stone types that meet the physical requirements and physical properties specified hereinafter.

- 5. Physical requirement:
  - a. Weight of voided shells in fine aggregates not to exceed 3 percent.
  - b. Clay, silts, and dust content not to exceed the following limits:

Coarse aggregates 1 percent by weight.

• Crushed stone sands 5 percent by weight.

Natural sands 3 percent by weight.

- c. Combined Flakiness index of coarse aggregates not to exceed 35 percent as determined in accordance with BS 812
- d. Combined Elongation index of coarse aggregates not to exceed 35 percent as determined in accordance with BS 812.
- e. Absorption of fine and coarse aggregates not to exceed 2.5 percent as determined in accordance with BS 812.
- 10% fines value of coarse aggregates shall not be less than 75KN as determined in accordance with BS 812-111.
- g. Los Angeles abrasion value shall not exceed 30% as determined to ASTM C131 or C535.
- h. Nominal size of coarse aggregates except otherwise stated in the contract document to be as follow:

Concrete class 'A' 10 mm.

Concrete class 'B'
20 mm.

Concrete class 'C' (unreinforced)
20 mm.

- 6. Except as may be modified hereunder, the aggregate (fine and coarse) for all types of concrete shall comply in all respects with BS 882 "Concrete aggregates from natural sources" and shall also comply with local regulations.
- 7. The aggregates used in the permanent works shall be naturally occurring crushed materials obtained only from approved sources. Aggregates subject to high drying shrinkage such as quartz shall not be used. Aggregates shall be clean, hard, and durable and shall not contain iron pyrites, iron oxides, mica, shale, coal or other laminar, soft or porous materials or hollow shells.