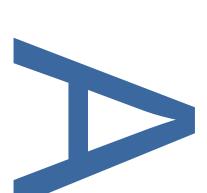
COCA COLA ENTERPRISES LTD, EDGINGTON WAY, SIDCUP, LONDON BOROUGH OF BEXLEY DA14 5DF: AN ARCHAEOLOGICAL WATCHING BRIEF

LOCAL PLANNING AUTHORITY: LONDON BOROUGH OF BEXLEY

SITE CODE: EDO18

**APRIL 2018** 

PRE-CONSTRUCT ARCHAEOLOGY







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# COCA COLA ENTERPRISES LTD, EDGINGTON WAY, SIDCUP, LONDON

## **BOROUGH OF BEXLEY DA14 5DF:**

SUMMARY OF AN ARCHAEOLOGICAL WATCHING BRIEF

CENTRAL NGR:	TQ 4737 7068
ARCHAEOLOGICAL SITE CODE:	EDO18
COMMISSIONING CLIENT:	Currie & Brown (UK) Ltd
on behalf of:	Coca Cola Enterprises Ltd
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# April 2018

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## 1 INTRODUCTION

- 1.1 Four test pits and seven boreholes were excavated between 12<sup>th</sup> and 13<sup>th</sup> April 2018 in advance of construction works. Three areas of proposed development included (1) the HGV Entrance to the very south of the site; (2) The Process Raw Materials Warehouse to the north of the site and (3) the Canning Flex Warehouse to the west of the site. The complex is bounded to the south by Edgington Way, to the east by the River Cray and to the west by Cray Road. The northerly limits of the complex area are bound by terraced housing fronting onto Pollard Walk. The area proposed for redevelopment lies in the south easterly limits of this complex and is centred on TQ 4737 7068 (Figure 1 and 2).
- 1.2 The proposed redevelopment of the above areas will require modifications to existing buildings on the site. The ongoing design of the project required the execution of seven foundation exploration pits and seven geotechnical boreholes to investigate the foundations of walls within the study area and provide further information about archaeological survival. In the event, only one borehole was opened in the HGV entrance, two boreholes and one test pits were opened in the north of the site by the Process Raw Materials building and four test pits and three boreholes in the west of the site at the Canning Flex Warehouse area (Figure 2).
- 1.3 The pits and boreholes were excavated by a Geotechnical Contractor under constant archaeological supervision. The Watching Brief was undertaken by the author of Pre-Construct Archaeology Limited (PCA), following a methodology outlined in a Written Scheme of Investigation (Moore 2018), which was approved in advance of the work by Mark Stephenson, Archaeology Advisor at the Greater London Advisory Service (GLAAS) at Historic England.
- 1.4 The chalk bedrock was recorded at c.3m below the modern ground level c.26.00 28.80m OD. This was overlain by the drift geology consisting of sand and gravel in a matrix of clay, possibly deposited during the Pleistocene. The latter was overlain by a second layer of drift geology composed of a yellowish mid brown brick-earth which may represent Holocene-era alluvium deposited by the nearby River Cray. In most cases, the brick-earth was found immediately below the made ground and concrete surfaces of the goods yard. In Borehole 2 a layer of plough (or agricultural) soil, dating to the post-Medieval period was recorded below the made ground and concrete overlying the brick-earth.
- 1.5 The site is located within an Archaeological Priority Area as defined by Bexley Council and an archaeological Desk-Based Assessment (DBA) was prepared for the site by PCA (Fairman 2014).

#### Previous work

1.6 The Archaeology Advisor to the London Borough of Bexley, Mark Stevenson of the Greater London Archaeological Advisory Service (GLAAS) at Historic England previously advised on the previous ASRS Development at this complex that the nature of the expected archaeological works should consist of a two-stage process of archaeological investigation comprising: first, evaluation to clarify the nature and extent of surviving remains, followed, if necessary, by a full investigation. The archaeological investigations at the ASRS Development consisted of evaluation trenches, and because archaeology was found, excavation commenced of the targeted areas. The principle archaeology encountered was a shallow hollow - in which brickearth had accumulated - containing a large assemblage of Mesolithic (very late Glacial to early post-Glacial period from c.10, 300 to 8,400 BC) lithics and débitage displaying minimal postdepositional disturbance. The rarity of the assemblage confirms its local and regional importance, and it is also of interest nationally and internationally (Grosso & Meddens 2016).

- 1.7 Given the site's importance the archaeological recording of the geotechnical investigation was of the greatest importance to inform on the design and nature of an archaeological evaluation.
- 1.8 All four geotechnical test pits were excavated by hand and boreholes excavated by a small portable rig under constant supervision of the attendant archaeologist over the course of two days. The test pits took the form of small investigatory interventions, most of which were smaller than a 1m x 1m square so observation of the lower layers was restricted.
- 1.9 Location plans of each of the trenches and borehole cores were drawn at 1:20 and a section of each pit showing the location of all archaeological and architectural features. Levels were taken from an existing site plan supplied by the clients.

Test Pit	Ground	Dimensions Dimensions		Depth	Depth
	level	north-south	east-west	BGL	(aOD)
3	31.29 m OD	0.30m	0.30m	1.42m*	29.85m
4	31.65m OD	0.80m	0.60m	1.17m*	30.48m
5	31.63m OD	1.20m	0.30m	0.76m*	30.76m
6	28.02m OD	1.00m	0.30m	1.34m*	26.48

\*Trenches in which excavation was limited by the presence of concrete foundations or obstructions.

Borehole	Ground	Depth	Depth
	level (aOD)	BGL	(aOD)
1	27.55 m OD	2.44m*	25.10m
2	31.28m OD	2.60m*	28.68m
3	31.30 OD	1.74m*	29.46m
4	31.32m OD	1.43m	28.13m
5	29.42m OD	3.20m	26.22
6	28.85m OD	3.22m	25.63m
7	28.16m OD	2.46m	25.70m

\* Borehole refusals due to impenetrable ground

- 1.10 The drift geology of brick-earth overlying the sand and gravels was recorded in most instances. The chalk bedrock was attained in boreholes 4, 5, & 6.
- 1.11 PCA were commissioned for the work by Currie & Brown on behalf of Coca-Cola Enterprises Ltd, the project was managed for PCA by Peter Moore and supervised by the author. It was

monitored by Mark Stephenson of Historic England.

# 2 ARCHAEOLOGICAL RESULTS

Test Pit 3

- 2.1.1 This test pit was located at the exterior doorway on the north-west corner of the Canning Flex Warehouse building (Figure 2, Figure 4: Section TP3, Plate 1a&b). The ground level was recorded at 31.29m OD. Excavation was hampered by the presence of the pre-existing concrete stepped footing and was only opened up to 0.30m x 0.30m square.
- 2.1.2 No layers other than the exposed concrete footings were observed or recorded.
- 2.1.3 Test Pit 3 was excavated to a depth of 1.42m BGL (29.85m OD).

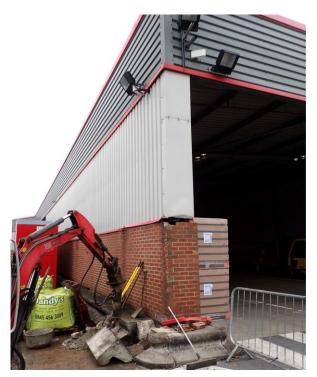




Plate 1a: General view of Test Pit 3 (left) located against the north-west corner of the Canning Flex Warehouse building. View to the south-east. Plate 1b: View of Test Pit 3 (right) to south-east showing concrete foundations. Scale 0.5m.

Test Pit 4

- 2.1.4 This test pit was positioned on the exterior doorway of the south-west corner of the Canning Flex Warehouse building opposite TP3 (Figure 2, Figure 4: Section TP4, Plate 2a&b), the ground level being recorded at 31.65m OD. As with TP3 above, the excavation was hampered by the presence of the pre-existing concrete stepped footing and was only opened up to 0.80m x 0.30m square.
- 2.1.5 Two layers of made ground [7] and [8] were identified beneath the concrete pad separated by a sheet of semi-permeable membrane or piling mat material. Excavation was halted once the depth of the stepped footing had been identified.

- 2.1.6 No archaeological layers were observed or recorded.
- 2.1.7 Test Pit 4 was excavated to a depth of 1.17m BGL, recorded at 30.48m OD.





Plate 2a & 2b: Plate 2a of Test Pit 4 (left), view to the NE (concrete pad cut in preparation for excavation marked by arrow). Plate 2b shows made ground layers [7] and [8] below the concrete. View to SE, scale 0.5m.

Test Pit 5

- 2.1.8 Test Pit 5 was located midway between the entrance to the Canning Flex Warehouse entrance and its SE corner against the exterior wall only several meters SE of Test Pit 4 (Figure 2, Figure 4: Section TP4, Plate 3a&b). The ground level was recorded at 31.63m OD.
- 2.1.9 Two layers of made ground [13] and [14] were identified beneath the concrete pad separated by a sheet of semi-permeable membrane or piling mat material. Excavation was halted once the depth of the stepped footing had been identified. A single snapped flint blade was recovered from make up layer [14], this is discussed more fully below.
- 2.1.10 No archaeological layers were observed or recorded.
- 2.1.11 Test Pit 5 was excavated to a depth of 0.77m BGL (36.76m OD).





Plate 3a: General view of Test Pit 5 located against the exterior south wall of the Canning flex Warehouse. View to the SE, scale 0.5m

Plate 3b: Test Pit 5 showing a reduced aperture to locate the base of the stepped foundations. Made ground layers [13] and [14] are visible, view to SE, scale 0.5m.

## Test Pit 6

- 2.1.12 This test pit was positioned on the exterior north-east corner of the Process Raw Materials Building (Figure 2, Figure 5: Section TP6, Plate 4a&b), and the ground level recorded at 28.02m OD. Excavation was hampered by the presence of the pre-existing concrete stepped footing and was opened up to 1m x 0.30m square.
- 2.1.13 No layers other than the exposed concrete footings and made ground layer [18] were observed or recorded.
- 2.1.14 No archaeological layers were observed or recorded.
- 2.1.15 Test Pit 6 was excavated to a depth of 1.34m BGL (26.48m OD).



Plate 4a: View to NE of Test Pit 6 against the Process Raw Materials Building



Plate 4b: View to SE of Test Pit 6. Only a small aperture was made next to the concrete stepped foundation restricting the observation of the lower layers. Only made ground layer [18] is visible. Scale 0.5m

- 2.1.16 Borehole 1 (Figure 2, Figure 3: Section BH1, Plate 5) was located outside the Security Gate at the south of the complex that opens onto Edgington Way. The ground level was recorded at 27.55m OD. The operation required the borehole to be located in a landscaped flower bed at the entrance to the site.
- 2.1.17 The rig auger refused at a depth of 2.44m below ground level (25.11m OD) once it had encountered compacted sub-angular flint nodules [24] which were identified from 25.55m OD.
- 2.1.18 The compact flint layer [24] was 0.42m thick overlain by a layer of reddish mid brown sand and gravel [23] which also contained rare sub-angular flint inclusions. The latter was overlain by made ground.
- 2.1.19 No archaeological layers were observed or recorded.

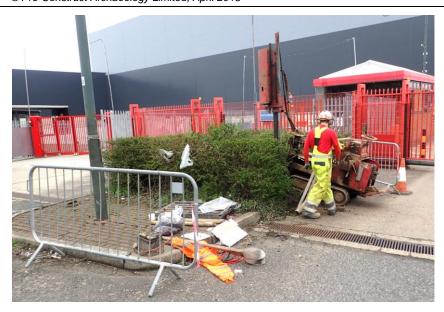


Plate 5: Location of Borehole 1 outside the security gate at the south of the site, view to north. Borehole 2

- 2.1.20 Borehole 2 (Figure 2, Figure 4: Section BH2, Plate 6) was located outside the Canning Flex Warehouse adjacent to the SW corner of the building in close proximity to Test Pits 2 and 3 where the ground level was recorded at 31.28m OD.
- 2.1.21 The rig auger refused at a depth of 2.60m below ground level (28.68m OD) once it had encountered compacted sub-angular flint nodules [6] which were identified at 28.80m OD.
- 2.1.22 The compact flint layer [6] had only been penetrated to a depth of 0.12m before refusal. The latter was overlain by a layer of yellowish mid brown sandy clay brickearth [5] which also contained rare sub-angular flint inclusions. The brickearth was overlain in turn by a layer of dark brown clayey silt garden soil [4] which measured 0.59m in thickness. A fragment of CBM and a short stem section of a clay tobacco pipe (CTP) was recovered from this soil horizon. It was the only borehole to have detected this layer which had been found in the previous evaluation. This lay directly below the concrete pad above.



