

OFFICE MEMORANDUM



MICHIGAN
DEPARTMENT OF STATE HIGHWAYS

December 19, 1967

To: L. T. Oehler, Director
Research Laboratory Section

From: F. J. Bashore

LAST COPY
DO NOT REMOVE FROM LIBRARY

Subject: Final Progress Report on Polymer Plastic Marker Posts.
Research Project 63 NM-87. Report No. R-669.

This memorandum supplements Research Reports R-445 and R-482, dated December 9, 1963 and October 23, 1964, respectively.

Eight plastic posts (black body, factory overcoated with white paint except for the top which was overcoated with black paint) were installed by Jackson District personnel in April, 1964 at locations as shown in the previous report.

Two white-pigmented plastic posts with black plastic caps were subsequently obtained and installed in August, 1964 at locations 9 and 10.

Mr. Harold J. Rust of Handley Industries, Inc. stated in his letter of June 23, 1964 to R. L. Greenman, that the painted posts were Kraylastic and the white-pigmented posts were Cicolac. He also pointed out that Cicolac had higher tensile and impact strengths than the Kraylastic. Both materials are A B S polymers, but manufactured by different companies.

A field inspection was made September 28, 1967 and it was found that all of the painted posts were destroyed and missing except for one at location 8 which had been broken off and pushed back into the ground to a depth of about 3 inches. The white-pigmented posts at locations 9 and 10 were still in place with excellent appearance. The post at location 10 had been struck near the base with no apparent damage except for a shallow gouge (Fig. 1).

Summary

1. All eight of one type of plastic marker posts were broken during 3-plus years of test exposure.
2. Both of another type of plastic marker posts were unbroken and serviceable after 3-plus years of test exposure.
3. The test marker posts are about as expensive as galvanized pipe posts (about \$5 each).

4. The test plastic marker posts can not be installed by driving, as can the galvanized posts.

Recommendation

Based on report information, we do not suggest use of tested type of plastic marker posts.

TESTING AND RESEARCH DIVISION



F. J. Bashore, Supervisor
Coatings, Sealers & Plastics Unit

FJB:slt

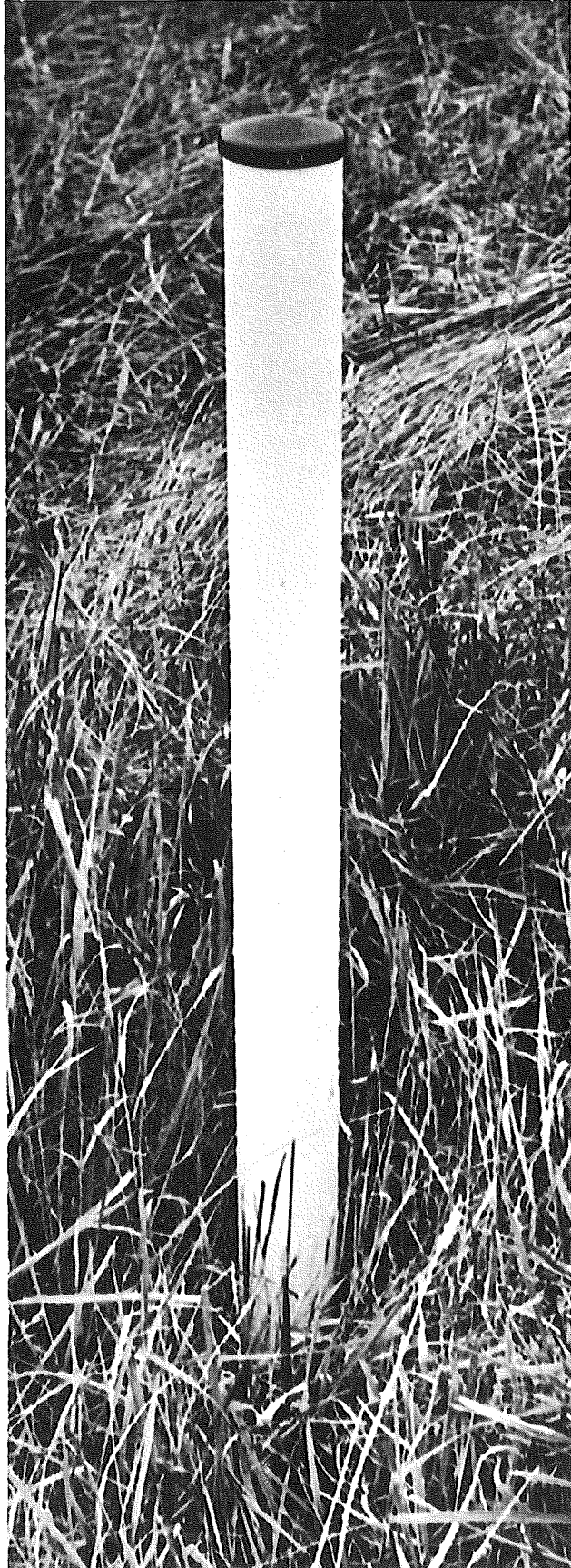


Figure 1. Post at location 10 typifies the good condition of the two white-pigmented posts after 3-plus years of service. Base of post shows impact damage that did not result in breakage.