Geoarchaeological Survey Report

RIVER OF LIFE II OXFORDSHIRE

For DigVentures

By Matt Law PhD ACIfA

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Geoarchaeological Survey Report

RIVER OF LIFE II OXFORDSHIRE

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Abstract

A geoarchaeological survey was carried out on three sites adjacent to the River Thames near Dorchester-on-Thames, Oxfordshire as part of the River of Life II project. This report presents interim results of the field survey.

The survey revealed that the modern topsoil is underlain by Holocene overbank alluvium at all sites, which in turn overlies gravelly sands of the Northmoor (Floodplain) Terrace of the River Thames. At the eastern side of Clifton Meadow, a peat deposit is stratified within the Holocene alluvium.

1. Introduction

1.1. This report has been prepared by Matt Law of L - P : Archaeology on behalf of DigVentures Ltd.

1.2. The fieldwork was carried out by Matt Law of L – P : Archaeology between 3-5th June 2019.

1.3. The three sites are Clifton Meadow, Church Farm, and Overy Mead, adjacent to the River Thames near Dorchester-on-Thames (FIGURE 1). The scheme is centred on NGR 456769, 194288.

2. Site Background

2.1. TOPOGRAPHY

2.1.1. Clifton Meadow and Church Farm are located on the south side of the River Thames on the Dorchester-on-Thames meander. Overy Mead is to the east of Dorchester on the north side of the river.

2.1.2. The study area is flat at around 45-47m above Ordnance Datum.

2.2. SITE CONDITIONS

2.2.1. The sites are presently under pasture.

3. Aims

3.1. The general aims of the geoarchaeological survey were to:

- establish the broad presence/absence, nature, character, distribution, extent and depth of deposits across the site and, where necessary, to correlate these as a deposit model.
- develop a preliminary assessment of the potential for archaeological preservation at the site.

3.2. The objectives of the survey were to:

- ascertain the extent, depth below ground, surface, character, and archaeological potential of Holocene and Pleistocene deposits encountered.
- establish the likely impact on any surviving deposits of the proposed development.
- determine the presence and potential of artefact evidence in the sediments encountered.
- determine the presence and potential of palaeoenvironmental evidence in the sediments encountered.
- establish correlations of any Pleistocene deposits found with reference to adjacent and regional sequences and to national frameworks.
- assess in local, regional and national terms, the archaeological and geological significance of any Pleistocene deposits encountered, and their potential to fulfil current research objectives.

4. Methodology

4.1. FIELDWORK

4.1.1. Four window samples (denoted WS01 - WS04) were extracted at each site (FIGURE 2), down to a maximum depth of 2 metres using a petrol driven JCB percussion hammer. Hand-dug pits were excavated to 1.2m depth below ground level in each case, in case of buried services.

4.1.2. The resulting cores were subject to detailed geoarchaeological recording on site. Four subsamples were taken off site for laboratory processing.

4.2. DEPOSIT MODELLING

4.2.1. Window sample and test pit data from the current survey was used in the deposit model construction, as well as archive data held by the British Geological Survey (BRITISH GEOLOGICAL SURVEY 2019). There are many borehole records in the study area, however the majority of these were discounted from inclusion because they do not report elevation above Ordnance Datum,

4.2.2. Records were visually examined and spatial data (Eastings, Northings and height above Ordnance Datum) extracted, corresponding to three key sedimentary facies. These were the modern ground surface, the surface of the alluvium and the surface of the Northmoor terrace gravel.

4.2.3. Extracted data were tabulated in a csv file and imported into a GIS (Geographic Information Systems) program (QGIS 2.18.10 Las Palmas) using the OSGB 1936 co-ordinate reference system.

4.2.4. At its simplest, deposit modelling is way of extending the coverage of a series of points with known *z* (elevation) values to the spaces in between the points in order to predict the elevation of deposit across a study area. This is done through a number of different statistical methods, outlined in Wheatley & Gillings (2002: 163–178) and Lloyd & Atkinson (2004).

4.2.5. A number of caveats should be noted when interpreting deposit models. The modelled surfaces that it produces are computed predictions and require ground truthing. They are derived from the relationship between known values, and so should not be expected to predict the presence of discrete features such as palaeochannels, bedrock outcrops or periglacial landforms nor archaeological features. Greater accuracy is found in areas for which there is more data available: coverage in the present study area is uneven. Deposit models are known to suffer from 'edge effects' which may impact accuracy around the edges of the modelled area. These occur because the interpolations at the edges of a study rely only on data points within the study area, whereas optimum interpolation would also implicate data points outside of the study area. To mitigate this risk, some data points outside of the study area have been included.

4.2.6. It should also be noted that the archive borehole data were collected by a number of different workers, working in a variety of conditions, and using different technologies to measure the position of boreholes and the depths of deposits within them. At times, data extraction for the models has required interpretative judgement by the modeller. Deposit models should thus only ever be seen as a guide to the potential of the buried resource.

4.2.7. The deposit models were created using a method of interpolation which uses weighted averages, Inverse Distance Weighting (IDW). This means that the influence of one point relative to another declines with increasing distance.

4.3. LABORATORY PROCEDURES

4.3.1. In order to assess the presence of biological remains or lithic debitage, four sub-samples of up to 100g weight from Clifton Meadow were washed through a 65µm mesh sieve. The sub-samples were taken from sediments in which shells had been seen during geoarchaeological recording. The resulting residue was then air dried and passed through a nest of sieves (2mm, 1mm, 500µm, 250µm, 125µm) before each fraction was scanned under a low power binocular microscope (x10 – x40 magnification).

4.3.2. Mollusca and plant macrofossils were identified with comparison to a reference collection. Ecological information for Mollusca are derived from Evans (1972), Macan (1977), Kerney and Cameron (1979), Davies (2008), and Killeen et al. (2004).

5. Results

5.1. Lithostratigraphic descriptions of deposits encountered in the test pits and window samples are given in APPENDIX 1.

5.2. THE STRATIGRAPHIC SEQUENCE

5.2.1. The earliest deposits encountered were a series of fluvial gravels and sand deposits, whose surface is at 0.66m below ground level at the north and south of Overy Mead (WS01 and WS03; PLATE 1), with a marked dip in WS04, where it is 1.1m below ground level. Its surface varies between 1.6 metres below ground level in WS01 and greater than 2m below ground level in WS03 at Clifton Meadow. It was reached at 0.9m below ground level in WS04 at the south of Church Farm, and dips to 1.8m below ground level in WS01.

5.2.2. These deposits are predominantly matrix-supported with coarse sand and a minor clay component. The predominant lithology is Middle Jurassic limestone, with a lesser quantity of flint. WS03 at Overy Mead contains large nodular flint cobbles, which may be indicative of bedload transport in more energetic flow. The lower level of the surface here may be indicative of a palaeochannel which remained into the Holocene. The deposits are assigned to the Northmoor (formerly Floodplain) river terrace. This is the most recent terrace of the Upper Thames. Initial aggradation of river terrace deposits takes place during the warming phase of a cold stage, when sand and gravel are laid down on a new river bed, however the majority of the gravel is laid down during a cooling phase entering a cold stage when the gravel bedload of a river increases due to the loss of vegetation meaning more sediment is available for erosion and subsequent transport. The Northmoor terrace is dated to the period between the end of the Ipswichian interglacial (Marine Isotope Stage (MIS) 5e) and the end of the Late Devensian glaciation (MIS 2).

5.2.3. The sand and gravel deposits are overlain by Holocene overbank alluvium at all sites. These are fine grained sandy-silty clays, which are usually stone free. They generally show greyish blue and reddish yellow mottles as a result of redoxymorphication processes due to a seasonally variable water table. Gleying is exhibited deeper in the profile, generally around 1m below ground level, but as high as 0.4m below ground level in WS04 at Clifton Meadow. At Church Farm and Clifton Meadow, the alluvium was rich in freshwater and terrestrial snail shells.

5.2.4. At Clifton Meadow, in WS03 below 1.5 metres, there is a semi-fibrous peaty clay which extends below the bottom of the borehole (PLATE 2). A peat in WS04 at the same site directly overlies the Northmoor sandy gravel between 0.7 and 1.8 metres below ground level. There is a thin peat deposit between 1.1 and 1.2 metres below ground level at Church Farm in WS01 (PLATE 3). The peat deposits are likely to form where former river channels become cut off from the main channel and choked with vegetation, perhaps as the river adjusted to a single channel from its Pleistocene braided form early in the Holocene.

5.2.5. The overbank alluvium is overlain at all sites by a modern topsoil, which is a sandy to silty clay loam, with occasional limestone pebbles derived from the underlying gravel.

5.3. CONDITIONS OF PRESERVATION

5.3.1. The sedimentary sequence at Overy Mead was dry, with occasional blue grey mottles suggesting waterlogging at some times in the past. Organic remains are unlikely to be preserved here, although the sediment is calcareous and so shells and bones may be preserved.

5.3.2. At Clifton Meadow, there was wet sediment in all boreholes, with water encountered at 0.77m below ground level in WS01. The overbank alluvium preserves mollusc shell and fine organics, while organic preservation is reasonably good within the peaty clays, with woodier plant fragments clearly recognisable.

5.3.3. At Church Farm, there was wet sediment in all boreholes, with some organic preservation.

5.4. THE SAMPLES

5.4.1. Absolute counts of biological remains from the samples are presented in TABLE 1.

5.4.2. A sample of the gravel from Clifton Meadow WS01 contained a rich assemblage of mollusc shells. These are predominantly freshwater taxa, with some species that are associated with flowing water (*Theodoxus fluviatilis*, *Ancylus fluviatilis*). The considerably higher number of *Bithynia tentaculata* opercula than shells is likely to be a result of water transport. As a whole, the assemblage is suggestive of a vegetated river environment.

5.4.3. A sample of the peat in WS03 contained a number of *Chara* sp. (stonewort) oospores. This is a submerged plant found in a range of freshwater habitats. There are a small number of poorly preserved snail shells, from a mixture of terrestrial (*Trochulus*, *Pupilla*) and freshwater (*Gyraulus*) species.

5.4.4. Two samples of the alluvium contain a mixture of terrestrial snails indicative of damp pasture conditions (*Pupilla*, *Trochulus*, *Succinea*) and species indicative of temporary standing water (*Galba*, *Anisus*), suggesting overbank flooding.

Location	WS01 (Backwater 1)	WS01 (Backwater 1)	WS02 (Pond 6)	WS03 (Backwater 3)
Sample depth	0.78m BGL	1.80m BGL	0.75m BGL	1.90m BGL
Facies	Alluvium	Gravel	Alluvium	Peat
Sample mass (g)	100	50	100	100
Mesh size (µm)	63	63	63	63
PLANT MACROFOSSILS				
Chara sp. oospore		1		25
Persicaria lapathifolia (L.) Delarbre 1800 seed		3		
MOLLUSCA				
Theodoxus fluviatilis (Linnaeus, 1758)		2		
Bithynia tentaculata (Linnaeus, 1758)				
Operculum	1	18		5
Shell	1	1		1
Valvata macrostoma Mörch, 1864		1		
Galba truncatula (O. F. Müller, 1774)	1		19	
Ancylus fluviatilis O. F. Müller, 1774		1		
Anisus leucostoma (Millet, 1813)			6	
Gyraulus crista (Linnaeus, 1758)		2		
Gyraulus laevis (Alder, 1838)				1
Pisidium casertanum f. ponderosa Stelfox, 1918				
Left valve		1		
Right valve		1		
Pisidium hibernicum Westerlund, 1894				
Right valve		3		
Vallonia cf. excentrica Sterki, 1893	1			
Pupilla muscorum (Linnaeus, 1758)			1	1
Succinea putris Linnaeus, 1758	1		3	
Trochulus hispidus (Linnaeus, 1758)	2		2	1
ANNELIDA				
Earthworm granule	1			

Table 1 – Biological remains from sub-samples at Clifton Meadow

6. Deposit Model

6.1. The deposit models are shown in FIGURES 3, 4, 5 and 6. Sample locations utilised in the construction of the models are given in TABLE 2.

Name	Eastings	Northings
SURVEY DATA		
Overy Mead WS01	457969.77	193626.61
Overy Mead WS02	458034.03	193781.13
Overy Mead WS03	458007.36	193813.58
Overy Mead WS04	458001.77	193861.86
Church Farm WS01	456880.40	194587.50
Church Farm WS02	456893.58	194435.65
Church Farm WS03	456832.87	194365.82
Church Farm WS04	456800.60	194121.51
Clifton Meadow WS01	455382.38	195781.29
Clifton Meadow WS02	455750.82	195771.88
Clifton Meadow WS03	455968.61	195742.49
Clifton Meadow WS04	456302.04	195604.80
BGS BOREHOLE DATA		
SU59SE8	458340	194020
SU59SE3	455980	193840
SU59SE4	456780	194080
SU59SE252	456430	193160
SU59SE9	458610	192870
SU59SE63	458925	193367
SU59SE62	458816	193647
SU59SE61	458780	193816

Table 2 – Data points used in deposit modelling

6.2. The deposit models show that the current surface of the sites is relatively flat, dipping slightly towards the modern course of the River Thames (FIGURE 3). The surface of the alluvium rises slightly to the north (FIGURE 4), while the surface of the Northmoor Terrace dips towards the Church Farm site (FIGURE 5).

6.3. The alluvium (which includes the peat deposits) has a thickness of between 0.4 and 1.2 metres across the sites, being deepest at the north of Church Farm and in the centre and east of Clifton Meadow. It is shallowest in Overy Mead,where there is less potential for organic preservation.

7. Summary and Conclusions

7.1. A geoarchaeological survey was carried out at three sites along the course of the River Thames near Dorchester-on-Thames

7.2. The sedimentary sequence consists of Northmoor terrace sandy gravels dated to the Late Devensian period overlain by Holocene overbank alluvium and a loamy modern topsoil. Preservation of biological remains is good within the alluvium, and shells are well-preserved within the gravel. At Clifton Meadow, there is a peat deposit which is at least 1 metre thick. A narrower peat deposit is present at the north of Church Farm.

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PLATES

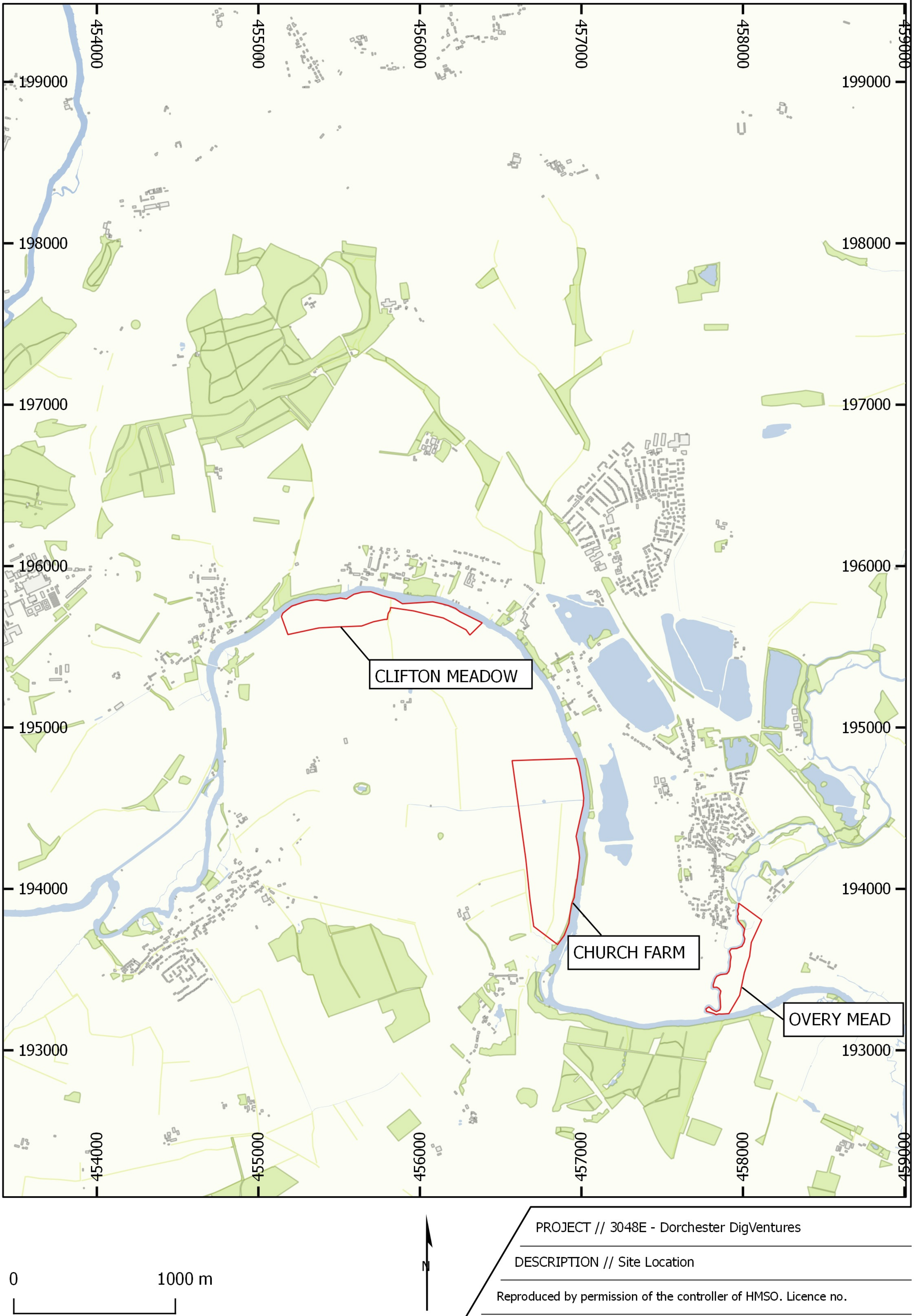

Plate 1 - Overy Mead, WS01, 1-2m bgl

Plate 2 - Clifton Meadow WS03, 1-2m bgl

Plate 3 - Church Farm WS01, 1-2m bgl

FIGURES

FIGURE 1// Site Location



PROJECT // 3048E - Dorchester DigVentures

DESCRIPTION // Site Location

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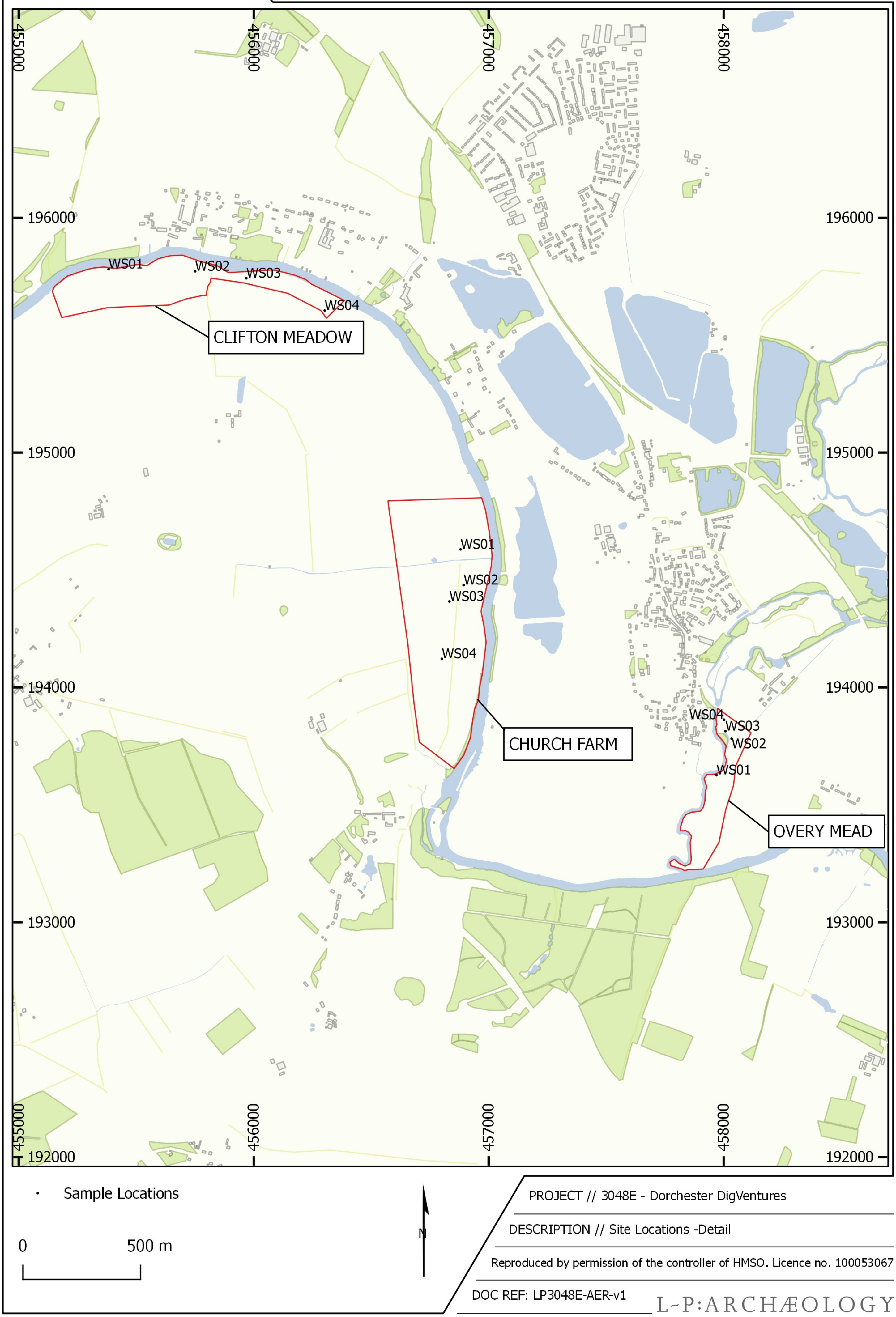
FIGURE 2// Site Location - Detail



PROJECT // 3048E - Dorchester DigVentures

DESCRIPTION // Site Locations -Detail

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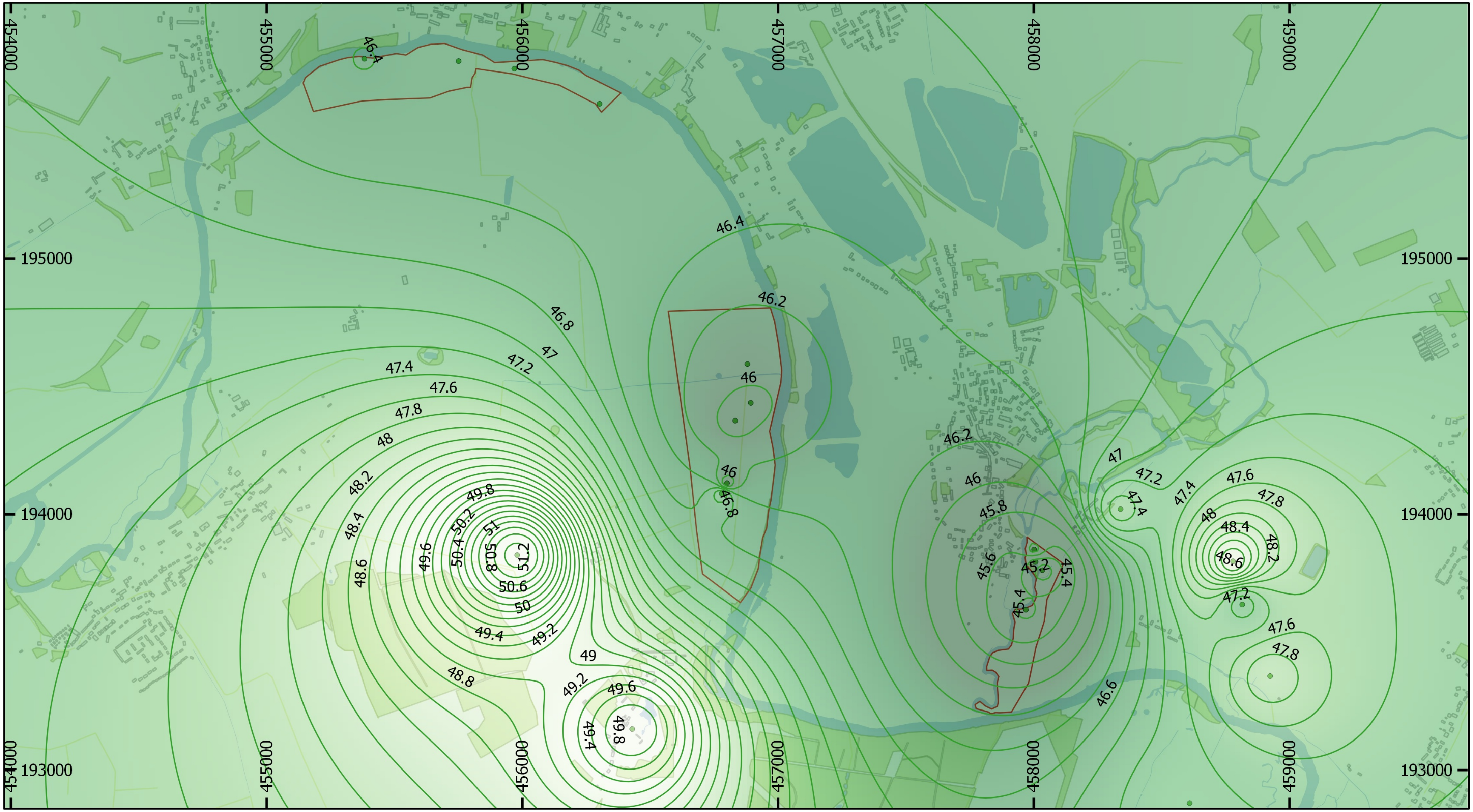
FIGURE 3// Ground Level



Interpolated Level of Ground Surface (m OD)

Data point

0 500 m

N

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DESCRIPTION // Deposit Model - Ground Level

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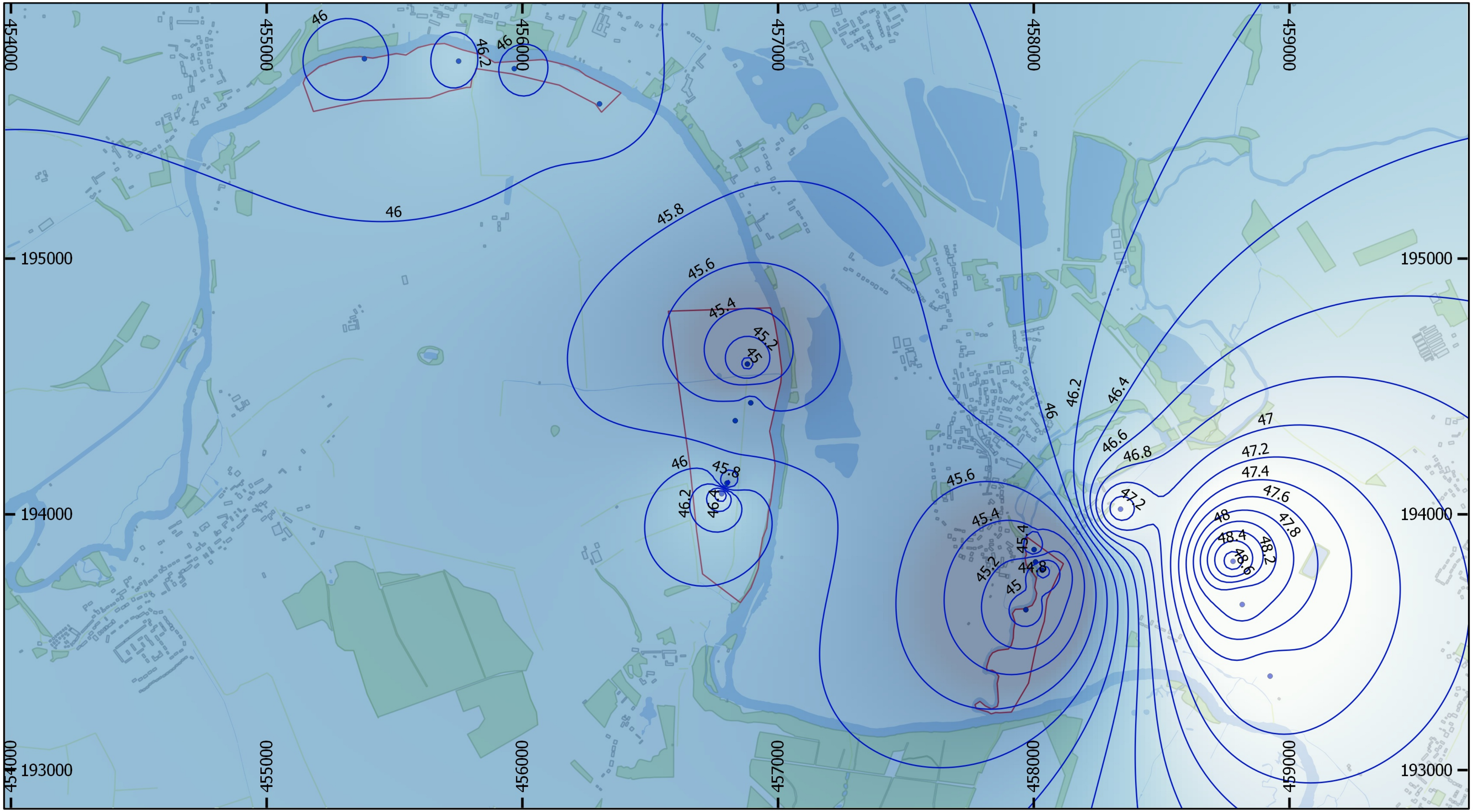
FIGURE 4 // Alluvium



Interpolated level of alluvium (m OD)

Data point

0 500 m

N

PROJECT // 3048E - Dorchester DigVentures

DESCRIPTION // Deposit Model - Surface of Alluvium

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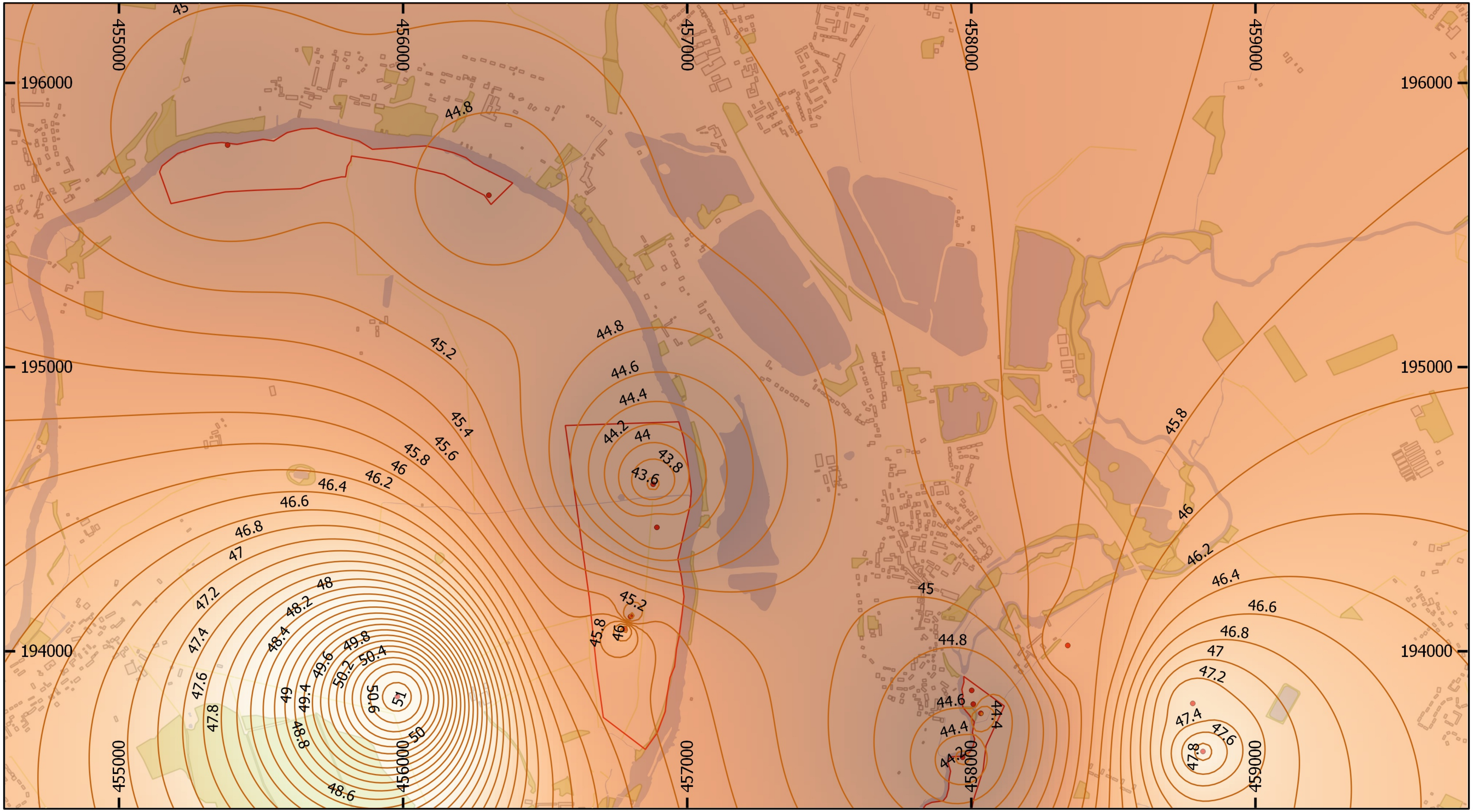
FIGURE 5// Northmoor Terrace



Interpolated level of Northmoor Terrace (m OD)

Data point

0 500 m

N

PROJECT // 3048E - Dorchester DigVentures

DESCRIPTION // Deposit Model - Surface of Northmoor Terrace

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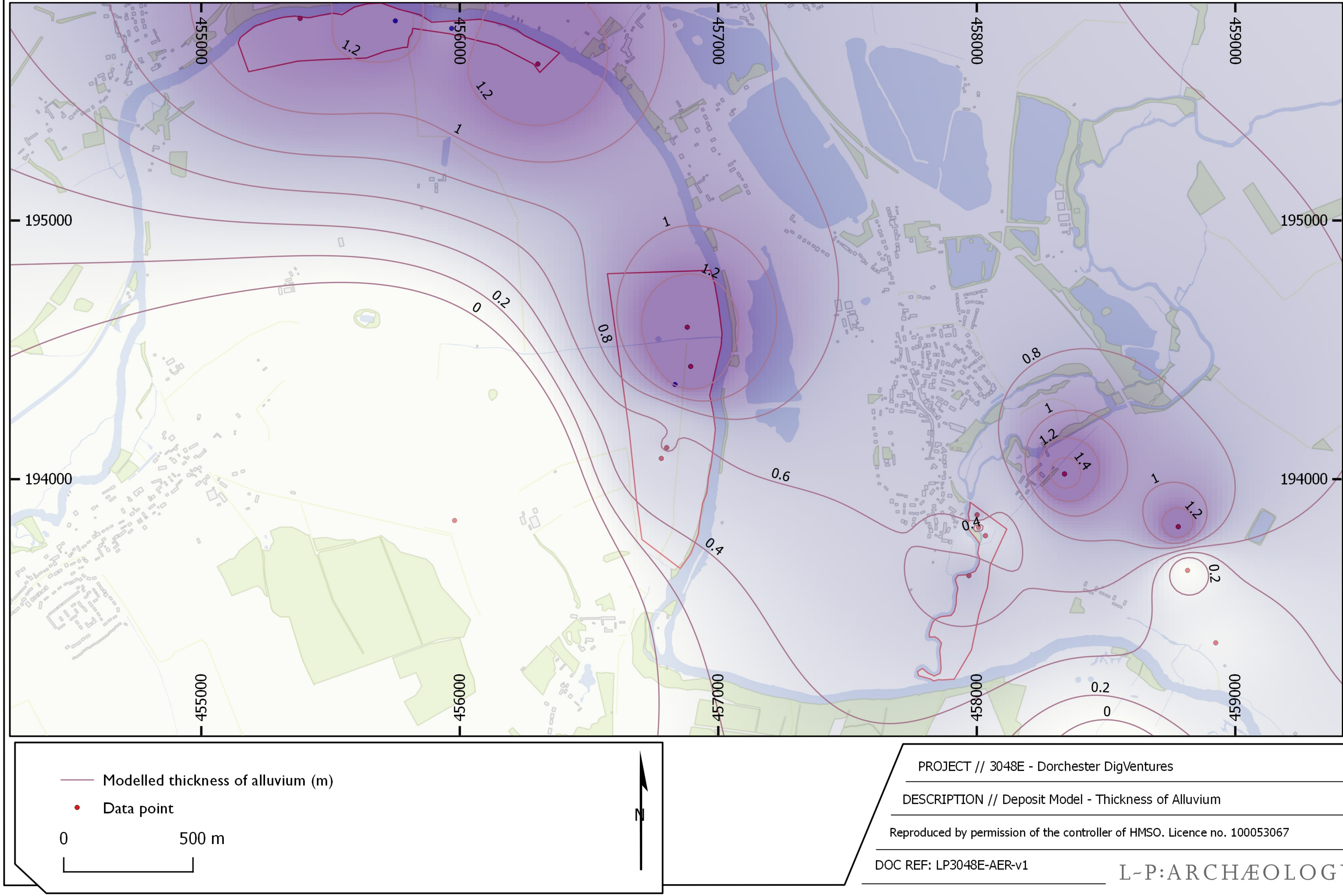
FIGURE 6 // Thickness of Alluvium



PROJECT // 3048E - Dorchester DigVentures

DESCRIPTION // Deposit Model - Thickness of Alluvium

DOC REF: LP3048E-AER-v1

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SEDIMENT DESCRIPTIONS

APPENDIX 1

OVERY MEAD WS01

Depth (m BGL)	Level (m OD)	Description	Interpretation
0	45.37	Uniform dark greyish brown humified organo-mineral silty clay loam. Stone free. Common fine-medium roots. Diffuse boundary onto	Topsoil
0.46	44.91	Uniform mid yellowish-brown sandy clay. Stone free. Rare fine-medium roots. Mid reddish-brown mottles below 0.80m. Abrupt boundary onto.	Alluvium
0.96	44.41	Mid yellowish-brown sandy clay with mid bluish grey mottles. Coarse sand. Common small angular-rounded limestone and flint pebbles, poorly sorted. Matrix supported. No inclusions. Diffuse boundary onto	Alluvium/ gravel interface
1.2	44.17	Uniform mid brownish-grey gravelly sand. Coarse sand. Common sub-angular to sub-rounded limestone and flint pebbles. Poorly sorted. Matrix-supported. No inclusions. Clear boundary onto	River Terrace Gravels
1.8	43.57	Uniform mid brownish yellow gravelly sand. Coarse sand. Common sub-angular to sub-rounded limestone and flint pebbles, poorly sorted. Matrix-supported. Fragments of large bivalve shell at 1.90m.	River Terrace Gravels
2	43.37	Bottom of sample	

OVERY MEAD WS02

Depth (m BGL)	Level (m OD)	Description	Interpretation
0	45.03	Uniform dark greyish brown humified organo-mineral silty clay loam. Rare flint pebbles, sub-rounded, poorly sorted. Common medium to fine roots. Gradual boundary onto	Topsoil
0.36	44.67	Uniform dark yellowish brown sandy clay. Coarse sand. Stone free. No inclusions. Rare fine roots. Gradual boundary onto	Alluvium
0.85	44.18	Uniform light bluish-grey sandy clay and gravel. Coarse sand. Common liestone and flint pebbles, poorly sorted. Sub-angular - sub-rounded. Matrix supported. Becoming mid reddish yellow below 1.10m	River Terrace Gravels
1.8	43.23	Uniform mid reddish yellow gravelly sand. Coarse sand. Common limestone and flint pebbles, poorly sorted. Sub-angular - sub-rounded. Matrix supported.	River Terrace Gravels
2	43.03	Bottom of sample	

OVERY MEAD WS03

Depth (m BGL)	Level (m OD)	Description	Interpretation
0	45.34	Uniform dark greyish brown humified organo-mineral silty clay loam. Stone free. Common medium-fine roots. Abrupt boundary onto	Topsoil
0.33	45.01	Uniform mid yellowish brown sandy clay. Slightly stony. Limestone and flint pebbles, sub angular to sub rounded, poorly sorted. Clay pipe stem. Common fine roots. Abrupt boundary onto	Alluvium
0.66	44.68	Uniform mid brownish yellow gravelly sand. Coarse sand. Moderately stony. Limestone and flint pebbles and flint cobbles. Matrix supported. Clear boundary onto	River Terrace Deposits
1.2	44.14	Uniform mid bluish grey gravelly sand. Coarse sand. Moderately stony. Limestone and flint pebbles and flint cobbles, sub-angular to rounded. Poorly sorted, matrix supported.	River Terrace Deposits
1.4	43.94	Bottom of sample	

OVERY MEAD WS04

Depth (m BGL)	Level (m OD)	Description	Interpretation
0	45.88	Uniform dark greyish brown humified organo-mineral silty clay loam. Slightly stony: flint pebbles, sub-rounded, poorly sorted. Common fine-medium roots.Clear boundary onto	Topsoil
0.3	45.58	Uniform mid greyish-brown sandy clay. Coarse sand. Stone free. Fragment of large bivave shell. Rare fine roots. Clear boundary onto	Alluvium
0.7	45.18	Mid reddish yellow sandy clay with light bluish grey mottles. Coarse sand. Slightly stony. Limestone and flint pebbles, sub-angular to sub-rounded. Poorly sorted. Gradual boundary onto	Alluvium
1	44.88	Uniform mid bluish grey sandy clay. Coarse sand. Slightly stony. Limestone and flint pebbles, sub-rounded to rounded. Poorly sorted. Some shell. Common fine roots. Abrupt boundary onto	Alluvium
1.1	44.78	Uniform dark bluish grey clayey sand. Coarse sand. Moderately stony: Limestone and flint pebbles, poorly sorted, sub-angular to rounded.	River Terrace Deposits
1.4	44.48	Bottom of Sample	

CLIFTON MEADOW WS01

Depth (m BGL)	Level (m OD)	Description	Interpretation
0	46.40	Uniform dark greyish brown humified organo-mineral loamy clay. Stone free. Common medium-fine roots. Clear boundary onto	Topsoil
0.43	45.97	Uniform dark bluish grey humified organo-mineral clay. Stone free. Waterlogged below 0.70. Becoming sandier below 1.45m. Clear boundary onto	Alluvium
1.6	44.8	Uniform mid reddish yellow gravelly sand. Coarse sand. Moderately stony. Limestone and flint pebbles, sub-angular to rounded. Poorly sorted. Matrix supported. Abrupt boundary onto	River Terrace Deposits
1.8	44.6	Dark greyish yellow gravelly sand. Coarse sand. Extremely stony. Limestone and flint pebbles, sub-angular to rounded, poorly sorted. Clast supported.	River Terrace Deposits
2	44.4	Bottom of sample	

CLIFTON MEADOW WS02

Depth (m BGL)	Level (m OD)	Description	Interpretation
0	46.68	Uniform dark reddish brown silty clay loam. Stone free. Common medium-fine roots. Gradual boundary onto	Topsoil
0.4	46.28	Light greyish-brown clay with light bluish grey mottles. Stone free, few snail shells, common fine roots. Becoming more blue below 0.80m	Alluvium
0.8	45.88	Bottom of pit	

CLIFTON MEADOW WS03

Depth (m BGL)	Level (m OD)	Description	Interpretation
0	46.46	Uniform dark greyish brown silty clay loam. Stone free. Common fine-medium roots. Clear boundary onto	Topsoil
0.5	45.96	Light brownish yellow clay with frequent light bluish grey mottles. Stone free. Common fine roots. Gradual boundary onto	Alluvium
0.9	45.56	Uniform mid bluish grey clay. Stone free. Rare fine roots. Clear boundary onto	Alluvium
1.5	44.96	Uniform dark reddish brown semi-fibrous peaty clay.	Peat
2	44.46	Bottom of sample	

CLIFTON MEADOW WS04

Depth (m BGL)	Level (m OD)	Description	Interpretation
0	46.44	Uniform dark reddish brown silty clay loam. Stone free. Common fine-medium roots. Abrupt boundary onto	Topsoil
0.4	46.04	Uniform mid bluish grey clay. Stone free. Rare fine roots. Clear boundary onto	Alluvium
0.7	45.74	Uniform dark reddish brown semi-fibrous peaty clay. Gradual boundary onto	Peat
1.8	44.64	Uniform dark yellowish brown sandy clay. Coarse sand. Organo-mineral (humified organics) Moderately stony. Limestone, flint and chalk pebbles, sub-angular to sub-rounded. Poorly sorted.	Illuviated organics in river terrace gravels

CHURCH FARM WS01

Depth (m BGL)	Level (m OD)	Description	Interpretation
0	45.37	Uniform dark greyish brown humified organo-mineral silty clay loam. Stone free. Common fine to medium roots. Gradual boundary onto	Topsoil
0.4	44.97	Light greyish brown clay with light bluish grey mottles. Stone free. Common shells. Common fine roots. Becoming uniform mid bluish-grey below 1.00m. Clear boundary onto	Alluvium
1.1	44.27	Uniform dark reddish brown semi-fibrous peaty clay. Gradual boundary onto	Peat
1.2	44.17	Light bluish grey humified organo-mineral clay. Stone free. Common fine roots. Diffuse boundary onto	Alluvium
1.8	43.57	Uniform mid reddish yellow sandy gravel. Extremely stony. Limestone and flint pebbles, sub-angular to sub-rounded. Poorly sorted.	River Terrace Gravels
2	43.37	Bottom of sample	

CHURCH FARM WS02

Depth (m BGL)	Level (m OD)	Description	Interpretation
0	45.92	Uniform dark reddish brown silty clay loam. Organo-mineral (humified organics). Stone free. Common medium-fine roots. Gradual transition onto	Topsoil
0.3	45.62	Mid yellowish brown clay with mid bluish grey mottles. Stone free. Common fine roots. Becomes mid bluish grey after 0.5m	Alluvium
1.65	44.27	Uniform mid reddish yellow sandy gravel. Extremely stony. Limestone and flint pebbles, sub-angular to sub-rounded. Poorly sorted.	River Terrace Gravels
2.00	43.92	Bottom of sample	

CHURCH FARM WS03

Depth (m BGL)	Level (m OD)	Description	Interpretation
0	45.92	Uniform dark reddish brown silty clay. Organo-mineral (humified organics). Stone free. Common medium-fine roots. Clear boundary onto	Topsoil
0.25	45.67	Light yellowish brown clay with light greyish blue mottles and black humified organic lenses	Alluvium
1	44.94	End of sample	

CHURCH FARM WS04

Depth (m BGL)	Level (m OD)	Description	Interpretation
0	45.82	Uniform dark reddish brown silty clay. Organo-mineral (humified organics). Stone free. Common medium-fine roots. Clear boundary onto	Topsoil
0.28	45.54	Light yellowish brown clay with light greyish blue mottles and black humified organic lenses. Abrupt boundary onto	Alluvium
0.9	44.92	Uniform mid reddish yellow sandy clay with gravel. Extremely stony. Sub-angular to sub-rounded limestone and flint. Poorly sorted. Matrix supported.	River terrace gravels
1.2	44.62	End of sample	