

December 4, 2015

Mr. Ben Phillips Ben Phillips Recycling 14 Commerce Parkway Fredericksburg, VA 22406

Reference: Crushed Concrete Laboratory Analysis

DEA Project No. 5526

Mr. Phillips:

Dominion Engineering Associates, Inc. (DEA) received a bulk sample from an offsite stockpile of crushed concrete to evaluate for compliance with the VDOT Road and Bridge specification 208.01/208.03 for 21A or 21B. A representative sample of the crushed concrete was tested in our laboratory in accordance with VTM-25. The gradation requirements per the chart referenced in specification and associated results are summarized below:

Sieve Size	Design Range	Job Mix	Lab Percent	Pass (P)
	(Percent Passing	Tolerance (%)	Passing	Fail (F)
2 inch	100	0	100	P
1 inch	94-100	±10	100	P
3/8 inch	63-72	±19	82	P
No. 10	32-41	±14	40	P
No. 40	14-24	±8	13	P
No. 200	6-12	<u>±</u> 4	11	P

This report has been prepared in accordance with generally acceptable geotechnical engineering practices and no other warranties, either expressed or implied, are made. If you should have any questions with the above or if we can be of further assistance, please do not hesitate to contact us.

Respectfully:

Dominion Engineering Associates, Inc.

ILLR

Kevin L. Parris President

Dominion engineering Associates (DOMINION)

8511 Indian Hills Court, Suite 202 Fredericksburg, Va 22407 Telephone: 540/710/9339

Fax: 540/710/7449

PROJECT NAME Ben Phillips Recycling

GRAIN SIZE DISTRIBUTION

CLIENT Ben Phillips Recycling PROJECT LOCATION Culpeper, Virginia PROJECT NUMBER 5526 U.S. SIEVE OPENING IN INCHES 6 4 3 2 1.5 1 3/4 1/23/8 U.S. SIEVE NUMBERS | 810 14 16 20 30 40 50 60 100 140 200 HYDROMETER 3 100 95 90 85 80 75 70 65 PERCENT FINER BY WEIGHT 60 55 50 45 40 35 30 25 20 15 10 5 0.001 0.1 0.01 100 10 GRAIN SIZE IN MILLIMETERS **GRAVEL** SAND **COBBLES** SILT OR CLAY coarse coarse medium fine

AB	ı				STANDARD CONTRACTOR								
NS I	Specim	en Identification		Classification					PL	PI	Сс	Cu	
GINT US LAB	5648	3 2.0		Recycled Concrete					NP	NP	17.51	240.39	
GPJ													
LING.													
CYC													
SRE			12										
	Specim	nen Identification	D100 D60 D30 D10 %			%Gravel	%Sand	%Sand %Silt			%Clay		
5526 BEN PHILLIPS RECYCLING.GPJ	5648	3 2.0	25	4.276	1.154		37.2	51.8				10.9	
26 BE													
N SIZ													
GRAIN SIZE													