

# 54 FURZE PLATT ROAD, MAIDENHEAD, ROYAL BOROUGH OF WINDSOR AND MAIDENHEAD

## Geoarchaeological Deposit Model Report

**NGR:** SU 878 825

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## 1. NON-TECHNICAL SUMMARY

A programme of geoarchaeological field investigations and deposit modelling was undertaken at the 54 Furze Platt Road site, building on a previous desk-based deposit modelling exercise (Green & Young, 2019). A total of five test pits were put down at the site, with a programme of updated deposit modelling, in order to (1) enhance our understanding of the sub-surface stratigraphy at the site; (2) to evaluate the potential of the sequences to contain evidence for Palaeolithic archaeology or biological remains; and (3) make recommendations for any further geoarchaeological or archaeological investigations at the site.

The results of the deposit modelling have revealed a sequence of Chalk bedrock, overlain by middle Pleistocene Gravel (likely to equate to the Boyn Hill Gravel of Gibbard (1985)), and modern Made Ground. A very clearly expressed difference in level of the gravel surface between the northern (ca. 46.5 to 47.5m OD) and southern (ca. 50.0 and 50.5m OD) halves of the site appears to be entirely due to quarrying in the northern half. For this reason, greater thicknesses of gravel are recorded in the south (4.6 to 4.8m) than in the north (0.4 to 1.4m), although in one borehole in the northwestern area of the site 12.4m of Gravel is recorded infilling a solution feature that has formed (probably during the Quaternary period) in the underlying Chalk. The ground level in the unquarried southern half of the site accords closely with the level recorded by Gibbard (1985) at the Boyn Hill type site, and it is likely that this Gravel unit extends across the present site. Although the Boyn Hill Gravel has been a significant source of Palaeolithic artefacts elsewhere in Maidenhead, including very close to the present site (Wymer, 1968), no lithic artefacts or faunal remains were identified in any of the seven 108 litre samples from the gravel sub-units identified across the five test pits.

The results of the geoarchaeological investigations are relatively conclusive in that the Gravel at 54 Furze Platt Road represents Boyn Hill, rather than Lynch Hill, Gravel, and to that end support the view of Gibbard (1985), Bridgland (1994) and Harding *et al.*, (1991). In addition, no lithic artefacts or faunal remains were identified in any of the five test pits at the site; on this basis, no further geoarchaeological or archaeological investigations are recommended at the site.

## 2. INTRODUCTION

### 2.1 Site context

This report summarises the findings arising out of the geoarchaeological field investigations and deposit modelling undertaken by Quaternary Scientific (University of Reading) in connection with the proposed development of land at 54 Furze Platt Road, Maidenhead, Royal Borough of Windsor and Maidenhead (National Grid Reference (NGR): SU 878 735; Figure 1). The site is in the valley of the Middle Thames on the northern outskirts of Maidenhead. The Thames here is flowing from north to south and the site lies to the west of the river at a distance of around 2.5km from its main channel. Near the site, the floodplain of the Thames is at a level of ca. 25.0m OD; the ground surface at the present site is around 48.5m OD in the northern area of the site, and 52m OD in the south, with a difference in level of around 3m in the northern and southern areas of the site separated by a retaining wall. The site lies in an area mapped by the British Geological Survey (BGS) ([www.bgs.ac.uk/opengeoscience](http://www.bgs.ac.uk/opengeoscience)) as Middle Pleistocene Lynch Hill Gravel overlying Chalk. This interpretation of the underlying geology has not been adopted more generally. Gibbard (1985; Fig.1), Bridgland (1994; p.151 Fig.3.14) and Harding *et al.* (1991) all show the site within an area of Boyn Hill Gravel, and Hare (1947) whose geomorphological mapping of the terraces of the Middle Thames is generally regarded as very reliable, places the site within an area where no morphological terrace could be recognised due, judging by his map (Hare, 1947; Plate 13), to dissection of the valley side.

Historically the site remained as agricultural land until the mid-19<sup>th</sup> century. At some time after 1874 a gravel working was developed in the northeastern quarter of the site, locally known as one of two Upper Furze Platt Pits. Working appears to have ceased within the present site by the end of the 19<sup>th</sup> century, and since then residential and commercial premises have progressively occupied the whole of the site. As a result, even in areas unaffected by gravel extraction, the upper part of the underlying natural sediment sequence is likely in most places to have been truncated or disturbed.

More recently, the report of investigations at the Polestar site (SU 878 826; Green & Young, 2012) immediately to the east (see Figure 2) recorded the surface of the bedrock Chalk in two trial pits in the western part of that site at levels of 44.31m OD and 43.78m OD. In two geotechnical boreholes in the eastern part of the same site the Chalk surface was recorded at and slightly below 40m OD, leading to the conclusion that the Chalk surface rises from east to west beneath the Polestar site. The results of a recent desk-based geoarchaeological deposit modelling exercise for the present site (Green & Young, 2019) showed that the surface of the Chalk is relatively uniform across much of the site, recorded at levels between 45.55 and 46.68m OD, although in one borehole towards the northwest it falls sharply to 32.99m OD. This feature is likely to represent a solution pipe formed in the Chalk, and subsequently infilled by the overlying Gravel (see Green & Young, 2019). The results of these investigations thus confirmed that the Chalk surface rises gradually from east to west, and supports the view (Gibbard, 1985; Bridgland, 1994, Harding *et al.*, 1991) that the area mapped here by the British Geological Survey (BGS) as Lynch Hill Gravel is in fact Boyn Hill Gravel.

The surface of the Gravel across the site was recorded at between 45.39 and 52.2m OD during the desk-based investigations, although two distinct levels for the surface of the Gravel are evident: in the southern part of the site, the Gravel is recorded at between ca. 50.0 and 50.5m OD, whilst in the northern area of the site it is lower, but again relatively even, lying at between ca. 46.5 and 47.5m OD (Green & Young, 2019). In general, greater thicknesses of Gravel were recorded in the south (4.6 to 4.8m) than in the north (0.4 to 1.4m).

## 2.2 Geoarchaeological and archaeological significance

There is general agreement that ca. 300m to the north of the present site, the Lynch Hill Terrace is present, underlain by Lynch Hill Gravel. Historically this gravel was worked in the Cannoncourt Farm Pit and contiguous with it to the north, Cooper's Pit (ERM321, MRW1033/1034/6470; see Figure 3), both of which have in the past yielded large numbers of Palaeolithic artefacts, as summarised in Wymer (1968), Roe (1981), Harding *et al* (1991) and Pettitt & White (2012). In the most recent investigations of the Cannoncourt Farm and Cooper's pits (Harding *et al.*, 1991), the Chalk surface was recorded at about 41.2m OD with the surface of the overlying Lynch Hill Gravel generally close to 44.5m OD. These figures demonstrate a height difference of ca. 5.0m between the Lynch Hill Terrace deposits and those underlying the present site.

Gibbard (1985), describing the Boyn Hill type site which is about 1.0 km to the south of the present site, writes 'the terrace surface is well developed here at 51-52m OD'. The Furze Platt Road site rises to this level in the southern area of the site, but there is a height difference of around 3.0m between the southern and northern halves of the site, separated by a retaining wall. This sloping topography probably explains why the locality is not mapped as a terrace remnant by Hare (1947). However, any superficial deposits underlying the site, such as the 3.66m of 'ballast' recorded in BGS archive borehole SU88SE13 are likely to be or to be derived from Boyn Hill Terrace Deposits.

