

Reviewed by:

R.F. Cauley
bert F. Cauley

Materials and Research Engineer



Prepared by:

R. InSB
Sheri Burch
October 31, 1997

RESEARCH UPDATE

Update: U97-14

PERFORMANCE GRADE ASPHALT CEMENT

REFERENCE: Work Plan 95-R-16, Report U96-4

HISTORY:

In 1995, three projects were completed using a high stability SHRP Performance Grade 70-28 asphalt cement in hopes of preventing or delaying extensive rutting. The depth of the top course on each of these projects was 40 mm. The projects included:

Essex Junction, NH 9542(1)S, beginning at MM 1.60 on VT 15 in Essex Junction and extending easterly 1.04 km to MM 2.249. The 1994 ADT was 13550.

South Burlington, NH 9552(1)S, beginning at MM 0.517 on US 2 in South Burlington and extending easterly 2.85 km to MM 2.289. The 1994 ADT was 25604.

Middlebury, NH 9545(1)S, beginning at MM 4.264 on US 7 in Middlebury and extending northerly 2.33 km to MM 5.712. The 1994 ADT was 11984.

More detailed information in regard to project location and design can be found in Report U96-4.

SURVEY INFORMATION:

All test sites were surveyed in August, 1997. Average rut depths show minimal change from 1996 to 1997, indicating no significant increase in rutting. Rut patterns are the same as described in Report U96-25.

The results of this survey are presented in the table below.

AVERAGE RUT DEPTH	PRECONSTRUCTION (1995)	1996	1997
ESSEX JUNCTION	16 mm	4.5 mm	3 mm
SOUTH BURLINGTON	22 mm	4.8 mm	4.5 mm
MIDDLEBURY	30 mm	2.5 mm	3 mm

FOLLOW-UP: All three projects will be inspected annually to determine if the high stability binder and mix can better resist rutting.