Georgia Department of Transportation Office of Materials and Research

Standard Operating Procedure (SOP) 44

Approval of Material Transfer Vehicle (MTV) for Placement of Asphaltic Concrete

I. General

It is the responsibility of the Bituminous Construction Branch of the Office of Materials and Research to monitor the quality of all Bituminous Materials and related equipment on Georgia Department of Transportation (GDOT) projects. Qualified Products List 88 (QPL 88) is maintained to reference approved Materials Transfer Vehicles (MTV's). Material Transfer Vehicles that appear on this list have been evaluated by the Office of Materials and Research for their capability of meeting the appropriate Georgia Department of Transportation Specifications.

II. Prerequisite for Approval

A. Inspection of the Equipment

It is the equipment supplier's responsibility to partner with GDOT approved asphaltic concrete producer(s)/contractor(s) to provide suitable projects on which their equipment may be evaluated. The equipment supplier in conjunction with the asphaltic concrete producer(s)/contractor(s) shall request in writing to the State Materials and Research Engineer that the equipment be evaluated. This request shall include the following:

- 1. List of GDOT Projects the MTV will be used on, including project description and work schedule. A minimum of three projects must be evaluated prior to approval consideration. Individual circumstances may require additional test projects prior to approval.
- 2. Contractor representative contact information that is responsible for the project.
- 3. Equipment specifications and operation manual.
- 4. Availability to attend an informal meeting to discuss Department expectations and policies.

The equipment shall be maintained in a satisfactory operation condition and be capable of its intended function at all times during production.

B. Project Related Test Section

The test sections shall consist of the following:

- 1. Placement of a minimum 12 ft. wide mat to evaluate its density, temperature, and textural consistency.
- 2. Placement of all coarse mix types (25 mm, 19 mm and 12.5 mm mixes), at various placement widths and depths. The MTV must be used on at least one project where coarse mixes are produced from a restricted plant. The asphalt plant should be listed on the current GDOT QPL-45 "List of Approved Hot Mix Asphaltic Concrete Plants" requiring the use of an MTV because of silo problems or plant segregation history.
- 3. Conformance to specification requirements referred to in Section 400.
 - Meet current smoothness requirements as specified
 - Meet all specification density requirements.
 - Meet temperature variability requirement across the mat.
 - Uniformity of mat texture.
 - Ensure continuity of operation between truck exchanges. The MTV is to be evaluated on at least one project during the placement of a 25 mm mix at maximum specified depth with a minimum 14 ft. paving width. The MTV should be capable of maintaining a level of mix in the hopper insert between truck exchanges adequate to prevent segregation and maintain a constant speed while placing the larger material volume.

C. Implementation

If the MTV satisfies all the applicable requirements, it will be listed on the approved list for Materials Transfer Vehicle. It should be noted that, the MTV may be removed from a project at anytime the Engineer determines it is not meeting requirements set forth in this document.

D. Minimum Number of Project

Prior to a Materials Transfer Vehicle being placed on the QPL, a minimum of three (3) GDOT Let projects meeting all specified requirements must be achieved.

III. QPL-88 "Georgia's List of Approved Materials Transfer Vehicles".

The Office of Materials and Research will publish a list of approved Materials Transfer Vehicles. The list will be published periodically, and as MTV's are added or removed from the list, notice will be given by letter. This list will designate the Manufacturers' name, name and model of the MTV, hopper capacity, and any restrictions associated with the use of that particular device (example-oversized hopper insert, remixing capability in hopper).

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