

9.2 Radon

9.2.1 Radon Affected Areas

Is the property in a Radon Affected Area as defined by the Health Protection Agency (HPA) and if so what percentage of homes are above the Action Level? The site is not in a Radon Affected Area, as less than 1% of properties are above the Action Level.

The radon data in this report is supplied by the BGS/Public Health England and is the definitive map of Radon Affected Areas in Great Britain and Northern Ireland. The dataset was created using long-term radon measurements in over 479,000 homes across Great Britain and 23,000 homes across Northern Ireland, combined with geological data. The dataset is considered accurate to 50m to allow for the margin of error in geological lines, and the findings of this report supercede any answer given in the less accurate Indicative Atlas of Radon in Great Britain, which simplifies the data to give the highest risk within any given 1km grid square. As such, the radon atlas is considered indicative, whereas the data given in this report is considered definitive.

9.2.2 Radon Protection

Is the property in an area where Radon Protection are required for new properties or extensions to existing ones as described in publication BR211 by the Building Research Establishment? No radon protective measures are necessary.

10. Mining

10.1 Coal Mining

Coal mining areas within 75m of the study site

None identified

Database searched and no data found.

10.2 Non-Coal Mining

Non-Coal Mining areas within 50m of the study site boundary

Identified

The following non-coal mining information is provided by the BGS:

Distance (m)	Direction	Name	Commodity	Assessment of likelihood
0.0	On Site	Not available	Chalk	Sporadic underground mining of restricted extent may have occurred. Potential for difficult ground conditions are unlikely and localised and are at a level where they need not be considered

Past underground mine workings are uncommon, localised and of limited area. The rock types present in this area are such that minor mineral veins may be present within them on which it is possible that there have been attempts to work these by underground methods and/or it is possible that small scale underground extraction of other materials may have occurred. All such occurrences are likely to be restricted in size and infrequent. It should be noted, however, that there is always the possibility of the existence of other sub-surface excavations, such as wells, cess pits, follies, air raid shelters/bunkers and other military structures etc. that could affect surface ground stability but which are outside the scope of this dataset. However, if in a coalfield area you should still consider a Coal Authority mining search for the area of interest.

10.3 Brine Affected Areas

Brine affected areas within 75m of the study site

None identified

Guidance: No Guidance Required.

Contact Details

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British Geological Survey Enquiries

Kingsley Dunham Centre
Keyworth, Nottingham NG12 5GG
Tel: 0115 936 3143.
Fax: 0115 936 3276.
Email:

Web: www.bgs.ac.uk

BGS Geological Hazards Reports and general geological enquiries:

enquiries@bgs.ac.uk



**British
Geological Survey**

NATURAL ENVIRONMENT RESEARCH COUNCIL

Environment Agency

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**Environment
Agency**

Public Health England

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**Public Health
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The Coal Authority

200 Lichfield Lane
Mansfield
Notts NG18 4RG
Tel: 0345 7626 848
DX 716176 Mansfield 5
www.coal.gov.uk



**The Coal
Authority**

Ordnance Survey

Adanac Drive, Southampton
SO16 0AS
Tel: 08456 050505



Local Authority

Authority: Reading Borough Council
Phone: 0118 937 3787

Web: <http://beta.reading.gov.uk/>

Address: Civic Offices, Bridge Street, Reading, RG1 2LU

Gemapping PLC

Virginia Villas, High Street, Hartley Witney,
Hampshire RG27 8NW
Tel: 01252 845444



Acknowledgements: Site of Special Scientific Interest, National Nature Reserve, Ramsar Site, Special Protection Area, Special Area of Conservation data is provided by, and used with the permission of, Natural England/Natural Resources Wales who retain the Copyright and Intellectual Property Rights for the data.

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<https://www.groundsure.com/terms-and-conditions-feb11-2019>

Melissa Southworth

From: Enquiries Groundsure <Enquiries.Groundsure@jpb.co.uk>
Sent: 20 January 2020 09:52
To: Melissa Southworth
Subject: RE: Groundsure report information

Melissa,

I have checked through our archives and we do not have any plans directly related to your site.

The closest records we have to your site are related to the Woodley Aerodrome and the area surrounding Woodley in Reading.

Kind regards,

**JOHNSON
POOLE &
BLOOMER**

CONSULTANTS
GEO-ENVIRONMENTAL & MINERALS
CELEBRATING 175 YEARS 1844 - 2019



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From: Melissa Southworth [mailto:melissa.southworth@appliedgeology.co.uk]
Sent: 08 January 2020 16:49
To: Enquiries Groundsure <Enquiries.Groundsure@jpb.co.uk>; Simon Greenway <Simon.Greenway@jpb.co.uk>
Subject: Groundsure report information

Good afternoon,

I have received notice via a Ground Sure report that states that there are JBG Mining Areas within 1km of our site. I have attached a relevant plan of our site.

I was wondering if you might be able to check your records to clarify/provide further details of this?

Kind regards

Melissa Southworth BSc, MSc, FGS
Project Geologist

APPLIED GEOLOGY

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First Floor, Lowton Business Park, Newton Road, Lowton St. Mary's, **Warrington**, WA3 2AN. tel: 01925 738599

Mob: 07799773193
email: melissa.southworth@appliedgeology.co.uk
web: www.appliedgeology.co.uk

Company Registration No. 6882453. Unit 23, Abbey Park, Stareton, Kenilworth, Warwickshire CV8 2LY

Your ref: SIG29

Our ref: 44836/CBH/CNE/HG

28th September 2018

Clark Smith Partnership,
Whitechapel Technology Centre,
65 Whitechapel Road,
London,
E1 1DU



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F: +44 (0)118 959 7498
E: reading@peterbrett.com

Attn: Hiten Gorsia

Dear Mr Gorsia,

RE: PBA NATURAL AND MINING CAVITIES DATABASES SEARCH AND CAVITIES OCCURRENCE ASSESSMENT FOR THE SITE AT 199-203 HENLEY ROAD, CAVERSHAM, READING, RG4 6LJ.

We refer to your emails dated 13th September 2018, regarding the above. We thank you for your instructions to carry out a natural and mining cavities databases search together with a cavities occurrence assessment for the above-named site.

The cavities database search and assessment have been carried out for the site centred at the National Grid Reference SU 73098 75304, as provided.

NATURAL CAVITY RECORDS

A search of the PBA Natural Cavities Database indicated that there are 13 recorded natural cavity locations within 1000m of the site centre as shown in Table 1 below.

Table 1: Natural Cavity records

Approximate NGR	Approximate distance from site centre (m)	Recorded Location	Geology	Natural Cavity Details	Source
SU 7222 7515	890 W	Derby Road, Caversham, Berkshire	Superficial: Lynch Hill Gravel Solid: Chalk Group	1 x Solution Pipe	Peter Brett Associates LLP
SU 7220 7518	910 W	Derby Road, Caversham, Berkshire	Superficial: Lynch Hill Gravel Solid: Chalk Group	1 x Solution Pipe	Peter Brett Associates LLP
SU 729 762	920 NNW	Montpellier Drive, Caversham Park Village, Caversham, Berkshire	Solid: Lambeth Group Chalk Group	1 x Sinkhole 1 x Solution Pipe	Soil Mechanics Ltd

J:\CDBS\CDBS Jul18-Jun19\Results\44836 COA - 199-203 Henley Road, Reading\44836 COA Henley Road, Reading CE.docx

Registered Office: Caversham Bridge House, Waterman Place, Reading, Berkshire, RG1 8DN. UK. T: +44 (0)118 950 0761 F: +44 (0)118 959 7498
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SU 7219 7515	920 W	Derby Road, Caversham, Berkshire	Superficial: Lynch Hill Gravel Solid: Chalk Group	1 x Solution Pipe	Peter Brett Associates LLP
SU 7218 7521	920 W	Derby Road, Caversham, Berkshire	Superficial: Lynch Hill Gravel Solid: Chalk Group	1 x Solution Pipe	Peter Brett Associates LLP
SU 7218 7516	930 W	Derby Road, Caversham, Berkshire	Superficial: Lynch Hill Gravel Solid: Chalk Group	1 x Solution Pipe	Peter Brett Associates LLP
SU 7218 7518	930 W	Derby Road, Caversham, Berkshire	Superficial: Lynch Hill Gravel Solid: Chalk Group	1 x Solution Pipe	Peter Brett Associates LLP
SU 7216 7521	940 W	Derby Road, Caversham, Berkshire	Superficial: Lynch Hill Gravel Solid: Chalk Group	1 x Solution Pipe	Peter Brett Associates LLP
SU 7215 7514	960 W	Derby Road, Caversham, Berkshire	Superficial: Lynch Hill Gravel Solid: Chalk Group	1 x Solution Pipe	Peter Brett Associates LLP
SU 7214 7516	970 W	Derby Road, Caversham, Berkshire	Superficial: Lynch Hill Gravel Solid: Chalk Group	1 x Solution Pipe	Peter Brett Associates LLP
SU 7213 7519	980 W	Derby Road, Caversham, Berkshire	Superficial: Lynch Hill Gravel Solid: Chalk Group	1 x Solution Pipe	Peter Brett Associates LLP
SU 7211 7521	990 W	Derby Road, Caversham, Berkshire	Superficial: Lynch Hill Gravel Solid: Chalk Group	1 x Solution Pipe	Peter Brett Associates LLP
SU 7211 7518	1000 W	Derby Road, Caversham, Berkshire	Superficial: Lynch Hill Gravel Solid: Chalk Group	1 x Solution Pipe	Peter Brett Associates LLP

MINING CAVITY RECORDS

A search of the PBA Mining Cavities Database indicated that there are seven recorded mining cavity locations within 2000m of the site centre, as shown in

Table 2 below.



Table 2: Mining Cavity records

Approximate NGR	Approximate distance from site centre (m)	Recorded Location	Geology	Natural Cavity Details	Source
Vicinity of SU 741 764	1480 NE	Play Hatch Quarry, Play Hatch, Oxfordshire	Superficial: Infilled Ground Solid: Chalk Group	Adit Entry Chalk Mine	Peter Brett Associates LLP
Vicinity of SU 716 761	1700 WNW	Southdown Road, Caversham, Berkshire	Superficial: Black Park Gravel Solid: Lambeth Group Chalk Group	Possible Crown Hole Collapse	Reading Borough Council
SU 7155 7615	1760 WNW	Southdown Road / Rotherfield Way, Caversham, Berkshire	Solid: Lambeth Group Chalk Group	2 x Adit Entry Chalk Mines	Peter Brett Associates LLP Reading Borough Council
Centred at SU 7227 7694	1830 NNW	Kiln Road / Peppard Road, Emmer Green, Berkshire	Superficial: Infilled Ground Solid: Lambeth Group Chalk Group	'Hanover Mine' Shaft Entry Pillar & Stall Chalk Mine	Peter Brett Associates LLP Chelsea Speleological Society, Volume: 11, page: 34.
Vicinity of SU 739 770	1880 NNE	Dunsden Green, Oxfordshire	Solid: Lambeth Group Chalk Group	Chalkwell	Chelsea Speleological Society, Volume: 23, pages: 17, 19.
SU 7130 7595	1910 WNW	Grove Hill / Elliot Close, Caversham, Berkshire	Superficial: Black Park Gravel Solid: Lambeth Group Chalk Group	'Grove Kiln' Shaft & Adit Entry Pillar and Stall Chalk Mine	Peter Brett Associates LLP Reading Borough Council

While there are no records pertaining to natural or mining cavities within your site footprint, we would draw your attention to the fact that the absence of existing records for the site should not be considered as conclusive.

CAVITIES OCCURRENCE ASSESSMENT

National Planning Policy Framework (NPPF 2018) Clause 178 requires an assessment for a site potentially at risk from ground instability. The aspects considered with regards to ground instability are related to: Natural hazards or former activities such as mining. Consideration is given below to the risk of these potential causes of instability arising from existing ground conditions across the site, as identified by the desk top data review.

Geology

With reference to online resources (www.bgs.ac.uk), the published geology shows that the site area is situated upon Cretaceous age Seaford Chalk Formation and Newhaven Chalk Formation (undifferentiated). To the immediate north of the site is the inferred boundary of superficial deposits comprising Quaternary Lynch Hill Gravel Member (sand and gravel). Additionally, to the immediate south of the site is the boundary of superficial deposits of Quaternary Alluvium (clay, silt, sand and gravel).



A review of the ground investigation carried out by Jomas Associates Ltd in September 2016 and March 2018 suggests that the southern extent of the site is covered by the Quaternary Alluvium deposits. This becomes evident as the depth to chalk level generally increases to the south, and deposits of brown, clayey, gravelly sand are encountered above the chalk.

Across the site the chalk surface level encountered is locally quite variable. In the northern extent of the site, the chalk is encountered as shallow as 0.1m bgl (WS11 2018) and found at levels of 0.4m to 1.0m bgl elsewhere (WS10, BH1 and BH2 2018). However, centrally and towards the south of the site, this increases in depth to 2.8m bgl (BH3 2018) and 1.9m bgl (WS8 2018). Though in between these positions chalk is found at 4m bgl (WS9 2018) compared to nearby 6.9m bgl (WS4 2016). Also, in WS2 (2016) it is found at 6.8m bgl compared with 2.0 to 2.8m bgl in WS5 (2018) which is close by and below the chalk at 2.8m sand is present to 4m+ depth. In WS6 (2018) chalk is at 1.9m bgl while surrounding boreholes indicate the chalk surface is in excess of 4m to 5m bgl.

The local variability of chalk levels and the profile in WS5 (2018) suggest that the chalk surface has been locally modified by fluvial erosion and re-deposition or by dissolution weathering producing karstic features. Some SPT results in the chalk show weakening by weathering (e.g. WS8 2018) and the boreholes also indicate that the chalk is discoloured (brown colouration noted).

A summary of the encountered geology across the site, as per the Jomas 2016 and 2018 ground investigations, can be found in Table 3 below.

Table 3: Encountered Ground Conditions during Jomas Ground Investigations

Stratum and Description	Encountered from (m bgl)	Base of Strata (m bgl)	Thickness range (m)
Topsoil: Dark brown, organic, sandy gravelly Clay. Gravel consists of medium, sub rounded flint (Not encountered in WS8)	0.0	0.10 – 0.40	0.10 – 0.40
Head Deposits: Brown, very low to medium strength sandy gravelly Clay. Gravel consists of flint and chalk. (Not encountered in WS11, BH1 or BH2)	0.0 – 0.30	0.50 – 2.80	0.30 – 2.50
Undifferentiated Chalk: Brown to white, structureless Chalk (Grade Dm to Dc). Chalk recovered as clayey, sandy gravel / sandy gravelly clay, with occasional cobbles. Gravel and cobbles consist of chalk and flint.	0.10 – 2.80	>4.00 - >20.00	>2.00 - >19.60

Hydrogeology

According to online resources (www.bgs.ac.uk) the published hydrogeological map Sheet 7: Hydrogeological Map of the South West Chilterns and the Berkshire and Marlborough Down (1:100,000 – 1978) presents the conditions at the site showing that the water table level within the chalk aquifer lies at between 30m and 40m OD. Based on OS map contours and spot heights, it appears that the site ground level drops to the south, ranging from 45m and 40m OD. On this basis, it is believed that a shallow groundwater table exists within the chalk aquifer, lying between 5m and 10m below the ground surface. With reference to the 2018 ground investigation carried out by Jomas, Table 4 below summarises the depths of groundwater strikes during drilling. It should be noted that the ground water level has implications for both the hazards posed by natural and mining cavities.



Table 4: Groundwater Strikes during Jomas Ground Investigation 2018.

Borehole ID	Depth Encountered
WS1	3.1
WS2	3.0
WS3	2.0
WS4	2.0
WS5	2.0
WS6	-
WS7	3.0
WS8	3.0
WS9	3.0
WS10	-
WS11	-
BH1	8.7
BH2	6.3
BH3	4.3

Geomorphology

Information provided from OS maps indicates that the site is situated upon the lower extent of a southern facing slope descending towards the Thames and Kennet Marina, and eventually to the River Thames. The slope originates to the north of the site in Caversham with land levels decreasing from c.95m OD to c.40m OD across an approximate distance of 1.5km. Surface land drainage would appear to be directed towards the valley floor. In areas overlain by superficial deposits, percolating groundwater would underdrain down into the chalk below at depth.

The Chalk outcrop in this area has undergone a variety of erosional and depositional episodes, followed by tectonic uplift and initial sub aerial erosion of the chalk surface. During the late Cretaceous/early Palaeogene, the region experienced a series of marine transgressions that resulted in deposition of the Palaeogene deposits (Lambeth Group and Thames Group deposits). Subsequently, the area has been subjected to extensive fluvio-glacial erosion during the Anglian times and further periglacial weathering and erosion during the Devensian glacial period. The overall effect has been to erode away much of the Palaeogene cover deposits, resulting in thinned patchy remnants of the Lambeth Group deposits forming remnant irregular outliers. In places, erosion has revealed the underlying chalk surface, which itself has been etched.

The fluvio-glacial erosion of Lambeth Group deposits and etching of the exposed Chalk surface is largely associated with the former path of the proto-Thames. The proto-Thames originally flowed north eastwards through the Vale of St Albans, before it was blocked by the Anglian ice front and forced to find a new southerly flow route at Maidenhead.

During colder climatic episodes (glacial/periglacial) when the ice cover increased, and water/sea levels fell, there were relatively short periods at the onset and finish of such conditions when water table levels fell widely below the chalk surface level. During such times downward percolation of groundwater occurred to initiate karstic weathering of the chalk surface where favourable circumstances allowed. Such conditions might also have allowed more intense dissolution to occur more widely along bedding planes and fissures at times when cold groundwater was able to circulate through the chalk sequence. Colder groundwater has the capacity to hold more dissolved carbon dioxide making it more acidic. This karstic activity was only possible during times when the ground (and groundwater) was not frozen, such as spring thaws and summer.

Each time as the climate improved after glacial and periglacial episodes, land drainage patterns were established. When water table conditions were favourable this allowed the infiltration of water, collecting upon cover deposits, to percolate downwards to initiate dissolution of the Chalk below. As



can be appreciated from the above events there have been sometimes when there were favourable conditions for solution feature development and other times when conditions were probably not favourable, together with times when solution features were actively destroyed by erosion.

Cavities Occurrence Assessment – Natural Cavities

In areas underlain by Chalk, the interface with cover deposits often forms a karstic horizon where solution features (swallow holes, sinkholes and solution pipes) are found. The most prominent karstic horizon is the Palaeogene/Chalk interface. At the site this interface has been eroded away however, thin, patchy remnants of the Lambeth Group still remain approximately 1km from the site. Given the distance between the site and the nearest Palaeogene outlier, and the fact that ground levels at the site are approximately 15m lower, dissolution remnants or partially eroded solution features associated with this interface would not be expected to be present on the site.

