

MONTANA DEPARTMENT OF TRANSPORTATION
Helena, Montana 59620-1001

MEMORANDUM

To: RRC Members
Kent M. Barnes, P.E./Materials Bureau
Robert E. Burkhardt/FHWA - Absent
John D. Craig/Transportation Planning Division – Represented by Becky Duke
Jim Greil/Aeronautics Division
Dennis A. Hult/Motor Carrier Services Division - Absent
James E. Hyatt/Maintenance Division
Joel M. Marshik, P.E./Environmental Services
Stefan Streeter, P.E./Billings District - Absent
James A. Walther, P.E./Highways & Engineering Division
Darrel G. Zook/Accounting Services Bureau

From: Susan C. Sillick
Manager, Research Program

Date: March 19, 2001

Subject: Summary of Minutes from the March 27, 2001 RRC Meeting

Darrell Zook, Accounting Service Bureau was introduced and welcomed as the newest member of the Research Review Committee.

1. **Budget Report:** Distributed at meeting

The RRC discussed concerns over Research's state budget authority. Research may not have enough state budget authority to cover its federal apportionment.

Jim Walther assured the committee that no federal funds will be lost due to inadequate state budget authority.

2. **Research Project – current listing:** Attached

2a. *Crash Test Pin and Loop Connection on the Concrete Median Barrier –*

It is unknown as to whether MDT's pin and loop connection for concrete median barrier will pass crash testing as per NCHRP 350. Some similar configurations have not passed crash testing. Recently Washington DOT crash tested a similar configuration for 10-foot barriers with 3 pin and loop connections. Our barriers are 10 feet with 2 pin and loop connections. Washington DOT also tested a 12.5-foot barrier with 2 pin and loop connections. This configuration passed the crash test. FHWA recommended we retrofit some of our barriers with 3 pin and loop connections and have them crash tested. The RRC suggested that we also crash test our current configuration.

Jim Hyatt made a motion to crash test the two types of barriers. The motion was seconded by Joel Marshik and passed unanimously with the understanding a new proposal is written.

3. **Reports:** No discussion

3a. *Field Evaluation of Corrosion Inhibitors for Concrete –* FHWA Pooled-fund Study – Progress Report 7/1/00-9/30/00 – Available Upon Request

3b. *Field Evaluation of Corrosion Inhibitors for Concrete –* FHWA Pooled-fund Study – Progress Report 10/1/00 – 12/31/00 – Available Upon Request

4. **Contract Extensions:**

4a. *Statewide Soil Corrosivity Study –* Distributed at meeting

The Technical Panel is currently reviewing the final report; initial responses have been very positive. With this, the panel recommends a contract extension for \$4,593.65 to cover costs, which occurred due to unforeseen expenditures.

Kent Barnes made a motion to approve the contract extension as submitted. Jim Hyatt seconded the motion. The motion carried.

5. **Proposals:**

5a. *Micropile Systems for Highway Bridges –* Pooled-Fund Study - Attached

Joe Kolman explained that the results of this pooled-fund study will provide a tool to help MDT with design of micropile systems.

Kent Barnes made a motion to join the pooled-fund study based upon recommendation from Joe Kolman, Bridge and John Moran, Geotech for \$20,000.00 over a 3-year period. Jim Hyatt seconded the motion. All present voted in favor of the motion.

5b. *Structural Design Course Development* – Pooled-Fund Study – Distributed at meeting

Joe Kolman explained that the new design code for bridges is LRFD (Load and Resistance Factor Design). Migration to this new design method has been hampered due to lack of training. The purpose of this pooled-fund study is to develop a course to provide necessary training.

Jim Hyatt made a motion that the RRC agrees with the concept of this pooled-fund study and proceeds with a dollar amount at a later date when more information is received. Kent Barnes seconded the motion. All present voted in favor of the motion.

5c. *NTPEP Pavement Marking Evaluation* – Pooled-Fund Study – Distributed at meeting

The purpose of NTPEP is to evaluate various products on a level playing field. Since MDT spends approximately 3 million dollars a year in pavement marking, the results of this type of evaluation will be useful to the Department.

Joe Marshik made a motion to join this pooled-fund study for \$5,000.00. Kent Barnes seconded the motion. All present voted in favor of the motion.

5d. *Pavement Performance Prediction Models* - Attached

Sue reminded the RRC that this proposal received approval-in-concept at a \$500,000.00 funding level from the RRC it went out for an RFP. The Technical Panel spent many hours evaluating proposals before and listening to presentations before making their decision to recommend this proposal to the committee.

Bill Vischer and Kent Barnes were present to discuss this proposal. A new pavement design guide is due out in 2002. This design guide will be general in nature and will need to be calibrated to local conditions. The purpose of this study is to provide this local calibration.

This study will take five years and cost approximately \$500,000.00. Following a discussion, the RRC decided they should allow 10% for negotiation purposes.

Jim Hyatt moved to approve this study for up to \$550,000.00. Joel Marshik seconded the motion. All present voted in favor of the motion.

6. **Implementation:** None

cc: Craig Abernathy/Pavement Analysis & Research Section
Bruce H. Barrett/District Administrator-Billings
D. John Blacker/Maintenance Division
Monte N. Brown/Administration Division
Michael D. Ferguson/Aeronautics Division
Loran Frazier, P.E./District Administrator-Missoula
Jason Giard, P.E./District Administrator-Butte
Gary A. Gilmore, P.E./Highways & Engineering Division
John Horton/Right-of-Way Bureau
Michael P. Johnson/District Administrator-Great Falls
Joseph P. Kolman, P.E./Bridge Bureau
Drew F. Livesay/Motor Carrier Services Division
William L. McChesney/District Administrator-Glendive
Russell G. McDonald/Human Resources Division
Kenneth H. Neumiller/Engineering Oversight Bureau
Jeanne Nydegger/Pavement Analysis & Research Section
Brooke Page/Pavement Analysis & Research Section
Carl S. Peil, P.E./Preconstruction Bureau
Timothy W. Reardon/Legal Services
Patricia Saindon/Transportation Planning Division
Robert D. Tholt, P.E./Construction Bureau
Jon S. Watson, P.E./Pavement Analysis & Research Section
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