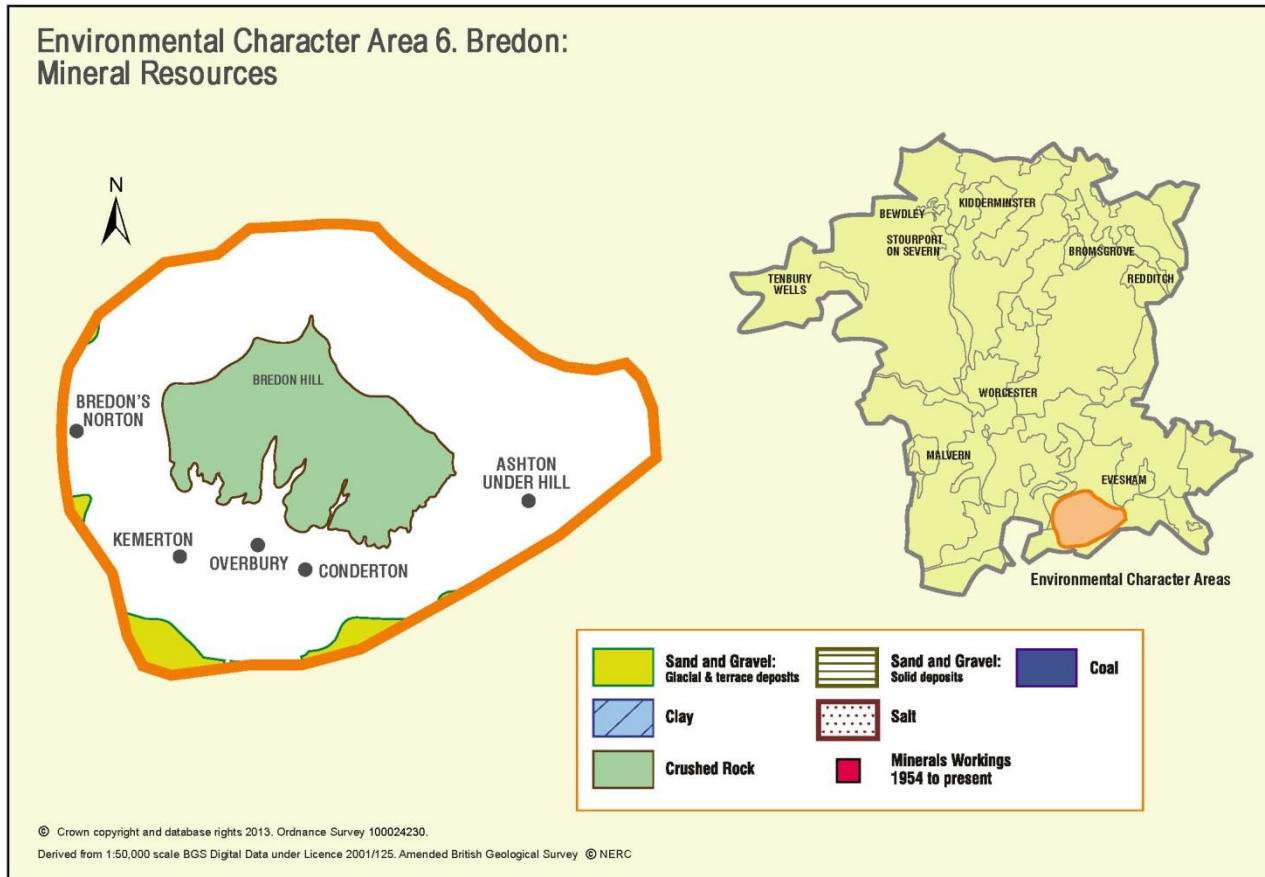


Appendix 6: Analysis of aggregate resources in ECA 6: Bredon



ECA Summary for the Third Stage consultation on MLP (Spring 2015):

Sand and gravel

There are no resource areas identified for sand and gravel in Bredon ECA. The sand and gravel resources which are shown here are assessed under ECA 16 and ECA 18.

Crushed rock

There is one resource area identified in Bredon ECA for crushed rock:

- Key: 1

Non-aggregates

BGS data indicates that there are no non-aggregate mineral deposits in Bredon ECA.

Overview of resource assessment for ECA 6

Crushed rock resource areas:

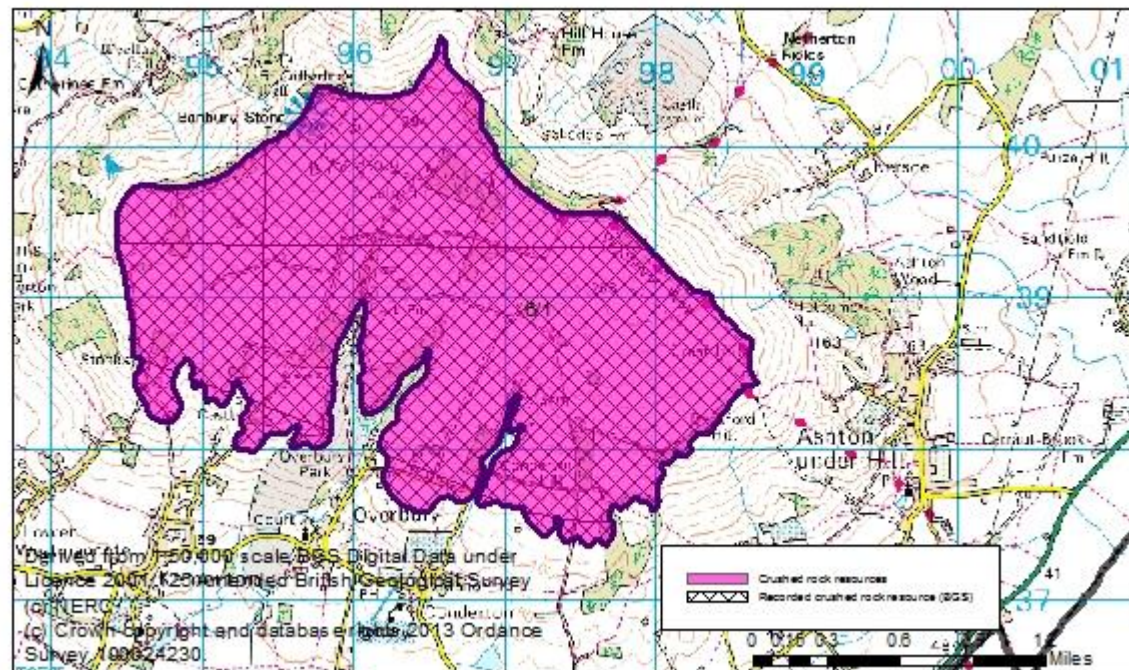
Resource number*	Second Stage Consultation		Third Stage Consultation	
	Original estimated resource tonnage (2.7 tonnes/m ³)	Significance	Revised estimate of resource tonnage (2.45 tonnes/m ³)	Significance
6/1	236,190,000	Key	289,332,750	Key

Overview

Resource number: 6/1
Resource name: Bredon Hill
Resource area: 764 ha
Resource depth: Estimated 22.9m

Location

OS sheet reference: SO 93 NE, SO 93 NW, SO 94 SE
National grid ref: 396487, 238925

**Resource description:**

Resource description: Birdlip limestone formation of the Inferior Oolite group (crushed rock).

A borehole at Lalu Farm shows Inferior Oolite to 36m, overlying Upper Lias clay, Mudstone rock bed, Middle Lias clay and Lower Lias clay. The BGS memoir for Tewkesbury area records probably 30m of Lower Inferior Oolite beds; about 9.1m of massive, oolitic shell-fragmented limestones exposed in an old quarry recorded by Richardson; and in a locality a mile to the north west of Overbury Church oolitic limestone estimated at 8.5m thick overlain in turn by 10.5m of lower limestone, up to 4.3m of Pea Grit and Lower Freestone (total 23.3m).

The deposit is substantially faulted and a borehole at Scarborough cottages shows Inferior Oolite to a depth of 15.9m, overlying Upper Lias clay to 29.7m, a fault zone to 32m, and Lower Lias clay to 76.4m.

The hill is surrounded by landslips of mudstones to the west and Upper and Lower Lias Clays and silts to the east. The hill has clearly been worked in several places in the historic past, and the older houses, walls and outbuildings in the villages all around it are almost completely built from local stone.

Estimated resource depth based on a mean average of: a) borehole at Lalu Farm: 36m, b) BGS memoir records of Tewkesbury area: 30m c) Richardson 9.1m d) Overbury Church 23.3m, e) borehole at Scarborough

	cottages: 15.9m = 22.9m
Assessment of resource for the second consultation on MLP (Autumn 2013)	
Commentary:	A large resource area with small-scale dispersed development across the resource area.
Crude estimate of resource:	Area: 764 ha x average depth: 22.9 m ÷ 2 Estimated resource volume: 87,478,000 m ³ Estimated resource tonnage (at 2.7 t/m³): 236,190,600 tonnes
Conclusion:	Significant – key resource. Use to define areas of search.
Assessment of resource for the Third Stage consultation on MLP (Spring 2015)	
Revised estimate of resource:	Area: 764 ha x average depth: 22.9 m ÷ 2 Estimated resource volume: 87,478,000 m ³ Estimated resource tonnage (at 2.45 t/m³): 289,332,750 tonnes
Conclusion:	Significant – key resource.