that all such persons are made aware of the contents of this letter.

8. Because the information provided to you may NOT be accurate, you are recommended to ascertain the presence of EDF Energy's electric lines and/or electrical plant by the digging of trial holes. Trial holes should be dug by hand only.
   Excavations must be carried out in line with the Health and Safety Executive guidance document HSG 47. We will not undertake this work. A copy of HSG 47 can be obtained from http://www.hsebooks.com

   All electric lines discovered must be considered LIVE and DANGEROUS at all times and must not be cut, resited, suspended, bent or interfered with unless specially authorised by EDF Energy.

   The electric line and electrical plant belonging to EDF Energy remains so even when made dead and abandoned and any such electric line and/or electrical plant exposed shall be reported to EDF Energy.

   Where your works are likely to affect our electric lines and/or electrical plant an estimate of the price of any protective /diversionary works can be prepared by EDF Energy Networks Branch at Metropolitan House, Darkes Lane, Potters Bar, Herts. , EN6 1AG, telephone no. 0845 234 0040

9 Any work near to any overhead electric lines must be carried out by you in accordance with the Health and Safety Executive guidance document GS6 and the Electricity at Work Regulations.

   The GS6 Recommendations may be purchased from HSE Books at http://www.hsebooks.com

   If given a reasonable period of prior notice EDF Energy will attend on site without charge to advise how and where "goal posts" should be erected. If you wish to avail yourself of this service, in the first instance please telephone: 0845 6014516 between 08:30 and 17:00 Monday to Friday, Public and bank holidays excepted.

10. You are responsible for the security of the information provided to you. It must not be given, sold or made available upon payment of a fee to a third party.

11. If in carrying out work on land in, on, under or over which is installed an electric line and/or electrical plant that belongs to EDF Energy you and/or anyone working on your behalf damages (however slightly) that apparatus you must inform immediately EDF Energy by telephone at the number below providing:

    - your name, address and telephone number; and
    - the date, time and place at which such damage was caused; and
    - a description of the electric line and/or electrical plant to which damage was caused; and
    - the name of the person whom it appears to you is responsible for that damage; and
    - the nature of the damage

    In the South East of England 0800 0963766 (24 Hours).

    In the East of England and London 0800 780078 (24 Hours).

12. The expression "EDF Energy" includes EDF Energy Networks (EPN) plc, EDF Energy Networks (LPN) plc, EDF Energy Networks (SPN) plc, EDF Energy Networks Ltd and any of their successors and predecessors in title.

IF YOU DO **NOT** ACCEPT AND/OR **DO NOT** UNDERSTAND THE TERMS OF USE SET OUT IN PARAGRAPHS 1 TO 12 INCLUSIVE ABOVE YOU MUST RETURN THE PLANS TO ME.

EDF Energy Contact Numbers and Addresses for London, the East of England & the South East of England

Disconnection	Please contact your supplier
Diversion/protection of cables	0870 1964599 Metropolitan House, Darkes Lane, Potters Bar, Herts, EN6 1AG
General network enquiries for the East of England, including East Anglia, Essex, Hertfordshire and Cambridgeshire. (Previously known as Eastern Electricity area)	0870 1963090 (8:30 to 5:00pm, Monday to Friday) Fore Hamlet, Ipswich, Suffolk, IP3 8AA
General network enquiries for London (Previously known as London Electricity area)	0870 1963090 (8:30 to 5:00pm, Monday to Friday) Fore Hamlet, Ipswich, Suffolk, IP3 8AA
General network enquiries for the South East of England (Previously known as Seeboard area)	0870 1963090 (8:30 to 5:00pm, Monday to Friday) Fore Hamlet, Ipswich, Suffolk, IP3 8AA
Load enquiries. If you want to increase the amount of load that you use, it will be	**FAX ONLY** 0845 6500248 Contact your supplier first.

necessary to FAX your proposal to the number on the right. You will be informed about any work that will be required by EDF Energy and given any necessary quotations.	
New connections	0845 2340040 Metropolitan House, Darkes Lane, Potters Bar, Herts, EN6 1AG
Wayleaves London. For information about substations etc. which are sited on your property and owned by EDF Energy in the London area.	0129 3577478 or 480 or 481 Operational Property and Consents Stephenson Way Crawley, West Sussex RH10 1TN
Wayleaves East of England. For information about substations etc. which are sited on your property and owned by EDF Energy in the East of England area.	0870 1963777 Operational Property and Consents Barton Road, Bury St Edmunds, Suffolk, IP32 7BG
Wayleaves South East of England. For information about substations etc. which are sited on your property and owned by EDF Energy in the South East of England area.	0129 3577381 or 383 or 384 Operational Property and Consents Stephenson Way Crawley, West Sussex RH10 1TN

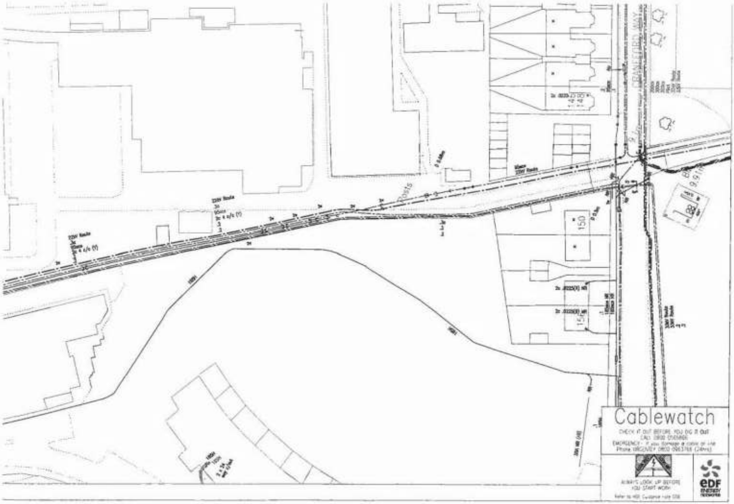
I would remind you that work adjacent to electric lines and/or electrical plant represents a serious risk to health and safety and as such should feature amongst the items you have assessed in your workplace risk assessment.

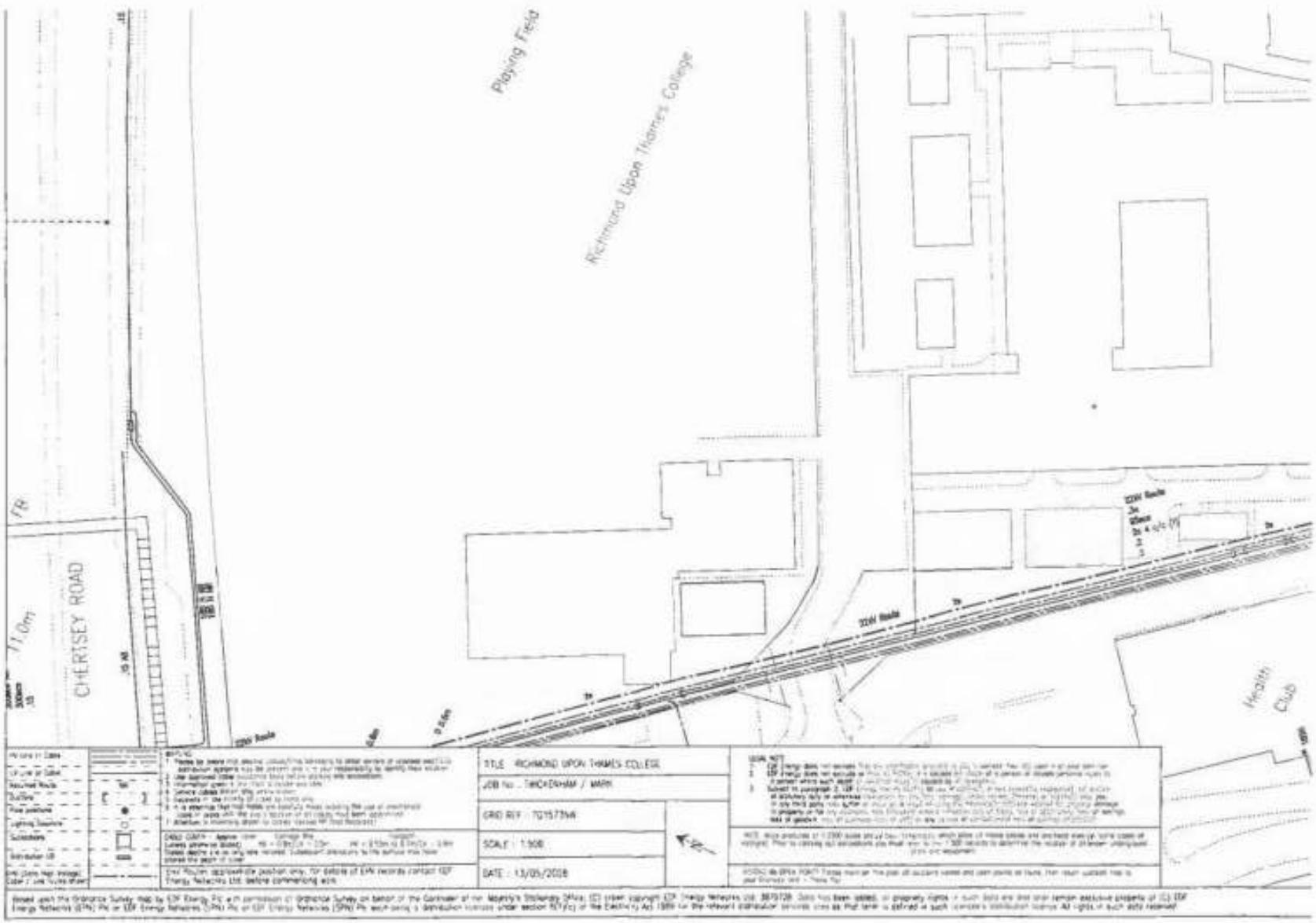
I shall be pleased to supply you with further assistance if you require it.

Yours sincerely

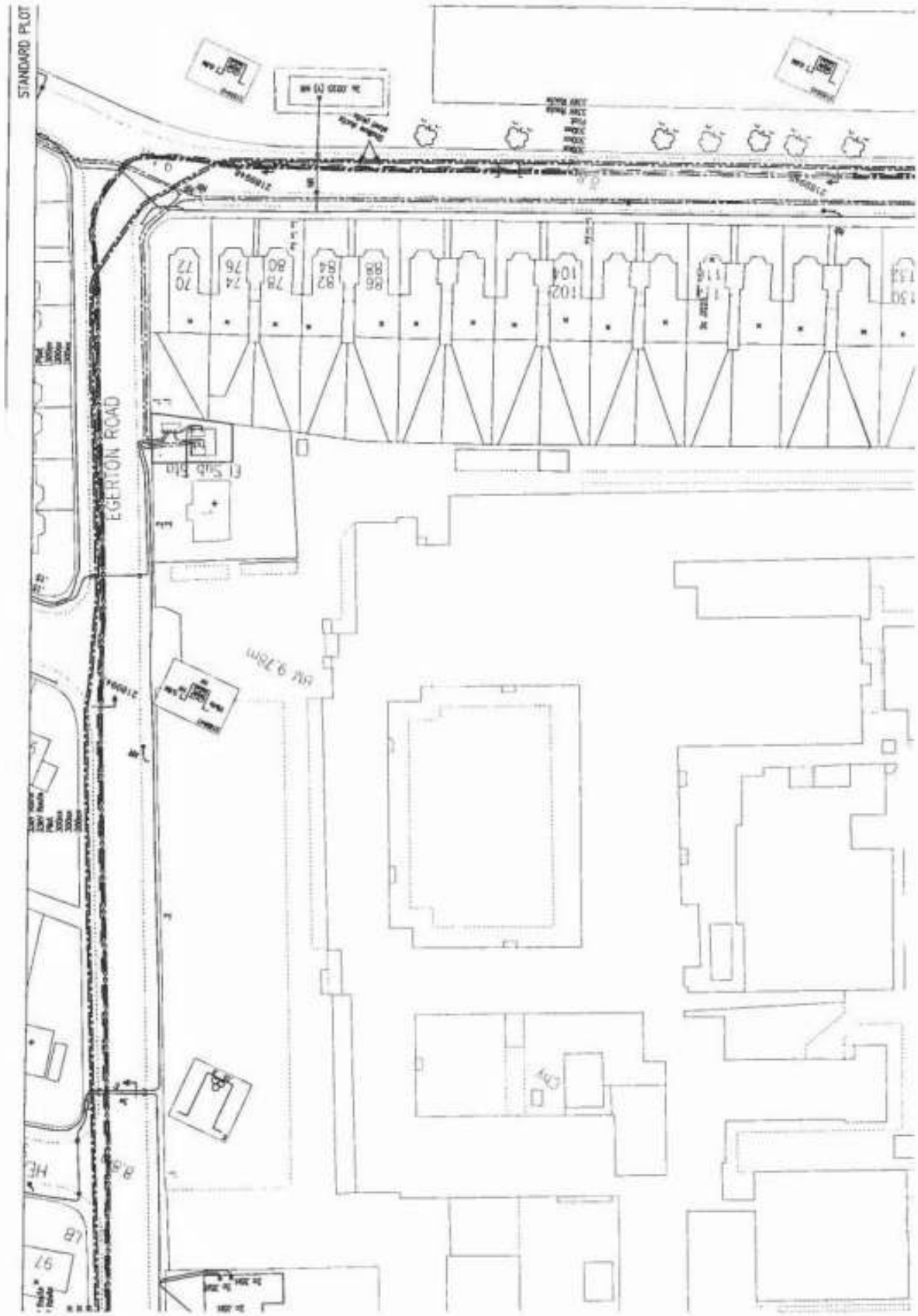
M. Ellis

Mark Ellis - Telephone: 0800 0565 866
Plan Provision


CRANFORD WAY
150
Cablewatch
CHECK IT OUT BEFORE YOU DIG IT OUT
ALWAYS LOOK UP BEFORE
YOU START WORK
edf
energy
networks


Playing Field
Richmond Upon Thames College
CHERTSEY ROAD
11.0m
FB
Health Club
TITLE : RICHMOND UPON THAMES COLLEGE
JOB No. : TWICKENHAM / MAIN
GRID REF : TQ157744
SCALE : 1:500
DATE : 13/05/2008


EDF Energy Networks Ltd
EGERTON ROAD


STANDARD PLOT
EGERTON ROAD

2304

Enverity

Newark Road Peterborough
t: 01733 555525 f. 01733 315280

e: admin @ enverity . co . uk

TEST CERTIFICATE

Determination of Liquid & Plastic Limits

Tested in accordance with BS 1377-2:1990: Method 4.4 & 5: One Point Method

Client:	Soiltechnics	Certificate Number:	PL1419-2/9/704
Client Address:	Cedar Barn White Lodge, Walgrave, Northampton, NN6 9PY	Client Reference:	STE1297R
		Job Number:	PL1419-2
		Date Sampled:	Unknown
Contact:	Lydia Drew	Date Received:	04.06.2008
		Date Tested:	17.06.2008
Site Name:	Richmond Upon Thames College	Sampling Certificate No.:	N/A
Site Address:		Certificate of Sampling:	N/A
		Sampled By:	Client

Test Results:

Laboratory Reference: PL1419-2/9

Sample Reference: Not Given

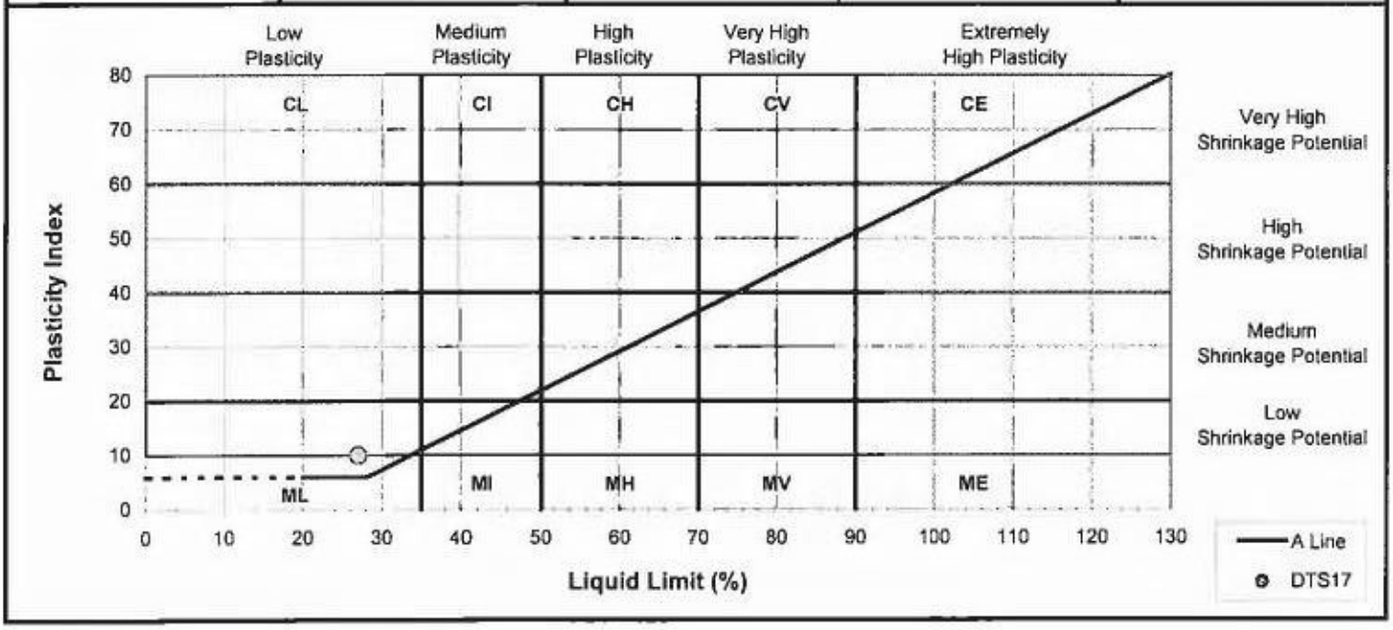
Sample Description: Stiff brown grey slightly sandy slightly gravelly CLAY

Location: DTS17 **Depth Top:** 0.50m

Sample Preparation: As Received **Depth Base:** 0.70m

Estimated % Passing 425µm BS Test Sieve

Moisture Content (%)	Liquid Limit [%]	Plastic Limit [%]	Plasticity Index	% Passing 425µm BS Test Sieve
N/A	27	17	10	96



Comments:

Approved Signatory: [ ] G. Meadows - Deputy Lab Manager
[ ] C. Reynolds - Deputy Lab Manager
[✓] J. Chapman - Team Leader

Signed:

for and on behalf of Enverity

Date Reported: 20.06.2008 Page 1 of 1

Form Number: EN/C/704 Version 1

xplor

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Registered in England & Wales
Registration Number 3096780
Reg Office 7 Laureate Paddocks
Newmarket Suffolk CB8 0AP

2304

Enverity

Newark Road Peterborough
t: 01733 555525 f: 01733 315280

e: admin @ enverity . co . uk

TEST CERTIFICATE

Determination of Liquid & Plastic Limits

Tested in accordance with BS 1377-2:1990: Method 4.4 & 5: One Point Method

Client:	Soiltechnics	Certificate Number:	PL1419-2/10/704
Client Address:	Cedar Barn White Lodge, Walgrave, Northampton, NN6 9PY	Client Reference:	STE1297R
		Job Number:	PL1419-2
		Date Sampled:	Unknown
Contact:	Lydia Drew	Date Received:	04.06.2008
		Date Tested:	17.06.2008
Site Name:	Richmond Upon Thames College	Sampling Certificate No.:	N/A
Site Address:		Certificate of Sampling:	N/A
		Sampled By:	Client

Test Results:

Laboratory Reference: PL1419-2/10
Sample Reference: Not Given

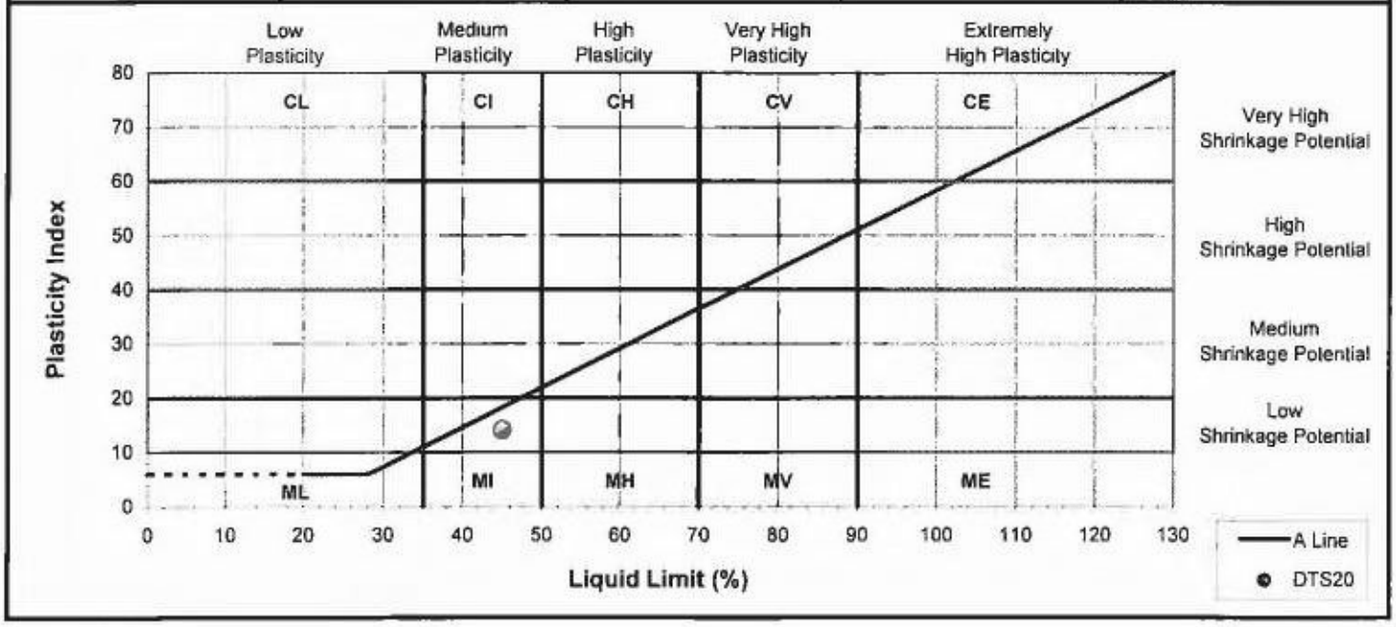
Sample Description: Dark grey brown slightly gravelly sandy SILT/CLAY

Location: DTS20 **Depth Top:** 0.40m

Sample Preparation: As Received **Depth Base:** 0.60m

Estimated % Passing 425µm BS Test Sieve

Moisture Content (%)	Liquid Limit [%]	Plastic Limit [%]	Plasticity Index	% Passing 425µm BS Test Sieve
N/A	45	31	14	77



Comments:

Approved Signatory: [ ] G. Meadows - Deputy Lab Manager
[ ] C. Reynolds - Deputy Lab Manager
[✓] J. Chapman - Team Leader

Signed:

for and on behalf of Enverity

Date Reported: 20.06.2008 Page 1 of 1
Form Number: EN/C/704 Version 1

Opinions and interpretations expressed herein are outside the scope of UKAS Accreditation

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Newmarket Suffolk CB8 0AP

2304

Enverity

Newark Road Peterborough
t: 01733 555525 f: 01733 315280

e: admin @ enverity . co . uk

TEST CERTIFICATE

Determination of Liquid & Plastic Limits

Tested in accordance with BS 1377-2:1990: Method 4.4 & 5: One Point Method

Client:	Soiltechnics	Certificate Number:	PL1419-2/11/704
Client Address:	Cedar Barn White Lodge, Walgrave, Northampton, NN6 9PY	Client Reference:	STE1297R
		Job Number:	PL1419-2
		Date Sampled:	Unknown
Contact:	Lydia Drew	Date Received:	04.06.2008
		Date Tested:	16.06.2008
Site Name:	Richmond Upon Thames College	Sampling Certificate No.:	N/A
Site Address:		Certificate of Sampling:	N/A
		Sampled By:	Client

Test Results:

Laboratory Reference: PL1419-2/11

Sample Reference: Not Given

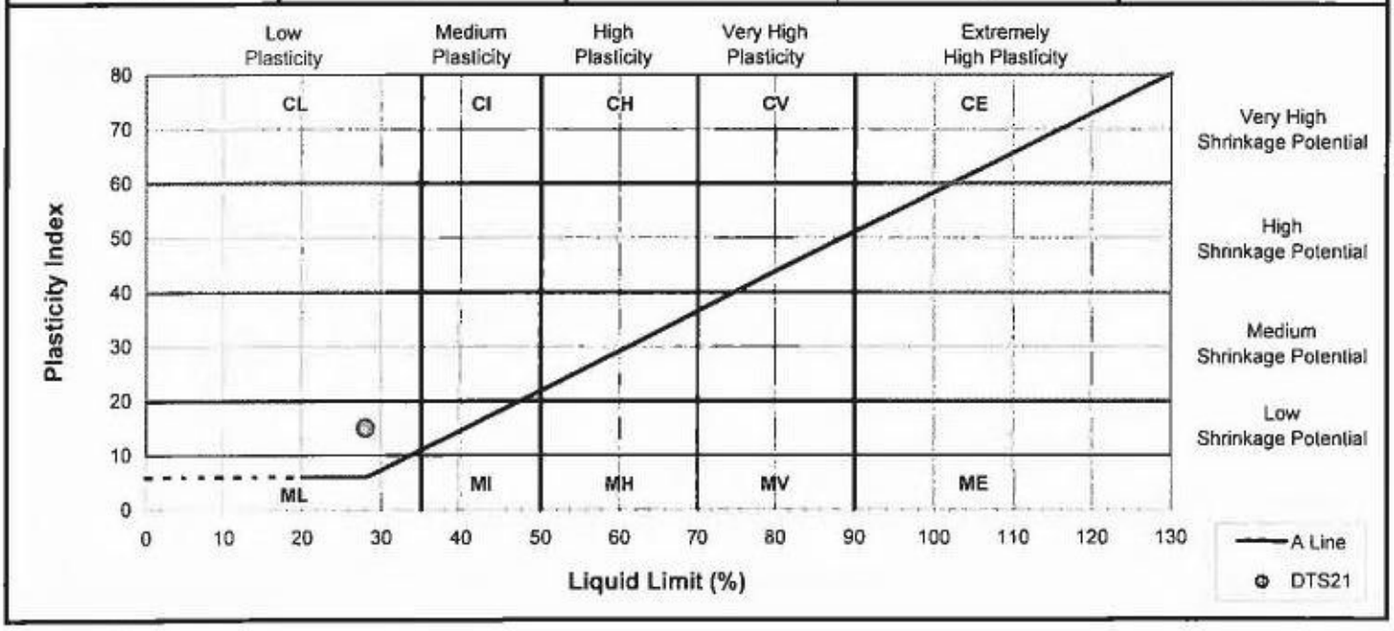
Sample Description: Brown clayey SAND and GRAVEL

Location: DTS21 **Depth Top:** 1.00m

Sample Preparation: Washed over 425µm BS Test Sieve **Depth Base:** 1.50m

Actual % Passing 425µm BS Test Sieve

Moisture Content (%)	Liquid Limit [%]	Plastic Limit [%]	Plasticity Index	% Passing 425µm BS Test Sieve
N/A	28	13	15	30



Comments:

Approved Signatory: [ ] G. Meadows - Deputy Lab Manager
[ ] C. Reynolds - Deputy Lab Manager
[✓] J. Chapman - Team Leader

Signed:

for and on behalf of Enverity

Date Reported: 20.06.2008 Page 1 of 1

Form Number: EN/C/704 Version 1

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e: admin @ enverity . co . uk

TEST CERTIFICATE

Determination of Liquid & Plastic Limits

Tested in accordance with BS 1377-2:1990: Method 4.4 & 5: One Point Method

Client:	Soiltechnics	Certificate Number:	PL1476-1/1/704
Client Address:	Cedar Barn White Lodge, Walgrave, Northampton, NN6 9PY	Client Reference:	STE1297R
		Job Number:	PL1476-1
		Date Sampled:	Unknown
Contact:	Lydia Drew	Date Received:	25.06.2008
		Date Tested:	03.07.08
Site Name:	Richmond Upon Thames College	Sampling Certificate No.:	N/A
Site Address:		Certificate of Sampling:	N/A
		Sampled By:	Client

