

To,
 Mr. Hamid Javid (AE B&R)
 GE (Air) Rafiqui
 PAF Base Rafiqui (a. Rehabilitation of Secondary School, B-1, B-3, b. Rehabilitation Class Rooms
 Secondary School B-5, c. Rehabilitation of Class Rooms Alongwith Lavatory Block,

Reference # CED/TFL 7351 (Dr. Rizwan Riaz)
 Reference of the request letter # 6000-AU/16/E-6

Dated: 08-08-2025
 Dated: 04-08-2025

Tension Test Report (Page-1/2)

Date of Test 18-08-2025
 Gauge Length 2 inches
 Description Girder Strip Tensile and Bend Test Report

Sr. No.	Designation	Size of Strip	X Section Area	Yield Load	Breaking Load	Yield Stress	Ultimate Stress	Elongation	% Elongation	Remarks
	(Inch)	(mm)	(mm ²)	(kg)	(kg)	(MPa)	(MPa)	(inch)		
1	Girder	9.70 x 33.20	322.04	13530	19130	412.2	582.7	0.7	35.0	-
2	Girder	9.70 x 33.50	324.95	12490	18470	377.1	557.6	0.5	25.0	-
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-

Note: Only 2 Samples for Tensile and 1 Samples for Bend test

Bend Test

Girder Strip Bend Test Through 180 Degree is Satisfactory

Test Performed and Verified by:

To,
 Mr. Hamid Javid (AE B&R)
 GE (Air) Rafiqui
 PAF Base Rafiqui (a. Rehabilitation of Secondary School, B-1, B-3, b. Rehabilitation Class Rooms
 Secondary School B-5, c. Rehabilitation of Class Rooms Along with Lavatory Block, Library and
 Computer Lab (B-7, B-8)

Reference # CED/TFL **7351** (Dr. Rizwan Riaz)
 Reference of the request letter # 6000-AU/16/E-6

Dated: 08-08-2025
 Dated: 04-08-2025

Weight & Size Test Report (Page – 2/2)

Date of Test 18-08-2025
 Description Girder Unit Weight and Size Test

Sr. No.	Designation	Weight	Length	Weight per Unit Length	Web Thickness	Height /Depth	Web Flange	Flange Thickness
	(inch)	(g)	(mm)	(kg/m)	(mm)	(mm)	(mm)	(mm)
1	Girder	8329	154.3	53.98	9.8	302.1	153.4	13.6
-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-
Only one sample for test								
-	-	-	-	-	-	-	-	-

Test Performed and Verified by:

To,

Mr. Mehran Ali (Resident Engineer)

AZ Engineering Associates

Improvement of Road From Hafizabad to Gujrat via Head Khanki Along Lower Chenab Canal (L.C.C. Main) Length =45.00 KMS in Districts Hafizabad & Gujranwala (Section-1 K.M. No.0.00 ton 19.97 KM

Reference # CED/TFL 7356 (Dr. Rizwan Riaz)

Dated: 11-08-2025

Reference of the request letter # AZEA/RE/HFZ/722

Dated: 21-07-2025

Tension Test Report (Page-1/1)

Date of Test 18-08-2025

Gauge Length 8 inches

Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Actual Weight Per Unit Length (lb/ft)	Nominal Size (#)	Actual Diameter (inch)	Area (in ²)		Yield Load (kg)	Breaking Load (kg)	Yield Stress (psi)		Ultimate Stress (psi)		Elongation (inch)	% Elongation	Remarks
				Nominal	Actual			Nominal	Actual	Nominal	Actual			
1	0.360	3	0.367	0.110	0.106	3010	4380	60309	62764	87759	91331	1.1	13.8	-
2	0.363	3	0.368	0.110	0.107	3010	4400	60309	62243	88160	90987	1.2	15.0	-
3	4.343	10	1.275	1.270	1.276	44200	58400	76706	76335	101349	100858	1.5	18.8	-
4	4.366	10	1.278	1.270	1.283	45400	58800	78789	77999	102043	101021	1.4	17.5	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Note: Only 4 Samples for Tensile and 2 Samples for Bend test

