



**STRUCTURAL ENGINEERING DIVISION**  
**Test Floor Laboratory**  
**Department of Civil Engineering**  
**University of Engineering and Technology Lahore, 54890**  
**Pakistan. Ph: 92-42-99029202**

To,

Lab Manager  
China Gezhouba Group C., Ltd.  
CGGC Dasu Hydropower Project Management in Pakistan  
Dasu Hydropower Project

Reference # CED/TFL **5467** (Dr. Safer Abbass)

Dated: 06-08-2024

Reference of the request letter # CGGC/MW-1/MW-2/MI/AFI/2024-103

Dated: 04-08-2024

**Tension Test Report** (Page – 1/6)

Date of Test 19-08-2024

Gauge length 600 mm

Description Steel Strand Tensile Test as per ASTM A-416-94a

Sr. No.	Nominal Diameter	Nominal Weight	Measured weight	Yield strength clause (6.3)		Breaking strength clause (6.2)		Young's Modulus of Elasticity	% Elongation	Remarks / Coil No.
	(mm)	(kg/km)	(kg/km)	(kg)	(kN)	(kg)	(kN)	E, GPa		
1	15.24 (0.6")	1100.0	1126.0	23900	234.46	27000	264.87	199	>3.50	xx
2	15.24 (0.6")	1100.0	1126.0	24500	240.35	27300	267.81	198	>3.50	xx
3	15.24 (0.6")	1100.0	1125.0	25800	253.10	27300	267.81	199	>3.50	xx
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	

**Only three samples 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

**I/C Testing Laboratoires**  
**UET Lahore, Pakistan.**

Note:

- 1- You can See your reports On Internet in the following web site  
[http://www.uet.edu.pk/faculties/facultiesinfo/civil/index.html?RID=testing\\_reports](http://www.uet.edu.pk/faculties/facultiesinfo/civil/index.html?RID=testing_reports)
2. The above results pertain to sample /samples supplied to this laboratory.
- 3- Sealed sample / Unsealed sample / Marked sample/Signed Samples



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**Test Floor Laboratory**  
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**University of Engineering and Technology Lahore, 54890**  
**Pakistan. Ph: 92-42-99029202**

To,

Lab Manager  
China Gezhouba Group C., Ltd.  
CGGC Dasu Hydropower Project Management in Pakistan  
Dasu Hydropower Project

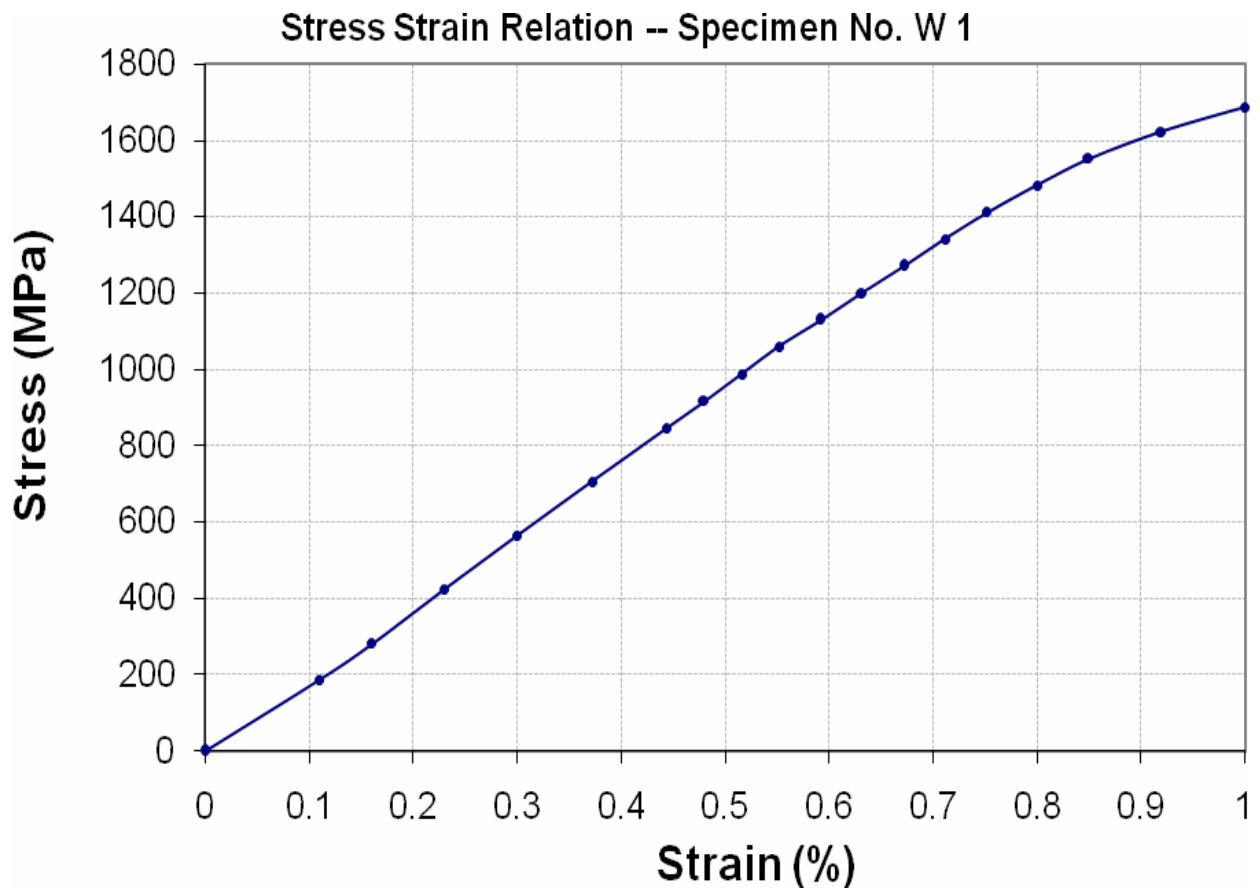
Reference # CED/TFL **5467** (Dr. Safer Abbass)

Dated: 06-08-2024

Reference of the request letter # CGGC/MW-1/MW-2/MI/AFI/2024-103

Dated: 04-08-2024

**Graph** (Page – 2/6)



**I/C Testing Laboratories**  
**UET Lahore, Pakistan.**

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CGGC Dasu Hydropower Project Management in Pakistan  
Dasu Hydropower Project

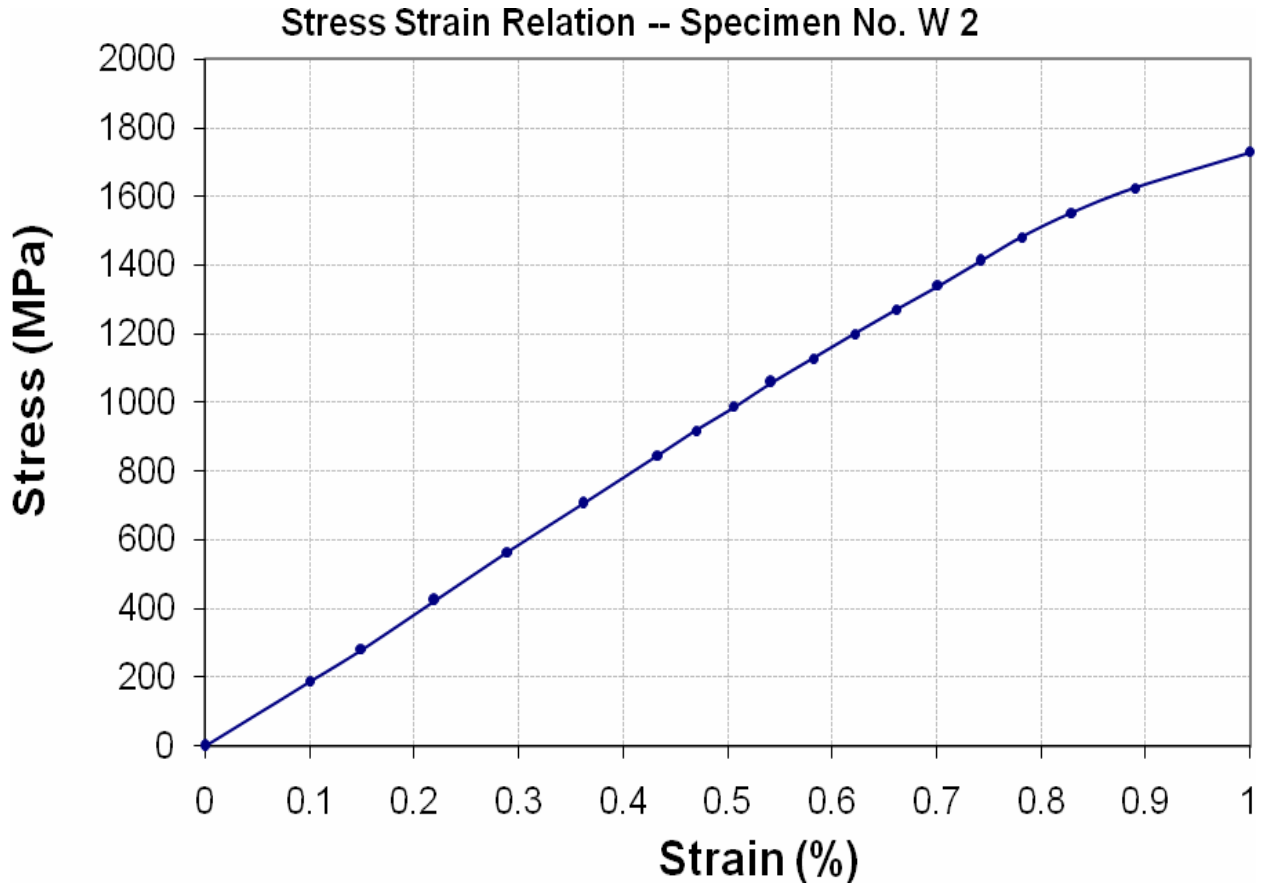
Reference # CED/TFL **5467** (Dr. Safer Abbass)

Dated: 06-08-2024

Reference of the request letter # CGGC/MW-1/MW-2/MI/AFI/2024-103

Dated: 04-08-2024

**Graph** (Page – 3/6)



**I/C Testing Laboratories**  
**UET Lahore, Pakistan.**

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**University of Engineering and Technology Lahore, 54890**  
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To,

Lab Manager  
China Gezhouba Group C., Ltd.  
CGGC Dasu Hydropower Project Management in Pakistan  
Dasu Hydropower Project

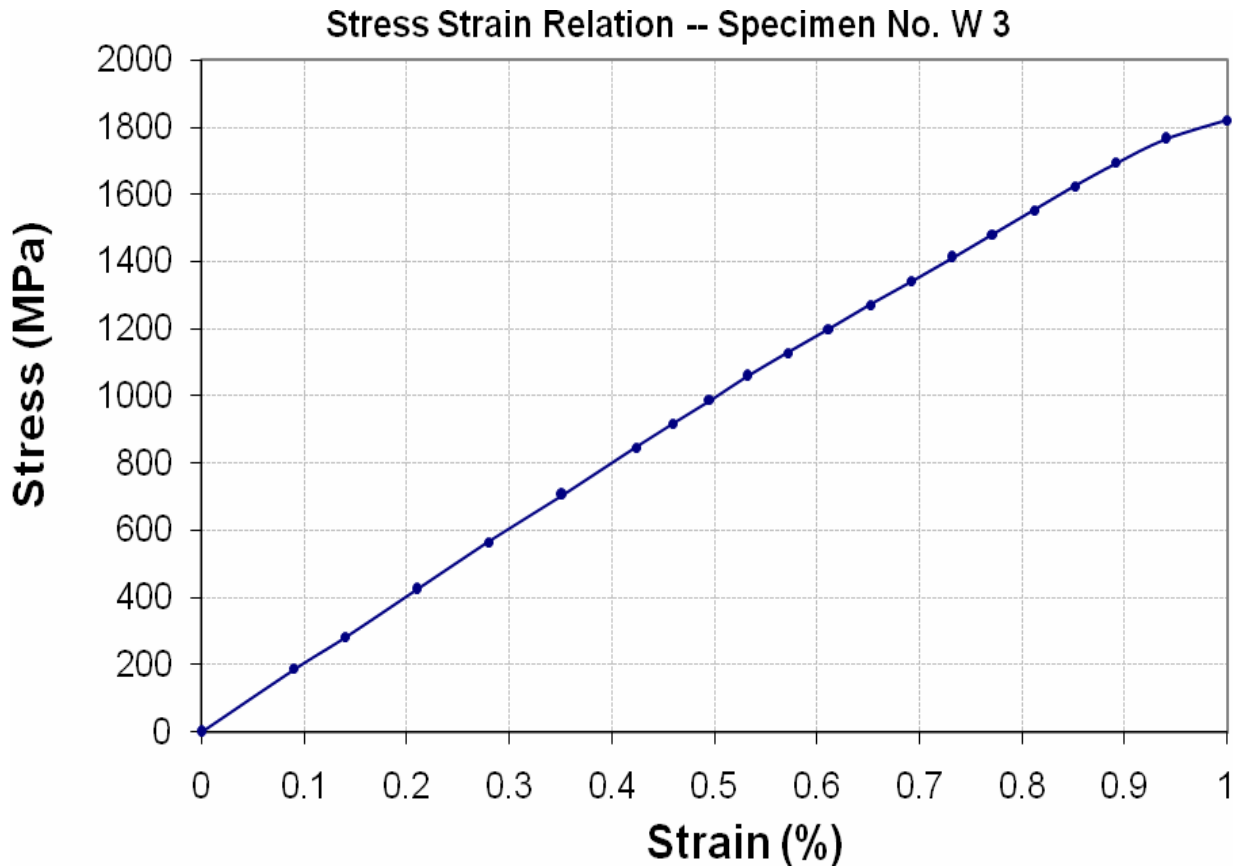
Reference # CED/TFL **5467** (Dr. Safer Abbass)

Dated: 06-08-2024

Reference of the request letter # CGGC/MW-1/MW-2/MI/AFI/2024-103

Dated: 04-08-2024

**Graph** (Page – 4/6)



**I/C Testing Laboratoires**  
**UET Lahore, Pakistan.**

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**University of Engineering and Technology Lahore, 54890**  
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To,

Lab Manager  
China Gezhouba Group C., Ltd.  
CGGC Dasu Hydropower Project Management in Pakistan  
Dasu Hydropower Project

Reference # CED/TFL **5467** (Dr. Safer Abbass)

Dated: 06-08-2024

Reference of the request letter # CGGC/MW-1/MW-2/MI/AFI/2024-39

Dated: 04-08-2024

**Tension Test Report** (Page – 1/6)

Date of Test 19-08-2024

Gauge length 600 mm

Description Steel Strand Tensile Test as per ASTM A-416-94a

Sr. No.	Nominal Diameter	Nominal Weight	Measured weight	Yield strength clause (6.3)		Breaking strength clause (6.2)		Young's Modulus of Elasticity	% Elongation	Remarks / Coil No.
	(mm)	(kg/km)	(kg/km)	(kg)	(kN)	(kg)	(kN)	E, GPa		
1	15.24 (0.6")	1100.0	1123.0	24500	240.35	27400	268.79	199	>3.50	xx
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	

**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

**I/C Testing Laboratoires**  
**UET Lahore, Pakistan.**

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**Test Floor Laboratory**  
**Department of Civil Engineering**  
**University of Engineering and Technology Lahore, 54890**  
**Pakistan. Ph: 92-42-99029202**

To,

Lab Manager  
China Gezhouba Group C., Ltd.  
CGGC Dasu Hydropower Project Management in Pakistan  
Dasu Hydropower Project

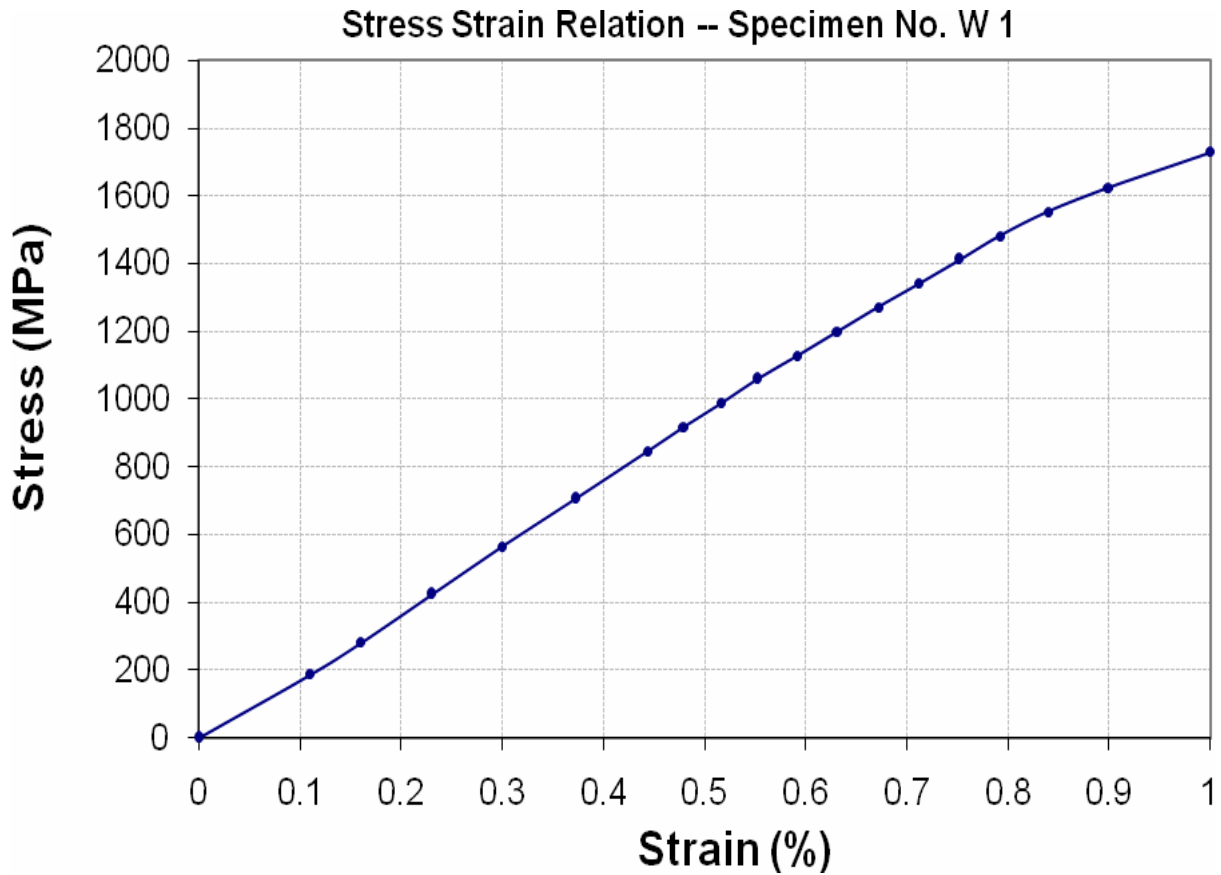
Reference # CED/TFL **5467** (Dr. Safer Abbass)

Dated: 06-08-2024

Reference of the request letter # CGGC/MW-1/MW-2/MI/AFI/2024-39

Dated: 04-08-2024

**Graph** (Page – 6/6)



**I/C Testing Laboratories**  
**UET Lahore, Pakistan.**

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**Test Floor Laboratory**  
**Department of Civil Engineering**  
**University of Engineering and Technology Lahore, 54890**  
**Pakistan. Ph: 92-42-99029202**

To,

Garrison Engineer (Army)  
Multan Cantt  
(CA No. ENC-A-46/2024 - Const of BDE Office Block for HQ SC at Multan)

Reference # CED/TFL **5505** (Dr. M Rizwan Riaz)  
Reference of the request letter # 6331/17/E-6

Dated: 13-08-2024  
Dated: 02-08-2024

**Tension Test Report** (Page -1/1)

Date of Test 19-08-2024  
Gauge length 8 inches  
Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight (lbs/ft)	Diameter/ Size (inch)		Area (in <sup>2</sup> )		Yield load (kg)	Breaking Load (kg)	Yield Stress (psi)		Ultimate Stress (psi)		Elongation (inch)	% Elongation	Remarks
		Nominal	Actual	Nominal	Actual			Nominal	Actual	Nominal	Actual			
1	0.375	3/8	0.375	0.11	0.110	3470	5100	69600	69410	102200	102100	1.10	13.8	
2	0.377	3/8	0.376	0.11	0.111	3430	5220	68800	68140	104600	103700	1.00	12.5	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>Note: only twone samples for tensile and one sample for bend test</b>														
Bend Test														
3/8" Dia Bar Bend Test Through 180° is Satisfactory														

**I/C Testing Laboratoires**  
**UET Lahore, Pakistan.**

Note:

- 1- You can See your reports On Internet in the following web site  
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**STRUCTURAL ENGINEERING DIVISION**  
**Test Floor Laboratory**  
**Department of Civil Engineering**  
**University of Engineering and Technology Lahore, 54890**  
**Pakistan. Ph: 92-42-99029202**

To,  
Project Manager,  
HIGH-Q  
Construction of HIGH-Q Mall at 3-A, Gulberg II, Lahore.

Reference # CED/TFL **5510** (Dr. Rizwan Azam)  
Reference of the request letter # QC/HQ/CIVIL/228

Dated: 15-08-2024  
Dated: 15-08-2024

**Tension Test Report** (Page -1/1)

Date of Test 19-08-2024  
Gauge length 8 inches  
Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight (lbs/ft)	Diameter/ Size (mm)		Area (in <sup>2</sup> )		Yield load (kg)	Breaking Load (kg)	Yield Stress (psi)		Ultimate Stress (psi)		Elongation (inch)	% Elongation	Remarks
		Nominal	Actual	Nominal	Actual			Nominal	Actual	Nominal	Actual			
1	0.407	10	9.92	0.12	0.120	3980	5300	73119	73290	97370	97600	1.10	13.8	
2	0.401	10	9.84	0.12	0.118	3980	5250	73119	74370	96451	98100	1.10	13.8	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>Note: only two samples for tensile and one sample for bend test</b>														
Bend Test														
10mm Bar Bend Test Through 180° is Satisfactory														

**I/C Testing Laboratoires**  
**UET Lahore, Pakistan.**

Note:

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**STRUCTURAL ENGINEERING DIVISION**  
**Test Floor Laboratory**  
**Department of Civil Engineering**  
**University of Engineering and Technology Lahore, 54890**  
**Pakistan. Ph: 92-42-99029202**

To,

Assistant Resident Engineer  
 MM Pakistan (Pvt) Ltd.  
 Package-03 (PCP) Gojra.  
 “Upgradation of Sewerage System and Construction of Waste Water Treatment Plant  
 (WWTP) Gojra City., Package 01 – Sewerage System”

Reference # CED/TFL **5511-12** (Dr. Usman Akmal)

Dated: 15-08-2024

Reference of the request letter # MMP/1095/Gojra/SEW/54/2024

Dated: 08-08-2024

**Tension Test Report** (Page -1/1)

Date of Test 19-08-2024

Gauge length 8 inches

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

Sr. No.	Weight (lbs/ft)	Diameter/ Size (inch)		Area (in <sup>2</sup> )		Yield load (kg)	Breaking Load (kg)	Yield Stress (psi)		Ultimate Stress (psi)		Elongation (inch)	% Elongation	Remarks
		Nominal	Actual	Nominal	Actual			Nominal	Actual	Nominal	Actual			
1	0.103	3/16	0.196	-----	0.030	1330	1400	-----	97200	-----	102400	1.10	13.8	Supreme Steel
2	0.213	1/4	0.282	-----	0.063	1730	2190	-----	60970	-----	77200	1.60	20.0	
3	0.344	3/8	0.359	0.11	0.101	2520	3890	50500	54930	78000	84800	1.40	17.5	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	

**Note: only three samples for tensile and three samples for bend test**

**Bend Test**

3/16" Dia Bar Bend Test Through 180° is Satisfactory

1/4" Dia Bar Bend Test Through 180° is Satisfactory

3/8" Dia Bar Bend Test Through 180° is Satisfactory

**I/C Testing Laboratoires**  
**UET Lahore, Pakistan.**

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**STRUCTURAL ENGINEERING DIVISION**  
**Test Floor Laboratory**  
**Department of Civil Engineering**  
**University of Engineering and Technology Lahore, 54890**  
**Pakistan. Ph: 92-42-99029202**

To,

Resident Engineer  
 NESPAK  
 PRSWSSP, Taunsa  
 Punjab Rural Municipal Services Company  
 Punjab Rural Sustainable Water Supply and Sanitation Project (PRSWSSP). Tehsil  
 Taunsa (Package-I).

Reference # CED/TFL **5513** (Dr. Usman Akmal)

Dated: 15-08-2024

Reference of the request letter # NESPAK/PRSWSSP/TAUSA/ME/329

Dated: 10-08-2024

**Tension Test Report** (Page -1/1)

Date of Test 19-08-2024

Gauge length 8 inches

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

Sr. No.	Weight (lbs/ft)	Diameter/ Size		Area (in <sup>2</sup> )		Yield load (kg)	Breaking Load (kg)	Yield Stress (psi)		Ultimate Stress (psi)		Elongation (inch)	% Elongation	Remarks
		Nominal (#)	Actual (inch)	Nominal	Actual			Nominal	Actual	Nominal	Actual			
1	0.404	3	0.389	0.11	0.119	4030	5350	80800	74730	107200	99300	1.30	16.3	FF Steel
2	0.405	3	0.389	0.11	0.119	4030	5220	80800	74570	104600	96600	1.00	12.5	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>Note: only two samples for tensile and one sample for bend test</b>														
Bend Test														
#3 Bar Bend Test Through 180° is Satisfactory														

**I/C Testing Laboratoires**  
**UET Lahore, Pakistan.**

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**STRUCTURAL ENGINEERING DIVISION**  
**Test Floor Laboratory**  
**Department of Civil Engineering**  
**University of Engineering and Technology Lahore, 54890**  
**Pakistan. Ph: 92-42-99029202**

To,

M/S ARG Construction (SMC-Private) Limited.  
 Sahiwal  
 (Construction of P5 Warehouse Building, Phillipe Morris Qadirabad.)

Reference # CED/TFL **5514** (Dr. Usman Akmal)  
 Reference of the request letter # 87

Dated: 16-08-2024  
 Dated: 10-08-2024

**Tension Test Report** (Page -1/1)

Date of Test 19-08-2024  
 Gauge length 8 inches  
 Description Deformed Steel Bar Tensile Test as per ASTM-A615

Sr. No.	Weight (lbs/ft)	Diameter/ Size (inch)		Area (in <sup>2</sup> )		Yield load (kg)	Breaking Load (kg)	Yield Stress (psi)		Ultimate Stress (psi)		Elongation (inch)	% Elongation	Remarks
		Nominal	Actual	Nominal	Actual			Nominal	Actual	Nominal	Actual			
1	0.382	3/8	0.378	0.11	0.112	3640	5170	73000	71470	103600	101600	1.00	12.5	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>Note: only one sample for tensile test</b>														
Bend Test														

**I/C Testing Laboratoires**  
**UET Lahore, Pakistan.**

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**STRUCTURAL ENGINEERING DIVISION**  
**Test Floor Laboratory**  
**Department of Civil Engineering**  
**University of Engineering and Technology Lahore, 54890**  
**Pakistan. Ph: 92-42-99029202**

To,  
 Project Manager  
 DSG Energy  
 Construction of Office Building at 29-M QIE, Lahore.

Reference # CED/TFL **5515** (Dr. Usman Akmal)  
 Reference of the request letter # Nil

Dated: 16-08-2024  
 Dated: 16-08-2024

**Tension Test Report** (Page -1/1)

Date of Test 19-08-2024  
 Gauge length 8 inches  
 Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight (lbs/ft)	Diameter/ Size		Area (in <sup>2</sup> )		Yield load (kg)	Breaking Load (kg)	Yield Stress (psi)		Ultimate Stress (psi)		Elongation (inch)	% Elongation	Remarks
		Nominal (#)	Actual (inch)	Nominal	Actual			Nominal	Actual	Nominal	Actual			
1	0.362	3	0.368	0.11	0.106	3330	4840	66800	68940	97000	100200	1.20	15.0	Hunza Steel
2	0.363	3	0.368	0.11	0.107	3310	4840	66400	68430	97000	100100	1.30	16.3	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>Note: only two samples for tensile and one sample for bend test</b>														
Bend Test														
#3 Bar Bend Test Through 180° is Satisfactory														

**I/C Testing Laboratoires**  
**UET Lahore, Pakistan.**

Note:

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**STRUCTURAL ENGINEERING DIVISION**  
**Test Floor Laboratory**  
**Department of Civil Engineering**  
**University of Engineering and Technology Lahore, 54890**  
**Pakistan. Ph: 92-42-99029202**

To,  
 M/S Jaffar Builders  
 Lahore  
 (Coca Cola Sunder Green Lahore.)

Reference # CED/TFL **5519** (Dr. Usman Akmal)  
 Reference of the request letter # Nil

Dated: 16-08-2024  
 Dated: 16-08-2024

**Tension Test Report** (Page -1/1)

Date of Test 19-08-2024  
 Gauge length 8 inches  
 Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight (lbs/ft)	Diameter/ Size		Area (in <sup>2</sup> )		Yield load (kg)	Breaking Load (kg)	Yield Stress (psi)		Ultimate Stress (psi)		Elongation (inch)	% Elongation	Remarks
		Nominal (#)	Actual (inch)	Nominal	Actual			Nominal	Actual	Nominal	Actual			
1	0.367	3	0.371	0.11	0.108	3110	4430	62400	63500	88800	90500	1.40	17.5	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>Note: only one sample for tensile and one sample for bend test</b>														
Bend Test														
#3Bar Bend Test Through 180° is Satisfactory														

**I/C Testing Laboratoires**  
**UET Lahore, Pakistan.**

Note:

- 1- You can See your reports On Internet in the following web site  
[http://www.uet.edu.pk/faculties/facultiesinfo/civil/index.html?RID=testing\\_reports](http://www.uet.edu.pk/faculties/facultiesinfo/civil/index.html?RID=testing_reports)
- 2- The above results pertain to sample /samples supplied to this laboratory.
- 3- Sealed sample / Unsealed sample / Marked sample/Signed Samples



**STRUCTURAL ENGINEERING DIVISION**  
**Test Floor Laboratory**  
**Department of Civil Engineering**  
**University of Engineering and Technology Lahore, 54890**  
**Pakistan. Ph: 92-42-99029202**

To,

Assistant Executive Engineer  
Assistant Garrison Engineer (Army) Pattoki  
(CA No. ENC-A-41/2024 - Const of 8 x Sldr Flats (G+3) Block No. 04 at Ammo Dep  
Pattoki)

Reference # CED/TFL **5520** (Dr. Usman Akmal)  
Reference of the request letter # 600-TR/40/E6

Dated: 16-08-2024  
Dated: 29-07-2024

**Tension Test Report** (Page -1/1)

Date of Test 19-08-2024  
Gauge length 8 inches  
Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight	Diameter/ Size (inch)		Area (in <sup>2</sup> )		Yield load	Breaking Load	Yield Stress (psi)		Ultimate Stress (psi)		Elongation	% Elongation	Remarks
	(lbs/ft)	Nominal	Actual	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)		
1	0.371	3/8	0.373	0.11	0.109	2520	3430	50500	50920	68800	69300	1.30	16.3	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>Note: only one samples for tensile and one sample for bend test</b>														
Bend Test														
3/8" Dia Bar Bend Test Through 180° is Satisfactory														

**I/C Testing Laboratoires**  
**UET Lahore, Pakistan.**

Note:

- 1- You can See your reports On Internet in the following web site  
[http://www.uet.edu.pk/faculties/facultiesinfo/civil/index.html?RID=testing\\_reports](http://www.uet.edu.pk/faculties/facultiesinfo/civil/index.html?RID=testing_reports)
2. The above results pertain to sample /samples supplied to this laboratory.
- 3- Sealed sample / Unsealed sample / Marked sample/Signed Samples



**STRUCTURAL ENGINEERING DIVISION**  
**Test Floor Laboratory**  
**Department of Civil Engineering**  
**University of Engineering and Technology Lahore, 54890**  
**Pakistan. Ph: 92-42-99029202**

To,

Sub Divisional Officer  
Buildings Sub Division No. 3  
Lahore.  
(Strengthening of Specialized Health Care & Medical Education Department Lahore.)

Reference # CED/TFL **5522** (Dr. Usman Akmal)  
Reference of the request letter # 1106-08/III

Dated: 16-08-2024  
Dated: 01-08-2024

**Tension Test Report** (Page -1/1)

Date of Test 19-08-2024  
Gauge length 8 inches  
Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight (lbs/ft)	Diameter/ Size		Area (in <sup>2</sup> )		Yield load (kg)	Breaking Load (kg)	Yield Stress (psi)		Ultimate Stress (psi)		Elongation (inch)	% Elongation	Remarks
		Nominal (#)	Actual (inch)	Nominal	Actual			Nominal	Actual	Nominal	Actual			
1	0.394	3	0.384	0.11	0.116	4000	5250	80200	76210	105200	100100	0.90	11.3	
2	0.378	3	0.376	0.11	0.111	4230	5350	84800	83930	107200	106200	1.00	12.5	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>Note: only two samples for tensile and one sample for bend test</b>														
Bend Test														
#3 Bar Bend Test Through 180° is Satisfactory														

**I/C Testing Laboratoires**  
**UET Lahore, Pakistan.**

Note:

- 1- You can See your reports On Internet in the following web site  
[http://www.uet.edu.pk/faculties/facultiesinfo/civil/index.html?RID=testing\\_reports](http://www.uet.edu.pk/faculties/facultiesinfo/civil/index.html?RID=testing_reports)
2. The above results pertain to sample /samples supplied to this laboratory.
- 3- Sealed sample / Unsealed sample / Marked sample/Signed Samples



**STRUCTURAL ENGINEERING DIVISION**  
**Test Floor Laboratory**  
**Department of Civil Engineering**  
**University of Engineering and Technology Lahore, 54890**  
**Pakistan. Ph: 92-42-99029202**

To,

Resident Engineer  
Master Consulting Engineers (Pvt) Ltd.  
Construction of 07-Storey Residential Block Having Minimum 100 Rooms with Attached  
Bathroom Facilities at Gurdwara Janamsthan Nankana Sahib.