The Boyn Hill Gravel has been a significant source of Palaeolithic artefacts. Wymer (1968) writing of the Maidenhead area observes that 'Palaeoliths have been found in great numbers, both in the Boyn Hill and Lynch Hill Terraces, but mainly in the latter.' He also observes that 'Almost everything in the Boyn Hill Terrace at Maidenhead is rolled, often almost beyond recognition.' Wymer lists about 50 handaxes from pits that he regards as having worked the Boyn Hill Gravel in the Maidenhead area, including 10 from the 'Upper Furze Platt Pit' (MRW8440; see Figure 3) which originally worked sand and gravel in the northeastern part of the present site. All these artefacts are described by Wymer as 'rolled' or 'v. rolled'.

## 2.3 Aims and objectives

Given that Palaeolithic artefacts have been recovered in gravel workings that formerly extended into the present site (MRW8440; see Figure 3), and the fact that the site lies between the Boyn Hill Gravel type site and the important Palaeolithic site in the Lynch Hill Gravel at the Cannon Court Farm Pit (ERM321, MRW1033/1034/6470), further geoarchaeological and archaeological investigation of the deposits underlying the site were recommended following the results of the desk-based deposit modelling exercise (Green & Young, 2019). A minimum of four

geoarchaeological test pits were recommended in order to enhance our understanding of the sub-surface stratigraphy of the site, investigating both the northern and southern areas of the site, and avoiding areas of known existing structures, foundations and utilities.

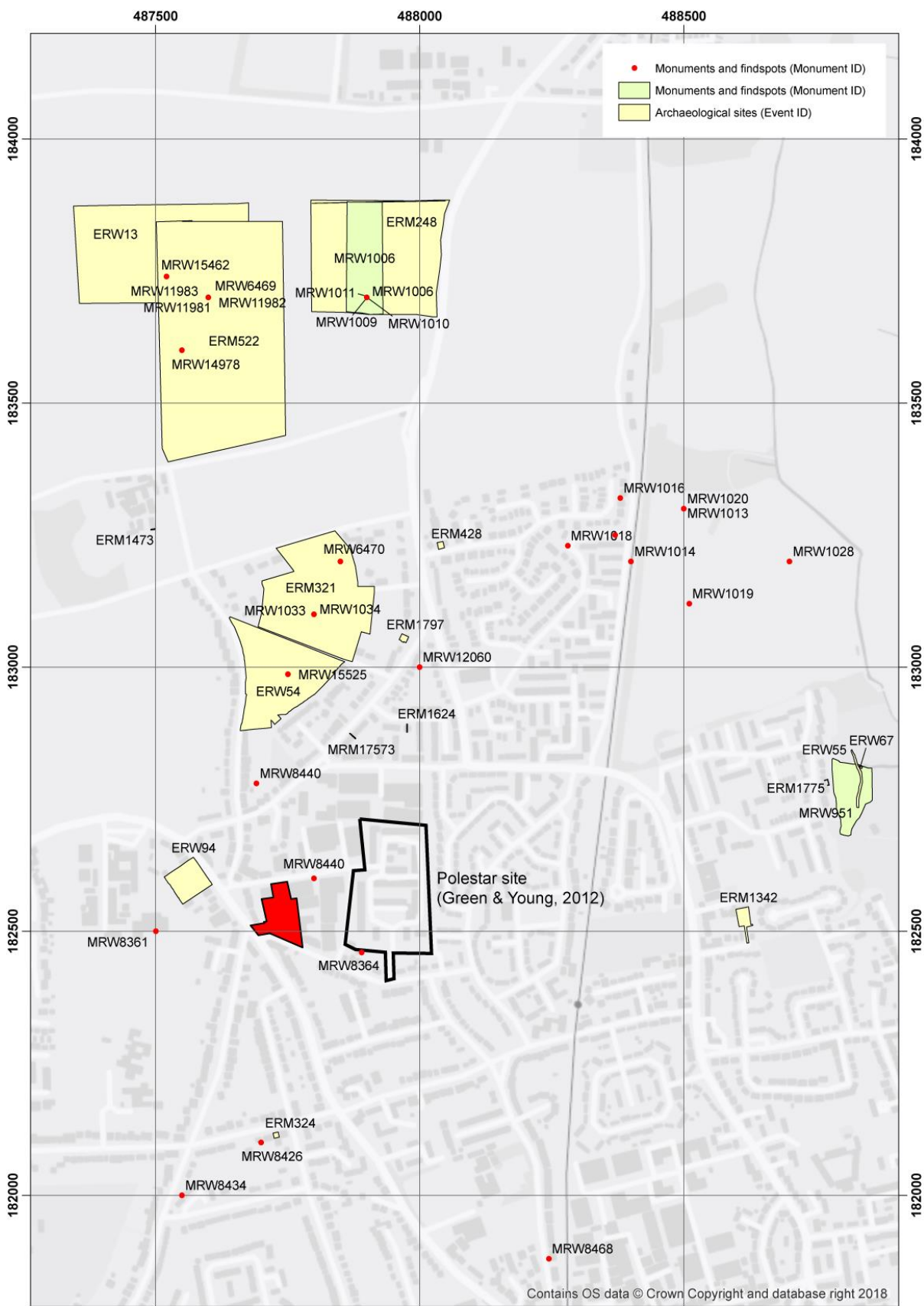
The aims of the geoarchaeological field investigations were as follows:

1. To enhance our understanding of the sub-surface stratigraphy at the site;
2. To evaluate the potential of the sequences to contain evidence for Palaeolithic archaeology or biological remains;
3. To make recommendations for any further geoarchaeological or archaeological investigations at the site.



