

OFFICE MEMORANDUM



MICHIGAN
STATE HIGHWAY DEPARTMENT
JOHN C. MACKIE, COMMISSIONER

October 23, 1964
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To: E. A. Finney, Director
Research Laboratory Division

From: F. J. Bashore

Subject: Field Installation and Inspection of Polymer Plastic Marker Posts.
Research Project R-63 NM-87. Research Report No. R-482.

The following memorandum supplements Research Report No. R-445 (dated December 9, 1963) which appraised the merits of subject plastic posts. After reviewing that report at its December 10, 1963 meeting, the New Materials Committee recommended that a test field installation of the plastic posts be made by the Office of Maintenance.

Eight plastic posts (black body, factory overcoated with a white paint except for the top which was overcoated with black paint) were field installed by Jackson District personnel in April 1964 as reported in H. J. Rathfoot's memorandum to W. W. McLaughlin dated May 4, 1964. In addition to giving the locations of the posts the memorandum included S. M. Cardone's evaluation of them, stating a) that the installed posts could easily be broken by application of nominal thrust, b) that they should be designed more economically as an anchored straight tube, and c) that it would be preferable if the posts were made of white plastic thereby obviating the necessity of subsequent field painting.

Two white plastic posts with black plastic caps were subsequently obtained and field installed in August 1964. Their locations and those of the other eight posts are indicated in Fig. 1 and listed as follows:

Black Plastic Posts (overcoated with paint)

1. 135 ft north of Lansing drive-in theatre, south of Jolly Road, east side of US 127.
2. 1/2 mile north of Miller Road at Marathon gasoline station, west side of US 127.
3. 360 ft north of intersection of M 99 and Haag Road, east side of M 99.
4. At intersection of M 99 and Haag Road, east side of M 99.
5. 260 ft north of Willoughby Road, west side of US 127.
6. 400 ft north of Sands Motel south of Holt, east side of US 127.
7. 1/2 mile south of Holt at Station 323+00, west side of US 127.

October 23, 1964

8. 1500 ft south of intersection of US 127 and Main Street at Station 724+00, west side of US 127.

White Plastic Posts (with black plastic caps)

9. 3-1/2 miles east of Mason at intersection of M 36 and Fields Road, north side of M 36.

10. 1/2 mile east of intersection of M 36 and Dexter Trail, north side of M 36.

The installed posts, two of which are shown in Fig. 2, were inspected this week, and found to be in a satisfactory structural condition. The painted posts showed no loss of gloss or paint deterioration after six months of service exposure. The white plastic posts did show a noticeable loss of gloss after about two months of service exposure; the resultant surface roughening was insufficient to promote dirt collection on the post surfaces. Future inspections will be made and reported. Also under observation are the galvanized marker posts installed in 1962 in a test exposure on I 96 east of Howell, as shown in Fig. 3.

