



## **Building Design Authority (P) Ltd**

*in joint Venture with*

**B.N. Consultancy Pvt. Ltd and**

**PLUSH Engineering & architects (P) Ltd Kathmandu.**

## **Monthly Progress Report**

**Regional Urban Development Project (RUDP)**

**Project Implementation Unit**

**Biratnagar, Nepal**



***September 2018***

**Biratnagar Metropolitan City (BMC), Nepal**

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## EXECUTIVE SUMMARY

This Project Monitoring Report mainly covers the Progress achieved in the component of Regional Urban Development Project (RUDP) in Biratnagar Metropolitan City, Nepal. The information has been provided by following Chapters as mentioned below.

1. **Introduction/ Background-** It provides brief Account of the Project and its Background stating why, how and when the Project was started in Biratnagar Metropolitan City.
2. **Salient Feature of Contract Package: RUDP/ICB/BRT/2-** It provides brief Account of Contract Data with Major components of works to be carried out.
3. **Sub Project Components-** It provides brief Account of various Sectors of the Project component summarizing the respective Progress such as Sewer Line, Storm Water Drain, Road side Drain, Roads and Lanes and Electrification Work if any. This Chapter further covers Environment Mitigation Measures and Social Safeguard measures.
4. **Objective and Scope of Works-** This Chapter briefly describes the expected output of the Project and Scope of Consultant regarding execution of Work.
5. **Progress of Sub – Project Components-** This Chapter comprises the status of Work stating what kind of works are being under Progress and how much Progress has been achieved till date. It further elaborates on the status of actual achievement versus the Targeted achievement till date. Having said that, the Progress may get affected by unpredicted events frequently occurring in case of our Country Nepal so such events are also enlisted for viewing the reasons behind affected Progress.
6. **Details of Pre Cast Activities-** Details of Precast activities are also provided in this Chapter in order to demonstrate the Progress by the Contractor. Since in Urban Sector the Work is required to conduct in speedy manner, Precast work is best alternate to be provided. Hence, the details of Precast activities have been provided in order to determine whether the Contractor is able to meet the Schedule or not.
7. **Contractor’s Manpower and Contractor’s Equipment-** Chapter 7 and Chapter 8 deal with summary of Manpower and Equipment respectively stating whether Resources owned by the Contractor are sufficient for the execution of Contract.



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## 1 PROJECT DESCRIPTION

### 1.1 INTRODUCTION/BACKGROUND

GoN has negotiated loan with Asian Development Bank for the Regional Urban Development Project (RUDP) in Nepal .The RUDP, in the line with ADB’s water and urban operation plans, will construct and upgrade urban infrastructure in eight towns in the Terai Region of Nepal, improve operational effectiveness of these eight municipalities. The project will also build institutional capacity of DUDBC for urban planning, project planning and project preparation in order to proactively shape urbanization in Nepal and implement the National Urban development strategy .Biratnagar is one of the eight municipal towns included in the RUDP. The subcomponent of the RUDP covers the construction and improvement of sewerage, drainage and roads and design of Integrated Solid Waste Management System for Biratnagar Municipality. Building Design Authority (P) Ltd (Nepal) ,B.N. Consultancy Pvt.ltd and PLUS Engineers & Architects (P) Ltd Kathmandu and have entered for a Contract of Consulting Services with Regional Urban Development Project (RUDP), Project Implementation Unit(PIU), Biratnagar Metropolitan City on 28<sup>th</sup> September 2017.

Regional Urban Development Project (RUDP the Department of Urban Development and Building Construction (DUDBC), under the Ministry of Urban Development(MUD) through the Government of Nepal (GoN) has received the loan from Asian Development Bank (ADB) Loan 47252-NEP.

In line with ADB’s Strategy 2020 and based on Nepal’s fundamental long term needs and on the GoN’s priority, the ADB is continuing to support the Government in (i) improving urban infrastructure; improving access to water supply and sanitation (ii) supporting urban environmental improvement(iii) strengthening the operation and management skills of local governments. The Regional Urban Development Project (RUDP) is forward to promote healthy cities by creating healthier urban environments and was formulated under the PPTA 2010.



2 CONTRACT DATA: - RUDP/ICB/BRT/2

<b>General Features</b>	
Name of Project	Regional Urban Development Project(RUDP)
Executing Agency	Government of Nepal,
	Ministry of Urban Development
	Department of Urban Development and Building Construction (DUDBC)
Implementing Agency	Biratnagar Metropolitan City, Biratnagar
Funded By	Asian Development Bank & Government of Nepal
Package	Construction and Completion of Sewerage, Drainage, Road, Footpath and Road furniture works
Contract No.	RUDP/ICB/BRT/2
Location	Biratnagar Metropolitan City, Biratnagar
Consultant	Building Design Authority (P) LTD in Joint Venture With B.N. consultancy Pvt and PLUS Engineers and Architects (P) Ltd Kathmandu.
Date of Sign of Design and Supervision Consulting Service	28th August 2017
Date of Commencement of Design and Supervision Consulting Service	6th September 2017
Date of Completion	5th September 2020
Contractor	ZHONGHENG Construction Group International Engineering Co Ltd. Beijing, China.
Date of Agreement Made	10 <sup>th</sup> October 2017
Date of Commencement	2 <sup>nd</sup> November 2017
Date of Completion	1 <sup>st</sup> November 2019
Contract Amount including PS and VAT	NRs. 2,611,092,249.63
<b>Progress</b>	
Road Rehabilitation (Asphalt)	19.18%
Sewer Line	40.79%
Storm Drain	97.44%
Road Side Drain	48.19%
Integrated Solid Waste Management (ISWM) Design	Inception Report as well as Stakeholder's Analysis, Communication Strategy and Consultation Plan for Integrated Solid Waste Management (ISWM) has already been submitted. Due to Socio Environment Problem, Progress of Integrated Solid Waste Management (ISWM) design has been hindered.
Physical Progress up to date	Planned : 31.03% , Actual : 28.72%; Lead(+) or Lag(-) by (-) 2.31%
Financial Progress up to date	In Percentage: 28.71%, In Figure: NRs. 749,668,654.07(including VAT,PS and Price Adjustment)
	In Words: NRs. Seven Hundred Forty Nine Million Six Hundred Sixty Eight Thousand Six Hundred Fifty Four and Paise Seven Only.



3. SUMMARY OF PROGRESS STATUS OF ALL MAJOR COMPONENTS

S.No	Description	Unit	BoQ Quantity	Progress up to date	Remaining	Progress Status expressed in %	Remarks
1	Sewer Line						
a	HDPE/RCC	m	20,082.00	8,191.00	11,891.00	40.79%	
b	Manhole	No.	656.00	276.00	380.00	42.07%	
c	Sewer Inlet	No.	1,010.00	107.00	903.00	10.59%	
d	House Connection	No.	3,784.00	113.00	3,671.00	2.99%	
2	Storm Water Drain						
a	RCC Drain	m	652.89/585	570.00	15.00	97.44%	Revised Length =585m
b	Piles	No.	132.00	138.00	(6.00)	100.00%	Exceeded
3	Road						
a	Subgrade	m	73,860.00	24,377.25	49,482.75	33.00%	
b	Subbase	m	73,860.00	24,153.65	49,706.35	32.70%	
c	Base	m	73,860.00	18,398.10	55,461.90	24.91%	
d	Prime	m	73,860.00	14,167.45	59,692.55	19.18%	
e	Asphalt	m	73,860.00	14,167.45	59,692.55	19.18%	
4	Road Side Drain	m	26,050.00	12,554.59	13,495.42	48.19%	



### 3.1 SUB PROJECT COMPONENTS

#### 3.1.1 SEWER LINES

Surveying works going on after identifying the all sewer lines i.e. T1, T2, T3, and T4. Production of manhole cover and precut are also going on at yard. Contractor has started the sewer inlet and house chamber connection works at R2, DSP road, T4Line 1 etc. and work is going on. In this month, the contractor has started sewer inlet and House connection chambers at T2 Line 18C, T2 Line 18A, T2 Line 26E, T2 Line 27, R12, R65, R87, R84, R45, T3 Line 11K, T3 Line 11i etc.

**Table 1: PROPOSED SEWER LINES**

S. NO.	Description	Unit	Original Quantity
<b>1</b>	<b>Sewerage Pipe Supply and Installation</b>	m	<b>20,082.00</b>
	<b>Reinforced Concrete Pipe laying and jointing</b>		<b>2241.00</b>
	Line T2 (Secondary)	m	206.00
	Line T3 (Trunk)	m	1905.00
	Line T4 (Trunk)	m	130.00
	<b>HDPE laying and jointing</b>	m	<b>17,841.00</b>
	Line T1 (Secondary)	m	1,825.00
	Line T2 (Secondary)	m	3,927.00
	Line T3 (Secondary)	m	9,997.00
	Line T4 (Secondary)	m	2,902.00
<b>2</b>	<b>Manhole ( Brick / RCC)</b>	<b>no.</b>	<b>685.00</b>
<b>3</b>	<b>Sewer Inlet</b>	<b>no.</b>	<b>1,010.00</b>
<b>4</b>	<b>House Connection</b>	<b>no.</b>	<b>3,784.00</b>
<b>5</b>	<b>Reinstatement of Roads</b>	<b>km</b>	<b>73.86</b>
<b>6</b>	<b>Road side Drain</b>	<b>Km</b>	<b>26.05</b>
<b>7</b>	<b>Storm Water Drain</b>	<b>m</b>	<b>652.8</b>



**Table: - 2 PHYSICAL PROGRESS IN SEWER LINES till September, 2018**

SN	Locations	BoQ		Up to Pre Month		This month		Total to date		Progress %
		Length (m)	Manhole (no)	Length(m)	Manhole (no)	Length (m)	Manhole (no)	Length (m)	Manhole (no)	
1	Hume pipe(T2)	206.00	6.00							
2	Hume pipe(T3)	1,905.00	58.00	292.00	6.00			292.00	6.00	
3	Hume Pipe (T4)	130.00	4.00	326.00	11.00			326.00	11.00	
	<b>Subtotal in (m)</b>	<b>2,241.00</b>	<b>68.00</b>	<b>618.00</b>	<b>17.00</b>	-	-	<b>618.00</b>	<b>17.00</b>	
1	HDPE(T1)	1,825.00	57.00	1,037.00	30.00			1,037.00	30.00	
2	HDPE(T2)	3,927.00	147.00	2,996.00	113.00			2,996.00	113.00	
3	HDPE(T3)	9,997.00	316.00	2,771.00	97.00			2,771.00	97.00	
4	HDPE(T4)	2,092.00	68.00	769.00	19.00			769.00	19.00	
	<b>Subtotal in (m)</b>	<b>17,841.00</b>	<b>588.00</b>	<b>7,573.00</b>	<b>259.00</b>	-	-	<b>7,573.00</b>	<b>259.00</b>	
	<b>Total</b>	<b>20,082.00</b>	<b>656.00</b>	<b>8,191.00</b>	<b>276.00</b>	-	-	<b>8,191.00</b>	<b>276.00</b>	<b>40.79%</b>
	<b>Sewer Inlet</b>	<b>BoQ(no)</b>		<b>Up to Pre Month</b>		<b>This month</b>		<b>Total to date</b>		<b>Progress %</b>
1	Sewer inlet	1,010.00			71.00		36.00		107.00	10.59
2	House connection	3,784.00			26.00		87.00		113.00	2.99

### 3.1.2 STORM WATER DRAIN

The storm water drain CN2, and CN3 has been provisioned in Regional Urban Development Project (RUDP) .The Contractor has already completed the works except some minor works at inlet and outlet which have been stopped due to monsoon. The detail of the progress is shown in the table:



**Table:-3 PROPOSED and PHYSICAL PROGRESS in STORM WATER DRAINS TILL September, 2018.**

SN	Name of Drain	Length in m				Type of Drain	Work Completed				Length of Covered Drain in m	Remarks	
		Original	Revised	Progress			Cumulative	Brick		RCC			
				Previous	This Month			m	M <sup>3</sup>	m			M <sup>3</sup>
1	CN2-CN3(Chyanghai Baari Nala)	652.89	585	570	0	570	RCC, closed			570		570	
2	CN2-CN3(Chyanghai Baari Nala)	132 nos piles	138	138	0	138 nos.							Piling works completed

### 3.1.3 ROADS AND LANES

Most of the roads/lanes in Biratnagar are in a poor state due to lack of periodic maintenance, and need improvement where as some of the roads are graveled and would benefit from upgrading. In the areas where drainage and sewerage works are proposed there will be significant impact on the existing roads. The Project has considered on design based on reinstatement, rehabilitation and upgrading of existing roads length 73.86 km. The Contractor has already started road works for upgrading the deteriorated pavement surface. The details of progress is as listed below;

**Table No:-4 PROPOSED and PHYSICAL PROGRESS of pavement works till September, 2018**

SN	Road Number	Name of Road	Length in m				Total	Work Completed				Remarks
			Original	Revised	Progress			Sub-base	Base	Asphalt	RCC	
					Previous	This Month						
1	R42	Bhagwati Marg	218	218	218		218	218	123			
2	R5	College Road	970	970	650		650	650				
3	B2	Gauri Shankar Marg	2777.83	2777.83	2152		2152	2152	1999.8	210		
4	R65	Satghumti Marg	282	320	320		320	320				
5	R107		173	215	215		215	215				
6	R107 a		50	50	50		50	50				
7	R104	VIP Marg	273	273	273		273	273	273			
8	R3A	Madhumara Marg	600	600	600		600	600	582			
9	B1	Kanchan Marg	1172.94	1173	1173		1173	1173	1106	1106		
10	R21	Pratibha Marg	1320	1320	950		950	950	689.6			
11	B3	Keshaliya Marg	1574	1574	1574		1574	1574	1627.75	1627.75		



12	S13		1617	1617	1417		1417	1417	1417	1433.3		
13	R12	Kanchha Dai Marg	1192	1192	837		837	837	837			
14	Rani site	Rani	4023	4023	2315		2315	2315	1702	1096		
15	R16	Satya Marg	604	604	604		604	604	604	542.1		
16	R26	Pasang Marg	617	654	654		654	654	654	215		
17	R28	Pustakalaya Marg	635	635	635		635	635	635	339.2		
18	R27	Peepal Marg	810	810	580		580	580	580	300		
19	R25	Devi Marg	599	580	580		580	580	580	561.7		
20	R24	Prabhat Marg	384.41	380	380		380	380	380	364.95		
21	R37	Banglamukhi Marg	420	477	477		477	477	477	200.7		
22	R7	Manakamana Marg	814	814	242		242	242	242			
23	R30	Shanti Marg	212	212	123.1		123.1		123.1	123.1		
24	R9	Fadindra Marg	123	123	119		119		119	119		
25	S11	Samrat Marg	660	660	660		660	660	504.6	504.6		
26	R22	Amar Marga	373.1	367.65	367.65		367.65	367.65	367.65	367.65		
27	R29	Shanti Marg	620	620	299		299	299	299	299		
28	R36	Gaurav Marg	218	218	220		220					
29	R33	Tarun Marg	285	285	171.5		171.5					
30	R64	Satya Narayan Marg	121	121	121		121	121				
31	R8			225	225		225	225				
32	N36			190	190		190	190				
33	R188	Shakti Marg	-	120	120		120	120				
34	R2	Main Road	-	300	300		300	300				
35	T3 Line 6A	PanditMrghnath Marg	-	220	220		220	220				
36	T2 Line 24C	Nava Jyoti Marg	-	205	205		205	205				
37	T2 Line 24D	Nava Jyoti Marg	-	210	210		210	210				
38	R63 (DSP Road)	DSP Road	420	420	420		420	420				
39	R90	Shakti Marg	450	380	380		380	380				
40	R77	Arniko Marg	80	80	80		80	80				
41	R76	Mitra Marg	270	270	270		270	270				
42	R183	Nava Jyoti Marg	240	240	240		240	240				
43	T1 L16B	Xenial Front	210	210	210		210	210				
44	T1 L16A	Xenial South	140	140	140		140	140				



45	R114	Dharanidhar Marg	560	560	560		560	560	560	560		
46	R113	Kavi Lekh Marg	740	740	740		740	740	740	740		
47	R5a		370	370	370		370	560				
48	Rani site B		600	520	520		520	740				
	<b>Total</b>				<b>24377</b>	<b>0</b>	<b>24377</b>	<b>24153.7</b>	<b>18398.1</b>	<b>14167.5</b>	<b>210</b>	

**Table No:-4.1 Footpath (Work Progress till the date)**

S N	Road Number	Name of Road	Type*	Category		Length in m					Footpath		Remarks
				<3m	>3m	Original	Revised	Progress		Cumulative	m	M <sup>3</sup>	
								Previous	This Month				
1	B2	Gauri Shankar Marg	Preca st block			2777.83	2777.83	900	0	900	900		

**Table No:-4.2 Road improvement Works (Work Progress till the date)**

SN	Description	Unit	Proposed	Total Up to Previous Month	This Month	Total Up to this Month	Progress
1	Subgrade	m	73,860.00	24,377.25	-	24,377.25	33.00%
2	Sub Base	m	73,860.00	24,153.65	-	24,153.65	32.70%
3	Base	m	73,860.00	18,398.10	-	18,398.10	24.91%
4	Prime	m	73,860.00	14,167.45	-	14,167.45	19.18%
5	Asphalt	m	73,860.00	14,167.45	-	14,167.45	19.18%



### 3.1.4 ROAD SIDE DRAIN

Most of the roads under this project for upgrading is without drain or existing drain in poor condition. The project has provisioned drain at both sides or one side as per the RoW of the road. The contractor has already started drain works at many locations. The progress for the drain works is listed below:

**Table No:-4a PROPOSED and PHYSICAL PROGRESS of Road side drain works till September, 2018.**

SN	Road Number	Name of Road	Length in m				Work Completed		Remarks	
			Original	Revised	Progress		Total	Brick m		RCC m
					Previous	This Month				
1	B1	Kanchan Marg	0	0	90	0	90	90		
2	R29	Shanti Marg	270	256.52	256.52	0	256.52	256.52		
3	N36		0	190	186	0	186	186		
4	R8		370	370	230	0	230	230		
5	R7	Devi Marg and Pipal Marg	155	155	89.575	0	89.575	89.575		
6	R63	DSP Road	418.79	418.79	198.8	0	198.8	198.8		
7	R9	Baglamukhi path	120	103.2	103.2	0	103.2	103.2		
8	S13	Udaya Marg	0	158.1	158.1	0	158.1	158.1		
9	N33		0	70	70	0	70	70		
10	R28	Pustakalaya Marg	340	278	278	0	278	278	one side	
11	R90	Shakti Marg	320	475	475	0	475	475	135m one side only	
12	R114	Dharanidhar Marg	0	312.33	312.33	0	312.33	312.33		
13	R11	Om Shiv Marg	0	200	190	10	200	200		
14	R18		0	382.5	382.5	0	382.5	382.5		
15	R17		0	360.85	360.85	0	360.85	360.85		
16	R113	Kavi Lekhnath Marg	0	312.45	312.45	0	312.45	312.45	one side	
17	R77	Arniko Marg	97	80.5	80.5	0	80.5	80.5		
18	R76	Mitra Marg	272	275	274	0	274	274		
19	N9	Devi Marg	0	222.7	222.7	0	222.7	222.7		
20	N4		0	170	147	0	147	147		
21	R33	Tarun Marg	0	265	217	47.48	264.48	264.48		
22	R36	Gaurav Marg	218	216.4	216.4		216.4	216.4		
23	R86	Janpath Marg	215	215	184	3	187	187		
24	R183	Nava Jyoti Marg	242	211	211		211	211		
25	R7a		77.81	68.55	68.55		68.55	68.55		
26	Rani site	Rani B	0	650	530		530	530		
27	Rani site	Rani A	0	300	270	0	270	270		
28	N3		0	120	95	15	110	110		



29	N5		0	40	40		40	40		
30	R21	Binayak Marga	0	390	390	0	390	390		
31	R2	Main Road	2060	2060	592.5	0	592.5	592.5		
32	T1L16B	Xenial Front	0	210	205.68	0	205.68	205.68		
33	T1L16A	Xenial South	0	160	160	0	160	160		
34	R75	Tintoliya Marga	135	135	255	0	255	255		
35	R122	Amar Marga	0	251	251	0	251	251		
36	R18 Branch		0	30	30	0	30	30		
37	R7(b)(Neuro to sidhartha chowk)	Siddhartha Marga	317	317	55	93.5	148.5	148.5		
38	R12	Sukra Path	0	953	120	180	300	300		
39	R42	Jahada Marga	0	150	150	21	171	171		
40	R6	Shahi Marg	460	430	430		430		430	
41	R21(a)	DharamBadh Junction	0	160	160		160	160		one side
42	R78	Binayak Marga	92	70	70		70	70		one side
43	R188	Shakti Marg		120	120		120	120		one side
44	R40	Brahma Kumari Marga	0	350	300		300	300		
45	Rani Site C		0	100	97.5		97.5	97.5		
46	Ranit Site D		0	131.45	131.45		131.45	131.45		
47	T3L21	Moti Marga	380	380	335	26	361	361		
48	T3L39	Gaheli Marga	0	278	260	10	270	270		
49	T3 Line 39A		0	90	0	90	90	90		
50	T3 L39B		0	50	0	50	50	50		
51	T2L27	Bhumi Prashasan Junction	92	80	60	20	80	80		
52	T4 Line 1	Sailesh Marg	0	197	100	0	100	100		
53	N2			100	40	55	95	95		
54	T2 Line 26E	College Road	80	80	75	5	80	80		
55	T2 Line 18C	Maisthan Marga	0	105	100	2	102	102		one side
56	T2Line 18A	Makalu Marga	90	90	60	0	60	60		
57	R6 (T3L11i)		0	275	0	58	58	58		
58	R9(T3L11k)	Tathasthu Marga	0	200	0	115	115	115		
59	R45 (T3 Line 10D)	Dadharam Marga	302	302	0	140	140	140		
60	R9 T2 L19	Fanindra Marga	0	225	0	40	40	40		
61	R7 (Neuro to Shanti Chowk)	Siddhartha Marga	240	605	0	172	172	172		
62	R84	School Marga	673	391	0	170	170	170		
63	R85	Lekhanath Marga	162	162	0	145	145	145		



64	R87	Byas Marga	160	160	0	80	80	80		
65	Rani B (Bus park)		0	120	0	68	68	68		
66	R8(a)	Madhumara Marg	218	218	0	141	141	141		
	<b>Total</b>				<b>10797.61</b>	<b>1756.98</b>	<b>12554.59</b>	<b>12124.59</b>	<b>430.00</b>	

### 3.5 ENVIRONMENTAL ASPECT

The environment has been defined to mean surrounding area including human and natural resources to be affected by execution and after completion of works. The Contractor shall take all precautions for safeguarding the environment during the course of the construction of the works. He shall abide by all prevalent laws, rules and regulations governing pollution and environmental protection mitigation measure specified in the latest publication of “Environmental Management Guidelines” published by the GoN and Projects Environmental management plan.

The Contractor shall prohibit employees from unauthorized use of explosives, poaching wildlife and cutting trees. The contractor shall be responsible for the action of his employees. Environmental protection works, among others, shall also include the following.

**Borrow/ quarry sites.**

The engineer shall have the power to disallow the method of construction and / or the use of borrow or quarry area, if in this opinion, the stability and safety of the works or any adjacent structure is endangered, or there is undue interference with the natural or artificial drainage or the method or use of area will promote undue erosion.

Since the contractor has made agreement for the supply of required materials from the crusher, no approval for quarry and borrow sites are required till date.

**Disposal of Spoil and Construction Waste.**

Material excess of the requirements for permanent works and unsuitable materials shall be disposed off in location and in the manner as agreed with the Engineer. The location of disposal site shall be such as not to promote instability, destruction of properties and public service system. Exposed area of such disposal site shall be suitably dressed and be planted with suitable vegetation.

The contractor has already provided the safe tipping sites and the excess materials are dumped as per the approved tipped sites.

**Provision and maintenance of Camps/Office/Stores/Equipment.**

Various works defined under this item are related to provision a maintenance camps for work person and employees, Contractor’s site office, stores equipment yards and workshops. The camps must be adequate rain roof, Spacious, airy, and hygienic with proper lighting and material storage facilities. The area shall be kept neat and clean etc.

Labour camps are provided at per the requirement at various locations. Visit to the Monitoring of the labour camp is done frequently and found to be satisfactory. The details of labour camp is provided at the Annex.

**Provision and maintenance of Toilets.**

Provision of toilets for labour and employees shall be made to avoid public nuisance as well as pollution of water courses and air. The Contractor shall construct suitable septic tanks and soak pit along with rooms of pit type latrines. Sufficient water must be provided and maintained in the toilets.

Toilets have been provided at each labour camp. The contractor has been instructed to improve the toilet conditions where required.



**Crushing plants.**

Crushing plants shall be located away from the population centers, water intakes, and should not disturb the sensitive echo system. Suitable dust control device shall be fitted to the crusher to control emission of dust from the plant etc.

**Hot mix plants and Batching plants.**

Hot mix plant and batching plant shall be located away from the population centers. The Contractor shall take every precaution to reduce levels of noise, vibration, dust and emission from his plants. No Bituminous material shall be discharged in to drains, nearby trees vegetation, property shall be protected during spray of bitumen etc.

**Occupational Health and Safety Measures**

The contractor shall provide personnel protective equipment (PPE) (Helmet, Boots, masks, gloves, jacket, protective glasses etc.) to use. Public notification, safety and warning signs and informative signboards in working sites for work safety shall be provided. The DSC engineer and DSC Environmental safeguard expert supervise and monitor the use of PPEs and other necessary safety measures regularly.

The project is environmental improvement project and mainly constitutes works on sewerage and drainage improvement works in BMC besides others. As per ADB guide lines on Environmental Assessment requirements, this project is classified as Environment Category B. According to Environmental Protection Regulation, 2054 BS, First Revised (2055 BS) schedule-3, IEE is required for Operations of Sewerage Schemes under Schedule 1.h.2.e (pertaining to Rule3). The final report on IEE was submitted and MoUD had approved the IEE on May14, 2013.

Installation of functioning sewers and functioning drainage system including roads/lanes improvement in BMC does not possess any adverse environmental impacts to its surrounding. In fact, these will greatly enhance the living conditions/hygiene of the inhabitants and facilitate transportation. Nevertheless, it is imperative to look into positive as well as negative impacts of such infrastructure development works in the urban area.

Training and awareness program regarding health, safety and disease at labour camps and yards on 3 and 4 March 2018 by Safety Prevention Officer Er. Dhiraj Sardar.

A regular monitoring visit by DSC was carried out regularly and a standard site specific environmental monitoring checklist was used to record the present status of the project and verified whether or not the EMP is compiled. A sample of environmental checklist is attached herewith as Annex.

**3.6 SOCIAL ASPECT**

Regional Urban development Project (RUDP) in Biratnagar has implemented to improve the quality of life and help to achieve higher and more socially inclusive economic growth of people through effective, efficient, and reliable delivery of improved and affordable municipal services. Infrastructure development of drainage and sewerage system as well as roads and lane improvement are the major components of RUDP in Biratnagar Metropolitan City (BMC). Establishment and functioning of Social Safeguard Desk in PIU is a major milestone of social development aspect which has been effective to address all social/ community development issues and concerns with active initiation of the DSC. Local labours have been deployed in civil construction works (i.e. in Road side drain / Sub grading works). The Engineer has issued the format of Social Safeguard Monitoring plan which is attached here with.

**Safeguard/ GESI Component****Community Awareness:**

Conduct regular Community awareness Consultations within Project Areas to build awareness on



Project Objectives, Activities and implementation during site observation, Monitoring and Meetings. Different site visit has been conducted during May, 2018 such as DDC Pre cast yard, Chyangbari Naala Biratnagar-16, Asphalt work at Sai Marg, Sewer Line construction work at Hanumandas Road and Asphalt Plant at Rani Site. Except of Minor, no any major conflict has been found during construction work. The visit was conducted jointly with Environment Safeguard Expert and Social Safeguard Expert.

**Grievance Redresses Mechanism:**

Total Four minor grievances have been registered in the GRC desk during May, 2018. The GRC committee has been addressed immediately registered Grievances and concerns raised by the concerned Stakeholders including Project beneficiaries.

**Gender Equity and Social Inclusion (GESI):**

Activities related to GESI has been monitored and supervised in all Construction sites. During site visit female workers were found in significant minority numbers at Construction sites, thus Contractor was instructed as follow:

- i. Encourage to Local female Employment as Labor and skilled man power.
- ii. Manage separate Camp and necessary facilities for female workers to encourage of female Employment.

**Status of Social and Environmental Safeguard Measures**

The present status to this regard has been reported as below:

During the site visit for Socio Environment monitoring by DSC Environmental and Social Safeguard Expert dated 19 September, 2018 and 20 September , 2018 following issues were discovered.

- i. The use of Personal Protection Equipment (PPE) were in very few usage thus the issue was considered unsatisfactory.
- ii. Proper Barricade was not done as well as caution signs and signals were not sufficiently used in Drainage and Sewer work Locations.
- iii. Tiolet at labour camp is found unhygienic.Dustbin not provided.
- iv. Water quality test has not been done at labour camp
- v. Information Board is lacking at yard

Considering above mentioned issues, the Contractor was instructed to use PPE, Barricades and proper signs and signals at working site, hygienic toilet, water test, dustbin . The implementation of Social and Environmental Safegurard measures during this month was found partially satisfactory.

**Status of Relocation of Services**

Relocation of Electric poles was done at R90, Rani and B1 Road. Similarly, relocation of water supply pipe lines were done at various locations at R6, R2, T3 Line 39, T3 Line 21, N2, R84 etc



### Status of Labour at Site

LABOUR CLASS	LABOUR		COMPOSITION		ETHNIC COMPOSITION				
	SKILLED	UNSKILLED	MALE	FEMALE	JANJATI	DALIT	MUSLIM	MADHESI	BRAHMIN CHHETRI
LOCAL	30	91	106	10	22	9	0	82	0
NON LOCAL	53	114	155	4	91	21	0	47	0
INDIAN	13	43	69	0	55	5	0	12	0
<b>TOTAL</b>	<b>96</b>	<b>248</b>	<b>330</b>	<b>14</b>	<b>168</b>	<b>35</b>	<b>0</b>	<b>141</b>	

### 3.7 FINANCIAL PLAN

The Sub-project cost will be disbursed in three years starting from FY2074/2075 to 2076/2077

#### 3.7.1 DISBURSEMENT RECORDS IN CONSTRUCTION

**Table:-5 DISBURSEMENT RECORDS in CONSTRUCTION**

S.No	Description	Submission date	Submitted Amount(NRs)	Remarks
1	IPC 01	15 <sup>th</sup> October 2017	339,105,000.00	Mobilization Advance
2	IPC02	2 <sup>nd</sup> April 2018	281,807,143.94	
3	IPC 03	1 <sup>st</sup> July 2018	350,151,414.42	
4	IPC 04	1 <sup>st</sup> October 2018	117,710,095.72	

## 4 OBJECTIVES AND SCOPE OF WORKS

### 4.1 OBJECTIVES

The following are the expected physical infrastructure improvement outputs of the project in Biratnagar:

- Drainage and sewerage systems improvement.
- Urban roads and lanes improvement.

Reference to the deliverables identified in the Project, indicates that there are a number of deliverables related specifically to the design aspects of the above infrastructure improvements with construction works.



#### 4.2 SCOPE OF WORKS

The scope of works for consultant's services is fairly detailed in the TOR attached with contract Agreement. The main points are summarized below:

- Detailed Design and Procurement Assistance Phase for integrated solid waste management design (ISWM)
- Monthly progress report and quarterly progress report.
- Semi- annual Environmental monitoring report.
- Semi-annual Safeguard monitoring report.
- Annual progress report including annual Environmental / Social safeguard monitoring report, assets.
- Detailed draft final report for our puts, including to assist the PIU (Employer),status of all supervision and construction works issues, all deliverables under the contacts.
- Sub project completion report, and summary of all other reports, progress and issues under the project.

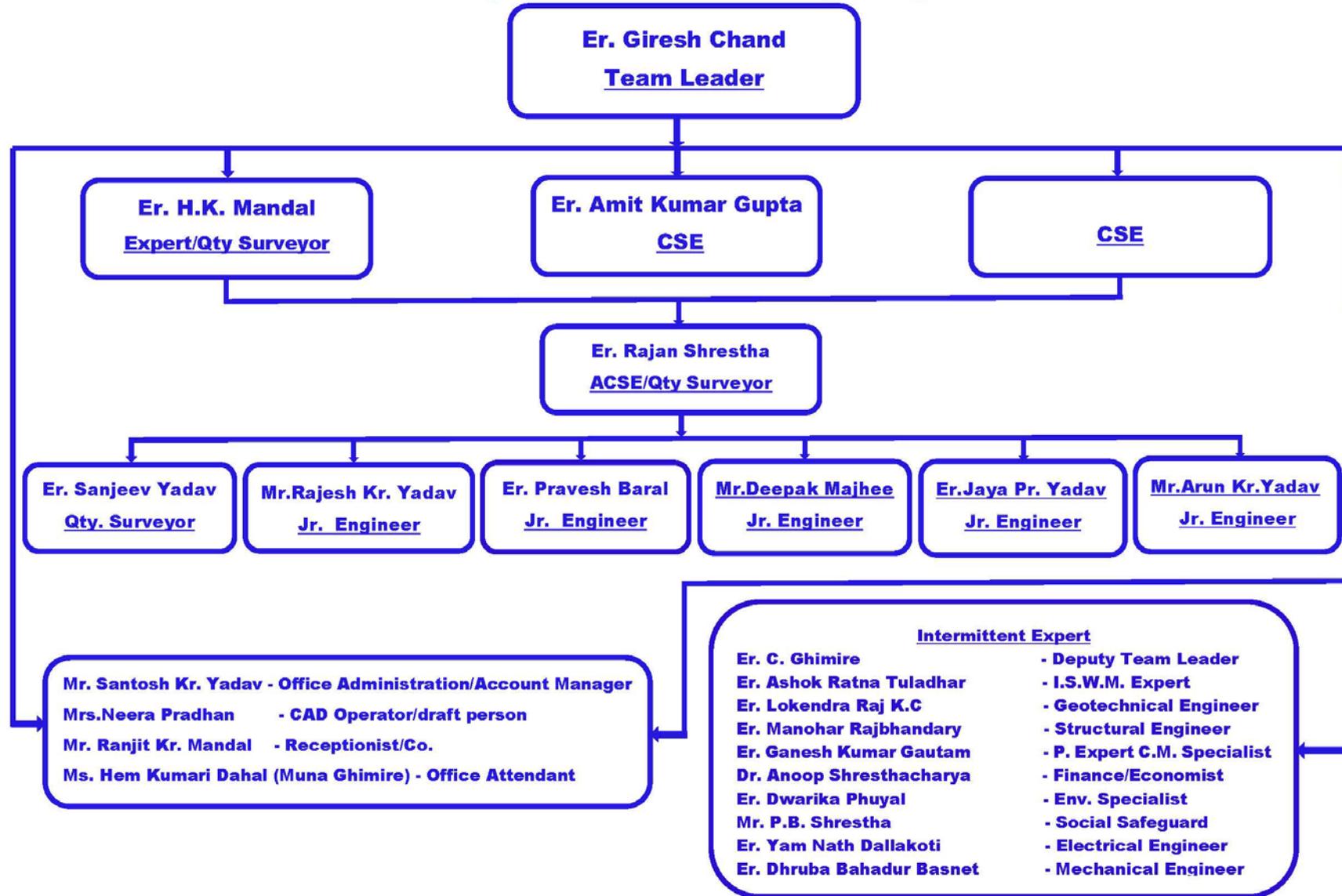


4.3 ORGANIZATION AND STAFFING

Attached



**ORGANIZATION CHART**  
**RUDP (ADB Loan No - 47252 Site Office, Bhatnagar)**



#### 4.4 CONSULTANT'S ACTIVITIES IN CONSTRUCTION PHASE

The current staffing of the consultant at project site is as follows:

**Table 6: CONSULTANT'S STAFF at Project Site, Biratnagar**

SN	Name	Designation	Joining date	Remarks
1	Giresh Chand	Team Leader	6 <sup>th</sup> Sep 2017	
2	Ashok Ratna Tuladhar	ISWM ( Designer)	6 <sup>th</sup> Sep 2017	Intermittent
3	Dwarika Phuyal	Environmental Safeguard Expert	1 Nov 2017	Intermittent
4	Prakash Bhakata Shrestha	Social Safeguard Monitoring Expert	26 <sup>th</sup> dec-2017	Intermittent
5	Ganesh Kumar Gautam	P.Expert C.M. Specialist	17 <sup>th</sup> Sep-2018	Intermittent
6	Hare Krishna Mandal	Expert/Quantity surveyor	1 <sup>st</sup> Nov 2017	
7	J.P Yadav	Construction Supervision Engineer	1 <sup>st</sup> March 2018	Discontinued the service since 25 <sup>th</sup> April, 2018.
8	A.K Gupta	Construction Supervision Engineer	1 <sup>st</sup> March 2018	
9	Nishant K.C.	Construction Supervision Engineer	2 <sup>nd</sup> April 2018	Discontinued the service since 1 <sup>st</sup> September, 2018.
10	Rajan Shrestha	ACSE/Quantity Surveyor	7 <sup>th</sup> Nov 2017	
11	Rajesh Kumar Yadav	Junior Engineer-1	6 <sup>th</sup> Sep 2017	
12	Sanjeev Yadav	Qty Surveyor	5 <sup>th</sup> Nov 2017	
13	Santosh Kumar Yadav	Office Administration/Account Manager	6 <sup>th</sup> Sep 2017	
14	Hem Kumari Dahal (Muna Ghimire)	Office Attendant	6 <sup>th</sup> Sep 2017	
15	Ranjit Kumar Mandal	Receptionist	10 <sup>th</sup> Dec 2017	
16	Pravesh Baral	Junior Engineer-2	10 <sup>th</sup> Dec 2017	
17	J.P Yadav	Junior Engineer-3	1 <sup>st</sup> March 2018	
18	Deepak Majhi	Junior Engineer-4	1 <sup>st</sup> March 2018	
19	Arun Kumar Yadav	Junior Engineer-5	16 <sup>th</sup> March 2018	
20	Neera Pradhan	CAD operator/Draft Person	10 <sup>th</sup> Dec 2017	



SN	Name	Designation	Joining date	Remarks
21	Ramji Ghimire	Driver	1st Dec-2017	

The consultant has been constantly supervising the contractor’s work in daily basis. The consultant is mainly focusing in construction management, contract administration and the following activities but not limited as listed below:

- i. Daily Construction supervision/Surveying works etc.
- ii. Quality control, cost control and time control
- iii. Measurement and Certification of Interim Payment Certificates (IPC)
- iv. Modification and design of Road side drain, storm drainage and sewer lines, manholes etc. as per site condition and approve working drawings as discussed/advised by employer.
- v. Supervise construction material testing and sampling
- vi. Monitor Environment Management Plan and its compliance
- vii. Monitor Social safeguard and Resettlement Plan and its compliance
- viii. Prepare Due Diligence Report of the Project
- ix. Maintain correspondences with the Employer and the Contractor
- x. Assisting PIU



5 PROGRESS OF SUB - PROJECT COMPONENTS

5.1 CONSTRUCTION MATERIALS.

As per Clause 1.8.2 Engineer has given early notice to the contractor for identification and sample of all construction material before starting any kind of works. Contractor has identified and submitted their requisition for sampling of materials. Sampling works of all construction materials have completed. Team leader has recommended their letter for required tests for authorized organizations. Some test reports have been submitted by the Contractor which has been tested from outside of authorized organization. Engineer has emphasized production of the pre-cast item like (kerb stone, drain cover slab, manhole etc) for better work progress of the project. The Contractor has established two production yards for pre-cast item (kerb stone, drain cover slab, man whole etc.) and production is going on.

The Contractor has informed to borrow RCC NP-3 pipes from Ithari Hume pipe factory or other location and also requested for three Edge bearing test. It will be tested very soon in presence of consultant TL/PIU and contractor representative.

TL discussed during monthly progress meeting and given guidance for making certain modification and review on submitted work program and QAP. Contractor agreed for review/modification and resubmission on work program / QAP.The contractor has already submitted the work program and QAP as instructed

5.2 Progress Achieved Till date

Month	Target This Month		Achievement This Month		Leading		Lagging		Remarks
	Monthly	Accumulated	Monthly	Accumulated	Monthly	Accumulated	Monthly	Accumulated	
July-18	0.15 %	25.17%	0.78%	25.18%	0.63%	0.01%			Leading
August-18	0.15 %	25.32%	2.32%	27.50%	2.17%	2.18%			Leading
September-18	5.71 %	31.03%	1.22%	28.72%				-2.31%	Lagging

5.3 Key Events

The consultant has noted the following key dates for the month of September, 2018.

**Table 8: KEY DATES of EVENTS / ACTIVITIES**

S. No.	Date	Activities/Events	Remarks
	<b>Weather Reports</b>		
1	Wednesday, September 1, 2018	Activities Disturbed due to Rainfall	
2	Thursday, September 30, 2018	Activities Disturbed due to Rainfall	
	<b>Strike</b>		



S. No.	Date	Activities/Events	Remarks
3	Monday, September 30, 2018	Bandha called by Netra Bikram Chand, Biplap	
	<b>Site visits</b>		
4	September 14, 2018	Project Director (PD) Visited to the site.	
5		Due to Socio Environment Problem, the consultant is not able to process for design of Integrated Solid Waste Management (ISWM).	

6 DETAILS OF PRE CAST ACTIVITIES.

**Table 9: PHYSICAL PROGRESS in PRODUCTION OF PRECAST ITEMS till, September, 2018**

Physical Progress till September 2018							
S.N.	Description	Unit	Progress			Total to Date (RM.)	Remarks
			BoQ	Up to Previous month (RM.)	This Month (RM.)		
1	Precast Slab	No		31,606.00	1,500.00	33,106.00	<b>Under progress</b>
2	Kerb Stone	Rm	147,729.68	59,285.00	2,000.00	61,285.00	41.48%

**Table 10: PHYSICAL PROGRESS in PRODUCTION OF RCC Hume Pipe at Itahari till, September, 2018**

Physical Progress till September- 2018							
S.N.	Description	Diameter (mm)	Progress			Total to Date (RM.)	Remarks
			BoQ (RM)	Up to Previous month (RM.)	This Month (RM.)		
1	RCC Pipe	300	336.00	336.00	-	336.00	
2	RCC Pipe	450	681.00	681.00	-	681.00	
3	RCC Pipe	500	842.00	842.00	-	842.00	
4	RCC Pipe	600	382.00	382.00	-	382.00	
	<b>Total</b>						



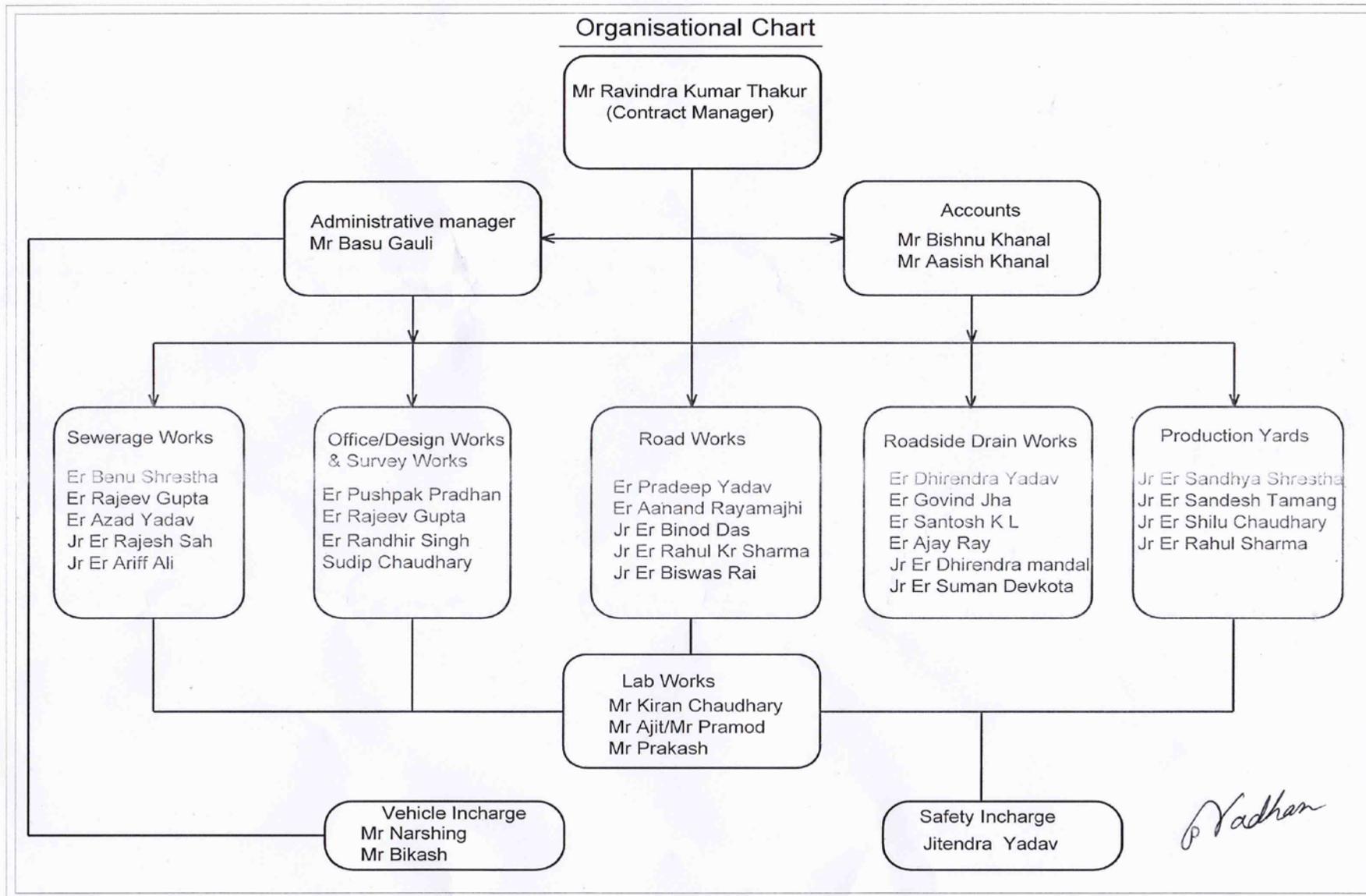
Table 11: PHYSICAL PROGRESS in PRODUCTION OF HDPE Pipe till, September, 2018

<i>Physical Progress till September- 2018</i>							
S.N.	Description	Diameter (mm)	Progress			Total to Date (RM.)	Remarks
			BoQ (RM)	Up to Previous month (RM.)	This Month (RM.)		
1	HDPE Pipe	110.00	1,987.20	1,987.20	-	1,987.20	Under process
2	HDPE Pipe	200.00	16,656.00	10,500.00	-	10,500.00	
3	HDPE Pipe	250.00	115.00	450.00	-	450.00	
<b>Total</b>							

Table 12: PHYSICAL PROGRESS in PRODUCTION OF UPVC Pipe till, September, 2018

<i>Physical Progress till September- 2018</i>							
S.N.	Description	Diameter (mm)	Progress			Total to Date (RM.)	Remarks
			BoQ (RM)	Up to Previous month (RM)	This Month (Rm.)		
1	UPVC Pipe	160.00	5,050.00	4,500.00	-	4,500.00	
2	UPVC Pipe	200.00	5,050.00	4000.00	-	4,000.00	





7 CONTRACTOR'S MANPOWER

Table 13: CONTRACTOR'S KEY STAFFS in September, 2018

S.No	Position	Minimum Number Required as per Contract	ZHONGHENG CONSTRUCTION Group	Remarks
1	Project/Contract Manager (1 No) 15/10 Yrs (Total/Similar Exp.)	1	1	
2	Civil Engineer-10/6	2	2	
3	Sanitary Engineer-(1no.)-12/8	1	-	
4	Road Engineer-(1no.)-12/8	1	1	
5	Electromechanical Engineer-(1no)-10/5	1	-	
6	Safety Engineer	-	1	
7	Site Engineer	-	8	
8	Sub- Engineer	-	18	
9	Accountant	-	2	
10	Lab Technician	-	1	
11	Store Keeper	-	2	
12	Vehicle Incharge	-	2	
13	Skilled Labors		96	
14	Unskilled Labors		248	



## 8 CONTRACTOR'S EQUIPMENT

Table 12: CONTRACTOR'S EQUIPMENT

S.No	Equipment Type and Characteristics	Min Number required as per Contract	ZHONGHENG CONSTRUCTION Group	Remarks
1	Excavator (200 above)	5	1	Backhoe loader-6nos.
2	Crane (10 ton capacity)	3	-	
3	Asphalt plant of adequate capacity	1	1	
4	Asphalt pavers	1	1	
5	Vibrating roller	2	1	
6	Pneumatic tyre roller 8 to 10 ton	2	1	
7	Smooth wheeled roller 8 to 10 ton	1	3	
8	Grader	1	2	
9	Track Dozer (120 to 180 HP)	1	-	
10	Bitumen distributor (4 to 6 Kilo litre)-	1	1	
11	Water browser ( minimum 5000 Litres)	3	4	
12	Chips spreader	1	-	
13	Bitumen decanter minimum 4000 Litres. ( preheating container)	2	1	
14	Air compressor	2	2	
15	Tipping Trucks	15	5	
16	Service vehicle	2	5	
17	Survey equipment (Total station with accessories)	1	1	
18	Theodolite	2	-	
19	Levelling	5	14	
20	Mobile Generator 15-20 Kva	3	7	
21	Mixer Machine	6	7	
22	Concrete Batching Plant	1	-	



S.No	Equipment Type and Characteristics	Min Number required as per Contract	ZHONGHENG CONSTRUCTION Group	Remarks
23	Concrete pump	1	-	
24	Drain cleaner/ Nala cleaner	2	-	
25	Broomer	-	1	
26	Motor Bike	-	10	
27	Plate Compactor	-	4	
28	Water Pump	-	6	

### WORK PLAN FOR THE NEXT MONTH

Following are the Contractor's works in the next month program.

- Detail Surveying works at various Road sections.
- Road works
- Precast production works at contractor's yard.
- Side drain works.
- Laying of kerb Stone, cover slab and interlocking tiles .
- Sewer inlet and House Connection works.



ANNEX-1: PHOTOGRAPHS OF SEPTEMBER, 2018

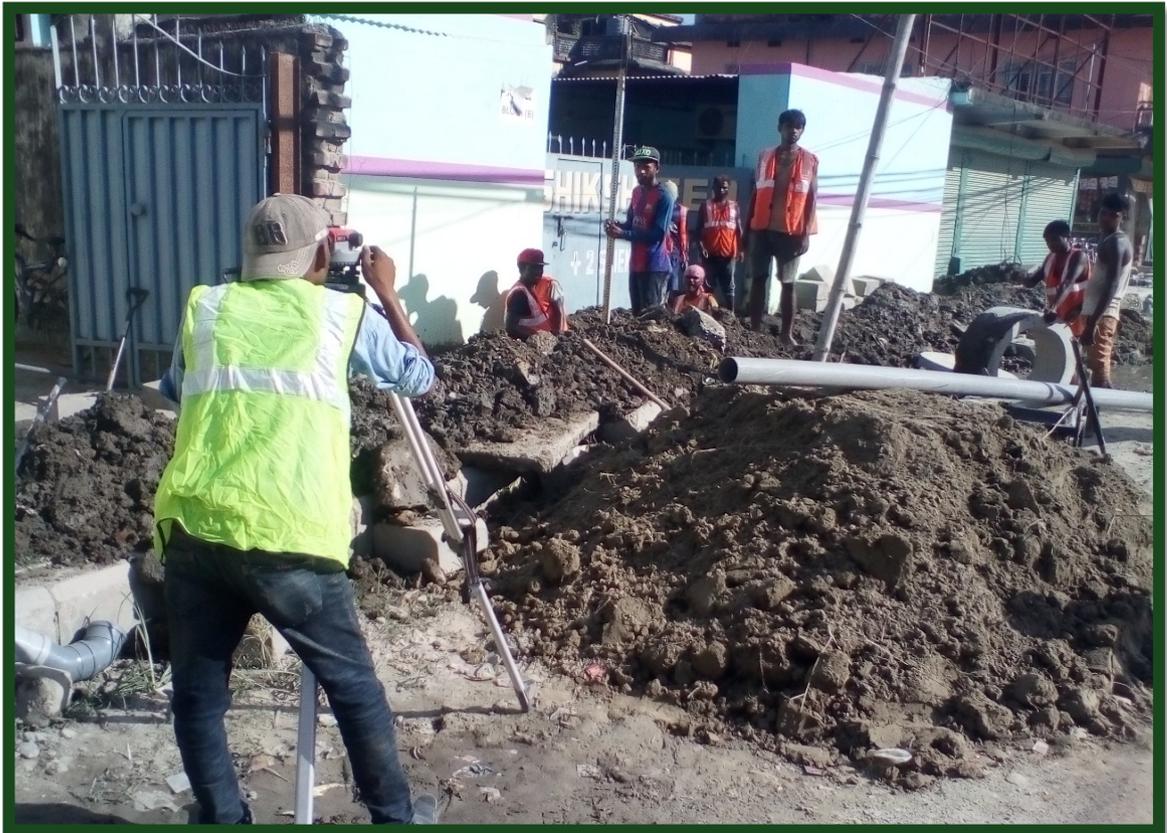




Sewer inlet work at R85



Sewer inlet works at R87



Sewer inlet works at R12



Sewer inlet works at R63



Drain at R45



Drain work at R87



Drain crossing at Rani



Drain works at R33



Outlet from gutter at R21



Joint testing of at Laboratory



Kerb stone works at R6



Relocation of water supply pipes





Road safety measures adopted at different roads



Manhole and Slab productions at yard





Safety Engineer providing first aid treatment to injured labour



PD Visited the site with PM & TL

ANNEX-2: MINUTES OF MEETING SEPTEMBER,  
2018



Meeting Minute: 7

**Regional Urban Development Project (RUDP), Biratnagar**

**Meeting of Safeguard Desk (SD)**

Venue: Project Implementation Unit (PIU), Biratnagar

Date: September 20, 2018 (2075/06/04)

**Participants:**

Er. Bharat Kumar Neupane Project Manager, PIU/RUDP, Biratnagar  
 Mr. Punam Kumar Dahal Chief, social Development, PIU/RUDP, Biratnagar  
 Mr. Prakash Bhakta Shrestha Social Safeguard Expert, DSC/RUDP, Biratnagar  
 Er. Dwarika Phuyal Environmental Safeguard Expert DSC/RUDP, Biratnagar



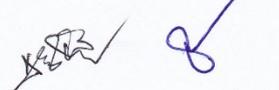
**Invitees:**

Er. Prakash Chaudhary Deputy Project Manager, PIU/RUDP, Biratnagar  
 Er. Giresh Chand TL, DSC/RUDP, Biratnagar  
 Er. Amit Gupta CSE, DSC/RUDP Biratnagar  
 Er. Ganesh Gautam Contract Management Expert, DSC/RUDP, Biratnagar




Discussion and Decisions:

S. No.	Agenda	Discussion and Decisions
1	SD meeting	The 7 <sup>th</sup> . Meeting of SD, RUDP, Biratnagar held in RUDP/PIU office. There is no major complain has been registered in the desk.
2	Satisfactorily progress on installing drain cover for Public safety	Road Side drains and storm drain found covered with RCC slab cover. During 6 <sup>th</sup> meeting drain were partly covered and drain were left open in few sections. The Contractor instructed to cover the newly constructed drains immediately after cleaning the drain properly and keep public notice board of caution for the public safety.
3	Progress envisaged in labor camps as safeguard measures.	Discussed on labor facilities in labor camp following facilities are found during labor camp site visit: i) Sufficient available of drinking water service. ii) Toilet facilities and sanitation condition of the toilet getting poor than previous monitoring visit. Therefore contractor instructed to provide proper toilet facilities with provision




		<p>of sufficient water and soap for hand washing and provide separate toilet for gents and ladies.</p> <p>iii) Keep first-aid kit box for primary treatment in emergency case.</p> <p>iv) No fire wood used.</p> <p>v) Yet tube well water quality was not tested prior to use. Contractor therefore instructed to perform water quality test of wells prior to use.</p> <p>vi) Contractor instructed to provide separate dust bins to collect organic and inorganic wastes in camps.</p>
4	Partly Satisfactorily progress envisaged of implementation of safeguard measures including barricades and sign boards.	<p>i) Discussed over the dust emission during construction dust was emitting in sites during dry and sunny day and sprinkling of water over dust prone area was not sufficient, contractor therefore instructed to increase the frequency of water sprinkling.</p> <p>ii) Discussed over the Use of personnel Protective Equipments like, helmet, boots, glove, and jackets by labors was found partly compliance. The contractor instructed for full compliance.</p> <p>iii) Contractors has found aware on child right, and instruct strictly no use of child labor.</p> <p>iv) Contractor has provided the site and personnel safety tools, barricades and traffic signs but are not sufficient, therefore contractor instructed to provide sufficient barricades, caution tape, caution boards, traffic signs in the construction sites.</p>
5	Encourage of Female employment.	<p>i) Contractor instructed to encourage employing as labor and skilled man power to local female.</p> <p>ii) Contractor instructed to manage separate camp and necessary facilities for female workers to encourage of employment.</p> <p>iii) Priority should be given to employ local labours.</p>
6	Discussion on Semi annual resettlement Plan report July, 2018	The matter of compensation to public infrastructures (Temples, Schools and college boundary) was discussed to arrange the budget for compensation.
7	Others	Decided to conduct a meeting immediately with contractor to discuss the issue of non-compliance of social and environmental safeguard.



Building Design Authority (P) Ltd

Joint Venture with  
 B.N.Consultancy Pvt. Ltd and P.N. Engineers & Architects (P) Ltd, Kathmandu, Nepal  
 REGIONAL URBAN DEVELOPMENT PROJECT (RUDP), ADB Loan No: 47252

Biratnagar Metropolitan city, Biratnagar

MINUTES OF MEETING NO. – 16

Contract: RUDP/ICB/BRT- 02

Date: September 4, 2018  
 Time: 4:30 PM  
 Venue: TL Office, Biratnagar

Attendance

Employer:

1. Mr. Kumar Prasad Dahal, CAO, BMC
2. Mr. Bharat Neupane, Project Manager, PHU

Consultant:

1. Mr. Giresh Chand , Team Leader

Giresh Chand, TL welcomed all participants in the meeting. Following matters were discussed and decided:

S.N.	Minutes	Action by
1.	TL, Mr. Chand briefed about the present status of the project as follows: 1) Road – 14.2 Km (Asphalt completed) against target 73.8 Km 2) Road Side Drain- 18.0 Km completed against target 26.05 Km 3) Sewer Line- 8.2 Km against target 20.08 Km 4) Storm Water Drain- 570 m against target 585 m (Revised length) The progress upto 21 August 2018 is 27.50 % against the target of 25.32 % i.e, lead by 2.18%.	DSC
2.	CAO asked regarding the lack of OHS (Occupational Health and Safety) and Signboard at site. TL informed that those OSH apparatus are provided from the contractor seems inadequate and assured to fulfill by instructing the contractor for the same.	DSC/Contractor

*(Handwritten signature)*

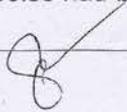
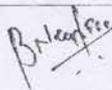
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Building Design Authority (P) Ltd  
 in Joint Venture with  
 B.N.Consultancy Pvt. Ltd and P... Engineers & Architects (P) Ltd, Kathmandu, Nepal  
**REGIONAL URBAN DEVELOPMENT PROJECT (RUDP), ADB Loan No: 47252**  
 Biratnagar Metropolitan city, Biratnagar

3.	<p>CAO enquired about the public various complains and grievances. TL informed that most the genuine complains/grievances have been addressed instantly by PIU/DSC. He regret to say that 100% public demand cannot be fulfilled due to technical and financial problem.</p>	Employer/DSC
4.	<p>TL requested Employer (BMC) to clear all the unclear RoW. He further added that the contractor has already informed formally as well as informally about his intention of claim for EoT and financial as per <b>clause 20.1</b></p> <p>Furthermore, TL informed that due to the lack of cooperation for shutdown from NEA, the progress had been hampered.</p>	Employer
5.	<p>TL informed that additional side drain works were under construction as per the instruction from the Employer. The status was as follows:</p> <p>Additional Length completed as per instruction: 11.05 Km</p> <p>Also TL informed that as per the employer's instruction/advice, extra road work( pavement) being carried out.</p> <p>CAO and PM advised to start to prepare all necessary documents for Variation Order.</p>	Employer/DSC
6.	<p>TL informed that all the replaced materials and goods left during relocation of electric poles had been taken by Electricity Authority Board.</p>	Employer/EAB




**MINUTES OF MEETING: 17**

**Contract:** Secondary Town Integrated Urban Environment Improvement Project, (STIUEIP) & Regional Urban Development Project (RUDP), at Biratnagar

**Date:** 12 September 2018

**Time:** 03:00 PM

**Venue:** PIU Office, Biratnagar

**Attendance**

Employer:		
1	Mr. Bhim Parajuli	Mayor, BMC
2	Kumar Prasad Dahal	Chief Administrative Officer (CAO), BMC
3	Dr Suman Karna	Municipal Advisor, BMC
4	Mr. Bharat Kumar Nuepane	Project Manager (PM), PIU
5	Mr. Prakash Narayan Chaudhary	Project Engineer (PE), PIU
Contractor:		
1	Mr. Ravindra Kumar Thakur	CM, Zhongheng Construction Group International Engineering Co. Ltd.
2	Mr. Benu Shrestha	Engineer, Zhongheng Construction Group International Engineering Co. Ltd.
3	Mr. Bishesh Prasai	M/S CTCE-Kalika JV
Consultant:		
1	Mr. Giresh Chand	Team Leader (TL), DSC
2	Mr. Amit Kumar Gupta	CSE, DSC
3	Mr. Hare Krishna Mandal	SQS, DSC

The meeting was chaired by Mayor, Bhim Parajuli and he welcomed all the participants in the meeting. Following matters were discussed and decided:

S. NO.	Minutes	Action by
1	<p>TL, Mr. Chand briefed about the present progress status of the project and expressed that work progresses are little bit slowly due to often heavy rainfall but the Contactor trying best to achieve the target. In STIUEIP Project the dedicated electricity work of WWTP, Jatuwa, placement of sewer inlet &amp; house chamber connection, procurement of O &amp; M equipments (additional), road maintenance &amp; defect remedial works are in progress and correspondingly in RUDP Project the road side drain, placement of sewer inlet &amp; house chamber connection, production of precast items as well as the road maintenance works are in progress, if weather favour then the Contractor aiming to start the remaining sewer line work too. The progresses are as mentioned below:</p> <p>STIUEIP:                      Physical progress: 98.07% (till June 2018)                      Financial progress: 94.82%</p> <p>RUDP:</p>	<p>The employer &amp; consultant</p>

*(Handwritten signatures)*



S. NO.	Minutes	Action by
	Physical progress: 27.50% (till Aug 2018) Financial progress: 22.84%	
2	<p>Mayor, Mr Parajuli expressed unsatisfaction with the progress concerning road maintenance works as the grievances are coming frequently to do the maintenance of road pot-holes and troubles associated with it in daily life of local stakeholders.</p> <p>TL, Mr. Chand informed that as instructed by the employer at various lanes like Madhumara Marg, nearby Red cross, east of NTC office, Amar tole, nearby Church, Sani Mandir, Milan Chowk and Bindabasini Marg, etc., more than 33 (thirty-three) trips of gravel has been laid by the Contractor.</p> <p>In addition to that as discussed/ decided in previous meeting and request from ward office representative's, at various stretches lots of trips were laid for road maintenance work like in DSP road, R2 (nearby Bhumi Parshasan &amp; Roadcess Chowk), Golchha Road, Siddhartha Marg (nearby Nuero &amp; Hanuman temple), R42 (Jahada Marga), at various places in Jatuwa Marga, T2 Line20 (branch of Jatuwa Marga near Yadav chowk), Fanindra Marg, Janani Marg, T2L18L (in front of Arniko school), R6 (Abad Narayan Marg) and R27 (nearby Ward office - 10), etc; and informed to PM, Mr. Nuepane &amp; ward office representative's respectively.</p> <p>TL, Mr. Chand also mentioned that as R3 Lane (Dharma Bandh road) is concerned the road maintenance work had done more than four time and still there are pot-holes which certainly trouble to users which happened due to delay in shut down and electricity utilities shifting and it tends to delay in handover to RUDP ( as instructed by employer). He also assured that once shut down from concerned authorities are arranged by the employer concurrently the road maintenance and Kerb stone fixation will be started.</p>	The employer & consultant & contractor
3	<p>Mayor, Mr Parajuli said to proceed the road maintenance of some more stretches like Sri Laxmi Marga (R19), Shahi Marg (south to Pratibha chowk), Tarun marg and Doorshansar Marg, etc. &amp; instructed to report in next scheduled meeting.</p> <p>TL, Mr. Chand admitted to proceed the above works as soon as possible in co-ordination of PM, Nuepane.</p>	The employer & consultant & contractor
4	<p>The employer said to start the work in R3 Lane (Dharma Bandh road) and try to complete the black topped work before Dashain festival.</p> <p>TL, Mr. Chand replied that the works are delaying due to delay in shut down, once the concerned authorities provide the shutdown as mentioned earlier the Contractor will start the remaining work soon and give best effort to complete on time.</p> <p>Mayor, Mr Parajuli assured us to resolve and facilitate the shutdown problem soon.</p>	The employer & consultant & contractor

Handwritten signatures and initials.



