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An Archaeological Watching Brief on the Rowdown to Beddington Lane Pipeline Project, London Boroughs of Bromley, Croydon and Sutton.

Site Code: RBC 06

Central National Grid References: Rowdown TQ 391 632
Kent Gate Way TQ 369 635
Lloyd Park TQ 338 645
Beddington Lane TQ 305 654

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CONTENTS

Figures

Appendices

1 ABSTRACT

1.1 An archaeological watching brief was undertaken by Pre-Construct Archaeology Limited on groundworks at four shaft sites along the Rowdown to Beddington Lane pipeline project. The shaft sites were located at Rowdown (Site 2), London Borough of Bromley (TQ 391 632), Kent Gate Way (Site 1), London Borough of Croydon (TQ 369 635), Lloyd Park (Site 3), London Borough of Croydon (TQ 338 645) and Beddington Lane (Site 4), London Borough of Sutton (TQ 305 654). The project was commissioned by Duncan Hawkins, CgMs Consulting Limited, on behalf of Morgan Est, and the fieldwork was undertaken by the author between 14th August and 18th October 2006.

1.2 The development project consists of the construction of a length of circa 8.8km of new cable tunnels right across the London Borough of Croydon between Rowdown (Bromley) and Beddington Lane (Sutton) sub stations, with four construction/access shafts along the route. The archaeological watching brief consisted of observing and recording the excavation of six trial pits each at both Rowdown and Lloyd Park sites, ten trial pits at Beddington Lane, the ground reduction works of the shaft at Kent Gate Way , and the ground reduction of the shaft at Rowdown.

1.3 The natural at Kent Gate Way was found to consist of chalk, which was overlain by 2.8m of natural sand and gravel, 1.6m of natural clay layer and 0.6m of made ground with a surface level of 83.90mOD. No archaeological deposits were observed on this site.

1.4 Natural chalk was identified at Rowdown between 0.40-0.44m depth of made ground over it. No archaeological deposits were observed on this site.

1.5 Natural at Lloyd Park was found to consist of a degraded chalk and was overlain by between 0.11-0.31m of a clayey sand subsoil and by between 0.30-0.49m of made ground. No archaeological deposits were observed on this site.

1.6 Natural at Beddington Lane was found to consist of sandy gravel and was covered by between 1.86-2.39m of made ground which included a considerable amount of 19th century domestic rubbish. No archaeologically significant deposits were observed at this site.

2 INTRODUCTION

2.1 This report details the results of an archaeological watching brief undertaken by Pre-Construct Archaeology Limited on groundworks at four shaft sites along the Rowdown to Beddington Lane pipeline project. The shaft sites were located at Rowdown (Site 2), London Borough of Bromley (TQ 391 632), Kent Gate Way (Site 1), London Borough of Croydon (TQ 369 635), Lloyd Park (Site 3), London Borough of Croydon (TQ 338 645) and Beddington Lane (Site 4), London Borough of Sutton (TQ 305 654) (see Figure 1). The project was commissioned by Duncan Hawkins, CgMs Consulting Limited, on behalf of Morgan Est, and the fieldwork was undertaken by the author between 14th August and 18th October 2006.

2.2 The development project consists of the construction of a length of circa 8.8km of new cable tunnels right across the London Borough of Croydon between Rowdown (Bromley) and Beddington Lane (Sutton) sub stations, with four construction/access shafts along the route. The archaeological watching brief consisted of observing and recording the excavation of six trial pits each at both Rowdown and Lloyd Park sites, ten trial pits at Beddington Lane, the ground reduction works of the shaft at Kent Gate Way, an area measuring 12m x 12m, and the ground reduction of the shaft at Rowdown, a circular trench with a 9m radius. The trial pits all measured circa 1m x 2.5m x 3m (depth).

2.3 The site at Rowdown is bounded by fields on all sides, with Rowdown Wood to the west. The Kent Gate Way site was bounded to the north and west by Kent Gate Way road, and to the east and south by fields. The Lloyd Park site was situated within Lloyd Park at the southern boundary and bounded by Coombe Road and Tram Link to the south, and the Lloyd Park Car Park and Pavilion to the west. The site at Beddington Lane was located at the south-east corner of the sub station. The sub station is bounded by Richmond Road to the south and Beddington Lane to the west, with Industrial estates to the north and east.

2.4 The site was assigned the code: RBC 06.

Figure 1
Site Locations
1:25,000 at A3

3 PLANNING BACKGROUND

3.1 In November 1990 the Department of the Environment issued Planning Policy Guidance Note 16 (PPG16) "Archaeology and Planning" providing guidance for planning authorities, property owners, developers and others on the preservation and investigation of archaeological remains.

3.2 In considering any planning application for development, the local planning authority is bound by the policy framework set by government guidance, in this instance PPG16, by current Structure and Local Plan policy and by other material.

3.3 The relevant Development Plan framework is provided by the Croydon Unitary Development Plan, also known as 'The Croydon Plan' (July 2006). The adopted Croydon Structure Plan states:

DEVELOPMENT PROPOSALS ON ARCHAEOLOGICAL SITES

UC11

DEVELOPMENT WILL ONLY BE PERMITTED IF ALL THE FOLLOWING CRITERIA ARE MET:

i) PROPOSALS HAVE BEEN PROPERLY ASSESSED AND PLANNED FOR ARCHAEOLOGICAL IMPLICATIONS, WHERE DEVELOPMENT MAY AFFECT THE ARCHAEOLOGICAL HERITAGE OF A SITE. THIS MAY INVOLVE PRELIMINARY ARCHAEOLOGICAL SITE EVALUATIONS, COMMISSIONED BY THE APPLICANTS FROM A PROFESSIONALLY QUALIFIED ARCHAEOLOGICAL PRACTICE OR ARCHAEOLOGICAL CONSULTANT;

ii) EARLY CO-OPERATION REGARDING THE PROPOSALS BETWEEN LANDOWNERS, DEVELOPERS AND ARCHAEOLOGICAL PRACTICES, IN ACCORDANCE WITH THE PRINCIPLES OF THE BRITTISH ARCHAEOLOGISTS AND DEVELOPERS LIASON GROUP CODE OF PRACTICE, HAS BEEN DEMONSTRATED.

iii) THE SITING AND DESIGN OF THE NEW DEVELOPMENT HAS REGARD TO MINIMISING THE DISTURBANCE OF ARCHAEOLOGICAL REMAINS, ENSURING THAT THOSE MOST IMPORTANT ARE PERMANENTLY PRESERVED IN SITU.

iv) AN APPROPRIATE LEVEL OF ARCHAEOLOGICAL INVESTIGATION, EXCAVATION, RECORDING, ANALYSIS AND PUBLICATION HAS BEEN

AGREED WITH THE COUNCIL, SECURED WHERE APPROPRIATE BY THE USE OF PLANNING CONDITIONS OR AGREEMENTS.

v) THE PROVISION OF ACCESS AND FACILITIES THAT INTERPRET AND EXPLAIN ARCHAEOLOGICAL SITES TO THE PUBLIC HAS BEEN CONSIDERED, SECURED WHERE APPROPRIATE BY THE USE OF PLANNING CONDITIONS OR AGREEMENTS.

UC 12

PRESERVING NATIONALLY IMPORTANT REMAINS:

THERE WILL BE A PRESUMPTION AGAINST DEVELOPMENT THAT WOULD HARM ARCHAEOLOGICAL REMAINS OF NATIONAL IMPORTANCE AND THEIR SETTING, WHETHER SCHEDULED OR NOT.

UC 13

PRESERVING LOCALLY IMPORTANT REMAINS:

DECISIONS ON DEVELOPMENT PROPOSALS AFFECTING LOCAL REMAINS WILL TAKE ACCOUNT OF THE ARCHAEOLOGICAL IMPORTANCE OF THOSE REMAINS, THE NEED FOR THE DEVELOPMENT, THE LIKELY EXTENT OF ANY HARM, AND THE PROSPECTS OF THE PROPOSALS SUCCESSFULLY PRESERVING BY RECORD THE ARCHAEOLOGICAL INTEREST OF THE SITE.