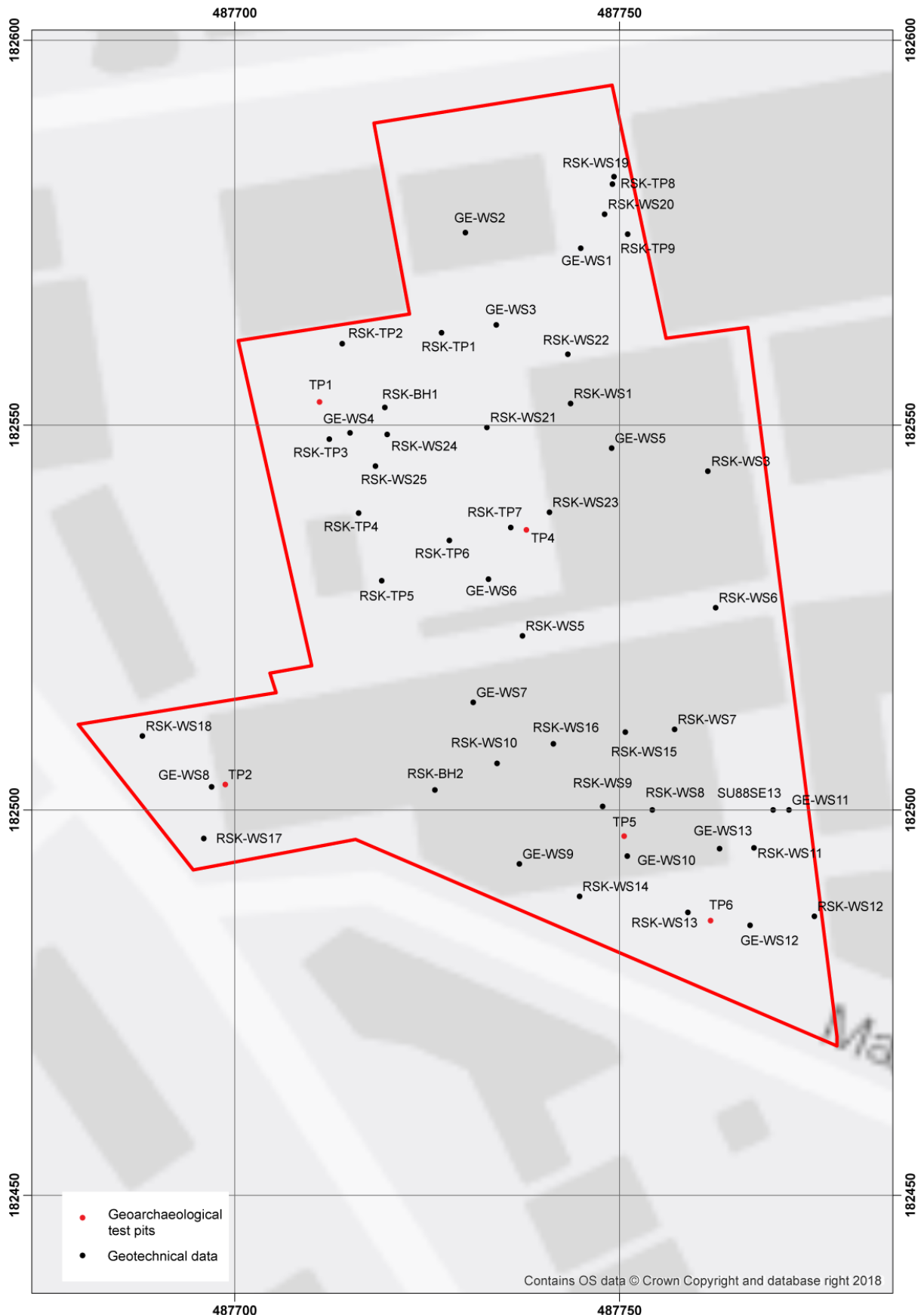


Figure 1: Location of 54 Furze Platt Road, Maidenhead, Royal Borough of Windsor and Maidenhead.



2.3  
 Figure 2: Location of 54 Furze Platt Road, Maidenhead showing HER data for the surrounding area (prehistoric/Palaeolithic finds only), along with nearby sites of geoarchaeological investigations as recorded in the HER (the nearby Polestar site (Green & Young, 2012) is also shown).





2.4  
 2.5 Figure 3: Location of the new geoarchaeological test pits (red) and geotechnical records (black) at 54 Furze Platt Road, Maidenhead, Royal Borough of Windsor and Maidenhead.

## 3. METHODS

### 3.1 Field investigations and lithostratigraphic descriptions

As recommended within the desk-based deposit model report (Green & Young, 2019), a total of five geoarchaeological test pits were put down at the site in March 2019 (see Table 1 and Figure 3). Proposed test pit TP3 was not put down as it was located within the area of the welfare facilities/parking at the site. The location of the test pits was recorded using a Leica GNSS (see Table 1).

**Table 1: Location of the test pits at 54 Furze Platt Road, Maidenhead.**

Test Pit	Easting	Northing	Elevation (m OD)	Maximum depth (m)
TP1	487711.06	182553.00	47.90	2.50
TP2	487698.77	182503.29	50.60	3.50
TP4	487737.92	182536.37	47.75	2.00
TP5	487750.63	182496.59	51.06	3.50
TP6	487761.86	182485.61	51.20	3.60

The test pits were put down using a mechanical excavator, and in most cases measured 1.5m width by 2.5m length. The test pits were put down to the maximum depth of the machine arm (3.5-3.6m) except where the bedrock Chalk was reached in test pits TP1 (2.2m) and TP4 (1.5m) at above that level.

The lithostratigraphy of the test pits was described in the field using standard procedures for recording unconsolidated sediments, noting the physical properties (colour), composition (gravel, sand, clay, silt and organic matter) and inclusions (e.g. artefacts) (Tröels-Smith, 1955). The procedure involved: (1) cleaning the section (where accessible) or examining the spoil from the test pit; (2) recording the physical properties, most notably colour using a Munsell Soil Colour Chart; (3) recording the composition; gravel (*Grana glareosa*; Gg), fine sand (*Grana arenosa*; Ga), silt (*Argilla granosa*; Ag) and clay (*Argilla steatoides*); (4) recording the degree of peat humification and (5) recording the unit boundaries e.g. sharp or diffuse. The results of the geoarchaeological description of the test pits are displayed in Tables 3 to 7.

In all test pits a total of 108 litres of material from each individual gravel unit was sieved on-site using a 10mm mesh, in order to identify any lithic artefacts or faunal remains. Where the Gravel was particularly silty or clayey (the upper unit in TP1) the spoil from this unit was examined by hand in order to identify any possible lithic artefacts/biological remains.

### 3.3 Deposit modelling

The model for the 54 Furze Platt Road site was based on a review of 48 existing borehole and test pit records, including a total of 34 geotechnical records put down by RSK (2018), 13 logs from Geo-Environmental Services Ltd (2017) and one borehole within the site from the British Geological Survey (BGS) onshore borehole archive (<http://mapapps2.bgs.ac.uk/geoindex/home.html>), in addition to the five new geoarchaeological boreholes (see Figure 3 and Tables 1 and 2).

Sedimentary units from the boreholes/test pits were classified into three main groups: (1) Bedrock, (2) Gravel, and (3) Made Ground. The classified data for groups 1-3 were then input into a database within the RockWorks 16 geological utilities software, the output from which was generated using ArcMAP 10. A northwest to southeast stratigraphic profile of selected records is shown in Figure 4. Models of surface height were generated for the Chalk (Figure 5) and Gravel (Figure 6), along with a thickness model for the Made Ground (Figure 7), using an Inverse Distance Weighted algorithm.

Because the boreholes are not uniformly distributed over the area of investigation, the reliability of the models generated using RockWorks is variable. In general, reliability improves from outlying areas where the models are largely supported by scattered archival records, towards the core area of commissioned boreholes within the site (see Figure 2). Within the site itself data coverage is generally good, and the area of the site can be modelled with a reliable level of confidence. Because of the 'smoothing' effect of the modelling procedure, the modelled levels of stratigraphic contacts may differ slightly from the levels recorded in borehole logs and section drawings. As a consequence of this, the modelling procedure has been manually adjusted so that only those areas for which sufficient stratigraphic data is present will be modelled. In order to achieve this, a maximum distance cut-off filter equivalent to a 20m radius around each record is applied to all deposit models. In addition, it is important to recognise that multiple sets of boreholes are represented, put down at different times and recorded using different descriptive terms and subject to differing technical constraints in terms of recorded detail including the exact levels of the stratigraphic boundaries.

