

MONTANA DEPARTMENT OF TRANSPORTATION
HELENA, MONTANA 59620-1001

Hays-North, 10 Miles North of Hays, South of Harlem
RTF 66-2(1)16, RTF 66-2(3)26, MT66
Final Report
November, 2001

The above projects were constructed in 1995. This project consisted of Cold-In-Place recycled asphalt. Two CIPR sections were implemented; 61mm CIPR, 46mm (0.15) and 61mm CIPR respectively. Two control sections were also included; 61mm(0.2) 85/100 grade B and 30mm (0.5") HMA (Maintenance Overlay). This project is classified as a formal experimental project through the year 2001. The Federal Experimental number is MT98-01.

These projects are located on Highway 66 (P-66) in the county of Blaine. The mile posting starts at approximately MP 16 to MP 49.

Transverse cracking for all treatments were rated as poor for overall performance. The 61 mm Grade B had the lowest per mile cracking compared to the other three treatments. The CIPR treatments had substantial range of cracking between the two. The 61 mm CIPR/46 mm Grade B performed better than the straight 61 mm CIPR, with a 101 difference in transverse cracking. The 30 mm HMA overlay had the highest level of cracking at an estimated 376 cracks-per-mile (CpM). We should note that the 30 mm overlay statistics is for information use only and should not be compared as an experimental component of this project. Regardless of severity, all cracks were counted within a 300 ft. data site at every milepost of the project length, and averaged out per mile. All CpM's were averaged out for entire length of the particular treatment type. Below is the individual breakout of cracking on all four treatments.

<u>Treatment Type</u>	<u>Cracks per Mile</u>	<u>STD</u>
61 mm 85/100 grade B	132	2.0
61 mm CIPR, 46 mm 85/100 grade B217	2.2	
61 mm CIPR	318	2.5
30 mm 0.5' HMA	376	3.6

All sections exhibited severity of cracking at the same level. Some transverse cracking were greater than ½ ". All sections had good rutting performance, with a averaged range of 2 – 6 mm rut depth. The 61 mm, Grade B had the best performance with rut, and the 61 mm CIPR had the highest average rut value at 5.8 mm. The following table contains the consolidated rutting information.

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Treatment Type - Accumulated Rut - MM	NB Lanes		SB Lanes	
	OWP	IWP	IWP	OWP
61 mm 85/100 Grade B	2.7	4.6	3.7	3.2
61 mm CIPR, 46 mm 85/100 Grade B	2.3	2.9	2.3	2.5
61 mm CIPR	5.3	5.7	5.8	3.2
30 mm 0.5' HMA	3.6	4.6	3.7	3.4