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
Development of Internal Infrastructure of CBD Walton (Phase 2 & 3) & Flyover Connecting Bab-e-Pakistan to Walton

Reference # CED/TFL **4667** (Dr. Ali Ahmed) Dated: 20-02-2024
Reference of the request letter # 4322/13/DAK/02/144 Dated: 12-02-2024

Tension Test Report (Page -1/1)

Date of Test 27-02-2024
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	0.376	3	0.375	0.11	0.111	3800	5000	76200	75750	100200	99700	0.90	11.3	Premium Batala
2	0.378	3	0.376	0.11	0.111	4500	5400	90200	89170	108200	107000	0.80	10.0	
3	5.341	11	1.414	1.56	1.570	44000	70200	62200	61780	99200	98600	1.70	21.3	
4	5.340	11	1.414	1.56	1.570	46600	73000	65900	65430	103200	102500	1.40	17.5	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	

Note: only four samples for tensile and two samples for bend test

Bend Test

#3 Bar Bend Test Through 180º is Satisfactory

#11 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
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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,

M/S Potential Engineers (Pvt) Limited.
Lahore
(PCC Pole Plant Sadiqabad)

Reference # CED/TFL **4679** (Dr. M Rizwan Riaz) Dated: 21-02-2024
Reference of the request letter # PCP/HTLT/SPUN/SDK/105 Dated: 20-02-2024

Tension Test Report (Page -1/2)

Date of Test 27-02-2024
Gauge length 8 inches
Description MS Plain Wire Tensile Test

Sr. No.	Weight	Diameter/ size		Area (mm^2)		Yield load	Breaking Load	Yield Stress (MPa)	Ultimate Stress (MPa)	Elongation	% Elongation	Remarks
	(kg/m)	Nominal (mm)	Actual (mm)	Nominal	Actual	(kg)	(kg)	Actual	Actual	(inch)		
1	0.145	5	4.85	------	18.5	1280	1640	680	872	0.20	2.5	
-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	
Note: only one sample 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,

M/S Potential Engineers (Pvt) Limited.
Lahore
(PCC Pole Plant Sadiqabad)

Reference # CED/TFL **4679** (Dr. M Rizwan Riaz) Dated: 21-02-2024
Reference of the request letter # PCP/HTLT/SPUN/SDK/107 Dated: 20-02-2024

Tension Test Report (Page -2/2)

Date of Test 27-02-2024
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**	**451.0**	**8200**	**80.44**	**10600**	**103.99**	**>3.50**	**xx**
2	**11.11 (7/16")**	**582.0**	**596.0**	**13000**	**127.53**	**14600**	**143.23**	**>3.50**	**xx**
-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-
Only two samples 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
NESPAK
Dualization & Improvement of Existing N – 50 from Yarik to Saggu Road Project (50km).

Reference # CED/TFL **4683** (Dr. M Rizwan Riaz) Dated: 21-02-2024
Reference of the request letter # CPEC/YS/RE/AHJ/84 Dated: 31-01-2024

Tension Test Report (Page -1/1)

Date of Test 27-02-2024
Gauge length 8 inches
Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight	Diameter/ Size (inch)		Area (in^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	0.360	10	9.32	0.12	0.106	3300	4700	60627	68750	86347	98000	1.00	12.5	FF Steel
2	0.358	10	9.30	0.12	0.105	3300	4700	60627	69060	86347	98400	1.10	13.8	
3	5.230	36	35.54	1.58	1.537	48600	67000	67812	69680	93486	96100	1.40	17.5	
4	5.257	36	35.63	1.58	1.545	48600	66400	67812	69320	92649	94800	1.60	20.0	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only four samples for tensile and two samples for bend test														
Bend Test														
10mm Dia Bar Bend Test Through 180º is Satisfactory														
36mm Dia Bar Bend Test Through 180º 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,

Resident Engineer
Diamer Basha Consultants Group (DBCG)
NESPAK - ACE -MMP - MWH - ROYRY - DOLSAR Jv
Diamer Basha Dam Project

Reference # CED/TFL **4689** (Dr. Ali Ahmed) Dated: 23-02-2024
Reference of the request letter # DBCG/Lab/PF JV/2024/009 Dated: 21-22-2024

Tension Test Report (Page -1/4)

Date of Test 27-02-2024
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	15.24 (0.6")	1102.0	1114.0	24200	237.40	27500	269.78	199	>3.50	WS-S1-2024-01
2	15.24 (0.6")	1102.0	1119.0	24600	241.33	27500	269.78	199	>3.50	WS-S1-2024-02
3	15.24 (0.6")	1102.0	1110.0	24400	239.36	27600	270.76	198	>3.50	WS-S1-2024-03
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
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.

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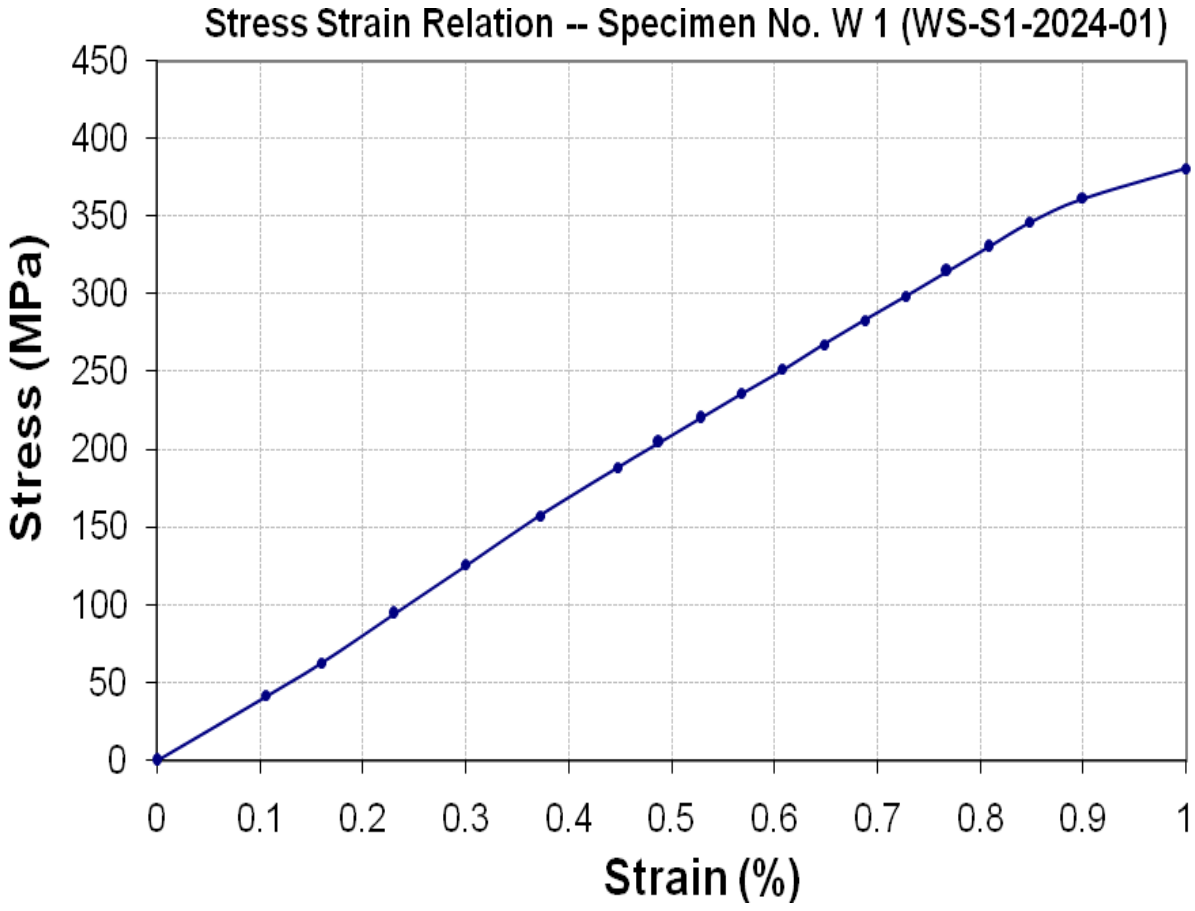
STRUCTURAL ENGINEERING DIVISION
Test Floor Laboratory
Department of Civil Engineering
University of Engineering and Technology Lahore, 54890
Pakistan. Ph: 92-42-99029202

To,

Resident Engineer
Diamer Basha Consultants Group (DBCG)
NESPAK - ACE -MMP - MWH - ROYRY - DOLSAR Jv
Diamer Basha Dam Project

Reference # CED/TFL **4689** (Dr. Ali Ahmed) Dated: 23-02-2024
Reference of the request letter # DBCG/Lab/PF JV/2024/009 Dated: 21-22-2024

Graph (Page – 2/4)



I/C Testing Laboratoires
UET Lahore, Pakistan.

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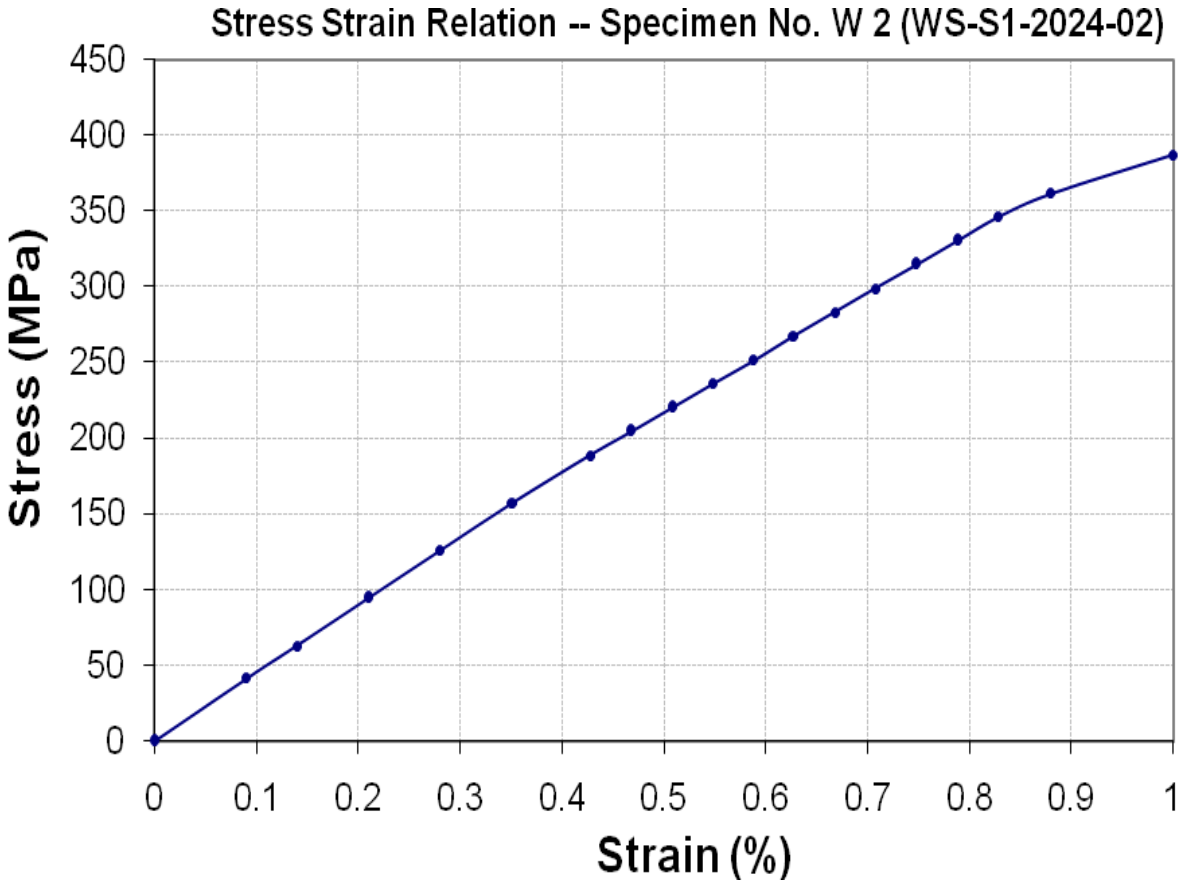
STRUCTURAL ENGINEERING DIVISION
Test Floor Laboratory
Department of Civil Engineering
University of Engineering and Technology Lahore, 54890
Pakistan. Ph: 92-42-99029202

To,

Resident Engineer
Diamer Basha Consultants Group (DBCG)
NESPAK - ACE -MMP - MWH - ROYRY - DOLSAR Jv
Diamer Basha Dam Project

Reference # CED/TFL **4689** (Dr. Ali Ahmed) Dated: 23-02-2024
Reference of the request letter # DBCG/Lab/PF JV/2024/009 Dated: 21-22-2024

Graph (Page – 3/4)



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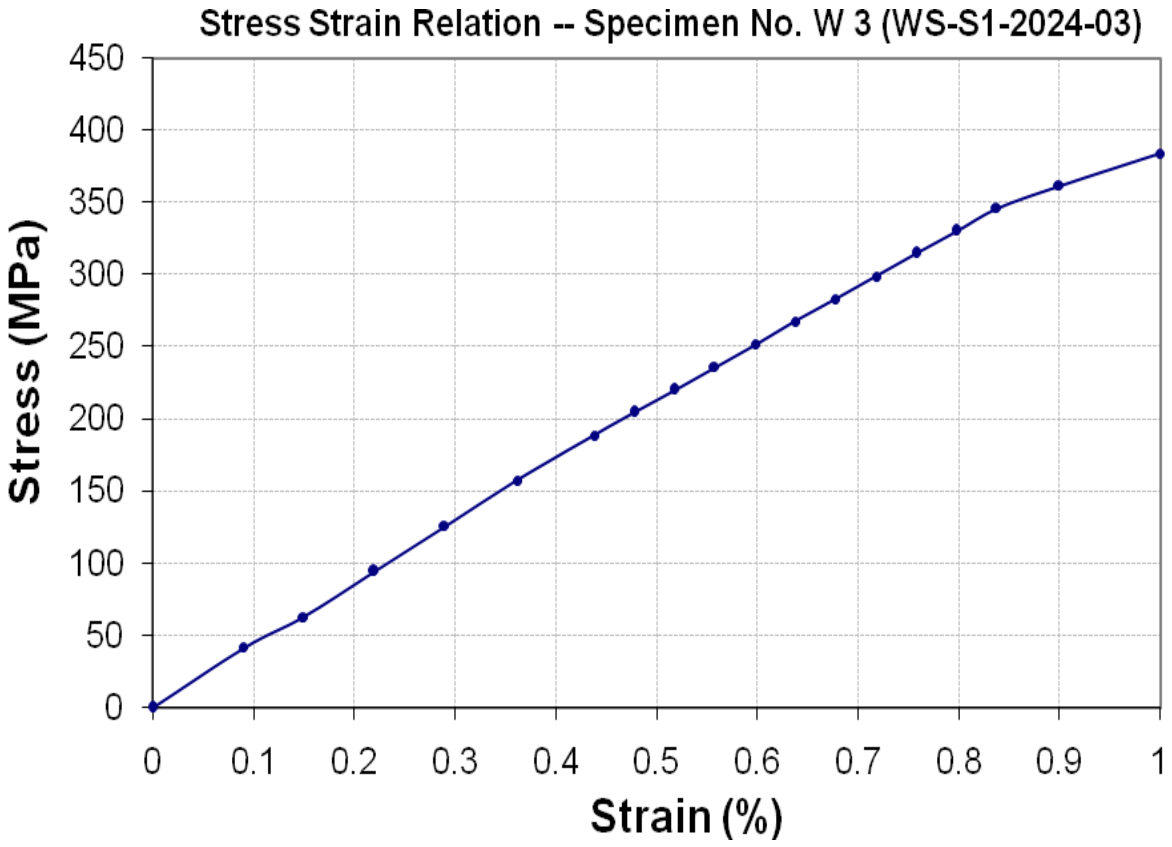
STRUCTURAL ENGINEERING DIVISION
Test Floor Laboratory
Department of Civil Engineering
University of Engineering and Technology Lahore, 54890
Pakistan. Ph: 92-42-99029202

To,

Resident Engineer
Diamer Basha Consultants Group (DBCG)
NESPAK - ACE -MMP - MWH - ROYRY - DOLSAR Jv
Diamer Basha Dam Project

Reference # CED/TFL **4689** (Dr. Ali Ahmed) Dated: 23-02-2024
Reference of the request letter # DBCG/Lab/PF JV/2024/009 Dated: 21-22-2024

Graph (Page – 4/4)



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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,

Sub Divisional Officer
Highway Sub-Division Sohawa
"Construction of Rohtas Fort bypass Road Length = 3.21 kmDistrict Jhelum."

Reference # CED/TFL **4692** (Dr. Ali Ahmed) Dated: 23-02-2024
Reference of the request letter # 35/S Dated: 21-02-2024

Tension Test Report (Page -1/1)

Date of Test 27-02-2024
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	5.397	11	1.421	1.56	1.587	47800	70800	67600	66410	100100	98400	1.50	18.8	
2	5.289	11	1.407	1.56	1.555	48200	69200	68100	68340	97800	98200	1.50	18.8	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only two samples for tensile and one sample for bend test														
Bend Test														
#11 Bar Bend Test Through 180º 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,

Senior Engineer (Civil)
WASO, Chashma
"Construction of Overhead Water Tank (20, 000 Gallon) Pump Rooms (03 Nos.) & Deep Well Turbines for Hostel Near Mianwali."

Reference # CED/TFL **4696** (Dr. M Rizwan Riaz) Dated: 26-02-2024
Reference of the request letter # WASO-P(CH)/OHWT-WB-149 Dated: 19-02-2024

Tension Test Report (Page -1/1)

Date of Test 27-02-2024
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	0.387	3	0.381	0.11	0.114	3600	5000	72200	69690	100200	96800	1.30	16.3	Sheikhoo Steel
2	0.378	3	0.376	0.11	0.111	3400	4900	68200	67530	98200	97400	1.40	17.5	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
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:
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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,

Team Leader - JIPIC
Project Implementation Consultants (PICs)
Jalalpur Irrigation Project (JIP)

Reference # CED/TFL **4697** (Dr. M Rizwan Riaz) Dated: 26-02-2024
Reference of the request letter # JIPIC/6380 Dated: 19-02-2024

Tension Test Report (Page – 1/1)

Date of Test 27-02-2024
Description Galvanized Steel Wire Rope Tensile Test

Sr. No.	Nominal Diameter	Measured weight	Breaking Load	Remarks / Coil No.
	(mm)	(kg/m)	(kg)	
1	**16**	**0.90**	**13500**	
-	-	-	-	
-	-	-	-	
-	-	-	-	
-	-	-	-	
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,

Deputy Director (Engg.)
Lahore Development Authority
"Construction of Shops at Shahdara Army Land Falling in The Aligment of The Project – Construction of of Multi-Level Grade Separartion at Shahdara Morr, Lahore."

Reference # CED/TFL **4698** (Dr. M Rizwan Riaz) Dated: 26-02-2024
Reference of the request letter # DD(ENGG.)/LDA/10 Dated: 19-02-2024

Tension Test Report (Page -1/2)

Date of Test 27-02-2024
Gauge length 8 inches
Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight	Diameter/ Size (inch)		Area (in^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	0.364	3/8	0.369	0.11	0.107	3400	4800	68200	69960	96200	98800	1.20	15.0	
2	0.367	3/8	0.371	0.11	0.108	3400	4900	68200	69420	98200	100100	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 180º 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,

Deputy Director (Engg.)
Lahore Development Authority
"Shifting / Construction of Building Block of Police Station Shahdara, Lahore Falling in The Aligment of The Project – Construction of of Multi-Level Grade Separartion at Shahdara Morr, Lahore."

Reference # CED/TFL **4698** (Dr. M Rizwan Riaz) Dated: 26-02-2024
Reference of the request letter # DD(ENGG.)/LDA/12 Dated: 19-02-2024

Tension Test Report (Page -2/2)

Date of Test 27-02-2024
Gauge length 8 inches
Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight	Diameter/ Size (inch)		Area (in^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	0.367	3/8	0.371	0.11	0.108	3500	4900	70200	71460	98200	100100	1.00	12.5	
2	0.366	3/8	0.370	0.11	0.108	3500	4900	70200	71610	98200	100300	1.30	16.3	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only two samples for tensile and one sample for bend test														
Bend Test														
3/8" Dia Bar Bend Test Through 180º 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,

Resident Engineer,
Orbit Developers Private Limited
The Spring Apartment Homes

Reference # CED/TFL **4701** (Dr. Ali Ahmed) Dated: 27-02-2024
Reference of the request letter# NIL Dated: 27-02-2024

Tension Test Report (Page -1/1)

Date of Test 27-02-2024
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	0.370	3	0.372	0.11	0.109	3500	5000	70200	70950	100200	101400	0.80	10.0	
2	0.371	3	0.373	0.11	0.109	3400	5000	68200	68670	100200	101000	0.90	11.3	
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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