Department of Civil Engineering (CED)

UNIVERSITY OF ENGINEERING & TECHNOLOGY (UET) LAHORE – 54890 (PAKISTAN)



Ref.-----

Date:-----

Mr. M. Khurram Iqbal Resident Engineer, NESPAK, RRP Narowal (Punjab).

Subject: <u>Testing of Materials</u> (WBM and Sand)

Project: Restoration/Improvement of Noor Kot to Fatwal via Essa

Dear Sir,

It is with reference to your letter No. RE/RRP/NRWL/KI/37 dated 24-12-2024. Please find below the results for the tests conducted on the aggregate samples provided to this laboratory on 30-12-2024 through your representative.

Water Bound Macadam

1. Sieve Analysis (ASTM C-136)

Sieve Size	3"	2 1/2"	2"	1 1/2"	1"	3/4"	1/2"	3/8"	#4
%age Passing	100	81.79	24.76	0.55	0	0	0	0	0

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

Specific Gravity (oven dried condition)	2.77
Specific Gravity (saturated surface dry condition)	2.78
Apparent Specific Gravity	2.81
Water Absorption (%)	0.48

3. Sodium Sulphate Soundness (ASTM C-88)

Sieve Size	Weight of	Weight of	Percentage	Weighted
	Fraction	Fraction	Passing	Percentage
	Before Test.	After Test.	Designated Sieve	Loss.
$2'' + 1 \frac{1}{2}''$	(gm)	(gm)	After Test.	
	5007.3	4990.1	0.34	0.28
			Total = 0.28%	

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

Grading Used	Los Angeles Abrasion Value (%)
1	20.67

5. Flakiness Index (BS 812: Part 105)

Siev	e Size	Individual	Weighted
Passing Retained		Flakiness	Flakiness
(in.) (in.)		Index (%)	Index (%)
3	2 1/2	4.21	0.77
2 1/2	2	5.56	3.17
2	1 1/2	5.80	1.40
1 1/2	1	0	0
	-	Flakiness In	dex = <u>5</u> .34%

<u>Sand</u>

1. Sieve Analysis (ASTM C-136)

Sieve Size	3/8"	#4	#8	#16	#30	#50	#100	#200
%age Passing	100	100	99.89	99 .75	9 <mark>9.5</mark> 6	87.26	9.79	1.58

2. Fineness Modulus (ASTM C-142)

Fineness Modulus (%) 1.04

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

Best Regards, Director Transportation Engineering Laboratory	 Note: This test report is based solely on the particular sample(s) supplied by the client and should not be reproduced in parts. Sampling has not been performed by Transportation Engineering Laboratory (TEL), UET and TEL-UET does not accept the responsibility that the sample(s) supplied is/are truly representative sample(s) of any batch or stock or entire project. While TEL-UET agrees to take every reasonable precaution to ensure validity of its test results, it assumes no liability thereof beyond the amount of the fee charged for the analysis or test. The party shall assume full responsibility for the ethical use of the results in the test reports and the TEL-UET shall be held free from any and all claims which may result from the use of such data by client or others.
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Department of Civil Engineering (CED)

UNIVERSITY OF ENGINEERING & TECHNOLOGY (UET) LAHORE – 54890 (PAKISTAN)



Phone: 092-42-9929202 Cable: UNIVENGTECH Fax: 092-42-9922566

Ref.-----

Date:-----

Mr. Fraz Khalid Syed Assistant Director (Q.C.D), WASA, LDA, Lahore.

Subject: <u>Testing of Crush</u> (M/s Riaz RCC Pipe Factory)

Dear Sir,

It is with reference to your letter No. QCD/2679 dated 28-12-2024. Please find below the results for the tests conducted on the aggregate sample provided to this laboratory through your representative.

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

Specific Gravity (oven dried condition)	2.81
Specific Gravity (saturated surface dry condition)	2.83
Apparent Specific Gravity	2.86
Water Absorption (%)	0.56

2. Sodium Sulphate Soundness (ASTM C-88)

Sieve Size	Weight of	Weight of	Percentage	Weighted		
	Fraction	Fraction	Passing	Percentage		
	Before Test	After Test	Designated Sieve	Loss		
1/2" + 3/2"	(gm)	(gm)	After Test			
12 18	1002.9	990.8	1.21	0.96		
	Total = 0.96%					

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

Grading Used	Los Angeles Abrasion Value (%)
В	18.21

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)

UNIVERSITY OF ENGINEERING & TECHNOLOGY (UET) LAHORE – 54890 (PAKISTAN)



Ref.-----

Date:-----

2.36

Mr. Fraz Khalid Syed Assistant Director (Q.C.D), WASA, LDA, Lahore.