Bend Test

3 Bar Bend Test Through 180 Degree is Satisfactory

10 Bar Bend Test Through 180 Degree is Satisfactory

Test Performed and Verified by:

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To,
 Mr. Muhammad Yousaf Afridi (Resident Engineer PMCSC)
 Minconsult SDN BHD JV Creative Engineering Consultants
 KPK Cities Improvement Project OCB-KPCIP-CW-02: Procurment of Works for Improvement /
 Construction of Water Suply System: LOT-3: Imrovment of Water Supply System with Scada in Kohat

Reference # CED/TFL 7363 (Dr. Rizwan Riaz)
 Reference of the request letter # KPCIP/PMCSC/CW-02/LOT-03/915

Dated: 12-08-2025
 Dated: 12-08-2025

Tension Test Report (Page-1/2)

Date of Test 18-08-2025
 Gauge Length 2 inches
 Description GI Pipe Strip Tensile Test Report

Sr. No.	Designation	Size of Strip	X Section Area	Yield Load	Breaking Load	Yield Stress	Ultimate Stress	Elongation	% Elongation	Remarks
	(Inch)	(mm)	(mm ²)	(kg)	(kg)	(MPa)	(MPa)	(inch)		
1	G.I Pipe	4.50 x 24.10	108.45	4050	5270	366.3	476.7	0.7	35.0	IIL Brand
2	G.I Pipe	4.40 x 24.50	107.80	4080	5350	371.3	486.9	0.7	35.0	IIL Brand
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-

Note: Only 2 Samples for Tensile and 0 Samples for Bend test

Bend Test

Test Performed and Verified by:

To,
 Mr. Muhammad Yousaf (Resident Engineer PMCSC-KPCIP)
 Minconsult SDN BHD JV Creative Engineering Consultants
 KPK Cities Improvement Project OCB-KPCIP-CW-02: Procurment of Works for Improvement /
 Construction of Water Suply System: LOT-3: Imrovment of Water Supply System with Scada in
 Kohat

Reference # CED/TFL **7363** (Dr. Rizwan Riaz) Dated: 12-08-2025
 Reference of the request letter # KPCIP/PMCSC/CW-02/LOT-03/915 Dated: 12-08-2025

Weight & Size Test Report (Page – 2/2)

Date of Test 18-08-2025
 Description G.I Pipe Unit Weight and Size Test

Sr. No.	Designation	Weight	Length	Weight per Unit Length	Dia	Thickness	Remark
	(inch)	(g)	(cm)	(kg/m)	(mm)	(mm)	
1	G.I Pipe	1548	126.4	12.25	114.1	4.5	-
2	G.I Pipe	1521	124.1	12.26	114.4	4.7	-
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-
Only two samples for test							
-	-	-	-	-	-	-	-

Test Performed and Verified by:

To,
 Admin Manager
 Malik Nawaz Javeed
 Construction of Canal Walk
 (Kamran Steel)

Reference # CED/TFL 7368 (Dr. Rizwan Riaz)
 Reference of the request letter # Nil

Dated: 13-08-2025
 Dated: 12-08-2025

Tension Test Report (Page-1/1)

Date of Test 18-08-2025
 Gauge Length 8 inches
 Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Actual Weight Per Unit Length (lb/ft)	Nominal Size (#)	Actual Diameter (inch)	Area (in ²)		Yield Load (kN)	Breaking Load (kN)	Yield Stress (psi)		Ultimate Stress (psi)		Elongation (inch)	% Elongation	Remarks
				Nominal	Actual			Nominal	Actual	Nominal	Actual			
1	0.364	3	0.369	0.110	0.107	34.50	52.70	70480	72476	107661	110709	1.0	12.5	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Note: Only 1 Samples for Tensile and 1 Samples for Bend test														

Bend Test	
# 3 Bar Bend Test Through 180 Degree is Satisfactory	

Test Performed and Verified by:

To,

Mr. Ahsan Rasheed
Syed Brother (Pvt.) Ltd.
4 Kanal Rehman Shaheed Road Gujrat

Reference # CED/TFL 7369 (Dr. Rizwan Riaz)
Reference of the request letter # Nil

Dated: 13-08-2025
Dated: 12-08-2025

Tension Test Report (Page-1/1)

