## **ORIGINAL**



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

in joint Venture withB.N. Consultancy Pvt. Ltd andPLUSH Engineering & architects (P) Ltd Kathmandu.

## **Monthly Progress Report**

Regional Urban Development Project (RUDP)
Project Implementation Unit
Biratnagar, Nepal



April 2019 Biratnagar Metropolitan City (BMC), Nepal

## **Table of Contents**

EXECUTIVE SUMMARY
1. PROJECT DESCRIPTION
1.1. INTRODUCTION/BACKGROUND 5
2. CONTRACT DATA: - RUDP/ICB/BRT/25
3. SUMMARY OF PROGRESS STATUS OF ALL MAJOR COMPONENTS
3.1. SUB PROJECT COMPONENTS 7
3.1.1. SEWER LINES
3.1.2. STORM WATER DRAIN11
3.1.3. ROADS AND LANES
3.1.4. ROAD SIDE DRAIN
3.2. ENVIRONMENTAL ASPECT
3.2.1. BORROW/ QUARRY SITES
3.2.2. DISPOSAL OF SPOIL AND CONSTRUCTION WASTE26
3.2.3. PROVISION AND MAINTENANCE OF TOILETS26
3.2.4. CRUSHING PLANTS27
3.2.5. ASPHALT PLANTS AND BATCHING PLANTS27
3.2.6. OCCUPATIONAL HEALTH AND SAFETY MEASURES27
3.3. SOCIAL ASPECT
3.4. SAFEGUARD/ GESI COMPONENT
3.4.1. COMMUNITY AWARENESS:28
3.4.2. GRIEVANCE REDRESSES MECHANISM:28
3.4.3. GENDER EQUITY AND SOCIAL INCLUSION (GESI):28
3.4.4. STATUS OF SOCIAL AND ENVIRONMENTAL SAFEGUARD MEASURES29
3.4.5. STATUS OF RELOCATION OF SERVICES29
3.5. FINANCIAL PLAN
3.5.1. DISBURSEMENT RECORDS IN CONSTRUCTION30
4. OBJECTIVES AND SCOPE OF WORKS
4.1. OBJECTIVES
4.2. SCOPE OF WORKS
4.3. ORGANIZATION AND STAFFING
4.4. CONSULTANT'S ACTIVITIES IN CONSTRUCTION PHASE
5. PROGRESS OF SUB - PROJECT COMPONENTS 36
5.1. CONSTRUCTION MATERIALS
5.2. PROGRESS ACHIEVED TILL DATE
5.3. KEY EVENTS
6. DETAILS OF PRE CAST ACTIVITIES
7. CONTRACTOR'S MANPOWER 40
8. CONTRACTOR'S EQUIPMENT41

9. WORK PLAN FOR THE NEXT MONTH	42
ANNEX-1: Photographs of April, 2019	43
ANNEX-2: MINUTES OF MEETING APRIL, 2019	47
ANNEX-3: LABORATORY TEST RESULTS OF APRIL, 2019	55
ANNEX-4: SOCIAL & ENVIRONMENT SAFEGUARD	144
ANNEX-5: S-Curve	154
ANNEX-6: MASTER PLAN OF RUDP PROJECT	156

#### **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 in the following Chapters are mentioned below:

- 1. Introduction/ Background- It provide brief Account on 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 a brief Account on the 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 the 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 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. Sometimes, the project gets delayed due to unforeseen obstacles which are rampant in the case of Nepal. Such events are also enlisted to clarify the reason for delay in the project.
- 6. **Details of Pre Cast Activities-** In the urban area, as ongoing projects creates a lot of disturbances and difficulties in the life of the people living in the project area, the work has to be conducted in the speedy manner to finish it as soon as possible. Precast of the project components are the best alternative to overcome this issue and details of precast activities are provided in this chapter.
- 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.

#### 1. PROJECT DESCRIPTION

#### 1.1. INTRODUCTION/BACKGROUND

GoN has negotiated loan with Asian Development Bank for the Regional Urban Development Project (RUDP) in Nepal. The RUDP, in the line with ADB's water and urban operation plans, will construct and upgrade urban infrastructure in eight towns in the Terai Region of Nepal, improve operational effectiveness of these eight municipalities. The project will also build institutional capacity of DUDBC for urban planning, project planning and project preparation in order to proactively shape urbanization in Nepal and implement the National Urban development strategy. Biratnagar is one of the eight municipal towns included in the RUDP. The subcomponent of the RUDP covers the construction and improvement of sewerage, drainage and roads and design of Integrated Solid Waste Management System for Biratnagar Municipality. Building Design Authority (P) Ltd (Nepal), B.N. Consultancy Pvt. Ltd and PLUS Engineers & Architects (P) Ltd Kathmandu and have entered for a Contract of Consulting Services with Regional Urban Development Project (RUDP), Project Implementation Unit (PIU), Biratnagar Metropolitan City on 28<sup>th</sup>October 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)						
	Government of Nepal,						
Executing Agency	Ministry of Urban Development						
	Department of Urban Development and Building Construction (DUDBC)						
Implementing Agency	Biratnagar Metropolitan City, Biratnagar						
Funded By	Asian Development Bank & Government of Nepal						
Package	Construction and Completion of Sewerage, Drainage, Road, Footpath and Road furniture works						
Contract No.	RUDP/ICB/BRT/2						
Location	Biratnagar Metropolitan City, Biratnagar						
Consultant	Building Design Authority (P) LTD in Joint Venture With B.N consultancy Pvt and PLUS Engineers and Architects (P) Ltd Kathmandu.						
Date of Sign of Design and Supervision Consulting Service	28th August 2017						
Date of Commencement of Design and Supervision Consulting Service	6th September 2017						
Date of Completion	5th September 2020						
Contractor	ZHONGHENG Construction Group International Engineering Co Ltd. Beijing, China.						
Date of Agreement Made	10 <sup>th</sup> October 2017						
Date of Commencement	2 <sup>nd</sup> November 2017						
Date of Completion	1 <sup>st</sup> November 2019						
Contract Amount including PS and VAT	NRs. 2,611,092,249.63						
Progress							
Road Rehabilitation (Asphalt)	40.74%						
Sewer Line	82.77%						
Storm Drain	97.44%						
Road Side Drain	94.67%						



	General Features						
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	With respect to Revised Work Program-01: Planned: 64.59%, Actual: 62.74%; Lead(+) or Lag(-) by (+) – 1.85%						
Financial Progress up to date	In Percentage: 52.00%, In Figure: NRs. 1,357,827,094.71 (including VAT and PS)  IPC – 8 is under perusal.  In Words: NRs. One Billion Three Hundred Fifty Seven Millions Eight Hundred Twenty Seven Thousand Ninety Four and Seventy One Only.						

# 3. SUMMARY OF PROGRESS STATUS OF ALL MAJOR COMPONENTS

S.No	Description	Unit	BoQ Quantity	Progress up to date	Remaining	Progress Status expressed in (%)	Remarks
1	Sewer Line						
a	HDPE/RCC	m	20,082.00	16,621.70	3,460.30	82.77%	
b	Manhole	No.	685.00	523.00 162.00		76.35%	
c	Sewer Inlet	No.	1,010.00	489.00	521.00	48.42%	
d	House Connection	No.	3,784.00	1,136.00	2,648.00	30.02%	
2	Storm Water Dra	in					
a	RCC Drain	Drain m 65		570.00	15.00	97.44%	Revised Length =585m
b	Piles	No.	132.00	138.00	(6.00)	100.00%	Exceeded



S.No	Description	Unit	BoQ Quantity	Progress up to date	Remaining	Progress Status expressed in (%)	Remarks					
3 Road												
a	Subgrade	m	73,860.00	36,507.91	37,352.09	49.43%						
b	Subbase	m	73,860.00	36,207.91	37,652.09	49.02%						
С	Base	m	73,860.00	32,737.92	41,122.08	44.32%						
d	Prime	m	73,860.00	30,088.82	43,771.18	40.74%						
e	Asphalt	m	73,860.00	30,088.82	43,771.18	40.74%						
4	Road Side Drain	m	26,050.00	24,661.19	1,388.81	94.67%						

#### 3.1. SUB PROJECT COMPONENTS

#### 3.1.1. SEWER LINES

Trunk Line T1 & T2 was already completed in STIUEIP (Secondary Town Integrated Urban Environmental Improvement Project) and remaining part of sewer lines in T4 completed and T3 have been identified and necessary survey and construction works are in progress. T3 Trunk along with the secondary lines are in progress, 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
	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	2,092.00
2	Manhole ( Brick / RCC)	no.	685.00
3	Sewer Inlet	no.	1,010.00
4	<b>House Connection</b>	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 date

		Bo	Q	Up to Pr	e Month	This	month	Total to	date	
SN	Description	Length (m)	Manhole (Nos.)	Length (m)	Manhole (Nos.)	Length (m)	Manhole (Nos.)	Length (m)	Manhole (Nos.)	Progress %
Hume	Pipe:									
1	Hume pipe (T2)	206.00	6.00	205.00	6.00	-	-	205.00	6.00	
2	Hume pipe (T3)	1,905.00	58.00	512.00	15.00	792.50	5.00	1,304.50	20.00	
3	Hume Pipe (T4)	130.00	4.00	326.00	11.00	1	-	326.00	11.00	
Subtot	cal in (m)	2,241.00	68.00	1,043.00	32.00	792.50	5.00	1,835.50	37.00	
HDPE	Pipe:									
1	HDPE (T1)	1,825.00	57.00	1,743.20	54.00			1,743.20	54.00	
2	HDPE (T2)	3,927.00	147.00	2,996.00	113.00	205.50	8.00	3,201.50	121.00	
3	HDPE (T3)	9,997.00	316.00	7,038.50	231.00	811.00	25.00	7,849.50	256.00	
4	HDPE (T4)	2,092.00	68.00	1,992.00	55.00			1,992.00	55.00	
Subtotal in (m)		17,841.00	588.00	13,367.70	453.00	1,016.50	33.00	14,786.20	486.00	



SN	Description	BoQ		Up to Pre Month		This	month	Total to	date	
		Length (m)	Manhole (Nos.)	Length (m)	Manhole (Nos.)	Length (m)	Manhole (Nos.)	Length (m)	Manhole (Nos.)	Progress %
Total		20,082.00	656.00	14,190.70	464.00	1,809.00	38.00	16,621.70	523.00	82.77%

SN	Description	BoQ (Nos.)	Up to Pre Month		This month		Total to date		Progress %
1	Sewer inlet	1,010.00	470.0	00		19.00		489.00	48.42
2	House connection	3,784.00	984.0	00		152.00		1,136.00	30.02



#### 3.1.2. STORM WATER DRAIN

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

Table: 3 PROPOSED and PHYSICAL PROGRESS in STORM WATER DRAINS till date.

	Name of Drain		Le	ength in n	1			W	ork C	omplete	ed	Length	
S		$\sim$ · ·	Revise	Prog	ress	Cum	Type of Drain	Brick		RCC		of Covered	Remarks
N			d	Previo us	This Month	ulativ e		m	$m^3$	m	$m^3$	Drain in m	
1	CN2-CN3 (Chyangh Baari Nala)	652.89	585	570	0	570	RCC, closed			570		570	
2	CN2-CN3 (Chyangh Baari Nala)	132 nos piles	138	138	0	138 nos.							Piling works completed

#### 3.1.3. ROADS AND LANES

Most of the roads/lanes in Biratnagar are in a poor state due to lack of periodic maintenance, and need improvement where as some of the roads are graveled and would benefit from upgrading. In the areas where drainage and sewerage works are proposed there will be significant impact on the existing roads. The Project has considered on design based on reinstatement, rehabilitation and upgrading of existing roads length 73.86 km. Some of the roads of the project has been completed and some of them are in the process of being upgraded and the summary is presented below.



Table No:-4 PROPOSED and PHYSICAL PROGRESS of pavement works till date

				]	Length in m				Work Co	mpleted			S		
SN	Road	Name of			Prog	ress		Sub-base	Base	Asphalt	RCC	Paint	ark		
SIN	Number	Road		Road	Original	Revised	Previous	This Month	Total	m	m	m	m	m	Remarks
1	R42	Bhagwati Marg	218.00	218.00	218.00		218.00	218.00	218.00	123.00					
2	R5	College Road	970.00	970.00	650.00		650.00	650.00	650.00	599.20					
3	B2	Gauri Shankar Marg	2,777.83	2,777.83	2,152.00		2,152.00	2,152.00	2,152.00	2,152.00	210.00				
4	R65	Satghumti Marg	282.00	320.00	320.00		320.00	320.00	320.00						
5	R107		173.00	215.00	215.00		215.00	215.00	215.00						
6	R107 a		50.00	50.00	50.00		50.00	50.00	50.00						
7	R104	VIP Marg	273.00	273.00	273.00		273.00	273.00	273.00	273.00					
8	R	Madhumara Marg	600.00	600.00	600.00		600.00	600.00	600.00	582.00					
9	B1	Kanchan Marg	1,172.94	1,173.00	1,173.00		1,173.00	1,173.00	1,106.00	1,106.00		1,106.00			
10	R21	Pratibha Marg	1,320.00	1,320.00	1,330.00		1,330.00	1,330.00	1,330.00	1,330.00		1,012.80			
11	В3	Keshaliya Marg	1,574.00	1,574.00	1,574.00		1,574.00	1,574.00	1,574.00	1,574.00					
12	S13		1,617.00	1,617.00	1,417.00		1,417.00	1,417.00	1,417.00	1,417.00		1,812.60			



					Length in m				Work Co	mpleted			<b>(</b>
SN	Road	Name of			Prog	ress		Sub-base	Base	Asphalt	RCC	Paint	ark
SIN	Number	Road	Original	Revised	Previous	This Month	Total	m	m	m	m	m	Remarks
13	R12	Kanchha Dai Marg	1,192.00		1,297.00		1,297.00	1,297.00	1,297.00	897.00			
14	Rani site	Rani	4,023.00	4,023.00	2,315.00		2,315.00	2,315.00	1,702.00	1,702.00			
15	R16	Satya Marg	604.00	604.00	604.00		604.00	604.00	604.00	542.10			
16	R26	Pasang Marg	617.00	654.00	654.00		654.00	654.00	654.00	654.00			
17	R28	Pustakalaya Marg	635.00	635.00	635.00		635.00	635.00	635.00	339.20			
18	R27	Peepal Marg	810.00	810.00	580.00		580.00	580.00	580.00	400.00		639.20	
19	R25	Devi Marg	599.00	580.00	580.00		580.00	580.00	580.00	561.70			
20	R24	Prabhat Marg	384.41	380.00	518.15		518.15	518.15	518.15	518.15			
21	R37	Banglamukhi Marg	420.00	477.00	477.00		477.00	477.00	477.00	477.00			
22	R7	Manakamana Marg	814.00	814.00	542.00		542.00	542.00	542.00	242.00			
23	R30	Shanti Marg	212.00	212.00	123.10		123.10	123.10	123.10	123.10			
24	R9	Fadindra Marg	123.00	123.00	119.00		119.00	119.00	119.00	119.00			
25	S11	Samrat Marg	660.00	660.00	660.00		660.00	660.00	504.60	504.60		504.60	
26	R22	Amar Marga	373.10	367.65	367.65		367.65	367.65	367.65	367.65			



					Length in m				Work Co	mpleted			S
SN	Road	Name of			Prog	ress		Sub-base	Base	Asphalt	RCC	Paint	ark
SIN	Number	Road	Original	Revised	Previous	This Month	Total	m	m	m	m	m	Remarks
27	R29	Shanti Marg	620.00	620.00	403.00		403.00	403.00	403.00	357.70		585.60	
28	R36	Gaurav Marg	218.00	218.00	220.00		220.00	220.00	220.00	220.00		440.00	
29	R33	Tarun Marg	285.00	285.00	280.00		280.00	280.00	280.00	280.00			
30	R64	Satya Narayan Marg	121.00	121.00	121.00		121.00	121.00	121.00				
31	R8		-	225.00	225.00		225.00	225.00	225.00	225.00			
32	N36		-	190.00	190.00		190.00	190.00	186.95	186.95			
33	R188	Shakti Marg	-	120.00	120.00		120.00	120.00	120.00	120.00			
34	R2	Main Road	-	-	1,085.00		1,085.00	785.00	350.00	350.00		350.00	
35	T3 Line 6A	Pandit Meghnath Marg	-	220.00	220.00		220.00	220.00	220.00	220.00			
36	T2 Line 24C	Nava Jyoti Marg	-	205.00	205.00		205.00	205.00					
37	T2 Line 24D	Nava Jyoti Marg	-	210.00	210.00		210.00	210.00					
38	R63 (DSP Road)	DSP Road	420.00	420.00	420.00		420.00	420.00	395.00	395.00			
39_	R90	Shakti Marg	450.00	320.00	320.00		320.00	320.00	320.00	320.00		640.00	



					Length in m				Work Co	mpleted			80
CNI	Road	Name of			Prog	ress		Sub-base	Base	Asphalt	RCC	Paint	ark
SN	Number	Road	Original	Revised	Previous	This Month	Total	m	m	m	m	m	Remarks
40	R77	Arniko Marg	80.00	80.00	80.00		80.00	80.00	80.00	80.00			
41	R76	Mitra Marg	270.00	270.00	270.00		270.00	270.00	270.00	270.00		541.20	
42	R183	Nava Jyoti Marg	240.00	240.00	240.00		240.00	240.00	220.00	220.00			
43	T1 L16B	Xenial Front	210.00	210.00	210.00		210.00	210.00	205.00	205.00			
44	T1L16A	Xenial South	140.00		180.00		180.00	180.00	180.00	180.00			
45	R114	Dharanidhar Marg	560.00	560.00	560.00		560.00	560.00	560.00	560.00		560.00	
46	R113	Kavi Lekh Marg	740.00	740.00	740.00		740.00	740.00	740.00	740.00			
47	R5a		370.00	370.00	370.00		370.00	370.00	370.00	370.00			
48	Rani site B		600.00	520.00	520.00		520.00	520.00	520.00	520.00			
49	R3	Dharamban Marg	-	2,230.00	2,233.00		2,233.00	2,233.00	2,150.30	2,150.30		2,080.30	
50	R78	Sombare - Highway	92.00	92.00	92.00		92.00	92.00	92.00	92.00			
51	R84	West of school	673.00	235.00	330.00		330.00	330.00	236.00	236.00			
52	R85	Machha Line	153.00		160.00		160.00	160.00	160.00	160.00			



					Length in m				Work Co	mpleted			
CNI	Road	Name of			Prog	ress		Sub-base	Base	Asphalt	RCC	Paint	ark
SN	Number	Road	Original	Revised	Previous	This Month	Total	m	m	m	m	m	Remarks
53	R87	Mahabir Chowk	150.00	148.00	148.00		148.00	148.00	110.00	110.00			
54	R86	Petrol pump side -R12			293.00		293.00	293.00	293.00	293.00			
55	R11	R18/R86	281.00	281.00	281.00		281.00	281.00	205.00	205.00			
56	N3	Jatuwa	120.00	117.00	117.00		117.00	117.00					
57	N4	Jatuwa	170.00	168.00	168.00		168.00	168.00	168.00	60.00			
58	R10	Ram Marga	1,092.00	1,092.00	292.00		292.00	292.00	292.00	292.00		853.20	
59	T2L26F	APF	61.50	61.50	55.00		55.00	55.00					
60	T2L27		80.00	80.00	80.00		80.00	80.00	80.00	80.00			
61	R122		265.55	265.55	265.55		265.55	265.55	265.55	265.55		497.40	
62	N9		220.42	220.42	220.42		220.42	220.42	220.42	220.42			
63	R17		610.06	610.06	365.00		365.00	365.00	365.00	365.00		730.00	
64	R18		465.78	465.78	370.00		370.00	370.00	370.00				



					Length in m	l			Work Co	mpleted			70
SN	Road	Name of			Prog	ress		Sub-base	Base	Asphalt	RCC	Paint	arks
SIN	Number	Road	Original	Revised	Previous	This Month	Total	m	m	m	m	m	Remarks
65	N2		75.84	75.84	75.84		75.84	75.84					
66	T3L6	Moti marga			170.00		170.00	170.00	170.00	170.00			
67	T3L6A	Golchha Marga			220.00		220.00	220.00	220.00	220.00			
68	T3L23	Madhumara road			300.00	121.00	421.00	421.00	300.00	300.00		358.40	
69	R45	Bata road			295.00	210.00	505.00	505.00	295.00	295.00			
70	T3L21				400.00		400.00	400.00	400.00	400.00		774.00	
71	N5				70.00		70.00	70.00	70.00	70.00		122.00	
72	T3L39				400.00		400.00	400.00	400.00	400.00		491.00	
73	T3L39A				130.00		130.00	130.00	130.00	130.00		179.40	
74	T3L39B				80.00		80.00	80.00	80.00	80.00		117.60	
75	R68 - T2L24G					220.00	220.00	220.00					
76	N10					194.00	194.00	194.00					
77	T3L24C					170.00	170.00	170.00					
78	T3L9					278.00	278.00	278.00					



				]	Length in m	l			Work Con	npleted			S
CNI	Road	Name of			Prog	ress		Sub-base	Base	Asphalt	RCC	Paint	arks
SN	Number	Road	Original	Revised	Previous	This Month	Total	m	m	m	m	m	Rem
79	R6					935.20	935.20	935.20	935.20	935.20			
80	N24					136.00	136.00	136.00	136.00	136.00			
	Total		32,328.43	33,733.63	34,243.71	2,264.20	36,507.91	36,207.91	32,737.92	30,088.82	210.00	14,395.30	



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

				Cate	egory		I	ength in r	n		Foo	tpath	S
SN	Road	Name of	Type*	Catt	gory			Progr	ess		100	сраси	Remarks
	Number	Road		<3m	>3m	Original	Revised	Previous	This Month	Cumulative	m	$\mathrm{m}^2$	Rei
1	B2	Gauri Shankar Marg	Precast block			2,777.83	2,777.83	1,700.00	1	1,700.00	1,700.00	3,888.96	
2	S11	Bhatta Chowk to Sankhar Chowk	Precast block			900.00	900.00	300.00	1	300.00	300.00	270.00	
3	B3 (3)	Keshaliya Road	Precast block					-	500.00	500.00	500.00	1,200.00	
4	R16	Jatuwa	Precast block					-	400.00	400.00	400.00	440.00	
5	R21		Precast block					-	230.00	230.00	230.00	230.00	

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

SN	Description	Unit	Proposed	Total Up to Previous Month	This Month	Total Up to this Month	Progress
1	Subgrade	m	73,860.00	28,454.25	8,053.66	36,507.91	49.43%
2	Sub Base	m	73,860.00	26,386.70	9,821.21	36,207.91	49.02%
3	Base	m	73,860.00	18,398.10	14,339.82	32,737.92	44.32%
4	Prime/Tack	m	73,860.00	15,167.45	14,921.37	30,088.82	40.74%
5	Asphalt	m	73,860.00	14,167.45	15,921.37	30,088.82	40.74%
6	Paint	m	73,860.00	500.00	13,895.30	14,395.30	19.49%

#### 3.1.4. ROAD SIDE DRAIN

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

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

				]	Length in m	ı		Work Cor	npleted	S
SN	Road	Name of			Progr	ess		Brick	RCC	ark
514	Number	Road	Original	Revised	Previous	This Month	Total	m	m	Remarks
1	B1	Kanchan Marg	-	-	90.00		90.00	90.00		
2	R29	Shanti Marg	270.00		256.52		256.52	256.52		
3	N36				185.88		185.88	185.88		
4	R8		370.00		219.83		219.83	219.83		
5	R7	Devi Marg and Pipal Marg	155.00	155.00	89.58		89.58	89.58		
6	R63	DSP Road	418.79		418.79		418.79	418.79		
7	R9	Baglamukhi path	120.00	103.20	103.20		103.20	103.20		
8	S13	Udaya Marga	-	158.10	158.10		158.10	158.10		
9	N33		-	70.00	70.00		70.00	70.00		
10	R28	Pustakalaya Marg	340.00	278.00	278.00		278.00	278.00		
11	R90	Shakti Marg	320.00		313.25		313.25	313.25		
12	R114	Dharanidhar Marg	-	312.33	312.33		312.33	312.33		
13	R11	Om Shiv Marg	-		200.17		200.17	200.17		
14	R18		-	382.50	381.50		381.50	381.50		
15	R17		-		75.00		75.00	75.00		
16	R113	Kavi Lekhnath Marg	-	312.45	72.45		72.45	72.45		
17	R77	Arniko Marg	97.00		80.00		80.00	80.00		
18	R76	Mitra Marg	272.00	275.00	270.00		270.00	270.00		
19	N9	Devi Marga	-		22.70		22.70	22.70		
20	N4		-	170.00	146.38		146.38	146.38		
21	R33	Tarun Marg	-	265.00	264.48		264.48	264.48		
22	R36	Gaurav Marg	218.00		216.45		216.45	216.45		



				]	Length in m	l		Work Con	mpleted	<b>SO</b>
SN	Road	Name of			Progr	ress		Brick	RCC	ark
SIN	Number	Road	Original	Revised	Previous	This Month	Total	m	m	Remarks
23	R86	Janpath Marg	215.00		187.55		187.55	187.55		
24	R183	Nava Jyoti Marg	242.00		211.05		211.05	211.05		
25	R7a		77.81		65.00		65.00	65.00		
26	Rani site	Rani B	-	650.00	530.00		530.00	530.00		
27	Rani site	Rani A	-	300.00	270.00		270.00	270.00		
28	N3		-		110.00		110.00	110.00		
29	N5		-		65.00		65.00	65.00		
30	R21	Binayak Marga	-	390.00	388.25		388.25	388.25		
31	R2	Main Road	2,060.00	2,060.00	1,782.50	150.00	1,932.50	1,932.50		
32	T1L16B	Xenial Front	-		205.68		205.68	205.68		
33	T1L16A	Xenial South	-	160.00	150.20		150.20	150.20		
34	R75	Tintoliya Marga	135.00	135.00	127.50		127.50	127.50		
35	R122	Amar Marga	-		250.48		250.48	250.48		
36	R18 Branch		-	30.00	30.00		30.00	30.00		
37	R7(b)(Neuro to sidhartha chowk)	Siddhartha Marga	317.00	317.00	300.00		300.00	300.00		
38	R12	Sukra Path	-		290.00		290.00	290.00		
39	R42	Jahada Marga	-		171.00		171.00	171.00		
40	R6	Shahi Marg	460.00		660.00	60.00	720.00		760.00	
41	R21(a)	DharamBadh Junction	-	160.00	80.00		80.00	80.00		
42	R78	Binayak Marga	92.00	70.00	70.00		70.00	70.00		
43	R188	Shakti Marg		120.00	115.60		115.60	115.60		
44	R40	Brahma Kumari Marga	-		150.00		150.00	150.00		
45	Rani Site C		-	100.00	97.50		97.50	97.50		
46	Ranit Site D		-	131.45	131.45		131.45	131.45		
47	T3L21	Moti Marga	380.00	380.00	360.95		360.95	360.95		



				]	Length in m			Work Con	mpleted	S
SN	Road	Name of			Progr	ess		Brick	RCC	Remarks
ы	Number	Road	Original	Revised	Previous	This Month	Total	m	m	Ren
48	T3L39	Gaheli Marga	-	278.00	270.00		270.00	270.00		
49	T3 Line 39A		-	90.00	90.00		90.00	90.00		
50	T3 L39B		-	-	90.00		90.00	90.00		
51	T2L27	Bhumi Prashasan Junction	92.00	80.00	79.50		79.50	79.50		
52	T4 Line 1	Sailesh Marg	-	197.00	100.00		100.00	100.00		
53	N2				95.00		95.00	95.00		
54	T2 Line 26E	College Road	80.00	80.00	90.00		90.00	90.00		
55	T2 Line 18C	Maisthan Marga	-	105.00	102.00		102.00	102.00		
56	T2Line 18A	Makalu Marga	90.00		60.00		60.00	60.00		
57	R6 (T3L11i)		-	275.00	247.50		247.50	247.50		
58	R9(T3L11k)	Tathasthu Marga	-	200.00	180.00		180.00	180.00		
59	R45 (T3Line10D)	Dadhiram Marga	302.00	302.00	260.00		260.00	260.00		
60	R9, T2 L19	Fanindra Marga	256.00	256.00	215.00		215.00	215.00		
61	R7c (Neuro to Shanti Chowk	Siddhartha Marga	240.00		305.00		305.00	305.00		
62	R84	School Marga	673.00		613.00	50.00	663.00	663.00		
63	R85	Lekhanath Marga	162.00		150.00		150.00	150.00		
64	R87	Byas Marga	160.00		150.00		150.00	150.00		
65	Rani B (Bus park)		-	120.00	90.00		90.00	90.00		
66	R8(a)	Madhumara Marg	218.00		285.00		285.00	285.00		
67	T3L23A		263.47	263.47	100.00		100.00	100.00		
68	Rani E		85.00	85.00	85.00		85.00	85.00		
69	R102	Hamro Marg			132.50		132.50	132.50		
70	R10/R10a	Ram Marga	1,092.41		740.36		740.36	740.36		
71	N10	APF	154.48	154.48	150.00		150.00	150.00		



				]	Length in m	ı		Work Con	npleted	S
SN	Road	Name of			Progr	ress		Brick	RCC	Remarks
ыч	Number	Road	Original	Revised	Previous	This Month	Total	m	m	Ren
72	R23	Bani Marg	226.12	226.12	200.00		200.00	200.00		
73	R103	Vibuti Marga	173.00	173.00	162.50		162.50	162.50		
74	T3L6	Sahid Marga		350.00	300.00	50.00	350.00	350.00		
75	P1, T3L6A	Pandit Meghnath Marga	280.00	280.00	260.00		260.00	260.00		
76	T2 L24C & D	Hanuman Das Marga	176.93	176.93	130.00		130.00	130.00		
77	R99	APF	187.00	187.00	187.00		187.00	187.00		
78	T2 L25		409.00	409.00	150.00		150.00	150.00		
79	R20		190.00	190.00	60.00		60.00	60.00		
80	T2L24F		120.00	120.00	60.00		60.00	60.00		
81	R105		168.19	168.19	150.00		150.00	150.00		
82	R34	Prabhu Marg	151.00	151.00	158.35		158.35	158.35		
83	R35	Garima Marg	138.00	138.00	138.00		138.00	138.00		
84	R107		180.00	180.00	160.00		160.00	160.00		
85	T3L13D		80.00	80.00	70.63		70.63	70.63		
86	T3L13E		70.00	70.00	62.40		62.40	62.40		
87	T3L11E		160.00	160.00	110.00		110.00	110.00		
88	B2				76.50		76.50	76.50		
89	R78				35.00		35.00	35.00		
90	R7b				288.50		288.50	288.50		
91	T3L21A				25.00		25.00	25.00		
92	R74				96.00		96.00	96.00		
93	R46				120.00		120.00	120.00		
94	R101				160.00		160.00	160.00		
95	T3L7A				100.00		100.00	100.00		
96	T3L8				75.00		75.00	75.00		
97	R20				100.00		100.00	100.00		
98	R5				200.00		200.00	200.00		



			Length in m					Work Completed		
SN	Road Number	Name of Road			Progr	ess		Brick	RCC	Remarks
			Original	Revised	Previous	This Month	Total	m	m	Ren
99	R67				110.00		110.00	110.00		
100	R82				250.00	100.00	350.00	350.00		
101	T1L13A				100.00		100.00	100.00		
102	T1L14A				150.00		150.00	150.00		
103	R68				200.00		200.00	200.00		
104	T3L22A				150.00		150.00	150.00		
105	T3L22B				120.00		120.00	120.00		
106	T3L25C				130.00		130.00	130.00		
107	T3L11B				60.00		60.00	60.00		
108	T3L11M				50.00		50.00	50.00		
109	R106				70.00		70.00	70.00		
110	R41				520.00		520.00	520.00		
111	T2L19B				110.00		110.00	110.00		
112	R30				180.00		180.00	180.00		
113	T3L13C				100.00		100.00	100.00		
114	T3L13J				72.53		72.53	72.53		
115	T2L18Y				100.00		100.00	100.00		
116	T2L19P				114.38		114.38	114.38		
117	T2L19Q				126.55		126.55	126.55		
118	R9A				208.73		208.73	208.73		
119	R9B				25.00		25.00	25.00		
120	T3L7	Sahid Marga			215.00	100.00	315.00	315.00		
121	T2L18K				40.00		40.00	40.00		
122	T3L23C				30.00		30.00	30.00		
123	T2L24E	Mahabir Marga			60.00		60.00	60.00		
124	R44				125.00	245.00	370.00	370.00		
125	R110				100.00	50.00	150.00	150.00		
126	Parichaya Marga				40.00	60.00	100.00	100.00		



	Road Number	Name of Road	Length in m					Work Completed		S
SN			Original I		Progr	ess	Total	Brick	RCC	lark
				Revised	Previous	This Month		m	m	Remarks
127	T3L25B				200.00		200.00	200.00		
128	T1L5, 5A				490.00	100.00	590.00	590.00		
129	R82				110.00		110.00	110.00		
130	T2L19Y					50.00	50.00	50.00		
	Total				23,696.19	965.00	24,661.19	23,941.19	760.00	



#### 3.2. 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.

#### 3.2.1. BORROW/ QUARRY SITES

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

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

#### 3.2.2. DISPOSAL OF SPOIL AND CONSTRUCTION WASTE

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

The contractor has already provided the safe tipping sites and the excess materials are dumped as per the approved tipped sites. Spoil and construction wastes are disposed at Madhumara site and excess construction materials are stocked at Madhumara site and at the open space at north of Degree College-(Rani Site)

#### Provision for maintenance of Camps/Office/Stores/Equipment.

This section describes about the works related to maintenance and upgrading of labor camps, contractor's employees camp, contractor's site office, contractor's equipments store yards, contractor's equipment store yards, contractor's precast production yards. The camp should have the proper roofing system. Besides that, it should be spacious, should have proper circulation of the fresh air, should be hygienic, and should have proper electric lightening system & water supply system. It should be neat and clean.

