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

,
Chief Resident Engineer
Osmani & Co. (Pvt) Ltd
Swat Motorway Project

Reference # CED/TFL **34156** (Dr. Qasim Khan) Dated: 11-11-2019
Reference of the request letter # 347/CRE/QATSMP/2019 Dated: 11-11-2019

Tension Test Report (Page – 1/2)

Date of Test 15-11-2019
Gauge length 2 inches
Description End Section Strip Tensile and Bend Test as per AASHTOO A-180

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	1.96x0.28	0.55	2300	2800	4190.96	5102.04	0.70	35.00	
2		1.96x0.28	0.55	2200	2800	4008.75	5102.04	0.70	35.00	
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
Only Two Samples for Tensile and One Sample for Bend Test										
Bend Test										
Strip Taken from End Section 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,
Chief Resident Engineer
Osmani & Co. (Pvt) Ltd
Swat Motorway Project

Reference # CED/TFL **34156** (Dr. Qasim Khan) Dated: 11-11-2019
Reference of the request letter # 347/CRE/QATSMP/2019 Dated: 11-11-2019

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

Date of Test 15-11-2019
Gauge length -------
Description End Section Weight and Size Test

Sr. No.	Designation	Weight	Length	Weight per Unit Length	Thickness	Remark
	------	(g)	(mm)	(kg/m)	(mm)	
1	**End Section**	**1647**	**146.20**	**11.27**	**2.80**	
-	-	-	-	-	-	
-	-	-	-	-	-	
-	-	-	-	-	-	
-	-	-	-	-	-	
-	-	-	-	-	-	
-	-	-	-	-	-	
Only One Sample for Test						

I/C Testing Laboratoires
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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,
Chief Resident Engineer
Osmani & Co. (Pvt) Ltd
Swat Motorway Project

Reference # CED/TFL **34157** (Dr. Qasim Khan) Dated: 11-11-2019
Reference of the request letter # 348/CRE/QATSMP/2019 Dated: 11-11-2019

Tension Test Report (Page – 1/2)

Date of Test 15-11-2019
Gauge length 2 inches
Description W-Section & Post Strip Tensile and Bend Test as per AASHTOO A-180

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	1.96x0.28	0.55	2200	2700	4008.75	4919.83	0.70	35.00	
2	W-Section	1.96x0.28	0.55	2300	2700	4190.96	4919.83	0.75	37.50	
3	Post	2.40x0.70	1.68	5900	8500	3511.90	5059.52	0.75	37.50	
4	Post	2.40x0.70	1.68	6000	8500	3571.43	5059.52	0.75	37.50	
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
Only Four Samples for Tensile and Two Samples for Bend Test										
Bend Test										
Strip Taken from W-Section Bend Test Through 180º is Satisfactory										
Strip Taken from Post Bend Test Through 180º 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,
Chief Resident Engineer
Osmani & Co. (Pvt) Ltd
Swat Motorway Project

Reference # CED/TFL **34157** (Dr. Qasim Khan) Dated: 11-11-2019
Reference of the request letter # 348/CRE/QATSMP/2019 Dated: 11-11-2019

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

Date of Test 15-11-2019
Gauge length -------
Description W-Section & Post Weight and Size Test

Sr. No.	Designation	Weight	Length	Weight per Unit Length	Thickness	Remark
	------	(g)	(mm)	(kg/m)	(mm)	
1	**W-Section**	**1852**	**157.10**	**11.79**	**2.80**	
2	**Post**	**4363**	**324.00**	**13.47**	**7.00**	
-	-	-	-	-	-	
-	-	-	-	-	-	
-	-	-	-	-	-	
-	-	-	-	-	-	
-	-	-	-	-	-	
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
China – Pakistan Economic Corridor (CPEC) Western Route Hakla (no M1) to D.I.Khan Motorway, Package-3 (Tarap to Kot Belian)

Reference # CED/TFL **34174** (Dr. M Rizwan Riaz) Dated: 13-11-2019
Reference of the request letter # CEPEC/NESPAK/CS/RE/PKG3/19/1249 Dated: 11-11-2019

Tension Test Report (Page – 1/1)

Date of Test 15-11-2019
Gauge length -------
Description Chain Link Face Wire and Tension Wire Tensile Test as per AASHTO-M-181

Sr. No.	Diameter Wire	Breaking Load	Remarks
	(mm)	(kN)	
1	**3.20**	**3.53**	**Chain Link Face Wire**
2	**3.20**	**3.64**	
3	**3.20**	**3.58**	
4	**3.00**	**5.74**	**Tension Wire**
5	**3.00**	**5.90**	
6	**3.00**	**5.97**	
-	**-**	**-**	
-	**-**	**-**	
Only Six Samples for Test			

I/C Testing Laboratoires
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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,
Assistant Engineer
B & W Department
UET Lahore
(Construction Site of Girls Hostel for 300 Students in UET Lahore)

Reference # CED/TFL **34178** (Dr. Qasim Khan) Dated: 13-11-2019
Reference of the request letter # B&W/AEN/1208 Dated: 13-11-2019

Tension Test Report (Page -1/1)

Date of Test 15-11-2019
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	0.379	3	0.377	0.11	0.111	3500	5400	70200	69230	108200	106800	1.00	12.5	
2	0.386	3	0.380	0.11	0.113	3500	5400	70200	67980	108200	104900	1.00	12.5	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
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,
Sub Divisional Officer (Buildings)
Sub Division Sheikhupura
(Construction of District Education Complex in District Sheikhupura)

Reference # CED/TFL **34179** (Dr. Qasim Khan) Dated: 14-11-2019
Reference of the request letter # 5913/S Dated: 07-11-2019

Tension Test Report (Page -1/1)

Date of Test 15-11-2019
Gauge length 8 inches
Description Deformed Steel Bar Tensile 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	0.377	3/8	0.376	0.11	0.111	4400	5400	88200	87440	108200	107400	0.90	11.3	
2	0.379	3/8	0.377	0.11	0.111	4400	5400	88200	86990	108200	106800	0.90	11.3	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
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,
M/S Agha Sons
242-S Quaid E Azam Industrial Estate
Kot Lakhpeth Lahore

Reference # CED/TFL **34181** (Dr. Qasim Khan) Dated: 14-11-2019
Reference of the request letter # Nil Dated: 13-11-2019

Tension Test Report (Page -1/1)

Date of Test 15-11-2019
Gauge length 8 inches
Description Deformed Steel Bar Tensile 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	0.381	3/8	0.378	0.11	0.112	3700	5300	74200	72760	106200	104300	1.30	16.3	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
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,
Resident Engineer
G3 Engineering Consultants(Pvt) Ltd
Consultancy Servicses for Resident Construction Supervision of Provision of Missing Specialties for up Gradation of DHQ Hospital to Teaching Hospital Gujranwala (Goup 1)

Reference # CED/TFL **34182** (Dr. Qasim Khan) Dated: 14-11-2019
Reference of the request letter # G3/205/1116 Dated: 05-09-2019

Tension Test Report (Page -1/1)

Date of Test 15-11-2019
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	0.429	3	0.401	0.11	0.126	4700	5600	94200	82210	112300	98000	1.00	12.5	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only one sample 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.

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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 Haris & Company
Lahore
(Edotco B2S Project)

Reference # CED/TFL **34183** (Dr. Qasim Khan) Dated: 14-11-2019
Reference of the request letter # 0009 Dated: 14-11-2019

Tension Test Report (Page -1/1)

Date of Test 15-11-2019
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	0.371	10	9.47	0.12	0.109	3700	4900	67975	74740	90021	99000	1.00	12.5	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only one sample 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.

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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 Transtech Engineering Company
NESPAK-CMEC
PTPL
Construction of 1263 MW Punjab Thermal Power Plant, Jhang (City Steel)

Reference # CED/TFL **34184** (Dr. Qasim Khan) Dated: 14-11-2019
Reference of the request letter # TEC/UET/19111301 Dated: 14-11-2019

Tension Test Report (Page -1/2)

Date of Test 15-11-2019
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	Heat No.
	(lbs/ft)	Nominal	Actual	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)		
1	0.376	10	9.53	0.12	0.111	3200	5000	58789	63790	91858	99700	1.20	15.0	15125
2	0.374	10	9.51	0.12	0.110	3100	5000	56952	62080	91858	100200	1.20	15.0	
3	0.372	10	9.47	0.12	0.109	3400	5300	62464	68610	97370	107000	1.30	16.3	16102
4	0.371	10	9.46	0.12	0.109	3400	5300	62464	68750	97370	107200	1.30	16.3	
5	0.374	10	9.50	0.12	0.110	3700	4900	67975	74200	90021	98300	1.20	15.0	15590
6	0.375	10	9.51	0.12	0.110	3600	4900	66138	72070	90021	98100	1.20	15.0	
Note: only six samples for tensile and three samples for bend test														
Bend Test														
10mm Dia Bar Bend Test Through 180º is Satisfactory														
10mm Dia Bar Bend Test Through 180º is Satisfactory														
10mm Dia Bar Bend Test Through 180º 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,
M/S Transtech Engineering Company
NESPAK-CMEC
PTPL
Construction of 1263 MW Punjab Thermal Power Plant, Jhang (City Steel)
Reference # CED/TFL **34184** (Dr. Qasim Khan) Dated: 14-11-2019
Reference of the request letter # TEC/UET/19111301 Dated: 14-11-2019

Tension Test Report (Page -2/2)

Date of Test 15-11-2019
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	Heat No.
	(lbs/ft)	Nominal	Actual	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)		
1	4.194	32	31.82	1.25	1.233	36600	57400	64551	65440	101235	102700	1.30	16.3	151 26
2	4.125	32	31.56	1.25	1.213	35400	56600	62434	64350	99824	102900	1.40	17.5	
3	4.157	32	31.68	1.25	1.222	35400	56200	62434	63860	99119	101400	1.50	18.8	151 27
4	4.276	32	32.13	1.25	1.257	37400	58200	65962	65580	102646	102100	1.40	17.5	
5	4.187	32	31.80	1.25	1.231	37400	44600	65962	66980	78660	79900	1.50	18.8	152 10
6	4.125	32	31.56	1.25	1.212	25200	38600	44445	45810	68078	70200	1.40	17.5	
7	4.102	32	31.47	1.25	1.206	36200	56200	63845	66180	99119	102800	1.40	17.5	152 11
8	4.163	32	31.71	1.25	1.224	36400	56600	64198	65560	99824	102000	1.50	18.8	
9	4.293	32	32.20	1.25	1.262	37000	58600	65256	64620	103352	102400	1.50	18.8	152 12
10	4.113	32	31.51	1.25	1.209	37200	43600	65609	67830	76896	79500	1.60	20.0	
Note: only ten samples for tensile and five samples for bend test														
Bend Test														
32mm Dia Bar Bend Test Through 180º is Satisfactory														
32mm Dia Bar Bend Test Through 180º is Satisfactory														
32mm Dia Bar Bend Test Through 180º is Satisfactory														
32mm Dia Bar Bend Test Through 180º is Satisfactory														
32mm Dia Bar Bend Test Through 180º 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

I/C Testing Laboratoires
UET Lahore, Pakistan.

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