Test Results:

Laboratory Reference: PL1476-1/1

Sample Reference: CBR Bulk 4

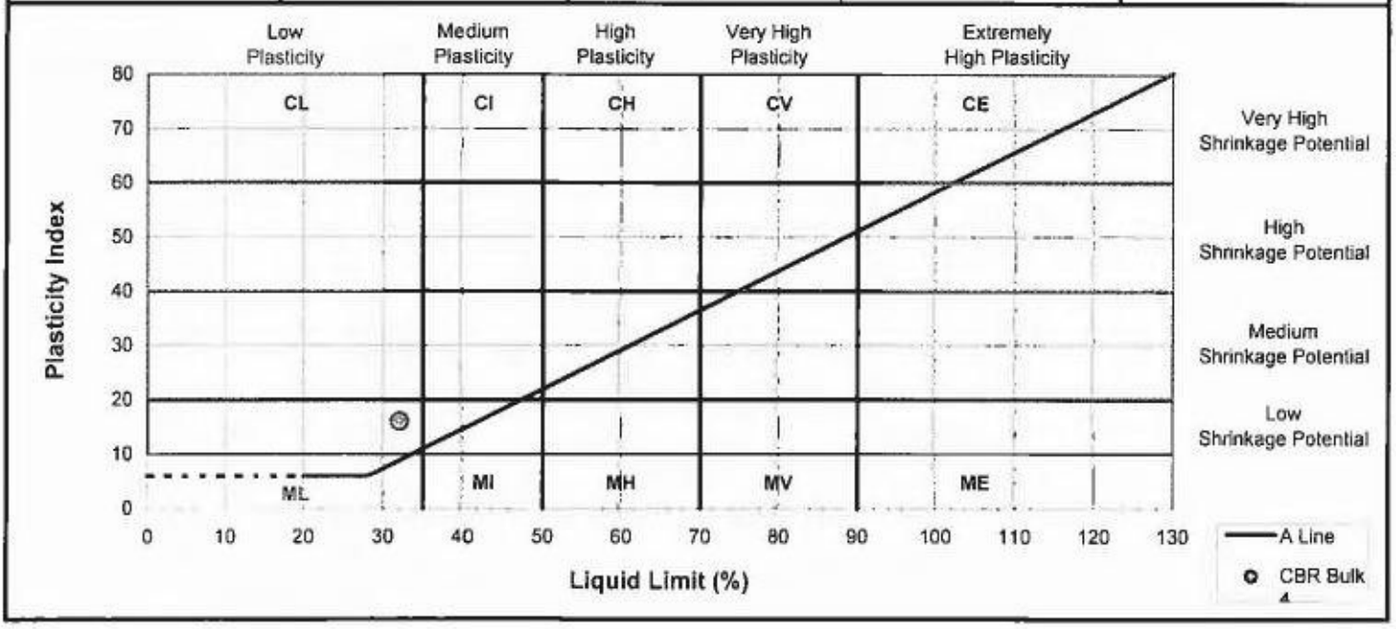
Sample Description: Soft brown orange-brown slightly gravelly sandy CLAY

Location: CBR Bulk 4 **Depth:** Not Given

Sample Preparation: As Received

Estimated % Passing 425µm BS Test Sieve

Moisture Content (%)	Liquid Limit [%]	Plastic Limit [%]	Plasticity Index	% Passing 425µm BS Test Sieve
18	32	16	16	84



Comments:

Approved Signatory: [✓] G. Meadows - Deputy Lab Manager
[ ] C. Reynolds - Deputy Lab Manager

Signed:

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Date Reported: 07.07.2008 Page 1 of 1

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TEST CERTIFICATE

Determination of Liquid & Plastic Limits

Tested in accordance with BS 1377-2:1990: Method 4.4 & 5: One Point Method

Client:	Soiltechnics	Certificate Number:	PL1476-1/2/704
Client Address:	Cedar Barn White Lodge, Walgrave, Northampton, NN6 9PY	Client Reference:	STE1297R
		Job Number:	PL1476-1
		Date Sampled:	Unknown
Contact:	Lydia Drew	Date Received:	25.06.2008
		Date Tested:	03.07.2008
Site Name:	Richmond Upon Thames College	Sampling Certificate No.:	N/A
Site Address:		Certificate of Sampling:	N/A
		Sampled By:	Client

Test Results:

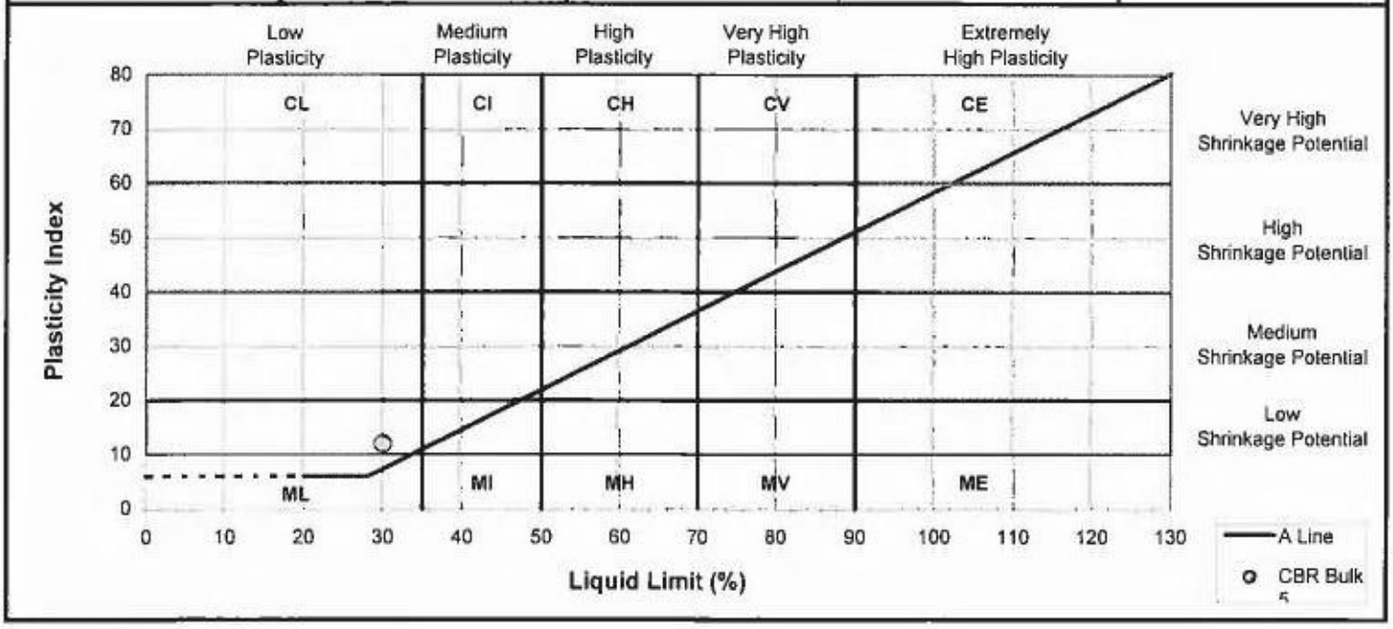
Laboratory Reference: PL1476-1/2
Sample Reference: CBR Bulk 5

Sample Description: Soft brown orange-brown slightly gravelly sandy CLAY with rare roots < 2mm

Location: CBR Bulk 5 **Depth:** Not Given

Sample Preparation: As Received
Estimated % Passing 425µm BS Test Sieve

Moisture Content (%)	Liquid Limit [%]	Plastic Limit [%]	Plasticity Index	% Passing 425µm BS Test Sieve
19	30	18	12	97



Comments:

Approved Signatory: [✓] G. Meadows - Deputy Lab Manager
[ ] C. Reynolds - Deputy Lab Manager

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TEST CERTIFICATE

Determination of Particle Size Distribution

Tested in Accordance with BS 1377-2: 1990: Method 9.2

Client:	Soiltechnics	Certificate Number:	PL1419-2/1/709
Client Address:	Cedar Barn White Lodge, Walgrave, Northampton, NN6 9PY	Client Reference:	STE1297R
		Lab Job Number:	PL1419-2
		Date Sampled:	Unknown
		Date Received:	04.06.2008
Contact:	Lydia Drew	Date Tested:	12.06.2008
		Certificate of Sampling:	N/A
Site Name:	Richmond Upon Thames College	Certificate of Sampling No.:	N/A
Site Address:		Sampled By:	Client

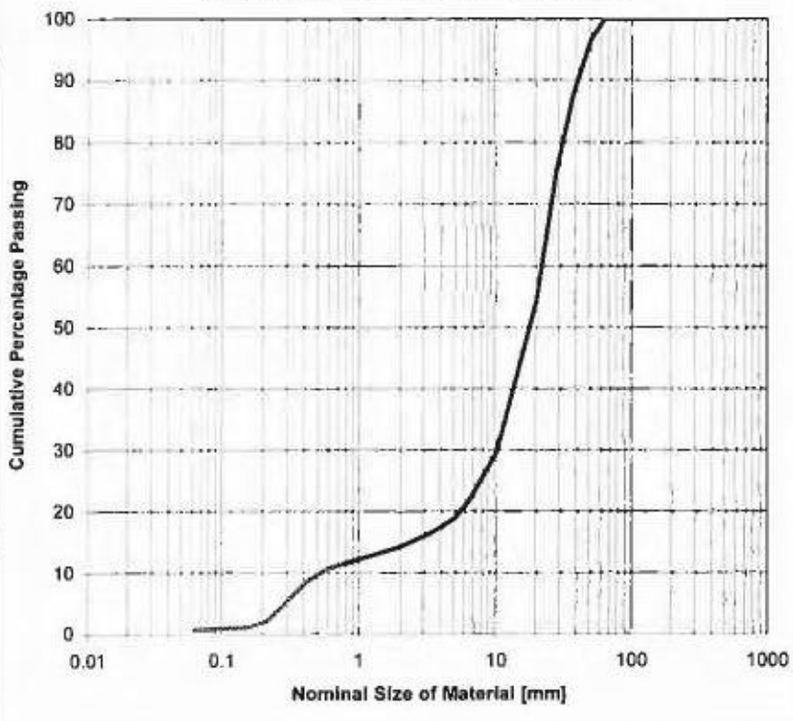
TEST RESULTS

Laboratory Reference: PL1419-2/1
Sample Reference: Not Given

Sample Description: Brown slightly silty SAND and GRAVEL
Material Specification: Not Required

Location: BH02
Supplier: Client
Source: Site

Depth Top: 2.10m
Depth Base: 2.50m



SIEVE ANALYSIS

Sieve Size [mm]	Passing [%]	Material Specification
500	100	
300	100	
200	100	
150	100	
125	100	
90	100	
75	100	
63	100	
50	97	
37.5	88	
28	75	
20	54	
14	41	
10	29	
6.3	22	
5.00	19	
3.35	16	
2.00	14	
1.18	13	
0.600	11	
0.425	9	
0.300	5	
0.212	2	
0.150	1	
0.063	1	

Comments:

Approved Signatory: [ ] G. Meadows - Deputy Lab Manager
[ ] C. Reynolds - Deputy Lab Manager
[✓] J. Chapman - Team Leader

Signed:

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TEST CERTIFICATE

Determination of Particle Size Distribution

Tested in Accordance with BS 1377-2: 1990: Method 9.2

Client:	Soiltechnics	Certificate Number:	PL1419-2/3/709
Client Address:	Cedar Barn White Lodge, Walgrave, Northampton, NN6 9PY	Client Reference:	STE1297R
		Lab Job Number:	PL1419-2
		Date Sampled:	Unknown
		Date Received:	04.06.2008
Contact:	Lydia Drew	Date Tested:	12.06.2008
		Certificate of Sampling:	N/A
Site Name:	Richmond Upon Thames College	Certificate of Sampling No.:	N/A
Site Address:		Sampled By:	Client

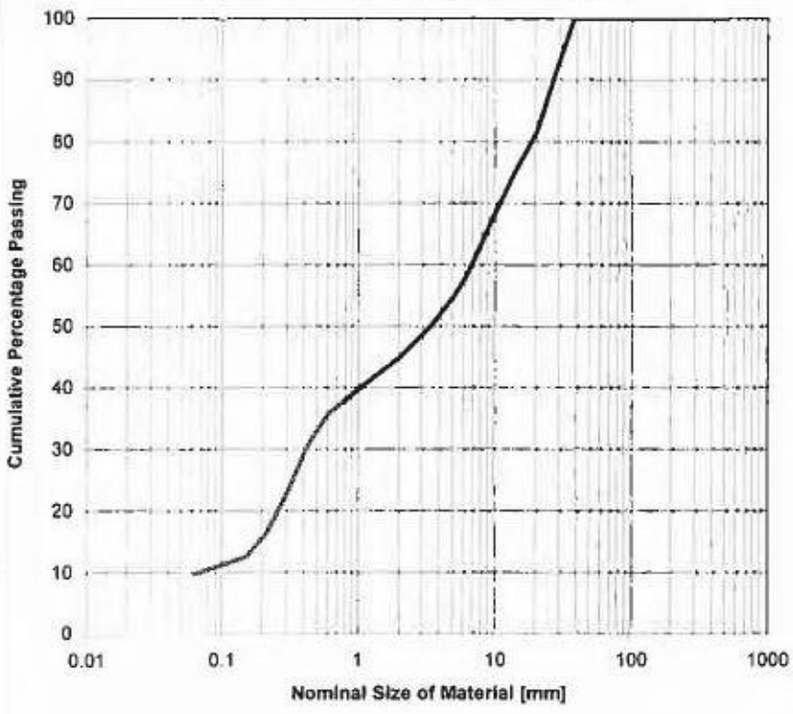
TEST RESULTS

Laboratory Reference: PL1419-2/3
Sample Reference: Not Given

Sample Description: Brown clayey SAND and GRAVEL
Material Specification: Not Required

Location: DTS03
Supplier: Client
Source: Site

Depth Top: 1.00m
Depth Base: 1.40m



SIEVE ANALYSIS

Sieve Size [mm]	Passing [%]	Material Specification
500	100	
300	100	
200	100	
150	100	
125	100	
90	100	
75	100	
63	100	
50	100	
37.5	100	
28	92	
20	82	
14	75	
10	69	
6.3	59	
5.00	55	
3.35	50	
2.00	45	
1.18	41	
0.600	36	
0.425	30	
0.300	23	
0.212	16	
0.150	13	
0.063	10	

Comments:

Approved Signatory: [ ] G. Meadows - Deputy Lab Manager
[ ] C. Reynolds - Deputy Lab Manager
[x] J. Chapman - Team Leader

Signed:

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TEST CERTIFICATE

Determination of Particle Size Distribution

Tested in Accordance with BS 1377-2: 1990: Method 9.2

Client:	Soiltechnics	Certificate Number:	PL1419-2/2/709
Client Address:	Cedar Barn White Lodge, Walgrave, Northampton, NN6 9PY	Client Reference:	STE1297R
		Lab Job Number:	PL1419-2
		Date Sampled:	Unknown
		Date Received:	04.06.2008
Contact:	Lydia Drew	Date Tested:	12.06.2008
		Certificate of Sampling:	N/A
Site Name:	Richmond Upon Thames College	Certificate of Sampling No.:	N/A
Site Address:		Sampled By:	Client

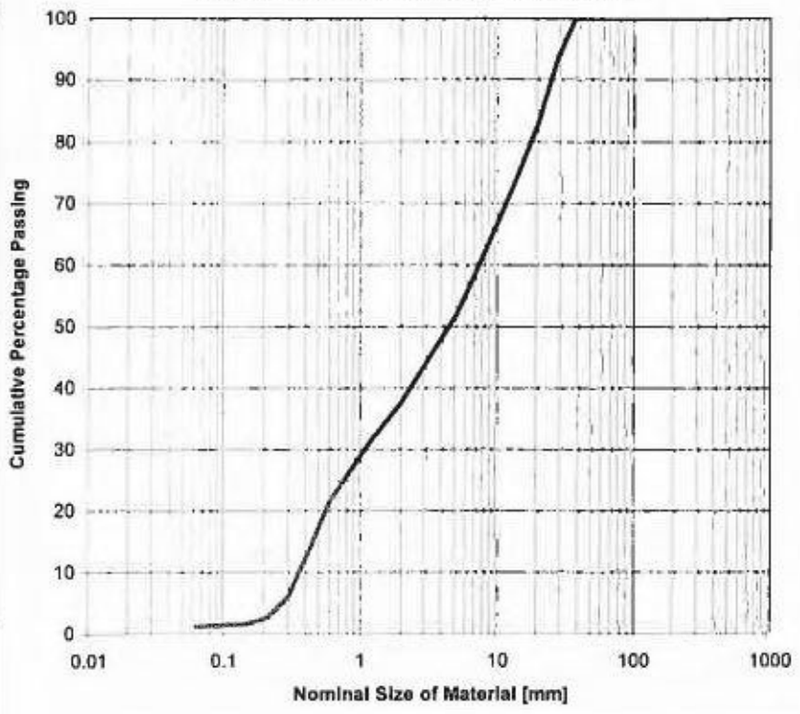
TEST RESULTS

Laboratory Reference: PL1419-2/2
Sample Reference: Not Given

Sample Description: Brown slightly silty SAND and GRAVEL
Material Specification: Not Required

Location: BH03
Supplier: Client
Source: Site

Depth Top: 1.60m
Depth Base: 2.00m



SIEVE ANALYSIS

Sieve Size [mm]	Passing [%]	Material Specification
500	100	
300	100	
200	100	
150	100	
125	100	
90	100	
75	100	
63	100	
50	100	
37.5	100	
28	94	
20	83	
14	74	
10	67	
6.3	57	
5.00	52	
3.35	46	
2.00	38	
1.18	31	
0.600	22	
0.425	14	
0.300	6	
0.212	3	
0.150	2	
0.063	1	

Comments:

Approved Signatory: [ ] G. Meadows - Deputy Lab Manager
[ ] C. Reynolds - Deputy Lab Manager
[✓] J. Chapman - Team Leader

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TEST CERTIFICATE

Determination of Particle Size Distribution

Tested in Accordance with BS 1377-2: 1990: Method 9.2

Client:	Soiltechnics	Certificate Number:	PL1419-2/6/709
Client Address:	Cedar Barn White Lodge, Walgrave, Northampton, NN6 9PY	Client Reference:	STE1297R
		Lab Job Number:	PL1419-2
		Date Sampled:	Unknown
		Date Received:	04.06.2008
Contact:	Lydia Drew	Date Tested:	12.06.2008
		Certificate of Sampling:	N/A
Site Name:	Richmond Upon Thames College	Certificate of Sampling No.:	N/A
Site Address:		Sampled By:	Client

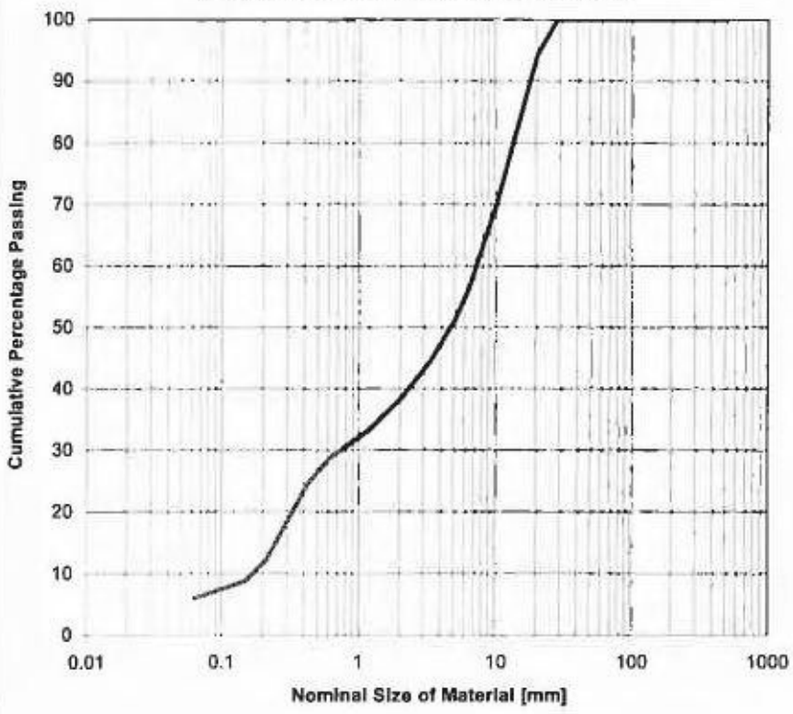
TEST RESULTS

Laboratory Reference: PL1419-2/6
Sample Reference: Not Given

Sample Description: Brown light brown clayey SAND and GRAVEL
Material Specification: Not Required

Location: DTS10
Supplier: Client
Source: Site

Depth Top: 0.80m
Depth Base: 1.00m



SIEVE ANALYSIS

Sieve Size [mm]	Passing [%]	Material Specification
500	100	
300	100	
200	100	
150	100	
125	100	
90	100	
75	100	
63	100	
50	100	
37.5	100	
28	100	
20	94	
14	82	
10	70	
6.3	56	
5.00	51	
3.35	45	
2.00	38	
1.18	33	
0.600	28	
0.425	24	
0.300	18	
0.212	12	
0.150	9	
0.063	6	

Comments:

Approved Signatory: [ ] G. Meadows - Deputy Lab Manager
[ ] C. Reynolds - Deputy Lab Manager
[✓] J. Chapman - Team Leader

Signed:

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Determination of Particle Size Distribution

Tested in Accordance with BS 1377-2: 1990: Method 9.2

Client:	Soiltechnics	Certificate Number:	PL1419-2/11/709
Client Address:	Cedar Barn White Lodge, Walgrave, Northampton, NN6 9PY	Client Reference:	STE1297R
		Lab Job Number:	PL1419-2
		Date Sampled:	Unknown
		Date Received:	04.06.2008
Contact:	Lydia Drew	Date Tested:	12.06.2008
		Certificate of Sampling:	N/A
Site Name:	Richmond Upon Thames College	Certificate of Sampling No.:	N/A
Site Address:		Sampled By:	Client

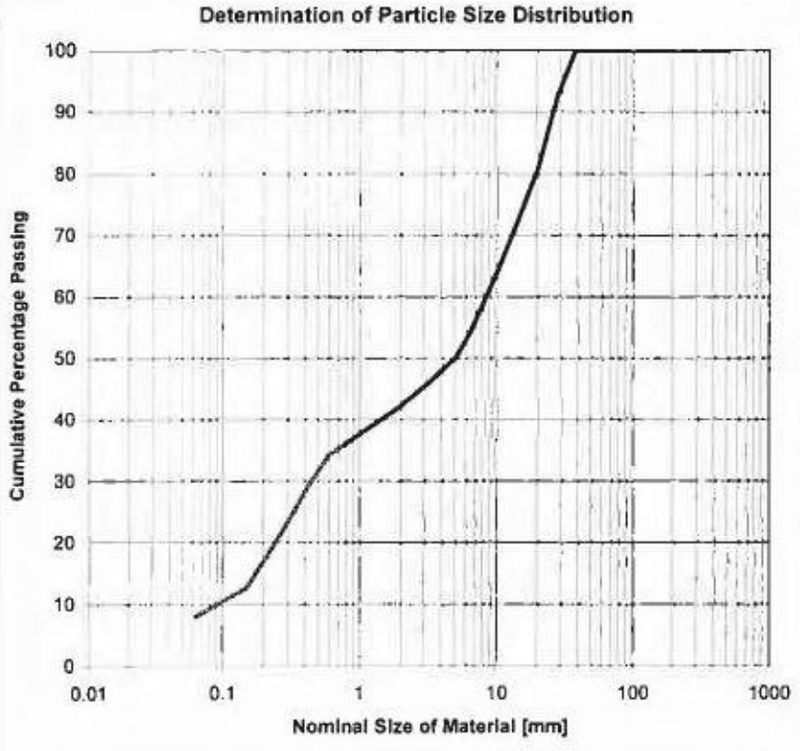
TEST RESULTS

Laboratory Reference: PL1419-2/11
Sample Reference: Not Given

Sample Description: Brown clayey SAND and GRAVEL
Material Specification: Not Required

Location: DTS21
Supplier: Client
Source: Site

Depth Top: 1.00m
Depth Base: 1.50m



SIEVE ANALYSIS

Sieve Size [mm]	Passing [%]	Material Specification
500	100	
300	100	
200	100	
150	100	
125	100	
90	100	
75	100	
63	100	
50	100	
37.5	100	
28	93	
20	81	
14	72	
10	64	
6.3	54	
5.00	50	
3.35	46	
2.00	42	
1.18	39	
0.600	34	
0.425	29	
0.300	23	
0.212	18	
0.150	13	
0.063	8	

Comments:

Approved Signatory: [ ] G. Meadows - Deputy Lab Manager
[ ] C. Reynolds - Deputy Lab Manager
[✓] J. Chapman - Team Leader

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TEST CERTIFICATE

Determination of California Bearing Ratio

Tested in accordance with BS 1377-4: 1990: Method 7.4

Client:	Soiltechnics	Certificate Number:	PL1419-2/4/736-1
Client Address:	Cedar Barn White Lodge, Walgrave, Northampton, NN6 9PY	Client Reference:	STE1297R
		Job Number:	PL1419-2
		Date Sampled:	Unknown
Contact:	Lydia Drew	Date Received:	04.06.2008
		Date Tested:	19.06.2008
Site Name:	Richmond Upon Thames College	Sampling Certificate No.:	N/A
Site Address:		Certificate of Sampling:	N/A
		Sampled By:	Client

Test Results:

Laboratory Reference: PL1419-2/4

Sample Reference: Not Given

Sample Description: Firm brown orange brown slightly gravelly sandy CLAY

Sample Location: DTS06/DTS07/CBR Bulk1

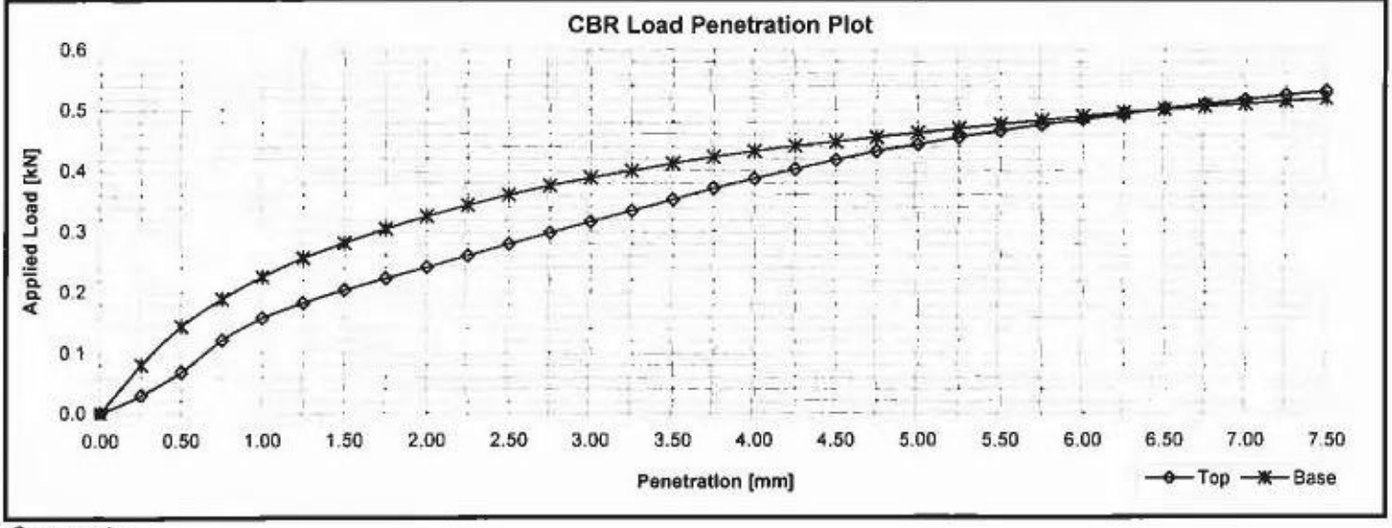
Depth Top: 0.50m

Sample Preparation: Recompacted using a 2.5kg rammer

Depth Base: 0.70m

Retained on 20mm test sieve:	7	(%)	Applied Seating Load (top):	10 N
Moisture Content (Top):	21	(%)	Applied Seating Load (base):	10 N
Moisture Content (Base):	21	(%)	Applied Surcharge:	12.0kg
Moisture Content (Mean):	21	(%)		
Initial Bulk Density:	2.03	(Mg/m³)		
Initial Dry Density:	1.67	(Mg/m³)		

