

# MEMORANDUM

# State of Alaska

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

TO: Barry L. Bergdoll, P.E.  
Acting Southeast Region Director  
John Horn, P.E.  
Central Region Director  
Tony Johansen, P.E.  
Northern Region Director

DATE: February 5, 1998

FILE NO:

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FROM: Michael L. Downing, P.E. *MLD*  
Director, Statewide Design &  
Engineering Services

SUBJECT: Non-crashworthy sign  
supports

Some of the sign installations along our highways are not crashworthy. All highway signs supported by two or more 2 ½ inch perforated tubes (P.T.s) located 7 feet or closer to each other do not pass federal crash standards. Two-inch P.T.s are the largest that may be used in dual post installations.

Dual 2 ½" P.T.s installations are common along our roads. In some cases, signs are supported by triple 2 ½" P.T.s. In other cases, signs are reinforced by additional P.T.s used as angled braces on the backs of sign supports. These also are not crashworthy.

These installations need to be made crashworthy. For multiple P.T.s, this can be done in a number of ways:

1. Install triangular slip bases for P.T.s (see attached information from vendor)
2. Install "Break-Safe" type supports
3. Replace the P.T.s with other crashworthy supports/bases
4. Move the P.T.s further than 7 feet from each other

The P.T.-braced signs can be corrected by removing the braces and strengthening the sign as necessary using crashworthy supports and bases.

These considerations do not apply to supports that are behind guardrail or are otherwise inaccessible from the road. It is desirable, although not mandatory, that supports accessible from the road and outside of the clear zone be made crashworthy also.

Please take the following actions:

1. Stop installing non-crashworthy sign supports immediately.
2. Correct any non-crashworthy installations as soon as possible by:
  - a) Inventorying all non-crashworthy installations in each region.
  - b) Estimating the cost of replacement.
  - c) Deciding how the work will be divided between CIP projects and M&O work.
  - d) Proceeding with the work assigned to M&O.
  - e) Initiating CIP projects for the remainder of the work.

Please submit an inventory of all non-crashworthy installations along with an estimated cost of correction to me by May 1, 1998.

Regional Traffic and Safety personnel are available to assist in identifying appropriate corrective measures.

From a liability and safety standpoint, it is important that the decisionmaking process on this issue be documented. A corrective plan should be in place soon although implementation may need to wait on availability of funds.

Highway Safety Improvement Program funds may be used to make the corrections.

Please contact Kurt Smith, State Traffic Engineer, at 465-6963 with any questions.

Thank You.

MLD:KS:cab

CC: With/Attachments

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