Date of Test 18-08-2025
Gauge Length 8 inches
Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Actual Weight Per Unit Length (lb/ft)	Nominal Size (#)	Actual Diameter (inch)	Area (in ²)		Yield Load (kN)	Breaking Load (kN)	Yield Stress (psi)		Ultimate Stress (psi)		Elongation (inch)	% Elongation	Remarks
				Nominal	Actual			Nominal	Actual	Nominal	Actual			
1	0.368	3	0.371	0.110	0.108	27.50	40.20	56180	57224	82125	83652	1.3	16.3	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Note: Only 1 Samples for Tensile and 0 Samples for Bend test

Bend Test														

Test Performed and Verified by:

To,

Assistant Project Director

PMU-SBP (Faisalabad)

Establishment of Sports Complex at Tehsil Pirmahal District Toba Tek Singh, GS#265

(Pavillion, Gymnasium, Boundary Wall)

Reference # CED/TFL

7371 (Dr. Rizwan Riaz)

Dated: 13-08-2025

Reference of the request letter #

APD/PMU/SBP/TEST/1111

Dated: 11-08-2025

Tension Test Report

(Page-1/1)

Date of Test 18-08-2025

Gauge Length 8 inches

Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Actual Weight Per Unit Length (lb/ft)	Nominal Size (#)	Actual Diameter (inch)	Area (in ²)		Yield Load (kN)	Breaking Load (kN)	Yield Stress (psi)		Ultimate Stress (psi)		Elongation (inch)	% Elongation	Remarks
				Nominal	Actual			Nominal	Actual	Nominal	Actual			
1	0.386	3	0.380	0.110	0.113	35.70	52.00	72932	70745	106231	103046	1.1	13.8	-
2	0.381	3	0.377	0.110	0.112	35.50	52.00	72523	71350	106231	104512	1.2	15.0	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Note: Only 2 Samples for Tensile and 1 Samples for Bend test

Bend Test

3 Bar Bend Test Through 180 Degree is Satisfactory

Test Performed and Verified by:

To,

Engr. Ch. Liaqat Ali (Resident Engineer)
G3 Engineering Consultants (Pvt.) Ltd.
Consultancy Services for Resident Construction Supervision for Construction of GOR, Near DHA
Phase-IX, Lahore (Kamran Steel)

Reference # CED/TFL 7373-5 (Dr. Rizwan Riaz)
Reference of the request letter # G3/0340/1058

Dated: 15-08-2025
Dated: 07-08-2025

Tension Test Report (Page-1/1)

Date of Test 18-08-2025
Gauge Length 8 inches
Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Actual Weight Per Unit Length (lb/ft)	Nominal Size (#)	Actual Diameter (inch)	Area (in ²)		Yield Load (kN)	Breaking Load (kN)	Yield Stress (psi)		Ultimate Stress (psi)		Elongation (inch)	% Elongation	Remarks
				Nominal	Actual			Nominal	Actual	Nominal	Actual			
1	0.404	3	0.389	0.110	0.119	37.70	51.00	77017	71336	104188	96503	1.1	13.8	-
2	0.407	3	0.390	0.110	0.12	38.20	51.70	78039	71787	105618	97157	1.1	13.8	-
3	0.404	3	0.389	0.110	0.119	36.2	50	73953	68498	102145	94611	1.2	15.0	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Note: Only 3 Samples for Tensile and 1 Samples for Bend test

Bend Test

3 Bar Bend Test Through 180 Degree is Satisfactory

Test Performed and Verified by:

To,

Riaz Sons & Company
Construction of Bridge and Drain at TNB
(Kamran Steel)

Reference # CED/TFL 7374 (Dr. Rizwan Riaz)
Reference of the request letter # NLC Thokar

Dated: 15-08-2025
Dated: 15-08-2025

Tension Test Report (Page-1/1)