CBR Top (%):	2.2	CBR Base (%):	2.7	Average CBR (%):	N/A



Comments:

Non-Standard Proctor Mould Used

Approved Signatory: [ ] G. Meadows - Deputy Lab Manager
[ ] C. Reynolds - Deputy Lab Manager
[✓] J. Chapman - Team Leader

Signed: for and on behalf of Enverity

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TEST CERTIFICATE

Determination of California Bearing Ratio

Tested in accordance with BS 1377-4: 1990: Method 7.4

Client:	Soiltechnics	Certificate Number:	PL1419-2/7/736-1
Client Address:	Cedar Barn White Lodge, Walgrave, Northampton, NN6 9PY	Client Reference:	STE1297R
		Job Number:	PL1419-2
		Date Sampled:	Unknown
Contact:	Lydia Drew	Date Received:	04.06.2008
		Date Tested:	18.06.2008
Site Name:	Richmond Upon Thames College	Sampling Certificate No.:	N/A
Site Address:		Certificate of Sampling:	N/A
		Sampled By:	Client

Test Results:

Laboratory Reference: PL1419-2/7

Sample Reference: Not Given

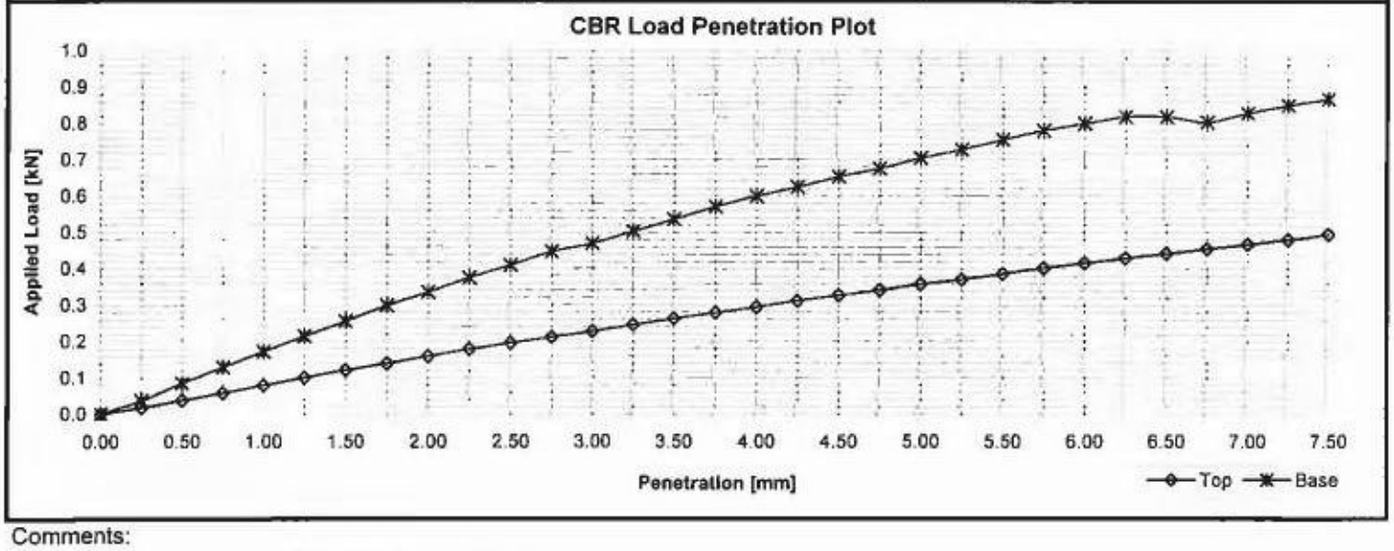
Sample Description: Firm brown grey slightly gravelly sandy CLAY

Sample Location: DTS11/DTS14/DTS17/CBR Bulk2 **Depth Top:** 0.50m

Sample Preparation: Recompacted using a 2.5kg rammer **Depth Base:** 0.70m

Retained on 20mm test sieve:	9	(%)	Applied Seating Load (top):	10 N
Moisture Content (Top):	14	(%)	Applied Seating Load (base):	10 N
Moisture Content (Base):	15	(%)	Applied Surcharge:	12.0kg
Moisture Content (Mean):	15	(%)		
Initial Bulk Density:	2.18	(Mg/m³)		
Initial Dry Density:	1.90	(Mg/m³)		

CBR Top (%):	CBR Base (%):	Average CBR (%):
1.8	3.5	N/A



Comments:

Non-Standard Proctor Mould used

Approved Signatory: [ ] G. Meadows - Deputy Lab Manager
[ ] C. Reynolds - Deputy Lab Manager
[✓] J. Chapman - Team Leader

Signed:

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TEST CERTIFICATE

Determination of California Bearing Ratio

Tested in accordance with BS 1377-4: 1990: Method 7.4

Client:	Soiltechnics	Certificate Number:	PL1419-2/10/736-1
Client Address:	Cedar Barn White Lodge, Walgrave, Northampton, NN6 9PY	Client Reference:	STE1297R
		Job Number:	PL1419-2
		Date Sampled:	Unknown
Contact:	Lydia Drew	Date Received:	04.06.2008
		Date Tested:	18.06.2008
Site Name:	Richmond Upon Thames College	Sampling Certificate No.:	N/A
Site Address:		Certificate of Sampling:	N/A
		Sampled By:	Client

Test Results:

Laboratory Reference: PL1419-2/10

Sample Reference: Not Given

Sample Description: Dark grey brown slightly gravelly sandy SILT/CLAY

Sample Location: DTS20/CBR Bulk3

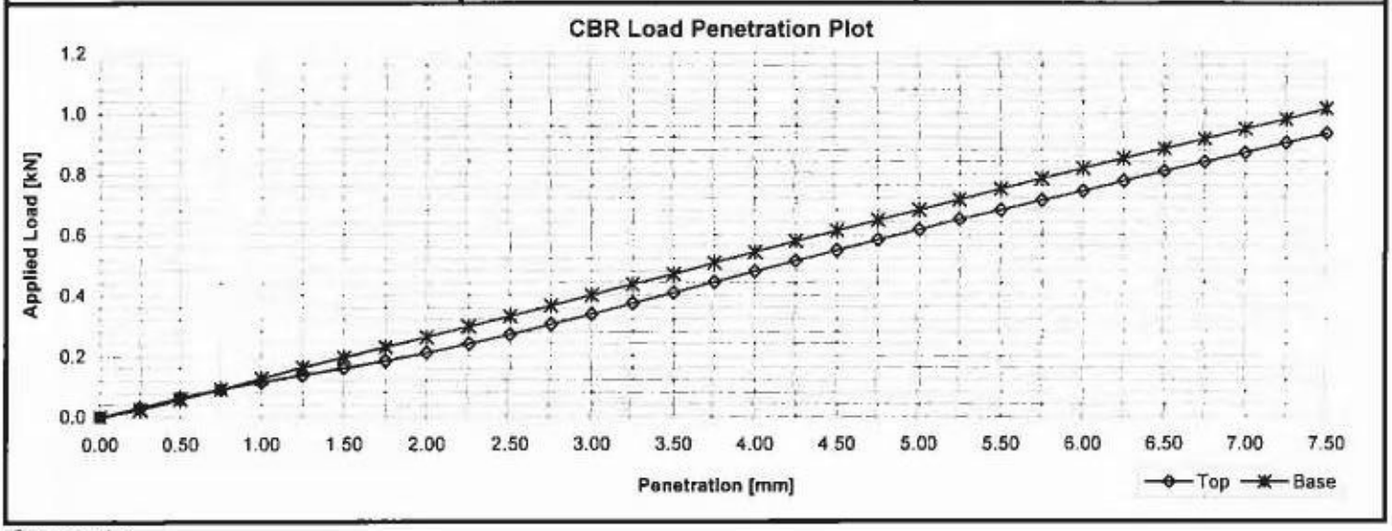
Depth Top: 0.40m

Sample Preparation: Recompacted using a 2.5kg rammer

Depth Base: 0.60m

Retained on 20mm test sieve:	1	(%)	Applied Seating Load (top):	10 N
Moisture Content (Top):	19	(%)	Applied Seating Load (base):	10 N
Moisture Content (Base):	18	(%)	Applied Surcharge:	12.0kg
Moisture Content (Mean):	18	(%)		
Initial Bulk Density:	2.02	(Mg/m³)		
Initial Dry Density:	1.70	(Mg/m³)		

CBR Top (%):	3.1	CBR Base (%):	3.4	Average CBR (%):	3.2



Comments:

Non-Standard Proctor Mould used

Approved Signatory: [ ] G. Meadows - Deputy Lab Manager
[ ] C. Reynolds - Deputy Lab Manager
[✓] J. Chapman - Team Leader

Signed: for and on behalf of Enverity

Date Reported: 20.06.2008 Page 1 of 1

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TEST CERTIFICATE

Determination of California Bearing Ratio

Tested in accordance with BS 1377-4: 1990: Method 7.4

Client:	Soiltechnics	Certificate Number:	PL1476-1/1/736-1
Client Address:	Cedar Barn White Lodge, Walgrave, Northampton, NN6 9PY	Client Reference:	STE1297R
		Job Number:	PL1476-1
		Date Sampled:	Unknown
Contact:	Lydia Drew	Date Received:	25.06.2008
		Date Tested:	04.07.2008
Site Name:	Richmond Upon Thames College	Sampling Certificate No.:	N/A
Site Address:		Certificate of Sampling:	N/A
		Sampled By:	Client

Test Results:

Laboratory Reference: PL1476-1/1

Sample Reference: CBR Bulk 4

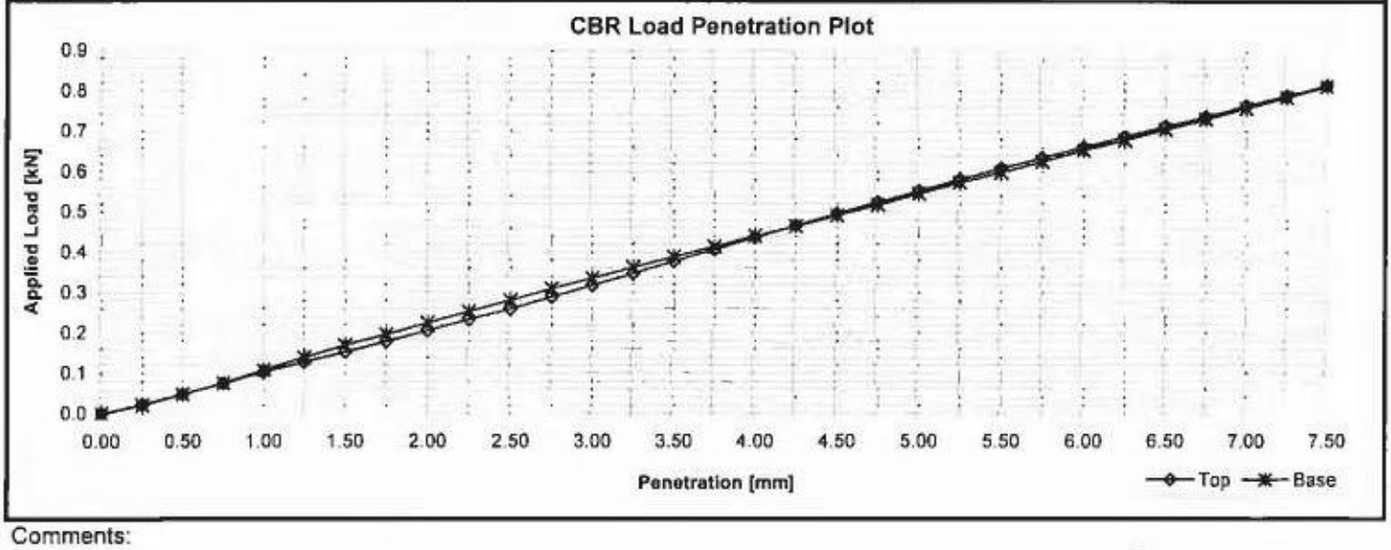
Sample Description: Soft brown orange-brown slightly gravelly sandy CLAY

Sample Location: CBR Bulk 4 **Depth:** Not Given

Sample Preparation: Recompacted at 'as received moisture content' using a 2.5kg ra

Retained on 20mm test sieve:	5	(%)	Applied Seating Load (top):	10 N
Moisture Content (Top):	18	(%)	Applied Seating Load (base):	10 N
Moisture Content (Base):	17	(%)	Applied Surcharge:	12.0kg
Moisture Content (Mean):	18	(%)		
Initial Bulk Density:	2.04	(Mg/m³)		
Initial Dry Density:	1.73	(Mg/m³)		

CBR Top (%):	CBR Base (%):	Average CBR (%):
2.8	2.7	2.7



Comments:

Approved Signatory: [✓] G. Meadows - Deputy Lab Manager
[ ] C. Reynolds - Deputy Lab Manager

Signed:

for and on behalf of Enverity

Date Reported: 07.07.2008 Page 1 of 1

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TEST CERTIFICATE

Determination of California Bearing Ratio

Tested in accordance with BS 1377-4: 1990: Method 7.4

Client:	Soiltechnics	Certificate Number:	PL1476-1/2/736-1
Client Address:	Cedar Barn White Lodge, Walgrave, Northampton, NN6 9PY	Client Reference:	STE1297R
		Job Number:	PL1476-1
		Date Sampled:	Unknown
Contact:	Lydia Drew	Date Received:	25.06.2008
		Date Tested:	04.07.2008
Site Name:	Richmond Upon Thames College	Sampling Certificate No.:	N/A
Site Address:		Certificate of Sampling:	N/A
		Sampled By:	Client

Test Results:

Laboratory Reference: PL1476-1/2

Sample Reference: CBR Bulk 5

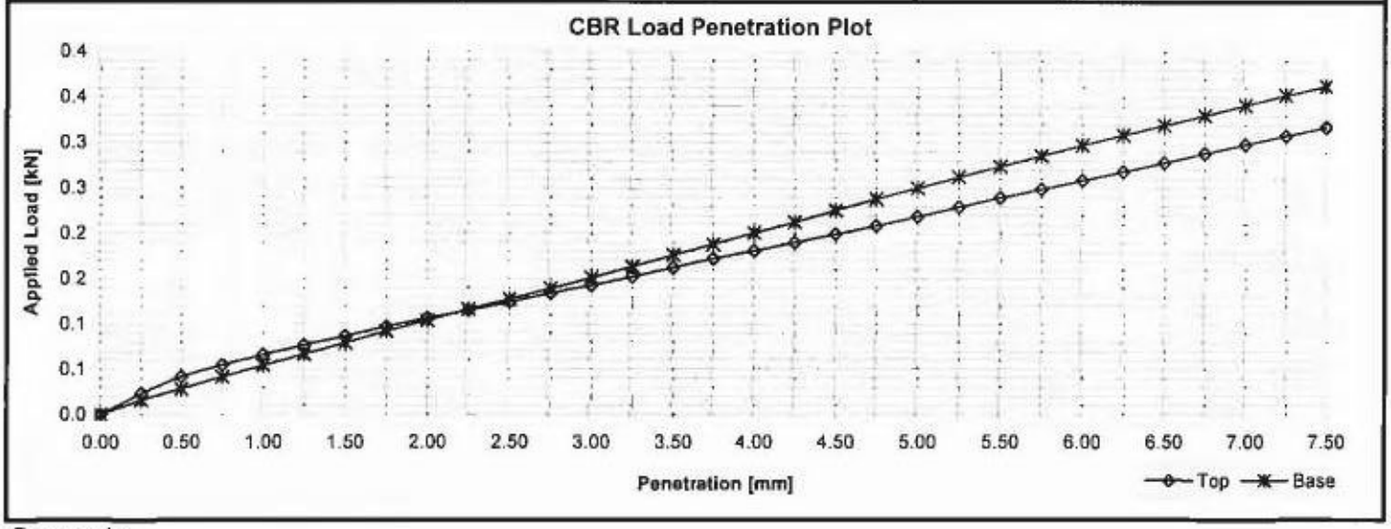
Sample Description: Soft brown orange-brown slightly gravelly sandy CLAY with rare roots < 2mm

Sample Location: CBR Bulk 5 **Depth:** Not Given

Sample Preparation: Recompacted at 'as received moisture content' using a 2.5kg ra

Retained on 20mm test sieve:	1	(%)	Applied Seating Load (top):	10 N
Moisture Content (Top):	19	(%)	Applied Seating Load (base):	10 N
Moisture Content (Base):	19	(%)	Applied Surcharge:	12.0kg
Moisture Content (Mean):	19	(%)		
Initial Bulk Density:	2.01	(Mg/m³)		
Initial Dry Density:	1.68	(Mg/m³)		

CBR Top (%):	CBR Base (%):	Average CBR (%):
1.1	1.3	1.1



Comments:

Approved Signatory: [✓] G. Meadows - Deputy Lab Manager
[ ] C. Reynolds - Deputy Lab Manager

Signed:

for and on behalf of Enverity

Date Reported: 07.07.2008 Page 1 of 1

Form Number: EN/C/736-1 Version 122

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TEST CERTIFICATE

Determination of Undrained Shear Strength in Triaxial Compression

(Single Stage Test - BS 1377:Part 7:Clause 8)

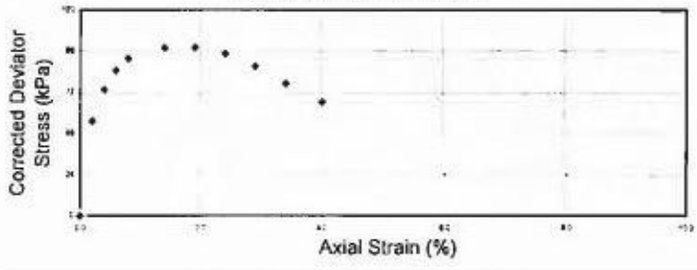
Client:	Soiltechnics	Certificate Number:	PL1419-1-1 / 713
Client	Cedar barn	Client Reference Number:	**STE1297R**
Address:	White Lodge	Date Sampled:	Unknown
	Walgrave, Northampton	Date Received:	04/06/08
Postcode:	NN6 9PY	Date Tested:	20/06/08
Contact:	Lydia Drew	Sampling Certificate No.:	N/A
Site Name:	Richmond Upon Thames College	Certificate of Sampling:	N/A
Site Address:		Sampled By:	Client

Test Results:

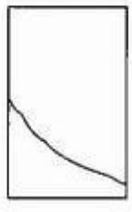
Lab Reference	PL1419-1-1	Sample Ref:	**Not Given**
Location:	**BH01**	Depth (m):	**11.50 to 11.90**
Sample Description:	Stf fiss dk gy CL		

Variations from Standard:	None		
Laboratory Temperature (°C):	22.0		
Specimen Details			
Height (mm):	199.0	Latex Membrane Thickness (mm):	0.40
Diameter (mm):	102.0	Applied Rate of Strain (%/min):	2.01
Depth within Sample (m):	11.60 to 11.80	Bulk Density (Mg/m^3):	**1.99**
Orientation within Sample:	Vertical	Moisture Content (%):	**28**
Method of Preparation :	Undisturbed (BS 1377 -1:8)	Dry Density (Mg/m^3):	**1.55**

Force against Axial Strain



Failure Sketch



Cell Pressure	**200**	kPa
Corrected Maximum Deviator Stress	**98**	kPa
Strain	**1.9**	%
Undrained Shear Strength	**49**	kPa
Mode of Failure		Brittle

Approved Signatory:
[ ] B.Wells - Laboratory Manager
[✓] G.Meadows - Deputy Lab Manager
[ ] M.Hartnup - Team Leader
[ ] J.Chapman - Team Leader

Signed:

Date Reported: 24/06/2008

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TEST CERTIFICATE

Determination of Undrained Shear Strength in Triaxial Compression

(Single Stage Test - BS 1377:Part 7:Clause 8)

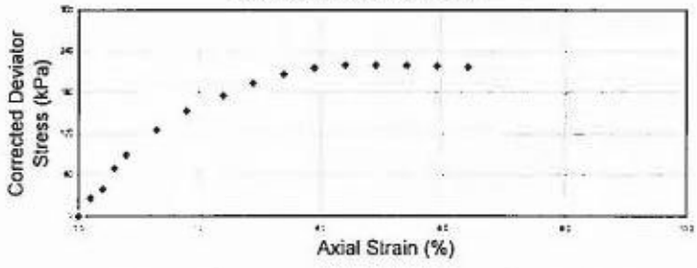
Client:	Soiltechnics	Certificate Number:	PL1419-1-2 / 713
Client	Cedar barn	Client Reference Number:	**STE1297R**
Address:	White Lodge	Date Sampled:	Unknown
	Walgrave, Northampton	Date Received:	04/06/08
Postcode:	NN6 9PY	Date Tested:	20/06/08
Contact:	Lydia Drew	Sampling Certificate No.:	N/A
Site Name:	Richmond Upon Thames College	Certificate of Sampling:	N/A
Site Address:		Sampled By:	Client

Test Results:

Lab Reference	PL1419-1-2	Sample Ref:	**Not Given**
Location:	**BH01**	Depth (m):	**21.60 to 20 .00**
Sample Description:	Stf dk gy CL		

Variations from Standard:	None		
Laboratory Temperature (°C):	22.0		
Specimen Details			
Height (mm):	199.0	Latex Membrane Thickness (mm):	0.40
Diameter (mm):	102.0	Applied Rate of Strain (%/min):	1.01
Depth within Sample (m):	21.70 to 21.90	Bulk Density (Mg/m^3):	**2.00**
Orientation within Sample:	Vertical	Moisture Content (%):	**27**
Method of Preparation :	Undisturbed (BS 1377 -1:8)	Dry Density (Mg/m^3):	**1.58**

Force against Axial Strain



Failure Sketch

Cell Pressure	**380**	kPa
Corrected Maximum Deviator Stress	**220**	kPa
Strain	**4.9**	%
Undrained Shear Strength	**110**	kPa
Mode of Failure		Brittle

Approved Signatory:
[ ] B.Wells - Laboratory Manager
[✓] G.Meadows - Deputy Lab Manager
[ ] M Hartnup - Team Leader
[ ] J.Chapman - Team Leader

Signed:

Date Reported: 24/06/2008

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TEST CERTIFICATE

Determination of Undrained Shear Strength in Triaxial Compression

(Single Stage Test - BS 1377:Part 7:Clause 8)

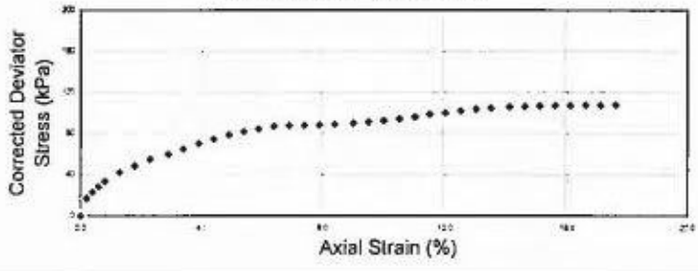
Client:	Soiltechnics	Certificate Number:	PL1419-1-3 / 713
Client	Cedar barn	Client Reference Number:	**STE1297R**
Address:	White Lodge	Date Sampled:	Unknown
	Walgrave, Northampton	Date Received:	04/06/08
Postcode:	NN6 9PY	Date Tested:	20/06/08
Contact:	Lydia Drew	Sampling Certificate No.:	N/A
Site Name:	Richmond Upon Thames College	Certificate of Sampling:	N/A
Site Address:		Sampled By:	Client

Test Results:

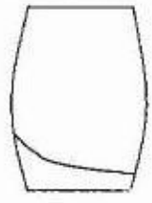
Lab Reference	PL1419-1-3	Sample Ref:	**Not Given**
Location:	**BH02**	Depth (m):	**6.00 to 6.40**
Sample Description:	F dk gy CL		

Variations from Standard:	None		
Laboratory Temperature (°C):	22.0		
Specimen Details			
Height (mm):	199.0	Latex Membrane Thickness (mm):	0.40
Diameter (mm):	102.0	Applied Rate of Strain (%/min):	1.01
Depth within Sample (m):	6.10 to 6.30	Bulk Density (Mg/m^3):	**1.87**
Orientation within Sample:	Vertical	Moisture Content (%):	**29**
Method of Preparation :	Undisturbed (BS 1377 -1:8)	Dry Density (Mg/m^3):	**1.45**

Force against Axial Strain



Failure Sketch



Cell Pressure	**110**	kPa
Corrected Maximum Deviator Stress	**108**	kPa
Strain	**17.6**	%
Undrained Shear Strength	**54**	kPa
Mode of Failure		Intermediate

Approved Signatory:
[ ] B.Wells - Laboratory Manager
[✓] G.Meadows - Deputy Lab Manager
[ ] M.Hartnup - Team Leader
[ ] J.Chapman - Team Leader

Signed:

Date Reported: 24/06/2008

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TEST CERTIFICATE

Determination of Undrained Shear Strength in Triaxial Compression

(Single Stage Test - BS 1377:Part 7:Clause 8)

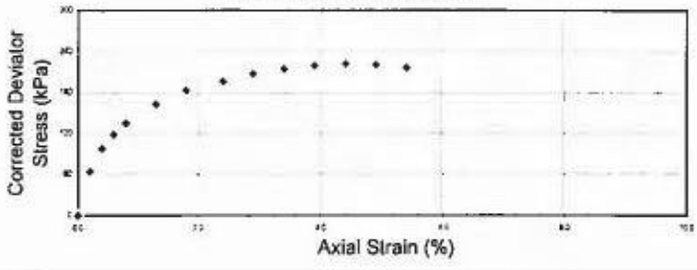
Client:	Soiltechnics	Certificate Number:	PL1419-1-5 / 713
Client	Cedar barn	Client Reference Number:	**STE1297R**
Address:	White Lodge	Date Sampled:	Unknown
	Walgrave, Northampton	Date Received:	04/06/08
Postcode:	NN6 9PY	Date Tested:	20/06/08
Contact:	Lydia Drew	Sampling Certificate No.:	N/A
Site Name:	Richmond Upon Thames College	Certificate of Sampling:	N/A
Site Address:		Sampled By:	Client

Test Results:

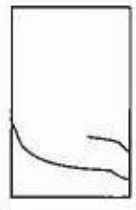
Lab Reference	PL1419-1-5	Sample Ref:	**Not Given**
Location:	**BH03**	Depth (m):	**17.50 to 17.90**
Sample Description:	Stf dk gy CL		

Variations from Standard:	None		
Laboratory Temperature (°C):	22.0		
Specimen Details			
Height (mm):	199.0	Latex Membrane Thickness (mm):	0.40
Diameter (mm):	102.0	Applied Rate of Strain (%/min):	1.01
Depth within Sample (m):	17.60 to 17.80	Bulk Density (Mg/m^3):	**2.02**
Orientation within Sample:	Vertical	Moisture Content (%):	**21**
Method of Preparation :	Undisturbed (BS 1377 -1:8)	Dry Density (Mg/m^3):	**1.67**

Force against Axial Strain



Failure Sketch



Cell Pressure	**310**	kPa
Corrected Maximum Deviator Stress	**222**	kPa
Strain	**4.4**	%
Undrained Shear Strength	**111**	kPa
Mode of Failure		Brittle

Approved Signatory:
[ ] B.Wells - Laboratory Manager
[✓] G.Meadows - Deputy Lab Manager
[ ] M.Hartnup - Team Leader
[ ] J.Chapman - Team Leader

Signed:

Date Reported: 24/06/2008

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TEST CERTIFICATE

Determination of Undrained Shear Strength in Triaxial Compression

(Single Stage Test - BS 1377:Part 7:Clause 8)