Subject: <u>Testing of (Harrow) Sand</u> (M/s Riaz RCC Pipe Factory)

Dear Sir,

It is with reference to your letter No. QCD/2681 dated 28-12-2024.

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	1/2"	3/8"	#4	#8	#16	#30	#50	#100	#200
%age Passing	100	99.40	95.94	90.96	80.40	63.81	27.63	5.51	1.10

2. Percentage of Silt and Clay (ASTM D-1140) Wet Sieving

			line and the second sec	
Silt a	and	Clay (%)		2.13

3. Fineness Modulus (ASTM C-142)

Fineness Modulus (%)

4. Specific Gravity & Water Absorption (ASTM C-128)

Specific Gravity (OD)	2.68
Specific Gravity (SSD)	2.70
Apparent Specific Gravity	2.74
Water Absorption (%)	0.83

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

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Director Transportation Engineering Laboratory	supplied is are using representative sample(s) of any succi of sider of stock of entire project.3. While TEL-UET agrees to take every reasonable precaution to ensure validity of its test results, it assumes no liability thereof beyond the amount of the fee charged for the analysis or test.
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Phone: 092-42-9929202 Cable: UNIVENGTECH Fax: 092-42-9922566

Ref.-----

Date:-----

Mr. Fraz Khalid Syed Assistant Director (Q.C.D), WASA, LDA, Lahore.

Subject: <u>Testing of Crush</u> (M/s S.S RCC Pipe Factory)

Dear Sir,

It is with reference to your letter No. QCD/2722 dated 30-12-2024. Please find below the results for the tests conducted on the aggregate sample provided to this laboratory through your representative.

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

Specific Gravity (oven dried condition)	2.82
Specific Gravity (saturated surface dry condition)	2.83
Apparent Specific Gravity	2.86
Water Absorption (%)	0.44

2. Sodium Sulphate Soundness (ASTM C-88)

	Sieve Size	Weight of	Weight of	Percentage	Weighted			
		Fraction Fraction Passing		Passing	Percentage			
		Before Test	After Test	Designated Sieve	Loss			
	$1/_{2}" + 3/_{2"}$	(gm)	(gm)	After Test				
	12 18	1002.4	992.6	0.98	0.80			
		Total = 0.80%						

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

Grading Used	Los Angeles Abrasion Value
	(%)
В	18.14

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

Best Regards,

Director Transportation Engineering Laboratory

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Phone: 092-42-9929202 Cable: UNIVENGTECH Fax: 092-42-9922566

Ref.-----

Date:-----

2.40

Mr. Fraz Khalid Syed Assistant Director (Q.C.D), WASA, LDA, Lahore.

Subject: <u>Testing of (Harrow) Sand</u> (M/s S.S RCC Pipe Factory)

Dear Sir,

It is with reference to your letter No. QCD/2720 dated 30-12-2024.

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	1/2"	3/8"	#4	#8	#16	#30	#50	#100	#200
%age Passing	100	99.04	95.74	90.74	79.20	63.46	26.76	5.49	1.14

2. Percentage of Silt and Clay (ASTM D-1140) Wet Sieving

		l'internet and the second s	
Silt a	nd Clay (%)		2.84

3. Fineness Modulus (ASTM C-142)

Fineness Modulus (%)

4. Specific Gravity & Water Absorption (ASTM C-128)

Specific Gravity (OD)	2.67
Specific Gravity (SSD)	2.69
Apparent Specific Gravity	2.73
Water Absorption (%)	0.77

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

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UNIVERSITY OF ENGINEERING & TECHNOLOGY (UET) LAHORE – 54890 (PAKISTAN)

Phone: 092-42-9929202 Cable: UNIVENGTECH Fax: 092-42-9922566

Ref.-----

Mr. Muhammad Zain-Ul-Abadeen Resident Engineer, NESPAK, Lahore.

Subject: <u>Testing of Bedding Material of Sewer Pipe</u> Tender No. XEN(O&M-I) NT/2024-25/79-Sewerage System in UC-228, Nishter Zone, Lahore

Dear Sir,

It is with reference to your letter No. 43101/MZA/01/1020 dated 03-01-2025. Please find below the results for the tests conducted on the aggregate sample provided to this laboratory on 13-01-2025 through your representative.

1. Sieve Analysis (ASTM C-136)

Sieve Size	2 1/2"	2"	1 1/2"	1"	3/4"	1/2"	3/8"	#4
%age Passing	100	27.24	1.32	0	0	0	0	0

2. 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	2.70
Water Absorption (%)	0.66

3. Sodium Sulphate Soundness (ASTM C-88)

Sieve Size	Weight of	Weight of	Percentage	Weighted
	Fraction	Fraction	Passing	Percentage
·	Before Test	After Test	Designated Sieve	Loss
$2" + 1 \frac{1}{2}"$	(gm)	(gm)	After Test	
	5007.0	4989.9	0.34	0.33
			Total = 0.33%	

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

Grading Used	Los Angeles Abrasion Value (%)
2	20.23

Sieve Size		Individual Weighted		Individual	Weighted	
Passing	Retained	Flakiness Flakiness		Elongation	Elongation	
(in.)	(in.)	Index (%)	Index (%)	Index (%)	Index (%)	
2 1/2	2	4.58	3.33	8.04	5.85	
2	1 1/2	6.07	1.57	9.75	2.53	
1 1/2	1	0	0	75.82	1.00	
Flakiness Index = 4.90		dex = 4.90%	Elongation Ind	ex = 9.38%		

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

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

Best Regards,

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Phone: 092-42-9929202 Cable: UNIVENGTECH Fax: 092-42-9922566

Ref.-----

Date:-----

Mr. Muhammad Zain-Ul-Abadeen Resident Engineer, NESPAK, Lahore.

Subject: <u>Testing of Fine Aggregate</u> Tender No. XEN(O&M-I) NT/2024-25/79-Sewerage System in UC-228, Nishter Zone, Lahore

Dear Sir,

It is with reference to your letter No. 43101/MZA/01/1023 dated 03-01-2025. Please find below the results for the tests conducted on the aggregate sample provided to this laboratory on 13-01-2025 through your representative.

1. Sieve Analysis (ASTM C-136)

Sieve Size	#4	#8	#16	#30	#50	#100	#200
%age Passing	100	99.86	99.76	99.54	86.90	8.91	1.39

2. Percentage of Fines (ASTM D-1140) Wet Sieving

	Silt and	l Clay (%)	3.26
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3. Fineness Modulus (ASTM C-142)

Fineness Modulus (%) 1.05

4. Organic Impurities (ASTM C-40)

Organic Impurities Nil

5. Sodium Sulphate Soundness (ASTM C-88)

Sieve Size	Weight of	Weight of	Percentage	Weighted		
	Fraction	Fraction	Passing	Percentage		
	Before Test	After Test	Designated Sieve	Loss		
	(gm)	(gm)	After Test			
#30 to #50	100.0	98.7	1.30	0.16		
Total = 0.16%						

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

Best Regards,

Director Transportation Engineering Laboratory

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Phone: 092-42-9929202 Cable: UNIVENGTECH Fax: 092-42-9922566

Ref.-----



Mr. Muhammad Zain-Ul-Abadeen Resident Engineer, NESPAK, Lahore.

Subject: <u>Testing of Coarse Aggregate</u> Tender No. XEN(O&M-I) NT/2024-25/84 Improvement of Water Supply/Sewerage System in UC-236, Nishter Zone, Lahore

Dear Sir,

It is with reference to your letter No. 43101/MZA/01/1050 dated 03-01-2025. Please find below the results for the tests conducted on the aggregate sample provided to this laboratory on 18-02-2025 through your representative.

1. Sieve Analysis (ASTM C-136)

Sieve Size	1"	3⁄4"	1/2"		3/8"	#4
%age Passing	100	97.09	8.18		1.99	0
				-		

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

Specific Gravity (oven dried condition)	2.81
Specific Gravity (saturated surface dry condition)	2.82
Apparent Specific Gravity	2.84
Water Absorption (%)	0.42

3. Sodium Sulphate Soundness (ASTM C-88)

Sieve Size	Weight of	Weight of	Percentage	Weighted
	Fraction	Fraction	Passing	Percentage
	Before Test	After Test	Designated Sieve	Loss
1/2" + 3/2"	(gm)	(gm)	After Test	
/2 /8	1004.3	994.2	1.01	0.96
			Total = 0.96%	

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

Grading Used	Los Angeles Abrasion Value (%)
В	16.10

Sieve Size		Individual	Weighted	Individual	Weighted	
Passing	Retained	Flakiness	Flakiness Flakiness		Elongation	
(in.)	(in.)	Index (%)	Index (%)	Index (%)	Index (%)	
1	3/4	0	0	23.46	0.68	
3/4	¹ / ₂	6.35	5.65	8.24	7.32	
¹ / ₂	3/8	4.61	0.29	11.04	0.68	
3/8	¹ / ₄	0	0	26.67	0.53	
·		Flakiness In	dex = 5.94%	Elongation Ind	ex = 9.21%	

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

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

Best Regards,

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Director Transportation Engineering Laboratory

Department of Civil Engineering (CED)

UNIVERSITY OF ENGINEERING & TECHNOLOGY (UET) LAHORE – 54890 (PAKISTAN)



Phone: 092-42-9929202 Cable: UNIVENGTECH Fax: 092-42-9922566

Ref.-----

Date:-----

Mr. Salim Javed Resident Engineer, NESPAK, Lahore.

Subject: <u>Testing of Fine Aggregate</u> (Sand) Tender No. XEN(O&M-I) NT/2024-25/72 - Provision of Water Supply and Sewerage System in Azam Chowk to Kamhan Village, UC-249, Nishter Zone, Lahore

Dear Sir,

It is with reference to your letter No. 43101/MZA/01/1128 dated 08-01-2025.

Please find below the results for the tests conducted on the aggregate sample provided to this laboratory on 20-01-2025 through your representative.

1. Sieve Analysis (ASTM C-136)

Sieve Size	#4	#8	#16	#30	#50	#100	#200
SIEVE SILE		110	110	1150	1150	1100	11200
%age Passing	100	99.40	98.89	98.35	96.52	12.76	2.25

2. Percentage of Fines (ASTM D-1140) Wet Sieving

Silt and Clay (%) 3.67

3. Fineness Modulus (ASTM C-142)

Fineness Modulus (%) 0.94

4. Specific Gravity & Water Absorption (ASTM C-128)

Specific Gravity (OD)	2.65
Specific Gravity (SSD)	2.67
Apparent Specific Gravity	2.70
Water Absorption (%)	0.82

5. Organic Impurities (ASTM C-40)

Organic Impurities Nil

Sieve Size	Weight of	Weight of	Percentage	Weighted
	Fraction	Fraction	Passing	Percentage
	Before Test	After Test	Designated Sieve	Loss
	(gm)	(gm)	After Test	
#30 to #50	100.0	98.6	1.40	0.10
			Total =	= 0.10%

6. Sodium Sulphate Soundness (ASTM C-88)

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

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UNIVERSITY OF ENGINEERING & TECHNOLOGY (UET) LAHORE – 54890 (PAKISTAN)

Phone: 092-42-9929202 Cable: UNIVENGTECH Fax: 092-42-9922566

Ref.-----

Mr. Safdar Rashid Resident Engineer, NESPAK.

Subject:Testing of Fine Aggregate (Sand)KBCMA College of Veterinary and Animal Sciences Narowal Campus

Dear Sir,

It is with reference to your letter No. 4650/311/SR/55 dated 22-10-2024. Please find below the results for the tests conducted on the aggregate sample provided to this laboratory on 22-01-2025 through your representative.

1. Sieve Analysis (ASTM C-136)

Sieve Size	#4	#8	#16	#30	#50	#100	#200
%age Passing	100	99.95	99.93	99.72	87.76	9.23	1.38

2. Fineness Modulus (ASTM C-142)

Fineness Modulus (%)

1.03

3. Specific Gravity & Water Absorption (ASTM C-128)

Specific Gravity (OD)	2.65
Specific Gravity (SSD)	2.67
Apparent Specific Gravity	2.70
Water Absorption (%)	0.80

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

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Date:-----

Department of Civil Engineering (CED)

UNIVERSITY OF ENGINEERING & TECHNOLOGY (UET) LAHORE – 54890 (PAKISTAN)



Ref.-----

Date:-----

Mr. Abid Azim Resident Engineer, NESPAK.

