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
Highway sub Division
Mianwali
(Widening / Improment of Road from C.J. Link Canal to Anwar Chowk Length 13.81 km in District Mianwali Part-A (II) +B Reach from lkm no. 5.95 to 13.81 = 7.86 km) (Including Bridge)

Reference # CED/TFL **36275** (Dr. Qasim Khan) Dated: 25-03-2021
Reference of the request letter # 125/SDO/Mwi Dated: 24-03-2021

Tension Test Report (Page – 1/2)

Date of Test 29-03-2021
Gauge length 640 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 "E"	% Elongation	Remarks / Coil No.
	(mm)	(kg/km)	(kg/km)	(kg)	(kN)	(kg)	(kN)	GPa		
1	**12.70 (1/2")**	**775.0**	**779.0**	**18500**	**181.49**	**20200**	**198.16**	**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.

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
2. The above results pertain to sample /samples supplied to this laboratory.
3- Sealed sample / Unsealed sample / Marked sample/Signed Samples

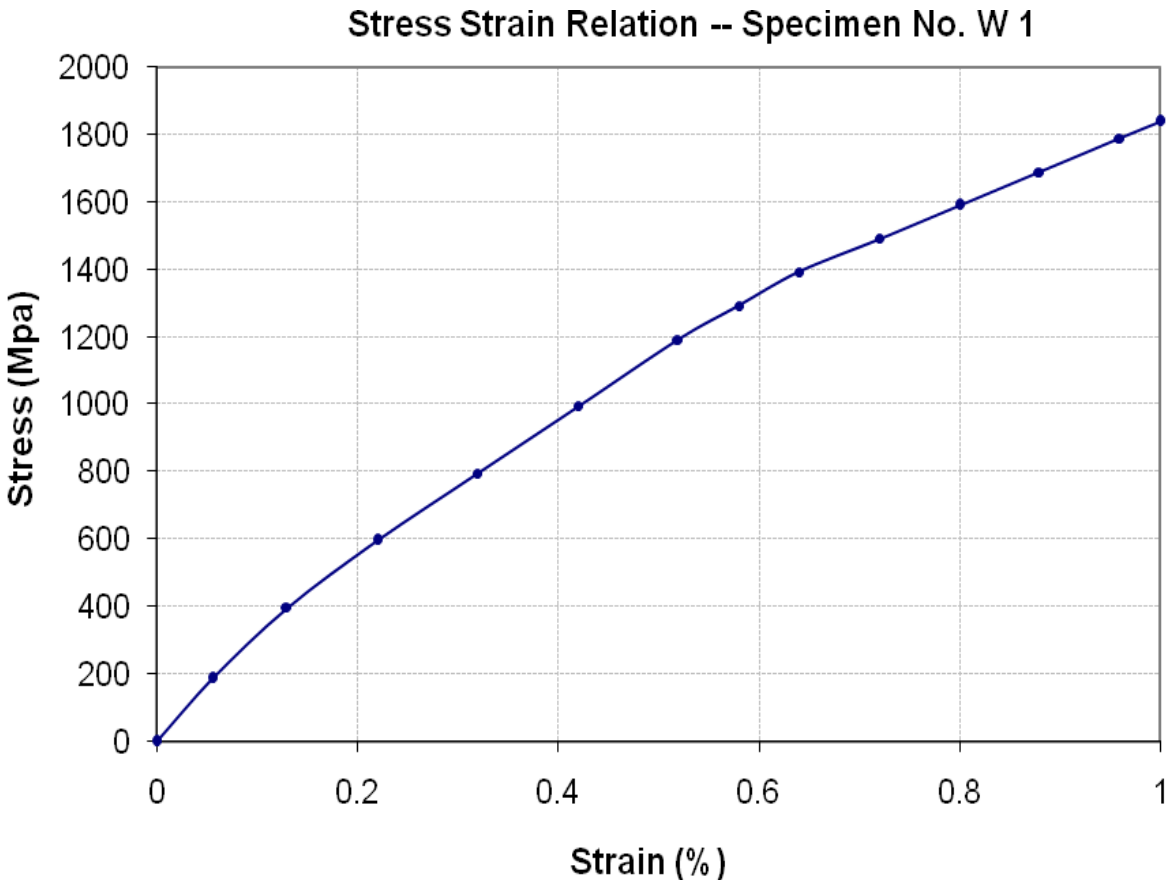
STRUCTURAL ENGINEERING DIVISION

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

To,
Sub Divisional Officer
Highway sub Division
Mianwali
(Widening / Improment of Road from C.J. Link Canal to Anwar Chowk Length 13.81 km in District Mianwali Part-A (II) +B Reach from lkm no. 5.95 to 13.81 = 7.86 km) (Including Bridge)

Reference # CED/TFL **36275** (Dr. Qasim Khan) Dated: 25-03-2021
Reference of the request letter # 125/SDO/Mwi Dated: 24-03-2021

Graph (Page – 2/2)



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
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,
108 Engr Bn
Kharian Cantt
Const. of 03 x Additional Buildings & Parking Shed at CMH Medical College Kharian Cantt.

Reference # CED/TFL **36276** (Dr. Qasim Khan) Dated: 26-03-2021
Reference of the request letter # Nil Dated: 25-03-2021

Tension Test Report (Page -1/1)

Date of Test 29-03-2021
Gauge length 8 inches
Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight	Diameter/ Size (mm)		Area (in^2)		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	0.408	10	9.92	0.12	0.120	4000	4900	73487	73570	90021	90200	1.20	15.0	
