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January 20, 2022

Matt Bustamante
Colorado Aggregate Recycling
9615 East County Line Road #303
Centennial, Colorado 80112

Subject: Laboratory Test Results, Recycled Concrete and Recycled Asphalt Samples,
Foothills Landfill and Golden Pit Stockpile, Respectively

Project No. 21-1-235

Dear Mr. Bustamante:

Attached are the results of testing performed on two lab samples submitted to our laboratory of recycled concrete and recycled asphalt (Kumar Lab Sample Nos. 1822 and 1823, respectively) obtained from the Foothills Landfill and Golden Pit Stockpile locations, respectively. Testing was performed to determine soil classification parameters, including Atterberg Limits, gradation and moisture-density relationship (modified Proctor). Additional testing performed on the sample of recycled concrete included R-Value (Hveem stabilometer) and L.A. Abrasion. The results of the tests are summarized in the attachments.

Based on the test results, the submitted sample of recycled concrete conforms to the gradation requirements for Class 6 Aggregate Base Course presented on Table 703-2 in the Colorado Department of Transportation's (CDOT) 2021 *Standard Specifications for Road and Bridge Construction*.

If you have questions or need further information, please call.

Sincerely,

KUMAR & ASSOCIATES, INC.

Ryan R. Kumar, P.E.

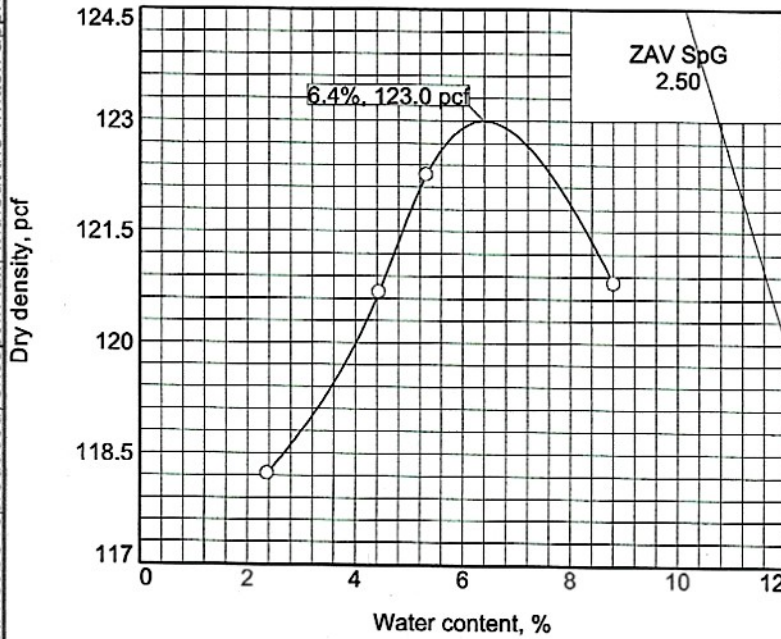


RRK/ma
Attachments
cc: file

These test results apply only to the samples which were tested. The testing report shall not be reproduced, except in full, without the written approval of K & A, Inc.

COMPACTION TEST REPORT

Curve No. 1823



Preparation Method	
Rammer: Wt.	10 lb. Drop 18 in.
Type	Manual
Layers: No.	five Blows per 56
Mold Size	0.075 cu. ft.
Test Performed on Material	
Passing	3/4 in. Sieve
%>3/4 in.	0 %<No.200 2.1
Atterberg (D 4318): LL	NV PI NP
NM (D 2216)	Sp.G. (D 854) 2.5
USCS (D 2487)	GW
AASHTO (M 145)	A-1-a
Date: Sampled	12-20-2021
Received	12-20-2021
Tested	12-22-2021
Tested By	WP

COMPACTION TESTING DATA
AASHTO T 180-10 Method D Modified

	1	2	3	4	5	6
WM + WS	10621.0	10792.0	10885.0	10976.0		
WM	6504.0	6504.0	6504.0	6504.0		
WW + T #1	711.4	781.7	974.8	682.2		
WD + T #1	698.6	755.0	936.8	641.4		
TARE #1	157.6	154.1	223.1	178.2		
WW + T #2						
WD + T #2						
TARE #2						
MOIST.	2.4	4.4	5.3	8.8		
DRY DENS.	118.2	120.7	122.3	120.8		

SIEVE TEST RESULTS
AASHTO T27 AASHTO T11

Opening Size	% Passing	Specs.
1-1/2"	100	
1"	100	
3/4"	100	
1/2"	100	
3/8"	70	
#4	36	
#8	25	
#16	12	
#30	5	
#50	3	
#100	2	
#200	2.1	

TEST RESULTS

Maximum dry density = 123.0 pcf
Optimum moisture = 6.4 %

Project No. 21-1-235 **Client:**
Project: Colorado Aggregate Recycling

Location: Golden Pit Stockpile **Sample Number:** 1823

Kumar & Associates, Inc.

Denver, Colorado

Material Description

Recycled Asphalt/ well-graded gravel with sand

Remarks:

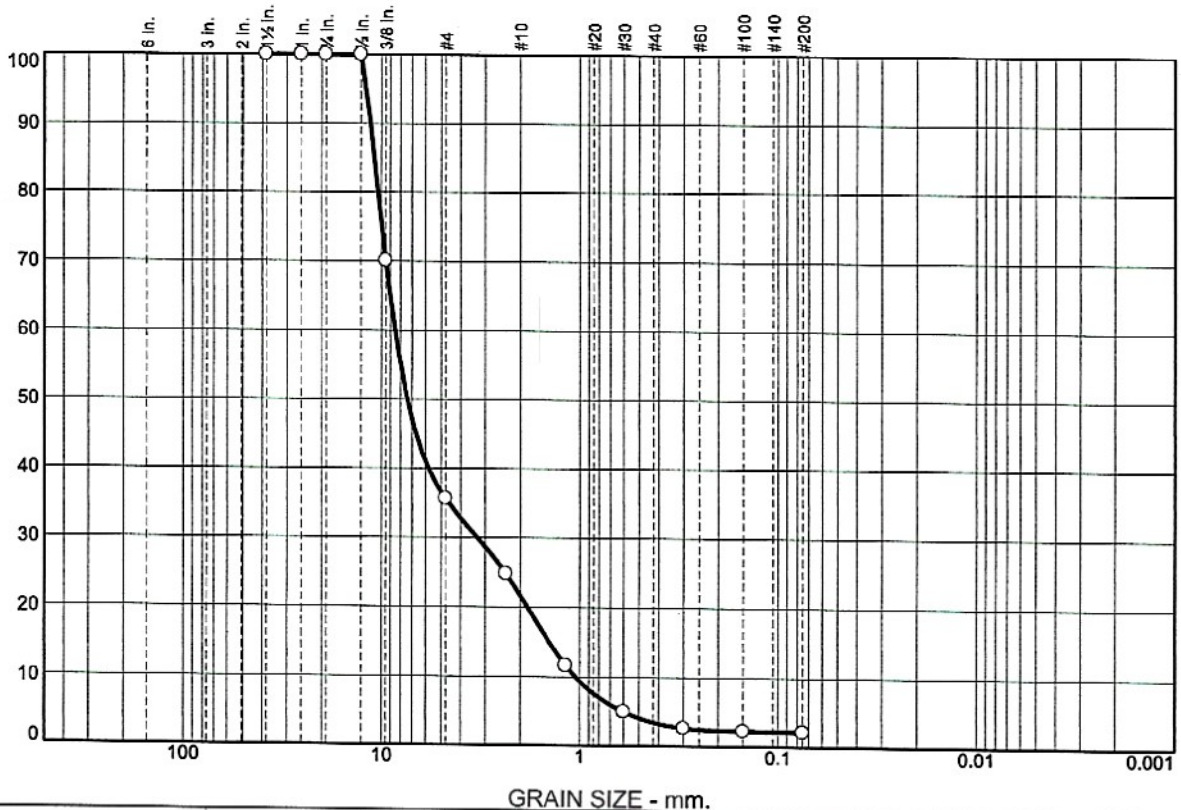
Checked by: _____ **DS**

Title: Lab Manager

Figure

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Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0	0	64	14	19	1	2	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
1-1/2"	100		
1"	100		
3/4"	100		
1/2"	100		
3/8"	70		
#4	36		
#8	25		
#16	12		
#30	5		
#50	3		
#100	2		
#200	2.1		

Material Description
Recycled Asphalt/ well-graded gravel with sand

Atterberg Limits
 PL= NP LL= NV PI= NP

Classification
 USCS= GW AASHTO= A-1-a

Remarks

* (no specification provided)

Location: Golden Pit Stockpile
Sample Number: 1823

Date: 12-20-2021

Kumar & Associates, Inc.
Denver, Colorado

Client:
Project: Colorado Aggregate Recycling
Project No: 21-1-235

Figure