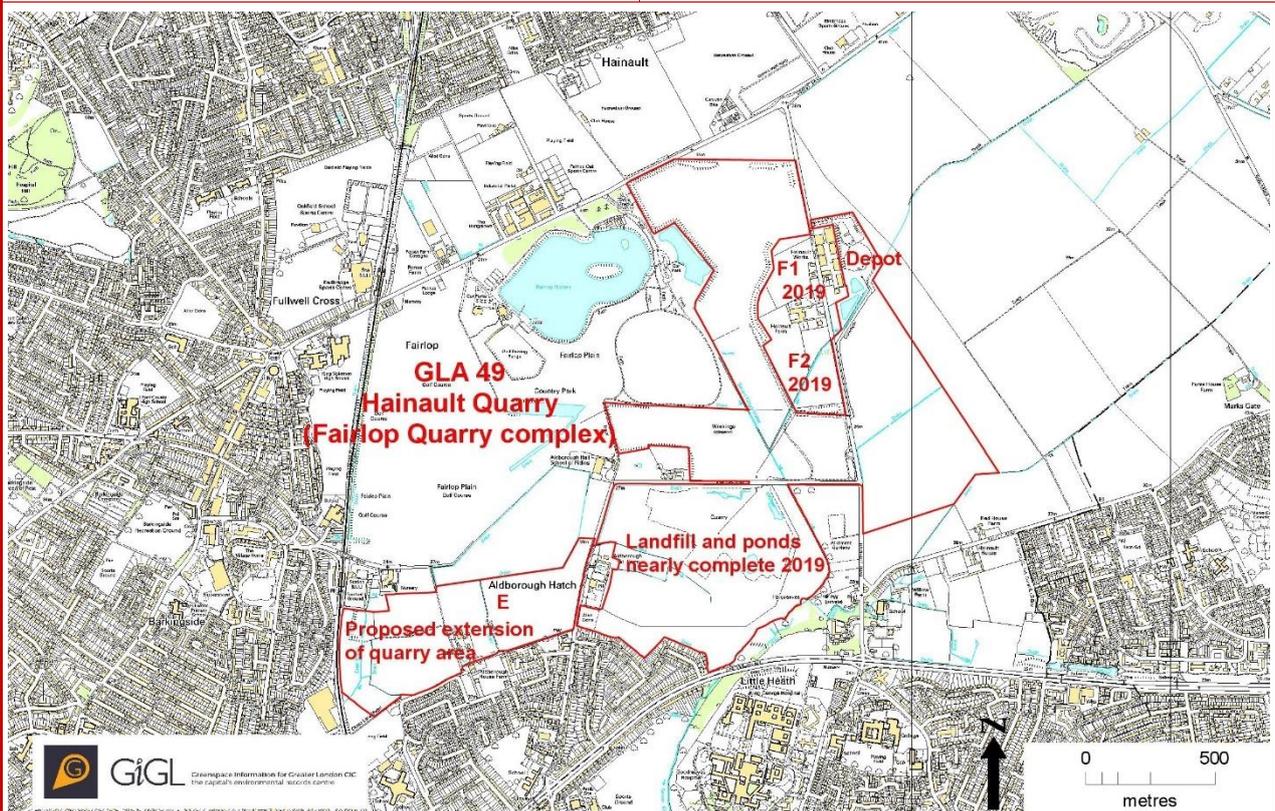


GLA 49 Fairlop Quarry Complex (Hainault Quarry)

Grid Reference: TQ 462 896	Site Type: aggregate quarry site
Site Area (hectares): 173.32	Current use: potential land fill
Site ownership: Brett Tarmac Ltd.	Borough: London Borough of Redbridge
Field surveyor: Diana Clements/Peter Collins Revisit: Diana Clements/Bill George	Date: July 2011 Date: 2019
Current geological designation: RIGS	Other designation: Borough Grade I SINC (Fairlop Plain and Fairlop Water)
Site Map	OS Topography © Crown Copyright



Stratigraphy and Rock Types

Time Unit: Pleistocene	Rock Unit: Boyn Hill Gravel Member, Maidenhead Formation
Rock Type: Sand and gravel	Details: Sand and pebbles (mostly flint)

Site Description

In 2019 the working quarry F1 had recently begun. Diggers had stripped off the top soil and put into bunds round the perimeter and were now extracting up to 2m of clay that overlies the gravel. No evidence of this was seen in our previous visit in 2011 and we are mystified as to what it might be. It is very slightly silty but apparently of no use for the gravel workers. We pondered whether it was a clay-rich layer on top of the Boyn Hill Gravel (Thames Terrace MIS 11), or a later layer of Brickearth not shown on the BGS maps. This needs more investigation. The working quarry in July 2011 is now currently being used for landfill. The quarries are naturally ephemeral with a stipulation that they need to be restored for agricultural use. The final undug area in the SW corner of the Fairlop Complex will see active working for another ten years. We would request that a small exposure is retained in either sector E or F, if not for the public, then for research. The complex includes the Hainault Road depot/processing plant.

Previous excavations in the area include the landscaped water feature that is now used for public recreation as Fairlop Waters. Other former quarries have been landfilled and re-established as agricultural land. As this is the only area in east London still quarrying Boyn Hill Gravel, it has been designated a RIGS site.

Assessment of Site Value

Geodiversity topic: Lithostratigraphy; sedimentology.

Access and Safety		
Aspect	Description	
Safety of access	The quarry can only be visited when accompanied by a representative of the quarry owner. It is locked when not operating.	
Safety of exposure	Danger of working machinery needs to be considered when visiting PPE required	
Permission to visit	Brett Tarmac Ltd. Fairlop Quarry, Hainault Road, Little Heath, Romford, Essex, RM6 5SS (Rick Napier site manager – Tel no: 0208 599 6509 See: https://fairlop.tarmac.com/contact-us/	
Current condition	The site is active.	
Current conflicting activities	Landfill and land reclamation	
Restricting conditions	Access and imminent disappearance of this site; we would request that a small exposure is made accessible somewhere within the complex once operations cease.	
Nature of exposure	Quarry for Boyn Hill Gravel.	
Culture, Heritage & Economic		
Aspect	Description	Rating
Historic, archaeological & literary associations	The area has been quarried from at least 1938 (BGS GDI old OS maps) but other literature not yet researched	2
Aesthetic landscape	Private land	0
History of Earth Sciences	Other gravel pits in East London have been important for archaeological remains but only minor evidence has been reported from the Fairlop, e.g. postholes. An archaeologist was onsite checking the removal of topsoil.	2
Economic geology	Gravel extraction has been an important industry in east London	8
GeoScientific Merit		
Geomorphology	Flat terrace feature at 25m above OD	2
Sedimentology	Potential detailed description of the gravels possible	6
Palaeontology	None known	0
Igneous / mineral / metamorphic geology	None.	0
Structural Geology	None.	0
Lithostratigraphy	Potential better exposure when Areas F, and then E become operational	6
Potential use	Research; (off-site education on Thames Terraces). Investigations into clay layer required.	
Fragility	landfill	
Current Site Value		
Community	.	2
Education		4
Geodiversity value		
RIGS:	It will be important to maintain an accessible face once extraction has ceased and for Redbridge to consider designating a face within the complex a RIGS for the Boyn Hill Gravel as there are no other exposures in east London	6

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Clay being removed from above the gravel. Photo: Bill George, 2019



Small temporary exposure dug for visit in 2019. Photo: Diana Clements 2019