

# SEMIANNUAL PROGRESS REPORT

Fiscal Year 2004

Date of This Report March 1, 2004 Project Number 9-8132 RMC 5

Period Covered by This Report September 1, 2003 through February 29, 2004

Project Title Florida DOT Bridge Rails

Name	Agency	Phone	Fax	Email
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## 1. REQUESTED CHANGES FOR POSSIBLE PROJECT MODIFICATION

**Project Duration:** *The project is due to complete in August 2004.*

**Project Personnel:** *Dean Alberson is the principal investigator.*

**Funding Needs:** *The project is currently running under budget. Until the new research phase is completed, excess fund determination will be difficult.*

**Work Plan:** *The project director has requested some research into related topics. We would like to request a contract modification. A proposed version of revised work plan is attached. No additional funds are needed or requested in order to accomplish the suggested revisions to the work plan.*

**Deliverables Table:** *There are no revisions at this time.*

## 2. PROGRAM DEVELOPMENT INFORMATION

Tasks 1 through 4 have been completed. Reports are pending on tasks 1 through 3 and have been completed for task 4. Task 5 details have not been finalized by project coordinator.

## 3. EQUIPMENT

*No equipment has been purchased.*

## 4. PROGRESS TO DATE, BY TASK

*Following the task number (or letter) designation as depicted in the project agreement:*

- *Task 1. FDOT 32" Jersey Shape Railing*
  - *A. Completed Construction Jan 03.*
  - *B. Full-Scale crash test Feb 20, 2003.*
  - *C. Report is complete and being reviewed by ITEC TTI.*
- *Task 2. 32" Kansas Corral Railing*
  - *A. Literature review completed Jan 2003.*

- *B. Completed comparative analysis Jun 2003.*
- *C. Report has been completed by researcher, being reviewed by Safety and Structural Systems staff for content.*
  
- *Task 3. Design of Deck Overhang*
  - *A. Test apparatus for static testing has been designed and fabricated, Feb 03.*
  - *B. Initial Test Specimen designed, Feb 03.*
  - *C. Static Testing completed Sept 19, 03*
  - *Final report in process.*
  
- *Task 4. Sign Support Testing*
  - *A. Specimens secured Feb 03.*
  - *B. Pendulum Tests Conducted Feb 03.*
  - *C. Report completed Feb 03.*
  
- *Task 5. Concrete Parapets, Sleeper Slabs and Parapet Orientation (Task to be added per modification, awaiting information from TxDOT)*

*TTI will review standards of TxDOT and other states to determine existing design methodologies for “Sleeper Slabs” and will report on findings. TTI will review the standards of TxDOT and other states regarding orientation of parapets and report on findings.*

## 5. PROGRESS ON DEVELOPMENT OF “PRODUCT” DELIVERABLES

<b>Product #</b>	<b>Product Description</b>	<b>Progress to Date &amp; Implementation Status</b>
P1	Test results of 32-inch New Jersey Safety Shape Railing	Included in 9-8132-R1 This is complete and under review.
P2	Recommended retrofit and replacement schemes for the three variants of 32-inch New Jersey Railing which, as a result of testing, are found to be non-compliant with AASHTO LRFD specifications and/or NCHRP 350 TL-4 requirements.	Included in 9-8132-R1  This is product and associated report are in progress and should be ready for TTI Communications review shortly.
P3	Test results of the variant 32-inch Kansas Corral Railing	Included in 9-8132-R2 This is product and associated report are in progress and should be ready for TTI Communications review shortly.
P4	Test results for deck overhang design according to AASTHO LRFD specifications.	Included in 9-8132-R3 This is product and associated report are in progress and should be ready for TTI Communications review shortly.
P5	Recommended revisions to AASHTO LRFD specifications for deck overhang design if testing warrants such revisions.	Included in 9-8132-R3 TTI is awaiting direction from TxDOT and Florida DOT.
P6	T4 Retrofit Design and Testing Results and Parapet Orientation Simulation Results	Included in 9-8132-R5 This shall be completed during the next reporting period.

**6. MEETINGS/CONFERENCES**

*The Project Director attended a kickoff meeting in October 02 and was present for crash test Feb. 20, 03.*

**7. POSSIBLE CANDIDATES FOR FORMAL PRESENTATIONS AT THE UPCOMING RMC MEETING.**

*Premature at this time.*

**8. MISCELLANEOUS**

*None.*