



RTAP NEWSLETTER

MONTANA STATE UNIVERSITY
BOZEMAN, MT 59717

Volume I Number III

Fall 1983

NEED A BRIDGE DESIGN? CALL DOH

Have you ever wondered why Montana does not have one or several standard bridge designs that could be used statewide? A design for a 60-foot simple span, two lane bridge capable of supporting an H20 load could be very useful across the state, right?

This question was posed to Mr. Robert A. Garber, Research Program Manager of the Montana Department of Highways. He said that the DOH would be reluctant to develop the necessary plans and specifications for a standard design, primarily because of the tort liability factor involved. DOH engineers strongly believe that bridge footings and bridge end/road approach treatments should be designed by trained professionals. Designs should be based on data and observations from detailed on-site investigations, because soil types and support characteristics can vary tremendously, even within a county. Likewise, professional attention should be given to hydrologic and flood prediction factors which may affect the structure. Use of a standard design at a stream crossing location where the soil or stream conditions are not "standard" could be disastrous.

So, where can county and city governments obtain professional engineering services for bridge design? You have several options.

First, you can hire a qualified private engineering firm.

Second, you can obtain standard designs from steel and prestressed concrete suppliers. These companies usually have typical drawings for rapid-erection structures using the components that they sell. However, these drawings usually cover the bridge superstructure only. Supports, footings, and abutments are usually not specific in these drawings.

Third, you can request assistance from the DOH. In general, the DOH will cooperate in performing bridge site investigation, design, and construction monitoring when requested to do so by the appropriate county or city officials.

"The DOH has designed numerous site-specific bridges on off-system roads for a number of counties in Montana in recent years," said Bob Garber. "There is a substantial off-system bridge replacement program now being handled by this Department, and most county commissions should be well aware of the necessity to set priorities and to coordinate with this Department. In many cases, the State can provide the engineering services at no cost to the local agency. The State, after all, has certain obligations to provide for the needs of its legally constituted subdivisions."

COUNTY ROAD SEMINAR Alan T. Jackson, an MSU Civil Engineering faculty member, has developed a three-day seminar covering common problems encountered at the local level. Subjects to be discussed include basic surveying, culvert installation, and pit management.

Kalispell - October 18, 19, 20

Miles City - October 25, 26, 27

Bozeman - November 1, 2, 3

Announcements and further details were mailed separately to all counties and cities.

ALSO IN APRIL

The California RTAP Center and the Asphalt Institute are cooperating in the development of a seminar on asphalt pavement maintenance and rehabilitation. This seminar will be presented in Montana as a joint effort by the Asphalt Institute and Montana State University. Tentative dates and locations are:

Billings - April 2

Great Falls - April 4

Bozeman - April 5, 6

More details in the next RTAP Newsletter!

ASPHALT PAVEMENT MAINTENANCE AND REHABILITATION SEMINAR

PRACTICAL TRAINING FOR MAINTENANCE SUPERVISORS AND CREW FOREMAN. The Federal Highway Administration will conduct a one-day workshop on the maintenance of highway safety hardware. Specific topics include:

Clear Zone Concept/Worksite Safety

Traffic Barriers (Guardrails)

Crash Cushions

Luminaire/Sign Supports.

Tentative schedule:

April 10 - Helena

April 11 - Billings.

More details later!

NEW LOOK FOR THE NEWSLETTER

We've changed colors but that's not all! Next issue, we expect to change print-type. Some of our readers have had difficulty adjusting to our "dot-matrix" computer printer. So, we've made arrangements to have the Newsletter printed by another printer...but not until the next issue. Please be patient...we're improving.

ANYBODY NEED ASSISTANCE?

It is a well known fact that the pace of activity around the University slows down significantly during the Summer Quarter. Students go home on vacation, and faculty members concentrate on their research, book and paper writing, fishing, or some combination of all. Apparently, county and city highway activity also slows down. We only received one request for assistance during the last quarter (down from 11 the previous quarter). If you have a technical problem, give us a call. If we can't help, we'll find out who can.

WILL WE BE LIKE NBC OR CBS?

A funny thing happened during the 1983 Emmy Awards broadcast. NBC won more Emmy's than the other two networks combined. Many of NBC's programs were "critically acclaimed", meaning they were high in artistic content. Yet sponsors keep choosing CBS and ABC over NBC. Why? They have the ratings, the audiences!

What does this have to do with RTAP? Plenty, because we're also interested in ratings. We may create the finest instructional TV tapes, seminars, and workshops in existence. But, unless these instructional products meet your needs, we are not accomplishing our objectives. We not only want to be "critically acclaimed", but we also want the "ratings."

To make sure we do both, we have formed an RTAP Advisory Committee. This committee will meet periodically to give us guidance concerning your needs. The Committee members are:

Charles Duncan, MT Division, FHWA
Robert A. Garber, Research Program Manager, MT DOH
Jim Ellis, Road Foreman, Lewis and Clark County
Duane Christensen, Road Supervisor, Stillwater County
Ken Haag, Director of Public Works, Billings
Cordell Ringle, Chief of Engineering, Billings Area, BIA
Max Rothschild, Region 8 Representative on FHWA Board of County Road Advisors (Road Supervisor, El Paso County, Colorado).

The advice of the committee members will be extremely helpful in insuring that the RTAP gets the ratings.

DO YOU NEED LITERATURE ON OTHER SUBJECTS?

Let us know what you need. If it's available in the FHWA system or elsewhere, we'll find it for you.