



December 19, 2017

PL-02667-01

Recycled Aggregate Materials Company
3713 Alamo Street
Simi Valley, California 93063

Attention: Mr. Dallas Jones

Subject: **Laboratory Test Results**
Caltrans Section 26 Class 3 Aggregate Base
Recycled Aggregate Materials Company
9005 Bradley Avenue
Sun Valley, California

This report presents the results of laboratory tests performed on one (1) sample of Caltrans Section 26 Class 3 Aggregate Base from the above referenced project. The sample was obtained by a qualified Earth Systems Southern California technician and delivered to our laboratory on November 8, 2017. Per your request the following tests were performed;

- A) Sieve Analysis (Caltest 202)
- B) Sand Equivalent (Caltest 217)
- C) Durability Index (Caltest 229)
- D) Resistance/R-Value (Caltest 301)
- E) Los Angeles Abrasion (Caltest 211)
- F) Maximum Density – Optimum Moisture (ASTM D-1557)

The laboratory test results are attached. We trust this report meets your current needs. If you have any questions please contact us.

Respectfully submitted,

Earth Systems
Southern California

Jim Tomkins
Project Engineer
P. E. #82397



12-20-17

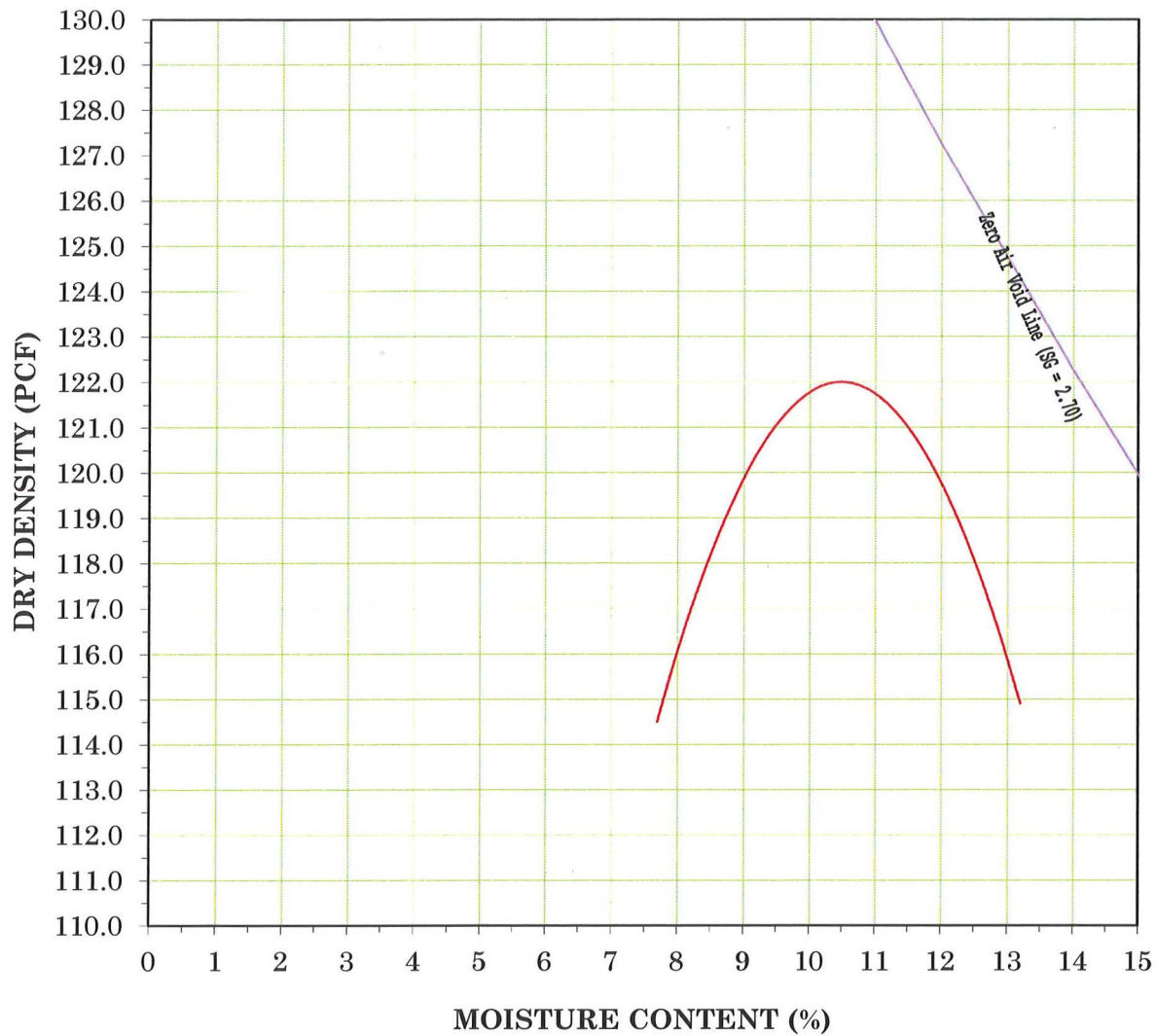
Distribution: e-mail: Dallas@ramco.us.com, manselmo@ramco.us.com;
markh@ramco.us.com; josh@ramco.us.com; april@ramco.us.com; dawn@ramco.us.com

Summary of Laboratory Test Results
Caltrans Standard Specifications
Section 26 Class 3 Aggregate Base
Recycled Aggregate Materials Company - Sun Valley, California
Sampled on November 8, 2017

F) **Maximum Density – Optimum Moisture** (ASTM D-1557)

<u>Sample Description</u>	<u>Maximum Density</u>	<u>Optimum Moisture</u>
Class 3 Aggregate Base*	122.0 PCF	10.5 %

*Note: This product contains crushed recycled asphalt concrete. A bias is required for all nuclear density tests to adjust the tested dry density results to reflect actual in-place densities.



Maximum Density - Optimum Moisture Characteristics*


Sample Location: Sample Delivered on November 8, 2017

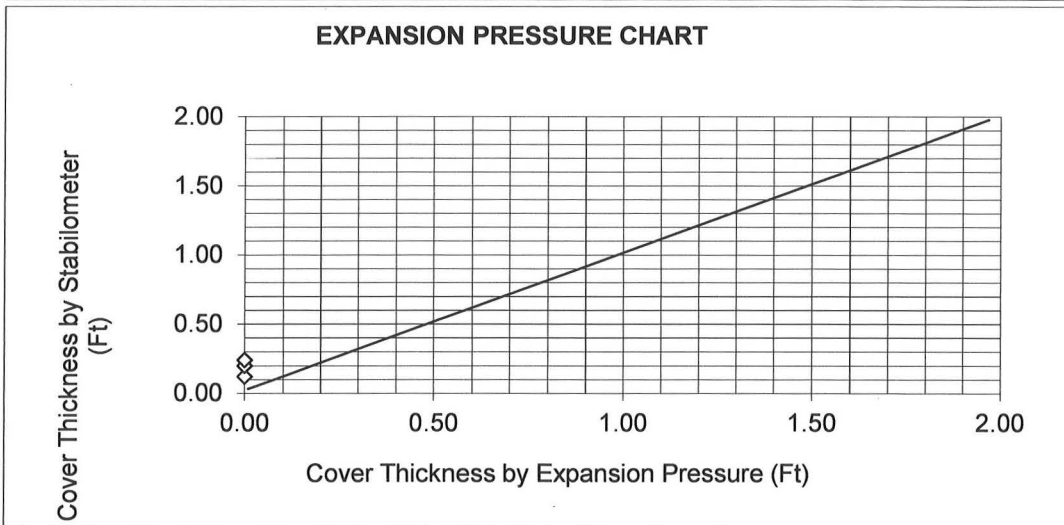
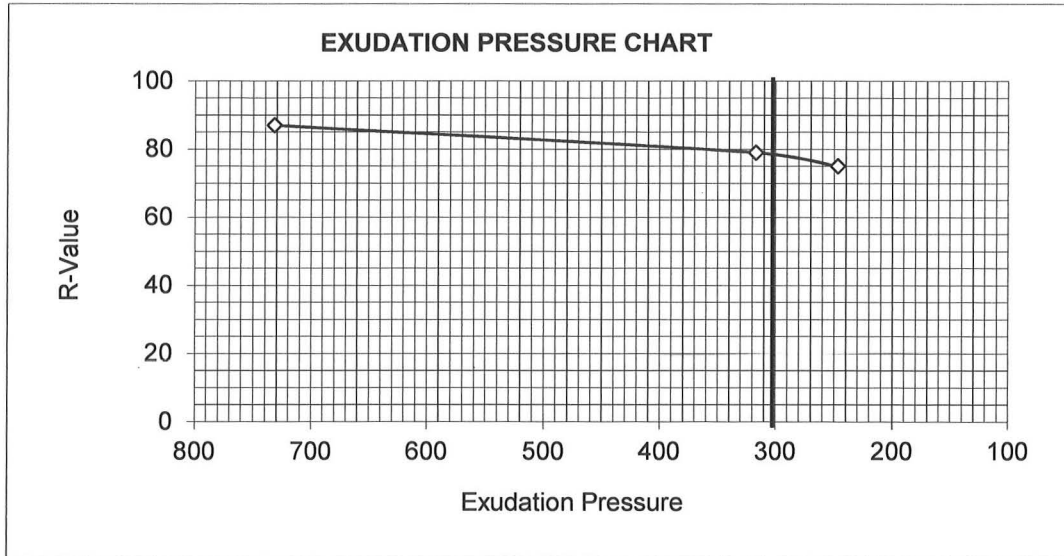
Material: Caltrans Class 3 Aggregate Base

Maximum Density (pcf): 122.0

Optimum Moisture: 10.5%

* Test Method: ASTM D-1557

MAXIMUM DENSITY - OPTIMUM MOISTURE	
RAMCO - Sun Valley	
Sun Valley, California	
 Earth Systems Southern California	
12/19/2017	PL-02667-01



JOB NAME: RAMCO - Sun Valley
SAMPLE I. D.: Sample Delivered on November 8, 2017
SOIL DESCRIPTION: Caltrans Class 3 Aggregate Base

SPECIMEN NUMBER	A	B	C
EXUDATION PRESSURE	732	317	247
RESISTANCE VALUE	87	79	75
EXPANSION DIAL(0.0001")	0	0	0
EXPANSION PRESSURE (PSF)	0.0	0.0	0.0
% MOISTURE AT TEST	12.6	13.2	13.4
DRY DENSITY AT TEST	114.2	108.0	107.6

R-VALUE @ 300 PSI EXUDATION	78
R-VALUE by Expansion Pressure*	100

*Based on a Traffic Index of 5.0 and a Gravel Factor of 1.70