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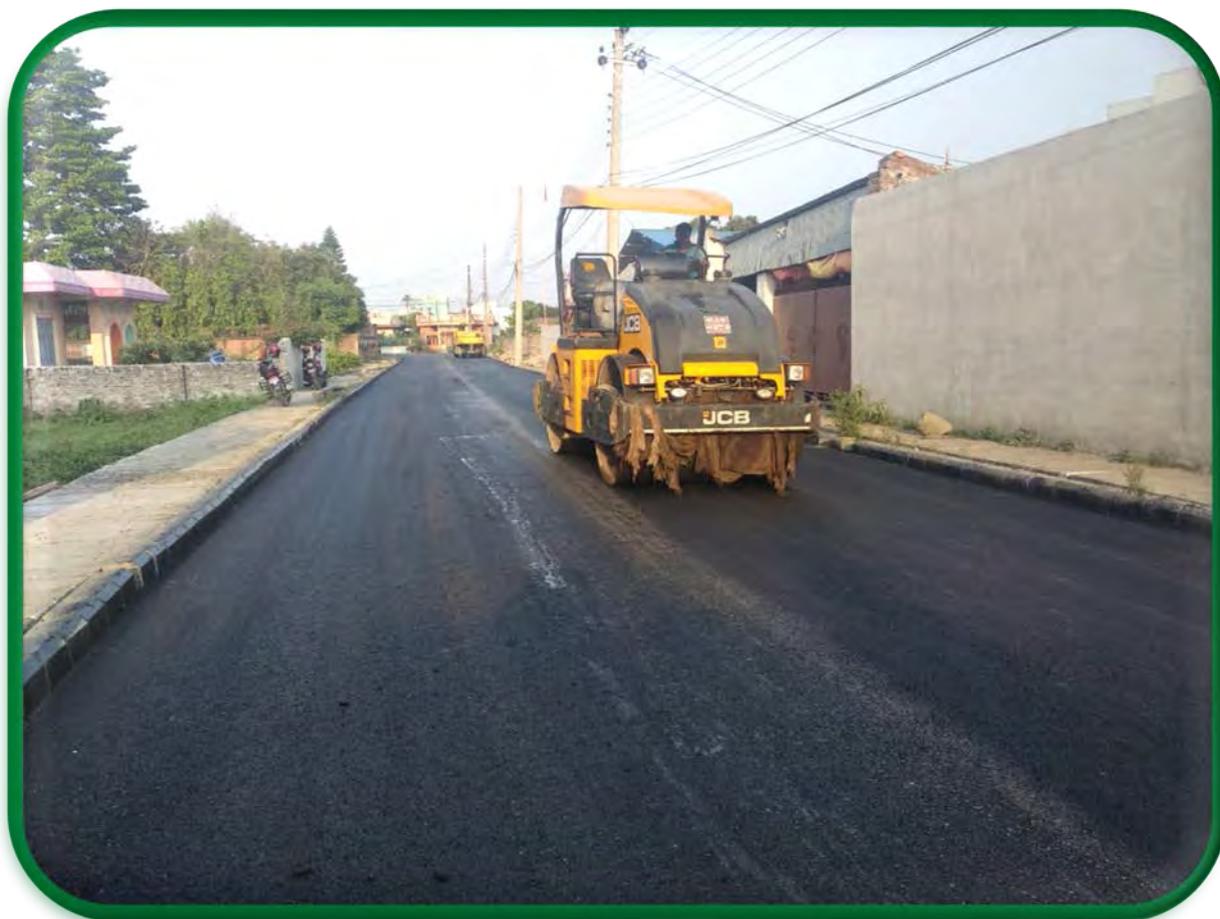
PLUSH Engineering & architects (P) Ltd Kathmandu.

Monthly Progress Report

Regional Urban Development Project (RUDP)

Project Implementation Unit

Biratnagar, Nepal



June 2018

Biratnagar Metropolitan City (BMC), Nepal

Table of Contents

EXECUTIVE SUMMARY	1
PROJECT DESCRIPTION.....	1
1.1 INTRODUCTION/BACKGROUND	1
2 CONTRACT DATA: - RUDP/ICB/BRT/2	2
3. SUMMARY OF PROGRESS STATUS OF ALL MAJOR COMPONENTS	3
3.1 SUB PROJECT COMPONENTS	3
3.2 STORM WATER DRAIN	5
3.3 ROADS AND LANES	6
3.4 ROAD SIDE DRAIN	12
3.5 ENVIRONMENTAL ASPECT	13
3.6 SOCIAL ASPECT	15
3.7 FINANCIAL PLAN	16
3.7.1 DISBURSEMENT RECORDS IN CONSTRUCTION	16
4 OBJECTIVES AND SCOPE OF WORKS.....	16
4.1 OBJECTIVES	16
4.2 SCOPE OF WORKS	16
4.3 ORGANIZATION AND STAFFING	17
4.4 CONSULTANT'S ACTIVITIES IN CONSTRUCTION PHASE.....	19
5 PROGRESS OF SUB – PROJECT COMPONENTS.....	21
5.1 CONSTRUCTION MATERIALS.....	21
5.2 Progress Achieved Till date	21
5.3 Key Events.....	21
6 DETAILS OF PRE CAST ACTIVITIES.....	23
7 CONTRACTOR'S MANPOWER.....	26
8 CONTRACTOR'S EQUIPMENT	27
9 WORK PLAN FOR THE NEXT MONTH	28
10 ANNEX-1: PHOTOGRAPHS OF JUNE, 2018	29
11 ANNEX-2: MINUTES OF MEETING JUNE, 2018	36
12 ANNEX-3: LABORATORY TEST RESULTS OF JUNE, 2018	43
13 ANNEX-4: SOCIAL SAFEGUARD MONITORING /ENVIRONMENTAL MONITORING FORMATS.....	107
14 ANNEX-5: S-CURVE	112
15 MASTER PLAN OF RUDP PROJECT	114

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. The Contractor seemed unable to meet the target by 2.81% in cumulative achievement due to unpredictable Rainfall this month as well as the Contractor seemed desperate in providing sufficient Labors on the Field.



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 28th August 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

General Features	
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 th October 2017
Date of Commencement	2 nd November 2017
Date of Completion	1 st November 2019
Contract Amount including PS and VAT	NRs. 2,611,092,249.63
Progress	
Road Rehabilitation (Asphalt)	18.91%
Sewer Line	39.95%
Storm Drain	81.18%
Road Side Drain	55.90%
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: 25.03%, Actual: 24.40%; Lead (+) or Lag (-) by -0.63% S curve attached
Financial Progress up to date	In Percentage: 22.84%, In Figure: NRs. 596,339,691.11(with vat & PS)



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	8,023.00	12,059.00	39.95%	
b	Manhole	No.	656.00	270.00	386.00	41.16%	
2	Storm Water Drain						
a	RCC Drain	m	652.89	530.00	122.89	81.18%	
b	Piles	No.	132.00	138.00	(6.00)	100.00%	Exceeded
3	Road						
a	Subgrade	m	73,086.00	21,964.65	51,121.35	30.05%	
b	Subbase	m	73,086.00	19,202.85	53,883.15	26.27%	
c	Base	m	73,086.00	18,075.85	55,010.15	24.73%	
d	Prime	m	73,086.00	13,819.20	59,266.80	18.91%	
e	Asphalt	m	73,086.00	13,819.20	59,266.80	18.91%	
4	Road Side Drain	m	26,050.00	14,562.93	11,487.07	55.90%	

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 precast are also going on. Laying of RCC Hume pipe as well as HDPE are going on at T3 Line 11, T3 line 13A, T2 line 19 P etc

Table 1: PROPOSED SEWER LINES

S. NO.	Description	Unit	Original Quantity
1	Sewerage Pipe Supply and Installation	m	20,082.00
	Reinforced Concrete Pipe laying and jointing		2241.00
	Line T2 (Secondary)	m	206.00
	Line T3 (Trunk)	m	1905.00
	Line T4 (Trunk)	m	130.00



S. NO.	Description	Unit	Original Quantity
	HDPE laying and jointing	m	17,841.00
	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
2	Manhole (Brick / RCC)	no.	685.00
3	Sewer Inlet	no.	1,010.00
4	House Connection	no.	3,784.00
5	Reinstatement of Roads	km	73.86
6	Road side Drain	Km	26.05
7	Storm Water Drain	m	652.8

Table: - 2 PHYSICAL PROGRESS IN SEWER LINES till June, 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	
	Subtotal in (m)	2,241.00	68.00	618.00	17.00	-	-	618.00	17.00	
1	HDPE(T1)	1,825.00	57.00	750.00	24.00	287.00	6.00	1,037.00	30.00	
2	HDPE(T2)	3,927.00	147.00	2,176.00	77.00	652.00	30.00	2,828.00	107.00	
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	
	Subtotal in (m)	17,841.00	588.00	6,466.00	217.00	939.00	36.00	7,405.00	253.00	
	Total	20,082.00	656.00	7,084.00	234.00	939.00	36.00	8,023.00	270.00	39.95%
	Sewer Inlet	BoQ(no)		Up to Pre Month		This month		Total to date		Progress %
1	Sewer inlet	1,010.00								



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)	
2	House connection	3,784.00								

3.2 STORM WATER DRAIN

The storm water drain CN2, and CN3 has been provisioned in Regional Urban Development Project (RUDP). The Contractor has already started construction of storm water drain. The construction of drain works is going on and piling works have been completed. The detail of the progress is shown in the table below:

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

SN	Location	Proposed Length in (m)	Progress		Total till date (m)	Progress %
			Up to previous month in (m)	This month in (m)		
1	CN2-CN3 (Chyangh Baari Naalaa)	652.89	500	30	530	Construction of drain works going on (80% completed)
2	CN2-CN3 (Chyangh Baari Naalaa)	132 nos piles	138	-	138 nos	Piling works completed



3.3 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 started detail survey work for upgrading the deteriorated pavement surface.

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

SN	Road Number	Road Name	Proposed Length(m)	Actual Length(m)	Progress Length in (m)		Total till date	Progress %
					Upto previous month	This month		
1	R3A	Madhumara Marg	600.00	600.00	600.00	-	600.00	(100%)Sub grade,
2	R42	Bhagwati Marg	218.00	218.00	218.00	-	218.00	(100%)Sub grade,
3	R104	VIP Marg	273.00	271.00	273.00	-	273.00	(100%)Sub grade
4	Rani site	Rani	4,023.00	2,315.00	1,702.00	613.00	2,315.00	(42.30%)Sub grade,
5	R37	Banglamukhi Marg	420.00	477.00	471.00	6.00	477.00	(100%)Sub grade,
6	R5	College Road	970.00	603.00	970.00	-	970.00	(100%)Sub grade,
7	R16	Satya Marg	604.00	580.00	604.00	-	604.00	(95.2%)Sub grade,
8	R21	Pratibha Marg	1,320.00	1,320.00	1,320.00	-	1,320.00	(71.96%)Sub grade,
9	R25	Devi Marg	599.00	580.00	580.00	-	580.00	(96.82%)Sub grade,
10	R24	Prabhat Marg	384.41	365.00	380.00	-	380.00	(98.71%)Sub grade,
11	R28	Pustakalaya Marg	635.00	343.00	635.00	-	635.00	(100%)Sub grade,
12	R27	Peepal Marg	810.00	580.00	810.00	-	810.00	(100%)Sub grade,



SN	Road Number	Road Name	Proposed Length(m)	Actual Length(m)	Progress Length in (m)		Total till date	Progress %
					Upto previous month	This month		
13	R26	Pasang Marg	617.00	580.00	654.00	-	654.00	(100%)Sub grade
14	B1	Kanchan Marg	1,172.94	1,110.00	1,173.00	-	1,173.00	(100%)Sub grade,
15	B2	Gauri Shankar Marg	2,777.83	1,233.00	2,152.00	-	2,152.00	(77.5%)Sub grade,
16	B3	Keshaliya Marg	1,574.00	560.00	1,574.00	-	1,574.00	(100%)Sub Grade
17	S11	Samrat Marg	660.00	504.60	660.00	-	660.00	(100%)Sub Grade,
18	S13		1,617.00	1,435.00	1,417.00	-	1,417.00	(87.63%) Sub Grade,
19	R114	Dharanidhar Marg	320.00	560.00	320.00	-	320.00	(100.00%) Sub Grade,
20	R12	Kanchha Dai Marg	1,192.00	660.00	837.00	-	837.00	(70.21%) Sub Grade
21	R5a		370.00	-	370.00	-	370.00	(100%)Sub Grade
22	R113	Kavi Lekhnath Marg	420.00	736.00	420.00	-	420.00	(100%)Sub Grade
23	R65		282.00	320.00	320.00	-	320.00	(100%)Sub Grade
24	R107		173.00	215.00	215.00	-	215.00	(100%)Sub Grade
25	R107 a		50.00	-	50.00	-	50.00	(100%)Sub Grade
26	R22		373.10	367.65		367.65	367.65	(100%)Sub Grade
27	R7		814.00	242.00		242.00	242.00	(29.73%) Sub Grade



SN	Road Number	Road Name	Proposed Length(m)	Actual Length(m)	Progress Length in (m)		Total till date	Progress %
					Upto previous month	This month		
28	R64		121.00	121.00		121.00	121.00	(100%)Sub Grade
29	R8		-	225.00		225.00	225.00	(100%)Sub Grade
30	N36		-	190.00		190.00	190.00	(100%)Sub Grade
31	R188		-	120.00		120.00	120.00	(100%)Sub Grade
32	R2		-	300.00		300.00	300.00	(100%)Sub Grade
33	T3 Line 6A		-	220.00		220.00	220.00	(100%)Sub Grade
34	T2 Line 24C		-	205.00		205.00	205.00	(100%)Sub Grade
35	T2 Line 24D		-	210.00		210.00	210.00	(100%)Sub Grade
36	R63 (DSP Road)	DSP Road	420.00	420.00		420.00	420.00	(100%)Sub Grade
37	R24	Prabhat Marg	384.41	365.00	380.00	-	380.00	(99.00%)Sub Base
38	R25	Devi Marg	599.00	580.00	580.00	-	580.00	(96.83%)Sub Base
39	R26	Pasang Marg	617.00	580.00	617.00	-	617.00	(100%)Sub Base
40	R27	Peepal Marg	810.00	580.00	810.00	-	810.00	(100%)Sub Base
41	R28	Pustakalaya Marg	635.00	343.00	343.00	-	343.00	(54.00%)Sub Base
42	Rani site	Rani	4,023.00	-	1,702.00	-	1,702.00	(42.3%)Sub Base



SN	Road Number	Road Name	Proposed Length(m)	Actual Length(m)	Progress Length in (m)		Total till date	Progress %
					Upto previous month	This month		
43	R37	Banglamukhi Marg	420.00	477.00	471.00	-	471.00	(100%)Sub Base
44	R65		282.00	320.00	320.00	-	320.00	(100%)Sub Base
45	R42	Bhagwati Marg	218.00	218.00	218.00	-	218.00	(100%)Sub Base
46	R104	VIP Marg	273.00	271.00	273.00	-	273.00	(100%)Sub Base
47	B1	Kanchan Marg	1,172.94	1,110.00	1,173.00	-	1,173.00	(100%)subbase
48	B2	Gauri Shankar Marg	2,777.83	1,233.00	1,448.00	-	1,448.00	(77.47%)Sub Base
49	S11	Samrat Marg	660.00	504.60	660.00	-	660.00	(100%)Sub Base
50	S13		1,616.26	1,435.00	1,417.00	-	1,417.00	(187.63%)Subbase
51	R12	Kanchha Dai Marg	1,192.00	660.00	837.00	-	837.00	(70.22%)Sub Base
52	R5	College Road	970.00	603.00	970.00	-	970.00	(100.00%)Sub Base
53	R16	Satya Marg	604.00	580.00	604.00	-	604.00	(100%)Sub Base
54	R21	Pratibha Marg	1,320.00	1,320.00	950.00	-	950.00	(71.96%)Sub Base
55	B3	Keshaliya Marg	1,574.00	560.00	1,574.00	-	1,574.00	(100%)Sub Base
56	R3A	Madhumara Marg	600.00	600.00	600.00	-	600.00	(100%)Sub Base
57	R107		173.00	215.00	215.00	-	215.00	(100%)Sub Base



SN	Road Number	Road Name	Proposed Length(m)	Actual Length(m)	Progress Length in (m)		Total till date	Progress %
					Upto previous month	This month		
58	R107a		50.00	-	50.00	-	50.00	(100%)Sub Base
59	R5a		370.00	-	370.00	-	370.00	(100%)Sub Base
60	R22		373.10	367.85		367.85	367.85	(100%)Sub Base
61	R7		814.00	242.00		242.00	242.00	(29.73%)Sub Base
62	R64		121.00	121.00		121.00	121.00	(100%)Sub Base
63	R8		-	225.00		225.00	225.00	(100%)Sub Base
64	N36		-	190.00		190.00	190.00	(100%)Sub Base
65	R188		-	120.00		120.00	120.00	(100%)Sub Base
66	R2		-	300.00		300.00	300.00	(100%)Sub Base
67	T3 Line 6A		-	220.00		220.00	220.00	(100%)Sub Base
68	T2 Line 24C		-	205.00		205.00	205.00	(100%)Sub Base
69	T2 Line 24D		-	210.00		210.00	210.00	(100%)Sub Base
70	R63 (DSP Road)	DSP Road	420.00	420.00		420.00	420.00	(100%)Sub Base
71	B1	Kanchan Marg	1,172.94	1,110.00	1,173.00	-	1,173.00	(98.04%)Base
72	B2	Gauri Shankar Marg	2,777.83	1,233.00	2,152.00	-	2,152.00	(100%)Base
73	B3	Keshaliya Marg	1,574.00	560.00	1,574.00	-	1,574.00	(100%)Base



SN	Road Number	Road Name	Proposed Length(m)	Actual Length(m)	Progress Length in (m)		Total till date	Progress %
					Upto previous month	This month		
74	S11	Samrat Marg	660.00	504.60	660.00	-	660.00	(100%) Base
75	S13		1,617.00	1,435.00	1,417.00	-	1,417.00	(87.63%) Base
76	R114	Dharanidhar Marg	320.00	560.00	320.00	-	320.00	(100.00%) Base
77	R12	Kanchha Dai Marg	1,192.00	660.00	837.00	-	837.00	(70.22%) Base
78	R113	Kavi Lekhnath Marg	420.00	736.00	420.00	-	420.00	(100%) Base
79	R5	College Road	970.00	603.00	970.00	-	970.00	(100%) Base
80	R16	Satya Marg	604.00	580.00	604.00	-	604.00	(100%) Base
81	R21	Pratibha Marg	1,320.00	1,320.00	1,320.00	-	1,320.00	(100%) Base
82	R24	Prabhat Marg	384.41	365.00	380.00	-	380.00	(100%) Base
83	R25	Devi Marg	599.00	580.00	580.00	-	580.00	(96.82%) Base
84	R26	Pasang Marg	617.00	580.00	580.00	-	580.00	(94%) Base
85	R27	Peepal Marg	810.00	580.00	580.00	-	580.00	(71.61%) Base
86	R28	Pustakalaya Marg	635.00	343.00	635.00	-	635.00	(54.44%) Base
87	R37	Banglamukhi Marg	477.00	477.00	471.00	-	471.00	(100%) Base
88	R3A	Madhumara Marg	600.00	600.00	600.00	-	600.00	(100%) Base
89	R42	Bhagwati Marg	218.00	218.00	218.00	-	218.00	(100%) Base
90	R104	VIP Marg	273.00	271.00	273.00	-	273.00	(100%) Base
91	Rani	Rani	4,023.00	-	1,702.00	-	1,702.00	(42.30%) Base
92	R22		373.10	367.85		367.85	367.85	(100%) Base
93	R7		814.00	242.00		242.00	242.00	(29.73%) Base



Table No:-4.1 Road improvement Works (Work Progress till the date)

<i>SN</i>	<i>Description</i>	<i>Unit</i>	<i>Proposed</i>	<i>Total Up to Previous Month</i>	<i>This Month</i>	<i>Total Up to this Month</i>	<i>Progress</i>
1	Subgrade	m	73,860.00	18,862.00	3,102.65	21,964.65	29.74%
2	Sub Base	m	73,860.00	18,576.00	626.85	19,202.85	26.00%
3	Base	m	73,860.00	17,199.00	876.85	18,075.85	24.47%
4	Prime	m	73,860.00	9,128.00	4,691.20	13,819.20	18.71%
5	Asphalt	m	73,860.00	9,128.00	4,691.20	13,819.20	18.71%

3.4 ROAD SIDE DRAIN

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

SN	Road Number	Road Name/ Loca
1	B1	Kanchan Marg
2	R29	Shanti Marg
3	N36	
4	R8	APF
5	R7	Manakamana Ma
6	R63	DSP Road
7	R9	Fanindra Marg
8	S13	
9	N33	
10	R28	Pustakalaya Ma
11	R90	Shakti Marg
12	R114	Dharanidhar Ma
13	R11	Om Shiv Marg
14	R18	
15	R17	
16	R113	Kavi Lekhnath Ma
17	R77	Arniko Marg
18	R76	Mitra Marg
19	N9	
20	N4	
21	R33	Tarun Marg
22	R36	Gaurav Marg



SN	Road Number	Road Name/ Loca
23	R86	Janpath Marg
24	R183	Nava Jyoti Mar
25	R7a	
26	Rani site	Rani
27	Rani site	Rani
28	N3	
29	N5	
30	R21	
31	R2	
32	Xenial Front	
33	Xenial South	
34	R75	
35	R122	
36	N2	
37	R73	
38	R12	
39	R42	
40	R63	
41	R21(a)	
42	R4	
43	R78	
44	R180	
45	R40	
46	R9	
47	Rani Site C	
48	Ranit Site D	
	Remaining	

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.

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.

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.

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.

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 be 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 30th May, 2018 and 31st May, 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.

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

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

SN	Description of Payment	Total Bill Amount with VAT & PS	Remark
----	------------------------	---------------------------------	--------

Table: -5 DISBURSEMENT RECORDS in CONSTRUCTION

1	IPC 01	339,105,000.00	Mobilization Advance.
	IPC 02	265,347,611.64	
	IPC 03	330,992,079.47	
	Grand Total =	935,444,691.11	

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 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.

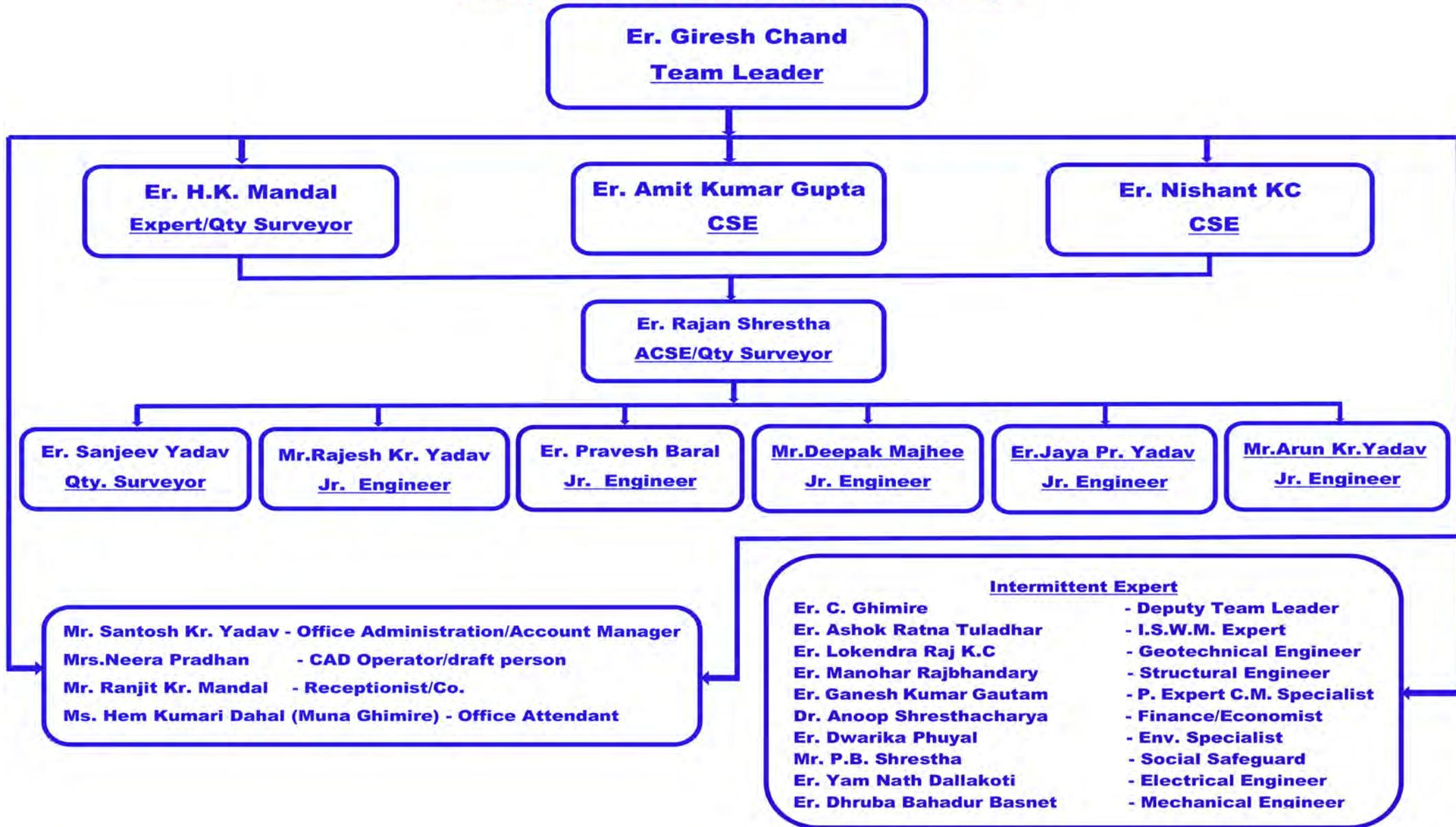


4.3 ORGANIZATION AND STAFFING

Attached



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



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



SN	Name	Designation	Joining date	Remarks
20	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.

5.2 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.

5.2 Progress Achieved Till date

Month	Target This Month		Achievement This Month		Leading		Lagging		Remarks
	Monthly	Accumulated	Monthly	Accumulated	Monthly	Accumulated	Monthly	Accumulated	
May-18	5.17%	24.88%	4.57%	22.07%			-0.60%	-2.81%	Lagging
June-18	0.15%	25.03%	2.32%	24.40%	2.18%			-0.63%	Lagging

5.3 Key Events

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

Table 8: KEY DATES of EVENTS / ACTIVITIES

S. No.	Date	Activities/Events	Remarks
	Weather Reports		
1	Friday, June 08, 2018	Activities Disturbed due to Rainfall	
2	Tuesday, June 12, 2018	Activities Disturbed due to Rainfall	
3	Sunday, June 17, 2018	Activities Disturbed due to Rainfall	
4	Thursday, June 21, 2018	Activities Disturbed due to Rainfall	
	Strike		
8		No Strike registered during the month of June	
	Security Problem at Site		
9	Sunday, June 03, 2018	Contractor's Work at site was hampered inflicting security reasons from Security Administration to other Contractors dated June 2, 2018 stating reputation of Construction Entrepreneurs on Stake.	
	Site visits		



S. No.	Date	Activities/Events	Remarks
10		Officials of Project Implementation Unit(PIU) have conducted frequent visit to the site during the month of May, 2018	

Weather Reports sourced by:

<https://www.timeanddate.com/weather/nepal/biratnagar/historic?month=6&year=2018>

Station Located at Biratnagar Airport

Among the mentioned Events, Heavy rainfall disturbed the Contractor’s activities resulting the Contractor not meeting the targeted Schedule.



6 DETAILS OF PRE CAST ACTIVITIES.

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

Physical Progress till June 2018							
S.N.	Description	Unit	Progress			Total to Date (RM.)	Remarks
			BoQ	Up to Previous month (RM.)	This Month (RM.)		
1	Precast Slab	No		23,525.00	4,074.00	27,599.00	Under progress
2	Kerb Stone	Rm	147,729.68	32,897.00	6,100.00	38,997.00	26.40%

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

Physical Progress till June- 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	Completed
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	
	Total						



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

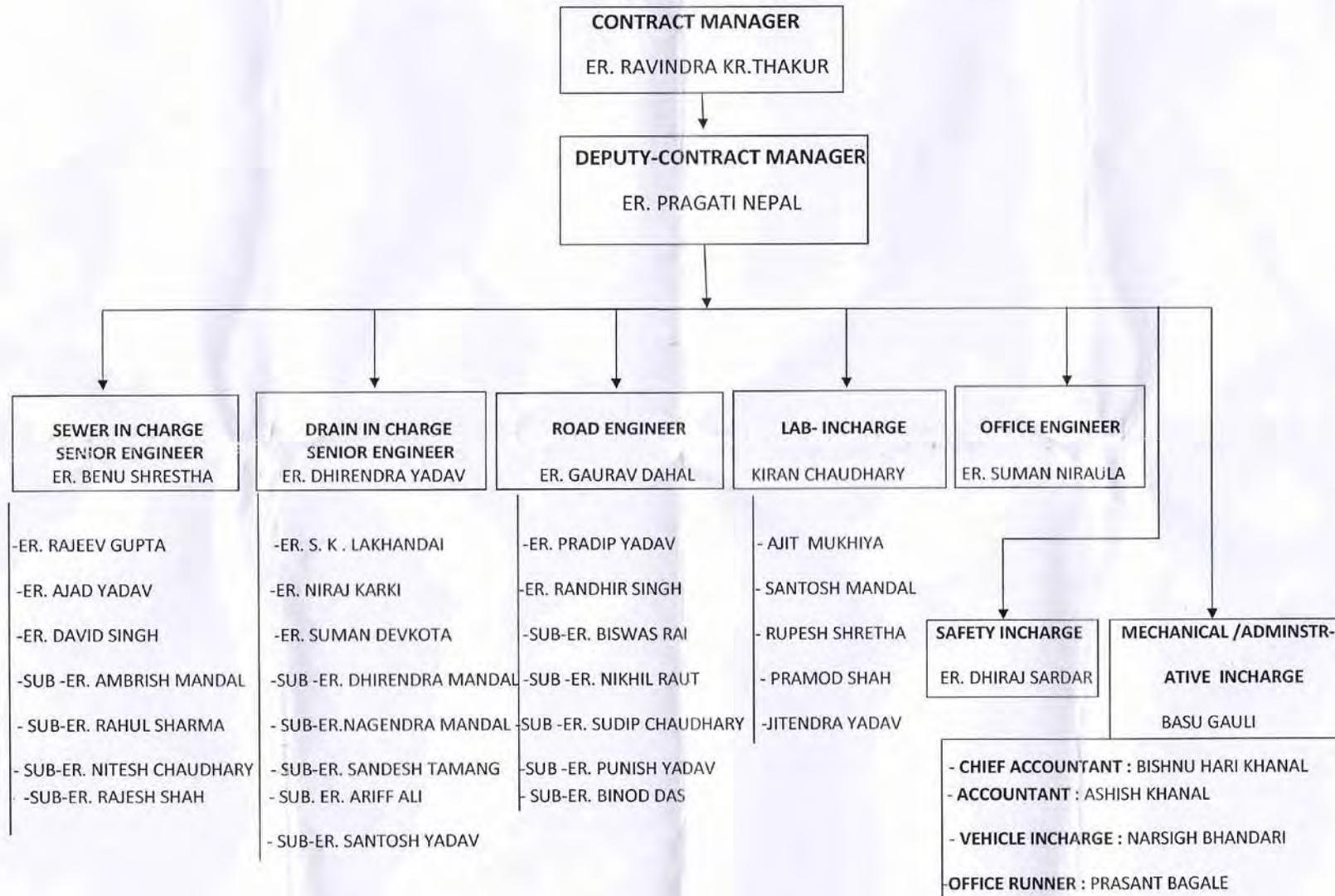
<i>Physical Progress till June- 2018</i>							
S.N.	Description	Diameter (mm)	Progress			Total to Date (RM.)	Remarks
			BoQ (RM)	Up to Previous month (RM.)	This Month (RM.)		
1	HDPE Pipe	110.00	1,987.20	1,987.20	-	1,987.20	Under process
2	HDPE Pipe	200.00	16,656.00	10,500.00	-	10,500.00	
3	HDPE Pipe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

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

<i>Physical Progress till June- 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	2,500.00	1,500.00	4,000.00	



ZHONGHENG CONSTRUCTION GROUP INTERNATIONAL ENGINEERING CO. LTD-BIRATNAGAR
SITE ORGANIZATION CHART(RUDP-BIRATNAGAR)



7 CONTRACTOR'S MANPOWER

Table 13: CONTRACTOR'S KEY STAFFS in June, 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		115	
14	Unskilled Labors		329	

As per sub Clause no. 6.7 GCC/ PCC regarding Health and Safety, the Contractor needs to appoint an Accident Prevention Officer. Accident Prevention Officer has left the site beyond dated 19th June, 2018 whom the Consultant has asked for replacement.



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	2	Backhoe loader-9 nos.
2	Crane (10 ton capacity)	3	-	
3	Asphalt plant of adequate capacity	1	1	
4	Asphalt pavers	1	1	
5	Vibrating roller	2	3	
6	Pneumatic tyre roller 8 to 10 ton	2	1	
7	Smooth wheeled roller 8 to 10 ton	1	1	
8	Grader	1	1	
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	8	
12	Chips spreader	1	-	
13	Bitumen decanter minimum 4000 Litres. (preheating container)	2	2	
14	Air compressor	2	2	
15	Tipping Trucks	15	30	
16	Service vehicle	2	5	
17	Survey equipment (Total station with accessories)	1	1	
18	Thedolite	2	-	
19	Levelling	5	12	
20	Mobile Generator 15-20 Kva	3	7	
21	Mixer Machine	6	7	
22	Concrete Batching Plant	1	-	
23	Concrete pump	1	-	



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

9 WORK PLAN FOR THE NEXT MONTH

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

- Detail Surveying works at various Road sections.
- Asphalt Concrete in Road section R37, R7, R27, Rani, R5
- Storm water drainage (CN2-CN3).
- Precast production works at contractor's yard.
- Side drain works.
- Laying of kerb Stone and cover slab.



10 ANNEX-1: PHOTOGRAPHS OF JUNE, 2018





Asphalt concrete works at R114



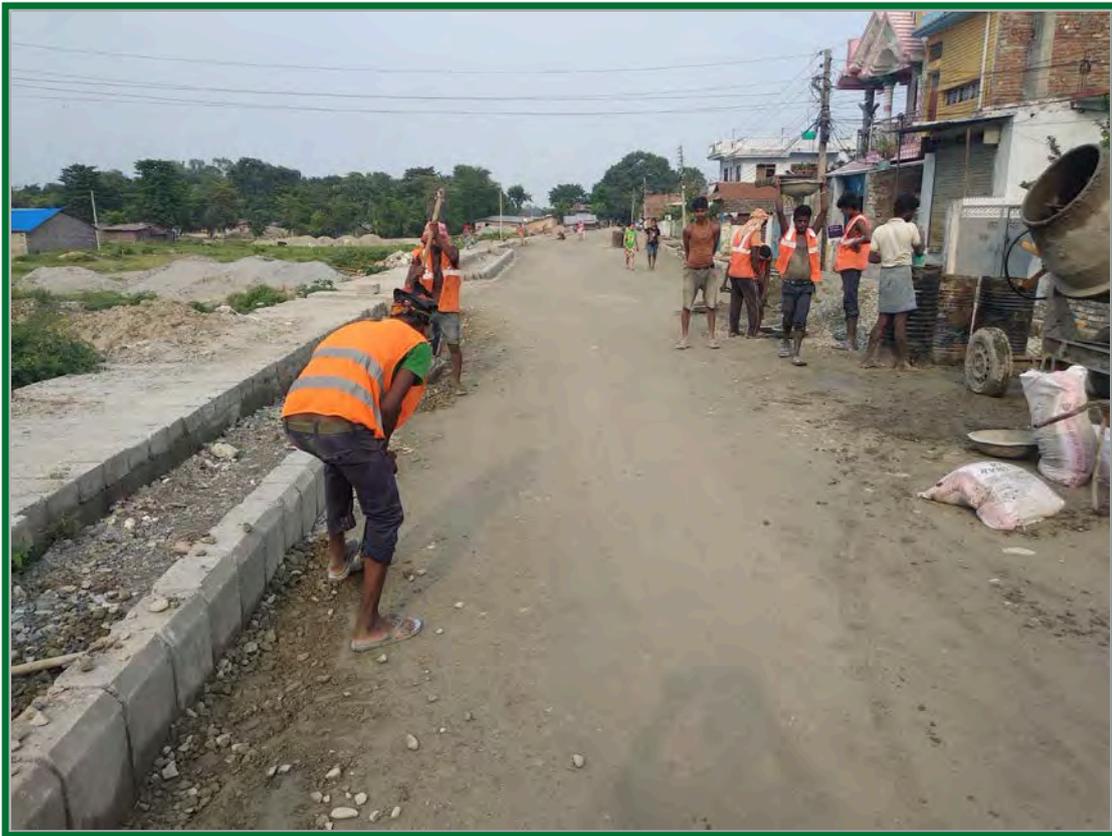
Asphalt concrete at R114



RCC Drain works at R6



Drain work at R12



Kerbstone works at S11



Site clearance work at B2



Gutter works at R113



Joint sampling of Bitumen at Asphalt plant



Casting cube mould of Kerbstone at DDC Yard



Reinstatement of water supply pipes



Relocation of Electric Poles at R5

11 ANNEX-2: MINUTES OF MEETING JUNE, 2018




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REGIONAL URBAN DEVELOPMENT PROJECT (RUDP), ADB Loan No: 47252

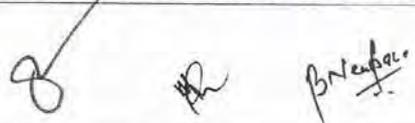
Biratnagar Metropolitan city, Biratnagar

MINUTES OF MEETING-12
Contract: Regional Urban Development Project (RUDP), Biratnagar
Date: 04 June 2018
Time: 04:00 PM
Venue: PIU Office, Biratnagar
Attendance