S. NO.	Minutes	Action by
5	<p>TL, Mr. Chand raised the following issues which may affect the project with respect to time and cost such as clearance of Right of way (ROW), cash flow on time and shutdown for electricity utilities, etc. Addition to above TL, Mr. Chand emphasised that sewer line at R3 (North to Devkota chowk, Sani hat Marg) is going to start after rainy season thus before that required to clear the site and other utilities by the employer.</p> <p>Mayor, Mr Parajuli /The employer assured us to shut out the above issues very soon.</p>	The employer
6	<p>TL, Mr. Chand informed that the consultant is not able to proceed the work of ISWM project (site near Dangra Khola) as per Term of references (TOR) due to Socio-Environmental safeguard issues, etc. Mayor, Mr Parajuli /The employer assured us to shut out the above issues very soon.</p>	The employer
7	<p>Municipal advisor, Mr. Suman Karna advised to use more safety sign board at site to avoid any accident &amp; to overcome from any tiresome during travelling. Also advised to remove the surplus materials from the site after completion of work.</p> <p>CM, Mr. Thakur admitted to fulfil the above requirement onward.</p>	The employer & consultant & contractor
8	<p>TL, Mr. Chand informed that about 9 Km in length of additional road side drains under construction as instructed by the employer which formally as well as informally informed.</p> <p>Mayor, Mr Parajuli /The employer added to continue the additional side drain and advice to prepare variation order (VO) to proceed further and to get approval from concerned authorities.</p>	The employer & consultant

*(Handwritten signature and initials)*



ANNEX-3: LABORATORY TEST RESULTS OF  
SEPTEMBER, 2018

**Attached**



**REGIONAL URBAN DEVELOPMENT PROJECT**

Biratnagar Metropolitan City

Contract No:- RUDP/ICB/BRT-02

**Summary Sheet of Concrete Cube Test Report**

							Month		September		
							Year		2018		
							Type of Material		Conc. Cube		
S.N.	Location	Lab Ref.no.	Type of Cement	Brand of Cement	Source of Sand+Agg.	Date of Casting	Date of Testing		Strength, N/mm <sup>2</sup>		Concrete Grade
							7 Days	28 Days	7 Days	28 Days	
1	R-6	RUDP-633	Salimar	OPC	Chisang Khola	4-Aug-18	11-Aug-18	1-Sep-18	17.88	M15	
2	R-6	RUDP-634	Salimar	OPC	Chisang Khola	4-Aug-18	11-Aug-18	1-Sep-18	22.05	M20	
3	DDC Yard	RUDP-635	Salimar	OPC	Chisang Khola	4-Aug-18	11-Aug-18	1-Sep-18	32.74	M30	
4	DDC Yard	RUDP-636	Salimar	OPC	Chisang Khola	5-Aug-18	12-Aug-18	2-Sep-18	22.88	M20	
5	R-2	RUDP-637	Salimar	OPC	Chisang Khola	5-Aug-18	12-Aug-18	2-Sep-18	21.60	M20	
6	R-6	RUDP-638	Salimar	OPC	Chisang Khola	5-Aug-18	12-Aug-18	2-Sep-18	17.81	M15	
7	Madhumara Yard	RUDP-639	Salimar	OPC	Chisang Khola	5-Aug-18	12-Aug-18	2-Sep-18	32.29	M30	
8	N-4	RUDP-640	Salimar	OPC	Chisang Khola	5-Aug-18	12-Aug-18	2-Sep-18	23.18	M20	
9	R-6	RUDP-641	Salimar	OPC	Chisang Khola	6-Aug-18	13-Aug-18	3-Sep-18	16.71	M15	
10	DDC-Yard	RUDP-642	Salimar	OPC	Chisang Khola	6-Aug-18	13-Aug-18	3-Sep-18	22.65	M20	
11	Madhumara Yard	RUDP-643	Salimar	OPC	Chisang Khola	6-Aug-18	13-Aug-18	3-Sep-18	33.11	M30	
12	Madhumara Yard	RUDP-644	Salimar	OPC	Chisang Khola	6-Aug-18	13-Aug-18	3-Sep-18	32.96	M30	
13	DDC-Yard	RUDP-645	Salimar	OPC	Chisang Khola	7-Aug-18	14-Aug-18	4-Sep-18	31.91	M30	
14	DDC-Yard	RUDP-646	Salimar	OPC	Chisang Khola	7-Aug-18	14-Aug-18	4-Sep-18	22.28	M20	
15	R-6	RUDP-647	Salimar	OPC	Chisang Khola	7-Aug-18	14-Aug-18	4-Sep-18	16.63	M15	
16	R-74	RUDP-648	Salimar	OPC	Chisang Khola	7-Aug-18	14-Aug-18	4-Sep-18	22.20	M20	
17	R-6	RUDP-649	Salimar	OPC	Chisang Khola	8-Aug-18	15-Aug-18	5-Sep-18	17.01	M15	
18	T2L26E	RUDP-650	Salimar	OPC	Chisang Khola	8-Aug-18	15-Aug-18	5-Sep-18	21.83	M20	
19	T3L23	RUDP-651	Salimar	OPC	Chisang Khola	8-Aug-18	15-Aug-18	5-Sep-18	22.73	M20	
20	Madhumara Yard	RUDP-652	Salimar	OPC	Chisang Khola	8-Aug-18	15-Aug-18	5-Sep-18	33.19	M30	
21	Madhumara Yard	RUDP-653	Salimar	OPC	Chisang Khola	8-Aug-18	15-Aug-18	5-Sep-18	32.59	M30	
22	T2L26E	RUDP-654	Salimar	OPC	Chisang Khola	9-Aug-18	16-Aug-18	6-Sep-18	21.75	M20	
23	R-74	RUDP-655	Salimar	OPC	Chisang Khola	9-Aug-18	16-Aug-18	6-Sep-18	22.05	M20	
24	R-6	RUDP-656	Salimar	OPC	Chisang Khola	9-Aug-18	16-Aug-18	6-Sep-18	16.63	M15	
25	DDC-Yard	RUDP-657	Salimar	OPC	Chisang Khola	9-Aug-18	16-Aug-18	6-Sep-18	23.26	M20	
26	DDC-Yard	RUDP-658	Salimar	OPC	Chisang Khola	9-Aug-18	16-Aug-18	6-Sep-18	32.46	M30	
27	R-2(Branch Road)	RUDP-659	Salimar	OPC	Chisang Khola	9-Aug-18	16-Aug-18	6-Sep-18	22.50	M20	
28	Madhumara Yard	RUDP-660	Salimar	OPC	Chisang Khola	10-Aug-18	17-Aug-18	7-Sep-18	34.02	M30	
29	DDC-Yard	RUDP-661	Salimar	OPC	Chisang Khola	10-Aug-18	17-Aug-18	7-Sep-18	33.04	M30	
30	R-6	RUDP-662	Salimar	OPC	Chisang Khola	10-Aug-18	17-Aug-18	7-Sep-18	18.89	M15	
31	R-2	RUDP-663	Salimar	OPC	Chisang Khola	10-Aug-18	17-Aug-18	7-Sep-18	22.28	M20	
32	R-6	RUDP-664	Salimar	OPC	Chisang Khola	11-Aug-18	18-Aug-18	8-Sep-18	16.19	M15	
33	R-74	RUDP-665	Salimar	OPC	Chisang Khola	12-Aug-18	19-Aug-18	9-Sep-18	22.73	M20	
34	T2L18A	RUDP-666	Salimar	OPC	Chisang Khola	12-Aug-18	19-Aug-18	9-Sep-18	21.83	M20	
35	DDC-Yard	RUDP-667	Salimar	OPC	Chisang Khola	13-Aug-18	20-Aug-18	10-Sep-18	23.41	M20	
36	R-6	RUDP-668	Salimar	OPC	Chisang Khola	15-Aug-18	22-Aug-18	12-Sep-18	17.14	M15	

Contractor

Consultant

ZHONGHENG CONSTRUCTION GROUP  
INTERNATIONAL ENGINEERING CO. LTD

BUILDING DESIGN AUTHORITY (P) LTD IN JOINT VENTURE  
WITH B.N. CONSULTANCY PVT. LTD AND PLUS ENGINEERS &  
ARCHITECTS (P) LTD, KATHMANDU, NEPAL

Checked By  
Engineer

Submitted By  
Contract Manager

Verified By  
Qty Engineer/CSE

Approved By  
Team Leader



**REGIONAL URBAN DEVELOPMENT PROJECT**

Biratnagar Metropolitan City

Contract No:- RUDP/ICB/BRT-02

Summary Sheet of Concrete Cube Test Report

S.N.	Location	Lab Ref.no.	Type of Cement	Brand of Cement	Source of Sand+Agg.	Date of Casting	Month		September		Concrete Grade
							Year		2018		
							Type of Material		Conc. Cube		
							Date of Testing		Strength, N/mm <sup>2</sup>		
		7 Days	28 Days	7 Days	28 Days						
37	T3L39	RUDP-669	Salimar	OPC	Chisang Khola	15-Aug-18	22-Aug-18	12-Sep-18		22.05	M20
38	R-6	RUDP-670	Salimar	OPC	Chisang Khola	15-Aug-18	22-Aug-18	12-Sep-18		16.71	M15
39	R-12	RUDP-671	Salimar	OPC	Chisang Khola	15-Aug-18	22-Aug-18	12-Sep-18		24.16	M20
39	DDC-yard	RUDP-672	Salimar	OPC	Chisang Khola	15-Aug-18	22-Aug-18	12-Sep-18		21.00	M20
40	DDC-yard	RUDP-673	Salimar	OPC	Chisang Khola	15-Aug-18	22-Aug-18	12-Sep-18		32.51	M30
40	Madhumara Yard	RUDP-674	Salimar	OPC	Chisang Khola	15-Aug-18	22-Aug-18	12-Sep-18		33.49	M30
41	R-12	RUDP-675	Salimar	OPC	Chisang Khola	15-Aug-18	22-Aug-18	12-Sep-18		22.43	M20
41	R-6	RUDP-676	Salimar	OPC	Chisang Khola	16-Aug-18	23-Aug-18	13-Sep-18		18.24	M15
42	R-12	RUDP-677	Salimar	OPC	Chisang Khola	16-Aug-18	23-Aug-18	13-Sep-18		21.90	M20
42	R-2	RUDP-678	Salimar	OPC	Chisang Khola	16-Aug-18	23-Aug-18	13-Sep-18		21.67	M20
43	Madhumara Yard	RUDP-679	Salimar	OPC	Chisang Khola	16-Aug-18	23-Aug-18	13-Sep-18		33.57	M30
43	DDC-yard	RUDP-680	Salimar	OPC	Chisang Khola	16-Aug-18	23-Aug-18	13-Sep-18		32.96	M30
44	R-6	RUDP-681	Salimar	OPC	Chisang Khola	17-Aug-18	24-Aug-18	14-Sep-18		17.58	M15
44	T3L21	RUDP-682	Salimar	OPC	Chisang Khola	17-Aug-18	24-Aug-18	14-Sep-18		22.28	M20
45	DDC-yard	RUDP-683	Salimar	OPC	Chisang Khola	17-Aug-18	24-Aug-18	14-Sep-18		23.10	M20
45	Madhumara-yard	RUDP-684	Salimar	OPC	Chisang Khola	18-Aug-18	25-Aug-18	15-Sep-18		32.74	M30
46	Madhumara-yard	RUDP-685	Salimar	OPC	Chisang Khola	18-Aug-18	25-Aug-18	15-Sep-18		33.49	M30
46	T3L39	RUDP-686	Salimar	OPC	Chisang Khola	18-Aug-18	25-Aug-18	15-Sep-18		21.67	M20
47	R-74	RUDP-687	Salimar	OPC	Chisang Khola	18-Aug-18	25-Aug-18	15-Sep-18		22.05	M20
47	R-12	RUDP-688	Salimar	OPC	Chisang Khola	18-Aug-18	25-Aug-18	15-Sep-18		21.90	M20
48	T3L18B	RUDP-689	Salimar	OPC	Chisang Khola	19-Aug-18	26-Aug-18	16-Sep-18		23.33	M20
48	R-74	RUDP-690	Salimar	OPC	Chisang Khola	19-Aug-18	26-Aug-18	16-Sep-18		22.35	M20
49	R-6	RUDP-691	Salimar	OPC	Chisang Khola	19-Aug-18	26-Aug-18	16-Sep-18		17.23	M15
49	DDC-yard	RUDP-692	Salimar	OPC	Chisang Khola	19-Aug-18	26-Aug-18	16-Sep-18		24.69	M20
50	DDC-yard	RUDP-693	Salimar	OPC	Chisang Khola	19-Aug-18	26-Aug-18	16-Sep-18		32.28	M30
50	T3L26E	RUDP-694	Salimar	OPC	Chisang Khola	20-Aug-18	27-Aug-18	17-Sep-18		22.35	M20
51	Koshi-Yard	RUDP-695	Salimar	OPC	Chisang Khola	20-Aug-18	27-Aug-18	17-Sep-18		22.05	M20
51	R-12	RUDP-696	Salimar	OPC	Chisang Khola	21-Aug-18	28-Aug-18	18-Sep-18		22.05	M20
52	R-74	RUDP-697	Salimar	OPC	Chisang Khola	21-Aug-18	28-Aug-18	18-Sep-18		22.05	M20
52	R-2 (Branch Road)	RUDP-698	Salimar	OPC	Chisang Khola	21-Aug-18	28-Aug-18	18-Sep-18		22.35	M20
53	T3L18A	RUDP-699	Salimar	OPC	Chisang Khola	21-Aug-18	28-Aug-18	18-Sep-18		22.20	M20
53	Madhumara-yard	RUDP-700	Salimar	OPC	Chisang Khola	21-Aug-18	28-Aug-18	18-Sep-18		31.83	M30
54	DDC-yard	RUDP-701	Salimar	OPC	Chisang Khola	21-Aug-18	28-Aug-18	18-Sep-18		32.81	M30
54	Madhumara-yard	RUDP-702	Salimar	OPC	Chisang Khola	23-Aug-18	30-Aug-18	20-Sep-18		31.76	M30
55	DDC-yard	RUDP-703	Salimar	OPC	Chisang Khola	23-Aug-18	30-Aug-18	20-Sep-18		32.16	M20
55	Koshi-Yard	RUDP-704	Salimar	OPC	Chisang Khola	23-Aug-18	30-Aug-18	20-Sep-18		33.34	M20
56	DDC-yard	RUDP-705	Salimar	OPC	Chisang Khola	24-Aug-18	31-Aug-18	21-Sep-18		32.36	M20
57	Koshi-Yard	RUDP-706	Salimar	OPC	Chisang Khola	25-Aug-18	1-Sep-18	22-Sep-18	16.04	22.43	M20

Contractor

consultant

ZHONGHENG CONSTRUCTION GROUP  
INTERNATIONAL ENGINEERING CO. LTD

BUILDING DESIGN AUTHORITY (P) LTD IN JOINT VENTURE  
WITH B.N. CONSULTANCY PVT. LTD AND PLUS ENGINEERS &  
ARCHITECTS (P) LTD, KATHMANDU, NEPAL

*Madhan*

Checked By  
Engineer

*[Signature]*  
Submitted By  
Contract Manager

*[Signature]*  
Verified By  
Qty Engineer/CSE

*[Signature]*  
Approved By  
Team Leader



**REGIONAL URBAN DEVELOPMENT PROJECT**

Biratnagar Metropolitan City

Contract No:- RUDP/ICB/BRT-02

**Summary Sheet of Concrete Cube Test Report**

S.N.	Location	Lab Ref.no.	Type of Cement	Brand of Cement	Source of Sand+Agg.	Date of Casting	Month		September		Concrete Grade
							Year		2018		
							Type-of Material		Conc. Cube		
Date of Testing		Strength, N/mm2		Concrete Grade							
7 Days	28 Days	7 Days	28 Days								
58	T3L23	RUDP-707	Salimar	OPC	Chisang Khola	25-Aug-18	1-Sep-18	22-Sep-18	15.66	23.56	M20
59	R-7	RUDP-708	Salimar	OPC	Chisang Khola	25-Aug-18	1-Sep-18	22-Sep-18	15.59	23.26	M20
60	R-84	RUDP-709	Salimar	OPC	Chisang Khola	25-Aug-18	1-Sep-18	22-Sep-18	16.11	22.28	M20
61	R-6	RUDP-710	Salimar	OPC	Chisang Khola	26-Aug-18	2-Sep-18	23-Sep-18	12.05	16.78	M15
62	DDC-yard	RUDP-711	Salimar	OPC	Chisang Khola	26-Aug-18	2-Sep-18	23-Sep-18	16.26	21.60	M20
63	T3L39	RUDP-712	Salimar	OPC	Chisang Khola	26-Aug-18	2-Sep-18	23-Sep-18	16.19	24.01	M20
64	R-87	RUDP-713	Salimar	OPC	Chisang Khola	27-Aug-18	3-Sep-18	24-Sep-18	16.56	21.98	M20
65	R-12	RUDP-714	Salimar	OPC	Chisang Khola	27-Aug-18	3-Sep-18	24-Sep-18	16.78	22.43	M20
66	R-87	RUDP-715	Salimar	OPC	Chisang Khola	27-Aug-18	3-Sep-18	24-Sep-18	15.22	21.98	M20
67	Koshi yard	RUDP-716	Salimar	OPC	Chisang Khola	28-Aug-18	4-Sep-18	25-Sep-18	16.78	22.95	M20
68	T3L39	RUDP-717	Salimar	OPC	Chisang Khola	28-Aug-18	4-Sep-18	25-Sep-18	16.63	22.50	M20
69	R-12	RUDP-718	Salimar	OPC	Chisang Khola	28-Aug-18	4-Sep-18	25-Sep-18	15.81	21.90	M20
70	R-2	RUDP-719	Salimar	OPC	Chisang Khola	28-Aug-18	4-Sep-18	25-Sep-18	15.74	23.56	M20
71	R-74	RUDP-720	Salimar	OPC	Chisang Khola	28-Aug-18	4-Sep-18	25-Sep-18	14.62	22.73	M20
72	R-45	RUDP-721	Salimar	OPC	Chisang Khola	29-Aug-18	5-Sep-18	26-Sep-18	16.56	22.58	M20
73	T3L18A	RUDP-722	Salimar	OPC	Chisang Khola	29-Aug-18	5-Sep-18	26-Sep-18	15.66	21.83	M20
74	R-6	RUDP-723	Salimar	OPC	Chisang Khola	29-Aug-18	5-Sep-18	26-Sep-18	14.69	21.83	M20
75	T3L11K	RUDP-724	Salimar	OPC	Chisang Khola	29-Aug-18	5-Sep-18	26-Sep-18	16.04	24.01	M20
76	Koshi yard	RUDP-725	Salimar	OPC	Chisang Khola	29-Aug-18	5-Sep-18	26-Sep-18	14.62	21.98	M20
77	T3L18B	RUDP-726	Salimar	OPC	Chisang Khola	30-Aug-18	6-Sep-18	27-Sep-18	15.52	23.56	M20
78	T3L39	RUDP-727	Salimar	OPC	Chisang Khola	30-Aug-18	6-Sep-18	27-Sep-18	16.26	22.05	M20
79	Madhumara Yard	RUDP-728	Salimar	OPC	Chisang Khola	30-Aug-18	6-Sep-18	27-Sep-18	23.86	33.57	M30
80	R-87	RUDP-729	Salimar	OPC	Chisang Khola	30-Aug-18	6-Sep-18	27-Sep-18	15.66	23.18	M20
81	R-85	RUDP-730	Salimar	OPC	Chisang Khola	30-Aug-18	6-Sep-18	27-Sep-18	15.22	22.95	M20
82	R-12	RUDP-731	Salimar	OPC	Chisang Khola	30-Aug-18	6-Sep-18	27-Sep-18	14.77	23.03	M20
83	R-84	RUDP-732	Salimar	OPC	Chisang Khola	30-Aug-18	6-Sep-18	27-Sep-18	14.92	21.75	M20
84	R-83	RUDP-733	Salimar	OPC	Chisang Khola	30-Aug-18	6-Sep-18	27-Sep-18	15.52	23.10	M20
85	DDC-yard	RUDP-734	Salimar	OPC	Chisang Khola	30-Aug-18	6-Sep-18	27-Sep-18	16.48	22.65	M20
86	Madhumara Yard	RUDP-735	Salimar	OPC	Chisang Khola	1-Sep-18	8-Sep-18	29-Sep-18	17.45	26.75	M25
87	R-2	RUDP-736	Salimar	OPC	Chisang Khola	1-Sep-18	8-Sep-18	29-Sep-18	15.22	23.51	M20
88	Madhumara Yard	RUDP-737	Salimar	OPC	Chisang Khola	1-Sep-18	8-Sep-18	29-Sep-18	23.12	32.74	M30
89	R-74	RUDP-738	Salimar	OPC	Chisang Khola	1-Sep-18	8-Sep-18	29-Sep-18	15.89	21.98	M20
90	R-45	RUDP-739	Salimar	OPC	Chisang Khola	1-Sep-18	8-Sep-18	29-Sep-18	14.55	21.98	M20
91	T3L18A	RUDP-740	Salimar	OPC	Chisang Khola	1-Sep-18	8-Sep-18	29-Sep-18	15.37	22.35	M20
92	R-6	RUDP-741	Salimar	OPC	Chisang Khola	2-Sep-18	9-Sep-18	30-Sep-18	15.81	23.03	M20
93	T3L11K	RUDP-742	Salimar	OPC	Chisang Khola	2-Sep-18	9-Sep-18	30-Sep-18	14.17	23.78	M20
94	Koshi yard	RUDP-743	Salimar	OPC	Chisang Khola	2-Sep-18	9-Sep-18	30-Sep-18	15.37	21.90	M20
95	T3L18B	RUDP-744	Salimar	OPC	Chisang Khola	2-Sep-18	9-Sep-18	30-Sep-18	15.74	24.76	M20

Contractor

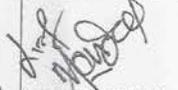
consultant

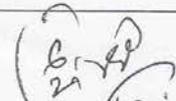
ZHONGHENG CONSTRUCTION GROUP  
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BUILDING DESIGN AUTHORITY (P) LTD IN JOINT VENTURE  
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Checked By  
Engineer

  
Submitted By  
Contract Manager

  
Verified By  
Qty Engineer/CSE

  
Approved By  
Team Leader



**REGIONAL URBAN DEVELOPMENT PROJECT**

**Biratnagar Metropolitan City**

**Contract No:- RUDP/ICB/BRT-02**

**Summary Sheet of Concrete Cube Test Report**

S.N.	Location	Lab Ref.no.	Type of Cement	Brand of Cement	Source of Sand+Agg.	Date of Casting	Month		September		Concrete Grade
							Year		2018		
							Type of Material		Conc. Cube		
							Date of Testing		Strength, N/mm2		
7 Days	28 Days	7 Days	28 Days								
96	T3L39	RUDP-745	Salimar	OPC	Chisang Khola	2-Sep-18	9-Sep-18	30-Sep-18	15.44	23.26	M20
97	R-87	RUDP-746	Salimar	OPC	Chisang Khola	2-Sep-18	9-Sep-18	30-Sep-18	16.78	22.13	M20
98	R-85	RUDP-747	Salimar	OPC	Chisang Khola	2-Sep-18	9-Sep-18	30-Sep-18	16.34	23.86	M20
99	Madhumara Yard	RUDP-748	Salimar	OPC	Chisang Khola	2-Sep-18	9-Sep-18	30-Sep-18	21.67	32.59	M30
100	Madhumara Yard	RUDP-749	Salimar	OPC	Chisang Khola	3-Sep-18	10-Sep-18	1-Oct-18	17.88		M25
101	R-12	RUDP-750	Salimar	OPC	Chisang Khola	3-Sep-18	10-Sep-18	1-Oct-18	15.22		M20
102	R-84	RUDP-751	Salimar	OPC	Chisang Khola	3-Sep-18	10-Sep-18	1-Oct-18	16.26		M20
103	R-83	RUDP-752	Salimar	OPC	Chisang Khola	4-Sep-18	11-Sep-18	2-Oct-18	15.44		M20
104	DDC-yard	RUDP-753	Salimar	OPC	Chisang Khola	4-Sep-18	11-Sep-18	2-Oct-18	15.44		M20
105	Madhumara Yard	RUDP-754	Salimar	OPC	Chisang Khola	4-Sep-18	11-Sep-18	2-Oct-18	18.16		M25
106	R-74	RUDP-755	Salimar	OPC	Chisang Khola	5-Sep-18	12-Sep-18	3-Oct-18	15.59		M20
107	T3L18A	RUDP-756	Salimar	OPC	Chisang Khola	5-Sep-18	12-Sep-18	3-Oct-18	17.23		M20
108	R-87	RUDP-757	Salimar	OPC	Chisang Khola	5-Sep-18	12-Sep-18	3-Oct-18	14.69		M20
109	R-85	RUDP-758	Salimar	OPC	Chisang Khola	5-Sep-18	12-Sep-18	3-Oct-18	15.81		M20
110	R-12	RUDP-759	Salimar	OPC	Chisang Khola	6-Sep-18	13-Sep-18	4-Oct-18	16.71		M20
111	R-83	RUDP-760	Salimar	OPC	Chisang Khola	7-Sep-18	14-Sep-18	5-Oct-18	15.29		M20
112	R-12	RUDP-761	Salimar	OPC	Chisang Khola	7-Sep-18	14-Sep-18	5-Oct-18	14.99		M20
113	R-7	RUDP-762	Salimar	OPC	Chisang Khola	7-Sep-18	14-Sep-18	5-Oct-18	15.14		M20
114	R-45	RUDP-763	Salimar	OPC	Chisang Khola	7-Sep-18	14-Sep-18	5-Oct-18	14.99		M20
115	T3L18A	RUDP-764	Salimar	OPC	Chisang Khola	7-Sep-18	14-Sep-18	5-Oct-18	15.66		M20
116	T3L11K	RUDP-765	Salimar	OPC	Chisang Khola	7-Sep-18	14-Sep-18	5-Oct-18	17.23		M20
117	Koshi Yard	RUDP-766	Salimar	OPC	Chisang Khola	7-Sep-18	14-Sep-18	5-Oct-18	14.69		M20
118	T3L18B	RUDP-767	Salimar	OPC	Chisang Khola	7-Sep-18	14-Sep-18	5-Oct-18	15.66		M20
119	R-12	RUDP-768	Salimar	OPC	Chisang Khola	7-Sep-18	14-Sep-18	5-Oct-18	16.26		M20
120	Madhumara Yard	RUDP-769	Salimar	OPC	Chisang Khola	7-Sep-18	14-Sep-18	5-Oct-18	18.97		M25
121	Madhumara Yard	RUDP-770	Salimar	OPC	Chisang Khola	7-Sep-18	14-Sep-18	5-Oct-18	18.46		M25
122	R-87	RUDP-771	Salimar	OPC	Chisang Khola	7-Sep-18	14-Sep-18	5-Oct-18	14.99		M20
123	R-85	RUDP-772	Salimar	OPC	Chisang Khola	7-Sep-18	14-Sep-18	5-Oct-18	15.96		M20
124	R-12	RUDP-773	Salimar	OPC	Chisang Khola	7-Sep-18	14-Sep-18	5-Oct-18	15.31		M20
125	R-84	RUDP-774	Salimar	OPC	Chisang Khola	7-Sep-18	14-Sep-18	5-Oct-18	16.26		M20
126	Madhumara Yard	RUDP-775	Salimar	OPC	Chisang Khola	7-Sep-18	14-Sep-18	5-Oct-18	23.63		M30
127	DDC-yard	RUDP-776	Salimar	OPC	Chisang Khola	7-Sep-18	14-Sep-18	5-Oct-18	15.37		M20
128	Koshi Yard	RUDP-777	Salimar	OPC	Chisang Khola	7-Sep-18	14-Sep-18	5-Oct-18	14.69		M20
129	Madhumara Yard	RUDP-778	Salimar	OPC	Chisang Khola	7-Sep-18	14-Sep-18	5-Oct-18	21.22		M30
130	Madhumara Yard	RUDP-779	Salimar	OPC	Chisang Khola	7-Sep-18	14-Sep-18	5-Oct-18	17.31		M25
131	R-87	RUDP-780	Salimar	OPC	Chisang Khola	7-Sep-18	14-Sep-18	5-Oct-18	15.07		M20
132	T3L18A	RUDP-781	Salimar	OPC	Chisang Khola	8-Sep-18	15-Sep-18	6-Oct-18	16.19		M20
133	R-45	RUDP-782	Salimar	OPC	Chisang Khola	8-Sep-18	15-Sep-18	6-Oct-18	15.44		M20
134	Koshi Yard	RUDP-783	Salimar	OPC	Chisang Khola	8-Sep-18	15-Sep-18	6-Oct-18	15.96		M20

