



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

To,
 Deputy Director (Maint)
 National Highway Authority
 Improvement & Upgradation of Chenab Toll Plaza (NBC) on GT Road, N-5

Reference # CED/TFL **35324** (Dr. Qasim Khan) Dated: 07-09-2020
 Reference of the request letter # Gen/DD(Maint)/WZD/NHA/2020/615 Dated: 31-08-2020

Tension Test Report (Page -1/4)

Date of Test 14-09-2020
 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 ²)		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	0.374	10	9.50	0.12	0.110	2600	3600	47766	52170	66138	72300	1.70	21.3	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only one sample for tensile and one sample for bend test														
Bend Test														
10mm 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
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 Improvement & Upgradation of Chenab Toll Plaza (NBC) on GT Road, N-5

Reference # CED/TFL **35324** (Dr. Qasim Khan) Dated: 07-09-2020
 Reference of the request letter # Gen/DD(Maint)/WZD/NHA/2020/615 Dated: 31-08-2020

Tension Test Report (Page -2/4)

Date of Test 14-09-2020
 Gauge length 8 inches
 Description Plain Steel Bar Tensile Test

Sr. No.	Weight (kg/m)	Diameter/ size		Area (mm ²)		Yield load (kg)	Breaking Load (kg)	Yield Stress (MPa) Actual	Ultimate Stress (MPa) Actual	Elongation (inch)	% Elongation	Remarks
		Nominal (mm)	Actual (mm)	Nominal	Actual							
1	5.658	32	30.29	-----	720.8	38800	56200	528	765	1.00	12.5	
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.	
Note: only one sample for tensile test												
Bend Test												

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Test Floor Laboratory
Department of Civil Engineering
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To,
 Deputy Director (Maint)
 National Highway Authority
 Improvement & Upgradation of Kala Shah Kaku Toll Plaza (NBC) on GT Road, N-5

Reference # CED/TFL **35324** (Dr. Qasim Khan) Dated: 07-09-2020
 Reference of the request letter # Gen/DD(Maint)/WZD/NHA/2020/612 Dated: 31-08-2020

Tension Test Report (Page -3/4)

Date of Test 14-09-2020
 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 ²)		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	0.401	10	9.84	0.12	0.118	2900	4000	53278	54190	73487	74800	1.70	21.3	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only one sample for tensile and one sample for bend test														
Bend Test														
10mm Dia Bar Bend Test Through 180° is Satisfactory														

I/C Testing Laboratoires
UET Lahore, Pakistan.

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 Improvement & Upgradation of Kala Shah Kaku Toll Plaza (NBC) on GT Road, N-5

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 Reference of the request letter # Gen/DD(Maint)/WZD/NHA/2020/612 Dated: 31-08-2020

Tension Test Report (Page -4/4)

Date of Test 14-09-2020
 Gauge length 8 inches
 Description Plain Steel Bar Tensile Test

Sr. No.	Weight (kg/m)	Diameter/ size		Area (mm ²)		Yield load (kg)	Breaking Load (kg)	Yield Stress (MPa) Actual	Ultimate Stress (MPa) Actual	Elongation (inch)	% Elongation	Remarks
		Nominal (mm)	Actual (mm)	Nominal	Actual							
1	5.675	32	30.34	-----	722.9	39600	56800	537	771	1.10	13.8	
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Note: only one sample for tensile test												
Bend Test												

I/C Testing Laboratories
UET Lahore, Pakistan.

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

To,
M. Shahbaz Iqbal
BPS (Pvt) Ltd
Alpha Homes (Apartments) Project

Reference # CED/TFL **35332** (Dr. Qasim Khan)
Reference of the request letter # Nil

Dated: 08-09-2020
Dated: 08-09-2020

Tension Test Report (Page -1/2)

Date of Test 14-09-2020
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 ²)		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	4.130	10	1.243	1.27	1.214	33000	53200	57300	59910	92400	96600	1.40	17.5	
2	4.101	10	1.239	1.27	1.205	32800	53800	57000	59980	93400	98400	1.70	21.3	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only two samples for tensile and two sample for bend test														
Bend Test														
#10 Dia Bar Bend Test Through 180° is Satisfactory														
#10 Dia Bar Bend Test Through 180° is Satisfactory														

I/C Testing Laboratoires
UET Lahore, Pakistan.

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To,
 M. Shahbaz Iqbal
 BPS (Pvt) Ltd
 Alpha Homes (Apartments) Project

Reference # CED/TFL **35332** (Dr. Qasim Khan)
 Reference of the request letter # Nil

Dated: 08-09-2020
 Dated: 08-09-2020

Tension Test Report (Page -2/2)

Date of Test 14-09-2020
 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 ²)		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	0.376	3	0.375	0.11	0.111	4000	5000	80200	79700	100200	99700	1.20	15.0	
2	0.370	3	0.372	0.11	0.109	4000	4900	80200	81060	98200	99300	1.20	15.0	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only two samples for tensile and two sample for bend test														
Bend Test														
#3 Dia Bar Bend Test Through 180° is Satisfactory														
#3 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 Swat, KPK
Standardization of Govt Schools in Khyber Pakhtunkhwa (GGPS Charli Lalku Swat)

Reference # CED/TFL **35333, 338** (Dr. Qasim Khan
Reference of the request letter # 4099/021/FA/233

Dated: 08-09-2020
Dated: 08-09-2020

Tension Test Report (Page – 1/4)

Date of Test 14-09-2020
Gauge length 2 inches
Description Steel Structure Steel Strip Tensile Test as per ASTM A-36

Sr. No.	Designation		Size of Strip	X Section Area	Yield load	Breaking Load	Yield Stress	Ultimate Stress	Elongation	% Elongation	Remarks
	(inch)	(mm)									
1	Angle	2.5x2.5x1/4	23.30x5.30	123.49	4800	7400	381.31	587.85	0.70	35.00	
2			23.30x5.30	123.49	4900	7300	389.25	579.91	0.75	37.50	
3	C Purlin	4x7.25	23.20x5.70	132.24	5300	8400	393.17	623.14	0.70	35.00	
4			23.20x5.70	132.24	5300	8400	393.17	623.14	0.70	35.00	
5	Plate	3/8	23.40x8.50	198.90	7100	11000	350.18	542.53	0.75	37.50	
6			23.40x8.50	198.90	7300	11300	360.05	557.33	0.80	40.00	
Only Six Samples for Tensile Test											
Bend Test											

I/C Testing Laboratoires
UET Lahore, Pakistan.