Plate 6: Borehole 2 core showing 'plough soil layer [4] at top with brick-earth [5] in the slot below terminating in a compacted flint nodule layer (just above the scale) [6].

- 2.1.23 Borehole 3 (Figure 2, Figure 4: Section BH3, Plate 7a&b) was located outside the Canning Flex Warehouse immediately SE of the building in close proximity to Test Pits 3 and 4 where the ground level was recorded at 31.30m OD.
- 2.1.24 The rig auger refused at a depth of 1.83m below ground level (29.47m OD) once it had encountered compacted sub-angular flint nodules [3] which were identified at 29.84m OD.
- 2.1.25 The compact flint layer [3] was penetrated to a depth of 0.36m before refusal. This was overlain by a layer of yellowish mid brown sandy clay brick-earth [2] which also contained rare subangular flint inclusions. This was overlain by a later layer of brick earth or sandy clay [1] which was lighter in colour, more plastic and devoid of inclusions. This was sealed by a 0.52m thick concrete pad.
- 2.1.26 No archaeological layers were observed or recorded.



Plate 7a: Location of Borehole 3 immediately Plate 7b: BH3 core showing brick-earth [1] at west of the Canning Flex Warehouse, view to top with increasing compacted flint [3]

the NW

increasing towards the base.

Borehole 4

- 2.1.27 Borehole 4 (Figure 2, Figure 4, Section BH4, Plate 8a&b) was located outside the Canning Flex Warehouse adjacent to test Pit 5 where the ground level was recorded at 31.32m OD.
- 2.1.28 BH 4 augured to a depth of 3.20 BGL where it met the chalk bedrock [12] albeit in a degraded 'putty chalk' form which contained a high proportion of clay where it lay on the interface with the sand and gravel [11] above. The augur penetrated 0.18m into the chalk [12]. The chalk was overlain by sand and gravel mixed with a high proportion of clay [11] which was 1.28m thick. The latter was overlain by layer [10], (0.25m thick) which was at an interface between the sand and gravel and the brick-earth [9] above. This was capped by a layer of tarmac 0.24m thick.
- 2.1.29 No archaeological layers were observed or recorded.



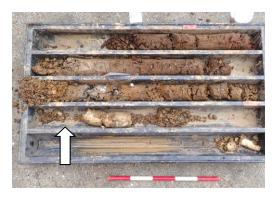


Plate 8a: Location of Borehole 4 at the south-west end of the Canning Flex Warehouse adjacent to Test Pit 5. View to NE. Plate 8b: Core from BH4 with brick-earth [9] at top and transition layer (or interface) [10] below which was sand and gravel layer (centre of tray) [11]. The degraded, clayey chalk bedrock 12] is marked with an arrow.

- 2.1.30 Borehole 5 (Figure 2, Figure 5: Section BH5, Plate 9 a&b) was located in the car park in the northwest corner of the site and west of the Process Raw Materials building. The ground level here was recorded at 29.42m OD.
- 2.1.31 BH 5 augured to a depth of 3.18 BGL where it met the chalk bedrock [22] albeit in a degraded 'putty chalk' form which contained a high proportion of clay where it lay on the interface with the

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sand and gravel [21] above. It penetrated 0.16m into the chalk [22]. The layer above was sand and gravel mixed with a high proportion of clay [21] which was 2.24m thick. This was overlain by layer [20], 0.20m thick, which was a mid grey sandy clay but not at all like the capping of brick-earth located elsewhere. This was in turn sealed by a layer of tarmac and ballast 0.60m thick.

2.1.32 No archaeological layers were observed or recorded.



Plate 9a: Location of Borehole 5 in the car in the north-west corner of the site, west of the Process Raw Materials building. View to NE.



Plate 9b: The top of the core is in the bottom slot in this instance. Layer [21] has frequent sub-angular flint inclusions (middle three rows) with the degraded chalk [22] at the top of the picture.

- 2.1.33 Borehole 6 (Figure 2, Figure 5: Section BH6, Plate 10) was located in the car park in the northwest corner of the site and west of the Process Raw Materials building and due south-east of Borehole 5. The ground level here was recorded at 28.85m OD.
- 2.1.34 BH 6 was augured to a depth of 3.23 BGL where it met the chalk bedrock [19] albeit in a degraded 'putty chalk' form which contained a high proportion of clay where it lay on the interface with the sand and gravel [17] above. It had penetrated 0.17m into the chalk [19]. The layer above was sand and gravel mixed with a high proportion of clay [17] which was 1.95m thick. This was overlain by layer [16], 0.20m thick, which was a light brown sandy clay. Above this was the brick-earth layer [15] which was 0.62m thick capped by a layer of tarmac and ballast 0.28m thick.
- 2.1.35 No archaeological layers were observed or recorded.



Plate 10: Location of Borehole 6 in the car park in the north-west area of the site, west of the Process Raw Materials building. View to the east.

- 2.1.36 The excavation of Borehole 7 (Figure 2, Figure 5: Section BH7, Plate 11 a&b) was located against the Process Raw Materials building. It was excavated *in lieu* of Test Pit 7 as the pit could not be opened any larger than the coring rig's auger due to it being located between the concrete foundations of the building and a linear storm drain, making this intervention extremely narrow. The ground level here was recorded at 28.16m OD.
- 2.1.37 BH 7 was augured to a depth of 2.47 BGL but it did not meet the chalk bedrock. The lowest layer attained was sand and gravel [26] which contained a high proportion of sub-angular flint c.1.1m thick. This was sealed by brick-earth [25] 0.59m thick capped by a 0.87m thick layer of modern ballast and tarmac.
- 2.1.38 No archaeological layers were observed or recorded.



