



Somat Engineering, Inc.

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ASTM D6938

REPORT NUMBER: 201 SHEET: 1 OF 1

DENSITY & MOISTURE DETERMINATION REPORT

DATE: 11/9/2020

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: Motor City Electric

PROJECT ENGINEER: Allen Ostrowski (AECOM)

WEATHER: Clear

TEST PERFORMED ON:		SUBGRADE	SUBBASE	X	AGGREGATE BASE	X	BACKFILL	OTHER						
STRUCTURE: Motor City Class II Backfill and Stone test for island and stone Subbase.														
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		12	852	113.0	50	5.4	5.0	107.7	110.1	97.8	57+55	33.0		1
2		6	2594	128.0	97	11.4	9.7		129.4	98.9	25+25	14.0		0.5
3		12	519	127.1	89	10.3	8.9		129.4	98.2	34+15	16.0		1
4		6	2546	128.9	92	10.7	9.1		129.4	99.6	34+50	20.0		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	5	0.0447	4213	1890	2323	5.12	114.6	110.1	15.1	Class II	READING 2	2934	475	
2	9.7	0.0333	4126	2172	1954	4.31	129.4	129.4	8.2-11.2	Recycled Stone	READING 3	2926	476	
											READING 4	2928	470	
											OPERATING STANDARD (READING 5)			
											DENSITY		MOISTURE	
											2930		471	
MIN. COMPACTION REQUIRED:					100.0%			98.0%	X	95.0%		90.0%	OTHER	
MAXIMUM DRY DENSITY BY:				X	MICH. CONE			D1557		T-99	X	T-180	OTHER	
REMARKS:														
SOMAT FIELD REPRESENTATIVE: Cody Cervelli											DATE: 11/9/2020			
SOMAT PROJECT MANAGER(s): Steve Drummond, P.E.											DATE: 11/10/2020			

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