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To,
Resident Engineer
NESPAK Swat, KPK
Standardization of Govt Schools in Khyber Pakhtunkhwa (GGPS Charli Lalku Swat)

Reference # CED/TFL **35333, 338** (Dr. Qasim Khan
Reference of the request letter # 4099/021/FA/233

Dated: 08-09-2020
Dated: 08-09-2020

Weight & Size Test Report (Page – 2/4)

Date of Test 14-09-2020
Gauge length -----
Description Angle Weight and Size Test

Sr. No.	Designation	Weight	Length	Weight per Unit Length	L-1	L-2	Thickness	Remark
	(mm)	(g)	(cm)	(kg/m)	(mm)	(mm)	(mm)	
1	2.5x2.5x1/4	3130	62.40	5.02	63.80	64.50	5.40	
-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	
Only One Sample for Test								

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To,
Resident Engineer
NESPAK Swat, KPK
Standardization of Govt Schools in Khyber Pakhtunkhwa (GGPS Charli Lalku Swat)

Reference # CED/TFL **35333, 338** (Dr. Qasim Khan
Reference of the request letter # 4099/021/FA/233

Dated: 08-09-2020
Dated: 08-09-2020

Weight & Size Test Report (Page – 3/4)

Date of Test 14-09-2020
Gauge length -----
Description C Purlin Weight and Size Test

Sr. No.	Designation	Weight	Length	Weight per Unit Length	Depth (d)	Flange Width (br)	Flange Thickness (tr)	Web Thickness (tw)	Remark
	(inch)	(g)	(cm)	(kg/m)	mm	mm	mm	mm	
1	4x7.25	6303	63.00	10.00	99.50	52.80	8.10	5.0	
-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	
Only One Sample for Test									

I/C Testing Laboratoires
UET Lahore, Pakistan.

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To,
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NESPAK Swat, KPK
Standardization of Govt Schools in Khyber Pakhtunkhwa (GGPS Charli Lalku Swat)

Reference # CED/TFL **35333, 338** (Dr. Qasim Khan
Reference of the request letter # 4099/021/FA/233

Dated: 08-09-2020
Dated: 08-09-2020

Weight & Size Test Report (Page – 4/4)

Date of Test 14-09-2020
Gauge length -----
Description Plate Weight and Size Test

Sr. No.	Designation	Weight	Length	Width (b)	Weight per Unit Area	Thickness	Remark
	(inch)	(g)	(cm)	(cm)	(kg/m ²)	(mm)	
1	3/8	6457	60.80	15.30	69.41	8.50	
-	-	-	-	-	-	-	
-	-	-	-	-	-	-	
-	-	-	-	-	-	-	
-	-	-	-	-	-	-	
-	-	-	-	-	-	-	
-	-	-	-	-	-	-	
Only One Sample for Test							

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Department of Civil Engineering
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To,
 Executive Engineer PWD
 Highways Division Bhimber
 (Construction of 81 Meter Pre-Stressed RCC Bridge at Moil Nallah on Main Barnala Chamb
 Road District Bhimber AK)

Reference # CED/TFL **35350** (Dr. Qasim Khan)
 Reference of the request letter # Nil

Dated: 10-09-2020
 Dated: 10-09-2020

Tension Test Report (Page -1/1)

Date of Test 14-09-2020
 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 ²)		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	5.246	11	1.401	1.56	1.542	51000	70200	72100	72900	99200	100400	1.40	17.5	
2	5.246	11	1.401	1.56	1.542	52400	72000	74100	74900	101800	103000	1.30	16.3	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only two samples for tensile and one sample for bend test														
Bend Test														
#11 Dia Bar Bend Test Through 180° is Satisfactory														

I/C Testing Laboratoires
UET Lahore, Pakistan.

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Test Floor Laboratory
Department of Civil Engineering
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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 **35353** (Dr. Qasim Khan)
Reference of the request letter # KK-DIK-BR-PJ/2020/186

Dated: 11-09-2020
Dated: 10-09-2020

Tension Test Report (Page – 1/3)

Date of Test 14-09-2020
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	784.0	17800	174.62	19900	195.22	198	>3.50	xx
2	12.70 (1/2")	775.0	782.0	18400	180.50	20100	197.18	199	>3.50	xx
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
Only two 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

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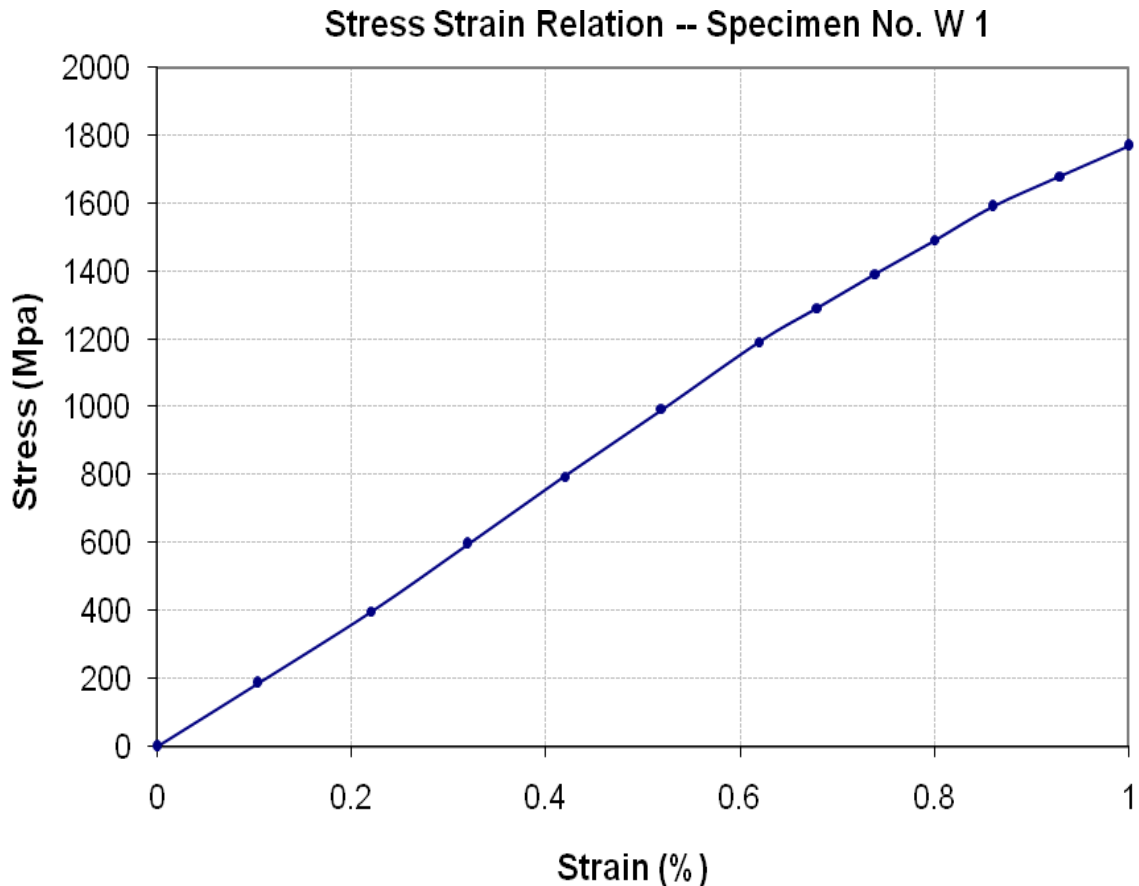
STRUCTURAL ENGINEERING DIVISION
Test Floor Laboratory
Department of Civil Engineering
University of Engineering and Technology Lahore, 54890
Pakistan. Ph: 92-42-99029202