Plate 11a: Location of Borehole 7 against the Process Raw Materials building. View to NW.

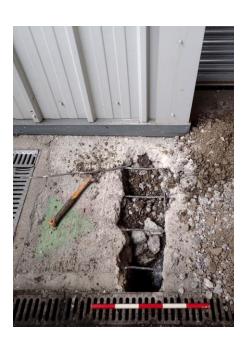


Plate 11b: BH7 was restricted due to the presence of the linear drain (underneath the photo scale) so was only large enough to receive the augur. View to north-east, scale 0.5m.

## 3 CONCLUSIONS

- 3.1 Contrary to initial expectations, the test pits failed to reveal any layers beyond the concrete foundations of the buildings.
- 3.2 The geotechnical test pits however, located the chalk bedrock and two layers of drift geology; sand and gravel (possibly river terrace gravel) below a layer of sandy clay brick-earth. Each of the elements are listed and described below.
- 3.3 A fragment of CBM and a short length of stem from a clay tobacco pipe were recovered from plough soil layer [4] in Borehole 2.
- 3.4 A broken, worked flint blade was recovered from a made ground layer [14] in Test Pit 5.

## Phase 1: Bedrock & Drift Geology Layers

Test Pit/Borehole	Top of feature/layer	Context number	Depth (BGL)	Thickness (m)	Base of feature/layer
	(m OD)				(m OD)
BH4	28.30	[12]	3.03m	0.18+	n/a
BH5	26.37	[22]	3.05m	0.15+	n/a
BH6	25.80	[19]	3.05m	0.16+	n/a

Phase 1a: Chalk

- 3.5 In the boreholes the chalk bedrock was recorded consistently around 3m BGL. The chalk was not excavated into to any depth.
- 3.6 The chalk was in a wet, degraded form mixed with clay from the base of the sand and gravel above and described by the geotechnicians as 'putty' chalk.
- 3.7 The chalk was discovered at variable heights of between c.26m OD and 28m OD. Boreholes 5 and 6 were approximately 132m apart across two areas of the site.

Phase 1b: Sand & Gravel (Pleistocene river gravel terraces)

Test Pit/Borehole	Top of feature/layer	Context Number	Depth BGL	Thickness (m)	Base of feature/layer
	(m OD)				(m OD)
BH1	26.38	[23/24]	1.20m	1.26	n/a
BH2	28.80	[6]	2.48m	0.12+	n/a

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BH3	29.83	[3]	1.47m	0.36+	n/a
BH4	29.56	[11]	1.76m	1.26	28.30
BH5	28.62	[21]	0.80m	2.25	26.37
BH6	27.75	[17]	1.10m	1.95	25.80
BH7	26.68	[26]	1.46m	1.02+	n/a

3.8 The layer of sand and gravel possibly represents an undulating Pleistocene-era (2.588 million years ago – 11.7 thousand years ago) gravel terrace on the west bank of the River Cray. It would have been deposited during a high energy event(s) such as an inundation or flood. The depth (BGL) of this layer recorded in BH2 is an anomaly but may represent a natural depression filled with brick-earth whilst BH5 appears to show a 'mound' or gravel bank rising above the surrounding gravels.

Test Pit/Borehole	Top of feature/layer	Context Number	Depth BGL	Thickness (m)	Base of feature/layer
	(m OD)				(m OD)
BH1	*	*	*	*	*
BH2	30.16	[5]	1.12m	1.36	28.80
BH3	30.76	[1/2]	0.54m	0.93	29.83
BH4	31.06	[9/10]	0.26m	1.50	29.56
BH5	28.82	[20]	0.60m	0.20	28.62
BH6	27.95	[16]	0.90m	0.20	27.75
BH7	27.29	[25]	0.86m	0.59	26.68

Phase 1c: Brick-earth (Mesolithic land surface)

\*Not present due to modern truncation

3.9 The brick-earth layer identified in the above boreholes is likely to represent Holocene-era (11.7 thousand years ago – present day<sup>1</sup>) alluvial low energy events; perhaps deposited by slow-moving floodwater which spread small –particle clays and sands over the underlying gravel

<sup>&</sup>lt;sup>1</sup> British Geological Society (BGS online) <u>http://mapapps.bgs.ac.uk/geologyofbritain/home.html</u> [Accessed 19:04:2018]

terraces. The sandy clay also showed some evidence of nascent foreshore deposits and organic layers which may suggest early vegetation establishing itself on the banks of the River Cray.

3.10 Unlike the gravels, this layer is likely to represent Holocene alluvium on the banks of the river upon which Mesolithic activity in the form of flint knapping took place. This can be interpreted as the former land surface during the Mesolithic period.

Test Pit/Borehole	Top of feature/layer	Context Number	Depth BGL	Thickness (m)	Base of feature/layer
	(m OD)				(m OD)
BH2	30.76	[4]	0.52m	0.60	30.16

Phase 2: Post Medieval Plough (or agricultural) Soil

- 3.11 An agricultural or plough soil was identified in the evaluation in 2016 (Moore 2018:5, Grosso & Mendes 2016:8). Layer [4] was comparable to the latter and may be part of a wider agricultural horizon across the study site dated to the post-medieval period. A fragment of sandy red brick in an abraded condition was recovered whose date range covers the 15<sup>th</sup> to 20<sup>th</sup> centuries so cannot give a precise date (Appendix 2). However, the soil layer seems to include re-worked elements so its provenance is debateable.
- 3.12 A short length of clay tobacco pipe stem was also recovered but clay tobacco pipe stems without their bowls are notoriously hard to date.
- 3.13 The sample of the soil examined was too small to make anything other than broad generalisations as to what it might represent.

## Phase 3: Modern 20<sup>th</sup> Century Buildings and Yard Surfaces

- 3.14 The test pits and boreholes were intended to both gauge the depth of the present buildings' foundations and to take soil samples for evidence of contamination. Boreholes 5 & 6 were made through tarmac in the north-west car park whilst the rest were broken out of concrete pads which form the exterior yard surfaces to the warehouse buildings. Both surfaces were laid on compacted stone ballast.
- 3.15 In Test Pit 5 a broken and damaged flint blade was recovered from the back-fill and ballast [14] under the concrete pad. Its condition indicated that it had been re-deposited (possibly several times) in re-worked material that constituted the make-up layers below the exterior yard surface. However, the flint has been identified as being a Mesolithic blade which displays two prior flake removals on its dorsal side (Appendix 3).

