

OFFICE MEMORANDUM



MICHIGAN
STATE HIGHWAY DEPARTMENT
JOHN C. MACKIE, COMMISSIONER

April 17, 1963
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To: Traffic Control Devices Committee:
H. H. Cooper, Chairman W. W. McLaughlin
J. J. Becker H. J. Rathfoot
J. L. Byers F. W. Gillespie

From: A. J. Permoda

Subject: Progress Report on 1962 Traffic Paint Performance Tests.
Research Project R-47 G-36(15). Report No. R-420.

This report is presented for review by the Committee, which is scheduled to initiate requisitions for traffic paints for the 1963 Performance Tests at the forthcoming Spring meeting. The following summaries give the Committee information to serve as a basis for selecting producers to submit paints for the tests.

Producers submitting paints for the 1962 tests, currently in progress, were as follows:

1. Acme Quality Paints, Inc. of Detroit.
2. Argo Paint & Chemical Co. of Detroit.
3. Baltimore Paint & Chemical Co. of Baltimore.
4. Boydell Brothers Co. of Detroit.
5. DeSoto Chemical Coatings, Inc. of Chicago.
6. Glidden Co. of Cleveland.
7. Jaegle Paint & Varnish Co. of Philadelphia.
8. Prismo Safety Corp. of Huntingdon, Pa.
9. Standard Detroit Paint Co. of Detroit.
10. Stiles Paint Co. of Kalamazoo
11. Wm. Armstrong Smith Co. of East Point, Georgia.
12. Truscon Laboratories of Detroit.

In order to indicate the trend in serviceability of traffic paints as evaluated in recent years, the range of six-month Service Factor performance ratings is tabulated below for paints in the 1962 tests, as well as those for the preceding three years:

Range of 6-mo Service Factors for:

Whites
Yellows

1962	1961	1960	1959
80-56	81-57	79-54	74-46
84-57	85-54	79-45	77-45

A comparison of these ratings, considering relocation of two test areas in 1961, perhaps indicates a slight trend toward improvement in performance, in response to Committee notices of May 9 and July 15, 1960, notifying producers that additional weight will be placed on quality.

Paints submitted for the 1962 tests were put down in the regular four field areas, shown in Fig. 1, during the period August 13-17, 1962. Some, not meeting all specification requirements, were treated as experimental paints and put down in fewer than four areas; others were borderline in conforming to requirements. Deficiencies for both categories are as follows:

1. Acme Paint Co.: Excessively low reflectivity on white and did not meet color standards on yellow. Borderline on settling. Both paints disqualified for full performance tests.
2. Boydell Bros. Co.: Borderline high viscosity and excessive bleeding on asphalt base by both the white and the yellow paints. Excessive settling rating. Both paints disqualified from full performance tests.
3. DeSoto Chemical Coatings: Excessive high viscosity of white and low viscosity of yellow. Both paints disqualified from full performance tests.
4. Glidden Co.: Excessive bleeding of white on asphalt base. White paint disqualified from full performance tests.
5. Jaegle Paint & Varnish Co.: Borderline bleeding of white on asphalt base, and borderline long drying time of yellow.
6. Standard Detroit Paint Co.: Excessive bleeding of white on both asphalt and tar bases. White paint disqualified from full performance tests.
7. Stiles Paint Co.: Borderline bleeding of white on asphalt base.

The preceding comments relative to performance paints show that a higher percentage than usual failed to meet all specification requirements. The manufacturers, listed above, should be notified of the deficiencies of their respective products when Requests for Bids are placed for the 1963 performance paints. These notifications should emphasize that a paint's failure to meet specification requirements is cause for disqualification from field performance tests, and therefore from bidding on roadway striping requirements.

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Traffic paints purchased for 1963 Performance Tests must be received by June 15 to provide the Laboratory time to run qualification tests prior to field application in mid-August.

Specifications to accompany 1963 Requests for Bids may be amended by Committee at its annual Spring meeting, so that those dated 5-2-60 will incorporate subsequent attachments and raise the minimum acceptable batch of yellow paint from 1000 to 2000 gallons, as was done for the white paint.

Experimental Paints. The following comments are made relative to the experimental stripes in the 1962 field tests, based on six months of exposure:

1. City of Detroit and Wayne County whites had a Service Factor rating equivalent to fourth best performance paint (each applied in four areas).
2. City of Detroit yellow had a rating equivalent to sixth best performance paint, which is a good rating since paints are grouped closely. Wayne County yellow had a rating about equivalent to twelfth best (each applied in three areas).
3. Epoxy (two-component) white and yellow, not formulated as traffic paints, had excessively long drying times. White had a good rating, yellow a fair rating (each applied in one area).
4. Pennsylvania Highway Dept. white had a good rating (applied in two areas).
5. Chlorinated rubber-alkyd white and yellow had good ratings (applied in three and two areas, respectively).

