## Sec. 13b-17-35. Backfilling

The backfilling of excavations in State highways shall be performed so that the least possible settling will occur. The excavation shall be filled with suitable material and thoroughly tamped in layers not to exceed six inches in thickness. Acceptability of excavated material to be used in the backfill shall be determined by the State.

Tamping shall be by means of mechanical rams, vibrators, hand tamps or by pneumatic tampers. If pneumatic tampers are used they shall have a tamping face area of not less than 50 square inches and each complete assembly shall have a weight of not less than two pounds per square inch. If a hand tamp is used it shall weigh not less than 12 pounds and have a tamping face area of not more than 50 square inches. When approved or directed by the State, the backfill shall be thoroughly consolidated by flushing the excavation with water. When sheeting and bracing are to be wholly or partly removed, this shall be done as backfilling progresses. When backfilling has reached the bottom brace, the latter and its horizontal rangers shall be removed, and this procedure shall be repeated throughout the backfilling operation. The sheeting shall be pulled in short increments, care being taken to avoid significant lateral movements of the sides of the trench. During and after pulling the sheeting, the backfill in the space formerly occupied by the sheeting shall be thoroughly rodded and tamped. The base in the pavement area and shoulder area shall be in accordance with current Standard Specifications for Roads, Bridges and Incidental Construction, as revised, or as directed by the District Maintenance Manager. Unsuitable material must be removed promptly from the work site by the permittee or his Contractor. Backfill around tree roots shall be placed carefully, tamped and puddled to prevent air pockets, root damage or settlement.

Compaction tests of the completed trench backfill may be required prior to the installation of the pavement replacement to ensure that this section's requirements are strictly enforced. Where broken stone bedding is used around the pipe, provision shall be made to physically prevent the encroachment into the voids between the stones of fine material present in the trench backfill material. This may be accomplished by covering the stone with an acceptable plastic sheeting or equivalent material.

(Effective August 27, 1992)