Reference # CED/TFL **5523** (Dr. Usman Akmal)

Dated: 19-08-2024

Reference of the request letter # NKB/RE/MCE/Steel/08

Dated: 19-08-2024

**Tension Test Report** (Page -1/1)

Date of Test 19-08-2024

Gauge length 8 inches

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

Sr. No.	Weight (lbs/ft)	Diameter/ Size (inch)		Area (in <sup>2</sup> )		Yield load (kg)	Breaking Load (kg)	Yield Stress (psi)		Ultimate Stress (psi)		Elongation (inch)	% Elongation	Remarks
		Nominal	Actual	Nominal	Actual			Nominal	Actual	Nominal	Actual			
1	0.375	3/8	0.374	0.11	0.110	3330	5150	66800	66650	103200	103100	1.00	12.5	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>Note: only one samples for tensile and one sample for bend test</b>														
Bend Test														
3/8" Dia Bar Bend Test Through 180° is Satisfactory														

**I/C Testing Laboratoires**  
**UET Lahore, Pakistan.**

Note:

- 1- You can See your reports On Internet in the following web site  
[http://www.uet.edu.pk/faculties/facultiesinfo/civil/index.html?RID=testing\\_reports](http://www.uet.edu.pk/faculties/facultiesinfo/civil/index.html?RID=testing_reports)
2. The above results pertain to sample /samples supplied to this laboratory.
- 3- Sealed sample / Unsealed sample / Marked sample/Signed Samples





**STRUCTURAL ENGINEERING DIVISION**  
**Test Floor Laboratory**  
**Department of Civil Engineering**  
**University of Engineering and Technology Lahore, 54890**  
**Pakistan. Ph: 92-42-99029202**

To,  
 Cost Control Engineer  
 Sufi City  
 Construction of Sufi City Housing Society, Mandi Bahaud Din.

Reference # CED/TFL **5524** (Dr. Usman Akmal)  
 Reference of the request letter # SUFI /2024/CE/11

Dated: 19-08-2024  
 Dated: 16-08-2024

**Tension Test Report** (Page -1/1)

Date of Test 19-08-2024  
 Gauge length 8 inches  
 Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight (lbs/ft)	Diameter/ Size		Area (in <sup>2</sup> )		Yield load (kg)	Breaking Load (kg)	Yield Stress (psi)		Ultimate Stress (psi)		Elongation (inch)	% Elongation	Remarks
		Nominal (#)	Actual (inch)	Nominal	Actual			Nominal	Actual	Nominal	Actual			
1	0.388	3	0.381	0.11	0.114	3310	5170	66400	63960	103600	99900	1.10	13.8	
2	0.378	3	0.376	0.11	0.111	3130	5010	62800	62020	100400	99300	1.20	15.0	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>Note: only two samples for tensile and one sample for bend test</b>														
Bend Test														
#3 Bar Bend Test Through 180° is Satisfactory														

**I/C Testing Laboratoires**  
**UET Lahore, Pakistan.**

Note:

- 1- You can See your reports On Internet in the following web site  
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- 2- The above results pertain to sample /samples supplied to this laboratory.
- 3- Sealed sample / Unsealed sample / Marked sample/Signed Samples



**STRUCTURAL ENGINEERING DIVISION**  
**Test Floor Laboratory**  
**Department of Civil Engineering**  
**University of Engineering and Technology Lahore, 54890**  
**Pakistan. Ph: 92-42-99029202**

To,  
 Program Manager  
 Punjab Human Capital Investment Project (PHCIP)  
 Burial Pit Construction.

Reference # CED/TFL **5526** (Dr. Usman Akmal) Dated: 19-08-2024  
 Reference of the request letter # PIU-H/PHCIP/PM/685/2024 Dated: 30-07-2024

**Tension Test Report** (Page -1/1)

Date of Test 19-08-2024  
 Gauge length 8 inches  
 Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight (lbs/ft)	Diameter/ Size		Area (in <sup>2</sup> )		Yield load (kg)	Breaking Load (kg)	Yield Stress (psi)		Ultimate Stress (psi)		Elongation (inch)	% Elongation	Remarks
		Nominal (#)	Actual (inch)	Nominal	Actual			Nominal	Actual	Nominal	Actual			
1	0.382	3	0.378	0.11	0.112	3770	5300	75600	74030	106200	104100	1.10	13.8	
2	0.384	3	0.379	0.11	0.113	3470	5450	69600	67760	109200	106500	0.80	10.0	
3	0.380	3	0.377	0.11	0.112	3110	4810	62400	61440	96400	95100	1.10	13.8	
4	0.378	3	0.376	0.11	0.111	3360	4840	67400	66680	97000	96100	1.00	12.5	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>Note: only four samples for tensile and two samples for bend test</b>														
Bend Test														
#3 Bar Bend Test Through 180° is Satisfactory														
#3 Bar Bend Test Through 180° is Satisfactory														

**I/C Testing Laboratoires**  
**UET Lahore, Pakistan.**

Note:

- 1- You can See your reports On Internet in the following web site  
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- 2- The above results pertain to sample /samples supplied to this laboratory.
- 3- Sealed sample / Unsealed sample / Marked sample/Signed Samples