

SECTION A6

LIGHTWEIGHT BACKFILL

GENERAL

The Contractor shall furnish Lightweight Backfill to be used as backfill material for all locations shown on the plans, specified herein or ordered by the Engineer.

MATERIALS

Lightweight Backfill shall conform to ASTM Designation C330 Standard Specification for Lightweight Aggregates for Structural Concrete. Lightweight aggregate shall have a proven record of durability and be non-corrosive with the following properties:

- 1.) The gradation should conform to the ASTM C330 Size Designation Coarse Aggregate, which is as follows:

<u>Sieve Size</u>	<u>Percent Finer by Weight</u>
1 inch	100
3/4 inch	80 to 100
3/8 inch	10 to 50
No. 4	0 to 15
No. 100	0 to 5

- 2.) The dry loose unit weight shall be less than 55 PCF. The producer shall verify a compacted density of less than 60 PCF, as measured in accordance with ASTM D-698 (the standard test methods of moisture-density relations of solid and aggregate mixtures using a 5.5 lb. hammer and 12-inch drop).

CONSTRUCTION METHODS

Lightweight Backfill shall be placed in layers not exceeding twelve (12) inches, measured prior to compaction.

Each layer shall be compacted using vibratory compaction equipment weighing not more than 12 tons static weight. The actual lift thickness, exact number of passes, and need for vibrating the roller will be determined by the engineer, depending on the project requirements (i.e. strength, compressibility, unit weight) and equipment used. The Contractor shall take all necessary precautions during construction activities in operations on or adjacent to the Lightweight Backfill to ensure that the material is not over-compacted.

Construction equipment, other than for compaction, shall not operate on the exposed Lightweight Backfill.

The areas to be backfilled shall not have any standing water in it prior to placement of the Lightweight Backfill.

Lightweight Backfill shall not be placed when frozen or on frozen material.

MEASUREMENT AND PAYMENT

Item A6-1 Lightweight Backfill C.Y.

The quantity of Lightweight Backfill to be paid for shall be that quantity delivered to the site and used for backfill of excavations. Such quantity shall be measured in place, and compacted, by the cubic yard. The Commission Inspector shall make such measurement.

Such measurements shall be based upon the depth of normal trench excavation (or ordered Below Grade Excavation), the length of the trench and the width of the trench. Such trench width shall not exceed the limits set forth in Section A1, Excavation and Backfill.

No payment shall be made for the re-use of any excavated material.

No payment shall be made for the furnishing of Lightweight Backfill to backfill any excavation made for the Contractor's convenience or excavations beyond the limits set forth in Section A1, Excavation and Backfill.