**Table 2: Existing geotechnical data used in the geoarchaeological deposit model at 54 Furze Platt Road, Maidenhead.**

Name	Source	Easting	Northing	Elevation (m OD)	Total depth (m)
GE-WS1	Geo-Environmental Services Ltd (2017)	487745.00	182573.00	47.40	6.00
GE-WS10		487751.00	182494.00	51.00	0.27
GE-WS11		487772.00	182500.00	51.10	2.00
GE-WS12		487767.00	182485.00	51.10	2.00
GE-WS13		487763.00	182495.00	51.10	3.00
GE-WS2		487730.00	182575.00	47.80	3.00
GE-WS3		487734.00	182563.00	47.80	0.50
GE-WS4		487715.00	182549.00	47.90	6.00
GE-WS5		487749.00	182547.00	47.70	3.00
GE-WS6		487733.00	182530.00	47.90	3.00
GE-WS7		487731.00	182514.00	50.00	0.00
GE-WS8		487697.00	182503.00	50.50	2.00
GE-WS9		487737.00	182493.00	51.00	3.00
RSK-WS1		RSK (2018)	487743.64	182552.81	47.50
RSK-WS3	487761.50		182544.01	47.50	1.80
RSK-WS5	487737.40		182522.60	50.22	3.00
RSK-WS6	487762.50		182526.30	50.98	3.00
RSK-WS7	487757.15		182510.46	51.10	2.10

Name	Source	Easting	Northing	Elevation (m OD)	Total depth (m)
RSK-WS8		487754.27	182500.03	51.10	2.10
RSK-WS9		487747.82	182500.45	51.10	3.00
RSK-WS10		487734.08	182506.07	51.10	1.00
RSK-WS11		487767.50	182495.06	51.10	2.00
RSK-WS12		487775.30	182486.20	51.06	2.40
RSK-WS13		487758.90	182486.70	51.25	2.20
RSK-WS14		487744.80	182488.80	51.06	2.40
RSK-WS15		487750.76	182510.12	51.10	2.00
RSK-WS16		487741.43	182508.62	51.10	4.00
RSK-WS17		487696.00	182496.30	50.54	1.80
RSK-WS18		487688.00	182509.60	50.42	2.20
RSK-WS19		487749.30	182582.30	47.43	4.00
RSK-WS20		487748.10	182577.40	47.39	3.00
RSK-WS21		487732.80	182549.70	47.75	3.00
RSK-WS22		487743.32	182559.21	47.70	3.60
RSK-WS23		487740.90	182538.70	47.98	3.00
RSK-WS24		487719.80	182548.80	47.84	3.00
RSK-WS25		487718.30	182544.70	47.95	4.00
RSK-TP1		487726.90	182562.00	47.67	0.95
RSK-TP2		487714.00	182560.60	47.90	1.55
RSK-TP3		487712.30	182548.20	47.94	1.30
RSK-TP4		487716.10	182538.60	47.88	1.30
RSK-TP5		487719.10	182529.80	47.92	1.60
RSK-TP6		487727.90	182535.00	47.90	1.55
RSK-TP7		487735.90	182536.70	47.87	1.90
RSK-TP8		487749.10	182581.30	47.40	1.70
RSK-TP9		487751.10	182574.80	47.54	1.60
RSK-BH1		487719.50	182552.30	47.79	30.60
RSK-BH2		487726.00	182502.60	51.05	40.00
SU88SE13	British Geological Survey (BGS) borehole archive	487770.00	182500.00	51.20	305.00

## 4. RESULTS, INTERPRETATION & DISCUSSION OF THE GEOARCHAEOLOGICAL FIELD INVESTIGATIONS & DEPOSIT MODELLING

The results of the lithostratigraphic descriptions of the new test pits are shown in Tables 3 to 7, with the results of the updated geoarchaeological deposit models displayed in Figures 4 to 7. The number and distribution of records across the site is now sufficient to model each stratigraphic with a reasonable degree of certainty. The full sequence of sediments recorded across the area of investigation comprises:

*Made Ground (modern)*

*Gravel (Boyn Hill Gravel)*

*Chalk (bedrock)*

### 4.1 Chalk (bedrock)

As identified during the investigations undertaken by Green & Young (2019), the surface of the bedrock is relatively uniform across much of the site, recorded at levels between 45.55 (RSK-BH2) and 46.68m OD (RSK-WS23) (see Figure 5). However, in one borehole towards the northwest (RSK-BH1) the surface of the Chalk is significantly lower, recorded at 32.99m OD. As highlighted by Green & Young (2019), this feature is likely to represent a solution pipe formed in the Chalk itself, and subsequently infilled by the overlying Gravel. Solution pipes can be large (10-20m across) features, formed from chemical weathering of the Chalk, probably during the Quaternary period. These features affect the overlying sediments over quite a large radius around the pipe itself, with faulting and down-warping of strata towards the pipe (e.g. see Rhodes & Marychurch, 1998). The result here is a much lower base and greater thickness of Gravel in the area of RSK-BH1 (see Figure 4). In the new geoarchaeological test pits that reached the surface of the bedrock in the northern area of the site it was recorded at levels consistent with the existing deposit models, recorded at 45.7 and 46.25m OD in test pits TP1 and TP4 respectively.

### 4.2 Gravel

Overlying the Chalk bedrock, a horizon of sandy, in places clayey or silty gravel was recorded widely across the site, considered here to represent the deposits of the Boyn Hill Gravel (the stratotype for which is in Maidenhead). Gibbard (1985) and Bridgland (1994) assign this unit to the middle Pleistocene Wolstonian Stage (Marine Isotope Stage (MIS) 10; see Discussion). The sands and gravels of this unit were deposited in a high-energy braided river systems which, while it was active, would have been characterised by longitudinal gravel bars and intervening low-water channels in which finer-grained sediments might have been deposited (for example, in the area of TP6 (see below).

The surface of the Gravel across the site (Figure 6) is recorded at between 45.39 (RSK-BH1) and 51.2m OD (SU88SE13), although two distinct levels for the surface of the Gravel are evident (see Figure 4): in the southern part of the site, the Gravel is relatively even at between ca. 50.0 and 50.5m OD, whilst in the northern area of the site it is lower, but again relatively even, lying at



between ca. 46.5 and 47.5m OD. The Gravel surface was noticeably higher in borehole SU88SE13, put down in 1935 during the development of the 'Maidenhead District Laundry' and most likely prior to the emplacement of the overlying Made Ground (see below). In TP6, the Gravel included an upper silt and clay rich unit between 48.2 and 50m OD, perhaps representing an area of lower energy flow in which finer-grained sediments were deposited.

In general, between 0.4 (RSK-WS23) and 4.8m (RSK-BH2) of Gravel is recorded across the site (where the basal chalk was reached); with the exception of RSK-BH1, greater thicknesses of Gravel are generally recorded in the south (4.6 to 4.8m) than in the north (0.4 to 1.4m). In RSK-BH1 in the northwestern area of the site 12.4m of Gravel is recorded, infilling the solution feature recorded here (see above). Again, the new geoarchaeological test pits recorded levels for the Gravel that were consistent with the existing deposit models; in the northern area of the site it was recorded at 47.3 and 46.65m OD in TP1 and TP4, whilst towards the south it was recorded at between 49.8 (TP2) and 50.56m OD (TP5).

No lithic artefacts or faunal remains were identified in any of the 108 litre samples sieved in the field, including a total of seven samples from each of the gravel sub-units identified across the five test pits. No lithic artefacts or biological remains were identified during scanning (by hand) of the upper silty and clayey gravel unit in TP6 (50.00 to 48.20m OD).

#### 4.3 Made Ground

Between 0.15 (RSK-TP2) and 2.4m (RSK-BH1) of Made Ground (Figure 7) caps the sequence across the site, directly overlying (and in places most likely truncating) the Gravel; no Made Ground was recorded in borehole SU88SE13, where the Gravel was recorded at a higher level of 51.2m OD, indicating that this borehole was put down prior to the emplacement of these ground-raising and levelling deposits.

**Table 3: Lithostratigraphic description of test pit TP1, 54 Furze Platt Road, Maidenhead, Royal Borough of Windsor and Maidenhead.**

Depth (m OD)	Depth (m bgs)	Description	Stratigraphic unit
47.90 to 47.50	0.00 to 0.40	Concrete hardstanding	MADE GROUND
47.50 to 47.30	0.40 to 0.60	Brick and concrete rubble with tarmac and gravel in a matrix of brown sandy clay.	
47.30 to 46.40	0.60 to 1.50	Gg3 Ga1 Ag+; orangey brown sandy gravel with a trace of silt. Gravel is predominantly flint, sub-angular to well-rounded, average diameter 40mm but generally 20-80mm in size. Diffuse contact in to:	BOYN HILL GRAVEL
46.40 to 45.70	1.50 to 2.20	Gg2 Ga1 Ag1; orangey brown silty sandy gravel. Gravel is predominantly flint, sub-angular to well-rounded, average diameter 40mm but generally 10-40mm in size.	
45.70 to 45.40	2.20 to 2.50	Chalk	BEDROCK

Table 4: Lithostratigraphic description of test pit TP2, 54 Furze Platt Road, Maidenhead, Royal Borough of Windsor and Maidenhead.

Depth (m OD)	Depth (m bgs)	Description	Stratigraphic unit
50.60 to 49.80	0.00 to 0.80	Brick and concrete rubble with gravel and sand; some ceramic tile.	MADE GROUND
49.80 to 49.10	0.80 to 1.50	Gg3 Ga1 Ag+; orangey brown sandy gravel with a trace of silt. Gravel is predominantly flint, sub-angular to well-rounded, average diameter 40mm but generally 20-60mm in size. Diffuse contact in to:	BOYN HILL GRAVEL
49.10 to 47.10	1.50 to 3.50	Gg3 Ga1 Ag+; orangey brown sandy gravel with a trace of silt. Gravel is predominantly flint, sub-angular to well-rounded, average diameter 60mm but generally 40-100mm in size.	

Table 5: Lithostratigraphic description of test pit TP4, 54 Furze Platt Road, Maidenhead, Royal Borough of Windsor and Maidenhead.

Depth (m OD)	Depth (m bgs)	Description	Stratigraphic unit
47.75 to 46.65	0.00 to 1.10	Brick rubble, with metal, gravel, concrete and mortar in matrix of dark brown sandy clay.	MADE GROUND
46.65 to 46.25	1.10 to 1.50	Gg3 Ga1; orangey brown sandy gravel. Gravel is predominantly flint, sub-angular to well-rounded, average diameter 50mm but generally 20-80mm in size. Sharp contact in to:	BOYN HILL GRAVEL
46.25 to 45.75	1.50 to 2.00	Chalk	BEDROCK

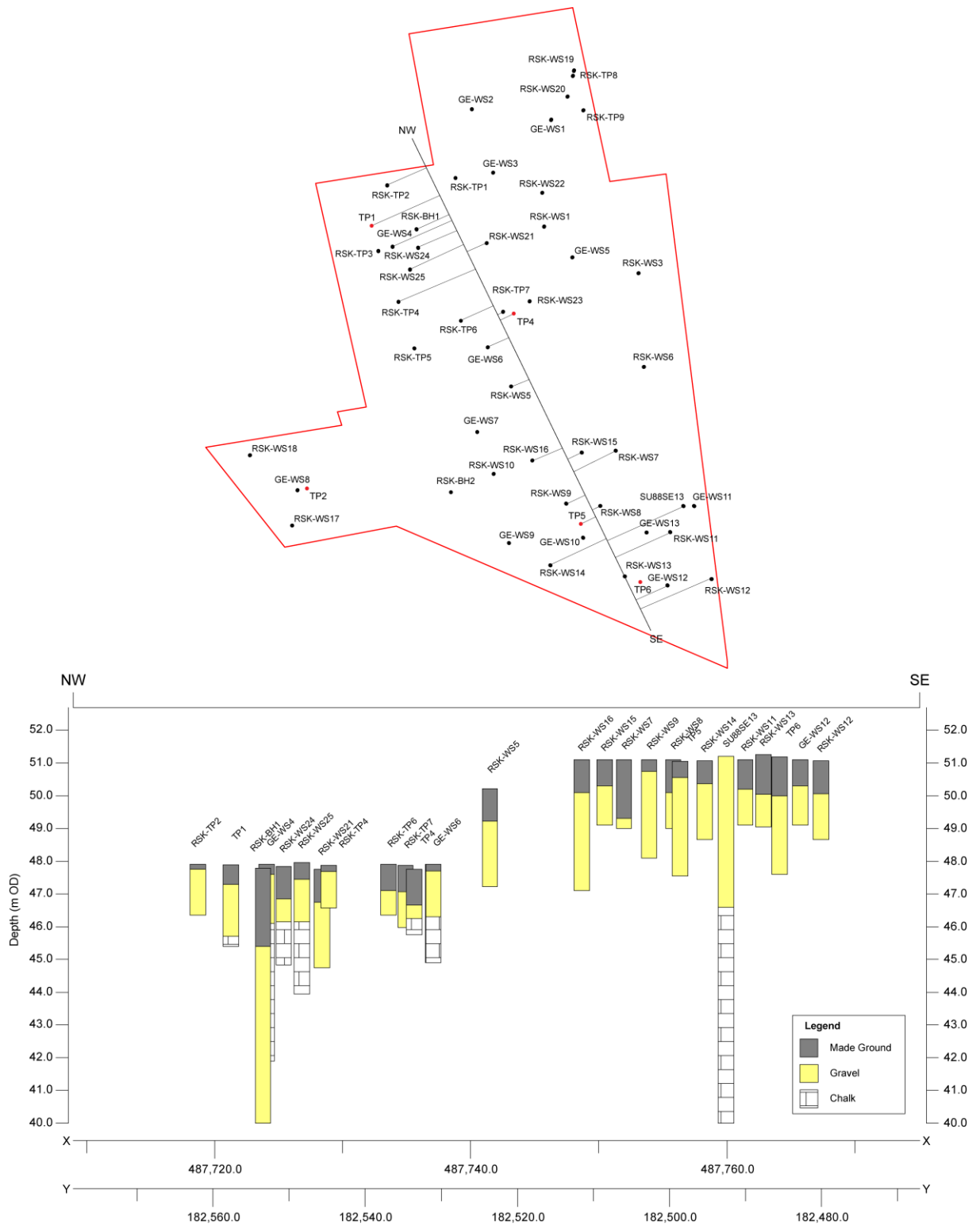
Table 6: Lithostratigraphic description of test pit TP5, 54 Furze Platt Road, Maidenhead, Royal Borough of Windsor and Maidenhead.

Depth (m OD)	Depth (m bgs)	Description	Stratigraphic unit
51.06 to 50.56	0.00 to 0.50	Tarmac hardstanding over concrete and brick rubble.	MADE GROUND
50.56 to 47.56	0.50 to 3.50	Gg3 Ga1 As+ Ag+; orangey brown sandy gravel with traces of clay and silt. Gravel is predominantly flint, sub-angular to well-rounded, average diameter 50mm but generally 20-90mm in size.	BOYN HILL GRAVEL

Table 7: Lithostratigraphic description of test pit TP6, 54 Furze Platt Road, Maidenhead, Royal Borough of Windsor and Maidenhead.

Depth (m OD)	Depth (m bgs)	Description	Stratigraphic unit
51.20 to 51.10	0.00 to 0.10	Tarmac hardstanding.	MADE GROUND
51.10 to 50.60	0.10 to 0.60	Gravel and brick in brown sandy clay.	
50.60 to 50.20	0.60 to 1.00	Brown clayey sandy gravel (appears reworked).	
50.20 to 50.00	1.00 to 1.20	Ashy fill.	
50.00 to 48.20	1.20 to 3.00	Ag2 As1 Gg1 Ga+; orangey greyish brown clayey gravelly silt with a trace of sand. Gravel is predominantly flint, angular to sub-rounded, average diameter 30mm but generally 20-60mm in size. Manganese staining throughout. Diffuse contact in to:	BOYN HILL GRAVEL
48.20 to 47.60	3.00 to 3.60	Gg2 Ag1 Ga1 As+; orangey greyish brown sandy silty gravel with a trace of	

Depth (m OD)	Depth (m bgs)	Description	Stratigraphic unit
		clay. Gravel is predominantly flint, sub-angular to rounded, average diameter 30mm but generally 20-60mm in size. Manganese staining throughout.	



4.3  
4.4  
4.5

4.6 Figure 4: Northwest-southeast stratigraphic profile of selected records across the site at 54 Furze Platt Road, Maidenhead.

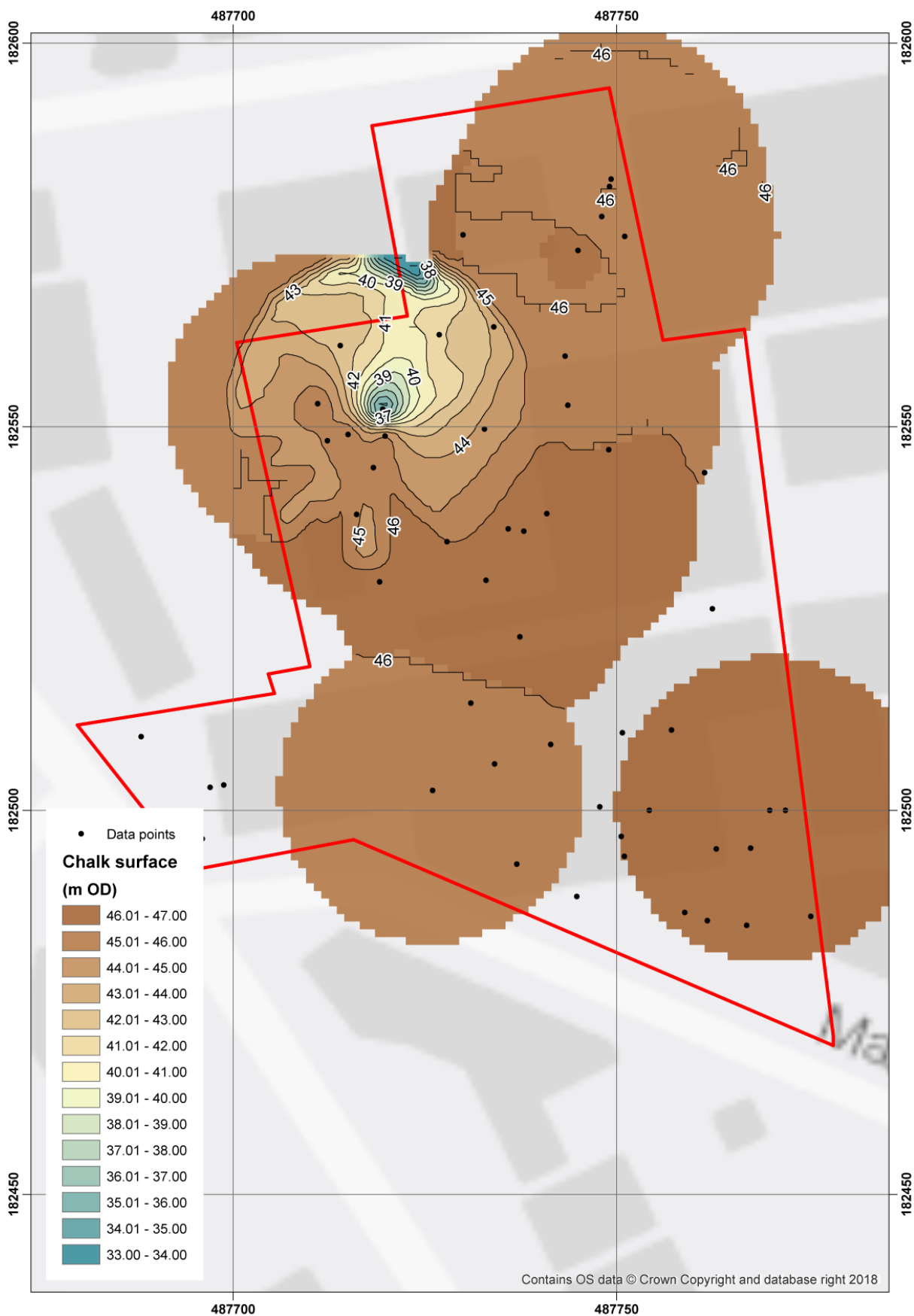


Figure 5: Top of the Chalk (m OD)