OFFICE OF TESTING AND RESEARCH

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FJB:nl

LANSING

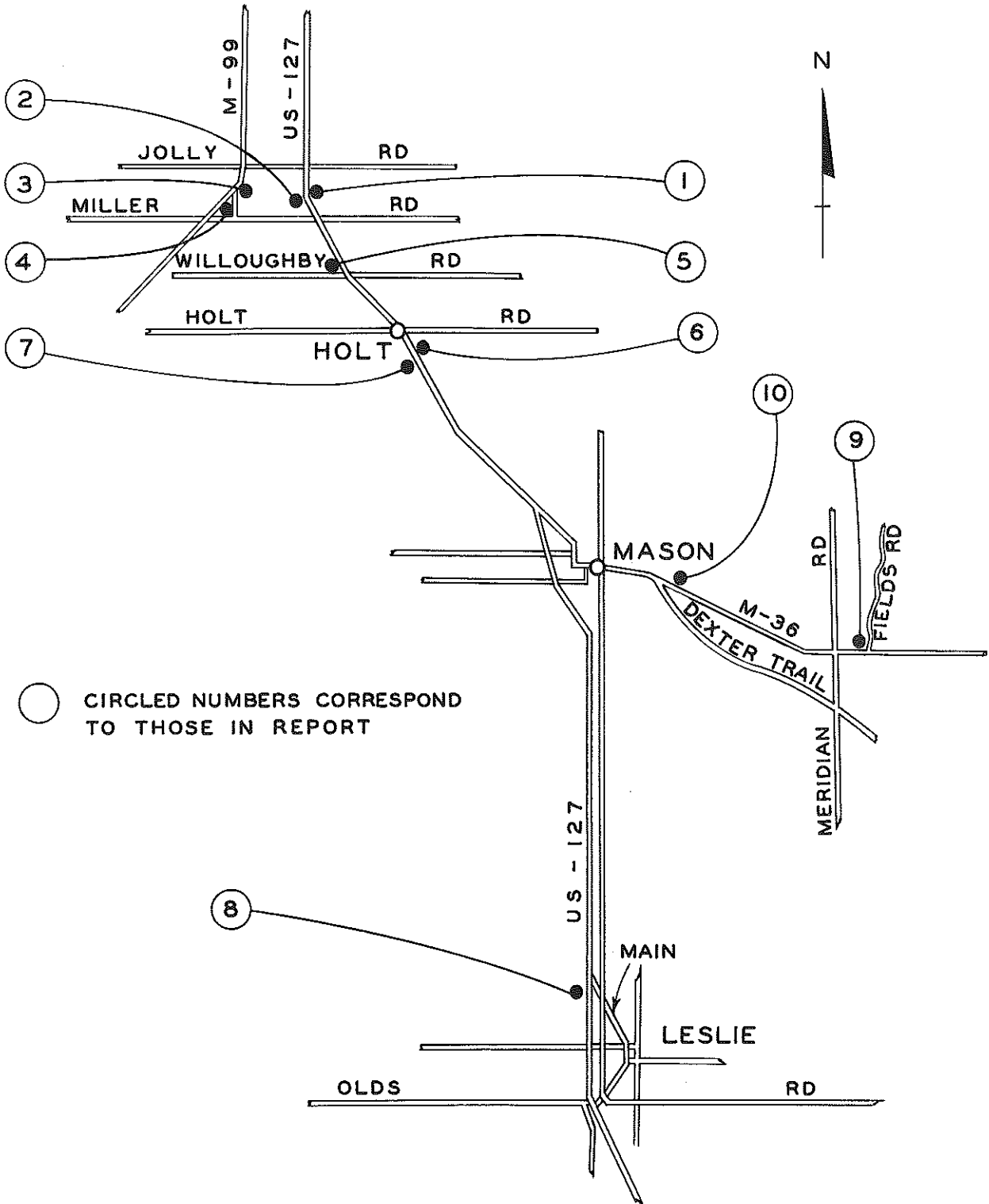


Figure 1. Locations of plastic marker posts.

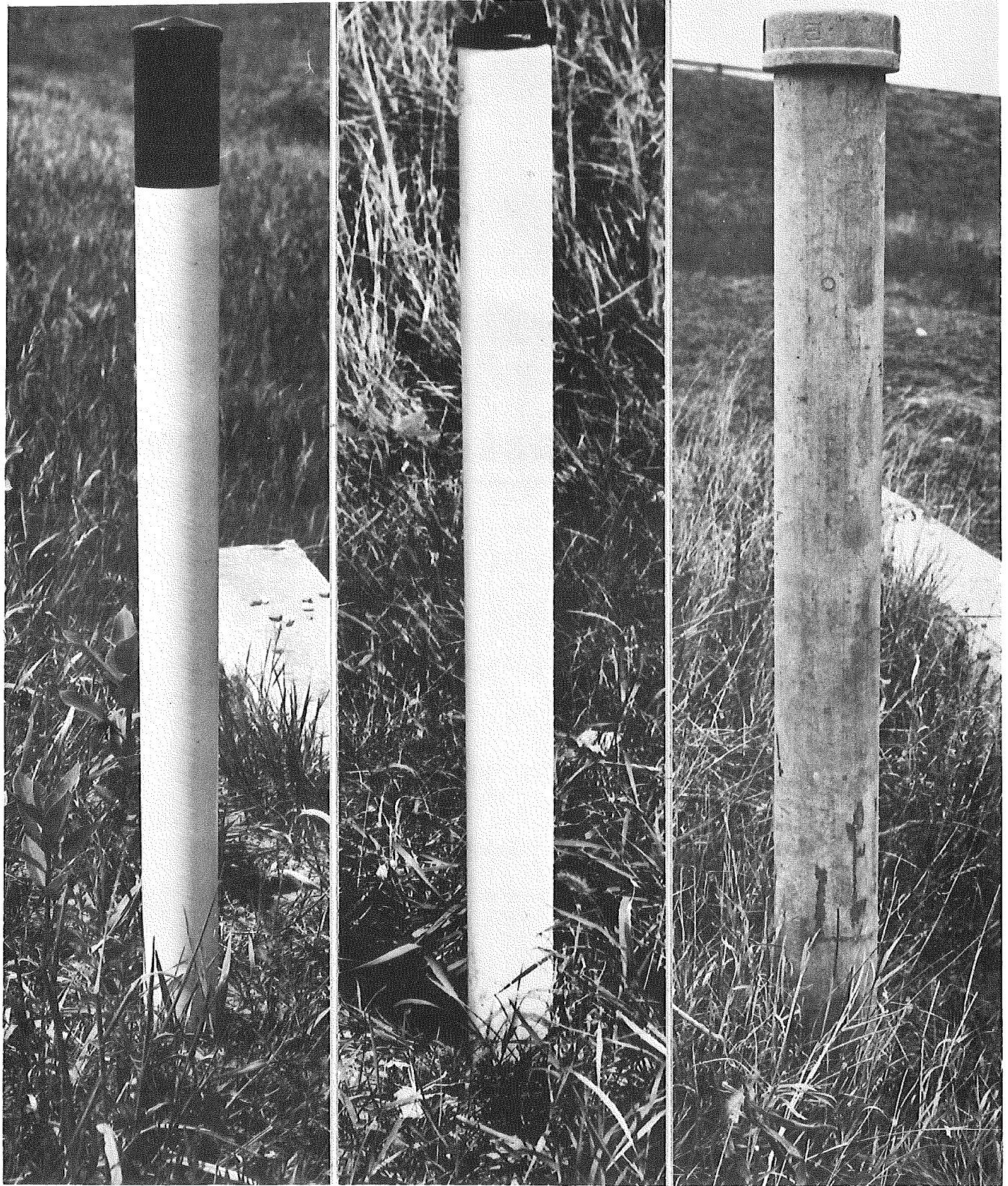


Figure 2. Typical black plastic marker post, factory-overcoated with white and black paint (left, Location No. 6), and typical white plastic marker post with black plastic cap (right, Location No. 10).

Figure 3. Typical appearance of galvanized marker post after two years of service (I 96 east of Howell).