

# RD&T Technology Facilitation Product Action Plan

## **Product - Fiber Reinforced Polymer (FRP) Specifications for Concrete Bridge Members.**

Description of Product - AASHTO Acceptance Test and Design Specifications for materials, tendons, and anchors and design of FRP-Prestressed concrete bridges. (FRP RC is covered in a separate specification).

Intended User - State DOT Materials Lab personnel, design engineers. Consulting design engineers.

Distribution methods - Report issued as an FHWA Report.

Delivery Date - 2000

Future Actions Needed / Planned - Use Draft report as the basic document for AASHTO T-21's sponsorship of the guide spec through the AASHTO balloting process.

## **Program/Product Support -**

R&D Contact - Eric Munley, High Performance Bridge Materials, (HRDI-06)

CBU Contact(s) - Ben Tang, John Hooks

Resource Center Contact(s) - Lou Triandafilou

Division Office Contact(s) - Milo Cress

Other Contact(s) - AASHTO Technical Committee T-21 (Paul Liles, Chairman)  
TRB Committee A2C07 (Eric Munley, Chairman)

Future Actions Needed / Planned - CBU support for adoption of AASHTO Guide Spec.

## **Outreach -**

Conference Presentations - Draft Spec was presented in a dedicated technical session at the 2000 TRB Annual Meeting.

Publications - Final Report (2000). Spec report was preceded by summary articles in technical journals and presentation at ACI, and other conferences.

Other Outreach Activities - AN AASHTO Spec was not originally a deliverable for this contract. Contractor is working on this under a no-cost time extension.

Future Actions Planned - have proposed that AASHTO T-21 set up a permanent working group on spec revisions. The 2000 version of the spec will be a "first edition." Many gaps in knowledge base have already been identified. AASHTO T-21 can serve as a focus for States' feedback on the spec and issue recommendations for refining the spec, including research priorities. As chairman, have also proposed that TRB committee (which includes academia, government, consulting, and industry representatives) serve as technical backup for this effort.

## **Training -**

Materials Needed - Need an overview for State bridge engineers and staff on the basic spec, including interpretation of test data. Need individual hands-on training for lab personnel on the conduct of tests. Need training for design engineers in design methods (including construction considerations). Integration into academic training for future engineers.

Instructor Requirements - PE (Spec Course), Certified Technician instructor (Test & Equipment courses).

Schedule of Training / Workshop / Briefing - Spec Course (NHI-based, first five years after adoption). Test & Equipment courses (Continuing).

Intended Audience(s) - State DOT Materials lab personnel and design engineers, as well as private consulting design engineers.

Alternative Formats - Live courses will work best in this situation.

## **Program Integration -**

RC Contact - Encourage States to participate in database of field installations. Facilitate feedback to AASHTO. Help State sponsorship of follow-up pooled-fund studies to refine the spec.

Research Contact - Develop follow-up studies to refine test methods or develop new ones. Coordinate with AASHTO T-21 in development of R&D-funded and pooled-fund studies.