To,
Resident Engineer / 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 **35353** (Dr. Qasim Khan)
Reference of the request letter # KK-DIK-BR-PJ/2020/186

Dated: 11-09-2020
Dated: 10-09-2020

Graph (Page – 2/3)



I/C Testing Laboratories
UET Lahore, Pakistan.

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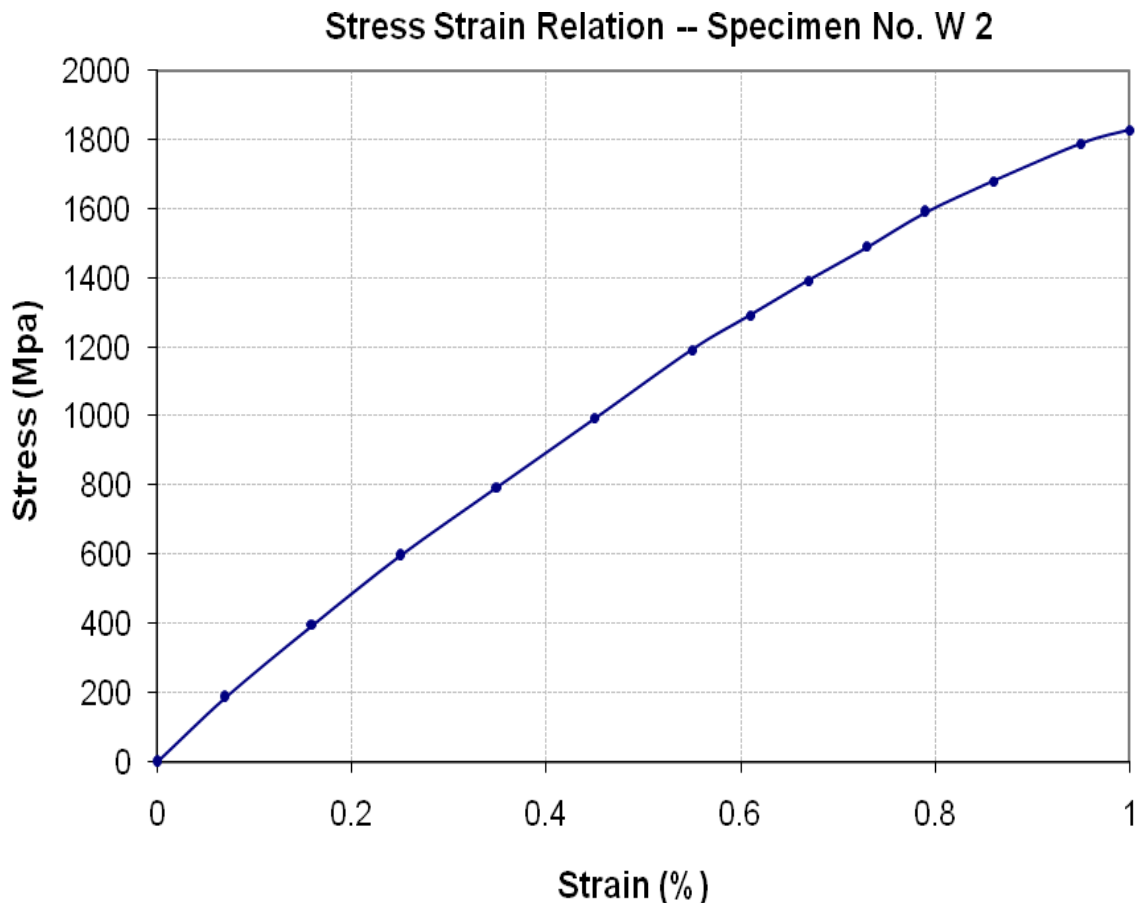
STRUCTURAL ENGINEERING DIVISION
Test Floor Laboratory
Department of Civil Engineering
University of Engineering and Technology Lahore, 54890
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To,
Resident Engineer / Team Leader
Prime Engineering Consultancy
Kallurkot Bridge Project
Construction of 4 Lane Bridge over River Indus Connecting Kallur Kot with D.I Khan

Reference # CED/TFL **35353** (Dr. Qasim Khan)
Reference of the request letter # KK-DIK-BR-PJ/2020/186

Dated: 11-09-2020
Dated: 10-09-2020

Graph (Page – 3/3)



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Department of Civil Engineering
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To,
Resident Engineer
ESS.I.AAR Consultant
Construction of Access Road for Rashakai Special Economic Zone

Reference # CED/TFL **35354** (Dr. Qasim Khan)
Reference of the request letter # E8R/RSEZ/008

Dated: 11-09-2020
Dated: 08-09-2020

Tension Test Report (Page – 1/4)

Date of Test 14-09-2020
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" GPa	% Elongation	Remarks / Coil No.
	(mm)	(kg/km)	(kg/km)	(kg)	(kN)	(kg)	(kN)			
1	12.70 (1/2")	775.0	778.0	16900	165.79	18900	185.41	198	>3.50	xx
2	12.70 (1/2")	775.0	778.0	17700	173.64	19800	194.24	199	>3.50	xx
3	12.70 (1/2")	775.0	778.0	17300	169.71	19300	189.33	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

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Note:

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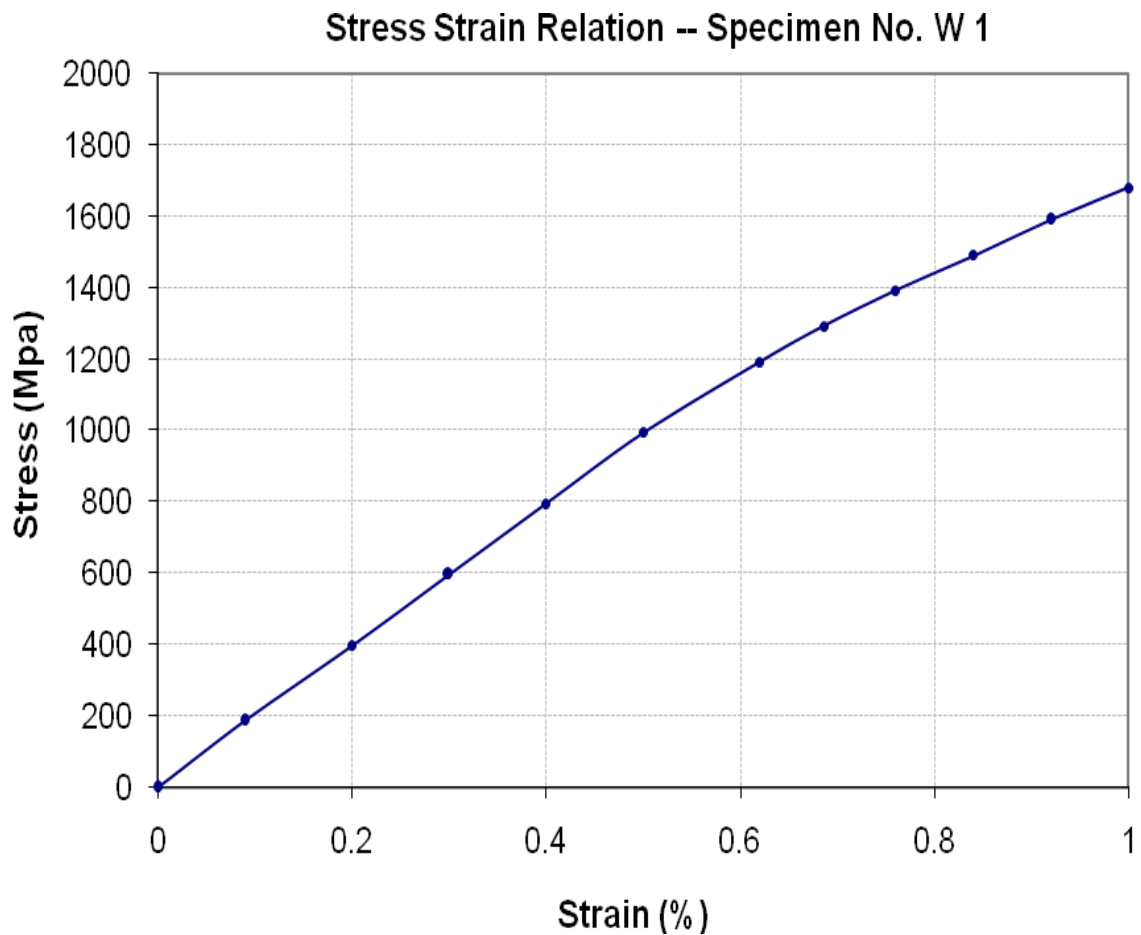
STRUCTURAL ENGINEERING DIVISION
Test Floor Laboratory
Department of Civil Engineering
University of Engineering and Technology Lahore, 54890
Pakistan. Ph: 92-42-99029202

To,
Resident Engineer
ESS.I.AAR Consultant
Construction of Access Road for Rashakai Special Economic Zone

Reference # CED/TFL **35354** (Dr. Qasim Khan)
Reference of the request letter # E8R/RSEZ/008

Dated: 11-09-2020
Dated: 08-09-2020

Graph (Page – 2/4)



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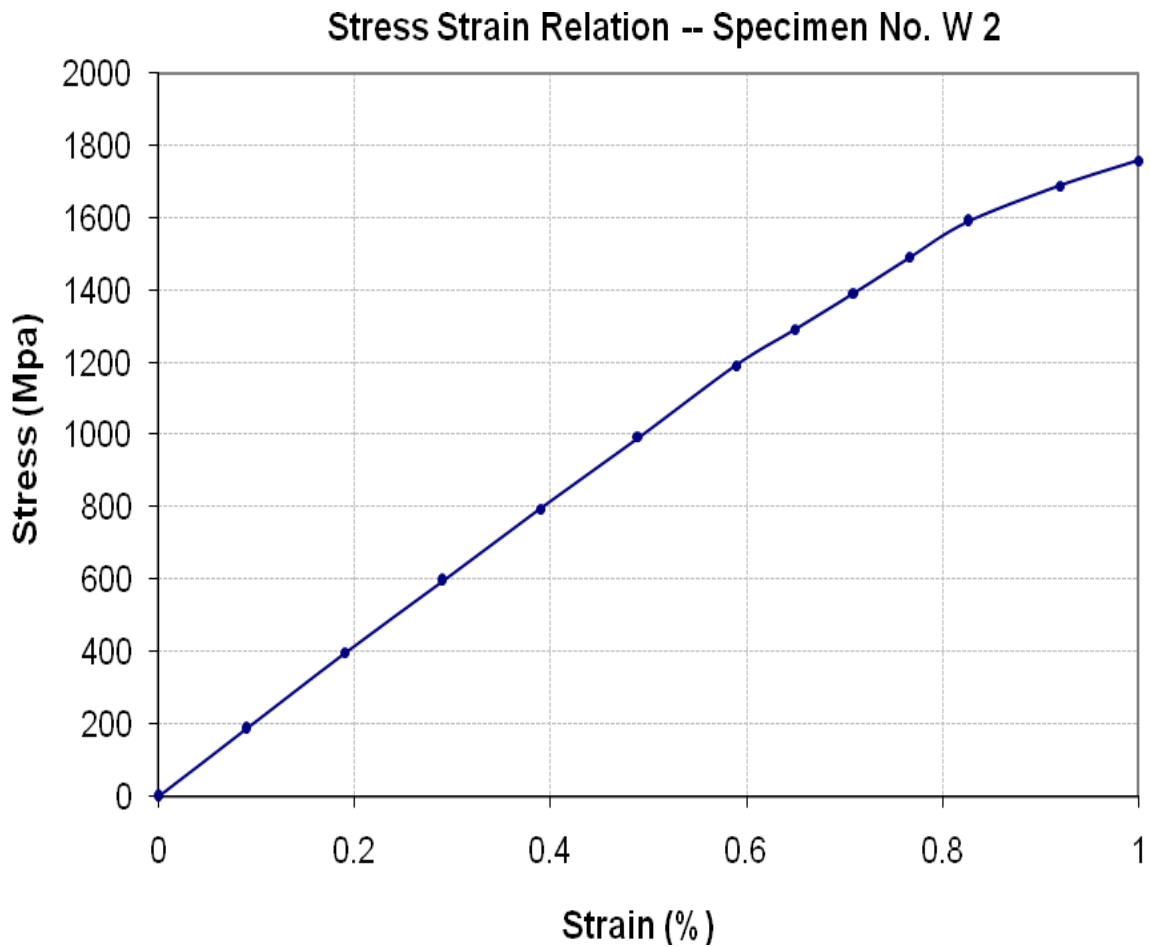
STRUCTURAL ENGINEERING DIVISION
Test Floor Laboratory
Department of Civil Engineering
University of Engineering and Technology Lahore, 54890
Pakistan. Ph: 92-42-99029202

