

FORMER GREGGS BAKERY GOULD ROAD TWICKENHAM

Supplementary Investigation

Client
London Square

Agent
Gravity Consulting Engineers

Report No. 5787

11th April 2024



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**FORMER GREGGS BAKERY
GOULD ROAD
TWICKENHAM**

Supplementary Investigation

Synopsis

A supplementary investigation has been carried out at a former Greggs Bakery in Twickenham, on the instructions of London Square. Technical direction was provided by Gravity Consulting Engineers. A Phase I Environmental Assessment¹ and a Phase II Geoenvironmental Investigation² have been prepared for the site and should be read in conjunction with this report.

The purpose of this phase of works was to investigate the possible presence of an air raid shelter, locate underground fuel storage tanks (USTs) and other geotechnical matters for the proposed redevelopment.

Both machine and hand dug trial pits were carried out as were 10 dynamic probes.

The air raid shelter was located but the USTs were absent from the locations investigated.

¹ Report No. 4609-1; Phase I Environmental Assessment, Former Greggs Bakery, Gould Road, Twickenham TW2 6RT; AP Geotechnics Ltd.; 14 March 2017

² Report No. 4609-2; Phase II Geoenvironmental Investigation, Former Greggs Bakery, Gould Road, Twickenham TW2 6RT; AP Geotechnics Ltd.; 26 September 2017

1

Site description

The area under investigation comprises the former Greggs Bakery in Gould Road, Twickenham. The current general arrangement is shown on Figure 1 at Appendix A.

A full site description is contained in the Phase 1 report to which the reader is referred.

2

Development proposals

It is intended to demolish the existing buildings and redevelop the site for residential use.

The proposed general arrangement is given at Figure 2 of Appendix A.

3

Geology

Published records of the British Geological Survey (BGS) indicate the site to lie on Kempton Park Gravel over London Clay. No Made Ground or Worked Ground is mapped at the subject site.

4

Field work

The extent of the field work was specified by the Consulting Engineer and comprised investigations in the north west of the site where former employees of Greggs had indicated that an air raid shelter was present, hand excavated trial pits to expose existing foundations,

excavations to locate underground fuel storage tanks (USTs) and an oil interceptor tank and in situ testing (dynamic probes) to aid understanding of the likely method used to construct the sewer which runs under the main body of the site and continues northward, under the River Crane.

All exploratory locations are shown on Figures 3 and 4 at Appendix A.

Details of the strata encountered are provided on the Trial Pit Records at Appendix B; together with particulars of the samples recovered and groundwater observations. The Dynamic Probe Records are presented at Appendix C whilst the plot of blow count against depth is shown on Figure 5 at Appendix A.

Schematic sections of the existing foundations are available with the Trial Pit Records at Appendix B.

5

Ground conditions

5.1

Stratigraphy

The stratigraphy of the site as revealed by the investigation is generally as previously described and will not be discussed herein.

5.2

Groundwater

No groundwater was encountered during this phase of works, save for the water within the air raid shelter. Standpipe readings taken during the previous investigation recorded the depth

to groundwater at around the three metre mark in most standpipes. However, groundwater in BH2 was consistently deeper, at some 6 m depth or so.

6

Discussion

6.1

General

The site has evidently already carried development and the investigation has revealed Made Ground to be present. It is possible that other pockets of Made Ground may also be present; perhaps deeper, of different character or associated with the remains of construction; even though not detected by this investigation.

All remnants of previous construction should be removed prior to casting new footings to enable the proposals to be constructed without hindrance and to perform satisfactorily.

The recommendations regarding spread foundations remain as detailed in the previous report and will not be reproduced here.

6.2

Air Raid Shelter

An hydraulic breaker attached to the backhoe excavator was used to break through the surfacing of asphalt over reinforced concrete and it immediately became apparent that the surface car park served as the roof of the air raid shelter. Several more holes were made in order to ascertain the approximate size of the shelter which is shown as TPA at Appendix B. The walls appeared to be concrete and the access steps are protected by two metal covers

set within the asphalt of the surface car parking. The base of the air raid shelter was at some 2.2 m depth with water standing within the structure at a depth of 1.40 m.

The previous phase of investigation included WSI which was advanced just to the north west of the shelter location and recorded gravel at 1.60 m depth whilst BHI (drilled to the east) recorded gravel at 1.80 m depth. It would therefore seem reasonable to assume that the shelter is founded within the gravel at some 2.4 - 2.5 m depth.

6.3

Underground Tanks

Paperwork provided to AP Geotechnics indicates that there are three underground storage tanks (USTs) located in the area between the Enessa Works and the bakery to the north. An unscaled plan was also included. Tank 1 has a storage capacity of 4546 litres (1000 gallons), Tank 2 has a capacity of 13 638 litres (3000 gallons) and Tank 3 is the largest with a capacity of 23 200 litres (5100 gallons). The tanks were used to store diesel and red diesel. A note from Adler & Allen Limited dated 25 July 2006 describes the decommissioning works to be carried out which comprised uplifting surplus diesel from Tank 3 and transferring it to an alternative fuel storage facility within the site, bottom out Tanks 1, 2 & 3 and prepare for foam filling and transfer tank bottoms for licensed disposal under EA consignment note. In addition, it was proposed to fill tanks 1, 2 & 3 with Bacel RG22 Resin and supply certification. The decommissioning works were carried out on 27 September 2006, as indicated by an EA consignment note dated such. However, no certification has been provided which relates to the filling of the tanks with foam. The available paperwork is reproduced at Appendix D.

Three trial trenches (TT1 to TT3) were excavated in the area believed to contain the USTs. However, no tanks were uncovered despite the trenches running the entire length of the area and natural ground was revealed in two of the three trenches. The Made Ground revealed

towards the eastern end of TT3 was more comparable to general backfill than that encountered in TT1 & TT2. In addition, no pedestals or former pump islands / apparatus was evident.

Previous Greggs employees had indicated that there was an oil interceptor tank located outside the stores building in the very south of the site close to the site of two metal covers. However, no tank was encountered in the two pits excavated (B & C), despite one being excavated between the two metal covers. Full details are shown on the Trial Pit Records at Appendix B.

6.4

In situ testing

Ten dynamic probes were carried out in an attempt to determine whether there was any variation in the density of the subsoil which may inform the method used to construct the sewer and associated zone of disturbed ground.

No manhole covers are present in the south of the site which relate to the sewer. There is a cover in Edwin Road and one within the warehouse, but none in between. Determining the route of the sewer was therefore somewhat problematic. Nevertheless, two rows of four and one row of two probes was carried out with the results presented at Appendix C. Probes 2, 3, 6, 7 & 9 are considered to be the closest to the route of the sewer.

The blow count against depth plot given at Figure 5 does not really provide a clear picture of significant or obvious differences of in situ density between the probe locations and associated distance from the sewer. Dynamic Probe No. 2 is the only one which had consistently low blow counts throughout its depth. Machine excavated trial pits / trenches across the sewer route is not considered a suitable alternative method of investigation as it is doubtful any

significant further insight would be gained. However, in view of the ground conditions underlying the site and depth of sewer, it is considered more likely than not (though difficult to prove) that the sewer was constructed using temporary support (sheet piles, trench boxes etc.,). In addition, any excavation in the gravel would have to cope with significant groundwater issues. The cover level in Edwin Road is given as 10.59 on the Thames Water Asset Location Search with an invert level of 3.91, resulting in the base of the sewer being at some 6.68 m depth which probably places the sewer in the London Clay and below the gravels and associated saturated zone. The sewer may well therefore have been thrust bored (though this assertion depends on the age of the sewer). Temporary support would have been required and therefore, construction of the sewer is unlikely to have taken place in open-cut due to the aforementioned.

6.5

Recommendations

The air raid shelter is located where Block G is proposed. The shelter therefore needs to be removed and the resultant excavation backfilled with appropriate material in an engineered manner.

In regard to the sewer, Thames Water should be contacted to see whether they have any information on the method used to construct it and its age. In addition, as mentioned in the Phase II report and in Section 5.2 of this document, the water level recorded in BH2 was consistently deeper than that recorded elsewhere, by some 3 m or so. The sound of rushing water is evident when standing over cover 3302A (northern part of warehouse) where the sewer is at a depth of some 9.83 m. It is therefore strongly recommended that a CCTV condition survey of this sewer and the one entering the site adjacent to No. 2 Gould Road is undertaken at an early stage.

The Consulting Engineer is concerned about the possibility of Made Ground / disturbed ground impacting spread foundations when close to the sewer in the completed development. If the line of the sewer were marked on the ground, a hand excavated trial trench to some 1.5 m depth could potentially ascertain the presence (or not) of Made Ground associated with the construction of the sewer.

Contact should be sought with former Greggs employees to determine whether any additional information exists regarding the presence (or not) of the USTs. Excavation of trial trenches 1 to 3 failed to uncover any of the three USTs purported to be there.

R G Chapman
AP GEOTECHNICS LTD.
11th April 2024

This report has been prepared for the sole and specific use of London Square for the purpose of the redevelopment of the former Greggs Bakery, Gould Road, Twickenham and should not be relied upon by any third party. Any other persons who use any information contained herein without the written permission of AP GEOTECHNICS LTD. do so at their own risk.

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PROCEDURAL NOTES for GROUND INVESTIGATIONS

General

This report has been prepared generally in accordance with CLR 11: Model Procedures for the Management of Land Contamination (Defra & Environment Agency 2004).

This report is based upon data obtained from field descriptions of the strata and examination of the samples by an engineer, together with the results of in situ and laboratory tests as appropriate. Responsibility cannot be accepted for variations in ground conditions between and around any of the exploratory points that is not revealed by the data. Whilst the report may offer an opinion on the ground conditions between exploratory points and below the depth of investigation, this is for guidance only and no liability is accepted for its accuracy. Unless specifically included in the report, it should be assumed that no testing has been carried out in respect of asbestos or Japanese Knotweed and no liability will be inferred or accepted.

Drilling procedure

Boring by light cable percussion drilling allows the ground conditions to be reasonably well established. However, a certain amount of disturbance is inevitable and some mixing of soils can occur.

Sampling procedure

"Undisturbed" samples of predominantly cohesive soils are taken with a 100mm diameter open tube sampler, generally in accordance with BS 5930: 1999.

Where appropriate, or where an undisturbed sample is unsuccessful, disturbed samples are recovered and sealed into polythene bags.

Groundwater samples are taken when water is encountered in sufficient quantity.

Standard penetration tests

The test is conducted generally in accordance with BS 1377: Part 9: 1990. The sampler tube is subject to a seating drive of 150mm into the soil at the base of the borehole. Results are given on the Borehole Records as the number of blows required to drive the sampler tube a further 300mm and this is known as the "N" value. Where the driving resistance is such that full penetration is not achieved, the test is generally terminated after 50 blows and the actual distance penetrated is recorded.

Groundwater

Groundwater observations necessarily reflect the conditions encountered at the time of the exploratory work. Long term monitoring of standpipes is usually required to establish an equilibrium water level since the normal rate of boring is too fast to permit steady state conditions to be achieved.

