



Somat Engineering, Inc.

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

ASTM D6938

REPORT NUMBER: 201 SHEET: 1 OF 1

DENSITY & MOISTURE DETERMINATION REPORT

DATE: 11/4/2020

JOB NUMBER: 2019057B

PROJECT NAME: Kercheval Streetscape(PW-7005)

LOCATION: Detroit, MI

GAUGE NUMBER: 2409

CLIENT: AECOM & City of Detroit

OWNER: City of Detroit (Public Works)

CONTRACTOR: Major Concrete

PROJECT ENGINEER: Allen Ostrowski (AECOM)

WEATHER: Clear

TEST PERFORMED ON:			SUBGRADE	X	SUBBASE	AGGREGATE BASE	BACKFILL	OTHER						
STRUCTURE: Recycled Crushed Concrete Subbase for ADA Ramps.														
TEST			WET DENSITY		MOISTURE			DRY DENSITY			TEST LOCATION			
ORIG.	RETEST	DEPTH	DENSITY COUNTS	WET DENSITY	MOIST. COUNTS	MOIST.	MOIST.	DRY DENSITY	MAX DENSITY	COMPACT.	STATIONING/LOCATION	OFFSET OF CL (FT)		DBG (FT)
		INCH	DC	PCF	MC	PCF	%	PCF	PCF	%		LEFT	RIGHT	
1		4	3773	122.2	92	10.6	9.5		127.2	96.0	126+25	28.0		0.5
2		4	3855	120.8	103	12.0	11.0		127.2	95.0	126+75	32.0		0.5
3		4	3765	122.3	88	10.1	9.0		127.2	96.2	129+30	29.0		0.5
4		4	3828	121.3	98	11.4	10.4		127.2	95.3	130+25	28.0		0.5
5		4	3716	123.1	86	9.9	8.7		127.2	96.8	132+90	33.0		0.5
6		4	3809	121.6	95	11.0	10.0		127.2	95.6	133+30	30.0		0.5
7		4	3838	121.1	98	11.4	10.4		127.2	95.2	135+75	29.0		0.5
8		4	3844	121.1	94	10.9	9.9		127.2	95.2	136+20	33.0		0.5

MAXIMUM DETERMINATION (FIELD) NOTE: To convert (g) to (lbs): Wt (g) / 453.59 = Wt. (lbs)											STANDARDIZATION		
TEST #	MOIST. %	MOLD VOL. (CFT)	WET SOIL + MOLD (g)	MOLD (g)	WET SOIL (g)	WET SOIL (lbs)	COMPACTED WET SOIL PCF	MAX DENSITY	OPTIMUM MOIST. %	MATERIAL	READING 1	DENSITY	MOISTURE
1	9.5	0.0333	4093	2172	1921	4.24	127.2	127.2	8.0-11.0	Recycled Stone	READING 2	2929	477
											READING 3	2945	467
											READING 4	2928	469
											OPERATING STANDARD (READING 5)		
											DENSITY	MOISTURE	
											2934	475	

MIN. COMPACTION REQUIRED:			100.0%	98.0%	X	95.0%	90.0%	OTHER
MAXIMUM DRY DENSITY BY:			MICH. CONE	D1557	T-99	X	T-180	OTHER

REMARKS:								

SOMAT FIELD REPRESENTATIVE:	Cody Cervelli	DATE:	11/4/2020
SOMAT PROJECT MANAGER(s):	Steve Drummond, P.E.	DATE:	11/5/2020

*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.