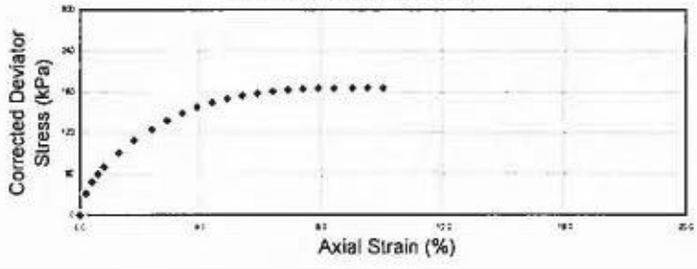
Client:	Soiltechnics	Certificate Number:	PL1419-1-6 / 713
Client	Cedar barn	Client Reference Number:	**STE1297R**
Address:	White Lodge	Date Sampled:	Unknown
	Walgrave, Northampton	Date Received:	04/06/08
Postcode:	NN6 9PY	Date Tested:	20/06/08
Contact:	Lydia Drew	Sampling Certificate No.:	N/A
Site Name:	Richmond Upon Thames College	Certificate of Sampling:	N/A
Site Address:		Sampled By:	Client

Test Results:

Lab Reference	PL1419-1-6	Sample Ref:	**Not Given**
Location:	**BH04**	Depth (m):	**7.00 to 7.40**
Sample Description:	Stf dk gy slsa CL		

Variations from Standard:	None		
Laboratory Temperature (°C):	22.0		
Specimen Details			
Height (mm):	199.0	Latex Membrane Thickness (mm):	0.40
Diameter (mm):	101.0	Applied Rate of Strain (%/min):	1.01
Depth within Sample (m):	7.10 to 7.30	Bulk Density (Mg/m^3):	**2.02**
Orientation within Sample:	Vertical	Moisture Content (%):	**28**
Method of Preparation :	Undisturbed (BS 1377 -1:8)	Dry Density (Mg/m^3):	**1.58**

Force against Axial Strain



Failure Sketch

Cell Pressure	**120**	kPa
Corrected Maximum Deviator Stress	**186**	kPa
Strain	**9.5**	%
Undrained Shear Strength	**93**	kPa
Mode of Failure		Intermediate

Approved Signatory:
[ ] B.Wells - Laboratory Manager
[V] G.Meadows - Deputy Lab Manager
[ ] M.Hartnup - Team Leader
[ ] J.Chapman - Team Leader

Signed:

Date Reported: 24/06/2008

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TEST CERTIFICATE

Determination of Undrained Shear Strength in Triaxial Compression

(Single Stage Test - BS 1377:Part 7:Clause 8)

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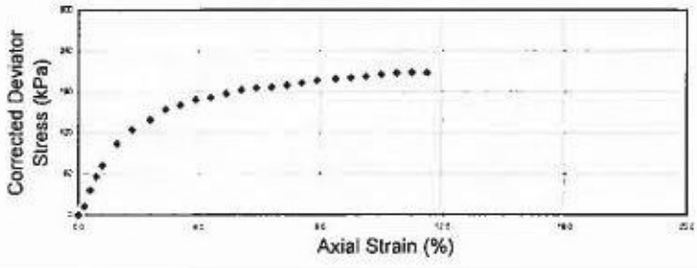
Client:	Soiltechnics	Certificate Number:	PL1419-1-7 / 713
Client	Cedar barn	Client Reference Number:	**STE1297R**
Address:	White Lodge	Date Sampled:	Unknown
	Walgrave, Northampton	Date Received:	04/06/08
Postcode:	NN6 9PY	Date Tested:	20/06/08
Contact:	Lydia Drew	Sampling Certificate No.:	N/A
Site Name:	Richmond Upon Thames College	Certificate of Sampling:	N/A
Site Address:		Sampled By:	Client

Test Results:

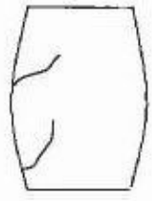
Lab Reference	PL1419-1-7	Sample Ref:	**Not Given**
Location:	**BH04**	Depth (m):	**14.10 to 14.50**
Sample Description:	Stf dk gy CL		

Variations from Standard:	None		
Laboratory Temperature (°C):	22.0		
Specimen Details			
Height (mm):	199.0	Latex Membrane Thickness (mm):	0.40
Diameter (mm):	102.0	Applied Rate of Strain (%/min):	1.01
Depth within Sample (m):	14.20 to 14.40	Bulk Density (Mg/m^3):	**1.94**
Orientation within Sample:	Vertical	Moisture Content (%):	**29**
Method of Preparation :	Undisturbed (BS 1377 -1:8)	Dry Density (Mg/m^3):	**1.51**

Force against Axial Strain



Failure Sketch



Cell Pressure	**250**	kPa
Corrected Maximum Deviator Stress	**209**	kPa
Strain	**11.0**	%
Undrained Shear Strength	**104**	kPa
Mode of Failure		Intermediate

Approved Signatory:
[ ] B.Wells - Laboratory Manager
[ ] G.Meadows - Deputy Lab Manager
[/] M.Hartnup - Team Leader
[ ] J.Chapman - Team Leader

Signed:

Date Reported: 24/06/2008

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TEST CERTIFICATE

Determination of Undrained Shear Strength in Triaxial Compression

(Single Stage Test - BS 1377:Part 7:Clause 8)

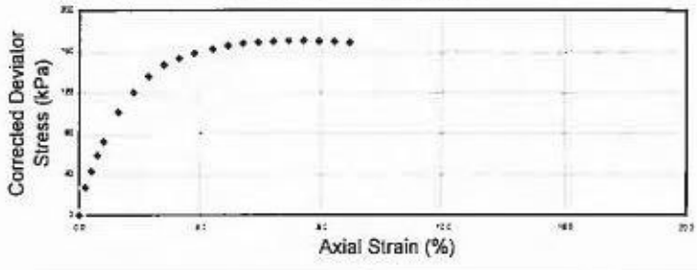
Client:	Soiltechnics	Certificate Number:	PL1419-1-8 / 713
Client	Cedar barn	Client Reference Number:	**STE1297R**
Address:	White Lodge	Date Sampled:	Unknown
	Walgrave, Northampton	Date Received:	04/06/08
Postcode:	NN6 9PY	Date Tested:	20/06/08
Contact:	Lydia Drew	Sampling Certificate No.:	N/A
Site Name:	Richmond Upon Thames College	Certificate of Sampling:	N/A
Site Address:		Sampled By:	Client

Test Results:

Lab Reference	PL1419-1-8	Sample Ref:	**Not Given**
Location:	**BH05**	Depth (m):	**5.50 to 5.90**
Sample Description:	Stf dk gy CL		

Variations from Standard:	None		
Laboratory Temperature (°C):	22.0		
Specimen Details			
Height (mm):	199.0	Latex Membrane Thickness (mm):	0.40
Diameter (mm):	102.0	Applied Rate of Strain (%/min):	1.01
Depth within Sample (m):	5.60 to 5.80	Bulk Density (Mg/m^3):	**2.00**
Orientation within Sample:	Vertical	Moisture Content (%):	**28**
Method of Preparation :	Undisturbed (BS 1377 -1:8)	Dry Density (Mg/m^3):	**1.57**

Force against Axial Strain



Failure Sketch

Cell Pressure	**90**	kPa
Corrected Maximum Deviator Stress	**170**	kPa
Strain	**6.9**	%
Undrained Shear Strength	**85**	kPa
Mode of Failure		Brittle

Approved Signatory:
[ ] B.Wells - Laboratory Manager
[ ] G.Meadows - Deputy Lab Manager
[✓] M.Hartnup - Team Leader
[ ] J.Chapman - Team Leader

Signed:

Date Reported: 24/06/2008

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TEST CERTIFICATE

Determination of Undrained Shear Strength in Triaxial Compression

(Single Stage Test - BS 1377:Part 7:Clause 8)

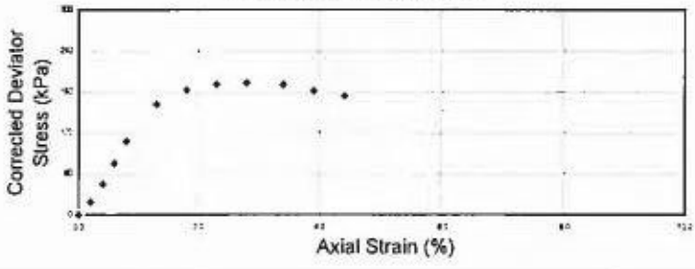
Client:	Soiltechnics	Certificate Number:	PL1419-1-10 / 713
Client	Cedar barn	Client Reference Number:	**STE1297R**
Address:	White Lodge	Date Sampled:	Unknown
	Waigrave, Northampton	Date Received:	04/06/08
Postcode:	NN6 9PY	Date Tested:	20/06/08
Contact:	Lydia Drew	Sampling Certificate No.:	N/A
Site Name:	Richmond Upon Thames College	Certificate of Sampling:	N/A
Site Address:		Sampled By:	Client

Test Results:

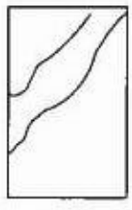
Lab Reference	PL1419-1-10	Sample Ref:	**Not Given**
Location:	**BH06**	Depth (m):	**20.00 to 20.40**
Sample Description:	Stf dk gy CL		

Variations from Standard:	None		
Laboratory Temperature (°C):	22.0		
Specimen Details			
Height (mm):	199.0	Latex Membrane Thickness (mm):	0.40
Diameter (mm):	102.0	Applied Rate of Strain (%/min):	1.01
Depth within Sample (m):	20.10 to 20.30	Bulk Density (Mg/m^3):	**1.99**
Orientation within Sample:	Vertical	Moisture Content (%):	**28**
Method of Preparation :	Undisturbed (BS 1377 -1:8)	Dry Density (Mg/m^3):	**1.56**

Force against Axial Strain



Failure Sketch



Cell Pressure	**360**	kPa
Corrected Maximum Deviator Stress	**193**	kPa
Strain	**2.8**	%
Undrained Shear Strength	**96**	kPa
Mode of Failure		Brittle

Approved Signatory:
[ ] B.Wells - Laboratory Manager
[ ] G Meadows - Deputy Lab Manager
[X] M.Hartnup - Team Leader
[ ] J.Chapman - Team Leader

Signed:

Date Reported: 24/06/2008

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TEST CERTIFICATE

One-Dimensional Consolidation Properties

(Tested in accordance with BS1377 : Part 5 1990)

Client:	Soiltechnics	Certificate Number:	PL1419-1-4/731
Client Address:	Cedar barn	Client Reference Number:	STE12972
	White Lodge	Date Sampled:	Unknown
	Walgrave, Northampton	Date Received:	04/06/2008
Postcode:	NN6 9PY	Date Tested:	09/06/2008
Contact:	Lydia Drew	Sampling Certificate No:	N/A
Site Name:	Richmond Upon Thames College	Certificate of Sampling:	N/A
Site Address:	London	Sampled By:	Client

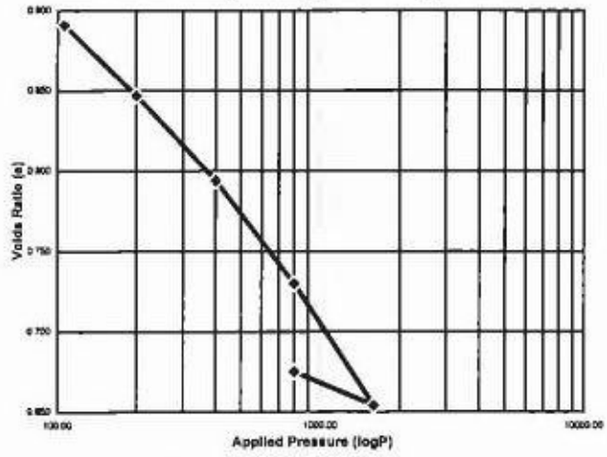
Test Details

Location:	BH03	
Sample Ref:	U1	
Sample Description:	Stiff fissured brown grey CLAY	
Particle Density (Mg/m^3):	2.74	Assumed
Mean Lab Temp. (°C):	22	
Variations from Standard:	None	
Lab Reference:	PL1419-1-4	
Depth (m):	7.50 m	

Specimen Details

	INITIAL	FINAL
Height (mm):	18.99	16.82
Bulk Density (Mg/m^3):	1.92	2.12
Moisture Content (%):	32	29
Dry Density (Mg/m^3):	1.45	1.64
Voids Ratio:	0.891	0.675
Degree of Saturation (%):	98.9	119.7
Diameter (mm):	74.93	N/A
Swelling Pressure (kPa):	106	N/A
Method of time fitting used:	Log Time	N/A

Voids Ratio against logarithm of Applied Pressure



Applied Pressure (kPa)	Coefficient of Compressibility m_v (m^2/MN)	Coefficient of Consolidation c_v (m^2/year)
106		
200	0.25	0.48
400	0.14	0.53
800	0.09	0.48
1600	0.05	0.45
800	0.02	---

Comments:

Approved Signatory:
[ ] B.Wells - Laboratory Manager
[ ] G.Meadows - Deputy Lab Manager
[ ] J.Chapman - Team Leader
[✓] M Hartnup - Team Leader

Signed:

Date Reported: 18/06/2008

Form Number: EN/C/731 Issue 1

for and on behalf of
Enverity
A DIVISION OF XPLOR LTD
Registered in England and Wales
Registration No. 3096780
Reg Office 7 Laureate Paddocks
Newmarket Suffolk CB8 7SQ

Enverity

Newark Road Peterborough
t:01733 555525 f:01733 315280
e: peterborough@enverity.co.uk

TEST CERTIFICATE

One-Dimensional Consolidation Properties

(Tested in accordance with BS1377 : Part 5 1990)

Client:	Soiltechnics	Certificate Number:	PL1419-1-9/731
Client Address:	Cedar barn	Client Reference Number:	STE1297R
	White Lodge	Date Sampled:	Unknown
	Walgrave, Northampton	Date Received:	04/06/2008
Postcode:	NN6 9PY	Date Tested:	09/06/2008
Contact:	Lydia Drew	Sampling Certificate No:	N/A
Site Name:	Richmond Upon Thames College	Certificate of Sampling:	N/A
Site Address:	London	Sampled By:	Client

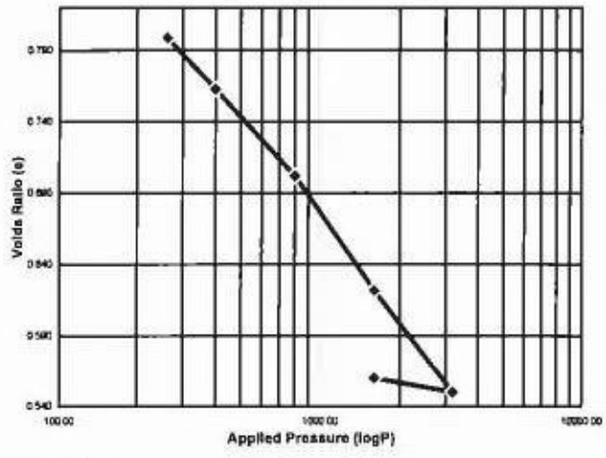
Test Details

Location:	BH05	
Sample Ref:	U2	
Sample Description:	Very Stiff fissured brown CLAY	
Particle Density (Mg/m^3):	2.74	Assumed
Mean Lab Temp. (°C):	22	
Variations from Standard:	None	
Lab Reference:	PL1419-1-9	
Depth (m):	15.70 m	

Specimen Details

	INITIAL	FINAL
Height (mm):	18.53	16.07
Bulk Density (Mg/m^3):	1.95	2.21
Moisture Content (%):	28	26
Dry Density (Mg/m^3):	1.52	1.76
Voids Ratio:	0.799	0.560
Degree of Saturation (%):	95.6	126.3
Diameter (mm):	75.02	N/A
Swelling Pressure (kPa):	261	N/A
Method of time fitting used:	Log Time	N/A

Voids Ratio against logarithm of Applied Pressure



Applied Pressure (kPa)	Coefficient of Compressibility m_v (m^2/MN)	Coefficient of Consolidation c_v (m^2/year)
261		
400	0.14	0.50
800	0.09	0.62
1600	0.06	1.45
3200	0.03	2.60
1600	0.00	---

Comments:

Approved Signatory:
[ ] B.Wells - Laboratory Manager
[ ] G.Meadows - Deputy Lab Manager
[ ] J.Chapman - Team Leader
[✓] M.Hartnup - Team Leader

Signed:

Date Reported: 18/06/2008

xplor

for and on behalf of Enverity

A DIVISION OF XPLOR LTD
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ALcontrol Laboratories

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Lydia Drew
Soiltechnics
Cedar Barn
White Lodge
Walgrave
Northampton
NN6 9PY

12 June 2008

TEST REPORT

Our Report Number: 08-50996

Your Order Reference: 8983

2 soil samples received on 04/06/2008

Final instructions received on 04/06/2008 (CoC No. 38963)

Project Name: Richmond-upon-Thames College

Project Code: STE1297R

Laboratory analysis started on 04 June 2008
All laboratory analysis completed by 12 June 2008

Sharon Googh
Project Co-Ordinator
ALCONTROL LABORATORIES

Daljit Jandu
Project Co-Ordinator
ALCONTROL LABORATORIES

ALcontrol Laboratories
Sample Description

Job Number: 08-50996
Client: Soiltechnics
Project Code: STE1297R

Matrix: Soil
Project Name: Richmond-upon-Thames College

Laboratory Reference No	Sample Reference	Sample Depth (m)	Date Sampled	Sample Description
320381	TP09	0.1-0.2	-	Dark brown sandy clay
320382	TP14	0.4	-	Dark brown sandy clay with vegetation

ALcontrol Laboratories
Table Of Results

Job Number : 08-50996
Matrix : Soil
Project Code: STE1297R

Project Name: Richmond-upon-Thames College
Client : Soiltechnics

Sample Reference	TP09	TP14				Method No	Units	LOD
Sample Depth (m)	0.1-0.2	0.4						
Date Sampled	-	-						
Date Scheduled	04/06/08	04/06/08						
Laboratory Reference No	320381	320382						
Analysis								
Moisture Content (Dry Weight)	31.0	13.3					%	0.1
Moisture Content (Wet Weight)	23.6	11.8					%	0.1
Organic Matter	5.1	4.5				092[I]	%	0.2
Organic Carbon	2.9	2.6				092[I,M]	%	0.1

[I] ISO 17025 accredited.
[M] MCERTS accredited for sand, loam and clay.

ALcontrol Laboratories
Table Of Results

Job Number : 08-50996
Matrix : Soil
Project Code: STE1297R

Project Name: Richmond-upon-Thames College
Client : Soiltechnics

Sample Reference	TP09	TP14				Method No	Units	LOD
Sample Depth (m)	0.1-0.2	0.4						
Date Sampled	-	-						
Date Scheduled	04/06/08	04/06/08						
Laboratory Reference No	320381	320382						
Analysis								
* * PAH SUITE * *								
Naphthalene	0.10	0.15				022S[TM]	mg/kg	0.1
Acenaphthylene	< 0.1	0.45				022S[TM]	mg/kg	0.1
Acenaphthene	< 0.1	19				022S[TM]	mg/kg	0.1
Fluorene	< 0.1	12				022S[TM]	mg/kg	0.1
Phenanthrene	0.17	41				022S[TM]	mg/kg	0.1
Anthracene	< 0.1	10				022S[TM]	mg/kg	0.1
Fluoranthene	0.38	19				022S[TM]	mg/kg	0.1
Pyrene	0.34	12				022S[TM]	mg/kg	0.1
Benzo(a)anthracene	0.16	2.8				022S[TM]	mg/kg	0.1
Chrysene	0.22	2.5				022S[TM]	mg/kg	0.1
Benzo(b)fluoranthene	0.21	1.8				022S[TM]	mg/kg	0.1
Benzo(k)fluoranthene	< 0.1	0.62				022S[TM]	mg/kg	0.1
Benzo(a)pyrene	0.16	1.0				022S[TM]	mg/kg	0.1
Indeno(1,2,3-cd)pyrene	< 0.1	0.34				022S[TM]	mg/kg	0.1
Dibenzo(a,h)anthracene	< 0.1	< 0.1				022S[TM]	mg/kg	0.1
Benzo(g,h,i)perylene	0.12	0.40				022S[TM]	mg/kg	0.1
PAH (Sum of EPA 16)	1.86	123.11				022S[I]	mg/kg	1.6

[I] ISO 17025 accredited.
[M] MCERTS accredited for sand, loam and clay.

ALcontrol Laboratories
Table Of Results

Job Number : 08-50996
Matrix : Soil
Project Code: STE1297R

Project Name: Richmond-upon-Thames College
Client : Soiltechnics

Sample Reference	TP09	TP14				Method No	Units	LOD
Sample Depth (m)	0.1-0.2	0.4						
Date Sampled	-	-						
Date Scheduled	04/06/08	04/06/08						
Laboratory Reference No	320381	320382						
Analysis								
* * CWG SUITE * *								
Aliphatic C5-C6	0.02	0.02				CWGS	mg/kg	0.01
Aliphatic >C6-C8	0.01	0.02				CWGS	mg/kg	0.01
Aliphatic >C8-C10	0.05	0.02				CWGS	mg/kg	0.01
Aliphatic >C10-C12	0.13	0.09				CWGS	mg/kg	0.01
Aliphatic >C12-C16	26	28				CWGS[T]	mg/kg	1
Aliphatic >C16-C21	4.2	40				CWGS[T]	mg/kg	1
Aliphatic >C21-C35	9.7	52				CWGS[T]	mg/kg	5
Aromatic C6-C7	< 0.01	< 0.01				CWGS	mg/kg	0.01
Total Aliphatics (C5-C35)	40	120				CWGS	mg/kg	5
Aromatic >C7-C8	< 0.01	< 0.01				CWGS	mg/kg	0.01
Aromatic >C8-C10	0.07	0.04				CWGS	mg/kg	0.01
Aromatic >C10-C12	0.20	0.13				CWGS	mg/kg	0.01
Aromatic >C12-C16	16	140				CWGS[T]	mg/kg	1
Aromatic >C16-C21	3.7	240				CWGS[T]	mg/kg	1
Aromatic >C21-C35	18	220				CWGS[T]	mg/kg	5
Total Aromatics (C5-C35)	38	600				CWGS	mg/kg	5
Volatile Hydrocarbons (C5-C12)	0.48	0.32				CWGS	mg/kg	0.01
Extractable Hydrocarbons (C12-C35)	78	720				CWGS	mg/kg	5
Total Hydrocarbons (C5-C35)	78	720				CWGS	mg/kg	5
MTBE	< 0.010	< 0.010				CWGS[M]	mg/kg	0.01
Benzene	< 0.010	< 0.010				CWGS[M]	mg/kg	0.01
Toluene	< 0.010	< 0.010				CWGS[M]	mg/kg	0.01
Ethylbenzene	< 0.010	< 0.010				CWGS[M]	mg/kg	0.01
m,p-Xylenes	< 0.010	< 0.010				CWGS[M]	mg/kg	0.01
o-Xylene	< 0.010	< 0.010				CWGS[M]	mg/kg	0.01
1,3,5-Trimethylbenzene	< 0.010	< 0.010				CWGS[M]	mg/kg	0.01
1,2,4-Trimethylbenzene	< 0.010	< 0.010				CWGS[M]	mg/kg	0.01

[T] ISO 17025 accredited.
[M] MCERTS accredited for sand, loam and clay.

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Table Of Results - Appendix

Job Number : 08-50996

Project Code: STE1297R

Project Name: Richmond-upon-Thames College
Client : Soiltechnics

Method No.	Reference	Description	
022S	In-house method	Determination of PAH compounds in soil samples by hexane / acetone extraction followed by GC-MS detection [Note: this method does not separate benzo(j)fluoranthene, and this PAH will be included in the sum of benzo(b)fluoranthene & benzo(k)fluoranthene]	W
CWGS	In-house method based on "Total Petroleum Hydrocarbon Criteria Working Group" series, 1998-9	Determination of "CWG" banded petroleum hydrocarbons in soil samples using a combination of headspace GC-FID (C5-C12) and hexane:acetone extraction / silica-alumina aliphatic - aromatic split / GC-FID (C12-C35) techniques with banding by comparison to alkane standards	W
092	In-house method	Determination of organic matter in soil samples by combustion analyser	D

Appendix

Code	Description
On Results	
*	Detection limit(s) raised due to matrix interference
¥	Detection limit(s) raised due to reduced amount of sample available for analysis
‡	Dilution factor applied due to nature of sample
NAD	No asbestos detected
$	Analysis sub-contracted
U/S	Analysis unsuitable for sample due to its matrix or properties
I/S	Insufficient sample
M/S	Sample cannot be located within the laboratory
ND	Not detected (below relevant analytical detection limit)
ç	Sample filtered prior to analysis
§	Please note product present, therefore this result is for indicative purpose only
On the Sample Numbers	
†	Sample type outside the scope of our MCERTS accreditation since matrix not included in method validation
¢	Unsuitable for analysis due to asbestos content
General Statements	
æ	Please note TOC's & LOI's have been repeated and the apparently anomalous results confirmed
¶	UKAS and/or MCERTS accreditation removed due to duration of sample in laboratory prior to testing
c	The BOD analysis was carried out prior to the COD analysis and included an oily layer, which is the likely cause of the anomalous results
Note:	Analysis carried out for organic compounds on water samples containing free product is on a "best endeavour" basis
Note:	All results calculated from organic carbon on a dry weight basis
Note:	Fe(II) and dissolved Fe are analysed by different methods, sometimes leading to slight discrepancy between results
Note:	"Total" results calculated by summing individual components are not rounded
Note:	The reporting limit stated in the LOD column is the standard method reporting limit, derived statistically from validation data, however it is occasionally necessary to raise reporting limits due to matrix interference or limited sample availability
Note:	During soil preparation, best efforts are made to produce analytical subsamples representative of the entire submitted sample, without exclusion of stones

ALcontrol Laboratories

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Lydia Drew
Soiltechnics
Cedar Barn
White Lodge
Walgrave
Northampton
NN6 9PY

17 June 2008

TEST REPORT

Our Report Number: 08-51154

Your Order Reference: 8990

18 soil samples received on 06/06/2008

Final instructions received on 06/06/2008

Project Name: Richmond-upon-Thames College

Project Code: STE1297R

Laboratory analysis started on 06 June 2008
All laboratory analysis completed by 17 June 2008

[redacted]

Sharon Googh
Project Co-Ordinator
ALCONTROL LABORATORIES

[redacted]

Rhys Ashton
Project Co-Ordinator
ALCONTROL LABORATORIES

ALcontrol Laboratories
Sample Description

Job Number: 08-51154
Client: Soiltechnics
Project Code: STE1297R

Matrix: Soil
Project Name: Richmond-upon-Thames College

Laboratory Reference No	Sample Reference	Sample Depth (m)	Date Sampled	Sample Description
321091	DTS10	0.1-0.3	-	Brown sandy clay with gravel
321092	DTS08	1.2-1.5	-	Brown sandy clay with gravel
321093	DTS06	0.05-0.2	-	Dark brown sandy clay with gravel and vegetation
321094	DTS01	0.4-0.55	-	Brown sandy clay with gravel and vegetation
321095	DTS03	0.2-0.4	-	Brown sandy clay with gravel and coal / coke
321096	DTS11	0.9-1.0	-	Brown sandy clay with gravel
321097	DTS16	0.1-0.25	-	Brown sandy clay with gravel and vegetation
321098	DTS12	0.5-0.6	-	Dark brown sandy clay with gravel and coal / coke
321099	DTS13	0.2-0.3	-	Dark brown sandy clay with gravel and coal / coke
321100	DTS05	0.2-0.35	-	Grey & brown sandy clay with gravel and coal / coke
321101	DTS19	0.2-0.4	-	Dark brown sandy clay with gravel and coal / coke
321102	DTS18	0.2-0.4	-	Brown sandy clay with gravel and vegetation
321103	DTS07	2.3-2.5	-	Brown sandy clay with gravel
321104 †	BH03	3.7	-	Grey & brown gravel with sand
321105	BH02	5.4	-	Grey clay
321106	BH03	8	-	Grey clay
321107	BH02	5.2	-	Brown sand with gravel
321108	BH05	9.5	-	Grey clay

ALcontrol Laboratories
Table Of Results

Job Number : 08-51154
Matrix : Soil
Project Code: STE1297R

Project Name: Richmond-upon-Thames College
Client : Soiltechnics

Sample Reference	DTS10	DTS08	DTS06	DTS01	DTS03	Method No	Units	LOD
Sample Depth (m)	0.1-0.3	1.2-1.5	0.05-0.2	0.4-0.55	0.2-0.4			
Date Sampled	-	-	-	-	-			
Date Scheduled	06/06/08	06/06/08	06/06/08	06/06/08	06/06/08			
Laboratory Reference No	321091	321092	321093	321094	321095			
Analysis								
Moisture Content (Wet Weight)	13.0	8.7	19.6	13.3	23.0		%	0.1
Moisture Content (Dry Weight)	15.0	9.6	24.3	15.3	29.8		%	0.1
Arsenic	13	12	20	11	15	069S[M]	mg/kg	3
Beryllium	3.4	< 0.5	1.2	0.7	0.9	069S[M]	mg/kg	0.5
Cadmium	0.7	< 0.5	0.8	< 0.5	0.5	069S[M]	mg/kg	0.5
Chromium	20	15	23	24	26	069S[M]	mg/kg	10
Lead	130	< 10	300	78	290	069S[M]	mg/kg	10
Mercury	< 0.6	< 0.6	1.7	0.7	< 0.6	069S[M]	mg/kg	0.6
Nickel	15	22	21	12	13	069S[M]	mg/kg	4
Selenium	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	069S[M]	mg/kg	2.5
Sulphate (Total Acid Soluble) as SO4	2800	< 200	700	320	9700	025a[M]	mg/kg	200
W/S Sulphate as SO4	0.72	< 0.02	0.02	0.02	1.5	074[M]	g/l	0.02
Sulphur (Total)	2400	< 100	540	200	3700	069S	mg/kg	100
Vanadium	55	26	42	37	36	069S[M]	mg/kg	3
Free Cyanide	< 1	< 1	< 1	< 1	< 1	061S[M]	mg/kg	1
Complex Cyanide	2.7	< 1	< 1	< 1	< 1	061S[I]	mg/kg	1
Total Cyanide	3.0	< 1	< 1	< 1	< 1	061S[M]	mg/kg	1
Organic Matter	1.8	< 0.2	8.5	2.6	0.85	092[I]	%	0.2
Organic Carbon	1.0	< 0.1	4.9	1.5	0.49	092[M]	%	0.1
pH	10.2	7.5	6.6	6.7	10.1	084S[M]	pH Units	1
Elemental Sulphur	760	< 100	< 100	< 100	< 100	032[M]	mg/kg	100

[I] ISO 17025 accredited.
[M] MCERTS accredited for sand, loam and clay.