Employer:		
1	Mr. Bhim Parajuli	Mayor, BMC
2	Mr. Kumar Prasad Dahal	Chief Administrative Officer (CAO), BMC
3	Mr. Bharat Kumar Nuepane	Project Manager (PM), PIU
4	Mr. Prakash Narayan Chaudhary	Project Engineer, PIU
5	Mr. Ghanshyam Kafley	Engineer, BMC
6	Mr. Poonam Kumar Dahal	Social Development Officer, PIU
Contractor:		
1	Mr. Ravindra Thakur	Contract Manager (CM), Zhongheng Construction Group Co. Ltd.
Consultant:		
1	Mr. Giresh Chand	Team Leader, DSC
2	Mr. Hare Krishna Mandal	Quantity Surveyor Expert, DSC

The meeting was chaired by Mayor, Mr. Bhim prajuli, Biratnagar Metropolitan City. Mr Kumar Prasad Dahal, CAO was introduced to all the Participants of the meeting as this was the first meeting he was participating. Mr. Bharat Kumar Neupane welcomed all the Participant and following matters were discussed and decided upon:

S. NO.	Minutes	Action by
1	Mr Bharat Kr Nuepane, PM briefed about the present status of the RUDP.	The Employer, Consultant & Contractor
	Mr. Giresh Chand, TL elaborated on Present Status of the Project stating the Progress Graph of the Project.	
	Road completed (Asphalt)- 9.128 Km	
	Sewer Line completed- 7.084 Km	
	Road Side Drain completed- 10.407 Km	
	Storm Water Drain completed- 500 m	



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REGIONAL URBAN DEVELOPMENT PROJECT (RUDP), ADB Loan No: 47252

Biratnagar Metropolitan city, Biratnagar

S. NO.	Minutes	Action by
	Mr. Giresh Chand, TL further emphasized stating that viewing upcoming Monsoon this year, Sub Base work has been under progress wherever Sewer Line was executed.	
2	Mr. Bhim Parajuli, Mayor stated that Qualitative Work facilitating the Public with smooth access within executed Project Area was desired.	The Employer, Consultant & Contractor
3	Mr. Giresh Chand, TL stated that in case Right of Way was cleared as soon as possible, the Contractor would be able to accelerate the execution of Work.	The Employer, Consultant & Contractor
	Mr. Giresh Chand, TL further asked the Employer about Integrated Solid Waste Management (ISWM) stating due to Socio Environment Problem the Design work was hindered though Inception Report as well as Stakeholder's Analysis, Communication Strategy and Consultation Plan for Integrated Solid Waste Management (ISWM) has already been submitted. Unless the Socio Environment Problem was sorted out, the Preliminary design could not be submitted as scheduled.	
	Mr. Bhim Parajuli, Mayor as well as Mr. Bharat Kumar Neupane, PM informed that the Site would be visited and they would interact with concerned Public. The Conclusion might be delivered after Rainy Season.	
	Mr. Kumar Prasad Dahal, CAO persuaded PIU, Consultant and Contractor to be considerate about Social Aspects while executing the Work.	
4	Mr. Ravindra Thakur, CM stated that all works were under Progress. He further told that he was committed to fulfil all requirements with Qualitative work as well as he further committed to execute the works as early as possible.	The Employer, Consultant & Contractor
5	The Team Members of the Employer thanked all the participants of the meeting and closed the meeting.	

[Handwritten signatures and initials]



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REGIONAL URBAN DEVELOPMENT PROJECT (RUDP), ADB Loan No: 47252

Biratnagar Metropolitan city, Biratnagar

MINUTES OF MEETING NO. – 13

Contract: RUDP/ICB/BRT- 02

Date: June 14 , 2018

Time: 2:30 PM

Venue: TL Office, Biratnagar

Attendance

Employer:

1. Mr. Bharat Kumar Neupane , Project Manager
2. Mr. Prakash Chaudhary, Deputy Project Manager
3. Mr. Ghanashyam Kafley, Project Engineer

Contractor:

1. Mr. Ujjwal Prasai , Project Manager, CTCE/Kalika
2. Mr. R.K Thakur, Contract Manager, Zhongheng
3. Mr. Mahesh Subedi, Engineer, CTCE/Kalika
4. Mr. Dharendra Yadav, Engineer, Zhongheng

Consultant:

1. Mr. Giresh Chand , Team Leader
2. Mr. Amit Kumar Gupta, CSE
3. Mr. H K Mandal, Expert/Quantity Surveyor
4. Mr. Rajan Shrestha, Engineer/ Quantity Surveyor
5. Mr. Rajesh K Yadav, Jr. Engineer

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

S.N.	Minutes	Action by
1.	TL, Mr. Chand asked the Project Manager, Mr Ujjwal Prasai of CTCE Kalika about the sewer inlets and House connections had not been connected at more than 572 places though it was the contractor's obligation to fulfill as per the outstanding works. Mr Ujjwal Prasai replied that he had already provided the letter indicating the cause of no work.	Employer/ Consultant/ Contractor

Address: Bargachhi Pipalchowk-05, Biratnagar Email: rudpbdabt@gmail.com



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	<p>Project Manager, Mr Bharat Neupane informed he was very serious about the matter from the beginning and the operation and maintenance of sewer had been raised time to time in every meeting. So the contractor could not escape from his obligation.</p> <p>Finally, it was agreed to workout at every site with team consisting the members from each party i.e., employer, Consultant and Contractor and sort out and decide at the spot from 15 June 2018 at 9 A.M and carry out physical works from 16 June 2018 and complete by the end of June. In case of any unseen disturbances, the remaining work would be completed on DLP period.</p>	
2	<p>The contractor of CTCE/Kalika asked the Employer to take over the existing HDPE pipe of R2 Road.</p> <p>The Employer replied to stock all the HDPE pipes at WWTP with safety.</p>	Employer/ Contractor
3	<p>PM informed that all the materials dumped at the site during construction eg, Kerbstone, aggregate, sand etc laid haphazardly required to be cleared at the locations where asphalt works had been completed. He further added for the proper channelization of rain water through drain.</p> <p>Contractor informed that he had already mobilized his manpower for the work and would complete before monsoon as consultant has instructed.</p>	Consultant/ Contractor
4	<p>CM, Mr. Ravindra Thakur informed that he had been facing several disturbances from the start of the work eg, site clearance, sewer inlet, shut down from NEA for electric pole shifting etc. hindering our schedule which were not mentioned in the contract document. Therefore, he requested for the extension of time for the completion of work.</p> <p>PM informed that he would sort out all the problems mentioned before this monsoon.</p>	Employer/ Consultant/ Contractor

[Handwritten signatures and initials]

Address: Bargachhi Pipachowk-03, Biratnagar Email: rudpbdabt@gmail.com





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REGIONAL URBAN DEVELOPMENT PROJECT (RUDP), ADB Loan No: 47252

Biratnagar Metropolitan city, Biratnagar

5.	<p>CM, Mr. Ravindra Thakur expressed his confusion whether he had to be responsible/or not for the work defected due to fail of other's work</p> <p>TL clearly informed that both contractors would be responsibility for their own work only.TL further informed that he would not be responsible for the defect encountered due to other's cause.</p>	Consultant/ Contractor
6.	<p>DPM informed about the quality of kerbstone laid at site not found satisfactory</p> <p>Contractor informed that the current kerbstones stacked at some sites were mistakenly taken before sufficient curing. So he would rectify those kerbstone.</p> <p>TL informed that there might also be the problem in working methodology of kerbstone.The material tested in cube mould found satisfactory as per the specification but not found satisfying in the constructed Kerbstone due to less moisture. He requested the employer for the joint inspection of work at yard.</p> <p>The employer agreed on the same</p>	Employer/ Consultant/ Contractor
7.	<p>TL informed to the employer that due to the existing subbase layer was at/above the drain level, the top of kerbstone might not match the existing drain level at site. Previously, CTCE/Kalika during STIEUP Project had laid the subbase at the existing OGL without necessary excavation to protect the existing water supply pipe below the road as instructed by Employer.</p>	
8.	<p>As far as inlet/House connections necessary for the Koshi Highway line were concerned, Mr Ujjwal Prasai admitted to start the work as early as possible. He also informed that all the necessary inventories required for the dedicated feeder line had been brought except cable and transformer. Also extension of control Room Building had been completed.</p>	

Handwritten signatures and initials in blue ink.

Address: Barguati Pipalchowk-05, Biratnagar, Email: mdpbitahit@gmail.com



REGIONAL URBAN DEVELOPMENT PROJECT (RUDP)

**RUDP/ICB/BRT/2
Meeting Attendance**

Date:14-June-2018

Venue: TL Office

S.N.	Name	Designation	Organization	Signature
1	Girish Chand.	Dsc, TL	BDA	
2	H. K. M...	Dsc Er	BDA	
3	Prakash N. Chaudhary.	DPM.	PIU	
4	Bhaskar Kumar Narayan	PM	PIU	
5	Er. Ghanashyam Kothiyal	Project Engineer	PIU	
6	Er. Ravindra Thakur	CM	Zhongheng	
7	Er. Dharendra Yadav	Engineer	"	
8	Er. Rajan Shrestha	Engineer	BDA	
9	Rajesh K. Yadav.	Jr. engineer.	DSC	
10	Mahesh Subedi	Engineer	CTEE-Kalika	
11	Ujjwal Basai	PM	CTEE/Kalika	
12	Amit Kumar Gupta	CSE	SEVERA/RVAP	
13				
14				
15				
16				
17				
18				
19				
20				



12 ANNEX-3: LABORATORY TEST RESULTS OF JUNE, 2018
Attached

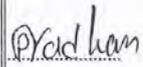
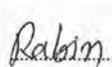
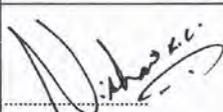
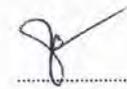


REGIONAL URBAN DEVELOPMENT PROJECT

Biratnagar Metropolitan City

Contract No:- RUDP/ICB/BRT-02

Summary Sheet of Mortar Test Report

							Month		June		
							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 ²		Type of Grade
							7 Days	28 Days	7 Days	28 Days	
1	R-111	MR-214	Arghakhachi	OPC	Chisang Khola	4-May-18	11-May-18	1-Jun-18	8.40	7.5	
2	Xenial Hotel	MR-215	Arghakhachi	OPC	Chisang Khola	4-May-18	11-May-18	1-Jun-18	8.40	7.5	
3	R-33	MR-216	Arghakhachi	OPC	Chisang Khola	5-May-18	12-May-18	2-Jun-18	8.94	7.5	
4	R-2	MR-217	Arghakhachi	OPC	Chisang Khola	5-May-18	12-May-18	2-Jun-18	7.74	7.5	
5	R-36	MR-218	Arghakhachi	OPC	Chisang Khola	7-May-18	14-May-18	4-Jun-18	7.87	7.5	
6	N-3	MR-219	Arghakhachi	OPC	Chisang Khola	8-May-18	15-May-18	5-Jun-18	8.94	7.5	
7	R-21	MR-220	Arghakhachi	OPC	Chisang Khola	8-May-18	15-May-18	5-Jun-18	8.27	7.5	
8	R-122	MR-221	Arghakhachi	OPC	Chisang Khola	8-May-18	15-May-18	5-Jun-18	9.20	7.5	
9	Rani Site	MR-222	Arghakhachi	OPC	Chisang Khola	10-May-18	17-May-18	7-Jun-18	8.94	7.5	
10	R-111	MR-223	Arghakhachi	OPC	Chisang Khola	10-May-18	17-May-18	7-Jun-18	8.00	7.5	
11	R-111	MR-224	Arghakhachi	OPC	Chisang Khola	11-May-18	18-May-18	8-Jun-18	9.07	7.5	
12	Xenial Hotel	MR-225	Arghakhachi	OPC	Chisang Khola	11-May-18	18-May-18	8-Jun-18	9.34	7.5	
13	R-111	MR-226	Arghakhachi	OPC	Chisang Khola	12-May-18	19-May-18	9-Jun-18	8.54	7.5	
14	Xenial Hotel	MR-227	Arghakhachi	OPC	Chisang Khola	12-May-18	19-May-18	9-Jun-18	8.54	7.5	
15	R-111	MR-228	Arghakhachi	OPC	Chisang Khola	13-May-18	20-May-18	10-Jun-18	8.14	7.5	
16	R-33	MR-229	Arghakhachi	OPC	Chisang Khola	13-May-18	20-May-18	10-Jun-18	7.74	7.5	
17	R-2	MR-230	Arghakhachi	OPC	Chisang Khola	13-May-18	20-May-18	10-Jun-18	8.67	7.5	
18	R-21	MR-231	Arghakhachi	OPC	Chisang Khola	13-May-18	20-May-18	10-Jun-18	8.94	7.5	
19	R-122	MR-232	Arghakhachi	OPC	Chisang Khola	13-May-18	20-May-18	10-Jun-18	7.87	7.5	
20	R-2	MR-233	Arghakhachi	OPC	Chisang Khola	16-May-18	23-May-18	13-Jun-18	8.94	7.5	
21	R-122	MR-234	Arghakhachi	OPC	Chisang Khola	16-May-18	23-May-18	13-Jun-18	8.67	7.5	
22	R-33	MR-235	Arghakhachi	OPC	Chisang Khola	16-May-18	23-May-18	13-Jun-18	7.87	7.5	
23	South of Xenial Hotel	MR-236	Arghakhachi	OPC	Chisang Khola	17-May-18	24-May-18	14-Jun-18	8.40	7.5	
24	T3 L21	MR-237	Arghakhachi	OPC	Chisang Khola	17-May-18	24-May-18	14-Jun-18	9.74	7.5	
25	R-2	MR-238	Salimar	OPC	Chisang Khola	17-May-18	24-May-18	14-Jun-18	8.67	7.5	
26	R-122	MR-239	Salimar	OPC	Chisang Khola	18-May-18	25-May-18	15-Jun-18	8.27	7.5	
27	R-21	MR-240	Salimar	OPC	Chisang Khola	18-May-18	25-May-18	15-Jun-18	8.00	7.5	
29	South of Xenial Hotel	MR-241	Salimar	OPC	Chisang Khola	19-May-18	26-May-18	16-Jun-18	8.40	7.5	
30	T3 L21	MR-242	Salimar	OPC	Chisang Khola	19-May-18	26-May-18	16-Jun-18	8.14	7.5	
31	R-33	MR-243	Salimar	OPC	Chisang Khola	19-May-18	26-May-18	16-Jun-18	8.94	7.5	
32	R-2	MR-244	Salimar	OPC	Chisang Khola	20-May-18	27-May-18	17-Jun-18	8.14	7.5	
33	R-21	MR-245	Salimar	OPC	Chisang Khola	20-May-18	27-May-18	17-Jun-18	8.67	7.5	
34	R-122	MR-246	Salimar	OPC	Chisang Khola	20-May-18	27-May-18	17-Jun-18	8.40	7.5	
35	T3 L21	MR-247	Salimar	OPC	Chisang Khola	21-May-18	28-May-18	18-Jun-18	8.00	7.5	
36	T3 L39	MR-248	Salimar	OPC	Chisang Khola	21-May-18	28-May-18	18-Jun-18	9.20	7.5	
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 					



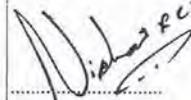
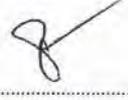
REGIONAL URBAN DEVELOPMENT PROJECT

Biratnagar Metropolitan City

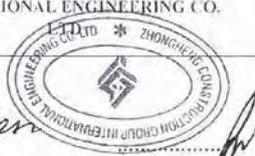
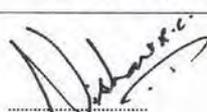
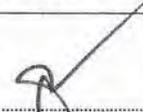
Contract No:- RUDP/ICB/BRT-02

Summary Sheet of Mortar Test Report

S.N.	Location	Lab Ref.no.	Type of Cement	Brand of Cement	Source of Sand	Date of Casting	Month		June		Type of Grade
							Year		2018		
							Description of Sample		Brick Wall		
							Date of Testing		Strength, N/mm ²		
7 Days	28 Days	7 Days	28 Days								
37	R-2	MR-249	Salimar	OPC	Chisang Khola	21-May-18	28-May-18	18-Jun-18	8.27	7.5	
38	R-122	MR-250	Salimar	OPC	Chisang Khola	21-May-18	28-May-18	18-Jun-18	8.14	7.5	
39	R-122	MR-251	Salimar	OPC	Chisang Khola	22-May-18	29-May-18	19-Jun-18	8.27	7.5	
40	T3 L21	MR-252	Salimar	OPC	Chisang Khola	22-May-18	29-May-18	19-Jun-18	8.40	7.5	
41	R-122	MR-253	Salimar	OPC	Chisang Khola	22-May-18	29-May-18	19-Jun-18	8.80	7.5	
42	T3 L39	MR-254	Salimar	OPC	Chisang Khola	22-May-18	29-May-18	19-Jun-18	8.40	7.5	
43	R-122	MR-255	Salimar	OPC	Chisang Khola	23-May-18	30-May-18	20-Jun-18	7.87	7.5	
44	T3 L21	MR-256	Salimar	OPC	Chisang Khola	24-May-18	31-May-18	21-Jun-18	8.54	7.5	
45	R-2	MR-257	Salimar	OPC	Chisang Khola	24-May-18	31-May-18	21-Jun-18	9.20	7.5	
46	R-122	MR-258	Salimar	OPC	Chisang Khola	24-May-18	31-May-18	21-Jun-18	8.67	7.5	
47	Xenial Hotel	MR-259	Salimar	OPC	Chisang Khola	24-May-18	31-May-18	21-Jun-18	8.14	7.5	
48	R-33	MR-260	Salimar	OPC	Chisang Khola	24-May-18	31-May-18	21-Jun-18	7.74	7.5	
49	R-111	MR-261	Salimar	OPC	Chisang Khola	25-May-18	1-Jun-18	22-Jun-18	5.74	8.80	7.5
50	R-2	MR-262	Salimar	OPC	Chisang Khola	25-May-18	1-Jun-18	22-Jun-18	6.14	8.67	7.5
51	South of Xenial hotel	MR-263	Salimar	OPC	Chisang Khola	26-May-18	2-Jun-18	23-Jun-18	5.87	7.74	7.5
52	R-122	MR-264	Salimar	OPC	Chisang Khola	28-May-18	4-Jun-18	25-Jun-18	5.87	7.74	7.5
53	T3L21	MR-265	Salimar	OPC	Chisang Khola	28-May-18	4-Jun-18	25-Jun-18	6.00	8.14	7.5
54	Rani Site	MR-266	Salimar	OPC	Chisang Khola	29-May-18	5-Jun-18	26-Jun-18	5.47	9.47	7.5
55	R-2	MR-267	Salimar	OPC	Chisang Khola	29-May-18	5-Jun-18	26-Jun-18	6.40	8.67	7.5
56	R-111	MR-268	Salimar	OPC	Chisang Khola	30-May-18	6-Jun-18	27-Jun-18	5.74	8.40	7.5
57	R-2	MR-269	Salimar	OPC	Chisang Khola	30-May-18	6-Jun-18	27-Jun-18	5.60	8.54	7.5
58	Rani site	MR-270	Salimar	OPC	Chisang Khola	1-Jun-18	8-Jun-18	29-Jun-18	5.65	8.94	7.5
59	R-2	MR-271	Salimar	OPC	Chisang Khola	1-Jun-18	8-Jun-18	29-Jun-18	5.74	8.40	7.5
60	T3L21	MR-272	Salimar	OPC	Chisang Khola	2-Jun-18	9-Jun-18	30-Jun-18	5.87	8.74	7.5
61	South of Xenial hotel	MR-273	Salimar	OPC	Chisang Khola	3-Jun-18	10-Jun-18	1-Jul-18	5.87		7.5
62	T3L39	MR-274	Salimar	OPC	Chisang Khola	4-Jun-18	11-Jun-18	2-Jul-18	5.60		7.5
63	T3L39	MR-275	Salimar	OPC	Chisang Khola	4-Jun-18	11-Jun-18	2-Jul-18	6.00		7.5
65	R-111	MR-276	Salimar	OPC	Chisang Khola	7-Jun-18	14-Jun-18	5-Jul-18	6.27		7.5
66	DSP Road	MR-277	Salimar	OPC	Chisang Khola	7-Jun-18	14-Jun-18	5-Jul-18	5.33		7.5
67	B2-I	MR-278	Salimar	OPC	Chisang Khola	8-Jun-18	15-Jun-18	6-Jul-18	6.27		7.5
68	DSP Road	MR-279	Salimar	OPC	Chisang Khola	8-Jun-18	15-Jun-18	6-Jul-18	6.14		7.5
69	Rani Site	MR-280	Salimar	OPC	Chisang Khola	8-Jun-18	15-Jun-18	6-Jul-18	6.14		7.5
70	Rani Site	MR-281	Salimar	OPC	Chisang Khola	9-Jun-18	16-Jun-18	7-Jul-18	6.67		7.5
71	N-3	MR-282	Salimar	OPC	Chisang Khola	10-Jun-18	17-Jun-18	8-Jul-18	5.33		7.5