To,
Resident Engineer
ESS.I.AAR Consultant
Construction of Access Road for Rashakai Special Economic Zone

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Dated: 11-09-2020
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Graph (Page – 3/4)



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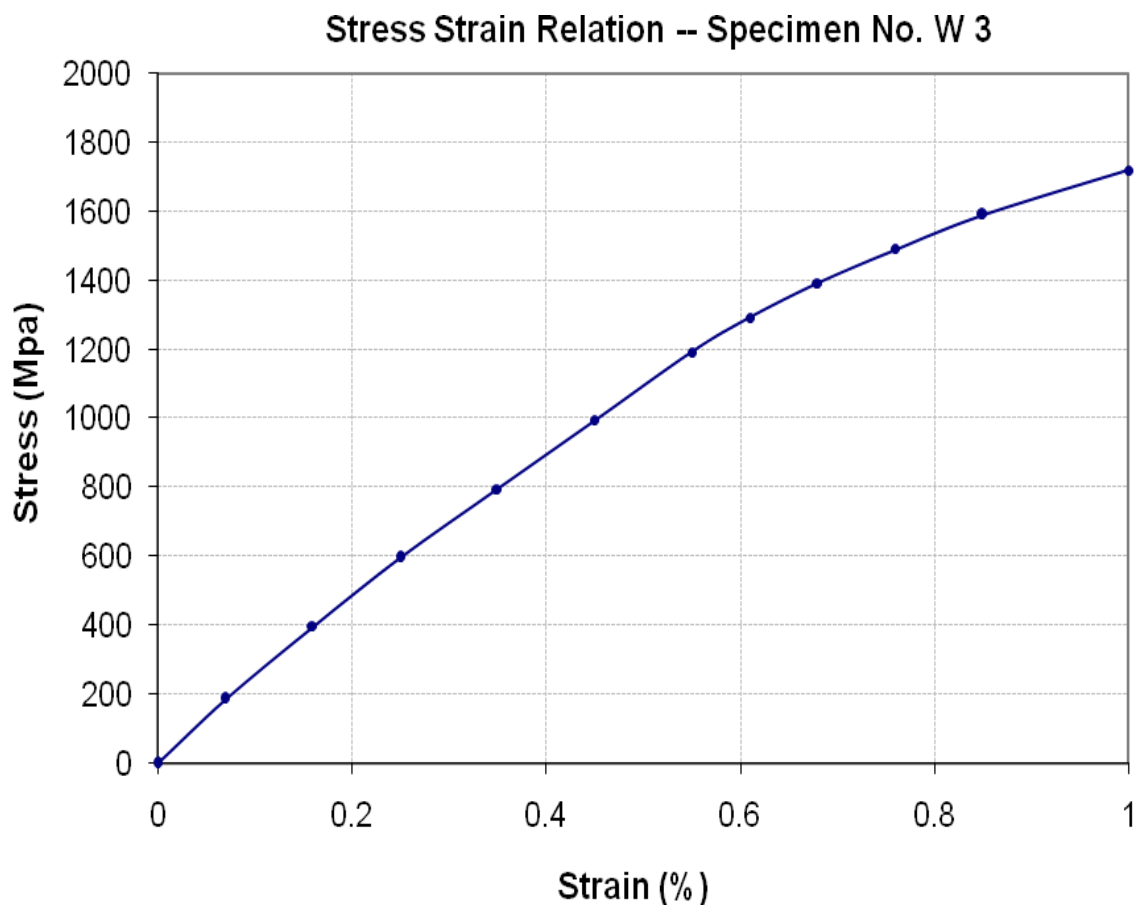
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Test Floor Laboratory
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University of Engineering and Technology Lahore, 54890
Pakistan. Ph: 92-42-99029202

To,
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ESS.I.AAR Consultant
Construction of Access Road for Rashakai Special Economic Zone

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Dated: 11-09-2020
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Graph (Page – 4/4)



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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
ACE, Kohat
Dualization of Sherkot – Hangu Section of Provincial Highway S-7 24 (kms)

Reference # CED/TFL **35355** (Dr. Qasim Khan)
Reference of the request letter # ACE/KHT/SHRP/684

Dated: 11-09-2020
Dated: 08-09-2020

Tension Test Report (Page – 1/4)

Date of Test 14-09-2020
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)			
1	12.70 (1/2")	775.0	779.0	16000	156.96	17300	169.71	199	>3.50	xx
2	12.70 (1/2")	775.0	778.0	16800	164.81	18900	185.41	198	>3.50	xx
3	12.70 (1/2")	775.0	779.0	17500	171.68	19100	187.37	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:

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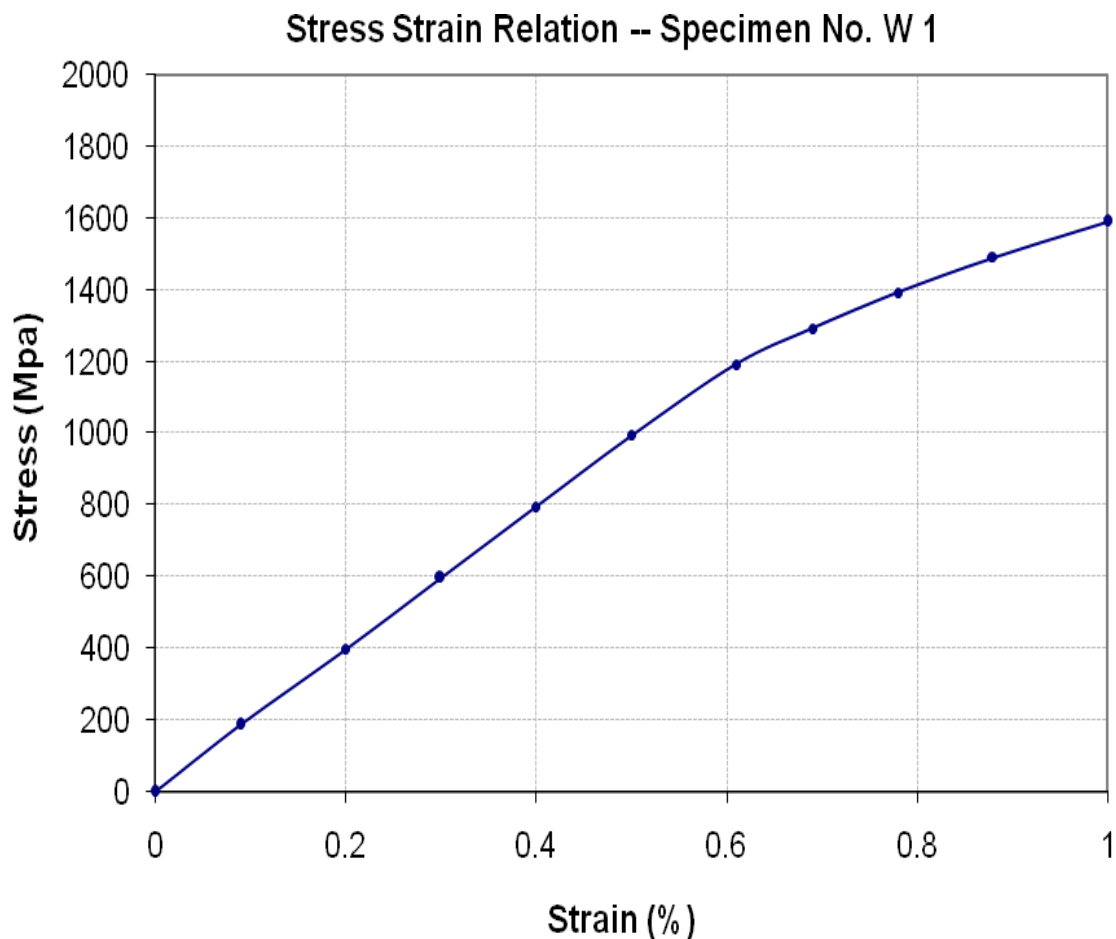
STRUCTURAL ENGINEERING DIVISION
Test Floor Laboratory
Department of Civil Engineering
University of Engineering and Technology Lahore, 54890
Pakistan. Ph: 92-42-99029202

To,
Resident Engineer
ACE, Kohat
Dualization of Sherkot – Hangu Section of Provincial Highway S-7 24 (kms)

Reference # CED/TFL **35355** (Dr. Qasim Khan)
Reference of the request letter # ACE/KHT/SHRP/684

Dated: 11-09-2020
Dated: 08-09-2020

Graph (Page – 2/4)



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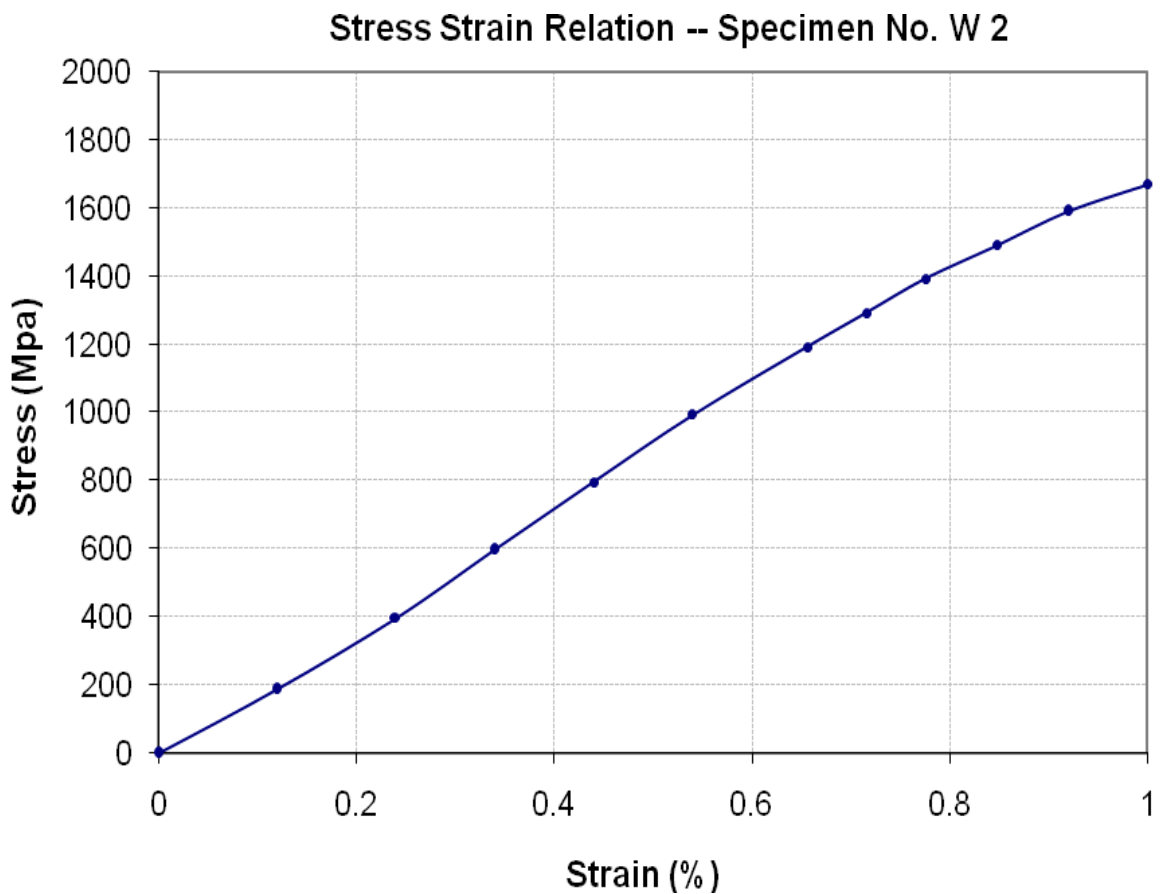
STRUCTURAL ENGINEERING DIVISION
Test Floor Laboratory
Department of Civil Engineering
University of Engineering and Technology Lahore, 54890
Pakistan. Ph: 92-42-99029202

