

TEXTURE METER

General Description

The Circular Texture Meter (CT Meter) uses a laser to measure the profile of a circle 284 mm (11.2 in) in diameter or 892 mm (35 in) in circumference. The profile is divided into eight segments of 111.5 mm (4.4 in). The average mean texture depth (MTD) is determined for each of the segments of the circle. The reported MTD is the average of all eight segment depths. The CT Meter is also being used on pervious pavements at MnROAD to measure clogging of the pervious voids.

COLLECTION FREQUENCY

Data is collected two times per year.



Procedure

1. Measurements are made according to ASTM E 2157.
2. Take 3 measurements at each test location.
3. Record mean texture depth (MTD) and root mean squared (RMD) for each measurement.
4. Record date, temperature, concrete surface moisture, and concrete distress at test location.

Specifications

ASTM E 2157



Data Processing

Each texture graph needs to be opened so that the MTD and RMD can be recorded.

Example Data Display

Ave: 0.52(1%)[0.31]

MTD RMS

Database Tables

TABLE – TEXTURE_METER

Name	Null?	Type	Units	Ranges	Example Data
CELL	NOT NULL	NUMBER(3)		0-999	205
DATE	NOT NULL	DATE			09-11-08
TIME		TIME	HRS	0-2400	1350
CONSTRUCTION		NUMBER(1)		1-9	2
STATION	NOT NULL	NUMBER(4,2)	FT		1126+55
OFFSET	NOT NULL	NUMBER(2,1)	FT	0-50	-13.5
PANEL_NO		NUMBER(2)		0-99	35
LANE		VARCHAR(15)			ML_DRIVING
MEAN_TEXTURE_DEPTH_1	NOT NULL	NUMBER(1,2)	MM	0.00 – 5.00	0.52
ROOT_MEAN_SQURE_1	NOT NULL	NUMBER(1,2)	MM	0.00 – 5.00	0.31
MEAN_TEXTURE_DEPTH_2		NUMBER(1,2)	MM	0.00 – 5.00	0.52
ROOT_MEAN_SQURE_2		NUMBER(1,2)	MM	0.00 – 5.00	0.31
MEAN_TEXTURE_DEPTH_3		NUMBER(1,2)	MM	0.00 – 5.00	0.52
ROOT_MEAN_SQURE_3		NUMBER(1,2)	MM	0.00 – 5.00	0.31
COMMENTS		VARCHAR2(255)			dry, spalling



For more information:

For more information contact:

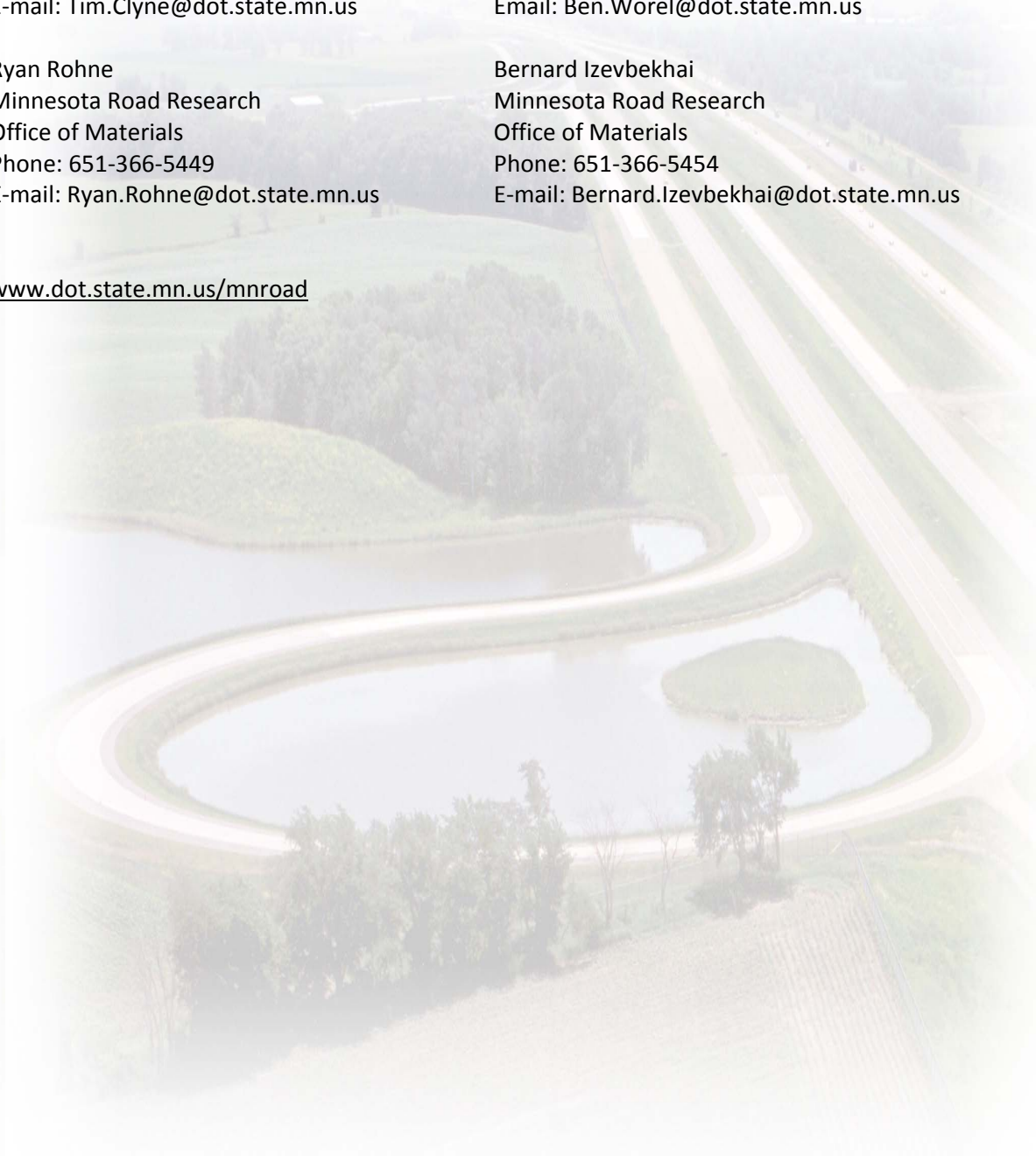
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MnROAD is a state of the art cold weather pavement and transportation testing facility located in Minnesota