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
HA Consulting
Construction of Central Building in I.T Park at Paf Air Base, Lahore

Reference # CED/TFL **4099** (Dr. M Rizwan Riaz) Dated: 24-10-2023
Reference of the request letter # 23/HAC/NASTP/0721 Dated: 12-10-2023

Tension Test Report (Page – 1/2)

Date of Test 06-11-2023
Gauge length 2 inches
Description H-Beam & I-Beam 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)	(mm^2)	(kg)	(kg)	(MPa)	(MPa)	(in)		
1	H-Beam	250x250x10x11	27.20x15.30	416.16	13800	22400	325	528	0.80	40.00	
2	I-Beam	500x200x10x16	27.20x9.90	269.28	7800	12500	284	455	0.90	45.00	
3	I-Beam	610x229x12x20	27.20x13.60	369.92	11300	17200	300	456	0.80	40.00	
-	-		-	-	-	-	-	-	-	-	
-	-		-	-	-	-	-	-	-	-	
-	-		-	-	-	-	-	-	-	-	
Only Three Samples for Tensile Test											
Bend Test											

Witness by Usman Atta

I/C Testing Laboratoires
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,

Team Leader
HA Consulting
Construction of Central Building in I.T Park at Paf Air Base, Lahore

Reference # CED/TFL **4099** (Dr. M Rizwan Riaz) Dated: 24-10-2023
Reference of the request letter # 23/HAC/NASTP/0721 Dated: 12-10-2023

Weight &Size Test Report (Page – 2/2)

Date of Test 06-11-2024
Description H-Beam & I-Beam Weight and Size Test

Sr. No.	Designation		Weight	Length	Weight per Unit Length	Depth (d)	Flange Width (b_f)	Flange Thickness (t_f)	Web Thickness (t_w)	Remark
	(mm)		(g)	(mm)	(kg/m)	mm	mm	mm	mm	
1	**H-Beam**	**250x250x10x11**	**9221**	**101.30**	**91.03**	**256.00**	**253.00**	**15.97**	**15.30**	
2	**I-Beam**	**500x200x10x16**	**8495**	**102.00**	**83.28**	**498.00**	**198.90**	**14.70**	**10.00**	
-	**I-Beam**	**610x229x12x20**	**14306**	**101.10**	**141.50**	**620.00**	**229.20**	**22.00**	**13.60**	
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-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
Only Three Samples for Test										

Witness by Usman Atta

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 (Maint)
NHA, Waziraba
"Provision of Motorcyclist Ramp with Existing Steel Overhead Bridge at km 1340-1341 (Rahwali Cantt) on N-5"

Reference # CED/TFL **4112** (Dr. M Rizwan Riaz) Dated: 26-10-2023
Reference of the request letter # Gen/DD(Maint)/WZD/NHA/2023/1134 Dated: 16-10-2023

Tension Test Report (Page – 1/2)

Date of Test 06-11-2023
Gauge length 2 inches
Description Structural 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)	(mm^2)	(kg)	(kg)	(MPa)	(MPa)	(in)		
1	H-Section	150x150	29.90x9.95	297.51	11500	14900	379	491	0.80	40.00	
2	Angle	75x75	25.70x6.20	159.34	5700	8900	351	548	0.70	35.00	
3	Channel	150x75	25.40x6.40	162.56	6100	9000	368	543	0.70	35.00	
-	-		-	-	-	-	-	-	-	-	
-	-		-	-	-	-	-	-	-	-	
-	-		-	-	-	-	-	-	-	-	
Only Three 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,

Deputy Director (Maint)
NHA, Waziraba
"Construction of Additional Motorcycle Ramp at km 1346-1347 (Mandi Stop) at Ghakhar Urban Area on GT Road, N-5"

Reference # CED/TFL **4112** (Dr. M Rizwan Riaz) Dated: 26-10-2023
Reference of the request letter # Gen/DD(Maint)/WZD/NHA/2023/1135 Dated: 16-10-2023

Tension Test Report (Page – 2/2)

Date of Test 06-11-2023
Gauge length 2 inches
Description Structural 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)	(mm^2)	(kg)	(kg)	(MPa)	(MPa)	(in)		
1	H-Section	150x150	29.90x9.80	293.02	11000	15000	368	502	0.80	40.00	
2	Angle	75x75	29.70x5.90	175.23	6400	9300	358	521	0.70	35.00	
3	Channel	150x75	26.40x6.10	161.04	5600	8900	341	542	0.80	40.00	
-	-		-	-	-	-	-	-	-	-	
-	-		-	-	-	-	-	-	-	-	
-	-		-	-	-	-	-	-	-	-	
Only Three 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

Ref: CED/TFL/10/4114 Dated: 26-10-2023
Dated of Test: 06-11-2023

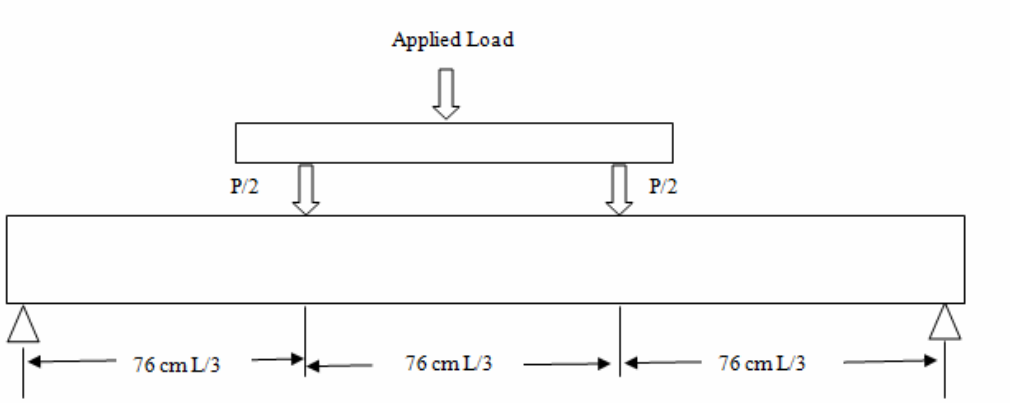
To

M/S Al Muhandes Engineering Solution
Karachi
(Unilever Food Lahore)

Subject: **TESTING OF RCC SLAB** (Page – 1/2)

Reference to your letter No. Nil, dated 26.10.2023 on the subject cited above. One Precast Slab (8' x 1' x 2") as received by us has been tested in Flexure (Four point loading). The results are tabulated as under.

Total Length	**:**	**242.50 cm**
Effective Length	**:**	**228.00 cm**
Width	**:**	**29.50 cm**
Thickness	**:**	**4.51 cm**
Ultimate Load	**:**	**1 kN**
Ultimate Moment	**:**	**0.38 kN-m**



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

Ref: CED/TFL/10/4114 Dated: 26-10-2023
Dated of Test: 06-11-2023

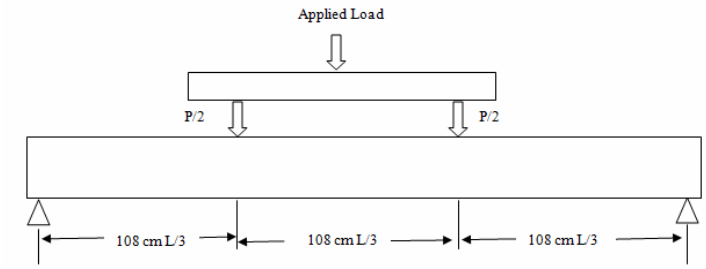
To

M/S Al Muhandes Engineering Solution
Karachi
(Unilever Food Lahore)

Subject: **TESTING OF RCC SLAB** (Page – 2/2)

Reference to your letter No. Nil, dated 26.10.2023 on the subject cited above. One Precast Girder (9' x 7" x 2") as received by us has been tested in Flexure (Four point loading). The results are tabulated as under.

Total Length	**:**	**335.40 cm**
Effective Length	**:**	**224.00 cm**
Depth	**:**	**16.50 cm**
Flange Width	**:**	**15.40 cm**
Flange Thickness	**:**	**5.44 cm**
Web Thickness	**:**	**5.43 cm**
Ultimate Load	**:**	**15 kN**
Ultimate Moment	**:**	**8.10 kN/m**



I/C Testing Laboratoires
UET Lahore, Pakistan.

Note:
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STRUCTURAL ENGINEERING DIVISION

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Department of Civil Engineering
University of Engineering and Technology Lahore, 54890
Pakistan. Ph: 92-42-99029202

To,

Chief Resident Engineer
UMDS Consultants
JV (Mincinsult, CEC and Jers)
Punjab Intermediated Cities Improvement Investment Program (PICIIP)
NCB-Works / PICIIP-04: Road Upgradation , Lot-94: Construction of Flyover in Sialkot.

Reference # CED/TFL **4153** (Dr. Rizwan Azam) Dated: 03-11-2023
Reference of the request letter # CRE/UMDS-JV/LOT-4/SKT/115 Dated: 31-10-2023

Tension Test Report (Page -1/1)

Date of Test 06-11-2023
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	4.221	10	1.257	1.27	1.241	34900	56200	60600	62000	97600	99900	1.50	18.8	Aziz Steel
2	4.215	10	1.256	1.27	1.239	34600	54800	60100	61560	95200	97500	0.80	10.0	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	

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

Bend Test

#10 Bar Bend Test Through 180º is Satisfactory

Witness by Iqbal Majid (M.E UMDS Consultants)

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,

Assistant Resident Engineer
NESPAK – EPCM-PICIIP
Punjab Intermediated Cities Improvement Investment Program (PICIIP)
Consultancy Services for Engineering, Procurement and Construction Management
Parking Sheds in Sahiwal & Sialkot (NCB-WORKS/PICIIP-27)

Reference # CED/TFL **4154** (Dr. M Rizwan Riaz) Dated: 03-11-2023
Reference of the request letter # 3976/11/FA/SWL/Sheds/01/427 Dated: 02-11-2023

Tension Test Report (Page -1/1)

Date of Test 06-11-2023
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	4100	5300	82200	81740	106200	105700	1.20	15.0	Sheikhoo Steel
2	0.374	3	0.374	0.11	0.110	4100	5200	82200	82270	104200	104400	1.10	13.8	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	

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 Paidar Builders (Pvt) Ltd.
Lahore
(Construction of TCF Primary School Unit – I Kot Addu Muzaffargarh.)

Reference # CED/TFL **4159** (Dr. M Rizwan Riaz) Dated: 06-11-2023
Reference of the request letter # PBL/UET/2023-497 Dated: 04-11-2023

Tension Test Report (Page -1/1)

Date of Test 06-11-2023
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	0.369	3/8	0.372	0.11	0.109	3500	4900	70200	71060	98200	99500	1.50	18.8	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only one sample for tensile test														
Bend Test														

I/C Testing Laboratoires
UET Lahore, Pakistan.

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To,

M/S Four Star Naru Construction Company
(Rehabilitation of 36" RCC Pipe Line , Stadium Road Daska.)

Reference # CED/TFL **4164** (Dr. M Rizwan Riaz) Dated: 06-11-2023
Reference of the request letter # Nil Dated: 06-11-2023

Tension Test Report (Page -1/1)

Date of Test 06-11-2023
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	0.365	3	0.370	0.11	0.107	3000	4600	60200	61660	92200	94600	1.30	16.3	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
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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