

APPENDIX 4

Shellingford Quarry - Method specification for the compaction of an Artificial Geological Boundary (AGB)

1. AGB Selection

The suitability of low permeability material, either in-situ or imported to be used for AGB construction works will be determined by staff having the appropriate level of technical competence with relevant qualifications gained from one of the accepted industry schemes.

Cohesive fill shall have a minimum undrained shear strength of 40kN/m² as determined by tactile site inspection based on the criteria set out in Table 13 of British Standard BS 5930:1999 (Code of Practice for Site Investigations).

2. AGB Placement and Compaction

General

- 2.01 The works will be undertaken by an experienced earthworks operator (Multi-Agg Limited) in accordance with principles of best practice including British Standard BS 6031:2009 (Code of Practice for Earthworks).
- 2.02 Phased dewatering of earthworks construction areas will be undertaken to ensure that the AGB placement and compaction is undertaken in dry conditions.
- 2.03 AGB shall be tipped short of the position of its eventual placement. Following inspection and confirmation of suitability, the fill shall be dozed and graded into place by a tracked bulldozer (CAT D6 or equivalent).
- 2.04 Within each phase of AGB, AGB shall be placed and compacted in uniform layers and shall, as far as is practicable.
- 2.05 No AGB shall be placed and left uncompacted at the end of the working day.
- 2.06 Compacted fill shall be graded to falls to ensure free runoff of rainwater without ponding during construction.
- 2.10 AGB placement and compaction activities shall be routinely monitored by the technically competent person.

Layer thickness

- 2.11 Loose layer thickness shall be no greater than 500mm (no greater than 250mm in the uppermost 1.5m).

Compaction plant

- 2.12 A tracked bulldozer (CAT D6 or equivalent) will be used to spread the deposited AGB material into layers and to compact.
- 2.13 The number of passes N is the number of times that each point on the surface of the AGB layer being compacted is traversed by the track of the bulldozer. The minimum value of N to be adopted is 6.