Contractor

consultant

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*[Signature]*

Checked By  
Engineer

*[Signature]*  
Submitted By  
Contract Manager

*[Signature]*  
Verified By  
Qty Engineer/CSE

*[Signature]*  
Approved By  
Team Leader



**REGIONAL URBAN DEVELOPMENT PROJECT**

Biratnagar Metropolitan City

Contract No:- RUDP/ICB/BRT-02

Summary Sheet of Concrete Cube Test Report

S.N.	Location	Lab Ref.no.	Type of Cement	Brand of Cement	Source of Sand+Agg.	Date of Casting	Month		September		Concrete Grade
							Year		2018		
							Type of Material		Conc. Cube		
							Date of Testing		Strength, N/mm <sup>2</sup>		
		7 Days	28 Days	7 Days	28 Days						
135	T3L18B	RUDP-784	Salimar	OPC	Chisang Khola	8-Sep-18	15-Sep-18	6-Oct-18	14.92		M20
136	Madhumara Yard	RUDP-785	Salimar	OPC	Chisang Khola	8-Sep-18	15-Sep-18	6-Oct-18	17.45		M25
137	Madhumara Yard	RUDP-786	Salimar	OPC	Chisang Khola	8-Sep-18	15-Sep-18	6-Oct-18	22.05		M30
138	R-85	RUDP-787	Salimar	OPC	Chisang Khola	8-Sep-18	15-Sep-18	6-Oct-18	15.37		M20
139	R-12	RUDP-788	Salimar	OPC	Chisang Khola	8-Sep-18	15-Sep-18	6-Oct-18	16.11		M20
140	T3L18A	RUDP-789	Salimar	OPC	Chisang Khola	8-Sep-18	15-Sep-18	6-Oct-18	15.37		M20
141	T3L18B	RUDP-790	Salimar	OPC	Chisang Khola	8-Sep-18	15-Sep-18	6-Oct-18	16.19		M20
142	Madhumara Yard	RUDP-791	Salimar	OPC	Chisang Khola	8-Sep-18	15-Sep-18	6-Oct-18	18.89		M25
143	Madhumara Yard	RUDP-792	Salimar	OPC	Chisang Khola	8-Sep-18	15-Sep-18	6-Oct-18	22.69		M30
144	DDC-yard	RUDP-793	Salimar	OPC	Chisang Khola	8-Sep-18	15-Sep-18	6-Oct-18	15.22		M20
145	Koshi Yard	RUDP-794	Salimar	OPC	Chisang Khola	8-Sep-18	15-Sep-18	6-Oct-18	16.11		M20
146	R-45	RUDP-795	Salimar	OPC	Chisang Khola	8-Sep-18	15-Sep-18	6-Oct-18	14.84		M20
147	T3L11K	RUDP-796	Salimar	OPC	Chisang Khola	9-Sep-18	16-Sep-18	7-Oct-18	15.29		M20
148	T3L18A	RUDP-797	Salimar	OPC	Chisang Khola	9-Sep-18	16-Sep-18	7-Oct-18	15.37		M20
149	R-85	RUDP-798	Salimar	OPC	Chisang Khola	9-Sep-18	16-Sep-18	7-Oct-18	16.26		M20
150	R-87	RUDP-799	Salimar	OPC	Chisang Khola	9-Sep-18	16-Sep-18	7-Oct-18	16.34		M20
151	Madhumara Yard	RUDP-800	Salimar	OPC	Chisang Khola	9-Sep-18	16-Sep-18	7-Oct-18	18.11		M25
152	Madhumara Yard	RUDP-801	Salimar	OPC	Chisang Khola	9-Sep-18	16-Sep-18	7-Oct-18	21.15		M30
153	R-83	RUDP-802	Salimar	OPC	Chisang Khola	9-Sep-18	16-Sep-18	7-Oct-18	15.81		M20
154	R-87	RUDP-803	Salimar	OPC	Chisang Khola	9-Sep-18	16-Sep-18	7-Oct-18	16.48		M20
155	R-45	RUDP-804	Salimar	OPC	Chisang Khola	9-Sep-18	16-Sep-18	7-Oct-18	14.99		M20
156	R-12	RUDP-805	Salimar	OPC	Chisang Khola	9-Sep-18	16-Sep-18	7-Oct-18	16.86		M20
157	Madhumara Yard	RUDP-806	Salimar	OPC	Chisang Khola	9-Sep-18	16-Sep-18	7-Oct-18	18.16		M25
158	DDC-yard	RUDP-807	Salimar	OPC	Chisang Khola	9-Sep-18	16-Sep-18	7-Oct-18	16.26		M20
159	R-84	RUDP-808	Salimar	OPC	Chisang Khola	9-Sep-18	16-Sep-18	7-Oct-18	15.74		M20
160	Madhumara Yard	RUDP-809	Salimar	OPC	Chisang Khola	9-Sep-18	16-Sep-18	7-Oct-18	18.66		M25
161	Koshi Yard	RUDP-810	Salimar	OPC	Chisang Khola	10-Sep-18	17-Sep-18	8-Oct-18	14.84		M20
162	T3L11K	RUDP-811	Salimar	OPC	Chisang Khola	10-Sep-18	17-Sep-18	8-Oct-18	14.77		M20
163	R-7	RUDP-812	Salimar	OPC	Chisang Khola	10-Sep-18	17-Sep-18	8-Oct-18	15.44		M20
164	T3L11K	RUDP-813	Salimar	OPC	Chisang Khola	10-Sep-18	17-Sep-18	8-Oct-18	14.77		M20
165	Koshi Yard	RUDP-814	Salimar	OPC	Chisang Khola	10-Sep-18	17-Sep-18	8-Oct-18	15.44		M20
166	B2-1	RUDP-815	Salimar	OPC	Chisang Khola	10-Sep-18	17-Sep-18	8-Oct-18	16.71		M20
167	Madhumara Yard	RUDP-816	Salimar	OPC	Chisang Khola	10-Sep-18	17-Sep-18	8-Oct-18	18.39		M25
168	Madhumara Yard	RUDP-817	Salimar	OPC	Chisang Khola	10-Sep-18	17-Sep-18	8-Oct-18	21.90		M30
169	R-12	RUDP-818	Salimar	OPC	Chisang Khola	10-Sep-18	17-Sep-18	8-Oct-18	15.22		M20
170	T3L11K	RUDP-819	Salimar	OPC	Chisang Khola	10-Sep-18	17-Sep-18	8-Oct-18	14.77		M20
171	Koshi Yard	RUDP-820	Salimar	OPC	Chisang Khola	10-Sep-18	17-Sep-18	8-Oct-18	15.44		M20
172	Madhumara Yard	RUDP-821	Salimar	OPC	Chisang Khola	10-Sep-18	17-Sep-18	8-Oct-18	17.78		M25
173	R-12	RUDP-822	Salimar	OPC	Chisang Khola	10-Sep-18	17-Sep-18	8-Oct-18	15.29		M20

Contractor

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Contract Manager

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Team Leader



**REGIONAL URBAN DEVELOPMENT PROJECT**

**Biratnagar Metropolitan City**

**Contract No:- RUDP/ICB/BRT-02**

**Summary Sheet of Concrete Cube Test Report**

S.N.	Location	Lab Ref.no.	Type of Cement	Brand of Cement	Source of Sand+Agg.	Date of Casting	Month		September		Concrete Grade
							Year		2018		
							Type of Material		Conc. Cube		
							Date of Testing		Strength, N/mm <sup>2</sup>		
		7 Days	28 Days	7 Days	28 Days						
174	R-45	RUDP-823	Salimar	OPC	Chisang Khola	10-Sep-18	17-Sep-18	8-Oct-18	16.86		M20
175	Madhumara Yard	RUDP-824	Salimar	OPC	Chisang Khola	10-Sep-18	17-Sep-18	8-Oct-18	18.54		M25
176	DDC-yard	RUDP-825	Salimar	OPC	Chisang Khola	10-Sep-18	17-Sep-18	8-Oct-18	14.99		M20
177	R-45	RUDP-826	Salimar	OPC	Chisang Khola	11-Sep-18	18-Sep-18	9-Oct-18	16.04		M20
178	T3L11K	RUDP-827	Salimar	OPC	Chisang Khola	11-Sep-18	18-Sep-18	9-Oct-18	15.74		M20
179	T3L18A	RUDP-828	Salimar	OPC	Chisang Khola	11-Sep-18	18-Sep-18	9-Oct-18	15.96		M20
180	R-12	RUDP-829	Salimar	OPC	Chisang Khola	11-Sep-18	18-Sep-18	9-Oct-18	16.86		M20
181	R-84	RUDP-830	Salimar	OPC	Chisang Khola	11-Sep-18	18-Sep-18	9-Oct-18	16.71		M20
182	R-87	RUDP-831	Salimar	OPC	Chisang Khola	11-Sep-18	18-Sep-18	9-Oct-18	16.26		M20
183	R-83	RUDP-832	Salimar	OPC	Chisang Khola	11-Sep-18	18-Sep-18	9-Oct-18	15.37		M20
184	DDC-yard	RUDP-833	Salimar	OPC	Chisang Khola	11-Sep-18	18-Sep-18	9-Oct-18	14.55		M20
185	Koshi Yard	RUDP-834	Salimar	OPC	Chisang Khola	11-Sep-18	18-Sep-18	9-Oct-18	14.62		M20
186	R-12	RUDP-835	Salimar	OPC	Chisang Khola	11-Sep-18	18-Sep-18	9-Oct-18	15.52		M20
187	T3L18A	RUDP-836	Salimar	OPC	Chisang Khola	11-Sep-18	18-Sep-18	9-Oct-18	16.56		M20
188	Madhumara Yard	RUDP-837	Salimar	OPC	Chisang Khola	11-Sep-18	18-Sep-18	9-Oct-18	18.59		M25
189	Madhumara Yard	RUDP-838	Salimar	OPC	Chisang Khola	12-Sep-18	19-Sep-18	10-Oct-18	17.66		M25
190	R-45	RUDP-839	Salimar	OPC	Chisang Khola	12-Sep-18	19-Sep-18	10-Oct-18	16.71		M20
191	R-87	RUDP-840	Salimar	OPC	Chisang Khola	12-Sep-18	19-Sep-18	10-Oct-18	15.74		M20
192	R-85	RUDP-841	Salimar	OPC	Chisang Khola	12-Sep-18	19-Sep-18	10-Oct-18	14.84		M20
193	R-83	RUDP-842	Salimar	OPC	Chisang Khola	12-Sep-18	19-Sep-18	10-Oct-18	16.34		M20
194	R-12	RUDP-843	Salimar	OPC	Chisang Khola	12-Sep-18	19-Sep-18	10-Oct-18	15.44		M20
195	R-83	RUDP-844	Salimar	OPC	Chisang Khola	12-Sep-18	19-Sep-18	10-Oct-18	15.89		M20
196	R-7	RUDP-845	Salimar	OPC	Chisang Khola	12-Sep-18	19-Sep-18	10-Oct-18	14.17		M20
197	T3L11K	RUDP-846	Salimar	OPC	Chisang Khola	12-Sep-18	19-Sep-18	10-Oct-18	16.78		M20
198	R-84	RUDP-847	Salimar	OPC	Chisang Khola	12-Sep-18	19-Sep-18	10-Oct-18	14.55		M20
199	R-45	RUDP-848	Salimar	OPC	Chisang Khola	12-Sep-18	19-Sep-18	10-Oct-18	14.92		M20
200	DDC-yard	RUDP-849	Salimar	OPC	Chisang Khola	12-Sep-18	19-Sep-18	10-Oct-18	14.62		M20
201	Madhumara Yard	RUDP-850	Salimar	OPC	Chisang Khola	12-Sep-18	19-Sep-18	10-Oct-18	19.07		M25
202	R-84	RUDP-851	Salimar	OPC	Chisang Khola	12-Sep-18	19-Sep-18	10-Oct-18	15.74		M20
203	R-12	RUDP-852	Salimar	OPC	Chisang Khola	12-Sep-18	19-Sep-18	10-Oct-18	16.11		M20
204	R-85	RUDP-853	Salimar	OPC	Chisang Khola	13-Sep-18	20-Sep-18	11-Oct-18	14.32		M20
205	R-45	RUDP-854	Salimar	OPC	Chisang Khola	13-Sep-18	20-Sep-18	11-Oct-18	15.44		M20
206	T3L39A	RUDP-855	Salimar	OPC	Chisang Khola	13-Sep-18	20-Sep-18	11-Oct-18	16.56		M20
207	R-85	RUDP-856	Salimar	OPC	Chisang Khola	13-Sep-18	20-Sep-18	11-Oct-18	15.81		M20
208	R-12	RUDP-857	Salimar	OPC	Chisang Khola	13-Sep-18	20-Sep-18	11-Oct-18	16.56		M20
209	T3L11K	RUDP-858	Salimar	OPC	Chisang Khola	13-Sep-18	20-Sep-18	11-Oct-18	14.84		M20
210	R-87	RUDP-859	Salimar	OPC	Chisang Khola	13-Sep-18	20-Sep-18	11-Oct-18	16.56		M20
211	R-7	RUDP-860	Salimar	OPC	Chisang Khola	13-Sep-18	20-Sep-18	11-Oct-18	17.01		M20
212	R-85	RUDP-861	Salimar	OPC	Chisang Khola	13-Sep-18	20-Sep-18	11-Oct-18	14.47		M20

Contractor

consultant

ZHONGHENG CONSTRUCTION GROUP  
INTERNATIONAL ENGINEERING CO. LTD

BUILDING DESIGN AUTHORITY (P) LTD IN JOINT VENTURE  
WITH B.N. CONSULTANCY PVT. LTD AND PLUS ENGINEERS &  
ARCHITECTS (P) LTD, KATHMANDU, NEPAL

*Madhan*  
Checked By  
Engineer

*[Signature]*  
Submitted By  
Contract Manager

*[Signature]*  
Verified By  
Qty Engineer/CSE

*[Signature]*  
Approved By  
Team Leader



**REGIONAL URBAN DEVELOPMENT PROJECT**

**Biratnagar Metropolitan City**

**Contract No:- RUDP/ICB/BRT-02**

**Summary Sheet of Concrete Cube Test Report**

S.N.	Location	Lab Ref.no.	Type of Cement	Brand of Cement	Source of Sand+Agg.	Date of Casting	Month		September		Concrete Grade
							Year		2018		
							Type of Material		Conc. Cube		
							Date of Testing		Strength, N/mm2		
7 Days	28 Days	7 Days	28 Days								
213	R-7	RUDP-862	Salimar	OPC	Chisang Khola	13-Sep-18	20-Sep-18	11-Oct-18	16.04		M20
214	R-87	RUDP-863	Salimar	OPC	Chisang Khola	13-Sep-18	20-Sep-18	11-Oct-18	14.92		M20
215	T3L18B	RUDP-864	Salimar	OPC	Chisang Khola	13-Sep-18	20-Sep-18	11-Oct-18	14.10		M20
216	R-87	RUDP-865	Salimar	OPC	Chisang Khola	13-Sep-18	20-Sep-18	11-Oct-18	16.04		M20
217	R-12	RUDP-866	Salimar	OPC	Chisang Khola	13-Sep-18	20-Sep-18	11-Oct-18	15.59		M20
218	R-7	RUDP-867	Salimar	OPC	Chisang Khola	13-Sep-18	20-Sep-18	11-Oct-18	15.14		M20
219	R-84	RUDP-868	Salimar	OPC	Chisang Khola	13-Sep-18	20-Sep-18	11-Oct-18	16.86		M20
220	R-45	RUDP-869	Salimar	OPC	Chisang Khola	14-Sep-18	21-Sep-18	12-Oct-18	14.32		M20
221	R-87	RUDP-870	Salimar	OPC	Chisang Khola	14-Sep-18	21-Sep-18	12-Oct-18	16.48		M20
222	R-85	RUDP-871	Salimar	OPC	Chisang Khola	14-Sep-18	21-Sep-18	12-Oct-18	16.19		M20
223	R-12	RUDP-872	Salimar	OPC	Chisang Khola	14-Sep-18	21-Sep-18	12-Oct-18	14.02		M20
224	R-83	RUDP-873	Salimar	OPC	Chisang Khola	14-Sep-18	21-Sep-18	12-Oct-18	16.19		M20
225	R-7	RUDP-874	Salimar	OPC	Chisang Khola	14-Sep-18	21-Sep-18	12-Oct-18	15.59		M20
226	T3L11K	RUDP-875	Salimar	OPC	Chisang Khola	14-Sep-18	21-Sep-18	12-Oct-18	15.81		M20
227	T3L18A	RUDP-876	Salimar	OPC	Chisang Khola	14-Sep-18	21-Sep-18	12-Oct-18	16.19		M20
228	R-45	RUDP-877	Salimar	OPC	Chisang Khola	14-Sep-18	21-Sep-18	12-Oct-18	15.66		M20
229	R-87	RUDP-878	Salimar	OPC	Chisang Khola	14-Sep-18	21-Sep-18	12-Oct-18	15.26		M20
230	R-85	RUDP-879	Salimar	OPC	Chisang Khola	14-Sep-18	21-Sep-18	12-Oct-18	15.66		M20
231	R-83	RUDP-880	Salimar	OPC	Chisang Khola	14-Sep-18	21-Sep-18	12-Oct-18	14.69		M20
232	R-7	RUDP-881	Salimar	OPC	Chisang Khola	14-Sep-18	21-Sep-18	12-Oct-18	15.29		M20
233	R-87	RUDP-882	Salimar	OPC	Chisang Khola	14-Sep-18	21-Sep-18	12-Oct-18	15.81		M20
234	Madhumara Yard	RUDP-883	Salimar	OPC	Chisang Khola	14-Sep-18	21-Sep-18	12-Oct-18	17.73		M25
235	R-12	RUDP-884	Salimar	OPC	Chisang Khola	14-Sep-18	21-Sep-18	12-Oct-18	14.99		M20
236	R-85	RUDP-885	Salimar	OPC	Chisang Khola	14-Sep-18	21-Sep-18	12-Oct-18	15.74		M20
237	R-83	RUDP-886	Salimar	OPC	Chisang Khola	14-Sep-18	21-Sep-18	12-Oct-18	16.11		M20
238	R-7	RUDP-887	Salimar	OPC	Chisang Khola	14-Sep-18	21-Sep-18	12-Oct-18	15.22		M20
239	Koshi Yard	RUDP-888	Salimar	OPC	Chisang Khola	15-Sep-18	22-Sep-18	13-Oct-18	16.63		M20
240	DDC-yard	RUDP-889	Salimar	OPC	Chisang Khola	15-Sep-18	22-Sep-18	13-Oct-18	15.52		M20
241	R-45	RUDP-890	Salimar	OPC	Chisang Khola	15-Sep-18	22-Sep-18	13-Oct-18	14.77		M20
242	R-87	RUDP-891	Salimar	OPC	Chisang Khola	15-Sep-18	22-Sep-18	13-Oct-18	16.04		M20
243	R-85	RUDP-892	Salimar	OPC	Chisang Khola	15-Sep-18	22-Sep-18	13-Oct-18	16.34		M20
244	R-83	RUDP-893	Salimar	OPC	Chisang Khola	15-Sep-18	22-Sep-18	13-Oct-18	15.66		M20
245	R-12	RUDP-894	Salimar	OPC	Chisang Khola	15-Sep-18	22-Sep-18	13-Oct-18	14.84		M20
246	R-83	RUDP-895	Salimar	OPC	Chisang Khola	15-Sep-18	22-Sep-18	13-Oct-18	15.07		M20
247	R-7	RUDP-896	Salimar	OPC	Chisang Khola	15-Sep-18	22-Sep-18	13-Oct-18	16.41		M20
248	T3L18B	RUDP-897	Salimar	OPC	Chisang Khola	15-Sep-18	22-Sep-18	13-Oct-18	14.40		M20
249	B2-1	RUDP-898	Salimar	OPC	Chisang Khola	15-Sep-18	22-Sep-18	13-Oct-18	15.44		M20
250	R-84	RUDP-899	Salimar	OPC	Chisang Khola	15-Sep-18	22-Sep-18	13-Oct-18	16.63		M20
251	R-45	RUDP-900	Salimar	OPC	Chisang Khola	15-Sep-18	22-Sep-18	13-Oct-18	15.74		M20

Contractor

consultant

ZHONGHENG CONSTRUCTION GROUP  
INTERNATIONAL ENGINEERING CO. LTD

BUILDING DESIGN AUTHORITY (P) LTD IN JOINT VENTURE  
WITH B.N. CONSULTANCY PVT. LTD AND PLUS ENGINEERS &  
ARCHITECTS (P) LTD, KATHMANDU, NEPAL

*[Signature]*  
Checked By  
Engineer

*[Signature]*  
Submitted By  
Contract Manager

*[Signature]*  
Verified By  
Qty Engineer/CSE

*[Signature]*  
Approved By  
Team Leader



**REGIONAL URBAN DEVELOPMENT PROJECT**

Biratnagar Metropolitan City

Contract No:- RUDP/ICB/BRT-02

Summary Sheet of Concrete Cube Test Report

S.N.	Location	Lab Ref.no.	Type of Cement	Brand of Cement	Source of Sand+Agg.	Date of Casting	Month		September		Concrete Grade
							Year		2018		
							Type of Material		Conc. Cube		
							Date of Testing		Strength, N/mm <sup>2</sup>		
		7 Days	28 Days	7 Days	28 Days						
252	Madhumara Yard	RUDP-901	Salimar	OPC	Chisang Khola	15-Sep-18	22-Sep-18	13-Oct-18	17.45		M25
253	Koshi Yard	RUDP-902	Salimar	OPC	Chisang Khola	15-Sep-18	22-Sep-18	13-Oct-18	14.40		M20
254	R-7	RUDP-903	Salimar	OPC	Chisang Khola	15-Sep-18	22-Sep-18	13-Oct-18	15.74		M20
255	R-45	RUDP-904	Salimar	OPC	Chisang Khola	15-Sep-18	22-Sep-18	13-Oct-18	15.29		M20
256	R-12	RUDP-905	Salimar	OPC	Chisang Khola	15-Sep-18	22-Sep-18	13-Oct-18	14.32		M20
257	R-45	RUDP-906	Salimar	OPC	Chisang Khola	16-Sep-18	23-Sep-18	14-Oct-18	16.11		M20
258	R-87	RUDP-907	Salimar	OPC	Chisang Khola	16-Sep-18	23-Sep-18	14-Oct-18	15.29		M20
259	R-85	RUDP-908	Salimar	OPC	Chisang Khola	16-Sep-18	23-Sep-18	14-Oct-18	15.66		M20
260	R-83	RUDP-909	Salimar	OPC	Chisang Khola	16-Sep-18	23-Sep-18	14-Oct-18	14.69		M20
261	R-7	RUDP-910	Salimar	OPC	Chisang Khola	16-Sep-18	23-Sep-18	14-Oct-18	16.04		M20
262	R-12	RUDP-911	Salimar	OPC	Chisang Khola	16-Sep-18	23-Sep-18	14-Oct-18	15.22		M20
263	Madhumara Yard	RUDP-912	Salimar	OPC	Chisang Khola	16-Sep-18	23-Sep-18	14-Oct-18	19.12		M25
264	Koshi Yard	RUDP-913	Salimar	OPC	Chisang Khola	16-Sep-18	23-Sep-18	14-Oct-18	14.62		M20
265	R-45	RUDP-914	Salimar	OPC	Chisang Khola	16-Sep-18	23-Sep-18	14-Oct-18	14.55		M20
266	R-87	RUDP-915	Salimar	OPC	Chisang Khola	16-Sep-18	23-Sep-18	14-Oct-18	15.44		M20
267	R-83	RUDP-916	Salimar	OPC	Chisang Khola	16-Sep-18	23-Sep-18	14-Oct-18	14.84		M20
268	R-85	RUDP-917	Salimar	OPC	Chisang Khola	16-Sep-18	23-Sep-18	14-Oct-18	15.74		M20
269	R-12	RUDP-918	Salimar	OPC	Chisang Khola	16-Sep-18	23-Sep-18	14-Oct-18	15.81		M20
270	T3L11K	RUDP-919	Salimar	OPC	Chisang Khola	16-Sep-18	23-Sep-18	14-Oct-18	14.10		M20
271	R-84	RUDP-920	Salimar	OPC	Chisang Khola	16-Sep-18	23-Sep-18	14-Oct-18	15.07		M20
272	T3L18B	RUDP-921	Salimar	OPC	Chisang Khola	16-Sep-18	23-Sep-18	14-Oct-18	16.41		M20
273	B2-1	RUDP-922	Salimar	OPC	Chisang Khola	16-Sep-18	23-Sep-18	14-Oct-18	14.84		M20
274	R-45	RUDP-923	Salimar	OPC	Chisang Khola	16-Sep-18	23-Sep-18	14-Oct-18	14.77		M20
275	R-87	RUDP-924	Salimar	OPC	Chisang Khola	16-Sep-18	23-Sep-18	14-Oct-18	14.40		M20
276	T3L11K	RUDP-925	Salimar	OPC	Chisang Khola	16-Sep-18	23-Sep-18	14-Oct-18	15.59		M20
277	Madhumara Yard	RUDP-926	Salimar	OPC	Chisang Khola	17-Sep-18	24-Sep-18	15-Oct-18	19.12		M25
278	R-45	RUDP-927	Salimar	OPC	Chisang Khola	17-Sep-18	24-Sep-18	15-Oct-18	15.66		M20
279	R-12	RUDP-928	Salimar	OPC	Chisang Khola	17-Sep-18	24-Sep-18	15-Oct-18	16.41		M20
280	R-87	RUDP-929	Salimar	OPC	Chisang Khola	17-Sep-18	24-Sep-18	15-Oct-18	15.66		M20
281	R-83	RUDP-930	Salimar	OPC	Chisang Khola	17-Sep-18	24-Sep-18	15-Oct-18	16.34		M20
282	R-12	RUDP-931	Salimar	OPC	Chisang Khola	17-Sep-18	24-Sep-18	15-Oct-18	15.44		M20
283	R-85	RUDP-932	Salimar	OPC	Chisang Khola	17-Sep-18	24-Sep-18	15-Oct-18	15.22		M20
284	T3L18A	RUDP-933	Salimar	OPC	Chisang Khola	17-Sep-18	24-Sep-18	15-Oct-18	15.29		M20
285	T3L11K	RUDP-934	Salimar	OPC	Chisang Khola	17-Sep-18	24-Sep-18	15-Oct-18	16.11		M20
286	R-12	RUDP-935	Salimar	OPC	Chisang Khola	17-Sep-18	24-Sep-18	15-Oct-18	14.25		M20
287	R-83	RUDP-936	Salimar	OPC	Chisang Khola	17-Sep-18	24-Sep-18	15-Oct-18	15.89		M20
288	DDC-yard	RUDP-937	Salimar	OPC	Chisang Khola	17-Sep-18	24-Sep-18	15-Oct-18	15.14		M20
289	R-7	RUDP-938	Salimar	OPC	Chisang Khola	17-Sep-18	24-Sep-18	15-Oct-18	15.89		M20
290	Madhumara Yard	RUDP-939	Salimar	OPC	Chisang Khola	17-Sep-18	24-Sep-18	15-Oct-18	17.31		M25

Contractor

consultant

ZHONGHENG CONSTRUCTION GROUP INTERNATIONAL ENGINEERING CO. LTD

BUILDING DESIGN AUTHORITY (P) LTD IN JOINT VENTURE WITH B.N. CONSULTANCY PVT. LTD AND PLUS ENGINEERS & ARCHITECTS (P) LTD, KATHMANDU, NEPAL

*[Signature]*  
Checked By  
Engineer

*[Signature]*  
Submitted By  
Contract Manager

*[Signature]*  
Verified By  
Qty Engineer/CSE

*[Signature]*  
Approved By  
Team Leader



**REGIONAL URBAN DEVELOPMENT PROJECT**

Biratnagar Metropolitan City

Contract No:- RUDP/ICB/BRT-02

**Summary Sheet of Concrete Cube Test Report**

S.N.	Location	Lab Ref.no.	Type of Cement	Brand of Cement	Source of Sand+Agg.	Date of Casting	Month		September		Concrete Grade
							Year		2018		
							Type of Material		Conc. Cube		
							Date of Testing		Strength, N/mm <sup>2</sup>		
		7 Days	28 Days	7 Days	28 Days						
291	R-45	RUDP-940	Salimar	OPC	Chisang Khola	17-Sep-18	24-Sep-18	15-Oct-18	16.04		M20
292	R-12	RUDP-941	Salimar	OPC	Chisang Khola	17-Sep-18	24-Sep-18	15-Oct-18	16.48		M20
293	R-87	RUDP-942	Salimar	OPC	Chisang Khola	17-Sep-18	24-Sep-18	15-Oct-18	14.77		M20
294	R-7	RUDP-943	Salimar	OPC	Chisang Khola	17-Sep-18	24-Sep-18	15-Oct-18	14.77		M20
295	R-83	RUDP-944	Salimar	OPC	Chisang Khola	17-Sep-18	24-Sep-18	15-Oct-18	16.34		M20
296	R-12	RUDP-945	Salimar	OPC	Chisang Khola	17-Sep-18	24-Sep-18	15-Oct-18	14.40		M20
297	T3L11K	RUDP-946	Salimar	OPC	Chisang Khola	17-Sep-18	24-Sep-18	15-Oct-18	16.56		M20
298	R-84	RUDP-947	Salimar	OPC	Chisang Khola	17-Sep-18	24-Sep-18	15-Oct-18	14.40		M20
299	R-83	RUDP-948	Salimar	OPC	Chisang Khola	17-Sep-18	24-Sep-18	15-Oct-18	14.84		M20
300	R-45	RUDP-949	Salimar	OPC	Chisang Khola	17-Sep-18	24-Sep-18	15-Oct-18	16.41		M20
301	T3L39A	RUDP-950	Salimar	OPC	Chisang Khola	17-Sep-18	24-Sep-18	15-Oct-18	14.92		M20
302	T3L11K	RUDP-951	Salimar	OPC	Chisang Khola	17-Sep-18	24-Sep-18	15-Oct-18	16.34		M20
303	R-45	RUDP-952	Salimar	OPC	Chisang Khola	18-Sep-18	25-Sep-18	16-Oct-18	14.77		M20
304	R-87	RUDP-953	Salimar	OPC	Chisang Khola	18-Sep-18	25-Sep-18	16-Oct-18	15.59		M20
305	Madhumara-Yard	RUDP-954	Salimar	OPC	Chisang Khola	18-Sep-18	25-Sep-18	16-Oct-18	18.16		M25
306	R-12	RUDP-955	Salimar	OPC	Chisang Khola	18-Sep-18	25-Sep-18	16-Oct-18	14.17		M20
307	R-83	RUDP-956	Salimar	OPC	Chisang Khola	18-Sep-18	25-Sep-18	16-Oct-18	15.66		M20
308	R-7	RUDP-957	Salimar	OPC	Chisang Khola	18-Sep-18	25-Sep-18	16-Oct-18	15.59		M20
309	Koshi Yard	RUDP-958	Salimar	OPC	Chisang Khola	18-Sep-18	25-Sep-18	16-Oct-18	16.04		M20
310	R-12	RUDP-959	Salimar	OPC	Chisang Khola	18-Sep-18	25-Sep-18	16-Oct-18	15.22		M20
311	R-45	RUDP-960	Salimar	OPC	Chisang Khola	18-Sep-18	25-Sep-18	16-Oct-18	15.29		M20
312	R-87	RUDP-961	Salimar	OPC	Chisang Khola	18-Sep-18	25-Sep-18	16-Oct-18	15.07		M20
313	R-85	RUDP-962	Salimar	OPC	Chisang Khola	18-Sep-18	25-Sep-18	16-Oct-18	15.89		M20
314	R-12	RUDP-963	Salimar	OPC	Chisang Khola	18-Sep-18	25-Sep-18	16-Oct-18	16.56		M20
315	R-83	RUDP-964	Salimar	OPC	Chisang Khola	18-Sep-18	25-Sep-18	16-Oct-18	16.04		M20
316	R-7	RUDP-965	Salimar	OPC	Chisang Khola	18-Sep-18	25-Sep-18	16-Oct-18	14.77		M20
317	T3L18B	RUDP-966	Salimar	OPC	Chisang Khola	18-Sep-18	25-Sep-18	16-Oct-18	16.41		M20
318	R-12	RUDP-967	Salimar	OPC	Chisang Khola	18-Sep-18	25-Sep-18	16-Oct-18	15.96		M20
319	Madhumara-Yard	RUDP-968	Salimar	OPC	Chisang Khola	18-Sep-18	25-Sep-18	16-Oct-18	18.61		M25
320	T3L18A	RUDP-969	Salimar	OPC	Chisang Khola	18-Sep-18	25-Sep-18	16-Oct-18	15.07		M20
321	Koshi Yard	RUDP-970	Salimar	OPC	Chisang Khola	18-Sep-18	25-Sep-18	16-Oct-18	14.84		M20
322	R-87	RUDP-971	Salimar	OPC	Chisang Khola	18-Sep-18	25-Sep-18	16-Oct-18	16.56		M20
323	R-45	RUDP-972	Salimar	OPC	Chisang Khola	19-Sep-18	26-Sep-18	17-Oct-18	14.32		M20
324	B2-1	RUDP-973	Salimar	OPC	Chisang Khola	19-Sep-18	26-Sep-18	17-Oct-18	14.02		M20
325	R-85	RUDP-974	Salimar	OPC	Chisang Khola	19-Sep-18	26-Sep-18	17-Oct-18	15.14		M20
326	R-12	RUDP-975	Salimar	OPC	Chisang Khola	19-Sep-18	26-Sep-18	17-Oct-18	16.26		M20
327	R-84	RUDP-976	Salimar	OPC	Chisang Khola	19-Sep-18	26-Sep-18	17-Oct-18	14.55		M20
328	R-87	RUDP-977	Salimar	OPC	Chisang Khola	19-Sep-18	26-Sep-18	17-Oct-18	16.19		M20
329	R-12	RUDP-978	Salimar	OPC	Chisang Khola	19-Sep-18	26-Sep-18	17-Oct-18	15.59		M20

Contractor

Consultant

ZHONGHENG CONSTRUCTION GROUP INTERNATIONAL ENGINEERING CO. LTD

BUILDING DESIGN AUTHORITY (P) LTD IN JOINT VENTURE WITH B.N. CONSULTANCY PVT. LTD AND PLUS ENGINEERS & ARCHITECTS (P) LTD, KATHMANDU, NEPAL

Checked By  
Engineer

Submitted By  
Contract Manager

Verified By  
Qty Engineer/CSE

Approved By  
Team Leader

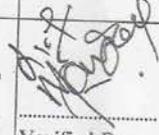
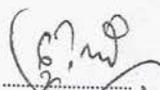


### REGIONAL URBAN DEVELOPMENT PROJECT

Biratnagar Metropolitan City

Contract No:- RUDP/ICB/BRT-02

Summary Sheet of Concrete Cube Test Report

S.N.	Location	Lab Ref.no.	Type of Cement	Brand of Cement	Source of Sand+Agg.	Date of Casting	Month		September		Concrete Grade	
							Year		2018			
							Type of Material		Conc. Cube			
							Date of Testing		Strength, N/mm <sup>2</sup>			
		7 Days	28 Days	7 Days	28 Days							
330	T3L11K	RUDP-979	Salimar	OPC	Chisang Khola	19-Sep-18	26-Sep-18	17-Oct-18	16.34		M20	
331	R-87	RUDP-980	Salimar	OPC	Chisang Khola	19-Sep-18	26-Sep-18	17-Oct-18	14.77		M20	
332	R-12	RUDP-981	Salimar	OPC	Chisang Khola	19-Sep-18	26-Sep-18	17-Oct-18	14.77		M20	
333	Madhumara-Yard	RUDP-982	Salimar	OPC	Chisang Khola	19-Sep-18	26-Sep-18	17-Oct-18	14.77		M20	
334	R-83	RUDP-983	Salimar	OPC	Chisang Khola	19-Sep-18	26-Sep-18	17-Oct-18	17.38		M25	
335	R-12	RUDP-984	Salimar	OPC	Chisang Khola	19-Sep-18	26-Sep-18	17-Oct-18	16.86		M20	
336	R-84	RUDP-985	Salimar	OPC	Chisang Khola	19-Sep-18	26-Sep-18	17-Oct-18	16.26		M20	
337	R-7	RUDP-986	Salimar	OPC	Chisang Khola	19-Sep-18	26-Sep-18	17-Oct-18	15.07		M20	
338	R-84	RUDP-987	Salimar	OPC	Chisang Khola	19-Sep-18	26-Sep-18	17-Oct-18	15.44		M20	
339	R-45	RUDP-988	Salimar	OPC	Chisang Khola	19-Sep-18	26-Sep-18	17-Oct-18	15.14		M20	
340	R-84	RUDP-989	Salimar	OPC	Chisang Khola	19-Sep-18	26-Sep-18	17-Oct-18	15.89		M20	
341	DDC-yard	RUDP-990	Salimar	OPC	Chisang Khola	20-Sep-18	27-Sep-18	18-Oct-18	16.11		M20	
342	R-85	RUDP-991	Salimar	OPC	Chisang Khola	20-Sep-18	27-Sep-18	18-Oct-18	15.96		M20	
343	R-83	RUDP-992	Salimar	OPC	Chisang Khola	20-Sep-18	27-Sep-18	18-Oct-18	14.84		M20	
344	R-84	RUDP-993	Salimar	OPC	Chisang Khola	20-Sep-18	27-Sep-18	18-Oct-18	14.32		M20	
345	Madhumara-Yard	RUDP-994	Salimar	OPC	Chisang Khola	20-Sep-18	27-Sep-18	18-Oct-18	15.22		M20	
346	R-7	RUDP-995	Salimar	OPC	Chisang Khola	20-Sep-18	27-Sep-18	18-Oct-18	18.45		M25	
347	R-12	RUDP-996	Salimar	OPC	Chisang Khola	20-Sep-18	27-Sep-18	18-Oct-18	14.69		M20	
348	T3L18B	RUDP-997	Salimar	OPC	Chisang Khola	20-Sep-18	27-Sep-18	18-Oct-18	15.59		M20	
349	Koshi Yard	RUDP-998	Salimar	OPC	Chisang Khola	20-Sep-18	27-Sep-18	18-Oct-18	14.84		M20	
350	DDC-yard	RUDP-999	Salimar	OPC	Chisang Khola	20-Sep-18	27-Sep-18	18-Oct-18	16.86		M20	
351	R-45	RUDP-1000	Salimar	OPC	Chisang Khola	20-Sep-18	27-Sep-18	18-Oct-18	16.04		M20	
352	R-12	RUDP-1001	Salimar	OPC	Chisang Khola	20-Sep-18	27-Sep-18	18-Oct-18	14.62		M20	
353	T3L11K	RUDP-1002	Salimar	OPC	Chisang Khola	20-Sep-18	27-Sep-18	18-Oct-18	14.69		M20	
354	R-7	RUDP-1003	Salimar	OPC	Chisang Khola	20-Sep-18	27-Sep-18	18-Oct-18	14.32		M20	
355	Madhumara-Yard	RUDP-1004	Salimar	OPC	Chisang Khola	20-Sep-18	27-Sep-18	18-Oct-18	15.07		M20	
356	R-45	RUDP-1005	Salimar	OPC	Chisang Khola	20-Sep-18	27-Sep-18	18-Oct-18	18.81		M20	
357	R-84	RUDP-1006	Salimar	OPC	Chisang Khola	21-Sep-18	28-Sep-18	19-Oct-18	15.14		M20	
358	R-87	RUDP-1007	Salimar	OPC	Chisang Khola	21-Sep-18	28-Sep-18	19-Oct-18	14.17		M20	
359	R-85	RUDP-1008	Salimar	OPC	Chisang Khola	21-Sep-18	28-Sep-18	19-Oct-18	14.77		M20	
360	R-7	RUDP-1009	Salimar	OPC	Chisang Khola	21-Sep-18	28-Sep-18	19-Oct-18	14.10		M20	
361	DDC-yard	RUDP-1010	Salimar	OPC	Chisang Khola	21-Sep-18	28-Sep-18	19-Oct-18	15.14		M20	
362	R-84	RUDP-1011	Salimar	OPC	Chisang Khola	21-Sep-18	28-Sep-18	19-Oct-18	14.77		M20	
363	R-12	RUDP-1012	Salimar	OPC	Chisang Khola	21-Sep-18	28-Sep-18	19-Oct-18	15.37		M20	
364	Madhumara-Yard	RUDP-1013	Salimar	OPC	Chisang Khola	21-Sep-18	28-Sep-18	19-Oct-18	14.84		M20	
365	R-12	RUDP-1014	Salimar	OPC	Chisang Khola	21-Sep-18	28-Sep-18	19-Oct-18	18.91		M25	
366	R-83	RUDP-1015	Salimar	OPC	Chisang Khola	21-Sep-18	28-Sep-18	19-Oct-18	15.07		M20	
367	R-45	RUDP-1016	Salimar	OPC	Chisang Khola	21-Sep-18	28-Sep-18	19-Oct-18	15.66		M20	
368	R-87	RUDP-1017	Salimar	OPC	Chisang Khola	21-Sep-18	28-Sep-18	19-Oct-18	16.34		M20	
Contractor							Consultant					
ZHONGHENG CONSTRUCTION GROUP INTERNATIONAL ENGINEERING CO. LTD							BUILDING DESIGN AUTHORITY (P) LTD IN JOINT VENTURE WITH B.N. CONSULTANCY PVT. LTD AND PLUS ENGINEERS & ARCHITECTS (P) LTD, KATHMANDU, NEPAL					
 Checked By Engineer							 Submitted By Contract Manager		 Verified By Qty Engineer/CSE		 Approved By Team Leader	



### REGIONAL URBAN DEVELOPMENT PROJECT

Biratnagar Metropolitan City

Contract No:- RUDP/ICB/BRT-02

#### Summary Sheet of Concrete Cube Test Report

S.N.	Location	Lab Ref.no.	Type of Cement	Brand of Cement	Source of Sand+Agg.	Date of Casting	Month		September		Concrete Grade
							Year		2018		
							Type of Material		Conc. Cube		
							Date of Testing		Strength, N/mm <sup>2</sup>		
		7 Days	28 Days	7 Days	28 Days						
369	R-85	RUDP-1018	Salimar	OPC	Chisang Khola	21-Sep-18	28-Sep-18	19-Oct-18	15.14		M20
370	R-12	RUDP-1019	Salimar	OPC	Chisang Khola	21-Sep-18	28-Sep-18	19-Oct-18	15.14		M20
371	R-7	RUDP-1020	Salimar	OPC	Chisang Khola	21-Sep-18	28-Sep-18	19-Oct-18	15.14		M20
372	Madhumara-Yard	RUDP-1021	Salimar	OPC	Chisang Khola	21-Sep-18	28-Sep-18	19-Oct-18	14.25		M20
373	T3L11K	RUDP-1022	Salimar	OPC	Chisang Khola	21-Sep-18	28-Sep-18	19-Oct-18	18.46		M25
374	R-84	RUDP-1023	Salimar	OPC	Chisang Khola	21-Sep-18	28-Sep-18	19-Oct-18	15.29		M20
375	R-45	RUDP-1024	Salimar	OPC	Chisang Khola	22-Sep-18	29-Sep-18	20-Oct-18	16.48		M20
376	R-12	RUDP-1025	Salimar	OPC	Chisang Khola	22-Sep-18	29-Sep-18	20-Oct-18	15.22		M20
377	T3L11K	RUDP-1026	Salimar	OPC	Chisang Khola	22-Sep-18	29-Sep-18	20-Oct-18	14.77		M20
378	R-7	RUDP-1027	Salimar	OPC	Chisang Khola	22-Sep-18	29-Sep-18	20-Oct-18	15.22		M20
379	R-84	RUDP-1028	Salimar	OPC	Chisang Khola	22-Sep-18	29-Sep-18	20-Oct-18	16.41		M20
380	R-12	RUDP-1029	Salimar	OPC	Chisang Khola	22-Sep-18	29-Sep-18	20-Oct-18	16.56		M20
381	R-83	RUDP-1030	Salimar	OPC	Chisang Khola	22-Sep-18	29-Sep-18	20-Oct-18	14.92		M20
382	Madhumara-Yard	RUDP-1031	Salimar	OPC	Chisang Khola	22-Sep-18	29-Sep-18	20-Oct-18	15.37		M20
383	R-45	RUDP-1032	Salimar	OPC	Chisang Khola	22-Sep-18	29-Sep-18	20-Oct-18	18.66		M25
384	R-87	RUDP-1033	Salimar	OPC	Chisang Khola	22-Sep-18	29-Sep-18	20-Oct-18	15.35		M20
385	R-85	RUDP-1034	Salimar	OPC	Chisang Khola	22-Sep-18	29-Sep-18	20-Oct-18	16.26		M20
386	R-83	RUDP-1035	Salimar	OPC	Chisang Khola	22-Sep-18	29-Sep-18	20-Oct-18	15.28		M20
387	R-12	RUDP-1036	Salimar	OPC	Chisang Khola	22-Sep-18	29-Sep-18	20-Oct-18	15.35		M20
388	DDC-yard	RUDP-1037	Salimar	OPC	Chisang Khola	22-Sep-18	29-Sep-18	20-Oct-18	15.05		M20
389	Koshi Yard	RUDP-1038	Salimar	OPC	Chisang Khola	22-Sep-18	29-Sep-18	20-Oct-18	15.50		M20
390	R-83	RUDP-1039	Salimar	OPC	Chisang Khola	22-Sep-18	29-Sep-18	20-Oct-18	14.68		M20
391	R-45	RUDP-1040	Salimar	OPC	Chisang Khola	22-Sep-18	29-Sep-18	20-Oct-18	14.45		M20
392	R-7	RUDP-1041	Salimar	OPC	Chisang Khola	23-Sep-18	30-Sep-18	21-Oct-18	15.88		M20
393	T3L11K	RUDP-1042	Salimar	OPC	Chisang Khola	23-Sep-18	30-Sep-18	21-Oct-18	15.50		M20
394	R-87	RUDP-1043	Salimar	OPC	Chisang Khola	23-Sep-18	30-Sep-18	21-Oct-18	14.45		M20
395	R-85	RUDP-1044	Salimar	OPC	Chisang Khola	23-Sep-18	30-Sep-18	21-Oct-18	14.90		M20
396	Madhumara-Yard	RUDP-1045	Salimar	OPC	Chisang Khola	23-Sep-18	30-Sep-18	21-Oct-18	15.05		M20
397	R-12	RUDP-1046	Salimar	OPC	Chisang Khola	23-Sep-18	30-Sep-18	21-Oct-18	18.66		M25
398	R-83	RUDP-1047	Salimar	OPC	Chisang Khola	23-Sep-18	30-Sep-18	21-Oct-18	15.05		M20
399	R-84	RUDP-1048	Salimar	OPC	Chisang Khola	23-Sep-18	30-Sep-18	21-Oct-18	14.15		M20
400	R-45	RUDP-1049	Salimar	OPC	Chisang Khola	23-Sep-18	30-Sep-18	21-Oct-18	16.18		M20
401	R-45	RUDP-1050	Salimar	OPC	Chisang Khola	23-Sep-18	30-Sep-18	21-Oct-18	14.30		M20
402	R-7	RUDP-1051	Salimar	OPC	Chisang Khola	23-Sep-18	30-Sep-18	21-Oct-18	14.83		M20
403	Koshi Yard	RUDP-1052	Salimar	OPC	Chisang Khola	23-Sep-18	30-Sep-18	21-Oct-18	16.41		M20
404	R-83	RUDP-1053	Salimar	OPC	Chisang Khola	23-Sep-18	30-Sep-18	21-Oct-18	14.90		M20
405	R-87	RUDP-1054	Salimar	OPC	Chisang Khola	23-Sep-18	30-Sep-18	21-Oct-18	14.68		M20
406	R-7	RUDP-1055	Salimar	OPC	Chisang Khola	23-Sep-18	30-Sep-18	21-Oct-18	14.75		M20
407	R-83	RUDP-1056	Salimar	OPC	Chisang Khola	23-Sep-18	30-Sep-18	21-Oct-18	15.73		M20

<p><b>Contractor</b></p> <p>ZHONGHENG CONSTRUCTION GROUP INTERNATIONAL ENGINEERING CO. LTD</p>	<p><b>Consultant</b></p> <p>BUILDING DESIGN AUTHORITY (P) LTD IN JOINT VENTURE WITH B.N. CONSULTANCY PVT. LTD AND PLUS ENGINEERS &amp; ARCHITECTS (P) LTD, KATHMANDU, NEPAL</p>
<p>Checked By Engineer</p> <p><i>(Signature)</i></p>	<p>Submitted By Contract Manager</p> <p>Verified By Qty Engineer/CSE</p> <p>Approved By Team Leader</p> <p><i>(Signature)</i></p>



**REGIONAL URBAN DEVELOPMENT PROJECT**

Biratnagar Metropolitan City

Contract No:- RUDP/ICB/BRT-02

Summary Sheet of Concrete Cube Test Report

S.N.	Location	Lab Ref.no.	Type of Cement	Brand of Cement	Source of Sand+Agg.	Date of Casting	Month		September		Concrete Grade
							Year		2018		
							Type of Material		Conc. Cube		
							Date of Testing		Strength, N/mm <sup>2</sup>		
							7 Days	28 Days	7 Days	28 Days	
408	R-12	RUDP-1057	Salimar	OPC	Chisang Khola	23-Sep-18	30-Sep-18	21-Oct-18	15.80		M20
409	T3L11K	RUDP-1058	Salimar	OPC	Chisang Khola	23-Sep-18	30-Sep-18	21-Oct-18	15.28		M20
410	DDC-yard	RUDP-1059	Salimar	OPC	Chisang Khola	23-Sep-18	30-Sep-18	21-Oct-18	14.75		M20
411	R-7	RUDP-1060	Salimar	OPC	Chisang Khola	23-Sep-18	30-Sep-18	21-Oct-18	14.83		M20
412	R-45	RUDP-1061	Salimar	OPC	Chisang Khola	23-Sep-18	30-Sep-18	21-Oct-18	15.73		M20
<div style="display: flex; justify-content: space-between;"> <span>Contractor</span> <span>Consultant</span> </div> <div style="display: flex; justify-content: space-between; margin-top: 10px;"> <div style="width: 45%;"> <p>ZHONGHENG CONSTRUCTION GROUP INTERNATIONAL ENGINEERING CO. LTD</p> </div> <div style="width: 50%;"> <p>BUILDING DESIGN AUTHORITY (P) LTD IN JOINT VENTURE WITH B.N. CONSULTANCY PVT. LTD AND PLUS ENGINEERS &amp; ARCHITECTS (P) LTD, KATHMANDU, NEPAL</p> </div> </div> <div style="display: flex; justify-content: space-between; margin-top: 20px;"> <div style="width: 20%;"> <p>Checked By Engineer</p> </div> <div style="width: 20%;"> <p>Submitted By Contract Manager</p> </div> <div style="width: 20%;"> <p>Verified By Qty Engineer/CSE</p> </div> <div style="width: 20%;"> <p>Approved By Team Leader</p> </div> </div>											

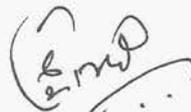


### REGIONAL URBAN DEVELOPMENT PROJECT

Biratnagar Metropolitan City  
Contract No:- RUDP/ICB/BRT-02  
Summary Sheet Of Monthly Test Report

S.N.	Lab Ref.No.	Testing Date	Location of Sample	Source of Brick	Name Of Brick	Water Absorption of Brick(%)	Month	September
							Year	2018
							Type of Material	Brick
							Strength of Brick(N/mm <sup>2</sup> )	Remarks
1	97	1-Sep-18	R-7	Dadarbairya	ACC	12.02	10.02	
2	98	1-Sep-18	R-85	Dadarbairya	ACC	9.86	11.55	
3	99	1-Sep-18	R-84	Dadarbairya	ACC	10.46	12.45	
4	100	1-Sep-18	R-12	Dadarbairya	ACC	10.46	12.45	
5	101	1-Sep-18	R-12	Dadarbairya	ACC	11.24	11.70	
6	102	2-Sep-18	R-83	Dadarbairya	ACC	9.90	11.26	
7	103	3-Sep-18	R-45	Dadarbairya	ACC	15.00	11.77	
8	104	3-Sep-18	R-7	Dadarbairya	ACC	13.76	12.83	
9	105	3-Sep-18	R-83	Dadarbairya	ACC	13.69	12.93	
10	106	3-Sep-18	T3L39	Dadarbairya	ACC	11.97	13.21	
11	107	4-Sep-18	T3L11K	Dadarbairya	ACC	10.60	14.30	
12	108	4-Sep-18	T3L18A	Dadarbairya	ACC	12.78	13.14	
13	109	4-Sep-18	R-45	Dadarbairya	ACC	11.39	12.73	
14	110	4-Sep-18	R-83	Dadarbairya	ACC	12.86	13.90	
15	111	4-Sep-18	R-12	Dadarbairya	ACC	14.21	13.54	
16	112	4-Sep-18	T3L39	Dadarbairya	ACC	12.30	12.88	
17	113	4-Sep-18	T3L18B	Dadarbairya	ACC	11.08	13.76	
18	114	5-Sep-18	R-7	Dadarbairya	ACC	12.09	14.11	
19	115	5-Sep-18	R-7	Dadarbairya	ACC	11.70	13.85	
20	116	5-Sep-18	R-45	Dadarbairya	ACC	12.46	12.64	
21	117	5-Sep-18	R-87	Dadarbairya	ACC	13.57	13.26	
22	118	5-Sep-18	R-87	Dadarbairya	ACC	14.22	14.03	
23	119	5-Sep-18	R-85	Dadarbairya	ACC	12.21	13.25	
24	120	5-Sep-18	R-85	Dadarbairya	ACC	10.24	12.97	
25	121	5-Sep-18	R-7	Dadarbairya	ACC	9.63	13.39	
26	122	5-Sep-18	R-7	Dadarbairya	ACC	11.08	14.10	
27	123	6-Sep-18	R-12	Dadarbairya	ACC	12.07	12.87	
28	124	6-Sep-18	R-85	Dadarbairya	ACC	13.53	13.32	
29	125	6-Sep-18	R-84	Dadarbairya	ACC	12.91	12.84	
30	126	6-Sep-18	R-45	Dadarbairya	ACC	14.67	12.92	
* Sub-Clause No.2502,Standard Specification Road And Bridge 2073						<20%	>8 to 10 N/mm <sup>2</sup>	

Comments:-

 <b>Contractor</b> ZHONGHENG CONSTRUCTION GROUP INTERNATIONAL ENGINEERING CO. LTD	<b>Consultant</b> BUILDING DESIGN AUTHORITY (P) LTD IN JOINT VENTURE WITH B.N. CONSULTANCY PVT. LTD AND PLUS ENGINEERS & ARCHITECTS (P) LTD, KATHMANDU, NEPAL		
Checked By  Engineer	Submitted By  Contract Manager	Verified By  QTY Engineer/CSE	Approved By  Team Leader



**REGIONAL URBAN DEVELOPMENT PROJECT**

Biratnagar Metropolitan City  
 Contract No:- RUDP/ICB/BRT-02  
 Summary Sheet Of Monthly Test Report

S.N.	Lab Ref.No.	Testing Date	Location of Sample	Source of Brick	Name Of Brick	Water Absorption of Brick(%)	Month	September	Remarks
							Year	2018	
							Type of Material	Brick	
							Strength of Brick(N/mm <sup>2</sup> )		
31	127	6-Sep-18	R-45	Dadarbairya	ACC				
32	128	7-Sep-18	R-12	Dadarbairya	ACC	11.26		13.25	
33	129	7-Sep-18	R-83	Dadarbairya	ACC	12.46		12.72	
34	130	7-Sep-18	R-7	Dadarbairya	ACC	14.26		14.11	
35	131	7-Sep-18	R-12	Dadarbairya	ACC	14.52		15.42	
36	132	8-Sep-18	R-84	Dadarbairya	ACC	13.53		14.70	
37	133	8-Sep-18	R-7	Dadarbairya	ACC	12.71		13.35	
38	134	8-Sep-18	R-7	Dadarbairya	ACC	11.43		12.30	
39	135	8-Sep-18	R-7	Dadarbairya	ACC	12.20		11.77	
40	136	8-Sep-18	R-7	Dadarbairya	ACC	13.35		12.42	
41	137	8-Sep-18	R-7	Dadarbairya	ACC	12.06		13.16	
42	138	8-Sep-18	R-84	Dadarbairya	ACC	13.52		14.00	
43	139	8-Sep-18	T3L39	Dadarbairya	ACC	14.98		13.57	
44	140	8-Sep-18	T3L18B	Dadarbairya	ACC	13.07		12.72	
45	141	11-Sep-18	T3L11K	Dadarbairya	ACC	11.73		14.41	
46	142	11-Sep-18	R-12	Dadarbairya	ACC	12.98		13.96	
47	143	11-Sep-18	R-84	Dadarbairya	ACC	11.97		14.12	
48	144	11-Sep-18	T3L18A	Dadarbairya	ACC	10.43		13.34	
49	145	14-Sep-18	R-12	Dadarbairya	ACC	11.57		14.21	
50	146	14-Sep-18	R-7	Dadarbairya	ACC	12.08		15.15	
51	147	14-Sep-18	R-45	Dadarbairya	ACC	11.74		14.79	
52	148	14-Sep-18	R-12	Dadarbairya	ACC	12.50		15.31	
53	149	14-Sep-18	T3L11I	Dadarbairya	ACC	11.39		14.09	
54	150	16-Sep-18	T3L39A	Dadarbairya	ACC	13.06		13.87	
55	151	16-Sep-18	R-84	Dadarbairya	ACC	12.40		12.85	
56	152	16-Sep-18	R-12	Dadarbairya	ACC	11.61		13.21	
57	153	16-Sep-18	R-7	Dadarbairya	ACC	12.79		12.73	
58	154	18-Sep-18	T3L11K	Dadarbairya	ACC	11.77		11.63	
59	155	18-Sep-18	R-7	Dadarbairya	ACC	12.07		11.74	
60	156	18-Sep-18	R-7	Dadarbairya	ACC	13.95		13.79	
Sub-Clause No.2502,Standard Specfication Road And Bridge 2073							12.95	13.04	
Comments:-							<20%	>8 to 10 N/mm <sup>2</sup>	

		Consultant	
ZHONGHENG CONSTRUCTION GROUP INTERNATIONAL ENGINEERING CO. LTD		BUILDING DESIGN AUTHORITY (P) LTD IN JOINT VENTURE WITH B.N. CONSULTANCY PVT. LTD AND PLUS ENGINEERS & ARCHITECTS (P) LTD, KATHMANDU, NEPAL	
Checked By Engineer	Submitted By Contract Manager	Verified By QTY Engineer/CSE	Approved By Team Leader



**REGIONAL URBAN DEVELOPMENT PROJECT**

Biratnagar Metropolitan City  
 Contract No:- RUDP/ICB/BRT-02  
 Summary Sheet Of Monthly Test Report

S.N.	Lab Ref.No.	Testing Date	Location of Sample	Source of Brick	Name Of Brick	Water Absorption of Brick(%)	Month	September
							Year	2018
Type of Material							Strength of Brick(N/mm <sup>2</sup> )	Brick
								Remarks
61	157	18-Sep-18	T3L21	Dadarbairya	ACC	10.92	12.74	
62	158	18-Sep-18	T3L21	Dadarbairya	ACC	12.00	13.36	
63	159	18-Sep-18	T3L39A	Dadarbairya	ACC	11.86	14.27	
64	160	20-Sep-18	R-7	Dadarbairya	ACC	12.03	13.28	
65	161	20-Sep-18	R-45	Dadarbairya	ACC	12.71	12.75	
66	162	20-Sep-18	T3L11K	Dadarbairya	ACC	10.75	14.03	
67	163	20-Sep-18	T3L11I	Dadarbairya	ACC	11.60	13.81	
68	164	20-Sep-18	T3L39A	Dadarbairya	ACC	12.68	14.07	
69	165	20-Sep-18	R-12	Dadarbairya	ACC	11.78	13.22	
70	166	22-Sep-18	R-84	Dadarbairya	ACC	12.98	14.80	
71	167	22-Sep-18	R-87	Dadarbairya	ACC	11.93	13.70	
72	168	22-Sep-18	R-7	Dadarbairya	ACC	12.69	12.57	
73	169	22-Sep-18	R-45	Dadarbairya	ACC	11.54	13.64	
74	170	22-Sep-18	T3L11I	Dadarbairya	ACC	12.61	12.64	
75	171	24-Sep-18	R-7	Dadarbairya	ACC	13.75	12.27	
76	172	24-Sep-18	R-12	Dadarbairya	ACC	14.12	13.21	
77	173	24-Sep-18	R-84	Dadarbairya	ACC	13.18	12.74	
78	174	24-Sep-18	R-7	Dadarbairya	ACC	14.15	11.80	
79	175	24-Sep-18	T3L39A	Dadarbairya	ACC	13.53	12.16	
80	176	24-Sep-18	B2-1	Dadarbairya	ACC	12.68	13.01	
81	177	24-Sep-18	T3L21	Dadarbairya	ACC	12.02	12.84	

Sub-Clause No.2502,Standard Specification Road And Bridge 2073

Comments:- <20% >8 to 10 N/mm<sup>2</sup>

**Contractor**  
 ZHONGHENG CONSTRUCTION GROUP-INTERNATIONAL ENGINEERING CO.,LTD

**Consultant**  
 BUILDING DESIGN AUTHORITY (P) LTD IN JOINT VENTURE WITH B.N. CONSULTANCY PVT. LTD AND PLUS ENGINEERS & ARCHITECTS (P) LTD, KATHMANDU, NEPAL

*[Signature]*  
 Checked By  
 Engineer

*[Signature]*  
 Submitted By  
 Contract Manager

*[Signature]*  
 Verified By  
 QTY Engineer/CSE

*[Signature]*  
 Approved By  
 Team Leader



REGIONAL URBAN DEVELOPMENT PROJECT											
Biratnagar Metropolitan City											
Contract No:- RUDP/ICB/BRT-02											
Summary Sheet of Mortar Test Report											
S.N.	Location	Lab Ref.no	Type of Cement	Brand of Cement	Source of Sand	Date of Casting	Month		September		Type of Grade
							Year		2018		
							Description of Sample		Brick Wall		
							Date of Testing		Strength, N/mm <sup>2</sup>		
				7 Days	28 Days	7 Days	28 Days				
1	R-21	MR-385	Salimar	OPC	Chisang Khola	4-Aug-18	11-Aug-18	1-Sep-18		9.20	7.5
2	T31.21	MR-386	Salimar	OPC	Chisang Khola	4-Aug-18	11-Aug-18	1-Sep-18		8.54	7.5
3	T31.39	MR-387	Salimar	OPC	Chisang Khola	4-Aug-18	11-Aug-18	1-Sep-18		8.94	7.5
4	Rani-Site	MR-388	Salimar	OPC	Chisang Khola	5-Aug-18	12-Aug-18	2-Sep-18		9.07	7.5
5	R-21	MR-389	Salimar	OPC	Chisang Khola	5-Aug-18	12-Aug-18	2-Sep-18		8.40	7.5
6	T31.21	MR-390	Salimar	OPC	Chisang Khola	5-Aug-18	12-Aug-18	2-Sep-18		9.07	7.5
7	T31.39	MR-391	Salimar	OPC	Chisang Khola	5-Aug-18	12-Aug-18	2-Sep-18		9.07	7.5
8	T21.26F	MR-392	Salimar	OPC	Chisang Khola	5-Aug-18	12-Aug-18	2-Sep-18		8.67	7.5
9	R-21	MR-393	Salimar	OPC	Chisang Khola	6-Aug-18	13-Aug-18	3-Sep-18		9.47	7.5
10	N-2	MR-394	Salimar	OPC	Chisang Khola	6-Aug-18	13-Aug-18	3-Sep-18		8.27	7.5
11	Rani-Site	MR-395	Salimar	OPC	Chisang Khola	6-Aug-18	13-Aug-18	3-Sep-18		8.80	7.5
12	T21.26F	MR-396	Salimar	OPC	Chisang Khola	6-Aug-18	13-Aug-18	3-Sep-18		9.34	7.5
62	R-21	MR-397	Salimar	OPC	Chisang Khola	6-Aug-18	13-Aug-18	3-Sep-18		8.67	7.5
14	N-2	MR-398	Salimar	OPC	Chisang Khola	7-Aug-18	14-Aug-18	4-Sep-18		8.80	7.5
15	Rani-Site	MR-399	Salimar	OPC	Chisang Khola	7-Aug-18	14-Aug-18	4-Sep-18		8.94	7.5
16	T21.26F	MR-400	Salimar	OPC	Chisang Khola	7-Aug-18	14-Aug-18	4-Sep-18		9.07	7.5
17	N-2	MR-401	Salimar	OPC	Chisang Khola	7-Aug-18	14-Aug-18	4-Sep-18		9.34	7.5
18	Rani-Site	MR-402	Salimar	OPC	Chisang Khola	8-Aug-18	15-Aug-18	5-Sep-18		8.67	7.5
19	R-21	MR-403	Salimar	OPC	Chisang Khola	8-Aug-18	15-Aug-18	5-Sep-18		9.20	7.5
20	T21.26F	MR-404	Salimar	OPC	Chisang Khola	8-Aug-18	15-Aug-18	5-Sep-18		8.94	7.5
21	R-74	MR-405	Salimar	OPC	Chisang Khola	8-Aug-18	15-Aug-18	5-Sep-18		8.67	7.5
22	T31.23	MR-406	Salimar	OPC	Chisang Khola	9-Aug-18	16-Aug-18	6-Sep-18		9.20	7.5
23	T31.26F	MR-407	Salimar	OPC	Chisang Khola	9-Aug-18	16-Aug-18	6-Sep-18		9.47	7.5
24	T31.39	MR-408	Salimar	OPC	Chisang Khola	9-Aug-18	16-Aug-18	6-Sep-18		8.94	7.5
25	Rani-Site	MR-409	Salimar	OPC	Chisang Khola	9-Aug-18	16-Aug-18	6-Sep-18		8.80	7.5
26	T21.26F	MR-410	Salimar	OPC	Chisang Khola	10-Aug-18	17-Aug-18	7-Sep-18		9.07	7.5
27	R-74	MR-411	Salimar	OPC	Chisang Khola	10-Aug-18	17-Aug-18	7-Sep-18		8.40	7.5
28	Rani-Site	MR-412	Salimar	OPC	Chisang Khola	11-Aug-18	18-Aug-18	8-Sep-18		9.07	7.5
29	T21.26F	MR-413	Salimar	OPC	Chisang Khola	11-Aug-18	18-Aug-18	8-Sep-18		8.94	7.5
30	R-74	MR-414	Salimar	OPC	Chisang Khola	11-Aug-18	18-Aug-18	8-Sep-18		8.80	7.5
31	T31.23	MR-415	Salimar	OPC	Chisang Khola	11-Aug-18	18-Aug-18	8-Sep-18		8.94	7.5
32	R-74	MR-416	Salimar	OPC	Chisang Khola	12-Aug-18	19-Aug-18	9-Sep-18		9.20	7.5
33	R-2	MR-417	Salimar	OPC	Chisang Khola	12-Aug-18	19-Aug-18	9-Sep-18		8.14	7.5
34	Rani-Site	MR-418	Salimar	OPC	Chisang Khola	12-Aug-18	19-Aug-18	9-Sep-18		8.80	7.5
35	T31.23	MR-419	Salimar	OPC	Chisang Khola	13-Aug-18	20-Aug-18	10-Sep-18		8.94	7.5
										9.34	7.5

<b>Contractor</b> ZHONGHENG CONSTRUCTION GROUP INTERNATIONAL ENGINEERING CO. LTD		<b>Consultant</b> BUILDING DESIGN AUTHORITY (P) LTD IN JOINT VENTURE WITH B.N. CONSULTANCY PVT. LTD AND PLUS ENGINEERS & ARCHITECTS (P) LTD, KATHMANDU, NEPAL	
Checked By Engineer	Submitted By Contract Manager	Verified By Qty Engineer/CSE	Approved By Team Leader

Checked By  
 Engineer



**REGIONAL URBAN DEVELOPMENT PROJECT**

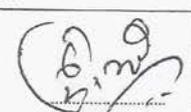
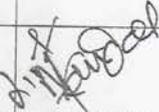
**Biratnagar Metropolitan City**

**Contract No:- RUDP/ICB/BRT-02**

**Summary Sheet of Mortar Test Report**

S.N.	Location	Lab Ref.no.	Type of Cement	Brand of Cement	Source of Sand	Date of Casting	Month		September		Type of Grade
							Year		2018		
							Description of Sample		Brick Wall		
							Date of Testing		Strength, N/mm <sup>2</sup>		
7 Days	28 Days	7 Days	28 Days								
36	T31.21	MR-420	Salimar	OPC	Chisang Khola	13-Aug-18	20-Aug-18	10-Sep-18		9.07	7.5
37	R-74	MR-421	Salimar	OPC	Chisang Khola	13-Aug-18	20-Aug-18	10-Sep-18		8.40	7.5
38	R-12	MR-422	Salimar	OPC	Chisang Khola	13-Aug-18	20-Aug-18	10-Sep-18		9.34	7.5
39	T31.23	MR-423	Salimar	OPC	Chisang Khola	14-Aug-18	21-Aug-18	11-Sep-18		7.87	7.5
40	Rani-Site	MR-424	Salimar	OPC	Chisang Khola	14-Aug-18	21-Aug-18	11-Sep-18		8.40	7.5
41	R-12	MR-425	Salimar	OPC	Chisang Khola	14-Aug-18	21-Aug-18	11-Sep-18		8.67	7.5
42	T31.39	MR-426	Salimar	OPC	Chisang Khola	15-Aug-18	22-Aug-18	12-Sep-18		9.20	7.5
43	T31.21	MR-427	Salimar	OPC	Chisang Khola	15-Aug-18	22-Aug-18	12-Sep-18		9.34	7.5
44	R-12	MR-428	Salimar	OPC	Chisang Khola	15-Aug-18	22-Aug-18	12-Sep-18		9.07	7.5
45	T31.23	MR-429	Salimar	OPC	Chisang Khola	15-Aug-18	22-Aug-18	12-Sep-18		8.40	7.5
46	R-74	MR-430	Salimar	OPC	Chisang Khola	15-Aug-18	22-Aug-18	12-Sep-18		8.54	7.5
47	R-2	MR-431	Salimar	OPC	Chisang Khola	16-Aug-18	23-Aug-18	13-Sep-18		8.27	7.5
48	R-74	MR-432	Salimar	OPC	Chisang Khola	16-Aug-18	23-Aug-18	13-Sep-18		8.40	7.5
49	R-12	MR-433	Salimar	OPC	Chisang Khola	16-Aug-18	23-Aug-18	13-Sep-18		9.07	7.5
50	T31.39	MR-434	Salimar	OPC	Chisang Khola	16-Aug-18	23-Aug-18	13-Sep-18		8.00	7.5
51	T31.23	MR-435	Salimar	OPC	Chisang Khola	18-Aug-18	25-Aug-18	15-Sep-18		8.94	7.5
52	T31.39	MR-436	Salimar	OPC	Chisang Khola	18-Aug-18	25-Aug-18	15-Sep-18		8.80	7.5
53	R-12	MR-437	Salimar	OPC	Chisang Khola	18-Aug-18	25-Aug-18	15-Sep-18		8.67	7.5
54	R-2	MR-438	Salimar	OPC	Chisang Khola	18-Aug-18	25-Aug-18	15-Sep-18		8.80	7.5
55	R-2 (Branch Road)	MR-439	Salimar	OPC	Chisang Khola	18-Aug-18	25-Aug-18	15-Sep-18		9.47	7.5
56	R-74	MR-440	Salimar	OPC	Chisang Khola	18-Aug-18	25-Aug-18	15-Sep-18		9.47	7.5
57	R-12	MR-441	Salimar	OPC	Chisang Khola	19-Aug-18	26-Aug-18	16-Sep-18		8.14	7.5
58	R-12	MR-442	Salimar	OPC	Chisang Khola	19-Aug-18	26-Aug-18	16-Sep-18		8.94	7.5
59	R-74	MR-443	Salimar	OPC	Chisang Khola	19-Aug-18	26-Aug-18	16-Sep-18		8.80	7.5
60	R-2 (Branch Road)	MR-444	Salimar	OPC	Chisang Khola	19-Aug-18	26-Aug-18	16-Sep-18		8.40	7.5
61	R-7	MR-445	Salimar	OPC	Chisang Khola	19-Aug-18	26-Aug-18	16-Sep-18		8.14	7.5
62	N-4	MR-446	Salimar	OPC	Chisang Khola	19-Aug-18	26-Aug-18	16-Sep-18		9.20	7.5
63	T31.23	MR-447	Salimar	OPC	Chisang Khola	20-Aug-18	27-Aug-18	17-Sep-18		8.67	7.5
64	T31.21	MR-448	Salimar	OPC	Chisang Khola	20-Aug-18	27-Aug-18	17-Sep-18		8.80	7.5
65	T31.39	MR-449	Salimar	OPC	Chisang Khola	20-Aug-18	27-Aug-18	17-Sep-18		8.40	7.5
66	R-12	MR-450	Salimar	OPC	Chisang Khola	20-Aug-18	27-Aug-18	17-Sep-18		8.27	7.5
67	R-2	MR-451	Salimar	OPC	Chisang Khola	20-Aug-18	27-Aug-18	17-Sep-18		9.07	7.5
68	R-2 (Branch Road)	MR-452	Salimar	OPC	Chisang Khola	20-Aug-18	27-Aug-18	17-Sep-18		8.80	7.5
69	R-74	MR-453	Salimar	OPC	Chisang Khola	20-Aug-18	27-Aug-18	17-Sep-18		7.74	7.5
70	T31.261	MR-454	Salimar	OPC	Chisang Khola	20-Aug-18	27-Aug-18	17-Sep-18		8.00	7.5
71	T31.23	MR-455	Salimar	OPC	Chisang Khola	21-Aug-18	28-Aug-18	18-Sep-18		8.54	7.5

<b>Contractor</b>	<b>Consultant</b>
ZHONGHENG CONSTRUCTION GROUP INTERNATIONAL ENGINEERING CO. LTD	BUILDING DESIGN AUTHORITY (P) LTD IN JOINT VENTURE WITH B.N. CONSULTANCY PVT. LTD AND PLUS ENGINEERS & ARCHITECTS (P) LTD, KATHMANDU, NEPAL
 Checked By Engineer	 Approved By Team Leader
 Submitted By Contract Manager	 Verified By Qty Engineer/CSE



**REGIONAL URBAN DEVELOPMENT PROJECT**

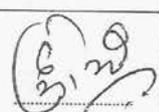
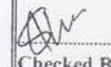
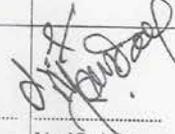
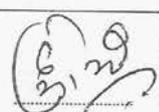
Biratnagar Metropolitan City

Contract No:- RUDP/ICB/BRT-02

Summary Sheet of Mortar Test Report

S.N	Location	Lab Ref.no.	Type of Cement	Brand of Cement	Source of Sand	Date of Casting	Month				Type of Grade
							September				
							Year				
							2018				
							Description of Sample		Brick Wall		
							Date of Testing		Strength, N/mm <sup>2</sup>		
							7 Days	28 Days	7 Days	28 Days	
107	T31.21	MR-456	Salimar	OPC	Chisang Khola	21-Aug-18	28-Aug-18	18-Sep-18		9.60	7.5
108	R-12	MR-457	Salimar	OPC	Chisang Khola	21-Aug-18	28-Aug-18	18-Sep-18		7.87	7.5
109	R-7	MR-458	Salimar	OPC	Chisang Khola	21-Aug-18	28-Aug-18	18-Sep-18		8.27	7.5
110	R-2 (Branch Road)	MR-459	Salimar	OPC	Chisang Khola	21-Aug-18	28-Aug-18	18-Sep-18		8.14	7.5
111	R-12	MR-460	Salimar	OPC	Chisang Khola	21-Aug-18	28-Aug-18	18-Sep-18		9.47	7.5
112	R-7	MR-461	Salimar	OPC	Chisang Khola	22-Aug-18	29-Aug-18	19-Sep-18		8.40	7.5
113	R-7	MR-462	Salimar	OPC	Chisang Khola	22-Aug-18	29-Aug-18	19-Sep-18		8.67	7.5
114	T21.18A	MR-463	Salimar	OPC	Chisang Khola	22-Aug-18	29-Aug-18	19-Sep-18		9.20	7.5
115	T21.18B	MR-464	Salimar	OPC	Chisang Khola	22-Aug-18	29-Aug-18	19-Sep-18		7.87	7.5
116	R-12	MR-465	Salimar	OPC	Chisang Khola	22-Aug-18	29-Aug-18	19-Sep-18		8.94	7.5
117	R-87	MR-466	Salimar	OPC	Chisang Khola	22-Aug-18	29-Aug-18	19-Sep-18		8.14	7.5
118	R-84	MR-467	Salimar	OPC	Chisang Khola	23-Aug-18	30-Aug-18	20-Sep-18		9.85	7.5
119	R-12	MR-468	Salimar	OPC	Chisang Khola	24-Jul-18	31-Jul-18	21-Aug-18		8.94	7.5
120	R-85	MR-469	Salimar	OPC	Chisang Khola	23-Aug-18	30-Aug-18	20-Sep-18		7.74	7.5
121	R-7	MR-470	Salimar	OPC	Chisang Khola	23-Aug-18	30-Aug-18	20-Sep-18		8.94	7.5
122	R-12	MR-471	Salimar	OPC	Chisang Khola	23-Aug-18	30-Aug-18	20-Sep-18		9.45	7.5
123	R-87	MR-472	Salimar	OPC	Chisang Khola	23-Aug-18	30-Aug-18	20-Sep-18		7.74	7.5
124	R-84	MR-473	Salimar	OPC	Chisang Khola	23-Aug-18	30-Aug-18	20-Sep-18		8.40	7.5
125	T31.23	MR-474	Salimar	OPC	Chisang Khola	24-Aug-18	31-Aug-18	21-Sep-18		8.00	7.5
126	R-12	MR-475	Salimar	OPC	Chisang Khola	24-Aug-18	31-Aug-18	21-Sep-18		9.07	7.5
127	R-87	MR-476	Salimar	OPC	Chisang Khola	24-Aug-18	31-Aug-18	21-Sep-18		8.67	7.5
128	R-84	MR-477	Salimar	OPC	Chisang Khola	24-Aug-18	31-Aug-18	21-Sep-18		8.94	7.5
129	R-85	MR-478	Salimar	OPC	Chisang Khola	24-Aug-18	31-Aug-18	21-Sep-18		9.85	7.5
130	R-7	MR-479	Salimar	OPC	Chisang Khola	24-Aug-18	31-Aug-18	21-Sep-18		8.80	7.5
131	T31.18A	MR-480	Salimar	OPC	Chisang Khola	24-Aug-18	31-Aug-18	21-Sep-18		7.74	7.5
132	T21.18B	MR-481	Salimar	OPC	Chisang Khola	25-Aug-18	1-Sep-18	22-Sep-18	6.27	9.07	7.5
133	R-74	MR-482	Salimar	OPC	Chisang Khola	25-Aug-18	1-Sep-18	22-Sep-18	6.00	8.14	7.5
134	T31.18A	MR-483	Salimar	OPC	Chisang Khola	25-Aug-18	1-Sep-18	22-Sep-18	6.27	7.87	7.5
135	R-85	MR-484	Salimar	OPC	Chisang Khola	25-Aug-18	1-Sep-18	22-Sep-18	6.27	8.94	7.5
136	R-87	MR-485	Salimar	OPC	Chisang Khola	25-Aug-18	1-Sep-18	22-Sep-18	5.87	8.40	7.5
137	R-12	MR-486	Salimar	OPC	Chisang Khola	25-Aug-18	1-Sep-18	22-Sep-18	6.27	7.87	7.5
138	R-84	MR-487	Salimar	OPC	Chisang Khola	25-Aug-18	1-Sep-18	22-Sep-18	5.87	8.27	7.5
139	R-83	MR-488	Salimar	OPC	Chisang Khola	26-Aug-18	2-Sep-18	23-Sep-18	6.67	9.20	7.5
140	T31.18B	MR-489	Salimar	OPC	Chisang Khola	26-Aug-18	2-Sep-18	23-Sep-18	6.00	8.54	7.5
141	R-45	MR-490	Salimar	OPC	Chisang Khola	26-Aug-18	2-Sep-18	23-Sep-18	5.74	8.00	7.5
142	R-7	MR-491	Salimar	OPC	Chisang Khola	26-Aug-18	2-Sep-18	23-Sep-18	6.40	8.94	7.5

<b>Contractor</b>	<b>Consultant</b>
ZHONGHENG CONSTRUCTION GROUP INTERNATIONAL ENGINEERING CO. LTD	BUILDING DESIGN AUTHORITY (P) LTD IN JOINT VENTURE WITH B.N. CONSULTANCY PVT. LTD AND PLUS ENGINEERS & ARCHITECTS (P) LTD, KATHMANDU, NEPAL
	
 Checked By Engineer	 Submitted By Contract Manager
 Verified By Qty Engineer/CSE	 Approved By Team Leader

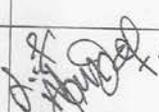
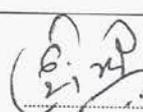


**REGIONAL URBAN DEVELOPMENT PROJECT**

Biratnagar Metropolitan City  
 Contract No:- RUDP/ICB/BRT-02  
 Summary Sheet of Mortar Test Report

S.N	Location	Lab Ref.no	Type of Cement	Brand of Cement	Source of Sand	Date of Casting	Month				Type of Grade
							September				
							Year				
							2018				
							Description of Sample				
							Brick Wall		Brick Wall		
							Date of Testing		Strength, N/mm <sup>2</sup>		
							7 Days	28 Days	7 Days	28 Days	
143	R-74	MR-492	Salimar	OPC	Chisang Khola	27-Aug-18	3-Sep-18	24-Sep-18	6.00	8.00	7.5
144	T31.18A	MR-493	Salimar	OPC	Chisang Khola	27-Aug-18	3-Sep-18	24-Sep-18	6.54	8.40	7.5
145	T31.11K	MR-494	Salimar	OPC	Chisang Khola	27-Aug-18	3-Sep-18	24-Sep-18	5.74	8.40	7.5
146	R-85	MR-495	Salimar	OPC	Chisang Khola	27-Aug-18	3-Sep-18	24-Sep-18	6.54	8.00	7.5
147	R-87	MR-496	Salimar	OPC	Chisang Khola	27-Aug-18	3-Sep-18	24-Sep-18	6.27	9.07	7.5
148	R-12	MR-497	Salimar	OPC	Chisang Khola	27-Aug-18	3-Sep-18	24-Sep-18	5.87	8.54	7.5
149	R-84	MR-498	Salimar	OPC	Chisang Khola	28-Aug-18	4-Sep-18	25-Sep-18	6.00	7.74	7.5
150	T31.21	MR-499	Salimar	OPC	Chisang Khola	28-Aug-18	4-Sep-18	25-Sep-18	6.14	8.94	7.5
151	R-83	MR-500	Salimar	OPC	Chisang Khola	29-Aug-18	5-Sep-18	26-Sep-18	5.87	8.40	7.5
152	T31.18B	MR-501	Salimar	OPC	Chisang Khola	29-Aug-18	5-Sep-18	26-Sep-18	5.87	7.74	7.5
153	R-45	MR-502	Salimar	OPC	Chisang Khola	29-Aug-18	5-Sep-18	26-Sep-18	6.40	8.27	7.5
154	R-7	MR-503	Salimar	OPC	Chisang Khola	29-Aug-18	5-Sep-18	26-Sep-18	6.67	7.74	7.5
155	T31.18A	MR-504	Salimar	OPC	Chisang Khola	29-Aug-18	5-Sep-18	26-Sep-18	6.40	8.54	7.5
156	T31.11K	MR-505	Salimar	OPC	Chisang Khola	30-Aug-18	6-Sep-18	27-Sep-18	5.74	9.20	7.5
157	R-85	MR-506	Salimar	OPC	Chisang Khola	30-Aug-18	6-Sep-18	27-Sep-18	6.14	8.00	7.5
158	R-87	MR-507	Salimar	OPC	Chisang Khola	30-Aug-18	6-Sep-18	27-Sep-18	5.87	8.54	7.5
159	R-12	MR-508	Salimar	OPC	Chisang Khola	31-Aug-18	7-Sep-18	28-Sep-18	6.40	9.20	7.5
160	R-84	MR-509	Salimar	OPC	Chisang Khola	31-Aug-18	7-Sep-18	28-Sep-18	7.07	9.34	7.5
161	R-83	MR-510	Salimar	OPC	Chisang Khola	1-Sep-18	8-Sep-18	29-Sep-18	5.60	8.27	7.5
162	T31.18B	MR-511	Salimar	OPC	Chisang Khola	1-Sep-18	8-Sep-18	29-Sep-18	6.27	9.34	7.5
163	R-45	MR-512	Salimar	OPC	Chisang Khola	1-Sep-18	8-Sep-18	29-Sep-18	5.74	9.07	7.5
164	R-7	MR-513	Salimar	OPC	Chisang Khola	1-Sep-18	8-Sep-18	29-Sep-18	5.33	8.40	7.5
165	T31.21	MR-514	Salimar	OPC	Chisang Khola	1-Sep-18	8-Sep-18	29-Sep-18	6.40	8.00	7.5
166	T31.39A	MR-515	Salimar	OPC	Chisang Khola	1-Sep-18	8-Sep-18	29-Sep-18	6.67	9.07	7.5
167	T31.18A	MR-516	Salimar	OPC	Chisang Khola	2-Sep-18	9-Sep-18	30-Sep-18	5.74	8.00	7.5
168	T31.11K	MR-517	Salimar	OPC	Chisang Khola	2-Sep-18	9-Sep-18	30-Sep-18	6.67	8.94	7.5
169	R-85	MR-518	Salimar	OPC	Chisang Khola	2-Sep-18	9-Sep-18	30-Sep-18	5.60	9.34	7.5
170	R-87	MR-519	Salimar	OPC	Chisang Khola	2-Sep-18	9-Sep-18	30-Sep-18	6.67	8.54	7.5
171	R-12	MR-520	Salimar	OPC	Chisang Khola	2-Sep-18	9-Sep-18	30-Sep-18	5.74	7.74	7.5
172	R-84	MR-521	Salimar	OPC	Chisang Khola	3-Sep-18	10-Sep-18	1-Oct-18	6.14		7.5
173	R-83	MR-522	Salimar	OPC	Chisang Khola	3-Sep-18	10-Sep-18	1-Oct-18	6.67		7.5
174	T31.18A	MR-523	Salimar	OPC	Chisang Khola	3-Sep-18	10-Sep-18	1-Oct-18	5.87		7.5
175	R-45	MR-524	Salimar	OPC	Chisang Khola	3-Sep-18	10-Sep-18	1-Oct-18	6.54		7.5
176	R-7	MR-525	Salimar	OPC	Chisang Khola	3-Sep-18	10-Sep-18	1-Oct-18	6.67		7.5
177	T31.21	MR-526	Salimar	OPC	Chisang Khola	4-Sep-18	11-Sep-18	2-Oct-18	5.33		7.5
178	T31.18A	MR-527	Salimar	OPC	Chisang Khola	4-Sep-18	11-Sep-18	2-Oct-18	6.27		7.5

<b>Contractor</b>	<b>Consultant</b>
ZHONGHENG CONSTRUCTION GROUP INTERNATIONAL ENGINEERING CO. LTD 	BUILDING DESIGN AUTHORITY (P) LTD IN JOINT VENTURE WITH B.N. CONSULTANCY PVT. LTD AND PLUS ENGINEERS & ARCHITECTS (P) LTD, KATHMANDU, NEPAL
Checked By Engineer	Submitted By Contract Manager
	
Verified By Qty Engineer/CSE	Approved By Team Leader
	



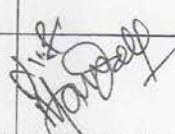
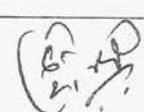
**REGIONAL URBAN DEVELOPMENT PROJECT**

**Biratnagar Metropolitan City**

**Contract No:- RUDP/ICB/BRT-02**

**Summary Sheet of Mortar Test Report**

S.N.	Location	Lab Ref.no.	Type of Cement	Brand of Cement	Source of Sand	Date of Casting	Month		September		Type of Grade
							- Year		2018		
							Description of Sample		Brick Wall		
							Date of Testing		Strength, N/mm <sup>2</sup>		
7 Days	28 Days	7 Days	28 Days								
179	T3L11K	MR-528	Salimar	OPC	Chisang Khola	5-Sep-18	12-Sep-18	3-Oct-18	5.87		7.5
180	R-85	MR-529	Salimar	OPC	Chisang Khola	5-Sep-18	12-Sep-18	3-Oct-18	6.40		7.5
181	R-87	MR-530	Salimar	OPC	Chisang Khola	5-Sep-18	12-Sep-18	3-Oct-18	5.33		7.5
182	R-12	MR-531	Salimar	OPC	Chisang Khola	6-Sep-18	13-Sep-18	4-Oct-18	6.54		7.5
183	R-84	MR-532	Salimar	OPC	Chisang Khola	6-Sep-18	13-Sep-18	4-Oct-18	6.00		7.5
184	R-83	MR-533	Salimar	OPC	Chisang Khola	6-Sep-18	13-Sep-18	4-Oct-18	5.33		7.5
185	R-83	MR-534	Salimar	OPC	Chisang Khola	6-Sep-18	13-Sep-18	4-Oct-18	5.60		7.5
186	T3L18A	MR-535	Salimar	OPC	Chisang Khola	6-Sep-18	13-Sep-18	4-Oct-18	6.54		7.5
187	R-45	MR-536	Salimar	OPC	Chisang Khola	6-Sep-18	13-Sep-18	4-Oct-18	6.00		7.5
188	R-7	MR-537	Salimar	OPC	Chisang Khola	7-Sep-18	14-Sep-18	5-Oct-18	6.67		7.5
189	T3L21	MR-538	Salimar	OPC	Chisang Khola	7-Sep-18	14-Sep-18	5-Oct-18	5.33		7.5
190	T3L39A	MR-539	Salimar	OPC	Chisang Khola	7-Sep-18	14-Sep-18	5-Oct-18	6.67		7.5
191	R-87	MR-540	Salimar	OPC	Chisang Khola	7-Sep-18	14-Sep-18	5-Oct-18	5.87		7.5
192	R-85	MR-541	Salimar	OPC	Chisang Khola	7-Sep-18	14-Sep-18	5-Oct-18	6.27		7.5
193	T3L11K	MR-542	Salimar	OPC	Chisang Khola	7-Sep-18	14-Sep-18	5-Oct-18	5.87		7.5
194	T3L18A	MR-543	Salimar	OPC	Chisang Khola	7-Sep-18	14-Sep-18	5-Oct-18	6.27		7.5
195	R-12	MR-544	Salimar	OPC	Chisang Khola	7-Sep-18	14-Sep-18	5-Oct-18	5.87		7.5
196	R-84	MR-545	Salimar	OPC	Chisang Khola	7-Sep-18	14-Sep-18	5-Oct-18	6.54		7.5
197	R-45	MR-546	Salimar	OPC	Chisang Khola	7-Sep-18	14-Sep-18	5-Oct-18	5.74		7.5
198	R-12	MR-547	Salimar	OPC	Chisang Khola	7-Sep-18	14-Sep-18	5-Oct-18	5.33		7.5
199	R-83	MR-548	Salimar	OPC	Chisang Khola	7-Sep-18	14-Sep-18	5-Oct-18	6.27		7.5
200	T3L18B	MR-549	Salimar	OPC	Chisang Khola	7-Sep-18	14-Sep-18	5-Oct-18	5.74		7.5
201	R-7	MR-550	Salimar	OPC	Chisang Khola	7-Sep-18	14-Sep-18	5-Oct-18	6.54		7.5
202	T3L21	MR-551	Salimar	OPC	Chisang Khola	7-Sep-18	14-Sep-18	5-Oct-18	6.94		7.5
203	T3L39A	MR-552	Salimar	OPC	Chisang Khola	7-Sep-18	14-Sep-18	5-Oct-18	5.33		7.5
204	R-84	MR-553	Salimar	OPC	Chisang Khola	7-Sep-18	14-Sep-18	5-Oct-18	6.27		7.5
205	R-87	MR-554	Salimar	OPC	Chisang Khola	7-Sep-18	14-Sep-18	5-Oct-18	5.47		7.5
206	R-85	MR-555	Salimar	OPC	Chisang Khola	7-Sep-18	14-Sep-18	5-Oct-18	6.54		7.5
207	T3L11K	MR-556	Salimar	OPC	Chisang Khola	8-Sep-18	15-Sep-18	6-Oct-18	6.00		7.5
208	T3L18A	MR-557	Salimar	OPC	Chisang Khola	8-Sep-18	15-Sep-18	6-Oct-18	6.54		7.5
209	R-12	MR-558	Salimar	OPC	Chisang Khola	13-Sep-18	20-Sep-18	11-Oct-18	5.87		7.5
210	R-83	MR-559	Salimar	OPC	Chisang Khola	13-Sep-18	20-Sep-18	11-Oct-18	5.74		7.5
211	T3L18B	MR-560	Salimar	OPC	Chisang Khola	13-Sep-18	20-Sep-18	11-Oct-18	6.67		7.5
212	R-7	MR-561	Salimar	OPC	Chisang Khola	13-Sep-18	20-Sep-18	11-Oct-18	5.60		7.5
213	T3L212	MR-562	Salimar	OPC	Chisang Khola	13-Sep-18	20-Sep-18	11-Oct-18	5.74		7.5
214	T3L39	MR-563	Salimar	OPC	Chisang Khola	8-Sep-18	15-Sep-18	6-Oct-18	6.54		7.5

<b>Contractor</b>		<b>Consultant</b>	
ZHONGHENG CONSTRUCTION GROUP INTERNATIONAL ENGINEERING CO. LTD		BUILDING DESIGN AUTHORITY (P) LTD IN JOINT VENTURE WITH B.N. CONSULTANCY PVT. LTD AND PLUS ENGINEERS & ARCHITECTS (P) LTD, KATHMANDU, NEPAL	
 Checked By Engineer	 Submitted By Contract Manager	 Verified By Qty Engineer/CSE	 Approved By Team Leader



**REGIONAL URBAN DEVELOPMENT PROJECT**

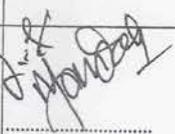
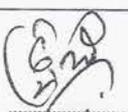
**Biratnagar Metropolitan City**

**Contract No:- RUDP/ICB/BRT-02**

**Summary Sheet of Mortar Test Report**

S.N.	Location	Lab Ref.no.	Type of Cement	Brand of Cement	Source of Sand	Date of Casting	Month		September		Type of Grade		
							-Year		2018				
							Description of Sample					Brick Wall	
							Date of Testing		Strength, N/mm <sup>2</sup>				
7 Days	28 Days	7 Days	28 Days										
215	R-84	MR-564	Salimar	OPC	Chisang Khola	8-Sep-18	15-Sep-18	6-Oct-18	5.87		7.5		
216	R-87	MR-565	Salimar	OPC	Chisang Khola	8-Sep-18	15-Sep-18	6-Oct-18	6.67		7.5		
217	R-85	MR-566	Salimar	OPC	Chisang Khola	8-Sep-18	15-Sep-18	6-Oct-18	6.14		7.5		
218	T3L11K	MR-567	Salimar	OPC	Chisang Khola	8-Sep-18	15-Sep-18	6-Oct-18	5.87		7.5		
219	T3L18A	MR-568	Salimar	OPC	Chisang Khola	8-Sep-18	15-Sep-18	6-Oct-18	5.60		7.5		
220	R-12	MR-569	Salimar	OPC	Chisang Khola	8-Sep-18	15-Sep-18	6-Oct-18	6.40		7.5		
221	R-83	MR-570	Salimar	OPC	Chisang Khola	8-Sep-18	15-Sep-18	6-Oct-18	6.80		7.5		
222	T3L18B	MR-571	Salimar	OPC	Chisang Khola	8-Sep-18	15-Sep-18	6-Oct-18	6.00		7.5		
223	R-7	MR-572	Salimar	OPC	Chisang Khola	8-Sep-18	15-Sep-18	6-Oct-18	5.87		7.5		
224	T3L21	MR-573	Salimar	OPC	Chisang Khola	8-Sep-18	15-Sep-18	6-Oct-18	6.54		7.5		
225	T3L39A	MR-574	Salimar	OPC	Chisang Khola	8-Sep-18	15-Sep-18	6-Oct-18	5.87		7.5		
226	R-84	MR-575	Salimar	OPC	Chisang Khola	8-Sep-18	15-Sep-18	6-Oct-18	6.14		7.5		
227	R-87	MR-576	Salimar	OPC	Chisang Khola	9-Sep-18	16-Sep-18	7-Oct-18	5.47		7.5		
228	R-85	MR-577	Salimar	OPC	Chisang Khola	9-Sep-18	16-Sep-18	7-Oct-18	6.40		7.5		
229	T3L11K	MR-578	Salimar	OPC	Chisang Khola	9-Sep-18	16-Sep-18	7-Oct-18	5.87		7.5		
230	B2-1	MR-579	Salimar	OPC	Chisang Khola	9-Sep-18	16-Sep-18	7-Oct-18	6.27		7.5		
231	T3L18A	MR-580	Salimar	OPC	Chisang Khola	9-Sep-18	16-Sep-18	7-Oct-18	5.74		7.5		
232	R-12	MR-581	Salimar	OPC	Chisang Khola	9-Sep-18	16-Sep-18	7-Oct-18	6.40		7.5		
233	R-83	MR-582	Salimar	OPC	Chisang Khola	9-Sep-18	16-Sep-18	7-Oct-18	5.87		7.5		
234	T3L18B	MR-583	Salimar	OPC	Chisang Khola	9-Sep-18	16-Sep-18	7-Oct-18	6.27		7.5		
235	R-7	MR-584	Salimar	OPC	Chisang Khola	9-Sep-18	16-Sep-18	7-Oct-18	5.47		7.5		
236	T3L21	MR-585	Salimar	OPC	Chisang Khola	9-Sep-18	16-Sep-18	7-Oct-18	6.40		7.5		
237	R-85	MR-586	Salimar	OPC	Chisang Khola	9-Sep-18	16-Sep-18	7-Oct-18	5.47		7.5		
238	R-87	MR-587	Salimar	OPC	Chisang Khola	9-Sep-18	16-Sep-18	7-Oct-18	6.40		7.5		
239	R-45	MR-588	Salimar	OPC	Chisang Khola	9-Sep-18	16-Sep-18	7-Oct-18	5.60		7.5		
240	R-7	MR-589	Salimar	OPC	Chisang Khola	9-Sep-18	16-Sep-18	7-Oct-18	6.54		7.5		
241	R-85	MR-590	Salimar	OPC	Chisang Khola	9-Sep-18	16-Sep-18	7-Oct-18	5.87		7.5		
242	R-12	MR-591	Salimar	OPC	Chisang Khola	9-Sep-18	16-Sep-18	7-Oct-18	6.00		7.5		
243	R-83	MR-592	Salimar	OPC	Chisang Khola	9-Sep-18	16-Sep-18	7-Oct-18	6.40		7.5		
244	T3L18B	MR-593	Salimar	OPC	Chisang Khola	9-Sep-18	16-Sep-18	7-Oct-18	5.47		7.5		
245	R-84	MR-594	Salimar	OPC	Chisang Khola	9-Sep-18	16-Sep-18	7-Oct-18	5.33		7.5		
246	T3L11K	MR-595	Salimar	OPC	Chisang Khola	9-Sep-18	16-Sep-18	7-Oct-18	6.40		7.5		
247	T3L111	MR-596	Salimar	OPC	Chisang Khola	10-Sep-18	17-Sep-18	8-Oct-18	5.47		7.5		
248	R-7	MR-597	Salimar	OPC	Chisang Khola	10-Sep-18	17-Sep-18	8-Oct-18	6.00		7.5		
249	R-84	MR-598	Salimar	OPC	Chisang Khola	10-Sep-18	17-Sep-18	8-Oct-18	6.27		7.5		
250	T3L21	MR-599	Salimar	OPC	Chisang Khola	10-Sep-18	17-Sep-18	8-Oct-18	5.87		7.5		

<b>Contractor</b>	<b>Consultant</b>
ZHONGHENG CONSTRUCTION GROUP INTERNATIONAL ENGINEERING CO. LTD 	BUILDING DESIGN AUTHORITY (P) LTD IN JOINT VENTURE WITH B.N. CONSULTANCY PVT. LTD AND PLUS ENGINEERS & ARCHITECTS (P) LTD, KATHMANDU, NEPAL
 Checked By Engineer	 Submitted By Contract Manager
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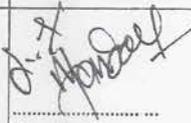
**REGIONAL URBAN DEVELOPMENT PROJECT**

**Biratnagar Metropolitan City**

**Contract No:- RUDP/ICB/BRT-02**

**Summary Sheet of Mortar Test Report**

							Month		September		
							-Year		2018		
							Description of Sample		Brick Wall		
S.N.	Location	Lab Ref.no.	Type of Cement	Brand of Cement	Source of Sand	Date of Casting	Date of Testing		Strength, N/mm <sup>2</sup>		Type of Grade
							7 Days	28 Days	7 Days	28 Days	
251	T3L39A	MR-600	Salimar	OPC	Chisang Khola	10-Sep-18	17-Sep-18	8-Oct-18	6.27		7.5
252	R-12	MR-601	Salimar	OPC	Chisang Khola	10-Sep-18	17-Sep-18	8-Oct-18	6.54		7.5
253	R-83	MR-602	Salimar	OPC	Chisang Khola	10-Sep-18	17-Sep-18	8-Oct-18	5.47		7.5
254	T3L18A	MR-603	Salimar	OPC	Chisang Khola	10-Sep-18	17-Sep-18	8-Oct-18	6.54		7.5
255	R-84	MR-604	Salimar	OPC	Chisang Khola	10-Sep-18	17-Sep-18	8-Oct-18	5.87		7.5
256	R-87	MR-605	Salimar	OPC	Chisang Khola	10-Sep-18	17-Sep-18	8-Oct-18	6.67		7.5
257	R-7	MR-606	Salimar	OPC	Chisang Khola	10-Sep-18	17-Sep-18	8-Oct-18	5.60		7.5
258	R-85	MR-607	Salimar	OPC	Chisang Khola	10-Sep-18	17-Sep-18	8-Oct-18	6.00		7.5
259	R-12	MR-608	Salimar	OPC	Chisang Khola	10-Sep-18	17-Sep-18	8-Oct-18	6.00		7.5
260	R-83	MR-609	Salimar	OPC	Chisang Khola	10-Sep-18	17-Sep-18	8-Oct-18	6.40		7.5
261	R-12	MR-610	Salimar	OPC	Chisang Khola	10-Sep-18	17-Sep-18	8-Oct-18	5.33		7.5
262	T3L18A	MR-611	Salimar	OPC	Chisang Khola	10-Sep-18	17-Sep-18	8-Oct-18	6.40		7.5
263	R-7	MR-612	Salimar	OPC	Chisang Khola	10-Sep-18	17-Sep-18	8-Oct-18	6.54		7.5
264	T3L21	MR-613	Salimar	OPC	Chisang Khola	10-Sep-18	17-Sep-18	8-Oct-18	5.74		7.5
265	T3L39A	MR-614	Salimar	OPC	Chisang Khola	10-Sep-18	17-Sep-18	8-Oct-18	5.87		7.5
266	R-84	MR-615	Salimar	OPC	Chisang Khola	10-Sep-18	17-Sep-18	8-Oct-18	6.27		7.5
267	R-87	MR-616	Salimar	OPC	Chisang Khola	10-Sep-18	17-Sep-18	8-Oct-18	6.40		7.5
268	R-85	MR-617	Salimar	OPC	Chisang Khola	11-Sep-18	18-Sep-18	9-Oct-18	5.74		7.5
269	T3L18A	MR-618	Salimar	OPC	Chisang Khola	11-Sep-18	18-Sep-18	9-Oct-18	6.14		7.5
270	T3L11K	MR-619	Salimar	OPC	Chisang Khola	11-Sep-18	18-Sep-18	9-Oct-18	6.27		7.5
271	R-12	MR-620	Salimar	OPC	Chisang Khola	11-Sep-18	18-Sep-18	9-Oct-18	5.60		7.5
272	R-83	MR-621	Salimar	OPC	Chisang Khola	11-Sep-18	18-Sep-18	9-Oct-18	6.67		7.5
273	R-45	MR-622	Salimar	OPC	Chisang Khola	11-Sep-18	18-Sep-18	9-Oct-18	6.67		7.5
274	T3L18A	MR-623	Salimar	OPC	Chisang Khola	11-Sep-18	18-Sep-18	9-Oct-18	6.80		7.5
275	R-12	MR-624	Salimar	OPC	Chisang Khola	11-Sep-18	18-Sep-18	9-Oct-18	5.74		7.5
276	R-87	MR-625	Salimar	OPC	Chisang Khola	11-Sep-18	18-Sep-18	9-Oct-18	6.27		7.5
278	R-83	MR-626	Salimar	OPC	Chisang Khola	11-Sep-18	18-Sep-18	9-Oct-18	6.27		7.5
279	T3L11K	MR-627	Salimar	OPC	Chisang Khola	11-Sep-18	18-Sep-18	9-Oct-18	5.87		7.5
280	R-87	MR-628	Salimar	OPC	Chisang Khola	11-Sep-18	18-Sep-18	9-Oct-18	6.67		7.5
281	R-45	MR-629	Salimar	OPC	Chisang Khola	11-Sep-18	18-Sep-18	9-Oct-18	6.67		7.5
282	T3L18A	MR-630	Salimar	OPC	Chisang Khola	11-Sep-18	18-Sep-18	9-Oct-18	5.60		7.5
283	R-87	MR-631	Salimar	OPC	Chisang Khola	11-Sep-18	18-Sep-18	9-Oct-18	6.94		7.5
284	R-83	MR-632	Salimar	OPC	Chisang Khola	11-Sep-18	18-Sep-18	9-Oct-18	6.00		7.5
285	R-12	MR-633	Salimar	OPC	Chisang Khola	11-Sep-18	18-Sep-18	9-Oct-18	6.27		7.5
286	R-7	MR-634	Salimar	OPC	Chisang Khola	12-Sep-18	19-Sep-18	10-Oct-18	6.54		7.5
287	R-45	MR-635	Salimar	OPC	Chisang Khola	12-Sep-18	19-Sep-18	10-Oct-18	5.60		7.5

<b>Contractor</b>		<b>Consultant</b>	
ZHONGHENG CONSTRUCTION GROUP INTERNATIONAL ENGINEERING CO. LTD		BUILDING DESIGN AUTHORITY (P) LTD IN JOINT VENTURE WITH B.N. CONSULTANCY PVT. LTD AND PLUS ENGINEERS & ARCHITECTS (P) LTD, KATHMANDU, NEPAL	
 Checked By Engineer	 Submitted By Contract Manager	 Verified By Qty Engineer/CSE	 Approved By Team Leader



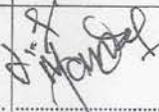
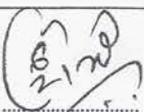
**REGIONAL URBAN DEVELOPMENT PROJECT**

**Biratnagar Metropolitan City**

**Contract No:- RUDP/ICB/BRT-02**

**Summary Sheet of Mortar Test Report**

S.N.	Location	Lab Ref.no.	Type of Cement	Brand of Cement	Source of Sand	Date of Casting	Month		September		Type of Grade
							Year		2018		
							Description of Sample		Brick Wall		
Date of Testing		Strength, N/mm <sup>2</sup>		7 Days	28 Days	7 Days	28 Days				
288	T3L11K	MR-636	Salimar					OPC	Chisang Khola	12-Sep-18	19-Sep-18
289	T3L18A	MR-637	Salimar	OPC	Chisang Khola	12-Sep-18	19-Sep-18	10-Oct-18	6.40		7.5
290	T3L18B	MR-638	Salimar	OPC	Chisang Khola	12-Sep-18	19-Sep-18	10-Oct-18	6.40		7.5
291	R-7	MR-639	Salimar	OPC	Chisang Khola	12-Sep-18	19-Sep-18	10-Oct-18	6.14		7.5
292	T3L39A	MR-640	Salimar	OPC	Chisang Khola	12-Sep-18	19-Sep-18	10-Oct-18	6.27		7.5
293	R-87	MR-641	Salimar	OPC	Chisang Khola	12-Sep-18	19-Sep-18	10-Oct-18	5.60		7.5
294	R-85	MR-642	Salimar	OPC	Chisang Khola	12-Sep-18	19-Sep-18	10-Oct-18	6.40		7.5
295	R-12	MR-643	Salimar	OPC	Chisang Khola	12-Sep-18	19-Sep-18	10-Oct-18	5.87		7.5
296	R-84	MR-644	Salimar	OPC	Chisang Khola	12-Sep-18	19-Sep-18	10-Oct-18	5.33		7.5
297	R-7	MR-645	Salimar	OPC	Chisang Khola	12-Sep-18	19-Sep-18	10-Oct-18	6.40		7.5
298	R-83	MR-646	Salimar	OPC	Chisang Khola	12-Sep-18	19-Sep-18	10-Oct-18	5.60		7.5
299	R-85	MR-647	Salimar	OPC	Chisang Khola	12-Sep-18	19-Sep-18	10-Oct-18	6.40		7.5
300	R-12	MR-648	Salimar	OPC	Chisang Khola	12-Sep-18	19-Sep-18	10-Oct-18	5.60		7.5
301	T3L11K	MR-649	Salimar	OPC	Chisang Khola	12-Sep-18	19-Sep-18	10-Oct-18	6.27		7.5
302	R-87	MR-650	Salimar	OPC	Chisang Khola	12-Sep-18	19-Sep-18	10-Oct-18	5.60		7.5
303	R-83	MR-651	Salimar	OPC	Chisang Khola	12-Sep-18	19-Sep-18	10-Oct-18	6.14		7.5
304	T3L18A	MR-652	Salimar	OPC	Chisang Khola	12-Sep-18	19-Sep-18	10-Oct-18	6.54		7.5
305	R-84	MR-653	Salimar	OPC	Chisang Khola	13-Sep-18	20-Sep-18	11-Oct-18	5.87		7.5
306	R-45	MR-654	Salimar	OPC	Chisang Khola	13-Sep-18	20-Sep-18	11-Oct-18	6.40		7.5
307	T3L18A	MR-655	Salimar	OPC	Chisang Khola	13-Sep-18	20-Sep-18	11-Oct-18	6.67		7.5
308	T3L11K	MR-656	Salimar	OPC	Chisang Khola	13-Sep-18	20-Sep-18	11-Oct-18	6.27		7.5
309	T3L18B	MR-657	Salimar	OPC	Chisang Khola	13-Sep-18	20-Sep-18	11-Oct-18	6.67		7.5
310	T3L39A	MR-658	Salimar	OPC	Chisang Khola	13-Sep-18	20-Sep-18	11-Oct-18	6.14		7.5
311	R-87	MR-659	Salimar	OPC	Chisang Khola	13-Sep-18	20-Sep-18	11-Oct-18	6.00		7.5
312	R-85	MR-660	Salimar	OPC	Chisang Khola	13-Sep-18	20-Sep-18	11-Oct-18	6.14		7.5
313	R-45	MR-661	Salimar	OPC	Chisang Khola	13-Sep-18	20-Sep-18	11-Oct-18	6.14		7.5
315	R-12	MR-662	Salimar	OPC	Chisang Khola	13-Sep-18	20-Sep-18	11-Oct-18	6.27		7.5
316	T3L11K	MR-663	Salimar	OPC	Chisang Khola	13-Sep-18	20-Sep-18	11-Oct-18	6.00		7.5
317	R-87	MR-664	Salimar	OPC	Chisang Khola	13-Sep-18	20-Sep-18	11-Oct-18	5.47		7.5
318	R-83	MR-665	Salimar	OPC	Chisang Khola	13-Sep-18	20-Sep-18	11-Oct-18	6.40		7.5
319	T3L11K	MR-666	Salimar	OPC	Chisang Khola	13-Sep-18	20-Sep-18	11-Oct-18	6.27		7.5
320	R-87	MR-667	Salimar	OPC	Chisang Khola	13-Sep-18	20-Sep-18	11-Oct-18	6.14		7.5
321	R-83	MR-668	Salimar	OPC	Chisang Khola	13-Sep-18	20-Sep-18	11-Oct-18	6.54		7.5
322	R-84	MR-669	Salimar	OPC	Chisang Khola	13-Sep-18	20-Sep-18	11-Oct-18	5.47		7.5
323	T3L18A	MR-670	Salimar	OPC	Chisang Khola	13-Sep-18	20-Sep-18	11-Oct-18	6.00		7.5
324	R-45	MR-671	Salimar	OPC	Chisang Khola	13-Sep-18	20-Sep-18	11-Oct-18	6.54		7.5

<b>Contractor</b>		<b>Consultant</b>	
ZHONGHENG CONSTRUCTION GROUP INTERNATIONAL ENGINEERING CO. LTD 		BUILDING DESIGN AUTHORITY (P) LTD IN JOINT VENTURE WITH B.N. CONSULTANCY PVT. LTD AND PLUS ENGINEERS & ARCHITECTS (P) LTD, KATHMANDU, NEPAL	
 ..... Checked By Engineer	 ..... Submitted By Contract Manager	 ..... Verified By Qty Engineer/CSE	 ..... Approved By Team Leader



**REGIONAL URBAN DEVELOPMENT PROJECT**

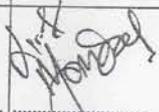
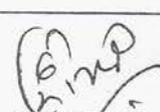
**Biratnagar Metropolitan City**

**Contract No:- RUDP/ICB/BRT-02**

**Summary Sheet of Mortar Test Report**

S.N.	Location	Lab Ref.no.	Type of Cement	Brand of Cement	Source of Sand	Date of Casting	Month		September		Type of Grade
							-Year		2018		
							Description of Sample		Brick Wall		
							Date of Testing		Strength, N/mm <sup>2</sup>		
7 Days	28 Days	7 Days	28 Days								
325	T3L18A	MR-672	Salimar	OPC	Chisang Khola	14-Sep-18	21-Sep-18	12-Oct-18	5.74		7.5
326	T3L11K	MR-673	Salimar	OPC	Chisang Khola	14-Sep-18	21-Sep-18	12-Oct-18	6.40		7.5
327	T3L39A	MR-674	Salimar	OPC	Chisang Khola	14-Sep-18	21-Sep-18	12-Oct-18	6.54		7.5
328	R-87	MR-675	Salimar	OPC	Chisang Khola	14-Sep-18	21-Sep-18	12-Oct-18	5.87		7.5
329	R-85	MR-676	Salimar	OPC	Chisang Khola	14-Sep-18	21-Sep-18	12-Oct-18	6.00		7.5
330	R-12	MR-677	Salimar	OPC	Chisang Khola	14-Sep-18	21-Sep-18	12-Oct-18	5.47		7.5
331	R-84	MR-678	Salimar	OPC	Chisang Khola	14-Sep-18	21-Sep-18	12-Oct-18	5.87		7.5
332	R-83	MR-679	Salimar	OPC	Chisang Khola	14-Sep-18	21-Sep-18	12-Oct-18	6.27		7.5
333	R-85	MR-680	Salimar	OPC	Chisang Khola	14-Sep-18	21-Sep-18	12-Oct-18	6.00		7.5
334	R-12	MR-681	Salimar	OPC	Chisang Khola	14-Sep-18	21-Sep-18	12-Oct-18	5.47		7.5
335	T3L11K	MR-682	Salimar	OPC	Chisang Khola	14-Sep-18	21-Sep-18	12-Oct-18	6.40		7.5
336	R-87	MR-683	Salimar	OPC	Chisang Khola	14-Sep-18	21-Sep-18	12-Oct-18	6.00		7.5
337	R-83	MR-684	Salimar	OPC	Chisang Khola	14-Sep-18	21-Sep-18	12-Oct-18	6.40		7.5
338	R-7	MR-685	Salimar	OPC	Chisang Khola	14-Sep-18	21-Sep-18	12-Oct-18	6.27		7.5
339	R-84	MR-686	Salimar	OPC	Chisang Khola	14-Sep-18	21-Sep-18	12-Oct-18	5.47		7.5
340	R-45	MR-687	Salimar	OPC	Chisang Khola	15-Sep-18	22-Sep-18	13-Oct-18	6.67		7.5
341	T3L18A	MR-688	Salimar	OPC	Chisang Khola	15-Sep-18	22-Sep-18	13-Oct-18	6.14		7.5
342	T3L11K	MR-689	Salimar	OPC	Chisang Khola	15-Sep-18	22-Sep-18	13-Oct-18	6.67		7.5
343	T3L18A	MR-690	Salimar	OPC	Chisang Khola	15-Sep-18	22-Sep-18	13-Oct-18	5.60		7.5
344	T3L39A	MR-691	Salimar	OPC	Chisang Khola	15-Sep-18	22-Sep-18	13-Oct-18	6.00		7.5
345	R-87	MR-692	Salimar	OPC	Chisang Khola	15-Sep-18	22-Sep-18	13-Oct-18	5.33		7.5
346	R-85	MR-693	Salimar	OPC	Chisang Khola	15-Sep-18	22-Sep-18	13-Oct-18	6.40		7.5
347	R-12	MR-694	Salimar	OPC	Chisang Khola	15-Sep-18	22-Sep-18	13-Oct-18	5.47		7.5
348	R-84	MR-695	Salimar	OPC	Chisang Khola	15-Sep-18	22-Sep-18	13-Oct-18	6.67		7.5
349	R-83	MR-696	Salimar	OPC	Chisang Khola	15-Sep-18	22-Sep-18	13-Oct-18	5.60		7.5
350	R-85	MR-697	Salimar	OPC	Chisang Khola	15-Sep-18	22-Sep-18	13-Oct-18	6.40		7.5
352	R-45	MR-698	Salimar	OPC	Chisang Khola	15-Sep-18	22-Sep-18	13-Oct-18	5.87		7.5
353	R-12	MR-699	Salimar	OPC	Chisang Khola	15-Sep-18	22-Sep-18	13-Oct-18	6.00		7.5
354	T3L11K	MR-700	Salimar	OPC	Chisang Khola	15-Sep-18	22-Sep-18	13-Oct-18	6.40		7.5
355	R-87	MR-701	Salimar	OPC	Chisang Khola	15-Sep-18	22-Sep-18	13-Oct-18	5.74		7.5
356	R-83	MR-702	Salimar	OPC	Chisang Khola	15-Sep-18	22-Sep-18	13-Oct-18	6.67		7.5
357	R-7	MR-703	Salimar	OPC	Chisang Khola	15-Sep-18	22-Sep-18	13-Oct-18	5.74		7.5
358	R-84	MR-704	Salimar	OPC	Chisang Khola	15-Sep-18	22-Sep-18	13-Oct-18	5.47		7.5
359	R-45	MR-705	Salimar	OPC	Chisang Khola	16-Sep-18	23-Sep-18	14-Oct-18	6.00		7.5
360	T3L11K	MR-706	Salimar	OPC	Chisang Khola	16-Sep-18	23-Sep-18	14-Oct-18	6.40		7.5
361	T3L18A	MR-707	Salimar	OPC	Chisang Khola	16-Sep-18	23-Sep-18	14-Oct-18	6.14		7.5

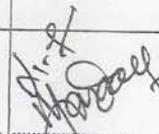
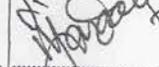
<b>Contractor</b>	<b>Consultant</b>
ZHONGHENG CONSTRUCTION GROUP INTERNATIONAL ENGINEERING CO. LTD	BUILDING DESIGN AUTHORITY (P) LTD IN JOINT VENTURE WITH B.N. CONSULTANCY PVT. LTD AND PLUS ENGINEERS & ARCHITECTS (P) LTD, KATHMANDU, NEPAL
 Checked By Engineer	 Submitted By Contract Manager
 Verified By Qty Engineer/CSE	 Approved By Team Leader



## REGIONAL URBAN DEVELOPMENT PROJECT

**Biratnagar Metropolitan City**  
**Contract No:- RUDP/ICB/BRT-02**  
**Summary Sheet of Mortar Test Report**

S.N.	Location	Lab Ref.no.	Type of Cement	Brand of Cement	Source of Sand	Date of Casting	Month		September		Type of Grade		
							- Year		2018				
							Description of Sample					Brick Wall	
							Date of Testing		Strength, N/mm <sup>2</sup>				
7 Days	28 Days	7 Days	28 Days										
362	T3L18B	MR-708	Salimar	OPC	Chisang Khola	16-Sep-18	23-Sep-18	14-Oct-18	6.14		7.5		
363	R-7	MR-709	Salimar	OPC	Chisang Khola	16-Sep-18	23-Sep-18	14-Oct-18	6.00		7.5		
364	R-87	MR-710	Salimar	OPC	Chisang Khola	16-Sep-18	23-Sep-18	14-Oct-18	5.47		7.5		
365	R-85	MR-711	Salimar	OPC	Chisang Khola	16-Sep-18	23-Sep-18	14-Oct-18	5.74		7.5		
366	R-12	MR-712	Salimar	OPC	Chisang Khola	16-Sep-18	23-Sep-18	14-Oct-18	6.40		7.5		
367	R-84	MR-713	Salimar	OPC	Chisang Khola	16-Sep-18	23-Sep-18	14-Oct-18	6.67		7.5		
368	R-83	MR-714	Salimar	OPC	Chisang Khola	16-Sep-18	23-Sep-18	14-Oct-18	5.47		7.5		
369	R-85	MR-715	Salimar	OPC	Chisang Khola	16-Sep-18	23-Sep-18	14-Oct-18	6.54		7.5		
370	R-45	MR-716	Salimar	OPC	Chisang Khola	16-Sep-18	23-Sep-18	14-Oct-18	6.27		7.5		
371	R-12	MR-717	Salimar	OPC	Chisang Khola	16-Sep-18	23-Sep-18	14-Oct-18	6.00		7.5		
372	T3L11K	MR-718	Salimar	OPC	Chisang Khola	16-Sep-18	23-Sep-18	14-Oct-18	6.54		7.5		
373	R-87	MR-719	Salimar	OPC	Chisang Khola	16-Sep-18	23-Sep-18	14-Oct-18	6.14		7.5		
374	R-83	MR-720	Salimar	OPC	Chisang Khola	16-Sep-18	23-Sep-18	14-Oct-18	5.87		7.5		
375	R-7	MR-721	Salimar	OPC	Chisang Khola	16-Sep-18	23-Sep-18	14-Oct-18	6.14		7.5		
376	R-84	MR-722	Salimar	OPC	Chisang Khola	16-Sep-18	23-Sep-18	14-Oct-18	6.54		7.5		
377	R-45	MR-723	Salimar	OPC	Chisang Khola	16-Sep-18	23-Sep-18	14-Oct-18	5.33		7.5		
378	R-84	MR-724	Salimar	OPC	Chisang Khola	17-Sep-18	24-Sep-18	15-Oct-18	6.54		7.5		
379	R-7	MR-725	Salimar	OPC	Chisang Khola	17-Sep-18	24-Sep-18	15-Oct-18	5.60		7.5		
380	R-83	MR-726	Salimar	OPC	Chisang Khola	17-Sep-18	24-Sep-18	15-Oct-18	6.67		7.5		
381	R-87	MR-727	Salimar	OPC	Chisang Khola	17-Sep-18	24-Sep-18	15-Oct-18	5.87		7.5		
382	T3L11K	MR-728	Salimar	OPC	Chisang Khola	17-Sep-18	24-Sep-18	15-Oct-18	5.74		7.5		
383	R-12	MR-729	Salimar	OPC	Chisang Khola	17-Sep-18	24-Sep-18	15-Oct-18	6.27		7.5		
384	R-45	MR-730	Salimar	OPC	Chisang Khola	17-Sep-18	24-Sep-18	15-Oct-18	6.14		7.5		
385	R-85	MR-731	Salimar	OPC	Chisang Khola	17-Sep-18	24-Sep-18	15-Oct-18	5.47		7.5		
386	R-83	MR-732	Salimar	OPC	Chisang Khola	17-Sep-18	24-Sep-18	15-Oct-18	5.74		7.5		
387	R-12	MR-733	Salimar	OPC	Chisang Khola	17-Sep-18	24-Sep-18	15-Oct-18	6.67		7.5		
389	R-83	MR-734	Salimar	OPC	Chisang Khola	17-Sep-18	24-Sep-18	15-Oct-18	5.47		7.5		
390	R-12	MR-735	Salimar	OPC	Chisang Khola	17-Sep-18	24-Sep-18	15-Oct-18	6.54		7.5		
391	R-87	MR-736	Salimar	OPC	Chisang Khola	17-Sep-18	24-Sep-18	15-Oct-18	5.87		7.5		
392	T3L11K	MR-737	Salimar	OPC	Chisang Khola	17-Sep-18	24-Sep-18	15-Oct-18	6.54		7.5		
393	T3L18A	MR-738	Salimar	OPC	Chisang Khola	17-Sep-18	24-Sep-18	15-Oct-18	6.54		7.5		
394	R-7	MR-739	Salimar	OPC	Chisang Khola	17-Sep-18	24-Sep-18	15-Oct-18	5.60		7.5		
395	R-85	MR-740	Salimar	OPC	Chisang Khola	17-Sep-18	24-Sep-18	15-Oct-18	6.00		7.5		
396	R-45	MR-741	Salimar	OPC	Chisang Khola	18-Sep-18	25-Sep-18	16-Oct-18	6.67		7.5		
397	T3L18A	MR-742	Salimar	OPC	Chisang Khola	18-Sep-18	25-Sep-18	16-Oct-18	6.14		7.5		
398	T3L11K	MR-743	Salimar	OPC	Chisang Khola	18-Sep-18	25-Sep-18	16-Oct-18	5.47		7.5		

<b>Contractor</b>	<b>Consultant</b>
ZHONGHENG CONSTRUCTION GROUP INTERNATIONAL ENGINEERING CO. LTD 	BUILDING DESIGN AUTHORITY (P) LTD IN JOINT VENTURE WITH B.N. CONSULTANCY PVT. LTD AND PLUS ENGINEERS & ARCHITECTS (P) LTD, KATHMANDU, NEPAL
 Checked By Engineer	 Submitted By Contract Manager
 Verified By Qty Engineer/CSE	 Approved By Team Leader



**REGIONAL URBAN DEVELOPMENT PROJECT**

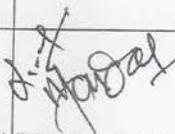
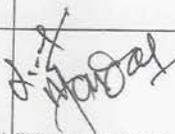
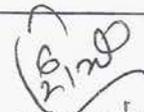
**Biratnagar Metropolitan City**

**Contract No:- RUDP/ICB/BRT-02**

**Summary Sheet of Mortar Test Report**

							Month		September		
							- Year		2018		
S.N.	Location	Lab Ref.no.	Type of Cement	Brand of Cement	Source of Sand	Date of Casting	Description of Sample		Brick Wall		
							Date of Testing		Strength, N/mm <sup>2</sup>		Type of Grade
							7 Days	28 Days	7 Days	28 Days	
399	T3L18B	MR-744	Salimar	OPC	Chisang Khola	18-Sep-18	25-Sep-18	16-Oct-18	5.74	7.5	
400	R-87	MR-745	Salimar	OPC	Chisang Khola	18-Sep-18	25-Sep-18	16-Oct-18	5.60	7.5	
401	R-85	MR-746	Salimar	OPC	Chisang Khola	18-Sep-18	25-Sep-18	16-Oct-18	6.14	7.5	
402	R-12	MR-747	Salimar	OPC	Chisang Khola	18-Sep-18	25-Sep-18	16-Oct-18	5.60	7.5	
403	R-84	MR-748	Salimar	OPC	Chisang Khola	18-Sep-18	25-Sep-18	16-Oct-18	6.00	7.5	
404	R-83	MR-749	Salimar	OPC	Chisang Khola	18-Sep-18	25-Sep-18	16-Oct-18	6.67	7.5	
405	R-85	MR-750	Salimar	OPC	Chisang Khola	18-Sep-18	25-Sep-18	16-Oct-18	5.74	7.5	
406	R-84	MR-751	Salimar	OPC	Chisang Khola	18-Sep-18	25-Sep-18	16-Oct-18	6.54	7.5	
407	R-87	MR-752	Salimar	OPC	Chisang Khola	18-Sep-18	25-Sep-18	16-Oct-18	5.87	7.5	
408	R-7	MR-753	Salimar	OPC	Chisang Khola	18-Sep-18	25-Sep-18	16-Oct-18	6.40	7.5	
409	T3L11K	MR-754	Salimar	OPC	Chisang Khola	18-Sep-18	25-Sep-18	16-Oct-18	5.74	7.5	
410	R-45	MR-755	Salimar	OPC	Chisang Khola	18-Sep-18	25-Sep-18	16-Oct-18	6.67	7.5	
411	R-45	MR-756	Salimar	OPC	Chisang Khola	19-Sep-18	26-Sep-18	17-Oct-18	5.74	7.5	
412	R-7	MR-757	Salimar	OPC	Chisang Khola	19-Sep-18	26-Sep-18	17-Oct-18	6.40	7.5	
413	R-45	MR-758	Salimar	OPC	Chisang Khola	19-Sep-18	26-Sep-18	17-Oct-18	6.67	7.5	
414	R-87	MR-759	Salimar	OPC	Chisang Khola	19-Sep-18	26-Sep-18	17-Oct-18	6.14	7.5	
415	R-85	MR-760	Salimar	OPC	Chisang Khola	19-Sep-18	26-Sep-18	17-Oct-18	6.67	7.5	
416	R-83	MR-761	Salimar	OPC	Chisang Khola	19-Sep-18	26-Sep-18	17-Oct-18	6.80	7.5	
417	B2-2	MR-762	Salimar	OPC	Chisang Khola	19-Sep-18	26-Sep-18	17-Oct-18	5.47	7.5	
418	R-12	MR-763	Salimar	OPC	Chisang Khola	19-Sep-18	26-Sep-18	17-Oct-18	6.67	7.5	
419	R-84	MR-764	Salimar	OPC	Chisang Khola	19-Sep-18	26-Sep-18	17-Oct-18	6.00	7.5	
420	R-7	MR-765	Salimar	OPC	Chisang Khola	19-Sep-18	26-Sep-18	17-Oct-18	5.33	7.5	
421	R-45	MR-766	Salimar	OPC	Chisang Khola	20-Sep-18	27-Sep-18	18-Oct-18	6.67	7.5	
422	R-87	MR-767	Salimar	OPC	Chisang Khola	20-Sep-18	27-Sep-18	18-Oct-18	5.60	7.5	
423	R-85	MR-768	Salimar	OPC	Chisang Khola	20-Sep-18	27-Sep-18	18-Oct-18	6.40	7.5	
424	R-83	MR-769	Salimar	OPC	Chisang Khola	20-Sep-18	27-Sep-18	18-Oct-18	5.87	7.5	
426	R-7	MR-770	Salimar	OPC	Chisang Khola	20-Sep-18	27-Sep-18	18-Oct-18	6.40	7.5	
427	T3L11K	MR-771	Salimar	OPC	Chisang Khola	20-Sep-18	27-Sep-18	18-Oct-18	6.67	7.5	
428	T3L18A	MR-772	Salimar	OPC	Chisang Khola	20-Sep-18	27-Sep-18	18-Oct-18	5.60	7.5	
429	R-84	MR-773	Salimar	OPC	Chisang Khola	20-Sep-18	27-Sep-18	18-Oct-18	6.54	7.5	
430	R-45	MR-774	Salimar	OPC	Chisang Khola	21-Sep-18	28-Sep-18	19-Oct-18	5.33	7.5	
431	R-87	MR-775	Salimar	OPC	Chisang Khola	21-Sep-18	28-Sep-18	19-Oct-18	6.67	7.5	
432	R-85	MR-776	Salimar	OPC	Chisang Khola	21-Sep-18	28-Sep-18	19-Oct-18	5.60	7.5	
433	R-12	MR-777	Salimar	OPC	Chisang Khola	21-Sep-18	28-Sep-18	19-Oct-18	5.87	7.5	
434	R-83	MR-778	Salimar	OPC	Chisang Khola	21-Sep-18	28-Sep-18	19-Oct-18	5.74	7.5	
435	R-7	MR-779	Salimar	OPC	Chisang Khola	21-Sep-18	28-Sep-18	19-Oct-18	5.87	7.5	