OFFICE OF TESTING AND RESEARCH

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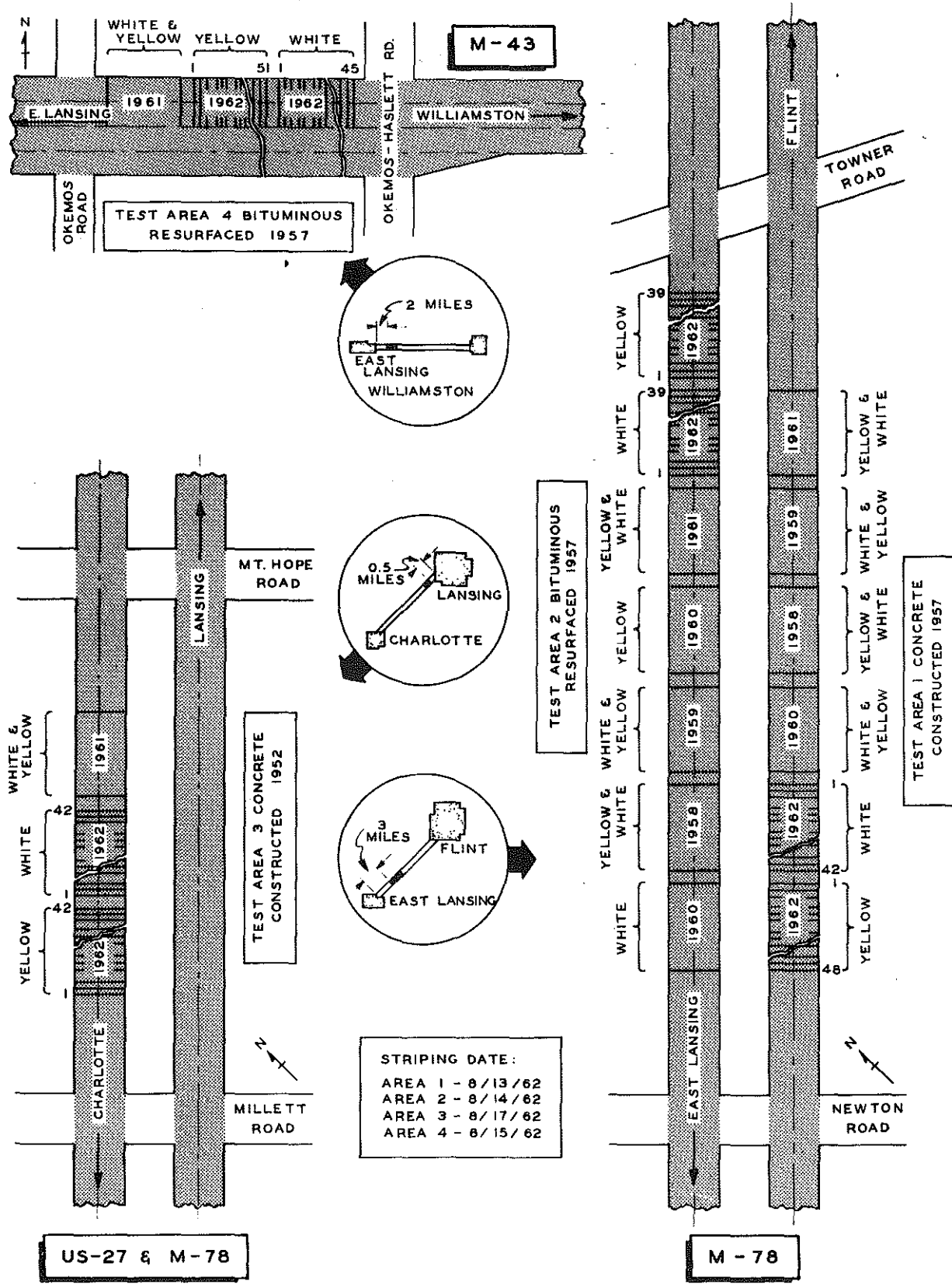
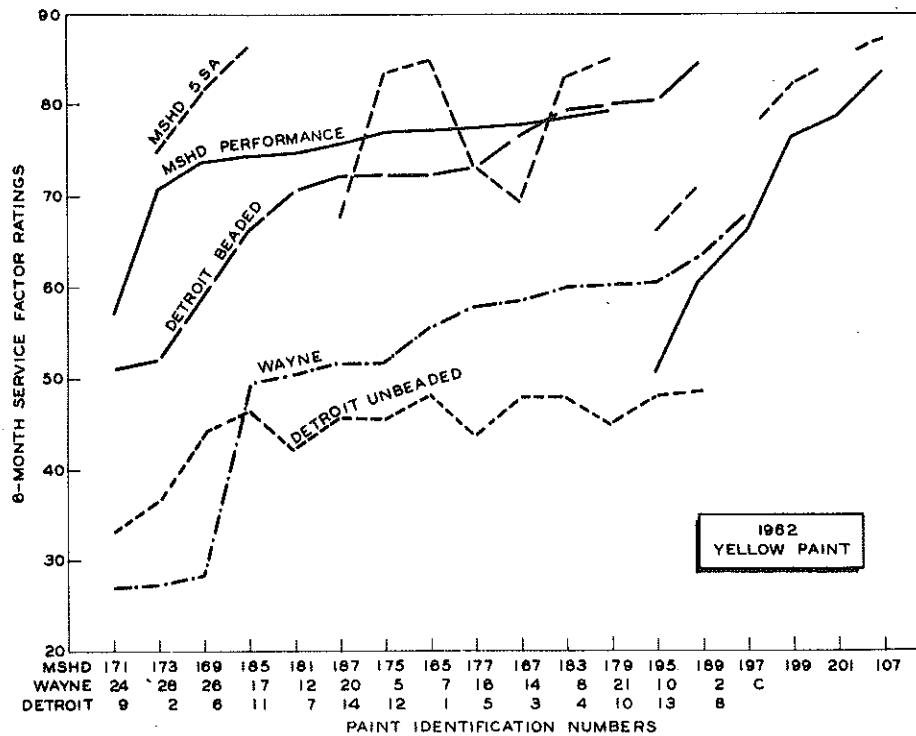