Groundwater levels are subject to variations caused by changes in drainage conditions and seasonal climatic changes.

Water may necessarily be added to advance the bore whilst casing may be required to maintain an open hole. These can both mask subsequent groundwater observations and are therefore noted on the individual Borehole Record.

APPENDICES

A Figures

Figure 1: Site Plan

Figure 2: Proposed Development

Figure 3: Approximate Exploratory Locations

Figure 4: Approximate Exploratory Locations

Figure 5: Dynamic Probe Profile

B Trial Pit Records

Symbols and Abbreviations

Trial Pit Records

C Dynamic Probe Records

D UST Data

APPENDIX A

FIGURES

Former Greggs Bakery,
Gould Road,
Twickenham, TW2 6RT

Site Plan

Scale: as shown



Figure 1

Former Greggs Bakery,
Gould Road, Twickenham,
TW2 6RT

Proposed Development

Scale: as shown



- Key
- Site Boundary
 - C-1 Plot Number
 - Proposed New Tree
 - Assess Planning Building Footprint
 - Existing Ground Levels
 - Proposed Ground Levels (Subject to Civil Engineer's Design)
 - Ground Floor Finished Floor Level (Subject to Civil Engineer's Design)
 - Existing Walls
 - Parking
 - Cycles

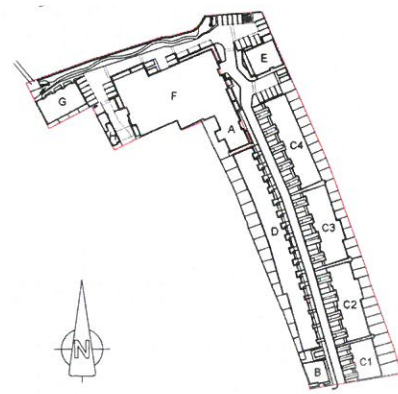


Figure 2

Former Greggs Bakery,
Gould Road, Twickenham,
TW2 6RT

**Approximate Exploratory
Locations**

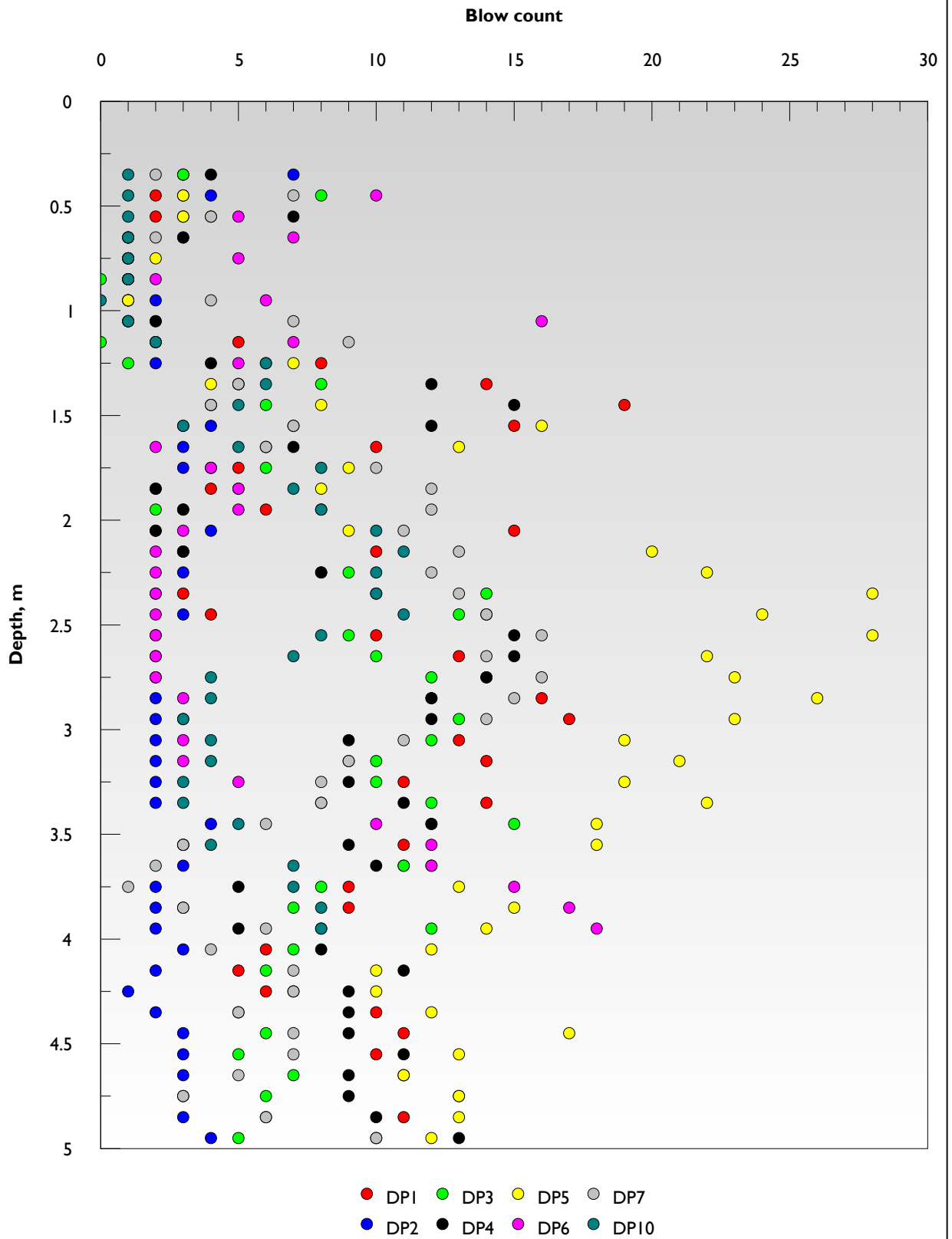
Scale: as shown



Figure 3

DYNAMIC PROBE PROFILE

Former Greggs Bakery, Twickenham



APPENDIX B

TRIAL PIT RECORDS

SYMBOLS and ABBREVIATIONS

Samples

Undisturbed

- U Standard open drive "undisturbed"
102mm dia. in boreholes
38mm dia. in trial pits, window sampler
and hand auger
- T Thin wall open drive
- P Piston
- CBR CBR mould
- L Windowless sampler liner

Disturbed

- D Small
- B Bulk
- W Water
- C Contaminants: plastic tub
- J Contaminants: brown glass jar

In situ tests

- SPT Standard Penetration Test, open shoe
solid cone
N value is number of blows for 300mm
penetration.
Blow count also given as seating drive
followed by four increments of 75mm.

V () Vane test (c_u kPa)

P () Hand penetrometer (c_u kg/cm²)

M () Mexe probe (CBR %)

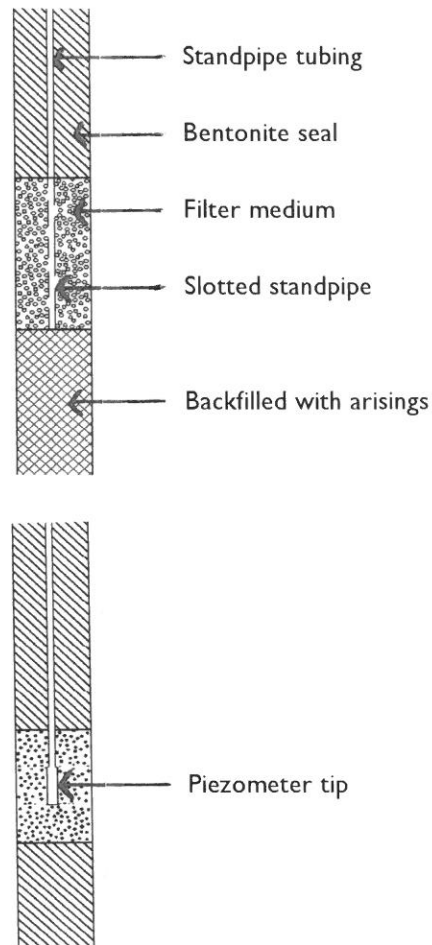
Water records

▼₂ Standing level


▽₂ Depth encountered

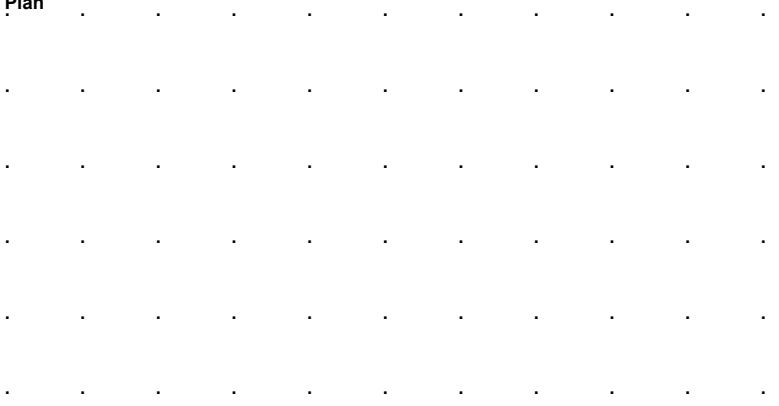
suffix identifies separate strikes

Standpipes

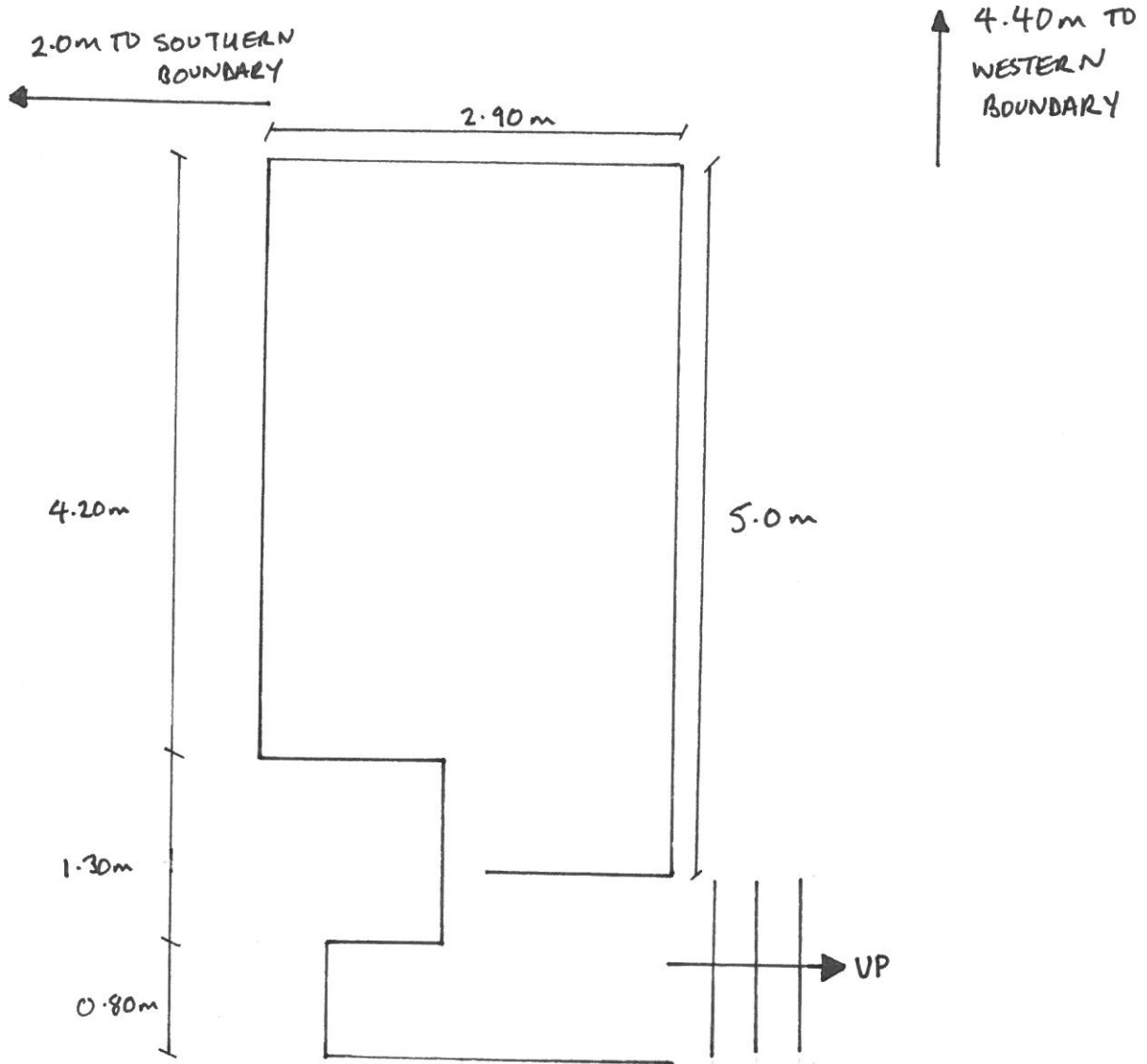


Excavation Method Trial Pit	Dimensions	Ground Level (mOD)	Client London Square	Job Number 5787
	Location See site plan	Dates 20/03/2024	Engineer Gravity Consulting Engineers	Sheet 1/2

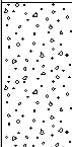
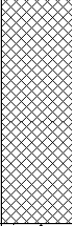

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
					(0.10) 0.10 (0.20) 0.30	ASPHALT Reinforced CONCRETE VOID		
			Water strike(1) at 1.40m.		(1.90)			∇1
					2.20	Complete at 2.20m		

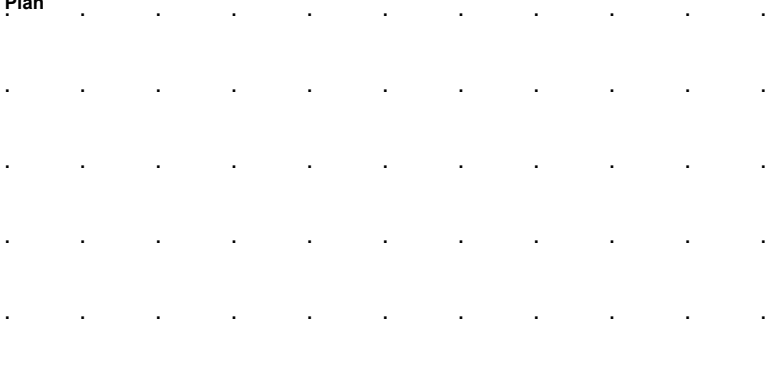
Plan 	Remarks		
	Exact shape of shelter may differ due to limited visibility of underground walls Water standing at 1.4 m depth within structure Air raid shelter accessed by stairs under metal cover		
	Scale (approx) 1:50	Logged By	Figure No. 5787.TPA

Excavation Method Trial Pit	Dimensions	Ground Level (mOD)	Client London Square	Job Number 5787
	Location See site plan	Dates 20/03/2024	Engineer Gravity Consulting Engineers	Sheet 2/2

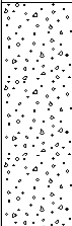
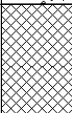





Excavation Method Trial Pit	Dimensions 2.5 m x 2.25 m x 0.90 m deep	Ground Level (mOD)	Client London Square	Job Number 5787
	Location	Dates 01/01/2024	Engineer Gravity Consulting Engineers	Sheet 1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
					(0.20)	Reinforced CONCRETE		
					0.20 (0.30)	MADE GROUND: Bricks, concrete and drainage pipes		
					0.50 (0.40)	Soft to firm orange brown mottled slightly sandy CLAY		
					0.90	Complete at 0.90m		

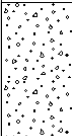

Plan 	Remarks Trial pit dry and backfilled with arisings		
	Scale (approx) 1:10	Logged By	Figure No. 5787.TPB

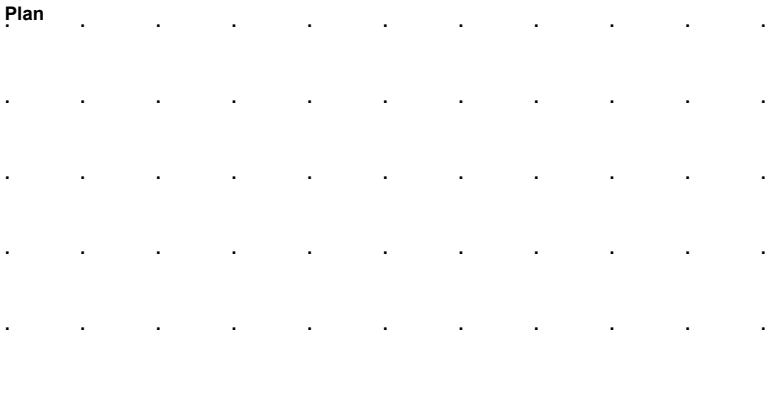
Excavation Method Trial Pit	Dimensions	Ground Level (mOD)	Client London Square	Job Number 5787
	Location See site plan	Dates 21/03/2024	Engineer Gravity Consulting Engineers	Sheet 1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
					(0.30)	Reinforced CONCRETE on concrete fragments		
					0.30 (0.15)	MADE GROUND: Dark brown crushed aggregate in a sand matrix		
					0.45 (0.10)	Weak CONCRETE		
					0.55 (0.35)	MADE GROUND: Dark brown and grey fragments of crushed aggregate and concrete in a matrix of silt and sand sized particles		
					0.90 (0.05) 0.95	CONCRETE		
						Terminated at 0.95m		

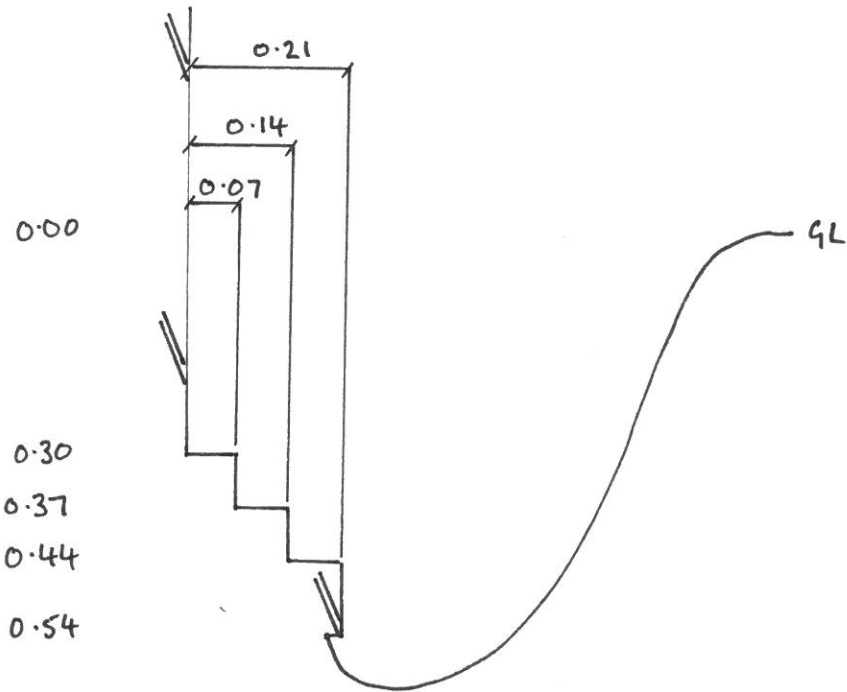
Plan .	Remarks Trial pit dry and backfilled with arisings Concrete at 0.90 m depth - too deep for breaker due to reinforcement in side of pit		
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Scale (approx) 1:10	Logged By	Figure No. 5787.TPC	

Excavation Method Trial Pit	Dimensions		Ground Level (mOD)	Client London Square	Job Number 5787
	Location See site plan		Dates 21/03/2024	Engineer Gravity Consulting Engineers	Sheet 1/2


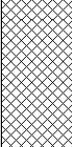
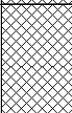

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
0.24	D1				(0.18)	CONCRETE		
0.38	D2				0.18 (0.36)	MADE GROUND: Dark brown and brown fragments of flint, brick, concrete and occasional ash in a matrix of silt and sand sized particles		
0.54	D3				0.54	...becoming slightly clayey Complete at 0.54m		

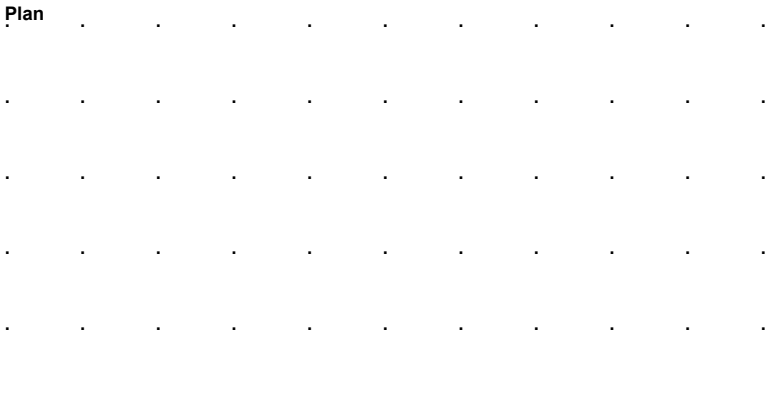
Plan 	Remarks Trial pit dry and backfilled with arisings		
	Scale (approx) 1:10	Logged By ljs	Figure No. 5787.TP1

Excavation Method Trial Pit	Dimensions	Ground Level (mOD)	Client London Square	Job Number 5787
	Location See site plan	Dates 21/03/2024	Engineer Gravity Consulting Engineers	Sheet 2/2

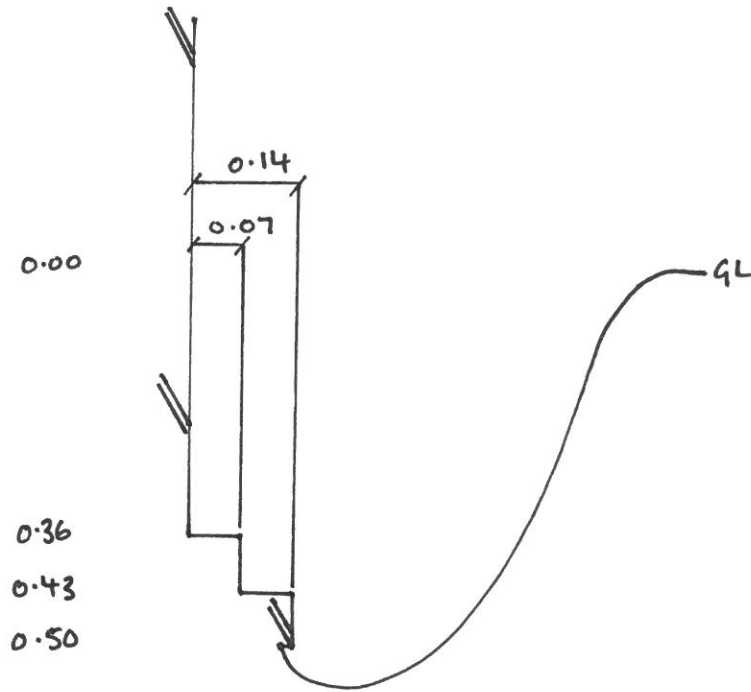


Excavation Method Trial Pit	Dimensions		Ground Level (mOD)	Client London Square	Job Number 5787
	Location See site plan		Dates 21/03/2024	Engineer Gravity Consulting Engineers	Sheet 1/2

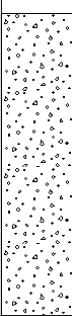
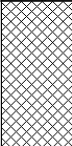
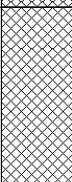
Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
0.15	D1				0.10	CONCRETE		
					0.10	MADE GROUND: Brown sandy flint gravel with occasional brick and concrete fragments		
					0.20			
					0.30	MADE GROUND: Dark brown and brown fragments of flint, brick, concrete and occasional ash in a matrix of silt and sand sized particles		
0.42	D2				0.15			
					0.45 (0.05)	MADE GROUND: Coarse flints with fragments of glass, pottery and ash in a matrix of silt and sand sized particles		
0.50	D3				0.50	Complete at 0.50m		

Plan 	Remarks Trial pit dry and backfilled with arisings		
	Scale (approx) 1:10	Logged By ljs	Figure No. 5787.TP2

Excavation Method Trial Pit	Dimensions	Ground Level (mOD)	Client London Square	Job Number 5787
	Location See site plan	Dates 21/03/2024	Engineer Gravity Consulting Engineers	Sheet 2/2

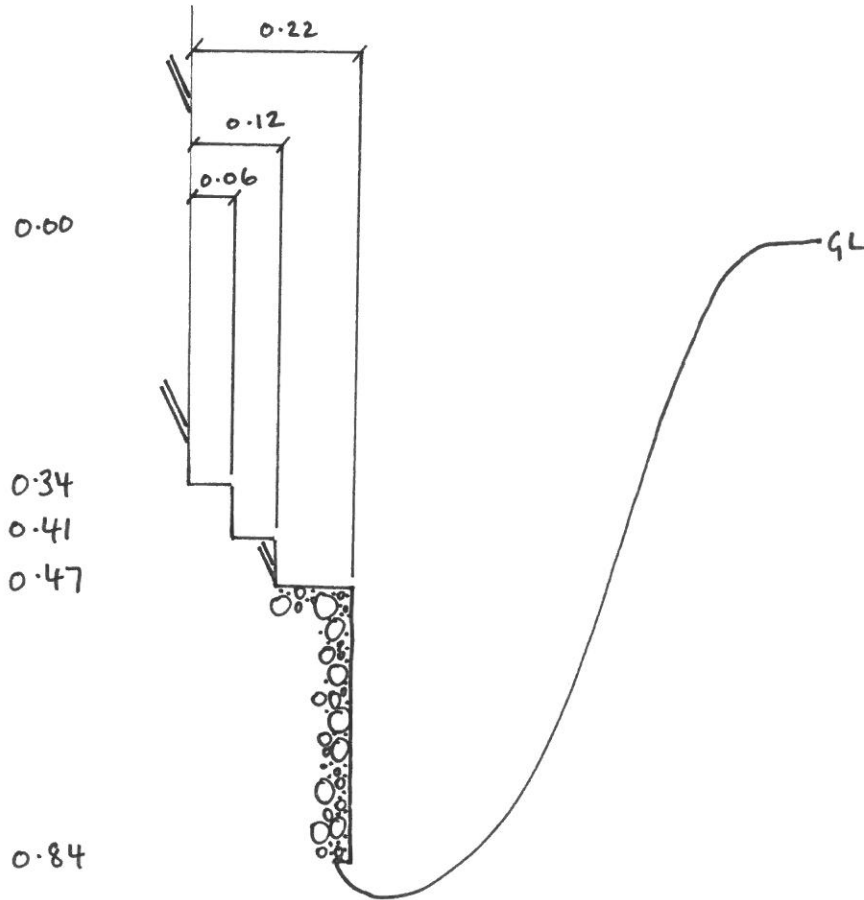


Excavation Method Trial Pit	Dimensions		Ground Level (mOD)	Client London Square	Job Number 5787
	Location See site plan		Dates 21/03/2024	Engineer Gravity Consulting Engineers	Sheet 1/2

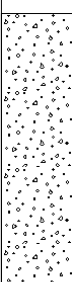


Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
0.47	D1				(0.40)	CONCRETE		
0.65	D2				(0.20)	MADE GROUND: Dark brown fragments of flint, brick, concrete and occasional ash in a matrix of brown sandy clay and sand		
0.84	HV 44kPa D3		46,48,38/Av. 44.00		(0.24)	MADE GROUND: Soft dark brown sandy clay with fragments of flint, brick and ash		
0.84					0.84	Complete at 0.84m		

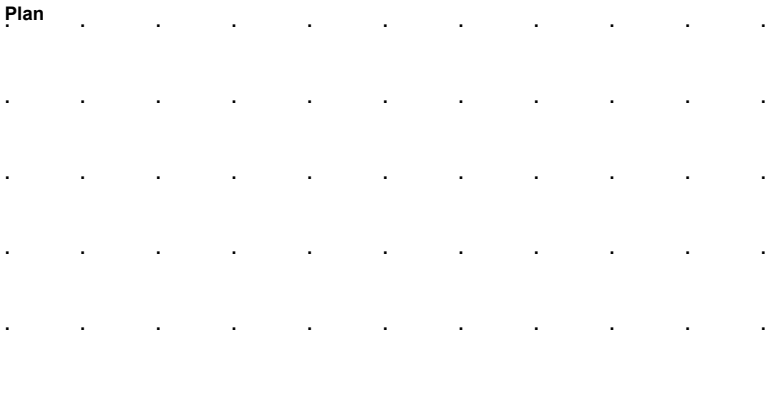
Plan .	Remarks Trial pit dry and backfilled with arisings		
	Scale (approx) 1:10	Logged By ljs	Figure No. 5787.TP3

Excavation Method Trial Pit	Dimensions	Ground Level (mOD)	Client London Square	Job Number 5787
	Location See site plan	Dates 21/03/2024	Engineer Gravity Consulting Engineers	Sheet 2/2

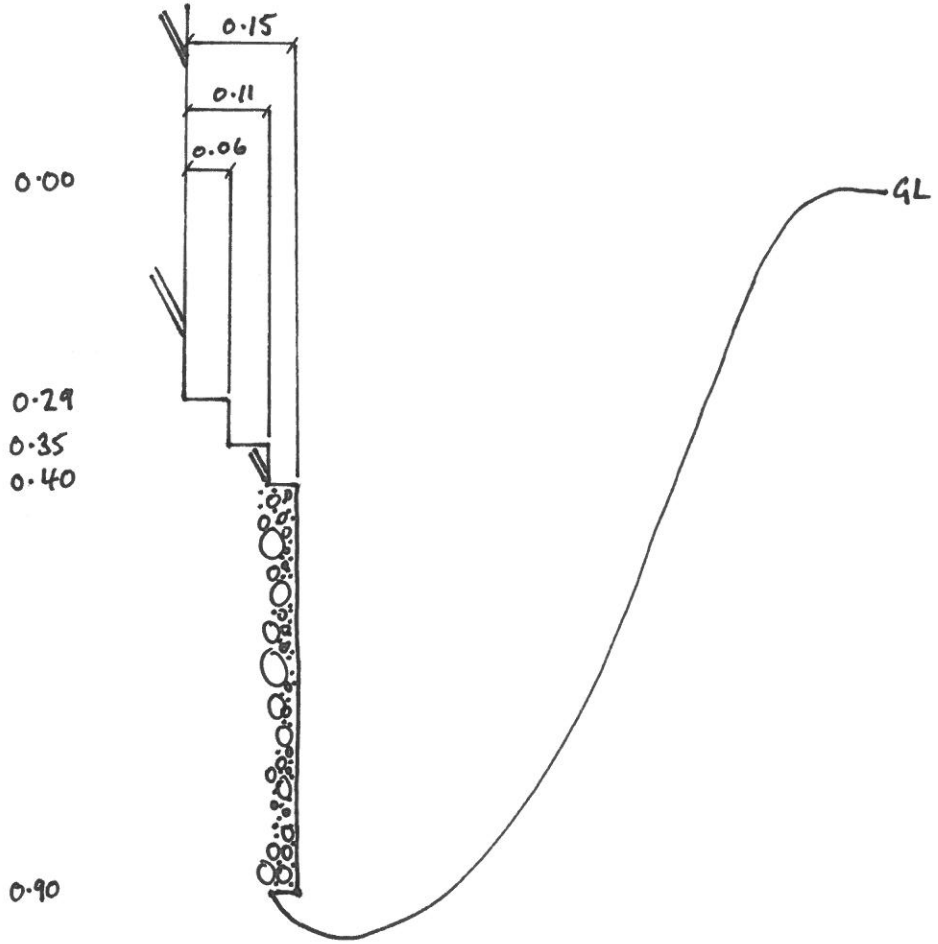


Excavation Method Trial Pit	Dimensions		Ground Level (mOD)	Client London Square	Job Number 5787
	Location See site plan		Dates 21/03/2024	Engineer Gravity Consulting Engineers	Sheet 1/2

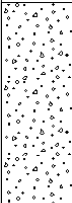


Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
0.40	D1				0.36 (0.12)	CONCRETE		
0.75	D2				0.48 (0.42)	MADE GROUND: Dark grey fragments of brick, ash and products of incomplete combustion in a matrix of silt and sand sized particles		
0.90 0.90	HV 28.67kPa D3		26,28,32/Av. 28.67		0.90	MADE GROUND: Soft orange brown and dark brown slightly sandy clay with flint gravel and occasional ash		
						Complete at 0.90m		

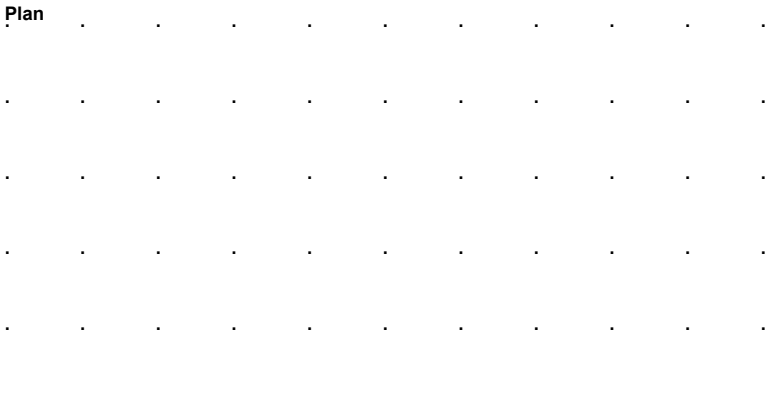
Plan 	Remarks Trial pit dry and backfilled with arisings		
	Scale (approx) 1:10	Logged By ljs	Figure No. 5787.TP4

Excavation Method Trial Pit	Dimensions	Ground Level (mOD)	Client London Square	Job Number 5787
	Location See site plan	Dates 21/03/2024	Engineer Gravity Consulting Engineers	Sheet 2/2

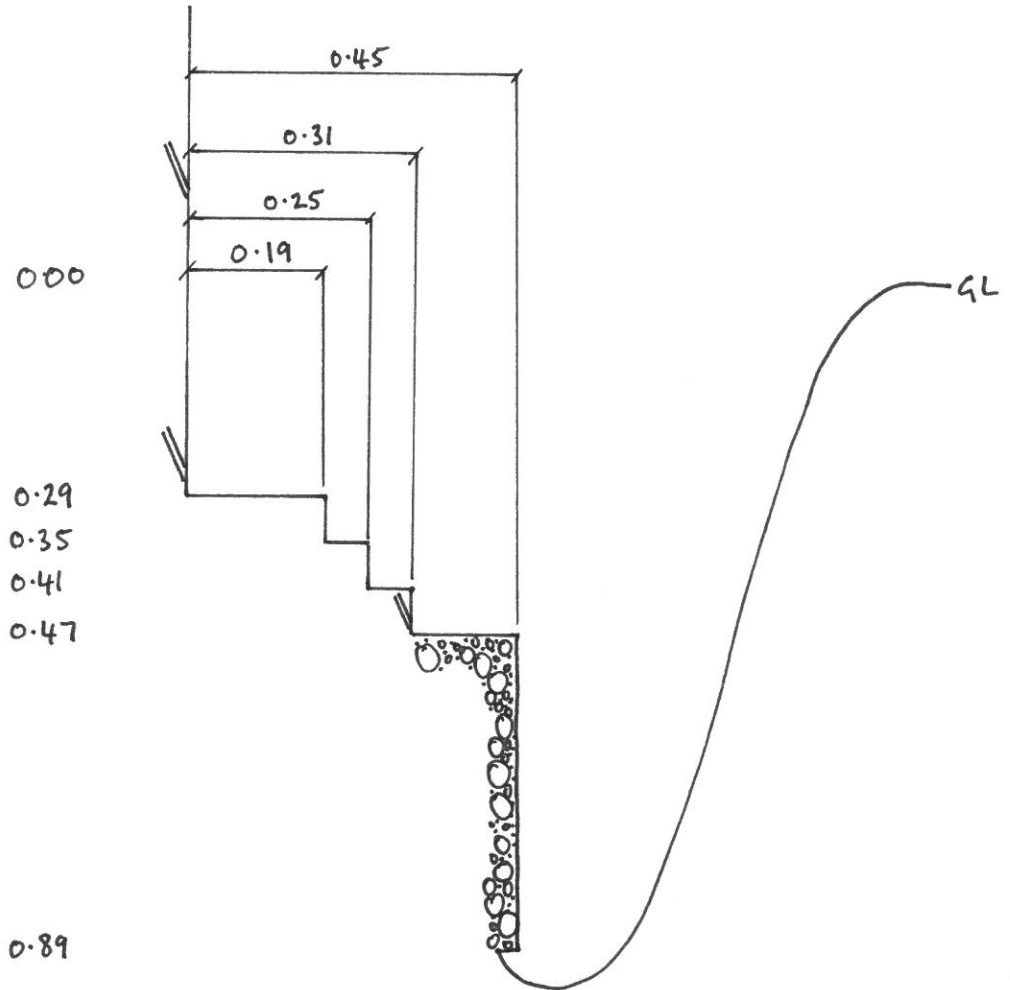


Excavation Method Trial Pit	Dimensions		Ground Level (mOD)	Client London Square	Job Number 5787
	Location See site plan		Dates 21/03/2024	Engineer Gravity Consulting Engineers	Sheet 1/2

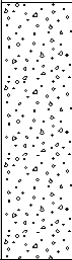


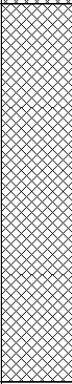
Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
0.55	D1				(0.27)	CONCRETE		
0.70	D2				0.27 (0.38)	MADE GROUND: Dark brown and orange brown fragments of flint, concrete, glass, ash and brick in a matrix of silt and sand sized particles. Locally claybound		
0.89	HV 36kPa D3		36,38,34/Av. 36.00		0.65 (0.24)	MADE GROUND: Soft orange brown and dark brown slightly sandy clay with flint gravel and occasional ash		
0.89					0.89	Complete at 0.89m		

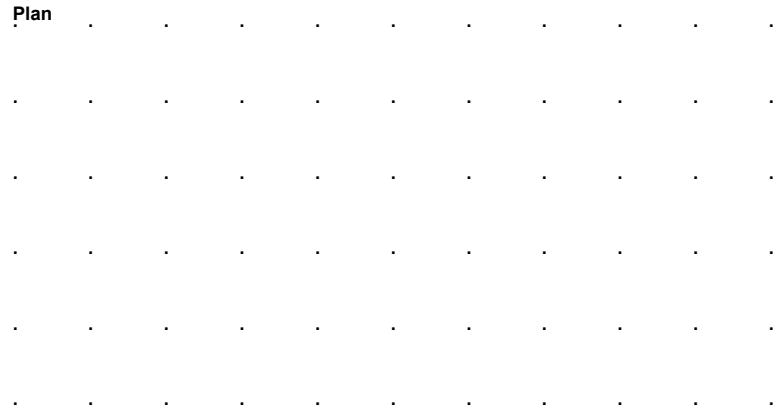
Plan 	Remarks Trial pit dry and backfilled with arisings		
	Scale (approx) 1:10	Logged By ljs	Figure No. 5787.TP5

Excavation Method Trial Pit	Dimensions	Ground Level (mOD)	Client London Square	Job Number 5787
	Location See site plan	Dates 21/03/2024	Engineer Gravity Consulting Engineers	Sheet 2/2

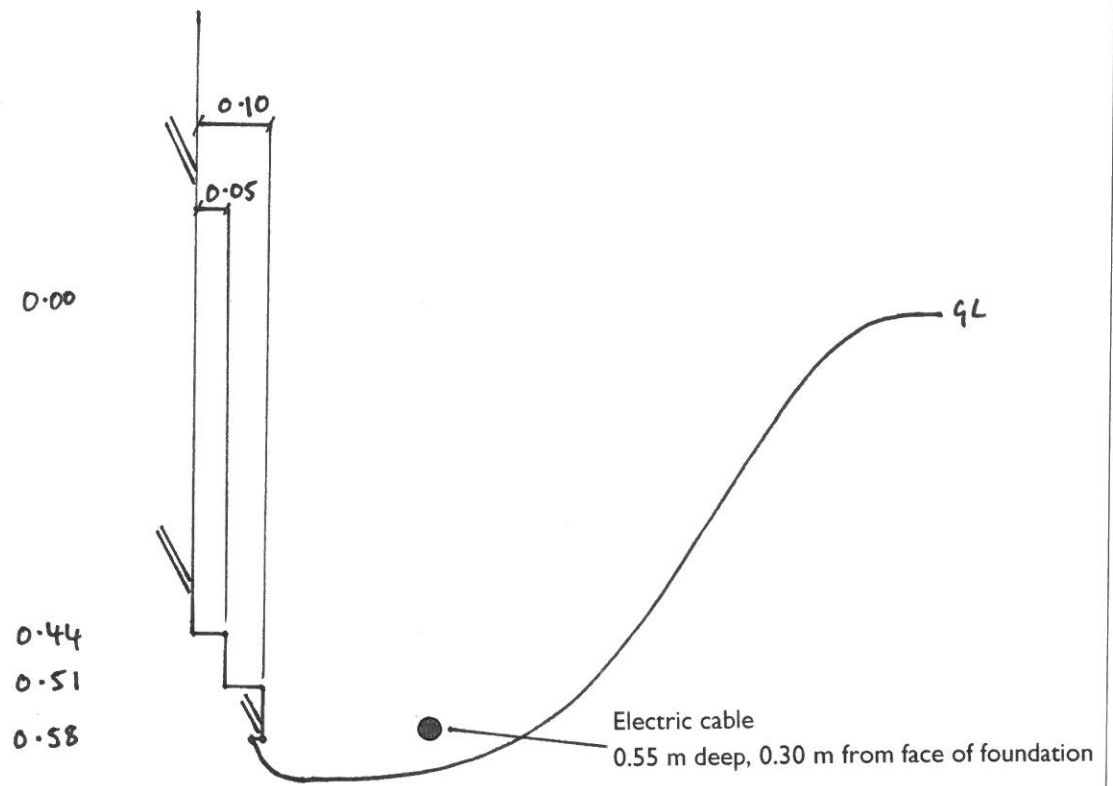


Excavation Method Trial Pit	Dimensions		Ground Level (mOD)	Client London Square	Job Number 5787
	Location See site plan		Dates 21/03/2024	Engineer Gravity Consulting Engineers	Sheet 1/2

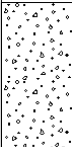


Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
0.45	D1				0.34	Asphalt over CONCRETE		
0.62	D2				0.24	MADE GROUND: Soft to firm dark brown sandy clay with fragments of concrete, brick, tile and ash		
1.00	D3				0.12	MADE GROUND: Fragments of flint and bricvk in a matrix of brown sand		
1.20	D4				0.50	MADE GROUND: Soft orange brown and dark brown slightly sandy clay with flint gravel and occasional ash		
					1.20	Complete at 1.20m		

Plan 	Remarks Trial pit dimensions:- D = 1.20 m; W = 0.50 m & L = 0.80 m Trial pit dry and backfilled with arisings		
	Scale (approx) 1:10	Logged By ljs	Figure No. 5787.TP6

Excavation Method Trial Pit	Dimensions	Ground Level (mOD)	Client London Square	Job Number 5787
	Location See site plan	Dates 21/03/2024	Engineer Gravity Consulting Engineers	Sheet 2/2

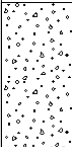
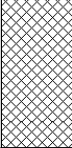



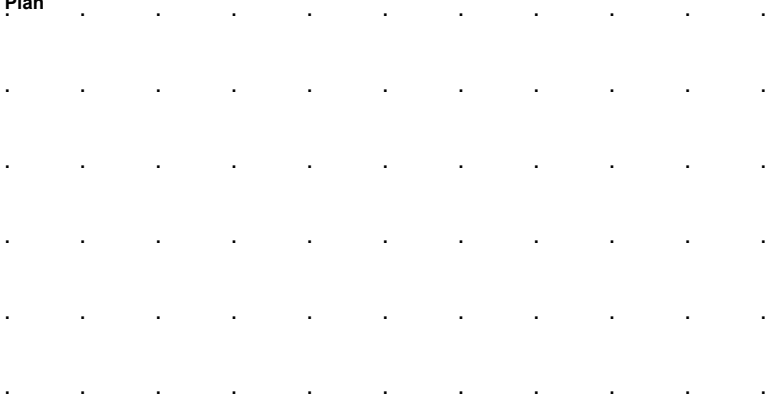
Excavation Method Trial Pit	Dimensions L = 8.5 m; W = 0.80 m & D = 1.10 m	Ground Level (mOD)	Client London Square	Job Number 5787
	Location See site plan	Dates 21/03/2024	Engineer Gravity Consulting Engineers	Sheet 1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
					(0.20)	Reinforced CONCRETE		
					0.20	MADE GROUND: Orange brown and red brown clayey gravel with fragments of flint, concrete and drainage pipes encased in concrete		
					(0.45)			
					0.65	Soft to firm orange brown and brown slightly sandy CLAY		
					(0.45)			
					1.10	Complete at 1.10m		

Plan .	Remarks Trial trench dry and backfilled with arisings		
	<table border="1"> <tr> <td>Scale (approx) 1:10</td> <td>Logged By</td> <td>Figure No. 5787.TT1</td> </tr> </table>	Scale (approx) 1:10	Logged By
Scale (approx) 1:10	Logged By	Figure No. 5787.TT1	

Excavation Method Trial Pit	Dimensions L = 8.50 m; W = 0.80 m & D = 1.0	Ground Level (mOD)	Client London Square	Job Number 5787
	Location See site plan	Dates 21/03/2024	Engineer Gravity Consulting Engineers	Sheet 1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
					0.20	Reinforced CONCRETE		
					0.20	MADE GROUND: Orange brown and red brown clayey gravel with fragments of flint, concrete and drainage pipes encased in concrete		
					0.40	Soft to firm orange brown and brown slightly sandy CLAY		
					1.00	Complete at 1.00m		

Plan 	Remarks Trial trench dry and backfilled with arisings		
	Scale (approx) 1:10	Logged By	Figure No. 5787.TT2

APPENDIX C

DYNAMIC PROBE RECORDS



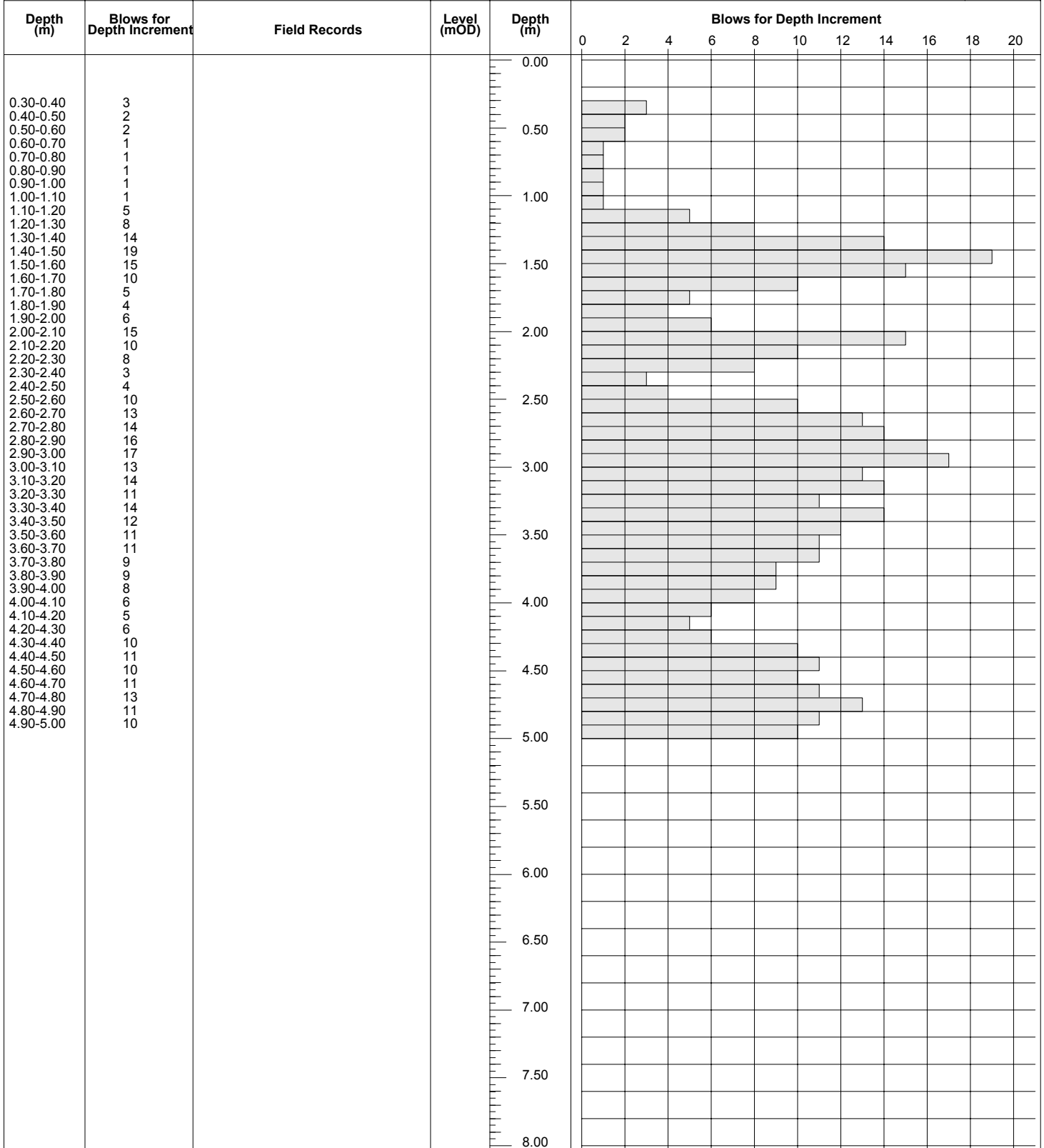
AP GEOTECHNICS

T 01932 848460
F 01932 851255
E mail@apgeotechnics.co.uk

Site
FORMER GREGGS BAKERY, GOULD ROAD,
TWICKENHAM, TW2 6RT

Probe
Number
DP1

Method Dynamic Probe	Cone Dimensions	Ground Level (mOD)	Client London Square	Job Number 5787
	Location See site plan	Dates 21/03/2024	Engineer Gravity Consulting Engineers	Sheet 1/1



Remarks	Scale (approx)	Logged By
	1:40	ljs
	Figure No. 5787.DP1	



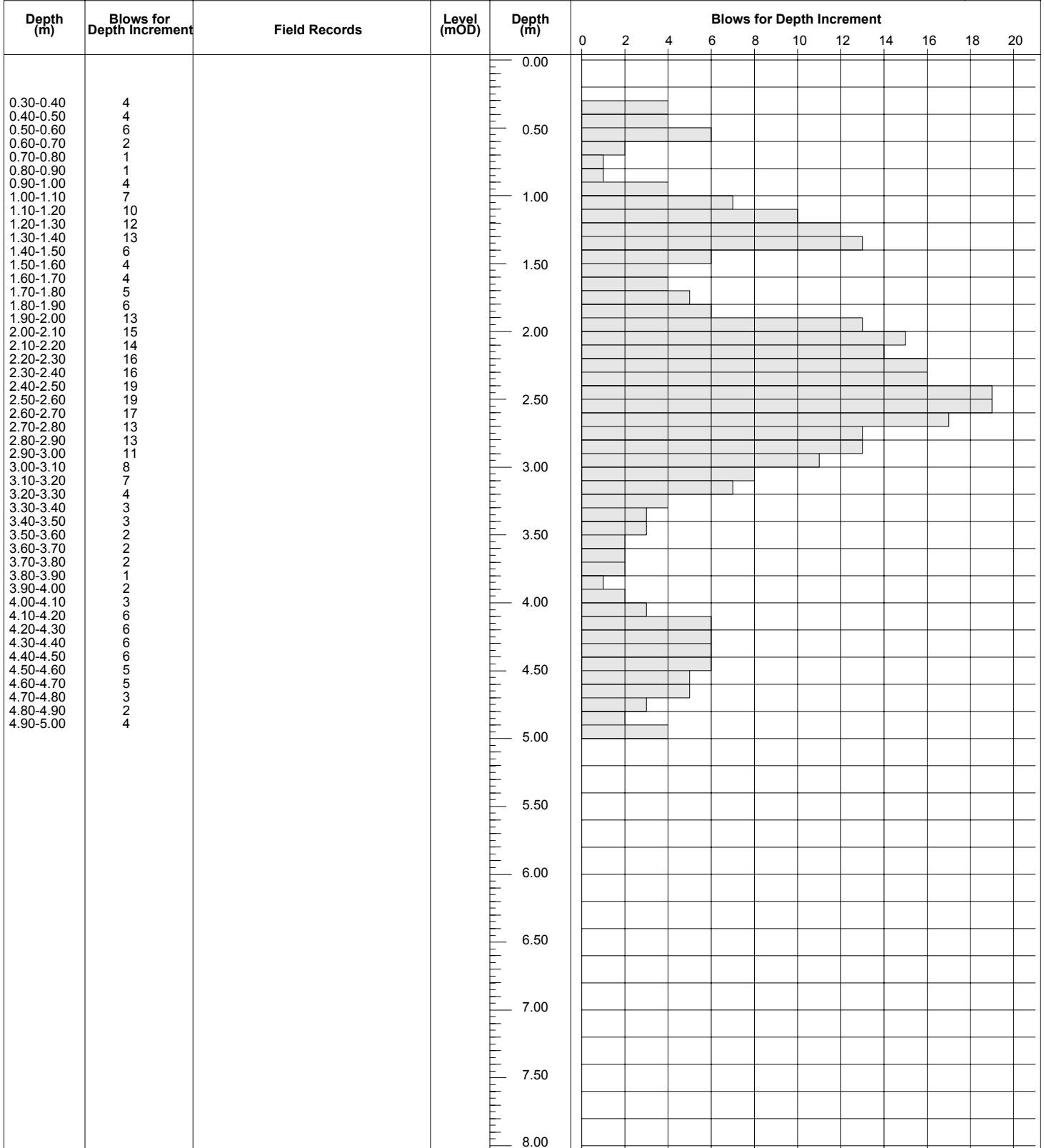
AP GEOTECHNICS

T 01932 848460
F 01932 851255
E mail@apgeotechnics.co.uk

Site
FORMER GREGGS BAKERY, GOULD ROAD,
TWICKENHAM, TW2 6RT

Probe
Number
DP8

Method Dynamic Probe	Cone Dimensions	Ground Level (mOD)	Client London Square	Job Number 5787
	Location See site plan	Dates 21/03/2024	Engineer Gravity Consulting Engineers	Sheet 1/1



Remarks	Scale (approx)	Logged By
	1:40	ljs
	Figure No. 5787.DP8	

APPENDIX D

UST DATA

Adler and Allan Limited, 22/42 Livingstone Road, London E15 2LJ
www.adlerandallan.co.uk email: sales@adlerandallan.co.uk
Tel: 020 8555 7111 Fax: 020 8519 3090

ALL PRICES EXCLUDE VAT

All quotations are subject to our terms and conditions, a copy of which is available upon request.

Our accounting terms are nett cash 30 days from date of invoice.

We hope you find the above quotation of interest and we look forward to hearing further from you in due course.

Yours faithfully,
Adler & Allan Limited

Steve Madeley
Operations Supervisor

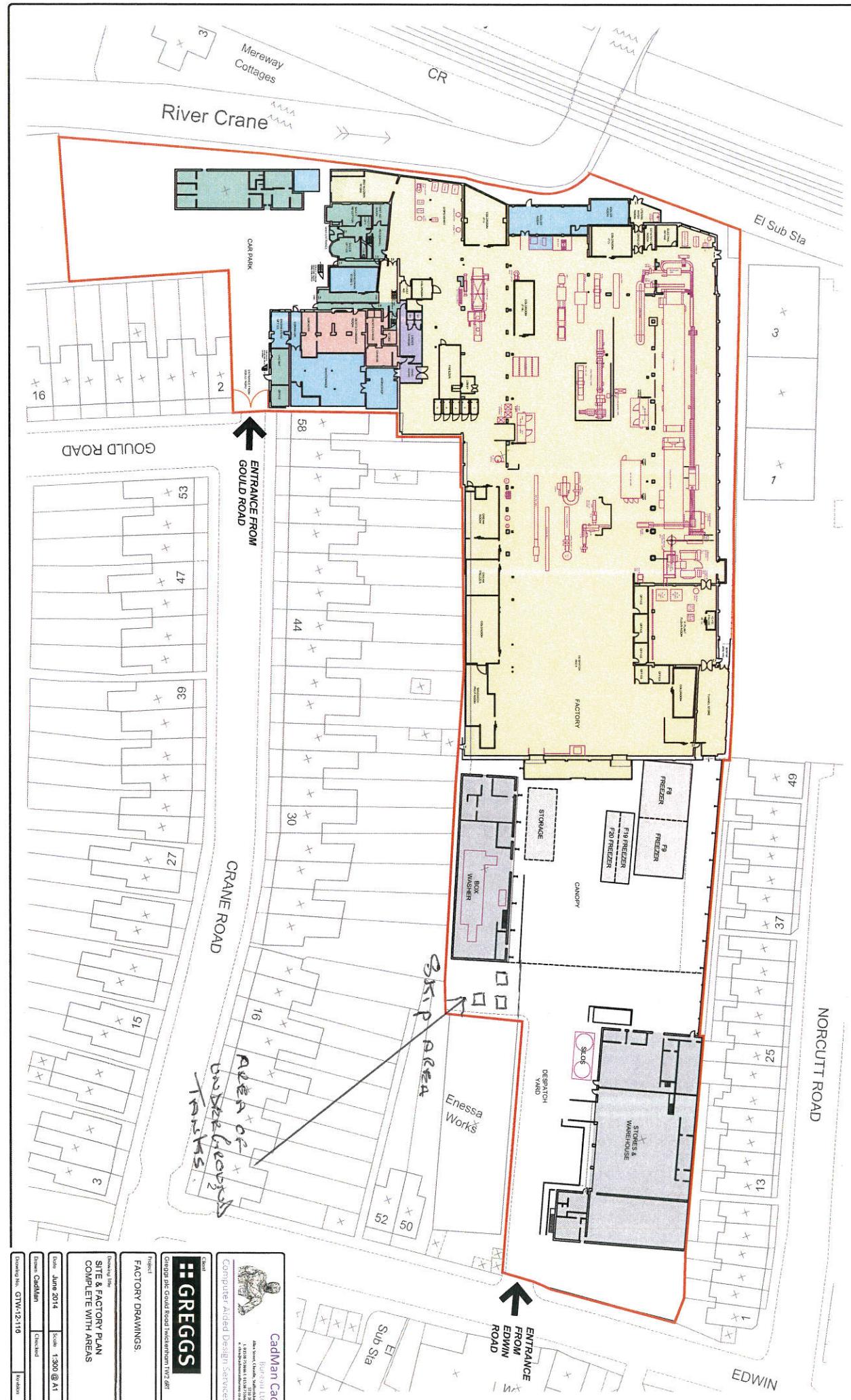
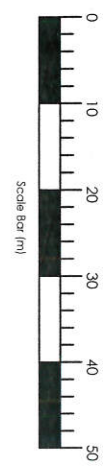
KURT — 3 Days / 1 Remove Lids
2. Empty
3. Rinse Room

S.I.C CODE
AAP 698

PREMISES CODE
15.81

TOTAL
£3441.00

- LEGEND**
- BAKERY - Area = 4664m²
 - ENGINEERING / PLANT - Area = 347m²
 - OFFICES & AMENITIES - Area = 310m²
 - STORE & WAREHOUSE BOX WASHER BLDG. - Area = 1007m²
 - EXTERNAL FREEZERS & STORAGE - Area = 2500m²
 - CHANGE AREA - Area = 229m²
 - SITE BOUNDARY - Area = 10,569m²



CadMan Cad
 BIRKENHEAD
 4th Floor, 100, Victoria Road
 BIRKENHEAD, CH43 1JH
 Tel: 01492 506000
 Fax: 01492 506001
 Email: sales@cadman.co.uk

Computer Aided Design Services

GREGGS
 GREGGS plc, Gould Road, Warrington, WIR 6RT

Project:
 FACTORY DRAWINGS

Drawn: June 2014
Scale: 1:300 @ A1

Checked: [Signature]

Drawn: CadMan

Drawn No.: GTW-12-110

Site & Factory Plan
 COMPLETE WITH AREAS

■ ■ GREGGS

DATE: 13/9/06

TIME:

NUMBER OF PAGES (INCLUDING THIS ONE)

II

TO STEVE MADLEY

FAX NUMBER 0208 519 3090

FROM

Mick Goodall — CHIEF PENWIPER

GREGGS SOUTH EAST (WLSC)

FAX NUMBER: 020-8755-1959

TEL NUMBER: 020-8894-2121

MESSAGE

STEVE AS DISCUSSED ON PHONE

COMPANY ORDER ATTACHED

ESTIMATED Tank Volume TOTAL 42 CUB/METRE

S.I.C CODE AAP698 — PREMISES CODE 15.81

START DATE 27/9/06 To 29/9/06 - 3 DAYS.

Regards

M. Goodall

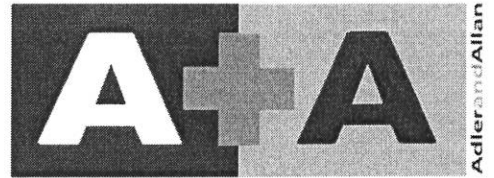


South East

○ West London
Service Centre
Gould Road, Twickenham
Middlesex TW2 6RT

Tel • 020 8894 2121
Fax • 020 8755 1959

with compliments



Adler and Allan Limited, 22/42 Livingstone Road, London E15 2LJ
www.adlerandallan.co.uk email: sales@adlerandallan.co.uk
Tel: 020 8555 7111 Fax: 020 8519 3090

Our ref: P08493/SLM

25th July 2006

Gregg's

For the attention of Ian Blackwood

Via E-Mail: ian.Blackwood@greggs.co.uk

Re: Fuel transfer and tank works @ Gregg's, Twickenham & Enfield

We thank you for your enquiry and following our recent site to are pleased to provide our quotation for the works required as follows:

To supply tanker labour and equipment to perform the following works;

- Uplift surplus diesel from tank no 3 and transfer alternative fuel storage unit within the site.
- Bottom out tank 1,2 & 3 and prepare for foam filling.
- Transfer tank bottoms for licensed disposal under EA consignment note.

For the sum of £795.00 plus disposal

Disposal @ £78.00 per 1000-litres or part thereof

*Tank 3 (2000 Ltr)
5,900 litres removed
(£468.00)*

Supply labour and equipment to perform the following works

- Foam fill tanks 1, 2 & 3 with Bacel RG22 Resin and supply certification

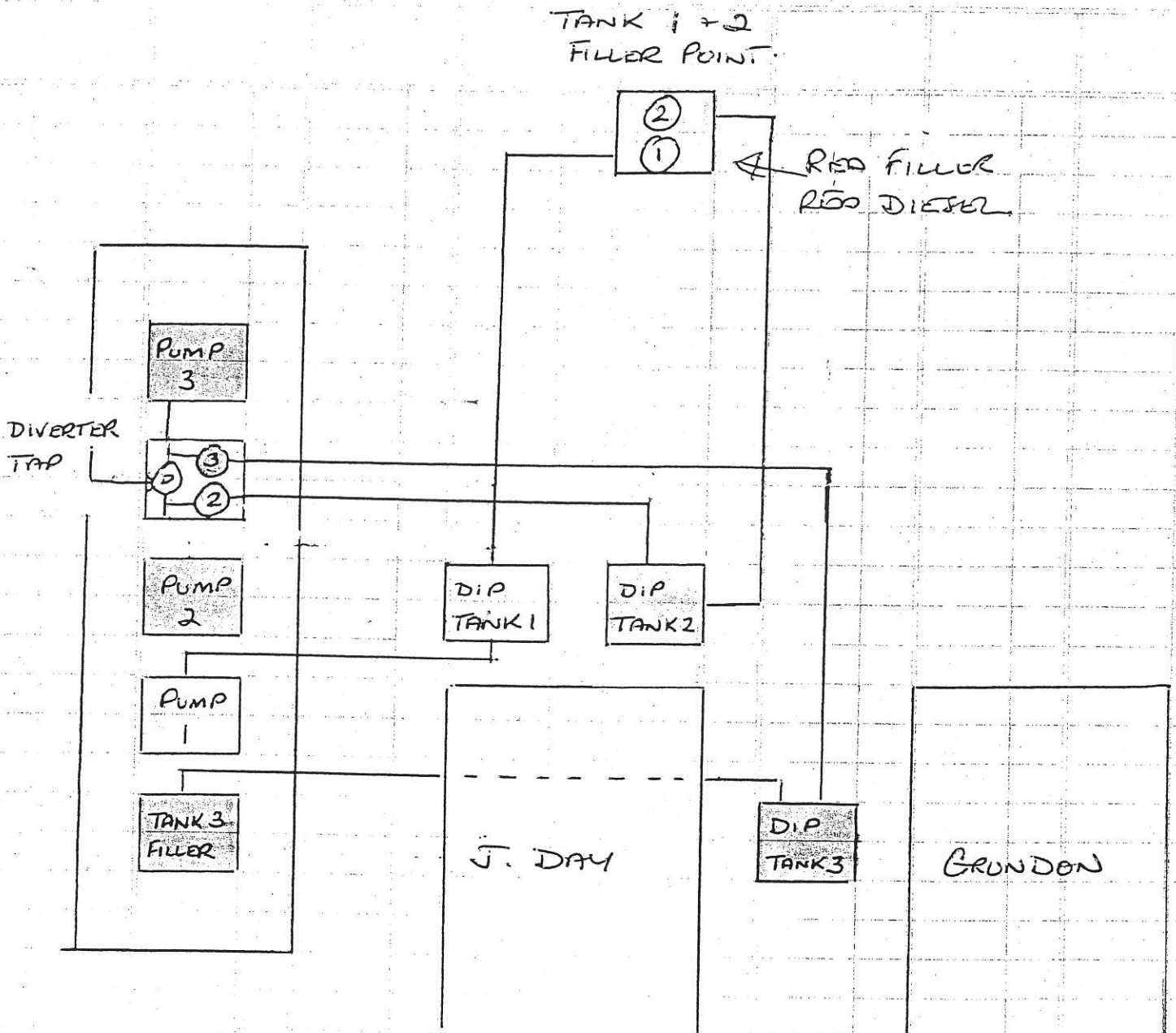
For the sum of £60.00 per cubic metre

> £60 x 41.5 drums = £2490

Notes:

- Quotation based on weekday working.
- Gregg's bakery to provide site premise and SIC codes for the disposal of tank sludge.
- Adler and Allan do not accept retentions.

FUEL TANK PLAN.

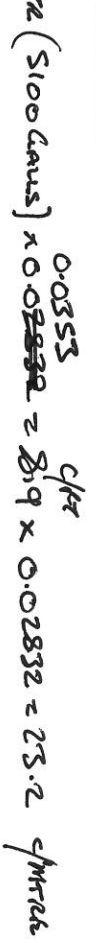
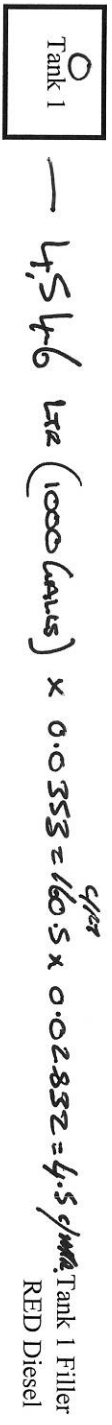
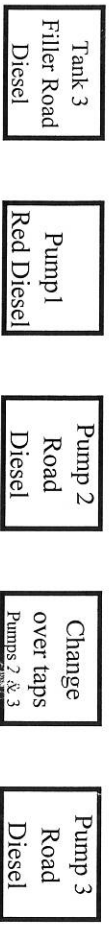


LIT

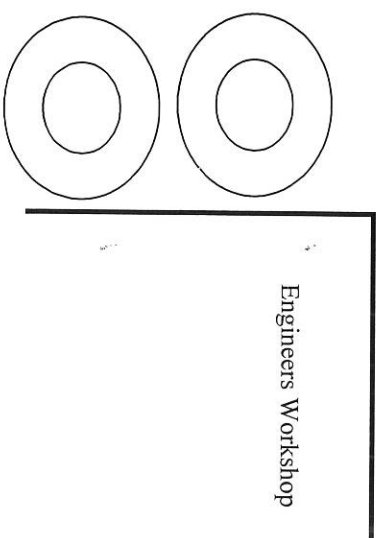
TANK 1	4546	(1000 GALLS)
TANK 2	13638	(3000 GALLS)
TANK 3	23200	(5100 GALLS)
TOTAL STORAGE 41384 (9103 GALLS).		

LITRS 4.546 = 1 GALL.

Fuel Pump and Tank Locations



TOTAL RESERVE 41384 (9103 Gaus)
41.4 c/mtr.



Engineers Workshop



The Hazardous Waste Regulations 2005: Consignment Note

PRODUCER'S/HOLDER'S/CONSIGNOR'S COPY (Delete as appropriate)

PART A Notification details

- 1 Consignment note code: **AAD698 / AS219**
- 2 The waste described below is to be removed from (name, address, postcode, telephone, e-mail, facsimile):
**GREEG'S SOUTH EAST, EDWIN ROAD
 TWICKENHAM, MIDDX, TW2 5RT**
- 3 Premises code (where applicable): **AAD698**
- 4 The waste will be taken to (name, address and postcode):
**ADLER AND ALLAN LTD, 24 SALOMONS WAY
 FERRY LANE SOUTH, RAINHAM, ESSEX
 RM13 9UL**
- 5 The waste producer was (if different from 2) (name, address, postcode, telephone, e-mail, facsimile):
AS(2)

PART B Description of the waste

- 1 The process giving rise to the waste(s) was: **DECOMMISSIONING OF UNDERGROUND FUEL TANKS**
- 2 SIC for the process giving rise to the waste: **15.811**
- 3 WASTE DETAILS (where more than one waste type is collected all of the information given below must be completed for each EWC identified)

Description of waste	List of wastes (EWC code)(6 digits)	Quantity (kg)	The chemical/biological components of the waste and their concentrations are:		Physical form (gas, liquid, solid, powder, sludge or mixed)	Hazard code(s)	Container type, number and size
			Component	Concentration (% or mg/kg)			
FUEL OIL + DIESEL	130701	5900 kg	DIESEL OIL	>0.1%	MIXED	H7	2000-GALLON ROAD FUEL TANKER
			X WATER				

The information given below is to be completed for each EWC identified

EWC code	Packing group(s)	UN identification number(s)	Proper shipping name(s)	UN class(es)	Special handling requirements
130701	III	1202	DIESEL	3	ADR

PART C Carrier's certificate

(If more than one carrier is used, please attach schedule for subsequent carriers. If a schedule of carriers is attached tick here.)

I certify that I today collected the consignment and that the details in A2, A4 and B3 are correct and I have been advised of any specific handling requirements.

1 Carrier name: **ADLER AND ALLAN LTD**
 On behalf of (name, address, postcode, telephone, e-mail, facsimile):
**22-42 LIVINGSTONE ROAD
 LONDON, E15 2LJ**

2 Carrier registration no./reason for exemption:
6TL/371490/CB

3 Vehicle registration no. (or mode of transport, if not road):
OL6286

Signature: *[Signature]*

Date: **27 09 2006** Time:

PART D Consignor's certificate

I certify that the information in A, B and C above is correct, that the carrier is registered or exempt and was advised of the appropriate precautionary measures. All of the waste is packaged and labelled correctly and the carrier has been advised of any special handling requirements.

1 Consignor name: **X**

On behalf of (name, address, postcode, telephone, e-mail, facsimile):
**GREEG'S SOUTH EAST
 EDWIN ROAD
 TWICKENHAM
 MIDDX
 TW2 5RT**

Signature: *[Signature]*

Date: Time:

PART E Consignee's certificate (where more than one waste type is collected all of the information given below must be completed for each EWC)

Individual EWC code(s) received	Quantity of each EWC code received (kg)	EWC code accepted/rejected	Waste management operation (R or D code)

1 I received this waste at the address given in A4 on: Date Time

2 Vehicle registration no. (or mode of transport if not road):
 Name:
 On behalf of (name, address, postcode, telephone, e-mail, facsimile):

3 Where waste is rejected please provide details:

I certify that waste management licence/permit/authorised exemption no(s).

authorises the management of the waste described in B at the address given in A4.
 Signature:
 Date: Time:



The Hazardous Waste Regulations 2005: Consignment Note

RETURN'S COPY

PART A Notification details

1 Consignment note code: **AAD698 / AS219**

2 The waste described below is to be removed from (name, address, postcode, telephone, e-mail, facsimile):
**GREGGS SOUTH EAST, EDWIN ROAD
TWICKENHAM, MIDDY, T.12 SRT**

3 Premises code (where applicable): **AAD698**

4 The waste will be taken to (name, address and postcode):
**ADLER AND ALLAN LTD, 24 SALAMONS WAY
FERRY LANE SOUTH, RAINHAM, ESSEX
RM13 9UL**

5 The waste producer was (if different from 2) (name, address, postcode, telephone, e-mail, facsimile):
AS(2)

PART B Description of the waste

If continuation sheet used, tick here

1 The process giving rise to the waste(s) was: **DECOMMISSIONING OF UNDERGROUND FUEL TANKS**

2 SIC for the process giving rise to the waste: **15.811**

3 WASTE DETAILS (where more than one waste type is collected all of the information given below must be completed for each EWC identified)

Description of waste	List of wastes (EWC code)(6 digits)	Quantity (kg)	The chemical/biological components of the waste and their concentrations are:		Physical form (gas, liquid, solid, powder, sludge or mixed)	Hazard code(s)	Container type, number and size
			Component	Concentration (% or mg/kg)			
FUEL OIL + DIESEL	130701	5900	DIESEL OIL	70.1%	MIXED	H7	2000-60LITRE RORO FUEL TANKER

The information given below is to be completed for each EWC identified

EWC code	Packing group(s)	UN identification number(s)	Proper shipping name(s)	UN class(es)	Special handling requirements
130701	III	1202	DIESEL	3	ADR

PART C Carrier's certificate

PART D Consignor's certificate

(If more than one carrier is used, please attach schedule for subsequent carriers. If a schedule of carriers is attached tick here.)

I certify that I today collected the consignment and that the details in A2, A4 and B3 are correct and I have been advised of any specific handling requirements.

1 Carrier name: **ADLER AND ALLAN LTD**
On behalf of (name, address, postcode, telephone, e-mail, facsimile):
**22-42 LIVINGSTONE ROAD
LONDON, E15 2LJ**

2 Carrier registration no./reason for exemption:
676/371490/CO

3 Vehicle registration no. (or mode of transport, if not road):
0116286

Signature

Date **29/10/2006** Time **11:00**

I certify that the information in A, B and C above is correct, that the carrier is registered or exempt and was advised of the appropriate precautionary measures. All of the waste is packaged and labelled correctly and the carrier has been advised of any special handling requirements.

1 Consignor name: **X**

On behalf of (name, address, postcode, telephone, e-mail, facsimile):

**GREGGS SOUTH EAST
EDWIN ROAD
TWICKENHAM
MIDDY
T.12 SRT**

Signature

Date **29/10/2006** Time **11:00**

PART E Consignee's certificate (where more than one waste type is collected all of the information given below must be completed for each EWC)

Individual EWC code(s) received	Quantity of each EWC code received (kg)	EWC code accepted/rejected	Waste management operation (R or D code)
130701	5900	ACC	RB

1 I received this waste at the address given in A4 on: Date **29/10/2006** Time **11:00**

2 Vehicle registration no. (or mode of transport if not road):
0116286

Name: **R. DUFF**

On behalf of (name, address, postcode, telephone, e-mail, facsimile):

3 Where waste is rejected please provide details:

**ADLER & ALLAN LTD
24 SALAMONS WAY FERRY LANE STH.
RAINHAM, ESSEX RM13 9UL
TEL: 01708 525 830 FAX: 01708 523 904**

I certify that waste management licence/permit/authorised exemption no(s):

WMI 80669

authorises the management of the waste described in B at the address given in A4.

Signature

Date **29/10/2006** Time **11:00**