

**New Jersey Department of Transportation
QUALITY IMPROVEMENT ADVISORY**

QUALITY MANAGEMENT SERVICES

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QIA No. QIA022

Approved: B. Strizki

Date: Sept. 30, 1999

Process Affected:

Scope Design Right of Way Utilities Environmental Historic Construction

Bureaus Affected: All CPM Units

Procedure(s) Affected: Project Delivery Schedule

Route & Section: NA

County/Municipality: NA

Project Summary: NA

Nature of Problem(s):

A field verification problem has been identified during a recent quality assurance review performed for the Initial Design Submission requirement of the project. In this case, the designer did not take into account the actual field conditions when calculating the contributory drainage area. This resulted in an unrealistically high runoff calculation and consequently, too many inlets were provided in the design. These types of issues have occurred in the past and many times significantly impact a project's costs and/or schedule.

Recommendation(s):

Project costs could have been minimized and delays avoided if the designer had verified the actual field conditions relative to the USGS Topographic Quadrant Map that was used. In order to improve the quality of the plans as well as to ensure the timely completion of projects, the following recommendation is made which can be applied to future projects in order to prevent recurrences.

- Contributory drainage areas to inlets should not be solely based on USGS Quadrant Maps, but should also be based on actual field conditions.

Implementation: Immediately

Impact Assessment:

Schedule Quality Cost Scope

Cost Impact: