

Architecture  
Structural  
Geotechnical



Materials Testing  
Forensic  
Civil/Planning

**ROCKY MOUNTAIN GROUP**  
**EMPLOYEE OWNED**

Job No. 178681

June 9, 2021

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

Re: Cement Treated Subgrade Test Results  
Martin Marietta CTS Sets 7, 8, 15, 16, and 17  
Creekside South at Lorson Ranch  
El Paso County, Colorado

Dear Landhuis Company:

RMG – Rocky Mountain Group performed compressive strength tests on CTS pucks prepared by Martin Marietta during placement and compaction of the CTS in the above referenced subdivision. These samples correspond by number, location and date to those sets prepared and reported as failing by RMG. The sets in question are numbered Set 7, 8, 15, 16, and 17. Compressive strength results for Martin Marietta pucks are presented in the tables below in accordance with ASTM reporting Standards:

Set Number / Sample Location	7-Day Compressive Strength	
	Tested Strength, psi	Average 7-Day Compressive Strength, psi
Set 7 / Shunka Lane, STA 3+00	139	120
	102	

Set Number / Sample Location	7-Day Compressive Strength	
	Tested Strength, psi	Average 7-Day Compressive Strength, psi
Set 8 / Horton Drive, STA 4+75	139	150
	154	

Set Number / Sample Location	7-Day Compressive Strength	
	Tested Strength, psi	Average 7-Day Compressive Strength, psi
Set 15 / Luneth Drive, STA 30+00	199	190
	188	

Set Number / Sample Location	7-Day Compressive Strength	
	Tested Strength, psi	Average 7-Day Compressive Strength, psi
Set 16 / Luneth Drive, STA 36+00	152	190
	218	

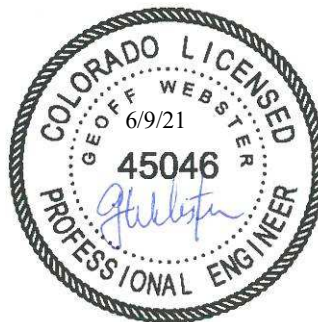
Set Number / Sample Location	7-Day Compressive Strength	
	Tested Strength, psi	Average 7-Day Compressive Strength, psi
Set 17 / Akela Lane, STA 4+25	163	160
	166	

RMG believes the failed test results are anomalous and not representative of the constructed condition. Based upon the test results presented above, and the fact that the CTS passed proofroll testing at the time of application, it is RMG's professional opinion the CTS throughout the project meets the minimum design strength requirements as recommended in RMG's Pavement Design Report, Creekside South at Lorson Ranch, El Paso County, Colorado, Job No. 178681, dated April 20, 2021.

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

Cordially,

RMG – Rocky Mountain Group



Geoff Webster, P.E.  
Sr. Geotechnical Project Engineer