



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
 Techno Consult International
 CPEC Package-1, D.I. Khan

Reference # CED/TFL **32537** (Dr. Ali Ahmed)
 Reference of the request letter # RE/CPEC/DIK/2019/456

Dated: 30-01-2019
 Dated: 29-01-2019

Tension Test Report (Page – 1/4)

Date of Test 08-02-2019
 Gauge length 2 inches
 Description Guard Rail & Vertical Steel Post Steel Strip Tensile Test as per ASSHTO
 M-180

Sr. No.	Designation	Size of Strip	X Section Area	Yield load	Breaking Load	Yield Stress	Ultimate Stress	Elongation	% Elongation	Remarks
1	Guard Rail	2.40x0.30	0.72	2700	3600	3750.00	5000.00	0.60	30.00	
2		2.40x0.30	0.72	2700	3600	3750.00	5000.00	0.50	25.00	
3	Vertical Steel Post	2.29x0.51	1.17	4100	5900	3510.57	5051.80	0.60	30.00	
4		2.29x0.51	1.17	4100	5900	3510.57	5051.80	0.60	30.00	
5	Vertical Steel Post	2.36x0.61	1.44	5400	7100	3751.04	4931.93	0.60	30.00	
6		2.10x0.61	1.28	4600	6600	3590.94	5152.22	0.70	35.00	
Only Six Samples for Tensile Test										
Bend Test										

I/C Testing Laboratoires
UET Lahore, Pakistan.

Note:

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To,
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Reference # CED/TFL **32537** (Dr. Ali Ahmed)
Reference of the request letter # RE/CPEC/DIK/2019/456

Dated: 30-01-2019
Dated: 29-01-2019

Size Test Report (Page – 2/4)
Date of Test 08-02-2019
Gauge length -----
Description Thickness of Sheet of Guard Rail & Vertical Steel Post

Sr. No.	Designation	Thickness		Remark
		(mm)	(mm)	
1	Guard Rail	-----	3.00	
2	Vertical Steel Post	5	5.10	
3		6	6.10	
-	-		-	
-	-		-	
-	-		-	
-	-		-	
-	-		-	
-	-		-	
-	-		-	
Only Three Samples for Test				

I/C Testing Laboratoires
UET Lahore, Pakistan.

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Dated: 30-01-2019
Dated: 29-01-2019

Tension Test Report (Page – 3/4)

Date of Test 08-02-2019
Gauge length -----
Description Chain Link Fence Wire Tensile Test as per AASHTO-M-181

Sr. No.	Diameter of Wire	Breaking Load		Remarks
	(mm)	(kg)	(kN)	
1	3.20	280	2.75	
2	3.20	280	2.75	
-	-	-	-	
-	-	-	-	
-	-	-	-	
-	-	-	-	
-	-	-	-	
Only Two Samples for Test				

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Reference of the request letter # RE/CPEC/DIK/2019/456

Dated: 30-01-2019
Dated: 29-01-2019

Size Test Report (Page – 4/4)
Date of Test 08-02-2019
Gauge length -----
Description Net Size Test

Sr. No.	Designation	Diameter of Wire	Grid	
			Length	Width
			(mm)	(mm)
1	Net	3.00	54.00	54.50
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
Only One Sample for Test				

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STRUCTURAL ENGINEERING DIVISION
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To,
Resident Engineer
SMEC International Pty Ltd
Peshawar–Karachi Motorway (PKM) Consultants Sukkur – Multan Section (392 km) (Section-6)

Reference # CED/TFL **32548** (Dr. Ali Ahmed)
Reference of the request letter # 5065057/6/6/399

Dated: 01-02-2019
Dated: 30-01-2019

Tension Test Report (Page – 1/1)

Date of Test 08-02-2019
Gauge length 2 inches
Description Galvanized Guard Rail & Metal Beam Strip Tensile and Bend Test

