

# MEMORANDUM

# State of Alaska

Department of Transportation and Public Facilities  
Statewide Design and Engineering Services Division

TO: Regional Directors  
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DATE: December 19, 2003

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Incorporated into the April 1, 2004 version of the  
*Alaska Flexible Pavement Design Manual.*

FROM: Gary Hogins, P.E. *GH*  
Acting Chief Engineer

SUBJECT: Policy on Stabilized Bases

It is the policy of the Department to use bound stabilized bases on all roadway construction, reconstruction, and rehabilitation projects on all roads owned by the Department.

**Average Daily Traffic 10,000 vehicles and greater or urban projects with curb and gutter:**

Use an asphalt treated base and, at the designer's option, an additional bound stabilized base.

**Average Daily Traffic below 10,000 vehicles:**

Use a bound stabilized base for all projects.

**Exceptions:**

1. Projects under the Gravel to Pavement Program
2. Projects exempted in writing by the regional preconstruction engineer with the recommendation of the regional materials engineer. Approval by the regional preconstruction engineer must be documented in the Design Study Report. Rationale may include:
  - Projects with a low average daily traffic
  - Areas underlain by unstable foundation such as ice-rich permafrost, where settlement results in frequent maintenance
  - Projects for which a stabilized base will not provide a cost-effective improvement in the pavement performance, reduced maintenance, or reduced future rehabilitation costs through a comprehensive life-cycle cost analysis. The period of the life-cycle cost analysis shall be 35 years.
3. Projects on roads where title is to be turned over to a local government.

Bound stabilized bases include a base with one or more of the following components:

- Emulsion
- Asphalt cement
- Foamed asphalt

- Lime treatment
- Cement treatment
- Recycled asphalt pavement
- A mix of recycled asphalt concrete and base material

In developing the design, use:

- *Alaska Soil Stabilization Design Guide FHWA-AK-RD-01-6B*
- The mechanistic design procedure to determine layer thickness

This policy supercedes directive issued August 30, 2002.

cc: Mike Barton, Commissioner

Dave Bloom, P.E., Regional Preconstruction Engineer, Northern Region D&ES

Pat Kemp, P.E., Regional Preconstruction Engineer, Southeast Region D&ES

John Mackinnon, Deputy Commissioner, Highways and Public Facilities

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