



TACK & LONGITUDINAL JOINTS: TACKING, STRAIGHTNESS, DENSITY

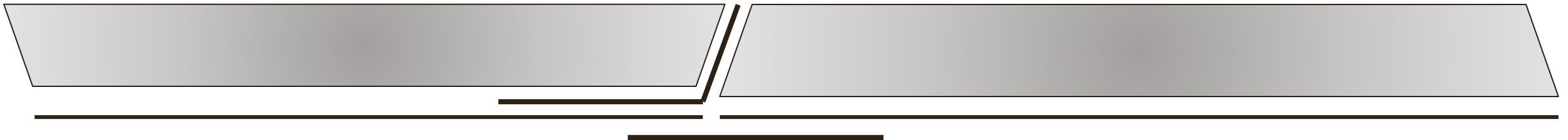
| CO Asphalt Program, March 2022

LONGITUDINAL JOINT CONSTRUCTION: TACKING



Longitudinal Joint Tacking: Spec Reference

Tack at joints, adjacent to curbs, gutters, or other appurtenances shall be applied with a hand wand or with spray bar at the rate of **0.2 gallon per square yard**. At joints, the tack applied by the hand wand or a spray bar shall be **2 feet in width with 4 to 6 inches protruding beyond the joint for the first pass**. Tack for the adjacent pass shall completely cover the **vertical face** of the pavement mat edge so that slight puddling of asphalt occurs at the joint, **and extend a minimum of 1 foot into the lane to be paved**.











Straightness and Compaction



Unsupported edges

From VECAT
Field I - Chapter 5 -
Joint Compaction and
Roller Operations Todd
Mansell



<https://www.youtube.com/watch?v=6NLURo8IBb4>

Straightness and compacting the unsupported edge:

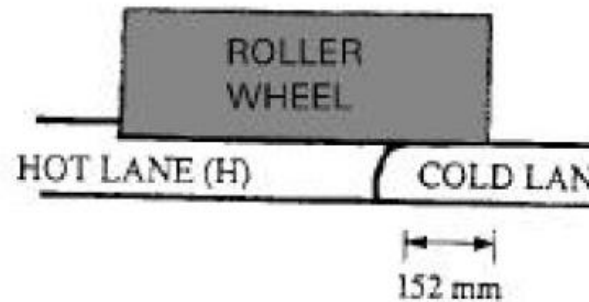
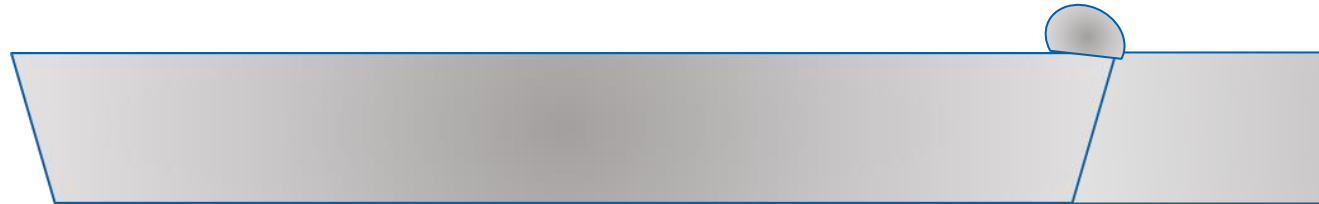
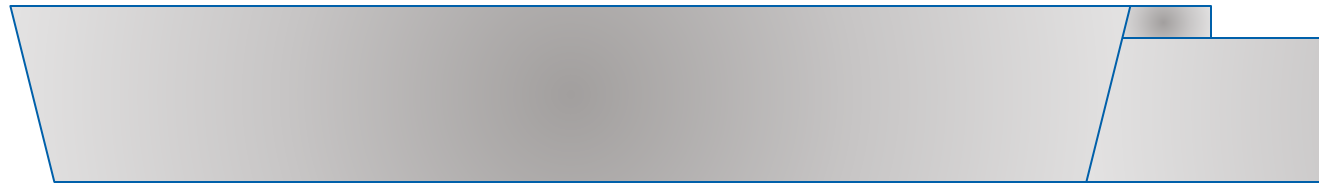


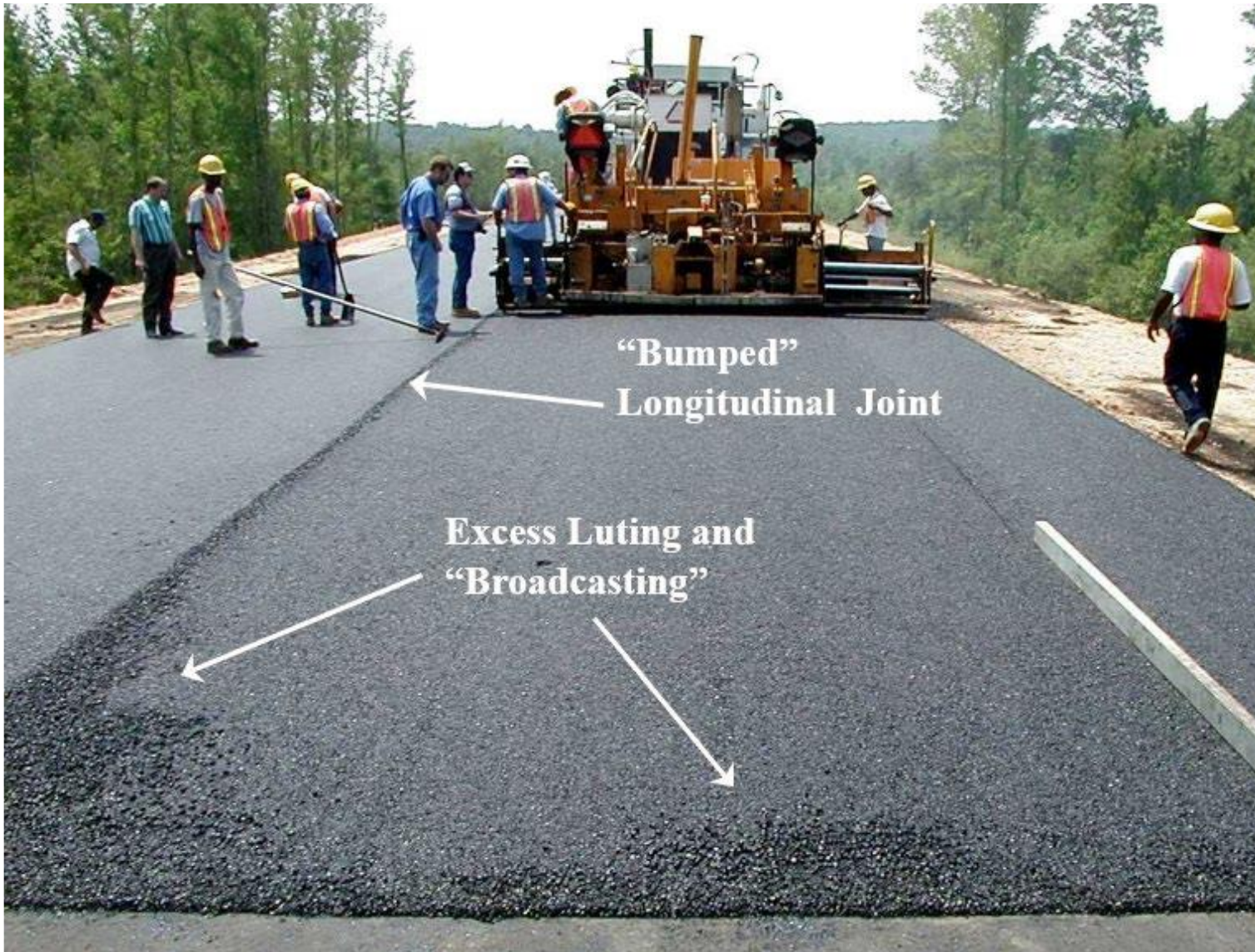
CONSTRUCTION OF DURABLE LONGITUDINAL JOINTS

James A. Scherocman, P.E.

Proper Overlap and 'Slight Bump'

2nd Pass





Improving Longitudinal Joint Performance: FHWA Tech Brief - FHWA-HIF-21-023

<https://www.fhwa.dot.gov/pavement/asphalt/pubs/hif21023.pdf>

Spec Reference on Straightness

If the offset for the longitudinal joint varies from a straight line more than 2 inches in 50 feet on tangent alignment, or from a true arc more than 2 inches in 50 feet on curved alignment, the Contractor shall seal the joint using a water-proof sealer at no cost to the Department.

...or from a true arc more than 2 inches
in 50 feet on curved alignment



Measuring Density of the Longitudinal Joint:

Roadway Configuration 3 - Divided Roadway with Two or More Lanes with One Full-Width Shoulder

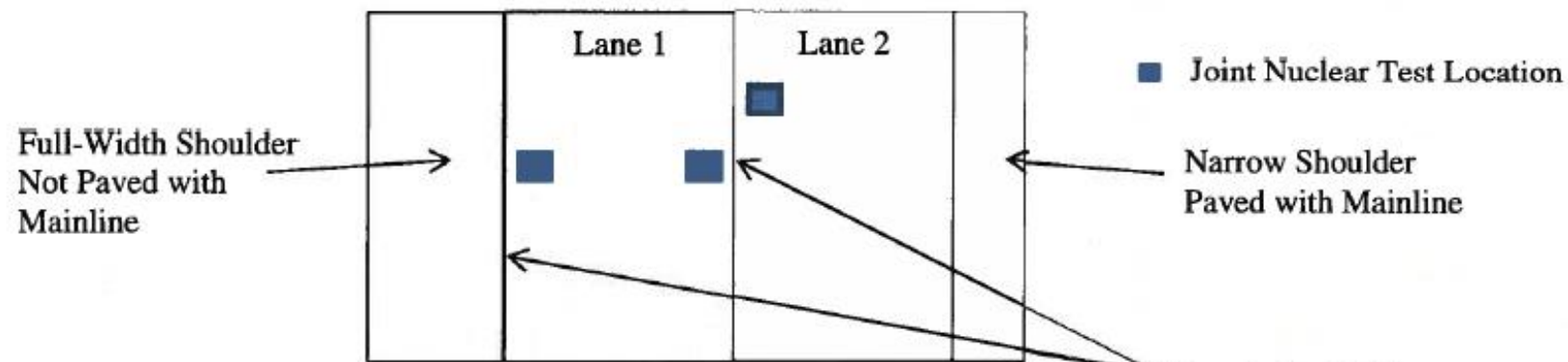


Diagram 3



Longitudinal Joints

Goal after 5 years old



QUESTIONS?

