Key Words: Pavement markings, Epoxy paint

ABSTRACT

It has been evident over the past years that it is difficult to maintain pavement markings on moderately to heavily traveled highways, especially on urban sections where there is a high frequency of lane changes.

Experience has shown that even though lane markings are replaced as many as three times a year on the MacVicar Freeway (I-235) in Des Moines, there are sections where the lane markings are worn off before the end of the winter season. The frequent application of lane markings on this big highly traveled multi-lane freeway has proven to be expensive. The lane markings cannot be replaced during the winter, therefore, the loss of lane markings creates potential traffic hazards.

The purpose of this research project is to determine if:

1. Epoxy lane markings will last an entire winter season without replacement,
2. Epoxy lane marking is an economical alternative to standard paint on high traffic multi-lane roadways where lane changing is frequent,
3. There are worthwhile benefits derived from thorough cleaning of the pavement surface before painting.

The success of epoxy lane marking depends on the success of the equipment with which it is mixed and applied. The epoxy lane marking material, if properly mixed and placed on a clean surface, has the durability required to withstand a high traffic volume and frequent lane changes for at least one year.

All old paint, oil and road film must be removed from the pavement surface so that the epoxy will adhere to the surface.