

Architecture  
Structural  
Geotechnical



Materials Testing  
Forensic  
Civil/Planning

**ROCKY MOUNTAIN GROUP  
EMPLOYEE OWNED**

Job No. 181479

November 15, 2021

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

Re: Cement Treated Subgrade Test Results (November 12, 2021, Set 32)  
The Hills at Lorson Ranch, Area B, Bufflehead Ln., STA 2+00  
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 four (4) 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 three (3) days prior to testing for compressive strength.

The compressive strength for each puck was determined at three (3) 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 table below:

Sample Location	Date Prepared	Puck #	3-Day Compressive Strength	
			Tested Strength, psi	Average 3-Day Compressive Strength, psi
Bufflehead Ln., STA 2+00 (Right of CL)	11/12/2021	A	260	310
		B	320	
		C	300	
		D	350	

Based upon our test results, the cement treated subgrade that was placed and compacted at the locations tested on November 12, 2021 met the minimum design strength requirements as recommended in RMG's *Pavement Design Report, The Hills at Lorson Ranch – Area "B", El Paso County, Colorado, Job No. 181479, last dated June 7, 2021, and the Addendum to Pavement Design Report, Job No. 181479, stamped September 2, 2021.* The average strength is greater than 275 psi, the subgrade shall be micro fractured prior to paving.

**Southern Office:**  
Colorado Springs, CO 80918  
719.548.0600

**Central Office:**  
Englewood, CO 80112  
303.688.9475

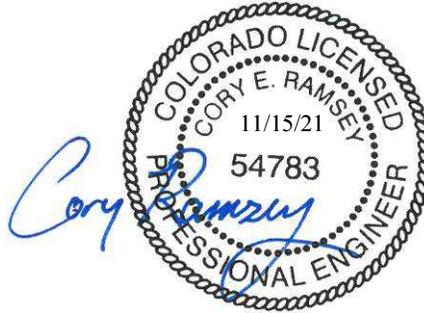
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Evans, CO 80620  
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I hope this provides the information you have requested. Should you have questions, please feel free to contact our office.

Cordially,

RMG – Rocky Mountain Group



Cory Ramsey, P.E.  
Geotechnical Project Manager