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						Month:	May
Biratnagar Metropolitan City						Year	2018
Contract No:- RUDP/ICB/BRT-02						Type of Material	Com. Material
Summary Sheet of Monthly Test Report						OMC	Remarks
Sr	Lab Ref no	Location of Sample	Chamage	Date of Testing	MDD		
Location:-T2Line 18							
1	RUDP-CM-01	T2L18	0+080	8-May-18	1.825	10.20	
Location:-T2Line 18N							
2	RUDP-CM-01	T2L18N	0+030	11-May-18	2.080	10.60	
Location:-T2L21							
3	RUDP-CM-01	T2L21	0+120	12-May-18	2.120	10.80	
Location:-T2L27							
4	RUDP-CM-01	T2L27	0+050	13-May-18	2.020	10.55	
Location:-T3L11E							
5	RUDP-CM-01	T3L11E	0+050	15-May-18	1.840	11.60	
Location:-T3L11 I							
6	RUDP-CM-01	T3L11 I	0+110	13-May-18	1.840	10.70	
Location:-T3L21							
7	RUDP-CM-01	T3L21	0+110	19-May-18	2.090	9.10	
Location:-T3L23							
8	RUDP-CM-01	T3L23	0+110	19-May-18	1.950	8.90	
Location:-T3L23A							
9	RUDP-CM-01	T3L23A	0+110	19-May-18	1.960	10.20	
Location:-T3L23B							
10	RUDP-CM-01	T3L23B	0+050	21-May-18	1.980	10.25	
Location:-T3L39							
11	RUDP-CM-01	T3L39	0+120	23-May-18	2.010	10.90	
Location:-T3L39B							
12	RUDP-CM-01	T3L39B	0+030	23-May-18	2.040	11.50	
Location:-T3L39A							
13	RUDP-CM-01	T3L39A	0+060	24-May-18	1.970	12.25	
Location:-T4L1							
14	RUDP-CM-01	T4L1	0+100	29-May-18	1.940	12.00	
Contractor				Consultant			
ZHONGHENG CONSTRUCTION GROUP INTERNATIONAL ENGINEERING CO.				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 City Engineer/CSE		 Approved By Team Leader	



REGIONAL URBAN DEVELOPMENT PROJECT

Biratnagar Metropolitan City

Contract No:- RUDP/ICB/BRT-02

Summary Sheet of Field Density Test

Sn.	Lab.Ref.no	Testing Date	Change	Moisture content %		Density(gm/cc)		Compaction %	
				OMC%	Field MC%	Max.Dry density gm/cc	Field Dry density, gm/cc	Compaction %	Specified %
Location:-T2Line18									
1	RUDP-SG-FD-1, L/S	10-May-18	0+050	10.20	9.86	1.825	1.671	✓ 91.54	90
2	RUDP-SG-FD-1, R/S	10-May-18	0+100	10.20	10.47	1.825	1.680	✓ 92.05	90
3	RUDP-SG-FD-1, L/S	10-May-18	0+150	10.20	10.38	1.825	1.675	✓ 91.79	90
Location:-T2Line18N									
4	RUDP-SG-FD-1, C/L	13-May-18	0+030	10.60	10.27	2.080	1.904	✓ 91.52	90
Location:-T2L21									
5	RUDP-SG-FD-1, R/S	14-May-18	0+040	10.80	9.36	2.120	1.966	✓ 92.73	90
6	RUDP-SG-FD-1, R/S	14-May-18	0+080	10.80	10.33	2.120	1.937	✓ 91.36	90
7	RUDP-SG-FD-1, L/S	14-May-18	0+150	10.80	9.42	2.120	1.961	✓ 92.50	90
8	RUDP-SG-FD-1, R/S	14-May-18	0+200	10.80	10.73	2.120	1.914	✓ 90.27	90
9	RUDP-SG-FD-1, R/S	14-May-18	0+250	10.80	10.03	2.100	1.950	✓ 91.99	90
Location:-T2L27									
10	RUDP-SG-FD-1, L/S	14-May-18	0+020	10.55	9.74	2.020	1.850	✓ 91.59	90
11	RUDP-SG-FD-1, R/S	14-May-18	0+060	10.55	10.10	2.020	1.852	✓ 91.69	90
Location:-T3L11E									
12	RUDP-SG-FD-1, L/S	16-May-18	0+030	11.60	10.85	1.840	1.694	✓ 92.06	90
13	RUDP-SG-FD-1, R/S	16-May-18	0+065	11.60	10.86	1.840	1.678	✓ 91.21	90
Location:-T3L11 I									
14	RUDP-SG-FD-1, L/S	16-May-18	0+080	10.70	9.90	1.830	1.683	✓ 91.46	90
15	RUDP-SG-FD-1, R/S	16-May-18	0+120	10.70	9.78	1.830	1.683	✓ 92.06	90
Location:-T3L21									
16	RUDP-SG-FD-1, L/S	21-May-18	0+090	9.10	8.49	2.090	1.925	✓ 92.09	90
17	RUDP-SG-FD-1, R/S	21-May-18	0+120	9.10	8.74	2.090	1.913	✓ 91.55	90
Location:-T3L23									
18	RUDP-SG-FD-1, L/S	21-May-18	0+070	8.90	7.83	1.950	1.828	✓ 93.76	90
19	RUDP-SG-FD-1, R/S	21-May-18	0+140	8.90	7.93	1.950	1.789	✓ 91.74	90
Location:-T3L23A									
20	RUDP-SG-FD-1, R/S	21-May-18	0+050	10.20	9.03	1.960	1.790	✓ 91.31	90
21	RUDP-SG-FD-1, R/S	21-May-18	0+130	10.20	9.94	1.960	1.790	✓ 91.09	90
Location:-T3L23B									
22	RUDP-SG-FD-1, L/S	21-May-18	0+040	10.25	9.64	1.980	1.811	✓ 91.45	90
23	RUDP-SG-FD-1, R/S	21-May-18	0+080	10.25	9.64	1.980	1.838	✓ 92.85	90
Location:-T3L23B									
24	RUDP-SG-FD-1, L/S	21-May-18	0+040	10.25	9.64	1.980	1.811	✓ 91.45	90
25	RUDP-SG-FD-1, R/S	21-May-18	0+080	10.25	9.97	1.980	1.838	✓ 92.85	90

<p style="text-align:center">Contractor</p> <p>HONGHENG CONSTRUCTION GROUP INTERNATIONAL ENGINEERING CO. LTD</p> <p><i>[Signature]</i> Checked By Engineer</p> <p><i>[Signature]</i> Submitted By Contract Manager</p>	<p style="text-align:center">Consultant</p> <p>BUILDING DESIGN AUTHORITY (P) LTD IN JOINT VENTURE WITH B.N. CONSULTANCY PVT. LTD AND P. U.S. ENGINEERS & ARCHITECTS (P) LTD, KATHMANDU.</p> <p><i>[Signature]</i> Verified By Qty Engineer/CSE</p> <p><i>[Signature]</i> Approved By Team Leader</p>
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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		June		Concrete Grade
							Year		2018		
							Type of Material		Conc. Cube		
							Date of Testing		Strength, N/mm ²		
7 Days	28 Days	7 Days	28 Days								
1	Koshi yard	RUDP-361	Arghakhachi	OPC	Chisang Khola	4-May-18	11-May-18	1-Jun-18	21.45	M20	
2	DDC-yard	RUDP-362	Arghakhachi	OPC	Chisang Khola	4-May-18	11-May-18	1-Jun-18	22.28	M20	
3	R-122	RUDP-363	Arghakhachi	OPC	Chisang Khola	4-May-18	11-May-18	1-Jun-18	20.85	M20	
4	DSP Road	RUDP-364	Arghakhachi	OPC	Chisang Khola	4-May-18	11-May-18	1-Jun-18	22.50	M20	
5	T3 L21	RUDP-365	Arghakhachi	OPC	Chisang Khola	4-May-18	11-May-18	1-Jun-18	21.75	M20	
6	B3-2	RUDP-366	Arghakhachi	OPC	Chisang Khola	4-May-18	11-May-18	1-Jun-18	21.00	M20	
7	RR-1	RUDP-367	Arghakhachi	OPC	Chisang Khola	4-May-18	11-May-18	1-Jun-18	21.75	M20	
8	DDC-yard	RUDP-368	Arghakhachi	OPC	Chisang Khola	4-May-18	11-May-18	1-Jun-18	32.53	M30	
9	Madhumara-Yard	RUDP-369	Arghakhachi	OPC	Chisang Khola	4-May-18	11-May-18	1-Jun-18	33.04	M30	
10	R-5 (South of Traffic Chowk)	RUDP-370	Arghakhachi	OPC	Chisang Khola	5-May-18	12-May-18	2-Jun-18	21.30	M20	
11	CN2CN3	RUDP-371	Arghakhachi	OPC	Chisang Khola	5-May-18	12-May-18	2-Jun-18	21.37	M20	
12	CN2CN3	RUDP-372	Arghakhachi	OPC	Chisang Khola	5-May-18	12-May-18	2-Jun-18	21.60	M20	
13	Rani-Site	RUDP-373	Arghakhachi	OPC	Chisang Khola	5-May-18	12-May-18	2-Jun-18	21.98	M20	
14	R-2	RUDP-374	Arghakhachi	OPC	Chisang Khola	5-May-18	12-May-18	2-Jun-18	22.88	M20	
15	Xenial Hotel	RUDP-375	Arghakhachi	OPC	Chisang Khola	5-May-18	12-May-18	2-Jun-18	22.05	M20	
16	Koshi yard	RUDP-376	Arghakhachi	OPC	Chisang Khola	5-May-18	12-May-18	2-Jun-18	21.75	M20	
17	CN2CN3	RUDP-377	Arghakhachi	OPC	Chisang Khola	5-May-18	12-May-18	2-Jun-18	22.80	M20	
18	R-2	RUDP-378	Arghakhachi	OPC	Chisang Khola	6-May-18	13-May-18	3-Jun-18	23.63	M20	
19	R-21	RUDP-379	Arghakhachi	OPC	Chisang Khola	6-May-18	13-May-18	3-Jun-18	22.43	M20	
20	T3 L21	RUDP-380	Arghakhachi	OPC	Chisang Khola	6-May-18	13-May-18	3-Jun-18	23.78	M20	
21	R-2	RUDP-381	Arghakhachi	OPC	Chisang Khola	6-May-18	13-May-18	3-Jun-18	23.41	M20	
22	R-36	RUDP-382	Salimar	OPC	Chisang Khola	6-May-18	13-May-18	3-Jun-18	22.88	M20	
23	R-111	RUDP-383	Salimar	OPC	Chisang Khola	6-May-18	13-May-18	3-Jun-18	23.33	M20	
24	RR-1	RUDP-384	Salimar	OPC	Chisang Khola	6-May-18	13-May-18	3-Jun-18	22.95	M20	
25	B2-2	RUDP-385	Salimar	OPC	Chisang Khola	6-May-18	13-May-18	3-Jun-18	24.53	M20	
26	DSP-Road	RUDP-386	Salimar	OPC	Chisang Khola	7-May-18	14-May-18	4-Jun-18	23.41	M20	
27	T3 L39	RUDP-387	Salimar	OPC	Chisang Khola	7-May-18	14-May-18	4-Jun-18	23.63	M20	
28	R-5 (South of Traffic Chowk)	RUDP-388	Salimar	OPC	Chisang Khola	7-May-18	14-May-18	4-Jun-18	22.20	M20	
29	RR-1	RUDP-389	Salimar	OPC	Chisang Khola	7-May-18	14-May-18	4-Jun-18	23.71	M20	
30	B2-2	RUDP-390	Salimar	OPC	Chisang Khola	7-May-18	14-May-18	4-Jun-18	23.26	M20	
31	CN2CN3	RUDP-391	Salimar	OPC	Chisang Khola	9-May-18	16-May-18	6-Jun-18	23.71	M20	
32	R-122	RUDP-392	Salimar	OPC	Chisang Khola	9-May-18	16-May-18	6-Jun-18	21.67	M20	
33	CN2CN3	RUDP-393	Salimar	OPC	Chisang Khola	9-May-18	16-May-18	6-Jun-18	22.88	M20	

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

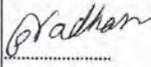
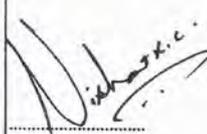
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Contract Manager

Verified By
Qty Engineer/CSE

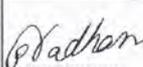
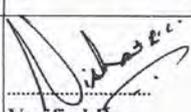
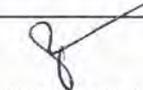
Approved By
Team Leader



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		June		Conc rete Grad
							Year		2018		
							Type of Material		Conc. Cube		
							Date of Testing		Strength, N/mm2		
							7 Days	28 Days	7 Days	28 Days	
34	Madhumara-Yard	RUDP-394	Salimar	OPC	Chisang Khola	9-May-18	16-May-18	6-Jun-18		31.93	M30
35	DDC-yard	RUDP-395	Salimar	OPC	Chisang Khola	10-May-18	17-May-18	7-Jun-18		22.05	M20
36	DDC-yard	RUDP-396	Salimar	OPC	Chisang Khola	10-May-18	17-May-18	7-Jun-18		21.60	M20
37	T3 L39	RUDP-397	Salimar	OPC	Chisang Khola	10-May-18	17-May-18	7-Jun-18		24.16	M20
38	CN2CN3	RUDP-398	Salimar	OPC	Chisang Khola	11-May-18	18-May-18	8-Jun-18		21.75	M20
39	T3 L21	RUDP-399	Salimar	OPC	Chisang Khola	11-May-18	18-May-18	8-Jun-18		24.08	M20
40	R-33	RUDP-400	Salimar	OPC	Chisang Khola	12-May-18	19-May-18	9-Jun-18		25.14	M20
41	R-21	RUDP-401	Salimar	OPC	Chisang Khola	12-May-18	19-May-18	9-Jun-18		22.35	M20
42	R-111	RUDP-402	Salimar	OPC	Chisang Khola	12-May-18	19-May-18	9-Jun-18		23.18	M20
43	South of Xenial Hotel	RUDP-403	Salimar	OPC	Chisang Khola	12-May-18	19-May-18	9-Jun-18		23.78	M20
44	RR-1	RUDP-404	Salimar	OPC	Chisang Khola	12-May-18	19-May-18	9-Jun-18		24.01	M20
45	B2-2	RUDP-405	Salimar	OPC	Chisang Khola	12-May-18	19-May-18	9-Jun-18		23.33	M20
46	R-5(South of Traffic	RUDP-406	Salimar	OPC	Chisang Khola	12-May-18	19-May-18	9-Jun-18		22.28	M20
47	DSP Road	RUDP-407	Salimar	OPC	Chisang Khola	16-May-18	23-May-18	13-Jun-18		21.00	M20
48	R-33	RUDP-408	Salimar	OPC	Chisang Khola	16-May-18	23-May-18	13-Jun-18		23.26	M20
49	R-21	RUDP-409	Salimar	OPC	Chisang Khola	16-May-18	23-May-18	13-Jun-18		21.83	M20
50	R-2	RUDP-410	Salimar	OPC	Chisang Khola	16-May-18	23-May-18	13-Jun-18		22.50	M20
51	B2-2	RUDP-411	Salimar	OPC	Chisang Khola	16-May-18	23-May-18	13-Jun-18		24.76	M20
52	RR-1	RUDP-412	Salimar	OPC	Chisang Khola	16-May-18	23-May-18	13-Jun-18		23.71	M20
53	DDC-Yard	RUDP-413	Salimar	OPC	Chisang Khola	17-May-18	24-May-18	14-Jun-18		22.35	M20
54	DDC-Yard	RUDP-414	Salimar	OPC	Chisang Khola	17-May-18	24-May-18	14-Jun-18		23.56	M20
55	Madumara-Yard	RUDP-415	Salimar	OPC	Chisang Khola	17-May-18	24-May-18	14-Jun-18		32.23	M30
56	T3 L39	RUDP-416	Salimar	OPC	Chisang Khola	17-May-18	24-May-18	14-Jun-18		23.78	M20
58	CN2CN3	RUDP-417	Salimar	OPC	Chisang Khola	17-May-18	24-May-18	14-Jun-18		21.67	M20
59	RR-2	RUDP-418	Salimar	OPC	Chisang Khola	17-May-18	24-May-18	14-Jun-18		22.28	M20