ALcontrol Laboratories
Table Of Results

Job Number : 08-51154
Matrix : Soil
Project Code: STE1297R

Project Name: Richmond-upon-Thames College
Client : Soiltechnics

Sample Reference	DTS11	DTS16	DTS12	DTS13	DTS05	Method No	Units	LOD
Sample Depth (m)	0.9-1.0	0.1-0.25	0.5-0.6	0.2-0.3	0.2-0.35			
Date Sampled	-	-	-	-	-			
Date Scheduled	06/06/08	06/06/08	06/06/08	06/06/08	06/06/08			
Laboratory Reference No	321096	321097	321098	321099	321100			
Analysis								
Moisture Content (Wet Weight)	13.1	10.3	20.9	14.0	8.5		%	0.1
Moisture Content (Dry Weight)	15.1	11.5	26.4	16.2	9.3		%	0.1
Arsenic	11	16	20	24	8.8	069S[M]	mg/kg	3
Beryllium	0.8	0.7	1.6	4.4	0.6	069S[M]	mg/kg	0.5
Cadmium	< 0.5	< 0.5	0.7	0.9	< 0.5	069S[M]	mg/kg	0.5
Chromium	27	21	24	34	13	069S[M]	mg/kg	10
Lead	17	84	300	400	75	069S[M]	mg/kg	10
Mercury	< 0.6	< 0.6	0.9	1.9	< 0.6	069S[M]	mg/kg	0.6
Nickel	22	15	23	30	13	069S[M]	mg/kg	4
Selenium	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	069S[M]	mg/kg	2.5
Sulphate (Total Acid Soluble) as SO4	< 200	320	540	540	680	025a[M]	mg/kg	200
W/S Sulphate as SO4	< 0.02	< 0.02	0.03	0.03	0.05	074[M]	g/l	0.02
Sulphur (Total)	< 100	190	400	580	440	069S	mg/kg	100
Vanadium	43	34	48	58	23	069S[M]	mg/kg	3
Free Cyanide	< 1	< 1	< 1	< 1	< 1	061S[M]	mg/kg	1
Complex Cyanide	< 1	< 1	< 1	< 1	< 1	061S[I]	mg/kg	1
Total Cyanide	< 1	< 1	< 1	< 1	< 1	061S[M]	mg/kg	1
Organic Matter	0.35	1.9	10	8.6	5.8	092[I]	%	0.2
Organic Carbon	0.20	1.1	5.8	5.0	3.4	092[M]	%	0.1
pH	6.9	7.1	6.0	7.1	9.1	084S[M]	pH Units	1
Elemental Sulphur	< 100	< 100	< 100	< 100	890	032[M]	mg/kg	100

[I] ISO 17025 accredited.
[M] MCERTS accredited for sand, loam and clay.

ALcontrol Laboratories
Table Of Results

Job Number : 08-51154
Matrix : Soil
Project Code: STE1297R

Project Name: Richmond-upon-Thames College
Client : Soiltechnics

Sample Reference	DTS19	DTS18	DTS07	BH03	BH02	Method No	Units	LOD
Sample Depth (m)	0.2-0.4	0.2-0.4	2.3-2.5	3.7	5.4			
Date Sampled	-	-	-	-	-			
Date Scheduled	06/06/08	06/06/08	06/06/08	06/06/08	06/06/08			
Laboratory Reference No	321101	321102	321103	321104 †	321105			
Analysis								
Moisture Content (Wet Weight)	19.6	13.6	11.8	6.3	21.3		%	0.1
Moisture Content (Dry Weight)	24.5	15.8	13.4	6.7	27.1		%	0.1
Arsenic	43	21	-	-	-	069S[M]	mg/kg	3
Beryllium	4.8	1.2	-	-	-	069S[M]	mg/kg	0.5
Cadmium	1.4	0.8	-	-	-	069S[M]	mg/kg	0.5
Chromium	37	42	-	-	-	069S[M]	mg/kg	10
Lead	1100	390	-	-	-	069S[M]	mg/kg	10
Mercury	< 0.6	1.3	-	-	-	069S[M]	mg/kg	0.6
Nickel	65	23	-	-	-	069S[M]	mg/kg	4
Selenium	< 2.5	< 2.5	-	-	-	069S[M]	mg/kg	2.5
Sulphate (Total Acid Soluble) as SO4	860	560	< 200	320	500	025a[M]	mg/kg	200
W/S Sulphate as SO4	0.05	0.09	< 0.02	0.10	0.32	074[M]	g/l	0.02
Sulphur (Total)	900	360	< 100	840	6800	069S	mg/kg	100
Vanadium	100	45	-	-	-	069S[M]	mg/kg	3
Free Cyanide	< 1	< 1	-	-	-	061S[M]	mg/kg	1
Complex Cyanide	< 1	< 1	-	-	-	061S[I]	mg/kg	1
Total Cyanide	< 1	< 1	-	-	-	061S[M]	mg/kg	1
Organic Matter	11	5.1	-	-	-	092[I]	%	0.2
Organic Carbon	6.4	3.0	-	-	-	092[M]	%	0.1
pH	6.5	5.9	7.5	7.3	7.6	084S[M]	pH Units	1
Elemental Sulphur	< 100	< 100	-	-	-	032[M]	mg/kg	100

[I] ISO 17025 accredited.
[M] MCERTS accredited for sand, loam and clay.

ALcontrol Laboratories
Table Of Results

Job Number : 08-51154
Matrix : Soil
Project Code: STE1297R

Project Name: Richmond-upon-Thames College
Client : Soiltechnics

Sample Reference	BH03	BH02	BH05			Method No	Units	LOD
Sample Depth (m)	8	5.2	9.5					
Date Sampled	-	-	-					
Date Scheduled	06/06/08	06/06/08	06/06/08					
Laboratory Reference No	321106	321107	321108					
Analysis								
Moisture Content (Wet Weight)	21.1	7.4	21.4				%	0.1
Moisture Content (Dry Weight)	26.7	8.0	27.3				%	0.1
Arsenic	-	-	-			069S[M]	mg/kg	3
Beryllium	-	-	-			069S[M]	mg/kg	0.5
Cadmium	-	-	-			069S[M]	mg/kg	0.5
Chromium	-	-	-			069S[M]	mg/kg	10
Lead	-	-	-			069S[M]	mg/kg	10
Mercury	-	-	-			069S[M]	mg/kg	0.6
Nickel	-	-	-			069S[M]	mg/kg	4
Selenium	-	-	-			069S[M]	mg/kg	2.5
Sulphate (Total Acid Soluble) as SO4	350	< 200	390			025a[M]	mg/kg	200
W/S Sulphate as SO4	0.27	0.05	0.28			074[M]	g/l	0.02
Sulphur (Total)	3600	620	4100			069S	mg/kg	100
Vanadium	-	-	-			069S[M]	mg/kg	3
Free Cyanide	-	-	-			061S[M]	mg/kg	1
Complex Cyanide	-	-	-			061S[I]	mg/kg	1
Total Cyanide	-	-	-			061S[M]	mg/kg	1
Organic Matter	-	-	-			092[I]	%	0.2
Organic Carbon	-	-	-			092[M]	%	0.1
pH	7.7	7.4	7.9			084S[M]	pH Units	1
Elemental Sulphur	-	-	-			032[M]	mg/kg	100

[I] ISO 17025 accredited.
[M] MCERTS accredited for sand, loam and clay.

ALcontrol Laboratories
Table Of Results

Job Number : 08-51154
Matrix : Soil
Project Code: STE1297R

Project Name: Richmond-upon-Thames College
Client : Soiltechnics

Sample Reference	DTS10	DTS08	DTS06	DTS01	DTS03	Method No	Units	LOD
Sample Depth (m)	0.1-0.3	1.2-1.5	0.05-0.2	0.4-0.55	0.2-0.4			
Date Sampled	-	-	-	-	-			
Date Scheduled	06/06/08	06/06/08	06/06/08	06/06/08	06/06/08			
Laboratory Reference No	321091	321092	321093	321094	321095			
Analysis								
* * PAH SUITE * *								
Naphthalene	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	022S[M]	mg/kg	0.1
Acenaphthylene	0.92	< 0.1	0.20	< 0.1	< 0.1	022S[M]	mg/kg	0.1
Acenaphthene	3.7	< 0.1	< 0.1	< 0.1	0.21	022S[M]	mg/kg	0.1
Fluorene	4.6	< 0.1	< 0.1	< 0.1	0.14	022S[M]	mg/kg	0.1
Phenanthrene	61	< 0.1	0.47	< 0.1	2.0	022S[M]	mg/kg	0.1
Anthracene	18	< 0.1	0.17	< 0.1	0.52	022S[M]	mg/kg	0.1
Fluoranthene	89	< 0.1	1.4	0.21	2.9	022S[M]	mg/kg	0.1
Pyrene	68	< 0.1	1.5	0.18	2.4	022S[M]	mg/kg	0.1
Benzo(a)anthracene	30	< 0.1	0.60	0.10	1.1	022S[M]	mg/kg	0.1
Chrysene	26	< 0.1	0.99	0.12	1.2	022S[M]	mg/kg	0.1
Benzo(b)fluoranthene	23	< 0.1	1.1	0.18	1.5	022S[M]	mg/kg	0.1
Benzo(k)fluoranthene	9.9	< 0.1	0.32	< 0.1	0.56	022S[M]	mg/kg	0.1
Benzo(a)pyrene	18	< 0.1	0.66	0.13	0.97	022S[M]	mg/kg	0.1
Indeno(1,2,3-cd)pyrene	6.4	< 0.1	0.25	< 0.1	0.51	022S[M]	mg/kg	0.1
Dibenzo(a,h)anthracene	1.6	< 0.1	< 0.1	< 0.1	0.13	022S[M]	mg/kg	0.1
Benzo(g,h,i)perylene	6.7	< 0.1	0.31	< 0.1	0.58	022S[M]	mg/kg	0.1
PAH (Sum of EPA 16)	365.66	ND	7.98	ND	14.59	022S[I]	mg/kg	1.6

[I] ISO 17025 accredited.
[M] MCERTS accredited for sand, loam and clay.

ALcontrol Laboratories
Table Of Results

Job Number : 08-51154
Matrix : Soil
Project Code: STE1297R

Project Name: Richmond-upon-Thames College
Client : Soiltechnics

Sample Reference	DTS11	DTS16	DTS12	DTS13	DTS05	Method No	Units	LOD
Sample Depth (m)	0.9-1.0	0.1-0.25	0.5-0.6	0.2-0.3	0.2-0.35			
Date Sampled	-	-	-	-	-			
Date Scheduled	06/06/08	06/06/08	06/06/08	06/06/08	06/06/08			
Laboratory Reference No	321096	321097	321098	321099	321100			
Analysis								
* * PAH SUITE * *								
Naphthalene	< 0.1	< 0.1	< 0.1	< 0.1	2.2	022S[I,M]	mg/kg	0.1
Acenaphthylene	< 0.1	< 0.1	< 0.1	< 0.1	16	022S[I,M]	mg/kg	0.1
Acenaphthene	< 0.1	< 0.1	< 0.1	< 0.1	23	022S[I,M]	mg/kg	0.1
Fluorene	< 0.1	< 0.1	< 0.1	< 0.1	24	022S[I,M]	mg/kg	0.1
Phenanthrene	< 0.1	0.18	0.81	0.77	130	022S[I,M]	mg/kg	0.1
Anthracene	< 0.1	< 0.1	0.21	0.16	52	022S[I,M]	mg/kg	0.1
Fluoranthene	< 0.1	0.32	1.5	2.0	200	022S[I,M]	mg/kg	0.1
Pyrene	< 0.1	0.29	1.3	1.7	150	022S[I,M]	mg/kg	0.1
Benzo(a)anthracene	< 0.1	0.12	0.64	0.90	68	022S[I,M]	mg/kg	0.1
Chrysene	< 0.1	0.12	0.71	1.1	64	022S[I,M]	mg/kg	0.1
Benzo(b)fluoranthene	< 0.1	0.14	0.80	1.5	74	022S[I,M]	mg/kg	0.1
Benzo(k)fluoranthene	< 0.1	< 0.1	0.29	0.51	28	022S[I,M]	mg/kg	0.1
Benzo(a)pyrene	< 0.1	0.10	0.72	1.1	58	022S[I,M]	mg/kg	0.1
Indeno(1,2,3-cd)pyrene	< 0.1	< 0.1	0.32	0.50	26	022S[I,M]	mg/kg	0.1
Dibenzo(a,h)anthracene	< 0.1	< 0.1	< 0.1	0.12	6.4	022S[I,M]	mg/kg	0.1
Benzo(g,h,i)perylene	< 0.1	< 0.1	0.34	0.58	26	022S[I,M]	mg/kg	0.1
PAH (Sum of EPA 16)	ND	ND	7.72	10.88	940.56	022S[I]	mg/kg	1.6

[I] ISO 17025 accredited.
[M] MCERTS accredited for sand, loam and clay.

ALcontrol Laboratories
Table Of Results

Job Number : 08-51154
Matrix : Soil
Project Code: STE1297R

Project Name: Richmond-upon-Thames College
Client : Soiltechnics

Sample Reference	DTS19	DTS18				Method No	Units	LOD
Sample Depth (m)	0.2-0.4	0.2-0.4						
Date Sampled	-	-						
Date Scheduled	06/06/08	06/06/08						
Laboratory Reference No	321101	321102						
Analysis								
* * PAH SUITE * *								
Naphthalene	< 0.1	< 0.1				022S[TM]	mg/kg	0.1
Acenaphthylene	< 0.1	< 0.1				022S[TM]	mg/kg	0.1
Acenaphthene	< 0.1	0.17				022S[TM]	mg/kg	0.1
Fluorene	< 0.1	0.10				022S[TM]	mg/kg	0.1
Phenanthrene	0.51	1.7				022S[TM]	mg/kg	0.1
Anthracene	< 0.1	0.36				022S[TM]	mg/kg	0.1
Fluoranthene	1.3	2.5				022S[TM]	mg/kg	0.1
Pyrene	1.3	2.3				022S[TM]	mg/kg	0.1
Benzo(a)anthracene	0.61	1.0				022S[TM]	mg/kg	0.1
Chrysene	0.75	1.3				022S[TM]	mg/kg	0.1
Benzo(b)fluoranthene	0.80	1.3				022S[TM]	mg/kg	0.1
Benzo(k)fluoranthene	0.29	0.49				022S[TM]	mg/kg	0.1
Benzo(a)pyrene	0.61	0.98				022S[TM]	mg/kg	0.1
Indeno(1,2,3-cd)pyrene	0.34	0.43				022S[TM]	mg/kg	0.1
Dibenzo(a,h)anthracene	< 0.1	0.10				022S[TM]	mg/kg	0.1
Benzo(g,h,i)perylene	0.41	0.51				022S[TM]	mg/kg	0.1
PAH (Sum of EPA 16)	6.91	13.32				022S[I]	mg/kg	1.6

[I] ISO 17025 accredited.
[M] MCERTS accredited for sand, loam and clay.

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Table Of Results - Appendix

Job Number : 08-51154

Project Code: STE1297R

Project Name: Richmond-upon-Thames College
Client : Soiltechnics

Summary of methods contained within report :

Method No.	Reference	Description	Wet/Dry Analysis
061S	In-house method based on Method 4500-CN, "Standard Methods for the Examination of Water and Waste Water", APHA AWWA WEF, Edition 18, 1992	Determination of cyanides and thiocyanate in soil samples by continuous flow colorimetry (Skalar)	W
022S	In-house method	Determination of PAH compounds in soil samples by hexane / acetone extraction followed by GC-MS detection [Note: this method does not separate benzo(j)fluoranthene, and this PAH will be included in the sum of benzo(b)fluoranthene & benzo(k)fluoranthene]	W
084S	In-house method referencing BS1377: Part 3: 1990 and Second Site Property: Environmental Assessment Guidance Version 3: March 2003	Determination of pH by addition of water followed by electrometric measurement	D
074	In-house method based on BS1377 Part 3, "Chemical and Electrochemical Tests", 1990	Determination of 2:1 water soluble sulphate in soil samples by Inductively Coupled Plasma - Optical Emission Spectrometry (ICP-OES)	D
069S	In-house method based on MEWAM "Methods for the Determination of Metals in Soil", HMSO, 1986	Determination of metals in soil samples by aqua-regia digestion followed by ICP-OES detection	D
032	In-house method	Determination of elemental sulphur (with simultaneous PAH screening) by dichloromethane extraction followed by HPLC-UV detection	D
025a	In-house method based on BS1377 Part 3, "Chemical and Electrochemical Tests", 1990	Determination of hydrochloric acid soluble sulphate in soil samples by Inductively Coupled Plasma - Optical Emission Spectrometry (ICP-OES)	D
092	In-house method	Determination of organic matter in soil samples by combustion analyser	D

Soil results are expressed on a dry weight basis. Where the test uses as-received sample, a moisture correction factor is applied to the wet weight result. This factor is determined gravimetrically using weight loss on drying at 30º (+/-5) C.

Appendix

Code	Description
On Results	
*	Detection limit(s) raised due to matrix interference
¥	Detection limit(s) raised due to reduced amount of sample available for analysis
‡	Dilution factor applied due to nature of sample
NAD	No asbestos detected
$	Analysis sub-contracted
U/S	Analysis unsuitable for sample due to its matrix or properties
I/S	Insufficient sample
M/S	Sample cannot be located within the laboratory
ND	Not detected (below relevant analytical detection limit)
ç	Sample filtered prior to analysis
§	Please note product present, therefore this result is for indicative purpose only
On the Sample Numbers	
†	Sample type outside the scope of our MCERTS accreditation since matrix not included in method validation
¢	Unsuitable for analysis due to asbestos content
General Statements	
æ	Please note TOC's & LOI's have been repeated and the apparently anomalous results confirmed
¶	UKAS and/or MCERTS accreditation removed due to duration of sample in laboratory prior to testing
c	The BOD analysis was carried out prior to the COD analysis and included an oily layer, which is the likely cause of the anomalous results
Note:	Analysis carried out for organic compounds on water samples containing free product is on a "best endeavour" basis
Note:	All results calculated from organic carbon on a dry weight basis
Note:	Fe(II) and dissolved Fe are analysed by different methods, sometimes leading to slight discrepancy between results
Note:	"Total" results calculated by summing individual components are not rounded
Note:	The reporting limit stated in the LOD column is the standard method reporting limit, derived statistically from validation data, however it is occasionally necessary to raise reporting limits due to matrix interference or limited sample availability
Note:	During soil preparation, best efforts are made to produce analytical subsamples representative of the entire submitted sample, without exclusion of stones

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08 July 2008

TEST REPORT

Our Report Number: 08-51972

Your Order Reference: 9054

6 water samples received on 27/06/2008

Final instructions received on 27/06/2008 (CoC No. 41242)

Project Name: Richmond- Upon- Thames College

Project Code: STE1297R

Laboratory analysis started on 27 June 2008
All laboratory analysis completed by 08 July 2008

Rexona Rahman
Analytical Reporting Manager
ALCONTROL LABORATORIES

Sharon Gdogh
Project Co-Ordinator
ALCONTROL LABORATORIES

ALcontrol Laboratories
Table Of Results

Job Number : 08-51972
Matrix : Water
Project Code: STE1297R

Project Name: Richmond- Upon- Thames College
Client : Soiltechnics

Sample Reference	BH01	BH02	BH03	BH04	BH05	Method No	Units	LOD
Sample Depth (m)	-	-	-	-	-			
Date Sampled	-	-	-	-	-			
Date Scheduled	27/06/08	27/06/08	27/06/08	27/06/08	27/06/08			
Laboratory Reference No	324614	324615	324616	324617	324618			
Analysis								
Arsenic (Dissolved)	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	080W[I]	mg/l	0.005
Barium (Dissolved)	0.035	0.045	0.044	0.062	0.045	080W[I]	mg/l	0.005
Beryllium (Dissolved)	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	080W[I]	mg/l	0.001
Boron (Dissolved)	0.30	0.48	0.14	0.23	0.072	080W[I]	mg/l	0.005
Cadmium (Dissolved)	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	080W[I]	mg/l	0.001
Chromium (Dissolved)	0.007	0.006	< 0.005	< 0.005	< 0.005	080W[I]	mg/l	0.005
Copper (Dissolved)	0.006	< 0.005	< 0.005	< 0.005	< 0.005	080W[I]	mg/l	0.005
Lead (Dissolved)	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	080W[I]	mg/l	0.005
Magnesium (Dissolved)	-	14	-	-	-	062W[I]	mg/l	0.1
Mercury (Dissolved)	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	080W[I]	mg/l	0.00005
Nickel (Dissolved)	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	080W[I]	mg/l	0.005
Selenium (Dissolved)	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	080W[I]	mg/l	0.005
Vanadium (Dissolved)	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	080W[I]	mg/l	0.005
Zinc (Dissolved)	0.010	0.007	< 0.005	< 0.005	< 0.005	080W[I]	mg/l	0.005
Ammoniacal Nitrogen as NH4	-	0.13	-	-	-	057W[I]	mg/l	0.065
Ammoniacal Nitrogen as N	-	0.10	-	-	-	057W[I]	mg/l	0.05
Free Cyanide	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	061W[I]	mg/l	0.02
Total Cyanide	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	061W[I]	mg/l	0.02
Nitrate as N	5.5	2.4	2.7	< 0.5	< 0.5	086W[I]	mg/l	0.5
pH	7.3	7.1	7.2	7.2	7.0	084W[I]	pH Units	1
Sulphide	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	055W[I]	mg/l	0.05
Sulphate as SO4	40	79	66	300	18	086W[I]	mg/l	10

[I] ISO 17025 accredited.
[N] MCERTS accredited for sand, loam and clay.

ALcontrol Laboratories
Table Of Results

Job Number : 08-51972
Matrix : Water
Project Code: STE1297R

Project Name: Richmond- Upon- Thames College
Client : Soiltechnics

Sample Reference	BH06					Method No	Units	LOD
Sample Depth (m)	-							
Date Sampled	-							
Date Scheduled	27/06/08							
Laboratory Reference No	324619							
Analysis								
Arsenic (Dissolved)	< 0.005					080W[I]	mg/l	0.005
Barium (Dissolved)	0.075					080W[I]	mg/l	0.005
Beryllium (Dissolved)	< 0.001					080W[I]	mg/l	0.001
Boron (Dissolved)	0.30					080W[I]	mg/l	0.005
Cadmium (Dissolved)	< 0.001					080W[I]	mg/l	0.001
Chromium (Dissolved)	< 0.005					080W[I]	mg/l	0.005
Copper (Dissolved)	< 0.005					080W[I]	mg/l	0.005
Lead (Dissolved)	< 0.005					080W[I]	mg/l	0.005
Magnesium (Dissolved)	11					062W[I]	mg/l	0.1
Mercury (Dissolved)	< 0.00005					080W[I]	mg/l	0.00005
Nickel (Dissolved)	0.007					080W[I]	mg/l	0.005
Selenium (Dissolved)	< 0.005					080W[I]	mg/l	0.005
Vanadium (Dissolved)	< 0.005					080W[I]	mg/l	0.005
Zinc (Dissolved)	0.006					080W[I]	mg/l	0.005
Ammoniacal Nitrogen as NH4	0.22					057W[I]	mg/l	0.065
Ammoniacal Nitrogen as N	0.17					057W[I]	mg/l	0.05
Free Cyanide	< 0.02					061W[I]	mg/l	0.02
Total Cyanide	< 0.02					061W[I]	mg/l	0.02
Nitrate as N	2.9					086W[I]	mg/l	0.5
pH	7.3					084W[I]	pH Units	1
Sulphide	< 0.05					055W[I]	mg/l	0.05
Sulphate as SO4	180					086W[I]	mg/l	10

[I] ISO 17025 accredited.
[b] MCERTS accredited for sand, loam and clay.

ALcontrol Laboratories
Table Of Results

Job Number : 08-51972
Matrix : Water
Project Code: STE1297R

Project Name: Richmond- Upon- Thames College
Client : Soiltechnics

Sample Reference	BH01	BH02	BH03	BH04	BH05	Method No	Units	LOD
Sample Depth (m)	-	-	-	-	-			
Date Sampled	-	-	-	-	-			
Date Scheduled	27/06/08	27/06/08	27/06/08	27/06/08	27/06/08			
Laboratory Reference No	324614	324615	324616	324617	324618			
Analysis								
* * PAH SUITE * *								
Naphthalene	< 0.0001	< 0.0001	< 0.0001	0.0012	< 0.0001	022W[I]	mg/l	0.0001
Acenaphthylene	< 0.0001	< 0.0001	< 0.0001	0.0001	< 0.0001	022W[I]	mg/l	0.0001
Acenaphthene	< 0.0001	< 0.0001	< 0.0001	0.0010	< 0.0001	022W[I]	mg/l	0.0001
Fluorene	< 0.0001	< 0.0001	< 0.0001	0.0007	< 0.0001	022W[I]	mg/l	0.0001
Phenanthrene	< 0.0001	< 0.0001	< 0.0001	0.0012	< 0.0001	022W[I]	mg/l	0.0001
Anthracene	< 0.0001	< 0.0001	< 0.0001	0.0003	< 0.0001	022W[I]	mg/l	0.0001
Fluoranthene	< 0.0001	< 0.0001	< 0.0001	0.0003	< 0.0001	022W[I]	mg/l	0.0001
Pyrene	< 0.0001	< 0.0001	< 0.0001	0.0002	< 0.0001	022W[I]	mg/l	0.0001
Benzo(a)anthracene	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	022W[I]	mg/l	0.0001
Chrysene	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	022W[I]	mg/l	0.0001
Benzo(b)fluoranthene	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	022W[I]	mg/l	0.0001
Benzo(k)fluoranthene	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	022W[I]	mg/l	0.0001
Benzo(a)pyrene	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	022W[I]	mg/l	0.0001
Indeno(1,2,3-cd)pyrene	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	022W[I]	mg/l	0.0001
Dibenzo(a,h)anthracene	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	022W[I]	mg/l	0.0001
Benzo(g,h,i)perylene	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	022W[I]	mg/l	0.0001
PAH (Sum of EPA 16)	ND	ND	ND	0.0051	ND	022W[I]	mg/l	0.0001

[I] ISO 17025 accredited.
[N] MCERTS accredited for sand, loam and clay.

