Architecture Structural Geotechnical



Materials Testing Forensic Civil/Planning

Job No. 181479

November 29, 2021

Landhuis Company 212 N. Wahsatch Ave. Ste 301 Colorado Springs, CO

Re: Cement Treated Subgrade Test Results (Set 64) The Hills at Lorson Ranch – Areas "E" and "G" El Paso County, Colorado

Dear Landhuis Company:

RMG – Rocky Mountain Group sampled cement treated subgrade (CTS) soils during placement and compaction during construction of the streets in the above referenced subdivision. Our sampling and testing consisted of preparation of six (6) CTS "pucks" for each sample location. Pucks were prepared by compacting sampled CTS materials in the Standard Proctor mold utilizing Standard Proctor compactive effort (ASTM D-698). The pucks were extruded from the mold and moist-cured in the laboratory four (4) days and seven (7) days prior to testing for compressive strength.

The compressive strength for each puck was determined at four (4) days and seven (7) days after placement to verify that the minimum required compressive strength of 125 psi was obtained prior to placement of hot-mix bituminous pavements. The results of our testing are presented in the tables below:

Sample Location	Date Prepared	Puck #	4-Day Compressive Strength	
			Tested Strength, psi	Average 4-Day Compressive Strength, psi
Splake St., STA 12+00 (Right of median)	11/22/2021	A64	290	320
		B64	340	

Sample Location	Date Prepared	Puck #	7-Day Compressive Strength	
			Tested Strength, psi	Average 7-Day Compressive Strength, psi
Splake St., STA 12+00 (Right of median)	11/22/2021	C64	390	370
		D64	380	
		E64	370	
		F64	330	

Based upon our test results, the cement treated subgrade that was placed and compacted at the locations tested on November 22, 2021 met the minimum design strength requirements as recommended in *RMG's Pavement Design Report, The Hills at Lorson Ranch – Areas "E" and "G", El Paso County, Colorado, Job No. 181479, last dated November 6, 2021.* 

I hope this provides the information you have requested. Should you have questions, please feel free to contact our office.

Cordially,

RMG – Rocky Mountain Group



Cory Ramsey, P.E. Geotechnical Project Manager