UC 14

ENABLING DEVELOPMENT:
ENABLING DEVELOPMENT WILL NOT BE PERMITTED UNLESS THE FOLLOWING CRITERIA ARE MET:

i) THE DEVELOPMENT WILL NOT MATERIALLY DETRACT FROM THE ARCHAEOLOGICAL, ARCHITECTURAL, HISTORIC, LANDSCAPE OR BIODIVERSITY INTEREST OF THE HERITAGE ASSET OR MATERIALLY HARM ITS SETTING;

ii) THE DEVELOPMENT AVOIDES DETRIMENTAL FRAGMENTATION OF MANAGEMENT OF THE HERITAGE ASSET;

iii) THE DEVELOPMENT WILL SECURE THE LONG TERM FUTURE OF THE HERITAGE ASSET AND, WHERE APPLICABLE, ITS CONTINUED USE FOR A SYMPATHETIC PURPOSE;

iv) THE PROBLEM THAT THE DEVELOPMENT SEEKS TO RESOLVE ARISES FROM THE INHERENT NEED OF THE HERITAGE ASSET, RATHER THAN

THE CIRCUMSTANCES OF THE PRESENT OWNER OR THE PURCHASE PRICE PAID;

v) SUFFICIENT FINANCIAL ASSISTANCE IS NOT AVAILABLE FROM ANY OTHER SOURCE;

vi) THE AMOUNT OF DEVELOPMENT IS THE MINIMUM NECESSARY TO SECURE THE FUTURE OF THE HERITAGE ASSET AND ITS FORM MINIMISES DISBENEFITS;

vii) THE VALUE OR BENEFIT TO THE SURVIVAL OR ENHANCEMENT OF THE HERITAGE ASSET OUTWEIGHS THE LONG-TERM COSTS TO THE COMMUNITY OF PROVIDING THE ENABLING DEVELOPMENT.

4 GEOLOGICAL BACKGROUND

4.1 The British Geological Survey map 270 of the area (1:50,000 series) indicates that the Beddington Lane site is underlain by River terraces, and the Lloyd Park and Kent Gate Way sites are underlain by Upper Chalk. British Geological Survey map 271 (1:50,000 series) indicates that the Rowdown site is underlain by clay with flints.

4.2 The site at Kent Gate Way lies at around 83.9m AOD. The Rowdown site lies at around 10.62m AOD, Lloyd Park at around 77.7m AOD and Beddington Lane at around 37m AOD.

5 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

5.1 GENERAL OVERVIEW

The historical assessment deals primarily with Croydon and its borders with Sutton and Bromley, and details where possible any archaeological find spots in the locale of individual study sites rather than along the length of the pipeline. Croydon appears to have had a varied and lengthy history, with evidence for settlement existing from the prehistoric periods onwards. A number of find spots are noted from the prehistoric and Roman periods and therefore potential does exist for new archaeological discoveries. However, a great deal of redevelopment and building work from the late C19th and more recently throughout the 1960s and 70s has taken place, transforming and thus truncating a large portion of the landscape likely to yield such finds. Modern developments have particularly affected the sites in question.

5.2 PREHISTORIC

5.2.1 A number of prehistoric features have been observed in the vicinity of the Beddington Lane site, namely in the area of the Wandle gravels. However, for the other sites in question, evidence is scanty; only isolated find spots are noted rather than any firmly dated archaeological features.

5.2.2 A few late Bronze Age/early Iron Age pottery sherds and worked flint fragments were found during excavations to the north of the Kent Gate Way site (TQ 37106375). A hill wash deposit was also discovered at the base of Gravel Hill containing Neolithic or Bronze Age worked flint. Excavations at a nearby service station also produced fragments of prehistoric pottery (TQ3703 6385).

5.2.3 Excavations close to the Lloyd Park area yielded Iron Age pottery (TQ 3710-3360 6455) and redeposited worked flint and probable Neolithic arrow head (TQ 3360 6455). No archaeological features however were discovered.

5.2.4 More evidence of the late Bronze Age/early Iron Age derives from excavations carried out in the Beddington area. Iron age linear features were uncovered to the north-east of the Beddington Lane sub station (TQ 3070 6560), indicative of late Bronze age/early Iron Age farming activities. Pit like features and late Neolithic mortlake ware pottery were discovered in the same vicinity (TQ 3050 6625), along with ditches and burnt flint scatters.

5.3 ROMAN

5.3.1 Croydon lies near to a Roman road stretching from London to Portslade (Weinreb and Hibbert:1983:221). A Roman presence is therefore noted in the area, but specific evidence for occupation is limited. Anecdotal evidence from the late C19th suggests that a Roman villa was found in Beddington. Similarly the finding of three coins of Otho, Vespasian and Hadrian is reported, however no provenance is noted. Therefore, barring a few spot finds of Roman pottery, evidence for this period is scanty. The line of a Roman road formed the very eastern boundary of the Rowdown sub station.

5.3.2 Recorded finds include redeposited Roman sherds and pottery within a post-hole, which were discovered during excavations close to the Kent Gate Way study site (TQ 3710 6375). In the same area, also close to the Lloyd Park study site a ditch was found containing Roman pottery sherds and slag associated with contemporary metal-working.

5.3.3 An evaluation carried out close to the Lloyd Park study site identified a number of Roman ditches and a cremation burial (TQ 3360 6455).

5.4 ANGLO SAXON AND EARLY MEDIEVAL

5.4.1 Few finds dating to the Anglo Saxon or early medieval periods are reported near to any of the study sites. Evidence for this period derives mainly from documentary sources.

5.4.2 Croydon is noted in the *Domesday* as 'Crogedene' in 962, becoming 'Croendene' in 1086 (Weinreb and Hibbert:1983:221). The name is believed to derive from the two saxon words 'crone' and 'dene' joined, to mean 'Sheep Valley' (Walford:1983:151). It is also thought that a church existed in the area from at least 960, as a document from this time notes a priest of Croydon (*ibid*).

5.4.3 Evidence for Saxo-Norman occupation was found during excavations close to the Lloyd Park and Kent Gate Way study sites (TQ 3710 6375). A number of features were recorded including pits, postholes and hearths. Early medieval plough soil was also noted in the same vicinity (TQ 3703 6385).

5.5 LATE MEDIEVAL AND POST-MEDIEVAL

5.5.1 Croydon experienced a great deal of change and growth in the post-medieval period with the extension of transport links and population increases. Archaeological discoveries relating to this period however are rare.

5.5.2 A chalk floor and cobbled surface believed to relate to a late C17th outbuilding and yard were uncovered during excavations to the north of the Kent Gate Way study site (TQ 3703 6385). Furthermore, remains of Coombe House, dating to the C18th were discovered resting directly on natural gravels some distance to the west of the Lloyd Park study site (TQ 3435 6450). The estate to which the house belonged is believed to date from the C13th, however modern services and landscaping have severely truncated parts of the site.

5.5.3 In the Addington Hills area, close to both the Lloyd Park and Kent Gate Way study sites, is the C18th Geoffrey Harris House. Foundations uncovered were thought to date back to the earlier C16th structure (TQ 3710 6375). No other archaeological deposits were found.

5.5.4 Croydon became a London Borough in 1886; good transport links to London led to a population increase, the beginnings of municipal development and the construction of large numbers of villas. A railway and canal have been in existence since 1809, and an airport since 1915, from which Amy Johnson began her record breaking flight to America (Weinreb and Hibbert:1983:221).

5.5.5 Severe bomb damage during World War II, gave rise to mass re-development throughout the 1960s and 70s, with the construction of skyscrapers and municipal buildings, transforming the landscape (Weinreb and Hibbert:1983:221).

6 ARCHAEOLOGICAL METHODOLOGY

6.1 The areas to be reduced were lain out by the groundwork contractors in accordance with the proposed development plan and verified by representatives from the National Grid and ESI. The ground-reduction for the trial pits and shaft location at Rowdown, Beddington and Lloyd Park were all hand dug to a depth of 1.2m and then machine excavated by the contractors. At Kent Gate Way, the ground-reduction was all undertaken by mechanical excavators operated by the contractors.

6.2 The attendant archaeologist monitored all ground-reduction so that any archaeological deposits could be identified, excavated and recorded stratigraphically, and all other deposits recorded.

6.4 Individual descriptions of all archaeological strata and features excavated and/or exposed were entered onto pro-forma recording sheets. All plans and sections of archaeological deposits were recorded on polyester based drawing film, the plans being drawn at a scale of 1:20 or 1:50 and the sections at 1:10. The recording system used was "single context".