Date of Test 18-08-2025
Gauge Length 8 inches
Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Actual Weight Per Unit Length (lb/ft)	Nominal Size (#)	Actual Diameter (inch)	Area (in ²)		Yield Load (kg)	Breaking Load (kg)	Yield Stress (psi)		Ultimate Stress (psi)		Elongation (inch)	% Elongation	Remarks
				Nominal	Actual			Nominal	Actual	Nominal	Actual			
1	0.380	3	0.377	0.110	0.112	3520	4660	70528	69413	93369	91893	1.1	13.8	-
2	0.391	3	0.383	0.110	0.115	5250	6370	105191	100661	127632	122135	0.7	8.8	-
3	4.309	10	1.270	1.270	1.266	34800	50400	60393	60571	87466	87724	1.5	18.8	-
4	4.203	10	1.254	1.270	1.235	33200	50000	57616	59241	86772	89219	1.7	21.3	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Note: Only 4 Samples for Tensile and 2 Samples for Bend test

Bend Test

3 Bar Bend Test Through 180 Degree is Satisfactory

10 Bar Bend Test Through 180 Degree is Satisfactory

Test Performed and Verified by:

To,

Director Projects
Sheikhoo Sugar Mills , Anwar Abad Kot Addu, Muzaffargarh
Sheikhoo Steel

Reference # CED/TFL 7376 (Dr. Rizwan Riaz)

Dated: 15-08-2025

Reference of the request letter # Nil

Dated: 12-08-2025

Tension Test Report (Page-1/1)

Date of Test 18-08-2025

Gauge Length 8 inches

Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Actual Weight Per Unit Length (lb/ft)	Nominal Size (mm)	Actual Diameter (inch)	Area (in ²)		Yield Load (kN)	Breaking Load (kN)	Yield Stress (psi)		Ultimate Stress (psi)		Elongation (inch)	% Elongation	Remarks
				Nominal	Actual			Nominal	Actual	Nominal	Actual			
1	0.409	10	0.391	0.120	0.12	41.50	54.00	77715	77683	101124	101081	0.9	11.3	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Note: Only 1 Samples for Tensile and 1 Samples for Bend test

Bend Test

10mm Bar Bend Test Through 180 Degree is Satisfactory

Test Performed and Verified by:

To,

District Engineer Chitral,
PATRIP Project SRSP, Chitral
Construction of Patai and Ursoon Bridges in UC Ashrait Citral (PAK-SRSP-CHI-019)

Reference # CED/TFL **7379** (Dr. Rizwan Riaz)
Reference of the request letter # Nil

Dated: 18-08-2025
Dated: 15-08-2025

Tension Test Report (Page – 1/1)

Date of Test 18-08-2025
Description Steel Wire Rope Tensile Test

Sr. No.	Nominal Diameter	Measured weight			Breaking Load	Remarks / Coil No.
	(mm)	Weight (g)	Length (cm)	(kg/m)	(kg)	
1	32 (6x36)	4315	99.5	4.34	61800	-
2	32 (6x36)	4455	102.2	4.36	60800	-
3	32 (6x36)	4325	99.4	4.35	54400	-
-	-	-	-	-	-	-
-	-	-	-	-	-	-
-	-	-	-	-	-	-
Only three samples for test						
-	-	-	-	-	-	-

Test Performed and Verified by:

To,

Syed Bilal Ghazi (Chief Material Specialist)
Nespak (Pvt.) Ltd.
Consultancy Services for Construction of Rathoa-Haryam Bridge, MirpurAJK
Witness by: Syed Bilal Ghazi (Chief Material Specialist, NEspak)

Reference # CED/TFL **7380** (Dr. Rizwan Riaz)
Reference of the request letter # 3366/03/CRM/01/181

Dated: 18-08-2025
Dated: 17-08-2025

Tension Test Report (Page -1/2)

Date of Test 18-08-2025
Gauge length 600 mm
Description Steel Strand Tensile Test as per ASTM A-416

Sr. No.	Nominal Diameter	Nominal Weight	Measured weight	Yield strength clause (6.3)		Breaking strength clause (6.2)		Young's Modulus of Elasticity "E"	% Elongation	Remarks / Coil No.
	(mm)	(kg/km)	(kg/km)	(kg)	(kN)	(kg)	(kN)	GPa		
1	15.24 (0.6")	1102.0	1112.0	24500	240.35	27200	266.83	204	>3.50	-
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
Only one sample for test										

