

Unit 3, Maple Park
Essex Road, Hoddesdon,
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Client: **GEA Ltd**

Project: **Ragged School**

Ref: **DA6188-00**

Source: National Monuments Record Office (Historic England)

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 **Approximate site boundary**



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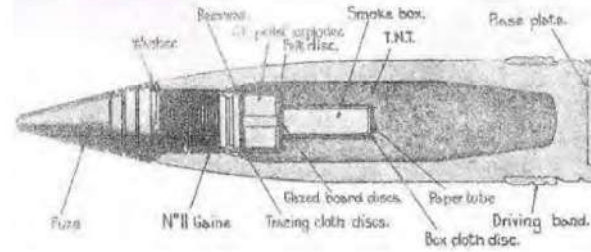
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 **Approximate site boundary**



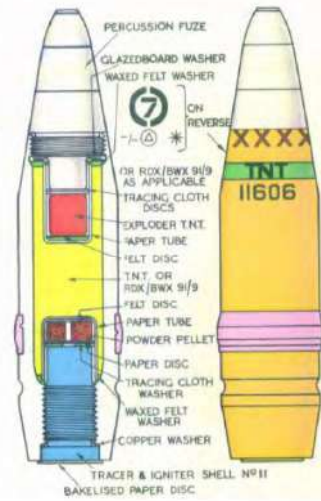
3.7 Inch QF Anti-Aircraft Projectile

| | |
|-------------------|---|
| Projectile Weight | 28lb (12.6 kg) |
| Explosive Weight | 2.52lbs |
| Fuze Type | Mechanical Time Fuze |
| Dimensions | 3.7in x 14.7in (94mm x 360mm) |
| Rate of Fire | 10 to 20 rounds per minute |
| Use | The 3.7in AA Mk 1-3 were the standard Heavy Anti-Aircraft guns of the British Army. |
| Ceiling | 30,000ft to 59,000ft |



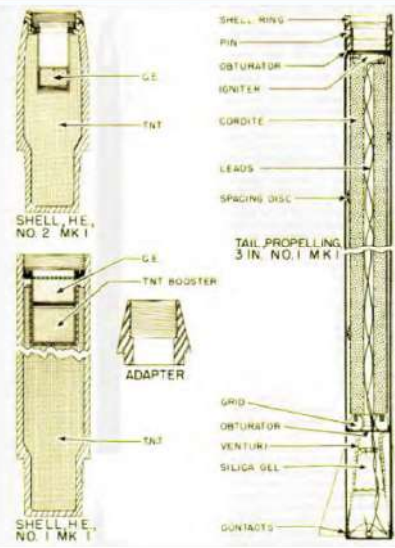
40mm Bofors Projectile

| | |
|-----------------------|---|
| Projectile Weight | 1.96lb (0.86kg) |
| Explosive Weight | 300g (0.6lb) |
| Fuze Type | Impact Fuze |
| Rate of Fire | 120 rounds per minute |
| Projectile Dimensions | 40 x 180mm |
| Ceiling | 23,000ft (7000m) |
| Remarks | Light quick fire high explosive anti-aircraft projectile. Each projectile fitted with small tracer element. If no target hit, shell would explode when tracer burnt out. Designed to engage aircraft flying below 2,000ft |



3in Unrotated Projectile (UP) Anti-Aircraft Rocket ("Z" Battery)

| | |
|--------------------------|---|
| HE Projectile Weight | 3.4kg (7.6lb) |
| Explosive Weight | 0.96kg (2.13lb) |
| Filling | High Explosive – TNT. Fitted with aerial burst fuzeing |
| Dimensions of projectile | 236 x 83mm (9.29 x 3.25in) |
| Remarks | As a short range rocket-firing anti-aircraft weapon developed for the Royal Navy. It was used extensively by British ships during the early days of World War II. The UP was also used in ground-based single and 128-round launchers known as Z Batteries. Shell consists of a steel cylinder reduced in diameter at the base and threaded externally to screw into the shell ring of the rocket motor |



1ST LINE DEFENCE

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| | |
|---|-------------------------|
| Client: GEA Ltd | |
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APPENDIX – PART 1B

Ground Investigation

Borehole Records

Trial Pit Records

SPT/Cohesion vs Depth plot


Geotechnical Laboratory Test Results


Chemical Analyses (Soil)






Generic Risk Based Screening Values



Site Plan

| Boring Method | | Casing Diameter | | Ground Level (mOD) | | Site | | Borehole Number | |
|--|----------------|--|-----------------|---------------------------|-------------|---|---|-----------------------|-----------|
| Cable Percussion | | 200mm cased to 17.00m 150mm cased to 25.00m | | 13.62 | | The Former Ragged School, 15-29 Eyre Street Hill, London EC1R 5DZ | | BH1 | |
| | | Location | | Dates | | Client | | Job Number | |
| | | | | 21/05/2018- 23/05/2018 | | Clerkenwell Lifestyle (UK) Ltd | | J18042 | |
| | | | | | | Engineer | | Sheet | |
| | | | | | | Heyne Tillett Steel | | 1/3 | |
| Depth (m) | Sample / Tests | Casing Depth (m) | Water Depth (m) | Field Records | Level (mOD) | Depth (m) (Thickness) | Description | Legend | Water |
| 0.20 | D1 | | | | | | Made ground (concrete screed over dark grey brown sandy silt with fragments of ash, concrete, chalk, pottery, coal and brick) | | |
| 0.50 | D2 | | | | | | | | |
| 0.80 | D3 | | | | | | | | |
| 1.00 | D4 | | | | | | | | |
| 1.20-1.65 | SPT(C) N60=5 | 1.00 | DRY | 1,0/1,1,1,1 | | (3.50) | | | |
| 1.20-1.65 | D5 | | | | | | | | |
| 1.75 | D6 | | | | | | | | |
| 2.00-2.45 | SPT(C) N60=5 | 2.00 | DRY | 1,0/1,1,1,1 | | | | | |
| 2.00-2.50 | D7 | | | | | | | | |
| 2.75 | D8 | | | | | | | | |
| 3.00-3.45 | SPT N60=9 | 3.00 | DRY | 1,1/2,1,2,2 | | | | | |
| 3.00-3.50 | D9 | | | | | | | | |
| 4.00-4.45 | U10 | | | 20 blows | | | Soft greyish brown mottled dark grey very silty CLAY with occasional gravel of flint and rare pockets of organic material | | |
| 4.50 | D11 | | | | | | Soft becoming firm brown mottled dark grey slightly fissured very silty CLAY with abundant selenite crystals and occasional partings of fine sand. | | |
| 5.00-5.45 | SPT N60=18 | 4.00 | DRY | 1,2/3,3,3,5 | | | | | |
| 5.50 | D12 | | | | | | Firm becoming stiff fissured dark blueish grey very silty CLAY with with abundant selenite crystals and occasional partings of fine sand. Sand partings becoming more frequent from a depth of 9.0 m. | | |
| 6.00 | D13 | | | | | | | | |
| 6.50-6.95 | U14 | | | 25 blows | | | | | |
| 7.00 | D15 | | | | | | | | |
| 7.50 | D16 | | | | | | | | |
| 8.00-8.45 | SPT N60=32 | 6.00 | DRY | 3,4/5,6,6,7 | | | | | |
| 8.00-8.45 | D17 | | | | | | | | |
| 9.00 | D18 | | | | | | | | |
| 9.50-9.95 | U19 | | | 30 blows | | | Stiff becoming very stiff brown mottled grey and red slightly silty CLAY. Becoming multicoloured at a depth of 13.5 m. | | |
| Remarks Service pit excavated to a depth of 1.2 m: 1 hour 30 minutes standing Borehole terminated at a depth of 27.5 m on hard strata 1 hour 30 minutes standing for occupants to move cars Standpipe installed to a depth of 7.0 m | | | | | | | | Scale (approx) | Logged By |
| | | | | | | | | 1:50 | JD |
| | | | | | | | | Figure No. J18042.BH1 | |

|  Geotechnical & Environmental Associates <small>Widbury Barn Widbury Hill Ware SG12 7QE</small> | | | | | Site The Former Ragged School, 15-29 Eyre Street Hill, London EC1R 5DZ | | Borehole Number BH1 | | |
|--|-------------------------------|--|-----------------|--|--|---|---|-----------------------------|---------------------------------|
| Boring Method Cable Percussion | | Casing Diameter 200mm cased to 17.00m 150mm cased to 25.00m | | Ground Level (mOD) 13.62 | | Client Clerkenwell Lifestyle (UK) Ltd | | Job Number J18042 | |
| Location | | Dates 21/05/2018-23/05/2018 | | Engineer Heyne Tillett Steel | | Sheet 2/3 | | | |
| Depth (m) | Sample / Tests | Casing Depth (m) | Water Depth (m) | Field Records | Level (mOD) | Depth (m) (Thickness) | Description | Legend | Water |
| 10.00 | D20 | | | | | | Occasionally thinly laminated partings of fine sand from a depth of 16.0 m. | | |
| 10.50 | D21 | | | | | | | | |
| 11.00-11.45 11.00-11.50 | SPT N60=40 D22 | 6.00 | DRY | 3,5/7,7,8,8 | | | | | |
| 11.50 | D23 | | | | | | | | |
| 12.00 | D24 | | | | | | | | |
| 12.50-12.95 | U25 | | | 21/05/2018:DRY | | | | | |
| 12.50-12.95 | U26 | | | 22/05/2018:DRY 50 blows | | (7.00) | | | |
| 13.50 | D27 | | | | | | | | |
| 14.00-14.45 14.00-14.50 | SPT N60=67 D28 | 6.00 | DRY | 4,7/10,12,13,16 | | | | | |
| 15.00 15.00-15.50 | D29 U29 | | | 80 blows | | | | | |
| 16.00 | D30 | | | | | | | | |
| 16.50 | D31 | | | | | | | | |
| 17.00-17.05 17.00-17.50 | SPT(C) 25*/30 50/15 D32 | 17.00 | | 25/50 | -3.08 | 16.70 | Very dense cemented brown SAND with fine gravel sized fragments of cemented sand | | |
| 18.00 18.00-18.45 | D34 D33 | | | | | | | | |
| 18.50-18.95 | SPT N60=59 | 17.00 | | 5,7/9,10,10,16 | | | | | |
| 19.50 | D35 | | | | | | | | |
| 20.00-20.45 | SPT N60=82 | 17.00 | | 6,8/11,14,17,20 | -3.88 | 17.50 | Very dense dark grey mottled brown very clayey very silty fine to medium SAND with abundant partings of greyish brown clay. Becoming fine to medium sand with rare fine gravel of lignite and cemented sand fragments from a depth of 20.0 m. | | |
| Remarks Service pit excavated to a depth of 1.2 m: 1 hour 30 minutes standing Borehole terminated at a depth of 27.5 m on hard strata 1 hour 30 minutes standing for occupants to move cars Standpipe installed to a depth of 7.0 m Chiselling from 16.80m to 17.40m for 2 hours. Water added from 17.00m. | | | | | | | Scale (approx) 1:50 | Logged By JD | Figure No. J18042.BH1 |







|  Geotechnical & Environmental Associates <small>Widbury Barn Widbury Hill Ware SG12 7QE</small> | | | | | Site The Former Ragged School, 15-29 Eyre Street Hill, London EC1R 5DZ | | Borehole Number BH1 | | |
|---|------------------------|--|-----------------|--|--|---|--|-----------------------------|---------------------------------|
| Boring Method Cable Percussion | | Casing Diameter 200mm cased to 17.00m 150mm cased to 25.00m | | Ground Level (mOD) 13.62 | | Client Clerkenwell Lifestyle (UK) Ltd | | Job Number J18042 | |
| Location | | Dates 21/05/2018-23/05/2018 | | Engineer Heyne Tillett Steel | | Sheet 3/3 | | | |
| Depth (m) | Sample / Tests | Casing Depth (m) | Water Depth (m) | Field Records | Level (mOD) | Depth (m) (Thickness) | Description | Legend | Water |
| 20.00-20.45 | D36 | | | | | (5.20) | | | |
| 21.00 | D37 | | | | | | | | |
| 21.50-21.95 21.50-21.95 | SPT N60=125 D38 | 17.00 | | 8,12/17,21,27,30 | | | | | |
| 22.50 | D39 | | | | | | | | |
| 23.00-23.45 23.00-23.45 | SPT(C) N60=76 B40 | 22.00 | | 1,10/12,14,15,17 | -9.08 | 22.70 | Very stiff occasionally friable brownish mottled grey silty CLAY with occasional bands of siltstone | | |
| 24.00 | D41 | | | | | | | | |
| 24.50 | D42 | | | 22/05/2018: | | | | | |
| 24.50-24.58 | SPT(C) 25*/45 50/30 | 23.00 | | 23/05/2018: 25/50 | | | | | |
| 25.50 | D43 | | | | | | | | |
| 26.00-26.27 26.00 | SPT(C) 50/120 D44 | 23.00 | | 10,15/50 | -10.28 | 23.90 | Very dense cemented very clayey medium SAND with abundant fine to coarse rounded gravel of mottled red claystone | | |
| 27.00-27.21 27.00-27.45 | SPT(C) 50/60 D45 | 23.00 | | 5,20/50 | | | | | |
| | | | | 23/05/2018: | | | | | |
| | | | | | -13.88 | 27.50 | Complete at 27.50m | | |
| Remarks Service pit excavated to a depth of 1.2 m: 1 hour 30 minutes standing Borehole terminated at a depth of 27.5 m on hard strata 1 hour 30 minutes standing for occupants to move cars Standpipe installed to a depth of 7.0 m Chiselling from 24.20m to 24.50m for 1 hour. Chiselling from 26.00m to 27.50m for 6 hours. Water added from 23.90m. Water added from 24.50m. Water added from 27.50m. | | | | | | | Scale (approx) 1:50 | Logged By JD | Figure No. J18042.BH1 |




|  Geotechnical & Environmental Associates <small>Widbury Barn Widbury Hill Ware SG12 7QE</small> | | | | | Site The Former Ragged School, 15-29 Eyre Street Hill, London EC1R 5DZ | | Borehole Number BH2 | | |
|---|-----------------------------|--|-----------------|------------------------------------|--|---|---|---|------------------------|
| Boring Method Cable Percussion | | Casing Diameter 150mm cased to 7.60m | | Ground Level (mOD) 13.44 | | Client Clerkenwell Lifestyle (UK) Ltd | | Job Number J18042 | |
| | | Location | | Dates 22/05/2018 | | Engineer Heyne Tillett Steel | | Sheet 1/2 | |
| Depth (m) | Sample / Tests | Casing Depth (m) | Water Depth (m) | Field Records | Level (mOD) | Depth (m) (Thickness) | Description | Legend | Water |
| 0.30 | D | | | | | | Made ground (tarmac over dark brown silty clayey sand with fragments of ash, concrete, coal, masonry and brick) |  | |
| 1.20-1.65 1.20 | SPT(C) N60=9 B | | | 2,1/3,2,2,1 | | | | | |
| 1.75 | D | | | | | | | | |
| 2.00-2.45 2.00 | SPT(C) N60=6 D | 2.00 | | 1,0/1,1,2,1 | | (5.00) | | | |
| 2.75 | D | | | | | | | | |
| 3.00-3.45 3.00-3.45 | SPT(C) N60=1 D | 3.00 | | 1,0/0,1,0,0 | | | | | |
| 3.75 3.75 4.00-4.45 4.00-4.45 | D D SPT(C) N60=1 D | 4.00 | | 1,0/0,0,0,1 | | | | | |
| 4.75 | D | | | | | | | | |
| 5.00-5.45 5.00-5.45 5.00-5.95 | SPT(C) N60=4 D D | 5.00 | | 1,1/1,0,2,1 | 8.44 | 5.00 | Soft to firm dark brownish grey very sandy very clayey slightly gravelly SILT with fragments of brick, flint, bone and pottery and rare pockets of organic content. |  | |
| 6.00 | D | | | | | (2.50) | | | |
| 6.50-6.95 | D | | | | | | | | |
| 7.50 | D | | | | 5.94 | 7.50 | Firm grey mottled brown very silty CLAY with abundant layers of fine sand and rare angular flint gravel. |  | |
| 8.00-8.45 | U | | | 30 blows | 5.44 | 8.00 | Firm becoming stiff slightly fissured greyish brown silty slightly sandy CLAY with abundant selenite crystals and occasional pockets of fine to medium sand. |  | |
| 9.00 | D | | | | | (2.10) | | | |
| 9.50-9.95 9.50-9.95 | SPT N60=31 D | 7.60 | | 3,5/6,7,7,8 | | | | | |
| Remarks Service pit excavated to a depth of 1.2 m: 1 hour 30 minutes standing time Groundwater not encountered 1 hour standing for UXO testing Standpipe installed to a depth of 7.5 m | | | | | | | | Scale (approx) 1:50 | Logged By JD |
| | | | | | | | | Figure No. J18042.BH2 | |





|  Geotechnical & Environmental Associates <small>Widbury Barn Widbury Hill Ware SG12 7QE</small> | | | | | Site The Former Ragged School, 15-29 Eyre Street Hill, London EC1R 5DZ | | Borehole Number BH2 | | |
|--|-----------------|--|-----------------|------------------------------------|--|---|--|---|------------------------|
| Boring Method Cable Percussion | | Casing Diameter 150mm cased to 7.60m | | Ground Level (mOD) 13.44 | | Client Clerkenwell Lifestyle (UK) Ltd | | Job Number J18042 | |
| | | Location | | Dates 22/05/2018 | | Engineer Heyne Tillett Steel | | Sheet 2/2 | |
| Depth (m) | Sample / Tests | Casing Depth (m) | Water Depth (m) | Field Records | Level (mOD) | Depth (m) (Thickness) | Description | Legend | Water |
| | | | | | 3.34 | 10.10 | Firm becoming stiff brown mottled grey and red slightly silty CLAY. Becoming multicoloured and stiff at a depth of 14.5 m. |  | |
| 10.50 | D | | | | | | | | |
| 11.00-11.45 | U | | | 60 blows | | | | | |
| 12.00 | D | | | | | | | | |
| 12.50-12.95 12.50-12.95 | SPT N60=33 D | 7.60 | | 1,5/7,7,7,9 | | (4.90) | | | |
| 13.50 | D | | | | | | | | |
| 14.55-15.00 14.55-15.00 | SPT N60=40 D | 7.60 | | 4,6/7,8,10,11 | | | | | |
| | | | | 22/05/2018:DRY | -1.56 | 15.00 | Complete at 15.00m | | |
| Remarks | | | | | | | | Scale (approx) 1:50 | Logged By JD |
| | | | | | | | | Figure No. J18042.BH2 | |







| GEA Geotechnical & Environmental Associates Widbury Barn Widbury Hill Ware SG12 7QE | | Site The Former Ragged School, 15-29 Eyre Street Hill, London EC1R 5DZ | | Borehole Number BH3 | | | | | |
|---|----------------------|--|-----------------|---------------------------------|-------------|-----------------------|---|-----------------|--------------------------|
| Boring Method Cable Percussion | | Casing Diameter 250mm cased to 18.00m 200mm cased to 27.00m 150mm cased to 35.00m | | Ground Level (mOD) 13.41 | | | | | |
| Client Clerkenwell Lifestyle (UK) Ltd | | Job Number J18042 | | Sheet 1/4 | | | | | |
| Location | | Dates 29/05/2018-01/06/2018 | | Engineer Heyne Tillett Steel | | | | | |
| Depth (m) | Sample / Tests | Casing Depth (m) | Water Depth (m) | Field Records | Level (mOD) | Depth (m) (Thickness) | Description | Legend | Water |
| 1.20-1.65 1.20-1.60 | SPT(C) N60=5 B | | DRY | 1,0/1,1,1,1 | | | Made ground (tarmac over grey silty sand clay with fragments of brick, coal, ash and concrete). | | |
| 1.75 | D | | | | | (4.00) | | | |
| 2.00-2.45 2.00-2.45 | SPT(C) N60=7 B | | DRY | 1,0/1,1,1,2 | | | | | |
| 2.75 | D | | | | | | | | |
| 3.00-3.45 3.00-3.45 | SPT(C) N60=9 B | 3.00 | DRY | 1,1/1,2,2,2 | | | | | |
| 3.75 | D | | | | | | | | |
| 4.00-4.45 | SPT(C) N60=13 | 4.00 | DRY | 1,1/2,2,3,3 | 9.41 | 4.00 | Soft greyish brown mottled dark grey very silty sandy CLAY with occasional flint gravel and rare pockets of organic content and brick fragments | | |
| 4.45 | B | | | | | (1.00) | | | |
| 4.75 | D | | | | | | | | |
| 5.00-5.45 | U | | | 20 blows | 8.41 | 5.00 | Firm grey mottled orange-brown slightly fissured very silty CLAY with abundant selenite crystals and occasional partings of fine sand <10 mm in thickness. Sand partings become more frequent and >20 mm thickness from a depth of 8.0 m. | | |
| 5.50 | D | | | | | | | | |
| 6.00 | D | | | | | | | | |
| 6.50-6.95 6.50-6.95 6.50-6.95 | SPT N60=21 D U | 6.00 | DRY | 1,2/3,3,4,6 25 blows | | | | | |
| 7.50 | D | | | | | (4.90) | | | |
| 8.00-8.45 | U | | | | | | | | |
| 8.50 | D | | | | | | | | |
| 9.00 | D | | | | | | | | |
| 9.50-9.95 9.50-9.95 | SPT N60=33 D | 6.00 | DRY | 3,4/5,6,7,7 | 3.51 | 9.90 | | | |
| Remarks Service pit excavated to a depth of 1.2 m: 1 hour 30 minutes standing time Groundwater not encountered 5 hours standing to clear car park of spoil 1 hours standing to wait for tenant car to be cleared | | | | | | | Scale (approx) 1:50 | Logged By JD | Figure No. J18042.BH3 |

| GEA Geotechnical & Environmental Associates Widbury Barn Widbury Hill Ware SG12 7QE | | Site The Former Ragged School, 15-29 Eyre Street Hill, London EC1R 5DZ | | Borehole Number BH3 | | | | | |
|--|-----------------|--|-----------------|---------------------------------|-------------|-----------------------|--|-----------------|--------------------------|
| Boring Method Cable Percussion | | Casing Diameter 250mm cased to 18.00m 200mm cased to 27.00m 150mm cased to 35.00m | | Ground Level (mOD) 13.41 | | | | | |
| Client Clerkenwell Lifestyle (UK) Ltd | | Job Number J18042 | | Sheet 2/4 | | | | | |
| Location | | Dates 29/05/2018-01/06/2018 | | Engineer Heyne Tillett Steel | | | | | |
| Depth (m) | Sample / Tests | Casing Depth (m) | Water Depth (m) | Field Records | Level (mOD) | Depth (m) (Thickness) | Description | Legend | Water |
| 10.50 | D | | | | | | Stiff becoming very stiff slightly fissured pale blueish grey mottled brown silty CLAY. Becoming multicoloured from a depth of 12.0 m. | | |
| 11.00-11.45 | U | | | 30 blows | | | | | |
| 11.50 | D | | | | | | | | |
| 12.00 | D | | | | | | | | |
| 12.50-12.95 12.50-12.95 | SPT N60=40 D | 6.00 | DRY | 3,4/6,7,8,9 | | (5.10) | | | |
| 14.50 | D | | | | | | | | |
| 15.00 | D | | | | -1.59 | 15.00 | Very stiff pale grey very silty sandy CLAY with occasional partings of sand | | |
| 15.50-15.95 | D | | | | | (1.50) | | | |
| 16.50 | D | | | | | | | | |
| 17.00-17.45 17.00-17.45 | SPT N60=86 D | 6.00 | DAMP | 5,10/12,15,17,21 | -3.09 | 16.50 | Very dense pale grey very silty very clayey fine to medium SAND | | |
| 18.00 18.00-18.95 | D B | | | | -4.59 | 18.00 | Very dense dark grey mottled brown very clayey very silty fine to medium SAND | | |
| 18.50-18.95 | SPT N60=53 | 18.00 | ADD | 4,6/8,10,11,11 | | (2.50) | | | |
| 19.50 | D | | | | | | | | |
| 20.00-20.45 | SPT N60=57 | 20.00 | ADD | 5,7/10,11,10,12 | | | | | |
| Remarks 29/05/2018: DRY 30/05/2018: 15.90m | | | | | | | Scale (approx) 1:50 | Logged By JD | Figure No. J18042.BH3 |

|  Geotechnical & Environmental Associates <small>Widbury Barn Widbury Hill Ware SG12 7QE</small> | | | | | Site The Former Ragged School, 15-29 Eyre Street Hill, London EC1R 5DZ | | Borehole Number BH3 | | |
|---|--------------------|---|-----------------|--|--|---|---|---|------------------------|
| Boring Method Cable Percussion | | Casing Diameter 250mm cased to 18.00m 200mm cased to 27.00m 150mm cased to 35.00m | | Ground Level (mOD) 13.41 | | Client Clerkenwell Lifestyle (UK) Ltd | | Job Number J18042 | |
| Location | | Dates 29/05/2018-01/06/2018 | | Engineer Heyne Tillett Steel | | Sheet 3/4 | | | |
| Depth (m) | Sample / Tests | Casing Depth (m) | Water Depth (m) | Field Records | Level (mOD) | Depth (m) (Thickness) | Description | Legend | Water |
| 20.00-20.45 | D | | | | -7.09 | 20.50 | Very stiff occasionally fissured multicoloured silty sandy CLAY with occasional claystone fragments |  | |
| 21.00 | D | | | | (2.00) | | | | |
| 21.50-21.95 | SPT(C) N60=65 B | 20.00 | ADD | 6,9/10,12,13,14 | | | | | |
| 22.50 | D | | | | -9.09 | 22.50 | Very dense cemented multicoloured clayey sandy GRAVEL |  | |
| 23.00-23.45 | B | | | | (1.50) | | | | |
| 24.00 | D | | | | -10.59 | 24.00 | Very stiff slightly fissured multicoloured very silty very sandy gravelly CLAY with abundant partings of fine to medium sand. Gravel is of claystone. |  | |
| 24.00-24.95 | B | | | | | | | | |
| 24.50-24.95 | SPT(C) N60=99 | 23.00 | ADD | 8,11/14,17,20,24 | | | | | |
| 25.00 | D | | | | | (2.00) | | | |
| 26.00-26.50 | D | | | 30/05/2018:25.90m | -12.59 | 26.00 | Very stiff greenish grey very sandy very gravelly CLAY. Gravel is rounded and of flint. |  | |
| 26.00-26.45 | SPT(C) N60=76 | 26.00 | ADD | 31/05/2018:25.90m 5,8/11,13,15,19 | | (1.50) | | | |
| 27.00 | D | | | | | | | | |
| 27.45-27.95 | D | | | | -14.09 | 27.50 | Very dense slightly cemented grey fine to medium silty SAND |  | |
| 27.50-27.95 | SPT(C) N60=84 | 26.00 | DAMP | 5,10/12,15,17,20 | | | | | |
| 28.50 | D | | | | | | | | |
| 29.00-29.45 | SPT N60=79 | 27.00 | ADD | 5,10/15,45 | | | | | |
| 29.00-29.50 | D | | | | | | | | |
| Remarks Chiselling from 23.00m to 23.50m for 1 hr 30 min hour. Chiselling from 26.50m to 27.00m for 2 hours. Water added from 23.00m to 26.00m. Water added from 26.00m to 35.00m. | | | | | | | | Scale (approx) 1:50 | Logged By JD |
| | | | | | | | | Figure No. J18042.BH3 | |





|  Geotechnical & Environmental Associates <small>Widbury Barn Widbury Hill Ware SG12 7QE</small> | | | | | Site The Former Ragged School, 15-29 Eyre Street Hill, London EC1R 5DZ | | Borehole Number BH3 | | |
|--|--------------------------|---|-----------------|--|--|---|--------------------------------------|---|------------------------|
| Boring Method Cable Percussion | | Casing Diameter 250mm cased to 18.00m 200mm cased to 27.00m 150mm cased to 35.00m | | Ground Level (mOD) 13.41 | | Client Clerkenwell Lifestyle (UK) Ltd | | Job Number J18042 | |
| Location | | Dates 29/05/2018-01/06/2018 | | Engineer Heyne Tillett Steel | | Sheet 4/4 | | | |
| Depth (m) | Sample / Tests | Casing Depth (m) | Water Depth (m) | Field Records | Level (mOD) | Depth (m) (Thickness) | Description | Legend | Water |
| 30.00 | D | | | | | | |  | |
| 30.50-30.71 | SPT(C) 25*/120 50/90 | 27.50 | ADD | 25/50 | | | | | |
| 30.50-30.95 | D | | | | | (7.50) | | | |
| 32.00-32.23 | SPT(C) 50/75 | 27.50 | ADD | 25/50 | | | | | |
| 32.00-32.50 | D | | | | | | | | |
| 32.50 | D | | | | | | | | |
| 33.00 | D | | | | | | | | |
| 33.50-33.65 | SPT(C) 25*/75 50/75 | 27.50 | ADD | 25/50 | | | | | |
| 33.50-33.95 | D | | | | | | | | |
| 34.50 | D | | | | | | | | |
| 35.00-35.45 | D | | | 31/05/2018:34.99m | -21.59 | 35.00 | Complete at 35.00m |  | |
| 35.00-35.35 | SPT(C) 25*/120 50/225 | 34.00 | ADD | 25/50 | | | | | |
| Remarks | | | | | | | | Scale (approx) 1:50 | Logged By JD |
| | | | | | | | | Figure No. J18042.BH3 | |


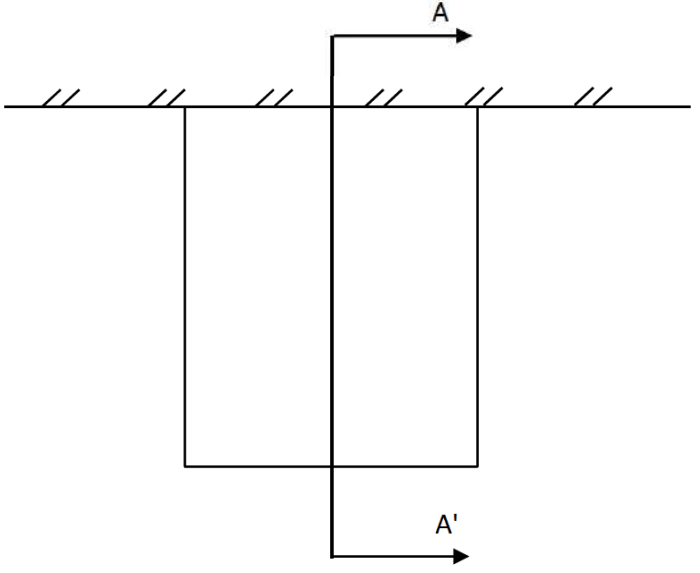


| | | | | | | | | | |
|--|-----------------------|------------------------|--|----------------------------|------------------------------|--|---|-----------------------------|--|
|  Geotechnical & Environmental Associates Widbury Barn Widbury Hill Ware SG12 7QE | | | Site The Former Ragged School, 15-29 Eyre Street Hill, London EC1R 5DZ | | Number BH4 | | | | |
| Excavation Method Drive-in Window Sampler | | Dimensions | | Ground Level (mOD) | | Client Clerkenwell Lifestyle (UK) Ltd | | Job Number J18042 | |
| | | Location | | Dates 12/05/2018 | | Engineer Heyne Tillett Steel | | Sheet 1/1 | |
| Depth (m) | Sample / Tests | Water Depth (m) | Field Records | Level (mOD) | Depth (m) (Thickness) | Description | Legend | Water | |
| | | | | | | Made ground (Concrete screed over dark brown silty sandy gravelly clay with fragments of brick, flint, coal, ash, shell, glass, chalk, charcoal and clinker) |  | | |
| | | | | | (2.80) | | | | |
| | | | | 2.80 | (0.60) | Soft to firm orange-brown mottled grey very silty sandy CLAY with rare gravel of flint |  | | |
| | | | | 3.40 | (2.00) | Soft to firm grey occasionally fissured very silty sandy CLAY with occasional selenite crystals and rare partings of fine sand |  | | |
| | | | | 5.40 | | Complete at 5.40m | | | |
| Remarks Borehole advanced through base of Trial Pit No 10 Groundwater not encountered | | | | | | | Scale (approx) 1:50 | Logged By JD | |
| | | | | | | | Figure No. j18042.BH4 | | |

| | | | | | | | | | |
|---|-----------------------|---|--|----------------------------|------------------------------|--|---|-----------------------------|--|
|  Geotechnical & Environmental Associates Widbury Barn Widbury Hill Ware SG12 7QE | | | Site The Former Ragged School, 15-29 Eyre Street Hill, London EC1R 5DZ | | Number BH5 | | | | |
| Excavation Method Window Sampler | | Dimensions | | Ground Level (mOD) | | Client Clerkenwell Lifestyle (UK) Ltd | | Job Number J18042 | |
| | | Location As per separate plan | | Dates 12/05/2018 | | Engineer Heyne Tillett Steel | | Sheet 1/1 | |
| Depth (m) | Sample / Tests | Water Depth (m) | Field Records | Level (mOD) | Depth (m) (Thickness) | Description | Legend | Water | |
| | | | | | (0.13) | MADE GROUND (concrete screed over rough concrete between 100 mm and 130 mm thick. No reinforcement) |  | | |
| | | | | | (0.27) | | | | |
| | | | | | 0.40 | MADE GROUND (brown and light grey sand and gravel of compacted concrete and brick fill) |  | | |
| 0.90 | D1 | | | | (4.10) | MADE GROUND (dark brown sandy gravelly clay with flint gravel and fragments of coal and ash, frequent fragments of brick and occasional concrete. Clayey with fragments of slate and burnt brick from 2.5 m to 2.7 m. Becoming silty from 4.4 m) |  | | |
| | | | | | | | | | |
| | | | | | 2.60 | D2 | | | |
| | | | | | | | | | |
| | | | | | 4.50 | Dark brown and black silty CLAY with occasional fine sand and medium subangular gravel |  | | |
| | | | | | (0.90) | | | | |
| | | | | | 5.40 | Soft dark grey slightly silty CLAY. Rare medium subangular gravel at 5.5 m. Becoming brown mottled grey from 5.7 m |  | | |
| | | | | | (0.60) | | | | |
| | | | | | 6.00 | Complete at 6.00m | | | |
| Remarks | | | | | | | Scale (approx) 1:50 | Logged By KM | |
| | | | | | | | Figure No. J18042.BH8 | | |

| Excavation Method | | | | Dimensions | | Ground Level (mOD) | | Site | | Number | |
|---|----------------|-----------------|---------------|----------------------|-----------------------|---|--------|---|------------------------|---------------------------------|--|
| Window Sampler | | | | | | | | The Former Ragged School, 15-29 Eyre Street Hill, London EC1R 5DZ | | BH6 | |
| | | | | Location | | Dates | | Client | | Job Number | |
| | | | | As per separate plan | | 12/05/2018 | | Clerkenwell Lifestyle (UK) Ltd | | J18042 | |
| | | | | | | | | Engineer | | Sheet | |
| | | | | | | | | Heyne Tillett Steel | | 1/1 | |
| Depth (m) | Sample / Tests | Water Depth (m) | Field Records | Level (mOD) | Depth (m) (Thickness) | Description | Legend | Water | | | |
| | | | | | (0.20) | MADE GROUND (70 mm smooth concrete over 130 mm rough concrete) | | | | | |
| | | | | | (0.20) | | | | | | |
| | | | | | (0.37) | MADE GROUND (brown and light grey sand and gravel of compacted concrete and brick fill) | | | | | |
| | | | | | | MADE GROUND (dark brown sandy gravelly clay with flint gravel and fragments of coal and ash, frequent fragments of brick including half bricks and occasional slate and concrete. Becoming grey mottled brown from 1.0 m. Poor sample recovery) | | | | | |
| | | | | | (2.63) | | | | | | |
| | | | | | | MADE GROUND (brown silty sand and gravel with frequent fragments of brick, occasional grey clay and rare fragments of glass and ceramic. Damp with fine to medium rounded flint gravel from approximately 4.0 m. Poor sample recovery) | | | | | |
| | | | | | (2.10) | | | | | | |
| | | | | | | Complete at 5.10m | | | | | |
| | | | | | 5.10 | | | | | | |
| Remarks Borehole terminated on refusal. Collapsed on withdrawal of rods to 3.50 m. Backfilled with arisings on completion. Borehole driven through base of Trial Pit No 9. Refer also to trial pit log. | | | | | | | | Scale (approx) 1:50 | Logged By KM | Figure No. J18042.BH9 | |

| Excavation Method | | | | Dimensions | | Ground Level (mOD) | | Site | | Number | |
|-------------------|----------------|-----------------|---------------|----------------------|-----------------------|--|--------|---|------------------------|---------------------------------|--|
| Window Sampler | | | | | | | | The Former Ragged School, 15-29 Eyre Street Hill, London EC1R 5DZ | | BH8 | |
| | | | | Location | | Dates | | Client | | Job Number | |
| | | | | As per separate plan | | 12/05/2018 | | Clerkenwell Lifestyle (UK) Ltd | | J18042 | |
| | | | | | | | | Engineer | | Sheet | |
| | | | | | | | | Heyne Tillett Steel | | 1/1 | |
| Depth (m) | Sample / Tests | Water Depth (m) | Field Records | Level (mOD) | Depth (m) (Thickness) | Description | Legend | Water | | | |
| | | | | | (0.13) | MADE GROUND (concrete screed over rough concrete between 100 mm and 130 mm thick. No reinforcement) | | | | | |
| | | | | | (0.27) | | | | | | |
| | | | | | 0.40 | MADE GROUND (brown and light grey sand and gravel of compacted concrete and brick fill) | | | | | |
| | | | | | | MADE GROUND (dark brown sandy gravelly clay with flint gravel and fragments of coal and ash, frequent fragments of brick and occasional concrete. Clayey with fragments of slate and burnt brick from 2.5 m to 2.7 m. Becoming silty from 4.4 m) | | | | | |
| 0.90 | D1 | | | | | | | | | | |
| | | | | | (4.10) | | | | | | |
| 2.60 | D2 | | | | | | | | | | |
| | | | | | | Dark brown and black silty CLAY with occasional fine sand and medium subangular gravel | | | | | |
| | | | | | 4.50 | | | | | | |
| | | | | | (0.90) | | | | | | |
| | | | | | | Soft dark grey slightly silty CLAY. Rare medium subangular gravel at 5.5 m. Becoming brown mottled grey from 5.7 m | | | | | |
| | | | | | 5.40 | | | | | | |
| | | | | | (0.60) | | | | | | |
| | | | | | 6.00 | Complete at 6.00m | | | | | |
| Remarks | | | | | | | | Scale (approx) 1:50 | Logged By KM | Figure No. J18042.BH8 | |

| | | | | | | | | | |
|--|-----------------------|---|----------------------|--|------------------------------|--|--|-----------------------------|--|
|  Geotechnical & Environmental Associates Widbury Barn Widbury Hill Ware SG12 7QE | | | | Site The Former Ragged School, 15-29 Eyre Street Hill, London EC1R 5DZ | | Number BH9 | | | |
| Excavation Method Window Sampler | | Dimensions | | Ground Level (mOD) | | Client Clerkenwell Lifestyle (UK) Ltd | | Job Number J18042 | |
| | | Location As per separate plan | | Dates 12/05/2018 | | Engineer Heyne Tillett Steel | | Sheet 1/1 | |
| Depth (m) | Sample / Tests | Water Depth (m) | Field Records | Level (mOD) | Depth (m) (Thickness) | Description | Legend | Water | |
| | | | | | (0.20) (0.20) (0.37) | MADE GROUND (70 mm smooth concrete over 130 mm rough concrete) |  | | |
| | | | | | (2.63) | MADE GROUND (brown and light grey sand and gravel of compacted concrete and brick fill) MADE GROUND (dark brown sandy gravelly clay with flint gravel and fragments of coal and ash, frequent fragments of brick including half bricks and occasional slate and concrete. Becoming grey mottled brown from 1.0 m. Poor sample recovery) |  | | |
| | | | | | 3.00 | MADE GROUND (brown silty sand and gravel with frequent fragments of brick, occasional grey clay and rare fragments of glass and ceramic. Damp with fine to medium rounded flint gravel from approximately 4.0 m. Poor sample recovery) |  | | |
| | | | | | (2.10) | | | | |
| | | | | | 5.10 | Complete at 5.10m | | | |
| Remarks Borehole terminated on refusal. Collapsed on withdrawal of rods to 3.50 m. Backfilled with arisings on completion. Borehole driven through base of Trial Pit No 9. Refer also to trial pit log. | | | | | | | Scale (approx) 1:50 | Logged By KM | |
| | | | | | | | Figure No. J18042.BH9 | | |

| | | | | | | | |
|--|--|--|--|---|--|---------------------------------|--|
|  | | | | www.gea-ltd.co.uk Herts 01727 824666 Notts 01509 674888 | | Trial Pit No 1 | |
| Site Former Ragged School, 15-29 Eyre Street Hill, London, EC1R 5DZ | | | | | | Job Number J18042 | |
| Client Clerkenwell Lifestyle (UK) Ltd | | | | | | Sheet | |
| Engineer HTS | | | | | | Dates 11/05/2018 | |
| Excavation Method Machine excavated | | Dimensions 750 x 1000 x 2500 | | Ground Level (mOD) 13.38 | | Location | |
| Plan:  | | | | | | | |
|  | | | |  | | | |
| Remarks: All dimensions in millimetres Sides of trial pit collapsing towards the base due to brick content Basement wall appeared extremely worn and friable toward GL | | | | | | Scale: 1:20 | |
| | | | | | | Logged by: JD | |

Site Former Ragged School, 15-29 Eyre Street Hill, London, EC1R 5DZ

Client Clerkenwell Lifestyle (UK) Ltd

Engineer CTP Consulting Engineers

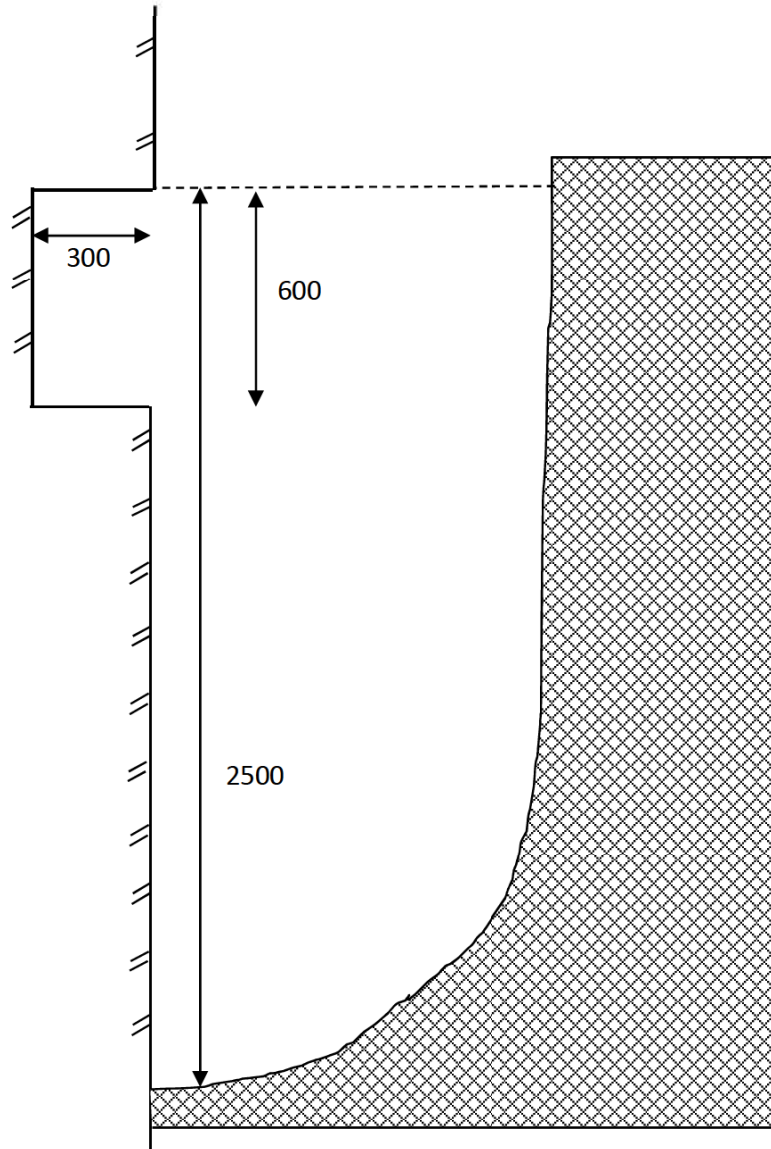
Job Number
J18042

Sheet

Dates
08/01/2018

| | | | |
|--|---------------------------------|--------------------|----------|
| Excavation Method Machine excavated | Dimensions 750 x 1000 x 2500 | Ground Level (mOD) | Location |
|--|---------------------------------|--------------------|----------|

Section A-A'



GL to 2.5 m Dark brown with black staining sandy silty clay with fragments of brick, concrete, coal, tarmac, flint, glass, ash and slate

| | |
|--|------------------|
| Remarks: All dimensions in millimetres Sides of trial pit collapsing towards the base due to water ingress during excavation Groundwater encountered at 0.9 m and rose to approximately 0.3 m | Scale: 1:20 |
| | Logged by: JS |