#### Area 1: HGV Entrance to South

3.16 Within the southern area of investigations a single borehole was excavated (BH1). The only

deposits of note recorded comprised natural drift geology overlain by modern made ground. The made ground extended to a depth of 1.20m below ground level and suggests that significant truncation has occurred within this area. This matches the truncation found in the nearby evaluation Trenches 6 and 7 in October 2015 (Grosso and Meddens 2016).

#### Area 2: Process Raw Materials Entrance to North

- 3.17 The northern area of investigations comprised the monitoring of boreholes 5-7 and test pit 6.
- 3.18 The combined results of the boreholes and test pit suggest a depth of made ground to between 0.60m and 0.90m below ground level. The made ground was observed to directly overlie natural deposits of brickearth which in turn sealed gravels and chalk. The investigations suggest that some degree of truncation has occurred, however the possibility for features of archaeological interest to cut the brickearth horizon remains.

#### Area 3: Canning Flex Warehouse to West

- 3.19 The western area of investigations comprised the monitoring of boreholes 2-4 and test pits 3-5.
- 3.20 This area exhibited the least depth of made ground of all areas investigated, with made ground extending to between 0.26m and 0.50m from ground level. This may explain the presence of a possible buried soil horizon in BH2 indicative of agricultural activity. Further evidence of limited truncation was observed in the height of the brickearth identified within BH4. The latter (at 0.26m below ground level) represents the highest outcropping of brickearth observed across all areas monitored during this phase of works.
- 3.21 Additional evidence for archaeological potential within this area derives from the recovery of artefacts from BH2 and TP5. The former recovered post-medieval material from the agricultural horizon. The recovery of a worked flint from TP5 is however significant. Although clearly residual within modern made ground, the potential remains that this could have derived from archaeological horizons in close proximity disturbed during the construction of the adjacent Warehouse.
- 3.22 In conclusion the small size of the test pits and their lack of depth beyond the concrete footings did not provide any further geotechnical information.
- 3.23 The borehole data was much more useful in that it allows a transect of the buried topography to be made and will hopefully allow us to predict the depth of the archaeological layers (the brick-earth alluvium) in relation to future works carried out on the site.
- 3.24 The three finds made during the operation were all likely to be residual but the flint blade however suggests a 'background' presence of lithic tools that have become re-worked into later layers and may derive from the old land surface below, a very significant finding given the 2015 discovery of in situ Mesolithic archaeology.

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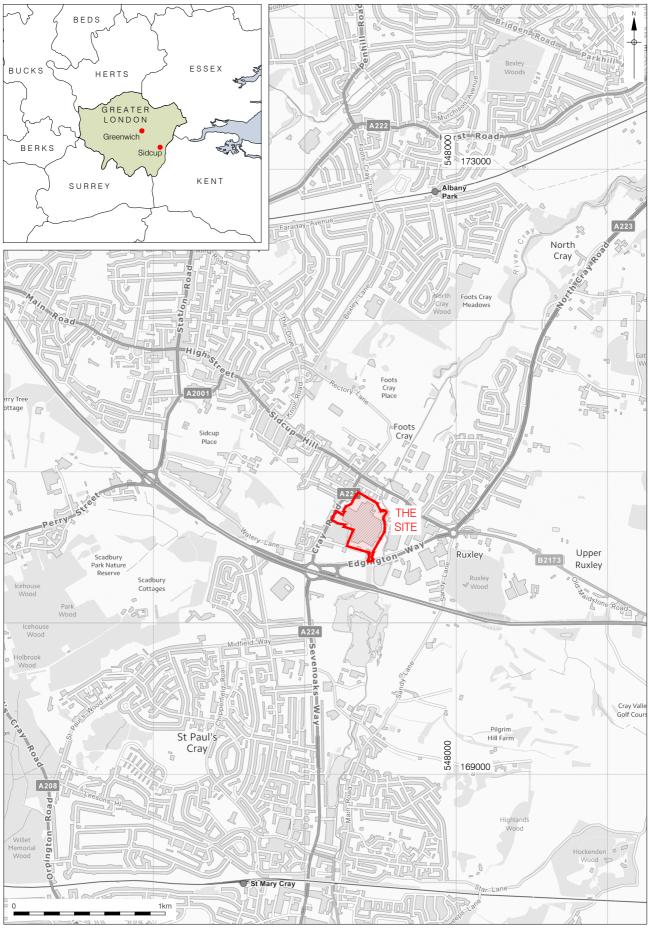
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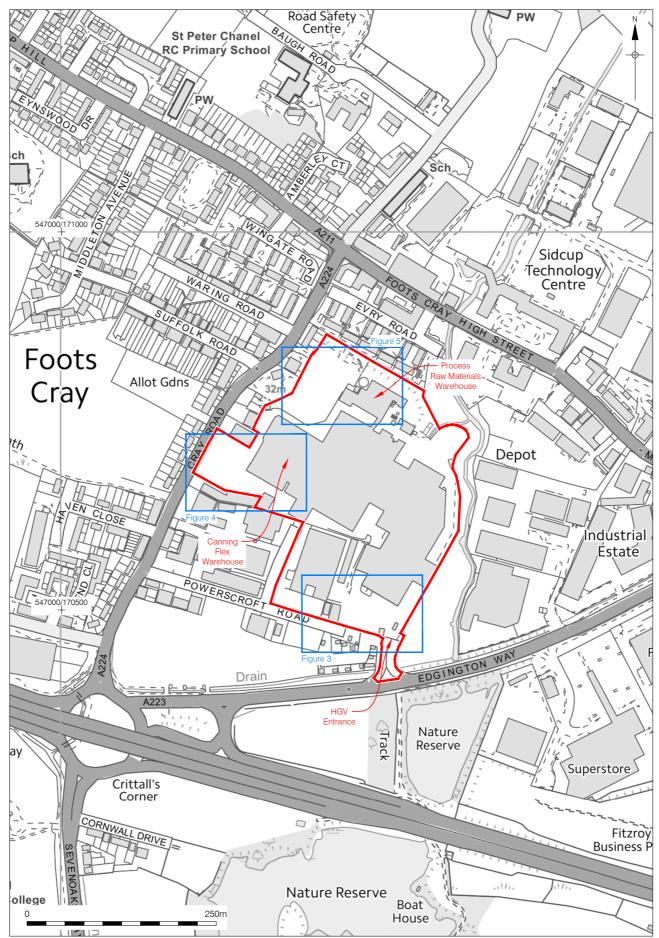
## 5 ACKNOWLEDGEMENTS