Note:

1. Modulus of Elasticity is based on nominal steel area of the steel strand vide clause 13.3 of ASTM – A416a
2. Load versus percentage strain graphs are attached

Test Performed and Verified by:

To,

Syed Bilal Ghazi (Chief Material Specialist)
Nespak (Pvt.) Ltd.
Consultancy Services for Construction of Rathoa-Haryam Bridge, MirpurAJK

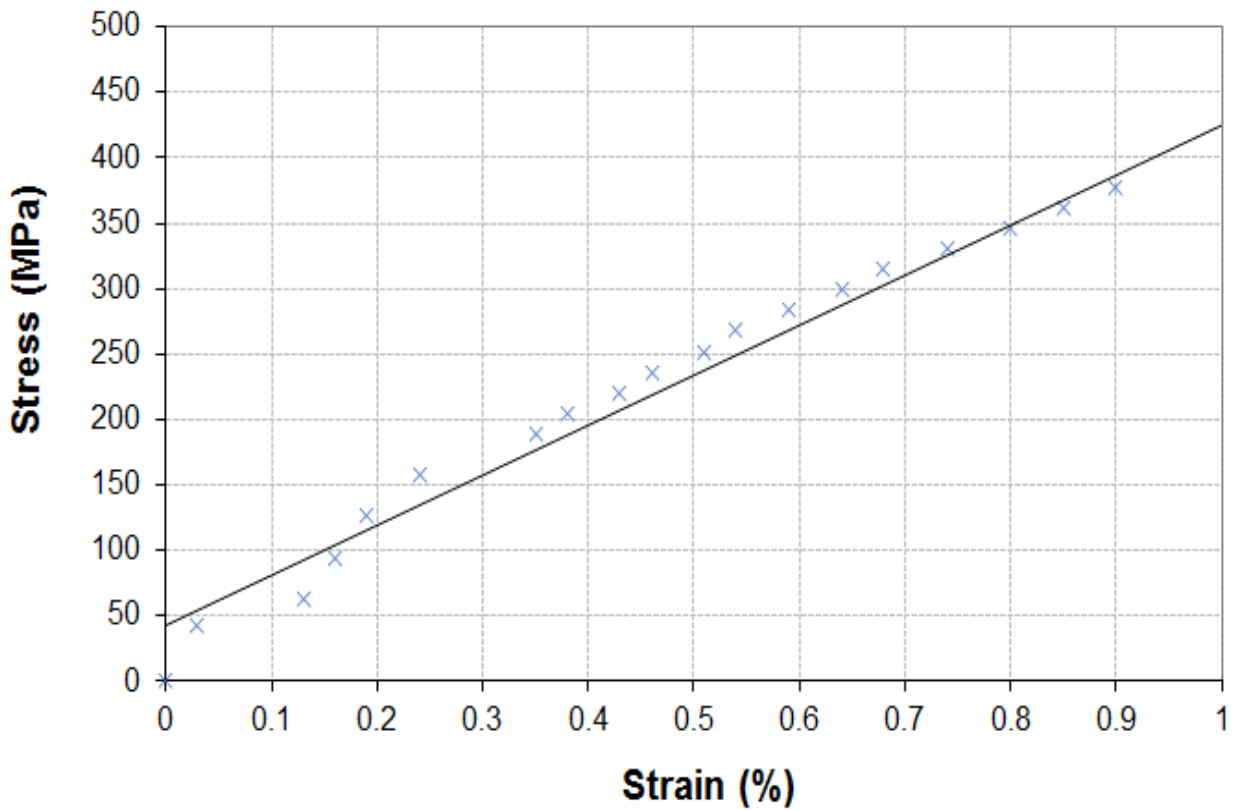
Reference # CED/TFL **7380** (Dr. Rizwan Riaz)
Reference of the request letter # 3366/03/CRM/01/181

Dated: 18-08-2025

Dated: 17-08-2025

Graph (Page – 2/2)

Stress Strain Relation



Test Performed and Verified by: