

**BOURNEMOUTH, DORSET & POOLE MINERAL SITES PLAN
EXAMINATION**

Representations on behalf of M B Wilkes Ltd

**John Cowley, Director, Mineral & Resource Planning
Associates Ltd**

APPENDIX JFC 2

BRITISH GEOLOGICAL SURVEY

COMMISSIONED REPORT CR/01/138N

Mineral Resources of East Dorset

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N R Webb³

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Geographical index

UK, Southern England, Dorset.

Subject index

Geology: Mineral resources: ball
clay, sand, sand and gravel,
sustainable development, land-
use planning.

Front cover

View from Creechbarrow,
westward along the Chalk ridge
to Povington ball clay pit, and
ball clay extraction at Doreys pit.

Bibliographical reference

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Appendix 9 Sand Grading Diagrams for Palaeogene (Tertiary) Sands

In order to assess the particle-size distribution of the Palaeogene sands in the project area, 273 samples were collected from pits and boreholes. Each pit sample was channelled over a 1 m interval and in the boreholes over a more variable interval (between 0.5 and 1 m). The samples were sieved in the Exeter Office using sieves, which ranged from 2 mm at the coarsest end down to 64 μm at the finest. Although sieves coarser than 2 mm are involved in the BS 1200 and BS 882 specifications, the sands analysed were sufficiently fine that little was retained on the 2 mm sieve in most instances, and it was not considered worthwhile to add coarser sieves.

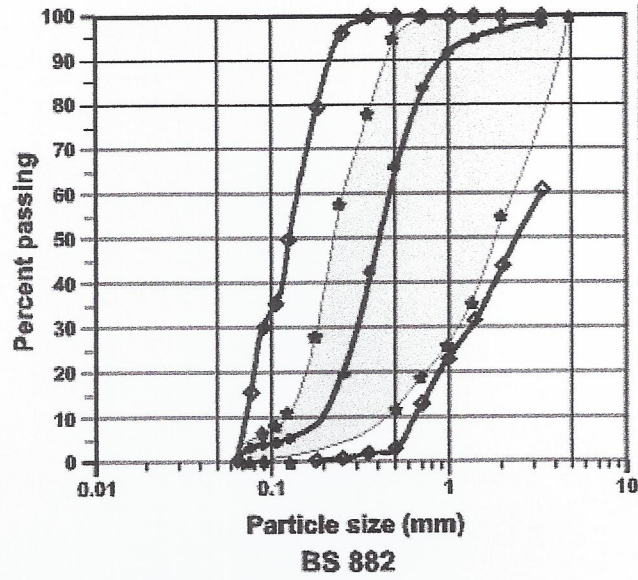
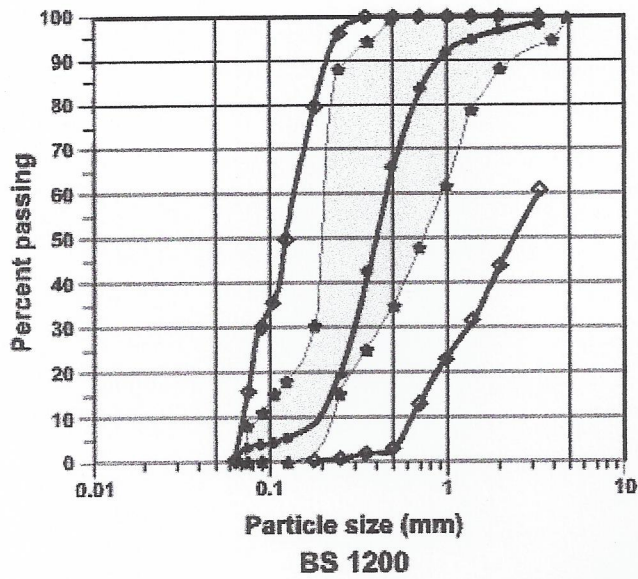
Data from a further 132 samples from within the present project area were available from sieving undertaken in 1983-86 during a BGS Land Use Planning project carried out for the Department of the Environment. These earlier samples were collected from pits and natural sections, but the samples were collected from 0.1m intervals within the section and, therefore, less averaging of the properties occurred. The coarsest sieve used in the analysis of these samples was 1 mm. Nonetheless it was felt that these data were useful enough to add to the more recent information.

The grading data was analysed using *Sivpro*, a software package, which besides producing grading curves on demand for individual samples, also produces composite grading curves. These show the curves for coarsest sample, finest sample and an average for a given selection of samples, normally chosen on a stratigraphical basis. A chosen BS grading curve envelope is also plotted. The software can produce lists showing passes and fails for individual samples.

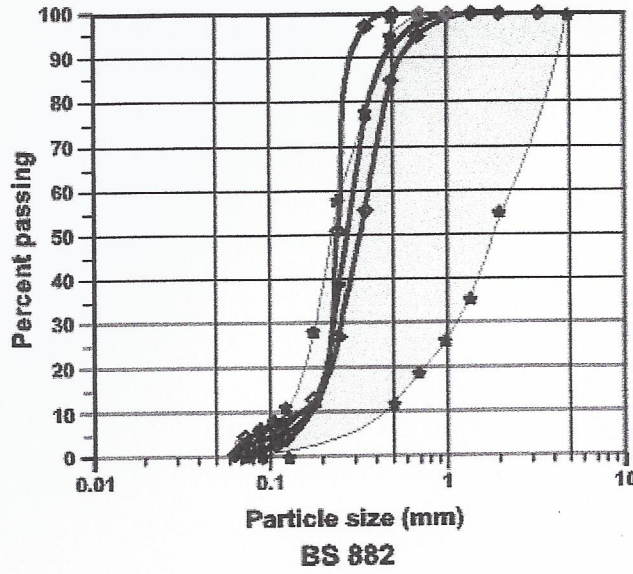
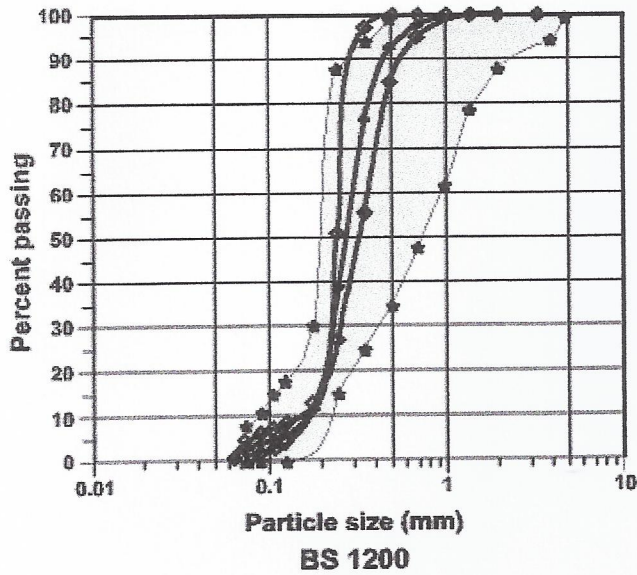
British Standards Institution BS 882:1992.
Specifications for Aggregates from Natural Sources for Concrete.

British Standards Institution BS 1200: 1984.
Specifications for Buildings sand from Natural Sources –

Sand grading diagrams for Parkstone Sand and Branksome Sand



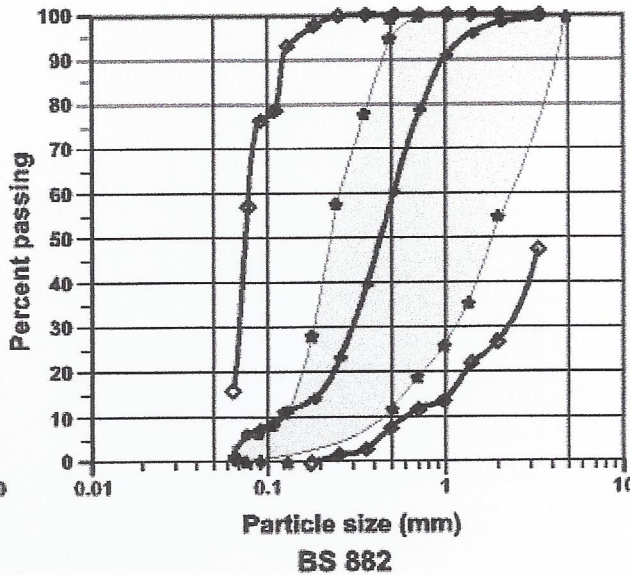
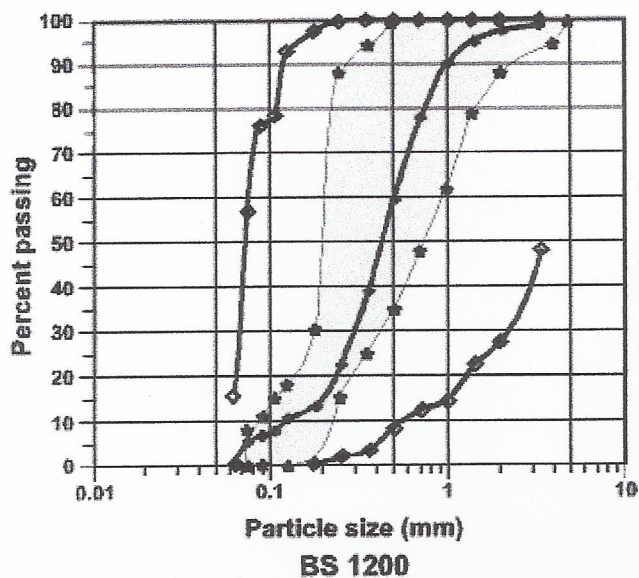
Parkstone Sand (63 samples)



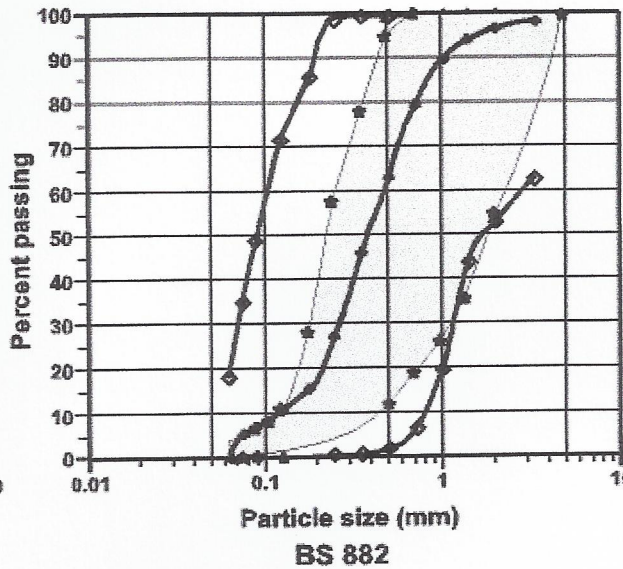
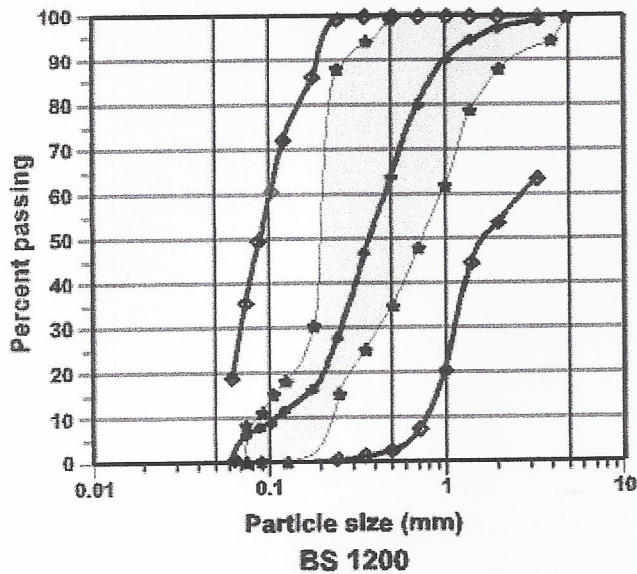
Branksome Sand (2 samples)

—◆—◆—◆— Finest and coarsest samples
 —★—★—★— Average of samples

Sand grading diagrams for Oakdale Sand and Broadstone Sand



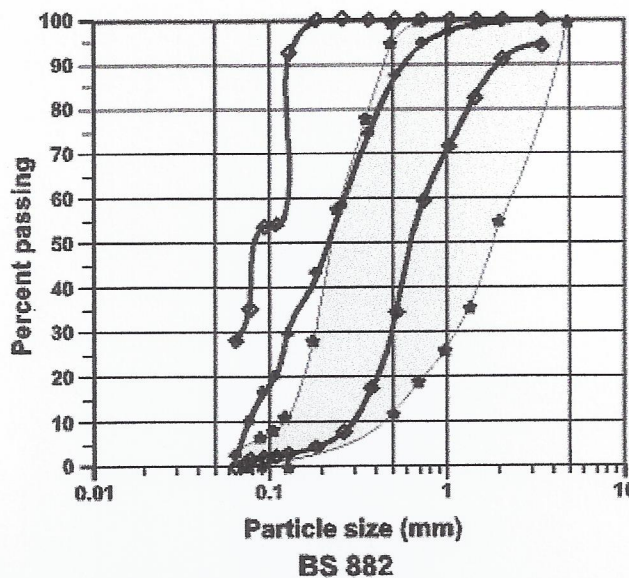
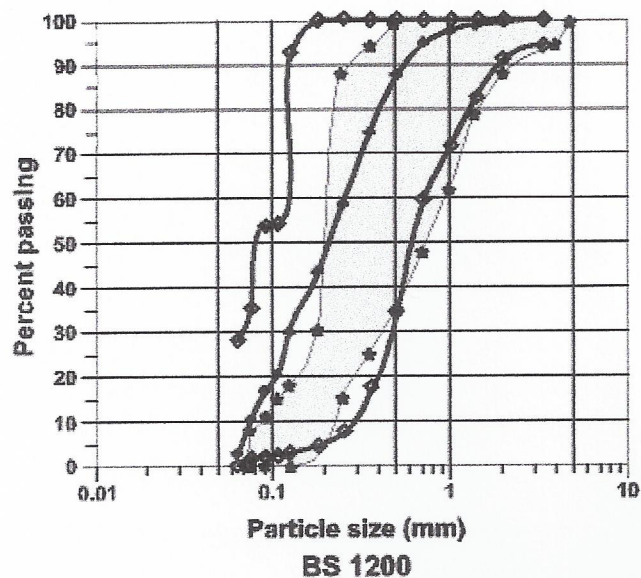
Oakdale Sand (124 samples)



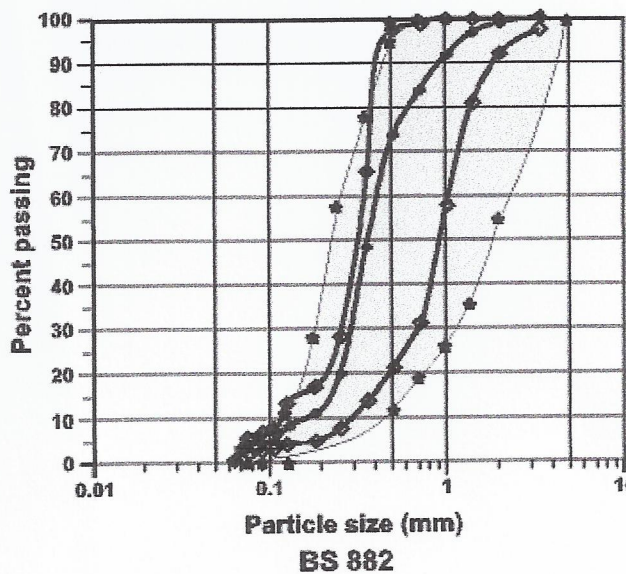
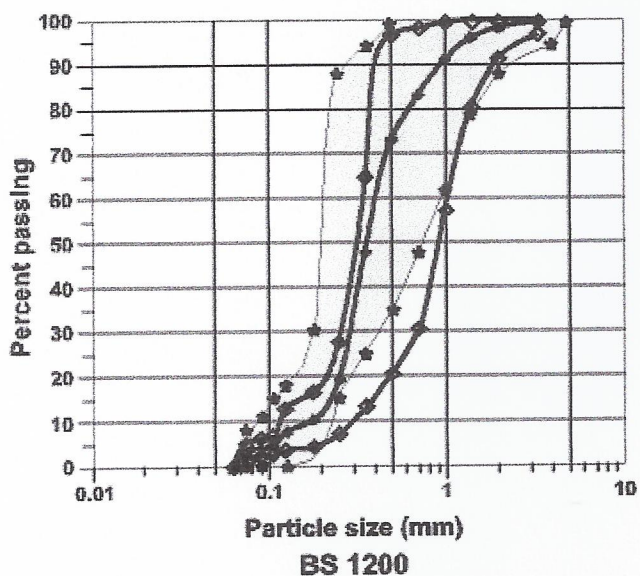
Broadstone Sand (124 samples)

- ◇—◇—◇— Average of samples
- BS envelope

Sand grading diagrams for London Clay sands and Creekmoor Sand



All sands in London Clay (40 samples)



Creekmoor Sand (7 samples)

- ◆— Average of samples
- BS envelope
- ◇— Finest and coarsest samples