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											
							Month		June		
							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/mm2		Concrete Grade
							7 Days	28 Days	7 Days	28 Days	
60	R-5(South of Traffic Chowk)	RUDP-419	Salimar	OPC	Chisang Khola	17-May-18	24-May-18	14-Jun-18		23.78	M20
61	R-2	RUDP-420	Salimar	OPC	Chisang Khola	17-May-18	24-May-18	14-Jun-18		22.35	M20
62	R-111	RUDP-421	Salimar	OPC	Chisang Khola	18-Apr-18	25-Apr-18	16-May-18		21.00	M20
63	DSP Road	RUDP-422	Salimar	OPC	Chisang Khola	18-Apr-18	25-Apr-18	16-May-18		21.67	M20
64	R-6	RUDP-423	Salimar	OPC	Chisang Khola	18-Apr-18	25-Apr-18	16-May-18		22.13	M20
65	CN2CN3	RUDP-424	Salimar	OPC	Chisang Khola	19-May-18	26-May-18	16-Jun-18		22.05	M20
66	R-2	RUDP-425	Salimar	OPC	Chisang Khola	19-May-18	26-May-18	16-Jun-18		22.43	M20
67	RR-2	RUDP-426	Salimar	OPC	Chisang Khola	19-May-18	26-May-18	16-Jun-18		22.43	M20
68	CN2CN3	RUDP-427	Salimar	OPC	Chisang Khola	19-May-18	26-May-18	16-Jun-18		21.60	M20
69	CN2CN3	RUDP-428	Salimar	OPC	Chisang Khola	19-May-18	26-May-18	16-Jun-18		21.75	M20
70	T3 L39	RUDP-429	Salimar	OPC	Chisang Khola	19-May-18	26-May-18	16-Jun-18		21.30	M20
71	R-6	RUDP-430	Salimar	OPC	Chisang Khola	20-May-18	27-May-18	17-Jun-18		21.83	M20
72	R-2	RUDP-431	Salimar	OPC	Chisang Khola	20-May-18	27-May-18	17-Jun-18		24.01	M20
73	DSP-Road	RUDP-432	Salimar	OPC	Chisang Khola	21-May-18	28-May-18	18-Jun-18		21.98	M20
74	CN2CN3	RUDP-433	Salimar	OPC	Chisang Khola	21-May-18	28-May-18	18-Jun-18		23.33	M20
75	CN2CN3	RUDP-434	Salimar	OPC	Chisang Khola	21-May-18	28-May-18	18-Jun-18		22.20	M20
76	CN2CN3	RUDP-435	Salimar	OPC	Chisang Khola	21-May-18	28-May-18	18-Jun-18		24.84	M20
77	R-6	RUDP-436	Salimar	OPC	Chisang Khola	21-May-18	28-May-18	18-Jun-18		23.71	M20
78	CN2CN3	RUDP-437	Salimar	OPC	Chisang Khola	22-May-18	29-May-18	19-Jun-18		22.43	M20
79	R-2	RUDP-438	Salimar	OPC	Chisang Khola	22-May-18	29-May-18	19-Jun-18		23.63	M20
80	DDC-yard	RUDP-439	Salimar	OPC	Chisang Khola	23-May-18	30-May-18	20-Jun-18		23.03	M20
81	CN2CN3	RUDP-440	Salimar	OPC	Chisang Khola	24-May-18	31-May-18	21-Jun-18		21.83	M20
82	DDC-yard	RUDP-441	Salimar	OPC	Chisang Khola	24-May-18	31-May-18	21-Jun-18		22.43	M20
84	CN2CN3	RUDP-442	Salimar	OPC	Chisang Khola	24-May-18	31-May-18	21-Jun-18		23.48	M20
85	RR-1	RUDP-443	Salimar	OPC	Chisang Khola	25-May-18	1-Jun-18	22-Jun-18	15.44	21.22	M20
86	CN2CN3	RUDP-444	Salimar	OPC	Chisang Khola	25-May-18	1-Jun-18	22-Jun-18	11.11	15.58	M15
87	RR-2	RUDP-445	Salimar	OPC	Chisang Khola	25-May-18	1-Jun-18	22-Jun-18	15.66	21.37	M20
88	R-5 (Traffic Chowk)	RUDP-446	Salimar	OPC	Chisang Khola	25-May-18	1-Jun-18	22-Jun-18	14.84	21.30	M20
89	R3-A	RUDP-447	Salimar	OPC	Chisang Khola	25-May-18	1-Jun-18	22-Jun-18	14.55	20.62	M20
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					

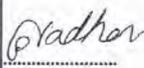
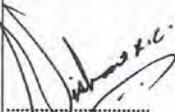


REGIONAL URBAN DEVELOPMENT PROJECT

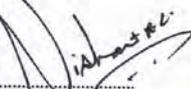
Biratnagar Metropolitan City

Contract No:- RUDP/ICB/BRT-02

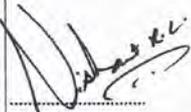
Summary Sheet of Concrete Cube Test Report

S.N.	Location	Lab Ref.no.	Type of Cement	Brand of Cement	Source of Sand+Agg.	Date of Casting	Month		June		Concrete Grade
							Year		2018		
							Type of Material		Conc. Cube		
							Date of Testing		Strength, N/mm ²		
7 Days	28 Days	7 Days	28 Days								
90	B2-1	RUDP-448	Salimar	OPC	Chisang Khola	25-May-18	1-Jun-18	22-Jun-18	15.29	21.67	M20
91	DSP Rod	RUDP-449	Salimar	OPC	Chisang Khola	26-May-18	2-Jun-18	23-Jun-18	15.55	22.13	M20
92	RR-1	RUDP-450	Salimar	OPC	Chisang Khola	26-May-18	2-Jun-18	23-Jun-18	14.55	21.75	M20
93	RR-2	RUDP-451	Salimar	OPC	Chisang Khola	26-May-18	2-Jun-18	23-Jun-18	15.14	21.67	M20
94	R5 (Traffic Chowk	RUDP-452	Salimar	OPC	Chisang Khola	26-May-18	2-Jun-18	23-Jun-18	14.4	21.00	M20
95	N-3	RUDP-453	Salimar	OPC	Chisang Khola	27-May-18	3-Jun-18	24-Jun-18	14.92	21.07	M20
96	RR-1	RUDP-454	Salimar	OPC	Chisang Khola	27-May-18	3-Jun-18	24-Jun-18	14.17	21.37	M20
97	R-21(East of Sombare Hatya)	RUDP-455	Salimar	OPC	Chisang Khola	27-May-18	3-Jun-18	24-Jun-18	15.14	21.83	M20
98	R3-A	RUDP-456	Salimar	OPC	Chisang Khola	27-May-18	3-Jun-18	24-Jun-18	14.17	21.60	M20
99	B2-1	RUDP-457	Salimar	OPC	Chisang Khola	28-May-18	4-Jun-18	25-Jun-18	14.99	21.45	M20
100	CN2CN3	RUDP-458	Salimar	OPC	Chisang Khola	28-May-18	4-Jun-18	25-Jun-18	14.96	21.75	M20
101	DSP Rod	RUDP-459	Salimar	OPC	Chisang Khola	28-May-18	4-Jun-18	25-Jun-18	15.22	22.35	M20
102	RR-1	RUDP-460	Salimar	OPC	Chisang Khola	28-May-18	4-Jun-18	25-Jun-18	14.55	21.67	M20
103	R-2	RUDP-461	Salimar	OPC	Chisang Khola	29-May-18	5-Jun-18	26-Jun-18	15.22	21.83	M20
104	R-12	RUDP-462	Salimar	OPC	Chisang Khola	29-May-18	5-Jun-18	26-Jun-18	13.87	22.35	M20
105	R-6	RUDP-463	Salimar	OPC	Chisang Khola	29-May-18	5-Jun-18	26-Jun-18	15.55	21.45	M20
106	RR-1	RUDP-464	Salimar	OPC	Chisang Khola	29-May-18	5-Jun-18	26-Jun-18	14.99	22.28	M20
107	R3-A	RUDP-465	Salimar	OPC	Chisang Khola	30-May-18	6-Jun-18	27-Jun-18	15.89	21.83	M20
108	Rani Site	RUDP-466	Salimar	OPC	Chisang Khola	30-May-18	6-Jun-18	27-Jun-18	14.10	22.58	M20
109	R-2	RUDP-467	Salimar	OPC	Chisang Khola	30-May-18	6-Jun-18	27-Jun-18	14.69	22.35	M20
110	DDC-yard	RUDP-468	Salimar	OPC	Chisang Khola	30-May-18	6-Jun-18	27-Jun-18	14.32	23.56	M20
111	CN2CN3	RUDP-469	Salimar	OPC	Chisang Khola	1-Jun-18	8-Jun-18	29-Jun-18	14.92	23.71	M20
112	DDC-yard	RUDP-470	Salimar	OPC	Chisang Khola	1-Jun-18	8-Jun-18	29-Jun-18	14.69	21.75	M20
113	Madhumara Yard	RUDP-471	Salimar	OPC	Chisang Khola	1-Jun-18	8-Jun-18	29-Jun-18	22.35	32.31	M30
114	R-2	RUDP-472	Salimar	OPC	Chisang Khola	1-Jun-18	8-Jun-18	29-Jun-18	14.99	21.07	M20
115	R-6	RUDP-473	Salimar	OPC	Chisang Khola	1-Jun-18	8-Jun-18	29-Jun-18	14.84	21.00	M20
117	RR-2	RUDP-474	Salimar	OPC	Chisang Khola	2-Jun-18	9-Jun-18	30-Jun-18	15.81	21.15	M20
118	S13-B	RUDP-475	Salimar	OPC	Chisang Khola	2-Jun-18	9-Jun-18	30-Jun-18	15.14	22.58	M20
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		June		Concrete Grade
							Year		2018		
							Type of Material		Conc. Cube		
							Date of Testing		Strength, N/mm ²		
							7 Days	28 Days	7 Days	28 Days	
119	R-113	RUDP-476	Salimar	OPC	Chisang Khola	2-Jun-18	9-Jun-18	30-Jun-18	15.1	21.22	M20
120	R-12	RUDP-477	Salimar	OPC	Chisang Khola	2-Jun-18	9-Jun-18	30-Jun-18	15.1	22.8	M20
121	R-111	RUDP-478	Salimar	OPC	Chisang Khola	3-Jun-18	10-Jun-18	1-Jul-18	15.5		M20
122	South of Xenial hotel	RUDP-479	Salimar	OPC	Chisang Khola	3-Jun-18	10-Jun-18	1-Jul-18	15.1		M20
123	N-3	RUDP-480	Salimar	OPC	Chisang Khola	3-Jun-18	10-Jun-18	1-Jul-18	15.9		M20
124	B2-1	RUDP-481	Salimar	OPC	Chisang Khola	3-Jun-18	10-Jun-18	1-Jul-18	15.1		M20
125	CN2CN3	RUDP-482	Salimar	OPC	Chisang Khola	4-Jun-18	11-Jun-18	2-Jul-18	14.6		M20
126	Madhumara	RUDP-483	Salimar	OPC	Chisang Khola	4-Jun-18	11-Jun-18	2-Jul-18	23.3		M30
127	DDC-yard	RUDP-484	Salimar	OPC	Chisang Khola	4-Jun-18	11-Jun-18	2-Jul-18	15.9		M20
128	CN2CN3	RUDP-485	Salimar	OPC	Chisang Khola	5-Jun-18	12-Jun-18	3-Jul-18	14.1		M20
129	R-6	RUDP-486	Salimar	OPC	Chisang Khola	5-Jun-18	12-Jun-18	3-Jul-18	15		M20
130	R-2	RUDP-487	Salimar	OPC	Chisang Khola	5-Jun-18	12-Jun-18	3-Jul-18	15.2		M20
131	Rani Site	RUDP-488	Salimar	OPC	Chisang Khola	6-Jun-18	13-Jun-18	4-Jul-18	14.6		M20
132	Madhumara	RUDP-489	Salimar	OPC	Chisang Khola	6-Jun-18	13-Jun-18	4-Jul-18	21.9		M30
133	S13-B	RUDP-490	Salimar	OPC	Chisang Khola	6-Jun-18	13-Jun-18	4-Jul-18	15.1		M20
134	S11-A	RUDP-491	Salimar	OPC	Chisang Khola	6-Jun-18	13-Jun-18	4-Jul-18	15.4		M20
135	R3-A	RUDP-492	Salimar	OPC	Chisang Khola	6-Jun-18	13-Jun-18	4-Jul-18	15.6		M20
136	Rani Site	RUDP-493	Salimar	OPC	Chisang Khola	7-Jun-18	14-Jun-18	5-Jul-18	14.6		M20
137	R-113	RUDP-494	Salimar	OPC	Chisang Khola	7-Jun-18	14-Jun-18	5-Jul-18	15.14		M20
138	R-6	RUDP-495	Salimar	OPC	Chisang Khola	7-Jun-18	14-Jun-18	5-Jul-18	15.1		M20
139	S11-A	RUDP-496	Salimar	OPC	Chisang Khola	8-Jun-18	15-Jun-18	6-Jul-18	14.3		M20
140	S13-B	RUDP-497	Salimar	OPC	Chisang Khola	8-Jun-18	15-Jun-18	6-Jul-18	14.8		M20
141	R-114	RUDP-498	Salimar	OPC	Chisang Khola	9-Jun-18	16-Jun-18	7-Jul-18	15.3		M20
142	R-111	RUDP-499	Salimar	OPC	Chisang Khola	9-Jun-18	16-Jun-18	7-Jul-18	14.8		M20
143	R-6	RUDP-500	Salimar	OPC	Chisang Khola	9-Jun-18	16-Jun-18	7-Jul-18	15.3		M20
144	R-2	RUDP-501	Salimar	OPC	Chisang Khola	9-Jun-18	16-Jun-18	7-Jul-18	15.7		M20
146	R-12	RUDP-502	Salimar	OPC	Chisang Khola	11-Jun-18	18-Jun-18	9-Jul-18	14.7		M20
147	R-2	RUDP-503	Salimar	OPC	Chisang Khola	11-Jun-18	18-Jun-18	9-Jul-18	14.6		M20
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		June		Concrete Grade
							Year		2018		
							Type of Material		Cone. Cube		
							Date of Testing		Strength, N/mm ²		
				7 Days		28 Days		7 Days		28 Days	
148	R-111	RUDP-504	Salimar	OPC	Chisang Khola	11-Jun-18	18-Jun-18	9-Jul-18	15.52		M20
149	R-12	RUDP-505	Salimar	OPC	Chisang Khola	11-Jun-18	18-Jun-18	9-Jul-18	17.73		M20
150	Rani site	RUDP-506	Salimar	OPC	Chisang Khola	12-Jun-18	19-Jun-18	10-Jul-18	14.99		M20
151	R-114	RUDP-507	Salimar	OPC	Chisang Khola	12-Jun-18	19-Jun-18	10-Jul-18	15.14		M20
152	CN2CN3	RUDP-508	Salimar	OPC	Chisang Khola	13-Jun-18	20-Jun-18	11-Jul-18	14.92		M20
153	Madhumara	RUDP-509	Salimar	OPC	Chisang Khola	13-Jun-18	20-Jun-18	11-Jul-18	23.41		M30
154	R-6	RUDP-510	Salimar	OPC	Chisang Khola	13-Jun-18	20-Jun-18	11-Jul-18	15.37		M20
155	R-2	RUDP-511	Salimar	OPC	Chisang Khola	14-Jun-18	21-Jun-18	12-Jul-18	14.55		M20
156	Rani site	RUDP-512	Salimar	OPC	Chisang Khola	14-Jun-18	21-Jun-18	12-Jul-18	14.99		M20
157	CN2CN3	RUDP-513	Salimar	OPC	Chisang Khola	14-Jun-18	21-Jun-18	12-Jul-18	11.3		M15
158	R-6	RUDP-514	Salimar	OPC	Chisang Khola	15-Jun-18	22-Jun-18	13-Jul-18	11.23		M15
159	R-2	RUDP-515	Salimar	OPC	Chisang Khola	15-Jun-18	22-Jun-18	13-Jul-18	15.44		M20
160	Rani site	RUDP-516	Salimar	OPC	Chisang Khola	15-Jun-18	22-Jun-18	13-Jul-18	14.77		M20
161	DDC-yard	RUDP-517	Salimar	OPC	Chisang Khola	16-Jun-18	23-Jun-18	14-Jul-18	15.52		M20
162	T3L39	RUDP-518	Salimar	OPC	Chisang Khola	16-Jun-18	23-Jun-18	14-Jul-18	15.92		M20
163	CN2CN3	RUDP-519	Salimar	OPC	Chisang Khola	16-Jun-18	23-Jun-18	14-Jul-18	14.77		M20
164	R-114	RUDP-520	Salimar	OPC	Chisang Khola	16-Jun-18	23-Jun-18	14-Jul-18	14.92		M20
165	R-104	RUDP-521	Salimar	OPC	Chisang Khola	17-Jun-18	24-Jun-18	15-Jul-18	14.77		M20
166	Madhumara	RUDP-522	Salimar	OPC	Chisang Khola	17-Jun-18	24-Jun-18	15-Jul-18	22.28		M30
167	R-104	RUDP-523	Salimar	OPC	Chisang Khola	18-Jun-18	25-Jun-18	16-Jul-18	15.07		M20
168	R-42	RUDP-524	Salimar	OPC	Chisang Khola	18-Jun-18	25-Jun-18	16-Jul-18	14.69		M20
169	R-111	RUDP-525	Salimar	OPC	Chisang Khola	19-Jun-18	26-Jun-18	17-Jul-18	15.22		M20
170	DDC-yard	RUDP-526	Salimar	OPC	Chisang Khola	19-Jun-18	26-Jun-18	17-Jul-18	15.07		M20
171	CN2CN3	RUDP-527	Salimar	OPC	Chisang Khola	19-Jun-18	26-Jun-18	17-Jul-18	15.81		M20
172	CN2CN3	RUDP-528	Salimar	OPC	Chisang Khola	19-Jun-18	26-Jun-18	17-Jul-18	15.74		M20
173	T3L39	RUDP-529	Salimar	OPC	Chisang Khola	19-Jun-18	26-Jun-18	17-Jul-18	15.71		M20
175	T3L21	RUDP-530	Salimar	OPC	Chisang Khola	19-Jun-18	26-Jun-18	17-Jul-18	16.26		M20
176	Rani site	RUDP-531	Salimar	OPC	Chisang Khola	19-Jun-18	26-Jun-18	17-Jul-18	15.22		M20
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	

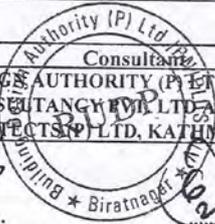


REGIONAL URBAN DEVELOPMENT PROJECT

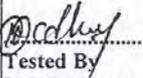
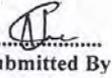
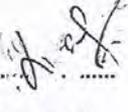
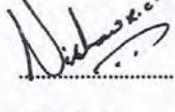
Biratnagar Metropolitan City
Contract No:- RUDP/ICB/BRT-02

Summary Sheet of Field Density Test

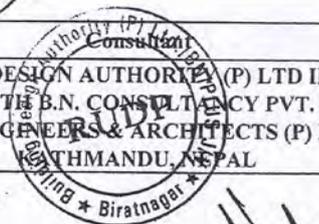
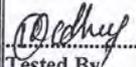
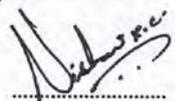
Sn.	Lab.Ref.no	Testing Date	Change	Location:-R-29															
				Moisture content %		Density(gm/cc)		Compaction %											
				OMC%	Field MC%	Max.Dry density gm/cc	Field Dry density, gm/cc	Compaction %	Specific %										
1	RUDP-SG-FD-1, L/S	4-Jun-18	0+050	8.10	7.69	1.960	1.908	97.33	95										
2	RUDP-SG-FD-1, R/S	4-Jun-18	0+100	8.10	7.80	1.960	1.870	95.39	95										
3	RUDP-SG-FD-1, L/S	4-Jun-18	0+150	8.10	6.99	1.960	1.870	96.27	95										
4	RUDP-SG-FD-1, L/S	4-Jun-18	0+180	8.10	6.15	1.960	1.913	97.61	95										
5	RUDP-SG-FD-1, R/S	4-Jun-18	0+250	8.10	6.29	1.960	1.870	95.40	95										
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 <p>ZHONGHENG CONSTRUCTION GROUP INTERNATIONAL ENGINEERS CO. LTD</p>	 <p>BUILDING DESIGN AUTHORITY (P) LTD IN JOINT VENTURE WITH B.N. CONSULTANT PVT. LTD AND PLUS ENGINEERS & ARCHITECTS PVT. LTD, KATHMANDU, NEPAL</p>
<p>Checked By Engineer</p>	<p>Submitted By Contract Manager</p>
<p>Verified By Qty Engineer/CSE</p>	<p>Approved By Team Leader</p>



