



Somat Engineering, Inc.

26445 Northline Rd, Taylor, MI 48180
Tel: 734-946-4966 Fax: 734-946-1147

ASTM D2950

REPORT NUMBER: 202 SHEET: 1 OF 1

ASPHALT DENSITY DETERMINATION REPORT

DATE: 12/7/2020

JOB NUMBER: 2019057B

PROJECT NAME: Kercheval Streetscape (PW-7005)

LOCATION: Detroit, MI

GAUGE NUMBER: 2131

CLIENT: AECOM & City of Detroit

OWNER: City of Detroit (Public Works)

CONTRACTOR: Cadillac Asphalt

PROJECT ENGINEER: Allen Ostrowski (AECOM)

WEATHER: Clear

TEST PERFORMED ON: ☒ WEARING COURSE (WC) ☐ LEVELING COURSE (LC) ☐ BASE COURSE (BC) ☐ OTHER ☐													
STRUCTURE: Mainline Lanes on NB side of Kercheval between E. Grand Blvd. & Van Dyke.													
TEST			WET DENSITY		MOISTURE			DENSITY		TEST LOCATION			
ORIG.	RETEST	DEPTH	DENSITY COUNTS	WET DENSITY	MOIST. COUNTS	MOIST.	MOIST.	MAX DENSITY	COMPACT.	STATIONING/LOCATION	OFFSET OF CL (FT)		COURSE
		INCH	DC	PCF	MC	PCF	%	PCF	%		LEFT	RIGHT	
1		BS	760	146.3	48	6.6	4.7	154.4	94.7	44+00	20		WC
2		BS	785	143.9	50	6.9	5	154.4	93.2	53+50	18		WC
3		BS	768	145.5	53	7.4	5.3	154.4	94.2	39+80	34		WC
4		BS	790	143.4	52	7.2	5.3	154.4	92.9	43+25	37		WC
5		BS	805	142	56	7.9	5.9	154.4	92	46+15	38		WC
6		BS	779	144.5	51	7.1	5.1	154.4	93.6	40+00	6		WC
7		BS	747	147.5	55	7.7	5.5	154.4	95.5	49+50	11		WC
8		BS	764	145.9	50	6.9	5	154.4	94.5	59+00	13		WC
9		BS	802	142.3	50	6.9	5.1	154.4	92.2	79+50	17		WC

MAXIMUM DETERMINATION (LAB)					PRESCALE			
NOTE: Gmb to Marshall conversion is $Gmb \times 62.4 \text{ (PCF)} = \text{MARSHALL (PCF)}$					16			
NOTE: Gmm to TMD conversion is $Gmm \times 62.4 \text{ (PCF)} = \text{TMD (PCF)}$					16			
MAXIMUM WET DENSITY BY:		MARSHALL/Gmb 95.0%		TMD/Gmm 92.0% - 96.0%		DENSITY		
		TMD/Gmm 92.0% - 97.0%		X TMD/Gmm 92.0% - 98.0%		MOISTURE		
READING 1					2731		386	
READING 2					2723		379	
READING 3					2727		379	
READING 4					2721		385	
OPERATING STANDARDS (READING 5)								
DENSITY					2721		380	
MOISTURE								

REMARKS:		DATE:
Material used was 5E3. TMD = 154.4		12/7/2020
SOMAT FIELD REPRESENTATIVE: Cody Cervelli		DATE: 12/8/2020
SOMAT PROJECT MANAGER(s): Steve Drummond, P.E.		DATE: 12/8/2020

*All results noted in this report relate only to items inspected or tested by Somat Engineering, Inc. and/or Somat Engineering of Ohio, Inc. (Somat). This report shall not be reproduced, except in full, without the prior written approval of Somat.