7 SUMMARY OF THE ARCHAEOLOGICAL SEQUENCE: TRIAL PITS AND SHAFT LOCATIONS

7.1 KENT GATE WAY (Site 1 – see Figures 1 & 2)

7.1.1 SHAFT LOCATION (Trench 1 – see Figure 6, Section 1)

Context Number	Context Description	Height mOD	Thickness M
1	Mid yellowish brown clayey silt, containing moderate small sub-angular pebbles: Topsoil	83.90	0.18
2	Mid brownish yellow clayey coarse sand, with very occasional small CBM frags and moderate medium angular flint nodules: Subsoil	83.72	0.42
3	Mid brownish orange sandy clay: Natural	83.30	0.55
4	Mid reddish brown sandy clay with frequent small sub rounded/angular pebbles: Natural	82.75	1.05
5	Light brownish yellow silty coarse sand with moderate small-medium angular pebbles/gravel: Natural	81.70	0.90
6	Mid brownish yellow coarse sand with large flint nodules: Natural	80.80	1.90
7	White chalk: Natural	78.90	No further excavation

7.2 ROWDOWN SUB STATION (Site 2 – see Figures 1 & 3)

7.2.1.1 TPs 1

Context Number	Context Description	Height mOD	Thickness m
8	Dark brownish black sandy silt/tarmac: C20th made ground	110.62	0.40
9	White chalk: Natural	110.22	No further excavation

7.2.1.2 TP 2

Context Number	Context Description	Height mOD	Thickness m
8	Dark brownish black sandy silt/tarmac: C20th made ground	110.62	0.40
9	White chalk: Natural	110.22	No further excavation

7.2.1.3 **TP 3**

Context Number	Context Description	Height mOD	Thickness m
8	Dark brownish black sandy silt/tarmac: C20th made ground	110.62	0.40
9	White chalk: Natural	110.22	No further excavation

7.2.1.4 **TP 4**

Context Number	Context Description	Height mOD	Thickness m
8	Dark brownish black sandy silt/tarmac: C20th made ground	110.62	0.40
9	White chalk: Natural	110.22	No further excavation

7.2.1.5 **TP 5**

Context Number	Context Description	Height mOD	Thickness m
8	Dark brownish black sandy silt/tarmac: C20th made ground	110.62	0.40
9	White chalk: Natural	110.22	No further excavation

7.2.1.6 **TP 6**

Context Number	Context Description	Height mOD	Thickness m
8	Dark brownish black sandy silt/tarmac: C20th made ground	110.62	0.40
9	White chalk: Natural	110.22	No further excavation

7.2.2 **SHAFT PERIMETER (see Figure 6, Section 2)**

Context Number	Context Description	Height mOD	Thickness m
10	Black Tarmac: C20th made ground	110.62	0.04
11	Compact mid brownish yellow coarse sand/pebbles: C20th Tarmac bedding layer	110.58	0.26
12	Dark brownish Black sandy silt/tarmac: C20th made ground	110.32	0.14
9	White chalk: Natural	110.18	<2.55

7.3 LLOYD PARK (Site 3 – see Figures 1 & 4)

7.3.1 TP 1 (see Figure 6, Section 3)

Context Number	Context Description	Height mOD	Thickness m
14	Dark brown sandy silt: Tosoil	77.7	0.26
15	Mid yellowish brown sandy silt with occasional CBM flecks: Made Ground	77.44	0.16
16	Greyish white chalk: Natural	77.28	No further excavation

7.3.2 TP 2

Context Number	Context Description	Height mOD	Thickness m
14	Dark brown sandy silt: Topsoil	77.7	0.15
17	Mid yellowish brown sandy silt with occasional CBM flecks: Made Ground	77.55	0.20
16	Greyish white chalk: Natural	77.35	Nor further excavation

7.3.3 TP 3

Context Number	Context Description	Height mOD	Thickness m
14	Dark brown sandy silt: Topsoil	77.7	0.22
18	Mid yellowish brown sandy silt with occasional CBM flecks: Made Ground	77.48	0.14
16	Greyish white chalk: Natural	77.34	No further excavation

7.3.4 TP 4

Context Number	Context Description	Height mOD	Thickness m
14	Dark brown sandy silt: Topsoil	77.7	0.19
19	Mid yellowish brown sandy silt with occasional CBM flecks: Made Ground	77.51	0.11
20	Firm, mid yellowish brown sandy silt with frequent gravel inclusions but no finds: Fill of cut feature [21] possibly for services	77.40	0.25
21	Linear cut with steep sides and flat base, cutting natural chalk (16): Cut for modern services	77.40	0.25

16	Greyish white chalk: Natural	77.40	No further excavation

7.3.5 **TP 5**

Context Number	Context Description	Height mOD	Thickness m
14	Dark brown sandy silt: Topsoil	77.7	0.15
22	Mid yellowish brown sandy silt with occasional CBM flecks: Made Ground	77.55	0.31
23	Firm mid orange-brown sandy clayey silt with occasional small rounded pebbles: Subsoil	77.24	0.11
16	Greyish white chalk: Natural	77.13	No further excavation

7.3.6 **TP 6**

Context Number	Context Description	Height mOD	Thickness m
14	Dark brown sandy silt: Topsoil	77.7	0.24
24	Mid yellowish brown sandy silt with occasional CBM flecks: Made Ground	77.46	0.25
25	Firm mid orange-brown clayey sand with occasional small rounded pebbles: Subsoil	77.21	0.31
16	Greyish white chalk: Natural	76.90	No further excavation

7.4 BEDDINGTON LANE SUB STATION (Site 4 – see Figures 1 & 5)

7.4.1 **TP 1**

Context Number	Context Description	Height mOD	Thickness M
26	Dark brownish black sandy silt with moderate small-medium sub-angular pebbles and occasional small pottery frags: Topsoil	37.14	0.23
27	Mid Brown sandy silt with small-medium rounded pebbles and occasional small iron nails: C20th Dump Layer	36.91	0.31
28	Mid Pinkish/Orange mottled Brown sandy silt, with frequent small-large pottery and glass frags including whole jars and bottles, occasional bone and leather frags: C19th/early	36.60	0.35

	C20th Dump Layer		
29	Mid orange-brown sandy silt with moderate amounts of medium pottery and animal bone frags, frequent medium glass frags, including whole bottles, occasional mod CBM frags and moderate small sub-angular pebbles: C19th Dump Layer	36.25	1.34
55	Mid brownish yellow coarse sandy gravel: Natural	34.91	No further excavation

7.4.2 **TP 2**

Context Number	Context Description	Height mOD	Thickness M
26	Dark brownish black sandy silt with moderate small-medium sub-angular pebbles and occasional small pottery frags: Topsoil	37.14	0.17
30	Dark brown fine sandy silt with sand lenses and occasional small pottery frags and rounded pebbles: Made Ground	36.97	0.46
33	Mid orange-greenish brown silty sand with frequent small angular pebbles, pottery and glass frags including whole large glass bottles: C19th/C20th Dump Layer	36.51	0.58
56	Mid pinkish-orange brown mottled silty coarse sand with frequent medium pottery and glass frags, including whole jars and bottles, occasional medium bone frags and frequent small rounded pebbles: C19th Dump Layer	35.93	0.65
55	Mid brownish yellow coarse sandy gravel: Natural	35.28	0.15 to limit of excavation

7.4.3 **TP 3 (see Figure 6, Section 8)**

Context Number	Context Description	Height mOD	Thickness M
26	Dark brownish Black sandy silt with moderate small-medium sub-angular pebbles and occasional small pottery frags: Topsoil	37.14	0.20
35	Mid Brown sandy silt with occasional small rounded pebbles and occasional iron nails: C20th Made Ground	36.94	0.26
36	Mid Pinkish Brown mottled silty sand with frequent medium-large pottery and glass frags, including whole bottles and jars, moderate medium rounded pebbles and occasional	36.68	0.21

	small-medium animal bone frags: C19th Dump Layer		
37	Mid orange-brown mottled silty sand with frequent medium-large pottery and glass fragments including whole bottles, occasional medium animal bone frags and moderate small sub-angular pebbles: C19th Dump Layer	36.47	1.53
55	Mid brownish yellow coarse sandy gravel: Natural	34.94	No further excavation

7.4.4 **TP 4**

Context Number	Context Description	Height mOD	Thickness m
26	Dark brownish black sandy silt with moderate small-medium sub-angular pebbles and occasional small pottery frags: Topsoil	37.14	0.19
38	Grey concrete with frequent medium rounded pebbles and flint nodules: C20th Concrete Layer	36.95	0.11
39	Mottled mid pinkish brown silty sand, with moderate small rounded pebbles and medium-large CBM frags (brick and tile), frequent medium-large pottery and glass frags, moderate large iron frags (railings/grills) and occasional charcoal flecks: C20th Made Ground	36.84	0.83
57	Mid pinkish-orange brown mottled silty sand with frequent medium pottery and glass frags, including whole jars and bottles, occasional medium animal bone frags and frequent small rounded pebbles: C19th Dump Layer	36.01	1.22
55	Mid brownish yellow coarse sandy gravel: Natural	34.79	No further excavation

7.4.5 **TP 5**

Context Number	Context Description	Height mOD	Thickness m
26	Dark brownish black sandy silt with moderate small-medium sub-angular pebbles and occasional small pottery frags: Topsoil	37.14	0.17
41	Dark brown fine sandy silt with moderate medium pottery and CBM frags (red and yellow frogged bricks), moderate small sub-angular pebbles and flint nodules and occasional plastic frags: C20th Made Ground	36.97	0.54
42	Light brownish yellow coarse sand with moderate medium-large CBM	36.43	0.60

	frags (frogged red and yellow whole bricks) and occasional small iron nails: C20th Made Ground		
58	Mottled pinkish-orange brown silty coarse sand with frequent medium-large pottery and glass frags, moderate medium CBM frags, small bone and iron nail frags, and frequent small angular pebbles: C19th/C20th Dump Layer	35.83	1.08
55	Mid brownish yellow coarse sandy gravel: Natural	34.75	No further excavation

7.4.6 **TP 6**

Context Number	Context Description	Height mOD	Thickness m
26	Dark brownish black sandy silt with moderate small-medium sub-angular pebbles and occasional small pottery frags: Topsoil	37.14	0.15
43	Mid greyish brown sandy silt with occasional small rounded pebbles and moderate medium-large CBM, pottery and glass frags: C19th/C20th Dump Layer	36.99	0.35
44	Dark pinkish brown silty sand with frequent small angular pebbles, and medium-large pottery and CBM frags (frogged bricks), moderate medium glass frags and occasional medium animal bone frags: C19th/C20th Dump Layer	36.64	0.37
45	Mid brownish yellow silty sand with occasional medium pottery frags, moderate medium angular pebbles and flint nodules, moderate medium-large glass frags including whole bottles: C19th Dump Layer	36.27	1.23
55	Mid brownish yellow coarse sandy gravel: Natural	35.04	No further excavation

7.4.7 **TP 7**

Context Number	Context Description	Height mOD	Thickness m
26	Dark brownish black sandy silt with moderate small-medium sub-angular pebbles and occasional small pottery frags: Topsoil	37.14	0.17
46	Mid greenish grey silty sand with occasional medium glass frags, moderate small angular pebbles and moderate small iron nails: C20th Made Ground	36.97	0.19
47	Mid pinkish-orange Brown mottled silty sand with frequent medium	36.78	1.93

	pottery and glass frags, including whole bottles and jars, occasional animal bone frags and frequent small rounded pebbles: C19th Dump Layer		
55	Mid brownish yellow coarse sandy gravel: Natural	34.85	No further excavation

7.4.8 **TP 8**

Context Number	Context Description	Height mOD	Thickness m
26	Dark brownish black sandy silt with moderate small-medium sub-angular pebbles and occasional small pottery frags: Topsoil	37.14	0.16
48	Mid greenish grey silty sand with occasional medium glass frags, moderate small iron nails and angular pebbles: C20th Made Ground	36.98	0.28
49	Mid pinkish-orange brown mottled silty sand with frequent medium pottery and glass frags, including whole jars and bottles, occasional animal bone frags and frequent small rounded pebbles: C19th Dump Layer	36.70	1.83
55	Mid brownish yellow coarse sandy gravel: Natural	34.87	No further excavation

7.4.9 **TP 9**

Context Number	Context Description	Height mOD	Thickness m
26	Dark brownish black sandy silt with moderate small-medium sub-angular pebbles and occasional small pottery frags: Topsoil	37.14	0.20
50	Mid greyish brown sandy silt with occasional medium glass and iron frags: C20th Dump Layer	36.94	0.32
51	Mid pinkish-orange brown mottled silty sand with frequent medium-large pottery and glass frags, moderate medium CBM frags, frequent small angular pebbles and moderate small-medium iron nails and animal bone frags: C19th Dump Layer	36.62	1.78
55	Mid brownish yellow coarse sandy gravel: Natural	34.84	No further excavation

7.4.10 **TP 10**

Context Number	Context Description	Height mOD	Thickness m
26	Dark brownish black sandy silt with moderate small-medium sub-angular pebbles and occasional small pottery frags: Topsoil	37.14	0.18
52	Mid greyish brown mixed silty sand with yellow clay lenses, containing frequent small angular/sub-rounded pebbles, moderate medium flint nodules and glass frags: C20th Made Ground	36.96	0.26
53	Mid pinkish grey silty, ashy sand, with frequent small angular pebbles, moderate medium pottery, glass and iron frags: C20th Made Ground	36.60	0.36
54	Mid pinkish-orange brown mottled silty sand, with frequent medium pottery and glass frags, including whole bottles and jars, frequent small rounded pebbles and occasional medium animal bone frags: C19th Dump Layer	36.24	1.40
55	Mid brownish yellow coarse sandy gravel: Natural	34.84	No further excavation

7.4.11 Works for new service trenches were also observed at this site. Deposits here confirmed the sequence already evident from the trial pits. Topsoil [26] overlay a dumped deposit [59] measuring 0.70m thick. This comprised a pink-orange grey sandy silt containing frequent medium to large glass fragments, including whole bottles and jars, moderate small to medium pottery fragments and occasional degraded iron fragments. The layer was therefore interpreted to be a late 19th century dumped deposit and equal to those observed in trial pits 1-10 as layers [28], [56], [36], [57], [58], [44], [47], [49], [51] and [54] respectively. The layer appeared to slope down towards the west of the site. At the northern extent of the service trenches an additional gravel layer [60] was observed directly below the topsoil. This was formed of a greyish yellow coarse sandy gravel measuring 0.60m thick. This deposit contained no finds or dating evidence and unfortunately the services had already been installed. It was therefore impossible to determine the nature of this layer. However it appeared to abut dumped layer [59] and hence was interpreted to be a dumped/made ground deposit.

