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 – Zeeruk (jv)
China Pakistan Economic Corridor (CPEC) Western Route Hakla (on M1) to D.I. Khan Motorway – Rehmani Khel to Kot Balian – Package IIB (ARFEN (Turkey))

Reference # CED/TFL **34740** (Dr. M Rizwan Riaz) Dated: 24-02-2020
Reference of the request letter # RE/NESPAK/P-2B/CPEC-WR/1130 Dated: 19-02-2020

Tension Test Report (Page – 1/2)

Date of Test 04-03-2020
Gauge length 2 inches
Description Aluminum Alloy Strip Seal Bridge Expansion Joint 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)	(kN)	(kN)	(MPa)	(MPa)	(in)		
1	**Aluminum Alloy**	**13.40x3.00**	**40.20**	**9.68**	**11.30**	**240.80**	**281.09**	**0.30**	**15.00**	
2		**13.40x3.00**	**40.20**	**9.95**	**11.07**	**247.51**	**275.37**	**0.30**	**15.00**	
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`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,
Resident Engineer
NESPAK – Zeeruk (jv)
China Pakistan Economic Corridor (CPEC) Western Route Hakla (on M1) to D.I. Khan Motorway – Rehmani Khel to Kot Balian – Package IIB (SARAMTECH (South Korea))

Reference # CED/TFL **34740** (Dr. M Rizwan Riaz) Dated: 24-02-2020
Reference of the request letter # RE/NESPAK/P-2B/CPEC-WR/1129 Dated: 19-02-2020

Tension Test Report (Page – 2/2)

Date of Test 04-03-2020
Gauge length 2 inches
Description Aluminum Alloy Strip Seal Bridge Expansion Joint 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)	(kN)	(kN)	(MPa)	(MPa)	(in)		
1	**Aluminum Alloy**	**13.90x3.00**	**41.70**	**10.05**	**11.02**	**241.01**	**264.27**	**0.30**	**15.00**	
2		**13.90x3.00**	**41.70**	**10.10**	**11.00**	**242.21**	**263.79**	**0.30**	**15.00**	
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-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
`Only Two Samples for Tensile Test										
Bend Test										

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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

Ref: CED/TFL/02/34760 Dated: 28-02-2020

Dated of Test: 04-03-2020

To
The Maintainers
Bahria Town, Lahore

Subject: **- TEST RESULT REPORT FOR COVERS FOR BEARING LOAD TEST**

Reference to your letter no. Nil dated: 28/02/2020 on the above mentioned subject. One Sewerage Drain Cover & one Rain Drain Cover for bearing load test as received by us has been tested as requested by the client and results are given below.

Sample # 1 Sewerage Drain Cover

Size of sample	**:**	**22-1/2" x 22-1/2"**
Loading pattern	**:**	**Uniformly distributed load**
Design Load	**:**	**30 Ton**
Applied Load	**:**	**30 Ton**
Remarks	**:**	**Large permanent deformation and cracks at centre**

Sample # 2 Rain Drain Cover

Size of sample	**:**	**22-1/2" x 22-1/2"**
Loading pattern	**:**	**Uniformly distributed load**
Design Load	**:**	**30 Ton**
Applied Load	**:**	**20 Ton**
Remarks	**:**	**Large permanent deformation and cracks at 20 Ton load**

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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 ICON Construction Services
Johar Town, Lahore
(Block M-4 House # 27 Lake City)

Reference # CED/TFL **34771** (Dr. Ali Ahmed) Dated: 03-03-2020
Reference of the request letter # Nil Dated: 02-03-2020

Tension Test Report (Page -1/1)

Date of Test 04-03-2020
Gauge length 8 inches
Description Deformed Steel Bar Tensile 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	0.359	3	0.367	0.11	0.106	3500	4700	70200	73010	94200	98100	1.90	23.8	
2	0.375	3	0.375	0.11	0.110	3700	5000	74200	74010	100200	100100	1.20	15.0	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only two samples 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,
Manager, QA/QC Department
Bahria Town Private Limited, Lahore
Masjid at Hussain Block (Nargis Block) Sectro 'C' Bahria Town Mulatn Road, Lahore

Reference # CED/TFL **34772** (Dr. Ali Ahmed) Dated: 03-03-2020
Reference of the request letter # QA/QC-Steel-1956 Dated: 28-02-2020

Tension Test Report (Page -1/1)

Date of Test 04-03-2020
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	0.371	3	0.372	0.11	0.109	3300	4600	66200	66790	92200	93100	1.30	16.3	FF Steel
2	0.371	3	0.372	0.11	0.109	3300	4600	66200	66770	92200	93100	1.50	18.8	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only two samples for tensile and one sample for bend test														
Bend Test														
#3 Bar Bend Test Through 180º is Satisfactory														

I/C Testing Laboratoires
UET Lahore, Pakistan.

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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
Building Sub Division
Nankana Sahib
(Upgradation of Government Girls Primary School Nabi Pur Piran Tehsil & District Nanakana Sahib to Elementry Level)

Reference # CED/TFL **34773** (Dr. Ali Ahmed) Dated: 03-03-2020
Reference of the request letter # 80/N Dated: 27-02-2020

Tension Test Report (Page -1/1)

Date of Test 04-03-2020
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	0.362	3/8	0.368	0.11	0.106	3600	4800	72200	74630	96200	99600	1.20	15.0	
2	0.363	3/8	0.369	0.11	0.107	3600	4700	72200	74350	94200	97100	1.20	15.0	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only two samples 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,
Resident Engineer
NESPAK
Rehabilitation of Road from Pattoki to Halla Road Length= 16.84 km Part B-2(11.25 to 15.56 km = 4.31 km) in District Kasur

Reference # CED/TFL **34774** (Dr. Ali Ahmed) Dated: 03-03-2020
Reference of the request letter # 3811/103/ADP/AC/645 Dated: 03-03-2020

Tension Test Report (Page -1/1)

Date of Test 04-03-2020
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	0.377	3	0.376	0.11	0.111	3500	4700	70200	69640	94200	93600	1.40	17.5	
2	0.373	3	0.374	0.11	0.110	3100	4600	62200	62310	92200	92500	1.20	15.0	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
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.

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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
(Const of Mosque Sector-D DHA Ph-I (M/s Imran Sadiq)

Reference # CED/TFL **34775** (Dr. Ali Ahmed) Dated: 03-03-2020
Reference of the request letter # 408/241/E/Lab/865/Nil Dated: 03-03-2020

Tension Test Report (Page -1/1)

Date of Test 04-03-2020
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	0.381	3	0.378	0.11	0.112	3200	4900	64200	63000	98200	96500	1.60	20.0	Kamran Steel
2	0.366	3	0.370	0.11	0.107	3200	4700	64200	65650	94200	96500	1.50	18.8	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	

Note: only two samples for tensile and one sample for bend test

Bend Test

#3 Bar Bend Test Through 180º is Satisfactory

I/C Testing Laboratoires
UET Lahore, Pakistan.

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Pakistan. Ph: 92-42-99029202

To,
M/S Shahid Builders (Pvt) Ltd
Lahore
(Construction of Labard Rehabilitation & Vocational Training Centre, Harbanspura, Lahore)

Reference # CED/TFL **34777** (Dr. Ali Ahmed) Dated: 03-03-2020
Reference of the request letter # SBL/2020/08 Dated: 03-03-2020

Tension Test Report (Page -1/1)

Date of Test 04-03-2020
Gauge length 8 inches
Description Deformed Steel Bar Tensile 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	0.382	3	0.378	0.11	0.112	3300	5100	66200	64810	102200	100200	1.20	15.0	
2	0.379	3	0.377	0.11	0.111	3300	5100	66200	65260	102200	100900	1.30	16.3	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only two samples for tensile test														
Bend 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,
Senior Resident Engineer
ProMag Pvt Ltrd
Civil Infrastructure Works Development of DHA Multan

Reference # CED/TFL **34778** (Dr. M Rizwan Riaz) Dated: 03-03-2020
Reference of the request letter # CRE/MTS/433 Dated: 19-02-2020

Tension Test Report (Page -1/1)

Date of Test 04-03-2020
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	0.404	10	9.88	0.12	0.119	3900	5200	71650	72310	95533	96500	0.80	10.0	AF
2	0.404	10	9.87	0.12	0.119	4100	5400	75324	76170	99207	100400	0.90	11.3	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only two samples for tensile and one sample for bend test														
Bend Test														
10mm Dia Bar Bend Test Through 180º is Satisfactory														

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Pakistan. Ph: 92-42-99029202

To,
M/S Moaz Steel
Lahore
(Couplers for CGGC-DESCON Jv Muhammad Dam Hydro Power Project)

Reference # CED/TFL **34782** (Dr. M Rizwan Riaz) Dated: 04-03-2020
Reference of the request letter # MZ/CGGC-DES/MD/UET/013 Dated: 04-03-2020

Tension Test Report (Page -1/1)

Date of Test 04-03-2020
Gauge length 8 inches
Description Plain Steel Bar 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	5.523	32	29.93	-------	703.6	36200	58400	505	814	1.60	20.0	
-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	
Note: only one sample for tensile test												
Bend Test												

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