

**FOR CONTRACT NO.: 09-341304**

# **INFORMATION HANDOUT**

## **MATERIALS INFORMATION**

**SUMMARY OF INVESTIGATIONS  
PAVEMENT CORING TABLE**

**ROUTE: 120-Mno-35.0/43.0**

## **Summary of Investigations**

Investigations carried out on the existing highway, SR 120 in Mono County, indicate the existing roadway structural section is suitable for recycling. Laboratory tests conducted on samples extracted from three test-pits indicate the engineering properties of these materials may be improved to provide sufficient strength to extend the life of the structural section for 20 years. Addition of foamed bitumen and cementitious material in a full-depth reclamation process will be used to provide a durable base course. Lastly, application of a 0.2-ft thick Hot Mix Asphalt (HMA) wearing course will complete the roadway rehabilitation.

The general structural section, from the bottom up is native graded basement material and asphaltic concrete. Native materials were designated GS (gravel & sand) under the Unified Soil Classification system.

The entire roadway, except for sections with recent thin HMA blankets, exhibits surface alligator cracking and major transverse thermal cracking. The transverse thermal cracking occurs at intervals of 20 feet; many of the cracks are as large as 6 inches wide. Several sections of the roadway show alligator cracking edge distress.

Coring data collected in June 2010 shows the existing pavement thickness varies in thickness between 4.2-in. and 8.7-in. on average. The pavement thickness is not uniform and varies throughout the length of the project. Refer to the attached Pavement Corings Table.

A foam mix design has been performed that used samples of the existing structural section material collected from test pits on the roadway throughout the length of the project. Using a foamed asphalt content of 3.0 % and a cement content of 2%, the average tensile strengths of test specimens was 294 Kpa dry and 264 Kpa wet. The Tensile Strength Ratio is 90%.

Pavement Corings Table  
(June 2010)  
(core depths in inches)

	Westbound ETW		Centerline		Eastbound ETW		Average
Station	AC Thickness		AC Thickness		AC Thickness		AC Thickness
	inches		inches		inches		inches
100+05	6.5		6.5		7.3		6.8
115+00	6.0		4.7		6.5		5.7
131+91	6.5		3.5		5.0		5.0
147+96	6.0		4.0		9.5		6.5
163+96	6.0		4.0		5.5		5.2
179+97	6.0		4.5		5.5		5.3
196+08	8.5		5.5		7.5		7.2
205+00	5.0		4.5		6.0		5.2
220+00	6.0		4.5		6.0		5.5
235+00	6.5		6.0		7.0		6.5
250+00	8.5		5.0		8.0		7.2
265+00	4.0		5.0		4.0		4.3
280+00	6.5		5.5		6.5		6.2
295+00	9.0		5.0		11.0		8.3
310+00	8.0		8.0		5.5		7.2
325+00	8.0		7.5		6.0		7.2
340+00	9.5		7.5		9.0		8.7
355+50	6.0		4.5		6.0		5.5
370+00	6.5		10.0		4.0		6.8
385+00	5.0		5.0		7.5		5.8
400+00	7.0		4.0		7.0		6.0
415+00	5.0		3.5		8.0		5.5
430+00	4.0		3.5		7.0		4.8
445+00	4.0		3.0		5.0		4.0
460+00	8.0		4.0		8.0		6.7
475+00	5.0		4.0		7.0		5.3
490+00	5.0		4.0		3.5		4.2
505+00	6.5		4.0		5.0		5.2
520+00	7.5		7.5		5.5		6.8
Average:	6.4		5.1		6.5		6.0

Any reliance placed by the Contractor on this information shall be at his own risk. The Contractor shall undertake his own testing program to determine the materials present and conditions prevailing at the time of construction.

# AC Thickness

