To,

Executive Engineer
Highways Division, Lahore
Reconstruction/Rehabilitation of G.T Road From Quaid-E-Azam Interchange (Lahore Ring Road) to Wahga Border in District Lahore

Reference # CED/TFL **7190** (Dr. Usman Akmal) Dated: 04-07-2025
Reference of the request letter # 85/camp Dated: 18-03-2025

Tension Test Report (Page-1/4)

Date of Test 09-07-2025
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	Breaking Load	Yield Stress (psi)		Ultimate Stress (psi)		Elongation	% Elongation	Remarks
				Nominal	Actual	(kN)	(kN)	Nominal	Actual	Nominal	Actual	(inch)		
1	**0.376**	**3**	**0.375**	**0.110**	**0.111**	**34.00**	**45.20**	**69459**	**69100**	**92339**	**91862**	**1.4**	**17.5**	**AK Steel**
2	**0.370**	**3**	**0.372**	**0.110**	**0.109**	**42.00**	**49.50**	**85802**	**86808**	**101124**	**102310**	**0.7**	**8.8**	**AK Steel**
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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,

Executive Engineer
Highways Division, Lahore
Reconstruction/Rehabilitation of G.T Road From Quaid-E-Azam Interchange (Lahore Ring Road) to Wahga Border in District Lahore

Reference # CED/TFL **7190** (Dr. Usman Akmal) Dated: 04-07-2025
Reference of the request letter # 116/camp Dated: 11-04-2025

Tension Test Report (Page-2/4)

Date of Test 09-07-2025
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	Breaking Load	Yield Stress (psi)		Ultimate Stress (psi)		Elongation	% Elongation	Remarks
				Nominal	Actual	(kN)	(kN)	Nominal	Actual	Nominal	Actual	(inch)		
1	**0.361**	**3**	**0.368**	**0.110**	**0.106**	**33.70**	**45.50**	**68846**	**71352**	**92952**	**96336**	**1.1**	**13.8**	**SJ Steel**
2	**0.391**	**3**	**0.383**	**0.110**	**0.115**	**33.20**	**49.50**	**67824**	**64885**	**101124**	**96741**	**1.1**	**13.8**	**SJ Steel**
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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,

Executive Engineer
Highways Division, Lahore
Reconstruction/Rehabilitation of G.T Road From Quaid-E-Azam Interchange (Lahore Ring Road) to Wahga Border in District Lahore

Reference # CED/TFL **7190** (Dr. Usman Akmal) Dated: 04-07-2025
Reference of the request letter # 106/camp Dated: 29-03-2025

Tension Test Report (Page-3/4)

Date of Test 09-07-2025
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	Breaking Load	Yield Stress (psi)		Ultimate Stress (psi)		Elongation	% Elongation	Remarks
				Nominal	Actual	(kN)	(kN)	Nominal	Actual	Nominal	Actual	(inch)		
1	**0.357**	**3**	**0.366**	**0.110**	**0.105**	**30.00**	**43.50**	**61287**	**64235**	**88866**	**93140**	**1.2**	**15.0**	**Mughal Steel**
2	**0.368**	**3**	**0.371**	**0.110**	**0.108**	**32.20**	**46.50**	**65781**	**66970**	**94995**	**96712**	**1.1**	**13.8**	**Mughal Steel**
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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,

Executive Engineer
Highways Division, Lahore
Reconstruction/Rehabilitation of G.T Road From Quaid-E-Azam Interchange (Lahore Ring Road) to Wahga Border in District Lahore

Reference # CED/TFL **7190** (Dr. Usman Akmal) Dated: 04-07-2025
Reference of the request letter # 29/camp Dated: 15-01-2025

Tension Test Report (Page-4/4)

Date of Test 09-07-2025
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	Breaking Load	Yield Stress (psi)		Ultimate Stress (psi)		Elongation	% Elongation	Remarks
				Nominal	Actual	(kN)	(kN)	Nominal	Actual	Nominal	Actual	(inch)		
1	**0.365**	**3**	**0.369**	**0.110**	**0.107**	**38.20**	**44.50**	**78039**	**80134**	**90909**	**93350**	**1.1**	**13.8**	**PSR Steel**
2	**0.369**	**3**	**0.371**	**0.110**	**0.108**	**34.20**	**46.20**	**69867**	**70918**	**94382**	**95802**	**1.2**	**15.0**	**PSR Steel**
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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,

Sub Divisional Officer
The Punjab Employees Social Security Institution
Construction of Boundary Wall, Guard Room, Main Gates and Street Lights for Pessi State of the Art Institute of Cardiology & Pulmonolgy Services, Teaching Hospital and a Center of Excellence

Reference # CED/TFL **7193** (Dr. Usman Akmal) Dated: 07-07-2025
Reference of the request letter # SS.DC(207)25/868 Dated: 02-07-2025

Tension Test Report (Page-1/1)

Date of Test 09-07-2025
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	Breaking Load	Yield Stress (psi)		Ultimate Stress (psi)		Elongation	% Elongation	Remarks
				Nominal	Actual	(kN)	(kN)	Nominal	Actual	Nominal	Actual	(inch)		
1	**0.409**	**3**	**0.391**	**0.110**	**0.12**	**35.00**	**51.20**	**71502**	**65436**	**104597**	**95723**	**1.3**	**16.3**	**3"/8**
2	**0.372**	**3**	**0.373**	**0.110**	**0.109**	**31.50**	**46.50**	**64351**	**64744**	**94995**	**95574**	**1.2**	**15.0**	**3"/8**
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Note: Only 2 Samples for Tensile and 0 Samples for Bend test														

Bend Test

Test Performed and Verified by:

To,

Mr. M. Armughan Khan (Deputy Director QCD)
WASA, Lahore
Tender No. XEN (O&M-II) AWT/2024-2025/143/Provision of Trunk Sewer (Umer Khan Road to Lahore Lyceum School Manawan Campus) (M/s. SA 4 Construction Company)

Reference # CED/TFL **7194** (Dr. Usman Akmal) Dated: 07-07-2025
Reference of the request letter # QCD/2981 Dated: 02-07-2025

Tension Test Report (Page-1/1)

Date of Test 09-07-2025
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	Breaking Load	Yield Stress (psi)		Ultimate Stress (psi)		Elongation	% Elongation	Remarks
				Nominal	Actual	(kN)	(kN)	Nominal	Actual	Nominal	Actual	(inch)		
1	**0.402**	**3**	**0.388**	**0.110**	**0.118**	**38.50**	**51.50**	**78652**	**73252**	**105209**	**97986**	**1.4**	**17.5**	-
2	**0.394**	**3**	**0.384**	**0.110**	**0.116**	**34.50**	**49.50**	**70480**	**66950**	**101124**	**96058**	**1.4**	**17.5**	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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,

Mr. Sayam Jee (Chief Executive Officer (CEO))
Risen Pro Industry (Pvt.) Ltd.

Reference # CED/TFL **7196** (Dr. Usman Akmal) Dated: 08-07-2025
Reference of the request letter # Nil Dated: 04-07-2025

Tension Test Report (Page -1/2)

Date of Test 09-07-2025
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/1000m)	(kg/1000m)	(kg)	(kN)	(kg)	(kN)	GPa		
1	**12.70 (1/2")**	**780.0**	**777.0**	**16800**	**164.81**	**18100**	**177.56**	**196**	**>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

