



**ENTECH**  
ENGINEERING, INC.

505 ELKTON DRIVE  
COLORADO SPRINGS, CO 80907  
PHONE (719) 531-5599  
FAX (719) 531-5238

APPROVED  
Engineering Department

04/21/2022 9:32:52 AM  
dsdnijkamp

EPC Planning & Community  
Development Department

April 15, 2022

SR Land, LLC  
20 Boulder Crescent, 2<sup>nd</sup> Floor  
Colorado Springs, CO 80903

Attn: Chaz Collins

Re: Laboratory Test Results – Asphalt Millings and Recycled Concrete  
Sterling Ranch Stockpiles  
Sterling Ranch – Filing No. 2  
Colorado Concrete Crushing  
El Paso County, Colorado

\*source pile shall be documented by the EPC inspector and shall not be added to during the season. New piles must be tested, approved, and piles documented by EPC inspector prior to use in EPC.

Dear Mr. Collins:

As requested, Entech Engineering, Inc. have performed laboratory testing on representative samples of asphalt millings and recycled concrete obtained from the stockpiles at Colorado Crushing at Sterling Ranch. The sampling of the stockpiles was performed by personnel of Entech Engineering, Inc. This letter presents the results of the laboratory testing.

The stockpiles are located southwest of the future Dines Boulevard and Sterling Ranch Road Intersection. This is the only source location for the asphalt millings and reclaimed concrete on the subject site. The piles appear to be of uniform material based on visual observations during sampling.

Sieve analyses and Atterberg Limits testing were performed on the samples. Testing was performed to determine the support characteristic of the asphalt millings and the crushed concrete for use in the Filing No. 2 roadways. In addition, LA Abrasion (ASTM C-131) testing was performed on the samples

The millings and recycled concrete are non-plastic and meet the gradation for Class 5 and 6 basecourse.

The results of the laboratory testing are summarized below and are presented in Figures 1 through 4.

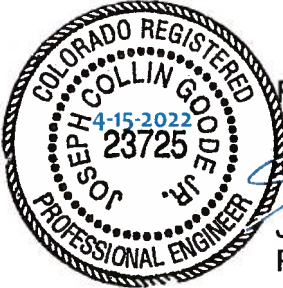
| <u>Soil Properties</u> | <u>Recycled Concrete</u> | <u>Asphalt Millings</u> |
|------------------------|--------------------------|-------------------------|
| Liquid Limit           | NV                       | NV                      |
| Plastic Index          | NP                       | NP                      |
| %200                   | 7.9                      | 4.2%                    |
| LA Abrasion Loss (%)   | 44                       | 31                      |

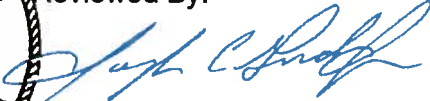
SR Land, LLC  
Laboratory Test Results – Asphalt Millings and Recycled Concrete  
Sterling Ranch Stockpiles  
Sterling Ranch – Filing No. 2  
El Paso County, Colorado

We trust that this report contains the information you require. If you have questions or need additional information, please contact us.

Respectfully Submitted,  
ENTECH ENGINEERING, INC.

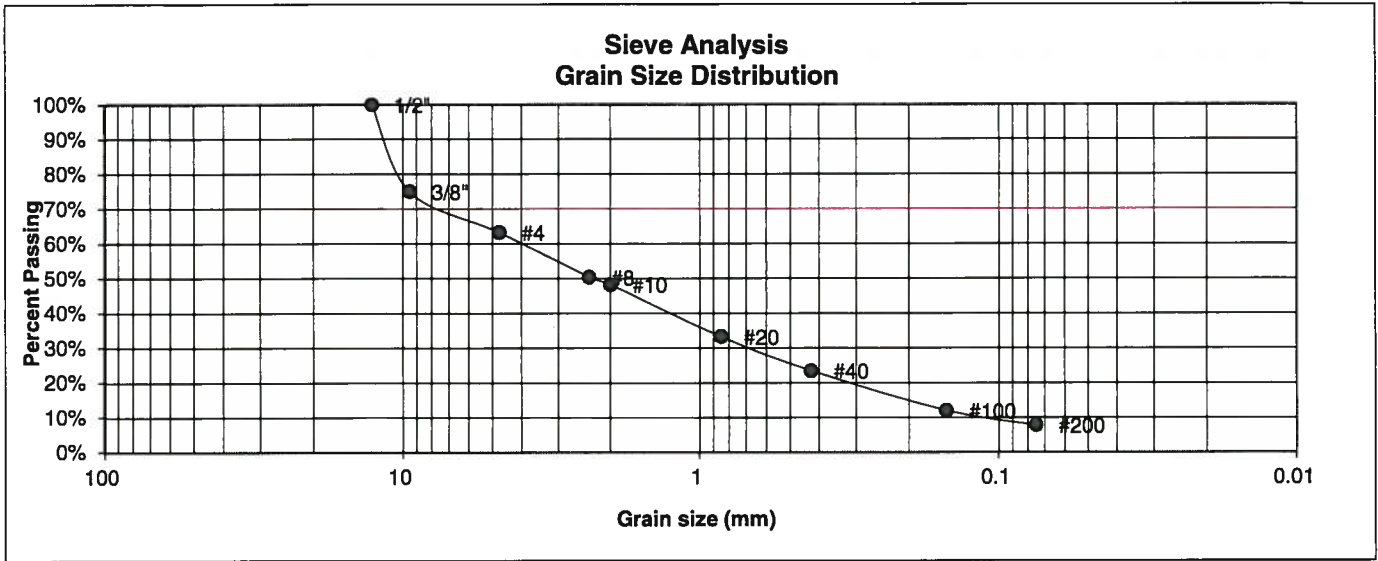
  
Daniel P. Stegman



Reviewed By:  
  
Joseph C. Goode, Jr., P.E.  
President

DPS/mhh  
Entech Job No. 220394  
AAprojects/2022/220394Reconc

|                    |                          |                               |       |                |           |
|--------------------|--------------------------|-------------------------------|-------|----------------|-----------|
| <b>SOIL TYPE #</b> | CRUSHED CONCRETE         | <b>UNIFIED CLASSIFICATION</b> | SM-SW | <b>TEST BY</b> | BL        |
| <b>CLIENT</b>      | SR LAND, LLC             | <b>AASHTO CLASSIFICATION</b>  |       | <b>JOB NO.</b> | 220394    |
| <b>PROJECT</b>     | STERLING RANCH, FILING 2 |                               |       | <b>DATE</b>    | 4/15/2022 |



| U.S. Sieve # | Percent Finer | CLASS 2 | CLASS 5 | CLASS 6 |
|--------------|---------------|---------|---------|---------|
| 3"           |               | 95-100  |         |         |
| 1 1/2"       |               |         | 100     |         |
| 1"           |               |         | 95-100  |         |
| 3/4"         |               |         |         | 100     |
| 1/2"         | 100.0%        |         |         |         |
| 3/8"         | 75.0%         |         |         |         |
| 4            | 63.3%         |         | 30-70   | 30-65   |
| 8            | 50.4%         |         |         | 25-55   |
| 10           | 48.3%         |         |         |         |
| 20           | 33.3%         |         |         |         |
| 40           | 23.5%         |         |         |         |
| 100          | 12.0%         |         |         |         |
| 200          | 7.9%          | 3-15    | 3-15    | 3-12    |

| Atterberg Limits          |    | FHA Swell |        |        |
|---------------------------|----|-----------|--------|--------|
| Moisture at start         |    |           |        |        |
| Moisture at finish        |    |           |        |        |
| Moisture increase         |    |           |        |        |
| Initial dry density (pcf) |    |           |        |        |
| Swell (psf)               |    |           |        |        |
| Plastic Limit             | NP |           |        |        |
| Liquid Limit              | NV | 35 max    | 30 max | 30 max |
| Plastic Index             | NP | 6 max     | 6 max  | 6 max  |

**ENTECH ENGINEERING, INC.**  
505 ELKTON DRIVE  
COLORADO SPRINGS, COLORADO 80907

**LABORATORY TEST RESULTS**

|        |       |                    |                      |
|--------|-------|--------------------|----------------------|
| DRAWN: | DATE: | CHECKED: <i>PS</i> | DATE: <i>4/15/22</i> |
|--------|-------|--------------------|----------------------|

JOB NO.: *220394*  
FIG NO.: *1*



# Laboratory Test Report

Client: **Entech Engineering, Inc.**  
Project: **20220641.001A**  
**08-000L - Entech Lab**

Report No.: **22-DEN-00237 Rev. 0** Issued: **4/13/2022**  
Sampled by: **Entech Lab** Date: **4/1/2022**  
Submitted by: **Entech Lab** Date: **4/1/2022**

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Aggregate Test Report: Los Angeles Abrasion

Tested on **4/6/2022** by **MJ Landrus**  
Material Description: **Light Gray, Reconstituted Concrete**

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Test Method: **ASTM C131 Grading B**

Loss after 500 revolutions: **44**

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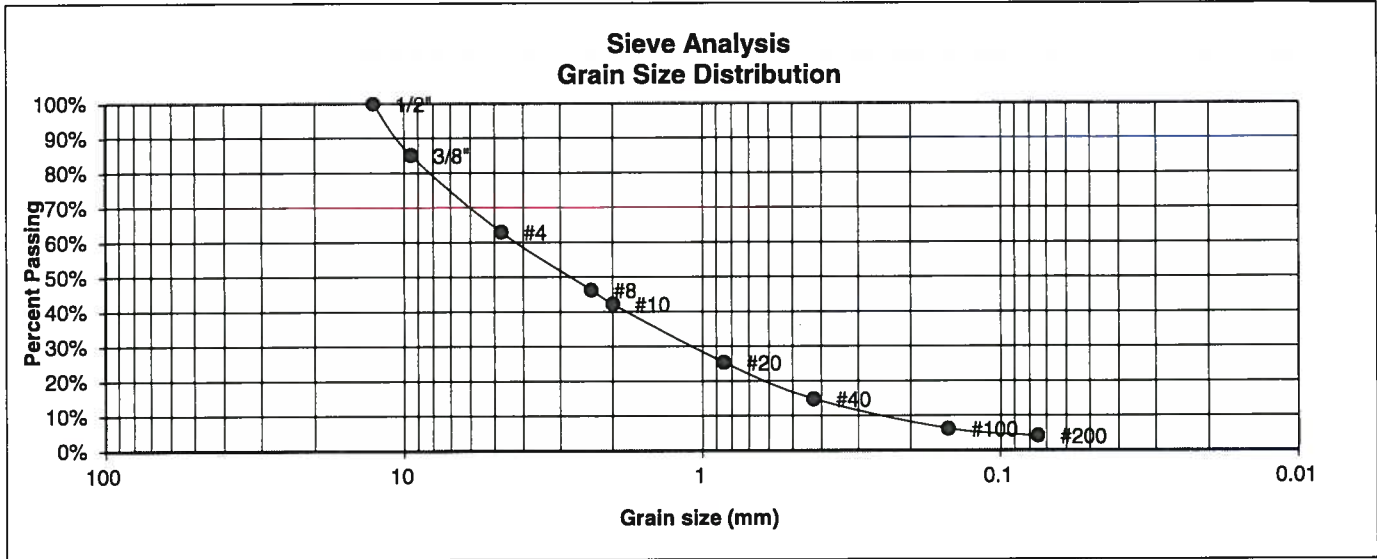
Remarks:

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Reviewed on 4/13/2022 by Tim Ryan,  
Project Manager

Limitations: Pursuant to applicable building codes, the results presented in this report are for the exclusive use of the client and the registered design professional in responsible charge. The results apply only to the samples tested. If changes to the specifications were made and not communicated to Kleinfelder, Kleinfelder assumes no responsibility for pass/fail statements (meets/did not meet), if provided. This report may not be reproduced, except in full, without written approval of Kleinfelder.

|                    |                          |                               |    |                |           |
|--------------------|--------------------------|-------------------------------|----|----------------|-----------|
| <b>SOIL TYPE #</b> | RECYCLED ASPHALT         | <b>UNIFIED CLASSIFICATION</b> | SW | <b>TEST BY</b> | BL        |
| <b>CLIENT</b>      | SR LAND, LLC             | <b>AASHTO CLASSIFICATION</b>  |    | <b>JOB NO.</b> | 220394    |
| <b>PROJECT</b>     | STERLING RANCH, FILING 2 |                               |    | <b>DATE</b>    | 4/15/2022 |



| U.S. Sieve # | Percent Finer | CLASS 2 | CLASS 5 | CLASS 6 |
|--------------|---------------|---------|---------|---------|
| 3"           |               | 95-100  |         |         |
| 1 1/2"       |               |         | 100     |         |
| 1"           |               |         | 95-100  |         |
| 3/4"         |               |         |         | 100     |
| 1/2"         | 100.0%        |         |         |         |
| 3/8"         | 85.1%         |         |         |         |
| 4            | 63.0%         |         | 30-70   | 30-65   |
| 8            | 46.3%         |         |         | 25-55   |
| 10           | 42.2%         |         |         |         |
| 20           | 25.4%         |         |         |         |
| 40           | 14.8%         |         |         |         |
| 100          | 6.2%          |         |         |         |
| 200          | 4.2%          | 3-15    | 3-15    | 3-12    |

| Atterberg Limits          |  | FHA Swell |  |  |
|---------------------------|--|-----------|--|--|
| Moisture at start         |  |           |  |  |
| Moisture at finish        |  |           |  |  |
| Moisture increase         |  |           |  |  |
| Initial dry density (pcf) |  |           |  |  |
| Swell (psf)               |  |           |  |  |

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**LABORATORY TEST RESULTS**

|        |       |          |         |
|--------|-------|----------|---------|
| DRAWN: | DATE: | CHECKED: | DATE:   |
|        |       | 25       | 4/15/22 |

JOB NO.:  
220394  
FIG NO.:  
3



# Laboratory Test Report

Client: **Entech Engineering, Inc.**  
Project: **20220641.001A**  
**08-000L - Entech Lab**

Report No.: **22-DEN-00237 Rev. 0** Issued: **4/13/2022**

Sampled by: **Entech Lab** Date: **4/1/2022**

Submitted by: **Entech Lab** Date: **4/1/2022**

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## Aggregate Test Report: Los Angeles Abrasion

Tested on **4/6/2022** by **MJ Landrus**

Material Description: **Dark Brown/Black, reconstituted Asphalt**

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Test Method: **ASTM C131 Grading B**

Loss after 500 revolutions: **31**

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Remarks:

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Reviewed on 4/13/2022 by Tim Ryan,  
Project Manager

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