To,
Resident Engineer
ACE, Kohat
Dualization of Sherkot – Hangu Section of Provincial Highway S-7 24 (kms)

Reference # CED/TFL **35355** (Dr. Qasim Khan)
Reference of the request letter # ACE/KHT/SHRP/684

Dated: 11-09-2020
Dated: 08-09-2020

Graph (Page – 3/4)



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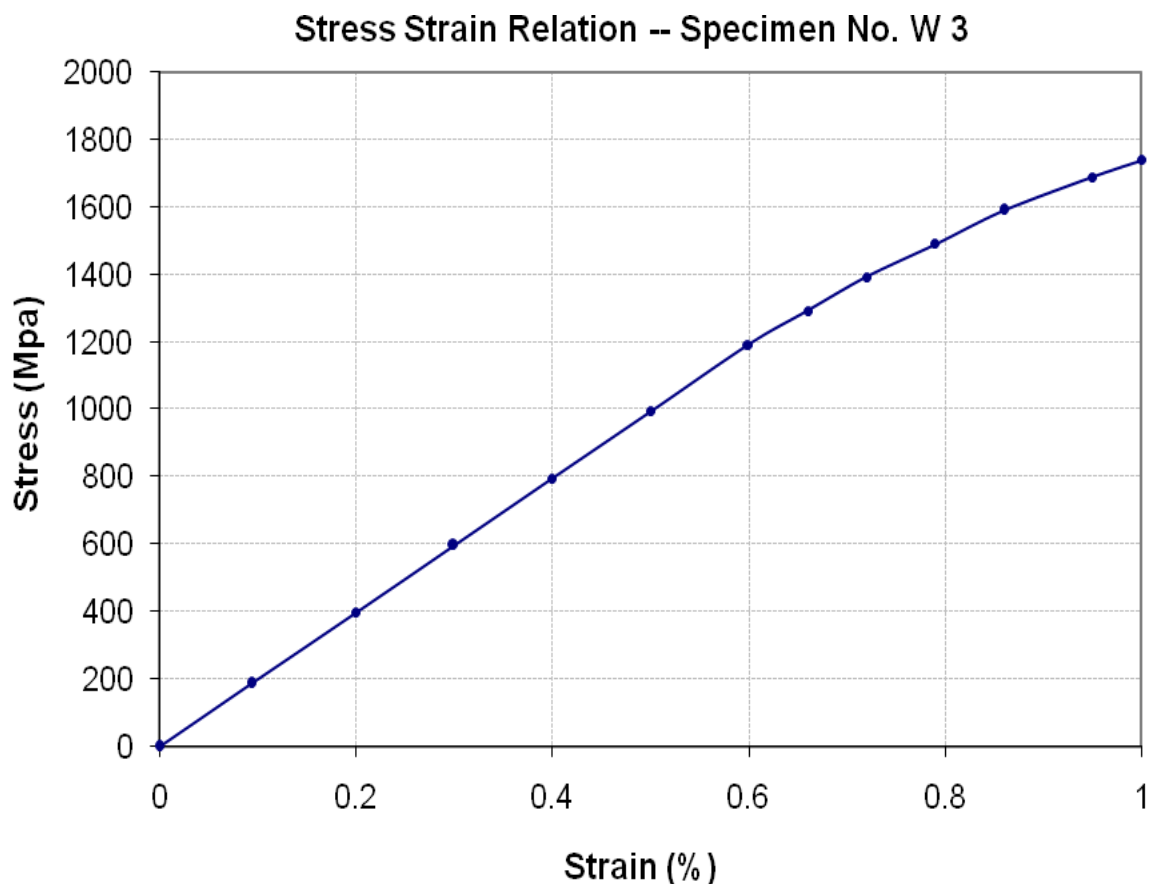
STRUCTURAL ENGINEERING DIVISION
Test Floor Laboratory
Department of Civil Engineering
University of Engineering and Technology Lahore, 54890
Pakistan. Ph: 92-42-99029202

To,
Resident Engineer
ACE, Kohat
Dualization of Sherkot – Hangu Section of Provincial Highway S-7 24 (kms)

Reference # CED/TFL **35355** (Dr. Qasim Khan)
Reference of the request letter # ACE/KHT/SHRP/684

Dated: 11-09-2020
Dated: 08-09-2020

Graph (Page – 4/4)



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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,
 General Manager Plant
 Shangrila Foods (Private) Limited
 Karachi

Reference # CED/TFL **35356** (Dr. Qasim Khan)
 Reference of the request letter # Nil

Dated: 11-09-2020
 Dated: 08-09-2020

Tension Test Report (Page -1/1)

Date of Test 14-09-2020
 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 ²)		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	0.363	3	0.368	0.11	0.107	4300	5300	86200	88940	106200	109700	0.70	8.8	
2	0.358	3	0.366	0.11	0.105	4100	5400	82200	85900	108200	113200	0.90	11.3	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only two samples for tensile and one sample for bend test														
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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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
 ESS-I-AAR
 Improvement/Beautification of Pull Dat DG Khan City

Reference # CED/TFL **35357** (Dr. Qasim Khan)
 Reference of the request letter # 425

Dated: 11-09-2020
 Dated: 14-07-2020

Tension Test Report (Page -1/1)

Date of Test 14-09-2020
 Gauge length 8 inches
 Description Deformed Steel Bar Tensile Test as per ASTM-A615

Sr. No.	Weight (lbs/ft)	Diameter/ Size (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	Nominal	Actual			
1	0.376	3	0.375	0.11	0.111	3300	5000	66200	65730	100200	99600	1.20	15.0	
2	0.376	3	0.375	0.11	0.110	3400	5000	68200	67880	100200	99900	1.30	16.3	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only two samples for tensile test														
Bend Test														

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,
 Project Manager
 Shahan Brothers
 DAC Tower 16 Shdman Jail Road Lahore

Reference # CED/TFL **35358** (Dr. Qasim Khan)
 Reference of the request letter # Nil

Dated: 11-09-2020
 Dated: 11-09-2020

Tension Test Report (Page -1/1)

Date of Test 14-09-2020
 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 ²)		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	0.356	3	0.365	0.11	0.105	3700	4800	74200	77870	96200	101100	1.10	13.8	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only one sample for tensile and one sample for bend test														
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,
 Project Director
 New Metro City Housing Scheme, Sara-I-Alamgir

Reference # CED/TFL **35359** (Dr. Qasim Khan)
 Reference of the request letter # PD/NMC/20/93

Dated: 11-09-2020
 Dated: 03-09-2020

Tension Test Report (Page -1/1)

Date of Test 14-09-2020
 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 ²)		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	0.372	3/8	0.373	0.11	0.109	3300	4600	66200	66550	92200	92800	1.20	15.0	Afco Steel
2	0.373	3/8	0.374	0.11	0.110	3400	4800	68200	68360	96200	96600	1.20	15.0	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only two samples for tensile and one sample for bend test														
Bend Test														
3/8" Dia Bar Bend Test Through 180° is Satisfactory														

I/C Testing Laboratories
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 Junaid (Pvt) Ltd
Lahore
(Manufacturing of Spun Hollow Poles)

Reference # CED/TFL **35360** (Dr. Qasim Khan)
Reference of the request letter # JPL/lab/Poles

Dated: 11-07-2020
Dated: 11-07-2020

Tension Test Report (Page -1/4)

Date of Test 14-09-2020
Gauge length 2 inches
Description MS Wire Tensile Test

Sr. No.	Weight (kg/m)	Diameter/ size		Area (mm ²)		Yield load (kg)	Breaking Load (kg)	Yield Stress (MPa) Actual	Ultimate Stress (MPa) Actual	Elongation (inch)	% Elongation	Remarks
		Nominal (mm)	Actual (mm)	Nominal	Actual							
1	0.148	5	4.89	-----	18.8	-----	1200	-----	626	0.30	15.0	
.	
.	
.	
.	
.	
Note: only one sample for tensile test												
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,
M/S Junaid (Pvt) Ltd
Lahore
(Manufacturing of Spun Hollow Poles)

Reference # CED/TFL **35360** (Dr. Qasim Khan)
Reference of the request letter # JPL/lab/Poles-A

Dated: 11-07-2020
Dated: 11-07-2020

Tension Test Report (Page -2/4)

Date of Test 14-09-2020
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)		% Elongation	Remarks / Coil No.
	(mm)	(kg/km)	(kg/km)	(kg)	(kN)	(kg)	(kN)		
1	9.53 (3/8")	432.0	417.0	9600	94.18	10700	104.97	>3.50	xx
-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-
Only one sample for Test									

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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 Junaid (Pvt) Ltd
Lahore
(Manufacturing of Spun Hollow Poles)

Reference # CED/TFL **35360** (Dr. Qasim Khan)
Reference of the request letter # JPL/lab/Poles-B

Dated: 11-07-2020
Dated: 11-07-2020

Tension Test Report (Page -3/4)

Date of Test 14-09-2020
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)		% Elongation	Remarks / Coil No.
	(mm)	(kg/km)	(kg/km)	(kg)	(kN)	(kg)	(kN)		
1	11.11 (7/16")	582.0	549.0	12700	124.59	14000	137.34	>3.50	xx
-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-
Only one sample for Test									

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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,
M/S Junaid (Pvt) Ltd
Lahore
(Manufacturing of Spun Hollow Poles)

Reference # CED/TFL **35360** (Dr. Qasim Khan)
Reference of the request letter # JPL/lab/Poles-C

Dated: 11-07-2020
Dated: 11-07-2020

Tension Test Report (Page -4/4)

Date of Test 14-09-2020
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)		% Elongation	Remarks / Coil No.
	(mm)	(kg/km)	(kg/km)	(kg)	(kN)	(kg)	(kN)		
1	12.70 (1/2")	775.0	784.0	18500	181.49	19800	194.24	>3.50	xx
-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-
Only one sample for 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,
Resident Engineer Sec-4
Zeeruk International (Pvt) Ltd
Lahore Sialkot Motorway Project
(759 CTE FWO (LSMP))

Reference # CED/TFL **35361** (Dr. Qasim Khan)
Reference of the request letter # LSMP/DCRE/2020/1846

Dated: 11-09-2020
Dated: 10-09-2020

Tension Test Report (Page – 1/1)

Date of Test 14-09-2020
Gauge length 2 inches
Description Mesh Wire for Gabion Tensile Test

Sr. No.	Diameter / size	Area	Breaking Load	Ultimate Stress	Elongation	% Elongation	Marks
	(cm)	(cm ²)	(kg)	(kg/cm ²)	(inch)		
1	0.41	0.13	600	4544.58	0.50	25.00	
2	0.41	0.13	600	4544.58	0.50	25.00	
-	-	-	-	-	-	-	
-	-	-	-	-	-	-	
-	-	-	-	-	-	-	
-	-	-	-	-	-	-	

Only Two Samples for Tensile Test

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
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To,
 Project Manager
 Liberty Builders
 Construction of Zee Avenue-Ramada Hotel & Suites 17-A Cooper Road, Lahore

Reference # CED/TFL **35363** (Dr. Qasim Khan)
 Reference of the request letter # ST/UET/20200914

Dated: 14-09-2020
 Dated: 14-09-2020

Tension Test Report (Page -1/1)

Date of Test 14-09-2020
 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 ²)		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	0.371	3	0.373	0.11	0.109	3500	5300	70200	70720	106200	107100	1.30	16.3	Ittefaq Steel
2	0.370	3	0.372	0.11	0.109	3400	5300	68200	68860	106200	107400	1.20	15.0	
3	0.387	3	0.381	0.11	0.114	3800	5500	76200	73540	110200	106500	1.20	15.0	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only three samples for tensile and one sample for bend test														
Bend Test														
#3 Bar Bend Test Through 180° is Satisfactory														

I/C Testing Laboratoires
UET Lahore, Pakistan.

Note:

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