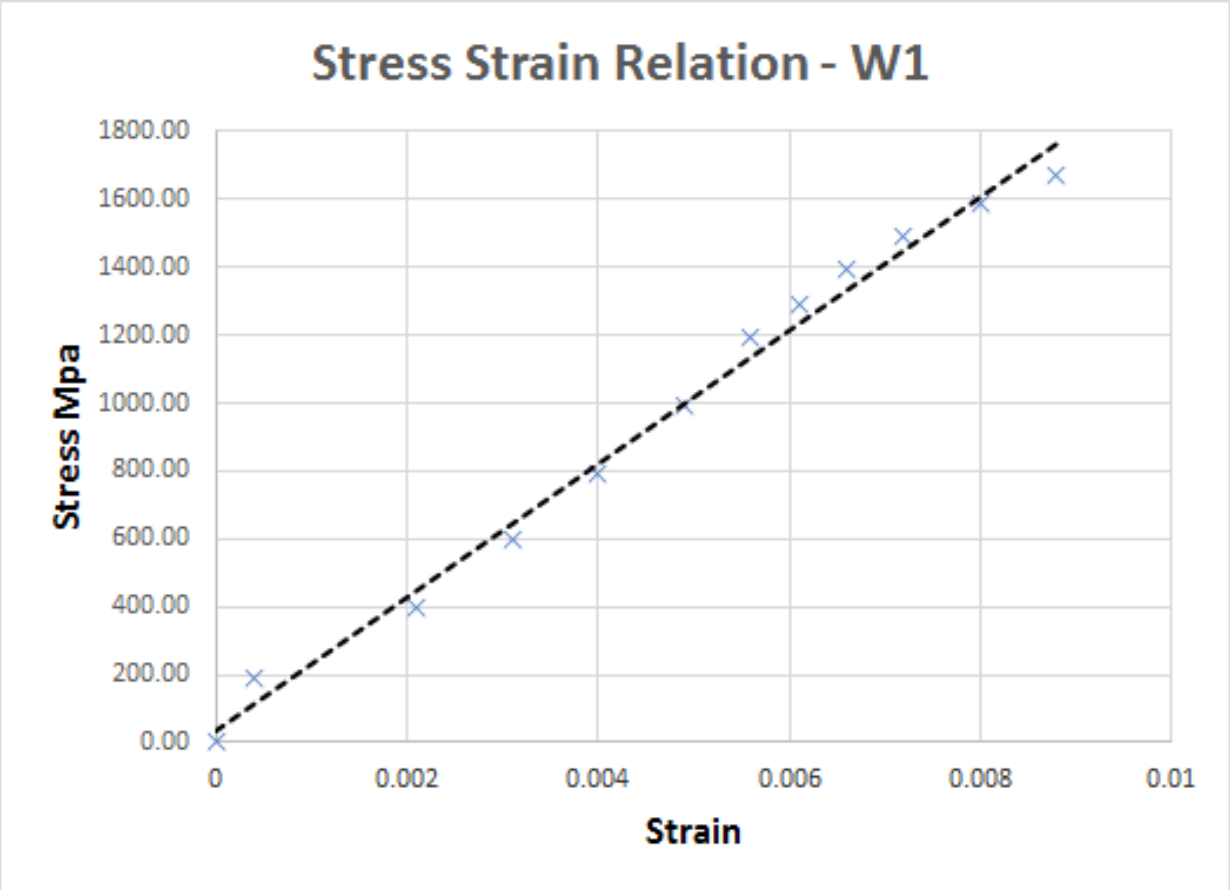
Test Performed and Verified by:

To,

Mr. Sayam Jee (Chief Executive Officer (CEO))
Risen Pro Industry (Pvt.) Ltd.

Reference # CED/TFL **7196** (Dr. Usman Akmal) Dated: 08-07-2025
Reference of the request letter # Nil Dated: 04-07-2025

Graph (Page – 2/2)



Test Performed and Verified by:

To,

Lt. Col. Muhammad Foad Bashir Saeed (R)
Defence Housing Authority, Lahore.
Const. of Bridge on Hudiara Drain Link Between Phase-VII to Village Karbath (M/s DHA C)
Witness by: Mr. Ijaz Ali (SLT DHA Lab)

Reference # CED/TFL **7198** (Dr. Safeer Abbas) Dated: 08-07-2025
Reference of the request letter # 408/241/32/Lab/12/138 Dated: 30-06-2025

Tension Test Report (Page -1/1)

Date of Test 09-07-2025
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)		% Elongation	Remarks / Coil No.
	(mm)	(kg/1000m)	(kg/1000m)	(kg)	(kN)	(kg)	(kN)		
1	**12.70 (1/2")**	**780.0**	**786.0**	**17800**	**174.62**	**19400**	**190.31**	**>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

Test Performed and Verified by:

To,

Mr. M. Shaharyar (Quality Control Engineer)
Maypole (Pvt.) Ltd. (Limelight Developers)
Limelight Tower Plot No. 90/B-2 Kasuri Road Gulberg III, Lahore

Reference # CED/TFL **7201** (Dr. Usman Akmal) Dated: 08-07-2025
Reference of the request letter # Nil Dated: 08-07-2025

Tension Test Report (Page-1/1)

Date of Test 09-07-2025
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	Breaking Load	Yield Stress (psi)		Ultimate Stress (psi)		Elongation	% Elongation	Remarks
				Nominal	Actual	(kN)	(kN)	Nominal	Actual	Nominal	Actual	(inch)		
1	**0.357**	**3**	**0.366**	**0.110**	**0.105**	**38.50**	**47.00**	**78652**	**82402**	**96016**	**100595**	**1.0**	**12.5**	-
2	**0.359**	**3**	**0.366**	**0.110**	**0.105**	**38.70**	**47.70**	**79060**	**82441**	**97446**	**101614**	**1.1**	**13.8**	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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:

Ref: CED/TFL/07/7202 Dated: 08-07-2025

Dated of Test: 09-07-2025 (Dr. Safeer Abbas)

To

Mr. Riaz Ahmed (General Manager)
M/s National Technocommercial Services (Private) Limited
Lahore

Subject: **- BREAKING LOAD TEST OF LUG No. MK-59 (NTS with Harding)**
(Page # 1/2)

Reference to your Letter No. NTS/DC-Lug 59/DC/25, dated: 07/07/2025, on the subject cited above. One Lug No. Sr. 1 (dia 44.0 mm, Length 66.50mm) with assembly as received by us have been tested. The results are shown below:

Sample No. : 01

Breaking Load : 14600 kg

Remarks : Lug Failure

Test Performed and Verified by:

Ref: CED/TFL/07/7202 Dated: 08-07-2025

Dated of Test: 09-07-2025 (Dr. Safeer Abbas)

To

Mr. Riaz Ahmed (General Manager)
M/s National Technocommercial Services (Private) Limited
Lahore

Subject: **- BREAKING LOAD TEST OF LUG) No. MK-43A (ATR) (NTS with Harding) (Page # 2/2)**

Reference to your Letter No. NTS/DC-Lug 43A/DC/24, dated: 13/02/2024, on the subject cited above. One Lug No. Sr. 2 (dia 44 mm, Length 59mm) with assembly as received by us has been tested. The results are shown below:

Sample No. : 01

Breaking Load : 16000 kg

Remarks : Lug Failure

Test Performed and Verified by:

To,

Resident Engineer (ACE Ltd, Sambrial Sialkot)
ACE Architectural & Town Planning Services Ltd.
Establishment of University of Applied Engineering and Emerging Technologies(UAEET) Sambrial, Sialkot (FF Steel)

Reference # CED/TFL **7203** (Dr. Usman Akmal) Dated: 09-07-2025
Reference of the request letter # ER/UAEET/ACE/2025/691 Dated: 08-07-2025

Tension Test Report (Page-1/1)

Date of Test 09-07-2025
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	Breaking Load	Yield Stress (psi)		Ultimate Stress (psi)		Elongation	% Elongation	Remarks
				Nominal	Actual	(kN)	(kN)	Nominal	Actual	Nominal	Actual	(inch)		
1	**0.372**	**3**	**0.373**	**0.110**	**0.109**	**35.20**	**45.50**	**71910**	**72323**	**92952**	**93486**	**1.4**	**17.5**	-
2	**0.372**	**3**	**0.373**	**0.110**	**0.109**	**34.50**	**45.00**	**70480**	**70862**	**91931**	**92429**	**1.1**	**13.8**	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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: