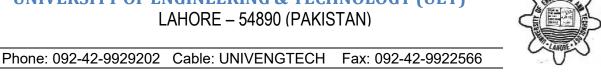
Department of Civil Engineering (CED)

UNIVERSITY OF ENGINEERING & TECHNOLOGY (UET)



Mr. Ghulam Rasool Domki Resident Engineer, NESPAK, Gujrat.

Ref.----

Subject: <u>Testing of Water Bound Macadam (WBM)</u>

Road Restoration Programme Gujrat

Rehabilitation of Sarai Alamgir – Kotla Arab Ali Khan – Jalalpur Sobtian Road,

Length = 46 km

Dear Sir,

It is with reference to your letter No. 103/RRP/GRT/GRD/95 dated 13-01-2025.

Please find below the result for the test conducted on the WBM sample provided to this laboratory through your representative.

Los Angeles Abrasion Value Test (ASTM C-131/535)

Frading Used	Los Angeles Abrasion Value		
	(%)		
1	20.38		

If you have further query, please do not hesitate to contact the undersigned.

Best Regards,

Director

Transportation Engineering Laboratory

Note:

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Date:----

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LAHORE - 54890 (PAKISTAN)





Date:----

Mr. Rauf Ahmad Senior Project Manager (DRGCC), Defence Raya Golf & Country Club, Lahore.

Ref.----

Subject: <u>Testing of Aggregate</u> (Base Course Material)

Proposed Construction and Completion of Road Work, Strom Water Drainage &

Public Health Works for 2 Kanal Villas (Plot-E) at Phase-VI

Dear Sir,

It is with reference to your letter No. DRGCC/INFRA-PLOT-E/001 dated 23-01-2025. Please find below the results for the tests conducted on the aggregate sample provided to this laboratory through your representative.

1. Sieve Analysis (ASTM C-136)

Sieve Size	1 1/2"	1"	3/4"	1/2",	3/8"	#4	
%age Passing	100	74.14	59.13	50.41	44.59	37.87	

2. Los Angeles Abrasion Value Test (ASTM C-131/535)

Grading Used	Los Angeles Abrasion Value
	(%)
A	26.21

3. Flakiness & Elongation Index (BS 812: Part 105)

Sieve	e Size	Individual	Weighted	Individual	Weighted	
Passing Retained (in.)		Flakiness	Flakiness	Elongation	Elongation	
		Index (%)	Index (%)	Index (%)	Index (%)	
1 ½	1	11.60	4.83	26.17	10.89	
1	3/4	12.53	3.03	26.62	6.43	
3/4	1/2	12.52	1.76	21.46	3.01	
1/2 3/8		7.34	0.69	12.42	1.16	
3/8	1/4	3.76	0.41	5.03	0.54	
		Flakiness Inc	dex = 10.72%	Elongation Ind	ex = 22.03%	

If you have further query, please do not hesitate to contact the undersigned.

Best Regards,

Director

Transportation Engineering Laboratory

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Department of Civil Engineering (CED)

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The Resident Engineer, NESPAK-RHC (J.V).

Subject: **Testing of Material**

Ref.----

Reconstruction of Cross Drainage Structure of Jahanpur Minor Damaged During

Flood 2022 at RD 250+000 of Qutab Drain

Dear Sir,

It is with reference to your letter No. 4688/13/MAB/03/47 dated 29-01-2025.

Please find below the results for the tests conducted on the stone sample provided to this laboratory through your representative.

1. Specific Gravity & Water Absorption (ASTM C-127)

Specific Gravity (oven dried condition)	2.68
Specific Gravity (saturated surface dry condition)	2.69
Apparent Specific Gravity	2.71
Water Absorption (%)	0.39

2. Los Angeles Abrasion Value Test (ASTM C-131/535)

Grading Used	Los Angeles Abrasion Value
	(%)
1	22.59

3. Unit Weight (Loose & Rodded); (ASTM C 29/C 29M)

Loose Unit Weight (g/cm ³)	1.42
Rodded Unit Weight (g/cm ³)	1.56

If you have further query, please do not hesitate to contact the undersigned.

Best Regards,

Note:

Director

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Department of Civil Engineering (CED)

UNIVERSITY OF ENGINEERING & TECHNOLOGY (UET)



Ref.----Date:----

The Executive Engineer, Highway Division, Narowal.

Testing of Asphalt Wearing Course Samples (Cores) Subject:

Annual Development Programme

Rehabilitation/Special Repair/Reconstruction of Road from Mukam Moor to Shah Pur Bhango via Chak Bharaiyan & Bhooj Pur (Length = 5.67 km)

Narowal

Dear Sir,

It is with reference to your letter No. 1727 dated 16-10-2024.

Please find below the results for the tests conducted on the two cores of asphalt concrete provided to this laboratory on 10-02-2025 through your representative.

BULK SPECIFIC GRAVITY OF COMPACTED ASPHALT (ASTM D2726):

Core #	Core # Mean Thickness (cm)		4	Mean Diameter (cm)	Bulk Specific Gravity	
1		K	7.527		10.000	2.399
2			7.880		10.000	2.401

If you have further query, please do not hesitate to contact the undersigned.

Best Regards,

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Director

Transportation Engineering Laboratory