

Attachment 1

RUBBLIZATION OF PCC - Guide Specification

S-1 (2104) Description

This section describes rubblizing and compacting existing concrete pavement to create a stable construction platform for a pavement overlay with or without an intermediate aggregate base layer.

S-2 (2104) Rubblize Concrete Pavement

Before rubblizing, saw full depth joints and completely sever all load transfer devices to isolate the rubblizing area. Saw jointed pavements at an existing joint. Do not damage adjacent pavement during rubblization. Rubblizing concrete pavement shall be done by using a self propelled concrete breaking machine capable of rubblizing the in-place concrete pavement. The machine shall be capable of controlling the striking force so as to break the concrete into pieces that have a maximum dimension less than or equal to 12 inches. This may be modified for thicker pavements. Also, 75% of the particles, as the engineer determines visually, must have a maximum dimension less than or equal to the following:

- In the bottom half of the slab; 9 inches
- In the top half of the slab; 3 inches
- At the surface of the slab; 2 inches

The Engineer may direct or allow larger maximum particle dimensions if site conditions warrant due to subgrade support. Determination of particle size shall be by excavating two test holes approximately nine square feet each, during the first half day. Excavate at least one test hole per lane mile thereafter unless the Engineer directs or allows otherwise. Backfill and restore the stability of each test hole.

The force used shall be only what is needed to obtain 12-inch and less. The operation shall then be followed by a vibratory steel drum roller outfitted with steel Z-bars. The rolling operation shall cover the full width and be repeated until the adequate surface sizing is achieved and the rubblized slab is well seated. The intent is to break the concrete and compact the concrete on a daily basis. If areas of poor subgrade are encountered these will be handled as directed by the Engineer using Pavement Removal, Muck Excavation, Geotextile Fabric, and/or Select Granular Borrow.

Do not damage pipes, valve boxes, manholes, and other fixtures. The contractor may prevent damage by doing one or more of the following:

1. Use engineer-approved, modified methods around fixtures and above pipes.
2. Remove pavement around fixtures and above pipes, backfill with aggregate and/or asphalt pavement and compact.

Prior to asphalt pavement placement all protruding reinforcing steel shall be removed or cut at the surface and all rubber or flexible debris shall be removed. Do not remove unexposed reinforcing steel. This operation shall be incidental to Rubblize Concrete Pavement and no direct compensation shall be made therefore.

S-4 (2104) Measurement

The specifier will measure rubblizing by the square yard acceptably completed.

S-5 (2104) Payment

The specifier will pay for the measured quantity at the contract unit price under the following bid item:

<u>Item Number</u>	<u>Description</u>	<u>Unit</u>
2104	Rubblizing Concrete Pavement	Square Yard

Payment is full compensation for rubblizing; removing pavement adjacent to fixtures and/or above pipes;

removing exposed steel; compacting the rubblized concrete; disposing of removed material; excavating, backfilling, and restoring the stability of test holes; and repairing the adjacent pavement.

Payment also includes water for dust control except if the contract contains the water bid item, the specifier (department) will pay separately for dust control water as specified.

The specifier (department) will pay separately for sawing under the Sawing Concrete bid item as specified.