REGIONAL URBAN DEVELOPMENT PROJECT								
Biratnagar Metropolitan City								
Contract No:- RUDP/ICB/BRT-02								
Field density test of Sub Grade								
(Sand Replacement Method)								
Lab Ref. No. :- RUDP-SG-FD-1				Location :- R-29				
Testing date :- 4-Jun-18				Change 0+000 to 0+276				
Cylinder no. :- 1				Tested Layer :- Sub Grade Final Layer				
Side:		LHS	RHS	LHS	LHS	RHS		
S.No	Test Stations	0+050	0+100	0+150	0+180	0+250		
1	Wt. of Sand before pouring (gm)	25000.00	25000.00	25000.00	25000.00	25000.00		
2	Wt. of Sand after pouring (gm)	17170.00	17280.00	17360.00	18422.00	18192.00		
3	Wt. of Sand in Cone (gm)	2858.00	2858.00	2858.00	2858.00	2858.00		
4	Wt. of Sand in Hole (gm)	4972.00	4862.00	4782.00	3720.00	3950.00		
5	Bulk density of sand (gm/cc)	1.450	1.450	1.450	1.450	1.450		
6	Volume of Hole (cc)	3428.97	3353.10	3297.93	2565.52	2724.14		
7	Depth of Hole (cm)	13.00	14.00	12.00	12.00	12.00		
8	Wt. of Wet Soil (gm)	7044	6758	6658	5210	5414		
9	Bulk density (gm/cc)	2.054	2.015	2.019	2.031	1.987		
10	Dry Density (gm/cc)	1.908	1.870	1.887	1.913	1.870		
Moisture Content								
11	Wt. of wet Soil (gm)	140.21	153.40	150.00	133.00	126.80		
12	Wt. of Dry Soil (gm)	130.20	142.30	140.20	125.30	119.30		
13	Wt. of Water (gm)	10.01	11.10	9.80	7.70	7.50		
14	Moisture content (%)	7.69	7.80	6.99	6.15	6.29		
Result Summary:								
Moisture Content (%)				Density (g/cc)		Compaction %	Spec. Limits %	Remarks:
Tests	Stations	OMC (%)	Field MC (%)	Max. Dry density (gm/cc)	Field Dry density (gm/cc)			
1	0+050	8.10	7.69	1.960	1.908	97.33	95.0%	
2	0+100	8.10	7.80	1.960	1.870	95.39	95.0%	
3	0+150	8.10	6.99	1.960	1.887	96.27	95.0%	
4	0+180	8.10	6.15	1.960	1.913	97.61	95.0%	
5	0+250	8.10	6.29	1.960	1.870	95.40	95.0%	
<i>Approved for further work</i>								
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				
 Tested By Lab Technician		 Submitted By Engineer		 Checked By		 Verified By		



REGIONAL URBAN DEVELOPMENT PROJECT								
Biratnagar Metropolitan City								
Contract No:- RUDP/ICB/BRT-02								
Field density test of Sub Grade								
(Sand Replacement Method)								
Lab Ref. No. :- RUDP-SG-FD-1		Testing date :- 4-Jun-18		Location :- N-36		Change 0+000 to 0+130		
Cylinder no. :- 1		Tested Layer :- Sub Grade Final Layer						
Side:		RHS	LHS					
S.No	Test Stations	0+060	0+140					
1	Wt. of Sand before pouring (gm)	25000.00	25000.00					
2	Wt. of Sand after pouring (gm)	17522.00	17623.00					
3	Wt. of Sand in Cone (gm)	2858.00	2858.00					
4	Wt. of Sand in Hole (gm)	4620.00	4519.00					
5	Bulk density of sand (gm/cc)	1.450	1.450					
6	Volume of Hole (cc)	3186.21	3116.55					
7	Depth of Hole (cm)	13.00	12.00					
8	Wt. of Wet Soil (gm)	6450.00	6325.00					
9	Bulk density (gm/cc)	2.024	2.029					
10	Dry Density (gm/cc)	1.908	1.910					
Moisture Content								
11	Wt. of wet Soil (gm)	134.00	167.10					
12	Wt. of Dry Soil (gm)	126.30	157.30					
13	Wt. of Water (gm)	7.70	9.80					
14	Moisture content (%)	6.10	6.23					
Result Summary:								
Tests	Stations	Moisture Content:(%)		Density (g/cc)		Compaction %	Spec.Limits %	Remarks:
		OMC (%)	Field MC (%)	Max. Dry density (gm/cc)	Field Dry density (gm/cc)			
1	0+060	7.80	6.10	1.985	1.908	96.12	95.0%	
2	0+140	7.80	6.23	1.985	1.910	96.24	95.0%	
<i>Approved for further work.</i>								
								
 Tested By Lab Technician		 Submitted By Engineer		 Checked By		 Verified By		



REGIONAL URBAN DEVELOPMENT PROJECT
Biratnagar Metropolitan City
Contract No:- RUDP/ICB/BRT-02
Field density test of Base
(Sand Replacement Method)

Lab Ref. No. :- RUDP-B-FD-01
 Testing date :- 1-Jun-18
 Cylinder no. :- 1

Spicific Gravity (+20mm) :- 2.680
 Chainage :0+000 to 0+460
 Tested Layer :- Base- Final Layer

Loaction:-RR-2

Side:	RHS	LHS	LHS	CL	LHS	RHS	LHS	LHS	LHS
S.No Test Stations	0+050	0+090	0+160	0+210	0+280	0+320	0+370	0+410	0+460
1 Wt. of Sand before pouring (gm)	25000	25000	25000	25000	25000	25000	25000	25000	25000
2 Wt. of Sand after pouring (gm)	17349	17810	17450	17341	17366	16880	16940	17458	17300
3 Wt. of Sand Used (gm)	7651	7190	7550	7659	7634	8120	8060	7542	7700
4 Wt. of Sand in Cone (gm)	2858	2858	2858	2858	2858	2858	2858	2858	2858
5 Wt. of Sand in Hole (gm)	4793	4332	4692	4801	4776	5262	5202	4684	4842
6 Bulk density of sand (gm/cc)	1.450	1.450	1.450	1.450	1.450	1.450	1.450	1.450	1.450
7 Volume of Hole (cc)	3305.52	2987.59	3235.86	3311.03	3293.79	3628.97	3587.59	3230.34	3339.31
8 Depth of Hole (cm)	15	15	15	15	15	15	15	15	15
9 Wt. of Wet Soil (Total), gm	7980	7214	7840	8069	8062	8799	8659	7660	8211
10 Wt. of Retained (> 20mm), gm	2254	2314	2714	2351	2366	2814	2410	1360	2710
11 Volume of Soil (> 20mm), cc	841.04	863.43	1012.69	877.24	882.84	1050.00	899.25	507.46	1011.19
12 Wet Density, gm/cm ³ (< 20 mm)	2.323	2.307	2.306	2.349	2.363	2.321	2.324	2.314	2.363
13 Dry Density gm/cc (< 20 mm)	2.210	2.209	2.200	2.232	2.239	2.207	2.221	2.213	2.234
Moisture Content:									
14 Wt. of wet soil (< 20 mm), gm	227.10	258.00	241.60	150.10	190.30	190.00	162.40	251.00	190.00
15 Wt. of Dry Soil (gm)	216.00	247.10	230.51	142.60	180.32	180.70	155.20	240.10	179.60
16 Wt. of Water (gm)	11.10	10.90	11.09	7.50	9.98	9.30	7.20	10.90	10.40
17 Moisture content (%)	5.14	4.41	4.81	5.26	5.53	5.15	4.64	4.54	5.79
Result Summary:									
Tests	Stations	Moisture Content:(%)		Density (g/cc)		Compaction %	Spec.Limits	Remarks	
		OMC (%)	Field MC (%)	Max. Dry density (gm/cc)	Field Dry density (gm/cc)				
1	0+050	5.10	5.14	2.242	2.210	98.57	98.00%		
2	0+090	5.10	4.41	2.242	2.209	98.54	98.00%		
3	0+160	5.10	4.81	2.242	2.200	98.12	98.00%		
4	0+210	5.10	5.26	2.242	2.232	99.56	98.00%		
5	0+280	5.10	5.53	2.242	2.239	99.85	98.00%		
6	0+320	5.10	5.15	2.242	2.207	98.44	98.00%		
7	0+370	5.10	4.64	2.242	2.221	99.08	98.00%		
8	0+410	4.70	4.54	2.253	2.213	98.24	98.00%		
9	0+460	4.70	5.79	2.253	2.234	99.14	98.00%		
 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								



REGIONAL URBAN DEVELOPMENT PROJECT

Biratnagar Metropolitan City
Contract No:- RUDP/ICB/BRT-02

Field density test of Base
(Sand Replacement Method)

Lab Ref. No. :- RUDP-B-FD-01
Testing date :- 1-Jun-18
Cylinder no. :- 1

Specific Gravity (+20mm) :- 2.680
Chainage :-0+500 to 0+540
Tested Layer :- Base Final Layer

Loaction:-RR-2

Side:		RHS	LHS						
S.No	Test Stations	0+500	0+530						
1	Wt. of Sand before pouring (gm)	25000	25000						
2	Wt. of Sand after pouring (gm)	17510	17350						
3	Wt. of Sand Used (gm)	7490	7650						
4	Wt. of Sand in Cone (gm)	2858	2858						
5	Wt. of Sand in Hole (gm)	4632	4792						
6	Bulk density of sand (gm/cc)	1.450	1.450						
7	Volume of Hole (cc)	3194.48	3304.83						
8	Depth of Hole (cm)	15	15						
9	Wt. of Wet Soil (Total), gm	7790	8125						
10	Wt. of Retained (> 20mm), gm	2651	2415						
11	Volume of Soil (> 20mm), cc	989.18	901.12						
12	Wet Density, gm/cm ³ (< 20 mm)	2.330	2.375						
13	Dry Density gm/cc (< 20 mm)	2.211	2.247						
Moisture Content:									
14	Wt. of wet soil (< 20 mm), gm	110.90	138.00						
15	Wt. of Dry Soil (gm)	105.20	130.54						
16	Wt. of Water (gm)	5.70	7.46						
17	Moisture content (%)	5.42	5.71						
Result Summary:									
Tests	Stations	Moisture Content.(%)		Density (g/cc)		Compaction %	Spec.Limits	Remarks	
		OMC (%)	Field MC (%)	Max. Dry density (gm/cc)	Field Dry density (gm/cc)				
10	0+500	4.70	5.42	2.253	2.211	98.11	98.00%		
11	0+530	4.70	5.71	2.253	2.247	99.74	98.00%		



REGIONAL URBAN DEVELOPMENT PROJECT																					
Biratnagar Metropolitan City																					
Contract No: RUDP/ICB/BRT-02																					
Summary Sheet of Monthly Test Report																					
Location:-R-104																					
															Month		June				
															Year		2018				
															Type of Material		Base				
S.N.	Lab.Ref no.	Location of Sample	Source of Sample	Date of Testing	Sieve Size in mm / % passing By Weight								MDD	OMC	PI%	L.A.A %	Fl and El %	A.I.V. %	CBR %	Remarks	
					40	31.5	20	10	4.75	2.36	0.6	0.075									
1	RUDP-B-01	R-104,(0+150)	Chisang Khola	12-Jun-18	100	91.40	68.14	53.79	34.19	26.46	14.02	6.77	2.248	5.10	NP	31.50	26.05/22.10	24.29	85.60		
2	RUDP-B-02	R-104,(0+250)	Chisang Khola	12-Jun-18	100	89.35	64.80	49.89	33.91	25.68	13.78	6.52			NP	33.48	23.56/17.78	21.81			
Spec. Limit :					100	85-100	62-92	40-70	26-55	21-53	12-28	2-10				< 45	< 35	< 35	>80		
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

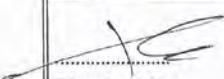
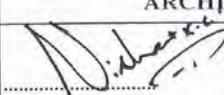
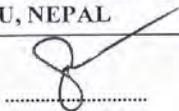
Biratnagar Metropolitan City

Contract No:- RUDP/ICB/BRT-02

Summary Sheet of Monthly Test Report of 20mm Agg.

										Month		June	
										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 El %	A.I.V.%	Remarks	
					40	20	10	4.75					
1	RUDP-CA-83	1-Jun-18	RR-1	Chisang Khola	100.00	96.20	38.81	5.33	26.22	19.48/17.26	21.28		
2	RUDP-CA-84	2-Jun-18	RR-2	Chisang Khola	100.00	95.65	44.54	5.99	25.10	19.39/16.80	20.47		
3	RUDP-CA-85	3-Jun-18	R-5(Traffic Chowk)	Chisang Khola	100.00	96.36	44.52	4.36	27.02	20.26/19.07	18.60		
4	RUDP-CA-86	3-Jun-18	R-21	Chisang Khola	100.00	97.25	33.85	5.27	27.00	22.59/20.41	19.84		
5	RUDP-CA-87	4-Jun-18	B2-1	Chisang Khola	100.00	96.05	29.22	4.15	23.10	21.27/19.96	18.67		
6	RUDP-CA-88	5-Jun-18	R3-A	Chisang Khola	100.00	96.69	34.81	4.05	28.02	20.41/19.55	18.80		
7	RUDP-CA-89	9-Jun-18	Koshi-Yard	Chisang Khola	100.00	97.32	30.49	4.46	28.28	18.52/17.43	18.50		
8	RUDP-CA-90	9-Jun-18	R-42	Chisang Khola	100.00	96.34	36.01	3.29	25.00	21.47/19.10	18.36		
9	RUDP-CA-91	10-Jun-18	DSP Road	Chisang Khola	100.00	95.95	35.87	4.05	25.04	21.66/20.04	19.45		
10	RUDP-CA-92	11-Jun-18	N-3	Chisang Khola	100.00	96.39	31.27	4.33	27.04	17.21/15.83	18.37		
11	RUDP-CA-93	11-Jun-18	R-12	Chisang Khola	100.00	96.77	34.08	5.50	22.90	17.46/16.91	17.73		
12	RUDP-CA-94	11-Jun-18	S13-B	Chisang Khola	100.00	97.73	38.98	2.65	22.90	19.86/18.60	17.71		
13	RUDP-CA-95	13-Jun-18	CN2CN3	Chisang Khola	100.00	96.78	37.37	2.84	22.88	19.63/18.36	18.45		
14	RUDP-CA-96	13-Jun-18	R-2	Chisang Khola	100.00	97.17	34.59	3.88	26.04	19.66/16.55	17.62		
15	RUDP-CA-97	14-Jun-18	R-114	Chisang Khola	100.00	96.45	41.35	2.09	28.36	19.42/18.41	18.15		
16	RUDP-CA-98	15-Jun-18	South of Xenial	Chisang Khola	100.00	97.22	35.54	4.48	30.28	18.33/17.73	18.75		
17	RUDP-CA-99	18-Jun-18	R-113	Chisang Khola	100.00	96.25	31.93	2.23	29.16	18.87/17.70	20.84		
18	RUDP-CA-100	20-Jun-18	Madhumara-Yard	Chisang Khola	100.00	95.88	27.87	4.51	27.50	19.83/18.80	19.24		
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					



REGIONAL URBAN DEVELOPMENT PROJECT													
Biratnagar Metropolitan City													
Contract No:- RUDP/ICB/BRT-02													
<u>Summary Sheet of Monthly Test Report of Concrete Sand</u>													
										Month	June		
										Year	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-83	1-Jun-18	RR-1	Chisang Khola	100.00	92.71	75.01	36.12	17.55	11.49	6.05	1.29	
2	RUDP-CS-84	2-Jun-18	RR-2	Chisang Khola	100.00	92.48	80.55	45.12	21.98	14.61	6.51	1.37	
3	RUDP-CS-85	3-Jun-18	R-5	Chisang Khola	100.00	93.28	83.10	57.62	24.01	17.73	4.87	1.69	
4	RUDP-CS-86	3-Jun-18	R-21	Chisang Khola	100.00	92.51	68.78	46.70	18.82	12.40	5.58	1.28	
5	RUDP-CS-87	4-Jun-18	B2-1	Chisang Khola	100.00	92.39	83.91	39.95	16.76	10.33	5.45	1.54	
6	RUDP-CS-88	5-Jun-18	R3-A	Chisang Khola	100.00	92.19	79.55	41.66	22.56	13.04	5.76	1.58	
7	RUDP-CS-89	9-Jun-18	R-63	Chisang Khola	100.00	92.57	77.27	54.04	23.66	16.15	6.08	1.98	
8	RUDP-CS-90	9-Jun-18	R-42	Chisang Khola	100.00	94.56	65.99	35.34	22.38	14.85	4.99	1.79	
9	RUDP-CS-91	9-Jun-18	DSP-Road	Chisang Khola	100.0	93.2	61.72	34.2	20.83	14.08	7.4	1.23	
10	RUDP-CS-92	9-Jun-18	N-3	Chisang Khola	100.0	93.34	63.16	35.11	20.62	12.63	5.61	1.23	
11	RUDP-CS-93	10-Jun-18	R-12	Chisang Khola	100.00	94.51	65.69	41.69	26.02	15.90	6.02	1.70	
12	RUDP-CS-94	11-Jun-18	S13-B	Chisang Khola	100.00	92.34	62.09	42.07	27.29	16.99	7.16	2.49	
13	RUDP-CS-95	11-Jun-18	R-2	Chisang Khola	100.00	92.57	80.06	63.84	36.85	17.59	6.07	1.92	
14	RUDP-CS-96	11-Jun-18	Cn2Cn3	Chisang Khola	100.00	92.38	76.22	60.49	35.49	15.67	5.43	1.78	
15	RUDP-CS-97	14-Jun-18	R-114	Chisang Khola	100.0	95.18	76.95	53.11	30.06	11.83	4.99	1.50	
16	RUDP-CS-98	14-Jun-18	South of Xenial Hotel	Chisang Khola	100.00	93.34	77.42	47.43	22.33	11.79	3.2	2.03	
Spec. Limit :					100	90~100	85~100	75~100	60~79	12~40	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		 Submitted By		 Verified By		 Approved By							
Engineer		Contract Manager		Qty Engineer/CSE		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		June	
										Year		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		
17	RUDP-CS-99	14-Jun-18	R-113	Chisang Khola	100.00	91.44	77.56	33.73	20.76	13.39	2.03	1.88	
18	RUDP-CS-100	18-Jun-18	Madhumara-Yard	Chisang Khola	100.00	92.25	77.68	36.56	17.81	10.50	1.59	1.74	
19	RUDP-CS-101	21-Jun-18	Rani Sie	Chisang Khola	100.00	94.23	82.29	45.47	26.16	16.10	8.72	1.31	
20	RUDP-CS-102	21-Jun-18	Madhumara-Yard	Chisang Khola	100.00	92.34	81.66	51.67	17.17	9.71	5.48	1.31	
21	RUDP-CS-103	22-Jun-18	T3L21	Chisang Khola	100.00	92.92	83.26	56.52	20.20	14.35	6.93	1.82	
22	RUDP-CS-104	22-Jun-18	DDC-Yard	Chisang Khola	100.00	92.58	81.51	62.06	35.01	10.17	3.89	2.12	
23	RUDP-CS-105	23-Jun-18	R-111	Chisang Khola	100.00	95.67	85.15	48.66	28.63	13.49	4.50	2.13	
24	RUDP-CS-106	23-Jun-18	T3L39	Chisang Khola	100.00	94.8	76.04	42.36	23.82	10.17	3.84	1.46	
25	RUDP-CS-107	24-Jun-18	Cn2Cn3	Chisang Khola	100.0	95.23	75.85	45.32	27.55	12.94	6.86	1.64	
26	RUDP-CS-108	24-Jun-18	DDC-Yard	Chisang Khola	100.0	92.99	63.62	56.11	32.81	18.58	4.43	1.37	
27	RUDP-CS-109	27-Jun-18	R-63	Chisang Khola	100.00	91.76	70.15	62.50	45.08	16.82	6.52	2.04	
Spec. Limit :					100	90~100	85~100	75~100	60~79	12~40	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