Sr. No.	Designation	Size of Strip	X Section Area	Yield load	Breaking Load	Yield Stress	Ultimate Stress	Elongation	% Elongation	Remarks
	-----	(cm)	(cm ²)	(kg)	(kg)	(kg/cm ²)	(kg/cm ²)	(in)		
1	Metal Beam	2.50x0.275	0.69	2600	3600	3781.82	5236.36	0.50	25.00	
2	Metal Beam	2.50x0.275	0.69	2600	3600	3781.82	5236.36	0.50	25.00	
3	Guard Rail	2.50x0.610	1.53	5600	7700	3672.13	5049.18	0.70	35.00	
4	Guard Rail	2.50x0.61	1.53	5700	8000	3737.70	5245.90	0.70	35.00	
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
Only Four Samples for Tensile and Two Samples for Bend Test										
Bend Test										
Strip Taken from Metal Beam Bend Test Through 180° is Satisfactory										
Strip Taken from Guard Rail Bend Test Through 180° is Satisfactory										

I/C Testing Laboratoires
UET Lahore, Pakistan.

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Test Floor Laboratory
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To,
 Resident Engineer
 SMEC International Pty Ltd
 Peshawar–Karachi Motorway (PKM) Consultants Sukkur – Multan Section (392 km) (Section-6)

Reference # CED/TFL **32550** (Dr. M Rizwan Azam)
 Reference of the request letter # 5065057/6/6/400

Dated: 01-02-2019
 Dated: 30-01-2019

Tension Test Report (Page – 1/2)

Date of Test 08-02-2019
 Gauge length 2 inches
 Description Sign Board Post (Aluminium) Strip Tensile Test

Sr. No.	Designation	Size of Strip	X Section Area	Yield load	Breaking Load	Yield Stress	Ultimate Stress	Elongation	% Elongation	Remarks
	(mm)	(mm)	(mm ²)	(kN)	(kN)	(MPa)	(MPa)	(in)		
1	Sign Board Post	27.20x3.10	84.32	37.10	44.52	439.99	527.99	0.20	10.00	
2		27.20x3.10	84.32	39.63	45.37	470.00	538.07	0.25	12.50	
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
Only Two Samples for Tensile Test										
Bend Test										

I/C Testing Laboratories
UET Lahore, Pakistan.

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To,
Resident Engineer
SMEC International Pty Ltd
Peshawar–Karachi Motorway (PKM) Consultants Sukkur – Multan Section (392 km) (Section-6)

Reference # CED/TFL **32550** (Dr. M Rizwan Azam)
Reference of the request letter # 5065057/6/6/400

Dated: 01-02-2019
Dated: 30-01-2019

Size Test Report (Page – 2/2)

Date of Test 08-02-2019
Gauge length -----
Description Thickness of Sheet of Sign Board

Sr. No.	Designation	Thickness	Remark
1	Sign Board	3.10	
-	-	-	
-	-	-	
-	-	-	
-	-	-	
-	-	-	
-	-	-	
-	-	-	
-	-	-	
Only One Sample for Test			

I/C Testing Laboratories
UET Lahore, Pakistan.

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To,
 Resident Engineer
 SMEC International Pty Ltd
 Peshawar–Karachi Motorway (PKM) Consultants Sukkur – Multan Section (392 km) (Section-6)

Reference # CED/TFL **32551** (Dr. Ali Ahmed)
 Reference of the request letter # 5065057/6/6/401

Dated: 01-02-2019
 Dated: 30-01-2019

Tension Test Report (Page – 1/2)

Date of Test 08-02-2019
 Gauge length 2 inches
 Description Hoop & Hold Steel Strip Tensile Test

Sr. No.	Designation	Size of Strip	X Section Area	Yield load	Breaking Load	Yield Stress	Ultimate Stress	Elongation	% Elongation	Remarks
	---	(mm)	(mm ²)	(kg)	(kg)	(MPa)	(MPa)	(in)		
1	Small	15.00x4.95	74.25	2300	3500	303.88	462.42	0.40	20.00	
2	Medium	23.00x5.10	117.30	4000	6200	334.53	518.52	0.50	25.00	
3	Large	23.00x4.90	112.70	3800	5700	330.77	496.16	0.45	22.50	
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
Only Three Samples for Tensile Test										
Bend Test										

I/C Testing Laboratoires
UET Lahore, Pakistan.

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To,
 Resident Engineer
 SMEC International Pty Ltd
 Peshawar–Karachi Motorway (PKM) Consultants Sukkur – Multan Section (392 km) (Section-6)

Reference # CED/TFL **32551** (Dr. Ali Ahmed)
 Reference of the request letter # 5065057/6/6/401

Dated: 01-02-2019
 Dated: 30-01-2019

Tension Test Report (Page -2/2)

Date of Test 06-02-2019
 Gauge length 8 inches
 Description Embedded Bolt Tensile and Bend Test

Sr. No.	Weight (lbs/ft)	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	5.64	32	30.26	-----	719.10	26200	41000	357	559	2.00	25.0	
2	5.65	32	30.27	-----	719.60	26600	41200	363	562	2.10	26.3	
-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	
Note: only two samples for tensile and one sample for bend test												
Bend Test												
32mm Dia Bolt 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
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Pakistan. Ph: 92-42-99029202

To,
 Resident Engineer
 EA Consulting (Pvt) Ltd
 Sukkur – Multan Motorway Project
 Section – III (CSCEC) (Honto Industrial (Private) Limited Company)

Reference # CED/TFL **32553** (Dr. M Rizwan Azam)
 Reference of the request letter # CRE/EA/M.P-III/314 -2019

Dated: 01-02-2019
 Dated: 31-01-2019

Tension Test Report (Page – 1/2)

Date of Test 08-02-2019
 Gauge length 2 inches
 Description Sign Panel (Aluminium) Strip Tensile Test

Sr. No.	Designation	Size of Strip	X Section Area	Yield load	Breaking Load	Yield Stress	Ultimate Stress	Elongation	% Elongation	Remarks
	(mm)	(mm)	(mm ²)	(kN)	(kN)	(MPa)	(MPa)	(in)		
1	Sign Panel	26.20x3.10	81.22	37.00	44.00	455.55	541.74	0.20	10.00	
2		26.20x3.10	81.22	40.20	44.15	494.95	543.59	0.25	12.50	
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
Only Two Samples for Tensile Test										
Bend Test										

I/C Testing Laboratoires
UET Lahore, Pakistan.

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To,
Resident Engineer
EA Consulting (Pvt) Ltd
Sukkur – Multan Motorway Project
Section – III (CSCEC) (Honto Industrial (Private) Limited Company)

Reference # CED/TFL **32553** (Dr. M Rizwan Azam)
Reference of the request letter # CRE/EA/M.P-III/314 -2019

Dated: 01-02-2019
Dated: 31-01-2019

Size Test Report (Page – 2/2)

Date of Test 08-02-2019
Gauge length -----
Description Thickness of Sheet of Sign Panel

Sr. No.	Designation	Thickness	Remark
	-----	(mm)	
1	Sign Board	3.10	
-	-	-	
-	-	-	
-	-	-	
-	-	-	
-	-	-	
-	-	-	
-	-	-	
-	-	-	
Only One Sample for Test			

I/C Testing Laboratories
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To,
 Resident Engineer
 Renardet S.A. (M-4) Package-III A
 Construction Supervision of Four Lane Motorway from Faisalabad to Khanewal Project (M-4),
 184 km, Package-3B, Shorkot-Dinpur Section (31km)(D & L International)(M/s GRC)
 Reference # CED/TFL **32557** (Dr. Ali Ahmed) Dated: 01-02-2019
 Reference of the request letter # RSA/M-4/3A/2019/286 Dated: 31-01-2019

Tension Test Report (Page – 1/1)

Date of Test 08-02-2019
 Gauge length 2 inches
 Description W-Section Strip Tensile and Bend Test

Sr. No.	Designation	Size of Strip	X Section Area	Yield load	Breaking Load	Yield Stress	Ultimate Stress	Elongation	% Elongation	Remarks
	-----	(cm)	(cm ²)	(kg)	(kg)	(kg/cm ²)	(kg/cm ²)	(in)		
1	W-Section	1.86x0.275	0.51	1900	2600	3714.57	5083.09	0.60	30.00	
2	W-Section	1.86x0.275	0.51	2000	2700	3910.07	5278.59	0.60	30.00	
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
Only Two Samples for Tensile and One Sample for Bend Test										
Bend Test										
Strip Taken from W-Section Bend Test Through 180° is Satisfactory										
Strip Taken from W-Section Bend Test Through 180° is Satisfactory										

I/C Testing Laboratoires
UET Lahore, Pakistan.

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Department of Civil Engineering
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To,
 Resident Engineer
 Renardet S.A. (M-4) Package-IIIB
 Construction of Faisalabad-Khanewal Motorway (M-4) Project, Package-IIIB, Dinpur-Khanewal, Section 3B

Reference # CED/TFL **32567** (Dr. Ali Ahmed)
 Reference of the request letter # RE/M-4/3B/2019/396

Dated: 04-02-2019
 Dated: 29-01-2019

Tension Test Report (Page – 1/2)

Date of Test 08-02-2019
 Gauge length 2 inches
 Description Vertical Post Strip Tensile Test

Sr. No.	Designation	Size of Strip	X Section Area	Yield load	Breaking Load	Yield Stress	Ultimate Stress	Elongation	% Elongation	Remarks
1	Vertical Post	2.40x0.61	1.46	5400	7200	3688.52	4918.03	0.70	35.00	
2	Vertical Post	2.40x0.61	1.46	5200	7200	3551.91	4918.03	0.70	35.00	
3	Vertical Post	2.40x0.61	1.46	5200	7200	3551.91	4918.03	0.70	35.00	
4	Vertical Post	2.40x0.61	1.46	5300	7200	3620.22	4918.03	0.70	35.00	
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
Only Four Samples for Tensile Test										
Bend Test										

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To,
Resident Engineer
Renardet S.A. (M-4) Package-IIIB
Construction of Faisalabad-Khanewal Motorway (M-4) Project, Package-IIIB, Dinpur-Khanewal, Section 3B

Reference # CED/TFL **32567** (Dr. Ali Ahmed)
Reference of the request letter # RE/M-4/3B/2019/396

Dated: 04-02-2019
Dated: 29-01-2019

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

Date of Test 06-02-2019
Gauge length -----
Description Vertical Post Weight and Size Test

Sr. No.	Designation	Weight	Length	Weight per Unit Length	Web Thickness (t _w)	Remark
		(g)	(cm)	(kg/m)	(mm)	
1	Vertical Post	8252	60.60	13.62	6.10	
2	Vertical Post	8399	61.10	13.75	6.10	
-	-	-	-	-	-	
-	-	-	-	-	-	
-	-	-	-	-	-	
-	-	-	-	-	-	
-	-	-	-	-	-	
-	-	-	-	-	-	
Only Two Samples for Test						

I/C Testing Laboratoires
UET Lahore, Pakistan.

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To,
 DCRE/RE-1
 Zeeruk International (Pvt) Ltd
 Lahore Sialkot Motorway Project

Reference # CED/TFL **32568** (Dr. Ali Ahmed)
 Reference of the request letter # LSMP/RE-1/2018/642

Dated: 04-02-2019
 Dated: 04-02-2019

Tension Test Report (Page – 1/2)

Date of Test 08-02-2019
 Gauge length 2 inches
 Description Steel Galvanized Steel Post & Galvanized Corrugated Beam Strip Tensile and Bend Test

Sr. No.	Designation	Size of Strip	X Section Area	Yield load	Breaking Load	Yield Stress	Ultimate Stress	Elongation	% Elongation	Remarks
1	Steel Post	2.26x0.71	1.60	5600	7800	3489.97	4861.02	0.60	30.00	
2	Steel Post	2.26x0.71	1.60	5700	8250	3552.29	5141.47	0.60	30.00	
3	Steel Beam	2.26x0.28	0.63	2400	3100	3792.67	4898.86	0.50	25.00	
4	Steel Beam	2.26x0.28	0.63	2400	3150	3792.67	4977.88	0.60	30.00	
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
Only Four Samples for Tensile and Two Samples for Bend Test										
Bend Test										
Strip Taken from Steel Beam Bend Test Through 180° is Satisfactory										
Strip Taken from Steel Beam 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,
DCRE/RE-1
Zeeruk International (Pvt) Ltd
Lahore Sialkot Motorway Project

Reference # CED/TFL **32568** (Dr. Ali Ahmed)
Reference of the request letter # LSMP/RE-1/2018/642

Dated: 04-02-2019
Dated: 04-02-2019

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

Date of Test 08-02-2019
Gauge length -----
Description Steel Galvanized Steel Post & Galvanized Corrugated Beam Weight and
Size Test

Sr. No.	Designation	Weight	Length	Weight per Unit Length	Depth	Thickness	Remark
1	Steel Post	6852	60.3	11.36	121.60	7.10	
2	Steel Beam	-----	-----	-----	-----	2.80	
-	-	-	-	-		-	
-	-	-	-	-		-	
-	-	-	-	-		-	
-	-	-	-	-		-	
-	-	-	-	-		-	
-	-	-	-	-		-	
Only Two Samples for Test							

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,
 QA & QC Civil Engineer
 Descon Engineering Ltd
 Parco Revamp & TA-04
 (Ittefaq Steel)

Reference # CED/TFL **32571** (Dr. Qasim Khan)
 Reference of the request letter # DEL-UET-05

Dated: 06-02-2019
 Dated: 06-02-2019

Tension Test Report (Page -1/1)

Date of Test 08-02-2019
 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	0.419	10	10.05	0.11	0.123	3900	6250	78200	69860	125300	112000	1.20	15.0	
2	0.411	10	9.96	0.11	0.121	3900	6200	78200	71220	124300	113300	1.20	15.0	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only two samples 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
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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
 Buildings Sub Division No. 15
 Lahore
 (Construction of Oath Commissioner Shed and Munshi Khan at Lahore High Court Lahore)

Reference # CED/TFL **32573** (Dr. Qasim Khan)
 Reference of the request letter # 2984/H

Dated: 06-02-2019
 Dated: 01-02-2019

Tension Test Report (Page -1/1)

Date of Test 08-02-2019
 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	0.362	3/8	0.368	0.11	0.106	3200	5300	64200	66370	106200	110000	1.30	16.3	
.	
.	
.	
.	
.	
Note: only one sample for tensile and one sample for bend test														
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
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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 Defence Housing Authority.
Lahore Cantt
(Dev of Prism-9 Pkg-08 DHA Ph-IX)(M/s Maaksons)
Reference # CED/TFL **32577** (Dr. Qasim Kahan)
Reference of the request letter # 408/241/E/Lab/12051/441

Dated: 06-02-2019

Dated: 06-02-2019

Tension Test Report (Page -1/2)

Date of Test 08-02-2019

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	0.379	3	0.377	0.11	0.112	3600	5100	72200	71160	102200	100900	1.30	16.3	FF Steel
2	0.372	3	0.373	0.11	0.109	3500	4900	70200	70490	98200	98700	1.40	17.5	
3	0.376	3	0.375	0.11	0.110	3400	4900	68200	67890	98200	97900	1.40	17.5	
4	0.370	3	0.372	0.11	0.109	3400	4800	68200	68920	96200	97300	1.10	13.8	
5	0.364	3	0.369	0.11	0.107	3400	5000	68200	70030	100200	103000	1.10	13.8	
6	0.376	3	0.375	0.11	0.111	3400	5000	68200	67790	100200	99700	1.30	16.3	
7	0.378	3	0.376	0.11	0.111	3500	5050	70200	69450	101200	100200	1.10	13.8	
8	0.373	3	0.374	0.11	0.110	3500	5000	70200	70280	100200	100400	1.20	15.0	

Note: only eight samples for tensile and four sample for bend test

Bend Test

#3 Bar Bend Test Through 180° is Satisfactory

#3 Bar Bend Test Through 180° is Satisfactory

#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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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 Defence Housing Authority.
Lahore Cantt
(Dev of Prism-9 Pkg-05 DHA Ph-IX)(M/s Maaksons)
Reference # CED/TFL **32577** (Dr. Qasim Kahan)
Reference of the request letter # 408/241/E/Lab/102/442

Dated: 06-02-2019

Dated: 06-02-2019

Tension Test Report (Page -2/2)

Date of Test 08-02-2019
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	0.377	3	0.376	0.11	0.111	3500	5000	70200	69610	100200	99500	1.40	17.5	FF Steel
2	0.366	3	0.370	0.11	0.108	3400	5000	68200	69600	100200	102400	1.10	13.8	
3	4.263	10	1.263	1.27	1.253	41200	58200	71500	72480	101100	102400	1.80	22.5	
4	4.222	10	1.257	1.27	1.241	39800	56800	69100	70690	98600	100900	1.60	20.0	
5	4.210	10	1.255	1.27	1.237	39600	56800	68800	70540	98600	101200	1.70	21.3	
6	4.232	10	1.258	1.27	1.244	40200	57200	69800	71240	99300	101400	1.50	18.8	
7	5.287	11	1.407	1.56	1.554	46200	71200	65300	65520	100600	101000	1.40	17.5	
8	5.299	11	1.408	1.56	1.557	46400	70600	65600	65670	99800	100000	1.40	17.5	

Note: only eight samples for tensile and four sample for bend test

Bend Test

#3 Bar Bend Test Through 180° is Satisfactory

#10 Bar Bend Test Through 180° is Satisfactory

#10 Bar Bend Test Through 180° is Satisfactory

#11 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 Design Force (Pvt) Limited
Karachi
(Attock Petrol Pump, Awian Chock 3No. Stop Alama Iqbal Town, Lahore)

Reference # CED/TFL **32578** (Dr. Qasim Khan)
Reference of the request letter # Nil

Dated: 06-02-2019
Dated: 06-02-2019

Tension Test Report (Page -1/1)

Date of Test 08-02-2019
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	0.361	3	0.368	0.11	0.106	3600	4900	72200	74740	98200	101800	0.90	11.3	
2	0.369	3	0.372	0.11	0.108	3600	4900	72200	73150	98200	99600	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:

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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 Fairmay Investments
Lahore

Reference # CED/TFL **32582** (Dr. Qasim Khan)
Reference of the request letter # Nil

Dated: 06-02-2019
Dated: 04-02-2019

Tension Test Report (Page -1/1)

Date of Test 08-02-2019
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	3200	5000	64200	64630	100200	101000	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 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,
 Resident Engineer
 ACE, Danish School Mankera Residency

Reference # CED/TFL **32583** (Dr. Qasim Khan)
 Reference of the request letter # ACE/RE-PDS/MNK/BHK/19/181

Dated: 06-02-2019
 Dated: 04-02-2019

Tension Test Report (Page -1/1)

Date of Test 08-02-2019
 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	0.399	3/8	0.387	0.11	0.117	3500	5300	70200	65700	106200	99500	0.90	11.3	
2	0.401	3/8	0.387	0.11	0.118	3600	5300	72200	67390	106200	99200	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,
 Civil Supervisor
 Ambition Apparel
 20-km Ferozpur Road Glaxo Town, Lahore

Reference # CED/TFL **32585** (Dr. Qasim Khan)
 Reference of the request letter # Nil

Dated: 06-02-2019
 Dated: 04-02-2019

Tension Test Report (Page -1/1)

Date of Test 08-02-2019
 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	0.392	3	0.383	0.11	0.115	3500	5200	70200	67010	104200	99600	1.20	15.0	
2	0.396	3	0.385	0.11	0.116	4000	5800	80200	75810	116300	110000	1.10	13.8	
3	0.369	3	0.372	0.11	0.109	3400	4700	68200	69010	94200	95400	1.00	12.5	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	

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

Bend Test

#3 Bar Bend Test Through 180° is Satisfactory

#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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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 Defence Housing Authority.
Lahore Cantt
(Proposed Commercial Plaza, DRGCC Ph-III DHA Ph-VI)(M/s Construct)

Reference # CED/TFL **32587** (Dr. Qasim Khan)
Reference of the request letter # 408/241/E/Lab/440/1449

Dated: 07-02-2019
Dated: 06-02-2019

Tension Test Report (Page -1/1)

Date of Test 08-02-2019
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	0.368	3	0.371	0.11	0.108	3800	4900	76200	77460	98200	99900	1.10	13.8	Kamran Steel
2	0.367	3	0.371	0.11	0.108	3700	4900	74200	75640	98200	100200	1.20	15.0	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
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
http://www.uet.edu.pk/faculties/facultiesinfo/civil/index.html?RID=testing_reports
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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,
 DHA
 Lahore
 Kennel Hospita Sec-E Extension DHA PH-VI(M/S FAUZ Engineering)

Reference # CED/TFL **32588-594**(Dr. Qasim)
 Reference of the request letter # 408/E/Lab/012/443

Dated: 07-02-2019
 Dated: 07-02-2019

Tension Test Report (Page -1/1)

Date of Test 08-02-2019
 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	0.368	3	0.371	0.11	0.108	3300	5000	66200	67310	100200	102000	1.40	17.5	
2	0.367	3	0.371	0.11	0.108	3200	5000	64200	65340	100200	102100	1.40	17.5	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
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,
 AL-Hafeez Group
 Lahore
 Abdul Kabir Plaza Gulburg-III, Lahore

Reference # CED/TFL **32590** (Dr. Qasim)
 Reference of the request letter # NIL

Dated: 07-02-2019
 Dated: 07-02-2019

Tension Test Report (Page -1/1)

Date of Test 08-02-2019
 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 (inch)	Actual (inch)	Nominal	Actual			Nominal	Actual	Nominal	Actual			
1	4.230	10/8	1.258	1.27	1.243	45200	59400	78500	80130	103100	105300	1.30	16.3	
2	4.245	10/8	1.260	1.27	1.248	45000	58600	78100	79480	101700	103600	1.30	16.3	
3	4.255	10/8	1.262	1.27	1.251	45400	59800	78800	80010	103800	105400	1.40	17.5	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only three samples for tensile and one sample for bend test														
Bend Test														
10/8" 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
- 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
 Zeeruk International (Pvt) Ltd
 Construction of Player Accommodation (02 Block)(Package VII) at Sports Complex Narowal

Reference # CED/TFL **32595** (Dr. Ali Ahmed)
 Reference of the request letter # ZI/4-28/19/23886

Dated: 08-02-2019
 Dated: 06-02-2019

Tension Test Report (Page -1/1)

Date of Test 08-02-2019
 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	0.384	3	0.379	0.11	0.113	3100	4100	62200	60540	82200	80100	1.50	18.8	
2	0.386	3	0.380	0.11	0.113	3100	4180	62200	60230	83800	81300	1.50	18.8	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
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:

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