Site Former Ragged School, 15-29 Eyre Street Hill, London, EC1R 5DZ

Client Clerkenwell Lifestyle (UK) Ltd

Engineer HTS

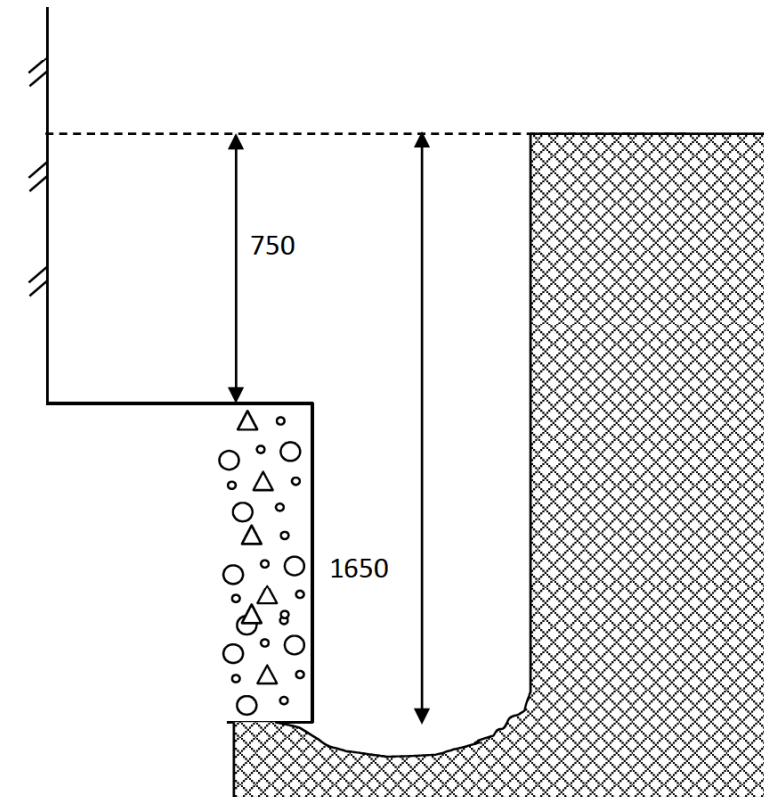
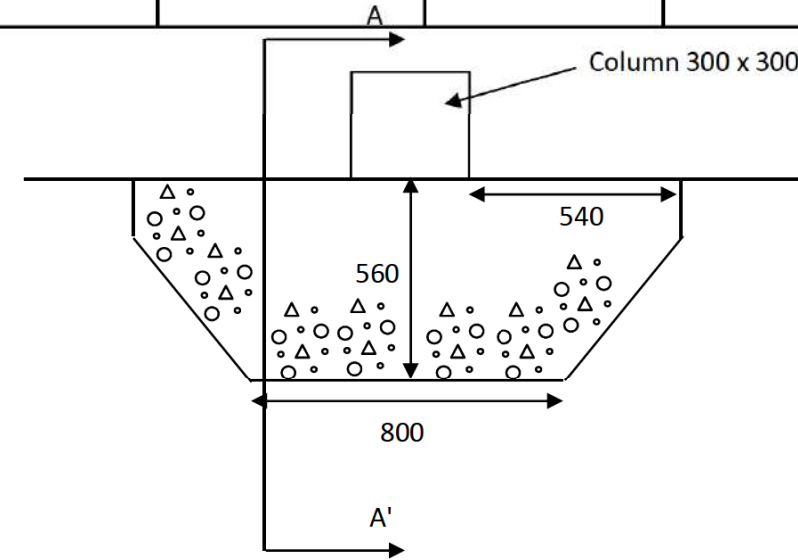
Job Number
J18042

Sheet

Dates
11/05/2018

| | | | |
|--|----------------------------------|-----------------------------|----------|
| Excavation Method Machine excavated | Dimensions 1000 x 1000 x 1700 | Ground Level (mOD) 13.23 | Location |
|--|----------------------------------|-----------------------------|----------|

Plan:



GL to 1.0 m Dark brown sandy silty clay with fragments of brick, concrete, coal, tarmac, flint, glass, ash and slate.

1.0 m to 1.7 m Whitish grey mottled orange-brown slightly silty clay with fragments of brick, flint and coal.

| | |
|---|------------------|
| Remarks: All dimensions in millimetres Sides of trial pit remained stable Pad foundation appeared to be irregularly shaped and of mass concrete. | Scale: 1:20 |
| | Logged by: JD |

Site Former Ragged School, 15-29 Eyre Street Hill, London, EC1R 5DZ

Client Clerkenwell Lifestyle (UK) Ltd

Engineer HTS

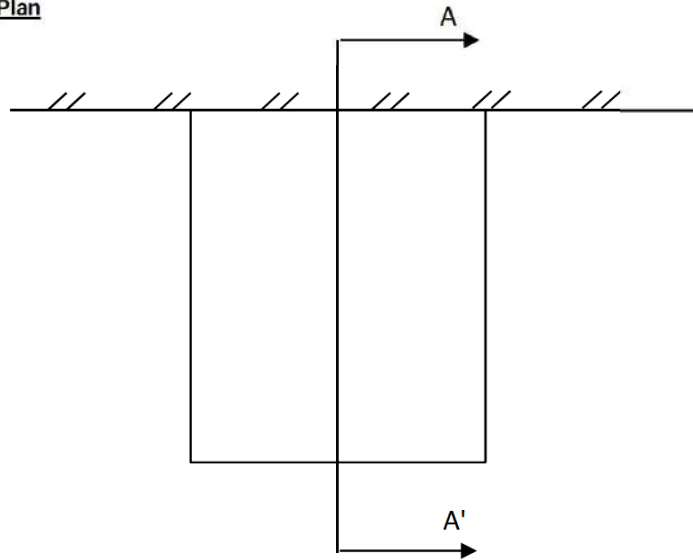
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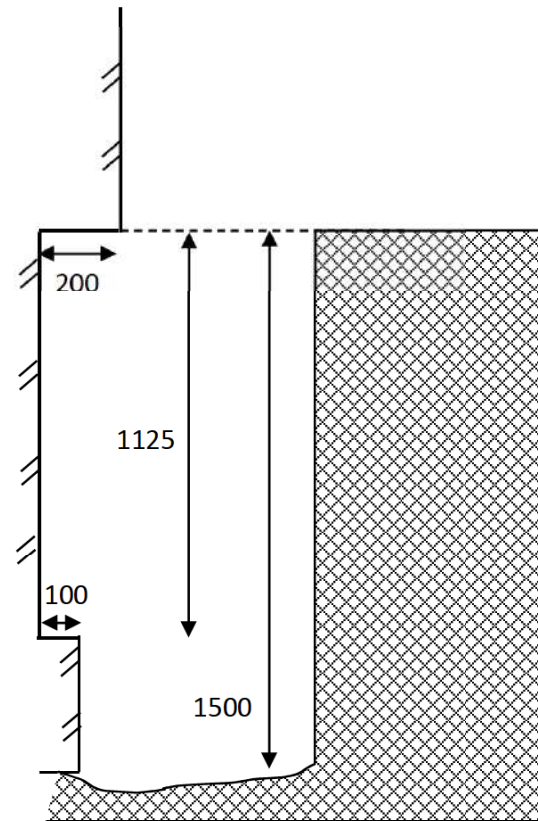
Dates
11/05/2018

| | | | |
|--|---------------------------------|--------------------|----------|
| Excavation Method Machine excavated | Dimensions 1000 x 750 x 1500 | Ground Level (mOD) | Location |
|--|---------------------------------|--------------------|----------|

Plan



Section



GL to 1.5 m Dark brown clayey silty sand with fragments of brick, concrete, slate, yark stone, tarmac and glass.

| | |
|--|------------------|
| Remarks: All dimensions in millimetres Sides of trial pit remained stable Base of footing proven with hand tool | Scale: 1:20 |
| | Logged by: JD |

Site Former Ragged School, 15-29 Eyre Street Hill, London, EC1R 5DZ

Client Clerkenwell Lifestyle (UK) Ltd

Engineer HTS

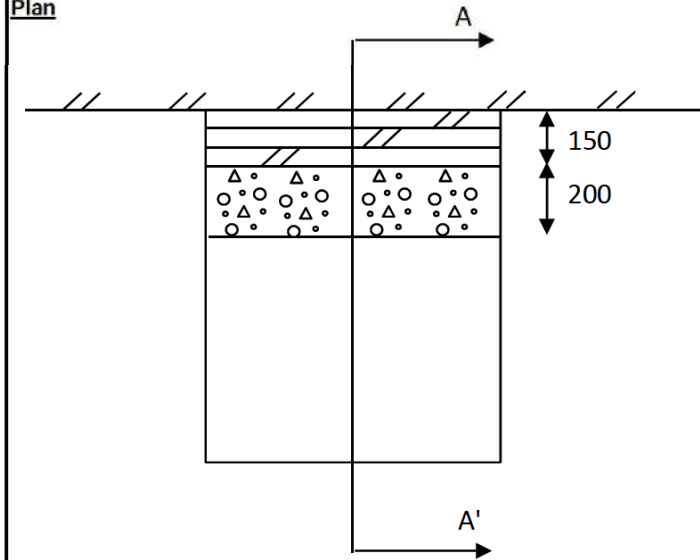
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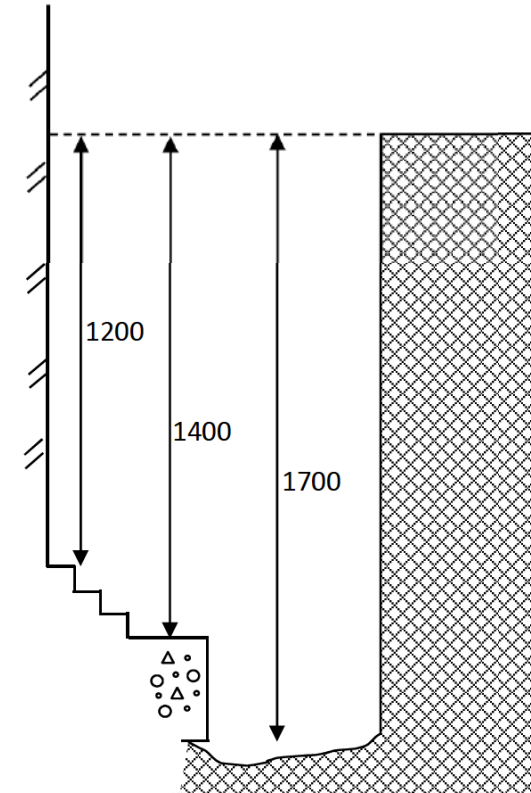
Dates
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| | | | |
|--|---------------------------------|--------------------|----------|
| Excavation Method Machine excavated | Dimensions 1000 x 750 x 1700 | Ground Level (mOD) | Location |
|--|---------------------------------|--------------------|----------|

Plan



Section



GL to 1.8 m Dark brown silty sand with fragments of brick, concrete, coal, tarmac, flint, glass, ash and slate

| | | |
|--|-----------------------------------|------------------|
| Remarks: All dimensions in millimetres Sides of trial pit remained stable Base of footing proven with hand tool | Slow water seepage at 1.7 m depth | Scale: 1:20 |
| | | Logged by: JD |

Site Former Ragged School, 15-29 Eyre Street Hill, London, EC1R 5DZ

Client Clerkenwell Lifestyle (UK) Ltd

Engineer HTS

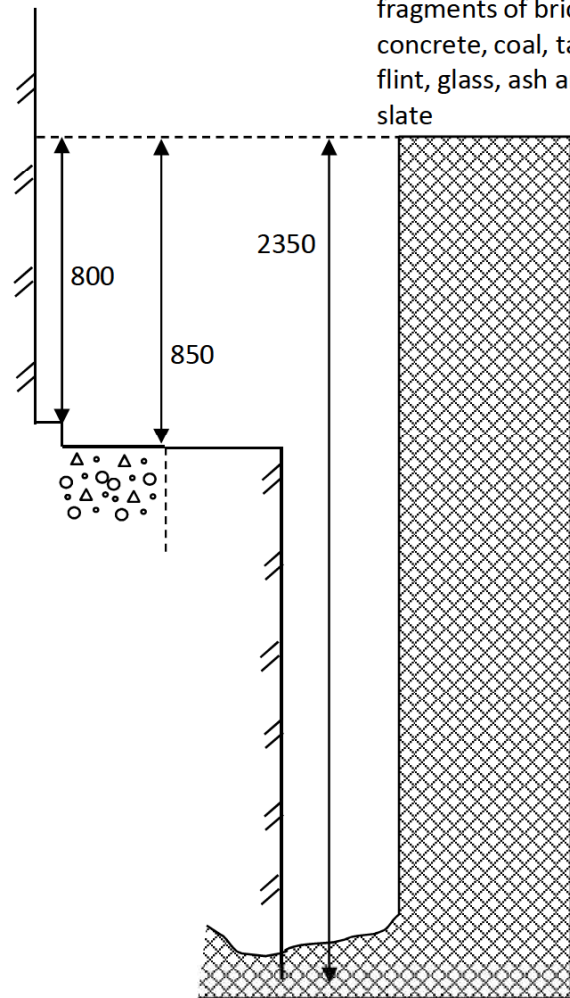
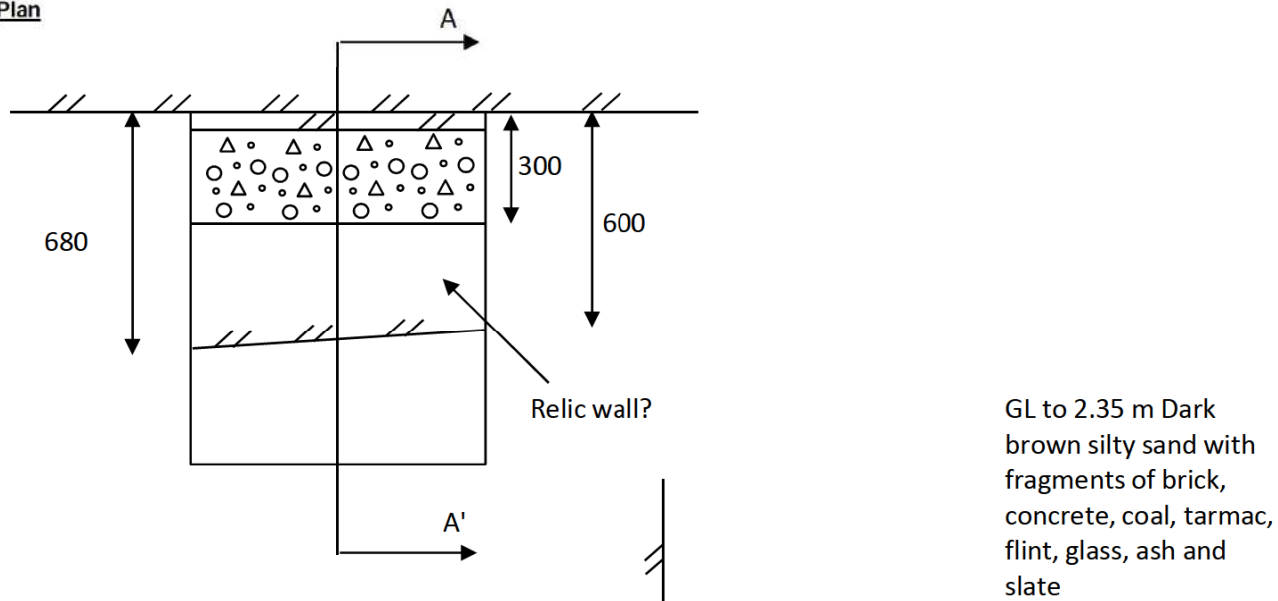
Job Number
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Dates
12/05/2018

| | | | |
|--|---------------------------------|--------------------|----------|
| Excavation Method Machine excavated | Dimensions 1000 x 750 x 2350 | Ground Level (mOD) | Location |
|--|---------------------------------|--------------------|----------|

Plan



| | | |
|--|--|------------------|
| Remarks: All dimensions in millimetres Sides of trial pit unstable toward base of pit Base of footing not encountered | Suspected Relic Wall in front of footing | Scale: 1:20 |
| | | Logged by: JD |

Site Former Ragged School, 15-29 Eyre Street Hill, London, EC1R 5DZ

Client Clerkenwell Lifestyle (UK) Ltd

Engineer HTS

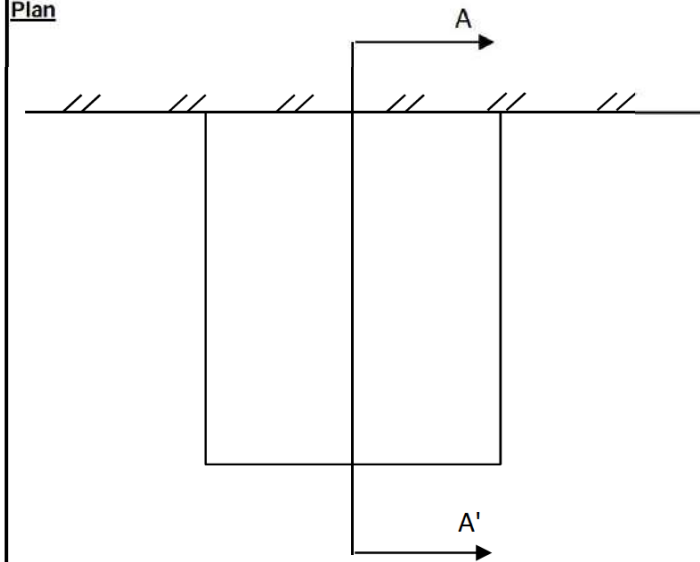
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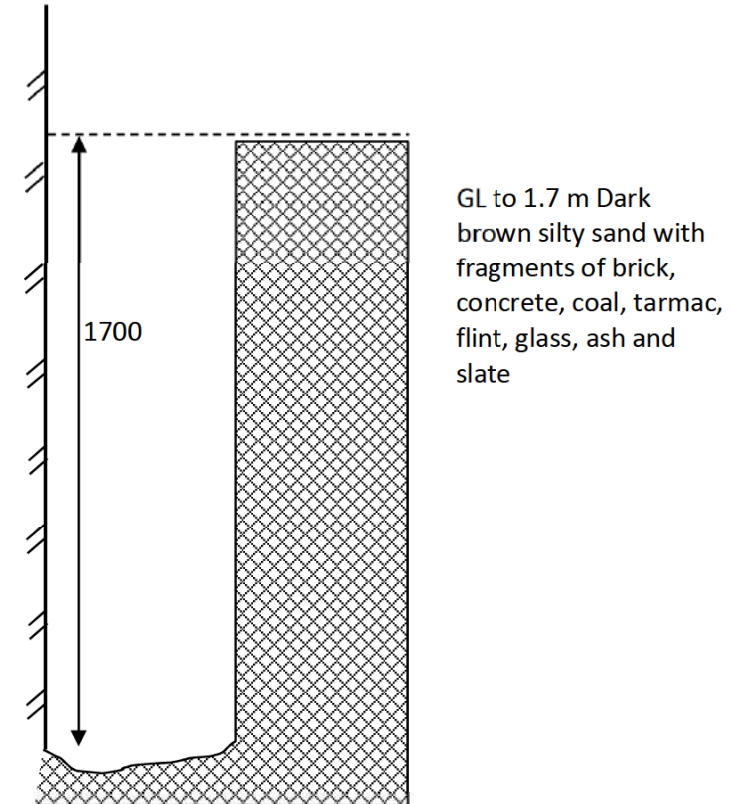
Dates
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| | | | |
|-------------------------------------|---------------------------------|--------------------|----------|
| Excavation Method Hand excavated | Dimensions 1000 x 750 x 1700 | Ground Level (mOD) | Location |
|-------------------------------------|---------------------------------|--------------------|----------|

Plan



Section



| | | |
|--|--|------------------|
| Remarks: All dimensions in millimetres Sides of trial pit remained stable Base of footing proven with hand tool | | Scale: 1:20 |
| | | Logged by: JD |

Site Former Ragged School, 15-29 Eyre Street Hill, London, EC1R 5DZ

Client Clerkenwell Lifestyle (UK) Ltd

Engineer HTS

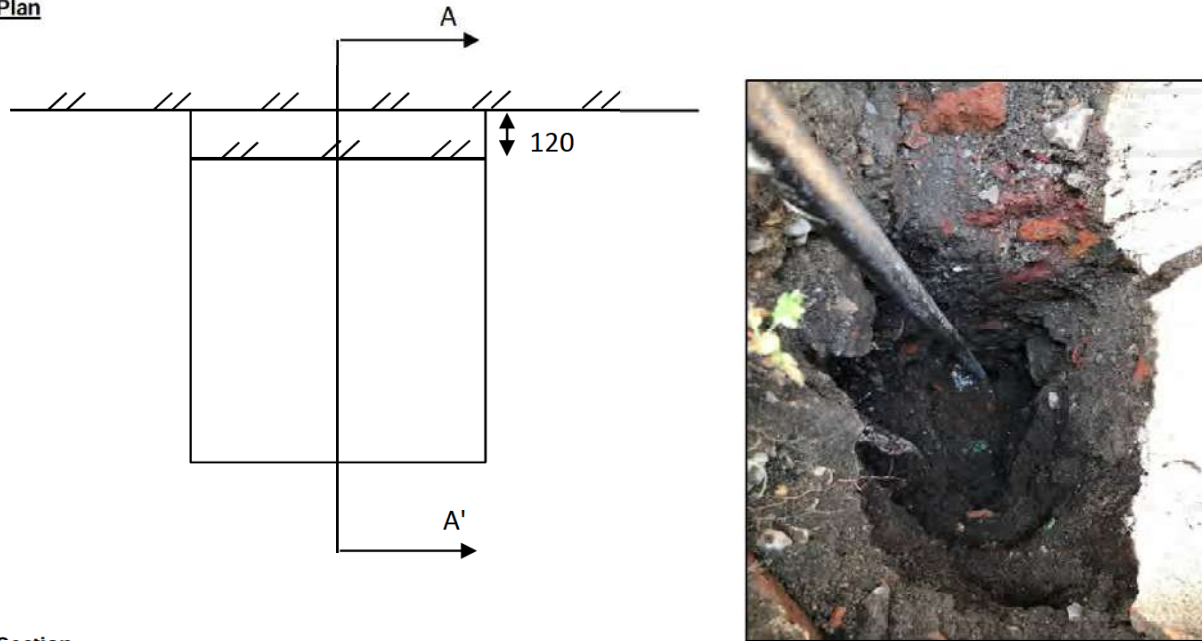
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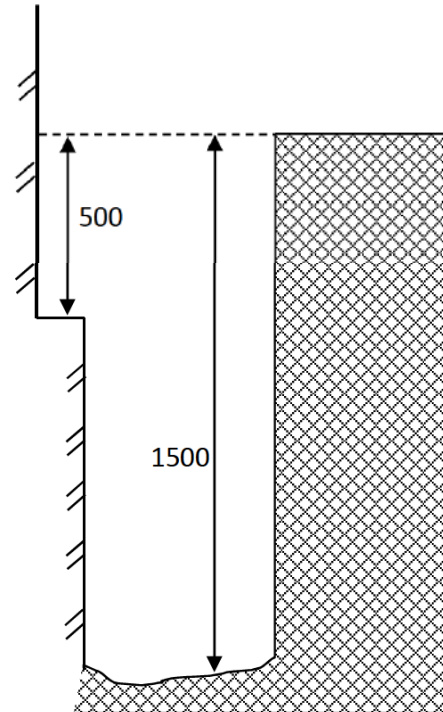
Dates
12/05/2018

| | | | |
|-------------------------------------|---------------------------------|--------------------|----------|
| Excavation Method Hand excavated | Dimensions 1000 x 750 x 1500 | Ground Level (mOD) | Location |
|-------------------------------------|---------------------------------|--------------------|----------|

Plan



Section



GL to 1.5 m Dark brown silty sand with fragments of brick, concrete, coal, tarmac, flint, glass, ash and slate

Remarks:
All dimensions in millimetres
Sides of trial pit remained stable
Base of footing proven with hand tool

Scale:
1:20
Logged by:
JD

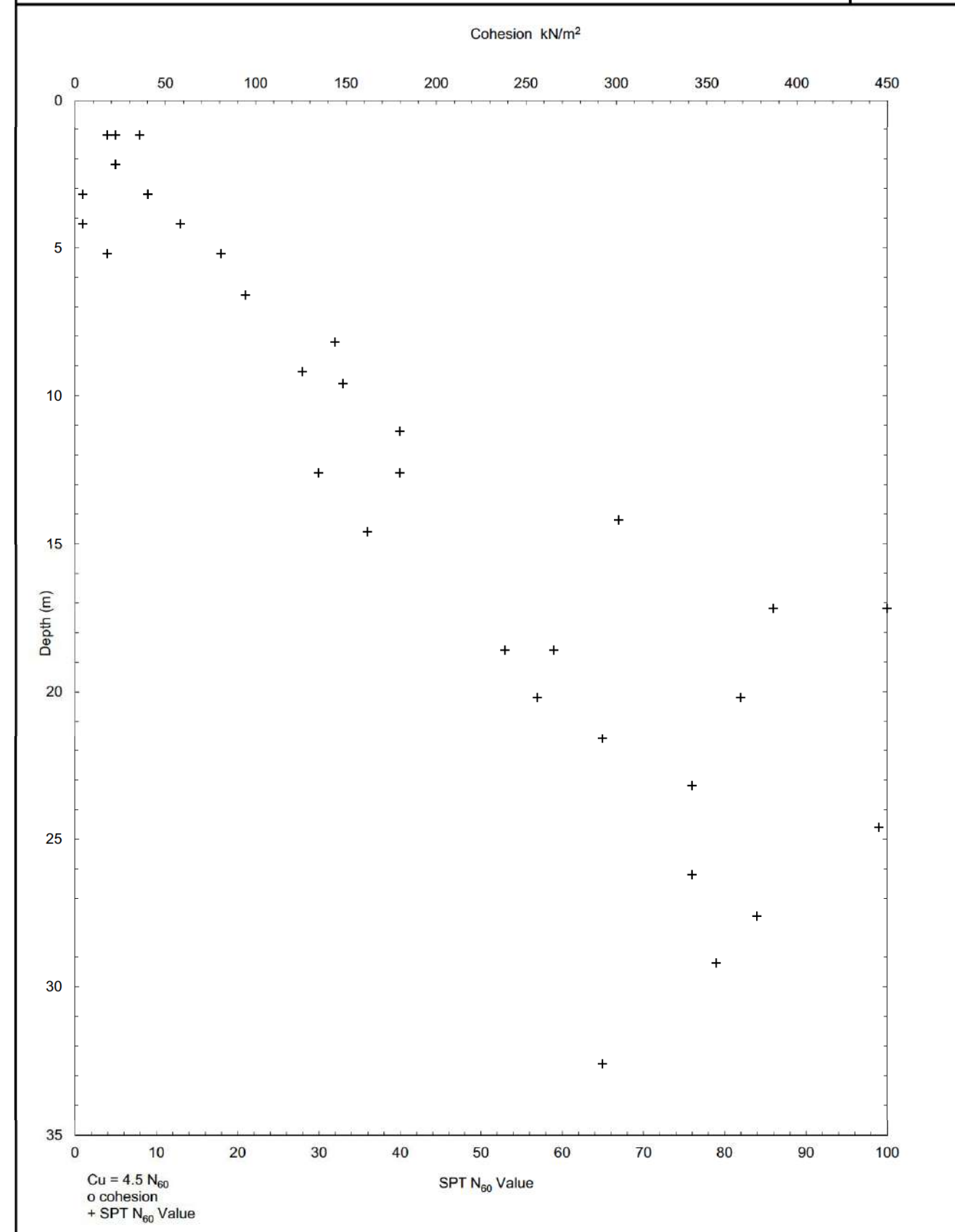
Site The Former Ragged School, 15-29 Eyre Street Hill, London, EC1R 5DZ

Client Clerkenwell Lifestyle (UK) Ltd

Engineer HTS

Job Number
J17017A

Sheet
1 / 1



SUMMARY OF GEOTECHNICAL TESTING

| Borehole / Trial Pit | | Sample details | | Classification Tests | | | | | Density Tests | | Undrained Triaxial Compression | | | Chemical Tests | | Other tests and comments | | | |
|----------------------|--|----------------|-----------|----------------------|-------------|--------|--------|--------|---------------|-------------|--------------------------------|-----------------------|-----------|-------------------|---------------------|--------------------------|------------------|------|-------------------------------|
| | | Sample Ref | Depth (m) | Type | Description | WC (%) | LL (%) | PL (%) | PI | <425 µm (%) | Bulk Mg/m ³ | Dry Mg/m ³ | Condition | Cell Pressure kPa | Deviator Stress kPa | | Shear Stress kPa | pH | 2:1 W/S SO ₄ (g/L) |
| BH1 | | | 2.00 | D | | | | | | | | | | | | | | | |
| BH1 | | | 4.00 | U | 38.4 | 59 | 24 | 35 | 99 | 1.91 | 1.38 | Undisturbed | 80 | 105 | 53 | | 7.9 | 0.04 | |
| BH1 | | | 6.50 | U | 32.6 | | | | | 1.94 | 1.46 | Undisturbed | 130 | 138 | 69 | | | | |
| BH1 | | | 9.50 | U | 23.8 | 58 | 21 | 37 | 98 | 2.04 | 1.65 | Undisturbed | 190 | 250 | 125 | | 8.4 | 0.30 | |
| BH1 | | | 12.50 | U | 23.1 | 69 | 27 | 42 | 100 | 2.11 | 1.71 | Undisturbed | 250 | 381 | 191 | | | | |
| BH1 | | | 18.00 | D | | | | | | | | | | | | | | | Particle Size Distribution |
| BH1 | | | 23.00 | B | 26.0 | 51 | 20 | 31 | 98 | | | | | | | | | | Particle Size Distribution |
| BH1 | | | 25.50 | D | | | | | | | | | | | | | | | |
| BH2 | | | 3.75 | D | | | | | | | | | | | | | | | |
| BH2 | | | 8.00 | U | 22.5 | 59 | 22 | 37 | 99 | 2.01 | 1.64 | Undisturbed | 160 | 215 | 107 | | | | |

Sample type: B (Bulk disturb.) BLK (Block) C (Core) D (Disturbed) LB (Large Bulk dist.) U (Undisturbed)

Checked and Approved by

S Burke
S Burke - Senior Technician
29/06/2016

Project Number:

GEO / 27587

Project Name:

EYRE STREET, RAGGED SCHOOL
J18042



Test Report By: GEOLABS Limited, Bucknalls Lane, Ganston, Watford, Hertfordshire, WD25 9XX
Client: Geotechnical & Environmental Associates Limited, Widbury Barn, Widbury Hill, Ware, Hertfordshire, SG12 7QE

SUMMARY OF GEOTECHNICAL TESTING

| Borehole / Trial Pit | | Sample details | | Classification Tests | | | | | Density Tests | | Undrained Triaxial Compression | | | Chemical Tests | | Other tests and comments | | | |
|----------------------|--|----------------|-----------|----------------------|-------------|--------|--------|--------|---------------|-------------|--------------------------------|-----------------------|-----------|-------------------|---------------------|--------------------------|------------------|----|-------------------------------|
| | | Sample Ref | Depth (m) | Type | Description | WC (%) | LL (%) | PL (%) | PI | <425 µm (%) | Bulk Mg/m ³ | Dry Mg/m ³ | Condition | Cell Pressure kPa | Deviator Stress kPa | | Shear Stress kPa | pH | 2:1 W/S SO ₄ (g/L) |
| BH2 | | | 11.00 | U | 21.8 | 60 | 24 | 36 | 100 | 2.10 | 1.73 | Undisturbed | 220 | 241 | 120 | | | | |
| BH3 | | | 5.00 | U | 37.0 | | | | | 1.88 | 1.36 | Undisturbed | 100 | 69 | 34 | | | | |
| BH3 | | | 8.00 | U | 30.0 | | | | | 1.99 | 1.53 | Undisturbed | 160 | 191 | 96 | | | | |
| BH3 | | | 11.00 | U | 29.2 | | | | | 2.00 | 1.55 | Undisturbed | 220 | 132 | 66 | | | | |
| BH3 | | | 14.00 | U | 20.5 | | | | | 2.13 | 1.77 | Undisturbed | 130 | 491 | 245 | | | | |
| BH3 | | | 15.50 | D | | | | | | | | | | | | | | | Particle Size Distribution |
| BH3 | | | 21.00 | D | 17.2 | 49 | 21 | 28 | 100 | | | | | | | | | | Particle Size Distribution |
| BH3 | | | 24.00 | D | | | | | | | | | | | | | | | Particle Size Distribution |
| BH3 | | | 27.00 | D | | | | | | | | | | | | | | | Particle Size Distribution |
| BH3 | | | 30.50 | D | | | | | | | | | | | | | | | Particle Size Distribution |

Sample type: B (Bulk disturb.) BLK (Block) C (Core) D (Disturbed) LB (Large Bulk dist.) U (Undisturbed)

Checked and Approved by

S Burke
S Burke - Senior Technician
29/06/2016

Project Number:

GEO / 27587

Project Name:

EYRE STREET, RAGGED SCHOOL
J18042



Test Report By: GEOLABS Limited, Bucknalls Lane, Ganston, Watford, Hertfordshire, WD25 9XX
Client: Geotechnical & Environmental Associates Limited, Widbury Barn, Widbury Hill, Ware, Hertfordshire, SG12 7QE

SUMMARY OF GEOTECHNICAL TESTING

| Borehole / Trial Pit | Sample details | | Description | Classification Tests | | | | | Density Tests | | Undrained Triaxial Compression | | | Chemical Tests | | Other tests and comments | | |
|----------------------|----------------|-----------|-------------|----------------------|--------|--------|--------|--------|---------------|------------------------|--------------------------------|-----------|-------------------|---------------------|------------------|--------------------------|----|----------------------------|
| | Sample Ref | Depth (m) | | Type | WC (%) | LL (%) | PL (%) | PI (%) | <425 µm (%) | Bulk Mg/m ³ | Dry Mg/m ³ | Condition | Cell Pressure kPa | Deviator Stress kPa | Shear Stress kPa | | pH | 2:1 W/S S04 (g/L) |
| BH3 | | 35.00 | D | | | | | | | | | | | | | | | Particle Size Distribution |
| | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | |

Sample type: B (Bulk disturb.) BLK (Block) C (Core) D (Disturbed) LB (Large Bulk dist.) U (Undisturbed)

GEO / 27587

EYRE STREET, RAGGED SCHOOL
J18042

Checked and Approved by
S Burke
S Burke - Senior Technician
29/06/2018

Project Number:
GEO / 27587

Project Name:
**EYRE STREET, RAGGED SCHOOL
J18042**

Test Report By: GEOLABS Limited, Bucknalls Lane, Garston, Watford, Hertfordshire, WD25 9XX
 Client: Geotechnical & Environmental Associates Limited, Widbury Barn, Widbury Hill, Ware, Hertfordshire, SG12 7QE

GL:Version 1.90 - 04/05/2018

BS EN ISO 17892-4 : 2016

PARTICLE SIZE DISTRIBUTION

BH / TP No. BH1
 Depth (m) 18.00
 Sample Type D

Description
Brownish grey clayey silty SAND.

BS EN ISO 17892-4 : 2016 : Clause 5.2 - Wet Sieve

| Sieve | |
|----------|--------|
| Size | % Pass |
| 200.0 mm | 100 |
| 125.0 mm | 100 |
| 90.0 mm | 100 |
| 75.0 mm | 100 |
| 63.0 mm | 100 |
| 50.0 mm | 100 |
| 37.5 mm | 100 |
| 28.0 mm | 100 |
| 20.0 mm | 100 |
| 14.0 mm | 100 |
| 10.0 mm | 100 |
| 6.30 mm | 100 |
| 5.00 mm | 100 |
| 3.35 mm | 100 |
| 2.00 mm | 100 |
| 1.18 mm | 99 |
| 600 µm | 99 |
| 425 µm | 99 |
| 300 µm | 99 |
| 212 µm | 94 |
| 150 µm | 76 |
| 63 µm | 27 |

| Particle Proportions | |
|----------------------|----|
| Cobbles | 0 |
| Gravel | 0 |
| Sand | 72 |
| Silt & Clay | 28 |

Checked and Approved by
S Burke
S Burke - Senior Technician
29/06/2018

Project Number:
GEO / 27587

Project Name:
EYRE STREET, RAGGED SCHOOL
J18042

Test Report By: GEOLABS Limited, Bucknalls Lane, Garston, Watford, Hertfordshire, WD25 9XX
 Client: Geotechnical & Environmental Associates Limited, Widbury Barn, Widbury Hill, Ware, Hertfordshire, SG12 7QE



1262 - PSD BH1 25.50 D - 27567-301819.XLSM

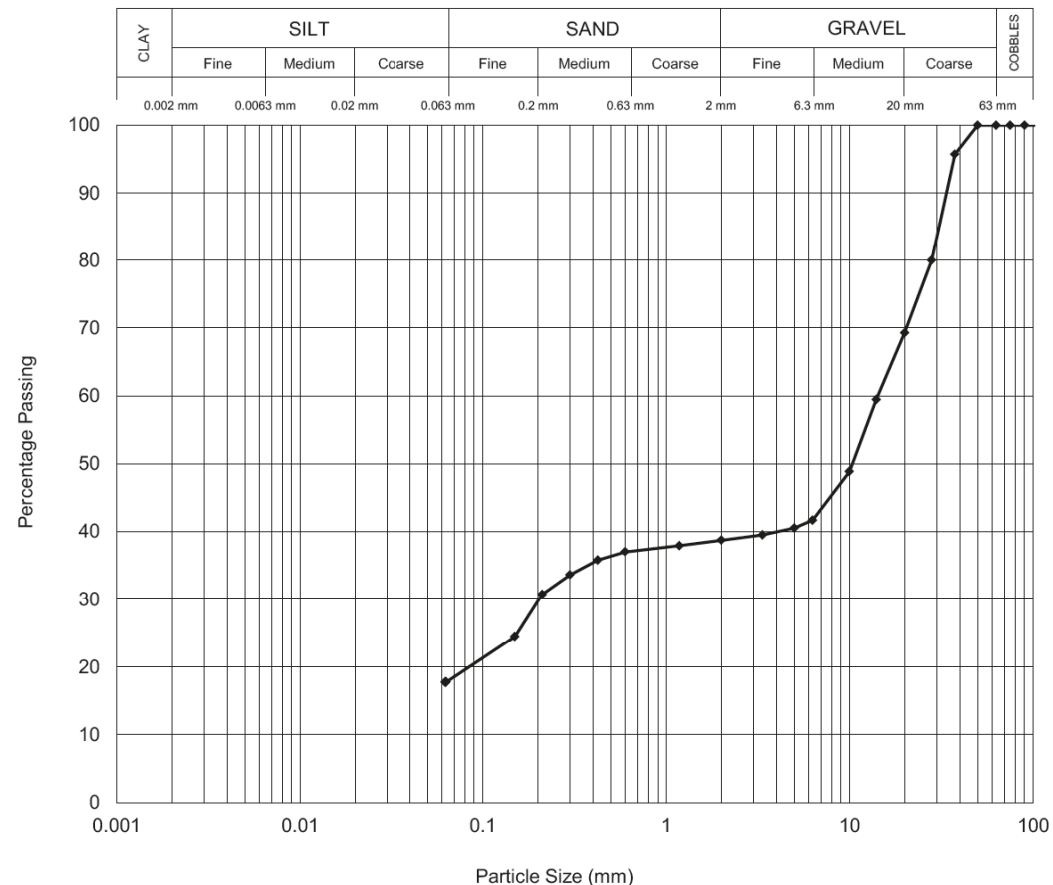
BS EN ISO 17892-4 : 2016

PARTICLE SIZE DISTRIBUTION

| | | |
|-------------|-------|--|
| BH / TP No. | BH1 | Description Greenish grey clayey sandy GRAVEL. |
| Depth (m) | 25.50 | |
| Sample Type | D | |
| Remarks | | Insufficient sample supplied to comply with BS EN ISO 17892-4 : 2016 minimum mass requirements |

BS EN ISO 17892-4 : 2016 : Clause 5.2 - Wet Sieve

| Sieve | |
|----------|--------|
| Size | % Pass |
| 200.0 mm | 100 |
| 125.0 mm | 100 |
| 90.0 mm | 100 |
| 75.0 mm | 100 |
| 63.0 mm | 100 |
| 50.0 mm | 100 |
| 37.5 mm | 96 |
| 28.0 mm | 80 |
| 20.0 mm | 69 |
| 14.0 mm | 59 |
| 10.0 mm | 49 |
| 6.30 mm | 42 |
| 5.00 mm | 41 |
| 3.35 mm | 40 |
| 2.00 mm | 39 |
| 1.18 mm | 38 |
| 600 µm | 37 |
| 425 µm | 36 |
| 300 µm | 34 |
| 212 µm | 31 |
| 150 µm | 24 |
| 63 µm | 18 |



| Particle Proportions | |
|----------------------|----|
| Cobbles | 0 |
| Gravel | 61 |
| Sand | 21 |
| Silt & Clay | 18 |

GL:Version 1.90 - 04/05/2018

Checked and Approved by
S Burke
S Burke - Senior Technician
29/06/2018

Project Number: **GEO / 27587**
Project Name: **EYRE STREET, RAGGED SCHOOL J18042**



1262 - PSD BH3 15.50 D - 27567-301830.XLSM

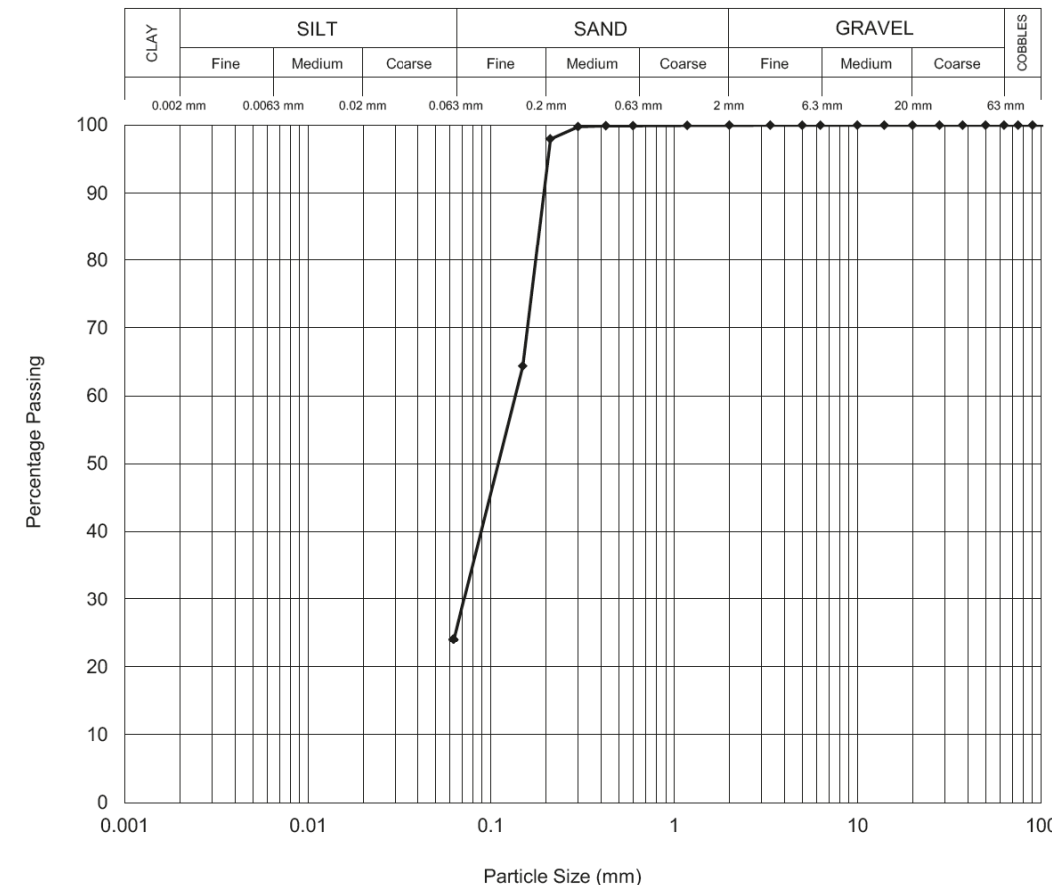
BS EN ISO 17892-4 : 2016

PARTICLE SIZE DISTRIBUTION

| | | |
|-------------|-------|---|
| BH / TP No. | BH3 | Description Light brownish grey clayey silty SAND. |
| Depth (m) | 15.50 | |
| Sample Type | D | |

BS EN ISO 17892-4 : 2016 : Clause 5.2 - Wet Sieve

| Sieve | |
|----------|--------|
| Size | % Pass |
| 200.0 mm | 100 |
| 125.0 mm | 100 |
| 90.0 mm | 100 |
| 75.0 mm | 100 |
| 63.0 mm | 100 |
| 50.0 mm | 100 |
| 37.5 mm | 100 |
| 28.0 mm | 100 |
| 20.0 mm | 100 |
| 14.0 mm | 100 |
| 10.0 mm | 100 |
| 6.30 mm | 100 |
| 5.00 mm | 100 |
| 3.35 mm | 100 |
| 2.00 mm | 100 |
| 1.18 mm | 100 |
| 600 µm | 100 |
| 425 µm | 100 |
| 300 µm | 100 |
| 212 µm | 98 |
| 150 µm | 64 |
| 63 µm | 24 |



| Particle Proportions | |
|----------------------|----|
| Cobbles | 0 |
| Gravel | 0 |
| Sand | 76 |
| Silt & Clay | 24 |

GL:Version 1.90 - 04/05/2018

Checked and Approved by
S Burke
S Burke - Senior Technician
29/06/2018

Project Number: **GEO / 27587**
Project Name: **EYRE STREET, RAGGED SCHOOL J18042**



1262 - PSD BH3 24.00 D - 27567-301636.XLSM

BS EN ISO 17892-4 : 2016

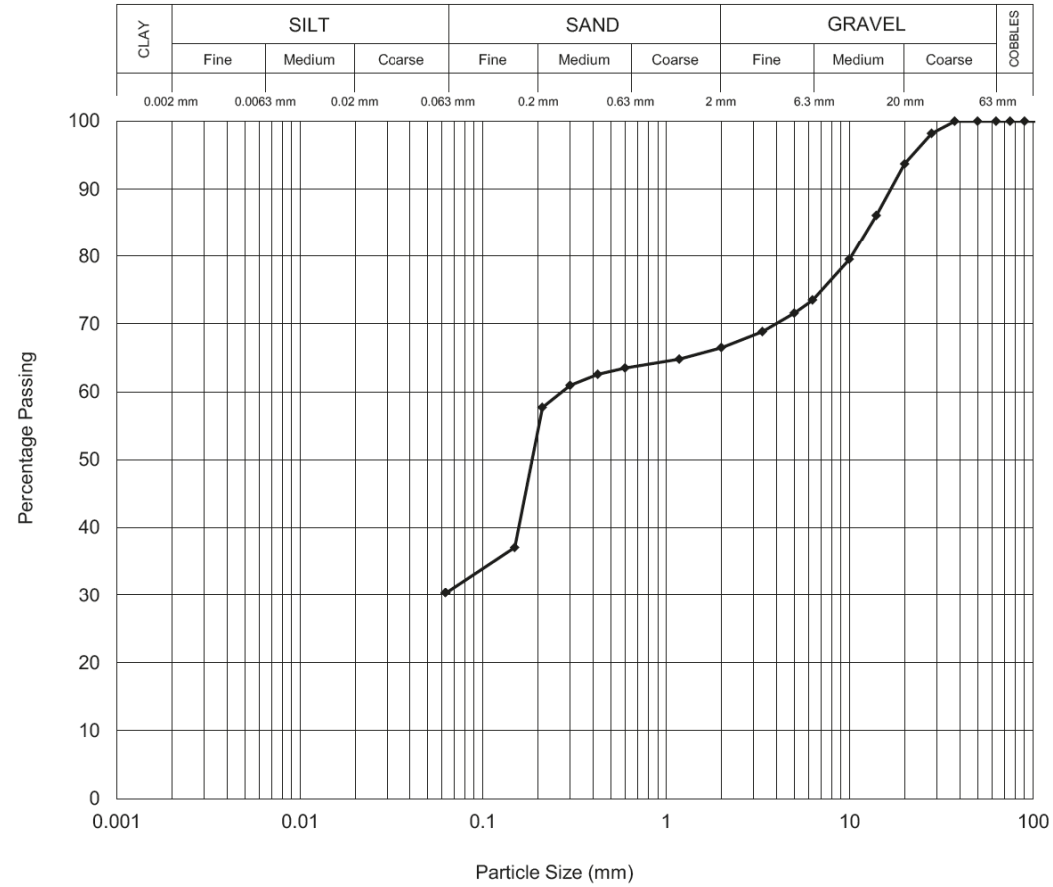
PARTICLE SIZE DISTRIBUTION

BH / TP No. BH3
 Depth (m) 24.00
 Sample Type D

Description
 Multicoloured clayey silty SAND and GRAVEL.

BS EN ISO 17892-4 : 2016 : Clause 5.2 - Wet Sieve

| Sieve | |
|----------|--------|
| Size | % Pass |
| 200.0 mm | 100 |
| 125.0 mm | 100 |
| 90.0 mm | 100 |
| 75.0 mm | 100 |
| 63.0 mm | 100 |
| 50.0 mm | 100 |
| 37.5 mm | 100 |
| 28.0 mm | 98 |
| 20.0 mm | 94 |
| 14.0 mm | 86 |
| 10.0 mm | 80 |
| 6.30 mm | 73 |
| 5.00 mm | 72 |
| 3.35 mm | 69 |
| 2.00 mm | 66 |
| 1.18 mm | 65 |
| 600 µm | 63 |
| 425 µm | 63 |
| 300 µm | 61 |
| 212 µm | 58 |
| 150 µm | 37 |
| 63 µm | 30 |



| Particle Proportions | |
|----------------------|----|
| Cobbles | 0 |
| Gravel | 34 |
| Sand | 36 |
| Silt & Clay | 30 |

GL:Version 1.90 - 04/05/2018

Checked and Approved by
S Burke
 S Burke - Senior Technician
 29/06/2018

Project Number: **GEO / 27587**
 Project Name: **EYRE STREET, RAGGED SCHOOL
 J18042**



1262 - PSD BH3 27.00 D - 27567-301817.XLSM

BS EN ISO 17892-4 : 2016

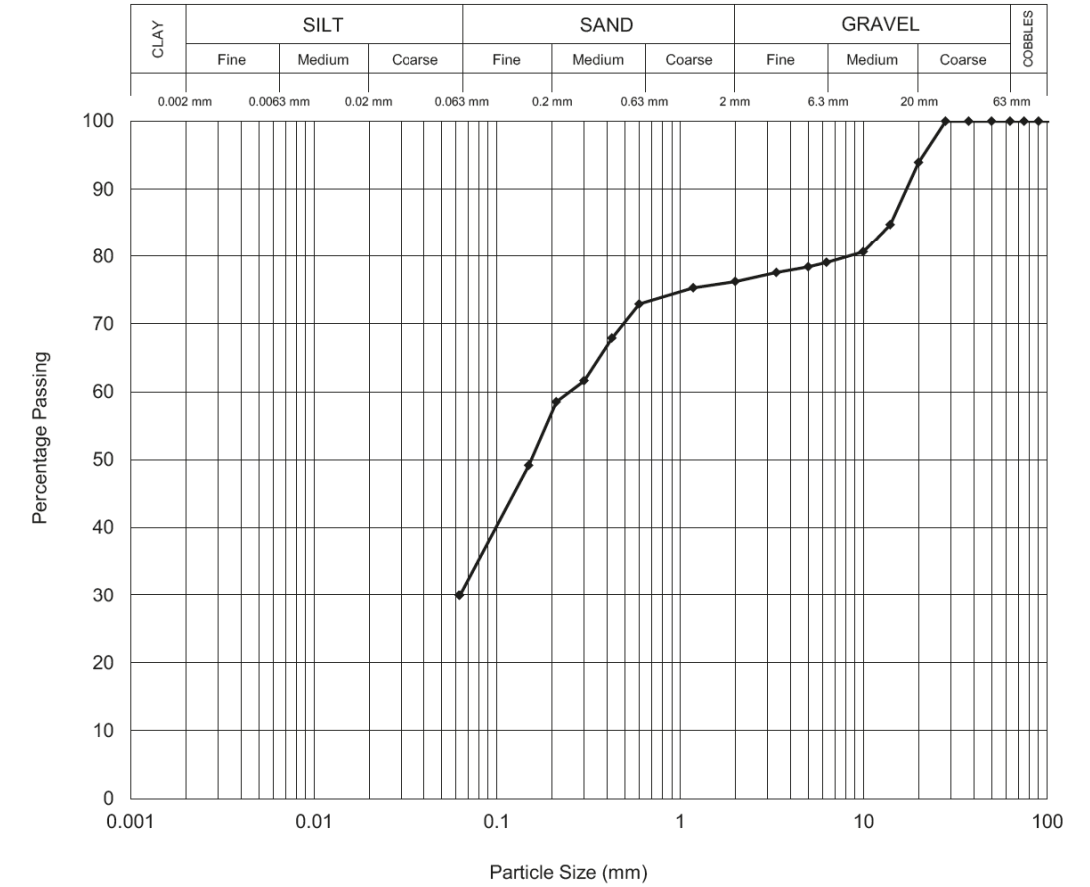
PARTICLE SIZE DISTRIBUTION

BH / TP No. BH3
 Depth (m) 27.00
 Sample Type D

Description
 Dark bluish grey slightly gravelly sandy CLAY.

BS EN ISO 17892-4 : 2016 : Clause 5.2 - Wet Sieve

| Sieve | |
|----------|--------|
| Size | % Pass |
| 200.0 mm | 100 |
| 125.0 mm | 100 |
| 90.0 mm | 100 |
| 75.0 mm | 100 |
| 63.0 mm | 100 |
| 50.0 mm | 100 |
| 37.5 mm | 100 |
| 28.0 mm | 100 |
| 20.0 mm | 94 |
| 14.0 mm | 85 |
| 10.0 mm | 81 |
| 6.30 mm | 79 |
| 5.00 mm | 78 |
| 3.35 mm | 78 |
| 2.00 mm | 76 |
| 1.18 mm | 75 |
| 600 µm | 73 |
| 425 µm | 68 |
| 300 µm | 62 |
| 212 µm | 59 |
| 150 µm | 49 |
| 63 µm | 30 |



| Particle Proportions | |
|----------------------|----|
| Cobbles | 0 |
| Gravel | 24 |
| Sand | 46 |
| Silt & Clay | 30 |

GL:Version 1.90 - 04/05/2018

Checked and Approved by
S Burke
 S Burke - Senior Technician
 29/06/2018

Project Number: **GEO / 27587**
 Project Name: **EYRE STREET, RAGGED SCHOOL
 J18042**



1262 - PSD BH3 30.50 D - 27567-301751.XLSM

BS EN ISO 17892-4 : 2016

PARTICLE SIZE DISTRIBUTION

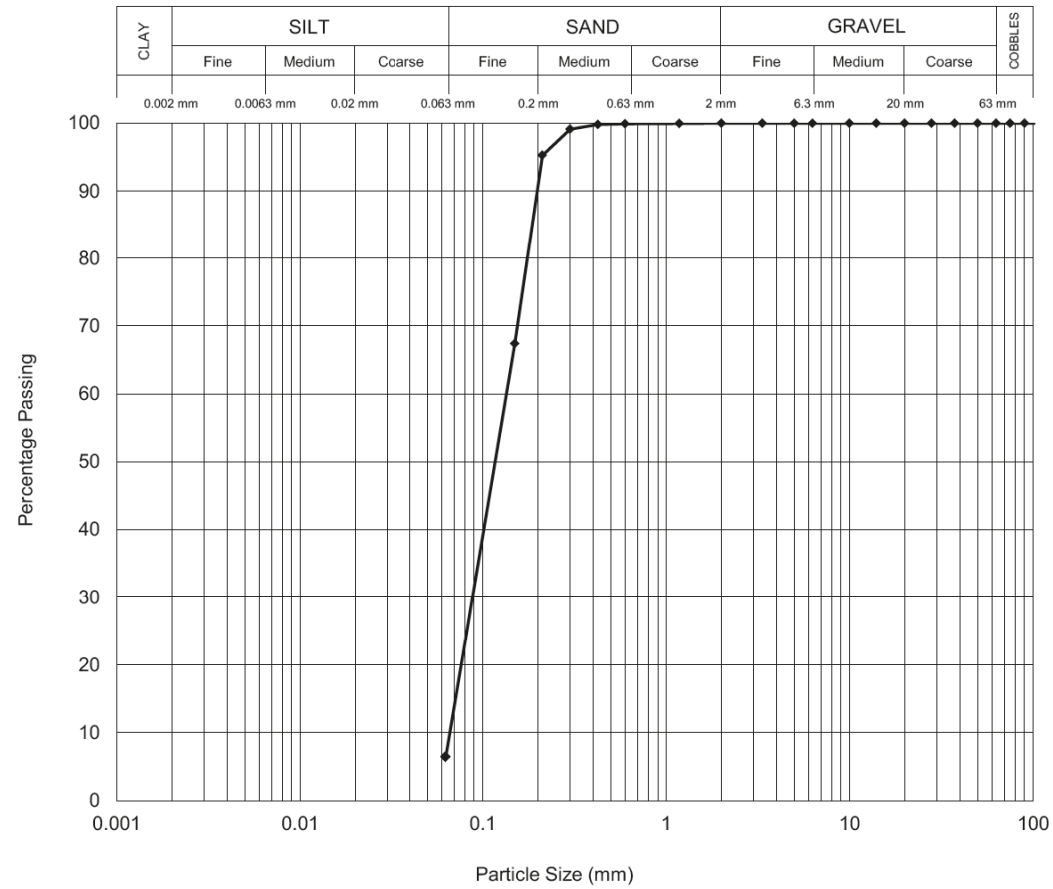
BH / TP No. BH3
 Depth (m) 30.50
 Sample Type D

Description

Grey silty SAND.

BS EN ISO 17892-4 : 2016 : Clause 5.2 - Dry Sieve

| Sieve | |
|----------|--------|
| Size | % Pass |
| 200.0 mm | 100 |
| 125.0 mm | 100 |
| 90.0 mm | 100 |
| 75.0 mm | 100 |
| 63.0 mm | 100 |
| 50.0 mm | 100 |
| 37.5 mm | 100 |
| 28.0 mm | 100 |
| 20.0 mm | 100 |
| 14.0 mm | 100 |
| 10.0 mm | 100 |
| 6.30 mm | 100 |
| 5.00 mm | 100 |
| 3.35 mm | 100 |
| 2.00 mm | 100 |
| 1.18 mm | 100 |
| 600 µm | 100 |
| 425 µm | 100 |
| 300 µm | 99 |
| 212 µm | 95 |
| 150 µm | 67 |
| 63 µm | 6 |



| Particle Proportions | |
|----------------------|----|
| Cobbles | 0 |
| Gravel | 0 |
| Sand | 94 |
| Silt & Clay | 6 |

GL:Version 1.90 - 04/05/2018

Checked and Approved by

S Burke

S Burke - Senior Technician
29/06/2018

Project Number:

GEO / 27587

Project Name:

**EYRE STREET, RAGGED SCHOOL
J18042**

GEOLABS



BS EN ISO 17892-4 : 2016

PARTICLE SIZE DISTRIBUTION

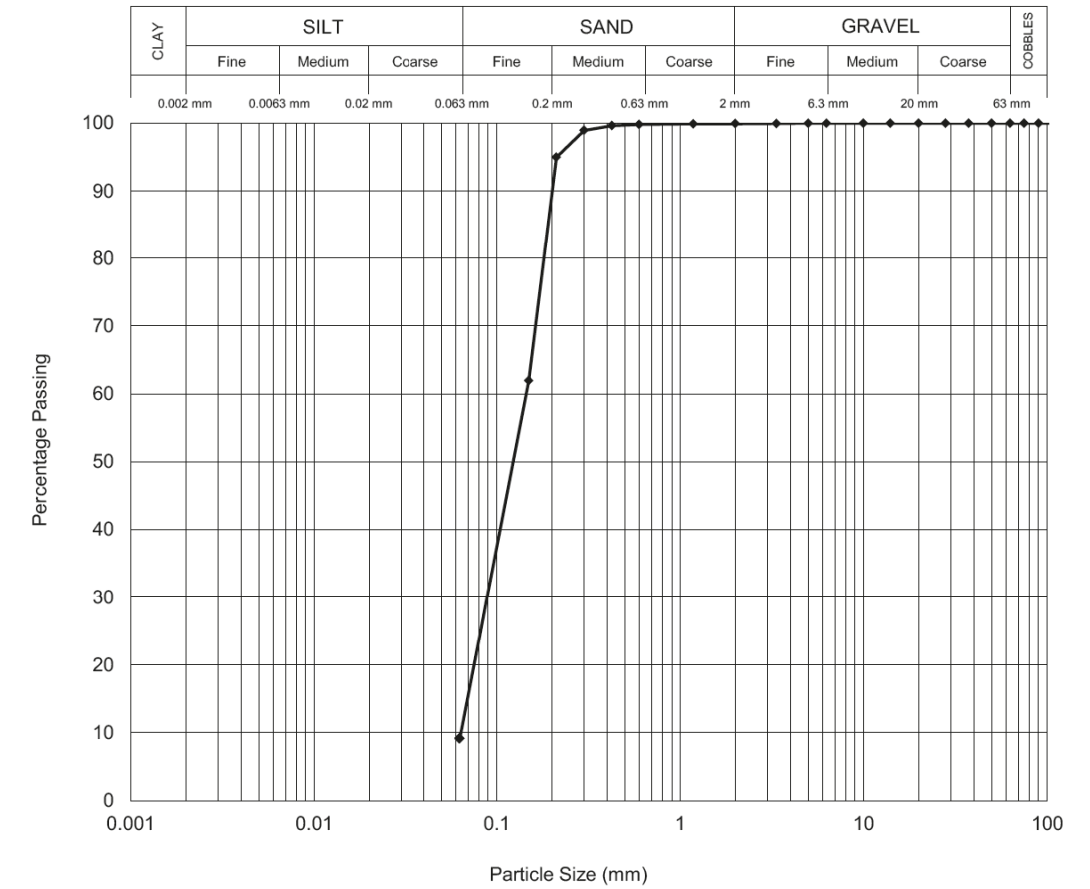
BH / TP No. BH3
 Depth (m) 35.00
 Sample Type D

Description

Dark grey clayey SAND.

BS EN ISO 17892-4 : 2016 : Clause 5.2 - Wet Sieve

| Sieve | |
|----------|--------|
| Size | % Pass |
| 200.0 mm | 100 |
| 125.0 mm | 100 |
| 90.0 mm | 100 |
| 75.0 mm | 100 |
| 63.0 mm | 100 |
| 50.0 mm | 100 |
| 37.5 mm | 100 |
| 28.0 mm | 100 |
| 20.0 mm | 100 |
| 14.0 mm | 100 |
| 10.0 mm | 100 |
| 6.30 mm | 100 |
| 5.00 mm | 100 |
| 3.35 mm | 100 |
| 2.00 mm | 100 |
| 1.18 mm | 100 |
| 600 µm | 100 |
| 425 µm | 100 |
| 300 µm | 99 |
| 212 µm | 95 |
| 150 µm | 62 |
| 63 µm | 9 |



| Particle Proportions | |
|----------------------|----|
| Cobbles | 0 |
| Gravel | 0 |
| Sand | 91 |
| Silt & Clay | 9 |

1262 - PSD BH3 35.00 D - 27567-301745.XLSM

GL:Version 1.90 - 04/05/2018

Checked and Approved by

S Burke

S Burke - Senior Technician
29/06/2018

Project Number:

GEO / 27587

Project Name:

**EYRE STREET, RAGGED SCHOOL
J18042**

GEOLABS



QUICK UNDRAINED TRIAXIAL COMPRESSION TEST

BH/TP No BH1
Depth (m) 4.00
Sample Type U

Description:
Stiff fissured multicoloured silty CLAY.

Specimen Details

| Specimen conditions | Undisturbed | |
|--------------------------|----------------------|-------|
| Length | (mm) | 202.0 |
| Diameter | (mm) | 103.3 |
| Moisture Content | (%) | 38.4 |
| Bulk Density | (Mg/m ³) | 1.91 |
| Dry Density | (Mg/m ³) | 1.38 |
| Test Details | | |
| Latex membrane thickness | (mm) | 0.3 |
| Membrane correction | (kPa) | 1.1 |
| Axial displacement rate | (%/min) | 2.0 |
| Cell pressure | (kPa) | 80 |
| Strain at failure | (%) | 19.8 |
| Maximum Deviator Stress | (kPa) | 105 |
| Shear Stress Cu | (kPa) | 53 |

Mode of failure

| | |
|------------------------------|----------|
| Orientation of the sample | Vertical |
| Distance from top of tube mm | 45 |

Checked and Approved by:

S Burke - Senior Technician
29/06/2018

Project Number:

GEO / 27587

Project Name:

**EYRE STREET, RAGGED SCHOOL
J18042**

GEOLABS**QUICK UNDRAINED TRIAXIAL COMPRESSION TEST**

BH/TP No BH1
Depth (m) 6.50
Sample Type U

Description:
Firm dark grey CLAY.

Specimen Details

| Specimen conditions | Undisturbed | |
|--------------------------|----------------------|-------|
| Length | (mm) | 203.6 |
| Diameter | (mm) | 103.4 |
| Moisture Content | (%) | 32.6 |
| Bulk Density | (Mg/m ³) | 1.94 |
| Dry Density | (Mg/m ³) | 1.46 |
| Test Details | | |
| Latex membrane thickness | (mm) | 0.3 |
| Membrane correction | (kPa) | 0.2 |
| Axial displacement rate | (%/min) | 2.0 |
| Cell pressure | (kPa) | 130 |
| Strain at failure | (%) | 2.7 |
| Maximum Deviator Stress | (kPa) | 138 |
| Shear Stress Cu | (kPa) | 69 |

Mode of failure

| | |
|------------------------------|----------|
| Orientation of the sample | Vertical |
| Distance from top of tube mm | 50 |

Checked and Approved by:

S Burke - Senior Technician
29/06/2018

Project Number:

GEO / 27587

Project Name:

**EYRE STREET, RAGGED SCHOOL
J18042**

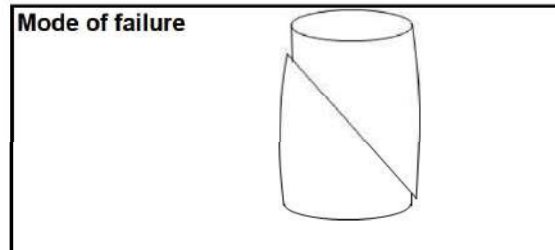
GEOLABS

QUICK UNDRAINED TRIAXIAL COMPRESSION TEST

| | | |
|-------------|------|--|
| BH/TP No | BH1 | Description: Very stiff fissured dark brown silty CLAY. |
| Depth (m) | 9.50 | |
| Sample Type | U | |

Specimen Details

| Specimen conditions | Undisturbed | |
|--------------------------|----------------------|-------|
| Length | (mm) | 202.2 |
| Diameter | (mm) | 102.8 |
| Moisture Content | (%) | 23.8 |
| Bulk Density | (Mg/m ³) | 2.04 |
| Dry Density | (Mg/m ³) | 1.65 |
| Test Details | | |
| Latex membrane thickness | (mm) | 0.3 |
| Membrane correction | (kPa) | 0.8 |
| Axial displacement rate | (%/min) | 2.0 |
| Cell pressure | (kPa) | 190 |
| Strain at failure | (%) | 12.9 |
| Maximum Deviator Stress | (kPa) | 250 |
| Shear Stress Cu | (kPa) | 125 |



Mode of failure

| | |
|------------------------------|----------|
| Orientation of the sample | Vertical |
| Distance from top of tube mm | |

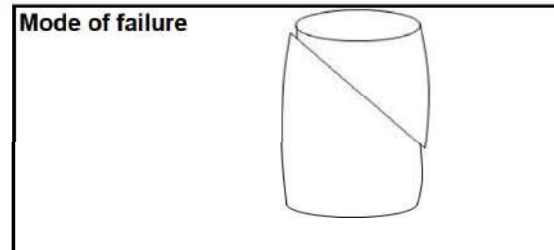
| | | |
|---|--|--|
| Checked and Approved by: <i>S Burke</i> S Burke - Senior Technician 29/06/2018 | Project Number: GEO / 27587 Project Name: EYRE STREET, RAGGED SCHOOL J18042 | |
|---|--|--|

QUICK UNDRAINED TRIAXIAL COMPRESSION TEST

| | | |
|-------------|-------|--|
| BH/TP No | BH1 | Description: Very stiff fissured brown mottled grey CLAY. |
| Depth (m) | 12.50 | |
| Sample Type | U | |

Specimen Details

| Specimen conditions | Undisturbed | |
|--------------------------|----------------------|-------|
| Length | (mm) | 202.9 |
| Diameter | (mm) | 103.1 |
| Moisture Content | (%) | 23.1 |
| Bulk Density | (Mg/m ³) | 2.11 |
| Dry Density | (Mg/m ³) | 1.71 |
| Test Details | | |
| Latex membrane thickness | (mm) | 0.3 |
| Membrane correction | (kPa) | 0.7 |
| Axial displacement rate | (%/min) | 2.0 |
| Cell pressure | (kPa) | 250 |
| Strain at failure | (%) | 10.8 |
| Maximum Deviator Stress | (kPa) | 381 |
| Shear Stress Cu | (kPa) | 191 |



Mode of failure

| | |
|------------------------------|----------|
| Orientation of the sample | Vertical |
| Distance from top of tube mm | 45 |

| | | |
|---|--|--|
| Checked and Approved by: <i>S Burke</i> S Burke - Senior Technician 29/06/2018 | Project Number: GEO / 27587 Project Name: EYRE STREET, RAGGED SCHOOL J18042 | |
|---|--|--|

1731 - UUTXL BH2 08.00 U - 27587-301608.XLSM

BS 1377 : Part 7 : 1990 Clause 8

QUICK UNDRAINED TRIAXIAL COMPRESSION TEST

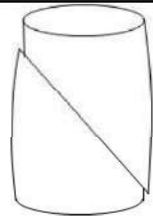
BH/TP No BH2
 Depth (m) 8.00
 Sample Type U

Description:
 Very stiff fissured dark brown silty CLAY.

Specimen Details

| Specimen conditions | Undisturbed | |
|--------------------------|----------------------|-------|
| Length | (mm) | 202.3 |
| Diameter | (mm) | 102.7 |
| Moisture Content | (%) | 22.5 |
| Bulk Density | (Mg/m ³) | 2.01 |
| Dry Density | (Mg/m ³) | 1.64 |
| Test Details | | |
| Latex membrane thickness | (mm) | 0.3 |
| Membrane correction | (kPa) | 1.1 |
| Axial displacement rate | (%/min) | 2.0 |
| Cell pressure | (kPa) | 160 |
| Strain at failure | (%) | 19.8 |
| Maximum Deviator Stress | (kPa) | 215 |
| Shear Stress Cu | (kPa) | 107 |

Mode of failure



| | |
|------------------------------|----------|
| Orientation of the sample | Vertical |
| Distance from top of tube mm | 30 |

GL-Version 1.69 - 11/05/2018

Checked and Approved by:

 S Burke - Senior Technician
 29/06/2018

Project Number: **GEO / 27587**
 Project Name: **EYRE STREET, RAGGED SCHOOL J18042**



1731 - UUTXL BH2 11.00 U - 27587-301606.XLSM

BS 1377 : Part 7 : 1990 Clause 8

QUICK UNDRAINED TRIAXIAL COMPRESSION TEST

BH/TP No BH2
 Depth (m) 11.00
 Sample Type U

Description:
 Very stiff fissured brown mottled grey CLAY.

Specimen Details

| Specimen conditions | Undisturbed | |
|--------------------------|----------------------|-------|
| Length | (mm) | 202.6 |
| Diameter | (mm) | 102.7 |
| Moisture Content | (%) | 21.8 |
| Bulk Density | (Mg/m ³) | 2.10 |
| Dry Density | (Mg/m ³) | 1.73 |
| Test Details | | |
| Latex membrane thickness | (mm) | 0.3 |
| Membrane correction | (kPa) | 0.3 |
| Axial displacement rate | (%/min) | 2.0 |
| Cell pressure | (kPa) | 220 |
| Strain at failure | (%) | 3.2 |
| Maximum Deviator Stress | (kPa) | 241 |
| Shear Stress Cu | (kPa) | 120 |

Mode of failure



| | |
|------------------------------|----------|
| Orientation of the sample | Vertical |
| Distance from top of tube mm | |

GL-Version 1.69 - 11/05/2018

Checked and Approved by:

 S Burke - Senior Technician
 29/06/2018

Project Number: **GEO / 27587**
 Project Name: **EYRE STREET, RAGGED SCHOOL J18042**



QUICK UNDRAINED TRIAXIAL COMPRESSION TEST

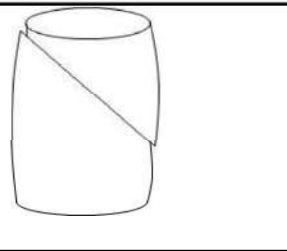
BH/TP No BH3
 Depth (m) 5.00
 Sample Type U

Description:
 Soft dark grey mottled brown CLAY.

Specimen Details

| Specimen conditions | | Undisturbed |
|--------------------------|----------------------|-------------|
| Length | (mm) | 203.3 |
| Diameter | (mm) | 101.9 |
| Moisture Content | (%) | 37.0 |
| Bulk Density | (Mg/m ³) | 1.86 |
| Dry Density | (Mg/m ³) | 1.36 |
| Test Details | | |
| Latex membrane thickness | (mm) | 0.3 |
| Membrane correction | (kPa) | 1.1 |
| Axial displacement rate | (%/min) | 2.0 |
| Cell pressure | (kPa) | 100 |
| Strain at failure | (%) | 19.7 |
| Maximum Deviator Stress | (kPa) | 69 |
| Shear Stress Cu | (kPa) | 34 |

Mode of failure



| | |
|------------------------------|----------|
| Orientation of the sample | Vertical |
| Distance from top of tube mm | 40 |

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QUICK UNDRAINED TRIAXIAL COMPRESSION TEST

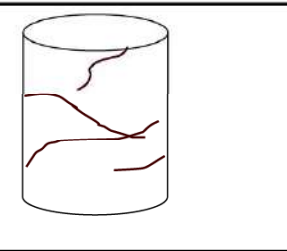
BH/TP No BH3
 Depth (m) 8.00
 Sample Type U

Description:
 Firm dark brown mottled dark grey CLAY.

Specimen Details

| Specimen conditions | | Undisturbed |
|--------------------------|----------------------|-------------|
| Length | (mm) | 203.0 |
| Diameter | (mm) | 103.3 |
| Moisture Content | (%) | 30.0 |
| Bulk Density | (Mg/m ³) | 1.99 |
| Dry Density | (Mg/m ³) | 1.53 |
| Test Details | | |
| Latex membrane thickness | (mm) | 0.3 |
| Membrane correction | (kPa) | 1.1 |
| Axial displacement rate | (%/min) | 2.0 |
| Cell pressure | (kPa) | 160 |
| Strain at failure | (%) | 19.7 |
| Maximum Deviator Stress | (kPa) | 191 |
| Shear Stress Cu | (kPa) | 96 |

Mode of failure



| | |
|------------------------------|----------|
| Orientation of the sample | Vertical |
| Distance from top of tube mm | 25 |

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QUICK UNDRAINED TRIAXIAL COMPRESSION TEST

BH/TP No BH3
 Depth (m) 11.00
 Sample Type U

Description:
 Firm brown mottled grey CLAY.

Specimen Details

| Specimen conditions | Undisturbed | |
|--------------------------|----------------------|-------|
| Length | (mm) | 203.6 |
| Diameter | (mm) | 103.2 |
| Moisture Content | (%) | 29.2 |
| Bulk Density | (Mg/m ³) | 2.00 |
| Dry Density | (Mg/m ³) | 1.55 |
| Test Details | | |
| Latex membrane thickness | (mm) | 0.3 |
| Membrane correction | (kPa) | 0.3 |
| Axial displacement rate | (%/min) | 2.0 |
| Cell pressure | (kPa) | 220 |
| Strain at failure | (%) | 4.4 |
| Maximum Deviator Stress | (kPa) | 132 |
| Shear Stress Cu | (kPa) | 66 |

Mode of failure



| | |
|------------------------------|----------|
| Orientation of the sample | Vertical |
| Distance from top of tube mm | 30 |

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QUICK UNDRAINED TRIAXIAL COMPRESSION TEST

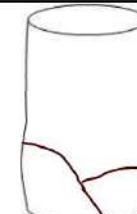
BH/TP No BH3
 Depth (m) 14.00
 Sample Type U

Description:
 Firm brown mottled grey CLAY.

Specimen Details

| Specimen conditions | Undisturbed | |
|--------------------------|----------------------|-------|
| Length | (mm) | 203.6 |
| Diameter | (mm) | 103.2 |
| Moisture Content | (%) | 20.5 |
| Bulk Density | (Mg/m ³) | 2.13 |
| Dry Density | (Mg/m ³) | 1.77 |
| Test Details | | |
| Latex membrane thickness | (mm) | 0.3 |
| Membrane correction | (kPa) | 0.5 |
| Axial displacement rate | (%/min) | 2.0 |
| Cell pressure | (kPa) | 130 |
| Strain at failure | (%) | 7.9 |
| Maximum Deviator Stress | (kPa) | 491 |
| Shear Stress Cu | (kPa) | 245 |

Mode of failure



| | |
|------------------------------|----------|
| Orientation of the sample | Vertical |
| Distance from top of tube mm | 30 |

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