Laboratory SOP 9
Revised July 1, 2003

Georgia Department of Transportation
Office of Materials and Research

Standard Operating Procedure (SOP) 9
Inspection of Guardrail Beams

I. General
This Standard Operating Procedure presents an outline of the responsibilities of fabricators/suppliers intending to provide guardrail beams and associated components for use on GDOT construction projects and the duties of Department personnel assigned to perform the required inspection.

It is the function of the Office of Materials and Research Inspection Services Branch to certify each fabricator/supplier and list each on Qualified Products List (SOP) 8, “Guardrail Producers”. Each fabricator/supplier is required to submit Form DOT 600 and attach certified mill test reports for each heat number represented. Construction inspectors will inspect and verify that guardrail beams and associated components delivered to GDOT construction projects meet specification requirements.

II. Acceptance
Each fabricator/supplier must qualify with the Office of Materials and Research to supply guardrail beams and associated components under the following acceptance procedure. For a fabricator/supplier to be considered under this procedure, it will be necessary to submit a written request to the Inspection Services Branch of the Office of Materials and Research to participate in our quality control and guarantee program. To qualify for the quality control and guarantee program, the fabricator/supplier must comply with all of the following requirements:

A. Yearly Certification and Guarantee
Furnish the Inspection Services Branch of the Office of Materials and Research a notarized yearly guarantee that all guardrail beams and/or associated components furnished to GDOT construction projects will meet the governing specification. A "Yearly Certification and Guarantee" is attached for completion and submittal to the Department. The guarantee shall be sworn to for the fabricator/supplier by a person having legal authority to bind the company.
B. Quality Control Plan

Submit to the Inspection Services Branch of the Office of Materials and Research in writing, an acceptable quality control procedure for guardrail beams and/or associated components. This may consist of a report prepared by the fabricator/supplier which documents the specific products evaluation techniques such as sampling frequency, type of tests conducted, method of identification of heats, coating lots, etc., that are maintained by the fabricator/supplier as a quality control program. The Office of Materials and Research reserves the right to withhold approval of any procedures judged to be inadequate for acceptable quality control.

C. Certified Mill Test and Coating Report

Furnish certified mill test and coating report for every heat number and coating lot representing material to be shipped to a Georgia project by the following procedure: Fabricator will furnish shipping report form DOT 600 (copy attached) with corresponding certified mill test reports to the Inspection Services Branch of the Office of Materials and Research. Form DOT 600 must be furnished to the Inspection Services Branch of the Office of Materials and Research within five (5) days after shipment.

D. Markings

Marking of beam element, end section, and backup plates shall be in accordance with the appropriate section of AASHTO M-180 and the manufacturers name or brand and heat number shall be legible after galvanizing and remain legible for a minimum of five years.

E. Department Sampling

Participation in the Department's quality control and guarantee program does not negate the Department's privilege to take random samples from the fabricator's or contractor's stock and to sample and test random samples from the projects.

III. Project Acceptance

As long as a fabricator/supplier appears on Qualified Products List (SOP) 8, the Engineer may permit the Contractor to use the guardrail beams and associated components. Guardrail beams and associated components received from fabricators/suppliers not appearing on Qualified Products List (SOP) 8 are not acceptable for use on GDOT construction projects and should be reported immediately to the Inspection Services Branch of the Office of Materials and Research.

Georgene M. Geary, P.E.
State Materials and Research Engineer

Glenn W. Durrence, P.E.
Director of Construction