- 5.1 Pre-Construct Archaeology Limited would like to thank Lawrence Dow of Currie & Brown for commissioning the work, Paul and Johnny of the Solmek Geotechnical team for their cooperation during the fieldwork and Mark Stephenson, archaeology advisor at the Greater London Archaeological Advisory Service (GLAAS) for monitoring the project on behalf of the London Borough of Bexley.
- 5.2 The author would also like to thank Hayley Baxter for preparing the illustrations, Amparo Valcarcel and Ella Egberts for assessing the artefacts and Peter Moore for project management and Amelia Fairman for editing.

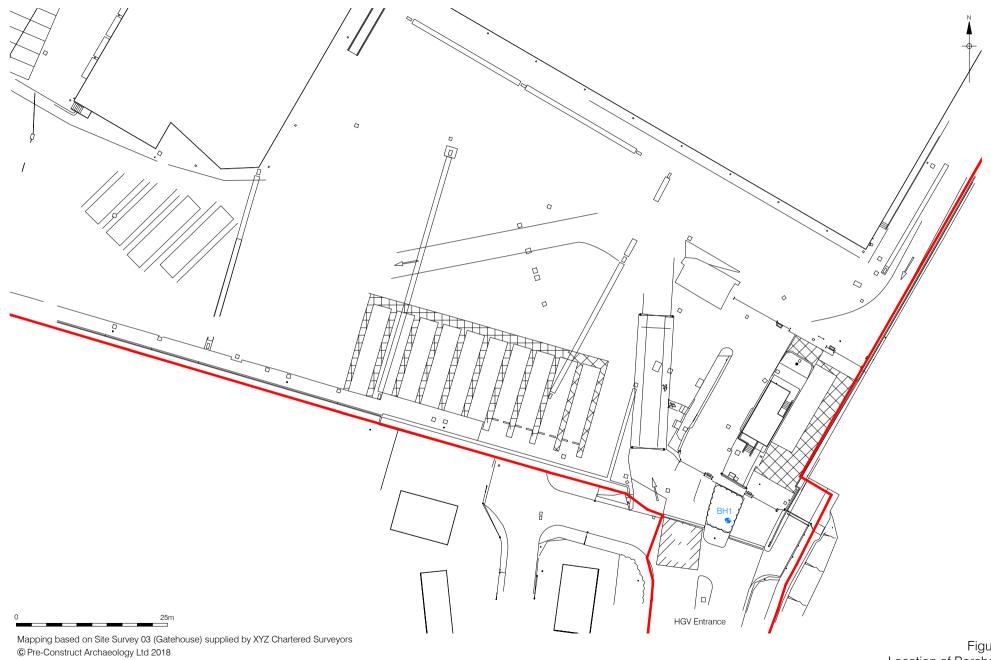


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Figure 1 Site Location 1:25,000 at A4

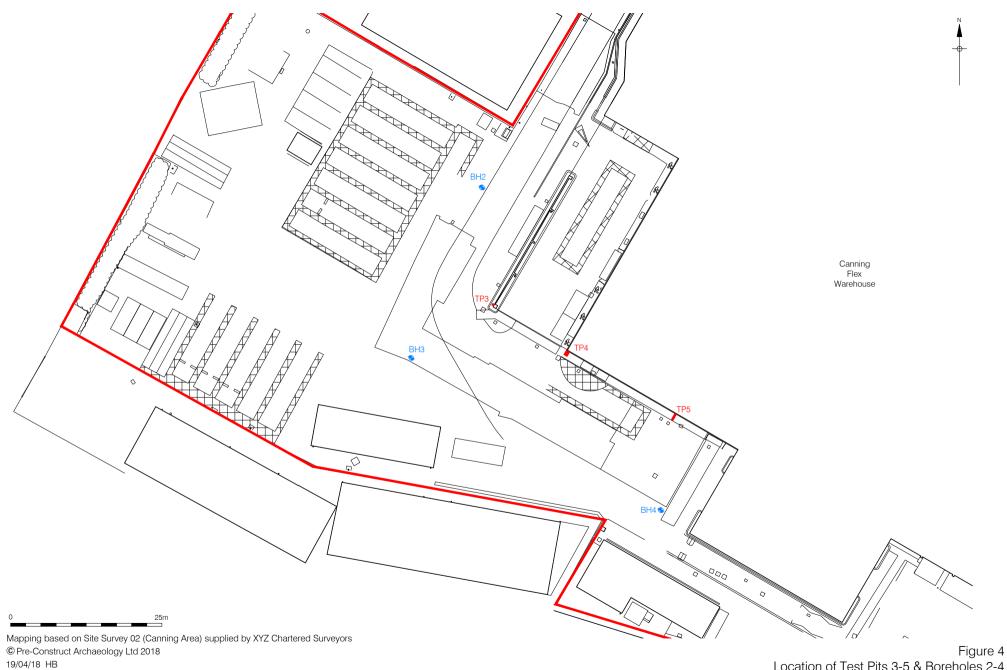


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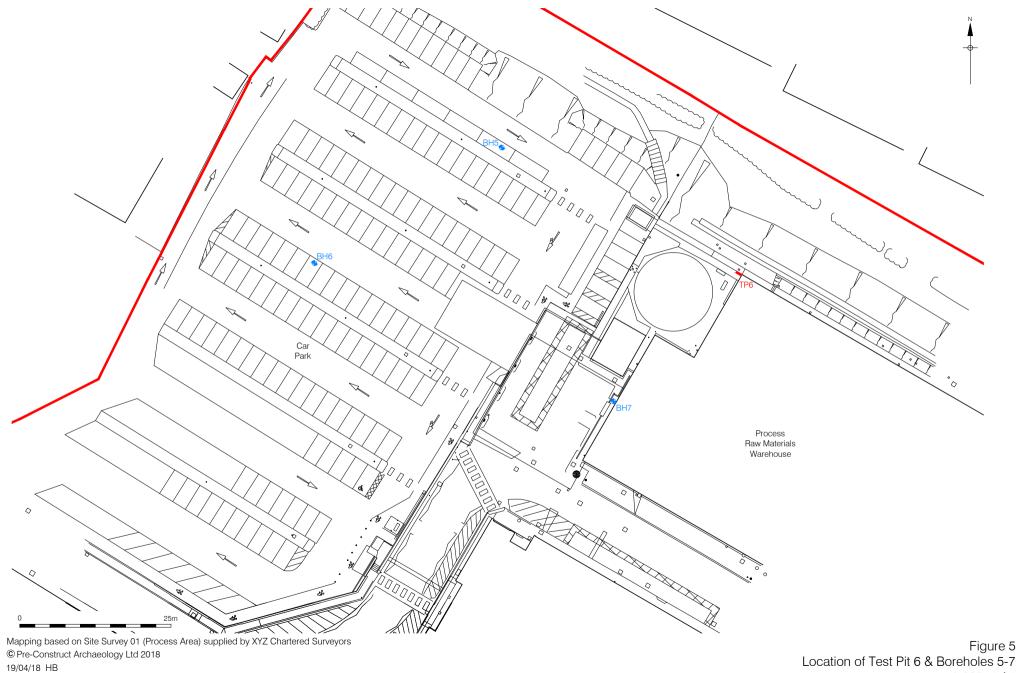


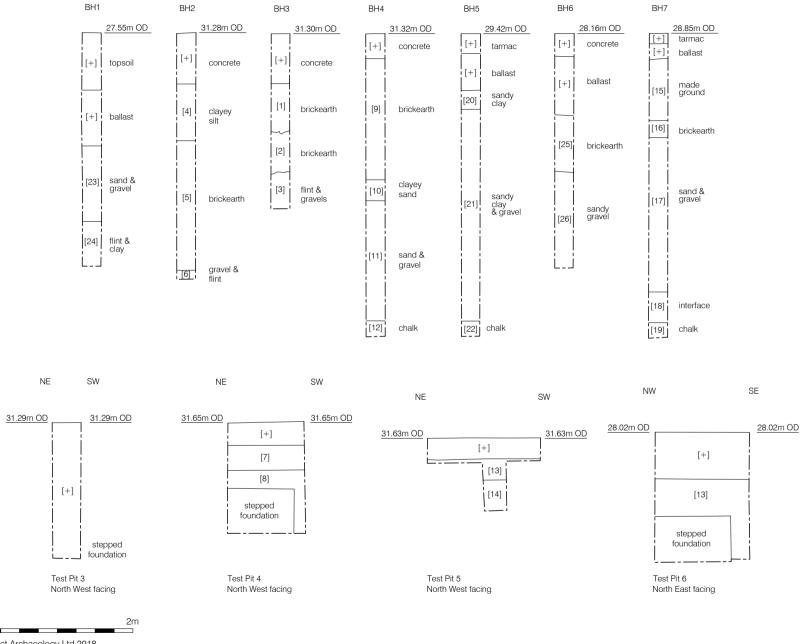
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Figure 3 Location of Borehole 1 1:625 at A4



Location of Test Pits 3-5 & Boreholes 2-4 1:625 at A4





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Figure 6 Sections 1:40 at A4

## **APPENDIX 1: OASIS REPORT FORM**

OASIS ID: preconst1-315021

Project details	
Project name	Coca-Cola enterprises Ltd, Edgington Way, Sidcup, London Borough of Bexley DA14 5DF
Short description of the project	Four test pits and seven boreholes were excavated across three areas at the Coca-Cola Enterprises Ltd site at Sidcup in advance of re-development. The test pit evidence was restricted to exposing the concrete footings of the present buildings and no archaeological layers were exposed. The borehole evidence was more positive, allowing a consistent tripartite 'site processes' model to be constructed. It was found that the chalk bedrock was overlain first by Pleistocene gravels; probably derived from flooding events of the nearby River Cray immediately to the east of the site. This in turn was overlain by Holocene alluviums in the form of a brick-earth, an old ground surface which was found to have been occupied in the Mesolithic period during an evaluation by PCA in 2015. A large quantity of struck flint-work was recovered from this surface. This current phase of the operation did not permit any open areas of excavation. Residual finds in the form of fragmentary tobacco pipe and CBM seemed to confirm the Post-medieval date for a trapped plough soil found in some areas of the site under the modern concrete surface. A single, broken Mesolithic flint blade was retrieved from a 'made ground' layer which had worked its way into the later layers through re-working and soil movement.
Project dates	Start: 12-04-2018 End: 13-04-2018
Previous/future work	Yes / Yes
Any associated project reference codes	EDO18 - Sitecode
Type of project	Field evaluation
Site status	Controlled sites under the Protection of Military Remains Act 1986
Site status (other) Current Land use	Archaeological Priority Area Industry and Commerce 1 - Industrial
Significant Finds	CLAY TOBACCO PIPE Post Medieval
Significant Finds	CBM Post Medieval
Significant Finds	FLINT BLADE Mesolithic
Project location	
Country	England
Site location	GREATER LONDON BEXLEY SIDCUP Coca Cola Enterprises Ltd
Postcode	DA14 5DF
Site coordinates	TQ 4737 7068 51.41544000756 0.11949017645 51 24 55 N 000 07 10 E Point