<b>Contractor</b>	<b>Consultant</b>
ZHONGHENG CONSTRUCTION GROUP INTERNATIONAL ENGINEERING CO. LTD 	BUILDING DESIGN AUTHORITY (P) LTD IN JOINT VENTURE WITH B.N. CONSULTANCY PVT. LTD AND PLUS ENGINEERS & ARCHITECTS (P) LTD, KATHMANDU, NEPAL 
 Checked By Engineer	 Submitted By Contract Manager
 Verified By Qty Engineer/CSE	 Approved By Team Leader

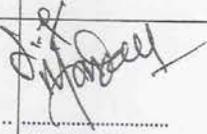
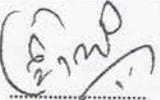


## REGIONAL URBAN DEVELOPMENT PROJECT

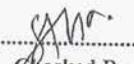
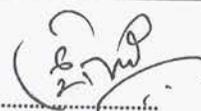
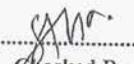
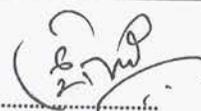
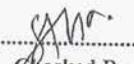
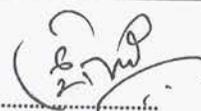
Biratnagar Metropolitan City

Contract No:- RUDP/ICB/BRT-02

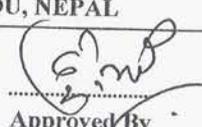
Summary Sheet of Mortar Test Report

							Month		September			
							- Year		2018			
							Description of Sample				Brick Wall	
S.N.	Location	Lab Ref.no.	Type of Cement	Brand of Cement	Source of Sand	Date of Casting	Date of Testing		Strength, N/mm2		Type of Grade	
							7 Days	28 Days	7 Days	28 Days		
							436	T3L11K	MR-780	Salimar		OPC
437	R-45	MR-781	Salimar	OPC	Chisang Khola	22-Sep-18	29-Sep-18	20-Oct-18	6.54		7.5	
438	R-87	MR-782	Salimar	OPC	Chisang Khola	22-Sep-18	29-Sep-18	20-Oct-18	6.54		7.5	
439	R-85	MR-783	Salimar	OPC	Chisang Khola	22-Sep-18	29-Sep-18	20-Oct-18	5.74		7.5	
440	R-83	MR-784	Salimar	OPC	Chisang Khola	22-Sep-18	29-Sep-18	20-Oct-18	6.27		7.5	
441	R-7	MR-785	Salimar	OPC	Chisang Khola	22-Sep-18	29-Sep-18	20-Oct-18	5.47		7.5	
442	T3L11K	MR-786	Salimar	OPC	Chisang Khola	22-Sep-18	29-Sep-18	20-Oct-18	6.14		7.5	
443	T3L18A	MR-787	Salimar	OPC	Chisang Khola	22-Sep-18	29-Sep-18	20-Oct-18	6.00		7.5	
444	R-84	MR-788	Salimar	OPC	Chisang Khola	22-Sep-18	29-Sep-18	20-Oct-18	6.27		7.5	
445	R-7	MR-789	Salimar	OPC	Chisang Khola	22-Sep-18	29-Sep-18	20-Oct-18	5.74		7.5	
446	R-45	MR-790	Salimar	OPC	Chisang Khola	23-Sep-18	30-Sep-18	21-Oct-18	6.67		7.5	
447	R-87	MR-791	Salimar	OPC	Chisang Khola	23-Sep-18	30-Sep-18	21-Oct-18	6.54		7.5	
448	R-85	MR-792	Salimar	OPC	Chisang Khola	23-Sep-18	30-Sep-18	21-Oct-18	6.27		7.5	
449	R-83	MR-793	Salimar	OPC	Chisang Khola	23-Sep-18	30-Sep-18	21-Oct-18	5.60		7.5	
450	R-12	MR-794	Salimar	OPC	Chisang Khola	23-Sep-18	30-Sep-18	21-Oct-18	6.54		7.5	
451	R-83	MR-795	Salimar	OPC	Chisang Khola	23-Sep-18	30-Sep-18	21-Oct-18	5.33		7.5	
452	R-7	MR-796	Salimar	OPC	Chisang Khola	23-Sep-18	30-Sep-18	21-Oct-18	6.54		7.5	
453	R-84	MR-797	Salimar	OPC	Chisang Khola	23-Sep-18	30-Sep-18	21-Oct-18	5.74		7.5	
454	T3L11K	MR-798	Salimar	OPC	Chisang Khola	23-Sep-18	30-Sep-18	21-Oct-18	6.00		7.5	
455	R-12	MR-799	Salimar	OPC	Chisang Khola	23-Sep-18	30-Sep-18	21-Oct-18	6.67		7.5	
456	R-84	MR-800	Salimar	OPC	Chisang Khola	23-Sep-18	30-Sep-18	21-Oct-18	6.14		7.5	
457	R-45	MR-801	Salimar	OPC	Chisang Khola	23-Sep-18	30-Sep-18	21-Oct-18	5.60		7.5	
458	R-7	MR-802	Salimar	OPC	Chisang Khola	23-Sep-18	30-Sep-18	21-Oct-18	6.14		7.5	
459	R-84	MR-803	Salimar	OPC	Chisang Khola	23-Sep-18	30-Sep-18	21-Oct-18	5.33		7.5	
460	R-83	MR-804	Salimar	OPC	Chisang Khola	23-Sep-18	30-Sep-18	21-Oct-18	6.14		7.5	
461	T3L11K	MR-805	Salimar	OPC	Chisang Khola	23-Sep-18	30-Sep-18	21-Oct-18	5.47		7.5	
463	R-83	MR-806	Salimar	OPC	Chisang Khola	23-Sep-18	30-Sep-18	21-Oct-18	6.00		7.5	
464	R-12	MR-807	Salimar	OPC	Chisang Khola	23-Sep-18	30-Sep-18	21-Oct-18	5.60		7.5	
465	R-84	MR-808	Salimar	OPC	Chisang Khola	23-Sep-18	30-Sep-18	21-Oct-18	5.74		7.5	
466	R-45	MR-809	Salimar	OPC	Chisang Khola	23-Sep-18	30-Sep-18	21-Oct-18	6.40		7.5	
467	R-83	MR-810	Salimar	OPC	Chisang Khola	23-Sep-18	30-Sep-18	21-Oct-18	6.27		7.5	
468	R-45	MR-811	Salimar	OPC	Chisang Khola	21-Sep-18	28-Sep-18	19-Oct-18	5.74		7.5	
<b>Contractor</b>						<b>Consultant</b>						
ZHONGHENG CONSTRUCTION GROUP INTERNATIONAL ENGINEERING CO. LTD						BUILDING DESIGN AUTHORITY (P) LTD IN JOINT VENTURE WITH B.N. CONSULTANCY PVT. LTD AND PLUS ENGINEERS & ARCHITECTS (P) LTD, KATHMANDU, NEPAL						
												
Checked By Engineer		Submitted By Contract Manager		Verified By Qty Engineer/CSE		Approved By Team Leader						

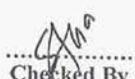
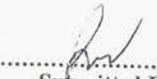
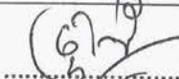


<b>REGIONAL URBAN DEVELOPMENT PROJECT</b>																						
Biratnagar Metropolitan City																						
Contract No:- RUDP/ICB/BRT-02																						
SUMMARY SHEET OF CEMENT TEST																						
											Month		September									
											Year		2018									
S.N.	Lab Ref.no.	Type of cement	Tetsing Date	Consistency & Setting Time			Soundness (mm)	Fineness (%)	Date of Casting	Date of Testing		Strength N/mm <sup>2</sup>		Remarks								
				Normal Cons.(%)	Initial(Min)	Final (min)				7 Days	28 Days	7 days	28 Days									
1	13	Salimar OPC																				
2	14	Salimar OPC						4-Aug-18	11-Aug-18	1-Sep-18		44.45										
3	15	Salimar OPC						8-Aug-18	15-Aug-18	5-Sep-18		45.38										
4	16	Salimar OPC						16-Aug-18	23-Aug-18	13-Sep-18		44.56										
5	17	Salimar OPC						19-Aug-18	26-Aug-18	16-Sep-18		45.48										
6	18	Salimar OPC						21-Aug-18	21-Aug-18	18-Sep-18		45.07										
7	19	Salimar OPC						22-Aug-18	22-Aug-18	19-Sep-18		45.58										
8	20	Salimar OPC						20-Aug-18	23-Aug-18	17-Sep-18		45.79										
9	21	Salimar OPC	3-Sep-18	29.85	103.00	205.00	2.09	3.24	24-Aug-18	31-Aug-18	21-Sep-18		44.76									
10	22	Salimar OPC	8-Sep-18	30.00	98.00	210.00	2.13	4.00	4-Sep-18	22-Aug-18	2-Oct-18	35.52										
11	23	Salimar OPC	15-Sep-18	28.50	121.00	265.00	2.02	3.05	9-Sep-18	23-Aug-18	7-Oct-18	34.90										
12	24	Salimar OPC	22-Sep-18	31.25	117.00	245.00	1.65	2.49	16-Sep-18	23-Aug-18	14-Oct-18	37.14										
Sp.Limit:					Min-30	Max-600	<10	<10	23-Sep-18	30-Sep-18	21-Oct-18	34.72	>33	>43								
<b>Comments:-</b>																						
<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th style="width:50%; text-align: center;">Contractor</th> <th style="width:50%; text-align: center;">Consultant</th> </tr> <tr> <td style="text-align: center;">                     ZHONGHENG CONSTRUCTION GROUP INTERNATIONAL ENGINEERING CO. LTD                 </td> <td style="text-align: center;">                     BUILDING DESIGN AUTHORITY (P) LTD IN JOINT VENTURE WITH B.N. CONSULTANCY PVT. LTD AND PLUS ENGINEERS &amp; ARCHITECTS (P) LTD, KATHMANDU, NEPAL                 </td> </tr> <tr> <td style="text-align: center;">  ..... Checked By Engineer                 </td> <td style="text-align: center;">  ..... Verified By QTY Engineer/CSE                 </td> </tr> <tr> <td style="text-align: center;">  ..... Submitted By Contract Manager                 </td> <td style="text-align: center;">  ..... Approved By Team Leader                 </td> </tr> </table>															Contractor	Consultant	ZHONGHENG CONSTRUCTION GROUP INTERNATIONAL ENGINEERING CO. LTD	BUILDING DESIGN AUTHORITY (P) LTD IN JOINT VENTURE WITH B.N. CONSULTANCY PVT. LTD AND PLUS ENGINEERS & ARCHITECTS (P) LTD, KATHMANDU, NEPAL	 ..... Checked By Engineer	 ..... Verified By QTY Engineer/CSE	 ..... Submitted By Contract Manager	 ..... Approved By Team Leader
Contractor	Consultant																					
ZHONGHENG CONSTRUCTION GROUP INTERNATIONAL ENGINEERING CO. LTD	BUILDING DESIGN AUTHORITY (P) LTD IN JOINT VENTURE WITH B.N. CONSULTANCY PVT. LTD AND PLUS ENGINEERS & ARCHITECTS (P) LTD, KATHMANDU, NEPAL																					
 ..... Checked By Engineer	 ..... Verified By QTY Engineer/CSE																					
 ..... Submitted By Contract Manager	 ..... Approved By Team Leader																					



REGIONAL URBAN DEVELOPMENT PROJECT																							
Biratnagar Metropolitan City																							
Contract No:- RUDP/ICB/BRT-02																							
Summary Sheet of Monthly Test Report of Concrete Sand																							
		Month																					
		Year		September 2018																			
		Type of Material		Concrete Sand																			
S.n.	Lab.Ref no.	Date of Test	Location of Sample	Source of Sample	Sieve Size in mm / % Passing by weight								Clay Content%	Remarks									
					10	4.75	2.36	1.18	0.600	0.300	0.150												
1	RUDP-CS-154	1-Sep-18	Madhumara-Yard	Chisang Khola	100.00	96.07	63.90	52.73	27.70	13.94	6.26	1.12											
2	RUDP-CS-155	2-Sep-18	R-2	Chisang Khola	100.00	95.49	67.33	51.30	27.64	13.52	7.45	1.80											
3	RUDP-CS-156	3-Sep-18	R-74	Chisang Khola	100.00	92.73	79.88	59.93	29.92	19.44	4.23	2.01											
4	RUDP-CS-157	4-Sep-18	R-45	Chisang Khola	100.00	94.47	77.04	58.11	29.90	12.46	5.53	1.85											
5	RUDP-CS-158	4-Sep-18	T3L18-A	Chisang Khola	100.00	93.07	72.63	50.69	19.68	12.69	7.00	1.85											
6	RUDP-CS-159	9-Sep-18	R-6	Chisang Khola	100.00	91.45	83.22	48.75	25.59	14.93	8.03	1.77											
7	RUDP-CS-160	10-Sep-18	T3L11K	Chisang Khola	100.00	92.94	83.65	52.31	29.25	16.28	7.49	1.89											
8	RUDP-CS-161	12-Sep-18	Koshi yard	Chisang Khola	100.00	98.33	86.41	65.26	30.73	13.20	7.35	2.09											
9	RUDP-CS-162	15-Sep-18	T3L18B	Chisang Khola	100.00	93.50	76.14	58.12	29.29	14.01	6.29	1.49											
10	RUDP-CS-163	16-Sep-18	T3L39	Chisang Khola	100.00	95.03	65.83	49.48	22.67	16.09	5.75	2.08											
11	RUDP-CS-164	17-Sep-18	R-87	Chisang Khola	100.00	94.62	64.96	55.46	22.48	15.30	5.54	1.12											
12	RUDP-CS-165	18-Sep-18	R-85	Chisang Khola	100.00	93.98	65.72	55.85	20.09	14.30	7.49	2.12											
13	RUDP-CS-166	20-Sep-18	R-12	Chisang Khola	100.00	95.30	68.70	47.20	17.70	11.60	5.25	1.65											
14	RUDP-CS-167	22-Sep-18	R-84	Chisang Khola	100.00	93.52	63.32	43.93	18.70	13.77	6.28	1.98											
15	RUDP-CS-168	24-Sep-18	R-83	Chisang Khola	100.00	94.29	65.36	47.96	20.50	12.68	7.23	1.30											
16	RUDP-CS-169	24-Sep-18	DDC Yard	Chisang Khola	100.00	93.15	61.69	46.37	19.38	13.09	6.75	1.78											
17	RUDP-CS-170	25-Sep-18	Koshi yard	Chisang Khola	100.00	91.48	61.64	44.48	20.64	14.47	7.46	2.11											
18	RUDP-CS-171	25-Sep-18	R-87	Chisang Khola	100.00	93.45	61.95	43.7	19.25	11.44	5.14	1.99											
19	RUDP-CS-172	26-Sep-18	Madhumara-Yard	Chisang Khola	100.00	94.22	63.87	43.94	21.18	12.17	4.81	1.6											
Spec. Limit :					100	90~100	60~95	30~70	15~34	5~20	0~10	<3%											
Contractor						Consultant																	
ZHONGHENG CONSTRUCTION GROUP INTERNATIONAL ENGINEERING CO. LTD						BUILDING DESIGN AUTHORITY (P) LTD IN JOINT VENTURE WITH B.N. CONSULTANCY PVT. LTD AND PLUS ENGINEERS & ARCHITECTS (P) LTD, KATHMANDU, NEPAL																	
 Checked By Engineer						 Submitted By Contract Manager						 Verified By Qty Engineer/CSE						 Approved By Team Leader					



REGIONAL URBAN DEVELOPMENT PROJECT												
Biratnagar Metropolitan City												
Contract No:- RUDP/ICB/BRT-02												
Summary Sheet of Monthly Test Report of 20mm Agg.												
										Month		September
										Year		2018
										Type of Material		20 mm Agg
S.n.	Lab.Ref no.	Date of Testing	Location of Sample	Source of Sample	Sieve Size in mm / % Passing by				L.A.A.%	Fl and EI %	A.I.V.%	Remarks
					40	20	10	4.75				
1	RUDP-CA-154	2-Sep-18	R-2	Chisang Khola	100.00	96.67	35.27	1.71	28.76	20.43/16.69	17.41	
2	RUDP-CA-155	2-Sep-18	Madhumara-Yard	Chisang Khola	100.00	97.47	38.63	0.97	25.10	19.70/16.30	22.59	
3	RUDP-CA-156	3-Sep-18	DDC-Yard	Chisang Khola	100.00	98.37	37.22	1.72	26.96	21.51/19.40	21.67	
4	RUDP-CA-157	4-Sep-18	R-7	Chisang Khola	100.00	97.77	32.54	2.61	25.56	21.01/19.60	22.04	
5	RUDP-CA-158	5-Sep-18	T3L11K	Chisang Khola	100.00	97.32	33.63	3.13	27.56	19.21/17.89	19.85	
6	RUDP-CA-159	6-Sep-18	R-45	Chisang Khola	100.00	97.02	36.97	4.03	25.02	20.99/17.42	19.53	
7	RUDP-CA-160	7-Sep-18	R-6	Chisang Khola	100.00	96.98	38.00	4.76	26.42	21.51/18.38	20.40	
8	RUDP-CA-161	8-Sep-18	T3L18A	Chisang Khola	100.00	96.89	45.41	5.03	25.72	22.05/18.91	21.11	
9	RUDP-CA-162	9-Sep-18	T3L18B	Chisang Khola	100.00	97.33	37.59	4.22	26.02	23.17/19.45	21.35	
10	RUDP-CA-163	12-Sep-18	T3L39	Chisang Khola	100.00	97.03	37.51	3.96	25.76	21.07/19.91	20.58	
11	RUDP-CA-164	14-Sep-18	R-87	Chisang Khola	100.00	96.17	35.37	2.01	26.60	20.27/19.77	22.86	
12	RUDP-CA-165	15-Sep-18	R-85	Chisang Khola	100.00	96.92	29.13	1.89	30.30	18.96/15.54	19.73	
13	RUDP-CA-166	15-Sep-18	R-12	Chisang Khola	100.00	97.29	31.98	2.14	28.22	20.93/17.81	20.74	
14	RUDP-CA-167	16-Sep-18	R-84	Chisang Khola	100.00	96.12	33.11	2.82	26.84	22.09/17.22	20.48	
15	RUDP-CA-168	17-Sep-18	Madhumara-Yard	Chisang Khola	100.00	97.97	31.96	3.14	28.36	22.25/21.79	19.52	
16	RUDP-CA-169	20-Sep-18	R-83	Chisang Khola	100.00	97.90	37.74	2.94	29.98	21.39/20.22	21.04	
17	RUDP-CA-170	24-Sep-18	DDC-Yard	Chisang Khola	100.00	96.34	35.46	3.86	30.30	20.52/18.57	22.53	
18	RUDP-CA-171	24-Sep-18	Koshi-Yard	Chisang Khola	100.00	97.60	31.84	3.13	29.72	19.48/18.24	20.08	
Spec. Limit :					100	95-100	25-55	0-10	<35	< 25	< 25	
Contractor						Consultant						
ZHONGHENG CONSTRUCTION GROUP INTERNATIONAL ENGINEERING CO. LTD						BUILDING DESIGN AUTHORITY (P) LTD IN JOINT VENTURE WITH B.N. CONSULTANCY PVT. LTD AND PLUS ENGINEERS & ARCHITECTS (P) LTD, KATHMANDU, NEPAL						
 Checked By Engineer						 Submitted By Contract Manager		 Verified By Qty Engineer/CSE		 Approved By Team Leader		



ANNEX-4: SOCIAL SAFEGUARD MONITORING  
/ENVIRONMENTAL MONITORING FORMATS

**Attached**



**Environmental Monitoring Format**  
Regional Urban Development Project (RUDP)/Biratnagar

Name of Sub Project: RUDP/ Biratnagar

Contract Package: RUDP/ICB/BRT/02

Sub-project Component: - Road Lanes Improvement/ Sewerage Drainage

Month: September 2018

**Checklist**

SN	Activity	Description/Present Status (Compliance/Partially Compliance/Non Compliance)	Remarks/ Corrective actions for Non-Compliance
<b>1</b>	<b>Training</b>		
1.1	Health, Safety and EMP trainings and awareness	Yes	
1.2	Others awareness and skill trainings	No	
<b>2</b>	<b>Occupational health and safety</b>		
2.1	Insurance for workers	Yes	
2.2	Personal Protective Equipment (PPE) provided to labors and is using (helmet, facemasks, muffles, gloves, boots, jacket, goggles etc.)	Daily Provided and is found partially used at site.	Contractor has been instructed verbally as well as in written to comply for the use of PPE
2.3	Public notification Safety and warning signs and informative signboards in working sites for work safety	Partially provided and found unsatisfactory	
2.4	Use of barricades, caution tape and flag	Found unsatisfactory	
<b>3</b>	<b>Campsite management</b>		
3.1	Location	DDC, Kanchanbari, Shanti CHowk, Rani	
3.2	First aid facilities available at camp and worksites	Yes	Contractor instructed to provide hygienic toilet and perform water test as soon as possible.
3.3	Drinking water supply and sanitation facilities/ pit latrines	Provided but water test not done	
3.4	Waste Disposal and Management facilities	Tap water/ Hand Pump	
3.5	Type of fuel used for cooking	Yes L.P.G	
<b>4</b>	<b>Spoil and Construction material Management</b>		
4.1	Cut and fill balance maintained or not, Reuse of spoil materials	Cut & Fill balance maintained	Contractor has provided the loctions of safe tipping sites
4.2	Use of safe spoil disposal locations	Not Applicable	
4.3	Disturbance to Pedestrian and traffic	No any disturbance to	



4.4	movement Use of private land and agreement with land owners	pedestrians & traffic movement Yes	
<b>5</b>	<b>Air, Noise and Water Pollution</b>		
5.1	Dust emission and Noise pollution sites	Water sprinkled by tanker on such sites.	Not satisfactory
5.2	Water quality monitoring result and locations	On process	
5.3	Block age of natural drainages ,water logging, drain water discharge into farmland/risky areas	Not Applicable	
<b>6</b>	<b>Quarrying of construction materials and Plants Installment</b>		
6.1	Quarry/borrow operation sites	Not Applicable	
6.2	Crusher plant and Asphalt plant operation restoration	Asphalt Plant	
<b>7</b>	<b>Impact/Disruption of Private properties</b>		
7.1	Building structures	Not Applicable	
7.2	Other utilities	Not Applicable	
<b>8</b>	<b>Impact/disruption of public infrastructures</b>		
8.1	Irrigation canal	Not Applicable	
8.2	Water supply pipe	Not Applicable	
8.3	Access road	Not Applicable	
8.4	Electric/Telephone pole	Not Applicable	
8.5	Others	Not Applicable	
<b>9</b>	<b>Sites for cultural and religious values</b>		
9.1	Cultural and religious sensitive spots (if any)	Not Applicable	
<b>10</b>	<b>Forest and vegetation</b>		
10.1	Number of trees removal	No	
10.2	No of tree plantation (Roadside)	Not Applicable	
<b>11</b>	<b>Accident cases and records</b>	No any records	
<b>12</b>	<b>Employment to local people</b>		
12.1	Men and women	Yes, both men and women	
12.2	Child labor (if any)	No	
<b>13</b>	<b>Establishment of Safeguard desk and meeting</b>	Yes	
<b>14</b>	<b>Grievances from local people and addressed</b>	Yes	



**Regional Urban Development Project(RUDP)  
Social Safeguard Monitoring**

Inventory of Social Facilities

**1.General information**

Subproject: -RUDP/ICB/BRT/2

Month/Year: - Sept 2018

Name of Contractor: -ZHONGGHENG Construction

Group/International Engineering Co pvt Beijing China.

Contract Package: RUDP/ICB/BRT/2

**2.Total numbers of contractor workers involved in road construction(write down the number)**

Type of Workers	Camp-1 (Madhu mara)	Camp-2 (Koshi Yard)	Camp-3 (DDC)	Camp-4 (Abbul)	Camp-5 (Dinesh+ company)	Camp-6 (Jeevan+ Dipen)	Camp-7 (Jalauddi n)	Camp-8 (Abbas+R oshan)	Camp-9 (Arun)	Camp-10 (Nitin+An wer)	Remarks	
Local	Male	0	0	0	12	0	10	16	31	0	34	103
	Female	0	0	0	0	0	0	0	2	0	2	4
Non-Local	Male	37	40	37	26	30	19	0	0	15	0	204
	Female	0	4	0	3	0	0	0	0	0	0	7
Child Labour	Male	0	0	0	0	0	0	0	0	0	0	0
	Female	0	0	0	0	0	0	0	0	0	0	0

**3. Source and adequacy of drinking water facility in the labour camp(use code)**

Sources	camp-1	Camp-2	Camp-3	Camp-4	Camp-5	Camp-6	Camp-7	Camp-8	Camp-9	Camp-10	Remarks
a. Piped water	2	2	1	2	3	2	1	3	2	3	21
b.Well/Spring	1	1	1	1	1	-	1	-	-	1	7
c.Tanker											
d. ....											
Code:											

**4. Type and number of toilets in the labour camp (write down the number)**

Type	Camp-1	Camp-2	Camp-3	Camp-4	Camp-5	Camp-6	Camp-7	Camp-8	Camp-9	Camp-10	Remarks
a.Pit Latrine	-	-	-	-	-	-	-	-	-	-	
b.Pan	2	2	2	3	3	2	2	2	2	3	23
c.Open											
d. ....											

**5. Energy used in labour camp (tick mark)**

Sources of Energy	Camp-1	Camp-2	Camp-3	Camp-4	Camp-5	Camp-6	Camp-7	Camp-8	Camp-9	Camp-10	Remarks
a. Firewood											
b.Kerosene											
c. L.P Gas	√	√	√	√	√	√	√	√	√	√	



**Regional Urban Development Project (RUDP)  
Social Safeguard Monitoring  
Status of Key Social Issues Compliance**

Subproject Road : -RUDP/ICB/BRT/2

Month/Year: Sept 2018

Name of Contractor :-ZHONGGHENG Construction

Group International Engineering Co pvt Beijing China.

Contract Package: RUDP/ICB/BRT/2

S.N	Key Social Issue	Compliance Status			Implementing Agency	Note of Remarks	Deadline
		Full	Partial	None			
1	Availability of drinking water services	√					
2	Availability of toilet facility in campsite	√					
3	Legal source of fuel wood use			√			
4	Legal document of fuel wood source			√			
5	Use of safety accessories	√					
6	Availability of first aid facility	√					
7	Basic wage rate to construction workers	√					
8	Equal wage rate to male and female workers		√				
9	Compensation of temporarily occupied land	√					
10	Compensation of temporarily occupied buildings	√					
11	Legal document of temporarily occupied assets	√					
12	Non use of child labour in construction activities	√					

Prepared by:

Verified by:

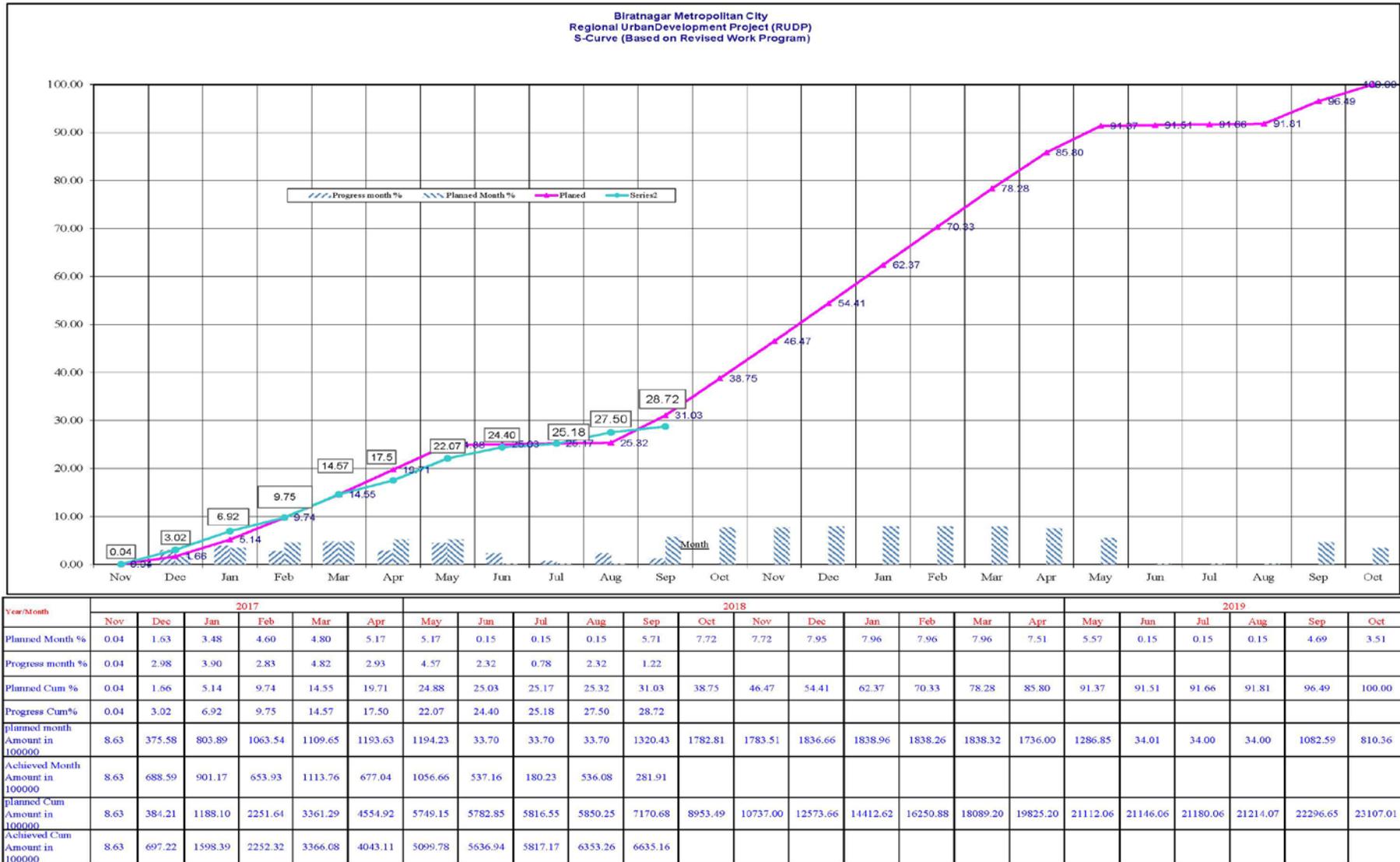
Monitored by:



ANNEX-5: S-CURVE

**Attached**





MASTER PLAN OF RUDP PROJECT



