

Section 9 - BACKFILLING

A. GENERAL BACKFILLING REQUIREMENTS

1. This work shall include:
 - a. Site filling and backfilling as indicated on the Contract Drawings.
 - b. Fill under building slabs-on-grade and paving as indicated on the Contract Drawings.
 - c. Consolidation and compaction.
 - d. Fill for over-excavation.
 - e. Place fill to final access road and site contours.

B. PRODUCTS

1. Fill Materials
 - a. 2B Limestone under concrete slabs or as indicted on the Contract Drawings.
 - b. Concrete: Lean concrete with a minimum 28-day compressive strength of 3000 psi where footing trenches have been over-excavated.
 - c. Roadway and Paving: Grade and level access road as indicated on the Contract Drawings.
2. Accessories
 - a. Vapor Retardant: 6 mil thick, polyethylene.

C. EXECUTION

1. Examination

All fill materials shall be inspected and accepted by the Engineer's representative prior to placement.
2. Preparation
 - a. Generally, compact subgrade to density requirements for subsequent backfill materials.
 - b. Proof roll all building sites.
 - c. Cut out soft areas of subgrade not capable of insitu compaction. Backfill with fill and compact to density equal to or greater than requirements for subsequent backfill material.
3. Backfilling - General
 - a. Fill material shall be obtained from excavation or furnished from other sources as required.

- b. Fill material shall be as indicated on the Contract Drawings. Otherwise, fill material shall be earth free from debris, stumps, roots, organic or frozen matter. Do not place fill on soft or frozen areas.
 - c. Backfill areas to the contours and elevations shown on the Contract Drawings with unfrozen materials.
 - d. Systematically backfill to allow maximum time for natural settlement. Do not backfill over porous, wet, frozen or spongy subgrade surfaces.
 - e. Granular Fill: Place and compact materials in continuous layers not exceeding 8 inches compacted depth.
 - f. Soil Fill: Place and compact material in continuous layers not exceeding 8 inches compacted depth.
 - g. Employ a placement method that does not disturb or damage foundation dampproofing and utilities in trenches.
 - h. Maintain optimum moisture content of backfill materials to attain required compaction density.
 - i. Fill shall be placed after permanent installations of utility lines have been completed.
 - j. Backfill against supported foundation walls. Do not backfill against unsupported, foundation walls.
 - k. Backfill simultaneously on each side of unsupported foundation walls until supports are in place.
 - l. Slope grade away from buildings at a minimum rate of 2 inches in 10 ft. unless noted otherwise.
 - m. Make grade changes gradual. Blend slope into level areas.
 - n. Spoil excess material onsite to Engineer satisfaction, all other surplus backfill materials from site must be removed and disposed of at Contractor's costs.
 - o. Leave fill material stockpile areas completely free of excess fill materials.
4. Tolerances
Top surface of backfilling under paved areas: plus or minus one inch from required elevations.
5. Protection of Finished Work
Re-compact fills that are disturbed by vehicle or equipment traffic.

END OF SECTION