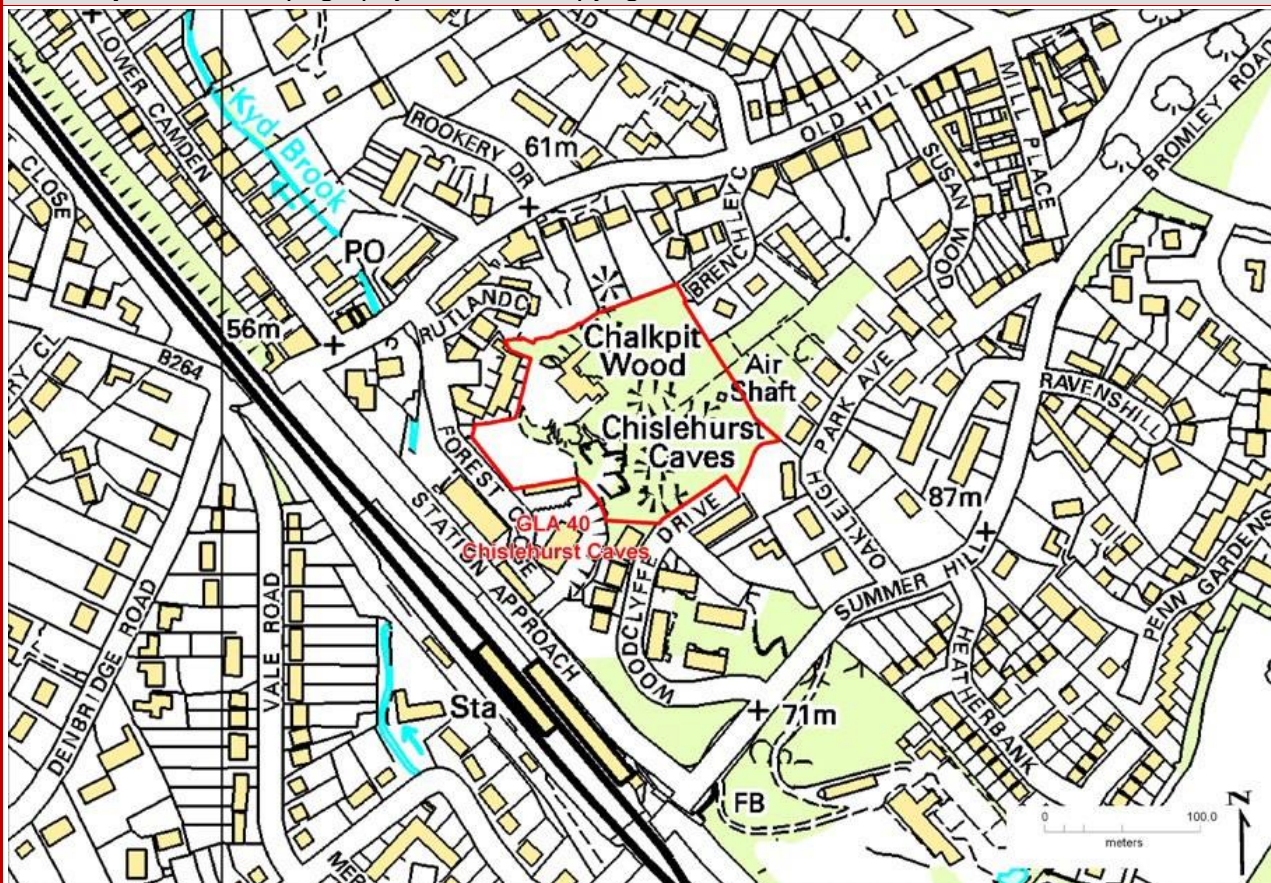


GLA 40 Chislehurst Caves

Grid Reference: TQ 431 696	Site Type: Manmade chalk caves
Site Area (hectares): 1.74 (c.8 underground)	Current use: privately owned tourist feature
Site ownership: Private owner	Borough: London Borough of Bromley
Field surveyor: Diana Clements	Date: November 2011
Latest visit: Diana Clements/Laurie Baker	Date: February 2016
Current geological designation: RIGS	Other designation: None

Site Map OS Topography © Crown Copyright



Stratigraphy and Rock Types

Time Unit: Paleocene	Rock Unit: Thanet Formation
Rock Type: Sand	Details: Sand with some clay. At the base of the formation there is a layer of rounded green coloured flint known as The Bullhead Bed
Time Unit: Late Cretaceous	Rock Unit: Seaford Chalk Formation, White Chalk Subgroup, possibly running up to base of Newhaven Chalk Formation at the top
Rock Type: Chalk	Details (Seaford Chalk): Firm white chalk with conspicuous semi-continuous nodular and tabular flint seams. Hardgrounds and thin marls are known from the lowest beds. Some flint nodules are large to very large.

Site Description

A manmade subterranean chalk mine dating from mediaeval times but mostly exploited during the 1800's. Mining chalk from a drift mine entrance at the bottom of a valley using a pillar and stall technique has been carried out for over 100 years. The site is famous for its use as an air-raid shelter in World war two. The site is privately owned and has regular guided tours; a leader with geological knowledge can be requested.

Geologically the main point of interest is the well exposed junction between the eroded top of the Upper Chalk and the Thanet Sand. It is one of the rare good exposures of the Bullhead Bed. With a full exposure of the top of the chalk there is a potential for more research on the detailed age at the top of the section. The geologist can point out a large ammonite in the roof.

Assessment of Site Value		
Geodiversity topic: Lithostratigraphy; sedimentology; geomorphology.		
Access and Safety		
Aspect	Description	
Safety of access	Good	
Safety of exposure	Well maintained by Owner.	
Permission to visit	Regular paid tours available, see: www.chislehurst-caves.co.uk	
Current condition	Good	
Current conflicting activities	None.	
Restricting conditions	Opening hours; route of standard guided tours does not pass the exposure of the Bullhead Bed and Thanet Sand	
Nature of exposure	Good underground exposures	
Culture, Heritage & Economic		
Aspect	Description	Rating
Historic, archaeological & literary associations	Well known historical site. Featured in GA Guide 68, 2012.	8
Aesthetic landscape	Popular visit feature	6
History of Earth Sciences	Useful educational location	6
Economic geology	Of great past importance.	8
GeoScientific Merit		
Geomorphology	Chalk close to the surface along the valley floor	2
Sedimentology	High quality rare exposure of Bullhead Bed	6
Palaeontology	External mould of <i>Parapuzosia</i> ammonite visible in roof of Middle Section. Macro and Microfossil potential.	4
Igneous/mineral/ Metamorphic Geology	None.	0
Structural Geology		2
Lithostratigraphy	Relationship of formations	6
Potential use	Research; further education; on-site interpretation.	
Fragility	Well protected.	
Current Site Value		
Community	Excellent tourist attraction	8
Education	Valuable.	5
Geodiversity value		
RIGS.	High geodiversity value because of junction with overlying Thanet Sand and the only publicly accessible mine in Greater London. Potential for more detailed research on the Chalk stratigraphy.	6

GLA 40 Chislehurst Caves



Photo: Laurie Baker, February 2016



Ammonite in roof of caves, February 2016. Photo: Laurie Baker