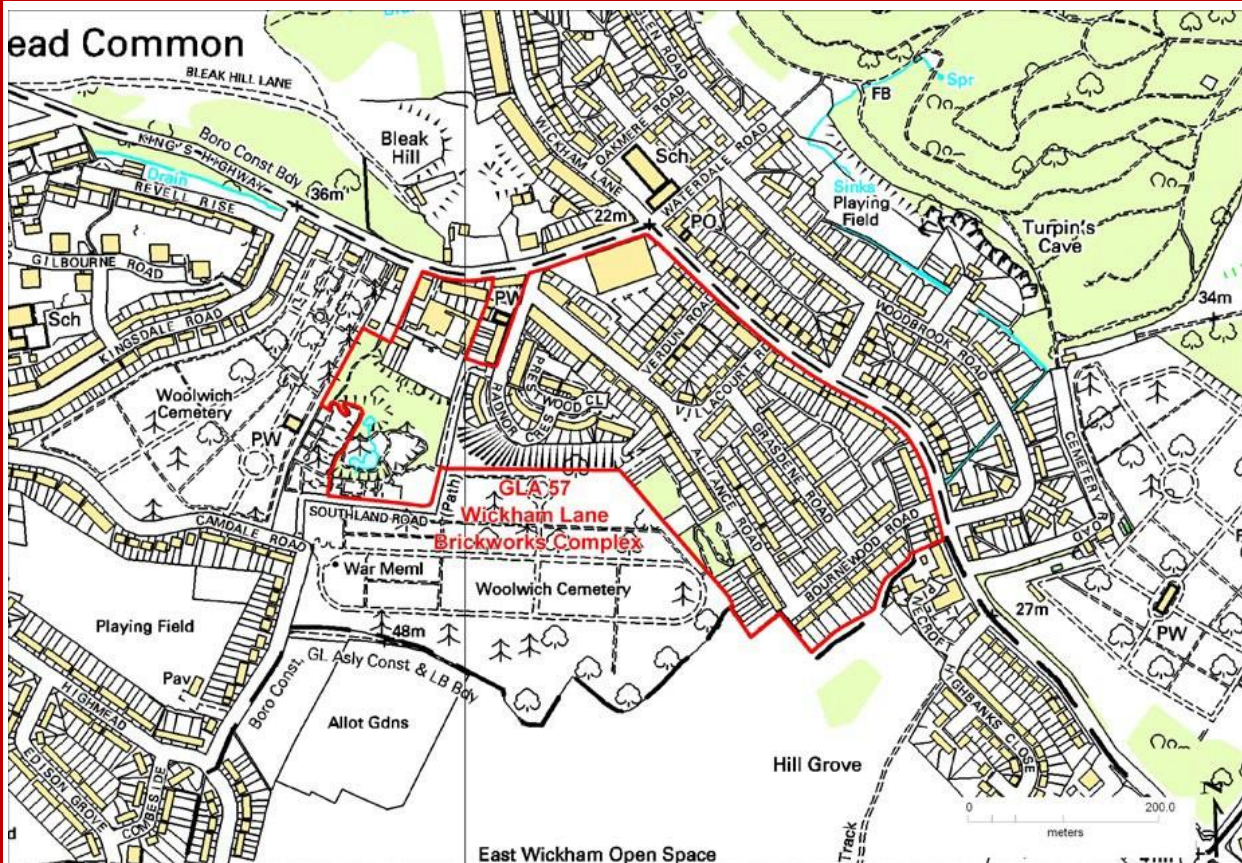


GLA 57 Wickham Valley Brickworks Complex

Grid Reference: Best exposure at TQ 4604 7743	Site Type: Former aggregate sites
Site Area (hectares): 14.67	Current use: Steep inaccessible cliff in front of and behind residential area
Site ownership: Various	Borough: London Borough of Greenwich
Field surveyor: Vernon Marks, Paul Rainey, Laurie Baker	Date: November 2010
Last visited: Paul Rainey, Diana Clements	2014
Current geological designation: LIGS	Other designation: Borough Grade II SINC (Woolwich Cemeteries and Rockliffe Gardens)

Site Map OS Topography © Crown Copyright



Stratigraphy and Rock Types

Time Unit: Quaternary	'Undifferentiated Thames Gravels'
Rock Type:	Includes 'Brickearth'
Time Unit: Eocene	Rock Unit: Blackheath Member, Harwich Formation, Thames Group
Rock Type: Sand and gravel	Details: Sand and pebbles (mostly round, black), with a fragile brackish marine fauna locally. Calclitic conglomerate found at certain horizons.
Time Unit: Paleocene-Eocene	Rock Unit: Upnor and Woolwich Formations, Lambeth Group
Rock Type: Clay, silt, sand	Details: Glauconitic sands overlain by a unit of blue-grey sand followed by interbedded grey clays and sands with a well-preserved brackish mollusc fauna. Marine Upnor sand at base.
Time Unit: Paleocene	Rock Unit: Thanet Formation
Rock Type: Clay, silt, sand	Details: Pale yellow-brown fine-grained sand
Time Unit : Late Cretaceous	Rock Unit: White Chalk Subgroup
Rock Type: Chalk	Details: Chalk with flints (unseen)

Site Description

The complex is the remains of three adjacent pits:

- 1) Cemetery Brickyard (1861-1908, now Rockcliff Gardens),
- 2) South Metropolitan Brickyard (1880-1912, reworked for sand in 1940s and 50s) (now Radnor Crescent and Prestwood Close) and
- 3) Gregory’s Pit, also known as Wickham Lane Brick Pit (c. 1840-1930) (now between Alliance Road and Wickham Lane).

The area has been entirely built over but behind the garages in Radnor Crescent the tall cliff forming the southern edge of the South Metropolitan Quarry can still be seen through the trees (best viewed in winter). The geology of this cliff is similar to Gilbert’s Pit SSSI (GLA 14) except for an unusual unit of blue- grey sand at the top of the Upnor Formation. Woolwich Cemetery is at the top of the cliff but allows no access. A recently installed fence surrounding the base of the c.100m long exposure, perhaps to discourage dumping, allows no access from the bottom either but with binoculars small patches of exposure in mid- and upper- cliff could still be seen in 2014. All three Brick Works were mixing clay and sand from Upnor, Woolwich and Thanet Formations from their open pits with chalk from their own underground mines but also exploited local ‘Brickearth’.

In the 1950s the underground mines were filled with fly-ash slurry and sealed off. Rockcliffe Gardens are of interest as an attempt to develop a major area of subsidence into the mine in 1937.

Assessment of Site Value

Geodiversity topic: Lithostratigraphy; sedimentology; palaeontology.

Access and Safety

Aspect	Description
Safety of access	Access no longer possible; scree at the base, still vertical at the top
Safety of exposure	The remaining cliff is fenced off and overgrown; the rest of the complex is built over.
Permission to visit	Private land with no access
Current condition	Overgrown.
Current conflicting activities	Access and vegetation.
Restricting conditions	Vegetation
Nature of exposure	Residual cliff in former quarry complex

Culture, Heritage & Economic

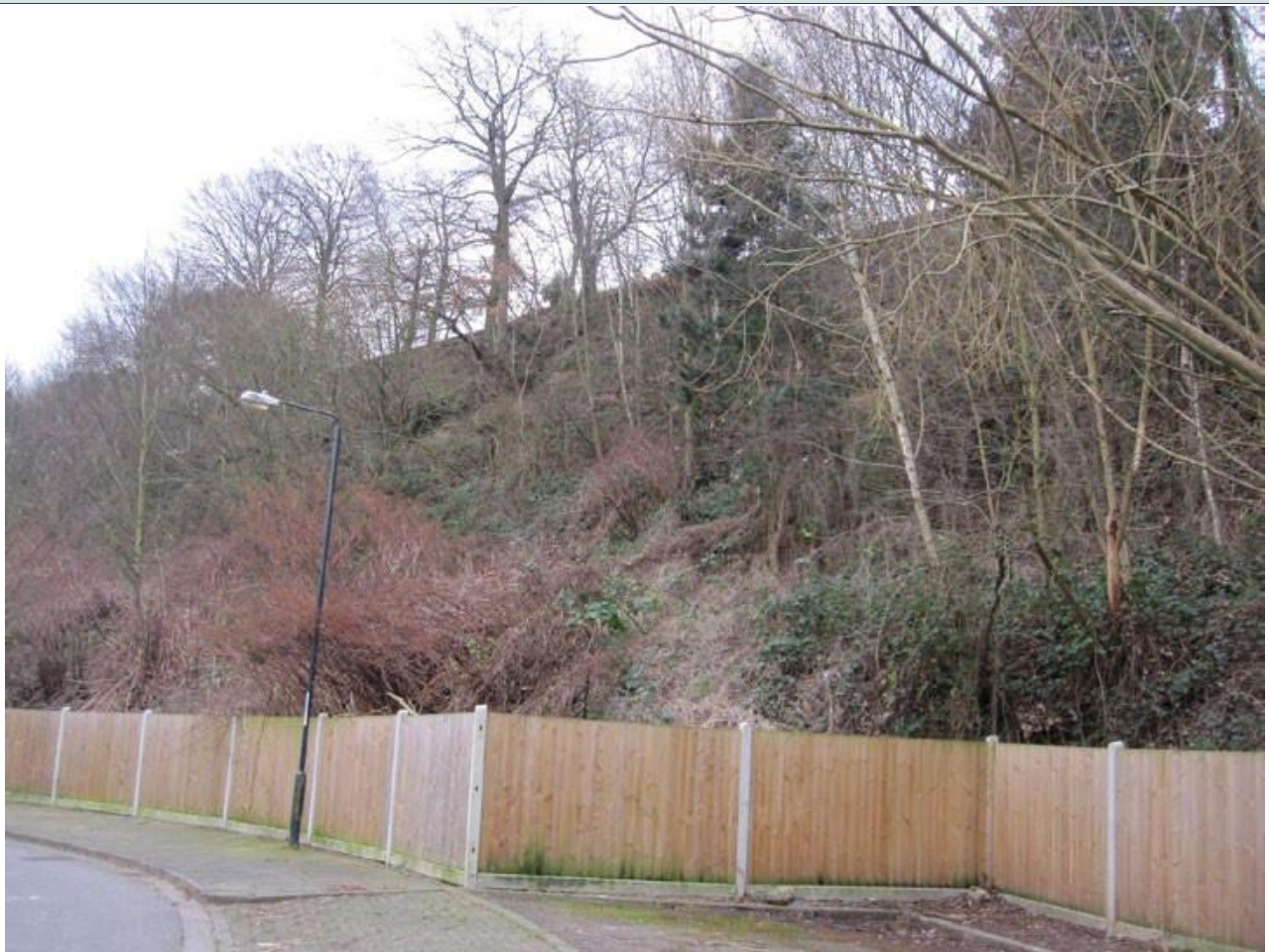
Aspect	Description	Rating
Historic, archaeological & literary associations	There is scope for a geological/industrial archaeology walk through this area and neighbouring former brick pits and chalk mines to the north and chalk pits to the east.	6
Aesthetic landscape	A fairly striking cliff visible to local residents	4
History of Earth Sciences	Whitaker, 1889 describes the pits. Geologist Association excursions to the quarries are described in the Proceedings (PGA): Leach & Polkinghorne, 1906; Baker & Priest, 1919; Leach, 1929, Pitcher, 1948, Epps, 1956. Leach, 1910 and Pearman, 1973 describe the mines. South Metropolitan Brickyard (Radnor Crescent) is also described in GA Guide No. 68, 2012.	4
Economic geology	Brickmaking in 19 th century and up to 1930. Underground chalk mining until 1920. One pit reworked for sand in 1950s.	4

GeoScientific Merit

Geomorphology	Steep valley beneath Harwich Formation plateau which has been quarried leaving a residual cliff	4
Sedimentology	Upnor Formation, Woolwich Formation and Blackheath Beds (Harwich Formation) are all still visible on the cliff-face, albeit sporadically and illustrate the variability in the succession from marine to estuarine and back to marine with alternating sands, clays and shell bed, with the rounded Blackheath Pebbles at the top. The prominent white band, visible from the base is the shell bed within the Woolwich Formation.	4
Palaeontology	Brackish fauna in the Woolwich Formations, probably also in	4

	Blackheath Beds.	
Igneous/mineral/ Metamorphic Geology	None.	0
Structural Geology	None.	0
Lithostratigraphy	Succession of lithology at one site (more accessible at GLA 14, Gilbert's Pit, SSSI). Historically pits were of much interest for nature of unconformities.	4
Potential use	Research; further education; on-site interpretation.	
Fragility	natural overgrowing; weathering/slumping.	
Current Site Value		
Community	Green background.	6
Education	Close to route of Green Chain Walk Geotrail	6
Geodiversity value		
LIGS:	Disused quarries included because of their historical significance in the area and the possibility of informing walkers on the Green Chain Walk.	4

GLA 57 Wickham Valley Brickworks Complex



From Radnor Crescent.. Photo: Diana Clements 2012