

MINNESOTA DEPARTMENT OF TRANSPORTATION

Engineering Services Division Technical Memorandum No. 07-12-TS-04

August 1, 2007

To:

Distribution 57, 612, 618 and 650

From:

Lisa Freese

Deputy Commissione

Subject

Pavement Reclamation Projects, Re-Classification as a Preservation Work Type

Expiration

This is a new Technical Memorandum. It will remain in effect until August 1, 2012 unless it is superseded or the information contained herein is placed in the Highway Project Development Process (HPDP) handbook.

Implementation

This criteria and re-classification of Pavement Reclamation shall be effective immediately for all trunk highway projects.

Introduction

In lieu of reconstruction, pavement reclamation technology has developed to be a reasonable alternative to replacing a roadway surface.

Pavement reclamation consists of pulverizing (grinding/milling) the existing bituminous pavement in place, and re-using it in the new pavement structure as an aggregate base material. The pulverizing process also incorporates some of the underlying aggregate base material to provide for a sound aggregate base.

Pavement reclamation was previously classified under the New Construction/Reconstruction work type. This has inhibited the districts from programming their projects under reclamation, as this categorization requires that the design be brought up to New Construction/Reconstruction standards.

A Pavement Reclamation Committee was created in October of 2006 to bring resolution to the above issues. The Committee recommended, and the Division Directors' approved the following:

- That pavement reclamation projects be re-classified in the Preservation Project Type classification, with some conditional requirements.
- > That the Office of Technical Support audit pavement reclamation projects for a period of five years.

Purpose

The purpose of this Technical Memorandum is to provide clear definition, guidelines, and project delivery expectations for pavement reclamation projects.

Guidelines

Pavement reclamation is now classified under the Preservation Project Type. The following two work type definitions will be used to determine the needed level of documentation and approval:

Technical Memorandum No. 07-12-TS-04 Pavement Reclamation Projects, Re-Classification as a Preservation Work Type August 1, 2007 Page 2

Pavement Reclamation Type A Project - A final profile height increase of 2" or less on the non-NHS.

- Requires a Design Memo with a completed Geometric Design Table.
- Requires a Project Safety Review (PSR)* as part of the normal Mn/DOT Scoping Process.
- Design Exception approval is not needed.

Pavement Reclamation Type B Project - A final profile height increase of greater than 2" on the non-NHS or any project on the NHS.

- Requires a Design Memo with a completed Geometric Design Table.
- Requires a Project Safety Review (PSR)* as part of the normal Mn/DQT Scoping Process.
- Requires a Design Exception if it reduces the in-place condition on any one of the 13 critical design elements.
- All Design Exceptions must be approved by the State Design Engineer.
- * A Project Safety Review (PSR) is a process used to determine potential low-cost safety improvements for a given section of roadway. It is usually completed in conjunction with the development of a construction improvement project during the scoping phase. Safety improvements are identified and evaluated based on their expected cost effectiveness.

Questions

For information on the technical contents of this memorandum, please contact **Nancy Yoo**, **Design Services Section Director**, at (651) 366 - 4703.

For information on a Project Safety Review (PSR), please contact **Dave Engstrom**, **State Traffic Safety Engineer**, at (651) 234 - 7016.

Any questions regarding publication or distribution of this Technical Memorandum should be referred to Sophia Wicklund, Design Standards Unit at (651) 366 - 4701 or Michael Elle, Design Standards Engineer at (651) 366 - 4622. A link to all active Memoranda and a list of historical Technical Memoranda can be found at http://www.dot.state.mn.us/atoz.html.