Height OD / Depth	Min: 27.3m Max: 31.06m
Project creators	
Name of Organisation	Pre-Construct Archaeology Ltd.
Project brief originator	GLAAS
Project director/manager	Peter Moore
Project supervisor	Wayne Perkins
Type of sponsor/funding body	Client
Name of sponsor/funding body	Coca Cola Enterprises Ltd
Project archives	
Physical Archive recipient	Bexley Museum
Physical Contents	"Ceramics","Worked stone/lithics","other"
Digital Archive recipient	Bexley Museum
Digital Media available	"Images raster / digital photography","Text"
Paper Archive recipient	Bexley Museum
Paper Media available	"Context sheet","Drawing"
Project bibliography 1	
Publication type	Grey literature (unpublished document/manuscript)
Title	Coca-Cola enterprises Ltd, Edgington Way, Sidcup, London Borough of Bexley DA14 5DF
Author(s)/Editor(s)	Perkins, W
Date	2018
Issuer or publisher	PCA Ltd
Place of issue or publication	Brockley
Description	Unpublished client report
Entered by Entered on	Wayne Perkins (WPerkins@preconstruct.com) 19 April 2018

# **APPENDIX 2: BUILDING MATERIALS ASSESSMENT**

Amparo Valcarcel, April 2018, Pre-Construct Archaeology Limited

Context	Fabric	Form	Size		e range of naterial	Latest dated material		Spot date	Spot date with mortar
4	3065	Post medieval sandy red brick	1	1450	1900	1450	1900	1450-1900	No mortar

One fragment of post medieval sandy red brick (3065 fabric) was collected from [4]. The fragment is abraded and small. The building material assemblage reflects the late post medieval development of this site and none of the material is of intrinsic interest. No further work recommended

# **APPENDIX 3: LITHICS ASSESSMENT**

Lithic assessment Coca-Cola Sidcup, Edgington Way, Bexley

Side code: EDO18

Ella Egberts April 2018

#### Struck flint

One small struck flint was recovered from context [14] (test pit 5) during an archaeological evaluation at the above named site. It concerns a struck flint fragment (likely blade), 19mm long, 14mm wide, 5mm thick and weighing 1.4g. The piece is quite damaged missing its proximal end and left edge, the right edge is chipped and damaged. The dorsal side shows at least two parallel negative blade scars. The technological and typological characteristics of the struck flint are indicative of a Mesolithic/Early Neolithic date. The condition of the piece suggests it has been moved to quite some extend after discard. This is in agreement with its recovery from made ground/recent deposits. The damage could have occurred during the process of reworking of this prehistoric material into more recent layers. It's presence at this location is unsurprising as the site is in the direct vicinity of a large Mesolithic flint scatter (RAY15).

# APPENDIX 4: CLAY TOBACCO PIPE

By Berni Sudds

A single fragment of clay tobacco pipe stem was recovered from layer [4], weighing 2 grams. The stem has a thin diameter with a fine bore and is dated to c. 1730–1910.

# **APPENDIX 5: CONTEXT INDEX**

Site_id	Site_Code	Context	CTX_Type	Area	Trench	CTX_Interpretation	CTX_Category	CTX_Levels_high	CTX_Levels_low	Phase
46	EDO18	1	Layer	внз	внз	Brickearth: yellowish mid brown sandy clay with occasional rounded pebble inclusions	Natural	31.3	30.27	1
46	EDO18	2	Layer	BH3	BH3	Brickearth with gravel inclusions	Natural	30.27	29.84	1
46	EDO18	3	Layer	BH3	внз	Clayey and gravel with sub-angular flint inclusions	Natural	30.46	29.46	1
46	EDO18	4	Layer	BH2	BH2	Buried plough soil or mixed garden soil, contained fragmentary CBM & CTP	Horticultural	30.75	30.15	2
46	EDO18	5	Layer	BH2	BH2	Brickearth (same as [2])	Natural	30.15	28.78	1
46	EDO18	6	Layer	BH2	BH2	Brickearth & gravel - same as [2]	Natural	28.78	28.68	1
46	EDO18	7	Layer	TP4	TP4	Made ground: ballast	Make-up	31.41	31.17	3

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46	EDO18	8	Layer	TP4	TP4	Made ground: brick and construction rubble	Make-up	31.17	30.48	3
46	EDO18	9	Layer	BH4	BH4	Brickearth - same as [1] & [5]	Natural	31.06	29.77	
46	EDO18	10	Layer	BH4	BH4	Soft, light grey clayey-sand. Interface between brickearth and sand and gravel.	Natural	29.77	29.35	1
46	EDO18	11	Layer	BH4	BH4	Sand & gravel in a matrix of yellow- brown sandy clay - same as [3], [6]	Natural	29.35	28.28	1
46	EDO18	12	Layer	BH4	BH4	Degraded, wet chalk mixed with clay	Natural	28.28	28.13	1
46	EDO18	13	Layer	TP5	TP5	Ballast - same as [7]	Make-up	31.41	31.19	3
46	EDO18	14	Layer	TP5	TP5	Mixed fragmentary building materials - same as [8]	Make-up	31.19	30.76	3
46	EDO18	15	Layer	BH6	BH6	Ballast - same as [7] & [13]	Make-up	28.58	27.93	3
46	EDO18	16	Layer	BH6	BH6	Brickearth - same as [1], [2], [5], [9] & [10]	Natural	27.93	27.76	1
46	EDO18	17	Layer	BH6	BH6	Sand & gravel - same as [3], [6] & [11]	Natural	27.76	25.8	1

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46	EDO18	18	Layer	TP 6	TP6	Re-worked sandy clay containing fragmentary CBM fragments	Make-up	27.53	26.48	3
46	EDO18	19	Layer	BH6	BH6	Degraded chalk bedrock	Natural	25.8	25.63	1
46	EDO18	20	Layer	BH5	BH5	Brickearth - same as [1], [2], [5], [9], [10] & [16]	Natural	28.82	28.62	1
46	EDO18	21	Layer	BH5	BH5	Sand & gravel - same as [3], [6], [11] & [17]	Natural	28.62	26.38	1
46	EDO18	22	Layer	BH5	BH5	Degraded chalk - same as [12] & [19]	Natural	26.38	26.22	1
46	EDO18	23	Layer	BH1	BH1	Sand & gravel - same as [3], [6], [11], [17] & [21]	Natural	26.38	25.57	1
						Sand & gravel containing a high proportion of sub-				
46	EDO18	24	Layer	BH1	BH1	angular flint nodules	Natural	25.57	25.1	1

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