In the local area, the Lambeth Group cover was removed by fluvio-glacial erosion during the deposition of the Lynch Hill Gravel Member which is a post-diversionary Thames deposit. Consequently, following the re-direction of the River Thames at Maidenhead accompanied by rising land levels and falling groundwater table levels there was the opportunity for surface water collecting upon the Lynch Hill deposits to under drain down into the chalk below. This produced a new phase of karst development and the formation of solution features. Many examples of this are presented in Table 1 above.

The River Thames has through time continued to cut down into the landscape and in doing so has eroded the Lynch Hill terrace deposits and etched into the Chalk below. The present River Thames floodplain contains extensive alluvial deposits the edge of which extend into the site and have been detected during the 2016 and 2018 ground investigations. The exploratory holes identify a highly variable chalk interface probably disturbed by both the effects of dissolution and fluvial erosion.

It is also widely recorded that within the floors of river valleys in chalkland areas that the continuous flows through the upper portion of the aquifer tends to enhance the transmissivity of chalk causing the formation of solution widened bedding planes and joints. Sometimes small-scale solution cavities can also be present.

An assessment of the site has been undertaken regarding the potential for solution features to have formed in the geological, geomorphological and hydrogeological setting of the site. This has also taken into consideration the wider spatial area factors pertaining to solution feature hazards, resulting in a rating of MODERATE for solution features developed in the chalk surface and HIGH within the chalk at depth.

Cavities Occurrence Assessment – Mining Cavities

Historical chalk mining is well documented in Berkshire and was carried out for a range of purposes. The most common uses of mined chalk were for agricultural purposes to obtain lime to spread over clay soils to improve their drainage, lighten the soil texture for ploughing and improve crop yields. Another common usage in the Reading area was to obtain mined chalk to powder and mix with milled clay to make bricks and tiles.

The PBA mining cavities database search indicated no features within the site boundary, however following a review of available historical OS maps, it is apparent that the site is situated within very close proximity to an old chalk pit and old gravel pit. The pits are first identified on the 1879 OS County Series Map of Oxfordshire and remain visible until 1932 when the former pits were infilled and the area was developed for residential use.

It should be noted that whenever chalk mining took place in the past, it was always carried out in dry chalk above the water table. No instances are known where dewatering was employed to create



dry chalk for mining. The groundwater strike results determined in the 2018 Jomas ground investigation, shows the groundwater levels to be relatively shallow, approximately 3m bgl. In these circumstances the conditions would not be favourable for past chalk mining.

Therefore, on the basis of the site history, geology, hydrogeology and geomorphology the potential for past chalk mining at the site is considered to be LOW.

Recommendations

It would be prudent for foundation and drainage designers to make reference to CIRIA C574 (2002) "Engineering in chalk". If during site investigation or construction abnormal ground conditions, such as loose or very loose material or voiding, are experienced a geotechnical engineer should be consulted prior to continuing.

It is understood that the foundation designer would like to use piled foundations. In the north part of the site where the chalk surface is shallow, then provided inspection shows that the chalk surface does not show signs of infilling or disturbance then shallow foundations or piles into the chalk should be acceptable. Given the variable nature of the ground conditions in the central and southern parts of the site there is greater uncertainty regarding the bearing capacity and stability of the underlying ground conditions for pile installation. It is assumed that the variable strength superficial deposits will be ignored in terms of pile shaft friction component and that all loads will be transferred into the chalk at depth. It is suggested that either each pile position is probed to at least 5m below the pile base level in chalk ahead of installation to check for voids or the piles are designed to support the structural loads entirely by shaft friction in the chalk, ignoring end bearing in case of future upward void migration from depth.

Yours sincerely

p.p. 

James Weddle

Associate

For and on behalf of

PETER BRETT ASSOCIATES LLP

Whilst all reasonable efforts are made to check that the information contained in the cavity databases is accurate we do not warranty that the data is complete or error free. The information is based upon our own researches and those collated from a number of external sources and is continually being augmented and updated. IN NO EVENT SHALL PETER BRETT ASSOCIATES LLP BE LIABLE FOR ANY LOSS OR DAMAGE INCLUDING, WITHOUT LIMITATION, INDIRECT OR CONSEQUENTIAL LOSS OR DAMAGE ARISING FROM THE USE OF THIS DATA.

**TOWN AND COUNTRY PLANNING ACT 1990
PLANNING AND COMPENSATION ACT 1991
THE TOWN & COUNTRY PLANNING
(DEVELOPMENT MANAGEMENT PROCEDURE) (ENGLAND) ORDER 2015**

APPLICATION FOR FULL PLANNING PERMISSION

To: Peter Dines
Gerald Eve
72 Welbeck Street
London
W1G 0AY

Application No: 190835
Application type: Full Planning Approval

Applicant: Signature Senior Lifestyle Ltd

READING BOROUGH COUNCIL as Local Planning Authority **GRANT FULL** planning permission for the following development in accordance with the plans and supporting information submitted in connection with this application.

Proposal: Demolition of 199-203 Henley Road and erection of part four, part three and part two storey 82 unit residential care home building (C2 use class) with associated external structures, access from Henley Road, car parking and landscaping

At: 199-203 Henley Road and land to the Rear of 205-207 Henley Road Caversham Reading RG4 6LJ

Subject to such conditions and for such reasons as may be attached

**OTHER STATUTORY CONSENTS MAY BE REQUIRED
PLEASE READ THE NOTES ISSUED WITH THIS DECISION NOTICE**

Date: 19 December 2019



RJE
Head of Planning, Development
& Regulatory Services

Application At: 199-203 Henley Road and land to the Rear of 205-207 Henley Road
Caversham Reading RG4 6LJ

Application No: 190835

Application type: Full Planning Approval

CONDITIONS & REASONS

1. The development hereby permitted shall begin no later than three years from the date of this planning permission.

REASON: In pursuance of Section 91 of the Town and Country Planning Act 1990 (as amended by Section 51 of the Planning and Compulsory Purchase Act 2004) in order to prevent an accumulation of unimplemented planning permissions.

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2. The development hereby permitted shall ONLY be carried out in accordance with the following approved plans:

Drawing no.s:

- AA7440-2004 - Proposed Lower Ground Floor Plan
- AA7400-2007 - Proposed Second & Third Floor Plans
- AA7440-2010 - Proposed Street Elevations
- AA7440-2011 - Proposed Elevations
- AA7400-2012 - Proposed Elevations

Received by the Local Planning Authority on 23rd May 2019

- 101F Landscape Masterplan

Received by the Local Planning Authority on 18th September 2019

- AA7440-2003 Rev A - Proposed Site Plan
 - AA7400-2005 Rev A - Proposed Ground Floor Plan
 - AA7440-2006 Rev A - Proposed First Floor Plan
- Received by the Local Planning Authority on 13th September 2019

- 3141.08A - Proposed Site Access and Vertical Alignment
- Received by the Local Planning Authority on 26th September 2019

Documents ref:

- Aether Air Quality Assessment ref. AQ_assessment/2019/Henley_Road Version 1.3
- CgMs Heritage Archaeological Desk Based Assessment ref.25345/AT
- Jomas Associated Ltd Geo-environmental & Geotechnical Assessment Ground Investigation Report
- Ethos Preliminary Ecological Appraisal V1 April 2019

Date: 19 December 2019



RJE
Head of Planning, Development
& Regulatory Services

- Ethos Protected Species Survey ref. V2 September 2019
 - Harniss Consulting Energy Strategy Report Rev P2
 - CSP Foul and Surface Water Drainage Scheme Report ref. SIG/29 Version 3 April 2019
 - PEP Travel Plan April 2019
 - PEP Transport Statement April 2019
 - Tracy Clarke Arboricultural Planning Report Impact Assessment and Method Statement ref. TCTC-17327-c April 2019
 - Edenvale Young Flood Risk Assessment Henley Road Caversham Rev E May 2 2019
 - Gerald Eve Planning Statement (including Sequential Test FRA) April 2019
 - Sharps Redmore Façade Acoustic Assessment ref. Signature Care Home Henley Road Caversham 30th April 2019
 - Lexington Communications Statement of Community Involvement April 2019
- Received by the Local Planning Authority on 23rd May 2019

- Tree Work Specification ref. Henley Road, Caversham
- Received on the 29th July 2019

- Harniss Utilities Statement Rev P1
- Received by the Local Planning Authority on 18th June 2019
- Harniss Consulting Statement on Controlling Kitchen Odours Rev P1
- Received by the Local Planning Authority on 8th August 2019
- 3141.09A Extent of New Access Road Proposed for Adoption dated 11th September 2019
- Received by the Local Planning Authority on 9th October 2019

REASON: For the avoidance of doubt and to ensure that the development is carried out and adhered to in accordance with the application form and associated details hereby approved.

5

3. No development shall commence beyond foundation level until a schedule of the materials to be used in the construction of the external surfaces of the development hereby permitted have been submitted to and approved in writing by the Local Planning Authority. The development shall be carried out and thereafter maintained in accordance with the details approved unless otherwise agreed in writing by the Local Planning Authority.

REASON: These details are required due to insufficient information being contained within this submission and in the interests of visual amenity and ensuring the new development responds positively to the local context and character in accordance with Policy CC7 of the Reading Borough Local Plan 2019

6

4. No development shall commence on site, including any works of demolition, until a site specific Construction Method Statement has been submitted to and been approved in writing by the Local Planning Authority. The Statement shall provide for:

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- a) Space on site where vehicles of site operatives and visitors can be parked with details of how site operatives and visitors will be required to make use of the parking area provided;
- b) Location on site for storage of plant and materials used in constructing the development;
- c) The erection and maintenance (including removal of any graffiti or fly posters) of security hoarding around the site;
- d) Identification of any footpath closures or road closures needed during construction;
- e) Required wheel washing facilities on site;
- f) A scheme for recycling waste resulting from the construction works. g) Measures for controlling the use of site lighting whether required for safe working or for security purposes;
- h) Required measures to control the emission of dust, dirt and other airborne pollutants during demolition and construction;
- i) Provisions to be made for the control of noise coming from the site during demolition and construction;
- j) Full details of pest control measures following any demolition required. Where necessary, capping of drains/sewers and baiting arrangements.

The measures within the approved Statement shall be adhered to throughout the demolition and construction period unless otherwise agreed in writing by the Local Planning Authority.

REASON: These details are required due to insufficient information being contained within this submission and in the interests of protecting the amenity of local land uses or neighbouring residents, the character of the area and highway safety in accordance with Policy CC8 and TR3 of the Reading Borough Local Plan 2019.

7

5. Prior to first use of the new access road hereby permitted (as shown on drawings ref. 3141.09A Extent of New Access Road Proposed for Adoption dated 11th September 2019 received by the Local Planning Authority on 9th October 2019 and 3141.08A - Proposed Site Access and Vertical Alignment Received by the Local Planning Authority on 26th September 2019), visibility splays of 2.4 metres by 90 metres shall be provided at the junction onto Henley Road in accordance with the approved plan. The visibility splay shall thereafter be kept free of all obstructions to visibility over a height of 0.6 metres above carriageway level.

REASON: In the interests of road safety in accordance with Core Strategy Policy CS20 and Sites and Detailed Policies document Policy DM12.

8

6. No development shall commence on site (including demolition or preparatory works) until an Arboricultural Method Statement and Tree Protection Plan in accordance with the relevant recommendations of appropriate British Standards or other recognised Codes of Good Practice for all existing trees that are not shown as being removed on the approved drawings, both within and adjacent to the site, have been submitted to and been approved in writing by the Local Planning Authority. The development shall not be

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carried out other than in accordance with the approved Arboricultural Method Statement and Tree Protection Plan.

Reason: In order to ensure that appropriate protection is given to trees of amenity value within and adjacent to the site in accordance with Policy EN14 of the Reading Borough Local Plan 2019.

9

7. No development shall commence on site until a comprehensive scheme of hard and soft landscaping has been submitted to and approved in writing by the Local Planning Authority. These details shall include:

- a. Proposed finished ground and floor levels or contours, means of enclosure (including specifications of mammal gaps where appropriate), car parking layouts, other vehicle and pedestrian access and circulation areas;
- b. Hard surfacing materials (permeable) and other ancillary structures (e.g. furniture, play equipment, refuse or other storage units, signs, lighting, external services, etc);
- c. Soft landscaping details shall include planting plan, specification (including cultivation and other operations associated with plant and grass establishment), schedules of plants (to include native and wildlife friendly species), noting species, planting sizes and proposed numbers/densities where appropriate, and implementation timetable;
- d. A maintenance programme detailing all operations to be carried out in order to allow successful establishment of planting;
- e. routes and details of proposed and existing functional services above and below ground including foul and surface water drainage, soakaways and SUDs details, power, communications cables and water and gas supply pipelines, including access points, tree pit specifications;
- f. Biodiversity enhancements, including integral bird nesting and bat roosting opportunities on and around the new buildings

The approved hard and soft landscaping scheme shall be carried out in accordance with the approved details prior to the occupation of any part of the development or in accordance with a timetable approved in writing by the Local Planning Authority.

Any trees or plants which, within a period of 5 years from the date of planting, die, are removed or become seriously damaged or diseased shall be replaced in the next planting season with others of similar size and species, to be agreed in writing by the Local Planning Authority.

REASON: These details are required prior to commencement of development because of insufficient information contained within this submission and in the interest of ensuring that the landscaping of the development enhances the visual local environment and in accordance with Policy CC7 of the Reading Borough Local Plan 2019.

10

8. No development shall take place within the application area until the applicant, their agents or successors in title have secured and implemented a programme of

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archaeological field evaluation in accordance with a written scheme of investigation, which has been submitted by the applicant and approved in writing by the Local Planning Authority. The results of the evaluation will inform the preparation of a subsequent mitigation strategy which will be submitted by the applicant and approved in writing by the Local Planning Authority prior to the commencement of the development. The mitigation strategy will provide for:

i) A programme of site investigation and recording, or alternative appropriate mitigation, within the area of archaeological interest. Development will not commence within the area of archaeological interest until the site investigation has been satisfactorily completed.

ii) A programme of post investigation assessment, analysis, publication, dissemination and archiving. This part of the condition shall not be discharged until these elements of the programme have been fulfilled in accordance with the programme set out in the WSI or unless otherwise agreed in writing by the Local Planning Authority

REASON: To ensure that any archaeological remains within the site are adequately investigated and recorded so as to advance our understanding of their significance in accordance with national and local plan policy and in the interest of protecting the archaeological heritage of the Borough in accordance with Policy EN2

11

9. Prior to first occupation of the development hereby permitted details of an electric vehicle (EV) charging scheme comprising a layout plan and detailed specification for a minimum of ten percent of all vehicle parking spaces to be provided with electric vehicle charging points, and a further ten percent of spaces provided with cabling and other supporting infrastructure reasonably required to enable EV charging points to be fitted, shall be submitted to and approved in writing by the Local Planning Authority. The EV charging spaces shall be provided prior to first occupation of the development hereby permitted and kept available for parking at all times thereafter.

REASON: In the interests of environmentally sustainable transport in accordance with Policy TR3 and TR5 of the Reading Local Plan 2019.

12

10. The development hereby permitted shall not be occupied until all vehicle parking spaces have been provided in accordance with the plans hereby approved. The spaces shall be kept available for parking at all times thereafter.

REASON: To ensure that the development is provided with adequate parking facilities to meet the needs of future occupiers and reduce the likelihood of roadside parking which could be a danger to other road users in accordance with Policy TR3 and TR5 of the Reading Local Plan 2019.

13

11. The development hereby permitted shall not be occupied until the vehicle access serving it has been constructed in accordance with the plans hereby approved.

REASON: In the interests of road safety in accordance with Policy TR1 and TR3 of the Reading Local Plan 2019.

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12. The development hereby permitted shall not be occupied until the bicycle parking facility has been provided in accordance with the plans hereby approved. The facility shall be kept available for bicycle parking at all times thereafter.

REASON: To encourage travel by sustainable alternatives to driving a motorcar in accordance with Policy TR1 and TR5 of the Reading local Plan 2019.

15

13. Prior to first occupation of the development hereby approved, the refuse and recycling storage facility shall be implemented fully in accordance with those details shown on the approved plans and thereafter retained for use by occupiers of the dwelling/building at all times.

REASON: In the interests of the visual amenity of the area and to ensure that bins can be easily accessed when required in accordance with Policy CC7 of the Reading Local Plan 2019.

16

14. The development hereby permitted shall not be occupied until the road serving it has been provided in accordance with the approved drawings to the satisfaction of the Local Planning Authority.

REASON: In the interests of road and pedestrian safety in accordance with Policy TR1 and TR3 of the Reading Local Plan 2019

17

15. Prior to first occupation of the development hereby permitted the existing access to the site shall be stopped up and abandoned and the footway and verge reinstated to the satisfaction of the Local Planning Authority. .

REASON: In the interests of road safety and maintenance of the highway in accordance with Policy TR1 and TR3 of the Reading Local Plan 2019.

18

16. Prior to first occupation of the development hereby permitted, all flood mitigation and protection measures as contained within Edenvale Young Flood Risk Assessment Henley Road Caversham Rev E dated May 2nd 2019 and received by the Local Planning Authority on 23rd May 2019 shall be implemented in full and maintained in perpetuity for the lifetime of the development. Finished floor levels shall be set no lower than 37.1 metres above Ordnance Datum.

REASON: In order to comply with good practice building for flood resilience/safety in the flood zone and in accordance with Policy EN18 of the Reading Borough Local Plan 2019.

19

17. Within 6 months of occupation of 50% of the total number of residential care home units hereby approved, a Travel Plan shall be submitted to and approved in writing by the Local Planning Authority. The plan shall include a full analysis of the existing modal split for the care home, reasons for the modal choice, and detailed proposals for future transport provision with the aim of securing reduction in car trips generated to and from the development hereby approved.

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REASON: In order to minimise danger, obstruction and inconvenience to users of the highway in and encourage modal shift in accordance with TR1 of the Reading Local Plan 2019.

20

18. On the first anniversary of the approved Travel Plan and annually thereafter, an annual review of the Travel Plan shall be submitted to and approved by the Local Planning Authority. This shall include a detailed survey of the number of movements generated by the care home and shall be compared with the initial survey carried out under the terms of condition no. 17 (the control level) and in the event of any reduction not being secured the developer shall undertake whatsoever measures, as may first have been agreed in writing by the Local Planning Authority, as are necessary to cause a reduction in the number of car borne trips to, as a maximum, the control level. This may include such options as a greater provision of subsidised transport.

REASON: In order to minimise danger, obstruction and inconvenience to users of the highway in accordance with TR1 of the Reading Local Plan 2019

21

19. No windows/doors/dormers/openings, other than those shown on the approved plans shall at any time be placed in the east and west side elevations of the building hereby permitted without the grant of a separate planning permission from the Local Planning Authority.