2	0.409	10	9.94	0.12	0.120	4100	4900	75324	75130	90021	89800	1.10	13.8	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only two samples for tensile and one sample for bend test														
Bend Test														
10mm Dia Bar Bend Test Through 180º 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
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
Progressive Consultants (Pvt) Ltd, PU Lahore
Construction of Institute of Energy and Environmental Engineering at University of Punjab, Lahore

Reference # CED/TFL **36277** (Dr. Qasim Khan) Dated: 26-03-2021
Reference of the request letter # RE/PCL—562/LHR/IEEE/PU/135 Dated: 08-03-2021

Tension Test Report (Page -1/1)

Date of Test 29-03-2021
Gauge length 8 inches
Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight	Diameter/ Size		Area (in^2)		Yield load	Breaking Load	Yield Stress (psi)		Ultimate Stress (psi)		Elongation	% Elongation	Remarks
	(lbs/ft)	Nominal (#)	Actual (inch)	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)		
1	0.385	3	0.380	0.11	0.113	3200	5000	64200	62280	100200	97400	1.20	15.0	
2	0.382	3	0.378	0.11	0.112	3200	4900	64200	62850	98200	96300	1.10	13.8	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only two samples for tensile and one sample for bend test														
Bend Test														
#3 Bar Bend Test Through 180º 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
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 / Team Leader
Prime Engineering Consultancy
Kallurkot Bridge Project
Construction of 4 Lane Bridge over River Indus Connecting Kallur Kot with D.I Khan

Reference # CED/TFL **36279** (Dr. Qasim Khan) Dated: 29-03-2021
Reference of the request letter # KK-DIK-BR-PJ/2021/278 Dated: 28-03-2021

Tension Test Report (Page – 1/2)

Date of Test 29-03-2021
Gauge length 640 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 "E"	% Elongation	Remarks / Coil No.
	(mm)	(kg/km)	(kg/km)	(kg)	(kN)	(kg)	(kN)	GPa		
1	**12.70 (1/2")**	**775.0**	**777.0**	**18300**	**179.52**	**20400**	**200.12**	**198**	**>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.

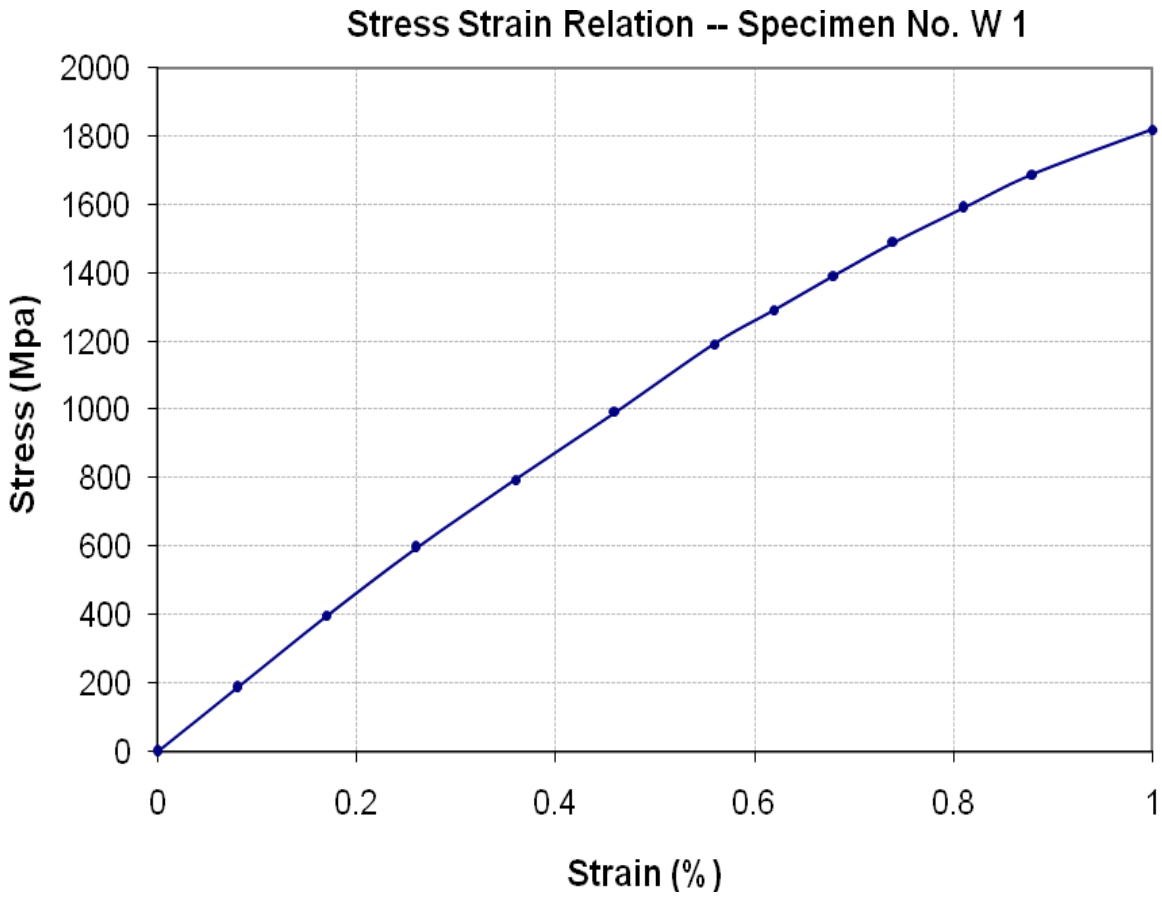
Note:
1- You can See your reports On Internet in the following web site
http://www.uet.edu.pk/faculties/facultiesinfo/civil/index.html?RID=testing_reports
2. The above results pertain to sample /samples supplied to this laboratory.
3- Sealed sample / Unsealed sample / Marked sample/Signed Samples

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 / Team Leader
Prime Engineering Consultancy
Kallurkot Bridge Project
Construction of 4 Lane Bridge over River Indus Connecting Kallur Kot with D.I Khan

Reference # CED/TFL **36279** (Dr. Qasim Khan) Dated: 29-03-2021
Reference of the request letter # KK-DIK-BR-PJ/2021/278 Dated: 28-03-2021

Graph (Page – 2/2)



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
2. The above results pertain to sample /samples supplied to this laboratory.
3- Sealed sample / Unsealed sample / Marked sample/Signed Samples