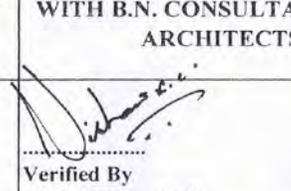
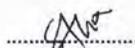
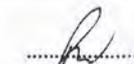
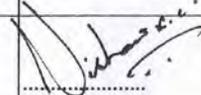
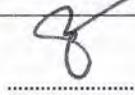
Contract No: RUDP/ICB/BRT-02

Summary Sheet of Monthly Test Report

Month	✓ June
Year	✓ 2018
Type of Material	✓ Base

Location:-R-114

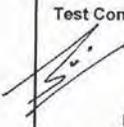
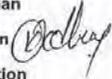
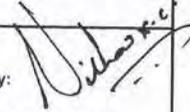
S.N.	Lab.Ref no.	Location of Sample	Source of Sample	Date of Testing	Sieve Size in mm / % passing By Weight								MDD	OMC	PI%	L.A.A. %	Fl and El %	A.I.V. %	CBR %	Remarks
					40	31.5	20	10	4.75	2.36	0.6	0.075								
1	RUDP-B-01	R-114,(0+100)	Chisang Khola	9-Jun-18	100	90.31	65.42	47.16	34.82	24.44	13.26	5.59			NP	33.52	32.61/21.10	25.78		
2	RUDP-B-02	R-114,(0+200)	Chisang Khola	9-Jun-18	100	95.29	67.61	42.54	35.38	30.52	13.80	3.79	2.251	5.75	NP	32.22	25.56/22.42	21.14	84.10	
3	RUDP-B-03	R-114,(0+300)	Chisang Khola	9-Jun-18	100	92.72	64.53	42.96	36.03	27.43	13.98	3.76			NP	36.36	23.62/17.42	24.45		
4	RUDP-B-04	R-114,(0+400)	R-114,(Existing Road)	10-Jun-18	100	91.83	65.79	47.94	40.45	29.43	17.15	7.94	2.232	6.10	NP	31.80	24.74/17.34	20.81	83.00	
5	RUDP-B-05	R-114,(0+500)	R-114,(Existing Road)	10-Jun-18	100	88.71	83.74	48.41	38.71	29.38	19.44	4.88			NP	32.02	21.20/17.61	21.69		
Spec. Limit :					100	85-100	62-92	40-70	26-55	21-53	12-28	2-10				< 45	< 35	< 35	> 80	

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



Project:Regional Urban Development Project (RUDP)																			
SUMMARY OF HOT MIX ASPHALT CONCRETE WEARING COURSE																			
FOR THE MONTH OF JUNE 2018																			
Test Result BY MARSHALL METHOD (AASHTO T 245-78)																			
Contract Package:RUDP-ICB/BRT/02																			
S. No.	LAB REF. NO.	Date of Laying	Location of Work ch:	Mix Agg Gradation % Passing Sieve Sizes mm						Bitumen Content From Extraction Test %	Mix Density gm/cc	Air Voids %	VMA %	Stability N	Flow mm				
				20	16	9.5	4.75	2.36	0.6							0.075			
1	24	3/6/2018	S11-B& R-R-2Ch: 0+000 to 0+128.5 & 0+000 to 0+320	100	100	78.04	54.7	35.82	17.15	6.55	5.73	2.374	3.17	16.44	14105	2.37			
2	25	5/6/2018	R24 CH: 0+000 to 0+380	100	100	77.72	54.8	35.70	17.24	6.42	5.75	2.373	3.16	16.47	12958	2.40			
3	26	6/6/2018	R-22 CH: 0+000 to 0+380	100	100	77.15	54.81	35.51	17.16	6.55	5.73	2.368	3.41	16.55	12478	2.50			
4	27	8/6/2018	R-3A CH: 0+000 to 0+550	100	100	77.72	54.69	35.59	17.13	6.30	5.76	2.373	3.15	16.49	13663	2.42			
5	28	18/6/2018	S-13-B CH: 0+000 to 0+440	100	100	77.30	54.38	35.07	16.83	6.22	5.74	2.369	3.34	16.61	13795	2.47			
6	29	19/6/2018	S-11-A CH: 0+000 to 0+380	100	100	76.88	54.39	35.30	17.26	6.44	5.73	2.372	3.23	16.49	14338	2.48			
7	30	20/6/2018	R-9,R-114 & R-30 CH: 0+000 to 0+117,0+000to 0+320 & 0+000 to 0+120	100	100	77.08	54.81	35.71	17.46	6.43	5.74	2.372	3.21	16.50	14725	2.57			
Specifications				100	100-100	76-82	54-59	33-37	16-21	6 to 9	5.703	Min2.358	3-6%	≥ 15	≥ 8500	2-3			
Job Mix Tolerances from RUDP Specification Table2-4-10				±5%	NIII	±5%	±3%	±2%	±1%	NIII	±0.3%	For (25-51)mm Thickness W/C Course							
REMARKS:																			
<table border="0" style="width:100%"> <tr> <td style="width:50%; vertical-align: top;"> <p>Contractor Reps</p> <p>Test Conducted /Report Prepared by:</p> <p>Sr,Lab Technician <i>[Signature]</i></p> <p>Lab Technician <i>[Signature]</i></p> <p>Kalika Construction</p> <p>Biratnagar, Sitee Lab JUDI</p> </td> <td style="width:50%; vertical-align: top;"> <p>Submitted By:</p> <p>Contract Manager <i>[Signature]</i></p> <p>Zhonghang Construction Group</p> <p>International Engineering Co.Ltd</p> </td> <td style="width:50%; vertical-align: top;"> <p>Consultant Rep</p> <p>Verified by/ Checked by: <i>[Signature]</i></p> <p>BUILDING DESIGN AUTHORITY (P) LTD IN Joint Venture</p> <p>With B.N. Consultancy PVT .LTF AND PLUS Engineers</p> <p>AND Architects(P) LTD Kathmandu NEPAL</p> </td> </tr> </table>																	<p>Contractor Reps</p> <p>Test Conducted /Report Prepared by:</p> <p>Sr,Lab Technician <i>[Signature]</i></p> <p>Lab Technician <i>[Signature]</i></p> <p>Kalika Construction</p> <p>Biratnagar, Sitee Lab JUDI</p>	<p>Submitted By:</p> <p>Contract Manager <i>[Signature]</i></p> <p>Zhonghang Construction Group</p> <p>International Engineering Co.Ltd</p>	<p>Consultant Rep</p> <p>Verified by/ Checked by: <i>[Signature]</i></p> <p>BUILDING DESIGN AUTHORITY (P) LTD IN Joint Venture</p> <p>With B.N. Consultancy PVT .LTF AND PLUS Engineers</p> <p>AND Architects(P) LTD Kathmandu NEPAL</p>
<p>Contractor Reps</p> <p>Test Conducted /Report Prepared by:</p> <p>Sr,Lab Technician <i>[Signature]</i></p> <p>Lab Technician <i>[Signature]</i></p> <p>Kalika Construction</p> <p>Biratnagar, Sitee Lab JUDI</p>	<p>Submitted By:</p> <p>Contract Manager <i>[Signature]</i></p> <p>Zhonghang Construction Group</p> <p>International Engineering Co.Ltd</p>	<p>Consultant Rep</p> <p>Verified by/ Checked by: <i>[Signature]</i></p> <p>BUILDING DESIGN AUTHORITY (P) LTD IN Joint Venture</p> <p>With B.N. Consultancy PVT .LTF AND PLUS Engineers</p> <p>AND Architects(P) LTD Kathmandu NEPAL</p>																	



Project:Regional Urban Development Project (RUDP)																
SUMMARY OF HOT MIX ASPHALT CONCRETE WEARING COURSE																
FOR THE MONTH OF JUNE 2018																
Test Result BY MARSHALL METHOD (AASHTO T 245-78)																
Contract Package:RUDP-ICB/BRT/02																
S. No.	LAB REF. NO.	Date of Laying	Location of Work ch:	Mix Agg Gradation % Passing Sieve Sizes mm						Bitumen Content From Extraction Test %	Mix Density gm/cc	Air Voids %	VMA %	Stability N	Flow mm	
				20	16	9.5	4.75	2.36	0.6							0.075
8	31	23/6/2018	R-42,R-114& R-104 Ch: 0+000 to 0+123,0 ³²⁰ to 0+560 & 0+000 to 0+270	100	100	77.19	55.01	35.70	17.67	6.42	5.75	2.368	3.39	16.67	14570	2.47
9	32	24/6/2018	R-113 CH: 0+000 to 0+416	100	100	77.09	55.03	35.51	17.69	6.66	5.73	2.366	3.48	16.71	12710	2.47
10	33	28/6/2018	R-29 & R-113 CH:0+000 to 0+340 & 0+000 to 0+324	100	100	76.87	55.02	35.50	17.46	6.43	5.74	2.364	3.56	16.8	13253	2.50
Specifications				100	100-100	76-82	54-59	33-37	16-21	6 to 9	5.703	Min2.358	3-6%	≥ 15	≥ 8500	2-3
Job Mix Tolerances from RUDP Specification Table2-4-10				±5%	Nil	±5%	±3%	±2%	±1%	Nil	±0.3%	For (25-51)mm Thickness W/C Course				
REMARKS:																
Test Conducted /Report Prepared by:  Sr,Lab Technician Lab Technician  Kalika Construction Biratnagar, Sitee Lab JUDI				Contractor Reps Submitted By: Contract Manager  Zhongheng Construction Group International Engineering Co,Ltd				Consultant Rep Verified by/ Checked by:  BUILDING DESIGN AUTHORITY (P) LTD IN Joint Venture With B.N. Consultancy PVT .LTF AND PLUS Engineers AND Architects(P) LTD Kathmandu NEPAL								

P.g 2of 2



REGIONAL URBAN DEVELOPMENT PROJECT

Biratnagar Metropolitan City

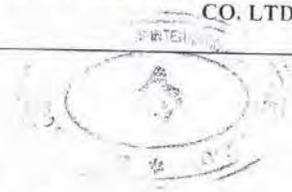
Contract No: RUDP/ICB/BRT-02

Summary Sheet of Monthly Test Report

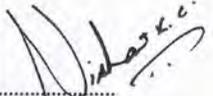
Month	June
Year	2018
Type of Material	Base ✓

Location:-R-113

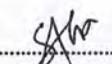
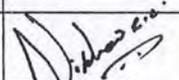
S.N	Lab Ref no	Location of Sample	Source of Sample	Date of Testing	Sieve Size in mm / % passing By Weight								MDD	OMC	PI%	L.A.A %	Fl and El %	A / V %	CBR %	Remarks	
					40	31.5	20	10	4.75	2.36	0.6	0.075									
1	RUDP-B-01	R-113,(0+400)	Chisang Khola	3-Jun-18	100	93.76	68.08	52.39	31.49	25.00	12.66	6.55	2.250	5.75	NP	35.10	26.10/22.07	23.59	82.00		
2	RUDP-B-02	R-113,(0+500)	Chisang Khola	3-Jun-18	100	90.55	74.56	57.61	32.06	24.30	13.65	6.05			NP	31.70	23.87/21.16	24.03			
3	RUDP-B-03	R-113,(0+150)	Chisang Khola	18-Jun-18	100	94.19	63.85	43.75	32.26	25.76	13.87	5.26	2.246	4.90	NP	32.70	22.55/17.59	23.11	81.60		
4	RUDP-B-04	R-113,(0+250)	Chisang Khola	18-Jun-18	100	92.63	69.63	44.61	33.32	25.44	14.21	4.36			NP	31.76	24.65/18.65	25.55			
5	RUDP-B-05	R-113,(0+350)	Chisang Khola	19-Jun-18	100	89.24	66.32	53.06	39.87	30.48	16.91	5.72	2.239	6.40	NP	33.76	22.38/17.40	22.40	84.00		
Spec. Limit :					100	85-100	62-92	40-70	26-55	21-53	12-28	2-10				<45	<35	<35	>80		

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 CEMENT TEST																	
												Month		June			
												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 ²		Remarks			
				Normal Cons.(%)	Initial(Min)	Final (min)				7 Days	28 Days	7 days	28 Days				
1	4	Arghakhachi OPC	3-May-18	27.25					4-May-18	11-May-18	1-Jun-18		49.48	✓			
2	5	Salimar OPC	14-May-18	30.50					15-May-18	22-May-18	12-Jun-18		47.09	✓			
3	6	Salimar OPC	5-Jun-18	30.25	88.00	250	2.29	2.63	6-Jun-18	13-Jun-18	4-Jul-18		36.48	✓			
4	7	Salimar OPC	14-Jun-18	29.25	92.00	245	3.08	2.56	15-Jun-18	22-Jun-18	13-Jul-18		34.82				
5	8	Salimar OPC	22-Jun-18	30.75	96.00	265	1.23	2.53	23-Jun-18	30-Jun-18	21-Jul-18		35.72				
Sp.Limit:					Min-45	Max-600	<10	<10					>33	>43	✓		
Comments:-																	
Contractor							Consultant										
ZHONGHENG CONSTRUCTION GROUP INTERNATIONAL ENGINEERS 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																				
Location:- R-24														Month		June				
														Year		2018				
														Type of Material		Base				
S.N.	Lab.Ref no.	Location of Sample	Source of Sample	Date of Testing	Sieve Size in mm / % passing By Weight								MDD	OMC	PI%	L.A.A. %	Fl and El %	A.I.V. %	CBR %	Remarks
					40	31.5	20	10	4.75	2.36	0.6	0.075								
1	RUDP-B-01	R-24, 0+125	Chisang Khola	1-Jun-18	100	88.71	71.90	55.70	34.63	26.34	18.05	6.02			NP	31.70	20.21/18.41	21.05		
2	RUDP-B-02	R24, 0+250	Chisang Khola	1-Jun-18	100	87.87	71.01	56.96	35.33	27.82	17.55	6.06	2.254	4.75	NP	30.40	19.91/18.73	21.37	87.00	
3	RUDP-B-03	R24, 0+350	Chisang Khola	1-Jun-18	100	90.26	73.64	56.98	33.53	26.52	15.58	6.23			NP	33.90	19.63/17.18	21.03		
					Spec. Limit :	100	85-100	62-92	40-70	26-55	21-53	12-28	2-10			< 45	< 35	< 35	> 80	
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

Month	June
Year	2018
Type of Material	Base

Location:- S13-B

S.N.	Lab.Ref no.	Location of Sample	Source of Sample	Date of Testing	Sieve Size in mm / % passing By Weight								MDD	OMC	PI%	L.A.A. %	Fl and El %	A.I.V. %	CBR %	Remarks
					40	31.5	20	10	4.75	2.36	0.6	0.075								
1	RUDP-B-01	S13-B,(0+150)	Chisang Khola	3-Jun-18	100	89.83	64.58	47.86	33.13	24.95	12.68	5.18	2.249	5.10	NP	30.58	22.36/17.29	20.63	83.60	
2	RUDP-B-02	S13-B,(0+250)	Chisang Khola	3-Jun-18	100	86.92	68.75	53.60	32.03	24.63	13.73	7.74			NP	33.04	23.21/16.68	22.20		
3	RUDP-B-03	S13-B,(0+350)	Chisang Khola	4-Jun-18	100	89.10	70.31	56.45	35.97	26.27	16.13	7.67	2.244	5.30	NP	34.22	20.21/17.76	21.01	86.50	
4	RUDP-B-04	S13-B,(0+450)	Chisang Khola	4-Jun-18	100	89.72	73.56	58.71	41.66	29.25	18.02	9.50			NP	29.72	21.26/17.56	21.46		
					Spec. Limit :	100	85-100	62-92	40-70	26-55	21-53	12-28	2-10			< 45	< 35	< 35	>80	

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

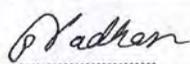
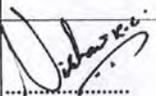
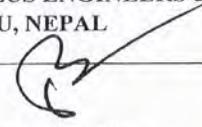
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Verified By
QTY Engineer/CSE

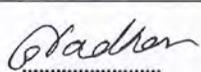
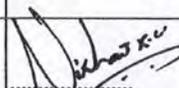
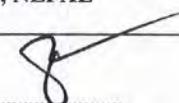
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Approved By
Team Leader



REGIONAL URBAN DEVELOPMENT PROJECT																				
Biratnagar Metropolitan City																				
Contract No: RUDP/ICB/BRT-02																				
Summary Sheet of Monthly Test Report																				
Location:- R-7																				
S.N.	Lab.Ref no.	Location of Sample	Source of Sample	Date of Testing	Sieve Size in mm / % passing By Weight								MDD	OMC	PI%	L.A.A. %	Fl and El %	Base		Remarks
					40	31.5	20	10	4.75	2.36	0.6	0.075						A.I.V. %	CBR %	
1	RUDP-B-01	R-7,0+120	Chisang Khola	3-Jun-18	100	90.92	77.04	41.84	32.76	23.84	17.53	5.64			NP	34.64	21.02/16.25	20.12		
2	RUDP-B-02	R-7,0+240	Chisang Khola	3-Jun-18	100	86.57	69.48	43.00	30.59	22.84	16.14	6.20	2.245	5.80	NP	33.72	26.47/20.35	20.69	81.30	
3	RUDP-B-03	R37, 0+300	Chisang Khola	3-Jun-18	100	87.29	69.91	48.95	37.90	29.22	15.07	7.08			NP	30.60	23.77/19.86	21.44		
Spec. Limit :					100	85-100	62-92	40-70	26-55	21-53	12-28	2-10				< 45	< 35	< 35	> 80	
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																				
Location:- R-22														Month		June				
														Year		2018				
														Type of Material		Base				
S.N.	Lab.Ref no.	Location of Sample	Source of Sample	Date of Testing	Sieve Size in mm / % passing By Weight								MDD	OMC	PI%	L.A.A. %	Fl and El %	A.I.V. %	CBR %	Remarks
					40	31.5	20	10	4.75	2.36	0.6	0.075								
1	RUDP-B-01	R-22,(0+100)	Chisang Khola	1-Jun-18	100	89.01	73.92	55.41	35.33	27.89	15.35	6.84			NP	33.50	22.70/16.52	20.41		
2	RUDP-B-02	R-22,(0+250)	Chisang Khola	1-Jun-18	100	86.79	71.42	50.69	33.25	26.13	15.28	5.42	2.250	5.00	NP	31.80	23.85/17.46	21.09	81.80	✓
3	RUDP-B-03	R-22,(0+350)	Chisang Khola	2-Jun-18	100	87.32	76.07	49.86	37.75	31.61	17.03	7.52	2.253	4.60	NP	33.44	22.51/17.32	20.41	83.00	✓
					Spec. Limit :	100	85-100	62-92	40-70	26-55	21-53	12-28	2-10			< 45	< 35	< 35	>80	
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