REASON: To safeguard the amenities of the adjoining premises from overlooking and loss of privacy in accordance with Policy CC8 of the Reading Borough Local Plan 2019.

22

20. No deliveries and/or waste collection movements shall take place outside the hours of 08:00hrs to 22:00hrs Monday to Saturdays or 10:00hrs to 18:00hrs on Sundays and Bank Holidays.

REASON: In order to protect local residents from unreasonable disturbance arising from the use in accordance with Policy CC7 and CC8 of the Reading Borough Local Plan 2019.

23

21. No mechanical plant shall be installed until a noise assessment of the proposed mechanical plant has been submitted and approved by the Local Planning Authority. The assessment shall be carried out for in accordance with BS4142:2014 methodology. The predicted specific sound level (LAeq,TR) (with reference to BS:4142) as measured at a point 1 metre external to the nearest noise-sensitive facade shall be at least 10dB below the pre-existing background sound level, LA90,T when all plant/equipment (or any part of it) is in operation. The predicted rating level, LAr,Tr (specific sound level plus any adjustment for the characteristic features of the sound) as measured at a point 1 metre external to the nearest noise-sensitive facade (habitable window of a dwelling) shall not exceed the pre-existing background sound level, LA90,T when all plant/equipment (or any part of it) is in operation. The plant shall thereafter only be installed in accordance with the assessment and shall thereafter be maintained so that it operates to the same standard.

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REASON: To safeguard the amenities of the adjoining premises and the area generally, in accordance with Policy CC8 and EN17 of the Reading Borough Local Plan 2019.

24

22. The development hereby permitted shall not be occupied or the use commenced until the kitchen extract/ventilation systems have been installed in accordance with the approved plans and specifications set out within the Harniss Consulting Statement on Controlling Kitchen Odours Rev P1 Received by the Local Planning Authority on 8th August 2019 and thereafter the kitchen extract/ventilation systems shall be permanently retained and maintained in accordance with the approved specifications.

REASON: To prevent odour and safeguard the amenity of nearby premises and the area generally in accordance with Policy CC8 and EN16 of the Reading Borough Local Plan 2019.

25

23. No development shall commence on site including demolition and any preparatory works until an assessment of the nature and extent of contamination has been submitted to and been approved in writing by the Local Planning Authority. This assessment must be undertaken by a competent person, and shall assess any contamination on the site, whether or not it originates on the site. Moreover, it must include:

(i) a survey of the extent, scale and nature of contamination;

(ii) an assessment of the potential risks to:

- human health,
- property (existing or proposed) including buildings, crops, livestock, pets, woodland and service lines and pipes,
- adjoining land,
- groundwaters and surface waters,
- ecological systems,
- archaeological sites and ancient monuments;

REASON: These details are required due to insufficient information being contained within this submission and to ensure the development is suitable for its end use and the wider environment and does not create undue risks to occupiers of the site or surrounding areas in accordance with Policy EN16 of the Reading Borough Local Plan 2019.

26

24. No development shall commence on site including demolition and any preparatory works until a detailed remediation scheme to bring the site to a condition suitable for the intended use by removing unacceptable risks to human health, buildings and other property and the natural and historical environment has been submitted to and been approved in writing by the Local Planning Authority. The scheme must include all works to be undertaken, proposed remediation objectives and remediation criteria, an appraisal of remedial options, and proposal of the preferred option(s), and a timetable of works and site management procedures. The scheme must ensure that the site will not qualify as contaminated land under Part 2A of the Environmental Protection Act 1990 in relation to the intended use of the land after remediation.

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REASON: These details are required due to insufficient information being contained within this submission and to ensure the development is suitable for its end use and the wider environment and does not create undue risks to occupiers of the site or surrounding areas in accordance with Policy EN16 of the Reading Borough Local Plan 2019.

27

25. The approved remediation scheme under Condition no. 24 shall be implemented in accordance with the approved timetable of works. A validation report (that demonstrates the effectiveness of the remediation carried out) shall be submitted to and approved by the Local Planning Authority before construction above foundation level.

REASON: To ensure the development is suitable for its end use and the wider environment and does not create undue risks to occupiers of the site or surrounding areas in accordance with Policy EN16 of the Reading Borough Local Plan 2019.

28

26. In the event that contamination is found at any time when carrying out the approved development not previously identified, development shall be halted on that part of the site the contamination reported in writing to the Local Planning Authority.

An assessment of the nature and extent of contamination shall be undertaken and where remediation is necessary a remediation scheme, together with a timetable for its implementation, shall be submitted in writing to the Local Planning Authority for its written approval. The measures in the approved remediation scheme shall be implemented in accordance with the approved timetable. Halted works shall not be recommenced until the measures identified in the approved remediation scheme have been completed and a validation report has been submitted to and been approved in writing by the Local Planning Authority. REASON: To ensure the development is suitable for its end use and the wider environment and does not create undue risks to occupiers of the site or surrounding areas in accordance with Policy EN16 of the Reading Borough Local Plan 2019.

29

27. No construction, demolition or associated deliveries shall take place outside the hours of 0800hrs to 1800hrs Mondays to Fridays, or 0800hrs to 1300hrs on Saturdays, and not at any time on Sundays and Bank or Statutory Holidays without prior written approval from the Local Planning Authority.

REASON: In order to protect occupiers of nearby properties from unreasonable disturbance from works connected with implementing this permission in accordance with Policy CC8 of the Reading Borough Local Plan 2019.

30

28. No development shall commence on site until details of finished floor levels relative to existing floor/ground levels have been submitted to and been approved in writing by the Local Planning Authority. The development shall be carried out only in accordance with the approved details.

REASON: These details are required due to insufficient information being contained within this submission and in order to ensure a satisfactory relationship between the

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proposed development and adjacent development, and to protect views in and out of the development in the interests of visual amenity in accordance with Policy CC7 of the Reading Borough Local Plan 2019.

31

29. Prior to first occupation of the development hereby permitted, full details of all external lighting to be installed within the development shall be submitted to and approved in writing by the Local Planning Authority. The details shall include a plan indicating the locations of the lights, specifications, height, luminance; lens shape/beam pattern and any hoods/shades. The approved scheme shall thereafter be installed before first occupation of the buildings or use commenced and the external lighting shall thereafter be maintained and operated in accordance with the approved details.

REASON: In order to protect the privacy and amenity of adjoining and future occupiers and enhance the appearance of the development in accordance with Policy CC7 and CC8 of the Reading Borough Local Plan 2019.

32

30. Prior to first occupation of any residential unit with the development hereby permitted all communal areas, as shown on the approved plans in Condition 2 above shall be ready for use and retained for communal use of the occupants of the care home thereafter.

Reason: In the interests of providing a suitable standard of accommodation for future occupiers and the potential for wider use of the building, in accordance with Policy OU1 of the Reading local plan 2019

33

31. No development shall commence on site until a copy of an Interim BREEAM Certificate in accordance with the BREEAM Sustainability Standard has been submitted and approved in writing by the Local Planning Authority, demonstrating compliance with a minimum BREEAM standard rating of Excellent, unless otherwise agreed in writing with the Local Planning Authority.

REASON: These details are required due to insufficient information being contained within this submission and in order to ensure that the development is carried out in accordance with sustainable building standards in accordance with Policy CC2 of the Reading Borough Local Plan 2019.

32. Within 3 months of first occupation of the development hereby approved, a copy of a Final BREEAM Certificate in accordance with the BREEAM Sustainability Standard following a post-construction stage review carried out by a licensed assessor has been submitted to and approved in writing by the Local Planning Authority, demonstrating that the development has attained as a minimum, the standard set out in the Interim BREEAM Certificate referred to in Condition no. 31.

REASON: To ensure that the development is carried out in accordance with sustainable building standards in accordance with Policy CC2 of the Reading Borough Local Plan 2019.

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33. The development hereby permitted shall not be occupied all lifts as shown on the approved plans in Condition 2 above have been provided. The lifts shall be retained in full working order thereafter.

REASON: to ensure a suitable level of access for those with mobility impairments in accordance with Policy CC7 of the Reading Borough Local Plan 2019.

36

34. Any walls or fencing constructed within or around the site within the 1% annual probability (1 in 100) flood extent with a 35% allowance for climate change shall be designed to be permeable to flood water.

REASON: To prevent obstruction to the flow and storage of flood water, with a consequent increased risk of flooding in accordance with Policy EN18 of the Reading Borough Local Plan 2019.

37

35. Prior to first occupation of the development hereby permitted, the energy measures set out within paragraph 1.0 on page 4 of the Harniss Consulting Energy Strategy Report Rev P2 received on 23rd May 2019 shall be provided in full. The energy measures shall be retained and in full working order thereafter.

REASON: To provide a decentralised energy source in accordance with Policy CC4 of the Reading Borough Local Plan 2019.

38

36. All on-site facilities within the care home hereby permitted shall operate as ancillary to the C2 care home use only and shall not operate as stand-alone facilities under any other Use Class.

REASON: To prevent any undue noise and disturbance or increased traffic congestion in accordance with Policies CC8 and TR3 of the Reading Borough Local Plan 2019.

39

37. No development hereby permitted, including any vegetation clearance, shall commence until a badger sett survey of the development site and immediately adjacent areas has been undertaken (survey to be undertaken within a 28 day period prior to the start of works on site) and a report detailing the results of the surveys has been submitted to and approved in writing by the Local Planning Authority. If surveys show that a licence to disturb a badger sett is required a copy of a valid licence is to be submitted to and approved in writing by the Local Planning Authority prior to the commencement of any licensable works.

REASON: To ensure that protected species are not adversely affected by the proposals in accord with Policy EN12 Reading Borough Local Plan 2019.

40

38. No development shall commence on site (including demolition or preparatory works) until a licence for development works affecting bats has been obtained from the Statutory Nature Conservation Organisation (Natural England) and a copy has been submitted to and approved in writing by the Local Planning Authority. Thereafter mitigations measures approved in the licence shall be maintained in accordance with the approved details. Should conditions at the site for bats change and the applicant

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conclude that a licence for development works affecting bats is not required the applicant is to submit a report to the Local Planning Authority detailing the reasons for this assessment and this report is to be approved in writing by the Local Planning Authority.

REASON: To ensure that bats, a European Protected Species, are not adversely impacted upon as a result of the development in accordance with Policy EN12 of the Reading Borough Local Plan 2019.

41

39. No development shall take place (including demolition, ground works, vegetation clearance) until a construction environmental management plan (CEMP: Biodiversity) has been submitted to and approved in writing by the local planning authority. The CEMP (Biodiversity) shall include the following:

- a) Risk assessment of potentially damaging construction activities.
- b) Identification of "biodiversity protection zones".
- c) Practical measures (both physical measures and sensitive working practices) to avoid or reduce impacts during construction (may be provided as a set of method statements).
- d) The location and timing of sensitive works to avoid harm to biodiversity features.
- e) The times during construction when specialist ecologists need to be present on site to oversee works.
- f) Responsible persons and lines of communication.
- g) The role and responsibilities on site of an ecological clerk of works (ECoW) or similarly competent person.
- h) Use of protective fences, exclusion barriers and warning signs.

The approved CEMP shall be adhered to and implemented throughout the construction period strictly in accordance with the approved details, unless otherwise agreed in writing by the local planning authority.

Reason: To minimise impacts on biodiversity in accordance with Paragraphs 170 and 175 of the NPPF and Policy EN12 of the Reading Borough Local Plan 2019.

42

40. No development shall commence on site until a Sustainable Drainage Strategy and associated detailed design, management and maintenance plan of surface water drainage for the site using SuDS methods has been submitted to and approved in writing by the Local Planning Authority. The strategy and plan shall include:

- i. a timetable for its implementation, and
- ii. a management and annual maintenance plan for the lifetime of the development which shall include the arrangements for adoption by any public body or statutory undertaker, or any other arrangements to secure the operation of the sustainable drainage scheme throughout its lifetime.

REASON: These details are required due to insufficient information being contained within this submission and in order to reduce the risk of flooding onsite or elsewhere in accordance with Policy EN18 of the Reading Borough Local Plan 2019.

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41. Prior to first occupation of the development hereby permitted, the sustainable drainage scheme for the site shall have been completed in accordance with the submitted and approved strategy and plan under Condition no. 40. The sustainable drainage scheme shall be managed and maintained thereafter in accordance with the agreed management and maintenance plan.

REASON: To reduce the risk of flooding onsite or elsewhere in accordance with Policy EN18 of the Reading Borough Local Plan 2019.

44

INFORMATIVES

1. The Local Planning Authority has worked positively and proactively with the applicant to resolve relevant matters to allow permission to be granted within the prescribed target or agreed extended timescale for the decision to be issued.

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2. In accordance with Article 35 (DMPO 2015) some conditions have been highlighted to make clear that they require approval from the Local Planning Authority before any development begins. This is because the details need to be designed or works implemented before any other works start on the site or are of a nature that it would be impractical to consider after work has started.

46

3. i) The attention of the applicant is drawn to Section 59 of the Highways Act 1980, which enables the Highway Authority to recover expenses due to damage caused by extraordinary traffic.

ii) Any works affecting the Highway shall be in accordance with Reading Borough's Council's document "Guidance Notes for Activities on the Public Highway within the Borough of Reading". The applicant should note that compliance with this document is mandatory and licences to work on the Highway will only be issued if the requirements contained within it are met. A copy can be obtained from the Council's website.

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4. A section 106 Agreement has been completed for this development. A copy of the S106 Legal Agreement is available on the Council's Public Register of Planning.

48

5. Your attention is drawn to the terms and conditions of this permission. Any development which is carried out but which differs materially from the approved plans and details or does not comply with any condition(s) or planning obligation(s) attached to the permission may result in the Council taking action to remedy the breach of planning control. If you are in any doubt please contact the Council.

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6. Your attention is drawn to the requirement for submission of a Building Regulations application for the proposed development. Please contact Building Control on 0118 937 2449 for advice.

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7. Complaints are commonly received about noise and dust caused by construction and demolition works, particularly working outside reasonable hours and smoke from bonfires associated with the burning of waste on site. The developer is reminded that construction and demolition associated with the approved development will be subject to environmental health law.

51

8. The Council introduced the Community Infrastructure Levy (CIL) on 1st April 2015. CIL is a way of securing financial contributions towards infrastructure from new development, and partially replaces the Section 106 planning obligation regime. It is a set charge per sq m of floorspace for different uses, and, unlike Section 106, it is non-negotiable. It applies to developments which result in at least one dwelling; where the space has not been in lawful use for 6 months within the last 3 years or 100 sq m of new floorspace. For this approved development the CIL status is NOT APPLICABLE. If chargeable you will be sent a CIL Liability Notice with the calculated amount soon. CIL becomes payable on commencement of the development or by instalments.

For more information go to:

http://www.reading.gov.uk/media/2791/Community-Infrastructure-Levy-Advice-to-Applicants/pdf/CIL_Advice_to_Applicants.pdf

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9. Before this planning permission is implemented, an agreement under Section 278 of the Highways Act 1980 will be required with respect to works affecting the existing Highway. The applicants should contact the Transport Development Control Section at Civic Centre, Reading, RG1 2LU telephone: 0118 937 2612, to discuss arrangements for this.

53

10. Before this planning permission is implemented an agreement under Section 38 of the Highways Act 1980 may be required with respect to the Adoption of new roads and footpaths by the Borough Council. The applicants should contact the Transport Development Control Section at Civic Centre, Reading, RG1 7TD telephone: 0118 937 3949, to discuss arrangements for this.

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NOTES

APPEALS TO THE SECRETARY OF STATE

If you are aggrieved by the decision of the Council to refuse permission for the proposed development or to grant it subject to conditions, then you can appeal to the Secretary of State under section 78 of the Town and Country Planning Act 1990.

If this is a decision on a planning application relating to the same or substantially the same land and development as is already the subject of an enforcement notice, if you want to appeal against the Council's decision on the application you must do so within 28 days of the date of this notice.

If an enforcement notice is served relating to the same or substantially the same land and development as in your application and you want to appeal against the Council's decision on your application, you must do so within 28 days of the date of service of the enforcement notice, or within 6 months (or 12 weeks in the case of a householder appeal) of the date of this notice, whichever period expires earlier.

If the above circumstances do not apply, any appeal must be made within the following time limits.

If this is a householder application and you want to appeal against the Council's decision then you must do so within 12 weeks of the date of this notice. If this is an advertisement application and you want to appeal against your local planning authority's decision then you must do so within 8 weeks of the date of this notice. If you want to appeal against your local planning authority's decision for any other type of application (which is not a householder or advertisement application, or an application for a Certificate of Lawfulness) then you must do so within 6 months of the date of this notice.

Appeals can be made online at: <https://www.gov.uk/planning-inspectorate>.

If you are unable to access the online appeal form, please contact the Planning Inspectorate to obtain a paper copy of the appeal form on tel: 0303 444 5000.

The Secretary of State can allow a longer period for giving notice of an appeal but will not normally be prepared to use this power unless there are special circumstances which excuse the delay in giving notice of appeal.

The Secretary of State need not consider an appeal if it seems to the Secretary of State that the local planning authority could not have granted planning permission for the proposed development or could not have granted it without the conditions they imposed, having regard to the statutory requirements, to the provisions of any development order and to any directions given under a development order.

If you intend to submit an appeal that you would like examined by inquiry then you must notify the Local Planning Authority and Planning Inspectorate

(inquiryappeals@planninginspectorate.gov.uk) at least 10 days before submitting the appeal.

Further details are on GOV.UK.

Purchase Notices

If either the Local Planning Authority or the Secretary of State refuses permission to develop land or grants it subject to conditions, the owner may claim that he can neither put the land to a reasonably beneficial use in its existing state nor render the land capable of a reasonably beneficial use by the carrying out of any development which has been or would be permitted. In these circumstances, the owner may serve a purchase notice on the Council in whose area the land is situated. This notice will require the Council to purchase his interest in the land in accordance with the provisions of Part VI of the Town and Country Planning Act 1990.

Street Naming & Numbering

You must contact Reading Borough Council to:

- Name or number a new development
- Name a new street
- Get addresses for flat conversions
- Name or rename an existing building

Otherwise the following may occur:

- You will not have an official address or postcode. When your property goes through the official process it may be given a different address and Postcode than you are currently using.
- You may have difficulty receiving mail
- You may have problems when buying goods or services such as utilities and telecommunications
- The emergency services may have difficulty locating you.
- You may have problems accessing Council services such as Education, Parking Services and Electoral Registration.

The Council is responsible for assigning house names and numbers and street names. It is also responsible for updating the National Land and Property Gazetteer (NLPG) which is a list of addresses which meet a common standard (BS7666) used throughout the country.

When a new address or change of address is requested, the Council contacts Royal Mail who check the address on behalf of the Emergency Services, assign a postcode and add it to their Postal Address File (PAF). The PAF list is used by many companies and services to check addresses, authenticate transactions and order goods, as well as deliver mail, so it is in your interest for your address to be on that list. Royal Mail will not create an address until requested to do so by the Council.

How to apply:

Email us using streetnamingnumbering@reading.gov.uk

Or telephone us on 0118 9373737

What we need to complete your request:

For new addresses or flat conversions:

- Site layout plan containing plot numbers
- Location plan - No bigger than A3 size (hard copy, PDF, JPEG or AutoCAD) showing the site boundary, including the new development, together with surrounding buildings for reference
- Anticipated completion and occupation dates

For change of address:

- You must be, or have authorisation from, the owner to request a change of address.
- Floor plan of the existing property
- Reason for change

Once created, the Council informs various bodies of your new address including the Emergency Services, Council Tax, Land Registry and utility companies as well as adding it to the National Land and Property Gazetteer.

Please be advised that companies and services using the PAF file only update the addresses monthly, quarterly or even less frequently, therefore it may take a while for your address to be listed in some places. It will, however, appear on the Royal Mail website within a few days once it has been added to the live address file.

Reading Borough Council has no control over the frequency by which other organisations update their address files.



PAGE: 2		JOB 1754				BOREHOLE S1	
DATE: 28.09.00		WOODS ROAD - CAVERSHAM					
DESCRIPTION	DEPTH	LEGEND	SAMPLE		THICKNESS	SPT	REMARKS
	LEVEL m		m	TYPE			
TOPSOIL	0.00	X - X - X			0.20		
Medium dense brown silty CLAY with some flinty gravel	0.20	X - X - X			0.35		
Dense silty sandy GRAVEL	0.55	X - X - X			0.65		--1754 / S1 / 0.6B
Firm brown/light brown very sandy clayey SILT with occasional fine gravel	1.20	X - X - X	B	0.80			--1754 / S1 / 1.3B
		X - X - X	B	1.30			--1754 / S1 / 1.8B
		X - X - X	B	1.80			--1754 / S1 / 2.3B
Firm brown sandy clayey SILT becoming gravelly	2.00	X - X - X	B	2.30			--1754 / S1 / 2.8B
		X - X - X	B	2.80			--1754 / S1 / 3.3B
		X - X - X	B	3.30			--1754 / S1 / 3.8B
		X - X - X	B	3.80			--1754 / S1 / 4.3B
Dense brown very sandy GRAVEL	4.30	X - X - X	B	4.30			--1754 / S1 / 4.8B
		X - X - X	B	4.80			--1754 / S1 / 5.3B
	5.60						Borehole remained dry
 TERRAMECH INVESTIGATIONS LIMITED 183 LONG LANE TILEHURST READING			REMARKS:				
U100=100mm dia. UNDISTURBED SAMPLE U38=38mm dia. UNDISTURBED SAMPLE D=SMALL DISTURBED SAMPLE B=BULK SAMPLE W=WATER SAMPLE SPT=STANDARD PENETRATION TEST CPT=CONE PENETRATION TEST							

[illegible]

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PAGE: 5

JOB 1754

BOREHOLE
S4

DATE: 28.09.00

WOODS ROAD - CAVERSHAM

DESCRIPTION

REDUCED
LEVEL m

DEPTH
m

LEGEND

SAMPLE

THICKNESS

SPT

REMARKS

TYPE

DEPTH

m

N

Medium dense dark brown silty fine SAND...

0.00

X : X :

0.50

Firm becoming stiff brown friable sandy...
gravelly SILT

0.50

X : X :

B

0.80

--1754 / S4 / 0.8B

1.00

B

1.30

--1754 / S4 / 1.3B

Stiff brown friable sandy clayey SILT with
some gravel

1.50

X : X :

Roots found down to 1.5m

B

1.80

0.50

--1754 / S4 / 1.8B

Dense orange/brown slightly clayey sandy...
GRAVEL

2.00

O : O :

0.20

Stiff brown very silty sandy CLAY with....
some flinty gravel

2.20

-X-X-

B

2.30

--1754 / S4 / 2.3B

1.00

B

2.80

--1754 / S4 / 2.8B

Medium dense white CHALK with some brown...
veins

3.20

-X-X-

B

3.30

--1754 / S4 / 3.3B

0.80

B

3.80

--1754 / S4 / 3.8B

4.00

Borehole remained dry

TERRAMECH INVESTIGATIONS LIMITED
183 LONG LANE TILEHURST READING

REMARKS:

U100=100mm dia. UNDISTURBED SAMPLE

U38=38mm dia. UNDISTURBED SAMPLE

D=SMALL DISTURBED SAMPLE

B=BULK SAMPLE

W=WATER SAMPLE

SPT=STANDARD PENETRATION TEST

CPT=CONE PENETRATION TEST

APPENDIX C

BOREHOLE LOG - CABLE PERCUSSION

BH101

Project Henley Road, Caversham

Project No.

AG3094-19

Client Signature Senior Lifestyle Developments

Sheet

1 of 1

Start 14/01/2020

Coordinates

Scale

1:50

End 15/01/2020

Ground Level 44.52m AOD

Total Depth

9.65m

Sample / Test Type	Depth (m)	Result	Casing Depth (m)	Level (mAOD)	Strata Depth (thickness) (m)	Description of Strata	Legend	GW	Install
D	0.10				(0.30)	Grass over soft brown slightly gravelly sandy CLAY with occasional roots and rootlets with natural faint organic odour. Sand is fine to coarse. Gravel is fine to medium subangular chalk.			
D	0.30			44.22	0.30				
ES	0.50			43.92	(0.30)	(TOPSOIL)			
D	0.70				0.60	Soft orangish brown slightly gravelly sandy CLAY. Sand is fine to coarse. Gravel is fine to coarse subangular to subrounded chalk. (HEAD/ALLUVIUM)			
D	1.20					Off white to white CHALK. Recovered as silty medium to high density chalk clasts with flint gravel. (SEAFORD CHALK FORMATION AND NEWHAVEN CHALK FORMATION (UNDIFFERENTIATED))			
S	1.20	N = 22	1.20			From 1.20m bgl: cobbles of flint.			
B	1.65								
D	2.00								
S	2.00	N = 20	2.00						
D	2.70								
D	3.00								
S	3.00	N = 15	3.00						
B	3.45								
D	4.00								
S	4.00	N = 24	4.00						
D	4.80								
D	5.10				(9.05)	At 5.00m bgl: very silty.			
S	5.10	N = 25	5.00						
B	5.55								
D	6.50								
S	6.50	N = 34	7.00						
D	7.50								
B	8.00								
U	8.00	(55)							
D	8.40								
S	8.40	N = 43	8.40						
D	9.00								
D	9.20								
S	9.20	N = 39	9.00						
				34.87	9.65	End of Borehole at 9.65m			

Chiselling			Groundwater Strikes					Drilled: TS Logged: MS Checked: AP
From	To	Duration (hh:mm)	Depth Strike	Rose to	Remarks	Cased	Sealed	
			8.40	8.30		8.00		

Remarks: Hand dug service inspection pit excavated to 1.20m bgl.

Installation: 50mm diameter standpipe installed to 8.50m bgl.

Diameter: 150mm to 9.65m

BOREHOLE LOG - CABLE PERCUSSION

BH102

Project Henley Road, Caversham
Client Signature Senior Lifestyle Developments
Start 06/01/2020
End 07/01/2020

Project No. AG3094-19
Sheet 1 of 3
Scale 1:50
Total Depth 20.50m

Coordinates
Ground Level 42.00m AOD

Sample / Test Type	Depth (m)	Result	Casing Depth (m)	Level (mAOD)	Strata Depth (thickness) (m)	Description of Strata	Legend	GW	Install
				41.70	(0.30) 0.30	Grass over soft dark brown slightly gravelly sandy CLAY with occasional near surface roots and rootlets. Sand is fine to coarse. Gravel is fine to coarse subangular to rounded chalk. (TOPSOIL)			
B ES	0.50 0.50					Off white to white CHALK. Recovered as clayey/silty low to medium density chalk gravel and cobbles. (SEAFORD CHALK FORMATION AND NEWHAVEN CHALK FORMATION (UNDIFFERENTIATED)) From 0.70m bgl: occasional flint gravel and cobbles.			
B D ES S	1.00 1.00 1.00 1.20	N = 8							
B D D S UT	2.00 2.00 2.00 2.00 2.50	N = 10 (100)			(3.70)				
D S	3.00 3.00	N = 7	3.00						
D D S	4.00 4.00 4.00	N = 11	3.00	38.00	4.00	White CHALK. Recovered as clayey/silty medium density chalk gravel and cobbles. (SEAFORD CHALK FORMATION AND NEWHAVEN CHALK FORMATION (UNDIFFERENTIATED))			
B D S	5.00 5.00 5.00	N = 14	4.50					▼	
D UT	6.00 6.00	(100)						▽	
D	7.00								
D S B	7.50 7.50 8.00	N = 15	7.50						
D S	9.00 9.00	N = 24	9.00						
B	10.00					Continued next sheet			

Chiselling			Groundwater Strikes					Drilled: Southeastern Drilling Services Ltd Logged: MS Checked: AP
From	To	Duration (hh:mm)	Depth Strike	Rose to	Remarks	Cased	Sealed	
10.80	11.00	00:20	6.20	5.20	Slow inflow	4.50		
14.20	14.50	00:25						
17.00	17.30	00:20						
20.20	20.50	01:00						

Remarks: Hand dug service inspection pit excavated to 1.20m bgl.

Installation: 50mm diameter standpipe installed to 10.00m bgl.

Diameter: 150mm to 20.50m, 200mm to 9.00m

BOREHOLE LOG - CABLE PERCUSSION

BH102

Project Henley Road, Caversham

Project No.

AG3094-19

Client Signature Senior Lifestyle Developments

Sheet

2 of 3

Start 06/01/2020

Coordinates

Scale

1:50

End 07/01/2020

Ground Level 42.00m AOD

Total Depth

20.50m

Sample / Test Type	Depth (m)	Result	Casing Depth (m)	Level (mAOD)	Strata Depth (thickness) (m)	Description of Strata	Legend	GW	Install
S	10.50	N = 27	10.50			White CHALK. Recovered as clayey/silty medium density chalk gravel and cobbles. (SEAFORD CHALK FORMATION AND NEWHAVEN CHALK FORMATION (UNDIFFERENTIATED))			
D	11.00					At 10.80m bgl: frequent cobbles of flint.			
D	12.00								
S	12.00	N = 30	12.00		(16.50)				
D	13.00								
S	13.50	N = 34	13.50						
D	14.00					At 14.20m to 14.50m bgl: frequent cobbles of flint.			
B	15.00								
D	15.00								
S	15.00	N = 36	15.00						
D	16.00								
D	16.50								
S	16.50	N = 50	16.50						
D	17.00					At 17.00m to 17.30m bgl: frequent cobbles of flint.			
D	18.00								
S	18.00	N = 50	18.00						
D	19.00								
S	19.50	N = 50	19.50						
B	20.00					Continued next sheet			

Chiselling			Groundwater Strikes					Drilled: Southeastern Drilling Services Ltd Logged: MS Checked: AP
From	To	Duration (hh:mm)	Depth Strike	Rose to	Remarks	Cased	Sealed	
10.80	11.00	00:20	6.20	5.20	Slow inflow	4.50		
14.20	14.50	00:25						
17.00	17.30	00:20						
20.20	20.50	01:00						

Remarks: Hand dug service inspection pit excavated to 1.20m bgl.

Installation: 50mm diameter standpipe installed to 10.00m bgl.

Diameter: 150mm to 20.50m, 200mm to 9.00m

BH102

Project No.	AG3094-19
Sheet	3 of 3
Scale	1:50
Total Depth	20.50m

Chiselling			Groundwater Strikes					Drilled: Southeastern Drilling Services Ltd Logged: MS Checked: AP
From	To	Duration (hh:mm)	Depth Strike	Rose to	Remarks	Cased	Sealed	
10.80	11.00	00:20	6.20	5.20	Slow inflow	4.50		
14.20	14.50	00:25						
17.00	17.30	00:20						
20.20	20.50	01:00						

Exploratory hole logs should be read in conjunction with key sheets

BOREHOLE LOG - CABLE PERCUSSION

BH103

Project Henley Road, Caversham

Project No.

AG3094-19

Client Signature Senior Lifestyle Developments

Sheet

1 of 2

Start 10/01/2020

Coordinates

Scale

1:50

End 13/01/2020

Ground Level 39.62m AOD

Total Depth

19.95m

Sample / Test Type	Depth (m)	Result	Casing Depth (m)	Level (mAOD)	Strata Depth (thickness) (m)	Description of Strata	Legend	GW	Install
				39.32	(0.30) 0.30	Grass over soft light brown slightly gravelly sandy CLAY with occasional roots and rootlets. Sand is fine to coarse. Gravel is fine to coarse subangular to subrounded flint. (TOPSOIL)			
B ES	0.50 0.50					Very soft to soft orangish brown slightly sandy CLAY. Sand is fine to coarse. Gravel is fine to coarse angular to subrounded flint and rare chalk. (HEAD/ALLUVIUM)			
B D ES S	1.00 1.00 1.00 1.20	N = 6			(1.70)				
B D S	2.00 2.00 2.00	N = 4		37.62	2.00 (0.70)	Loose yellowish/orangish brown slightly gravelly silty fine to medium SAND. Gravel is fine to coarse subangular to subrounded chalk. (KEMPTON PARK GRAVEL FORMATION)			
B D D S	3.00 3.00 3.00 3.00	N = 8	3.00	36.92	2.70 (1.30)	Creamy white to white CHALK. Recovered as silty low to medium density chalk clasts with flint gravel. (SEAFORD CHALK FORMATION AND NEWHAVEN CHALK FORMATION (UNDIFFERENTIATED))			
B D D S	4.00 4.00 4.00 4.00	N = 7	4.00	35.62	4.00	Off white to white CHALK. Recovered as clayey medium to high density chalk clasts with flint gravel. (SEAFORD CHALK FORMATION AND NEWHAVEN CHALK FORMATION (UNDIFFERENTIATED))			
B D D S	5.00 5.00 5.00 5.00	N = 9	5.00						
D D S	6.00 6.00 6.00	N = 14	6.00						
D	7.00								
D S D	7.50 7.50 8.00	N = 14	7.50						
D D S	9.00 9.00 9.00	N = 18	9.00						
B	10.00					Continued next sheet			

Chiselling			Groundwater Strikes					Drilled: Southeastern Drilling Services Ltd
From	To	Duration (hh:mm)	Depth Strike	Rose to	Remarks	Cased	Sealed	
11.20		00:20	4.20	2.20	Slow inflow	3.00		Logged: MS
15.60		00:20						Checked: AP
17.20		00:20						
19.00		01:00						

Remarks: Hand dug service inspection pit excavated to 1.20m bgl. Borehole backfilled with bentonite on completion.

Installation:

Diameter: 200mm to 9.00m, 150mm to 19.95m

BOREHOLE LOG - CABLE PERCUSSION

BH103

Project Henley Road, Caversham

Project No.

AG3094-19

Client Signature Senior Lifestyle Developments

Sheet

2 of 2

Start 10/01/2020

Coordinates

Scale

1:50

End 13/01/2020

Ground Level 39.62m AOD

Total Depth

19.95m

Sample / Test Type	Depth (m)	Result	Casing Depth (m)	Level (mAOD)	Strata Depth (thickness) (m)	Description of Strata	Legend	GW	Install
D	10.00					Off white to white CHALK. Recovered as clayey medium to high density chalk clasts with flint gravel. (SEAFORD CHALK FORMATION AND NEWHAVEN CHALK FORMATION (UNDIFFERENTIATED))			
D	10.50								
S	10.50	N = 19	10.50						
D	11.00					From 11.00m bgl: high density chalk clasts.			
						At 11.20m bgl: frequent gravel, cobbles and boulder sized flint.			
D	12.00								
D	12.00				(15.95)				
S	12.00	N = 35	12.00						
D	13.00								
D	13.45								
S	13.50	N = 34	13.50						
D	14.00								
D	15.00								
D	15.00								
S	15.00	N = 36	15.00			At 15.60m bgl: frequent cobbles and boulder sized flint.			
D	16.00								
D	16.50								
S	16.50	N = 42	16.50						
D	17.00					At 17.20m bgl: frequent cobble and boulder sized flint.			
D	18.00								
D	18.00								
S	18.00	N = 44	18.00						
B	19.00					At 19.00m bgl: frequent cobble and boulder sized flint.			
D	19.50								
S	19.50	N = 50	19.50						
				19.67	19.95	End of Borehole at 19.95m			

Chiselling			Groundwater Strikes					Drilled: Southeastern Drilling Services Ltd Logged: MS Checked: AP
From	To	Duration (hh:mm)	Depth Strike	Rose to	Remarks	Cased	Sealed	
11.20		00:20	4.20	2.20	Slow inflow	3.00		
15.60		00:20						
17.20		00:20						
19.00		01:00						

Remarks: Hand dug service inspection pit excavated to 1.20m bgl. Borehole backfilled with bentonite on completion.

Installation:

Diameter: 200mm to 9.00m, 150mm to 19.95m

BOREHOLE LOG - CABLE PERCUSSION

BH104

Project Henley Road, Caversham

Project No.

AG3094-19

Client Signature Senior Lifestyle Developments

Sheet

1 of 2

Start 08/01/2020

Coordinates

Scale

1:50

End 09/01/2020

Ground Level 37.76m AOD

Total Depth

20.00m

Sample / Test Type	Depth (m)	Result	Casing Depth (m)	Level (mAOD)	Strata Depth (thickness) (m)	Description of Strata	Legend	GW	Install
B ES	0.50 0.50			37.16	(0.60) 0.60	Soft dark brown slightly gravelly sandy CLAY with frequent near surface roots and rootlets. Sand is fine to coarse. Gravel is fine to coarse subangular to rounded flint and occasional chalk fragments. (TOPSOIL)			
B ES S	1.00 1.00 1.20	N = 3			(1.70)	Soft orangish brown slightly gravelly slightly sandy CLAY with occasional laminations of greyish brown silt. Sand is fine to coarse. Gravel is fine to coarse subangular to subrounded flint and chalk fragments. (HEAD/ALLUVIUM)			
B D S	2.00 2.00 2.00	N = 4		35.46	2.30	Loose orangish brown slightly gravelly silty fine to coarse SAND. Gravel is fine to coarse subangular to rounded flint. (KEMPTON PARK GRAVEL FORMATION)		▼	
B D C	3.00 3.00 3.00	N = 8	3.00	34.56	3.20	From 3.00m bgl: slightly clayey with occasional cobbles of flint.		▽	
B D S	4.00 4.00 4.00	N = 8	4.00			Loose orangish brown clayey/silty SAND and GRAVEL. Sand is fine to coarse. Gravel is fine to coarse subangular to rounded flint. (KEMPTON PARK GRAVEL FORMATION)			
B D C	5.00 5.00 5.00	N = 9	4.50		(4.80)				
D C	6.00 6.00	N = 14	6.00			From 6.00m bgl: medium dense with cobbles of flint.			
D	7.00								
C	7.50	N = 18	7.50						
B D	8.00 8.00			29.76	8.00	Cream to off white CHALK. Recovered as silty medium to high density fine to coarse gravel and cobbles of chalk and occasional flint. (SEAFORD CHALK FORMATION AND NEWHAVEN CHALK FORMATION (UNDIFFERENTIATED))			
D D S	9.00 9.00 9.00	N = 15	9.00		(3.00)				
D	10.00					Continued next sheet			

Chiselling			Groundwater Strikes					Drilled: Southeastern Drilling Services Ltd
From	To	Duration (hh:mm)	Depth Strike	Rose to	Remarks	Cased	Sealed	
7.10	7.50	00:30	3.20	2.20	Slow inflow			Logged: MS Checked: AP
10.35	10.50	00:20						
13.20	13.50	00:20						
18.40	18.60	00:20						
19.60	20.00	01:00						

Remarks: Hand dug service inspection pit excavated to 1.20m bgl. Borehole backfilled with bentonite on completion.

Installation:

Diameter: 200mm to 9.00m, 150mm to 20.00m

BOREHOLE LOG - CABLE PERCUSSION

BH104

Project Henley Road, Caversham

Project No.

AG3094-19

Client Signature Senior Lifestyle Developments

Sheet

2 of 2

Start 08/01/2020

Coordinates

Scale

1:50

End 09/01/2020

Ground Level 37.76m AOD

Total Depth

20.00m

Sample / Test Type	Depth (m)	Result	Casing Depth (m)	Level (mAOD)	Strata Depth (thickness) (m)	Description of Strata	Legend	GW	Install
D	10.50	N = 21	10.50	26.76	11.00	Cream to off white CHALK. Recovered as silty medium to high density fine to coarse gravel and cobbles of chalk and occasional flint. (SEAFORD CHALK FORMATION AND NEWHAVEN CHALK FORMATION (UNDIFFERENTIATED)) <i>At 10.50m bgl: mottled orangish brown.</i>			
S	10.50								
D	11.00					Off white to white CHALK. Recovered as silty medium to high density fine to coarse gravels and cobbles of chalk and occasional flint. (SEAFORD CHALK FORMATION AND NEWHAVEN CHALK FORMATION (UNDIFFERENTIATED))			
S	11.00								
D	12.00	N = 30	12.00						
S	12.00								
B	13.00								
D	13.00								
D	13.50	N = 35	13.50						
S	13.50								
D	14.00								
S	14.00								
D	15.00	N = 50	15.00						
S	15.00								
D	16.00								
S	16.00								
D	16.50	N = 50	16.50						
S	16.50								
B	17.00								
D	17.00								
D	18.00	N = 50							
S	18.00								
B	19.00								
D	19.00								
D	19.50	N = 50							
S	19.50								
				17.76	20.00	From 19.60m to 20.00m bgl: frequent flint gravel and cobbles.			
						End of Borehole at 20.00m			

Chiselling			Groundwater Strikes					Drilled: Southeastern Drilling Services Ltd Logged: MS Checked: AP
From	To	Duration (hh:mm)	Depth Strike	Rose to	Remarks	Cased	Sealed	
7.10	7.50	00:30	3.20	2.20	Slow inflow			
10.35	10.50	00:20						
13.20	13.50	00:20						
18.40	18.60	00:20						
19.60	20.00	01:00						

Remarks: Hand dug service inspection pit excavated to 1.20m bgl. Borehole backfilled with bentonite on completion.

Installation:

Diameter: 200mm to 9.00m, 150mm to 20.00m

BH105

AG3094-19

1 of 2

1:50

19.35m

Continued next sheet

Checked: AP

Diameter: 150mm to 19.35m

BOREHOLE LOG - CABLE PERCUSSION

BH105

Project Henley Road, Caversham
Client Signature Senior Lifestyle Developments
Start 19/12/2019
End 06/01/2020

Project No. AG3094-19
Sheet 2 of 2
Scale 1:50
Total Depth 19.35m

Coordinates
Ground Level 37.86m AOD

Sample / Test Type	Depth (m)	Result	Casing Depth (m)	Level (mAOD)	Strata Depth (thickness) (m)	Description of Strata	Legend	GW	Install
C	10.50	N = 41	10.50			Off white to white slightly silty/clayey CHALK. Recovered as low density gravel and cobbles of chalk and occasional flint. (SEAFORD CHALK FORMATION AND NEWHAVEN CHALK FORMATION (UNDIFFERENTIATED)) <i>At 10.00m bgl: frequent flint gravel and cobbles.</i>			
D	11.20								
D	12.00								
S	12.00	N = 40	12.00		(14.80)				
B	12.60					<i>At 12.60m bgl: frequent flint gravel and cobbles.</i>			
C	13.00	N >50	13.00						
D	13.80								
D	14.00					<i>From 13.80m bgl: very fine to medium flint gravels.</i>			
S	14.00	N >50	14.00						
D	15.00								
D	15.50								
S	15.50	N = 45	15.50						
D	16.50								
D	17.00								
S	17.00	N >50	17.00						
D	18.00					<i>From 18.00m bgl: flint gravels becoming coarse.</i>			
D	18.50								
S	18.50	N >50	18.50						
D	18.80					<i>At 18.80m bgl: frequent flint gravel and cobbles.</i>			
C	19.10	N >50	19.00	18.76	19.10				
						End of Borehole at 19.35m			

Chiselling			Groundwater Strikes					Drilled: TS Logged: MS Checked: AP
From	To	Duration (hh:mm)	Depth Strike	Rose to	Remarks	Cased	Sealed	
10.00	10.25	01:00	4.80	4.40		4.40		
12.60	13.00	02:00						
18.80	19.10	01:30						

Remarks: Hand dug service inspection pit excavated to 1.20m bgl. Borehole backfilled with arisings on completion.

Installation:

Diameter: 150mm to 19.35m

BOREHOLE LOG - CABLE PERCUSSION

BH106

Project Henley Road, Caversham

Project No.

AG3094-19

Client Signature Senior Lifestyle Developments

Sheet

1 of 2

Start 10/01/2020

Coordinates

Scale

1:50

End 10/01/2020

Ground Level 37.28m AOD

Total Depth

18.57m

Sample / Test Type	Depth (m)	Result	Casing Depth (m)	Level (mAOD)	Strata Depth (thickness) (m)	Description of Strata	Legend	GW	Install
B	0.10				(0.45)	Grass over soft light brown slightly gravelly sandy CLAY with occasional roots and rootlets. Sand is fine to coarse. Gravel is fine to coarse subangular to subrounded flint.			
D	0.50			36.83	0.45				
ES	0.50					Soft orangish brown slightly gravelly sandy CLAY. Sand is fine to coarse. Gravel is fine to coarse angular to subrounded flint. (HEAD/ ALLUVIUM)			
D	1.00								
D	1.20				(1.50)				
S	1.20	N = 7	1.20						
D	1.80								
D	1.95			35.33	1.95				
C	2.00	N = 13	2.00			Firm yellowish brown slightly gravelly CLAY. Gravel is fine to coarse angular to subangular chalk. (HEAD/ALLUVIUM)			
B	2.20								
					(1.85)				
C	3.00	N = 11	3.00						
D	3.50								
D	3.80			33.48	3.80				
C	4.00	N = 20	4.00			Medium dense yellowish/orangish brown sandy GRAVEL. Sand is fine to coarse. Gravel is fine to coarse angular to subrounded flint. (KEMPTON PARK GRAVEL FORMATION)			
B	4.45				(1.65)				
C	5.00	N = 15	4.45						
D	5.40			31.83	5.45				
D	5.50					Firm yellowish/orangish brown slightly gravelly sandy CLAY. Sand is fine to coarse. Gravel is fine to medium subangular to rounded flint. (KEMPTON PARK GRAVEL FORMATION)			
D	5.60	N = 14	5.60		(0.85)				
S	5.60								
D	6.20			30.98	6.30				
B	6.30				(0.60)	Yellowish/orangish brown slightly sandy fine to coarse GRAVEL and COBBLES of flint. Sand is fine. (KEMPTON PARK GRAVEL FORMATION)			
D	6.90			30.38	6.90				
D	7.00					Off white to white CHALK recovered as clayey high density chalk gravel and occasional flint. (SEAFORD CHALK FORMATION AND NEWHAVEN CHALK FORMATION (UNDIFFERENTIATED))			
S	7.00	N = 21	7.00						
D	8.00								
D	8.50								
S	8.50	N = 31	8.50						
D	9.50								
D	10.00								

Continued next sheet

Chiselling			Groundwater Strikes					Drilled: TS Logged: MS Checked: AP
From	To	Duration (hh:mm)	Depth Strike	Rose to	Remarks	Cased	Sealed	
6.30	6.80	01:15	4.00	3.80		3.80	0.00	
12.40	12.60	00:45						
14.10	14.25	00:30						
18.10	18.30	00:45						

Remarks: Hand dug service inspection pit excavated to 1.20m bgl. Borehole backfilled with arisings on completion.

Installation:

Diameter: 150mm to 18.57m

BOREHOLE LOG - CABLE PERCUSSION

BH106

Project Henley Road, Caversham

Project No.

AG3094-19

Client Signature Senior Lifestyle Developments

Sheet

2 of 2

Start 10/01/2020

Coordinates

Scale

1:50

End 10/01/2020

Ground Level 37.28m AOD

Total Depth

18.57m

Sample / Test Type	Depth (m)	Result	Casing Depth (m)	Level (mAOD)	Strata Depth (thickness) (m)	Description of Strata	Legend	GW	Install
S	10.00	N = 36	10.00			Off white to white CHALK recovered as clayey high density chalk gravel and occasional flint. (SEAFORD CHALK FORMATION AND NEWHAVEN CHALK FORMATION (UNDIFFERENTIATED))			
D	11.00								
D	11.50								
S	11.50	N = 50	11.50						
D	12.20								
B	12.40					At 12.40m and 12.60m bgt. band of flint cobbles and boulders.			
D	13.00				(11.40)				
S	13.00	N >50	13.00						
B	13.42								
						At 14.10m and 14.25m bgt. band of flint cobbles and boulders.			
D	14.50								
S	14.50	N >50	14.50						
D	15.50								
D	16.00								
S	16.00	N >50	16.00						
D	17.00								
D	17.50								
S	17.50	N >50	17.50						
D	18.10								
C	18.30	N >50	18.30	18.98	18.30	From 18.10m and 18.30m bgt. flint cobbles and boulders.			
						End of Borehole at 18.57m			

Chiselling			Groundwater Strikes					Drilled: TS Logged: MS Checked: AP
From	To	Duration (hh:mm)	Depth Strike	Rose to	Remarks	Cased	Sealed	
6.30	6.80	01:15	4.00	3.80		3.80	0.00	
12.40	12.60	00:45						
14.10	14.25	00:30						
18.10	18.30	00:45						

Remarks: Hand dug service inspection pit excavated to 1.20m bgt. Borehole backfilled with arisings on completion.

Installation:

Diameter: 150mm to 18.57m

BOREHOLE LOG - CABLE PERCUSSION

BH107

Project Henley Road, Caversham

Project No.

AG3094-19

Client Signature Senior Lifestyle Developments

Sheet

1 of 2

Start 17/12/2019

Coordinates

Scale

1:50

End 19/12/2019

Ground Level 37.00m AOD

Total Depth

18.84m

Sample / Test Type	Depth (m)	Result	Casing Depth (m)	Level (mAOD)	Strata Depth (thickness) (m)	Description of Strata	Legend	GW	Install
D	0.20				(0.45)	Grass over soft light brown slightly gravelly sandy CLAY with occasional roots and rootlets. Sand is fine to coarse. Gravel is fine to coarse subangular to subrounded flint.			
D	0.50			36.55	0.45	(TOPSOIL)			
ES	0.60					Very soft to soft orangish brown slightly gravelly sandy CLAY. Sand is fine to coarse. Gravel is fine to coarse angular to subrounded flint. (HEAD/ALLUVIUM)			
D	1.20					From 1.20m bgl: becoming very sandy.			
S	1.20	N = 3	1.00		(2.15)				
B	1.65					From 1.65m bgl: occasional fragments of chalk gravel.			
D	2.20								
S	2.20	N = 4	2.00						
D	2.80			34.40	2.60	Orangish brown clayey gravelly fine to coarse SAND. Gravel is fine to coarse subangular to rounded flint and fragments of chalk. (KEMPTON PARK GRAVEL FORMATION)			
D	3.00					At 3.00m bgl: very dense logs/possible cobbles.			
S	3.00	N > 50	3.00		(1.40)				
D	3.20								
B	3.55								
B	4.00			33.00	4.00	Loose orangish brown slightly silty SAND and GRAVEL. Sand is fine to coarse. Gravel is fine to coarse angular to subrounded flint. (KEMPTON PARK GRAVEL FORMATION)			
C	4.00	N = 9	4.00						
C	5.00	N = 18	5.00			From 5.00m bgl: medium dense with occasional cobbles of flint.			
B	5.50								
B	6.50				(4.30)				
D	7.50								
S	7.50	N = 23	8.00						
B	7.95								
B	8.10								
D	8.30			28.70	8.30	Off white to white CHALK. Recovered as clayey silt with medium density chalk gravels. (SEAFORD CHALK FORMATION AND NEWHAVEN CHALK FORMATION (UNDIFFERENTIATED))			
S	8.30	N = 17	8.00		(1.20)				
D	9.50			27.50	9.50	Off white to white CHALK. Recovered as clayey low density chalk and flint gravels with occasional flint cobbles. (SEAFORD CHALK FORMATION AND NEWHAVEN CHALK FORMATION (UNDIFFERENTIATED))			
D	9.80								
S	9.80	N = 24	10.00						

Chiselling			Groundwater Strikes					Drilled: TS
From	To	Duration (hh:mm)	Depth Strike	Rose to	Remarks	Cased	Sealed	
3.45	3.55	01:00	3.40	2.50		3.40		Logged: MS
7.95	8.10	02:00						Checked: AP
10.40	10.80	01:30						
16.80	18.10	02:30						
18.40	18.80	01:30						

Remarks: Hand dug service inspection pit excavated to 1.20m bgl.

Installation: 50mm diameter standpipe installed to 6.00m bgl. 50mm diameter standpipe installed to 14.00m bgl.

Diameter: 150mm to 18.84m

BOREHOLE LOG - CABLE PERCUSSION

BH107

Project Henley Road, Caversham
Client Signature Senior Lifestyle Developments
Start 17/12/2019
End 19/12/2019

Project No. AG3094-19
Sheet 2 of 2
Scale 1:50
Total Depth 18.84m

Coordinates
Ground Level 37.00m AOD

Sample / Test Type	Depth (m)	Result	Casing Depth (m)	Level (mAOD)	Strata Depth (thickness) (m)	Description of Strata	Legend	GW	Install
B	10.40					Off white to white CHALK. Recovered as clayey low density chalk and flint gravels with occasional flint cobbles. (SEAFORD CHALK FORMATION AND NEWHAVEN CHALK FORMATION (UNDIFFERENTIATED)) From 10.00m bgl: occasional to frequent gravel and cobble sized flint. At 10.40m bgl: flint cobbles.			
D	11.00								
D	11.40								
S	11.40	N >50	11.00						
D	12.50								
D	13.00								
S	13.00	N = 27	13.00			From 13.00m bgl: high density chalk clasts.			
D	14.00								
D	14.50				(9.34)				
S	14.50	N >50	15.00						
D	15.00								
D	15.80								
S	15.80	N >50	16.00						
D	16.70								
B	16.80					From 16.80m bgl: frequent gravel, cobbles and boulder sized flint.			
C	17.00	N >50	17.00						
D	17.50								
D	18.10								
S	18.10	N >50	18.00						
B	18.40					At 18.40m bgl: frequent flint cobbles.			
D	18.80			18.16	18.84				
S	18.80	N >50	19.00			End of Borehole at 18.84m			

Chiselling			Groundwater Strikes					Drilled: TS Logged: MS Checked: AP
From	To	Duration (hh:mm)	Depth Strike	Rose to	Remarks	Cased	Sealed	
3.45	3.55	01:00	3.40	2.50		3.40		
7.95	8.10	02:00						
10.40	10.80	01:30						
16.80	18.10	02:30						
18.40	18.80	01:30						

Remarks: Hand dug service inspection pit excavated to 1.20m bgl.

Installation: 50mm diameter standpipe installed to 6.00m bgl. 50mm diameter standpipe installed to 14.00m bgl.

Diameter: 150mm to 18.84m

BOREHOLE LOG - CABLE PERCUSSION

BH108

Project Henley Road, Caversham

Project No.

AG3094-19

Client Signature Senior Lifestyle Developments

Sheet

1 of 2

Start 08/01/2020

Coordinates

Scale

1:50

End 09/01/2020

Ground Level 36.92m AOD

Total Depth

17.50m

Sample / Test Type	Depth (m)	Result	Casing Depth (m)	Level (mAOD)	Strata Depth (thickness) (m)	Description of Strata	Legend	GW	Install
B	0.10				(0.50)	Grass over soft to firm light brown sandy CLAY with frequent near surface roots and rootlets. Sand is fine to coarse. (TOPSOIL)			
D	0.50			36.42	0.50				
ES	0.50					Soft orangish brown slightly gravelly slightly sandy CLAY with occasional laminations of silt. Sand is fine to coarse. Gravel is fine to coarse subangular to rounded fragments of chalk and black specs of possible organic matter. (HEAD/ALLUVIUM)			
D	1.00								
D	1.20								
S	1.20	N = 6	1.20						
B	1.65								
D	2.00								
S	2.00	N = 7	2.00						
B	2.45				(3.70)				
						From 3.00m bgl: very fine flint gravels. At 3.25m bgl: very soft.			
D	3.25								
S	3.25	N = 9	3.00						
B	3.70								
U	3.80	(22)							
B	4.20			32.72	4.20				
B	4.50					Medium dense orangish brown slightly clayey SAND and GRAVEL. Sand is fine to coarse. Gravel is fine to coarse angular to subrounded flint. (KEMPTON PARK GRAVEL FORMATION)			
C	4.50	N = 16	4.50		(1.20)				
	5.00	N = 16	5.00						
B	5.40			31.52	5.40				
B	5.80			31.12	5.80				
C	6.00	N = 24	6.00		(0.50)	Firm orangish brown slightly gravelly slightly sandy CLAY. Sand is fine to coarse. Gravel is fine to coarse subangular to subrounded flint and occasional chalk fragments. (KEMPTON PARK GRAVEL FORMATION)			
D	6.30			30.62	6.30				
D	6.50					Medium dense orangish brown slightly clayey SAND and GRAVEL. Sand is fine to coarse. Gravel is fine to coarse subangular to rounded flint. (KEMPTON PARK GRAVEL FORMATION)			
S	6.50	N = 23	6.50			Off white to white CHALK. Recovered as medium to strong density chalk gravel. (SEAFORD CHALK FORMATION AND NEWHAVEN CHALK FORMATION (UNDIFFERENTIATED)) At 6.50m bgl: some silt.			
D	7.50								
D	8.00								
S	8.00	N = 32	8.00			At 8.00m bgl: some silt.			
D	8.50					From 8.50m bgl: flint gravel and cobbles.			
D	9.50					At 9.50m bgl: some silt along gravels.			
D	10.00								
						Continued next sheet			

Chiselling			Groundwater Strikes					Drilled: TS Logged: MS Checked: AP
From	To	Duration (hh:mm)	Depth Strike	Rose to	Remarks	Cased	Sealed	
8.50	8.75	01:00	4.50	4.30		4.20		
11.10	11.25	01:00						
16.80	17.20	02:00						

Remarks: Hand dug service inspection pit excavated to 1.20m bgl.

Installation: 50mm diameter standpipe installed to 6.00m bgl.

Diameter: 150mm to 17.50m

BOREHOLE LOG - CABLE PERCUSSION

BH108

Project

Henley Road, Caversham

Project No.

AG3094-19

Client

Signature Senior Lifestyle Developments

Sheet

2 of 2

Start

08/01/2020

Coordinates

Scale

1:50

End

09/01/2020

Ground Level

36.92m AOD

Total Depth

17.50m

Sample / Test Type	Depth (m)	Result	Casing Depth (m)	Level (mAOD)	Strata Depth (thickness) (m)	Description of Strata	Legend	GW	Install
S	10.00	N = 33	10.00			Off white to white CHALK. Recovered as medium to strong density chalk gravel. (SEAFORD CHALK FORMATION AND NEWHAVEN CHALK FORMATION (UNDIFFERENTIATED))			
B	11.10					At 11.10m bgl: flint gravel and cobbles.			
D	11.40								
D	11.60					At 11.60m bgl: some silt along gravels.			
S	11.60	N = 41	11.60		(11.20)				
D	12.40								
D	13.00					At 13.00m bgl: some silt along gravels recovered.			
S	13.00	N = 50	13.00						
D	14.40								
D	14.60								
S	14.60	N >50	14.60						
D	15.50								
D	16.00					At 16.00m bgl: some silt along gravels recovered.			
S	16.00	N >50	16.00						
D	16.50					At 16.60m bgl: flint gravel and cobbles.			
D	16.80								
S	16.80	N >50	16.80						
D	17.10								
D	17.20					From 17.20m bgl: large flint cobbles.			
S	17.20	N >50	17.20	19.42	17.50	End of Borehole at 17.50m			

Chiselling			Groundwater Strikes					Drilled: TS Logged: MS Checked: AP
From	To	Duration (hh:mm)	Depth Strike	Rose to	Remarks	Cased	Sealed	
8.50	8.75	01:00	4.50	4.30		4.20		
11.10	11.25	01:00						
16.80	17.20	02:00						

Remarks: Hand dug service inspection pit excavated to 1.20m bgl.

Installation: 50mm diameter standpipe installed to 6.00m bgl.

Diameter: 150mm to 17.50m

BOREHOLE LOG - CABLE PERCUSSION

BH109

Project Henley Road, Caversham
Client Signature Senior Lifestyle Developments
Start 13/01/2020
End 13/01/2020

Project No. AG3094-19
Sheet 1 of 1
Scale 1:50
Total Depth 9.95m

Coordinates
Ground Level 38.30m AOD

Sample / Test Type	Depth (m)	Result	Casing Depth (m)	Level (mAOD)	Strata Depth (thickness) (m)	Description of Strata	Legend	GW	Install
D	0.20				(0.40)	Grass over soft light brown slightly gravelly sandy CLAY with occasional roots and rootlets. Sand is fine to coarse. Gravel is fine to coarse subangular to subrounded flint.			
D	0.40			37.90	0.40	(TOPSOIL)			
ES	0.50								
D	0.80					Soft orangish brown slightly gravelly sandy CLAY. Sand is fine to coarse. Gravel is fine to coarse angular to subrounded flint. (HEAD/ ALLUVIUM)			
D	1.20								
S	1.20	N = 7	1.20		(2.20)				
B	1.65								
D	2.00								
S	2.00	N = 8	2.00						
D	2.60			35.70	2.60	Off white to white CHALK. Recovered as clayey medium density chalk clasts with flint gravels. (SEAFORD CHALK FORMATION AND NEWHAVEN CHALK FORMATION (UNDIFFERENTIATED))			
D	3.00								
S	3.00	N = 18	3.00						
B	3.45								
D	4.00								
S	4.00	N = 20	4.00						
B	4.45								
D	5.00								
S	5.00	N = 24	5.00						
D	5.90					At 5.90m and 6.10m bgl: band of flint gravels and cobbles.			
D	5.90				(7.35)				
D	6.50								
S	6.50	N = 31	6.50						
B	7.20					At 7.20m to 7.35m bgl: band of flint gravels and cobbles.			
D	7.50								
D	8.00								
S	8.00	N = 40	8.00						
D	9.00								
D	9.50								
S	9.50	N = 48	9.50						
				28.35	9.95	End of Borehole at 9.95m			

Chiselling			Groundwater Strikes					Drilled: TS Logged: MS Checked: AP
From	To	Duration (hh:mm)	Depth Strike	Rose to	Remarks	Cased	Sealed	
5.90 7.20	6.10 7.35	01:00 00:30	3.90	4.00		3.90		

Remarks: Hand dug service inspection pit excavated to 1.20m bgl.

Installation: 50mm diameter standpipe installed to 8.00m bgl.

Diameter: 150mm to 9.95m

SPT SUMMARY SHEET

Project: Henley Road, Caversham
Client: Signature Senior Lifestyle Developments
Project No: AG3094-19

Borehole No.	Borehole depth (m)	Bottom depth (m)	Casing depth (m)	Water Level (m)	Equipment ref.	Seating Drive		Test Drive					Test Type	N Value
						Blows	Pen (mm)	Blows		Pen (mm)		Total Pen (mm)		
BH101	1.20	1.65	1.20	Dry	AG001	3 5	75 75	5 7 5 5	75 75 75 75	300	S	22		
BH101	2.00	2.45	2.00	Dry	AG001	3 4	75 75	4 5 5 6	75 75 75 75	300	S	20		
BH101	3.00	3.45	3.00	Dry	AG001	3 3	75 75	2 4 4 5	75 75 75 75	300	S	15		
BH101	4.00	4.45	4.00	Dry	AG001	4 5	75 75	5 6 6 7	75 75 75 75	300	S	24		
BH101	5.10	5.55	5.00	Dry	AG001	4 5	75 75	5 6 7 7	75 75 75 75	300	S	25		
BH101	6.50	6.95	7.00	Dry	AG001	7 12	75 75	9 9 8 8	75 75 75 75	300	S	34		
BH101	8.40	8.85	8.40	8.40	AG001	7 9	75 75	10 10 11 12	75 75 75 75	300	S	43		
BH101	9.20	9.65	9.00	9.30	AG001	7 8	75 75	8 9 10 12	75 75 75 75	300	S	39		
BH102	1.20	1.65			SEDS11	2 2	75 75	2 2 2 2	75 75 75 75	300	S	8		
BH102	2.00	2.45			SEDS11	2 1	75 75	2 3 3 2	75 75 75 75	300	S	10		
BH102	3.00	3.45	3.00		SEDS11	2 2	75 75	2 2 1 2	75 75 75 75	300	S	7		
BH102	4.00	4.45	3.00		SEDS11	3 3	75 75	3 3 2 3	75 75 75 75	300	S	11		
BH102	5.00	5.45	4.50		SEDS11	3 3	75 75	3 3 4 4	75 75 75 75	300	S	14		
BH102	7.50	7.95	7.50	5.10	SEDS11	2 4	75 75	4 3 4 4	75 75 75 75	300	S	15		
BH102	9.00	9.45	9.00	7.20	SEDS11	1 2	75 75	4 6 7 7	75 75 75 75	300	S	24		
BH102	10.50	10.95	10.50	7.50	SEDS11	2 3	75 75	5 7 7 8	75 75 75 75	300	S	27		
BH102	12.00	12.45	12.00	7.00	SEDS11	4 4	75 75	7 7 8 8	75 75 75 75	300	S	30		
BH102	13.50	13.95	13.50	6.00	SEDS11	4 5	75 75	8 8 9 9	75 75 75 75	300	S	34		
BH102	15.00	15.45	15.00	5.50	SEDS11	4 6	75 75	8 8 10 10	75 75 75 75	300	S	36		
BH102	16.50	16.95	16.50	5.20	SEDS11	5 6	75 75	13 13 14 10	75 75 75 75	300	S	50		
BH102	18.00	18.45	18.00	5.00	SEDS11	4 6	75 75	12 13 13 12	75 75 75 75	300	S	50		
BH102	19.50	19.95	19.50	4.80	SEDS11	5 6	75 75	10 13 15 12	75 75 75 75	300	S	50		
BH103	1.20	1.65			SEDS11	1 1	75 75	1 1 2 2	75 75 75 75	300	S	6		
BH103	2.00	2.45			SEDS11	1 2	75 75	1 0 1 2	75 75 75 75	300	S	4		
BH103	3.00	3.45	3.00		SEDS11	1 0	75 75	2 2 2 2	75 75 75 75	300	S	8		
BH103	4.00	4.45	4.00	2.20	SEDS11	1 2	75 75	1 2 2 2	75 75 75 75	300	S	7		
BH103	5.00	5.45	5.00	3.00	SEDS11	2 1	75 75	2 3 2 2	75 75 75 75	300	S	9		
BH103	6.00	6.45	6.00	4.20	SEDS11	2 3	75 75	3 3 4 4	75 75 75 75	300	S	14		
BH103	7.50	7.95	7.50	4.00	SEDS11	2 2	75 75	2 4 4 4	75 75 75 75	300	S	14		
BH103	9.00	9.45	9.00	4.10	SEDS11	4 6	75 75	5 4 4 5	75 75 75 75	300	S	18		
BH103	10.50	10.95	10.50	4.00	SEDS11	4 5	75 75	5 5 4 5	75 75 75 75	300	S	19		
BH103	12.00	12.45	12.00	3.80	SEDS11	4 6	75 75	8 8 9 10	75 75 75 75	300	S	35		
BH103	13.50	13.95	13.50	4.30	SEDS11	4 6	75 75	7 7 10 10	75 75 75 75	300	S	34		
BH103	15.00	15.45	15.00	6.80	SEDS11	5 6	75 75	8 9 9 10	75 75 75 75	300	S	36		

Notes:

1. Test carried out in general accordance with BS EN ISO 22476-3:2005
2. N values have not been subjected to any correction.
3. Test carried out using split spoon S, or solid cone C.

SPT SUMMARY SHEET

Project: Henley Road, Caversham
Client: Signature Senior Lifestyle Developments
Project No: AG3094-19

Borehole No.	Borehole depth (m)	Bottom depth (m)	Casing depth (m)	Water Level (m)	Equipment ref.	Seating Drive		Test Drive					Test Type	N Value
						Blows	Pen (mm)	Blows		Pen (mm)		Total Pen (mm)		
BH103	16.50	16.95	16.50	7.00	SEDS11	4 6	75 75	9 10 11 12	75 75 75 75	300	S	42		
BH103	18.00	18.45	18.00	7.20	SEDS11	5 6	75 75	11 10 11 12	75 75 75 75	300	S	44		
BH103	19.50	19.95	19.50	6.20	SEDS11	4 6	75 75	12 13 13 12	75 75 75 75	300	S	50		
BH104	1.20	1.65			SEDS11	1 0	75 75	1 0 1 1	75 75 75 75	300	S	3		
BH104	2.00	2.45			SEDS11	1 0	75 75	1 0 2 1	75 75 75 75	300	S	4		
BH104	3.00	3.45	3.00	2.20	SEDS11	2 3	75 75	2 2 2 2	75 75 75 75	300	C	8		
BH104	4.00	4.45	4.00	2.50	SEDS11	2 2	75 75	2 2 2 2	75 75 75 75	300	S	8		
BH104	5.00	5.45	4.50	3.00	SEDS11	1 2	75 75	2 2 3 2	75 75 75 75	300	C	9		
BH104	6.00	6.45	6.00	2.80	SEDS11	2 2	75 75	3 3 4 4	75 75 75 75	300	C	14		
BH104	7.50	7.95	7.50	3.00	SEDS11	2 4	75 75	5 5 4 4	75 75 75 75	300	C	18		
BH104	9.00	9.45	9.00	3.00	SEDS11	4 5	75 75	5 5 3 2	75 75 75 75	300	S	15		
BH104	10.50	10.95	10.50	3.10	SEDS11	4 4	75 75	5 5 6 5	75 75 75 75	300	S	21		
BH104	12.00	12.45	12.00	4.10	SEDS11	4 5	75 75	7 7 8 8	75 75 75 75	300	S	30		
BH104	13.50	13.95	13.50	5.00	SEDS11	4 6	75 75	8 8 9 10	75 75 75 75	300	S	35		
BH104	15.00	15.45	15.00	6.20	SEDS11	4 6	75 75	10 13 13 14	75 75 75 75	300	S	50		
BH104	16.50	16.95	16.50	7.20	SEDS11	4 6	75 75	12 13 13 12	75 75 75 75	300	S	50		
BH104	18.00	18.45			SEDS11	6 6	75 75	10 13 13 14	75 75 75 75	300	S	50		
BH104	19.50	19.95			SEDS11	5 6	75 75	12 14 14 10	75 75 75 75	300	S	50		
BH105	1.20	1.65	1.00	DRY	AG001	1 2	75 75	2 2 3 3	75 75 75 75	300	S	10		
BH105	2.50	2.95	3.00	DRY	AG001	2 3	75 75	4 4 3 4	75 75 75 75	300	S	15		
BH105	3.30	3.75	3.00	3	AG001	2 1	75 75	1 1 2 2	75 75 75 75	300	C	6		
BH105	4.80	5.25	5.00	4	AG001	1 2	75 75	4 5 5 4	75 75 75 75	300	S	18		
BH105	6.00	6.45	6.00	5	AG001	1 2	75 75	3 7 7 6	75 75 75 75	300	S	23		
BH105	7.50	7.95	7.50	4.50	AG001	2 3	75 75	3 4 5 7	75 75 75 75	300	S	19		
BH105	9.00	9.45	9.00	4.50	AG001	3 4	75 75	5 7 8 8	75 75 75 75	300	S	28		
BH105	10.50	10.95	10.50	4.50	AG001	9 8	75 75	10 9 10 12	75 75 75 75	300	C	41		
BH105	12.00	12.45	12.00	4.50	AG001	8 9	75 75	9 10 10 11	75 75 75 75	300	S	40		
BH105	13.00	13.42	13.00	4.50	AG001	10 12	75 75	12 14 15 9	75 75 75 40	265	C	>50		
BH105	14.00	14.40	14.00	4.50	AG001	11 12	75 75	12 13 14 11	75 75 75 20	245	S	>50		
BH105	15.50	15.95	15.50	4.50	AG001	10 10	75 75	10 11 12 12	75 75 75 75	300	S	45		
BH105	17.00	17.38	17.00	4.50	AG001	11 12	75 75	14 15 18 3	75 75 75 0	225	S	>50		
BH105	18.50	18.82	18.50	4.50	AG001	12 14	75 75	16 18 16	75 75 20	170	S	>50		
BH105	19.10	19.36	19.00	4.50	AG001	15 10	75 30	19 25 6	75 75 0	150	C	>50		
BH106	1.20	1.65	1.20	Dry	AG001	1 1	75 75	1 2 2 2	75 75 75 75	300	S	7		

Notes:

1. Test carried out in general accordance with BS EN ISO 22476-3:2005
2. N values have not been subjected to any correction.
3. Test carried out using split spoon S, or solid cone C.

SPT SUMMARY SHEET

Project: Henley Road, Caversham
Client: Signature Senior Lifestyle Developments
Project No: AG3094-19

Borehole No.	Borehole depth (m)	Bottom depth (m)	Casing depth (m)	Water Level (m)	Equipment ref.	Seating Drive		Test Drive					Test Type	N Value
						Blows	Pen (mm)	Blows		Pen (mm)		Total Pen (mm)		
BH106	2.00	2.45	2.00	Dry	AG001	2 2	75 75	3 3 4 3	75 75 75 75	300	C	13		
BH106	3.00	3.45	3.00	Dry	AG001	1 2	75 75	3 3 2 3	75 75 75 75	300	C	11		
BH106	4.00	4.45	4.00	3.80	AG001	3 4	75 75	4 5 5 6	75 75 75 75	300	C	20		
BH106	5.00	5.45	4.45	3.80	AG001	3 4	75 75	3 4 5 3	75 75 75 75	300	C	15		
BH106	5.60	6.05	5.60	3.80	AG001	2 3	75 75	3 3 4 4	75 75 75 75	300	S	14		
BH106	7.00	7.45	7.00	4.00	AG001	2 3	75 75	4 5 5 7	75 75 75 75	300	S	21		
BH106	8.50	8.95	8.50	4.00	AG001	4 5	75 75	6 7 9 9	75 75 75 75	300	S	31		
BH106	10.00	10.45	10.00	4.00	AG001	5 7	75 75	7 9 10 10	75 75 75 75	300	S	36		
BH106	11.50	11.95	11.50	3.80	AG001	7 9	75 75	12 12 13 13	75 75 75 75	300	S	50		
BH106	13.00	13.40	13.00	4.00	AG001	9 11	75 75	12 14 14 10	75 75 75 20	245	S	>50		
BH106	14.50	14.88	14.50	4.00	AG001	10 10	75 75	13 15 16 6	75 75 75 0	225	S	>50		
BH106	16.00	16.33	16.00	4.00	AG001	11 13	75 75	15 17 16	75 75 30	180	S	>50		
BH106	17.50	17.82	17.50	4.00	AG001	12 13	75 75	14 19 17	75 75 20	170	S	>50		
BH106	18.30	18.58	18.30	4.00	AG001	13 12	75 50	19 22 9	75 75 0	150	C	>50		
BH107	1.20	1.65	1.00	DRY	AG001	1 2	75 75	1 1 0 1	75 75 75 75	300	S	3		
BH107	2.20	2.65	2.00	DRY	AG001	1 0	75 75	1 1 1 1	75 75 75 75	300	S	4		
BH107	3.00	3.32	3.00	1.50	AG001	1 2	75 75	9 25 16	75 75 20	170	S	>50		
BH107	4.00	4.45	4.00	2.50	AG001	1 2	75 75	2 2 2 3	75 75 75 75	300	C	9		
BH107	5.00	5.45	5.00	2.50	AG001	3 4	75 75	4 5 5 4	75 75 75 75	300	C	18		
BH107	7.50	7.95	8.00	3.00	AG001	3 4	75 75	4 5 6 8	75 75 75 75	300	S	23		
BH107	8.30	8.75	8.00	2.90	AG001	2 3	75 75	3 4 5 5	75 75 75 75	300	S	17		
BH107	9.80	10.25	10.00	3.00	AG001	3 5	75 75	5 5 6 8	75 75 75 75	300	S	24		
BH107	11.40	11.82	11.00	3.00	AG001	1 2	75 75	5 15 18 12	75 75 75 40	265	S	>50		
BH107	13.00	13.45	13.00	3.00	AG001	2 4	75 75	5 7 7 8	75 75 75 75	300	S	27		
BH107	14.50	14.63	15.00	3.00	AG001	18 7	75 20	50	30	30	S	>50		
BH107	15.80	16.11	16.00	3.00	AG001	10 12	75 75	14 16 20	75 75 10	160	S	>50		
BH107	17.00	17.05	17.00	3.00	AG001	25	20	50	30	30	C	>50		
BH107	18.10	18.48	18.00	3.00	AG001	10 14	75 75	14 15 15 6	75 75 75 0	225	S	>50		
BH107	18.80	18.84	19.00	3.00	AG001	25	20	50	20	20	S	>50		
BH108	1.20	1.65	1.20	DRY	AG001	1 1	75 75	1 2 2 1	75 75 75 75	300	S	6		
BH108	2.00	2.45	2.00	DRY	AG001	1 2	75 75	1 2 2 2	75 75 75 75	300	S	7		
BH108	3.25	3.70	3.00	Dry	AG001	1 2	75 75	2 2 2 3	75 75 75 75	300	S	9		
BH108	4.50	4.95	4.50	4.30	AG001	2 3	75 75	3 4 4 5	75 75 75 75	300	C	16		
BH108	5.00	5.45	5.00	4.30	AG001	3 4	75 75	3 4 4 5	75 75 75 75	300		16		

Notes:

1. Test carried out in general accordance with BS EN ISO 22476-3:2005
2. N values have not been subjected to any correction.
3. Test carried out using split spoon S, or solid cone C.

SPT SUMMARY SHEET

Project: Henley Road, Caversham
Client: Signature Senior Lifestyle Developments
Project No: AG3094-19

Borehole No.	Borehole depth (m)	Bottom depth (m)	Casing depth (m)	Water Level (m)	Equipment ref.	Seating Drive				Test Drive						Test Type	N Value			
						Blows		Pen (mm)		Blows				Pen (mm)				Total Pen (mm)		
BH108	6.00	6.45	6.00	4.30	AG001	4	5	75	75	5	6	6	7	75	75	75	75	300	C	24
BH108	6.50	6.95	6.50	4.30	AG001	3	4	75	75	4	5	7	7	75	75	75	75	300	S	23
BH108	8.00	8.45	8.00	4.30	AG001	4	5	75	75	6	7	7	12	75	75	75	75	300	S	32
BH108	10.00	10.45	10.00	4.30	AG001	5	7	75	75	7	8	9	9	75	75	75	75	300	S	33
BH108	11.60	12.05	11.60	4.30	AG001	6	7	75	75	9	10	10	12	75	75	75	75	300	S	41
BH108	13.00	13.45	13.00	4.50	AG001	7	9	75	75	10	12	14	14	75	75	75	75	300	S	50
BH108	14.60	15.01	14.60	4.50	AG001	8	9	75	75	11	14	15	10	75	75	75	30	255	S	>50
BH108	16.00	16.38	16.00	4.50	AG001	9	10	75	75	12	15	17	6	75	75	75	0	225	S	>50
BH108	16.80	17.12	16.80	4.30	AG001	8	12	75	75	16	18	16		75	75	20		170	S	>50
BH108	17.20	17.50	17.20	4.30	AG001	12	13	75	75	18	22	10		75	75	0		150	S	>50
BH109	1.20	1.65	1.20	Dry	AG001	1	1	75	75	2	1	2	2	75	75	75	75	300	S	7
BH109	2.00	2.45	2.00	Dry	AG001	1	2	75	75	2	1	2	3	75	75	75	75	300	S	8
BH109	3.00	3.45	3.00	Dry	AG001	3	4	75	75	5	5	4	4	75	75	75	75	300	S	18
BH109	4.00	4.45	4.00	4.00	AG001	4	4	75	75	5	4	5	6	75	75	75	75	300	S	20
BH109	5.00	5.45	5.00	4.00	AG001	5	4	75	75	5	6	6	7	75	75	75	75	300	S	24
BH109	6.50	6.95	6.50	4.00	AG001	7	6	75	75	7	7	8	9	75	75	75	75	300	S	31
BH109	8.00	8.45	8.00	4.00	AG001	8	9	75	75	9	10	10	11	75	75	75	75	300	S	40
BH109	9.50	9.95	9.50	4.00	AG001	9	10	75	75	10	12	13	13	75	75	75	75	300	S	48
DCS101	1.20	1.47			110.119	4	15	75	75	28	22			75	45			120	C	>50
DCS102	1.20	1.65			110.119	3	3	75	75	2	2	14	22	75	75	75	75	300	C	40
DCS102	1.60	1.91			110.119	10	18	75	75	20	24	6		75	75	10		160	C	>50
DCS103	1.20	1.65			110.119	2	3	75	75	3	3	2	3	75	75	75	75	300	C	11
DCS103	2.00	2.45			110.119	5	3	75	75	4	3	4	2	75	75	75	75	300	S	13
DCS103	3.00	3.45			110.119	4	4	75	75	4	3	4	4	75	75	75	75	300	S	15
DCS103	3.50	3.76			110.119	18	7	75	75	29	21			75	30			105	S	>50
DCS104	1.20	1.65			110.119	5	2	75	75	2	2	3	2	75	75	75	75	300	S	9
DCS104	2.00	2.45			110.119	2	2	75	75	2	2	2	2	75	75	75	75	300	S	8
DCS104	3.00	3.45			110.119	2	2	75	75	3	4	3	4	75	75	75	75	300	S	14
DCS104	4.00	4.45			110.119	3	3	75	75	4	4	3	4	75	75	75	75	300	S	15
DCS104	5.00	5.45			110.119	4	2	75	75	3	4	4	5	75	75	75	75	300	S	16

Notes:

1. Test carried out in general accordance with BS EN ISO 22476-3:2005
2. N values have not been subjected to any correction.
3. Test carried out using split spoon S, or solid cone C.



Hammer Energy Test Report

in accordance with BSEN ISO 22476-3:2005

Dynamic sampling uk ltd
5-8 victory parkway
victory road
Derby
DE24 8ZF

Hammer Ref: AG001
 Test Date: 15/03/2019
 Report Date: 15/03/2019
 File Name: AG001.spt
 Test Operator: TS

Instrumented Rod Data

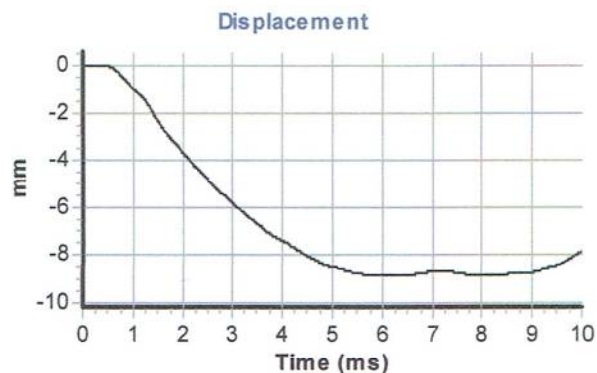
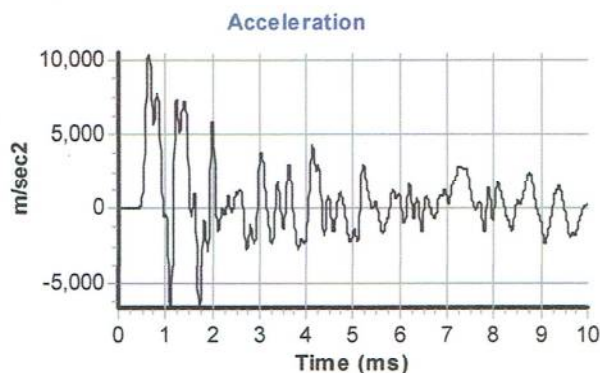
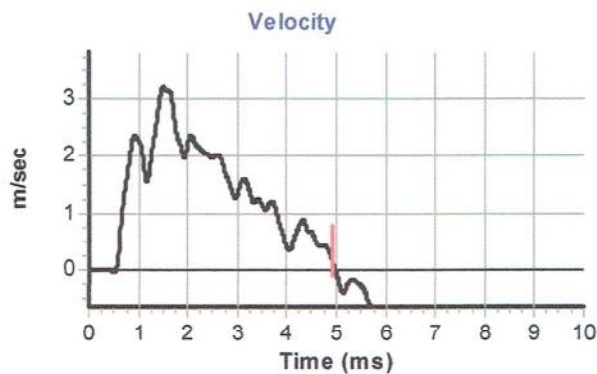
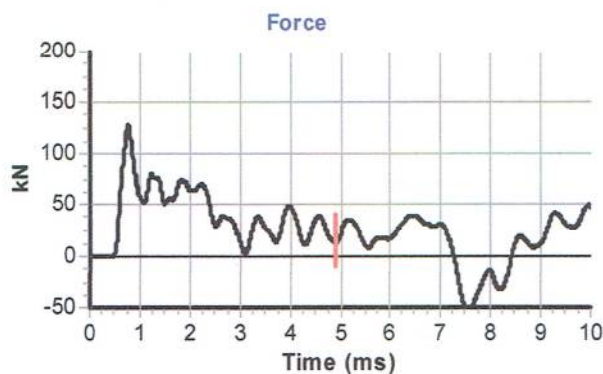
Diameter d_r (mm): 54
 Wall Thickness t_r (mm): 6.0
 Assumed Modulus E_a (GPa): 208
 Accelerometer No.1: 9603
 Accelerometer No.2: 6457

Hammer Information

Hammer Mass m (kg): 63.5
 Falling Height h (mm): 760
 String Length L (m): 15.0

Comments / Location

Applied geology hammer tested at
 Dynamic samplings yard.



Calculations

Area of Rod A (mm^2): 905
 Theoretical Energy E_{theor} (J): 473
 Measured Energy E_{meas} (J): 363

Energy Ratio E_r (%)

77

Signed: A.parker.

Title: Associate Director.

The recommended calibration interval is 12 months

SPT Hammer Energy Test Report

in accordance with BSEN ISO 22476-3:2005

Southern Testing
Keeble House
Stuart Way
East Grinstead
West Sussex
RH19 4QA

SPT Hammer Ref: SEDS11
Test Date: 04/05/2019
Report Date: 04/05/2019
File Name: SEDS11.spt
Test Operator: NPB

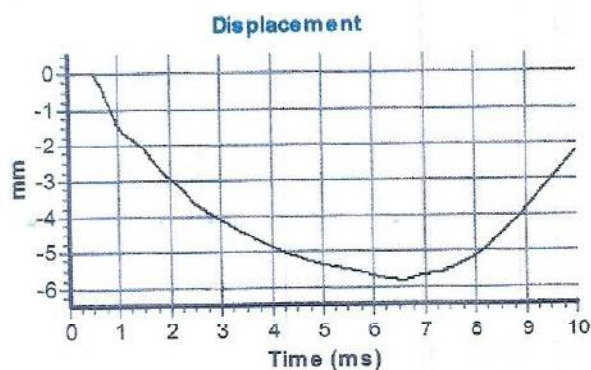
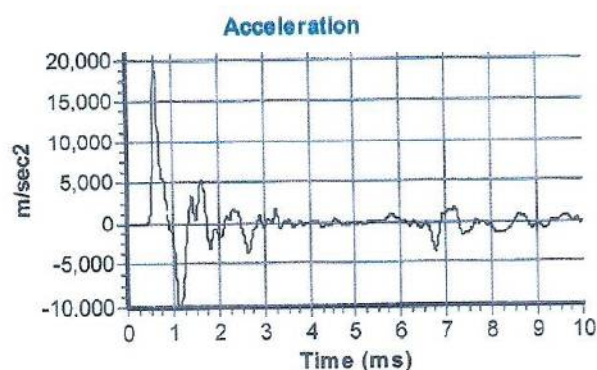
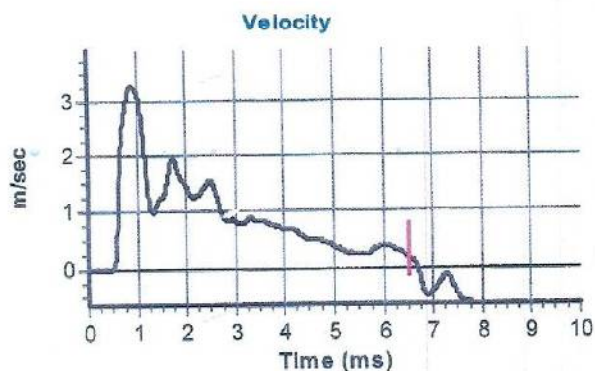
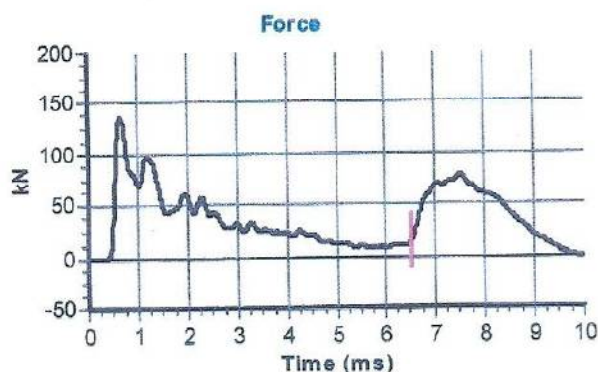
Instrumented Rod Data

Diameter d_r (mm): 54
Wall Thickness t_r (mm): 6.0
Assumed Modulus E_a (GPa): 200
Accelerometer No.1: 6458
Accelerometer No.2: 9607

SPT Hammer Information

Hammer Mass m (kg): 63.5
Falling Height h (mm): 760
SPT String Length L (m): 14.5

Comments / Location
CHARLWOODS



Calculations

Area of Rod A (mm^2): 905
Theoretical Energy E_{theor} (J): 473
Measured Energy E_{meas} (J): 284

Energy Ratio E_r (%): **60**

Signed: Neil Burrows
Title: Field Operations Manager

The recommended calibration interval is 12 months

BOREHOLE LOG - DRIVEN CONTINUOUS SAMPLING

DCS101

Project Henley Road, Caversham
Client Signature Senior Lifestyle Developments
Start 13/12/2019
End 13/12/2019

Coordinates
Ground Level 45.00m AOD

Project No. AG3094-19
Sheet 1 of 1
Scale 1:25
Total Depth 1.20m

Sample / Test Type	Depth (m)	Result	Dia. / Rec.	Level (mAoD)	Strata Depth (thickness) (m)	Description of Strata	Legend	GW	Install
D	0.05	N >50		44.90	(0.10)	Asphalt.			
				0.10	(MADE GROUND)				
B	0.30				(0.30)	Soft light brown slightly gravelly sandy CLAY. Sand is coarse. Gravel is fine to coarse angular to subangular flint, brick fragments and chalk.			
ES	0.30			44.60	0.40	(MADE GROUND)			
ES	0.50				(0.30)	Soft to firm orangish brown slightly gravelly sandy CLAY. Sand is fine to coarse. Gravel is fine to coarse angular to subrounded flint and chalk. (HEAD/ALLUVIUM)			
B	0.60			44.30	0.70				
B	0.80				(0.50)	Cream brown to off white CHALK. Recovered as slightly sandy slightly clayey low to medium density gravel and cobbles of chalk and frequent flint. (SEAFORD CHALK FORMATION AND NEWHAVEN CHALK FORMATION (UNDIFFERENTIATED))			
D	1.10								
D	1.20								
C	1.20								
						End of Borehole at 1.20m			

Installation:

Remarks: Hand dug service inspection pit excavated to 1.20m bgl. Pit terminated at 1.20m bgl due to sampler refusal. Pit backfilled with arisings on completion.

Groundwater Strikes					Drilled: DH Logged: MS Checked: AP
Depth Strike	Rose to	Remarks	Cased	Sealed	

BOREHOLE LOG - DRIVEN CONTINUOUS SAMPLING

DCS102

Project Henley Road, Caversham
Client Signature Senior Lifestyle Developments
Start 13/12/2019
End 13/12/2019

Project No. AG3094-19
Sheet 1 of 1
Scale 1:25
Total Depth 1.60m

Coordinates
Ground Level 45.23m AOD

Sample / Test Type	Depth (m)	Result	Dia. / Rec.	Level (mAOD)	Strata Depth (thickness) (m)	Description of Strata	Legend	GW	Install
ES	0.10	N = 40	101mm / 80%	44.93	(0.30)	Grass over soft brown slightly gravelly sandy CLAY. Sand is fine to coarse. Gravel is fine to coarse angular to subrounded flint and brick. (MADE GROUND)			
D	0.15				0.30				
D	0.40				(0.30)	Soft orangish brown gravelly slightly sandy CLAY. Sand is fine to coarse. Gravel is fine to coarse subangular to rounded flint and chalk. (HEAD/ALLUVIUM)			
					0.60				
B	0.80	N > 50		43.63	(1.00)	Cream to white CHALK. Recovered as slightly silty sandy low to medium density gravels and cobbles of chalk and rare flint. (SEAFORD CHALK FORMATION AND NEWHAVEN CHALK FORMATION (UNDIFFERENTIATED))			
D	0.90								
D	1.20								
C	1.20								
D	1.60	N > 50		43.63	1.60	End of Borehole at 1.60m			
C	1.60								

Installation:

Remarks: Hand dug service inspection pit excavated to 1.20m bgl. Borehole terminated at 1.60m bgl due to sampler refusal. Borehole backfilled with arisings on completion.

Groundwater Strikes					Drilled: DH Logged: MS Checked: AP
Depth Strike	Rose to	Remarks	Cased	Sealed	

BOREHOLE LOG - DRIVEN CONTINUOUS SAMPLING

DCS103

Project Henley Road, Caversham
Client Signature Senior Lifestyle Developments
Start 13/12/2019
End 13/12/2019

Coordinates
Ground Level 42.54m AOD

Project No. AG3094-19
Sheet 1 of 1
Scale 1:25
Total Depth 3.50m

Sample / Test Type	Depth (m)	Result	Dia. / Rec.	Level (mAOD)	Strata Depth (thickness) (m)	Description of Strata	Legend	GW	Install
ES	0.10			42.34	(0.20)	Grass over soft brown slightly gravelly sandy CLAY with occasional roots and rootlets. Sand is coarse. Gravel is fine to coarse flint and occasional chalk. (TOPSOIL)			
ES	0.40				0.20				
B	0.50				(0.60)	Soft becoming firm with depth orangish brown slightly gravelly sandy CLAY. Sand is coarse. Gravel is fine to coarse subangular to rounded flint and chalk. (HEAD/ALLUVIUM)			
				41.74	0.80				
B	0.90					Off white to white CHALK. Recovered as slightly sandy silty low to medium density gravel and cobbles of chalk and frequent flint. (SEAFORD CHALK FORMATION AND NEWHAVEN CHALK FORMATION (UNDIFFERENTIATED))			
D	1.00								
C	1.20	N = 11				Between 1.20m and 1.40m bgl: very silty.			
D	1.30								
			101mm / 70%						
D	2.00								
S	2.00	N = 13			(2.70)				
D	2.50		92mm / -%						
D	3.00								
S	3.00	N = 15	79mm / -%						
D	3.50			39.04	3.50				
S	3.50	N > 50				End of Borehole at 3.50m			

Installation:

Remarks: Hand dug service inspection pit excavated to 1.20m bgl. Borehole terminated at 3.50m bgl due to sampler refusal. Borehole backfilled with arisings on completion.

Groundwater Strikes					Drilled: DH Logged: MS Checked: AP
Depth Strike	Rose to	Remarks	Cased	Sealed	

BOREHOLE LOG - DRIVEN CONTINUOUS SAMPLING

DCS104

Project Henley Road, Caversham
Client Signature Senior Lifestyle Developments
Start 13/12/2019
End 13/12/2019

Coordinates
Ground Level 41.87m AOD

Project No. AG3094-19
Sheet 1 of 1
Scale 1:25
Total Depth 5.00m

Sample / Test Type	Depth (m)	Result	Dia./ Rec.	Level (mAOD)	Strata Depth (thickness) (m)	Description of Strata	Legend	GW	Install
D ES	0.20 0.20				(0.45)	Grass over brown slightly gravelly clayey fine to coarse SAND with occasional roots and rootlets. Gravel is fine to coarse subangular to rounded flint. (TOPSOIL)			
B	0.50			41.42	0.45 (0.25)	Soft becoming firm with depth orangish brown slightly gravelly sandy CLAY. Sand is coarse. Gravel is fine to coarse subangular to rounded flint and chalk. (HEAD/ALLUVIUM)			
B	0.80			41.17	0.70	Buff to white CHALK. Recovered as slightly clayey low to medium density gravels and cobbles of chalk and occasional flint. (SEAFORD CHALK FORMATION AND NEWHAVEN CHALK FORMATION (UNDIFFERENTIATED))			
D S	1.20 1.30	N = 9							
			101mm /80%						
D S	2.00 2.00	N = 8							
						At 2.20m to 2.50m bgl: mottled orange.			
D	2.50		92mm /70%						
B D S	3.00 3.00 3.00	N = 14			(4.30)				
			79mm /80%						
D S	4.00 4.00	N = 15							
			70mm /50%						
S	5.00	N = 16		36.87	5.00	End of Borehole at 5.00m			

Installation:

Remarks: Hand dug service inspection pit excavated to 1.20m bgl. Borehole backfilled with arisings on completion.

Groundwater Strikes					Drilled: DH Logged: MS Checked: AP
Depth Strike	Rose to	Remarks	Cased	Sealed	



Hammer Energy Test Report

in accordance with BSEN ISO 22476-3:2005

Dynamic sampling uk ltd
5-8 victory parkway
victory road
Derby
DE24 8ZF

Hammer Ref: 110.119
 Test Date: 20/03/2019
 Report Date: 20/03/2019
 File Name: 110.119.spt
 Test Operator: TS

Instrumented Rod Data

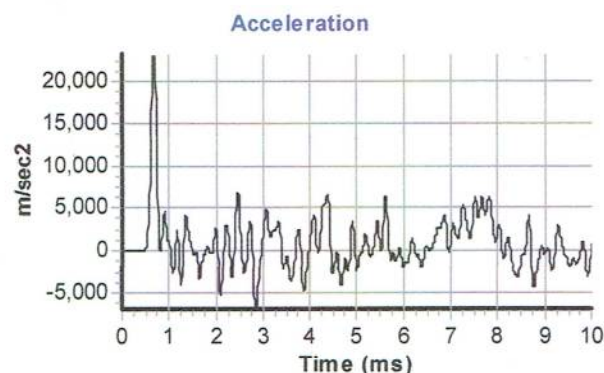
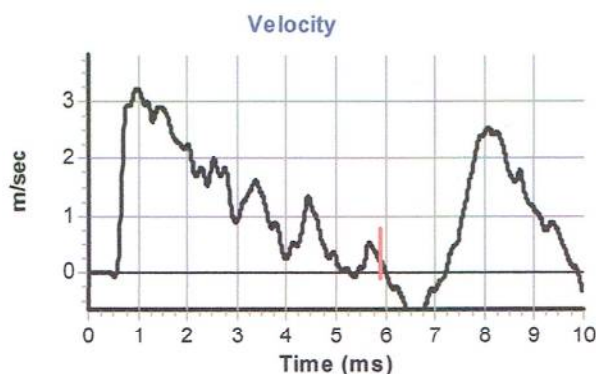
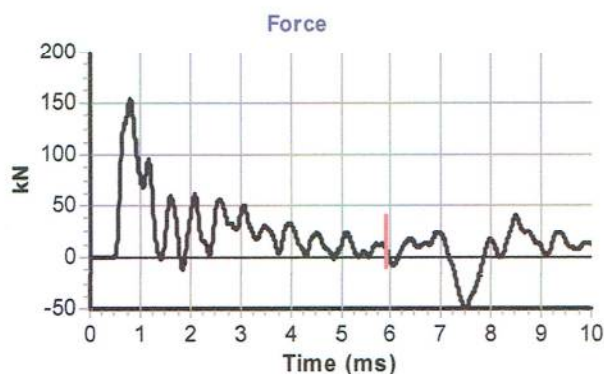
Diameter d_r (mm): 54
 Wall Thickness t_r (mm): 6.0
 Assumed Modulus E_a (GPa): 208
 Accelerometer No.1: 9603
 Accelerometer No.2: 6457

Hammer Information

Hammer Mass m (kg): 63.5
 Falling Height h (mm): 760
 String Length L (m): 15.0

Comments / Location

Applied geology tested at Dynamic samplings yard.



Calculations

Area of Rod A (mm²): 905
 Theoretical Energy E_{theor} (J): 473
 Measured Energy E_{meas} (J): 373

Energy Ratio E_r (%): **79**

[Signature]

Signed: A.parker.

Title: Associate Director.

The recommended calibration interval is 12 months

TRIAL PIT LOG

HP101

Project Henley Road, Caversham

Project No.

AG3094-19

Client Signature Senior Lifestyle Developments

Sheet

1 of 1

Date 13/12/2019

Scale

1:25

Ground Level 36.50m AOD

Coordinates

Total Depth

0.70m

Sample / Test Type	Depth (m)	Result	Level (mAOD)	Strata Depth (thickness) (m)	Ease of Dig	Description of Strata	Legend	GWL
ES	0.20			(0.30) 36.20 0.30		Grass over soft brown slightly gravelly sandy CLAY with occasional roots and rootlets. Sand is fine to coarse. Gravel is fine to coarse subangular to rounded flint. (TOPSOIL)		
B ES	0.50 0.50			(0.40) 35.80 0.70		Soft orangish brown slightly gravelly sandy CLAY. Sand is fine to coarse. Gravel is fine to coarse subangular to rounded flint and rare chalk. (HEAD/ ALLUVIUM)		
						End of Trial Pit at 0.70m		

Method: Hand dug

Groundwater: Groundwater not encountered.

Stability: Stable.

Remarks: Hand pit carried out for environmental sampling purposes. Trial pit backfilled with arisings on completion.

Length: 0.30m

Width: 0.30m

Logged: MS

Checked: AP

TRIAL PIT LOG

HP102

Project Henley Road, Caversham
Client Signature Senior Lifestyle Developments
Date 13/12/2019

Project No. AG3094-19
Sheet 1 of 1
Scale 1:25

Ground Level 36.50m AOD **Coordinates** **Total Depth** 0.60m

Sample / Test Type	Depth (m)	Result	Level (mAoD)	Strata Depth (thickness) (m)	Ease of Dig	Description of Strata	Legend	GW
ES	0.10		36.30	(0.20) 0.20	E	Grass over soft brown slightly gravelly sandy CLAY with occasional roots and rootlets. Gravel is fine to coarse subangular to rounded flint. (TOPSOIL)		
B ES	0.30 0.30			(0.40) 0.60	E	Soft orangish brown slightly gravelly sandy CLAY. Sand is coarse. Gravel is fine to coarse angular to subrounded flint and occasional chalk. (HEAD/ ALLUVIUM)		
						End of Trial Pit at 0.60m		

Method: Hand dug

Groundwater: Groundwater not encountered.

Stability: Stable.

Remarks: Hand pit carried out for environmental sampling purposes. Trial pit backfilled with arisings on completion.

Length:	0.30m
Width:	0.30m
Logged:	MS
Checked:	AP

TRIAL PIT LOG

HP103

Project Henley Road, Caversham

Project No.

AG3094-19

Client Signature Senior Lifestyle Developments

Sheet

1 of 1

Date 13/12/2019

Scale

1:25

Ground Level 36.50m AOD

Coordinates

Total Depth

0.60m

[illegible]

Method: Hand dug

Groundwater: Groundwater not encountered.

Stability: Stable.

Remarks: Hand pit carried out for environmental sampling purposes. Trial pit backfilled with arisings on completion.

Length: 0.30m

Width: 0.30m

Logged: MS

Checked: AP

TP101

Project No.	AG3094-19
Sheet	1 of 1
Scale	1:25

3.00m

Method: Backhoe excavator
Groundwater: Groundwater not encountered.
Stability: Stable.
Remarks: Soakaway test undertaken within trial pit, see separate results sheet for details. Trial pit backfilled with arisings on completion.

Length:	2.00m
Width:	0.52m
Logged:	MS
Checked:	AP

TRIAL PIT LOG

TP102

Project Henley Road, Caversham

Project No.

AG3094-19

Client Signature Senior Lifestyle Developments

Sheet

1 of 1

Date 12/12/2019

Scale

1:25

Ground Level 37.00m AOD

Coordinates

Total Depth

2.90m

[illegible]

Method: Backhoe excavator

Groundwater: Strike at 2.50m bgl.

Stability: Unstable from 2.00m bgl with continuous collapse of sidewalls.

Remarks: Soakaway test attempted within trial pit, pit collapse terminated test - pit relocated to location TP102A. Trial pit backfilled with arisings on completion.

Length: 2.00m

Width: 0.62m

Logged: MS

Checked: AP

TRIAL PIT LOG

TP102A

Project Henley Road, Caversham
Client Signature Senior Lifestyle Developments
Date 12/12/2019

Project No. AG3094-19
Sheet 1 of 1
Scale 1:25

Ground Level 37.44m AOD **Coordinates** **Total Depth** 2.24m

Sample / Test Type	Depth (m)	Result	Level (mAoD)	Strata Depth (thickness) (m)	Ease of Dig	Description of Strata	Legend	GW
			37.29	(0.15) 0.15	E	Grass over light brown slightly gravelly sandy CLAY with occasional roots and rootlets. Sand is coarse. Gravel is fine to coarse subrounded flint. (TOPSOIL) Soft orangish brown slightly gravelly sandy CLAY. Sand is coarse. Gravel is fine to coarse subrounded flint and chalk. (HEAD/ALLUVIUM)		
				(1.95)	E	From 1.20m bgt. firm.		
			35.34 35.20	2.10 (0.14) 2.24	E	Light yellowish brown slightly gravelly clayey/silty fine to coarse SAND. Gravel is fine to coarse subrounded flint and chalk. (KEMPTON PARK GRAVEL FORMATION) End of Trial Pit at 2.24m		

Method: Backhoe excavator

Groundwater: Groundwater not encountered.

Stability: Stable.

Remarks: Soakaway test undertaken within trial pit, see separate results sheet for details. Trial pit backfilled with arisings on completion.

Length:	2.09m
Width:	0.69m
Logged:	MS
Checked:	AP

TRIAL PIT LOG

TP103

Project Henley Road, Caversham
Client Signature Senior Lifestyle Developments
Date 17/12/2019

Project No. AG3094-19
Sheet 1 of 1
Scale 1:25

Ground Level 40.79m AOD **Coordinates** **Total Depth** 3.90m

Sample / Test Type	Depth (m)	Result	Level (mAOD)	Strata Depth (thickness) (m)	Ease of Dig	Description of Strata	Legend	GW
ES	0.30					Gravel over brown slightly gravelly clayey SAND with occasional roots and rootlets. Sand is fine to coarse. Gravel is fine to coarse angular to subangular brick, plastic, concrete, metal, flint, chalk and frequent cobbles and boulders of flint. (MADE GROUND)		
B	0.50			(1.10)	M	At 0.50m bgl: relict wall in western extent of pit, removed during trial pit excavation.		
D	0.90							
B	1.20		39.69	1.10		Structureless CHALK composed of slightly sandy silty GRAVELS and COBBLES. Clasts compose of very weak to weak medium density off white to white chalk and occasional flint. (Grade Dc)		
D	1.40				E	(SEAFORD CHALK FORMATION AND NEWHAVEN CHALK FORMATION (UNDIFFERENTIATED))		
				(1.30)				
D	2.00							
B	2.50		38.39	2.40		Very weak to weak off white to white CHALK with occasional flint gravels and cobbles. No discernible fractures. (Grade B3)		
					M-H	(SEAFORD CHALK FORMATION AND NEWHAVEN CHALK FORMATION (UNDIFFERENTIATED))		
D	3.00			(1.50)				
D	3.50							
			36.89	3.90		End of Trial Pit at 3.90m		

Method: Backhoe excavator
Groundwater: Groundwater not encountered.
Stability: Stable.
Remarks: Trial pit backfilled with arisings on completion.

Length:	3.00m
Width:	0.62m
Logged:	MS
Checked:	AP

TRIAL PIT LOG

TP104

Project Henley Road, Caversham
Client Signature Senior Lifestyle Developments
Date 17/12/2019

Project No. AG3094-19
Sheet 1 of 1
Scale 1:25

Ground Level 39.50m AOD **Coordinates** **Total Depth** 3.70m

Sample / Test Type	Depth (m)	Result	Level (mAoD)	Strata Depth (thickness) (m)	Ease of Dig	Description of Strata	Legend	GW
ES	0.20			(0.40)	E	Grass over soft light brown slightly gravelly sandy CLAY with occasional roots and rootlets. Sand is fine to coarse. Gravel is fine to coarse subangular to rounded flint. (TOPSOIL)		
D	0.30		39.10	0.40				
B	0.50				E	Soft to firm orangish brown slightly gravelly sandy CLAY. Sand is coarse. Gravel is fine to coarse flint. (HEAD/ALLUVIUM)		
				(0.70)				
D	1.00		38.40	1.10				
D	1.20				E	Structureless CHALK composed of slightly sandy silty GRAVEL and COBBLES. Clasts comprise weak medium dense cream white chalk and occasional flint. (Grade Dc) (SEAFORD CHALK FORMATION AND NEWHAVEN CHALK FORMATION (UNDIFFERENTIATED))		
B	1.40		37.90	1.60				
D	1.80				E	Structureless CHALK composed of cream white gravelly clayey SILT. Gravel is fine to coarse subangular medium density chalk and rare flint. (Grade Dm) (SEAFORD CHALK FORMATION AND NEWHAVEN CHALK FORMATION (UNDIFFERENTIATED))		
B	2.00			(0.80)				
D	2.50		37.10	2.40				
					M-H	Weak to medium density buff white to white CHALK with frequent flint gravels and cobbles. No discernible fractures. (Grade B3) (SEAFORD CHALK FORMATION AND NEWHAVEN CHALK FORMATION (UNDIFFERENTIATED))		
B	3.00			(1.30)				
D	3.40		35.80	3.70				
						End of Trial Pit at 3.70m		

Method: Backhoe excavator
Groundwater: Groundwater not encountered.
Stability: Stable.
Remarks: Trial pit backfilled with arisings on completion.

Length:	3.00m
Width:	0.58m
Logged:	MS
Checked:	AP

Exploratory Hole Log Key Sheet

Sample Notation		Backfill Symbols		Legend Symbols	
D	Small Disturbed sample		Sand		Topsoil
B	Bulk Disturbed sample		Gravel		Made Ground
ES	Environmental sample		Concrete		Concrete
U	Undisturbed U100 sample		Bentonite		Clay
UT	Undisturbed UT100 sample		Arising		Silt
C	Core sample		Grout		Sand
W	Water sample				Gravel
In Situ Test Notation		Installation Symbols			Peat
S	Standard Penetration Test		Plain Standpipe		Cobbles
S (C)	Standard Penetration Test (cone)		Slotted Standpipe		Boulders
HV	Hand Shear Vane Test		Piezometer		Mudstone
PID	Photoionization Detector Test		Vibrating Wire Piezometer		Siltstone
MEXE	Mexecone Cone Penetrometer Test		Inclinometer		Sandstone
PP	Pocket Penetrometer Test		Extensometer (with magnet locations)		Limestone
K	Permeability Test				Chalk
Results Notation		Groundwater (GW)			Coal
Cu	Shear Strength		Rise		Breccia
N	SPT N Value		Groundwater Strike - with Recorded Rise		Conglomerate
PID	VOC Concentration		Strike		Shale
()	U/UT Blow Count		Groundwater Strike - No Recorded Rise		Igneous Rock
Rotary Core Notation					Metamorphic Rock
TCR	Total Core Recovery				No Recovery
SCR	Solid Core Recovery				
RQD	Rock Quality Designation				
FI	Fracture Index				
If	Fracture Spacing				
NI	Non Intact				
NR	No Recovery				
NA	Not Applicable				
Ease of Dig					
VE	Very Easy				
E	Easy				
M	Moderate				
H	Hard				
VH	Very Hard				
General Notes					
1. Details of the standpipe/piezometer are given on the log. The 'Install' column shows a graphical representation of the installed including depth of instruments including slotted section or piezometer depth, and backfill details. 2. Standard Penetration Test is defined in BS EN ISO 17892. Total N value is shown on the logs, full details of the test increments, equipment references, water and casing levels shown on the SPT Summary Sheet.					
Note: Most soils comprise a mixture of particle sizes. The soil type is graphically represented on the log and may be a combination of these symbols.					