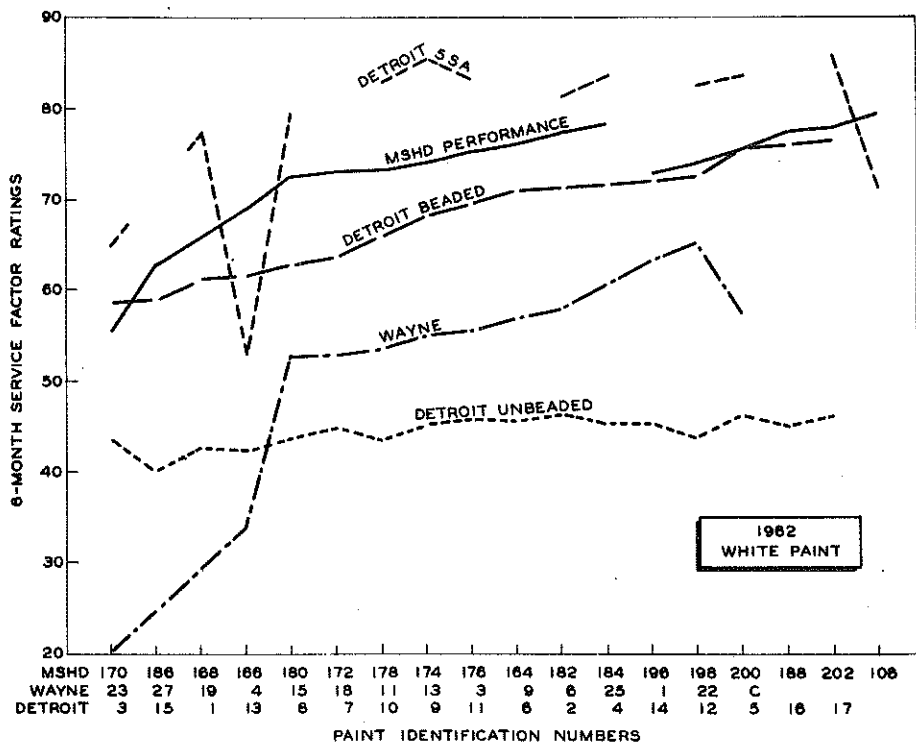


Figure 1. Location of 1962 Traffic Paint Performance Test Areas.



1962 Performance Tests at Six-Month Level including
Cooperative with Detroit & Wayne County