Month	JUNE
Year	2018

Location:- R-3A

Type of Material	Base
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Sl. No.	Lab. Ref no.	Location of Sample	Source of Sample	Date of Testing	Sieve Size in mm / % passing By Weight								MDD	OMC	PI%	L.A.A. %	Fl and El %	A.I.V. %	CBR %	Remarks
					40	31.5	20	10	4.75	2.36	0.6	0.075								
	RUDP-B-01	R-3A, 0+100	Chisang Khola	3-Jun-18	100	85.49	65.68	56.61	42.22	26.97	18.87	8.77			NP	31.80	20.61/17.42	22.64		
	RUDP-B-02	R-3A, 0+200	Chisang Khola	3-Jun-18	100	88.30	78.42	62.78	39.71	30.60	16.52	8.47	2.252	4.90	NP	33.48	19.94/17.21	20.61	84.0	
	RUDP-B-03	R-3A, 0+300	Chisang Khola	3-Jun-18	100	86.39	68.34	56.50	34.93	27.81	14.15	6.34			NP	31.76	23.78/20.03	21.58		
	RUDP-B-04	R-3A, 0+3500	Chisang Khola	4-Jun-18	100	89.11	72.21	52.28	34.17	30.37	17.63	8.39	2.250	5.00	NP	31.70	22.11/17.58	21.71	85.0	
	RUDP-B-05	R-3A, 0+450	Chisang Khola	4-Jun-18	100	88.28	66.13	51.48	39.58	29.10	14.27	6.86			NP	33.10	24.29/15.84	20.11		
	RUDP-B-06	R-3A, 0+550	Chisang Khola	4-Jun-18	100	88.78	76.94	55.47	37.02	25.13	14.60	7.05	2.247	5.40	NP	33.50	19.73/16.19	20.41	88.40	
Spec. Limit :					100	85-100	62-92	40-70	26-55	21-53	12-28	2-10				< 45	< 35	< 35	> 80	

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

Radham
Checked By
Engineer

Rabin
Submitted By
Contract Manager

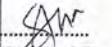
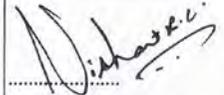
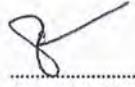
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Verified By
QTY Engineer/CSE

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Approved By
Team Leader

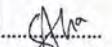


REGIONAL URBAN DEVELOPMENT PROJECT Biratnagar Metropolitan City Contract No: RUDP/ICB/BRT-02 Daily Application Rate Check for Priming work																							
SUMMARY FOR THE MONTH OF JUNE 2018																							
Type of Bitumen:80/100 P.G																							
Cutter Percentage:MC 70:MC30																							
SN NO	Location	Date of Priming	Station		Side of Priming	Area of Priming	Intersection Area m2	Total Area M2	Bitumen Consumption (ltr)	Application Rate By Dip Lit/m2	Application Rate Bt Tray Test Lit/m2												
From	to																						
17	R-113	23-Jun-18	0+150	0+416	Both Side	1436.4	0	1436.4	1550	1.08	1.03												
18	R-113	24-Jun-18	0+000	0+150	Both Side	810	0	810	850	1.05	1.04												
19	R-29	27-Jun-18	0+000	0+340	Both Side	1564	0	1564	1700	1.09	1.08												
20	R-113	27-Jun-18	0+000	0+324	Both Side	1817.64	0	1817.64	1950	1.07	1.06												
Total									29900														
Required specification for Prime coat 1.0 Lit/M2 ± 5% Specific Gravity of Bitumen 1.019																							
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 Daily Application Rate Check for Priming work												
Type of Bitumen:80/100 P.G Cutter Percentage:MC 70:MC30												
SUMMARY FOR THE MONTH OF JUNE 2018												
SN NO	Location	Date of Priming	Station From	Station to	Side of Priming	Area of Priming	Intersection Area m2	Total Area M2	Bitumen Consumption (ltr)	Application Rate By Dip Lit/m2	Application Rate Bt Tray Test Lit/m2	
1	RR-2	02-Jun-18	0+000	0+320	Both Side	2320	38.45	2358.45	2400	1.02	1.05	
2	S11-B	02-Jun-18	0+000	0+128.5	Both Side	876.37	0	876.37	900	1.03	1.06	
3	R-24	04-Jun-18	0+000	0+380	Both Side	1672	0	1672	1800	1.08	1.05	
4	R-22	05-Jun-18	0+000	0+380	Both Side	1425	0	1425	1500	1.05	1.03	
5	R3-A	06-Jun-18	0+000	0+290	Both Side	1745.8	0	1745.8	1800	1.03	1.05	
6	R3-A	07-Jun-18	0+290	0+560	Both Side	1552.5	180.25	1732.75	1850	1.07	1.04	
7	S13-B	14-Jun-18	0+000	0+440	Both Side	2534.4	0	2534.4	2600	1.03	1.02	
8	S11-A	14-Jun-18	0+000	0+220	Both Side	1500.4	14.48	1514.88	1600	1.06	1.05	
Required specification for Prime coat 1.0 Lit/M2 ± 5% Specific Gravity of Bitumen 1.019												
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						
 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											
Daily Application Rate Check for Priming work											
Type of Bitumen:80/100 P.G				SUMMARY FOR THE MONTH OF JUNE 2018							
Cutter Percentage:MC 70:MC30											
SN NO	Location	Date of Priming	Station From to		Side of Priming	Area of Priming	Intersection Area m2	Total Area M2	Bitumen Consumption (ltr)	Application Rate By Dip Lit/m2	Application Rate Bt Tray Test Lit/m2
9	S11-A	15-Jun-18	0+220	0+380	Both Side	1164	69.29	1233.29	1350	1.09	1.08
10	R-30	15-Jun-18	0+000	0+120	Both Side	540	0	540	550	1.02	1.06
11	R-9	15-Jun-18	0+000	0+117	Both Side	538.2	0	538.2	575	1.07	1.06
13	R-114	18-Jun-18	0+000	0+320	Both Side	2259.2	0	2259.2	2400	1.06	1.04
14	R-104	22-Jun-18	0+000	0+270	Both Side	1190.7	0	1190.7	1300	1.09	1.06
15	R-42	22-Jun-18	0+000	0+123	Both Side	624.84	0	624.84	675	1.08	1.06
16	R-114	22-Jun-18	0+320	0+560	Both Side	2355.2	0	2355.2	2550	1.08	1.06
Required specification for Prime coat 1.0 Lit/M2 ± 5% Specific Gravity of Bitumen 1.019											
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
Daily Application Rate Check for TACK COAT**

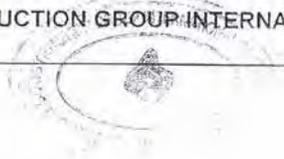
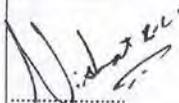
Type of Bitumen:80/100 P.G

SUMMARY FOR THE MONTH OF JUNE 2018

S.N.	Location	Date of Tack coat	Station		Side of Tack coat	Area of Tack coat	Intersection Area m2	Total Area M2	Bitumen Consumption	Application Rate By Dip Lit/m2	Application Rate Bt Tray Test Lit/m2
			From	to							
1	S11-B	3-Jun-18	0+000	0+128.5	BHS	876.37	0	876.37	600	0.68	0.65 ✓
2	RR-2	3-May-18	0+000	0+320	BHS	2320	97.68	2417.68	1500	0.62	0.59 ✓
3	R-24	5-Jun-18	0+000	0+380	BHS	1687.2	0	1687.20	1000	0.59	0.54 ✓
3	R-22	6-Jun-18	0+000	0+380	BHS	1425	0	1425.00	850	0.60	0.59 ✓
4	R3-A	8-Jun-18	0+000	0+550	BHS	2120	185.5	2305.50	1450	0.63	0.60 ✓
5	S13-B	18-Jun-18	0+000	0+440	BHS	3000.8	0	3000.80	1750	0.58	0.56 ✓

Sub-Clause No.1302,Standard Specification Road And Bridge 2073-Table No. 0.5 to 0.6

Specific Gravity of Bitumen 1.019 ✓

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
Daily Application Rate Check for TACK COAT**

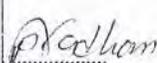
Type of Bitumen:80/100 P.G

SUMMARY FOR THE MONTH OF JUNE 2018

S.N	Location	Date of Tack coat	Station From	Station to	Side of Tack coat	Area of Tack coat	Intersection Area m2	Total Area M2	Bitumen Consumption	Application Rate By Dip Lit/m2	Application Rate Bt Tray Test Lit/m2
6	S11-A	19-Jun-18	0+000	0+380	BHS	2713	106.62	2819.62	1600	0.57 ✓	0.52 ✓
7	R-9	20-Jun-18	0+000	0+117	BHS	546.39	0	546.39	335	0.61 ✓	0.58 ✓
8	R-30	20-Jun-18	0+000	0+120	BHS	540	0	540.00	315	0.58 ✓	0.57 ✓
9	R-114	20-Jun-18	0+000	0+320	BHS	2259.2	0	2259.20	1500	0.66 ✓	0.65 ✓
10	R-104	23-Jun-18	0+000	0+270	BHS	1190.7	0	1190.70	750	0.63 ✓	0.60 ✓
11	R-42	23-Jun-18	0+000	0+123	BHS	624.84	0	624.84	400	0.64 ✓	0.59 ✓

Sub-Clause No.1302,Standard Specification Road And Bridge 2073-Table No. 0.5 to 0.6

Specific Gravity of Bitumen 1.019

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
Daily Application Rate Check for TACK COAT

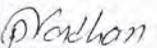
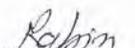
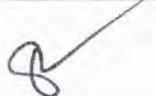
Type of Bitumen:80/100 P.G

SUMMARY FOR THE MONTH OF JUNE 2018

S.N.	Location	Date of Tack coat	Station		Side of Tack coat	Area of Tack coat	Intersection Area m2	Total Area M2	Bitumen Consumption	Application Rate By Dip Lt/m2	Application Rate Bt Tray Test Lt/m2
			From	to							
12	R-114	23-Jun-18	0+320	0+560	BHS	1766.4	0	1766.40	1100	0.62	0.58
13	R-113	26-Jun-18	0+000	0+416	BHS	2246.4	0	2246.40	1550	0.69	0.67
14	R-29	28-Jun-18	0+000	0+340	BHS	1564	0	1564.00	1000	0.64	0.61
15	R-113	28-Jun-18	0+000	0+324	BHS	1817.64	0	1817.64	1200	0.66	0.63
Total									16900		

Sub-Clause No.1302,Standard Specification Road And Bridge 2073-Table No. 0.5 to 0.6

Specific Gravity of Bitumen 1.019

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



13 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: June 2018

Checklist

SN	Activity	Description/Present Status (Compliance/Partially Compliance/Non Compliance)	Remarks/ Corrective actions for Non-Compliance
1	Training		
1.1	Health, Safety and EMP trainings and awareness	Yes	
1.2	Others awareness and skill trainings		
2	Occupational health and safety		
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	
2.3	Public notification Safety and warning signs and informative signboards in working sites for work safety	Yes provided	
2.4	Use of barricades, caution tape and flag	Daily used.	
3	Campsite management		
3.1	Location	DDC, Kamehanbari shanti Chark, Rani	
3.2	First aid facilities available at camp and worksites	Yes	
3.3	Drinking water supply and sanitation facilities/ pit latrines	Tap water/hand pump	
3.4	Waste Disposal and Management facilities	Yes	
3.5	Type of fuel used for cooking	L.P.G.	
4	Spoil and Construction material Management		
4.1	Cut and fill balance maintained or not, Reuse of spoil materials	cut & fill balance maintained	
4.2	Use of safe spoil disposal locations	Not applicable	



4.3	Disturbance to Pedestrian and traffic movement	<i>No any disturbance to Pedestrian and traffic movement Yes</i>
4.4	Use of private land and agreement with land owners	
5	Air, Noise and Water Pollution	
5.1	Dust emission and Noise pollution sites	<i>Water sprinkled by tanker on such sites.</i>
5.2	Water quality monitoring result and locations	
5.3	Block age of natural drainages ,water logging, drain water discharge into farmland/risky areas	<i>N.A</i>
6	Quarrying of construction materials and Plants Installment	
6.1	Quarry/borrow operation sites	<i>N.A</i>
6.2	Crusher plant and Asphalt plant operation restoration	<i>Asphalt plant</i>
7	Impact/Disruption of Private properties	
7.1	Building structures	<i>N.A</i>
7.2	Other utilities	<i>N.A</i>
8	Impact/disruption of public infrastructures	
8.1	Irrigation canal	<i>N.A</i>
8.2	Water supply pipe	<i>N.A</i>
8.3	Access road	<i>N.A</i>
8.4	Electric/Telephone pole	<i>N.A</i>
8.5	Others	<i>N.A</i>
9	Sites for cultural and religious values	
9.1	Cultural and religious sensitive spots (if any)	<i>N.A</i>
10	Forest and vegetation	
10.1	Number of trees removal	<i>N.A</i>
10.2	No of tree plantation(Roadside)	<i>N.A</i>
11	Accident cases and records	<i>No any records</i>
12	Employment to local people	
12.1	Men and women	<i>Both Men & Women</i>
12.2	Child labor (if any)	<i>No</i>
13	Establishment of Safeguard desk and meeting	<i>Yes</i>
14	Grievances from local people and addressed	<i>Yes</i>



**Regional Urban Development Project(RUDP)
Social Safeguard Monitoring
Inventory of Social Facilities**

1. General information

Subproject: -RUDP/ICB/BRT/2

Month/Year: June/2018

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	Camp-2	Camp-3	Camp-4	Camp-5	Camp-6	Camp-7	Camp-8	Camp-9	Camp-10	Remarks
Local	Male											
	Female											
* Non-Local	Male	7	20	38	26	36	21	17	14	28	23	
	Female											
Child Labour	Male											
	Female											

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	2			2	2	2	2		
b. Well/Spring		2	2	2	2	2				2		
c. Tanker												
d.												
Code:												
Insufficient-1	Sufficient-2	Plenty-3										

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						1				1		
b. Pan		4	2	2	1		1	1	1		1	
c. Open												
d.												

5. Energy used in labour camp (tick mark)												
Sources of E		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		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	

Prepared by:



verified by:-

Monitored by:-



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

Subproject Road : -RUDP/ICB/BRT/2

Month/Year: June/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:



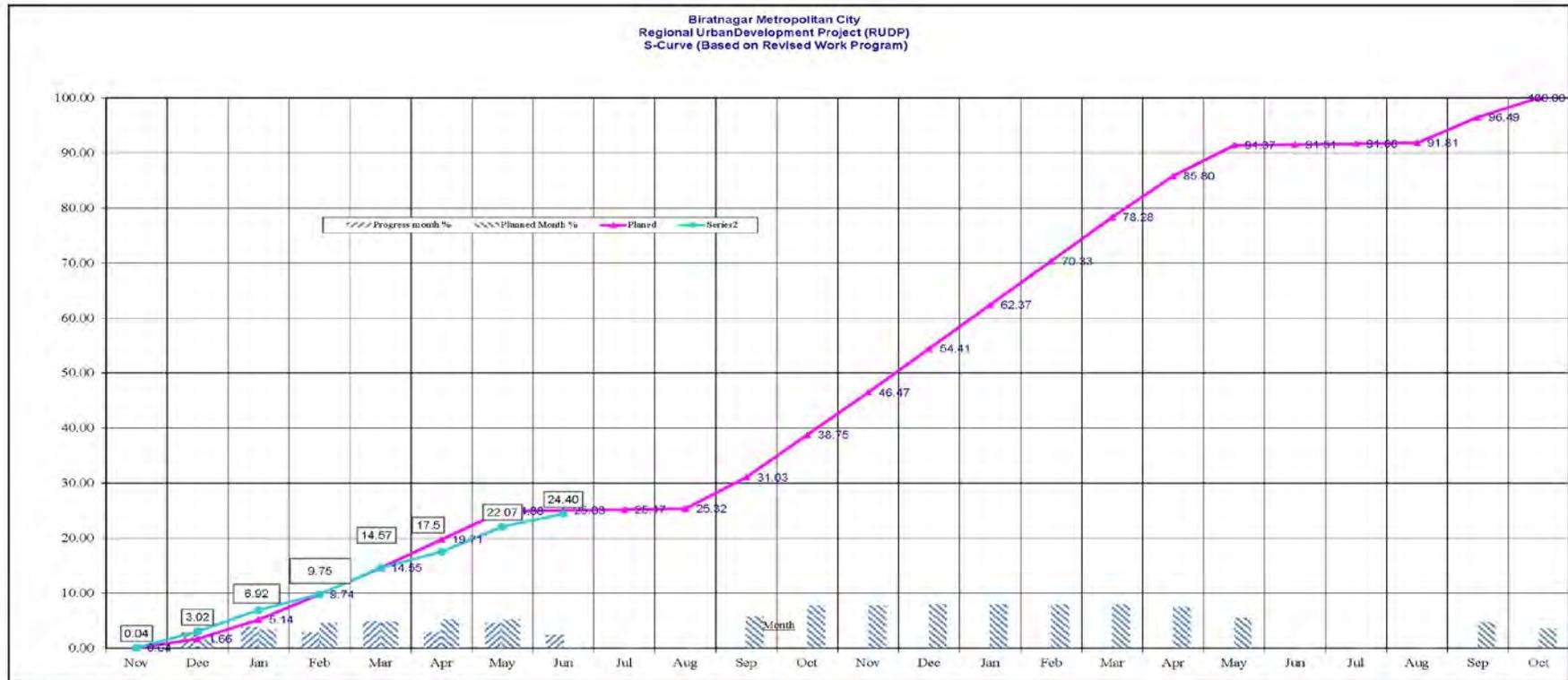
Verified by:

Monitored by:



14 ANNEX-5: S-CURVE
Attached





Year/Month	2017						2018						2019											
	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
Planned Month %	0.04	1.63	3.48	4.60	4.80	5.17	5.17	0.15	0.15	0.15	5.71	7.72	7.72	7.95	7.96	7.96	7.96	7.51	5.57	0.15	0.15	0.15	4.69	3.51
Progress month %	0.04	2.98	3.90	2.83	4.82	2.93	4.57	2.32																
Planned Cum %	0.04	1.66	5.14	9.74	14.55	19.71	24.88	25.03	25.17	25.32	31.03	38.75	46.47	54.41	62.37	70.33	78.28	85.80	91.37	91.51	91.66	91.81	96.49	100.00
Progress Cum%	0.04	3.02	6.92	9.75	14.57	17.50	22.07	24.40																
planned month Amount in 100000	8.63	375.58	803.89	1063.54	1109.65	1193.63	1194.23	33.70	33.70	33.70	1320.43	1782.81	1783.51	1836.66	1838.96	1838.26	1838.32	1736.00	1286.85	34.01	34.00	34.00	1082.59	810.36
Achieved Month Amount in 100000	8.63	688.59	901.17	653.93	1113.76	677.04	1056.66	537.16																
planned Cum Amount in 100000	8.63	384.21	1188.10	2251.64	3361.29	4554.92	5749.15	5782.85	5816.55	5850.25	7170.68	8953.49	10737.00	12573.66	14412.62	16250.88	18089.20	19825.20	21112.06	21146.06	21180.06	21214.07	22296.65	23107.01
Achieved Cum Amount in 100000	8.63	697.22	1598.39	2252.32	3366.08	4043.11	5099.78	5636.94																



15 MASTER PLAN OF RUDP PROJECT



RUDP PROJECT (Road)