ALcontrol Laboratories
Table Of Results

Job Number : 08-51972
Matrix : Water
Project Code: STE1297R

Project Name: Richmond- Upon- Thames College
Client : Soiltechnics

Sample Reference	BH06					Method No	Units	LOD
Sample Depth (m)	-							
Date Sampled	-							
Date Scheduled	27/06/08							
Laboratory Reference No	324619							
Analysis								
* * PAH SUITE * *								
Naphthalene	< 0.0001					022W[I]	mg/l	0.0001
Acenaphthylene	< 0.0001					022W[I]	mg/l	0.0001
Acenaphthene	< 0.0001					022W[I]	mg/l	0.0001
Fluorene	< 0.0001					022W[I]	mg/l	0.0001
Phenanthrene	< 0.0001					022W[I]	mg/l	0.0001
Anthracene	< 0.0001					022W[I]	mg/l	0.0001
Fluoranthene	< 0.0001					022W[I]	mg/l	0.0001
Pyrene	< 0.0001					022W[I]	mg/l	0.0001
Benzo(a)anthracene	< 0.0001					022W[I]	mg/l	0.0001
Chrysene	< 0.0001					022W[I]	mg/l	0.0001
Benzo(b)fluoranthene	< 0.0001					022W[I]	mg/l	0.0001
Benzo(k)fluoranthene	< 0.0001					022W[I]	mg/l	0.0001
Benzo(a)pyrene	< 0.0001					022W[I]	mg/l	0.0001
Indeno(1,2,3-cd)pyrene	< 0.0001					022W[I]	mg/l	0.0001
Dibenzo(a,h)anthracene	< 0.0001					022W[I]	mg/l	0.0001
Benzo(g,h,i)perylene	< 0.0001					022W[I]	mg/l	0.0001
PAH (Sum of EPA 16)	ND					022W[I]	mg/l	0.0001

[I] ISO 17025 accredited.
[N] MCERTS accredited for sand, loam and clay.

ALcontrol Laboratories
Table Of Results - Appendix

Job Number : 08-51972

Project Code: STE1297R

Project Name: Richmond- Upon- Thames College
Client : Soiltechnics

Summary of methods contained within report :

Method No.	Reference	Description	Wet/Dry Analysis
086W	In-house method	Determination of anion content in aqueous samples using ion chromatographic determination with electrical conductivity detector	
084W	In-house method	Determination of pH in aqueous samples by direct electrometric measurement	
080W	In-house method based on MEWAM "Inductively Coupled Plasma Spectrometry", HMSO, 1996	Determination of metals in aqueous samples by nitric acid digestion followed by Inductively Coupled Plasma - Mass Spectrometry detection (ICP-MS)	
062W	In-house method based on MEWAM "Inductively Coupled Plasma Spectrometry", HMSO, 1996	Determination of metals in aqueous samples by nitric digestion followed by ICP-OES detection	
061W	In-house method based on Method 4500-CN, "Standard Methods for the Examination of Water and Waste Water", APHA AWWA WEF, Edition 18, 1992	Determination of cyanides and thiocyanate in aqueous samples by continuous flow colorimetry (Skalar)	
057W	In-house method based on Method 18.13 "Environmental Assessment Guidance" Version 3, Second Site Property, March 2003	Determination of ammoniacal nitrogen in aqueous samples by ion selective electrode	
055W	In-house method based on MEWAM "Sulphide in Waters and Effluents", HMSO, 1983	Determination of sulphide in aqueous samples by direct colourimetry	
022W	In-house method	Determination of PAH compounds in aqueous samples by pentane extraction followed by GC-MS detection [Note: this method does not separate benzo(j)fluoranthene, and this PAH will be included in the sum of benzo(b)fluoranthene & benzo(k)fluoranthene]	

Appendix

Code	Description
On Results	
*	Detection limit(s) raised due to matrix interference
¥	Detection limit(s) raised due to reduced amount of sample available for analysis
‡	Dilution factor applied due to nature of sample
NAD	No asbestos detected
$	Analysis sub-contracted
U/S	Analysis unsuitable for sample due to its matrix or properties
I/S	Insufficient sample
M/S	Sample cannot be located within the laboratory
ND	Not detected (below relevant analytical detection limit)
ç	Sample filtered prior to analysis
§	Please note product present, therefore this result is for indicative purpose only
On the Sample Numbers	
†	Sample type outside the scope of our MCERTS accreditation since matrix not included in method validation
¢	Unsuitable for analysis due to asbestos content
General Statements	
æ	Please note TOC's & LOI's have been repeated and the apparently anomalous results confirmed
¶	UKAS and/or MCERTS accreditation removed due to duration of sample in laboratory prior to testing
c	The BOD analysis was carried out prior to the COD analysis and included an oily layer, which is the likely cause of the anomalous results
Note:	Analysis carried out for organic compounds on water samples containing free product is on a "best endeavour" basis
Note:	All results calculated from organic carbon on a dry weight basis
Note:	Fe(II) and dissolved Fe are analysed by different methods, sometimes leading to slight discrepancy between results
Note:	"Total" results calculated by summing individual components are not rounded
Note:	The reporting limit stated in the LOD column is the standard method reporting limit, derived statistically from validation data, however it is occasionally necessary to raise reporting limits due to matrix interference or limited sample availability
Note:	During soil preparation, best efforts are made to produce analytical subsamples representative of the entire submitted sample, without exclusion of stones

Statistical analysis of test data in relation to concentrations of inorganic chemical contaminants

Receptor: End user
Assessment criteria: Industrial/Commercial

Contaminant	Maximum value test									Mean value test				
	Number of test results (sample size, n)	Outlier test statistics (T)	Critical Values 5%	Critical Values 10%	Number of samples considered outliers	Outlier sample location: Exploration point	Outlier sample location: Sample depth (m)	Outlier sample location: Concentration of outlier (mg/kg)	Further investigation suggested from test result alone (see note 3)	95th Percentile value (mg/kg)	Soil Guideline value (mg/kg)	Generic Assessment Criteria (mg/kg)	Guideline exceeded by 95th percentile value?	95th percentile value (all tests) (mg/kg)
Arsenic	12	2.234	2.29	2.13	1	DTS19	0.2-0.4	43	Y					
Arsenic	11	1.471	2.25	2.1	1					18.3	500	-	N	22.7
Beryllium	12	1.690	2.29	2.13	0					2.5	-	1950	N	2.5
Cadmium (pH - 5.9)	12	2.298	2.29	2.13	1	DTS19	0.2-0.4	1.4	Y					
Cadmium (pH - 5.9)	11	1.619	2.25	2.1	1					0.7	1400	-	N	0.8
Chromium (tot)	12	1.610	2.29	2.13	0					29.9	5000	-	N	29.9
Cyanide (free)	12	0.000	2.29	2.13	0					1.0	-	n/a	N	1.0
Cyanide (total)	12	3.175	2.29	2.13	1	DTS10	0.1-0.3	3	Y					
Cyanide (total)	11	0.000	2.25	2.1	1					1.0	-	n/a	N	1.5
Lead	12	1.519	2.29	2.13	0					419.5	750	-	N	419.5
Mercury	12	1.937	2.29	2.13	0					1.1	480	-	N	1.1
Nickel	12	2.491	2.29	2.13	1	DTS19	0.2-0.4	65	Y					
Nickel	11	1.638	2.25	2.1	1					22.1	5000	-	N	30.3
Selenium	12	0.957	2.29	2.13	0					2.5	8000	-	N	2.5
Sulfur	12	2.235	2.29	2.13	1	DTS05	0.2-0.35	890	Y					
Sulfur	11	3.015	2.25	2.1	2	DTS10	0.1-0.3	760	Y					
Sulfur	10	0.000	2.18	2.04	2					100.0	-	n/a	N	367.8
Vanadium	12	2.230	2.29	2.13	1	DTS19	0.2-0.4	100	Y					
Vanadium	11	1.363	2.25	2.1	1					46.6	-	4250	N	56.0

Notes
1. Maximum value and mean value test carried out on number of test results available (refer to Contaminated Land report no 7 (CLR7))
2. Outlier samples identified by maximum value test are removed from sample population to carry out mean value test.
3. Further investigations suggested by statistical analysis may not necessarily be required. Refer to report for discussion.
4. Measured concentrations that are below the analytical detection limit, are assigned a value equal to the detection limit for the purposes of carrying out the above statistical analysis (in accordance with A8 of CLR7).
5. Generic Assessment Criteria (GAC) as presented in "Generic Assessment Criteria for Human Health Risk Assessment" published by Land Quality Management (LQM) and the Chartered Institute of Environmental Health (CIEH).

Outlier test statistic lies between critical values

Outlier test statistic is zero

Project
Richmond-Upon-Thames College, Egerton Road, Twickenham

SOILTECHNICS

Statistical analysis of test data in relation to concentrations of organic chemical contaminants

Receptor: End user
Assessment criteria: Industrial/Commercial

Contaminant	Maximum value test									Mean value test				
	Number of test results (sample size, n)	Outlier test statistics (T)	Critical Values 5%	Critical Values 10%	Number of samples considered outliers	Outlier sample location: Exploration point	Outlier sample location: Sample depth (m)	Outlier sample location: Concentration of outlier (mg/kg)	Further investigation suggested from test result alone (see note 3)	95th Percentile value (mg/kg)	Soil Guideline value (mg/kg)	Generic Assessment Criteria (mg/kg)	Guideline exceeded by 95th percentile value?	95th percentile value (all tests) (mg/kg)
Benzo(a)pyrene	15	2.394	2.4	2.25	1	DTS05	0.2-0.35	58	Y					
Benzo(a)pyrene	14	2.508	2.37	2.21	2	DTS10	0.1-0.3	18	Y					
Benzo(a)pyrene	13	1.122	2.32	2.175	2					0.7	-	29.7	N	12.4
Dibenzo(a,h)anthracene	15	2.962	2.4	2.25	1	DTS05	0.2-0.35	6.4	Y					
Dibenzo(a,h)anthracene	14	3.453	2.37	2.21	2	DTS10	0.1-0.3	1.6	Y					
Dibenzo(a,h)anthracene	13	2.682	2.32	2.175	3	DTS03	0.2-0.4	0.13	Y					
Dibenzo(a,h)anthracene	12	3.175	2.29	2.13	4	DTS13	0.2-0.3	0.12	Y					
Dibenzo(a,h)anthracene	11	0.000	2.25	2.1	4					0.1	-	29.7	N	1.4
Fluorene	15	2.304	2.4	2.25	1	DTS05	0.2-0.35	24	Y					
Fluorene	14	2.645	2.37	2.21	2	TP14	0.4	12	Y					
Fluorene	13	3.315	2.32	2.175	3	DTS10	0.1-0.3	4.6	Y					
Fluorene	12	3.175	2.29	2.13	4	DTS03	0.2-0.4	0.14	Y					
Fluorene	11	0.000	2.25	2.1	4					0.1	-	59000	N	5.8
Naphthalene	15	3.584	2.4	2.25	1	DTS05	0.2-0.35	2.2	Y					
Naphthalene	14	3.474	2.37	2.21	2	TP14	0.4	0.15	Y					
Naphthalene	13	0.000	2.32	2.175	2					0.1	-	290	N	0.5

Notes
1. Maximum value and mean value test carried out on number of test results available (refer to Contaminated Land report no 7 (CLR7))
2. Outlier samples identified by maximum value test are removed from sample population to carry out mean value test.
3. Further investigations suggested by statistical analysis may not necessarily be required. Refer to report for discussion.
4. Measured concentrations that are below the analytical detection limit, are assigned a value equal to the detection limit for the purposes of carrying out the above statistical analysis (in accordance with A8 of CLR7).
5. Generic Assessment Criteria (GAC) as presented in "Generic Assessment Criteria for Human Health Risk Assessment" published by Land Qulaity Management (LQM) and the Chartered Institute of Environmental Health (CIEH).

Outlier test statistic lies between critical values

Outlier test statistic is zero

Project
Richmond-Upon-Thames, Egerton Road, Twickenham
STE1297R

SOILTECHNICS

Summary of petroleum hydrocarbon test results

Indicators (Red highlights indicate exceedance of guideline value)

Indicator	unit	Guideline value	Concentration	
			TP09	TP14
			0.1-0.2	0.4
Toluene	mg/kg	350	< 0.010	< 0.010
Ethylbenzene	mg/kg	48000	< 0.010	< 0.010
Naphthalene	mg/kg	720	0.1	0.15
Benzo(a)pyrene	mg/kg	29.7	0.16	1
Dibenz(a,h)anthracene	mg/kg	29.7	< 0.1	< 0.1

Hydrocarbon banding (Red highlights indicate exceedance of GAC value)

Fraction	unit	GAC	Concentration	
			TP09	TP14
			0.1-0.2	0.4
Aliphatic				
EC 5 - 6	mg/kg	168	0.02	0.02
EC >6 - 8	mg/kg	535	0.01	0.02
EC >8 - 10	mg/kg	160	0.05	0.02
EC >10 - 12	mg/kg	30600	0.13	0.09
EC >12 - 16	mg/kg	30600	26	28
EC >16 - 35	mg/kg	631000	13.9	92
EC >35 - 44	mg/kg			
Aromatic				
EC 5 - 7 (benzene)	mg/kg	62.1	< 0.01	< 0.01
EC >7 - 8 (toluene)	mg/kg	71.1	< 0.01	< 0.01
EC >8 - 10	mg/kg	263	0.07	0.04
EC >10 - 12	mg/kg	1450	0.2	0.13
EC >12 - 16	mg/kg	12500	16	140
EC >16 - 21	mg/kg	9400	3.7	240
EC >21 - 35	mg/kg	9460	18	220
EC >35 - 44	mg/kg			

Soil organic matter 4.5 %

Notes

1. Generic Assessment Criteria (GAC) as presented in "Generic Assessment Criteria for Human Health Risk Assessment" published by Land Quality Management (LQM) and the Chartered Institute of Environmental Health (CIEH).

Project
Richmond-Upon-Thames College
STE1297R

SOILTECHNICS

Date/Time	Location	Atmos-pheric pressure (mB)	Temper-ature (°C)	Methane, CH_4 (%v/v) *Chg*		Carbon Dioxide, CO_2 (%v/v) *Chg*		Oxygen, O_2 (%v/v)		Balance	Lower Explosive Limit	Gas Flow (q)
				Peak	Steady	Peak	Steady	Minimum	Average	(%v/v)	(% LEL)	(l/Hr)
20/06/2008 12:10	BH01	1013	16.0	0.0	0.0	2.0	2.0	18.5	18.5	79.5	0.0	0.0
20/06/2008 12:14	BH02	1013	16.0	0.0	0.0	2.0	0.1	18.8	20.5	79.4	0.0	0.0
20/06/2008 10:56	BH03	1013	16.0	0.1	0.0	5.2	5.2	6.7	6.6	88.2	0.0	0.0
20/06/2008 11:41	BH04	1013	16.0	0.0	0.0	0.5	0.4	19.3	19.5	80.1	0.0	0.0
20/06/2008 11:22	BH05	1013	16.0	0.0	0.0	5.0	5.0	0.3	0.3	94.7	0.0	0.0
20/06/2008 11:10	BH06	1013	16.0	0.0	0.0	4.7	4.2	7.4	7.4	88.4	0.0	0.0
08/07/2008 12:32	BH01	1003	18.0	0.0	0.0	0.1	0.0	20.2	20.4	79.6	0.0	0.0
08/07/2008 12:40	BH02	1004	18.0	0.0	0.0	0.0	0.0	0.0	20.3	79.7	0.0	0.0
08/07/2008 12:56	BH03	1004	18.0	0.0	0.0	5.0	5.0	10.4	10.4	84.6	0.0	0.0
08/07/2008 13:10	BH04	1005	18.0	0.0	0.0	1.0	1.0	17.2	17.3	81.7	0.0	0.0
08/07/2008 13:21	BH05	1005	18.0	0.0	0.0	6.1	6.1	0.2	0.2	93.7	0.0	0.0
08/07/2008 13:41	BH06	1005	18.0	0.0	0.0	4.6	4.6	14.9	14.9	80.5	0.0	0.0
				0.1	0.0	6.1	6.1	0.0	0.2	94.7	0.0	0.1
				0.0	0.0	3.0	2.8	11.2	13.0	84.2	0.0	0.1

Peak hazardous gas flow rate *Qhgs*		Steady hazardous gas flow rate *Qhgs*		NHBC Guideline	NHBC Guideline	Characteristic gas situation	Potentially Explosive	Water Level (m)
CH_4	CO_2	CH_4	CO_2	(Peak)	(Steady)			
0.00	0.00	0.00	0.00	GREEN	GREEN	ONE	NO	1.4
0.00	0.00	0.00	0.00	GREEN	GREEN	ONE	NO	1.33
0.00	0.00	0.00	0.00	AMBER 1	AMBER 1	TWO	NO	1.4
0.00	0.00	0.00	0.00	GREEN	GREEN	ONE	NO	1.6
0.00	0.00	0.00	0.00	GREEN	GREEN	TWO	NO	2.37
0.00	0.00	0.00	0.00	GREEN	GREEN	ONE	NO	2.4
0.00	0.00	0.00	0.00	GREEN	GREEN	ONE	NO	1.36
0.00	0.00	0.00	0.00	GREEN	GREEN	ONE	NO	1.33
0.00	0.00	0.00	0.00	GREEN	GREEN	TWO	NO	1.44
0.00	0.00	0.00	0.00	GREEN	GREEN	ONE	NO	1.62
0.00	0.00	0.00	0.00	AMBER 1	AMBER 1	TWO	NO	2.38
0.00	0.00	0.00	0.00	GREEN	GREEN	ONE	NO	2.54
0.00	0.01	0.00	0.01	AMBER1	AMBER 1	TWO	**Worst case scenario**	
0.00	0.00	0.00	0.00	GREEN	GREEN	ONE	**Average site scenario**	

Additional Considerations

Notes:
Gas Screening Value (GSV) derived by mulitlying the peak gas concentration (%) by the peak flow rate (l/h).

The gas analyser is capable of measuring flow to an accuracy of 0.1l/h. Below this value the analyser records zero flow. Adopting a precautionary approach we have used a flow rate of 0.1l/h when the analyser records zero with this flow rate used to determine the gas screening value.

SOILTECHNICS

Record of in-situ gas and water level monitoring results

Project
Richmond-Upon-Thames College, Twickenham

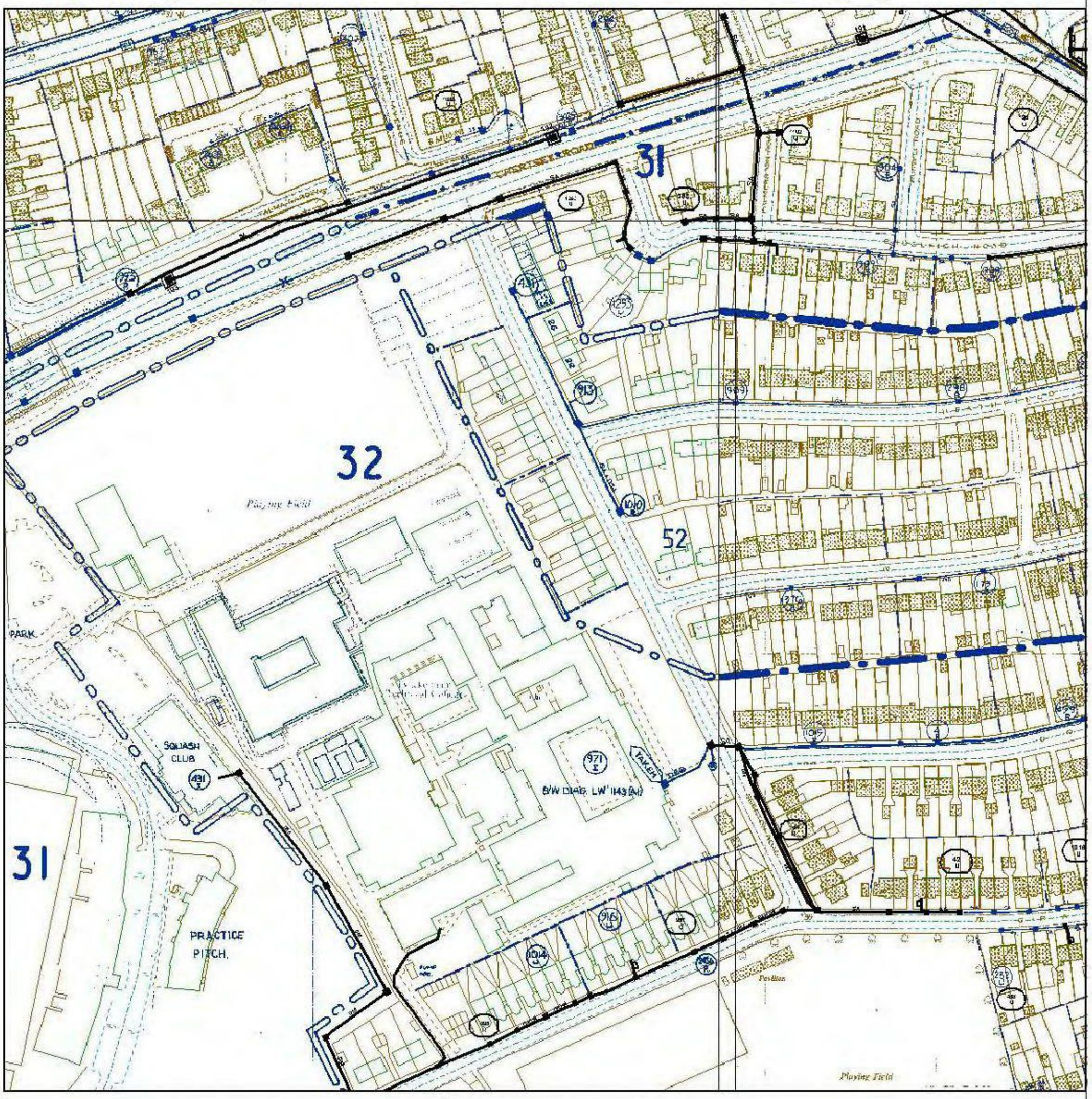
Project Reference
STE1297R

Location Plan or Drawing No.
D-STE1297R-02

Draft
Preliminary

Appendix
K

Maps by email Plant Information Reply



IMPORTANT WARNING

Information regarding the location of BT apparatus is given for your assistance and is intended for general guidance only. No guarantee is given of its accuracy. It should not be relied upon in the event of excavations or other works being made near to BT apparatus which may exist at various depths and may deviate from the marked route.

DIAL BEFORE YOU DIG

FOR PROFESSIONAL ON SITE ASSISTANCE PRIOR TO COMMENCEMENT OF EXCAVATION WORKS

ADVANCE NOTICE REQUIRED
(Office hours: Monday-Friday 08.00 to 17.00)

Tel: 0800 9173993
E-mail: dbyd@openreach.co.uk
Website: www.dialbeforeyoudig.com

KEY TO BT SYMBOLS

- UNDERGROUND PLANT
- A/C, D/W or W — OVERHEAD PLANT
- JOINT BOX
- 456 OR 456 — DISTRIBUTION POINT
- OR 72 — MANHOLE
- DP BOUNDARY
- OR — OTHER BT BOUNDARY
- POLE
- CABINET
- BURIED JOINT
- J — JOINTING POST
- PROPOSED U/G
- A/C, D/W or W — PROPOSED O/H
- PROPOSED BOX

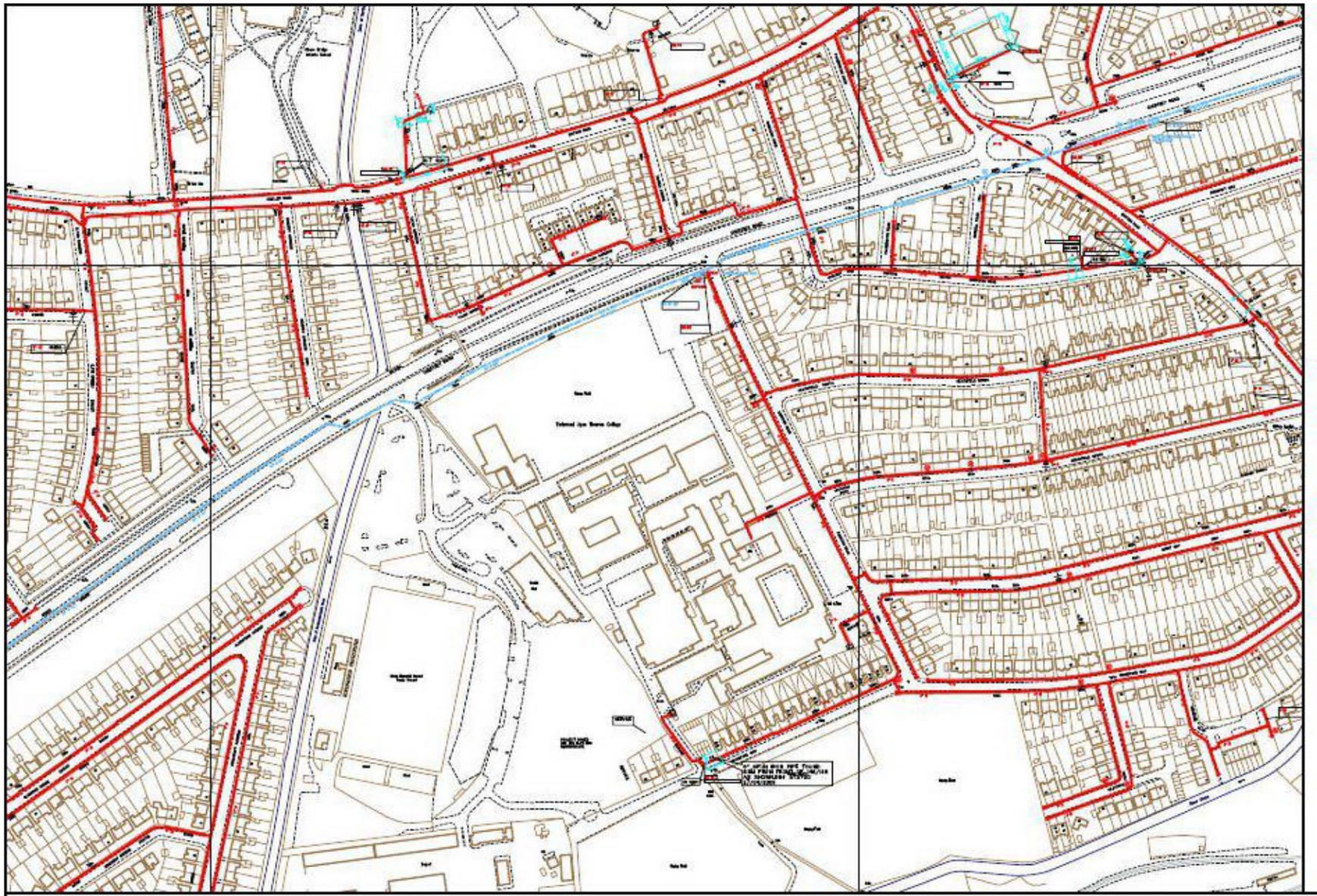
Other proposed plant is shown using dashed lines. BT symbols not listed above may be disregarded. Existing BT plant may not be recorded. Information valid at the time of preparation.

openreach
a BT Group business

BT ref: FFT12340B

Map reference (centre): TQ1542073848

Issued: 12/05/08 12:37:09



SCALE: Not to scale

USER ID: mikeb

DATE: 17/06/2008

EXTRACT DATE: 11/03/2008

MAP REF: TQ1573

CENTRE: 515342, 173859

LP MAINS

MP MAINS

IP MAINS

LHP MAINS

NHP MAINS

Some examples of Plant Items:

Valve

Depth of Cover

Syphon

Diameter Change

Material Change

This plan shows those pipes owned by National Grid Gas plc in their role as a Licensed Gas Transporter (GT). Gas pipes owned by other GTs, or otherwise privately owned, may be present in this area. Information with regard to such pipes should be obtained from the relevant owners. The information shown on this plan is given without warranty, the accuracy thereof cannot be guaranteed. Service pipes, valves, syphons, stub connections, etc. are not shown but their presence should be anticipated. No liability of any kind whatsoever is accepted by National Grid Gas plc or their agents, servants or contractors for any error or omission. Safe digging practices, in accordance with HS(G)47, must be used to verify and establish the actual position of mains, pipes, services and other apparatus on site before any mechanical plant is used. It is your responsibility to ensure that this information is provided to all persons (either direct labour or contractors) working for you on or near gas apparatus. The information included on this plan should not be referred to beyond a period of 28 days from the date of issue. Further information on all DR4s can be determined by calling the DR4 hotline on 01455 892426 (9am-5pm) A DR4 is where a potential error has been identified within the asset record and a process is currently underway to investigate and resolve the error as appropriate.

MAPS Viewer Version 5.6.0.1

Local Machine

Asset Location Search

Andy Keeler
Soiltechnics Limited
Cedar Barn
White Lodge
NORTHAMPTON
NN6 9PY

Search address supplied

Richmond-upon-Thames College
Egerton Road
Twickenham
London
TW2 7JS

Your reference STE1297R
Our reference ALS/ALS Standard/2008_1162211

Search date 12 May 2008

Thames Water Utilities Ltd

Property Insight
PO Box 3189
Slough SL1 4WW

DX 151280 Slough 13

T 0118 925 1504
F 0118 923 6655/57
E searches@thameswater.co.uk
I www.twpropertyinsight.co.uk

Registered in England and Wales
No 2366661. Registered office
Clearwater Court, Vastern Road
Reading RG1 8DB

Asset Location Search

Search address supplied: Richmond-upon-Thames College, Egerton Road, Twickenham, London, TW2 7JS

Dear Sir / Madam

An Asset Location Search is recommended when undertaking a site development. It is essential to obtain information on the size and location of clean water and sewerage assets to safeguard against expensive damage and allow cost-effective service design.

This search provides maps showing the position, size of Thames Water assets close to the proposed development and also manhole cover and invert levels, where available.

Please note that none of the charges made for this report relate to the provision of Ordnance Survey mapping information. The replies contained in this letter are given following inspection of the public service records available to this company. No responsibility can be accepted for any error or omission in the replies.

You should be aware that the information contained on these plans is current only on the day that the plans are issued. The plans should only be used for the duration of the work that is being carried out at the present time. Under no circumstances should this data be copied or transmitted to parties other than those for whom the current work is being carried out.

Thames Water do update these service plans on a regular basis and failure to observe the above conditions could lead to damage arising to new or diverted services at a later date.

Contact Us

If you have any further queries regarding this enquiry please feel free to contact a member of the team on 0118 925 1504, or use the address below:

Thames Water Utilities Ltd
Property Insight
PO Box 3189
Slough
SL1 4WW

Tel: 0118 925 1504
Fax: 0118 923 6657

Email: searches@thameswater.co.uk
Web: www.twpropertyinsight.co.uk

Thames Water Utilities Ltd

Property Insight
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T 0118 925 1504
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E searches@thameswater.co.uk
I www.twpropertyinsight.co.uk

Registered in **England and Wales**
No 2366661, Registered office
Clearwater Court, Vastern **Road**
Reading RG1 8DB

Asset Location Search

Waste Water Services

Please provide a copy extract from the public sewer map.

Enclosed is a map showing the approximate lines of our sewers. Our plans do not show sewer connections from individual properties or any sewers not owned by Thames Water unless specifically annotated otherwise. Records such as "private" pipework are in some cases available from the Building Control Department of the relevant Local Authority.

Where the Local Authority does not hold such plans it might be advisable to consult the property deeds for the site or contact neighbouring landowners.

This report relates only to sewerage apparatus of Thames Water Utilities Ltd, it does not disclose details of cables and or communications equipment that may be running through or around such apparatus.

The sewer level information contained in this response represents all of the level data available in our existing records. Should you require any further Information, please refer to the relevant section within the 'Further Contacts' page found later in this document.

For your guidance:

- The Company is not generally responsible for rivers, watercourses, ponds, culverts or highway drains. If any of these are shown on the copy extract they are shown for information only.
- Sewers indicated on the extract of the public sewer map as being subject to an agreement under Section 104 of the Water Industry Act 1991 are not an 'as constructed' record. It is recommended that these details are checked with the developer.

Clean Water Services

Please provide a copy extract from the public water main map.

Enclosed is a map showing the approximate positions of our water mains and associated apparatus. Please note that records are not kept of the positions of individual domestic supplies.

For your information, there will be a pressure of at least 10m head at the outside stop valve. If you would like to know the static pressure, please contact our Customer Centre on 0845 920 0800. The Customer Centre can also arrange for a full flow and pressure test to be carried out for a fee.

Thames Water Utilities Ltd

Property Insight
PO Box 3189
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I www.twpropertyinsight.co.uk

Registered in England and Wales
No 2366661. Registered office
Clearwater Court, Vastern Road
Reading RG1 8DB

Asset Location Search

For your guidance:

- Assets other than vested water mains may be shown on the plan, for information only.
- If an extract of the public water main record is enclosed, this will show known public water mains in the vicinity of the property. It should be possible to estimate the likely length and route of any private water supply pipe connecting the property to the public water network.

Payment for this Search

An invoice is enclosed. Please send remittance to Thames Water Utilities Ltd., PO Box 223, Swindon, SN38 2TW.

Thames Water Utilities Ltd

Property Insight
PO Box 3189
Slough SL1 4WW

DX 151280 Slough 13

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F 0118 923 6655/57
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I www.twpropertyinsight.co.uk

Registered in England and Wales
No. 2366661, Registered office
Clearwater Court, Vastern Road
Reading RG1 8DB

Asset Location Search

Further contacts:

Waste Water queries

Should you require verification of the invert levels of public sewers, by site measurement, you will need to approach the relevant Thames Water Area Network Office for permission to lift the appropriate covers. This permission will usually involve you completing a TWOSA form. For further information please contact our Customer Center on Tel: 0845 920 0800. Alternatively, a survey can be arranged, for a fee, through our Customer Centre on the above number.

If you have any questions regarding sewer connections, building over issues or any other questions regarding operational issues please direct them to our service desk. Which can be contacted by writing to:

Developer Services (Waste Water)
Thames Water
Clear Water Court
Vastern Road
Reading
RG1 8DB

Tel: 0845 850 2777
Fax: 0118 923 6613
Email: developer.services@thameswater.co.uk

Should you require any further information regarding budget estimates, diversions or stopping up notices then please contact:

DevCon Team
Asset Investment
Thames Water
Maple Lodge STW
Denham Way
Rickmansworth
Hertfordshire
WD3 9SQ

Tel: 01923 898 072
Fax: 01923 898 106
Email: devcon.team@thameswater.co.uk

Thames Water Utilities Ltd

Property Insight
PO Box 3189
Slough SL1 4WW

DX 151280 Slough 13

T 0118 925 1504
F 0118 923 6655/57
E searches@thameswater.co.uk
I www.twpropertyinsight.co.uk

Registered in England and Wales
No. 2366661, Registered office
Clearwater Court, Vastern Road
Reading RG1 8DB

Asset Location Search

Clean Water queries

Should you require any advice concerning clean water operational issues or clean water connections, please contact our Kew Service Desk by writing to:

Clean Water Design
Thames Water Utilities
1 Kew Bridge Road
Brentford
Middlesex
TW8 0EF

Tel: 0845 850 2777
Fax: 0208 213 8833
Email: developer.services@thameswater.co.uk

Thames Water Utilities Ltd

Property Insight
PO Box 3189
Slough SL1 4WW

DX 151280 Slough 13

T 0118 925 1504
F 0118 923 6655/57
E searches@thameswater.co.uk
I www.twpropertyinsight.co.uk

Registered in England and Wales
No 2366661. Registered office
Clearwater Court, Vastern Road
Reading RG1 8DB

position of the apparatus shown on this plan is given without obligation and warranty, and the accuracy cannot be guaranteed. Service pipes are not shown but their presence should be anticipated. No liability of any kind soever is accepted by Thames Water for any error or omission. The actual position of mains and services must be verified and established on site before any works are undertaken.

metre intervals

GLE hardcopy facility - Normal Map.
e plot is centred on (515338 , 173813), which is in TQ1573NW. Printed on 12 May 2008 at 15:52:58 by RIMISSON.

nments:
ver plan

'rintbox (515084,173559) -> (515592,174067)
'entral Mapsheet : TQ1573NW
Jser : RIMISSON
'ime : Mon May 12 15:53:10 2008

: position of apparatus shown on this plan is given without obligation and warranty, and the accuracy cannot be guaranteed. Service pipes are not shown but their presence should be anticipated. No liability of any kind whatsoever is accepted by Thame ter for any error or omission. The actual position of mains and services must be verified and established on site before any works are undertaken.

. Levels quoted in metres Ordnance Newlyn Datum. The value -9999.00 indicates no survey information is available.

(515524,174052) there is a MANHOLE with SHORT NUMBER=5006 COVER= 8.64 INVERT= 7.17
(515514,174066) there is a MANHOLE with SHORT NUMBER=5008 COVER= 8.60 INVERT= 7.33
(515521,174048) there is a MANHOLE with SHORT NUMBER=5009 COVER= 8.61 INVERT= 7.40
(515545,174057) there is a MANHOLE with SHORT NUMBER=5010 COVER= 8.45 INVERT= 7.54
(515579,174067) there is a MANHOLE with SHORT NUMBER=5011 COVER= 8.46 INVERT= 7.42
(515592,174061) there is a MANHOLE with SHORT NUMBER=5012 COVER= 8.52 INVERT= 7.01
(515582,173754) there is a MANHOLE with SHORT NUMBER=5702 COVER= -9999.00 INVERT= -9999.00
(515580,173752) there is a MANHOLE with SHORT NUMBER=5704 COVER= -9999.00 INVERT= -9999.00
(515592,173837) there is a MANHOLE with SHORT NUMBER=5801 COVER= -9999.00 INVERT= -9999.00
(515589,173839) there is a MANHOLE with SHORT NUMBER=5804 COVER= -9999.00 INVERT= -9999.00
(515578,173908) there is a MANHOLE with SHORT NUMBER=5902 COVER= -9999.00 INVERT= -9999.00
(515588,173992) there is a MANHOLE with SHORT NUMBER=5903 COVER= -9999.00 INVERT= -9999.00
(515575,173911) there is a MANHOLE with SHORT NUMBER=5905 COVER= -9999.00 INVERT= -9999.00
(515585,173989) there is a MANHOLE with SHORT NUMBER=5906 COVER= -9999.00 INVERT= -9999.00
(515564,173760) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515564,173776) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515569,173902) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515569,173890) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515570,173889) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515571,173920) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515571,173828) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515571,173932) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515572,173816) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515476,173887) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515476,173886) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515585,174058) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515572,174054) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515569,174053) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515568,174042) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515568,174039) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515572,173933) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515573,173815) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515574,173917) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515574,173933) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515574,173905) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515575,173888) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515575,173859) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515575,173832) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515592,173778) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515591,173777) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515591,173765) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515580,173845) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515580,173778) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515579,173861) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515576,173847) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515576,173818) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515576,173860) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515577,173778) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515578,173745) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515578,173741) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00

rintbox (515084,173559) -> (515592,174067)
Central Mapsheet : TQ1573NW
Jser : RIMISSON
Time : Mon May 12 15:53:10 2008

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(515528,173836) there is a MANHOLE with SHORT NUMBER=5803 COVER= -9999.00 INVERT= -9999.00
(515521,173998) there is a MANHOLE with SHORT NUMBER=5901 COVER= -9999.00 INVERT= -9999.00
(515518,173995) there is a MANHOLE with SHORT NUMBER=5904 COVER= -9999.00 INVERT= -9999.00
(515515,173933) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515515,173921) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515515,173932) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515517,173813) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515539,173905) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515540,173733) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515543,173815) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515543,173933) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515543,173917) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515542,173830) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515542,173932) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515542,173920) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515542,173815) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515524,173888) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515541,173827) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515561,173744) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515560,173933) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515558,173933) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515558,173889) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515558,173814) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515555,173889) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515552,173776) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515549,173776) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515548,173842) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515564,173859) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515563,173775) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515563,173763) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515563,173999) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515562,173745) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515561,173859) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515561,173814) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515547,173717) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515529,173933) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515528,173814) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515547,173719) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515546,173859) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515546,173846) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515545,173858) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515527,173888) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515540,173731) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515539,173888) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515519,173764) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515518,173933) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515538,173889) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515538,173776) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515538,173903) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515496,173913) there is a MANHOLE with SHORT NUMBER=4909 COVER= -9999.00 INVERT= -9999.00

rintbox (515084,173559) -> (515592,174067)
Central Mapsheet : TQ1573NW
User : RIMISSON
Time : Mon May 12 15:53:10 2008

. Levels quoted in metres Ordnance Newlyn Datum. The value -9999.00 indicates no survey information is available.

(515507,173751) there is a MANHOLE with SHORT NUMBER=5701 COVER= -9999.00 INVERT= -9999.00
(515505,173748) there is a MANHOLE with SHORT NUMBER=5703 COVER= -9999.00 INVERT= -9999.00
(515565,173683) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515579,173684) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515580,173683) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515588,173693) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515586,173684) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515589,173683) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515484,174020) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515481,173890) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515489,173805) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515488,173849) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515487,173815) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515487,173805) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515487,173920) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515486,173933) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515485,173932) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515485,173820) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515484,173850) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515509,173774) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515509,173765) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515509,173760) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515532,173745) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515532,173933) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515531,173814) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515531,173858) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515508,173775) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515507,173891) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515514,173810) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515534,173858) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515534,173777) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515533,173746) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515513,173889) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515507,173892) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515506,173903) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515504,173853) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515501,173852) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515491,173838) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515490,173850) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515490,173917) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515489,173933) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515479,173904) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515493,174020) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515503,174020) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515509,174020) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515514,174020) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515545,174000) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515547,174000) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515097,174061) there is a MANHOLE with SHORT NUMBER=0005 COVER= 11.01 INVERT= 8.76
(515113,174068) there is a MANHOLE with SHORT NUMBER=1001 COVER= 10.46 INVERT= -8.44

rintbox (515084,173559) -> (515592,174067)
entral Mapsheet : TQ1573NW
ser : RIMISSON
ime : Mon May 12 15:53:10 2008

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(515102,174044) there is a MANHOLE with SHORT NUMBER=1002 COVER= 10.71 INVERT= 6.98
(515113,174060) there is a MANHOLE with SHORT NUMBER=1002 COVER= 11.08 INVERT= 5.69
(515114,174055) there is a MANHOLE with SHORT NUMBER=1003 COVER= 10.99 INVERT= 5.70
(515114,174050) there is a MANHOLE with SHORT NUMBER=1003 COVER= 11.09 INVERT= 7.85
(515118,174002) there is a MANHOLE with SHORT NUMBER=1004 COVER= -9999.00 INVERT= -9999.00
(515114,174045) there is a MANHOLE with SHORT NUMBER=1004 COVER= 10.64 INVERT= 6.97
(515153,174057) there is a MANHOLE with SHORT NUMBER=1005 COVER= 10.24 INVERT= 6.93
(515102,174052) there is a MANHOLE with SHORT NUMBER=1006 COVER= 10.95 INVERT= 8.26
(515149,174059) there is a MANHOLE with SHORT NUMBER=1007 COVER= 10.32 INVERT= 6.12
(515137,174061) there is a MANHOLE with SHORT NUMBER=1008 COVER= 10.62 INVERT= 7.61
(515136,174065) there is a MANHOLE with SHORT NUMBER=1009 COVER= 10.60 INVERT= 7.75
(515111,174063) there is a MANHOLE with SHORT NUMBER=1011 COVER= 11.09 INVERT= 8.88
(515347,174059) there is a MANHOLE with SHORT NUMBER=3001 COVER= 9.12 INVERT= 7.95
(515344,174063) there is a MANHOLE with SHORT NUMBER=3002 COVER= 9.08 INVERT= 7.86
(515363,174022) there is a MANHOLE with SHORT NUMBER=3003 COVER= 9.43 INVERT= 7.67
(515366,174010) there is a MANHOLE with SHORT NUMBER=3004 COVER= -9999.00 INVERT= -9999.00
(515480,173656) there is a MANHOLE with SHORT NUMBER=4602 COVER= 8.90 INVERT= 7.94
(515406,173957) there is a MANHOLE with SHORT NUMBER=4907 COVER= -9999.00 INVERT= -9999.00
(515405,173951) there is a MANHOLE with SHORT NUMBER=4910 COVER= -9999.00 INVERT= -9999.00
(515502,173670) there is a MANHOLE with SHORT NUMBER=5601 COVER= -9999.00 INVERT= -9999.00
(515536,173679) there is a MANHOLE with SHORT NUMBER=5602 COVER= -9999.00 INVERT= -9999.00
(515535,173676) there is a MANHOLE with SHORT NUMBER=5603 COVER= -9999.00 INVERT= -9999.00
(515405,173631) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515449,173912) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515563,173687) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515563,173683) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515561,173687) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515556,173702) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515554,173702) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515521,173701) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515521,173700) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515510,173690) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515508,173695) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515507,173695) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515502,173673) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515501,173673) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515487,173669) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515487,173668) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515483,173676) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515498,173682) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515450,173914) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515083,174042) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515086,174001) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515409,173898) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515408,173900) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515446,173648) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515447,173648) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515088,173862) there is a MANHOLE with SHORT NUMBER=0809 COVER= 11.06 INVERT= 5.70
(515124,173600) there is a MANHOLE with SHORT NUMBER=1601 COVER= 11.24 INVERT= -7.24
(515104,173734) there is a MANHOLE with SHORT NUMBER=1701 COVER= 10.42 INVERT= -7.66

'rintbox (515084,173559) -> (515592,174067)
Central Mapsheet : TQ1573NW
Jser : RIMISSON
Time : Mon May 12 15:53:10 2008

. Levels quoted in metres Ordnance Newlyn Datum. The value -9999.00 indicates no survey information is available.

(515164,173908)	there is a MANHOLE with SHORT NUMBER=1901	COVER=	10.99	INVERT=	9.35
(515154,173927)	there is a MANHOLE with SHORT NUMBER=1902	COVER=	11.38	INVERT=	8.53
(515174,173964)	there is a MANHOLE with SHORT NUMBER=1903	COVER=	-9999.00	INVERT=	-9999.00
(515173,173956)	there is a MANHOLE with SHORT NUMBER=1904	COVER=	-9999.00	INVERT=	-9999.00
(515238,173945)	there is a MANHOLE with SHORT NUMBER=2901	COVER=	-9999.00	INVERT=	-9999.00
(515234,173968)	there is a MANHOLE with SHORT NUMBER=2902	COVER=	-9999.00	INVERT=	-9999.00
(515218,173974)	there is a MANHOLE with SHORT NUMBER=2903	COVER=	-9999.00	INVERT=	-9999.00
(515382,173614)	there is a MANHOLE with SHORT NUMBER=3601	COVER=	9.43	INVERT=	8.24
(515314,173978)	there is a MANHOLE with SHORT NUMBER=3901	COVER=	-9999.00	INVERT=	-9999.00
(515303,173985)	there is a MANHOLE with SHORT NUMBER=3904	COVER=	-9999.00	INVERT=	-9999.00
(515432,173897)	there is a MANHOLE with SHORT NUMBER=4801	COVER=	-9999.00	INVERT=	-9999.00
(515433,173900)	there is a MANHOLE with SHORT NUMBER=4908	COVER=	-9999.00	INVERT=	-9999.00
(515427,173894)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
(515086,173913)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
(515427,173859)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
(515087,173999)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
(515091,173959)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
(515093,173942)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
(515098,173914)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
(515401,173639)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
(515442,173931)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
(515400,173914)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
(515442,173831)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
(515441,173934)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
(515440,173832)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
(515398,173949)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
(515398,173918)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
(515395,173925)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
(515404,173632)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
(515403,173912)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
(515442,173658)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
(515439,173908)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
(515394,173927)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
(515437,173995)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
(515387,173944)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
(515436,173999)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
(515436,173908)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
(515435,173843)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
(515434,173845)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
(515432,173644)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
(515432,173643)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
(515089,173971)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
(515089,173986)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
(515428,173651)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
(515429,173855)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
(515429,173889)	there is a MANHOLE with SHORT NUMBER=	COVER=	-9999.00	INVERT=	-9999.00
(515083,173898)	there is a MANHOLE with SHORT NUMBER=0801	COVER=	10.25	INVERT=	8.98
(515084,173872)	there is a MANHOLE with SHORT NUMBER=0807	COVER=	10.60	INVERT=	-8.12
(515084,173856)	there is a MANHOLE with SHORT NUMBER=0808	COVER=	10.20	INVERT=	-8.00
(515435,174044)	there is a MANHOLE with SHORT NUMBER=4004	COVER=	8.65	INVERT=	7.51

rintbox (515084,173559) -> (515592,174067)
Central Mapsheet : TQ1573NW
User : RIMISSON
Time : Mon May 12 15:53:10 2008

. Levels quoted in metres Ordnance Newlyn Datum. The value -9999.00 indicates no survey information is available.

(515449,174049) there is a MANHOLE with SHORT NUMBER=4006 COVER= -9999.00 INVERT= -9999.00
(515456,174028) there is a MANHOLE with SHORT NUMBER=4007 COVER= -9999.00 INVERT= -9999.00
(515421,173633) there is a MANHOLE with SHORT NUMBER=4601 COVER= 9.19 INVERT= 7.58
(515424,173630) there is a MANHOLE with SHORT NUMBER=4603 COVER= 8.95 INVERT= 8.14
(515469,173829) there is a MANHOLE with SHORT NUMBER=4802 COVER= -9999.00 INVERT= -9999.00
(515468,173823) there is a MANHOLE with SHORT NUMBER=4803 COVER= -9999.00 INVERT= -9999.00
(515470,173994) there is a MANHOLE with SHORT NUMBER=4901 COVER= -9999.00 INVERT= -9999.00
(515467,173992) there is a MANHOLE with SHORT NUMBER=4902 COVER= -9999.00 INVERT= -9999.00
(515420,173920) there is a MANHOLE with SHORT NUMBER=4911 COVER= -9999.00 INVERT= -9999.00
(515330,174036) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515334,174054) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515456,173837) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515414,173917) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515458,173970) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515463,173883) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515419,173635) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515462,173977) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515417,173883) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515460,173655) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515416,173883) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515460,173656) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515415,173645) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515414,173921) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515085,173999) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515084,173912) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515083,173942) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515475,173931) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515475,173660) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515474,173660) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515473,173899) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515472,173846) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515472,173835) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515471,173930) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515471,173847) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515470,173838) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515470,173670) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515466,173884) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515420,173635) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515414,173888) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515456,173664) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515456,173835) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515453,174017) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515439,174013) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515338,174054) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515343,174056) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515370,174001) there is a MANHOLE with SHORT NUMBER=3005 COVER= 9.07 INVERT= 7.72
(515310,174001) there is a MANHOLE with SHORT NUMBER=3006 COVER= 9.46 INVERT= 7.91
(515307,174014) there is a MANHOLE with SHORT NUMBER=3007 COVER= 9.27 INVERT= 8.00
(515301,174014) there is a MANHOLE with SHORT NUMBER=3008 COVER= 9.23 INVERT= 7.71
(515406,174036) there is a MANHOLE with SHORT NUMBER=4001 COVER= 9.04 INVERT= 7.77

rintbox (515084,173559) -> (515592,174067)
entral Mapsheet : TQ1573NW
ser : RIMISSON
ime : Mon May 12 15:53:10 2008

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position of apparatus shown on this plan is given without obligation and warranty, and the accuracy cannot be guaranteed. Service pipes are not shown but their presence should be anticipated. No liability of any kind whatsoever is accepted by Thame ter for any error or omission. The actual position of mains and services must be verified and established on site before any works are undertaken.

. Levels quoted in metres Ordnance Newlyn Datum. The value -9999.00 indicates no survey information is available.

(515323,174068) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515422,174067) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515329,174040) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515326,174051) there is a MANHOLE with SHORT NUMBER= COVER= -9999.00 INVERT= -9999.00
(515410,173920) there is a MANHOLE with SHORT NUMBER= COVER= 0.00 INVERT= 0.00
(515463,173918) there is a MANHOLE with SHORT NUMBER= COVER= 0.00 INVERT= 0.00
(515423,173893) there is a MANHOLE with SHORT NUMBER= COVER= 0.00 INVERT= 0.00
(515437,173865) there is a MANHOLE with SHORT NUMBER= COVER= 0.00 INVERT= 0.00
(515439,173859) there is a MANHOLE with SHORT NUMBER= COVER= 0.00 INVERT= 0.00
(515448,173890) there is a MANHOLE with SHORT NUMBER= COVER= 0.00 INVERT= 0.00
(515482,173899) there is a MANHOLE with SHORT NUMBER= COVER= 0.00 INVERT= 0.00
(515490,173923) there is a MANHOLE with SHORT NUMBER= COVER= 0.00 INVERT= 0.00
(515511,173820) there is a MANHOLE with SHORT NUMBER= COVER= 0.00 INVERT= 0.00
(515514,173899) there is a MANHOLE with SHORT NUMBER= COVER= 0.00 INVERT= 0.00
(515534,173766) there is a MANHOLE with SHORT NUMBER= COVER= 0.00 INVERT= 0.00
(515517,173822) there is a MANHOLE with SHORT NUMBER= COVER= 0.00 INVERT= 0.00
(515517,173844) there is a MANHOLE with SHORT NUMBER= COVER= 0.00 INVERT= 0.00
(515538,173765) there is a MANHOLE with SHORT NUMBER= COVER= 0.00 INVERT= 0.00
(515519,173923) there is a MANHOLE with SHORT NUMBER= COVER= 0.00 INVERT= 0.00
(515522,173846) there is a MANHOLE with SHORT NUMBER= COVER= 0.00 INVERT= 0.00
(515545,173900) there is a MANHOLE with SHORT NUMBER= COVER= 0.00 INVERT= 0.00
(515546,173824) there is a MANHOLE with SHORT NUMBER= COVER= 0.00 INVERT= 0.00
(515547,173922) there is a MANHOLE with SHORT NUMBER= COVER= 0.00 INVERT= 0.00
(515552,173847) there is a MANHOLE with SHORT NUMBER= COVER= 0.00 INVERT= 0.00
(515566,173767) there is a MANHOLE with SHORT NUMBER= COVER= 0.00 INVERT= 0.00
(515575,173921) there is a MANHOLE with SHORT NUMBER= COVER= 0.00 INVERT= 0.00
(515576,173827) there is a MANHOLE with SHORT NUMBER= COVER= 0.00 INVERT= 0.00
(515576,173898) there is a MANHOLE with SHORT NUMBER= COVER= 0.00 INVERT= 0.00
(515580,173851) there is a MANHOLE with SHORT NUMBER= COVER= 0.00 INVERT= 0.00

ALS Sewer Map Key

Public Sewer Types (Operated & Maintained by Thames Water)

Foul: A sewer designed to convey waste water from domestic and industrial sources to a treatment works.

Surface Water: A sewer designed to convey surface water (e.g. rain water from roofs, yards and car parks) to rivers or watercourses.

Combined: A sewer designed to convey both waste water and surface water from domestic and industrial sources to a treatment works.

- Joint
- Trunk Surface Water
- Storm Relief
- Vent Pipe
- Proposed Thames Surface Water Sewer
- Gallery
- Surface Water Rising Main
- Sludge Rising Main
- Vacuum
- Trunk Foul
- Trunk Combined
- Bio-solids (Sludge)
- Trade Effluent
- Proposed Thames Water Foul Sewer
- Foul Rising Main
- Combined Rising Main
- Proposed Thames Water Rising Main
- Syphon

Sewer Fittings

A feature in a sewer that does not affect the flow in the pipe. Example: a vent is a fitting as the function of a vent is to release excess gas.

- AV Air Valve
- BS Blind Shaft
- CP Catch Pit
- DC Dam Chase
- DF Double Flushing Tank / Chamber
- SF Single Flushing Tank / Chamber
- HB Hatch Box
- Other (specified on plan)
- LH Lamp Hole
- LS Lifting Shaft
- ME Meter
- RE Rodding Eye
- VC Vent Column
- VT Vent
- WO Washout

Operational Controls

A feature in a sewer that changes or diverts the flow in the sewer. Example: A hydrobrake limits the flow passing downstream.

- BD Backdrop Manhole
- BV Butterfly Valve
- CL Clough
- DB Dam Board
- DP Drop Pipe
- DS Drop Shaft
- FL Flume
- FV Flap Valve
- HW Headwall
- HY Hydrobrake
- PI Petrol Interceptor
- PS Penstock
- RV Reflux Valve
- ST Step
- SV Sluice Valve
- TA Tank
- WW Weir
- Other (specified on plan)

End Items

End symbols appear at the start or end of a sewer pipe. Examples: an Undefined End at the start of a sewer indicates that Thames Water has no knowledge of the position of the sewer upstream of that symbol, Outfall on a surface water sewer indicates that the pipe discharges into a stream or river.

- STW Effluent Discharge
- SA/ SA Soakaway
- Outfall
- Undefined End
- GU Gulley
- Inlet

Other Symbols

Symbols used on maps which do not fall under other general categories

- Public/ Private Pumping Station
- Change of characteristic indicator (C.O.C.I.)
- Sewage Treatment Works
- IL Invert Level
- Summit

Areas

Lines denoting areas of underground surveys, etc.

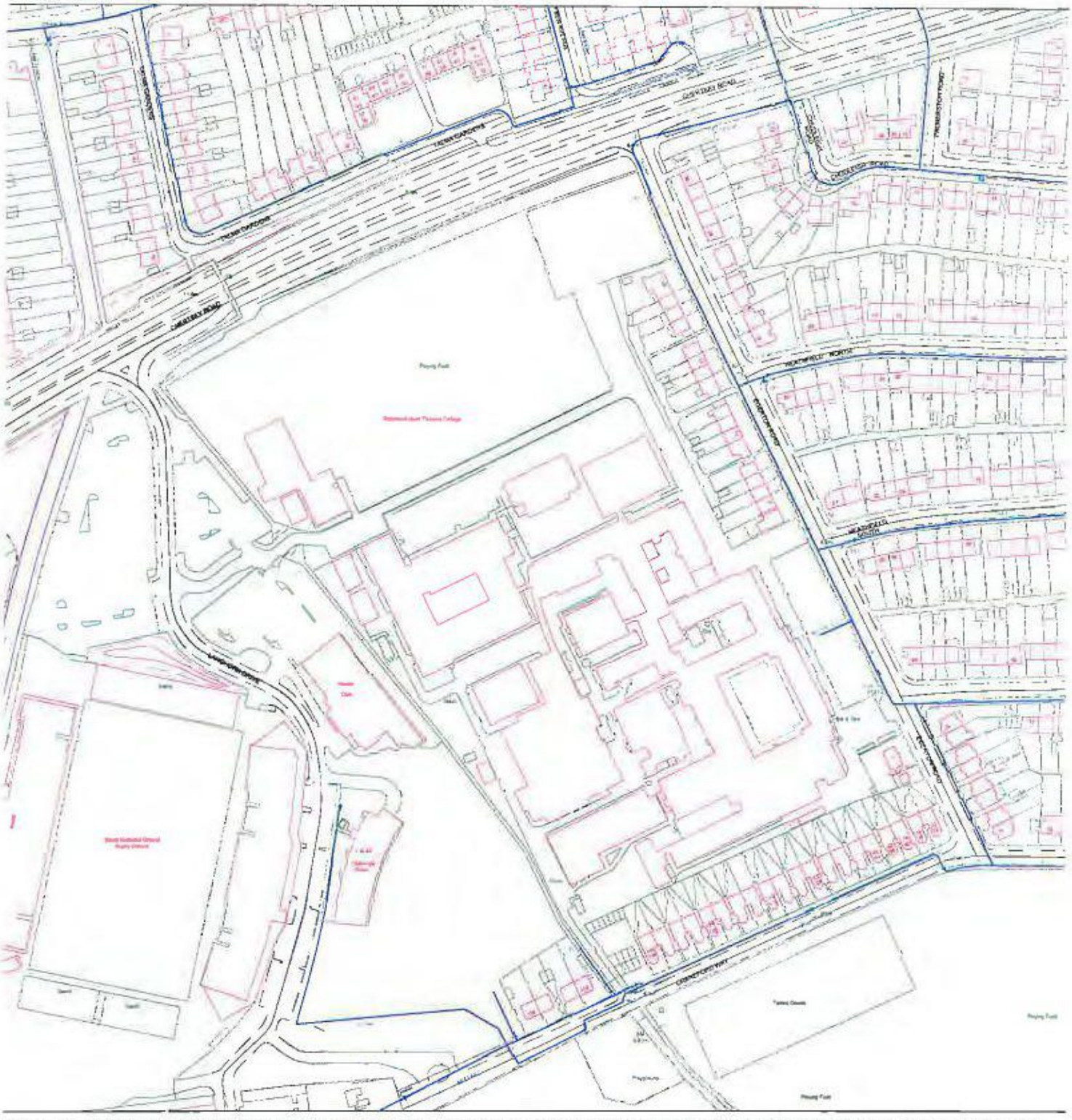
- Building over Case (BOC No.) or Low Lying Land (LLL No.)
- Sewage Treatment Works or Pumping Station
- Area under Adoption Agreement
- Survey Area
- Drawing Area or chamber
- Licence Area
- Area pending Adoption Agreement
- Other Area (specified on plan)

Other Sewer Types (Not Operated or Maintained by Thames Water)

- Foul Sewer
- Combined Sewer
- Culverted Watercourse
- Status Unknown
- Surface Water Sewer
- Highway Drain
- Proposed
- Abandoned Sewer

Notes:

1) All levels associated with the plans are to Ordnance Datum Newlyn.
2) All measurements on the plans are metric.
3) Arrows (on gravity fed sewers) or flecks (on rising mains) indicate direction of flow.
4) For symbols referred to as 'Other' on this key, please see the plan for further information.
5) Most private pipes are not shown on our plans, as in the past, this information has not been recorded.
6) -9999.00 or 0 on a manhole level indicates that data is unavailable.
7) The text appearing alongside a sewer line indicates the internal diameter of the pipe in millimetres. Text next to a manhole indicates the manhole reference number and should not be taken as a measurement. When cover and invert levels appear on a plan they are clearly prefixed by 'CL' and 'IL'. If you are unsure about any text or symbology present on the plan, please contact a member of Property Insight on 0118 925 1504.



position of the apparatus shown on this plan is given without obligation and warranty, and the accuracy cannot be guaranteed. Service pipes are not shown but their presence should be anticipated. No liability of any kind tsoever is accepted by Thames Water for any error or omission. The actual position of mains and services must be verified and established on site before any works are undertaken.

metre intervals

GLE hardcopy facility - Normal Map.
e plot is centred on (515338 , 173813), which is in TQ1573NW. Printed on 12 May 2008 at 15:52:25 by RIMISSON.

numents:
r plan

ALS Water Map Key

Water Pipes (Operated & Maintained by Thames Water)

Distribution Main: The most common pipe shown on water maps. With few exceptions, domestic connections are only made to distribution mains.

Trunk Main: A main carrying water from a source of supply to a treatment plant or reservoir, or from one treatment plant or reservoir to another. Also a main transferring water in bulk to smaller water mains used for supplying individual customers.

Supply Main: A supply main indicates that the water main is used as a supply for a single property or group of properties.

Fire Main: Where a pipe is used as a fire supply, the word FIRE will be displayed along the pipe.

Metered Pipe: A metered main indicates that the pipe in question supplies water for a single property or group of properties and that quantity of water passing through the pipe is metered even though there may be no meter symbol shown.

Transmission Tunnel: A very large diameter water pipe. Most tunnels are buried very deep underground. These pipes are not expected to affect the structural integrity of buildings shown on the map provided.

Raw Water Main: A main that carries untreated water rather than water that is safe to drink. These mains are usually found near reservoirs where their purpose is to link reservoirs or to feed untreated water from a reservoir into a water treatment works.

Other (Specified on plan)

Proposed Main: A main that is still in the planning stages or in the process of being laid. More details of the proposed main and its reference number are generally included near the main.

Depth of Water Pipes (Normal Cover)

PIPE DIAMETER	DEPTH BELOW GROUND
Up to 300mm (12")	900mm (3')
300mm - 600mm (12" - 24")	1100mm (3' 8")
600mm and bigger (24" plus)	1200mm (4')

Hydrants

Single Hydrant
Double Hydrant

The abbreviations below indicate the use of the hydrant symbols above.

FH Fire Hydrant
WO Washout
RWH Raw Water Hydrant
P Private Hydrant

Meters

Meter

The abbreviations below indicate the use of the meter symbol above. Meter symbols without an abbreviation should be taken as revenue meters.

ZM Zonal
DM District
WM Waste

Valves

Open General Purpose Valve

The abbreviations below indicate the type of the valve symbol above.

BF Butterfly
BP Bypass
EV Emptying
SV Sluice

Closed General Purpose Valve

The abbreviations below indicate the use of the valve symbol above.

DBV District Boundary Valve
DPV District Pressure Valve
PBV Pressure Boundary Valve
SSV Stand Shut Valve
ZBV Zonal Boundary Valve
ZZ Other (specified on plan)

Air Valve

The abbreviations below indicate the use of the valve symbol above.

AV Air Valve
AC Air Cock (manual air valve)
AAV Automatic Air Valve

The abbreviations below indicate the use of the valve symbol above.

PS Pressure Sustaining
PC Pressure Controlling

Pressure Reducing
Reflux Non-Return Valve (NRA)
Stopcock

End Items

Symbol indicating what happens at the end of a water main.

Blank Flange
Capped End
Emptying Pit
Undefined End
Manifold
Customer Supply
Fire Supply

Supply Assets

The abbreviations below indicate the use of the supply asset symbol above.

BS Booster Station
PS Pumping Station
SI Inspection Shaft
SP Pumping Shaft
SR Service Reservoir
TO Tower
TW Treatment Works
XX Other (specified on plan)

Other Symbols

Protection Test Point
Protection Point / Anode
Pressure Transducer / Critical Pressure Point
Data Logger
Telemetry Pit / Chamber
Other (specified on plan)

Other Water Pipes (Not Operated or Maintained by Thames Water)

Other Water Company Main: Occasionally other water company water pipes may overlap the border of our clean water coverage area. These mains are denoted in purple and in most cases have the owner of the pipe displayed along them.

Private Main: Indiates that the water main in question is not owned by Thames Water. These mains normally have text associated with them indicating the diameter and owner of the pipe.

Terms and Conditions

All sales are made in accordance with Thames Water Utilities Limited (TWUL) standard terms and conditions unless previously agreed in writing.

1. All goods remain in the property of Thames Water Utilities Ltd until full payment is received.
2. Provision of service will be in accordance with all legal requirements and published TWUL policies.
3. All invoices are strictly due for payment 14 days from due date of the invoice. Any other terms must be accepted/agreed in writing prior to provision of goods or service, or will be held to be invalid.
4. Thames Water does not accept post-dated cheques-any cheques received will be processed for payment on date of receipt.
5. In case of dispute TWUL's terms and conditions shall apply.
6. Penalty interest may be invoked by TWUL in the event of unjustifiable payment delay. Interest charges will be in line with UK Statute Law 'The Late Payment of Commercial Debts (Interest) Act 1998'.
7. Interest will be charged in line with current Court Interest Charges, if legal action is taken.
8. A charge may be made at the discretion of the company for increased administration costs.

A copy of Thames Water's standard terms and conditions are available from the Commercial Billing Team (TW.cashoperations@npower.com).

We publish several Codes of Practice including a guaranteed standards scheme. You can obtain copies of these leaflets by calling us on 0845 9200 800.

If you are unhappy with our service you can speak to your original goods or customer service provider. If you are not satisfied with the response, your complaint will be reviewed by the Customer Services Director. You can write to him at: Thames Water Utilities Ltd. PO Box 492, Swindon, SN38 8TU.

If the Goods or Services covered by this invoice falls under the regulation of the 1991 Water Industry Act, and you remain dissatisfied you can refer your complaint to WaterVoice Thames on 0845 758 1658 (it will cost you the same as a local call) or write to them at 4th Floor (South), High Holborn House, 52-54 High Holborn, London WC1V 6RL.

Ways to pay your bill

By Post – Cheque only, made payable to 'Thames Water Utilities Ltd' writing your Thames Water account number on the back. Please fill in the payment slip below and send it with your cheque to Thames Water Utilities Ltd., PO Box 223, Swindon SN38 2TW	**By BACS Payment** direct to our bank on account number 90478703, sort code 60-00-01 may be made. A remittance advice must be sent to Thames Water Utilities Ltd., PO Box 223, Swindon SN38 2TW. Or fax to 01793 424599 or email: cashoperations@thameswater.co.uk	**Telephone Banking** By calling your bank and quoting your invoice number and the Thames Water's bank account number 90478703 and sort code 60-00-01	**By Swift Transfer** You may make your payment via SWIFT by quoting **NWBKGB2L** together with our bank account number 90478703, sort code 60-00-01 and invoice number

Mr. Andy Keeler
Soiltechnics Ltd
Cedar Barn
White Lodge
Walgrave
Northampton
NN6 9PY

Our Ref: 2008/2007851
Your Ref: STE1297R
13/05/2008

Dear Sir/Madam

RICHMOND UPON THAMES COLLEGE, EGERTON ROAD, TWICKENHAM TW2 7JS

Thank you for your letter of 12/05/2008 in which you asked if there are any electric lines and/or electrical plant belonging to EDF Energy (SPN) plc ("EDF Energy") within the land identified by your enquiry.

EDF Energy operates the electricity distribution system in three regions: London, the South East, and the East. The map affixed to this letter shows the extent of these regions.

Where 33,000/132,000 volt overhead/underground lines and/or plant are present a site meeting will be required between your contractor and a representative of EDF Energy Networks Limited in order that you may satisfy EDF Energy's representative that you will carry out your works in such a manner as will not cause damage to its electric lines and or plant.

Subject to the above, I enclose a copy of EDF Energy's record of its electric lines and/or electrical plant at the site. If the records provided do not relate to the land to which you had intended to refer please resubmit your enquiry.

This information is made available to you on the terms set out in the numbered paragraphs below.

1. EDF Energy does not warrant that the information provided to you is correct. You rely upon it at your own risk.

2. EDF Energy does not exclude or limit its liability if it causes the death of any person or causes personal injury to a person where such death or personal injury is caused by its negligence.

3. Subject to paragraph 2 EDF Energy has no liability to you in contract, in tort (including negligence), for breach of statutory duty or otherwise how for any loss, damage, costs, claims, demands, or expenses that you or any third party may suffer or incur as a result of using the information provided whether for physical damage to property or for any economic loss (including without limitation loss of profit, loss of opportunity, loss of savings, loss of goodwill, loss of business, loss of use) or any special or consequential loss or damage whatsoever.

4. The information about EDF Energy's electrical plant and/or electric lines provided to you belongs to and remains EDF Energy's property. You must not alter it in any respect.

5. The information provided to you about the electrical plant and/or electric lines depicted on the plans may NOT be a complete record of such apparatus belonging to EDF Energy. The information provided relates to electric lines and/or electrical plant belonging to EDF Energy that it believes to be present but the plans are NOT definitive: other electric lines and/or electrical plant may be present and that may or may not belong to EDF Energy.

6. Other apparatus not belonging to EDF Energy is not shown on the plan. It is your responsibility to make your own enquiries elsewhere to discover whether apparatus belonging to others is present. It would be prudent to assume that other apparatus is present.

7. You are responsible for ensuring that the information made available to you is passed to those acting on your behalf and that all such persons are made aware of the contents of this letter.

8. Because the information provided to you may NOT be accurate, you are recommended to ascertain the presence of EDF Energy's electric lines and/or electrical plant by the digging of trial holes. Trial holes should be dug by hand only.
   Excavations must be carried out in line with the Health and Safety Executive guidance document HSG 47. We will not undertake this work. A copy of HSG 47 can be obtained from http://www.hsebooks.com

   All electric lines discovered must be considered LIVE and DANGEROUS at all times and must not be cut, resited, suspended, bent or interfered with unless specially authorised by EDF Energy.

   The electric line and electrical plant belonging to EDF Energy remains so even when made dead and abandoned and any such electric line and/or electrical plant exposed shall be reported to EDF Energy.

   Where your works are likely to affect our electric lines and/or electrical plant an estimate of the price of any protective /diversionary works can be prepared by EDF Energy Networks Branch at Metropolitan House, Darkes Lane, Potters Bar, Herts. , EN6 1AG, telephone no. 0845 234 0040

9 Any work near to any overhead electric lines must be carried out by you in accordance with the Health and Safety Executive guidance document GS6 and the Electricity at Work Regulations.

   The GS6 Recommendations may be purchased from HSE Books at http://www.hsebooks.com

   If given a reasonable period of prior notice EDF Energy will attend on site without charge to advise how and where "goal posts" should be erected. If you wish to avail yourself of this service, in the first instance please telephone: 0845 6014516 between 08:30 and 17:00 Monday to Friday, Public and bank holidays excepted.

10. You are responsible for the security of the information provided to you. It must not be given, sold or made available upon payment of a fee to a third party.

11. If in carrying out work on land in, on, under or over which is installed an electric line and/or electrical plant that belongs to EDF Energy you and/or anyone working on your behalf damages (however slightly) that apparatus you must inform immediately EDF Energy by telephone at the number below providing:

    - your name, address and telephone number; and
    - the date, time and place at which such damage was caused; and
    - a description of the electric line and/or electrical plant to which damage was caused; and
    - the name of the person whom it appears to you is responsible for that damage; and
    - the nature of the damage

    In the South East of England 0800 0963766 (24 Hours).

    In the East of England and London 0800 780078 (24 Hours).

12. The expression "EDF Energy" includes EDF Energy Networks (EPN) plc, EDF Energy Networks (LPN) plc, EDF Energy Networks (SPN) plc, EDF Energy Networks Ltd and any of their successors and predecessors in title.

IF YOU DO **NOT** ACCEPT AND/OR **DO NOT** UNDERSTAND THE TERMS OF USE SET OUT IN PARAGRAPHS 1 TO 12 INCLUSIVE ABOVE YOU MUST RETURN THE PLANS TO ME.

EDF Energy Contact Numbers and Addresses for London, the East of England & the South East of England

Disconnection	Please contact your supplier
Diversion/protection of cables	0870 1964599 Metropolitan House, Darkes Lane, Potters Bar, Herts, EN6 1AG
General network enquiries for the East of England, including East Anglia, Essex, Hertfordshire and Cambridgeshire. (Previously known as Eastern Electricity area)	0870 1963090 (8:30 to 5:00pm, Monday to Friday) Fore Hamlet, Ipswich, Suffolk, IP3 8AA
General network enquiries for London (Previously known as London Electricity area)	0870 1963090 (8:30 to 5:00pm, Monday to Friday) Fore Hamlet, Ipswich, Suffolk, IP3 8AA
General network enquiries for the South East of England (Previously known as Seeboard area)	0870 1963090 (8:30 to 5:00pm, Monday to Friday) Fore Hamlet, Ipswich, Suffolk, IP3 8AA
Load enquiries. If you want to increase the amount of load that you use, it will be	**FAX ONLY** 0845 6500248 Contact your supplier first.

necessary to FAX your proposal to the number on the right. You will be informed about any work that will be required by EDF Energy and given any necessary quotations.	
New connections	0845 2340040 Metropolitan House, Darkes Lane, Potters Bar, Herts, EN6 1AG
Wayleaves London. For information about substations etc. which are sited on your property and owned by EDF Energy in the London area.	0129 3577478 or 480 or 481 Operational Property and Consents Stephenson Way Crawley, West Sussex RH10 1TN
Wayleaves East of England. For information about substations etc. which are sited on your property and owned by EDF Energy in the East of England area.	0870 1963777 Operational Property and Consents Barton Road, Bury St Edmunds, Suffolk, IP32 7BG
Wayleaves South East of England. For information about substations etc. which are sited on your property and owned by EDF Energy in the South East of England area.	0129 3577381 or 383 or 384 Operational Property and Consents Stephenson Way Crawley, West Sussex RH10 1TN

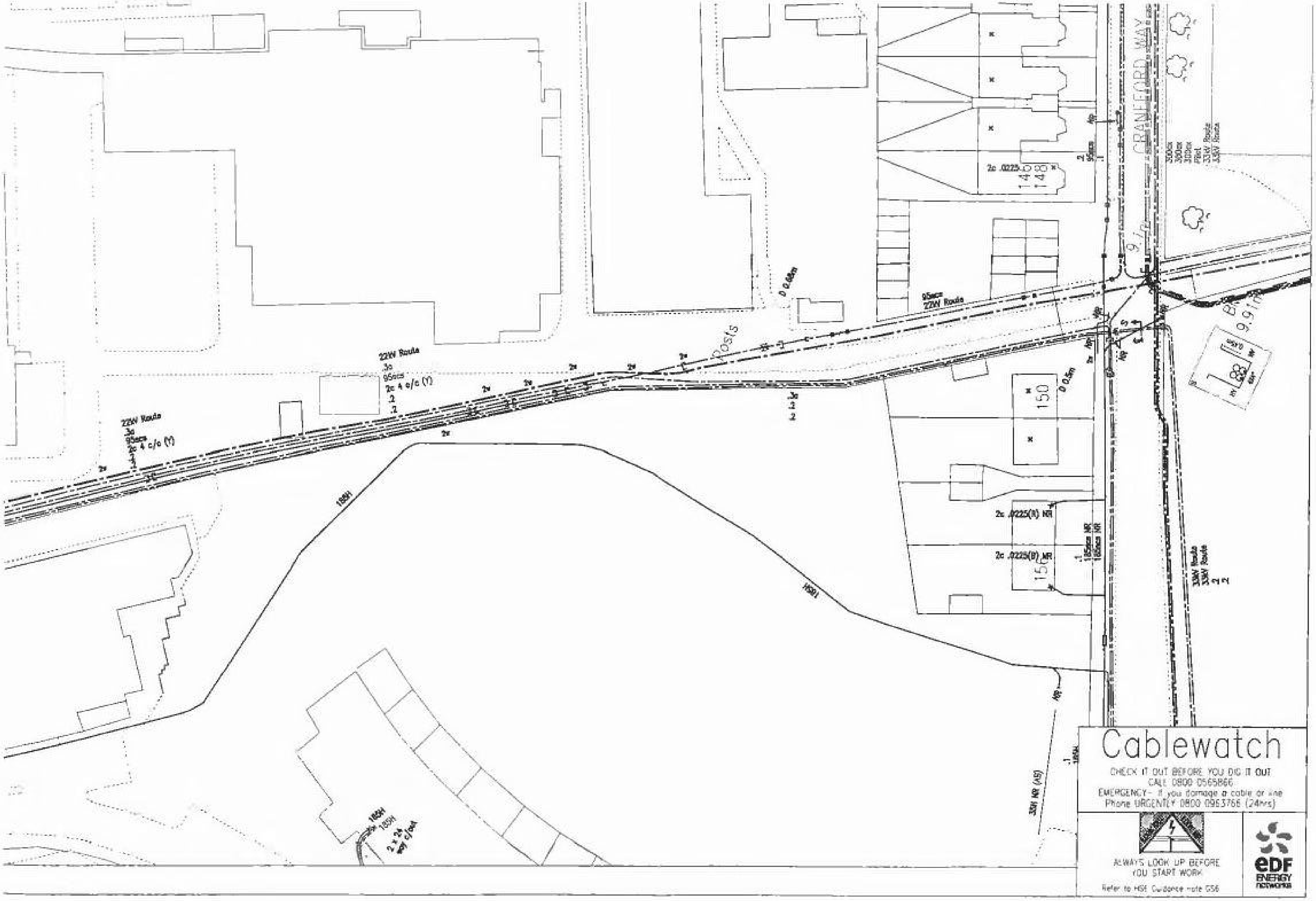
I would remind you that work adjacent to electric lines and/or electrical plant represents a serious risk to health and safety and as such should feature amongst the items you have assessed in your workplace risk assessment.

I shall be pleased to supply you with further assistance if you require it.

Yours sincerely

M. Ellis

Mark Ellis - Telephone: 0800 0565 866
Plan Provision


CRANFORD WAY
Posts
22W Route
95ecs
2c 4 c/c (Y)
150
D 0.5m
D 0.68m
33W Route
Cablewatch
CHECK IT OUT BEFORE YOU DIG IT OUT
CALL 0800 0565866
EMERGENCY - If you damage a cable or line
Phone URGENTLY 0800 0963766 (24hrs)
ALWAYS LOOK UP BEFORE
YOU START WORK
Refer to HSE Guidance note GS6
EDF ENERGY networks

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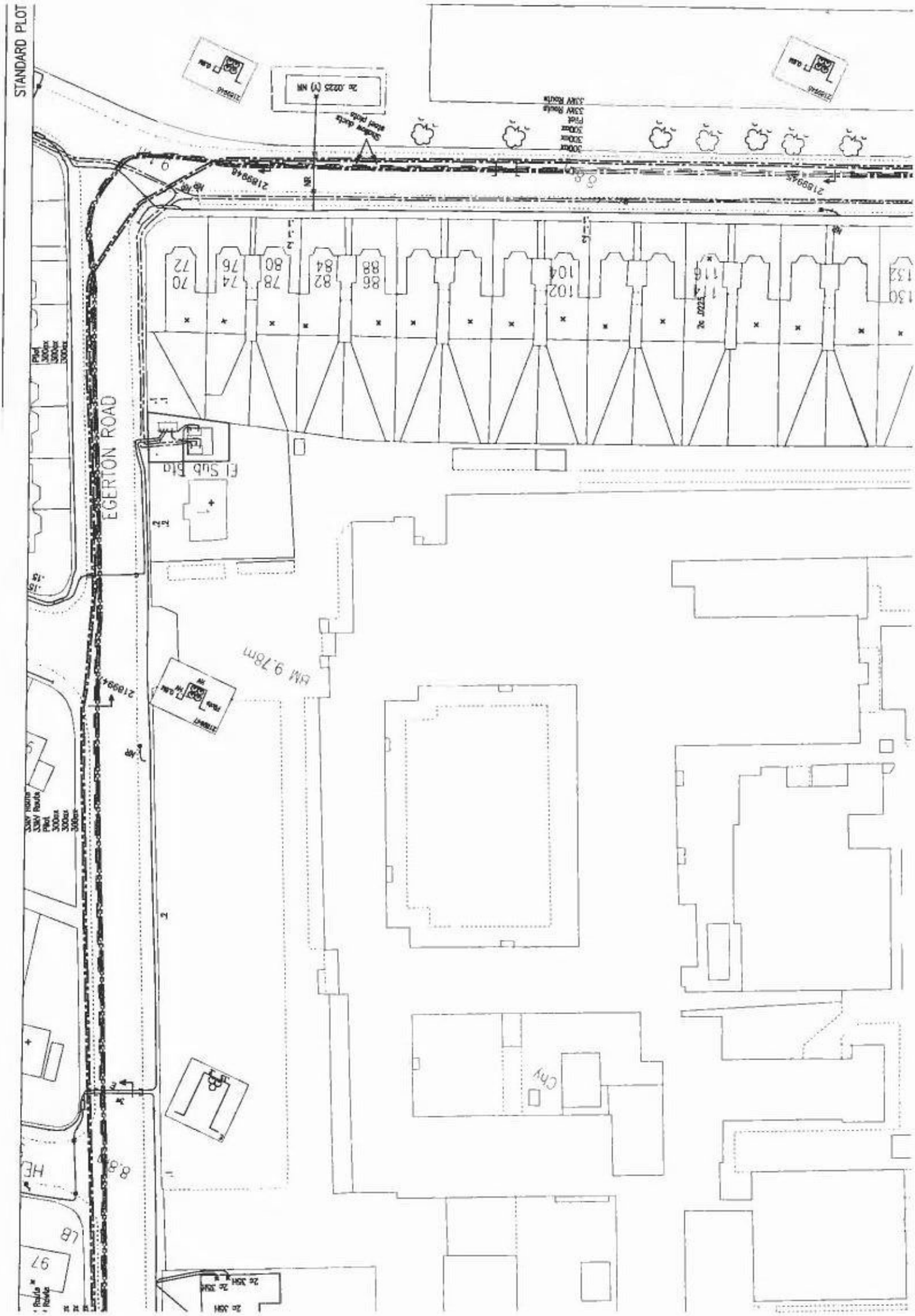
EDF Energy Networks Ltd


STANDARD PLOT
EGERTON ROAD