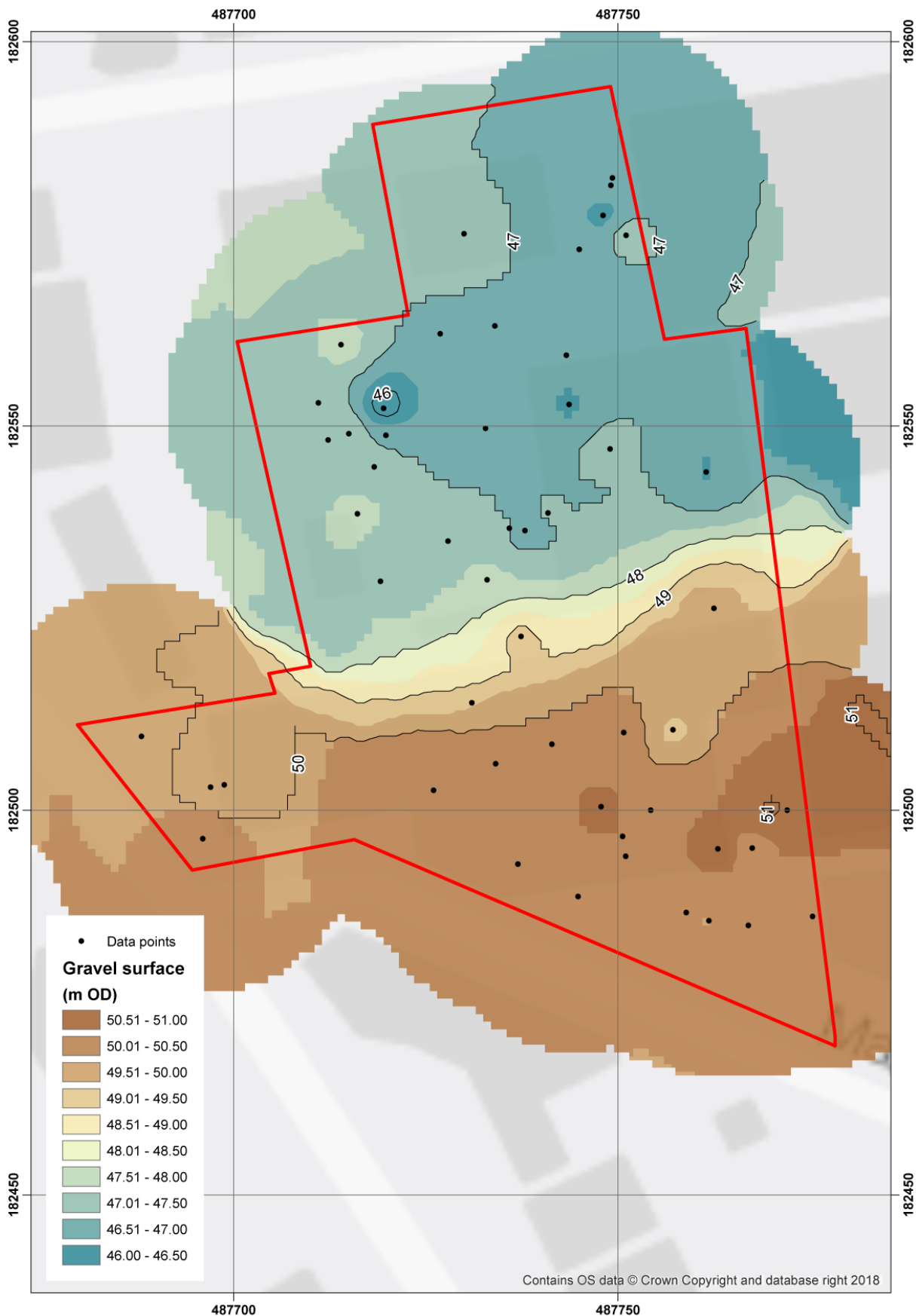


Figure 6: Top of the Gravel (m OD)

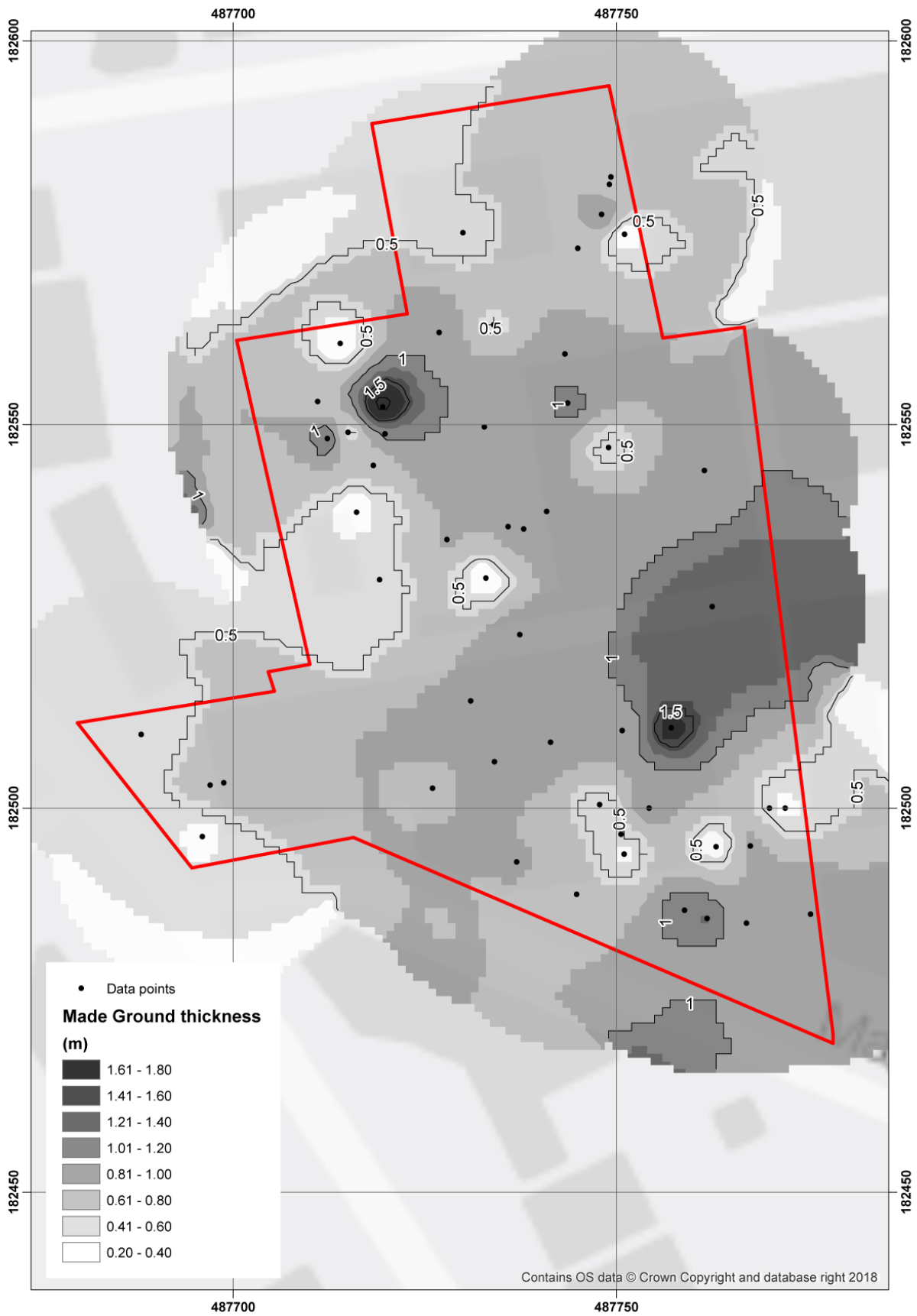


Figure 7: Thickness of the Made Ground (m)

## 5. DISCUSSION & CONCLUSIONS

A programme of geoarchaeological field investigations and deposit modelling was undertaken at the 54 Furze Platt Road site. A total of five test pits were put down at the site, with a programme of updated deposit modelling building on a previous desk-based deposit modelling exercise (Green & Young, 2019), in order to (1) enhance our understanding of the sub-surface stratigraphy at the site; (2) to evaluate the potential of the sequences to contain evidence for Palaeolithic archaeology or biological remains; and (3) make recommendations for any further geoarchaeological or archaeological investigations at the site.

The results of the new geoarchaeological field investigations concur with those of the existing desk-based deposit models. The surface of the bedrock Chalk is relatively uniform across much of the site, recorded at levels between 45.55 and 46.68m OD, although in one borehole towards the northwest it falls sharply to 32.99m OD. This feature is considered to represent a solution pipe formed in the Chalk, and subsequently infilled by the overlying Gravel. At the Polestar site (see Figure 3; Green & Young, 2012) the surface of the bedrock Chalk was recorded at levels of 44.31m OD and 43.78m OD in the western area of this site, falling to slightly below 40m OD in two geotechnical boreholes in the eastern part of the same site. The results of the investigations at the present site thus confirm that the Chalk surface rises gradually from east to west, and supports the view (Gibbard, 1985; Bridgland, 1994, Harding *et al.*, 1991) that the area mapped here by the British Geological Survey (BGS) as Lynch Hill Gravel is in fact Boyn Hill Gravel.

The surface of the Gravel across the site is recorded at between 45.39 and 52.2m OD, although two distinct levels for the surface of the Gravel are evident: in the southern part of the site, the Gravel is recorded at between ca. 50.0 and 50.5m OD, whilst in the northern area of the site it is lower, but again relatively even, lying at between ca. 46.5 and 47.5m OD. The very clearly expressed difference in level of the gravel surface between the northern and southern halves of the site appears to be entirely due to quarrying in the northern half. The 1897 Ordnance Survey (OS) extract shown in CgMs Heritage (2018) shows a gravel pit extending into the northern part of the site. The 1912 extract shows much of the site occupied by buildings, but there is a bluff shown in the southern half of the site, which evidently relates to the extensive gravel working immediately to the east, and also coincides with the position of the change of level shown in the model of the gravel surface. This bluff in the southern area of the site thus most likely represents the limit of gravel working within the site, reached sometime between 1897 and 1912.

In general, greater thicknesses of Gravel are recorded in the south (4.6 to 4.8m) than in the north (0.4 to 1.4m). In one borehole (RSK-BH1) in the northwestern area of the site 12.4m of Gravel is recorded, infilling a solution feature that has formed (probably during the Quaternary period) in the underlying Chalk. The ground level in the unquarried southern half of the site accords closely with the level recorded by Gibbard (1985) at the Boyn Hill type site, and it is likely that the undisturbed Boyn Hill Gravel is present in the southern part of the site. Although the Boyn Hill Gravel has been a significant source of Palaeolithic artefacts elsewhere in Maidenhead, including very close to the

present site (Wymer, 1968), no lithic artefacts or faunal remains were identified in any of the seven 108 litre samples from the gravel sub-units identified across the five test pits.

## 6. RECOMMENDATIONS

The results of the geoarchaeological investigations are relatively conclusive in that the Gravel at 54 Furze Platt Road represents Boyn Hill, rather than Lynch Hill, Gravel, and to that end support the view of Gibbard (1985), Bridgland (1994) and Harding *et al.*, (1991). In addition, no lithic artefacts or faunal remains were identified in any of the five test pits at the site; on this basis, no further geoarchaeological or archaeological investigations are recommended at the site.



## 7. REFERENCES

Bridgland, D.R. (1994) *Quaternary of the Thames*. Chapman & Hall, London.

CgMs Heritage (2018) Archaeological Desk Based Assessment: 54 Furze Platt Road, Maidenhead. *CgMs Heritage Unpublished Report, April 2018*.

Gibbard, P.L. (1985) *The Pleistocene History of the Middle Thames Valley*. Cambridge University Press, Cambridge.

Geo-Environmental Services Ltd (2017) Ground Appraisal Report for the site known as, Clean Laundry, 54 Furze Platt Road, Maidenhead, SL6 7NL on Behalf of Clean Laundry. *Geo-Environmental Services Limited Unpublished Report, June 2017*.

Green, C.P. & Young, D.S. (2019) 54 Furze Platt Road, Maidenhead, Royal Borough of Windsor and Maidenhead Desk-Based Geoarchaeological Deposit Model Report. *Quaternary Scientific (QUEST) Unpublished Report February 2019; Project Number 072/18*.

Harding, P., Bridgland, D.R., Madgett, P.A. & Rose, J. (1991) Recent investigations of Pleistocene sediments near Maidenhead, Berkshire and their archaeological content. *Proceedings of the Geologists' Association*, **102**, 25-53.

Hare, F.K. (1947) The geomorphology of a part of the Middle Thames. *Proceedings of the Geologists' Association*, **38**, 294-339.

Pettitt, P. & White, M. (2012) *The British Palaeolithic*. Routledge, London.

Roe, D.A. (1981) *The Lower and Middle Palaeolithic Periods in Britain*. Routledge & Kegan Paul, London.

Rhodes, S.J. & Marychurch, I.M. (1998) Chalk solution features at three sites in southeast England: their formation and treatment. *Geological Society, London, Engineering Geology Special Publications*, **15**, 277-289.

RSK (2018) Former Clean Laundry, 54 Furze Platt Road, Maidenhead Geo-environmental Site Investigation Report. *RSK Unpublished Report, March 2018*.

Wymer, J.J. (1968) *Lower Palaeolithic Archaeology in Britain*. John Baker, London.

## 8. OASIS

### OASIS ID: quaterna1-350108

#### Project details

Project name	54 Furze Platt Road, Maidenhead
Short description of the project	<p>A programme of geoarchaeological field investigations and deposit modelling was undertaken at the site, in order to (1) enhance our understanding of the sub-surface stratigraphy at the site; (2) to evaluate the potential of the sequences to contain evidence for Palaeolithic archaeology or biological remains; and (3) make recommendations for any further geoarchaeological or archaeological investigations at the site. The results of the deposit modelling have revealed a sequence of Chalk bedrock, overlain by middle Pleistocene Gravel (likely to equate to the Boyn Hill Gravel of Gibbard (1985)), and modern Made Ground. A very clearly expressed difference in level of the gravel surface between the northern (ca. 46.5 to 47.5m OD) and southern (ca. 50.0 and 50.5m OD) halves of the site appears to be entirely due to quarrying in the northern half. For this reason, greater thicknesses of gravel are recorded in the south (4.6 to 4.8m) than in the north (0.4 to 1.4m). The ground level in the unquarried southern half of the site accords closely with the level recorded by Gibbard (1985) at the Boyn Hill type site, and it is likely to be this Gravel unit that is recorded across the present site. Although the Boyn Hill Gravel has been a significant source of Palaeolithic artefacts elsewhere in Maidenhead, including very close to the present site (Wymer, 1968), no lithic artefacts or faunal remains were identified in any of the gravel sub-units identified across the five test pits. The results of the geoarchaeological investigations are relatively conclusive in that the Gravel at 54 Furze Platt Road represents Boyn Hill, rather than Lynch Hill, Gravel, and to that end support the view of Gibbard (1985), Bridgland (1994) and Harding et al., (1991). In addition, no lithic artefacts or faunal remains were identified in any of the five test pits at the site; on this basis, no further geoarchaeological or archaeological investigations are recommended at the site.</p>
Project dates	Start: 01-01-2019 End: 30-04-2019
Previous/future work	No / No
Type of project	Environmental assessment
Survey techniques	Landscape

### Project location

Country England  
Site location BERKSHIRE WINDSOR AND MAIDENHEAD MAIDENHEAD 54 Furze Platt Road  
Postcode SL6 7NL  
Site coordinates SU 8780 8250 51.534086931703 -0.734013032697 51 32 02 N 000 44 02 W Point

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### Project creators

Name of Quaternary Scientific (QUEST)  
Organisation

Project brief CgMs Consulting  
originator

Project design Dr C.P. Green  
originator

Project D.S. Young  
director/manager

Project supervisor D.S. Young

Type of Developer  
sponsor/funding  
body

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### Project archives

Physical Archive No  
Exists?

Digital Archive No  
Exists?

Paper Archive Berkshire HER  
recipient

Paper Contents "Stratigraphic"

Paper Media "Report"  
available

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Entered by Daniel Young (d.s.young@reading.ac.uk)

Entered on 29 April 2019