

SECTION 526—RUBBLIZING OF CONCRETE PAVEMENTS

526.1 DESCRIPTION—This work is rubblizing and seating of existing concrete pavements before the placement of a pavement overlay.

Rubblizing is classified into two types as follows:

(a) **Type 1.** Rubblizing pavement into pieces having a maximum horizontal dimension of 300 mm (12 inches).

(b) **Type 2.** Rubblizing pavement into pieces having a maximum horizontal dimension of 200 mm (8 inches) and with at least 50% of the pieces per square meter (square yard) having a maximum horizontal dimension of 100 mm (4 inches).

526.2 MATERIAL—

(a) **Coarse Aggregate, Type A or Type B, No. 1.** [Section 703.2](#)

(b) **Subbase, No. 2A.** [Section 350.2](#)

526.3 CONSTRUCTION—

(a) **Equipment.** Submit a pavement rubblizing plan and list of proposed equipment for Department approval before the start of construction. If, during rubblizing operations results are not being obtained, cease all rubblizing operations and submit an alternate plan and list of equipment capable of obtaining the specified results to the Representative. Resume rubblizing operations upon acceptance of the alternate plan.

(b) **Existing Bituminous Surfaces.** Remove any existing bituminous paving materials that are overlaying the concrete pavement, as specified in [Section 490.3](#), before beginning rubblizing operations. Do not remove any existing full depth bituminous patches.

(c) **Rubblizing.** Use mechanical or sonic vibratory equipment capable of providing concrete pieces of the specified dimensions, throughout the full depth of the pavement, on a regular and continuous basis. Provide equipment suitable to the Representative.

For Type 2 rubblizing, ensure that pieces are free of bond with reinforcement to allow adequate seating.

Excavate two, 1.0 m x 3.6 m (3-foot by 12-foot), full-depth sections of rubblized pavement, within the first 1.0 km (1/2 mile) of rubblizing operations, to ensure that the pavement is being rubblized to the specific dimensions. Excavate additional areas, as directed, to ensure that the specified dimensions are being maintained. Repeat the initial two-section, full-depth pavement removal testing procedure whenever the equipment, rubblizing pattern, or breaking force is changed.

Use coarse aggregate to backfill all excavated areas. Place backfill in maximum 150 mm (6-inch) lifts and compact by rolling until nonmovement is achieved. Do not allow any shoving or wave motion under the roller.

Cut off and remove any reinforcement steel exposed at the surface of the rubblized pavement. If the transverse joints of the original pavement contained steel plates, remove any steel plates that are exposed.

Exercise care during rubblizing operations to prevent shattering pavement edges adjacent to bituminous base repairs.

Exercise extreme care during rubblizing operations to protect and prevent damage to underground utilities, drainage facilities, bridge approach slabs, and bridge decks. Repair any damage that occurs to these areas, at no cost to the Department.

(d) **Seating.** Following the rubblizing operation, use a 45 tonne (50-ton), pneumatic-tired roller, as specified in [Section 108.05\(c\)3.e](#), to seat the rubblized pavement. Establish a rolling pattern that ensures all areas of rubblized pavement surface are directly contacted by the roller in no more than four passes. Do not use vibratory rollers.

Final seating of the rubblized pavement is satisfactory when vertical deflection under the roller is less than 20 mm (3/4 inch). Undercut areas where this condition is not achieved. Remove all unsuitable or unstable material. Backfill to existing subgrade with suitable material, to the top of existing subbase with subbase material, and to the top of the rubblized pavement with coarse aggregate. Compact backfill as previously specified in [Section 526.3\(c\)](#).

Forty-five tonne (Fifty-ton) rollers may only cross bridges as approved by the Bridge Engineer. Repair any damage that occurs to bridge approach slabs and bridge decks during the seating operation, at no cost to the Department.

(e) Final Surface. After final seating, sweep and clean the surface of the rubblized and seated pavement to remove all loose material.

Prohibit traffic on the roadway after the pavement has been rubblized and seated.

Repair all rubblized and seated pavement areas disturbed by construction traffic, at no cost to the Department.

Complete all operations before construction of the leveling course. If a bituminous leveling course is indicated, apply a prime coat to the rubblized and seated surface, as specified in [Section 461](#), before placing the leveling course.

Complete placement of the overlay within 60 calendar days after rubblizing and seating. Do not leave the rubblized and seated pavement exposed to freezing conditions.

526.4 MEASUREMENT AND PAYMENT—

(a) Rubblize and Seat Concrete Pavement. Square Meter (Square Yard)

(b) Class 1A Excavation. Cubic Meter (Cubic Yard)

(c) Class 1B Excavation. Cubic Meter (Cubic Yard)
Measured to existing subgrade level.

(d) Coarse Aggregate. Cubic Meter (Cubic Yard)
For the size indicated.

(e) Removal of Existing Bituminous Surface Course. [Section 490.4](#)