Subject: <u>Testing of Aggregate</u> (Granular Sub-base)

Rehabilitation/Improvement of Roads UC 32, 33, 34, 35, Ravi Zone MCL

Dear Sir,

It is with reference to your letter No. 4084/103/LDP/Ravi/04/45 dated 14-01-2025. Please find below the results for the tests conducted on the aggregate sample provided to this laboratory on 24-01-2025 through your representative.

1. Sieve Analysis (ASTM C-136)

Transportation Engineering Laboratory

Sieve Size	1 1/2"	1"	3/4"	1/2"	3/8"	#4
%age Passing	100	89.31	62.48	41.73	36.92	34.27

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

Grading Used	Los Angeles Abrasion Value
A	26.71

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

Best Regards,

Director

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Department of Civil Engineering (CED)

UNIVERSITY OF ENGINEERING & TECHNOLOGY (UET) LAHORE – 54890 (PAKISTAN)



Date:-----

Phone: 092-42-9929202 Cable: UNIVENGTECH Fax: 092-42-9922566

Ref.-----

Mr. Ahsan Munir Project Manager, Safiya Homes Private Limited.

Subject: <u>Testing of Asphalt Core</u>

Dear Sir,

It is with reference to your letter No. Nil dated 23-01-2025. Please find below the results for the tests conducted on asphalt concrete core provided to this laboratory through your representative.

BULK SPECIFIC GRAVITY OF COMPACTED ASPHALT (ASTM D2726):

Mean Thickness	Mean Diameter	Bulk
(cm)	(cm)	Specific Gravity
6.450	9.600	2.399

BITUMEN EXTRACTION TEST: (Core)

Bitumen Extraction Vo	ulue (AS	TM D-	2172)				4.4	41%	
Gradation Analysis									
Sieve No.			3/4"	1/2"	3/8"	#4	#8	#50	#200
% Passing	7		100	93.64	73.13	54.41	26.78	8.77	2.81

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

Best Regards, Note: 1. This test report is based solely on the particular sample(s) supplied by the client and should not be reproduced in parts. 2. Sampling has not been performed by Transportation Engineering Laboratory (TEL), UET and TEL-UET does not accept the responsibility that the sample(s) supplied is/are truly representative sample(s) of any batch or stock or entire Director project. Transportation Engineering Laborato 3. While TEL-UET agrees to take every reasonable precaution to ensure validity of its test results, it assumes no liability thereof beyond the amount of the fee charged for the analysis or test. 4. The party shall assume full responsibility for the ethical use of the results in the test reports and the TEL-UET shall be held free from any and all claims which may result from the use of such data by client or others. 5. This test report shall not be reproduced wholly or in parts unless negotiated.

Department of Civil Engineering (CED)

UNIVERSITY OF ENGINEERING & TECHNOLOGY (UET) LAHORE – 54890 (PAKISTAN)

Phone: 092-42-9929202 Cable: UNIVENGTECH Fax: 092-42-9922566

Ref.-----

Mr. Abid Azim Resident Engineer, NESPAK.

Subject:

Testing of Aggregate (Granular Sub-base)

- 1. Rehabilitation/Improvement of Roads UC 01, Ravi Zone MCL
- 2. Rehabilitation/Improvement of Roads UC 10, 11 & 12, Ravi Zone MCL

Dear Sir,

It is with reference to your letter No. 4084/103/LDP/Ravi/04/54 dated 04-02-2025. 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	2"	1"	3/8"	#4	#10	#40	#200
%age Passing	100	78.39	58.11	41.97	35.02	27.72	8.87

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

	Grading	Used	Los Angeles Abrasion Value
			(%)
	А		25.74

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Best Regards, Director Transportation Engineering Laboratory	 Note: 1. This test report is based solely on the particular sample(s) supplied by the client and should not be reproduced in parts. 2. Sampling has not been performed by Transportation Engineering Laboratory (TEL), UET and TEL-UET does not accept the responsibility that the sample(s) supplied is/are truly representative sample(s) of any batch or stock or entire project. 3. While TEL-UET agrees to take every reasonable precaution to ensure validity of its test results, it assumes no liability thereof beyond the amount of the fee charged for the analysis or test. 4. The party shall assume full responsibility for the ethical use of the results in the test reports and the TEL-UET shall be held free from any and all claims which may result from the use of such data by client or others. 5. This test report shall not be reproduced wholly or in parts unless negotiated.
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Department of Civil Engineering (CED)

UNIVERSITY OF ENGINEERING & TECHNOLOGY (UET) LAHORE – 54890 (PAKISTAN)



Ref.-----

Date:-----

The Sub Divisional Officer, Head Works Sub Division, Suliemanki.

Subject: <u>Testing of Fine Aggregate</u> (Sand) Reconstruction of Residences and Allied Structures in Canal Colony, Suliemanki Barrage

Dear Sir,

It is with reference to your letter No. 73-75 dated 08-02-2025.

Please find below the results for the tests conducted on the aggregate sample provided to this laboratory on 18-02-2025 through your representative.

1. Sieve Analysis (ASTM C-136)

Sieve Size	3/8"	#4	#8	#16	#30	#50	#100	#200
%age Passing	100	98.34	88.23	68.89	53.68	28.01	3.43	1.46

2. Fineness Modulus (ASTM C-142)

Fineness Modulus (%)

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

Best Regards,

Director Transportation Engineering Laboratory

Note:

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2.59

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Department of Civil Engineering (CED)

UNIVERSITY OF ENGINEERING & TECHNOLOGY (UET) LAHORE – 54890 (PAKISTAN)



Ref.-----

Date:-----

Mr. Muhammad Furqan Alam Resident Engineer, HA Consulting – JV – Mascon Associates.

Subject: <u>Testing of Fine Aggregate</u> (Lawrancepur Sand)

Dear Sir,

It is with reference to your letter No. 25/HAC-MAS/RE/Sharaqpur/115 dated 24-02-2025. 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	1/2"	3/8"	#4	#8	#16	#30	#50	#100	#200
%age Passing	100	98.90	95.59	90.48	79.88	64.07	26.99	5.29	1.00

2. Fineness Modulus (ASTM C-142)

Fineness Modulus (%)	2.39
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If you have further query, please do not hesitate to contact the undersigned.

Best Regards,

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supplied is/are truly representative sample(s) of any batch or stock or entire project.3. While TEL-UET agrees to take every reasonable precaution to ensure validity of its test results, it assumes no liability thereof beyond the amount of the fee

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Department of Civil Engineering (CED)

UNIVERSITY OF ENGINEERING & TECHNOLOGY (UET) LAHORE – 54890 (PAKISTAN)



Phone: 092-42-9929202 Cable: UNIVENGTECH Fax: 092-42-9922566

Ref.-----

Date:-----

Mr. Hammad Javeed Resident Engineer, Jaranwala, HA Consulting – JV – Mascon Associates.

Subject: <u>Testing of Fine Aggregate</u> (Harrow Sand)

Dear Sir,

It is with reference to your letter No. 25/HAC-MAS/RE/JRW/0017 dated 27-02-2025. 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	1/2"	3/8"	#4	#8	#16	#30	#50	#100	#200
%age Passing	100	<u>98.94</u>	95.82	90.78	80.01	64.05	27.04	5.49	1.10

2. Fineness Modulus (ASTM C-142)

Fineness Modulus (%)	2.38
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If you have further query, please do not hesitate to contact the undersigned.

Best Regards,

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Department of Civil Engineering (CED)

UNIVERSITY OF ENGINEERING & TECHNOLOGY (UET) LAHORE - 54890 (PAKISTAN)

Phone: 092-42-9929202 Cable: UNIVENGTECH Fax: 092-42-9922566

Ref.-----

Date:-----

Mr. Asad Shiekh CEO SAR Construction Company.

Testing of Aggregate (Base Course) Subject: Construction of Al-Ghani Garden Phase-7

Dear Sir,

It is with reference to your letter No. SAR/Al-Ghani Garden Phase-7/03/2025 dated 10-03-2025. Please find below the results for the test conducted on the aggregate sample provided to this laboratory through your representative.

Sieve Analysis (ASTM C-136)

Sieve Size	2"	1"	3/8"	#4	#10	#40	#200
%age Passing	100	70.00	48.00	27.00	17.00	12.00	8.00

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

Best Regards,

Director project. Transportation Engineering Laboratory

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