Labor camps are provided at various locations as per requirement and these sites are frequently visited and monitored. The condition is found to be satisfactory. The details of the labor camp is provided in annex.

#### 3.2.3. PROVISION AND MAINTENANCE OF TOILETS

Provision of toilets for labor 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 for pit type latrines. Sufficient water must be provided and maintained in the toilets.

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



The numbers of toilets in each camp is also attached hereby in annex. Toilets in all the camps are found to be in the acceptable condition.

#### 3.2.4. 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 should be fitted with crusher to control emission of dust from plant. The crusher plant is located at around 42 km north-east of Biratnagar at a place called Chishyang.

#### 3.2.5. ASPHALT 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.

As the concrete quantity of the project is very minimal, there is no need of the separate batch plant for concrete mixing. However, as there are a lot of asphalt concrete works to be done in the project, a separate asphalt plant has been installed, especially for the project, at around 6 Km south of the Biratnagar DSC office at a place called Rani.

#### 3.2.6. 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 the environmental improvement project and mainly constitutes 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-2054BS, 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 was submitted to MoUD on 14th May, 2013 and has already been approved.

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 in habitants 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 and a standard site specific environmental monitoring checklist was used to record the present status of the project to verify if work has been done as per EMP Guidelines. A sample of environmental checklist is attached herewith as Annex.



#### 3.3. 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 labors 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.

#### 3.4. SAFEGUARD/ GESI COMPONENT

#### 3.4.1. 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. Before commissioning of any works at any stretches, we paste the information templates at certain interval and provide sufficient information to the users regarding it.

#### 3.4.2. GRIEVANCE REDRESSES MECHANISM:

Although many grievances were received verbally, only 9 grievances have been registered formally which have immediately been addressed and resolved. This month, one grievance was found to be registered in written from PCO/ADB for quality works at Pasang Marga – R26 and same time various grievances for various stretches were received verbally and were addressed immediately.

## 3.4.3. 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 (7 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.

Camps and construction sites are regularly been monitored to find the status of working force.



## 3.4.4. 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 on date 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> December, 2018 following issues were found. Social Safeguard revisited the site on 29<sup>th</sup>, 30<sup>th</sup> and 31<sup>st</sup> December.

- i. Efforts are being made to control dust emission at construction site by sprinkling water. As personal safety was given prime importance, construction workers were made to use helmet, globe and jacket while on the construction site.
- ii. Besides that, special attentions were given on the placement of safety board and traffic signboards, safety tools, barricades, tapes, etc. and special care were taken to make sign boards big enough to make them visible from distant.
- iii. Taking into consideration of the fact that the involvement of the significant numbers of female as employee in ADB project is the main project objective of ADB, contractor paid especial attention to have a separate toilet and separate labor camp for female that facilitates and encourages female to get work in the construction field.
- iv. Significant improvement was found to be done in health and sanitation issues in the labor camp than in the previous monitoring visit; like, quality and quantity of drinking water was improved and condition of toilet was found to be enhanced. However, to meet the sanitation condition to predetermined level, further instructions were given by contractor to make provision for sufficient water in toilet and soap for hand-wash. Furthermore, yard in charge was suggested to have sufficient medications, bandages and other necessary first aid equipments.

The implementation of Social and Environmental Safeguard measures during this month was found partially satisfactory. The contractor has conducted water quality test and the report is attached in the Annex.

#### 3.4.5. STATUS OF RELOCATION OF SERVICES

Electric poles were relocated at Rani, Bata Road, R183, R10, Zenial East & South, T3L6, T3L6A, T3L7 and DSP Road. Similarly, relocation of water supply pipe lines was done in B1 and R39, etc as per shut down schedules.

Table – 5: Status of Labor at Site

Labour	Labour		Composition		Ethnic composition				
class	Skilled	Unskilled	Male	Female	Janjati	Dalit	Muslim	Madhesi	Brahmin/ Chhetri
Local	58	165	214	9	35	28	16	144	0
Non local	95	263	358	0	95	86	22	155	0
Indian	0	0	0	0	0	0	0	0	0
TOTAL	153	428	572	9	130	114	38	299	0



#### 3.5. FINANCIAL PLAN

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

#### 3.5.1. DISBURSEMENT RECORDS IN CONSTRUCTION

Table - 6: DISBURSEMENT RECORDS in CONSTRUCTION

S.No	Description	Submission date	Submitted Amount(NRs)	Remarks
1	IPC 01	15 <sup>th</sup> October 2017	339,105,000.00	Mobilization Advance
2	IPC 02	2 <sup>nd</sup> April 2018	261,501,492.21	
3	IPC 03	1st July 2018	316,582,708.58	
4	IPC 04	1 <sup>st</sup> October 2018	105,227,887.17	
5	IPC 05	2 <sup>nd</sup> December 2018	95,951,603.44	
6	IPC 06	3 <sup>rd</sup> January 2019	264,937,394.99	
7	IPC 07	12th April 2019	313,626,008.32	
Total amount excluding PA & Mobilization advance till date =			1,357,827,094.71	

#### 4. OBJECTIVES AND SCOPE OF WORKS

#### 4.1. OBJECTIVES

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

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

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

#### 4.2. SCOPE OF WORKS

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

- Detailed Design and Procurement Assistance Phase for integrated solid waste management design (ISWM)
- Monthly progress report and quarterly progress report.
- Semi- annual Environmental monitoring report.
- Semi-annual Safeguard monitoring report.

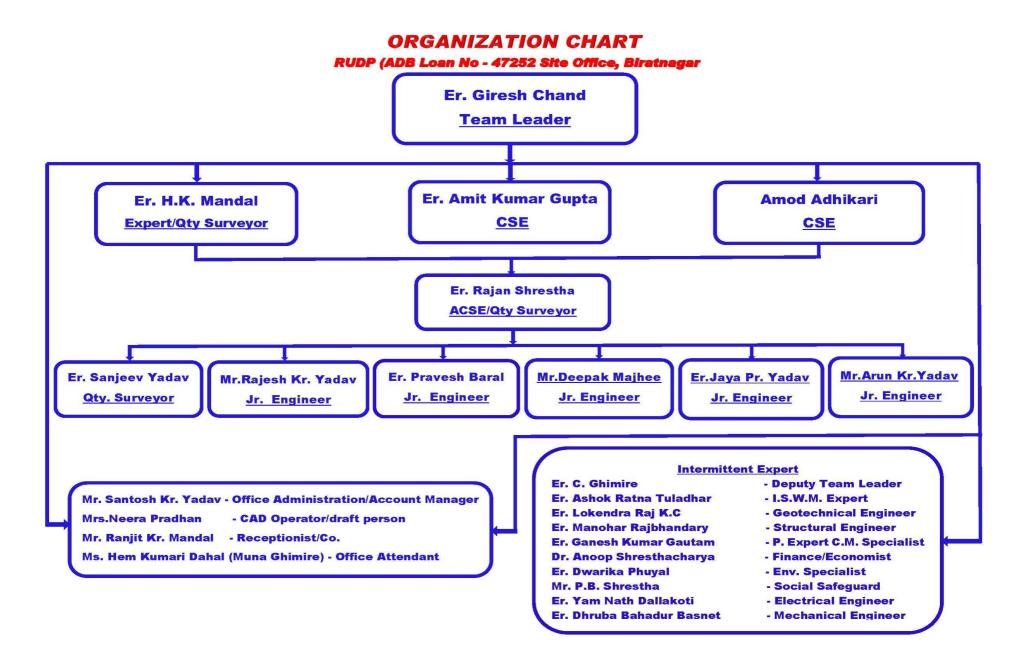


- Annual progress report including annual Environmental / Social safeguard monitoring report, assets.
- Detailed draft final report for our puts, including to assist the PIU (Employer), status of all supervision and construction works issues, all deliverables under the contacts.
- Sub project completion report, and summary of all other reports, progress and issues under the project.



#### 4.3. ORGANIZATION AND STAFFING

## **Attached**





## 4.4. CONSULTANT'S ACTIVITIES IN CONSTRUCTION PHASE

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

Table 7: CONSULTANT'S STAFF at Project Site, Biratnagar

SN	Name	Designation	Joining date	Remarks
1	Giresh Chand	Team Leader	6 <sup>th</sup> Sep 2017	
2	Ashok Ratna Tuladhar	ISWM ( Designer)	6 <sup>th</sup> Sep 2017	Intermittent
3	Dwarika Phuyal	Environmental Safeguard Expert	1 Nov 2017	Intermittent
4	Prakash Bhakata Shrestha	Social Safeguard Monitoring Expert	26 <sup>th</sup> dec-2017	Intermittent
5	Hare Krishna Mandal	Expert/Quantity surveyor	1 <sup>st</sup> Nov 2017	
6	J.P Yadav	Construction Supervision Engineer	1st March 2018	Discontinued the service since 25 <sup>th</sup> April, 2018.
7	A.K Gupta	Construction Supervision Engineer	1 <sup>st</sup> March 2018	
8	Nishant K.C.	Construction Supervision Engineer	2 <sup>nd</sup> April 2018	Discontinued the service since 1stOctober, 2018.
9	Amod Adhikari	Construction Supervision Engineer	7 <sup>th</sup> Oct 2018	Discontinued the service since 1st April, 2019.
10	Rajan Shrestha	ACSE/Quantity Surveyor	7 <sup>th</sup> Nov 2017	He is going to promote at the post of CSE from 1st May 2019.
11	Rajesh Kumar Yadav	Junior Engineer-1	6 <sup>th</sup> Sep 2017	
12	Sanjeev Yadav	Qty. Surveyor	5 <sup>th</sup> Nov 2017	
13	Santosh Kumar Yadav	Office Administration/Account Manager	6 <sup>th</sup> Sep 2017	
14	Hem Kumari Dahal (Muna Ghimire)	Office Attendant	6 <sup>th</sup> Sep 2017	
15	Ranjit Kumar Mandal	Receptionist	10 <sup>th</sup> Dec 2017	
16	Pravesh Baral	Junior Engineer-2	10 <sup>th</sup> Dec 2017	
17	J.P Yadav	Junior Engineer-3	1 <sup>st</sup> March 2018	
18	Deepak Majhi	Junior Engineer-4	1st March 2018	



SN	Name	Designation	Joining date	Remarks
19	Arun Kumar Yadav	Junior Engineer-5	16 <sup>th</sup> March 2018	
20	Neera Pradhan	CAD operator/Draft Person	10 <sup>th</sup> Dec 2017	
21	Yubraj Poudel	Driver	10th Feb-2019	

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.

Before using any construction material in the project, as per clause 7.3, engineer gave prior notice to contractor for joint inspection of the construction materials and all materials have been jointly checked and verified. Team leader issued letter to contractor to do the lab test of the construction materials from the authorized organizations and lab reports of the tested materials have been submitted by contractor. Engineer has emphasized on the 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 Itahari 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. PROGRESS ACHIEVED TILL DATE**

	Target This Month		Target This Month  Achievement This Month  Leading		eading	Lagging			
Month	Monthly	Accumulated	Monthly	Accumulated	Monthly	Accumulated	Monthly	Accumulated	Remarks
July-18	0.15%	25.17%	0.78%	25.18%	0.63%	0.01%		NA	Leading
August-18	0.15%	25.32%	2.32%	27.50%	2.17%	2.18%		NA	Leading
September- 18	5.71%	31.03%	1.22%	28.72%	NA	-2.31%		-2.31%	Lagging
October-18	7.72%	38.75%	2.30%	31.03%	NA	-7.72%		-7.72%	Lagging
November- 18	7.72%	46.47%	5.20%	36.22%	NA	-10.25%		-10.25%	Lagging
December- 18	7.95%	54.41%	3.40%	39.62%	NA	-14.79%		-14.79%	Lagging
January-19	7.96%	62.37%	5.65%	45.27%	NA	-17.10%		-17.10%	Lagging
February-	7.96%	<del>70.33%</del>	5.11%	<del>50.38%</del>	NA	<del>-19.95%</del>		<del>-19.95%</del>	Lagging
February- 19 (after Revision)	5.33%	50.03%	5.11%	50.38%	NA	0.35%		NA	Leading
March -19	7.75%	57.77%	7.84%	58.21%	NA	0.44%		NA	Leading
April-19	6.82%	64.59%	4.53%	62.74%	NA	-1.85%		-1.85%	Lagging

Note- Due to delay in shifting of telecom cable, Dharma Bhakari – sewer line works in T3 Trunk delayed by 15 days and physical progresses have been lagged due to start of early monsoon, delay in IPC payment disbursement and shut down for relocation of electricity by NTC.



### **5.3. KEY EVENTS**

The consultant has noted the following key dates for the month of April, 2019.

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

S. No.	Date	Activities/Events	Remarks
1		Frequent visit of sites by the representatives of the employer.	

## 6. DETAILS OF PRE CAST ACTIVITIES.

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

	Physical Progress till date								
			P						
S.N.	Description	Unit	BoQ	Up to Previous month (RM.)	This Month (RM.)	Total to Date (RM.)	Remarks		
1	Precast Slab	No		45,722.00	2649.00	48,371.00	Under progress		
2	Kerb Stone	Rm	147,729.68	77,293.30	0.00	77,293.30	52.32%		

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

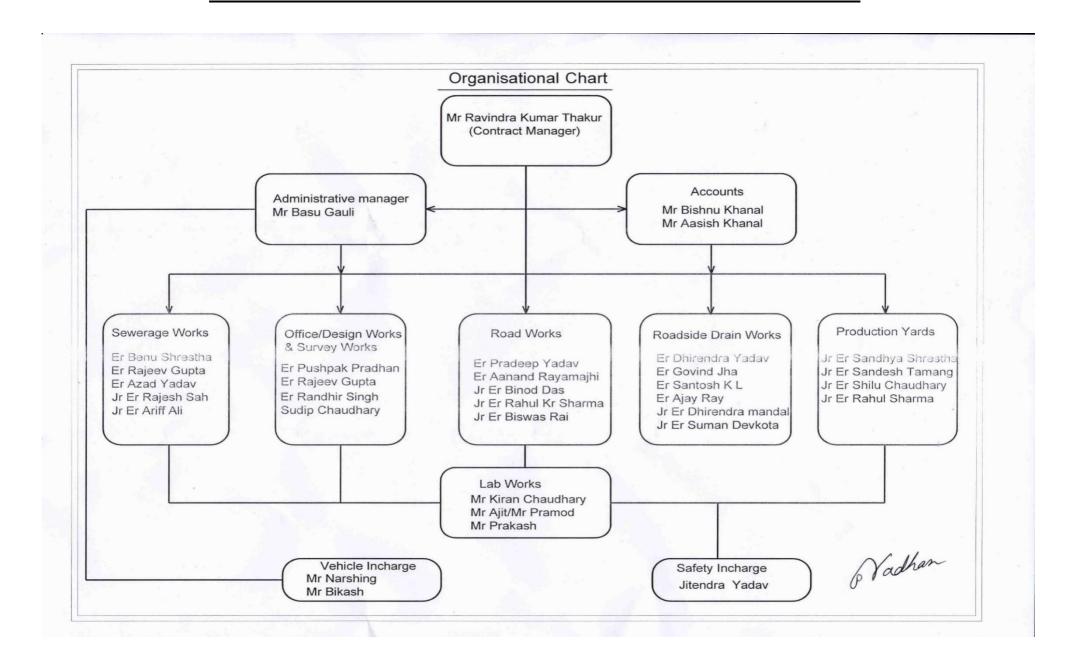
	Physical Progress till date							
				Progress				
S.N.	Description	Diameter (mm)	BoQ (RM)	Up to Previous month (RM.)	This Month (RM.)	Total to Date (RM.)	Remarks	
1	RCC Pipe	300	336.00	336.00	-	336.00		
2	RCC Pipe	450	681.00	681.00	-	681.00		
3	RCC Pipe	500	842.00	842.00	-	842.00		
4	RCC Pipe	600	382.00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

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

	Physical Progress till date								
				Progr	ess				
S.N.	Description	Diameter (mm)	BoQ (RM)	Up to Previous month (RM.)	This Month (RM.)	Total to Date (RM.)	Remarks		
1	HDPE Pipe	110.00	1,987.20	2,487.20	-	2,487.20			
2	HDPE Pipe	200.00	16,656.00	16,500.00	-	16,500.00	Under process		
3	HDPE Pipe	250.00	115.00	450.00	-	450.00			
	Total								

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

	Physical Progress till date						
				Prog	ress		
S.N.	Description	Diameter (mm)	BoQ (RM)	Up to Previous month (RM)	This Month (Rm.)	Total to Date (RM.)	Remarks
1	UPVC Pipe	160.00	5,050.00	4,800.00	-	4,800.00	
2	UPVC Pipe	110.00	5,050.00	4,000.00	-	4,000.00	





# 7. CONTRACTOR'S MANPOWER

Table 13: CONTRACTOR'S KEY STAFFS till date

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	-	14	
8	Sub- Engineer	-	12	
9	Accountant	-	2	
10	Lab Technician	-	1	
11	Store Keeper	-	2	
12	Vehicle In charge		2	
13	Skilled Labors		108	
14	Unskilled Labors		212	



# 8. CONTRACTOR'S EQUIPMENT

**Table 14: 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	4	Among 4nos., 2ton rollers-2nos.
6	Pneumatic tyre roller 8 to 10 ton	2	2	
7	Smooth wheeled roller 8 to 10 ton	1	1	
8	Grader	1	3	
9	Track Dozer (120 to 180 HP)	1	-	
10	Bitumen distributor (4 to 6 Kilo Litres)	1	1	
11	Water browser ( minimum 5000 Litres)	3	13	
12	Chips spreader	1	-	
13	Bitumen decanter minimum 4000 Litres. (preheating container)  Air compressor	2	2	
14	Excavator (200 above)	5	2	Backhoe loader-9 nos.
15	Tipping Trucks	15	25	
16	Service vehicle	2	5	
17	Survey equipment (Total station with accessories)	1	1	
18	Theodolite	2	-	
19	Levelling	5	18	
20	Mobile Generator 15-20 KVA	3	11	
21	Mixer Machine	6	10	
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	-	15	
27	Plate Compactor	-	6	
28	Water Pump	-	7	

# 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 and for sewer line.
- Road works
- Road painting works.
- Precast production works at contractor's yard.
- Road Side drain works.
- Laying of Kerb Stone, cover slab and interlocking tiles.
- Sewer line, Sewer inlet and House Connection works.
- Brick Manholes for sewer line.
- Relocation of electric poles and water supply works, etc.



**ANNEX-1: Photographs of April, 2019** 



Sewer pipe laying in T3 Trunk

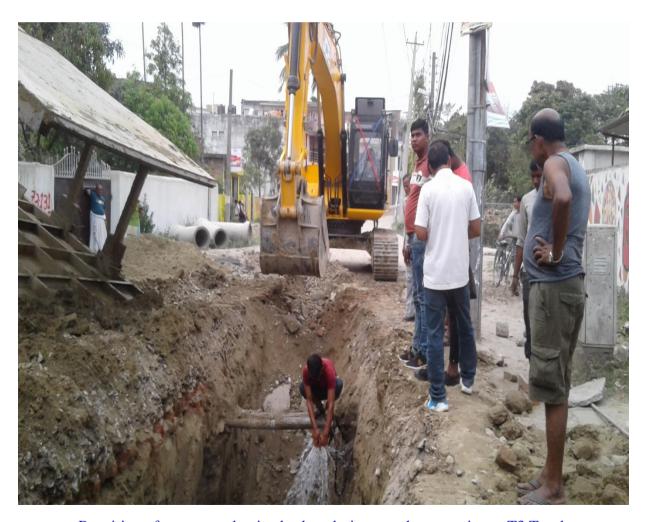


Sewer pipe laying in T3 Trunk





PCC for road side drain at R2 – Night shift

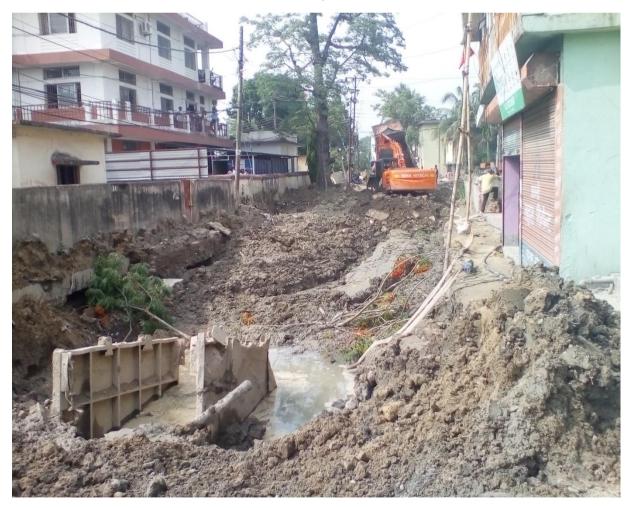


Repairing of water supply pipe broken during trench excavation at T3 Trunk





Field Density test – R6



Problem of sand boiling in T3 Trunk near Family Planning



**ANNEX-2: Minutes of Meeting April, 2019** 

Meeting Minute: 12

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

### Meeting of Safeguard Desk (SD)

Venue: Project Implementation Unit (PIU), Biratnagar

Date: April 26, 2019 (2076/01/13)

Participants:

Safeguard Desk (SD) members

Er. Bharat Kumar Neupane Project Manager, PIU/RUDP, Biratnagar

Mr. Punam Kumar Dahal Chief, social Development, PIU/RUDP, Biratnagar

Mr. Prakash Bhakta Shrestha Social Safeguard Expert, DSC/RUDP, Biratnagar

Er. Dwarika Phuyal Environmental Safeguard Expert DSC/RUDP, Biratnagar

Invitee:

Er. Giresh Chand Team Leader, DSC/RUDP, Biratnagar

Discussion and Decisions; regarding ADB/PCO letter by accordingly 16 April 2019 and 21 April 2019.

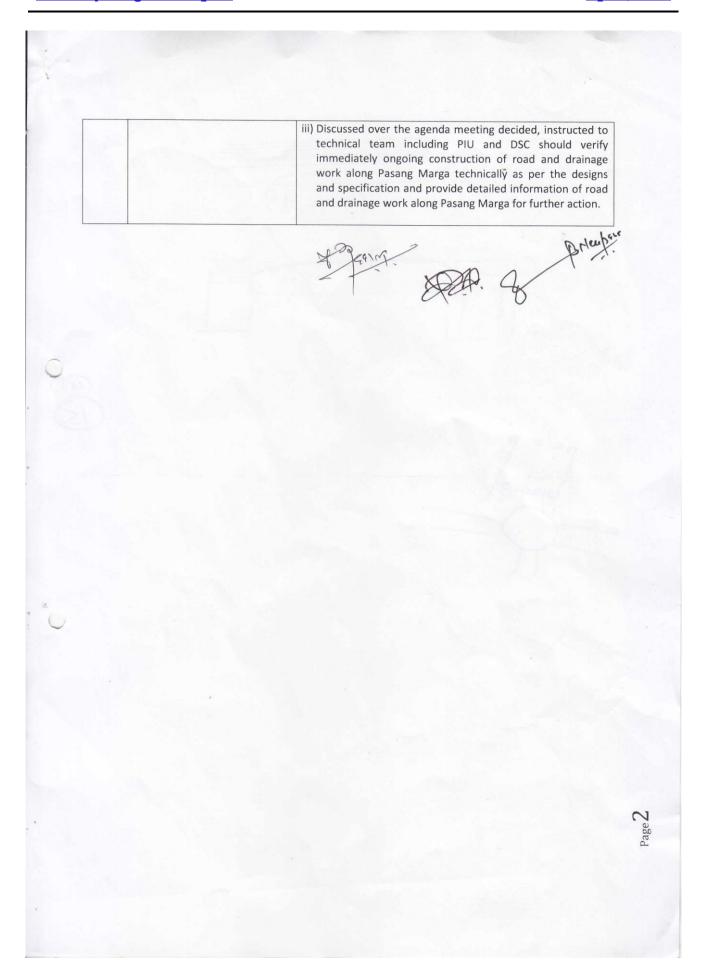
S. No.	Agenda	Discussion and Decisions
1	SD meeting	The 12 <sup>th</sup> . Meeting of SD, RUDP, Biratnagar held in RUDP/PIU office. There is no major complains has been registered in the desk.
2	Detailed information on Grievance in Pasang Marga in Biratnagar and the issue raised by ADB through the letter dated 16 April 2019 and letter of PCO dated 21 April 2019, regarding complain on ongoing construction of road and drainage work along Pasang Marga contractor is not following the specification as per design on the quality of work.  DSC has been received above	Discussed on agenda no.2 following decision has been decided:  i) There is no complain has been registered either written or verbally in the Grievance Redress committee and Safeguard Committee or municipality regarding complain on ongoing construction of road and drainage work along Pasang Marga contractor is not following the specification as per design on the quality of work.  ii) Road and drainage work along Pasang Marga has been completed and local people are found satisfied, no complain has been raised during social safeguard committee members visit on April 26, 2019, Mr. Punam Kumar Dahal Member secretary of GRC and Safeguard committee and Prakash Bhakta Shrestha, Social safeguard

\* Par

8

Byenpare of age







Meeting Minute: 11

# Regional Urban Development Project (RUDP), Biratnagar

### Meeting of Safeguard Desk (SD)

Venue: Project Implementation Unit (PIU), Biratnagar

Date: April 18, 2019 (2076/01/05)

Participants:

Er. Bharat Kumar Neupane Project Manager, PIU/RUDP, Biratnagar

Chief, social Development, PIU/RUDP, Biratnagar

Mr. Prakash Bhakta Shrestha

Social Safeguard Expert, DSC/RUDP, Biratnagar

Er. Dwarika Phuyal

Environmental Safeguard Expert DSC/RUDP, Biratnagar

### Discussion and Decisions:

Mr. Punam Kumar Dahal

S. No.	Agenda	Discussion and Decisions
1	SD meeting	The 11 <sup>th</sup> . Meeting of SD, RUDP, Biratnagar held in RUDP/PIU office. There is no major complains has been registered in the desk.
2	Progress envisaged in labor camps as safeguard measures.	Discussed on labor facilities in labor camp following facilities are found during labor camp site visit:  i) Sufficient available of drinking water service.  ii) Toilet facilities and sanitation condition of the toilet at DDC precast yard, Madhumara yard and Koshi yard found improved than that of previous monitoring visit.  iii) Provided toilet facilities with provision of sufficient water and soap for hand washing found not improved than before visit and the contractor instructed to provide separate toilet for gents and ladies.  iv) Separate toilets for gents and ladies are provided in Labour camp at Madhumara.  v) There is first-aid box in precast yard, however the medicines are not sufficient yet, therefore contractor instructed to keep first-aid box with necessary medicines in all labor camps and working sites for primary treatment in emergency cases.  vi) No fire wood used. LPG has been provided by contractor at labour camp for cooking.  vii)Tube well water quality of DDC yard, lab office, Koshi yard were tested and found satisfactory result. Contractor

Page 1





			instructed to perform water quality test of other new wells of labor camp prior to use for drinking.  viii) There were not provision of solid waste collection facilities in labor camps. Contractor again instructed to provide separate dust bins to collect bio-degradable and non-biodegradable wastes in camps.  ix) The labor camps' at Koshi and Madhumara yard are made up of CGI sheets which will be unsafe and may cause minor to major injuries to labors due to high speed wind or storm. Therefore the contractor requested to make safe or relocate the labor camp at safer place with provision of good drinking water supply and sanitation facilities. Labor has not found aware on use of PPEs, contractor should aware labors on personnel safety during construction work.
	4	Satisfactorily progress envisaged of implementation of safeguard measures including barricades and sign boards.	<ul> <li>i) Discussed over the dust emission during construction dust was emitting in few sites and sprinkling of water over dust prone area was not sufficient, contractor therefore instructed to increase the frequency of water sprinkling.</li> <li>ii) Discussed over the Use of personnel Protective Equipment like, helmet, boots, glove, and jackets by labors was found partly compliance.         The contractor instructed for full compliance.     </li> <li>iii) Contractors has found aware on child right, and instruct strictly no use of child labor.</li> <li>iv) Contractor has provided the site and personnel safety tools, barricades and traffic signs but are not sufficient, therefore contractor again instructed to provide sufficient barricades, caution tape, caution boards, traffic signs in the construction sites.</li> <li>v) The contractor has installed the project information board.</li> </ul>
)	5	Encourage of Female employment.	i) Contractor instructed to encourage employing as labor and skilled man power to local female.  ii) Contractor instructed to manage separate camp and necessary facilities for female workers to encourage of employment.  iii) Priority should be given to employ local labors.
	6	Others	The overall safeguard compliance found partly satisfactory and contractor instructed to fully comply immediately.



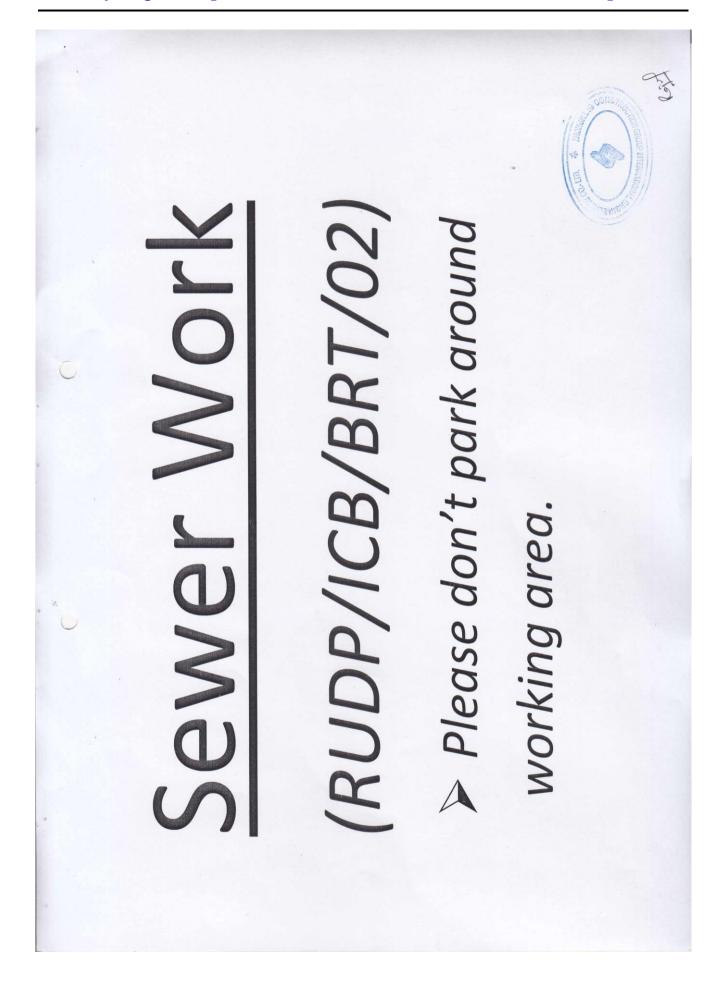


# सुचना ! सुचना !! सुचना !!!

कल्मट मत्काएर

आशिष निर्माण सेवा प्रात्ति. RUDP/ICB/BRT/2, Biratnagar







सुचनाः सुचना !!