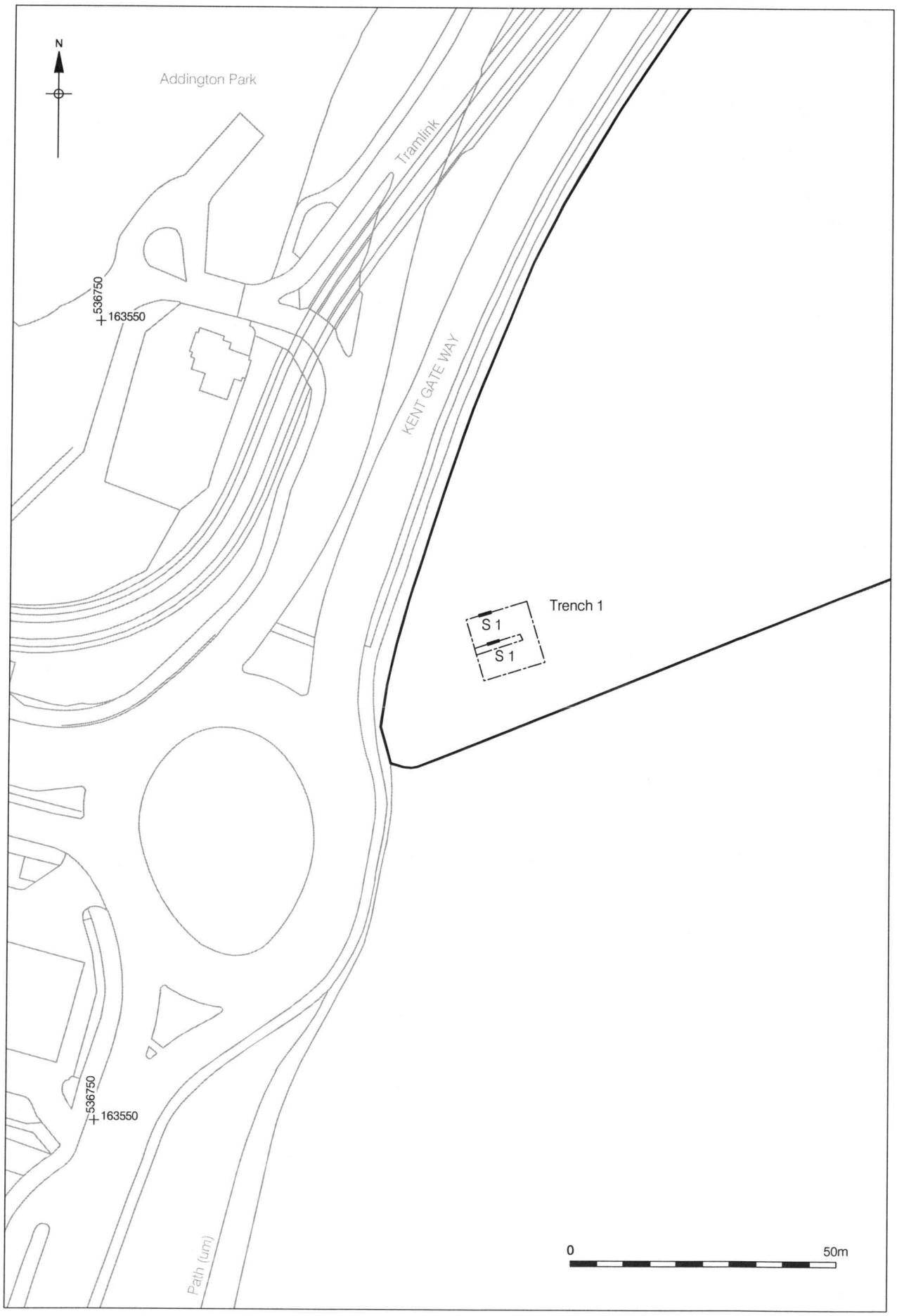

Figure 2
Site 1
1:1,000 at A4

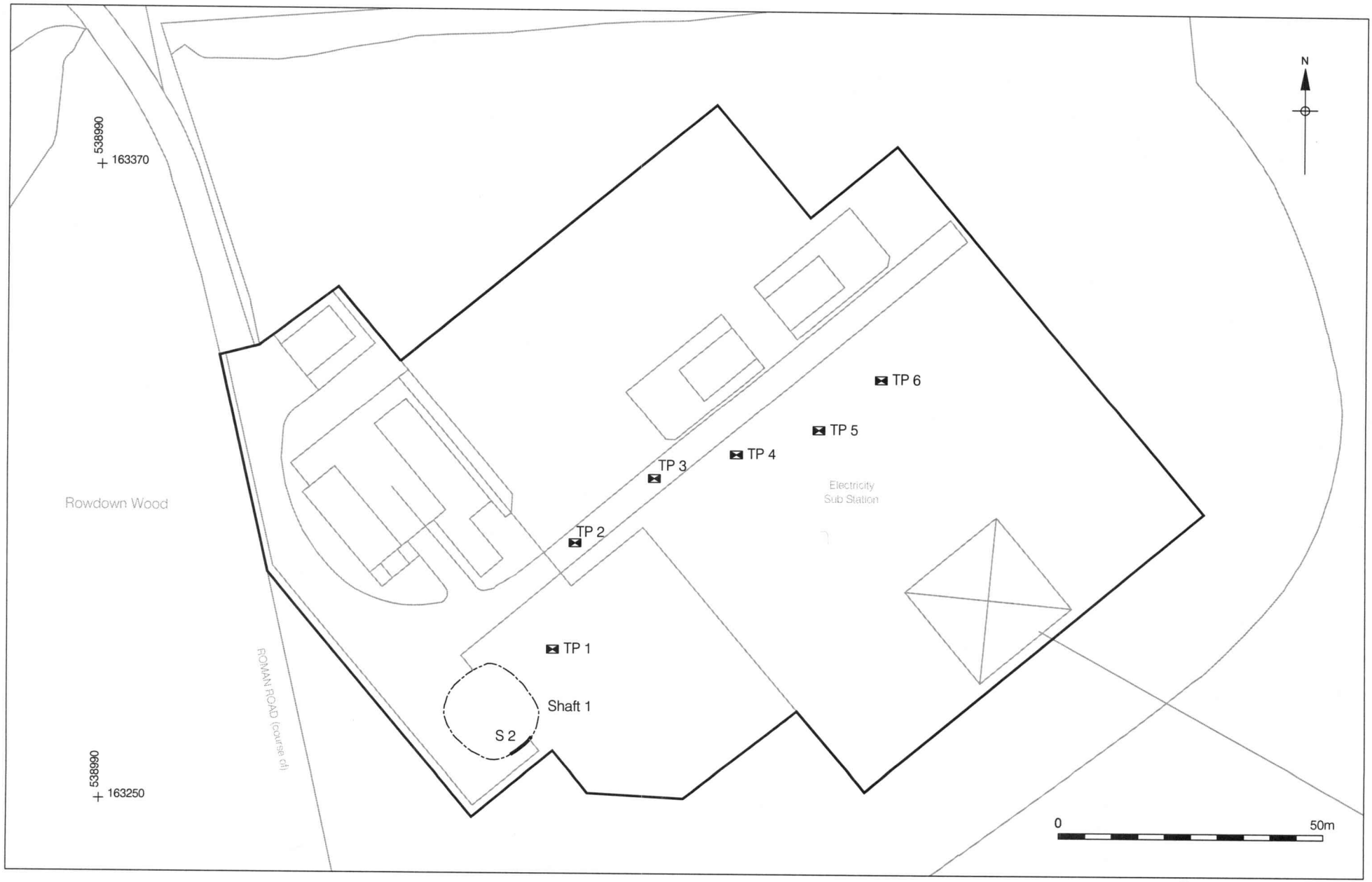

Figure 3
Site 2
1:1,000 at A4

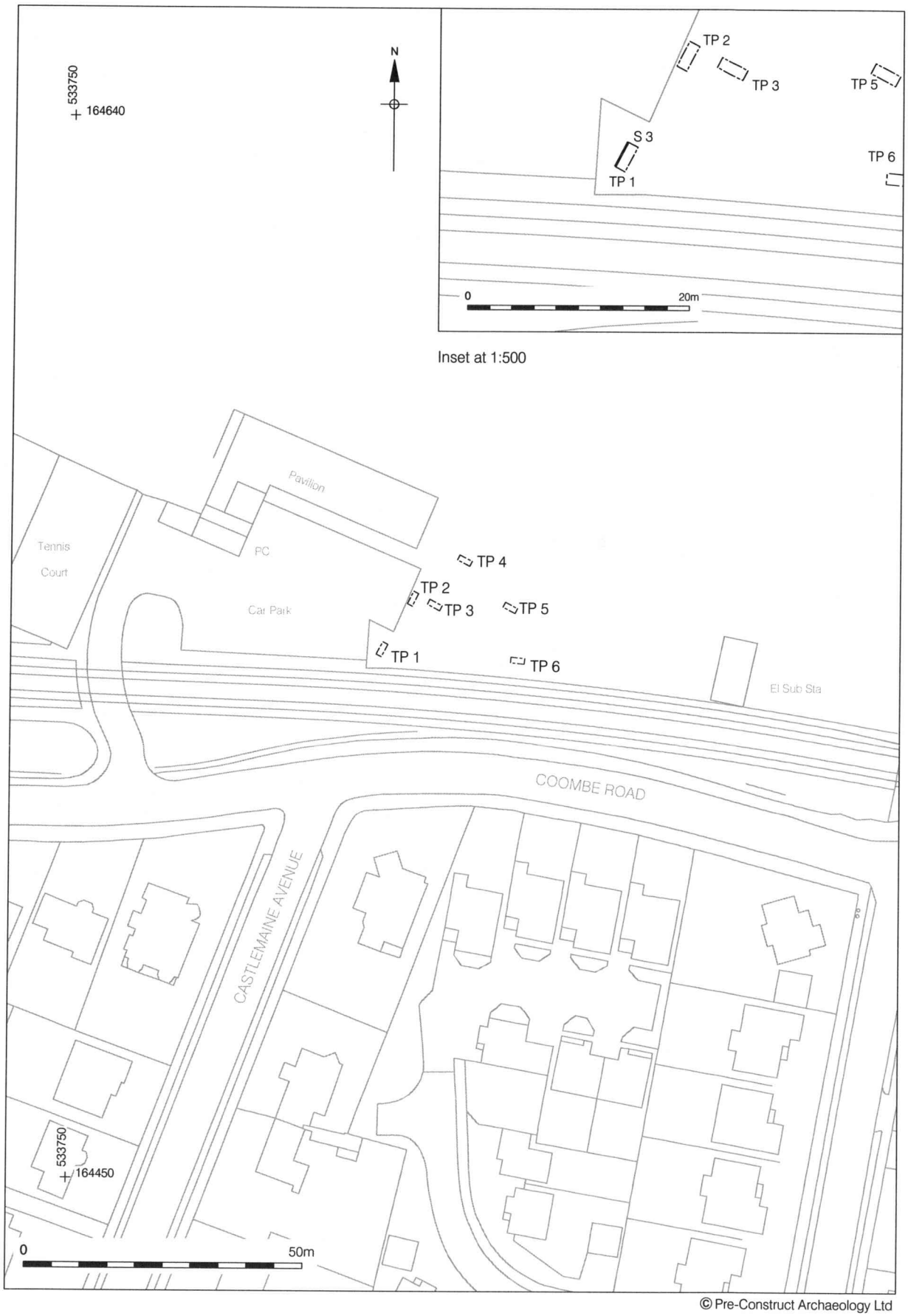

Figure 4
Site 3
1:1,000 at A4

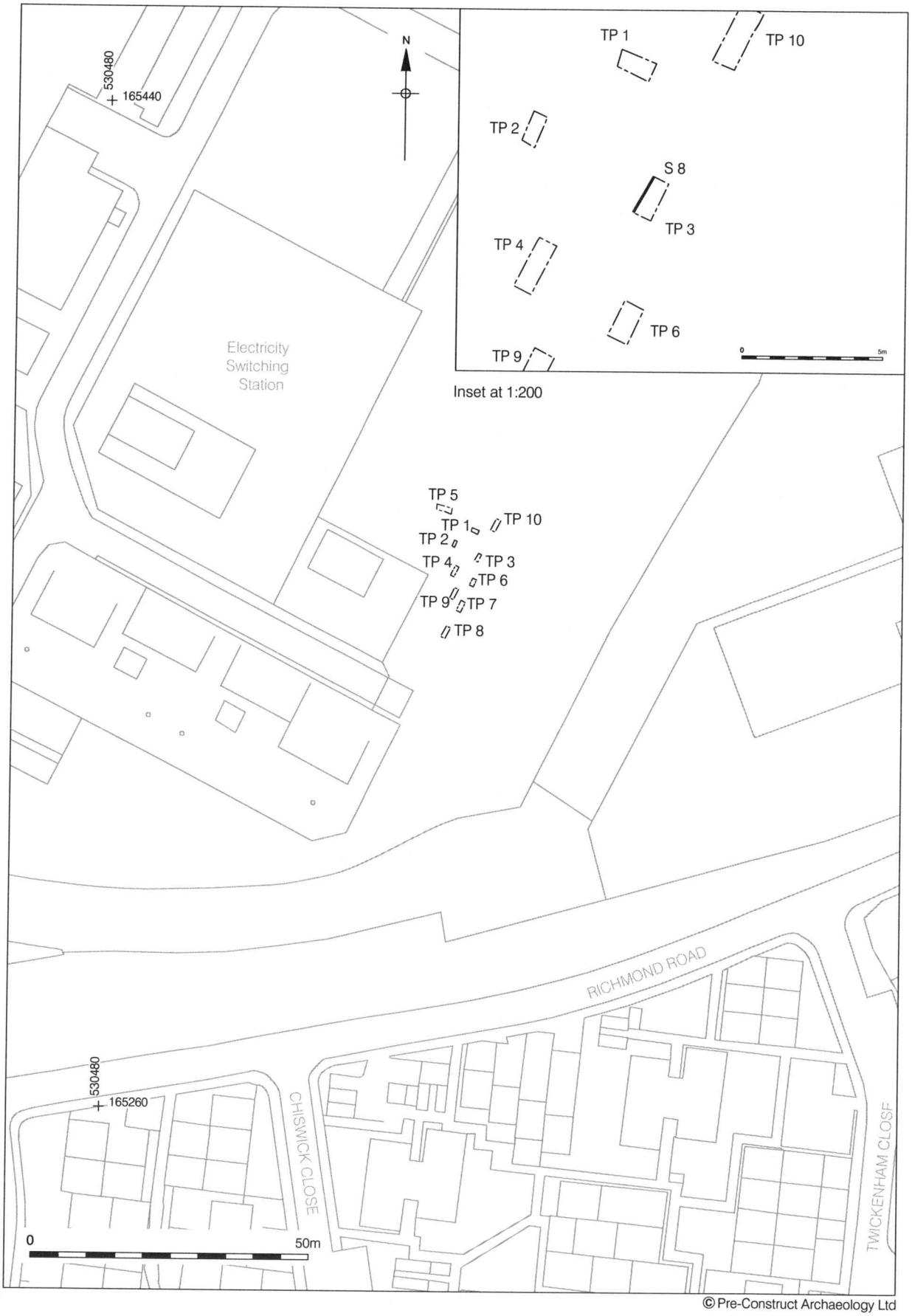

Figure 5
Site 4
1:1,000 at A4

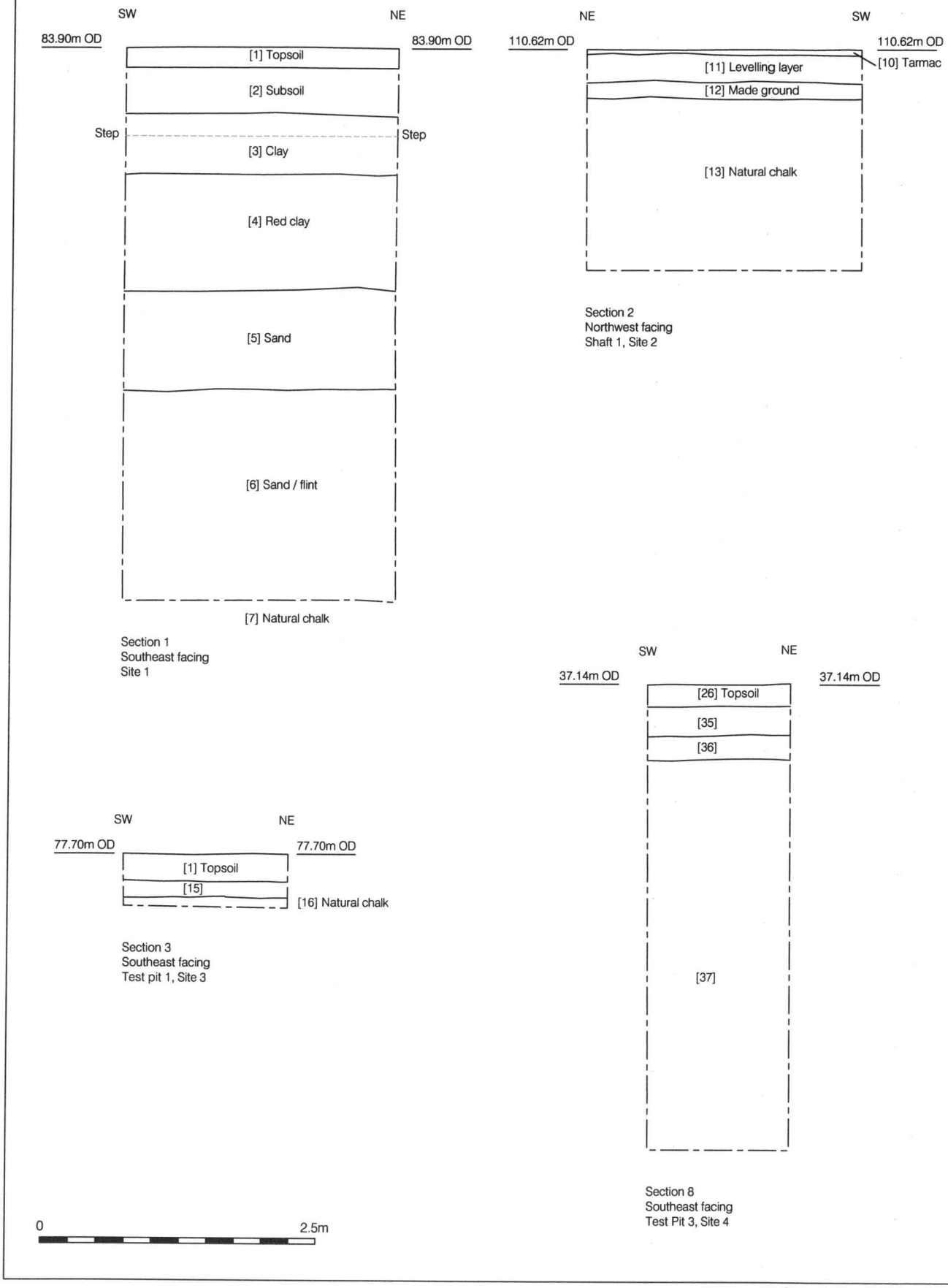

Figure 6
Sections 1,2,3 & 8
1:50 at A4

8 INTERPRETATIONS AND CONCLUSIONS

8.1 The watching brief was intended to identify and record any archaeological deposits, structures or artifacts revealed during the trial pitting and general ground reduction works at the four shaft location sites between the Beddington Lane with Rowdown sub stations.

8.2 Kent Gate Way (Site 1):

8.2.1 The natural at Kent Gate Way was found to consist of chalk, which was overlain by 2 natural sand/gravel layers (2.8m thick) and 2 natural clay layers (1.6m thick). These were sealed by 0.6m of made ground with a surface level of 83.90mOD.

8.2.2 No archaeological deposits were observed on this site.

8.3 Rowdown (Site 2):

8.3.1 Natural chalk was identified at Rowdown at between 110.18m-110.22mOD with between 0.40-0.44m depth of made ground over it, and had a surface level of 110.62mOD.

8.3.2 No archaeological deposits were observed on this site.

8.4 Lloyd Park (Site 3):

8.4.1 Natural on site was found to consist of a degraded chalk at between 77.13m-77.90mOD and was overlain by between 0.11-0.31m of a clayey sand subsoil. That was then covered by between 0.30-0.49m of made ground with a surface level of 77.70mOD.

8.4.2 No archaeological deposits were observed on this site.

8.5 Beddington Lane (Site 4):

8.5.1 Natural was found to consist of sandy gravel at between 34.75m-35.28mOD and was covered by between 1.86-2.39m of made ground with a surface level of 37.14mOD.

8.5.2 The considerable build-up of made ground contained significant amounts of 19th century domestic rubbish suggesting that the site, which may lie in a larger gravel extraction quarry, was a primary rubbish disposal site, or that the material was accumulated elsewhere and was disposed of here.

8.5.3 No archaeologically significant deposits were observed at this site.

9 ACKNOWLEDGMENTS

9.1 Pre-Construct Archaeology Limited would like to thank Duncan Hawkins of CgMs Consulting Ltd for commissioning the work on behalf of Morgan Est.

9.2 The author would like to thank Dave Harris for the illustrations, the National Grid representatives for all their help throughout the project and Peter Moore for his project management and editing.

10 BIBLIOGRAPHY

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Weinreb, B and **Hibbert, C**, 1983, *The London Encyclopaedia*, Macmillan, p221

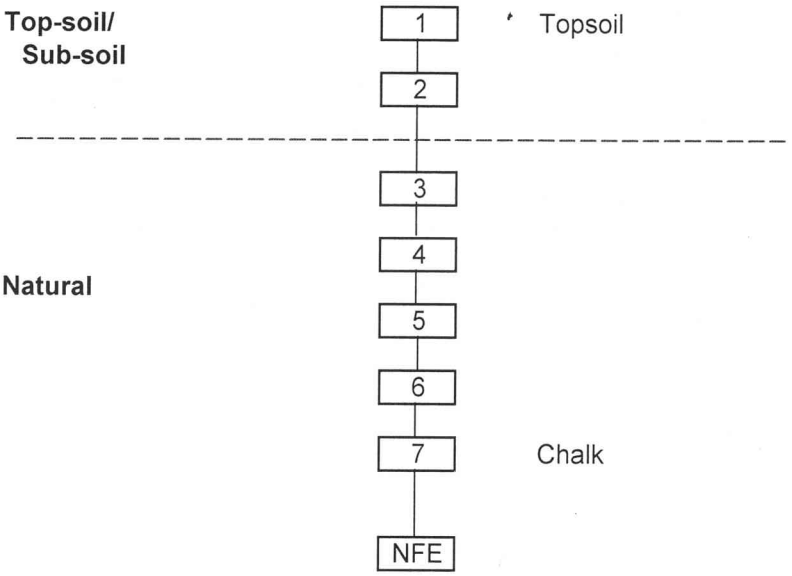
APPENDIX 1 – CONTEXT INDEX

Context Number	Trench	Section Number	Phase	Type	Description	Highest
1	KGW	1	2	Layer	Topsoil, yellow/brown clayey silt	83.9
2	KGW	1	2	Layer	Sub-soil, brown/yellow clayey sand	83.72
3	KGW	1	1	Layer	Natural clay	83.3
4	KGW	1	1	Layer	Natural red clay	82.75
5	KGW	1	1	Layer	Natural sandy gravel	81.7
6	KGW	1	1	Layer	Natural sand/flint layer	80.8
7	KGW	1	1	Layer	Natural Chalk	78.9
8	R1-6		2	Layer	Made Ground brown/black silty sand	110.62
9	R1-6		1	Layer	Natural Chalk	110.22
10	RS1	2	2	Layer	Tarmac	110.62
11	RS1	2	2	Layer	Made Ground brown/yellow silty sand	110.58
12	RS1	2	2	Layer	Made Ground brown/black sandy silt	110.32
13					VOID	
14	L1-6	3	2	Layer	Topsoil, dark brown sandy silt	77.7
15	L1	3	2	Layer	Made ground yellow/brown sandy silt	77.44
16	L1-6	3,4,5	1	Layer	Natural chalk	77.35
17	L2		2	Layer	Made ground yellow/brown sandy silt	77.55
18	L3		2	Layer	Made ground yellow/brown sandy silt	77.48
19	L4		2	Layer	Made ground yellow/brown sandy silt	77.51
20	L4	4	2	Fill	Fill of [21], yellow/brown sandy gravel	77.4
21	L4	4	2	Cut	Cut for 20th century services	77.4
22	L5	5	2	Layer	Made ground yellow/brown sandy silt	77.55
23	L5	5	1	Layer	Sub-soil, orange/brown sandy/clayey silt	77.24
24	L6		2	Layer	Made ground yellow/brown sandy silt	77.46
25	L6		1	Layer	Sub-soil, orange/brown sandy/clayey silt	77.21
26	B1-10	6	3	Layer	Topsoil, black/brown sandy silt	37.14
27	B1	6	3	Layer	Dump layer brown sandy silt	36.91
28	B1	6	2	Layer	Dump layer, pink/brown sandy silt	36.6
29	B1	6	2	Layer	Dump layer, orange/brown sandy silt	36.25
30	B2	7	3	Layer	Made ground, brown sandy silt	36.97
31					VOID	
32					VOID	
33	B2	7	3	Layer	Made ground, orange-greenish brown silty sand	36.51
34					VOID	
Context Number	**Trench**	**Section Number**	**Phase**	**Type**	**Description**	**Highest**
35	B3	8	3	Layer	Dump layer brown sandy silt	36.94
36	B3	8	2	Layer	Dump layer pink/brown silty sand	36.68
37	B3	8	2	Layer	Dump layer orange/brown silty sand	36.47
38	B4	9	3	Layer	Concrete	36.95
39	B4	9	3	Layer	Made ground pink/brown silty sand	36.84
40					VOID	
41	B5	10	3	Layer	Made ground brown silty sand	36.97
42	B5	10	3	Layer	Made ground brown/yellow silty sand	36.43
43	B6	11	3	Layer	Dump layer, grey/brown sandy silt	36.99
44	B6	11	2	Layer	Dump layer, pink/brown silty sand	36.64
45	B6	11	2	Layer	Dump layer, brown/yellow silty sand	36.27
46	B7	12	3	Layer	Made ground green/grey silty sand	36.97
47	B7	12	2	Layer	Dump layer, pink/brown silty sand	36.78
48	B8	13	3	Layer	Made ground green/grey silty sand	36.98
49	B8	13	2	Layer	Dump layer, pink/brown silty sand	36.7
50	B9		3	Layer	Dump layer, grey/brown sandy silt	36.94
51	B9		2	Layer	Dump layer, pink/brown silty sand	36.62
52	B10		3	Layer	Made ground grey/brown silty sand	36.96
53	B10		3	Layer	Made ground, pink/grey silty sand	36.6
54	B10		2	Layer	Dump layer, pink/brown silty sand	36.24
55	B	7. - 13	1	Layer	Natural Gravel	35.28
56	B2	7	2	Layer	Dump layer, pink/brown silty sand	35.93
57	B4	9	2	Layer	Dump layer, pink/brown silty sand	36.01
58	B5	10	2	Layer	Dump layer, pink/brown silty sand	35.83
59	B		2	Layer	Dump layer, pink/orange/grey sandy silt	
60	B		2	Layer	Made ground? Grey/yellow sandy gravel	

APPENDIX 2 – SITE MATRICES

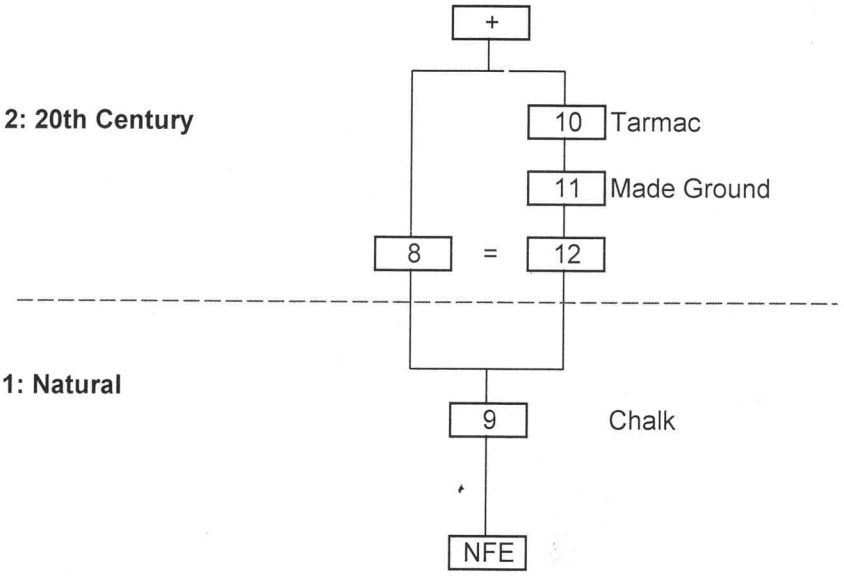
KENT GATE WAY

Phase 2: Top-soil/ Sub-soil

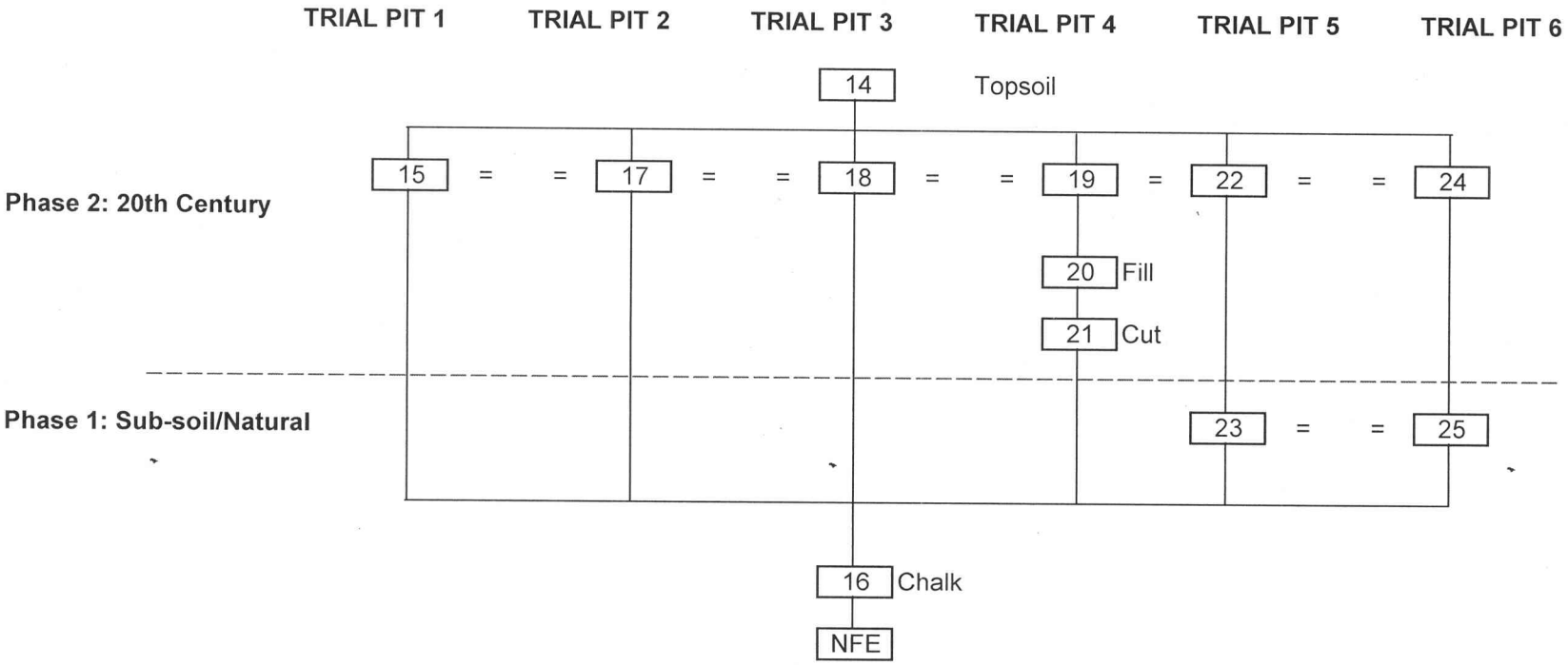


Phase 1: Natural

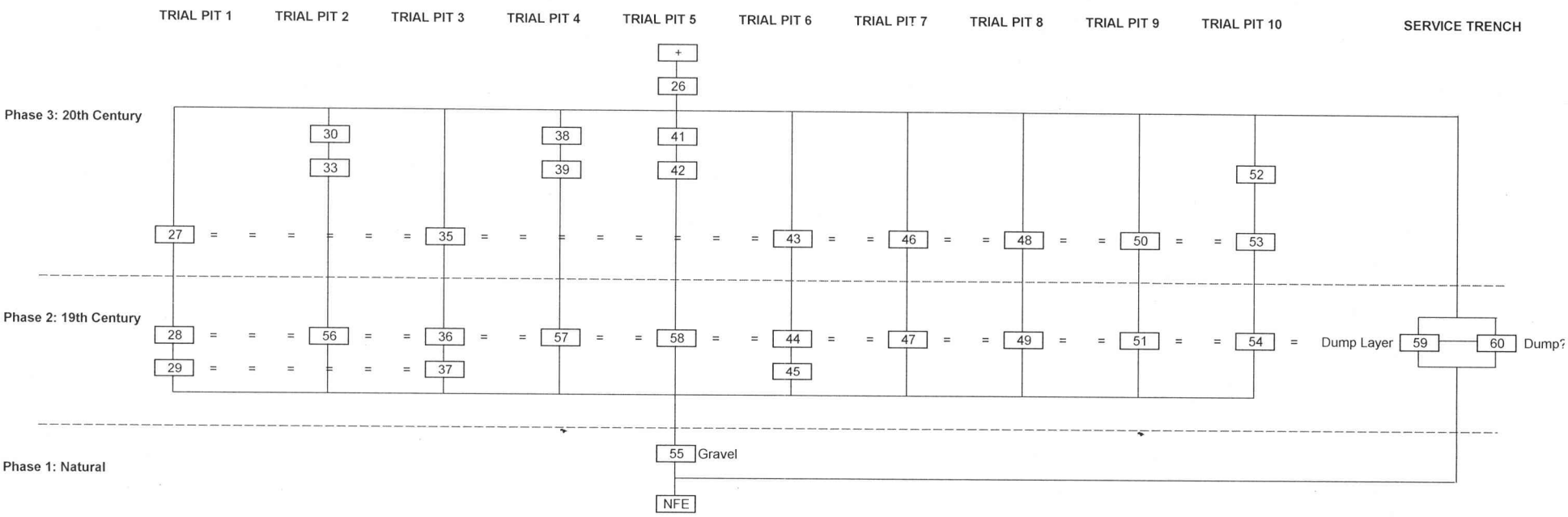
ROWDOWN SUB-STATION



LLOYD PARK:


TRIAL PIT 1
TRIAL PIT 2
TRIAL PIT 3
TRIAL PIT 4
TRIAL PIT 5
TRIAL PIT 6
14
Topsoil
Phase 2: 20th Century
15
17
18
19
22
24
20
Fill
21
Cut
Phase 1: Sub-soil/Natural
23
25
16
Chalk
NFE

BEDDINGTON LANE:



APPENDIX 3 – OASIS DATA COLLECTION FORM

OASIS DATA COLLECTION FORM: England

OASIS ID: preconst1-20934

Project details

Project name	Rowdown Sub-Station to Beddington Lane Sub-Station Pipeline
Short description of the project	An archaeological watching brief undertaken at four sites as part of a pipeline project, laying electrical cables between Rowdown and Beddington Lane National Grid Sub Stations. The sites consistedof the four construction/access shafts at the following locations locations; Kent Gate Way, Rowdown, Lloyd Park and Beddington Lane. Each site was monitored during geotechnical trial pitting of the shaft location areas but no archaeplogical artefacts or deposits were found.
Project dates	Start: 14-08-2006 End: 18-10-2006
Previous/future work	No / No
Any associated project reference codes	RBC 06 - Sitecode
Type of project	Recording project
Site status	None
Current Land use	Industry and Commerce 1 - Industrial
Monument type	MADE GROUND Modern
Significant Finds	19TH CENTURY RUBBISH Post Medieval
Investigation type	'Watching Brief'
Prompt	Direction from Local Planning Authority - PPG16

Project location

Country	England
Site location	GREATER LONDON CROYDON CROYDON Rowdown to Beddington Lane Pipeline
Postcode	CRO
Study area	8.80 Kilometres
Site coordinates	TQ 3679 6353 51.3538384878 -0.03532709111980 51 21 13 N 000 02 07 W Point
Site coordinates	TQ 3369 6453 51.3635656899 -0.07944834799990 51 21 48 N 000 04 46 W Point
Site coordinates	TQ 3899 6325 51.3507869018 -0.00385897342225 51 21 02 N 000 00 13 W Point
Site coordinates	TQ 3040 6544 51.3725111948 -0.126350199261 51 22 21 N 000 07 34 W Point
Height OD	Min: 35.28m Max: 110.62m

Project creators

Name of Organisation	Pre-Construct Archaeology Ltd
Project brief originator	CgMs Consulting
Project design originator	Duncan Hawkins
Project director/manager	Peter Moore
Project supervisor	Amelia Fairman
Name of sponsor/funding body	Morgan Est

Project archives

Physical Archive	No

Exists?	
Digital Archive recipient	LAARC
Digital Contents	'Stratigraphic','Survey'
Digital Media available	'Spreadsheets','Survey','Text'
Paper Archive recipient	LAARC
Paper Contents	'Stratigraphic','Survey'
Paper Media available	'Context sheet','Correspondence','Drawing','Map','Matrices','Plan','Report','Section','Survey'

Project bibliography 1

Publication type	Grey literature (unpublished document/manuscript)
Title	An Archaeological Watching Brief on the Rowdown to Beddington Lane Pipeline Project, London Boroughs of Bromley, Croydon and Sutton.
Author(s)/Editor(s)	Fairman, A
Date	2007
Issuer or publisher	Pre-Construct Archaeology Limited
Place of issue or publication	London
Description	Bound unpublished developer report.

Entered by	Peter Moore (pmoore@pre-construct.com)
Entered on	11 January 2007

OASIS:

Please e-mail English Heritage for OASIS help and advice