

Architecture  
Structural  
Geotechnical



Materials Testing  
Forensic  
Civil/Planning

Job No. 181479

November 29, 2021

Revised December 1, 2021

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

Re: Cement Treated Subgrade Test Results (Set 70)  
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 five (5) days and seven (7) days prior to testing for compressive strength.

The compressive strength for each puck was determined at five (5) 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 #	5-Day Compressive Strength	
			Tested Strength, psi	Average 5-Day Compressive Strength, psi
Pikeminnow Place, STA 10+00 (Left of median)	11/24/2021	A70	180	180

Sample Location	Date Prepared	Puck #	7-Day Compressive Strength	
			Tested Strength, psi	Average 7-Day Compressive Strength, psi
Pikeminnow Place, STA 10+00 (Left of median)	11/24/2021	B70	200	190
		C70	190	
		D70	220	
		E70	200	
		F70	160	

Based upon our test results, the cement treated subgrade that was placed and compacted at the locations tested on November 24, 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