अयोजनाको नामः क्षेत्रिय सहरी विकास आयोजना।

उल्लेखित आयोजना अन्तर्गत विराटनगर माहानगरपालिकामा Contract No. RUDP/ICB/BRT/2 अर्नगत त्रिमुतीं चोक देखि चांदिन चोक सम्मकोको वाटोमा, आज २०७५ जेष्ठ ५ गते वाटो पिच गर्ने कार्यहरू भईरहेको हुंदा सर्वसाधारणमा जानकारीका साध सहयोगको लागी अनुरोध छ।

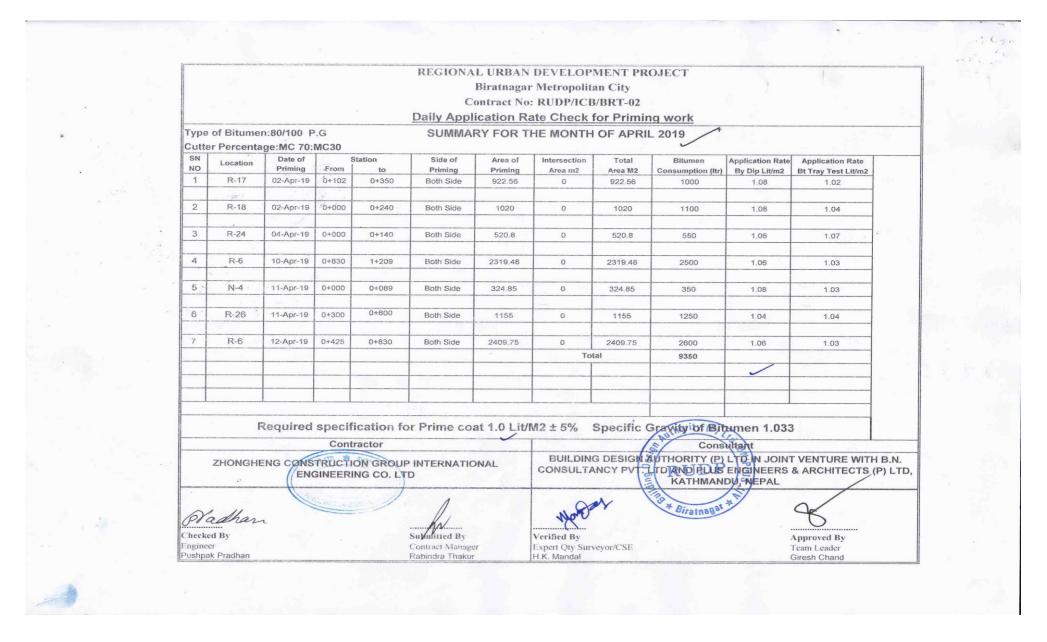
पि. आइ.युः

वि. डि. एः

निर्माण व्यवसायी

Zhongheng Construction Group of International Engineering

# ANNEX-3: Laboratory Test Results of April, 2019 ATTACHED





### 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 APRIL 2019 Location Date of Station Side of Area of Intersection Total Bitumen **Application Rate Application Rate** Tack coat From to Tack coat Tack coat Area m2 Area M2 Consumption By Dip Lit/m2 Bt Tray Test Lit/m2 R-17 4-Apr-19 0+102 0+350 BHS 902.72 0 902.72 500 0.55 0.51 R-26 16-Apr-19 0+300 0+600 BHS 1116 0 1116.00 0.58 650 0.51 3 R-24 16-Apr-19 0+000 0+140 BHS 523.6 0 523.60 0.56 300 0.57 4 R-6 19-Apr-19 0+800 BHS 1+209 2380.38 0 2380.38 1400 0.59 0.51 5 20-Apr-19 0+425 0+800 BHS 2473.5 0 2473.50 1400 0.57 0.52 6 R-18 20-Apr-19 0+000 0+240 BHS 1015.2 0 1015.20 600 0.59 0.56 N-4 20-Apr-19 0+000 0+089 BHS 331.97 0 331.97 200 0.60 Total 5050 Required tack coat is 0.40 to 0.60Lit/M2 According to Road Note -3, Section 711.2 Specific Gravity of Bitumen 1.033 Consultant Contractor BUILDING DESIGN AUTHORITY (P) LTD IN JOINT VENTURE WITH B.N. CONSULTANCY PVT. LTD AND PLUS ENGINEERS & ARCHITECTS (P) ZHONGHENG CONSTRUCTION GROUP INTERNATIONAL ENGINEERING CO. LTD (P Vadhan Checked By Approved By Submitted By Verified By Engineer Contract Manager Expert Qty Surveyor Team Leader Pushpak Pradhan Rabindra Thakur H.K. Mandal Giersh Chand



### REGIONAL URBAN DEVELOPMENT PROJECT Biratnagar Metropolitan City Contract No:- RUDP/ICB/BRT-02 **Summary Sheet of Monthly Test Report** Month: April Year 2019 Type of Location :- R-2 (Traffic chowk to Jaljala Chowk) Sub-base Material Sieve Size in mm / passing % By Weight Location of Lab.Ref no. Date of Testing Source of Sample PI% MDD OMC CBR% Remarks Sample 63.0 37.5 20.0 10.0 5.0 2.36 1.18 0.075 RUDP-SB-01 R-2,(0+900) Chisang Khola 7-Apr-19 100 90.84 74.65 58.03 35.93 25.67 7.45 2.216 6.25 40.00 RUDP-SB-02 R-2,(1+050) Chisang Khola 7-Apr-19 100 91.55 74.91 60.74 36.61 25.56 16.65 7.30 1.80 RUDP-SB-03 R-2,(1+150) Chisang Khola 7-Apr-19 100 92.99 78.86 37.65 28.55 16.92 9.52 62.20 1.22 Spec. Limit: 100 | 65~95 | 50~85 | 40~75 | 30~60 | 20~45 | 15~37 | 4~15 "no ohsultant Contractor BUILDING DESIGN AUTHORITA TO LTD IN JOINT VENTURE WITH B.N. CONSULTANCY ZHONGHENG CONSTRUCTION GROUP INTERNATIONAL PVT. LTD AND PLUS ENGINEERS & ARCHITECTS (P) LTD, KATHMANDU, NEPAL ENGINEERING CO. LTD Checked By Submitted By Verified By Approved By Engineer Contract Manager Expert Qty Surveyor/CSE Team Leader Pushpak Pradhan Rabindra Kr. Thakur H.K. Mandal Giresh Chand



# REGIONAL URBAN DEVELOPMENT PROJECT

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

		C			UDP/ICB/F Field Density				
			Summary	Silect of	Fleid Delisit	<u>y rest</u>	Month		April
						1	Year		2019
		Location:-R	2 (Traffi	c Chowle	to Isliala C	howk)	Type of Material		ub-Base
		LocationK	-2 (Train		e content %		ity(gm/cc)		oaction %
Sn.	Lab.Ref.no	Testing Date	Chainage			Max.Dr		Compac	
311.	Lau.Kei.iio	resting Date	Chamage	OMC%	Field MC%	density		tion	%
1	DUDD CD ED 1 I/C	15-Apr-19	0+850	6.25	5.01	2.216	2.144	96.74	95
1	RUDP-SB-FD-1, L/S						The state of the s		95
2	RUDP-SB-FD-1, C/L	15-Apr-19	0+880	6.25	5.33	2.216	2.168	97.81	
3	RUDP-SB-FD-1, R/S	15-Apr-19	0+910	6.25	6.72	2.216	2.180	98.35	95
4	RUDP-SB-FD-1, L/S	15-Apr-19	0+940	6.25	5.31	2.216	2.147	96.89	95
5	RUDP-SB-FD-1, R/S	15-Apr-19	0+980	6.25	5.31	2.216	2.143	96.73	95
6	RUDP-SB-FD-1, R/S	15-Apr-19	1+020	6.25	5.27	2.216	2.165	97.72	95
7	RUDP-SB-FD-1, L/S	15-Apr-19	1+050	6.25	5.58	2.216	2.168	97.86	95
8	RUDP-SB-FD-1,R/S	15-Apr-19	1+080	6.25	5.58	2.216	2.140	96.58	95
9	RUDP-SB-FD-1, L/S	15-Apr-19	1+100	6.25	5.58	2.216	2.120	95.68	95
10	RUDP-SB-FD-1, L/S	15-Apr-19	1+130	6.25	5.58	2.216	2.111	95.27	95
11	RUDP-SB-FD-1, R/S	15-Apr-19	1+150	6.25	5.58	2.216	2.136	96.40	95
	<del></del>								
		100				whorit	the same of the sa		
	ZHONGHENG CONSTI INTERNATIONAL ENGI	RUCTION GRO		BUILDI B.	N. CONSULT ARCHITE	THORITANCY PWI CTS (P) L	onsultant FY (P) LTD IN J TLTD AND PLU TD, KATHMAN	JS ENGINE	EERS &
6	Vadhen		,	ř.	Monday	# Bira	tnagar	4	
En	ecked By gineer C	Submitted By Contract Manag abindra Kr. Thal	er	Verific Expert Qt H.K. M	y Surveyor/CSE			Approve Team Lea Giresh Cl	ader



### REGIONAL URBAN DEVELOPMENT PROJECT Biratnagar Metropolitan City Contract No:- RUDP/ICB/BRT-02 Summary Sheet of Monthly Test Report Month: April 2019 Year Type of Sub grade Location:-R-2 Material Location/Chainage Sn. Lab.Ref no. Source of Sample Date of Testing MDD OMC PI% CBR% Remarks RUDP-SG-01 R-2,(0+880) **Existing Road** 3-Apr-19 1.966 7.55 9.41 6.72 RUDP-SG-02 R-2,(1+050) Existing Road 3-Apr-19 1.993 7.30 8.09 7.22 Contractor Consultant BUILDING DESIGNAT THORITY (P) LTD IN JOINT VENTURE WITH BY CONSULTANCY PVT. LTD AND ZHONGHENG CONSTRUCTION GROUP INTERNATIONAL ENGINEERING CO. LTD PLUS ENGINEERS & ARCHITECTS (P) LTD, KARIMANDU, NEPAL Biratnagai

Checked By Engineer Pushpak Pradhan

Submitted By Contract Manager Rabindra Thakur Verified By Expert Qty Surveyor/CSE H.K. Mandal Approved By Team Leader Giresh Chand

# REGIONAL URBAN DEVELOPMENT PROJECT

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

Summary Sheet of Field Density Test

							Month	Febra	
			Lo	cation:-R	-2	T	Year	201	
					e content %		pe of Material (gm/cc)	Sub-G Compac	
Sn.	Lab.Ref.no	Testing Date	Chanage		Field MC%	Max.Dry density gm/cc	Field Dry density, gm/cc	Compaction %	Specified %
1	RUDP-SG-FD-1, R/S	6-Apr-19	0+840	7.55	7.43	1.966	1.944	98.89	95
2	RUDP-SG-FD-1, C/L	6-Apr-19	0+870	7.55	8.71	1.966	1.902	96.73	95
3	RUDP-SG-FD-1, L/S	6-Apr-19	0+910	7.55	8.16	1.966	1.917	97.49	95
4	RUDP-SG-FD-1, R/S	6-Apr-19	0+940	7.55	8.58	1.966	1.893	96.28	95
5	RUDP-SG-FD-1, R/S	6-Apr-19	0+970	7.55	7.15	1.966	1.910	97.15	95
6	RUDP-SG-FD-1, C/L	6-Apr-19	1+050	7.55	8.54	1.966	1.926	97.96	95
7	RUDP-SG-FD-1, L/S	6-Apr-19	1+080	7.55	7.54	1.966	1.929	98.14	95
8	RUDP-SG-FD-1, R/S	6-Apr-19	1+100	7.55	7.84	1.966	1.901	96.71	95
9	RUDP-SG-FD-1, L/S	6-Apr-19	1+050	7.30	7.36	1.993	. 1.943	97.47	95
10	RUDP-SG-FD-1, R/S	6-Apr-19	1+150	7.30	7.29	1.993	1.915	96.07	95
									-
-								1000	
_									
					- K		Land Miles		
		-							
		-							
					-				
-		-							
-									
		1		0					
	1,10	ach LTD. M				1.00			
	Cor	tractor	0.00		. 4	shi	Consultant		T. Wet
ZH	ONGHENG CONSTRUCT ENGINEER	TION GROUP I RING CO. LTD	NTERNAT	TONAL	WITH B.N. C	ESIGN AUT CONSULTAN CHIPECTS	HORITY (P) I CY PVT, LTD P(LTD, KAT	CTD IN JOINT AND PLUS EN HMANDU, NEI	VGINEERS
	(Nadhan				Markey	X light de	Biratnagat	2	

(Wadhan Checked By

Engineer Pushpak Pradhan

Submitted By Contract Manager Rabindra Thakur

Verified By Expert Qty Surveyor/CSE H.K. Mandal

Approved By Team Leader Giresh Chand

			REGIONA	Birat: Contra	naga act N	r Me	trop UDP/	olita ICB/	n Ci	ty 02							
				Summ	ary Sh	eet of N	Month!	y Test	Repor	<u>t</u>							
				19										Mon			April
														Yes			2019
				Locati	ion:	-Ran	i-Bu	par	k (B)	Y				Mate			Sub-base
	All and a second					Sieve	Size in	mm/p	assing '	6 By W	eight						
Sn.	Lab.Ref no.	Location of Sample	Source of Sample	Date of Testing	63.0	37.5	20.0	10.0	5.0	2.36	1.18	0.075	MDD	OMC	PI%	CBR%	Remarks
1	RUDP-SB-01	Rani-Buspark,(0+080)	Chisang Khola	14-Apr-19	100	90.43	74.06	60.87	48,71	35.74	17.63	9.34	2.228	6.45	1.75	46.00	
-		- ja/3	2														
			28 T	1													
c.																	
		4						7				> 1					
				Spec. Limit :	100	65~95	50~85	40~75	30~60	20~45	15~37	4~15			<6	>30	
		The second secon														/	
		Contra	of an								1	thorit	V (P)	_			
		Contra	ictor								151	Cons	utean	34	-		
ZH	ONGHENG CO	ONSTRUCTION GROU		NAL ENGINEER	ING	BUIL P	DING VT. LT	DESIG D ANE	N AUT PLUS	HORIT ENGI	YERRS	R IBO	JOINT	E TU	RE W	ІТН В.N. КАТНМА	CONSULTANO NDU, NEPAL
6	Vadken	mone # 1			11/4	me	1		( ag	Birati	nagar *		(	V			
	Checked By			Submitted By				rified								roved E	
	Engineer			Contract Manag				Qty S		r/CSE						m Leade	
	hpak Pradhan			abindra Kr. Thal				K. Mar		7656						sh Char	



### REGIONAL URBAN DEVELOPMENT PROJECT Biratnagar Metropolitan City Contract No:- RUDP/ICB/BRT-02 Summary Sheet of Field Density Test Month April Year 2019 Location:-Rani-Buspark (B) Type of Material Sub-Base Moisture content % Density(gm/cc) Compaction % Testing Date Chainage Max.Dry Sn. Lab.Ref.no Field Dry Compac Specified OMC% Field MC% density density, % tion RUDP-SB-FD-1, L/S 21-Apr-19 0+040 6.45 5.95 95 2.228 2.188 98.21 21-Apr-19 RUDP-SB-FD-1, R/S 0+090 6.45 6.30 2.228 2.149 96.46 95 RUDP-SB-FD-1, C/L 21-Apr-19 0+130 6.45 5.09 2.228 2.141 96.11 95 Consultant Contractor BUILDING DESIGN AUTHORITY (P) LTD IN JOINT VENTURE WITH ZHONGHENG CONSTRUCTION GROUP B.N. CONSULTANCY POT LETO AND DIPS ENGINEERS & ARCHITECTS (P) 12 D, KATHMANDY, REPAL INTERNATIONAL ENGINEERING CO. LTD Biratnagat adhan Checked By Submitted By Verified By Approved By Engineer Contract Manager Expert Qty Surveyor/CSE Team Leader H.K. Mandal Giresh Chand Pushpak Pradhan Rabindra Kr. Thakur



			REGIO	Cor	atna itrac	N D gar I t No:-	Metr RUD	opol P/IC	itan B/BF	City RT-02		PRO	JEO	СТ			
														Mon			April
					_									Yes			2019
					Loc	ation								Mate			Sub-base
Sn.	Lab.Ref no.	Location of	Source of Sample	Date of Testing		Sieve	Size in	mm / p	assing '	% By W	/eight		MDD	OMC	DIO	CBR%	p
SII.	Lao.Rei iio.	Sample	Source of Sample	Date of Testing	63.0	37.5	20.0	10.0	5.0	2.36	1.18	0.075	MDD	OMC	P1%	CBR%	Remarks
1	RUDP-SB-01	R-75,(0+090)	Chisang Khola	17-Apr-19	100	87.53	67.64	56.21	42.23	32.17	18.85	9.47	2.214	5.75	1.43	42.00	-
		Lan III													L		
		21 1	29 6														
			17														
-	· ·	1															
	15.4																
$\dashv$	-	-								1						_	
		1													-		
		144	-														
-																	
									No. of the last								
				Spec. Limit :	100	65~95	50_95	40-75	30-60	20.45	1527	4-15			<6	>30	
			30	Speci Emilia	100	00 70	150 05	140-73	150-00		uthori	7		1	1-0	1-90	
		Cor	ntractor							/3	UTHO	Cons	ltant				
	ZHONGHEN	G CONSTRUCTENGINEE		BUILI	DING I	DESIG:	N AUT PLUS	HORVI	Y (P) I	TD IN	HITEC	VENTU TS (P) I	RE W	VITH B.N. KATHMA	CONSULTANC INDU, NEPAL		
(P.	Yadhan Ju							Mon	gar	- 10	N Bira	tnagat				8	
	hecked By			Submitted By				rified								proved B	
	Engineer			ontract Manage			Expert			or						am Leader	
Push	pak Pradhan		R	abindra Kr. Thak	ur		H.F	C. Mar	idal						Gire	sh Chan	d

					tropolitan JDP/ICB/B				
					Field Density				
			Summar	y Sheet of	Field Delisity	Test	Month		April
							Year		2019
			Loc	ation:-R	2-75	Ty	pe of Material		ıb-Base
					e content %		(gm/cc)		paction %
Sn.	Lab.Ref.no	Testing Date	Chainage	OMC%	Field MC%	Max.Dry density	Field Dry density,	Compac tion	Specified %
1	RUDP-SB-FD-1, R/S	21-Apr-19	0+040	5.75	5.81	2.214	2.144	96.84	95
2	RUDP-SB-FD-1, R/S		0+060	5.75	4.78	2.214	2.137	96.51	95
3	RUDP-SB-FD-1, C/L	21-Apr-19	0+090	5.75	4.95	2.214	2.187	98.77	95
4	RUDP-SB-FD-1, R/S	21-Apr-19	0+110	5.75	5.98				
4	KUDF-3B-FD-1, K/3	21-Apr-19	0+110	3.73	3.96	2.214	2.120	95.77	95
				4,			-		
							***		-
9	_								
				-			F 1-16.		
_									
									-
				4.					
_								- 1	
-									
						-			
							1-1-1-1		
_									
-			19. U 11. 11. 11. 11.	*					-
								America.	
					*				
		12000		4			whority (P)		
]	ZHONGHENG CONSTR INTERNATIONAL ENGI	RUCTION GRO		BUILDI B.	NG DESIGN A N. CONSULTA ARCHITEC	UTHORITY NCY PVIEL	ultant P) LTD IN JO FD AND PLU KATHMANI	SENGINE	ERS &
	A SHOW	an uss		1 Note 1			* Biratnaga		/



	11	R	EGIONA	L URBA Biratn Contra Summa	agai	Met	ropo DP/I	olitar CB/E	Cit	y 02	PR	OJ	ECT	<b>x</b> .			7
														Mon			March
														Typ			2019
				Locat	ion									Mate			Sub-base
Sn.	Lab Ref no.	Location of		D 000		Sieve	Size in	mm/p	assing '	% By W	eight/						
Sn.	Lab.Ref no.	Sample	Source of Sample	Date of Testing	63.0	37.5	20.0	10.0	5.0	2.36	1.18	0.075	MDD	OMC	PI%	CBR%	Remarks
1	RUDP-SB-01	Rani-Buspark-A,(0+050)	Chisang Khola	13-Apr-19	100	86.97	68.51	55.67	45.48	31.65	20.49	8,81	2.232	6.20	1.29	43.20	
-																	
		- 201	7 -				-										
	· V		-														
-														-			
	7/10	-															
		1		41			f								-		
		-															
					-					-				-	-		
															100		
				0 11 1	400	C= 0=			20. (0								
_				Spec. Limit :	100	65~95	50~85	40~75	30~60	20~45	15~37	4~15			<6	>30	
												hority	10				
-	-	Contrac	tou.					-			(Na)	-		1			
		Contrac	101		-						3/	Cons	ultant?	60			
но	NGHENG CO	NSTRUCTION GROUP I		. ENGINEERING	G CO.	BUILI PV	DING I	DESIG! D AND	N AUT PLUS	HORFI ENGIN	Y (P) I NEERS	TD IN	JOINT	VENTU	RE W	TTH B.N KATHM/	CONSULTANO ANDU, NEPAL
P	Vadhan	and the or			*	Serve .	par_	_	13	Dirett	18 DEL	7	(	R			
C	hecked By			Submitted By			Ve	rified	Ву							roved B	ý
	Engineer			ontract Manage				t Qty Si		r/CSE						m Leade	
ush	pak Pradhan		Ra	abindra Kr. Thak	ur		H.F	K. Man	ndal		Lancer				Gire	sh Chan	id

		R	EGIONA	L URBA Biratn							PR	0J]	ECT				1
				Contra						700							
				Summa													
														Mor	ith:		March
														Ye			2019
				Locat	ion	:-Rar	i-Bu	spar	k-A					Mate			Sub-base
		Location of				Sieve	Size in	mm/p	assing '	% By W	eight eight						
Sn.	Lab.Ref no.	Sample	Source of Sample	Date of Testing	63.0	37.5	20.0	10.0	5.0	2.36	1.18	0.075	MDD	OMC	PI%	CBR%	Remarks
1	RUDP-SB-01	Rani-Buspark-A,(0+050)	Chisang Khola	13-Apr-19	100	86.97	68.51	55.67	45.48	31.65	20.49	8.81	2.232	6.20	1.29	43.20	
-				<u> </u>						5							
	-	-W-	7 6		-								_				-
	-	1			-												
		7 7															
-	4																
-																	
		4															
		,					r				- 7					•	
,		144								0.70		aug.	Щ.				
		· · · · · · · · · · · · · · · · · · ·															
-				<del></del>					_	_			4				
		Tri Ver															
				Spec. Limit:	100	65~95	50~85	40~75	30~60	20~45	15~37	4~15			<6	>30	
											(il	nority	1	_			
		Contrac	ctor					-	-	-	3/	Cons	sultant?	ON			
ZHO.	NGHENG CO	NSTRUCTION GROUP I	NTERNATIONAL	ENGINEERING	3.00	RUILI	DING I	ESIG	VAUT	HORIT	V (P) I	TD IN			RF W	ITH R N	. CONSULTANC
		LTD															ANDU, NEPAL
-											3			5			
		The second of		1				ij.			1.50	-	X	/		Λ	
1	V //	Court IS D				0	M			C. cell	308		(	*			
P	adhan	· *			1	KIM	1							1			
C	hecked By			Submitted By			V	rified	Rv						Δnn	roved E	9)
	Engineer		C	ontract Manage	er			: Qty Si		r/CSE						m Leade	•
	ipak Pradhan			bindra Kr. Thak				(. Man		,						sh Char	



Lab.Ref.no		REGIO	NAL U	iratna	gar Me	VELOP etropolitar UDP/ICB/B	City	PROJ	ECT	
Lab.Ref.no				Summar	y Sheet o	f Field Density	Test			
Lab.Ref.no								Month		April
Sn. Lab.Ref.no  Testing Date Chainage    Moisture content %   Density(gm/cc)   Compaction %			т.	antion.	D! D.	1 (4)				
Sn. Lab.Ref.no  Testing Date Chainage  OMC% Field MC% Max.Dry density, dens	_		Lo	cation:-	Moietus	uspark (A)				
1 RUDP-SB-FD-1, R/S 13-Apr-19 0+030 6.20 5.61 2.232 2.183 97.80 95 2 RUDP-SB-FD-1, L/S 13-Apr-19 0+090 6.20 5.95 2.232 2.194 97.16 95	Sn	Lah Ref no	Testing Data	Chainaga	ivioistui	le content %				
1 RUDP-SB-FD-1, R/S 13-Apr-19 0+030 6.20 5.61 2.232 2.183 97.80 95 2 RUDP-SB-FD-1, L/S 13-Apr-19 0+090 6.20 5.95 2.232 2.194 97.16 95	011.	Duo.rel.no	1 CStillg Date	Chamage	OMC%	Field MC%	The state of the s			
2 RUDP-SB-FD-1, L/S 13-Apr-19 0+090 6.20 5.95 2.232 2.194 97.16 95	1	RUDP-SR-FD-1 R/S								22.00
	_		1							
	_	RODI -5D-1 D-1, E/5	13-Api-19	0+090	0.20	3.93	2.232	2.194	97.16	/ 95
		4.8	in the				Author	rity (P)		
Authority (P)	I	ZHONGHENG CONSTR	UCTION GRO		BUILDIN B.N	N. CONSULTAI	Consultation Consu	P) LTD IN TO	ENGINE	ERS &
Contractor  ZHONGHENG CONSTRUCTION GROUP INTERNATIONAL ENGINEERING CO. LTD  BUILDING DESIGN AUTHORITY (P) LTD IN JOINT VENTURE WITH B.N. CONSULTANCY PVR LTD AND PLUS ENGINEERS & ARCHITECTS (P) LTD, KATHMANDU, NEPAL		cked By	Submitted By ontract Manage		Verifie Export/Qty	d By	* Birati	15/	Approved Team Lea	By



- 1							gar N t No:-											
					Sur	nmary	Sheet	of Mor	thly T	est Re	port							
															Mon Yea			April 2019
								тэт	7.					1	Type	of		Sub-base
					1	Loca	tion :	Size in			1/ D., 11	1-1-64			Mater	rial		
	Sn.	Lab.Ref no.	Location of Sample	Source of Sample	Date of Testing	63.0	37.5	20.0	mm / p	5.0	2.36	1	0.075	MDD	OMC	P1%	CBR%	Remarks
	1	RUDP-SB-01	T3L7A,(0+050	Chisang Khola	17-Apr-19	100	84.56	66.94	55.98	46 99	37.73	17.19	9.26	2.230	6.20	0.99	43.00	
	1	KUDP-SB-01	13L/A,(0+030	Chisang Khoia	17-2491-12	100	04.20	.00.51	55.50	10.77								
			197	79 1														
- 1				21				-										
	1										-	-	-				-	
				-			-	-		_	-							
		- 1	-	4														
		-	1						_	_	-					_		
1	-					-	-	-	-		-	-						
			-					-						/				
-																		
						-	-			_	-	-	-	-				
	-		1				-	-	-	-	-		-	-				
			1															
1					Spec. Limit:	100	65~95	50-85	40-75	30-60	20~45	15~37	4~15			<6	1	
		ZHONGHEN	G CONSTRUC	nuractor TION GROUP IN	TRNATIONAL		BUIL	DING VT. LT	DESIG D ANI	N AUT	HORI S ENGI	HA GROUP	(111) IS		Burnell P.	REV	VITH B.N KATHM	. CONSULTANCY ANDU, NEPAL
	Q.	Vadha Checked By Engineer hpak Pradhan	,		Submitted By Contract Manag	ger		V	erified	By Survey		(in)		etnagar	15/	App Te	proved am Leade	 ⊋y :r



	REGIO	NAL U					PROJ	ECT	
		В	iratnag ontract	gar Me No:- RI	tropolitan JDP/ICB/B	City RT-02			
					Field Density				
							Month		April
							Year		2019
			Loca	tion:-T3			Type of Material	100	ub-Base
				Moistur	e content %		ty(gm/ce)		paction %
n.	Lab.Ref.no	Testing Date	Chainage	OMC%	Field MC%	Max.Dry		Compac	Specified %
	DUDD OD ED 1 D/O					density	density,		95
1	RUDP-SB-FD-1, R/S	20-Apr-19	0+020	6.20	5.61	2.230	2.216	96.22	
2	RUDP-SB-FD-1, L/S	20-Apr-19	0+050	6.20	5.95	2.230	2.184	97.95	95
3	RUDP-SB-FD-1, R/S	20-Apr-19	0+090	6.20	5.99	2.230	2.175	97.53	95
1									
							1.		
_									
					1		<del> </del>		
-									
			-			1			
						-			
							<u> </u>		
		-						1	A
		8,87917938						-	
				rd.		(8)	sthority (P)		
	Contrac	tor					sultant	1	
	ZHONGHENG CONSTI	RUCTION GRO INEERING CO	OUP , LTD		NG DESIGN A N. CONSULTA , ARCHITE	NC ZYT.	RIPLE	STAT VEN STANGINE NEPA	EERS &
6	Yadhan	# ON CO		16	gar,	Till A	Biratnagar *	9	/
1								<u> </u>	
Ch	ecked By	Submitted By			ed By			Approve	
Fr	ngineer (	Contract Manag	er		y Surveyor Mandal			Team Lo Giresh C	



	REGIO	NAL U			VELOP! tropolitan		PROJ	ECT	
		C	ontract	No:- RI	JDP/ICB/B	RT-02			
			Summary	Sheet of	Field Density	Test			
							Month		April
			•		T 77 .	_	Year		2019
_			Loca	tion:-T3	e content %		ype of Material		oaction %
	I I D C	T D.	CI ·	Moistur	e content %	Max.Dry	(gm/ce) Field Dry		Specified
1.	Lab.Ref.no	Testing Date	Chainage	OMC%	Field MC%			tion	%
+	DUDD OD ED 1 D/O					density	density,	96.22	95
	RUDP-SB-FD-1, R/S		0+020	6.20	5.61	2.230			95
	RUDP-SB-FD-1, L/S	20-Apr-19	0+050	6.20	5.95	2.230	2,184	97.95	
4	RUDP-SB-FD-1, R/S	20-Apr-19	0+090	6.20	5.99	2.230	2.175	97.53	95
4							-		
1	\								
					,				
T									
1									
1									
1									
+							-		
+									
+								-	
+									
4									
4									
$\neg$									
7						1			
+				-		1	-		
+									
+			-						
+							-		
+							1		
4								1	
1							-	_	-
		5 '42							7
	9	8000				/	hority (P)		
_	Contrac	itor				and the same of th	sultant	1	
]	ZHONGHENG CONSTI	RUCTION GRO			NG DESIGN A N. CONSULTA , ARCHITE	UTHORTY INC 12 T.I. CTS (E) L.T.	(P) LTD IN A	SENGINE	ERS &
6	Yadhan	* 0.7 03		100	gar,	THE WAY	Piratnagar * 1	K	/
Che	ecked By	Submitted By	er .	Verifi Export/Qt	ed By			Approve	



			REGIO	Bir Cor	atna itrac	N D gar I t No:-	Metr RUI	opol OP/IC	itan B/BF	City RT-02		PRO	)JE(	CT			Ti de la companya de
				Su	nmar	Sneet	01 M0	ntniy	t est Re	port				Mon	th.		April
														Yes	ar		2019
				I	oca	tion:-	T2L	24E						Type Mate			Sub-base
n.	Lab.Ref no.	Location of	Source of Sample	Date of Testing		Sieve	Size in	mm/p	assing '	% By W	eight		MDD	0140	DIO	CDDO	B
11.	Lab.Kei no.	Sample	Source of Sample	Date of Testing	63.0	37.5	20.0	10.0	5.0	2.36	1.18	0.075	MDD	OMC	PI%	CBR%	Remarks
1	RUDP-SB-01	Γ2L24E,(0+100		13-Apr-19	100	91.54	78.90	53.91	44.38	37.25	17.91	13.23	2.223	5.50	1.00	46.00	
2	RUDP-SB-02	Γ2L24E,(0+100	Chisang Khola	13-Apr-19	100	88.79	74.67	52.08	41.48	33.68	16.25	11.52			2.44		
		,	-/														
												-					
	4																
+		-															
		1															
	-																
		1															
+																	
_				Spec. Limit:	100	65~95	50~85	40~75	30~60	20~45	15~37	4~15			<6	>30	
	ZHONGHEN	G CONSTRUCT	TION GROUP INTRING CO. LTD	ERNATIONAL		BUIL	DING I	DESIGI D AND	N AUT	HORIT ENGIN	Y (P) I	TD IN	JOINT CHITTE	VENTU	RE W.TD, F	ITH B.N.	CONSULTANCY NDU, NEPAL
E	Yordhan necked By Engineer pak Pradhan		C	Submitted By ontract Manage bindra Kr. Thak		Exp	ert Qt	rified by Surve	eyor/C	SE.		* Bira	tnagar		App	roved B m Leader sh Chan	y



### REGIONAL URBAN DEVELOPMENT PROJECT Biratnagar Metropolitan City Contract No:- RUDP/ICB/BRT-02 Summary Sheet of Field Density Test Month April Year 2019 Location:-T2L24E Type of Material Sub-Base Moisture content % Density(gm/cc) Compaction % Sn. Lab.Ref.no Testing Date Chanage Max.Dry Field Dry Compac Specified OMC% Field MC% density density, tion % RUDP-SB-FD-1, L/S 2.223 18-Apr-19 0+050 5.50 5.43 2.174 97.79 95 2 RUDP-SB-FD-1, C/L 18-Apr-19 0+080 5.50 4.39 2.223 2.177 97.92 95 RUDP-SB-FD-1, L/S 3 18-Apr-19 0+120 5.50 6.42 2.223 2.198 98.87 95 4 RUDP-SB-FD-1, R/S 18-Apr-19 0+180 5.50 6.75 2.223 2.173 97.75 95 RUDP-SB-FD-1, L/S 18-Apr-19 0 + 2005.50 5.43 2.223 2.166 97.42 95 charity ( Contractor Consultant BUILDING DESIGN AUTHORITY (P) LTD IN JOINT VENTURE WITH ZHONGHENG CONSTRUCTION GROUP B.N. CONSULTANCY PYT. LTD AND PLUS ENGINEERS & ARCHITECTS (E) LTD, KATHMANDU, NEPAL INTERNATIONAL ENGINEERING CO. LTD Biratnagat pyadhan Checked By Submitted By Verified By Approved By Engineer Contract Manager Expert Qty Surveyor/CSE Team Leader Pushpak Pradhan H.K. Mandal Rabindra Kr. Thakur Giresh Chand



			REGION	Bir: Con	atna tract	N D gar N No:-	Aetro RUD	opoli P/IC	tan B/BR	City T-02		PRC	)JE(	СТ			
														Mor	nth:		March
														Ye			2019
				L	ocat	ion :	T2L	24G						Typ			Sub-base
		Location of				Sieve	Size in	mm / p	assing	% By V	Veight				T		100000000000000000000000000000000000000
n.	Lab.Ref no.	Sample	Source of Sample	Date of Testing	63.0	37.5	20.0	10.0	5.0	2.36	1.18	0.075	MDD	OMC	P1%	CBR%	Remarks
1	RUDP-SB-01	T2L24G,(0+100)	Chisáng Khola	19-Apr-19	100	87.81	70.21	58.53	46.79	34.15	20.29	9.43	2.229	6.20	1.04	47.00	
2	RUDP-SB-02	T2L24G,(0+200)	Chisang Khola	19-Apr-19	100	88.57	70.43	57.50	42.00	30.15	16.37	7.34			2.42		
1		X 7 10	100 10														
			9														
1																	
+												-					
1																	100
	4.7																
		2															
-																	
+	A THE			1													
+																	
-																	
+																	
_				Spec. Limit :	100	65~95	E0 0E	10.75	20. 60	20. 45	15.35						
				Spec. Limit :	100	65~95	50~85	40~/5	30~60	20~45	15~37	4~15			<6	>30	
											with	ority (	PI				
_		Cont	ractor							1	N. N.	Cons	ultant				
7.9	ZHONGHENO	ENGINEER	ON GROUP BY THE ING CO. LTD	ERNATIONAL		BUILI PV	OING E	DESIGN D AND	N AUTI PLUS	HORIT	Y (P) I VEERS	TD IN	HITEC	ENTU IS (P) I	RE W	TTH B.N. KATHMA	. CONSULTAN ANDU, NEPAL
P	allan	ERMATION	M 4UORD	h		¥.	Men	del			8 4 81	ratna 3	II KE		(	P	
Ch	ecked By		ma	Submitted By			V2	rified	B.,								
	ngineer			ontract Manage	r		Expert			ICSE						roved B m Leader	
	ak Pradhan			bindra Kr. Thaki	200			. Man		/ CSE						m Leader sh Chan	



### REGIONAL URBAN DEVELOPMENT PROJECT Biratnagar Metropolitan City Contract No:- RUDP/ICB/BRT-02 Summary Sheet of Field Density Test Month April Year 2019 Location:-T2L24G Type of Material Sub-Base Moisture content % Compaction % Density(gm/cc) Sn. Lab.Ref.no Testing Date Chainage Max.Dry Field Dry Specified Compac OMC% Field MC% density density, tion RUDP-SB-FD-1, R/S 21-Apr-19 0+040 6.20 5.81 2.229 2.144 96.19 95 RUDP-SB-FD-1, R/S 21-Apr-19 0+080 6.20 4.78 2.229 2.144 96.19 95 RUDP-SB-FD-1, C/L 2.229 21-Apr-19 0+1206.20 5.95 2.187 98.10 95 RUDP-SB-FD-1, R/S 21-Apr-19 0 + 1806.20 5.98 2.229 2.156 96.72 95 RUDP-SB-FD-1, L/S 21-Apr-19 0+200 6.20 5.98 2.229 2.152 96.83 95 ON GROUP INTERCTOR Consultant BUILDING DESIGN AUTHORITY (P) LTD IN JOINT VENTURE WITH ZHONGHENG CONSTRUCTION GROUP INTERNATIONAL ENGINEERING CO. LTD B.N. CONSULTANCY PYT. LTD AND PLUS ENGINEERS & ARCHITECTS (P) LTD, KATHMANDU, NEPAL SNOHZ # ZHONG Biratnagar Checked By Submitted By Verified By Approved By Contract Manager Engineer Export Qty Surveyor/CSE Team Leader Pushpak Pradha Rabindra Kr. Thakur H.K. Mandal Giresh Chand



			REGIO	Bir Cor	atna itrac	N D gar I t No:-	Metr RUI	opol P/IC	itan B/BF	City RT-02		PRC	)JE(	CT			
														Mor	nth:		April
														Ye			2019
					Loca	ition	:-S1	3-B						Mate			Sub-base
		Location of				Sieve	Size in	mm/p	assing 6	% By W	eight/						
Sn.	Lab.Ref no.	Sample	Source of Sample	Date of Testing	63.0	37.5	20.0	10.0	5.0	2.36	1.18	0.075	MDD	OMC	PI%	CBR%	Remarks
1	RUDP-SB-01	S13-B,(0+100)	Chisang Khola	14-Apr-19	100	87.85	72.29	53.01	40.86	34.30	16.49	12.18	2.219	5.70	1.08	48.00	
			1911														
			4														
												54 11					
	1																
	GLAND.		4)														
		1.74															
		1 2 0															
10			04														
	100											-					
_																	
-									_						-		
		0.0	7	Spec. Limit :	100	65~95	50~85	40~75	30~60	20~45	15~37	4~15			<6	>30	
		, 1 -	ages of the last o									hor	ity (P)				-
		Col	etractor ZHOMON							+	2 %		ultant	6			
	ZHONGHENG	G CONSTRUCT ENGINEE	TION GROUP INT	ERNATIONAL		BUIL	DING I	DESIG D AND	N AUT	HORIT ENGIN	Y (P) I	LTD IN	JOINT	VENTU TSEP) I	RE W	TTH B.N.	CONSULTANCY NDU, NEPAL
Q.	VorChan		OKAMATKI NUSES			Month	pal			10	+ Bira	inagar *			R		
C	hecked By			Submitted By			Ve	rified	Ву						App	roved E	By
	Engineer		C	ontract Manag	er	Ex	ert Qt	y Surve	eyor/C	SE						m Leade	
Push	npak Pradhan		Ra	bindra Kr. Thak	ur		H.H	. Mar	dal						Gire	sh Char	id



	REGIO	Bi Co	ratnag ntract N	ar Met No:- RU	ELOP ropolitar DP/ICB/B	City RT-02	T PROJ	ECT	
				6			Month		April
							Year		2019
			Loca	tion:-S1	3-B		Type of Material		ib-Base
				Moisture	e content %	Densi	ty(gm/cc)	Comp	action %
Sn.	Lab.Ref.no	Testing Date	Chanage	OMC%	Field MC%	Max.Dry density	Field Dry density,	Compac	Specified %
1	RUDP-SB-FD-1, R/S	17-Apr-19	0+050	5.70	5.20	2.219	2.127	95.87	95
2	RUDP-SB-FD-1, R/S	17-Apr-19	0+090	5.70	4.14	2.219	2.170	97.78	95
3	RUDP-SB-FD-1, L/S	17-Apr-19	0+120	5.70	4.62	2.219	2.167	97.67	95
4	RUDP-SB-FD-1, R/S	17-Apr-19	0+160	5.70	5.88	2.219	2.152	96.97	95
-		- 1							No.
_								1	
		Sail Section							
	a law management	11.17		0			14.80		
	STION GROUP INTE	RNATIO				/	nority (P)		
	CHONGHOOM	OF CALL				AUI			
1	ZHONGHENG CONSTR INTERNATIONAL ENGIN	UCTION GRO		BUILDING B.N.	CONSULTA	UTHÖRITY NOVERVIR	sultant (P) LTD IN JO	ENGINE	ERS &
(P)	Jow han	Submitted By ontract Manage	\$	Verified	per		D, KATHMANE	Approved Team Lea	ТВу



			R	EGIO	NA.	B	iratna ontra	agar N et No: 1	Aetro RUDP	polita ICB/B	n Cit	y 2	PRO	OJE	CT						
						Sum	mary	Sheet o	f Mon	thly To	est Rej	port			_	Mo	nth		Α,	oril	
																Ye				19	
						I	ocat	ion:-	R-18							Type of	Material		В	ase	
		Location of		Date of		S	ieve Size	in mm /	% passin	g By We	ight					L.A.A.		A.I.V.		CBR	
S.N.	Lab.Ref no.	Sample	Source of Sample	Testing	40	31.5	20	10	4.75	2.36	0.6	0.075	MDD	OMC	PI%	%	Fl and El %	%	CR %	%	Remark
1	RUDP-B-01	R-18,(0+150)	Chisang Khola	5-Apr-19	100	91.22	75.17	61.33	34.88	27.26	14.93	7.23	2.253	5.80	NP	31.76	25.91/20.87	22.35	83.32	83.00	
2	RUDP-B-02	R-18,(0+250)	Chisang Khola	5-Apr-19	100	87.98	69.03	58.41	37.76	26.19	17.05	4.00			NP	32.76	22.51/17.58	21.85	87.80		
3	RUDP-B-03	R-18,(0+350)	Chisang Khola	5-Apr-19	100	87.44	72.48	63.08	37.87	30.15	15.66	6.92			NP	30.70	21.14/17.84	23.50	85.85		
			2											_							
	-												-			_				_	
	1-1-1											-		-	-			-			
-			-		1	_															_
10.0			100					(A)				1000									
			18																		
_			S	pec. Limit :	100	85-100	62-92	40-70	26-55	21-53	12-28	2-10				< 45	< 35	< 35	>80	>80	
ZF	IONGHEN	G CONSTRU	CTION GROUCO. L	P INTER	NAT	IONAI	L ENG	INEEI	RING	BUIL		CONS	ULTA	NCY	PAT	LTD	LTOIN JO AND PLU ATHMAN	IS EN	GINE	ERS &	
	Check Engi Pushpak	neer					ontract	tted By Manag Kr. Tha		Ex	xpert Q	erified ty Surv K. Man	eyor/C	SE	* Bil	atnaga	1.*/		Appro Team Giresh	Leade	r



### REGIONAL URBAN DEVELOPMENT PROJECT Biratnagar Metropolitan City Contract No:- RUDP/ICB/BRT-02 Summary Sheet of Field Density Test Month April Year 2019 Location:-R-18 Base Type of Material Compaction % Density(gm/cc) Moisture content % Specified Compaction Field Dry Testing Date Chainage Max.Dry Lab.Ref.no Sn. OMC% Field MC% % % density density, 2.252 99.96 98 5.71 2.253 5.80 RUDP-B-FD-1, R/S 6-Apr-19 0 + 0601 2.212 98.20 98 5.84 2.253 5.80 2 RUDP-B-FD-1, C/L 6-Apr-19 0+120 5.29 2.232 99.06 98 2.253 0+190 5.80 3 RUDP-B-FD-1, R/S 6-Apr-19 99.78 98 5.41 2.253 2.248 6-Apr-19 0 + 2405.80 4 RUDP-B-FD-1, C/L 98 99.50 2.253 2.242 0+280 5.80 5.98 5 RUDP-B-FD-1, L/S 6-Apr-19 98 98.53 5.68 2.253 2.220 RUDP-B-FD-1, R/S 6-Apr-19 0+320 5.80 6 Consultant Contractor BUILDING DESIGN AUTHORITY (P) LTD IN JOINT VENTURE WITH B.N. ZHONGHENG CONSTRUCTION GROUP CONSULTANCY PVT. LTD AND PRUS ENGINEERS & ARCHITECTS (P) INTERNATIONAL ENGINEERING CO. LTD LTD, KATHMANDU, NEPAT Biratnagat

Checked By
Engineer
Pushpak Pradhan

Submitted By
Contract Manager
Rabindra Kr. Thakur

Verified By
Expert Qty Surveyor/CSE
H.K. Mandal

Approved By Team Leader Giresh Chand

														Mon Ye:	ar		April 2019
					Loc	ation	4.00	115.750174						Mate			Sub-base
in.	Lab.Ref no.	Location of Sample	Source of Sample	Date of Testing	<i>(</i> 2.0					% By W			MDD	ОМС	PI%	CBR%	Remarks
1	RUDP-SB-01	R-24,(0+100)	Chisang Khola	2.4.10	63.0	37.5	20.0	10.0	5.0	2.36	1.18	0.075					
	KUDF-SB-01	R-24,(0+100)	Chisang Khoia	3-Apr-19	100	86.60	70.28	59.28	46.84	37.08	17.93	7.08	2.225	5.80	2.55	47.20	
		100	109 11														
			2														
	¥	,															
+							-										
	1 1																
+	-	1															
		7															
+																	
$\neg$																	
				Spec. Limit :	100	65-05	E0. 9E	40.75	20. 60	20 45	15 27	1.10			-6	- 20	
				Spec. Limit :	100	05~95	50~85	40~/5	30~60	20~45	15~37	4~15			<6	>30	
												thorit	V (D)				
-		Con	ntractor								, /		ultant	1			
		Col	itractor								15	Cons	uitant	12			
	ZHONGHENO		TION GROUP INT	ERNATIONAL		BUILI PV	OING I	DESIGN D AND	AUTI PLUS	HORIT ENGIN	Y (P) L	TOIN .	HITEC	VENTU	RE W	ТТН В.N. КАТНМА	CONSULTANO
_											13			(3)		~	10000
			S 14 919 93	Cod a				70	1		1	* Bir	atnagar	/	1	2	
1	2/11			o charge			ila	NO	1						_	/	
190	140 yan		10	Sh.			1									1	
Cl	necked By			Submitted By			Ve	rified								roved B	
	ngineer		C	ontract Manage	er				irveyo	/CSE						m Leader	
meh	pak Pradhan		D o	bindra Kr. Thak			ши	. Man	del							sh Chan	

	REGIO	NAL II	RRAI	V DE	VELOP	MFN	T PROJ	FCT	
	THE OT	В	iratna	gar Me	etropolitar UDP/ICB/B	City	I FROJ	ECI	
					f Field Density				
					Tield Density	[	Month		April
							Year		2019
			Loc	ation:-F			Type of Material		ıb-Base
C	I.I.D.C				re content %		ity(gm/cc)		oaction %
Sn.	Lab.Ref.no	Testing Date		OMC%	Field MC%	Max.Dr density		Compac tion	Specified %
1	RUDP-SB-FD-1, R/S	6-Apr-19	0+050	5.80	5.32	2.225	2.170	97.54	95
2	RUDP-SB-FD-1, L/S	6-Apr-19	0+090	5.80	5.97	2.225	2.141	96.21	95
2	RUDP-SB-FD-1, R/S	6-Apr-19	0+120	5.80	5.49	2.225	2.182	98.05	95
				8					
							-		
-									
-		~							
1		-							
									- 4
		W. The				0.0	hority (P.		
	Contract	or	7.7			Con	sultant		
Ι	ZHONGHENG CONSTR NTERNATIONAL ENGIN	UCTION GRO NEERING CO.	UP LTD	BUILDIN B.N	I. CONSULTAN	THORITY CY PYT. TS (P) L [1	(P) LTD IN JO LTD AND PLUS LKATHMAND	ENGINEE	URE WITH
	dhan	of the second		7.1	we are	op lind	¥ Biratnagat ¥	W	/
Eng	ineer Co	Submitted By ontract Manage oindra Kr. Thaku		Verifie export/Qty H.K. Ma	Surveyor			Approved Team Lead Giresh Cha	ler



			REGION	VAL UR	BA	N D	EVI	ELC	PN	1EN	TI	PRO	JEC	Т			
				Bir	atna	gar N	<b>Ietro</b>	poli	tan (	City							
						No:-											
				Sun	mary	Sheet o	f Mon	thly To	est Rej	port							
														Mor	nth:		April
				_										Ye			2019
				I	oca	tion :								Type			Sub-base
Sn.	Lab.Ref no.	Location of	C	D		Sieve	Size ir	mm/p	assing	% By W	Veight						
	Lub.rter no.	Sample	Source of Sample	Date of Testing	63.0	37.5	20.0	10.0	5.0	2.36	1.18	0.075	MDD	OMC	PI%	CBR%	Remarks
1	RUDP-SB-01	T3L11H,(0+100)	Chisang Khola	5-Apr-19	100				200								
2	RUDP-SB-02	T3L11H,(0+200)	Chisang Khola	5-Apr-19	100	90.87	73.66	54.52	39.22	22.33	16.89	9.85			1.89		
3	RUDP-SB-03	T3L11H,(0+300)	Chisang Khola	5-Apr-19	100	89.15	68.76	51.99	38.48	28.28	16.69	7.88	2.228	6.45	1.98	43.00	
4	RUDP-SB-04	T3L11H,(0+400)	Chisang Khola	5-Apr-19	100	88.65 91.23	66.21	51.82	35.41	26.76	16.92	9.44			1.11		/
5	RUDP-SB-05	T3L11H,(0+500)	Chisang Khola	5-Apr-19	100		72.05	62.71	41.02	32.63	17.47	8.08			2.39		
	*		Blouzi Smerre	3-Mpr-19	100	90.85	69.77	61.86	41.22	28.10	18.39	8.69			1.17		
17	(4																
	4/1		+														
-		-															
	-1		11														
								-									
	2.17					-											
												-					
-				A													
-															-		
				Spec. Limit :	100	(5.05)	50.05	40 ==									
				Spec. Dillit.	100	65~95	50~85	40~/5	30~60	20~45	15~37	4~15		-	<6	>30	
														_			
-																	
		Conti	ractor							/	Autho	Const	iltant				
	ZHONGHEN	CONCERNICATION								18	/		101				
	ZHONGHEN	G CONSTRUCTION ENGINEERI	ON GROUP INTE	RNATIONAL	- 1	BUILD	ING D	ESIGN	AUTH	ORITY	(P) L	TD IN J	IOINT	ENTUR	RE WI	TH B.N.	CONSULTANC
		ENGINEERI	NG COLLID		- 1	PV	T. LTD	AND	LUS I	ENGIN	EERS	& ARC	HITECT	S (P) L	TD, K	ATHMA	NDU, NEPAL
										15		100000	151				
		1305 # UT	3	la.				0		1.30		,	15/			1	
1	211			tomper		11	Che	2		1	* Bira	nagar	*		0	T	
P	1 adnas	Z		ALL		1	KONO	•			-	Has				1	
Ch	ecked By		-			(-											
	ngineer			Submitted By ntract Manage	.	,		ified E							Appr	oved B	y
	ak Pradhan					E	xpert (			CSE					Tean	Leader	
			Rat	indra Kr. Thaku	Г		H.K.	Mand	al						Ciron	h Chanc	J

### REGIONAL URBAN DEVELOPMENT PROJECT Biratnagar Metropolitan City Contract No:- RUDP/ICB/BRT-02 Summary Sheet of Field Density Test Month April Year 2019 Location:-T3L11H Type of Material Sub-Base Moisture content % Density(gm/cc) Compaction % Sn. Lab.Ref.no **Testing Date** Chainage Max.Dry Field Dry Compac Specified OMC% Field MC% density density, tion RUDP-SB-FD-1, L/S 7-Apr-19 0+090 6.45 5.01 2.228 2.154 96.66 95 RUDP-SB-FD-1, C/L 7-Apr-19 0+160 5.33 6.45 2.228 95 2.178 97.74 RUDP-SB-FD-1, R/S 7-Apr-19 0+210 6.45 6.72 2.228 2.190 98.28 95 RUDP-SB-FD-1, L/S 7-Apr-19 0+290 6.45 5.31 2.157 2.228 96.82 95 RUDP-SB-FD-1, R/S 7-Apr-19 0 + 3606.45 5.31 2.228 2.155 96.74 95 RUDP-SB-FD-1, R/S 7-Apr-19 0 + 4806.45 5.27 2.228 2.179 97.82 95 RUDP-SB-FD-1, L/S 7-Apr-19 0 + 5006.45 5.58 2.228 2.179 98.26 95 Contractor Consultant BUILDING DESIGN AUTHORITY (P) LTD IN JOINT VENTURE WITH ZHONGHENG CONSTRUCTION GROUP B.N. CONSULTANCY FYT. LTD AND PLUS ENGINEERS & ARCHITECTS (PLATD, KATHMANDU, NEPAL INTERNATIONAL ENGINEERING CO. LTD Biratnagat Checked By Submitted By Verified By Approved By Engineer Contract Manager

Expert Qty Surveyor/CSE

H.K. Mandal



Pushpak Pradhan

Rabindra Kr. Thakur

Team Leader

# REGIONAL URBAN DEVELOPMENT PROJECT

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

Summary Sheet of Monthly Test Report

						Mor Ye			pril 019
			Location	:-R-20		Type Mate		Sub	grade
Sn.	Lab.Ref no.	Location/Chainage	Source of Sample	Date of Testing	MDD	OMC	PI%	CBR%	Remark
1	RUDP-SG-01	R-20,(0+050)	Existing Road	5-Apr-19	2.040	8.80	9.74	86.60	
									-
-									
							- 17		
		Sp.Liı	mit				<18	>3	
							~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 Pushpak Pradhan

Submitted By Contract Manager Rabindra Kr. Thakur

Verified By Expert Qty Surveyor / CSE

H.K. Mandal

Approved By Team Leader Giresh Chand

	REGIO	ONAL U			VELOI etropolita		ΓPRO	JECT	
			Contrac	t No:- R	UDP/ICB/	BRT-02			
					of Field Densi				
							Month	Ap	
			Lo	cation:-R	20	-	Year	201	
			Lo		e content %	Density	pe of Material	Sub-G Compac	
Sn.	Lab.Ref.no	Testing Date	Chanage	OMC%	Field MC%	Max.Dry	Field Dry density, gm/cc	Compaction %	Specifie
1	RUDP-SG-FD-1, L/S	8-Apr-19	0+020	8.80	8.56	2.040	1.979	96.99	95
2	RUDP-SG-FD-1, C/L		0+050	8.80	7.40	2.040	1.976	96.88	95
3	RUDP-SG-FD-1, R/S	8-Apr-19	0+070	8.80	7.81	2.040	1.951	95.64	95
$\dashv$	4	X 3 ViX							
$\dashv$		, 180		100					
	. 15	, i	= 1	-		, ,	authority (c		
		tractor				1.5	Consultant	19	
ZHO	ONGHENG CONSTRUCT	TION GROUP RING CO. LTI		TIONAL	BUILDING D WITH B.N. C & AR	CHITECTS	HORITY (P). CYPVT LTI P) LTD, KAT	LTD IN JOINT O AND PLUS E HMANDU, NE	VENTUR NGINEER PAL
	Checked By Engineer Pushpak pradhan		Submit Contract Rabindra	Manager	Verified Expert Qty Sue H.K. Mar	By veyor/CSE		Approved By Team Leader Giresh Chand	



# REGIONAL URBAN DEVELOPMENT PROJECT Biratnagar Metropolitan City Contract No:- RUDP/ICB/BRT-02 Summary Sheet of Monthly Test Report Month April 2019 Year Location:-R-6 Sub grade Material Location/Chainage Lab.Ref no. Source of Sample Date of Testing MDD OMC PI% CBR% Remarks RUDP-SG-01 R-6,(0+100) **Existing Road** 5-Apr-19 1.986 7.20 8.68 8.10 Sp.Limit Contractor Consultant BUILDING DESIGN AUTHORITY (P) LTD IN ZHONGHENG CONSTRUCTION GROUP JOINT VENTURE WITH B.N. CONSULTANCY PVT. INTERNATIONAL ENGINEERING CO. LTD LTD AND PLUS ENGINEERS & ARCHITECTS (P) LTD, KATHMANDU, NEPAL Checked By Submitted By Verified By Approved By Engineer

Contract Manager

Rabindra Kr. Thakur



Pushpak Pradhan

Team Leader

Giresh Chand

Expert Qty Surveyor /CSE

H.K. Mandal

	REGIO	ONAL U					Γ PRO.	JECT	
			Biratna Contrac	gar M	etropolita UDP/ICB/	In City			
					of Field Densi				
			Summa	Ty Sheet	of Field Delist	ty Test	Month	I 4m	
							Year	Apr 201	
			Lo	cation:-R		Ту	pe of Material	Sub-G	
				Moisture	content %	Density	(gm/cc)	Compac	tion %
Sn.	Lab.Ref.no	Testing Date	Chanage	OMC%	Field MC%	Max.Dry density	Field Dry density,	Compaction	Specifie
1	RUDP-SG-FD-1, R/S	8-Apr-19	0+020	7.20	6.00	gm/cc	gm/cc	%	
2	RUDP-SG-FD-1, C/L	8-Apr-19	0+020	7.20	6.99	1.986	1.934	97.37	95
3	RUDP-SG-FD-1, R/S		0+100	7.20	7.53 6.15	1.986	1.923	96.81	95
4	RUDP-SG-FD-1, L/S	8-Apr-19	0+220			1.986	1.909	96.11	95
т .	KODI -3G-FD-1, L/3	6-Apr-19	0+220	7.20	6.98	1.986	1.944	97.91	95
_									-
				3					
-									
						F 32			
-									
$\dashv$									
$\dashv$								S. Or T.	
1									ARCHE.
4					. effe				
+		-							
							-		
+		1. 1. 1. 1. 1.		1.5					
							uthority (P)		
_	Con	tractor				/ 1		2	200
	5 CO. LTD. \$	ZHOW-			DIW No.	191	Consultant	12	
ZHC	ONGHENG CONSTRUCT ENGINEER	ION GROUP I	NTERNAT	TIONAL	WITH B.N. C	ONSULTANO	CY PVT. LTD	TD IN JOINT AND PLUS EN HMANDU, NEI	GINEERS
	N.11		Sec	Der	N. W.	1.37	Biratnagar		
	(Plachan)		SX.	744	Ware			Ю	
	Checked By Engineer		Submitt Contract N		Verified			Approved By	
F	Pushpak pradhan	1	Rabindra K	r. Thakur	Expert Qty Suev H.K. Man	dal		Team Leader Siresh Chand	



# REGIONAL URBAN DEVELOPMENT PROJECT Biratnagar Metropolitan City Contract No:- RUDP/ICB/BRT-02 Summary Sheet of Monthly Test Report Month: April Year 2019 Type of Location:-R-7 (Shidarth Chowk to Neuro Chowk) Sub grade Material Location of Lab.Ref no. Source of Sample Date of Testing MDD OMC PI% CBR% Remarks Sample RUDP-SG-01 R-7,(0+150) **Existing Road** 3-Apr-19 1.950 8.30 9.31 6.70 Sp. Limit Contractor Consultant BUILDING DESIGN AUTHORITY (P) LTD IN JOINT ZHONGHENG CONSTRUCTION GROUP INTERNATIONAL VENTURE WITH B.N. CONSULTANCY PVT. LTD AND ENGINEERING CO. LTD PLUS ENGINEERS & ARCHITECTS (P) LTD, KATHMANDU, NEPAL Biratnagat Checked By Submitted By Verified By Approved By Engineer Contract Manager Expert Qty Surveyor Team Leader Pushpak Pradhan Rabindra Kr. Thakur H.k.Mandal Giresh Chand

### REGIONAL URBAN DEVELOPMENT PROJECT Biratnagar Metropolitan City Contract No:- RUDP/ICB/BRT-02 Summary Sheet of Field Density Test Month April Year 2019 Location:-R-7 (Shidarth Chowk to Nieuro Chowk) Type of Material Sub-Grade Moisture content % Density(gm/cc) Compaction % Max.Dry Field Dry Sn. Lab.Ref.no Testing Date Chanage Specified OMC% Field MC% density density, Compaction % gm/cc gm/cc % RUDP-SG-FD-1, L/S 7-Apr-19 0+040 8.30 7.26 1.950 1.872 96.03 95 2 RUDP-SG-FD-1, R/S 7-Apr-19 0+090 8.30 7.21 1.950 1.896 97.24 95 3 RUDP-SG-FD-1, L/S 7-Apr-19 0+1908.30 6.95 1.950 1.921 98.52 95 RUDP-SG-FD-1, R/S 7-Apr-19 0+280 8.30 7.71 1.950 1.895 97.19 95 hority (P) Contractor Consultant ? BUILDING DESIGN AUTHORITY (P) LTB IN JOINT VENTURE ZHONGHENG CONSTRUCTION GROUP INTERNATIONAL WITH B.N. CONSULTANCY PVT. LTD AND PLUS ENGINEERS ENGINEERING CO. LTD & ARCHITECTS (P) LTD, KATHMANDU, NEPAL Biratnagas Wordhan Checked By Submitted By Verified By Approved By Engineer Pushpak Pradhan Contract Manager Expert Qty Surveyor/CSE Team Leader Rabindra Kr. Thakur Giresh Chand



# REGIONAL URBAN DEVELOPMENT PROJECT Biratnagar Metropolitan City Contract No:- RUDP/ICB/BRT-02 Summary Sheet of Monthly Test Report Month: April 2019 Year Type of Sub grade Location:-T3L11I Material Location/Chainage Lab.Ref no. Date of Testing Source of Sample MDD OMC PI% CBR% Remarks RUDP-SG-01 T3L11 I,(0+150) **Existing Road** 5-Apr-19 2.030 8.40 9.67 7.50 Sp.Limit <18 Contractor Consultant BUILDING DESIGN AUTHORITY (P) LTD IN JOINT ZHONGHENG CONSTRUCTION GROUP INTERNATIONAL VENTURE WITH B.N. CONSULTANCY PVT. LTD AND ENGINEERING CO. LTD PLUS ENGINEERS & ARCHITECTS (P) LTD, KATHMANDU, NEPAL \* Biratnagat \* Submitted By Verified By Approved By Engineer Contract Manager Expert Qty Surveyor/CSE Team Leader Pushpak Pradhan Rabindra kr. Thakur H.K. Mandal Giresh Chand

	REGI	ONAL	URBA	N DF	VELO	PMEN	T PRO	JECT	
			Biratna	agar M	etropolit	an City	1110	OLCI	
					RUDP/ICB				
			Summa	ry Sheet	of Field Dens	sity Test			
						-	Month Year		oril 19
			Locat	ion:-T3L		Ту	pe of Material		Grade
				Moistur	e content %	Density	(gm/cc)	Compa	ction %
Sn.	Lab.Ref.no	Testing Date	Chanage	OMC%	Field MC%	Max.Dry density gm/cc	Field Dry density, gm/cc	Compaction %	Specified %
1	RUDP-SG-FD-1, R/S	8-Apr-19	0+050	8.40	7.43	2.030	2.004	98.71	95
2	RUDP-SG-FD-1, C/L	8-Apr-19	0+120	8.40	8.71	2.030	1.983	97.67	95
3	RUDP-SG-FD-1, L/S	8-Apr-19	0+180	8.40	8.16	2.030	2.003	98.66	95
4	RUDP-SG-FD-1, R/S	8-Apr-19	0+200	8.40	8.58	2.030	1.985	97.76	95
5	RUDP-SG-FD-1, R/S	8-Apr-19	0+260	8.40	7.15	2.030	1.971	97.09	95
7									
									4 1 1 2
-									
-									
$\dashv$							-		
-									
+									
+									
7									
1									
				1					
			7						
						1			
							1		
1					1-1-1				
1		100	4						
	5	1.5.30							7
			¥			/	Authority (	1110	
	Con	itractor		-		1.0	-/		-
ZH	ONGHENG CONSTRUCT	TION GROUP I		ONAL	WITH B.N. C	CONSULTAN	CYPVT. LTI	TO IN JOINT O AND PLUS EN HMANDU, NEP	GINEERS
		ALLEY AND	,	-			* Biratnag	ar*	y
	Wadhan		for ship	300	alfong	1		X	
	Checked By		Submitte		Verified	Ву	•••	Approved By	
	Engineer Pushpak Pradhan		Contract M		Expert Qty Surv			Team Leader	



		I	REGIONA	Birat Contr	naga act N	r Me o:- R	trop UDP/	olita ICB/	n Ci BRT-	ty 02	Γ PI	ROJ	EC	Γ			
				Summ	ary Sh	eet of N	Aonthl	y Test	Repor	<u>t</u>							
														Mon Ye			April 2019
					Loc	ation	R.	.18						Typ	e of	6	ub-base
ac i		Location of							assing 5	% By W	/eight	-		Mate	rnal		ub-base
Sn.	Lab.Ref no.	Sample	Source of Sample	Date of Testing	63.0	37.5	20.0	10.0	5.0	2.36	1.18	0.075	MDD	OMC	PI%	CBR%	Remarks
1	RUDP-SB-01	R-18,(0+150)	Chisang Khola	1-Apr-19	100	87.93	69.30	58.54	46.81	34.75	17.33	7.95	2.227	5.30	1.24	4.50	
2	RUDP-SB-02	R-18,(0+300)	Chisang Khola	1-Apr-19	100	85.27	64.43	53.79	38.19	30.78	17.36	7.41		0.50	1.48	4.00	-
_		The 100	12 1														
-			7														
		, ,															
+-	· C	-				_			-								
	7.4		*	V													
	7	7	100							- 7							
-	-	2 7 14 1															
		LIV-Y											_				
-																	
						-					_						
																-	-
_																	
-				Spec. Limit :	100	65~95	50~85	40~75	30~60	20~45	15~37	4~15			<6	>30	
										100	nority	PIL	\				
_		Con	tractor							5/	· C	onsulta	mir				
	ZHONGHENG	CONSTRUCT	ION GROUP INTE	DNIETONIE		E	UILDI	NG DE	SIGN	ATTH	ORITY	(P) T	D TN 10	INTVE	NEED	RE WITE	r n sv
	ZHORGHER	ENGINEER	ING CO. LTD	RNATIONAL		CC	NSUL	TANC	PVT.	LTD	ND-PI	USEN	GINEEL	RS & AI	CHI	ECTS (I	D.N.
			5/							K	ATHM	IANDU	NEPAI				, 212,
	The Part of the Pa		THEY IN STUDY					1		10	_	1.4	/			-	
				er you.				24	/	1	Biratn	1939,				B	
6	Vallan		,	Sarof			W	1							0	7	
	gener)		× •	91			/	·····									
	ecked By			Submitted By				ified E								oved B	
	ngineer pak Pradhan			ntract Manage					veyor/	CSE						n Leader	
usni	pak Pradhan Rabindra Kr. Thakur				r	H.K. Mandal								Giresh Chand			

### REGIONAL URBAN DEVELOPMENT PROJECT Biratnagar Metropolitan City Contract No:- RUDP/ICB/BRT-02 Summary Sheet of Field Density Test Month April Year 2019 Type of Material Location:-R-18 Sub-Base Moisture content % Density(gm/cc) Compaction % Lab.Ref.no Testing Date Chainage Sn. Max.Dry Specified Field Dry Compac OMC% Field MC% density tion % density, RUDP-SB-FD-1, R/S 3-Apr-19 0+0805.30 5.08 2.227 2.156 96.82 95 RUDP-SB-FD-1, C/L 5.30 5.25 3-Apr-19 0 + 1402.227 2.154 96.71 95 5.30 3 RUDP-SB-FD-1, R/S 3-Apr-19 0+190 5.38 2.227 2.157 96.84 95 RUDP-SB-FD-1, L/S 3-Apr-19 0+290 5.30 5.41 2.227 2.195 98.55 95 RUDP-SB-FD-1, R/S 0+360 5.30 5.41 3-Apr-19 2.227 2.159 97.01 95 thority (P) Contractor Consultant BUILDING DESIGN AUTHORITY (P) LTD IN JOINT VENTURE WITH ZHONGHENG CONSTRUCTION GROUP B.N. CONSULTANCY PVT. LTD AND PLUS ENGINEERS & INTERNATIONAL ENGINEERING CO. LTD ARCHITECTS (P) ETD, KATHMANDO, NEPAL Biratnaga! Checked By Submitted By Verified By Approved By

Export Qty Surveyor/CSE

H.K. Mandal

Contract Manager

Rabindra Kr. Thakur

Engineer

Pushpak Pradhan

Team Leader

# REGIONAL URBAN DEVELOPMENT PROJECT Biratnagar Metropolitan City Contract No:- RUDP/ICB/BRT-02 Summary Sheet of Monthly Test Report Month: April Year 2019 Type of Material Location:-R-103 Sub grade Location/Chainage Sn. Lab.Ref no. Date of Testing Source of Sample MDD OMC PI% CBR% Remarks RUDP-SG-01 R-103 Existing Road 2-Apr-19 2.012 8.30 10.43 7.10 >3 Contractor Consultant BUILDING DESIGN AUTHORITY (P) LTD IN JOINT ZHONGHENG CONSTRUCTION GROUP INTERNATIONAL VENTURE WITH B.N. CONSULTANCY PVT. LTD AND ENGINEERING CO. LTD PLUS ENGINEERS & ARCHITECTS (P) LTD, KATHMANDU, NEPAL Checked By Submitted By Verified By Approved By Engineer Expert Qty Surveyor/CSE Contract Manager

Rabindra kr. Thakur

Pushpak Pradhan

Team Leader

Giresh Chand

H.K. Mandal

	REGI	ONAL	URBA Biratna	N DE	EVELO etropolit	PMEN an City	T PRO	JECT	
			Contrac	t No:- F	RUDP/ICB	/BRT-02			
			Summa	ry Sheet	of Field Dens	ity Test			
						12	Month Year		pril
			Loca	tion:-R-1		Ty	pe of Material		019 Grade
				Moistur	e content %	Density	(gm/cc)		iction %
Sn.	Lab.Ref.no	Testing Date	Chanage	OMC%	Field MC%	Max.Dry density gm/cc	Field Dry density, gm/cc	Compaction %	Specified
1	RUDP-SG-FD-1, R/S	4-Apr-19	0+040	8.30	8.29	2.012	1.955	97.16	95
2	RUDP-SG-FD-1, R/S	4-Apr-19	0+090	8.30	8.94	2.012	1.952	96.99	95
3	RUDP-SG-FD-1, L/S	-	0+120	8.30	7.41	2.012	1.971	97.96	95
4	RUDP-SG-FD-1, R/S	4-Apr-19	0+160	8.30	7.85	2.012	1.947	96.77	95
+	1.								15.00
		11/2	,	2					
	Con	tractor		-			& Burity	10.	
ZH	ONGHENG CONSTRUCT	- THE STATE OF	NTERNATI	ONAL	WITH B.N. C	ONSULTAN	CY PVT. LTD	LTD IN JOINT AND PLUS EN HMANDU, NEP	GINEERS &
	Checked By Engineer	# 10	Submitte	ed By	Nerified I	······	* Biratnag	Approved By	



# REGIONAL URBAN DEVELOPMENT PROJECT Biratnagar Metropolitan City Contract No:- RUDP/ICB/BRT-02 Summary Sheet of Monthly Test Report Month: April Year 2019 Type of Location:-R-40 Sub grade Material Location/Chainage Sn. Lab.Ref no. Source of Sample Date of Testing MDD OMC PI% CBR% Remarks RUDP-SG-01 R-40,(0+100) **Existing Road** 2-Apr-19 1.985 8.20 10.27 7.24 Contractor Consultant BUILDING DESIGN AUTHORITY (P) LTD IN ZHONGHENG CONSTRUCTION GROUP JOINT VENTURE WITH B.N. CONSULTANCY PVT. INTERNATIONAL ENGINEERING CO. LTD LTD AND PLUS ENGINEERS & ARCHITECTS (P) LTD, KATHMANDU, NEPAL

Submitted By

Contract Manager

Rabindra Kr. Thakur

Checked By

Engineer

Pushpak Pradhan

Approved By

Team Leader

Giresh Chand

Verified By

Expert Qty Surveyor/CSE

H.K. Mandal

	REGIO	ONAL I	Biratn Contra	agar M ct No:- I	EVELO Letropolite RUDP/ICB of Field Dens	an City /BRT-02	T PRO	JECT	
			Summ	ary Sheet	of Fleid Dens	ity Test	Month	1	"
							Year		oril 19
			Lo	cation:-R-		Ту	pe of Material		Grade
				Moisture	e content %	Density	(gm/cc)	Compa	ction %
Sn.	Lab.Ref.no	Testing Date	Chanage	OMC%	Field MC%	Max.Dry density gm/cc	Field Dry density,	Compaction	Specifie
1	RUDP-SG-FD-1, R/S	4-Apr-19	0+050	8.20	8.79	1.985	gm/cc	%	
2	RUDP-SG-FD-1, C/L		0+100	8.20	8.67	1.985	1.913 1.926	96.37	95
3	RUDP-SG-FD-1, L/S	4-Apr-19	0+160	8.20	7.82	1.985	1.926	97.04	95
4	RUDP-SG-FD-1, C/L	4-Apr-19	0+210	8.20	8.24	1.985		98.85	95
5	RUDP-SG-FD-1, R/S	4-Apr-19	0+280	8.20	7.21	1.985	1.934	97.43	95
6	RUDP-SG-FD-1, L/S	4-Apr-19	0+320	8.20	7.31	1.985	2.045	96.49	95
	,		0.020	0.20	7.51	1.703	2.043	96.94	95
		1.4.45	42						
		. 4							
	1, 13								
-	Com	tractor				Tun	nority (P)		
ZHO	ONGHENG CONSTRUCT	ERW.	NTERNAT	TIONAL	WITH B.N. CO	CHITECTS (P	Y PVT LTD	ETD IN JOINT AND PLUS EN IMANDU, NEP	CINEERS
gine	Mari ed By er ak pradhan		Submitt Contract Mabindra K	Manager E	Verified I	By eyor/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: April Year 2019 Type of Location:-R-9 Sub grade Material Location/Chainage Sn. Lab.Ref no. Source of Sample Date of Testing MDD OMC PI% CBR% Remarks RUDP-SG-01 R-9,(0+200) **Existing Road** 6-Apr-19 1.970 8.25 10.15 7.30 Sp.Limit Contractor Consultant BUILDING DESIGNAUTHORITE (P) LTD IN JOINT ZHONGHENG CONSTRUCTION GROUP INTERNATIONAL VENTURE WITH B.N. CONSULTANCY PVT. LTD AND PLUS ENGINEERS & ARCHITECTS (P) LTD, ENGINEERING CO. LTD ONOHS # DIJ 03 KATHMANDU, NEPAL Biratnagat \*



Submitted By Contract Manager Rabindra kr. Thakur

Verified By Expert Qty Surveyor/CSE H.K. Mandal

Approved By Team Leader Giresh Chand



	REGI	ONAL					T PRO	JECT	
			Biratna	gar M	etropolit UDP/ICB	an City			
					of Field Dens				
				- Janeer	or riela Della	T CSt	Month	A	pril
			Loo	odlow. D	0	- × , - 7	Year	20	)19
			Loc	ation:-R-	e content %		pe of Material (gm/cc)		Grade oction %
G.,	I 1 D C	m .: D .	G.			Max.Dry	Field Dry	Compa	
Sn.	Lab.Ref.no	Testing Date	Chanage	OMC%	Field MC%	density gm/cc	density, gm/cc	Compaction %	Specifie %
1	RUDP-SG-FD-1, R/S	7-Apr-19	0+180	8.25	7.89	1.970	1.900	96.46	95
2	RUDP-SG-FD-1, C/L	7-Apr-19	0+220	8.25	7.52	1.970	1.921	97.51	95
3	RUDP-SG-FD-1, L/S	7-Apr-19	0+250	8.25	7.70	1.970	1.919	97.41	95
-									
							***		
+									
+								-21	
+					<u> </u>				
					-				
+									
+								DESCRIPTION OF THE PROPERTY OF	
+	18				1		1		
			,				ority (P) Lia		
_	Co	ntractor				(2)	Consultan	it c	
ZH	ONGHENG CONSTRUCT ENGINEE	TION GROUP I RING CO. LTD	NTERNAT	IONAL	WITH B.N.	CONSULTAN	CY PVT, LT	) LTD IN JOIN D AND PLUS EN THMANDU, NEI	NGINEERS
		ENERGY NUTRICE	,	f		(all)	9 * Biratnag	1 × 1	/
	06.4		I'm y	K	alouto			4	
	@Yodlan	era v m et	A					V	
	Checked By Engineer Pushpak Pradhan		Submitt Contract N		Verified Expert Qty Sur			Approved By Team Leader	



# | REGIONAL URBAN DEVELOPMENT PROJECT | Biratnagar Metropolitan City | Contract No:- RUDP/ICB/BRT-02 | Summary Sheet of Monthly Test Report | Month: | April | Year | 2019 | Type of | Material | Sub grade | Date of Testing | MDD | OMC | PI% | CBR% | Remain | CBRS-01 | R-44,(0+150) | Existing Road | 6-Apr-19 | 2.030 | 7.30 | 11.73 | 7.60 | CBR% | Remain | CBRS-01 | R-44,(0+150) | Existing Road | 6-Apr-19 | 2.030 | 7.30 | 11.73 | 7.60 | CBRS-01 | R-44,(0+150) | Existing Road | 6-Apr-19 | 2.030 | 7.30 | 11.73 | 7.60 | CBRS-01 | R-44,(0+150) | Existing Road | 6-Apr-19 | 2.030 | 7.30 | 11.73 | 7.60 | CBRS-01 | R-44,(0+150) | Existing Road | 6-Apr-19 | 2.030 | 7.30 | 11.73 | 7.60 | CBRS-01 | R-44,(0+150) | Existing Road | 6-Apr-19 | 2.030 | 7.30 | 11.73 | 7.60 | CBRS-01 | R-44,(0+150) | Existing Road | 6-Apr-19 | 2.030 | 7.30 | 11.73 | 7.60 | CBRS-01 | R-44,(0+150) | R-44,(0+150) | Existing Road | 6-Apr-19 | 2.030 | 7.30 | 11.73 | 7.60 | CBRS-01 | R-44,(0+150) | R-44,(0+150) | Existing Road | 6-Apr-19 | 2.030 | 7.30 | 11.73 | 7.60 | CBRS-01 | R-44,(0+150) | R-44,(0+150) | Existing Road | 6-Apr-19 | 2.030 | 7.30 | 11.73 | 7.60 | CBRS-01 | R-44,(0+150) | R-44,(0+150) | R-44,(0+150) | Existing Road | 6-Apr-19 | 2.030 | 7.30 | 11.73 | 7.60 | CBRS-01 | R-44,(0+150) | R-44,(

DUIDD CC 01								Remarks
RUDP-SG-01	R-44,(0+150)	Existing Road	6-Apr-19	2.030	7.30	11.73	7.60	
						LE		
						4-6		
						1		
						218	73	

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 ENCINEERS & ARCHITECTS (P) LTD, KATHMANDU, NEPAL

(Wadhan

Checked By Engineer Pushpak Pradhan h, this

Submitted By Contract Manager Rabindra Kr. Thakur Verified By
Expert Qty Surveyor/CSE
H.K. Mandal

Approved By

Team Leader Giresh Chand

	REGIO	ONAL U	Biratna	agar Me	etropolita	n City	7	Γ PRO.	JECT		
					UDP/ICB/		2				
			Summa	ry Sheet o	f Field Densi	ty Test		Month	Apr	eil	
								Year	201		
			Loc	cation:-R-	44			pe of Material	Sub-G		
				Moisture	content %	Den	sity(	(gm/cc)	Compac	ction %	
	7 1 D C	T D	Cl i			Max.Di	ry	Field Dry		Specified	
n.	Lab.Ref.no	Testing Date	Chainage	OMC%	Field MC%	density	у	density,	Compaction	%	
						gm/cc		gm/cc	%	70	
1	RUDP-SG-FD-1, R/S	10-Apr-19	0+080	7.30	6.49	2.030		1.973	97.21	95	
2	RUDP-SG-FD-1, C/L	10-Apr-19	0+120	7.30	6.96	2.030		1.957	96.41	95	
3	RUDP-SG-FD-1, L/S	10-Apr-19	0+180	7.30	6.87	2.030		1.980	97.53	95	
4	RUDP-SG-FD-1, C/L	10-Apr-19	0+210	7.30	6.81	2.030	)	1.960	96.55	95	
5	RUDP-SG-FD-1, R/S		0+240	7.30	6.17	2.030	)	1.981	97.59	95	
6	RUDP-SG-FD-1, R/S	10-Apr-19	0+260	7.30	6.63	2.030	)	1.988	97.92	95	
_				4. 1		- 4					
									TA MARK A		
-											
_					-						
_											
							-				
							_				
							_				
- 1/1										7	
					1						
									1973		
-		1 1 W 18 18 18 18 18 18 18 18 18 18 18 18 18									
_											
_			1								
	1. 1.	A	1 M		244.34			Fritz			
	Co	Contractor					-	Consultar	nt /		
ZI	HONGHENG CONSTRUC ENGINE	CTION GROUD ERING CO. LT	P INTERNATIO	ATIONAL	WITH R.N.	CONSUL	TAN	CY PVT. LT	P) LTD IN JOIN D AND PLUS F THMANDU, NE	NGINEERS	
	Warthan	2015 W UT	Le,	My dup	Mank	y	1	* Biratnat	lat x kin		
	Checked By Engineer			nitted By	Vekifie Expert Qty St	ed By			Approved By Team Leader		



														34	43		
														Mor Ye.			April 2019
					Loca	tion	R_	107						Type	of		Sub-base
		Location of					Size in		assing (	% By W	/eight			Mate	nai		out base
Sn.	Lab.Ref no.	Sample	Source of Sample	Date of Testing	63.0	37.5	20.0	10.0	5.0	2.36	1.18	0.075	MDD	OMC	PI%	CBR%	Remarks
1	RUDP-SB-01	R-107,(0+090)	Chisang Khola	6-Apr-19	100	86.31	69.12	58.42	49.65	39.87	18.16	9.78	2.232	6.20	1.29	43.20	
		-19a×1													-		
		15	178 1														
_		-	0														
		100															
													_				
		4	Company of the last								1 5 5						
			7														
-		3							_								
-																	
-				Spec, Limit:	100	65~95	50~85	40~75	30~60	20~45	15~37	4~15			<6	>30	
										/	hority						
		Cor	itractor							100		Cons	iltant				
	ZHONGHENG	CONSTRUCT	ION GROUP INT		- 1					3/		1	02				
	ZHONGHENC		RING CO. LTD	ERNATIONAL		BUILL	ING D	ESIGN	AUTI	ENCIN	X (P) F	TDIN.	OINT	VENTU	RE W	ITH B.N.	. CONSULTANCY ANDU, NEPAL
			The P	)]])			1. 1.11	AND	LUS		EERS	& ARC	S C	15 (F) L	ID, E	ATHMA	ANDU, NEPAL
			WINDSH WIERKA						N.	10		/ 4	7	-	_	-	
				12 N at			. 0		_	1	Birate	agai			,	R	
6	Yadhas	2		Xo. Carol		1	Mall	Par !	1							-	
V						Marc							,			·····	
	Checked By Submitted By					Werified By							Approved By				
	ngineer pak Pradhan			ontract Manage		Expert Qty Surveyor/CSE									m Leader		
	pak Pradnan		Ra	bindra Kr. Thaku	ir l		HK	. Man	lat						Cira	sh Chan	d

### REGIONAL URBAN DEVELOPMENT PROJECT Biratnagar Metropolitan City Contract No:- RUDP/ICB/BRT-02 Summary Sheet of Field Density Test Month April Year 2019 Location:-R-107 Type of Material Sub-Base Moisture content % Density(gm/cc) Compaction % Sn. Lab.Ref.no Testing Date Chainage Max.Dry OMC% Field MC% Field Dry Compac Specified density density, tion % RUDP-SB-FD-1, R/S 8-Apr-19 0+020 6.20 5.81 2.232 2.178 97.60 95 2 RUDP-SB-FD-1, L/S 8-Apr-19 0+050 2.232 6.20 6.60 2.160 96.77 95 2 RUDP-SB-FD-1, R/S 8-Apr-19 0+1506.20 6.53 2.232 2.181 97.70 95 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 Biratnagat Checked By Submitted By Verified By Approved By Engineer

Export/Qty Surveyor

H.K. Mandal



Pushpak Pradhan

Contract Manager

Rabindra Kr. Thakur

Team Leader

# REGIONAL URBAN DEVELOPMENT PROJECT Biratnagar Metropolitan City Contract No:- RUDP/ICB/BRT-02 **Summary Sheet of Monthly Test Report** Month April Year 2019 Type of Location:-T2L25 Sub grade Material Location/Chainage Lab.Ref no. Source of Sample Date of Testing MDD OMC PI% CBR% Remarks RUDP-SG-01 T2L25,(0+150) **Existing Road** 2-Apr-19 2.010 8.70 8.38 7.52 Sp.Limit Contractor Consultant BUILDING DESIGN AUTHORITY (P) LTD IN ZHONGHENG CONSTRUCTION GROUP JOINT VENTURE WITH B.N. CONSULTANCY PVT. INTERNATIONAL ENGINEERING CO. LTD LTD AND PLUS ENGINEERS & ARCHITECTS (P) LTD, KATHMANDU, NEPAL Checked By Submitted By Verified By Approved By Engineer Contract Manager Expert Qty Surveyor /CSE Team Leader Pushpak Pradhan Rabindra Kr. Thakur H.K. Mandal



### REGIONAL URBAN DEVELOPMENT PROJECT Biratnagar Metropolitan City Contract No:- RUDP/ICB/BRT-02 Summary Sheet of Field Density Test Month April Year Location:-T2L25 Type of Material Sub-Grade Moisture content % Density(gm/cc) Compaction % Max.Dry Field Dry Sn. Lab.Ref.no Testing Date Chanage Specified OMC% Field MC% density density, Compaction % gm/cc gm/cc % RUDP-SG-FD-1, L/S 2-Apr-19 0+040 8.70 8.61 2.010 1.978 98.39 95 RUDP-SG-FD-1, C/L 2-Apr-19 0+110 8.70 7.71 2.010 1.936 96.31 95 RUDP-SG-FD-1, R/S 2-Apr-19 0+160 7.63 8.70 2.010 1.954 97.23 95 RUDP-SG-FD-1, L/S 2-Apr-19 7.14 0 + 1908.70 1.972 2.010 96.62 95 Contractor Consultant BUILDING DESIGN AUTHORITY (P) LTD IN JOINT VENTURE ZHONGHENG CONSTRUCTION GROUP INTERNATIONAL WITH B.N. CONSULTANCY PVT. LTD AND PLUS ENGINEERS ENGINEERING CO. LTD & ARCHITECTS (P) LTD, KATHMANDU, NEPAL Biratnago Checked By Submitted By Verified By Approved By Engineer Contract Manager Expert Qty Sueveyor/CSE H.K. Mandal Team Leader Giresh Chand Pushpak pradhan Rabindra Kr. Thakur



	REGI	Co	RBAN DEV ratnagar Me ontract No:- RU ummary Sheet of M	tropolitan C JDP/ICB/BRT	ity '-02	PRO	OJE	CT	
						Mor	th:	I A	pril
						Ye	ar		019
			Location	:-R-107		Type		Sub	grade
Sn.	Lab.Ref no.	Location of Sample	Source of Sample	Date of Testing	MDD	OMC	PI%	CBR%	Remarks
1	RUDP-SG-01	R-107,(0+080)	Existing Road	3-Apr-19	2.020	7.80	10.11	7.16	
-									
					in the second				
					- 4				
		Sp. Lim	nit				<18	>3	Z
		Contractor			DUI	ity (P)	~		
				RIIII DINC DES		nsultant		WD 311	
ZHONG	HENG CONSTR ENGIN	UCTION GROUP NEERING CO. LTI	INTERNATIONAL )	BUILDING DES VENTURE WITH PLUS ENGI	B.N. CO NEERS &	NSULTA & ARCH	ANCY TECT	PVT. LT	DAND
		33.00		·	ATHMA OII	thaday	EPAL		
Plac	than		for spirker	NOWEGO		4	X		
hecked				Verified By			Approve	ed Bv	
ngineer Pushpak	Pradhan		Contract Manager abindra Kr. Thakur	ger Expert Qty Surveyor Team Leader					

	REGI	ONAL I	URBA	N DE	VELOI	PMENT	PROJ	ECT			
			Biratna	agar Me	etropolita UDP/ICB/	n City	11100	LCI			
			Summa	ry Sheet o	of Field Densi	ty Test					
						-	Month	Ap			
				Location	-R-107	T	ype of Material	Sub-G			
				Moisture	content %	Density	(gm/cc)	Compac			
Sn.	Lab.Ref.no	Testing Date	Chanage	OMC%	Field MC%	Max.Dry density gm/cc	Field Dry density,	Compaction	Specifie		
1	RUDP-SG-FD-1, L/S	5-Apr-19	0+040	7.80	6.98		gm/cc	%			
2	RUDP-SG-FD-1, R/S	5-Apr-19	0+040	7.80	6.96	2.020	1.953	96.68	95		
3	RUDP-SG-FD-1, L/S	5-Apr-19	0+150	7.80	7.06		1.984	98.20	95		
-	12 1, 2/0	5 11p1-19	0+130	7.80	7.00	2.020	1.966	97.34	95		
								1			
						10					
$\dashv$			-			-					
_											
						4/					
		1									
			7								
			-	-							
7							1 4 4 4 4 4	1000			
$\dashv$											
+									. #		
+											
+											
+								111111			
+											
4											
					124						
	`	- 1		11			_				
	18	NOWN .	-					1			
	, and a second	100		7.4							
								-			
							- vitu				
		4		1.		Auth	ority (P)				
	Con	tractor,				1/2/	Consultant				
ZHC	ONGHENG CONSTRUCT ENGINEER	ION GROUP IN	NTERNAT	IONAL	WITH B.N. CO	ONSULTANC	Y PVT. LTD	ED IN JOINT V AND PLUS ENG MANDU, NEPA	GINEERS		
	Nadhan	The second second	Jam	A	O Diretnagat *						
	pourun		An	,	Mars						
	Checked By		Submitte	ed By	Werified I	Rv.		A 1.5			
-	Engineer		Contract M	Ianager E	xpert Qty Surve	eyor/CSE		Approved By Team Leader			
F	ushpak Pradhan		Rabindra Kr	. Thakur	H.K.Mano	dal		Giresh Chand			



			REGIO	NAL UR Bir Cor	atna	gar l t No:-	Metr	opol	itan	City		PRO	)JE(	CT			
				Su	mmar	Sheet	of Mo	nthly '	Test Re	eport							
														Mor			April
														Ye Typ			2019
		_		,	Loca	tion								Mate			Sub-base
Sn.	Lab.Ref no.	Location of Sample	Source of Sample	Date of Testing	63.0	Sieve	Size in	mm/F	assing 5.0	% By W	/eight	0.075	MDD	ОМС	PI%	CBR%	Remarks
1	RUDP-SB-01	T2L25,(0+180)	Chisáng Khola	4-Apr-19	100	91.66	75.08	57.16									1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
2	RUDP-SB-02	T2L25,(0+100)		4-Apr-19	100	90.16	73.28	59.14	36.68 40.52	24.22	16.15	8.84	2.223	6.45	1.89	45.00	
		15 3 5 91	177 8		100	20.10	13.20	39.14	40.32	31.18	19.10	8.91	_		1.23		
			1														
		*											_				
-																	
							-										The same of the sa
-		- 1															
		0.70											-			_	
	3.																
-																	
					-												
						-											
											-	-	_				
				Spec. Limit :	100	65~95	50~85	40~75	30~60	20~45	15~37	4~15			<6	>30	
														1		/	
		Con	tractor	H 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			_				tho	Const	-				
		The state of								1	FILLING	Const	utant				
2	ZHONGHENG	CONSTRUCT	ION GROUP INT ING CO. LTD	ERNATIONAL		BUILD PV	ING D	ESIGN AND	AUTH PLUS I	ORIT	(P) L'	TD IN J	OINT	ENTUI S (P) L	RE WI TD, K	ТН В.N. АТНМА	CONSULTANCY NDU, NEPAL
6	adhan		345 # SU.03	for shap.		1	Sup.	pol	_	135	N. Y. B.	ratnaga	THE STATE OF THE S		0	P	
Che	ecked By				7	1/2-	ified F						*			*****	
	ngineer			Submitted By intract Manager				ified E	veyor/	CCF					-	oved By	,
ushpa	ak Pradhan			oindra Kr. Thaku				Mand		CSE				100		Leader	

### REGIONAL URBAN DEVELOPMENT PROJECT Biratnagar Metropolitan City Contract No:- RUDP/ICB/BRT-02 Summary Sheet of Field Density Test Month April Year 2019 Location:-T2L25 Type of Material Sub-Base Moisture content % Density(gm/cc) Compaction % Lab.Ref.no Testing Date Chainage Max.Dry Sn. Field Dry Compac Specified OMC% Field MC% density, density tion % RUDP-SB-FD-1, L/S 7-Apr-19 0 + 0806.45 5.55 2.223 2.147 96.56 95 RUDP-SB-FD-1, C/L 5.01 7-Apr-19 0+1406.45 2.188 98.44 95 3 RUDP-SB-FD-1,R/S 0+190 5.23 7-Apr-19 6.45 2.223 2.139 96.24 95 arity (P) Consultant ? Contractor BUILDING DESIGN AUTHORITY (P) LTD IN JOINT VENTURE WITH ZHONGHENG CONSTRUCTION GROUP B.N. CONSULTANCY PVT. LTD AND PLUS ENGINEERS & INTERNATIONAL ENGINEERING CO. LTD ARCHITECTS (P) LTD, KATHMANDU, NEPAL \* Biratnagal Checked By Verified By Approved By Submitted By Engineer Contract Manager Expert Qty Surveyor/CSE Team Leader Pushpak Pradhan H.K. Mandal Rabindra Kr. Thakur Giresh Chand

#### REGIONAL URBAN DEVELOPMENT PROJECT Biratnagar Metropolitan City Contract No:- RUDP/ICB/BRT-02 **Summary Sheet of Monthly Test Report** Month: April Year 2019 Type of Location:-T3L11H Sub grade Material Lab.Ref no. Location/Chainage Source of Sample Date of Testing MDD OMC PI% CBR% Remarks RUDP-SG-01 T3l11H,(0+200) **Existing Road** 1-Apr-19 1.980 8.30 10.90 8.00 2 RUDP-SG-02 T3111H,(0+400) **Existing Road** 2-Apr-19 1.982 7.50 6.88 7.89 3 RUDP-SG-03 T3l11H,(0+500) **Existing Road** 2-Apr-19 8.18 Sp.Limit Contractor Consultant BUILDING DESIGN AUTHORITY (P) LTD IN JOINT ZHONGHENG CONSTRUCTION GROUP INTERNATIONAL VENTURE WITH B.N. CONSULTANCY PVT. LTD AND ENGINEERING CO. LTD PLUS ENGINEERS & ARCHITECTS (P) LTD, KATHMANDU/NEPAL Biratnagat 68 adhan Checked By Submitted By Verified By Approved By Engineer Contract Manager Expert Qty Surveyor/CSE Team Leader Pushpak Pradhan Rabindra kr. Thakur H.K. Mandal Giresh Chand

				- N					
	REGI	ONAL	URBA	N DE	VELO	PMEN	T PRO	<b>JECT</b>	
			Biratna	igar M	etropolit	an City			
					RUDP/ICB				
			Summa	ry Sheet	of Field Dens	ity Test			
						-	Month Year		pril )19
			Locati	on:-T3L		7	Type of Material		Grade
				Moistur	e content %		y(gm/cc)	Compa	ction %
Sn.	Lab.Ref.no	Testing Date	Chanage			Max.Dry	Field Dry		Specified
		3		OMC%	Field MC%	density	density,	Compaction	%
1	DUDD CC FD 1 D/C	1.1.10	0.050	0.00	7.00	gm/cc	gm/cc	%	
2	RUDP-SG-FD-1, R/S	4-Apr-19	0+050	8.30	7.89	1.980	1.901	96.01	95
3	RUDP-SG-FD-1, C/L RUDP-SG-FD-1, L/S	4-Apr-19 4-Apr-19	0+100 0+160	8.30	6.96 7.51	1.980	1.915	96.71	95
4	RUDP-SG-FD-1, R/S	4-Apr-19 4-Apr-19	0+160	8.30		1.980	1.894	95.66	95
5	RUDP-SG-FD-1, R/S	4-Apr-19 4-Apr-19	0+260	8.30	6.94	1.980	1.939	97.95	95
6	RUDP-SG-FD-1, R/S	•	0+260	8.30	6.87	1.980	1.906	96.29	95
7	RUDP-SG-FD-1, L/S	4-Apr-19 4-Apr-19	0+300	8.30 7.50	7.31	1.980	1.895	95.72	95
8	RUDP-SG-FD-1, R/S	4-Apr-19 4-Apr-19	0+450	7.50	6.88	1.982	1.928	97.27	95
K	KODI-30-ID-1, K/S	4-Apr-19	0+300	7.50	0.88	1.982	1.934	97.57	95
-				-					_
-							100		
-									
-									
$\dashv$									
$\dashv$									
$\dashv$									
							-		
$\dashv$									
$\dashv$					-				-
$\dashv$									
$\dashv$						_			
		-							<del></del>
						100			
$\dashv$			17 79.1						
+								1	
$\dashv$		Value V						-	
		134.45		100					7
				-			shority (P)		
	Co	ntractor ZHOMO	1			/8	Consultan	(0)	
ZH	ONGHENG CONSTRUCT ENGINEE	TION GROUP I		IONAL	BUILDING WITH B.N. O	DESIGN A CONSULTA CCHITECTS	UTHORITY (P NEY PVT. LTI 5 (P) LTD, KAT	) LTD IN JOIN D AND PLUS EN HMANDU, NEI	Γ VENTURE NGINEERS & PAL
			R	C T.		The state of the s	* Biratnagat	***	/
	Padhan		for h		Now	el		R	
1	Checked By Engineer Pushpak Pradhan	1-1	Submitte Contract M Rabindra K	/lanager	Velified Expert Qty Sur H.K. Mar	veyor/CSE		Approved By Team Leader Giresh Chand	



			REC	GIONA	L URB				PROJI	ECT						
					Biratn	agar Me	etropolita	ın City								
					Contrac	et No: RI	DP/ICB/	BRT-02								
			Test Resu	ılt BY	MARSH	ALL N	IETHO	O (AA	SHTO	T 245-	78)					
			SUMIV	IARY I	FOR TH	E MON	NTH OF	APRIL	2019						- 8	P.g 1of 1
s.	LAB REF.	Date of	Location of Work ch:				Agg Gra		n		Bitumen Content From Extraction	Mix Density	Air Voids	VMA %	Stability	Flow ma
No.	NO.	Laying	Location of Work Cir.	20	16	9.5	4.75	2.36	0.6	0.075	Test %	gm/cc	%	VIIIA 76	N	riow min
1	80	4/4/2019	R-17, 0+102 to 0+350	100	100	80.37	55.34	32.63	15.45	6.75	5.74	2.369	3.44	16.60	11863	2.40
2	81	16/4/2019	R-26 & R-24, 0+300 to 0+600 & 0+000 to0+140	100	100	80.70	55.78	32.98	15.16	6.57	5.70	2.375	3.26	16.37	11974	2.47
3	82	19/4/2019	R-6, 0+800 to 1+209	100	100	78.79	55.88	36.37	17.06	6.46	5.71	2.374	3.30	16.42	11886	2.37
4	83	20/4/2019	R-6,0+425 to 0+800	100	100	77.19	55.13	34.77	17.58	6.44	5.73	2.372	3.33	16.49	11952	2.43
5	84	20/4/2019	N-4 & R-18, 0+000 to 0+080 & 0+000 to 0+240	100	100	78.15	55.67	35.09	16.64	6.03	5.71	2.372	3.38	16.49	11875	2.47
~	_										V					
	_										-		-	-		
	4		THE SECOND STATE OF THE SE									was.				
														76		
					-	-					-			-		
																7.54
-	-															
			Specifacations	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 Tol	erances from RUDP Specifacation Table2-4-10	±5%	Nill	±5%	±3%	±2%	±1%	Nill	±0.3%		(25-51)mm	Thicknes	ss W/C Co	ourse
RI	MARI	KS:								who	ity IPI	0				
			Contractor							1-1	Const	ultant				
	ZI	HONGHEN	G CONSTRUCTION GROUP INTERNATIONAL EN	GINEERI	NG CO. LT	TD	BUILDIN	LTD AND	N AUTHO	RITY (P) I	TD IN JOH	NT VENT	URE WITH ) LTD, KAT	B.N. CON	SULTAN J, NEPAL	CY PVT.
· ·	adh		Continuent a constitution		R		W	MOS		Sulling.	* Biratnan	al #		6		
ngi	ked E	By Pradhan			Submitted Contract Ma Rabindra Ti	anager	Expert Qty H.K. Manda	Surveyor/C	SE						Approved Team Lead Giresh Cha	Ver





	REGIO	NAL UI	RBAN	DEV	VELOP	MEN	T PROJ	ECT	
		Bi	ratnag	ar Mei	tropolita JDP/ICB/I	n City			
					Field Densit				
		11	Summary	Silect 01	rieid Densit	<u>y Test</u>	Month		
						1	Year		April 2019
			Loc	ation:-F			Type of Material	S	ub-Base
Sn.	Lab.Ref.no	Tasting Data	Cl:	Moisture	e content %	Dens	sity(gm/cc)	_	paction %
311.	Lau.Rel.II0	Testing Date	Chainage	OMC%	Field MC%	Max.Dr		Compac	
1	RUDP-SB-FD-1, L/S	18-Apr-19	0+040	6.45	5.01	density 2.228		tion	%
2	RUDP-SB-FD-1, C/L	18-Apr-19	0+080	6.45	5.33	2.228	2.148	96.39 97.46	95 95
3	RUDP-SB-FD-1, R/S	18-Apr-19	0+150	6.45	6.72	2.228	2.171	97.40	95
				5,10	51,72	2.220	2.102	91.03	93
								-	
			100						
					-				
							*		
					NE TO THE	150		7577	
	111								
					10				
									-
								1777	
		10. 15	1. 11				- inv		
	NON Contract	ero				6	shority (P)		
	ZHONGHENG CONSTR	UNIA!		BUILDING	G DESIGN AT	THORY	Y (P) LTD IN JO	INT VENT	CLIDE WITE
I	TERNATIONAL ENGIN	EERING CO. I	TD	B.N.	CONSULTA	NCY PVT.	LTD AND PLU	SENGINE	ERS &
	13	15		3 - 1	ARCHITEC	CTS (P) LT	D, KATHMANI	U, NEPAL	
	THONORE THONOR	1.00	,	N <sub>2</sub> and		1911	15	-/	
	The second second	KITT			0	100	* Biratnagat *		/
1	11	1	150	N Q	el		Ti attiag	01/	
pVc	when	1		MANA	,			6	
		Submitted By		Verified				Approved	Bv
		ntract Manager pindra Kr. Thakur		xpert Qty S H.K. Mar	urveyor/CSE			Team Lead	



			REGIO	Cor	atna itrac	N D agar l et No:- y Sheet	Metr RUI	opol OP/IC	itan B/Bl	City		PRO	OJE	СТ			
														Mor			April
														Ye			2019
					Loc	ation								Mate			Sub-base
Sn.	Lab.Ref no.	Location of Sample	Source of Sample	Date of Testing	63.0		Size in	mm / p	5.0	% By V	Veight	0.075	MDD	ОМС	PI%	CBR%	Remarks
1	RUDP-SB-01	N-10,(0+080)	Chisang Khola	17-Apr-19	100	90.17	73.20	47.54	32.34	23.28	16.17	5.58	2.220	5.50	1.00	50.00	
			113/ 6		700	70.17	75.20	47.54	32.34	23.20	10.17	3.36	2.220	3.30	1.00	50.00	
			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1														
		EL CONTRACTOR															
	- 1		10 k														
$\dashv$		-															
		1 7 7															
												-					
	4 14																
																	a made
					-									_			
				Spec. Limit:	100	65~95	50~85	40~75	30~60	20~45	15~37	4~15	-	-	<6	>30	
	ii A		**************************************									Lat.	tu (a)		~	~	
		Con	tractor										ultant	100			
	ZHONGHENC	ENGINEER	ON GROUPINT UNG CO. LTD	ERNATIONAL		BUILI PV	DING I	ESIGN D AND	N AUTI PLUS	HORIT ENGIN	Y (P) L	TD IN	JOINT	VENTUI	RE WI	ITH B.N.	CONSULTANCY NDU, NEPAL
	adhan	TERMAN	# dno89 #9	f.			More	pol	/		3	* Bira	magal *	**	0	R	
	ecked By			Submitted By			11	Verifie	ed By						Appr	roved By	,
	ngineer		Co	ontract Manage	r				Surve	yor						n Leader	
ushp	oak Pradhan		Ral	oindra Kr. Thaku	ır			H.K. M								h Chan	



#### REGIONAL URBAN DEVELOPMENT PROJECT Biratnagar Metropolitan City Contract No:- RUDP/ICB/BRT-02 Summary Sheet of Field Density Test Month April Year 2019 Location:-R-183 Type of Material Sub-Base Moisture content % Density(gm/cc) Compaction % Lab.Ref.no Testing Date Chanage Sn Max.Dry Field Dry Compac Specified OMC% Field MC% density density tion % 1 RUDP-SB-FD-1, R/S 21-Apr-19 0+050 5.50 5.17 2.220 2.177 98.08 95 RUDP-SB-FD-1, R/S 2 21-Apr-19 0+090 5.50 4.56 2,220 2.137 96.25 95 RUDP-SB-FD-1, L/S 3 21-Apr-19 0+130 5.50 4.98 2.220 2.156 97.10 95 4 RUDP-SB-FD-1, R/S 21-Apr-19 0+1705.50 4.75 2.220 2.154 97.01 95 K 7 thority (P) ON GROUP INTERN Contractor Consultant BUILDING DESIGN AUTHORITY (P) LTD IN JOINT VENTURE WITH ZHONGHENG CONSTRUCTION GROUP B.N. CONSULTANCY PVT. LTD AND PLUS ENGINEERS & INTERNATIONAL ENGINEERING CO. LTD ARCHITECTS (P) LTD, KATHMANDU, NEPAL Biratnagat Checked By Submitted By Verified By Approved By Engineer Contract Manager Expert/Qty Surveyor Team Leader Pushpak Pradhan Rabindra Kr. Thakur H.K. Mandal Giresh Chand



			REGIO		atna	igar l	Metr	opol	itan	City		PRO	)JE(	CT			
						t No:- v Sheet											
				<u> 5u</u>	nmar	y sneet	OI IVIO	nthiy i	est Re	eport				Mor	th:		April
														Ye			2019
				Location :	-R-	(Sida	rth Ch	owk to	Neuro	Chov	vk)			Type			Sub-base
	15 W/ST (25	Location of								% By W							
Sn	Lab.Ref no.	Sample	Source of Sample	Date of Testing	63.0	37.5	20.0	10.0	5.0	2.36	1.18	0.075	MDD	OMC	PI%	CBR%	Remarks
1	RUDP-SB-01	R-7,(0+150)	Chisang Khola	11-Apr-19	100	87.97	69.39	57.90	43.51	36.94	16.28	6.50	2.224	5.80	1.95	47.00	
		980	0.05									7					
			7,														
			2														
11	*	-															
	2.1		- N														
			7	-													
-		\$1 0 de															
			A										1/1			-150	
	4																
								-	_		-		_				
													-				
				Spec. Limit :	100	(5.05	50.05	40. 77	20. (0	20.45							
				Spec. Limit :	100	05~95	50~85	40~/5	30~60	20~45	15~37	4~15			<6	>30	
											narity	(P) )					
-		Co	itractor	1						- 8		1	2				
		co.Lif	. Proughe	-	-					-		Cons	ultant		_		
	ZHONGHENO	CONSTRUCT ENGINEE	TION GROUP INT RING CO. LTD	ERNATIONAL		BUILI	OING D	DESIGN D AND	AUTI PLUS	HORIT	Y (P) L EERS	TO IN	JOINT '	VENTU TS (P) I	RE W	TTH B.N KATHM	. CONSULTANCY ANDU, NEPAL
	-	MOTTA	ARBITM GLOORD MATERA	-		rear the				- 3	Bira	tnagat	*/			1	
(0	Vollan			1			M C	pel	/							4	>,
	<u> </u>						Mark	<i>l</i>									
	necked By			Submitted By				rified							App	roved E	By \
	Engineer			ontract Manage			Expert			CSE						m Leade	
Push	pak Pradhan		Ra	bindra Kr. Thak	ur		H.K	. Man	dal						Gires	sh Char	ıd



### REGIONAL URBAN DEVELOPMENT PROJECT Biratnagar Metropolitan City Contract No:- RUDP/ICB/BRT-02 Summary Sheet of Field Density Test Month April Year 2019 Location:-R-7 (Sidartha Chowk to neuro chokwk) Type of Material Sub-Base Moisture content % Density(gm/cc) Compaction % Sn. Lab.Ref.no Testing Date Chainage Max.Dry Field Dry Specified OMC% Compac Field MC% density density, tion % RUDP-SB-FD-1, R/S 14-Apr-19 0+050 5.80 5.32 2.225 2.170 97.59 95 RUDP-SB-FD-1, L/S 14-Apr-19 0+090 5.80 5.97 2.225 2.141 96.25 95 RUDP-SB-FD-1, R/S 14-Apr-19 0 + 2405.80 5.49 2.225 2.182 98.10 95 whority ( MIP INTERNA Contractor Consultant ZHONGHENG CONSTRUCTION GROUP INTERNATIONAL INSCINEERING CO. LTD BUILDING DESIGN AUTHORITY (P) LTD IN JOINT VENTURE WITH B.N. CONSULTANCY PVT. LTD AND PLUS ENGINEERS & ARCHITECTS (P) LTD, KATHMANDU, NEPAL Giratnagat \* Checked By Submitted By Verified By Approved By Engineer Contract Manager Export/Qty Surveyor Team Leader Pushpak Pradhan H.K. Mandal Rabindra Kr. Thakur Giresh Chand



	REG	IONAL UF	RBAN DEV	ELOPM Cropolitan C	ENT	PRO	OJE	CT	
		Co	ntract No:- RU	DP/ICB/BRT	-02				
		50	animary sheet of M	ontmy Test Repo	<u>rt</u>	Mor Ye			April 2019
	-		Location	1:-N-10		Type Mate		Sub	grade
Sn.	Lab.Ref no.	Location/Chainage	Source of Sample	Date of Testing	MDD	OMC	PI%	CBR%	Remarks
1	RUDP-S-01	N-10,(0+150)	Existing Road	9-Apr-19	1.950	8.40	9.71	6.40	
_									
1									
							214	73	1
					hority	(P) Lia			
	- //	Contractor National		. /		nsultant	-		
HON	GHENG CONS	TRUCTION CROUP CANCERING CO. LT	INTERNATIONAL	BUILDING DE VENTURE WITI PLUS ENG	H B.N. CO	DNSULT	ANCY ITECT	PVT. L	TD AND
	1		- 2		* B	iratnag			/
(P.	Vordhan		4	However			4	V	
	necked By Engineer		Submitted By Contract Manager	Verified By Expert Qty Survey	1005			pproved Team Lea	



	REGIO	ONAL U	Biratna	gar Me	VELOF etropolita UDP/ICB/	n City	Γ PROJ	JECT	
			Summar	ry Sheet o	of Field Densit	ty Test			
							Month	Apr	ril
							Year	201	
			Loc	ation:-N		T	pe of Material	Sub-G	
				Moistur	e content %		(gm/cc)	Compac	tion %
Sn.	Lab.Ref.no	Testing Date	Chanage	OMC%	Field MC%	Max.Dry density gm/cc	Field Dry density,	Compaction	Specifie %
1	RUDP-SG-FD-1, L/S	15-Apr-19	0+050	8.40	8.70	1.950	gm/cc	%	0.5
2	RUDP-SG-FD-1, R/S	1	0+110	8.40	8.88		1.891	96.96	95
3	RUDP-SG-FD-1, L/S	15-Apr-19	0+110	8.40	8.99	1.950	1.879	96.33	95
K	KODI -50-1 D-1, L/3	13-Apt-19	0-100	8.40	8.99	1.950	1.906	97.72	95
-	_								
-									
_									
П	11								
								L ST	
_									
							-		
				7					
$\neg$									
$\dashv$					1				
$\dashv$									
$\neg$									
$\dashv$									
-		1							
							7		
		1. 10. 15.5							\
+				15			V		1
		1							1
	1 13					/	ority (P)		
	TON!	tractor tractor	1	-		, mil	100	1	
-	Con	LIACTO	C	-	-	15/	Consultant	01	
ZHC	NGHENG CONSTRUCT ENGINEER	ION GROUP IN	TERNAT	IONAL	WITH B.N. CO	ONSULTANO	CY PVF. LTD	TD IN JOINT AND PLUS EN IMANDU, NEP	GINEERS
	Wallian	% CIT-00	1		May	2 130*	Biratnagar	2	/
	Madugn	t:2 .				•••••		U	
	Checked By	5	Sulmitted I	By	Kerifie	d Day		Annuaria I D.	
	Engineer Pushpak Pradhan			J	Merine	I Dy		Approved By	



			REGIO	NAL UR Bir Cor	atna	N D gar l t No:-	Metr	opol	itan	City		PR(	)JE	СТ			
				Su	mmar	Sheet	of Mo	nthly 7	Γest Re	eport							
														Mor Ye			April
					Locs	tion	·_S_1	30						Type	e of		2019 Sub-base
		Location of			Loca		Size in		nassina (	% By W	/eight			Mate	rial		Sub-base
Sn.	Lab.Ref no.	Sample	Source of Sample	Date of Testing	63.0	37.5	20.0	10.0	5.0	2.36	1.18	0.075	MDD	OMC	PI%	CBR%	Remarks
1	RUDP-SB-01	S-13C, (0+050)	Chisang Khola	24-Apr-19	100	88.66	70.58		45.16				2.226				
		1991)	Chronic Policia	24-2491-19	100	00.00	10.38	37.23	45.16	34.72	20.52	10.08	2.226	5.90	1.37	42.50	
			- 17 11														
	Maria de la companya della companya	,	2									-					
	*																
1.0	16																
			7 7														
-		2 3 3 3															
-					-												
		-21															
						-											
_		+		Spec. Limit :	100	65~95	50~85	40~75	30~60	20~45	15~37	4~15			<6	>30	
								1							~	~	
-		Con	tractor								2001	ty (P)					
		CO.FIRO	MONGHER			-		17 100		-	101	Cons	últant	-			
1 9	ZHONGHENG	ENGINEEL	ION GROUP INT UNG CO. LITE	ERNATIONAL		BUILD	ING D T. LTI	ESIGN AND	AUTH PLUS I	IORIT	Y (P) L EERS	TD IN .	JOINT	VENTUI TS (P) L	RE W	ITH B.N.	CONSULTANCY ANDU, NEPAL
69.	Vadlan	TENNATION	W GROUP IN	<u>J</u>		1/1	and a	1	-	( I	* Birt	tnagar	*		0	R	
	ecked By			Submitted By		(	\ Ver	ified I	Ву						Appr	oved B	······
	ngineer			ontract Manage		Exp	ert Qty			E						n Leader	
Push	oak Pradhan		Ra	bindra Kr. Thaku	ır		HK	Mano	tal							h Chan	

	REGIO	Bi	iratnag	ar Met	ELOP tropolitan DP/ICB/E	City	Γ PROJ	ECT	
			Summary	Sheet of	Field Density	Test			
			(1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-	f.	.5		Month		April
				. ~	100		Year		2019
			Locat	tion:-S-	e content %		ype of Material	The second secon	ub-Base
2	Lab.Ref.no	T4: D-4-	Cl '				y(gm/cc)		paction %
Sn.	Lab.Rel.no	Testing Date	Chainage	OMC%	Field MC%	Max.Dry	Field Dry	Compac	Specified %
1	RUDP-SB-FD-1, R/S	27-Apr-19	0+030	5.90	4.77	density 2,226	density,	tion 96.70	95
2	RUDP-SB-FD-1, L/S	_	0+060	5.90	5.43	2.226	2.174	97.68	95
2	RODI SB I D-1, E/S	21-1101-19	0.000	3.70	3,43	2.220	2.174	97.00	, 93
	*								
							*		
		10 mm							
		7.97						A	
	SUCTION GROUP INTER	RNATIO				/	Authority (P)		
							sultant	180	
	ZHONGHENG COSSI NTERNATIONAL ENGI	NEERING CO.	DUP LTD	BUILDIN B.N	. CONSULTA	NCY PVT.	(P) LTD IN J LTD AND PLU D, KATHMAN	JS ENGINE	EERS &
	Conf. We	ano	× ×	¿ CA	g	and	Biratnagat #		/
	orlhan ecked By	Submitted By,		Verifie				Approved	
		ontract Manage abindra Kr. Thak		Expert Qty H.K.Ma	Surveyor/CSE andal			Team Lea Giresh Ch	



				REGIONA	Bira Cont	tnagar N	letropol RUDP/IC	litan City CB/BRT-02						
			-				Recording to the second				Month	h		oril
											Year		20	19
			Tetsing	Consistar	ncy & Setting	Time	Soundnes		Date of	Date of	Testing	Streng	th N/mm <sup>2</sup>	
.N.	Lab Ref.no.	Type of cement	Date'	Normal Cons.(%)	Initial(Min)	Final (min)	s(mm)	Fineness(%)	Casting	7 Days	28 Days	7 days	28 Days	Remark
1	40	Saptakoshi OPC	15-Mar-19						16-Mar-19	23-Mar-19	13-Apr-19		46.96	
2	41	Saptakoshi OPC	22-Mar-19						23-Mar-19	30-Mar-19	20-Apr-19		45.23	
3	42	Saptakoshi OPC	3-Apr-19	28.20	149.00	290.00	2.16	1.73	4-Apr-19	11-Apr-19	2-May-19	25.28		
4	.43	Saptakoshi OPC	12-Apr-19	29.50	180.00	299.00	1.98	2.70	14-Apr-19	21-Apr-19	12-May-19	27.03		
	11 14													
	- A													
		7												
	4 1	Sp.Limi	t:		Min-30	Max-600	<10	<10				>23	>43	
ZH	ONGHENG	CONSTRUCTIO	GROUP ON CALOUR	INTERNATIO					GN AUTHOR	Consultant RITY (P) LED DPDUS ENG	IN JOINT V			
	(Yav)	han sed By	OHZ * CU	Submitte			Veri	fied By	3	THMANDU?	NEPAL		Approved	 By
	Eng	ineer		Contract M	lanager			ty Surveyor Mandal				1	eam Lead	4





	REGIO	В	iratnag	gar Me	VELOP tropolitan JDP/ICB/B	City	PROJ	ECT	
					Field Density				
					*		Month	1	April
							Year		2019
		]	Location	1:-R-9(T	'3L11K)		pe of Material		ib-Base
					e content %	Density		-	action %
n.	Lab.Ref.no	Testing Date	Chainage	OMC%	Field MC%	Max.Dry density	Field Dry density,	Compac	Specified %
1	RUDP-SB-FD-1, R/S	20-Apr-19	0+050	5.75	6.02	2.216	2.133	96.23	95
2	RUDP-SB-FD-1, R/S	20-Apr-19	0+080	5.75	5.37	2.216	2.169	97.86	95
3	RUDP-SB-FD-1, C/L	20-Apr-19	0+120	5.75	6.23	2.216	2.134	96.28	95
1	RUDP-SB-FD-1, R/S	20-Apr-19	0+150	5.75	6.10	2.216	2.166	97.75	95
								/	
				1847					
				-					
7									
			<u> </u>						
-									
-				-					
-				1					
-				-	· · · · · · · · · · · · · · · · · · ·				
_			-					-	
_							-		
_							-		
				-					
					2.01				
				3.423	11				
						Auth	ority (P)		
7 10	co: Contrac	ZHONGHENG TOP	1.5			10/	ultant	1	
	ZHONGHENG CONSTI	RUCTION GRO NEERING CO	OUP . LTD	BUILDI B.	NG DESIGN A N. CONSULTA ARCHITE	UTHORITY NCVZVP. L	(P) LTDIN J	SENGINE	ERS &
P	Vadham	anni a sa	, , ,	Mond		* Bin	ratnagar * !	K	
En		Submitted By Contract Manag abindra Kr. Tha	jer -	Export/Qt	ed By y Surveyor Mandai			Approve Team Le Giresh C	ader



					nagar l	Metropo RUDP/I	olitan Ci	ty					
			1	Summary Sheet of	Month	ly Test R	eport of (	Cancrete	Sand	Mon	41.		•
										Yea		Ap	
	1									Type Mater	of	Cancret	
S.n.	Lab.Ref no.	Date of Test	Location of Sample	Source of Sample	10	4.75	eve Size in	mm / % Pa	ssing by we	0.300	0.150	Clay Contetnt%	Remarks
1	RUDP-CS-311	1-Apr-19	R-2	Chisang Khola	100.00	91.94	64.20	54.43	28.72	18.96	7.24	1.51	
2	RUDP-CS-312	2-Apr=19	R-110	Chisang Khola	100.00	91.45	70.41	58.34	28.00	16.85	6.71	1.31	
3	RUDP-CS-313	3-Apr-19	T3L12	Chisang Khola	100.00	91.46	74.29	59.24	27.50	18.96	7.89	1.11	
4	RUDP-CS-314	4-Apr-19	Madhumara-yard	Chisang Khola	100.00	94.75	69.92	60.36	29.99	18.84	7.50	1.70	
5	RUDP-CS-315		R-7	Chisang Khola	100.00	91.69	63.00	53.71	30.89	20.78	7.74	1.06	
6	RUDP-CS-316		R-82	Chisang Khola	100.00	92.30	64.75	55,35	32.33	22.53	6.48	1.37	
7	RUDP-CS-317	6-Apr-19	R-44	Chisang Khola	100.00	91.04	69.01	56.72	37.84	25.11	7.46	1.79	-
8	RUDP-CS-318		Cn2cn3	Chisang Khola	100.00	91.63	70.44	57.34	31.13	16.85	7.49	1.45	
9	RUDP-CS-319		DDC Yard	Chisang Khola	100.00	93.53	81.53	67.41	38.00	21.40	9.41	1.13	7
10			R-2	Chisang Khola	100.00	90.74	73.66	50.86	29.70	20.16	9.08	1.13	
11			R-44	Chisang Khola	100.00	91.53	73.51	45.01	27.58	16.43	7.96	1.03	
12	RUDP-CS-322		Rani-Site	Chisang Khola	100.00	97.29	68.74	54.94	35.32	22.33	8.53	1.59	
13	RUDP-CS-323		T2L19Y	Chisang Khola	100.00	91.79	67.54	57.39	37.10	26.96	7.73	1.79	
14	RUDP-CS-324		Koshi-yard	Chisang Khola	100.00	91.15	78.56	48.28	23.95	13.51	6.06	1.48	
15	RUDP-CS-325	19-Apr-19	T1L5	Chisang Khola	100.00	93.46	74.35	52.72	29.28	14.19	4.63	1.28	
16	RUDP-CS-326	20-Apr-19	R-46	Chisang Khola	100.00	93.33	61.93	42.51	26.57	16.91	8.21	1.48	
17	RUDP-CS-327		T2L22A	Chisang Khola	100.00	91.01	79.72	53.34	22.07	13.45	7.06	1.19	
18	RUDP-CS-328	22-Apr-19	DDC Yard	Chisang Khola	100.00	93.28	78.13	53.36	20.67	12.88	7.22	1.69	
				Spec. Limit :	100	89~100	60~100	30~100	15~100	5~70	0~15	<3%	
-			Contractor				-		2000	onsultant			
2	ZHONGHENC		1 CO CO OF 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	P INTERNATION TD	NAL		N. CONS	SULTAN	THORIT	Y (P) LY	D IN JO	DINT VENT S ENGINER DU, NEPAL	
60	Yadhen			D		Work	gen-		UID INS * E	Piratnanar.		R	
	cked By			Submitted By Contract Manager		Verified	By ty Survey	or/CSF				Approved Team Lead	
	pak Pradhan			Rabindra K. Thak		H.K. Mai		OI/CSE				7.75.00	
40.00	par i raditati			Kaomura K. Illak	ш	III.IX. IVIdi	nuai					Giresh Char	10

				Contr	nagar I act No:-	Metropo RUDP/I	litan Ci CB/BRT-	ty 02		ECT			
				Summary Sheet of	Month	ly Test Ro	eport of (	Cancrete	Sand	Mon	th	Ap	ril
										Yea	r	20	
										Type of M	laterial	Cancre	te Sand
S.n.	Lab.Ref no.	Date of	Location of	Source of Sample		Si	eve Size in	mm / % Pa	ssing by w	eight		Clay	
J.II.	3.7	Test	Sample	Source of Sample	10	4.75	2.36	1.18	0.600	0.300	0.150	Contetnt%	Remarks
19	RUDP-CS-329	23-Apr-19	R-44	Chisang Khola	100.00	91.52	81.56	54.50	21.59	12.53	6.43	1.13	
20	RUDP-CS-330	26-Apr-19	R-46	Chisang Khola	100.00	92.55	80.45	54.93	20.17	11.48	5.34	1.42	
_								/					
		V											
-		-	4										
	-												
	(All marks									1			
-													
					-								
				Spec. Limit:	100	89~100	60~100	30~100	15~100	5~70	0~15	<3%	
-			Contractor				/			Consultant			
	O-Company		- W W :	24 1 - 12/61		DILLI	NG DEC	TON AT					****
2	ZHONGHENO		NEERING CO. L	P INTERNATION TD	NAL	B.	N. CONS	SULTAN	CY PVI	LIDA	ND PLU	DINT VENT S ENGINEI DU, NEPAL	ERS &
6	Vadhan		15.6	A		Mond	<b>9</b>		* Bir	atnagat	/	8	
	cked By			Submitted By	22.	Verified	By					Approved	By
	neer			Contract Manager		Expert Q	y Surveye	or/CSE				Team Lead	
hish	pak Pradhan			Rabindra K. Thak	ur	H.K. Mar						Giresh Char	

			REGIO	NAL URBA	N DE	VELO	OPM	EN.	ΓPR	OJECT			
						etropol							
				Contra	ct No:- 1	RUDP/IC	B/BRT	T-02					
			<u>s</u>	ummary Sheet o	f Month	ly Test R	eport o	of 20m	m Agg.				
										Mor	ıth	Ap	ril
										Ye:	ar	20	
										Type of N	(laterial	20 mm	
.n.	Lab.Ref no.	Date of Testing	Location of Sample	Source of Sample	Sieve	Size in mm	/ % Pa:	ssing by	weight 5	L.A.A.%	Fl and EI %		Remarks
1	RUDP-CA-311	1-Apr-19	Koshi-yard	Chisang Khola	100.00	92.96	43.58	5.00	2.41	26.10	20.68/16.81	20.80	
2	RUDP-CA-312	2-Apr-19	R-110	Chisang Khola	100.00	97.43	34.42	4.37	2.33	22.50	17-84/16.26	20.80	
3	RUDP-CA-313	5-Apr-19	7 R-2	Chisang Khola	100.00	97.54	29.21	4.73	2.07	27.76			
1	RUDP-CA-314	5-Apr-19	R-44	Chisang Khola	100.00	98.13	32.08	4.28	1.93	29.18	21.31/17.40 19.60/17.54	20.32	
5	RUDP-CA-315	6-Apr-19	R-7	Chisang Khola	100.00	97.18	36.83	6.76	2.32	27.58	20.03/15.51	21.02	_
5	RUDP-CA-316	7-Apr-19	T1L5	Chisang Khola	100.00	96.97	39.39	7.09	2.32	28.10	18.46/16.16	19.71 21.51	
	RUDP-CA-317	7-Apr-09	DDC-yard	Chisang Khola	100.00	96,97	39.39	7.09	2.32	26.76	18.46/16.16	20.86	
8	RUDP-CA-318	7-Apr-19	T1L5	Chisang Khola	100,00	96,86	40.78	7.34	2.41	32.10	17.01/16.16	21.40	
)	RUDP-CA-319	* 8-Apr-19	T3L12	Chisang Khola	100.00	97.37	42.04	5.69	2.63	26.02	17.01/16.16	19.24	
0	RUDP-CA-320	. 9-Apr-19	T2L22A	Chisang Khola	100.00	96.24	46.22	6.44	3.45	28.42	17.25/16.90	19.24	
1	RUDP-CA-321	10-Apr-19	Koshi-yard	Chisang Khola	100.00	95.32	42.90	7.58	3.29	22.10	18.53/16.94	23.29	
2	RUDP-CA-322	11-Apr-19	R-21	Chisang Khola	100.00	93.92	37.77	5.91	2.54	24.98	17.52/15.90	21.70	
3	RUDP-CA-323	13-Apr-19	Rani-site	Chisang Khola	100.00	95.09	41.10	6.82	1.91	26.12	18.58/16.47	22.08	
4	RUDP-CA-324	16-Apr-19	R-82	Chisang Khola	100.00	94.84	41.25	7.31	2.28	24.90	18.04/13.36	21.87	
5	RUDP-CA-325	18-Apr-19	DDC-yard	Chisang Khola	100.00	95.02	40.52	6.17	2.49	29.58	16.06/13.36	19.43	
6	RUDP-CA-326	22-Apr-19	Madhumara-yard	Chisang Khola	100.00	94.78	35.53	4.73	2.13	27.50	16.51/13.76	21.45	
7	RUDP-CA-327	23-Apr-19	R-46	Chisang Khola	100.00	95.89	33.67	5.11	2.00	25.76	17.29/14.37	20,43	
3	RUDP-CA-328	23-Apr-19	R-2	Chisang Khola	100.00	94.73	32.42	5.97	1.82	23.76	19.37/17.32	21.65	
)	RUDP-CA-329	25-Apr-19	Koshi-yard	Chisang Khola	100.00	95.02	36.18	5.64	1.72	25.10	20.95/17.32	22.12	
)	RUDP-CA-330	26-Apr-19	R-110	Chisang Khola	100.00	96.04	40.53	6.59	2.28	26.82	20.32/16.85	21.36	
_				Spec. Limit:	100/	85~100,	0~70	0~25	0~5	<35	< 25	< 25	
_					. /	/		/	1	1	/	/	
		C	ontractor		~				* sho	TITY Consult	ant		
			* 100	1 10 10 10		92933		-	100	0.0			
	ZHONGHENO	G CONSTRUC	TION GROUP	INTERNATION.	AT.	BUII	DING	DESI	GN AU	THORITY	P) LTD IN	JOINT VI	ENTURE
			ERING CO. LTI			WITH	B.N.	CONS	ULTAN	CY PVT. I	ED AND P	LUS ENGI	NEERS &
			* 2				AF	RCHIT	ECTS (	P) LTD, K	ATHMAND	U. NEPAL	
		· Const	Suk a Sub-	-		~	19	200	=	/	5/		
/	2/1/			1		A ONE	1		30	_ *	7	P	
10	Vadhan			1/1	. 1	W.C.			*	Piratnagar T		R	
C	hecked By					Z				-			
	Engineer			Submitted			ified B					Approv	ad By
	pak Pradhan			Contract Man		Expert Q			SE			Team L	
uSI	ipak riadhan			Rabindra K. Tl	nakur	H.K	Manda	1				Giresh C	hand

			REGIO	Bir Cont	BAN DEVE atnagar Metro ract No:- RUDI ary Sheet Of Mon	P/ICB/BRT-02	ECT	
							Month	April
							Year	2019
Т	Lab						Type of Material	Brick
N.	Ref.No.	Testing Date	Location of Sample	Source of Brick	Name Of Brick	Water Absorption of Brick(%)	Strength of Brick(N/mm²)	Remark
1	486	2-Apr-19	R-46	Dadarbairya	ACC	13.18	15.08	
2	487	2-Apr-19	R-2	Dadarbairya	ACC	14.73	14.22	
3	488	3-Apr-19	R-2	Dadarbairya	ANAND	10.91	13.26	
1	489	3-Apr-19	T2L22A	Dadarbairya	ANAND	12.32	14.83	
5	490	4-Apr-19	R-110	Dadarbairya	ACC	13.35	14.48	
5	491	4-Apr-19	R-46	Dadarbairya	ACC	11.55	15.44	
7	492	5-Apr-19	T3L12	Dadarbairya	ANAND	13.08	13.22	
3 .	493	5-Apr-19	T2L19Y	Dadarbairya	ACC	12.70	14.96	
)	494	6-Apr-19	T1L5	Dadarbairya	ACC	14.52	13.01	
0	495	7-Apr-19	R-7	Dadarbairya	ACC	14.86	13.72	
1	496	7-Apr-19	R-82	Dadarbairya	ACC	14.13	14.08	
2	497	7-Apr-19	R-44	Dadarbairya	ACC	12.93	13.10	
.3	498	8-Apr-19	Rani Site	Dadarbairya	ACC	13.90	14.10	
4	499	8-Apr-19	T2L24E	Dadarbairya	ACC	13.54	14.31	
5	500	9-Apr-19	R-7	Dadarbairya	ACC	14.37	13.22	
6	501	9-Apr-19	R-82	Dadarbairya	ANAND	14.35	13.55	
7	502	9-Apr-19	T3L10	Dadarbairya	ANAND	13.48	14.73	
8	503	9-Apr-19	R-21	Dadarbairya	ANAND	13.54	14.23	
9	504	10-Apr-19	T1L5	Dadarbairya	ANAND	13.75	13.82	
0	505	10-Apr-19	R-46	Dadarbairya	ACC	12.93	14.39	
1	506	10-Apr-19	R-2	Dadarbairya	ANAND	14.31	13.78	
2	507	10-Apr-19	R-110	Dadarbairya	ANAND	15.10	14.37	
3	508	10-Apr-19	T2L22A	Dadarbairya	ANAND	13.11	13.99	
4	509	10-Apr-19	R-82	Dadarbairya	ACC	14.33	14.83	
5	510	11-Apr-19	R-44	Dadarbairya	ACC	13.49	13.76	
6	511	11-Apr-19	- R-7	Dadarbairya	ACC	13.04	14.62	
7	512	11-Apr-19	R-46	Dadarbairya	ACC	14.37	13.75	
8	513	11-Apr-19	R-7	Dadarbairya	ACC	13.38	14.54	
9	514	11-Apr-19	Rani Site	Dadarbairya	ANAND	14.88	13.58	
0	515	11-Apr-19	Rani Site	Dadarbairya	ANAND	12.86	14.68	
			Sp. Limit			<20%	>8 to 10 N/mm²	
om	ments:-					inority (P)	7	
2		Co	ntractor		15	Consultar	id.	
NON	NGHENG CO		GROUP INTERNATION	AL ENGINEERING	BUILDING DESIGN F	AUTHORITY (P) LTD IN JOINT VENT PLUS ENGINEERS & ARCHITECTS (P)	TRE WITH B.N. CONSULTANCY	PVT. LTD A
			PROTESTINE OF CALL MORNING			* Biratnagat *		
P	Yadhar	η	1		Market		B	
	ecked By ngineer		Submitted Contract Ma	The same of the sa	Verified By Expert/Qty Surveyor		Approved By	
	ak Pradhan		Rabindra Kr.		H.K.Mandal		Team Leader Giresh Chand	



			REGIO	Bir Conti	atnagar Metro ract No:- RUDI ary Sheet Of Mon	P/ICB/BRT-02		1
							Month	April
							Year Type of Material	2019 Brick
N.	Lab Ref.No.	Testing Date	Location of Sample	Source of Brick	Name Of Brick	Water Absorption of Brick(%)	Strength of Brick(N/mm²)	Remark
1	516	13-Apr-19	T3110	Dadarbairya	ACC	13.12	13.17	
2	517	13-Apr-19	R-2	Dadarbairya	ACC	14.14	13.94	
3	518	13-Apr-19	T2L24E	Dadarbairya	ACC	13.29	12.66	
4	519	13-Apr-19	T3L12	Dadarbairya	ANAND	10.55	13.78	
5	520	13-Apr-19	R-2	Dadarbairya	ANAND	14.28	13.40	
6	521	13-Apr-19	R-21	Dadarbairya	ANAND	13.62	12.74	
7	522	13-Apr-19	R-82	Dadarbairya	ANAND	14.00	12.99	
8	523	14-Apr-19	T3L12	Dadarbairya	ANAND	15.69	13.57	
9	524	14-Apr-19	T2L19Y	Dadarbairya	ACC	14.64	12.82	
0	525	14-Apr-19	R-2	Dadarbairya	ACC	13.23	12.88	
1	526	14-Apr-19	R-2	Dadarbairya	ACC	14.36	13.71	
2	527	16-Apr-19	T1L5	Dadarbairya	ACC	13.88	14.43	
3	528	16-Apr-19	T3L12	Dadarbairya	ACC	15.43	13.36	
4	529	16-Apr-19	Rani site	Dadarbairya	ANAND	14.97	12.23	
5	530	16-Apr-19	R-82	Dadarbairya	-	13.84	12.81	
6	531		T2L22A		ANAND	12.74		
7	532	17-Apr-19	R-46	Dadarbairya	ANAND		15.99	
-		17-Apr-19	R-2	Dadarbairya	ACC	11.67	15.43	
8	533	17-Apr-19		Dadarbairya	ACC	13.35	14.47	-
9	534	17-Apr-19	R-110	Dadarbairya	ACC	12.65	13.35	
0	535	17-Apr-19	R-46	Dadarbairya	ACC	13.61	12.23	
1	536	19-Apr-19	R-44	Dadarbairya	ACC	14.95	13.83	
2	537	19-Apr-19	R-44	Dadarbairya	ACC	14.20	15.14	
3	538	19-Apr-19	T1L5	Dadarbairya	ACC	14.71	13.93	
4	539	19-Apr-19	Rani site	Dadarbairya	ACC	15.58	15.25	
5	540	19-Apr-19	Rani site	Dadarbairya	ACC	14.95	15.76	
6	541	19-Apr-19	T2L24E	Dadarbairya	ACC	15.70	15.03	
7	542	19-Apr-19	T1L5	Dadarbairya	ACC	14.19	13.68	
8	543	19-Apr-19	T2L19Y	Dadarbairya	ACC	13.52	13.61	2
9	544	21-Apr-19	Rani site	Dadarbairya	ACC	14.77	14.24	
0	545	21-Apr-19	R-21	Dadarbairya	ANAND	14.36	13.64	
	ma canta.		Sp. Limit			<20%	>8 to 10 N/mm²	
3111	ments:-					100 (8)		
					-	Thority (P)	Lin	
,		Co	ontractor, Zilone		THE TITE	Consultar	nt (0)	
101	NGHENG C		GROUP INTERNATION CO. LTD	AL ENGINEERING		AUTHORITY (P) LTD IN JOINT VENT PLUS ENGINEERS & ARCHITECTS (P)	LTD, KATHMANDU, NEPAL	PVT. LTD A
(P)	You ho	77)	A. Submitte	d By	Verified By	* Biratin	Approved By	
1000	The state of the s		Contract M				Uhbioseg ph	



			REGIO	Bir Cont	atnagar Metro	P/ICB/BRT-02	JEC I	N S
							Month	April
							Year Type of Material	2019 Brick
5.N.	Lab Ref.No.	Testing Date	Location of Sample	Source of Brick	Name Of Brick	Water Absorption of Brick(%		Remarks
61	546	21-Apr-19	T3110	Dadarbairya	ACC	15.64	12.80	
62	547	21-Apr-19	R-110	Dadarbairya	ACC	15.37	14.09	
63	548	21-Apr-19	R-7	Dadarbairya	ACC	15.45	14.48	
_								
					2127	Table 1		
-						- E-2 *		
					15	3		
-			1		10.			
1						*		
-								
7								
								-
4	100							
+								
1								-
1								
T						187		
					¥ -			
			-					
0.00	ments:-		Sp. Limit			<20%	>8 to 10 N/mm²	
.UIII	ments:-					Authority (P)	The	
		11	entractor * ZHONON	1	0.2	Consul	7 77	
HON	GHENG C		SROUP INTERNATION	AL ENGINEERING	BUILDING DESIGN	AUTHORITY (P) LTD IN JOINT VE PLUS ENGINEERS & ARCHITECTS	NTURE WITH B.N. CONSULTANCY (P) UTD, KATHMANDU, NEPAL	PVT. LTD ANI
			Manyheas a North	,	. *	* Biratnag	i i	
			1		N. Secol	/		
Po	ortho	187	K		Marie		O	
	cked By		Submitted		Verified By		Approved By	
	igineer ak Pradhan		Contract Ma Rabindra Kr.		Expert/Qty Surveyor H.K.Mandal		Team Leader Giresh Chand	
		12		15:			on estrictiona	



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

								Month		Aj	pril
								Year		20	019
							Ту	pe of Material		Conc.	. Cube
S.N.	Location	Lab Ref.no.	Type of Cement	Brand of	Source of	Date of	Date of	Testing	Strength,	N/mm2	Concr
		Duo Troi.no.	Type or comen	Cement	Sand+Agg.	Casting	7 Days	28 Days	7 Days	28 Days	Grad
1	T3L5A	RUDP-1686	Shalimar Gold	OPC	Chisang Khola	4-Mar-19	11-Mar-19	1-Apr-19		23.21	M2
2	koshi Yard	RUDP-1687	Shalimar Gold	OPC	Chisang Khola	4-Mar-19	11-Mar-19	1-Apr-19		21.86	M2
3	T2L25B	RUDP-1688	Shalimar Gold	OPC	Chisang Khola	4-Mar-19	11-Mar-19	1-Apr-19		23.06	M2
4	T3L23C	RUDP-1689	Shalimar Gold	OPC	Chisang Khola	5-Mar-19	12-Mar-19	2-Apr-19		22.91	M2
5	T2L19B	RUDP-1690	Shalimar Gold	OPC	Chisang Khola	5-Mar-19	12-Mar-19	2-Apr-19		23.58	M
6	koshi Yard	RUDP-1691	Shalimar Gold	OPC	Chisang Khola	5-Mar-19	12-Mar-19	2-Apr-19		23.50	M
7	R-84	RUDP-16/12	Shalimar Gold	OPC	Chisang Khola	6-Mar-19	13-Mar-19	3-Apr-19		24.10	M
8	R-2	RUDP-1693	Shalimar Gold	OPC	Chisang Khola	6-Mar-19	13-Mar-19	3-Apr-19		24.25	M2
9	R-44	RUDP-1694	Shalimar Gold	OPC	Chisang Khola	6-Mar-19	13-Mar-19	3-Apr-19		23.50	M2
10	DDC YARD	RUDP-1695	Shalimar Gold	OPC	Chisang Khola	6-Mar-19	13-Mar-19	3-Apr-19		22.91	M2
11	DDC YARD	RUDP-1696	Shalimar Gold	OPC	Chisang Khola	6-Mar-19	13-Mar-19	3-Apr-19		22.99	M2
12	Madhumara Yard	RUDP-1697	Shalimar Gold	OPC	Chisang Khola	6-Mar-19	13-Mar-19	3-Apr-19		22.03	M2
13	T2L24E	RUDP-1698	Shalimar Gold	OPC	Chisang Khola	7-Mar-19	14-Mar-19	4-Apr-19		23.06	M2
14	R-84	RUDP-1699	Shalimar Gold	OPC	Chisang Khola	7-Mar-19	14-Mar-19	4-Apr-19		21.08	
15	R-23	RUDP-1700	Shalimar Gold	OPC	Chisang Khola	7-Mar-19	14-Mar-19	4-Apr-19		23.36	M
16	R-2	RUDP-1701	Shalimar Gold	OPC	Chisang Khola	7-Mar-19	14-Mar-19	4-Apr-19		100000000000000000000000000000000000000	Ma
17	R-85	RUDP-1702	Shalimar Gold	OPC	Chisang Khola	7-Mar-19 7-Mar-19	100000000000000000000000000000000000000			24.25	M2
18	DDC YARD	RUDP-1703	Shalimar Gold	OPC		7-Mar-19	14-Mar-19	+ 4-Apr-19		23.65	M2
19	R-44	RUDP-1703	Shalimar Gold		Chisang Khola		14-Mar-19	4-Apr-19		21.78	M2
				OPC	Chisang Khola	7-Mar-19	14-Mar-19	4-Apr-19		22.26	M2
2()	Madhumara Yard	RUDP-1705	Shalimar Gold	OPC	Chisang Khola	8-Mar-19	15-Mar-19	5-Apr-19		28.06	M2
21	CN2CN3	RUDP-1706	Shalimar Gold	OPC	Chisang Khola	8-Mar-19	15-Mar-19	5-Apr-19		23.06	Ma
22	koshi Yard	RUDP-1707	Shalimar Gold	OPC	Chisang Khola	8-Mar-19	15-Mar-19	5-Apr-19		22.47	M
23	R-23	RUDP-17()8	Shalimar Gold	OPC	Chisang Khola	8-Mar-19	15-Mar-19	5-Apr-19		23.06	M2
24	T2L25B	RUDP-1709	Shalimar Gold	OPC	Chisang Khola	9-Mar-19	16-Mar-19	6-Apr-19		21.71	M2
25	T3L10E	RUDP-1710	Shalimar Gold	OPC	Chisang Khola	9-Mar-19	16-Mar-19	6-Apr-19		22.41	M2
26	T3L13K	RUDP-1711	Shalimar Gold	OPC	Chisang Khola	9-Mar-19	16-Mar-19	6-Apr-19		23.50	M2
27	R-84	RUDP-1712	Shalimar Gold	OPC	Chisang Khola	10-Mar-19	17-Mar-19	7-Apr-19		22.91	M2
28	T3L10E	RUDP-1713	Shalimar Gold	OPC	Chisang Khola	10-Mar-19	17-Mar-19	7-Apr-19		21.78	M2
29	CN2CN3	RUDP-1714	Shalimar Gold	OPC	Chisang Khola	10-Mar-19	17-Mar-19	7-Apr-19		22.11	M2
30	Madhumara Yard	RUDP-1715	Shalimar Gold	OPC	Chisang Khola	10-Mar-19	17-Mar-19	7-Apr-19		27.23	M2
31	Madhumara Yard	RUDP-1716	Shalimar Gold	OPC	Chisang Khola	10-Mar-19	17-Mar-19	7-Apr-19		22.51	M2
32	R-9B	RUDP-1717	Shalimar Gold	OPC	Chisang Khola	11-Mar-19	18-Mar-19	8-Apr-19		22.48	M2
33	T1L5A	RUDP-1718	Shalimar Gold	OPC	Chisang Khola	11-Mar-19	18-Mar-19	8-Apr-19		21.78	M2
34	DDC YARD	RUDP-1719	Shalimar Gold	OPC	Chisang Khola	11-Mar-19	18-Mar-19	8-Apr-19	71 7.1	23.21	M2
35	R-44	RUDP-1720	Shalimar Gold	OPC	Chisang Khola	11-Mar-19	18-Mar-19	8-Apr-19		22.91	M2
36	T2L24E	RUDP-1721	Shalimar Gold	OPC	Chisang Khola	11-Mar-19	18-Mar-19	8-Apr-19		23.36	M2
37	CDO MARG	RUDP-1722	Shalimar Gold	OPC	Chisang Khola	11-Mar-19	18-Mar-19	8-Apr-19		22.44	M2
38	Madhumara Yard	RUDP-1723	Shalimar Gold	OPC	Chisang Khola	11-Mar-19	18-Mar-19	8-Apr-19		32.44	M3
30	Madhuara Yard	RUDP-1724	Shalimar Gold	OPC	Chisang Khola	11-Mar-19	18-Mar-19	8-Apr-19		22.91	M2
40	Ram site	RUDP-1725	Shalimar Gold	OPC	Chisang Khola	11-Mar-19	18-Mar-19	8-Apr-19		21.93	M2
11	Koshi Yard	RUDP-1726	Saptakoshi	OPC	-Chisang Khola	12-Mar-19	19-Mar-19	9-Apr-19		21.78	M2
12	R-44	RUDP-1727	Saptakoshi	OPC '	Chisang Khola	12-Mar-19	19-Mar-19	9-Apr-19		22.91	M2
13	Madhuara Yard	RUDP-1728	Saptakoshi	OPC	Chisang Khola	12-Mar-19					
14				// POST 50 TO		200000000000000000000000000000000000000	19-Mar-19	9-Apr-19		22.41	M2
	Koshi Yard	RUDP-1729	Saptakoshi	OPC	Chisang Khola	13-Mar-19	20-Mar-19	10-Apr-19		23.03	M2
45	T1L5A	RUDP-1730	Saptakoshi	OPC	Chisang Khola	13-Mar-19	20-Mar-19	10-Apr-19		23,50	M2
46	Rani site	RUDP-1731	Saptakoshi	OPC	Chisang Khola	13-Mar-19	20-Mar-19	10-Apr-19		23.36	M2
47	DDC YARD	RUDP-1732	Saptakoshi Saptakoshi IERWATIONA	OPC	Chisang Khola	13-Mar-19	20-Mar-19	10-Apr-19	` '	23.43	M2
48	T2L25B	TION GROUP IN	TED approvision	OPC	y Chisàng Khola	13-Mar-19	20-Mar-19	-10-Apr-19		22.91	M2

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

Wadhon Checked By

Checked By , Engineer Pushpak Pradhan Submitted By Contract Manager Rabindra K.Thakur

Verified By
Expert Qty Surveyor/CSE
H.K. Mandal

on a man



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

								Month		AI	oril
								Year		-	19
							т	ype of Material			Cube
				Brand of	Source of	Date of	Date of		Strength		
S.N.	Location	Lab Ref.no.	Type of Cement	Cement	Sand+Agg.	Casting	7 Days	28 Days	7 Days	28 Days	Concr
49	R-84	RUDP-1734	Saptakoshi	OPC	Chisang Khola	14-Mar-19	21-Mar-19	11-Apr-19	, Dajo	22.51	M20
50	Madhuara Yard	RUDP-1735	Saptakoshi	OPC	Chisang Khola	14-Mar-19	21-Mar-19	11-Apr-19		22.33	M20
51	T2L25B	RUDP-17.86	Saptakoshi	OPC	Chisang Khola	15-Mar-19	22-Mar-19	12-Apr-19	1	23.28	M20
52	R-9B	RUDP-1737	Saptakoshi	OPC	Chisang Khola	15-Mar-19	22-Mar-19	12-Apr-19	1	22.91	M20
53	R-44	RUDP-1738	Saptakoshi	OPC	Chisang Khola	15-Mar-19	22-Mar-19	12-Apr-19		23.21	M20
54	T3L10E	RUDP-1739	Saptakoshi	OPC	Chisang Khola	15-Mar-19	22-Mar-19	12-Apr-19		23.25	M20
55	R-2	RUDP-1740	Saptakoshi	OPC	Chisang Khola	16-Mar-19	23-Mar-19	13-Apr-19	1	23.73	M20
56	T3L13K	RUDP-1741	Saptakoshi	OPC	Chisang Khola	16-Mar-19	23-Mar-19	13-Apr-19	-	23.73	
57	R-10	RUDP-1742	Saptakoshi	OPC	Chisang Khola	16-Mar-19	23-Mar-19	13-Apr-19		22.41	M2
58	DDC YARD	RUDP-1743	Saptakoshi	OPC	Chisang Khola	17-Mar-19	24-Mar-19	14-Apr-19			M2
59	R-27	RUDP-1744	Saptakoshi	OPC	Chisang Khola	17-Mar-19	24-Mar-19	14-Apr-19		23.21	M2
60	T3L6	RUDP-1745	Saptakoshi	OPC	Chisang Khola	17-Mar-19	24-Mar-19	14-Apr-19		22.91	M2
61	R-76	RUDP-1746	Saptakoshi	OPC	Chisang Khola	17-Mar-19	24-Mar-19			21.63	M2
62	Madhuara Yard	RUDP-1747	Saptakoshi	OPC	Chisang Khola	17-Mar-19		14-Apr-19	-	24.02	M2
63	R-44	RUDP-1748	Saptakoshi	OPC	Chisang Khola	17-Mar-19	24-Mar-19	14-Apr-19		32.66	M3
64	R-9B	RUDP-1749	Saptakoshi	OPC			24-Mar-19	14-Apr-19	-	22.91	M2
65	T3L13K	RUDP-1750	Saptakoshi		Chisang Khola	18-Mar-19	25-Mar-19	15-Apr-19		23.06	M2
66	T3L10 E	RUDP-1751	Saptakoshi	OPC	Chisang Khola	18-Mar-19	25-Mar-19	15-Apr-19		22.91	M2
67		RUDP-1752		OPC	Chisang Khola	19-Mar-19	26-Mar-19	16-Apr-19		23.73	M2
8	Madhuara Yard		Saptakoshi	OPC	Chisang Khola	19-Mar-19	26-Mar-19	16-Apr-19		27.08	M2
-	R-2	RUDP-1753	Saptakoshi	OPC	Chisang Khola	20-Mar-19	27-Mar-19	17-Apr-19		22.91	M
59	T2L23C	RUDP-1754	Saptakoshi	OPC	Chisang Khola	20-Mar-19	27-Mar-19	17-Apr-19		22.33	M
70	T3L25B	RUDP-1755	Saptakoshi	OPC	Chisang Khola	20-Mar-19	27-Mar-19	17-Apr-19		22.91	M
)	T1L5A	RUDP-1756	Saptakoshi	OPC	Chisang Khola	20-Mar-19	27-Mar-19	17-Apr-19		23.73	M
2	R-2	RUDP-1757	Saptakoshi	OPC	Chisang Khola	20-Mar-19	27-Mar-19	17-Apr-19		22.91	M
73	T3L25B	RUDP-1758	Saptakoshi	OPC	Chisang Khola	20-Mar-19	27-Mar-19	17-Apr-19		22.44	M2
74	T3L6	RUDP-1750	Saptakoshi	OPC	Chisang Khola	20-Mar-19	27-Mar-19	17-Apr-19		22.48	M2
75	Madhuara Yard	RUDP-1760	Saptakoshi	OPC	Chisang Khola	21-Mar-19	28-Mar-19	18-Apr-19	1	21.50	M2
6	R-2	RUDP-1761	Saptakoshi	OPC	Chisang Khola	25-Mar-19 ·	1-Apr-19	22-Apr-19	15.57	21.06	M
77	T2L22A	RUDP-1762	Saptakoshi	OPC	Chisang Khola	25-Mar-19	1-Apr-19	22-Apr-19	15.20	22.39	M
8	R-110	RUDP-1763	Saptakoshi	OPC	Chisang Khola	25-Mar-19	1-Apr-19	22-Apr-19	14.90	23.28	M2
9	Madhuara Yard	RUDP-1764	Saptakoshi	OPC	Chisang Khola	26-Mar-19	2-Apr-19	23-Apr-19	15.35	23.58	M2
0	R-2	RUDP-1765	Saptakoshi	OPC	Chisang Khola	26-Mar-19	2-Apr-19	23-Apr-19	15,80	24.91	M2
11	DDC YARD	RUDP-1766	Saptakoshi	OPC	Chisang Khola	26-Mar-19	2-Apr-19	23-Apr-19	14.75	24.17	M2
2	Madhuara Yard	RUDP-1767	Saptakoshi	OPC	Chisang Khola	28-Mar-19	4-Apr-19	25-Apr-19	15.05	23.28	M2
1	R-44	RUDP-1768	Saptakoshi	OPC	Chisang Khola	28-Mar-19	4-Apr-19	25-Apr-19	14.83	23.65	M2
4	DDC YARD	RUDP-1769	Saptakoshi	OPC	Chisang Khola	28-Mar-19	4-Apr-19	25-Apr-19	14.53	22.76	M2
5	Madhuara Yard	RUDP-1770	Saptakoshi	OPC	Chisang Khola	29-Mar-19	5-Apr-19	26-Apr-19	15.87	21.71	M2
6	R-2	RUDP-1771	Saptakoshi	OPC	Chisang Khola	29-Mar-19	5-Apr-19	26-Apr-19	14.68	22.47	-
7	T2L22A	RUDP-1772	Saptakoshi	OPC	Chisang Khola	29-Mar-19	5-Apr-19	26-Apr-19		23.65	M2
8	Madhuara Yard	RUDP-1773	Saptakoshi	OPC	Chisang Khola	29-Mar-19	5-Apr-19	26-Apr-19	14.46		M2
9	T2L19Y	RUDP-1774	Saptakoshi	OPC	Chisang Khola	29-Mar-19	5-Apr-19	26-Apr-19	17.97	27.08	M2
0	R-2	RUDP-1775	Saptakoshi	OPC ·	Chisang Khola	30-Mar-19	7/10		14.83	23.06	M2
	T2L22A	RUDP-1776	Saptakoshi	OPC			6-Apr-19	27-Apr-19	15.50	23.95	M20
2	Koshi Yard	RUDP-1777	. Saptakoshi		Chisang Khola	30-Mar-19	6-Apr-19	27-Apr-19	15.80	21.58	M2
3	T3L12	RUDP-1778		OPC	Chisang Khola	30-Mar-19	6-Apr-19	27-Apr-19	16.10	24.32	M2
4	DDC YARD		Saptakoshi	OPC	Chisang-Khola	31-Mar-19	7-Apr-19	28-Apr-19	16.18	24.32	M2
*		RUDP-1779	Saptakoshi	OPC	Chisang Khola	I-Apr-19	8-Apr-19	29-Apr-19	15.28	24.39	M20
<b>*</b>	R-110	RUDP-1780	Saptakoshi	OPC	Chisang Khola	1-Apr-19	8-Apr-19	29-Apr-19	14.91	22.15	M20
6	R-2	RUDP-1781	Saptakoshi	OPC	Chisang Khola	1-Apr-19	8-Apr-19	0129-App-19	15.73	23.72	M2

ZHONGHENG CONSTRUCTION GROUP INTERNATIONAL ENLINEERING CO. LTD BUILDING DESIGN AUTHORITY (P) LTD IN JOINT VENTURE WITH B.N. CONSULTANCY PVT. LTD AND BLUS ENGINEERS & ARCHITECTS (P) LTD KATHMANDU, NEPAL

Wachan

Checked By Engineer Pushpak Pradhan Submitted By
Contract Manager
Rabindra K.Thakur

Verified By

Expert Qty Surveyor/CSE H.K. Mandal Approved B



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

								Month		A	oril
								Year		20	19 .
-0							T	ype of Material		Conc.	Cube
S.N.	Longtion	Lab Ref.no.	T	Brand of	Source of	Date of	Date of		Strength	, N/mm2	Concrete
3,1%,	Location	Lao Ker.no.	Type of Cement	Cement	Sand+Agg.	Casting	7 Days	28 Days	7 Days	28 Days	Grade
97	TIL5	RUDP-1782	Saptakoshi	OPC	Chisang Khola	1-Apr-19	8-Apr-19	29-Apr-19	16.03	22.97	M20
98	R-44	RUDP-1783	Saptakoshi	OPC	Chisang Khola	1-Apr-19	8-Apr-19	29-Apr-19	15.95	24.17	M20
99	R-44	RUDP-1784	Saptakoshi	OPC	Chisang Khola	1-Apr-19	8-Apr-19	29-Apr-19	15.13	22.58	M20
100	DDC YARD	RUDP-1785	Saptakoshi	OPC	Chisang Khola	2-Apr-19	9-Apr-19	30-Apr-19	14.83	21.78	M20
101	T2L19Y	RUDP-1786	Saptakoshi	OPC	Chisang Khola	2-Apr-19	9-Apr-19	30-Apr-19	16.47	23.05	M20
102	R-7	RUDP-1787	Saptakoshi	OPC	Chisang Khola	3-Apr-19	10-Apr-19	1-May-19	14.69		M20
103	T3L12	RUDP-1788	Saptakoshi	OPC	Chisang Khola	3-Apr-19	10-Apr-19	1-May-19	14.16		M20
104	Rani site	RUDP-1789	Saptakoshi	OPC	Chisang Khola	4-Apr-19	11-Apr-19	2-May-19	15.21		M20
105	Madhumara Yard	RUDP-1790	Saptakoshi	OPC	Chisang Khola	4-Apr-19	11-Apr-19	2-May-19	18.19		M25
106	DDC YARD	RUDP-1791	Saptakoshi	OPC	Chisang Khola	4-Apr-19	11-Apr-19	2-May-19	22.88		M30
107	R-44	RUDP-1792	Saptakoshi	OPC	Chisang Khola	4-Apr-19	11-Apr-19	2-May-19	15.65		M20
108	R-7	RUDP-1793	Saptakoshi	OPC	Chisang Khola	5-Apr-19	12-Apr-19	3-May-19	15.13		M20
109	Koshi yard	RUDP-1794	Saptakoshi	OPC	Chisang Khola	5-Apr-19	12-Apr-19	3-May-19	16.69		
110	R-2	RUDP-1795	Saptakoshi	OPC	Chisang Khola	5-Apr-19	12-Apr-19	3-May-19			M20
111	R-2	RUDP-1796	Saptakoshi	OPC	Chisang Khola			-	14.23		M20
112	R-2	RUDP-1797	Saptakoshi	OPC	-	6-Apr-19	13-Apr-19	4-May-19	15.72		M20
113	R-82	RUDP-1798	Saptakoshi	OPC	Chisang Khola	6-Apr-19	13-Apr-19	4-May-19	15.72		M20
114	DDC YARD	RUDP-1798			Chisang Khola	6-Apr-19	13-Apr-19	4-May-19	14.23		M20
115	T2L22A		Saptakoshi	OPC	Chisang Khola	6-Apr-19	13-Apr-19	4-May-19	21.63		M30
_		RUDP-1800	Saptakoshi	OPC	Chisang Khola	7-Apr-19	14-Apr-19	5-May-19	15.65		M20
16	R-110	RUDP-1801	Saptakoshi	OPC	Chisang Khola	7-Apr-19	14-Apr-19	5-May-19	15.20		M20
117	T3L12	RUDP-1802	Saptakoshi	OPC	Chisang Khola	7-Apr-19	14-Apr-19	5-May-19	14.23		M20
118	T3L12	RUDP-1803	Saptakoshi	OPC	Chisang Khola	7-Apr-19	14-Apr-19	5-May-19	15.43		M20
119	Rani site	RUDP-1804	Saptakoshi	OPC	Chisang Khola	7-Apr-19	14-Apr-19	5-May-19	16.54		M20
120	R-82	RUDP-1805	Saptakoshi	OPC	Chisang Khola	8-Apr-19	15-Apr-19	6-May-19	15.87		M20
121	DDC YARD	RUDP-1806	Saptakoshi	OPC	Chisang Khola	8-Apr-19	15-Apr-19	6-May-19	14.01		M20
122	T2L19Y	RUDP-1807	Saptakoshi	OPC	Chisang Khola	8-Apr-19	15-Apr-19	6-May-19	15.28		M20
123	R-82	RUDP-1808	Saptakoshi	OPC	Chisang Khola	9-Apr-19	16-Apr-19	7-May-19	14.68		M20
124	DDC YARD	RUDP-1809	Saptakoshi	OPC	Chisang Khola	9-Apr-19	16-Apr-19	7-May-19	15.43		M20
125	Rani site	RUDP-1810	Saptakoshi	OPC	Chisang Khola	10-Apr-19	17-Apr-19	8-May-19	14.39		M20
126	DDC YARD	RUDP-1811	Saptakoshi	OPC	Chisang Khola	10-Apr-19	17-Apr-19	8-May-19	14.53		M20
127	R-110	RUDP-1812	Saptakoshi	OPC	Chisang Khola	11-Apr-19	18-Арг-19	9-May-19	15.43		M20
128	T1L5	RUDP-1813	Saptakoshi	OPC	Chisang Khola	12-Apr-19	19-Apr-19	10-May-19	14.83		M20
129	DDC YARD	RUDP-1814	Saptakoshi	OPC	Chisang Khola	13-Apr-19	20-Apr-19	11-May-19	21.78		M30
130	R-82	RUDP-1815	Saptakoshi	OPC	Chisang Khola	13-Apr-19	20-Apr-19	11-May-19	14.90		M20
131	T1L5	RUDP-1816	Saptakoshi	OPC	Chisang Khola	13-Apr-19	20-Apr-19	11-May-19	15.43		M20
132	DDC YARD	RUDP-1817	Saptakoshi	OPC	Chisang Khola	13-Apr-19	20-Apr-19	11-May-19	14.83		M20
133	· R-2	RUDP-1818	Saptakoshi	OPC	Chisang Khola	14-Apr-19	21-Apr-19	12-May-19	16.77		M20
34	R-110	RUDP-1819	Saptakoshi	OPC	Chisang Khola	14-Apr-19	21-Apr-19	12-May-19	14.83		M20
35	R-46	RUDP-1820	Saptakoshi	OPC	Chisang Khola	15-Apr-19	22-Apr-19	13-May-19	14.23		M20
36	Koshi yard	RUDP-1821	Saptakoshi	OPC	Chisang Khola	15-Apr-19	22-Apr-19	13-May-19	15.80		M20
37	T2L19Y	RUDP-1822	Saptakoshi	OPC	Chisang Khola	16-Apr-19	23-Apr-19	14-May-19	15.05		M20
38	T3L7	RUDP-1823	Saptakoshi	OPC	Chisang Khola	16-Apr-19	23-Apr-19	14-May-19	14.46		
39	R-82	RUDP-1824	Saptakoshi	OPC	Chisang Khola	16-Apr-19					M20
40	T3L12	RUDP-1825	Saptakoshi	OPC	Chisang Khola	17-Apr-19	23-Apr-19	14-May-19	15.13		M20
41	R-42	RUDP-1826	Saptakoshi	OPC	Chisang Khola	17-Apr-19	24-Apr-19	15-May-19	15.72		M20
42	T3L12	RUDP-1827 -	Saptakoshi	OPC			24-Apr-19	15-May-19	15.13		M20
43	TIL5	RUDP-1827	Saptakoshi		Chisang Khola	17-Apr-19	24-Apr-19	15-May-19	16.39		M20
44	R-82			OPC	Chisang Khola	18-Apr-19	25-Apr 19h 0	vity-yay-10	15.80		M20
44	K-82	RUDP-1829	Saptakoshi	OPC '	Chisang Khola	19-Apr-19	26-Ap-19	17-Mar-19	14.75		M20

ZHONGHENG CONSTRUCTION GROUP INTERNATIONAL ENGINEERING CO. LTD

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

Biratnagai \*

Checked By

Engineer

Pushpak Pradhan

Submitted By Contract Manager Rabindra K.Thakur

Verified By

Expert Qty Surveyor/CSE H.K. Mandal

Approved By Team Leader

N. 5 6 7 8 9	Location			Summar	y Sheet of Con	DP/ICB/BI					
5 6 7 8	Location					-		Month Year			oril 19
5 6 7 8	Location						T	pe of Materia			Cube
5 6 7 8	Location			Brand of	Source of	Date of	Date of		Strength		
6 7 8		Lab Ref.no.	Type of Cement	Cement	Sand+Agg	Casting	7 Days	28 Days	7 Days	28 Days	Concrete
6 7 8	DDC YARD	RUDP-1830	Saptakoshi	OPC	Chisang Khola	20-Apr-19	27-Apr-19	18-May-19	16.62	26 Days	M20
7 8	R-46	RUDP-1831	Saptakoshi	OPC	Chisang Khola	20-Apr-19	27-Apr-19	18-May-19	15.80		M20
8	DDC YARD	RUDP-1832	Saptakoshi	OPC	Chisang Khola	21-Apr-19	28-Apr-19	19-May-19	21.63		
-	R-46	RUDP-1833	Saptakoshi	OPC	Chisang Khola	22-Apr-19	29-Apr-19	20-May-19			M30
	DDC YARD	RUDP-1834	Saptakoshi	OPC	Chisang Khola	22-Apr-19		20-May-19	15.80		M20
0	R-46	RUDP-1835	Saptakoshi	OPC			29-Apr-19		14.90		M20
1					Chisang Khola	23-Apr-19	30-Apr-19	21-May-19	15.28		M20
	R-110	RUDP-1836	Saptakoshi	OPC	Chisang Khola	23-Apr-19	30-Арт-19	21-May-19	16.25		M20
+		1									
+											
$\pm$											
T											
$\pm$								-			
Ŧ											
$\pm$								-			
+											
+	-										
+											
+							\				
_											
_											
-											
_											all a sens
									1		
									1		
			25 Tab							1	
		500								1	
			1 135		- 15		ho	ity (P)			
				y.			VAN.	-(1)			1
	//	TD 24 70					1.8/	1	50		
P			RUCTION GI NEERING C	O. LTD	BUILDING I CONSULTA	DESIGN AU ANCY PVT.	LTD KATH	P) LTB IN PLUS ENGI MANDU, N	EPAL	NTURE WARCHITE	<u>, , , , , , , , , , , , , , , , , , , </u>



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

								Month		A	pril
4								Year		2	019
					- 1		Descri	ption of Sam	ple	Bric	k Wall
S.N.	Location	Lab	T. CO.	Brand of	0 00 1	Date of	Date of	Testing	Strength,	N/mm2	Type of
5.IN.	Location	Ref.no.	Type of Cement	Cement	Source of Sand	Casting	7 Days	28 Days	7 Days	28 Days	Grade
1	T3L23C	MR-1600	Shalimar Gold	OPC	Chisang Khola	4-Mar-19	11-Mar-19	1-Apr-19		9.19	7.5
2	T3L25B	MR-1601	Shalimar Gold	OPC	Chisang Khola	5-Mar-19	12-Mar-19	2-Apr-19		8.24	7.5
3	R-84	MR-1602	Shalimar Gold	OPC	Chisang Khola	5-Mar-19	12-Mar-19	2-Apr-19		8.54	7.5
4	R-44	MR-1603	Shalimar Gold	OPC	Chisang Khola	5-Mar-19	12-Mar-19	2-Apr-19		9.05	7.5
5	T3L6	MR-1604	Shalimar Gold	OPC	Chisang Khola	5-Mar-19	12-Mar-19	2-Apr-19		8.51	7.5
6	T2L23L	MR-1605	Shalimar Gold	OPC	Chisang Khola	6-Mar-19	13-Mar-19	3-Apr-19		8.65	7.5
7	R-23	MR-1606	Shalimar Gold	OPC	Chisang Khola	6-Mar-19	13-Mar-19	3-Apr-19		8.38	7.5
8	R-9B	MR-1607	Shalimar Gold	OPC	Chisang Khola	6-Mar-19	13-Mar-19	3-Apr-19		9.19	7.5
9	Rani Site	MR-1608	Shalimar Gold	OPC	Chisang Khola	7-Mar-19	14-Mar-19	4-Apr-19		8.51	7.5
10	R-23	MR-1609	Shalimar Gold	OPC	Chisang Khola	7-Mar-19	14-Mar-19	4-Apr-19		8.65	7.5
11	T2L25B	MR-1610	Shalimar Gold	OPC	Chisang Khola	7-Mar-19	14-Mar-19	4-Apr-19		9.32	7.5
12	R-84	MR-1611	Shalimar Gold	OPC	Chisang Khola	7-Mar-19	14-Mar-19	4-Apr-19		8.78	7.5
13	R-44	MR-1612	Shalimar Gold	OPC	Chisang Khola	8-Mar-19	15-Mar-19	5-Apr-19		8.11	7.5
14	T3L6	MR-1613	Shalimar Gold	OPC	Chisang Khola	8-Mar-19	15-Mar-19	5-Apr-19		9.19	7.5
15	T2L23C	MR-1614	Shalimar Gold	OPC	Chisang Khola	8-Mar-19	15-Mar-19	5-Apr-19		8.38	7.5
16	T2L24E	MR-1615	Shalimar Gold	OPC	Chisang Khola	9-Mar-19	16-Mar-19	6-Apr-19		8.38	7.5
17	R-23	MR-1616	Shalimar Gold	OPC	Chisang Khola	10-Mar-19	17-Mar-19	7-Apr-19		9.19	7.5
18	T3L6	MR-1617	Shalimar Gold	OPC	Chisang Khola	10-Mar-19	17-Mar-19	7-Apr-19		9.19	7.5
19	R-2	MR-1618	Shalimar Gold	OPC	Chisang Khola	10-Mar-19	17-Mar-19	7-Apr-19		8.78	7.5
20	R-9B	MR-1619	Shalimar Gold	OPC	Chisang Khola	11-Mar-19	18-Mar-19	8-Apr-19		9.19	7.5
21	T2L19B	MR-1620	Shalimar Gold	OPC	Chisang Khola	11-Mar-19	18-Mar-19	8-Apr-19		8.65	7.5
22	R-23	MR-1621	Shalimar Gold	OPC	Chisang Khola	11-Mar-19	18-Mar-19	8-Apr-19		9.19	7.5
23	R-23	MR-1622	Shalimar Gold	OPC	Chisang Khola	11-Mar-19	18-Mar-19	8-Apr-19		8.51	7.5
24	R-84	MR-1623	Shalimar Gold	OPC	Chisang Khola	11-Mar-19	18-Mar-19	8-Apr-19		9.19	7.5
25	R-2	MR-1624	Shalimar Gold	OPC	Chisang Khola	11-Mar-19	18-Mar-19	8-Apr-19		8.51	7.5
26	R-44	MR-1625	Shalimar Gold	OPC	Chisang Khola	11-Mar-19	18-Mar-19	8-Apr-19		8.38	7.5
27	R-84	MR-1626	Shalimar Gold	OPC	Chisang Khola	11-Mar-19	18-Mar-19	8-Apr-19		8.78	7.5
28	T2L25B	MR-1627	Shalimar Gold	OPC	Chisang Khola	11-Mar-19	18-Mar-19	8-Apr-19		8.51	7.5
29	T1L5	MR-1628	Shalimar Gold	OPC	Chisang Khola	11-Mar-19	18-Mar-19	8-Apr-19		9.59	7.5
30	R-44	MR-1629	Shalimar Gold	OPC	Chisang Khola	11-Mar-19	18-Mar-19	8-Apr-19		8.11	7.5
31	R-84	MR-1630	Shalimar Gold	OPC	Chisang Khola	11-Mar-19	18-Mar-19	8-Apr-19		8.65	7.5
32	T3L23C	MR-1631	Shalimar Gold	OPC	Chisang Khola	11-Mar-19	18-Mar-19	8-Apr-19		9.19	7.5
33	R-23	MR-1632	Shalimar Gold	OPC	Chisang Khola	12-Mar-19	19-MBH-19	19/Apr-19		8.24	7.5

HENG CONSTRUCTION GROUP

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,

Checked By

Engineer Pushpak Pradhan Submitted By Contract Manager Rabindra Kr. Thakur Verified By

Expert Qty Surveyor/CSE H.K. Mandal Approved By Team Leader



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

Brand of Cement  OPC  OPC  OPC  OPC  OPC  OPC  OPC  OP	Source of Sand Chisang Khola	Date of Casting 12-Mar-19 12-Mar-19 12-Mar-19 12-Mar-19 12-Mar-19 12-Mar-19 12-Mar-19		Year ption of Sam Testing  28 Days  9-Apr-19 9-Apr-19 9-Apr-19 9-Apr-19 9-Apr-19 9-Apr-19 9-Apr-19 9-Apr-19	ple Strength 7 Days	Brick	7.5 7.5 7.5 7.5 7.5
Cement  Cement	Chisang Khola	12-Mar-19 12-Mar-19 12-Mar-19 12-Mar-19 12-Mar-19 12-Mar-19 12-Mar-19 12-Mar-19	Date of 7 Days 19-Mar-19 19-Mar-19 19-Mar-19 19-Mar-19 19-Mar-19	28 Days 9-Apr-19 9-Apr-19 9-Apr-19 9-Apr-19 9-Apr-19 9-Apr-19	Strength.	28 Days 8.24 8.38 9.19 9.32	Type Grad 7.5 7.5 7.5 7.5
Cement  Cement	Chisang Khola	12-Mar-19 12-Mar-19 12-Mar-19 12-Mar-19 12-Mar-19 12-Mar-19 12-Mar-19 12-Mar-19	7 Days 19-Mar-19 19-Mar-19 19-Mar-19 19-Mar-19 19-Mar-19 19-Mar-19	28 Days 9-Apr-19 9-Apr-19 9-Apr-19 9-Apr-19 9-Apr-19		28 Days 8.24 8.38 9.19 9.32	7.5 7.5 7.5 7.5
Cement  Cement	Chisang Khola	12-Mar-19 12-Mar-19 12-Mar-19 12-Mar-19 12-Mar-19 12-Mar-19 12-Mar-19 12-Mar-19	19-Mar-19 19-Mar-19 19-Mar-19 19-Mar-19 19-Mar-19 19-Mar-19	9-Apr-19 9-Apr-19 9-Apr-19 9-Apr-19 9-Apr-19	7 Days	Days 8.24 8.38 9.19 9.32	7.5 7.5 7.5 7.5
ii OPC ii OPC iii OPC	Chisang Khola Chisang Khola Chisang Khola Chisang Khola Chisang Khola Chisang Khola Chisang Khola Chisang Khola	12-Mar-19 12-Mar-19 12-Mar-19 12-Mar-19 12-Mar-19 12-Mar-19	19-Mar-19 19-Mar-19 19-Mar-19 19-Mar-19 19-Mar-19	9-Apr-19 9-Apr-19 9-Apr-19 9-Apr-19 9-Apr-19	730	8.38 9.19 9.32	7.5 7.5 7.5
ii OPC ii OPC iii OPC	Chisang Khola Chisang Khola Chisang Khola Chisang Khola Chisang Khola Chisang Khola Chisang Khola	12-Mar-19 12-Mar-19 12-Mar-19 12-Mar-19 12-Mar-19	19-Mar-19 19-Mar-19 19-Mar-19 19-Mar-19	9-Apr-19 9-Apr-19 9-Apr-19 9-Apr-19		9.19 9.32	7.5 7.5
ii OPC ii OPC iii OPC	Chisang Khola	12-Mar-19 12-Mar-19 12-Mar-19 12-Mar-19	19-Mar-19 19-Mar-19 19-Mar-19	9-Apr-19 9-Apr-19 9-Apr-19		9.19 9.32	7.5 7.5
ii OPC ii OPC iii OPC	Chisang Khola Chisang Khola Chisang Khola Chisang Khola Chisang Khola	12-Mar-19 12-Mar-19 12-Mar-19	19-Mar-19 19-Mar-19 19-Mar-19	9-Apr-19 9-Apr-19 9-Apr-19		9.32	7.5
ii OPC ii OPC iii OPC	Chisang Khola Chisang Khola Chisang Khola Chisang Khola	12-Mar-19 12-Mar-19 12-Mar-19	19-Mar-19 19-Mar-19	9-Apr-19 9-Apr-19			
ii OPC ii OPC ii OPC ii OPC ii OPC ii OPC	Chisang Khola Chisang Khola Chisang Khola	12-Mar-19	19-Mar-19	9-Apr-19			
ii OPC ii OPC ii OPC ii OPC ii OPC ii OPC	Chisang Khola Chisang Khola Chisang Khola					8.51	7.5
ii OPC ii OPC ii OPC ii OPC ii OPC	Chisang Khola Chisang Khola		15 1.141 15	9-ADT-19		9.05	7.5
ii OPC ii OPC ii OPC ii OPC	Chisang Khola		19-Mar-19	9-Apr-19		8.11	7.5
ii OPC ii OPC ii OPC	-	12-Mar-19	19-Mar-19	9-Apr-19		8.11	7.5
i OPC	Cindang renora	12-Mar-19	19-Mar-19	9-Apr-19	-	8.38	7.5
ii OPC	Chisang Khola	12-Mar-19	19-Mar-19	9-Apr-19		8.11	7.5
	Chisang Khola	12-Mar-19	19-Mar-19	9-Apr-19		9.19	7.5
	Chisang Khola	12-Mar-19	19-Mar-19	9-Apr-19		8.24	7.5
i OPC	Chisang Khola	12-Mar-19	19-Mar-19	9-Apr-19		8.65	7.5
i OPC	Chisang Khola	12-Mar-19	19-Mar-19	9-Apr-19		9.19	7.5
i OPC	Chisang Khola	13-Mar-19	20-Mar-19	10-Apr-19	-	8.65	
					-		7.5
							7.5
				-		_	7.5
			-	-			7.5
120000000000000000000000000000000000000							7.5
	-			A		_	7.5
				-	-		7.5
			-	-			7.5
			-	1		_	7.5
							7.5
						_	7.5
i OPC	Chisang Khola	13-Mar-19					7.5
i OPC	Chisang Khola	13-Mar-19					7.5
i OPC	Chisang Khola	13-Mar-19	20-Mar-19	10-Apr-19		9.19	7.5
i OPC	Chisang Khola	13-Mar-19	20-Mar-19	10-Apr-19		7.97	7.5
i OPC	Chisang Khola	13-Mar-19	20-Mar-19	10-Apr-19		8.38	. 7.5
i OPC	Chisang Khola	13-Mar-19	20-Mar-19	10-Apr-19		8.24	7.5
		. ,	"Uthority	PI			
	- 1	18		anto			
	VENTURE V	VITH B.N.	CONSULT	ANCYPV (P) LVD,	T. LTE	AND	PLU
	ni OPC	ni OPC Chisang Khola	ni OPC Chisang Khola 13-Mar-19	OPC	OPC	OPC	OPC

Checked By

Engineer Pushpak Pradhan Submitted By

Contract Manager Rabindra Kr. Thakur Verified By

Expert Qty Surveyor/CSE H.K. Mandal Approved By

Team Leader Giresh Chand



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

								Month		A	pril
								Year		20	019
+					1535		Descri	ption of Samp	ple	Brick	k Wall
S.N.	Location	Lab	Type of Cement	Brand of	Source of Sand	Date of	Date of	Testing	Strength,		Туре о
		Ref.no.		Cement	2	Casting	7 Days	28 Days	7 Days	28 Days	Grade
67	Cdo Marg	MR-1666	Saptakoshi	OPC	Chisang Khola	13-Mar-19	20-Mar-19	10-Apr-19		8.11	7.5
68	'R-2	MR-1667	Saptakoshi	OPC	Chisang Khola	13-Mar-19	20-Mar-19	10-Apr-19		9.19	7.5
69	R-44	MR-1668	Saptakoshi	OPC	Chisang Khola	14-Mar-19	21-Mar-19	11-Apr-19		8.92	7.5
70	T2L19B	MR-1669	Saptakoshi	OPC	Chisang Khola	14-Mar-19	21-Mar-19	11-Apr-19	100	8.51	7.5
71	R-84	MR-1670	Saptakoshi	OPC	Chisang Khola	14-Mar-19	21-Mar-19	11-Apr-19		8.51	7.5
72	T2L24E	MR-1671	Saptakoshi	OPC	Chisang Khola	14-Mar-19	21-Mar-19	11-Apr-19		8.51	7.5
73	T2L24E	MR-1672	Saptakoshi	OPC	Chisang Khola	14-Mar-19	21-Mar-19	11-Apr-19		8.92	7.5
74	T2L25B	MR-1673	Saptakoshi	OPC	Chisang Khola	14-Mar-19	21-Mar-19	11-Apr-19		8.92	7.5
75	T1L5	MR-1674	Saptakoshi	OPC	Chisang Khola	14-Mar-19	21-Mar-19	11-Apr-19		8.38	7.5
76	T3L23C	MR-1675	Saptakoshi	OPC	Chisang Khola	14-Mar-19	21-Mar-19	11-Apr-19		9.19	7.5
77	Rani site	MR-1676	Saptakoshi	OPC	Chisang Khola	14-Mar-19	21-Mar-19	11-Apr-19		7.97	7.5
78	R-9B	MR-1677	Saptakoshi	OPC	Chisang Khola	14-Mar-19	21-Mar-19	11-Apr-19		8.24	7.5
79	R-23	MR-1678	Saptakoshi	OPC	Chisang Khola	14-Mar-19	23-Feb-İ9	11-Apr-19		8.24	7.5
80	Cdo Marg	MR-1679	Saptakoshi	OPC	Chisang Khola	14-Mar-19	21-Mar-19	11-Apr-19		8.38	7.5
81	R-9B	MR-1680	Saptakoshi	OPC	Chisang Khola	14-Mar-19	21-Mar-19	11-Apr-19		9.19	7.5
82	R-2	MR-1681	Saptakoshi	OPC	Chisang Khola	14-Mar-19	21-Mar-19	11-Apr-19		9.19	7.5
83	R-44	MR-1682	Saptakoshi	OPC	Chisang Khola	14-Mar-19	21-Mar-19	11-Apr-19		8.65	7.5
.84	T2L19B	MR-1683	Saptakoshi	OPC	Chisang Khola	14-Mar-19	21-Mar-19	11-Apr-19		8.11	7.5
85	R-2	MR-1684	Saptakoshi	OPC	Chisang Khola	14-Mar-19	21-Mar-19	11-Apr-19		8.38	7.5
86	R-9B	MR-1685	Saptakoshi	OPC	Chisang Khola	15-Mar-19	22-Mar-19	12-Apr-19		8.51	7.5
87	T2L25B	MR-1686	Saptakoshi	OPC	Chisang Khola	15-Mar-19	22-Mar-19	12-Apr-19		9.19	7.5
88	Cdo Marg	MR-1687	Saptakoshi	OPC	Chisang Khola	15-Mar-19	22-Mar-19	12-Apr-19		8.65	7.5
89	R-9B	MR-1688	Saptakoshi	OPC	Chisang Khola	15-Mar-19	22-Mar-19	12-Apr-19		8.11	7.5
90	R-2	MR-1689	Saptakoshi	OPC	Chisang Khola	15-Mar-19	22-Mar-19	12-Apr-19		9.19	7.5
91	R-44	MR-1690	Saptakoshi	OPC	Chisang Khola	15-Mar-19	22-Mar-19	12-Apr-19		8.51	7.5
92	T2L19B	MR-1691	Saptakoshi	OPC	Chisang Khola	15-Mar-19	22-Mar-19	12-Apr-19		8.51	7.5
93	T3L23C	MR-1692	Saptakoshi	OPC	Chisang Khola	15-Mar-19	22-Mar-19	12-Apr-19		7.84	7.5
94	R-2	MR-1693	Saptakoshi	OPC	Chisang Khola	15-Mar-19	22-Mar-19	12-Apr-19		8.65	7.5
95	R-44	MR-1694	Saptakoshi	OPC	Chisang Khola	15-Mar-19	22-Mar-19	12-Apr-19		9.19	7.5
96	T2L19B	MR-1695	Saptakoshi	OPC	Chisang Khola	15-Mar-19	22-Mar-19	12-Apr-19		8.24	7.5
97	R-84	MR-1696	Saptakoshi	OPC	Chisang Khola	15-Mar-19	22-Mar-19	12-Apr-19		8.24	7.5
98	T2L24E	MR-1697	Saptakoshi	OPC	Chisang Khola	15-Mar-19	22-Mar-19	12-Apr-19		9.19	7.5
99	T2L25B	MR-1698	Saptakoshi	OPC	Chisang Khola	15-Mar-19	22-Mar-19	12-Apr-19		8.65	7.5

Contractor 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 Biratnagar

Consultant

Checked By

Engineer Pushpak Pradhan Submitted By

Contract Manager Rabindra Kr. Thakur Verified By

Expert Qty Surveyor/CSE H.K. Mandal



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

								Month			pril
								Year		- 17	019
_					<u> </u>		Descri	ption of Samp	ole	Brick	k Wall
S.N.	Location	Lab	Type of Cement	Brand of	Source of Sand	Date of	Date o	f Testing	Strength		Туре
J., 1.	Document	Ref.no.	Type of coment	Cement	Source of Sand	Casting	7 Days	28 Days	7 Days	28 Days	Grad
100	T1L5	MR-1699	Saptakoshi	OPC	Chisang Khola	15-Mar-19	22-Mar-19	12-Apr-19		9.19	7.5
101	Cdo-Marg	MR-1700	Saptakoshi	OPC	Chisang Khola	15-Mar-19	22-Mar-19	12-Apr-19		8.24	7.5
02	R-9B	MR-1701	Saptakoshi	OPC	Chisang Khola	15-Mar-19	22-Mar-19	12-Apr-19		8.38	7.5
103	R-84	MR-1702	Saptakoshi	OPC	Chisang Khola	15-Mar-19	22-Mar-19	12-Apr-19		9.19	7.5
104	R-44	MR-1703	Saptakoshi	OPC	Chisang Khola	15-Mar-19	22-Mar-19	12-Apr-19		8.51	7.5
105	Rani-site	MR-1704	Saptakoshi	OPC	Chisang Khola	15-Mar-19	22-Mar-19	12-Apr-19		8.78	7.5
106	R-9B	MR-1705	Saptakoshi	OPC	Chisang Khola	16-Mar-19	23-Mar-19	13-Apr-19		8.38	7.5
107	R-2	MR-1706	Saptakoshi	OPC	Chisang Khola	16-Mar-19	23-Mar-19	13-Apr-19		9.19	7.5
108	R-44	MR-1707	Saptakoshi	OPC	Chisang Khola	16-Mar-19	23-Mar-19	13-Apr-19		8.38	7.5
109	T2L19B	MR-1708	Saptakoshi	OPC	Chisang Khola	16-Mar-19	23-Mar-19	13-Apr-19		8.78	7.5
110	R-84	MR-1709	Saptakoshi	OPC	Chisang Khola	16-Mar-19	23-Mar-19	13-Apr-19		8.11	7.5
111	T2L24E	MR-1710	Saptakoshi	OPC	Chisang Khola	16-Mar-19	23-Mar-19	13-Apr-19		8.24	7.5
112	R-2	MR-1711	Saptakoshi	OPC	Chisang Khola	16-Mar-19	23-Feb-19	13-Apr-19		8.38	7.5
113	T3L6	MR-1712	Saptakoshi	OPC	Chisang Khola	16-Mar-19	23-Mar-19	13-Apr-19		8.11	7.5
114	R-44	MR-1713	Saptakoshi	OPC	Chisang Khola	16-Mar-19	23-Mar-19	13-Apr-19		8.11	7.5
115	R-23	MR-1714	Saptakoshi	OPC	Chisang Khola	16-Mar-19	23-Mar-19	13-Apr-19		9.19	7.5
116	R-2	MR-1715	Saptakoshi	OPC	Chisang Khola	16-Mar-19	23-Mar-19	13-Apr-19		8.92	7.5
117	R-84	MR-1716	Saptakoshi	OPC	Chisang Khola	16-Mar-19	21-Mar-19	13-Apr-19		8.78	7.5
118	T2L25B	MR-1717	Saptakoshi	OPC	Chisang Khola	16-Mar-19	23-Mar-19	13-Apr-19		9.19	7.5
119	T2L24E	MR-1718	Saptakoshi	OPC	Chisang Khola	16-Mar-19	23-Mar-19	13-Apr-19		8.51	7.5
120	T2L25B	MR-1719	Saptakoshi	OPC	Chisang Khola	16-Mar-19	23-Mar-19	13-Apr-19		8.11	7.5
121	R-44	MR-1720	Saptakoshi	OPC	Chisang Khola	16-Mar-19	23-Mar-19	13-Apr-19		8.24	7.5
122	R-84	MR-1721	Saptakoshi	OPC	Chisang Khola	16-Mar-19	23-Mar-19	13-Apr-19		8.65	7.5
123	T3L23C	MR-1722	Saptakoshi	OPC	Chisang Khola	16-Mar-19	22-Mar-19	13-Apr-19		8.38	7.5
124	T1L5	MR-1723	Saptakoshi	OPC	Chisang Khola	17-Mar-19	24-Mar-19	14-Apr-19		9.19	7.5
125	R-9B	MR-1724	Saptakoshi	OPC	Chisang Khola	17-Mar-19	24-Mar-19	14-Apr-19		8.51	7.5
126	R-2	MR-1725	Saptakoshi	OPC	Chisang Khola	17-Mar-19	24-Mar-19	14-Apr-19		7.97	7.5
127	R-44	MR-1726	Saptakoshi	OPC	Chisang Khola	17-Mar-19	24-Mar-19	14-Apr-19		8.65	7.5
128	R-23	MR-1727	Saptakoshi	OPC	Chisang Khola	17-Mar-19	24-Mar-19	14-Apr-19		8.11	7.5
129	T3L6	MR-1728	Saptakoshi	OPC	Chisang Khola	17-Mar-19	24-Mar-19	14-Apr-19		9.19	7.5
130	T2L19B	MR-1729	Saptakoshi	OPC	Chisang Khola	17-Mar-19	24-Mar-19	14-Apr-19		8.78	7.5
131	R-84	MR-1730	Saptakoshi	OPC	Chisang Khola	17-Mar-19	24-Mar-19	14-Apr-19		8.24	7.5
132	R-84	MR-1731	Saptakoshi	OPC	Chisang Khola	17-Mar-19	24-Mar-19	14-Apr-19		9.05	7.5
		7.3	17:50				thority			1.00	7.0
		Contra	actor				Consult				
			TRUCTION O		VENTURE V	VITH B.N.	N AUTHO	RITYP) I ANCYPV S (P) LTD,	T. LTE	AND	PLU

Checked By

Engineer Pushpak Pradhan Submitted By

Contract Manager Rabindra Kr. Thakur Verified By

Expert Qty Surveyor/CSE H.K. Mandal



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

								Month		A	pril
								Year		2	019
					12		Descri	ption of Sam	ple	Bric	k Wall
S.N.	Tantin	Lab	T	Brand of	5	Date of	Date of	Testing	Strength, N/mm2 28 Days 8.78 8.24 7.97 8.51 9.19 8.65 8.11 8.11 8.65 8.51 8.65 8.51 8.78 8.65 8.11 8.11 8.65 8.51 8.78 9.19 8.65 8.11 8.11 8.65 8.51 8.78 9.19 8.65 8.11 9.19 8.65 8.11 9.19 8.65 8.11 9.19 8.65 8.11 9.19 8.65 8.11 9.19 8.65 8.11 9.19 8.65 8.11 9.19 8.65 8.11 9.19 8.65 8.38	Type of	
5.IV.	Location	Ref.no.	Type of Cement	Cement	Source of Sand	Casting	7 Days	28 Days	7 Days	100	Grade
133	T1L5	MR-1732	Saptakoshi	OPC	Chisang Khola	17-Mar-19	24-Mar-19	14-Apr-19		8.78	7.5
134	R-2	MR-1733	Saptakoshi	OPC	Chisang Khola	17-Mar-19	24-Mar-19	14-Apr-19		8.24	7.5
135	R-44	MR-1734	Saptakoshi	OPC	Chisang Khola	17-Mar-19	24-Mar-19	14-Apr-19		7.97	7.5
136	R-84	MR-1735	Saptakoshi	OPC	Chisang Khola	17-Mar-19	24-Mar-19	14-Apr-19		8.51	7.5
137	R-9B	MR-1736	Saptakoshi	OPC	Chisang Khola	17-Mar-19	24-Mar-19	14-Apr-19		9.19	7.5
138	R-23	MR-1737	Saptakoshi	OPC	Chisang Khola	17-Mar-19	24-Mar-19	14-Apr-19		8.11	7.5
139	T1L5	MR-1738	Saptakoshi	OPC	Chisang Khola	17-Mar-19	23-Mar-19	14-Apr-19		8.24	7.5
140	T1L5A	MR-1739	Saptakoshi	OPC	Chisang Khola	17-Mar-19	24-Mar-19	14-Apr-19		9.19	7.5
141	T3L23C	MR-1740	Saptakoshi	OPC	Chisang Khola	17-Mar-19	24-Mar-19	14-Apr-19		8.65	7.5
142	R-7	MR-1741	Saptakoshi	OPC	Chisang Khola	17-Mar-19	24-Mar-19	14-Apr-19		8.11	7.5
143	R-7	MR-1742	Saptakoshi	OPC	Chisang Khola	17-Mar-19	24-Mar-19	14-Apr-19		8.11	7.5
144	R-84	MR-1743	Saptakoshi	OPC	Chisang Khola	17-Mar-19	24-Mar-19	14-Apr-19		8.11	7.5
145	T2L25B	MR-1744	Saptakoshi	OPC	Chisang Khola	18-Mar-19	23-Feb-19	15-Apr-19		9.19	7.5
146	R-23	MR-1745	Saptakoshi	OPC	Chisang Khola	18-Mar-19	25-Mar-19	15-Apr-19		8.65	7.5
147	R-84	MR-1746	Saptakoshi	OPC	Chisang Khola	18-Mar-19	25-Mar-19	15-Apr-19		8.11	7.5
148	R-2	MR-1747	Saptakoshi	OPC	Chisang Khola	18-Mar-19	25-Mar-19	15-Apr-19		8.11	7.5
149	R-44	MR-1748	Saptakoshi	OPC	Chisang Khola	18-Mar-19	25-Mar-19	15-Apr-19			7.5
150	T3L23C	MR-1749	Saptakoshi	OPC	Chisang Khola	18-Mar-19	25-Mar-19	15-Apr-19		-	7.5
151	T1L5	MR-1750	Saptakoshi	OPC	Chisang Khola	18-Mar-19	25-Mar-19	15-Apr-19			7.5
152	R-84	MR-1751	Saptakoshi	OPC	Chisang Khola	18-Mar-19	25-Mar-19	15-Apr-19			7.5
153	R-23	MR-1752	Saptakoshi	OPC	Chisang Khola	18-Mar-19	25-Mar-19	15-Apr-19			7.5
154	R-23	MR-1753	Saptakoshi	OPC	Chisang Khola	18-Mar-19	25-Mar-19	15-Apr-19			7.5
155	R-2	MR-1754	Saptakoshi	OPC	Chisang Khola	18-Mar-19	25-Mar-19	15-Apr-19			7.5
156	R-84	MR-1755	Saptakoshi	OPC	Chisang Khola	18-Mar-19	25-Mar-19	15-Apr-19			7.5
157	R-82	MR-1756	Saptakoshi	OPC	Chisang Khola	18-Mar-19	25-Mar-19	15-Apr-19			7.5
158	R-44	MR-1757	Saptakoshi	OPC	Chisang Khola	18-Mar-19	25-Mar-19	15-Apr-19			7.5
159	T1L5	MR-1758	Saptakoshi	OPC	Chisang Khola	18-Mar-19	25-Mar-19	15-Apr-19			7.5
160	T3L23C	MR-1759	Saptakoshi	OPC	Chisang Khola	18-Mar-19	25-Mar-19	15-Apr-19		8.38	7.5
161	R-23	MR-1760	Saptakoshi	OPC	Chisang Khola	18-Mar-19	25-Mar-19	15-Apr-19		9.19	7.5
162	R-9B	MR-1761	Saptakoshi	OPC	Chisang Khola	19-Mar-19	26-Mar-19	16-Apr-19		8.65	7.5
163	R-2	MR-1762	Saptakoshi	OPC	Chisang Khola	19-Mar-19	26-Mar-19	16-Apr-19		8.51	7.5
164	R-84	MR-1763	Saptakoshi	OPC	Chisang Khola	19-Mar-19	26-Mar-19	16-Apr-19		9.19	7.5
165	T2L19B	MR-1764	Saptakoshi	OPC	Chisang Khola	19-Mar-19	26-Mar-19	16-Apr-19		7.97	7.5

Contractor

ZHONGHENG CONSTRUCTION GROUP INTERNATIONAL ENGINEERING CO. LTD

NEPAL

BUILDING DESIGN AUTHORITY (PLTD IN JOINT

VENTURE WITH B.N. CONSULTANCY PET. LTD AND PLUS

ENGINEERS & ARCHITECTS (P) LTD, KATHMANDU,

Biratnaga

Checked By

Engineer Pushpak Pradhan Submitted By

Contract Manager Rabindra Kr. Thakur Verified By

Expert Qty Surveyor/CSE H.K. Mandal Approved By Team Leader



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

								TOTAL STREET			
								Month			pril
								Year			019
			,				Descri	ption of Samp	ple	Bric	k Wall
S.N.	Location	Lab	Type of Cement	Brand of	Source of Sand	Date of	Date of	Testing	Strength,		Type o
		Ref.no.		Cement	H THE F	Casting	7 Days	28 Days	7 Days	28 Days	Grade
166	T2L24E	MR-1765	Saptakoshi	OPC	Chisang Khola	19-Mar-19	26-Mar-19	16-Apr-19		9.05	7.5
167	T2L25B	MR-1766	Saptakoshi	OPC	Chisang Khola	19-Mar-19	26-Mar-19	16-Apr-19		8.24	7.5
168	R-9B	MR-1767	Saptakoshi	OPC	Chisang Khola	19-Mar-19	26-Mar-19	16-Apr-19		8.51	7.5
169	R-23	MR-1768	Saptakoshi	OPC	Chisang Khola	19-Mar-19	26-Mar-19	16-Apr-19		9.19	7.5
170	R-84	MR-1769	Saptakoshi	OPC	Chisang Khola	19-Mar-19	26-Mar-19	16-Apr-19		7.97	7.5
171	R-9B	MR-1770	Saptakoshi	OPC	Chisang Khola	19-Mar-19	26-Mar-19	16-Apr-19		9.19	7.5
172	T1L5	MR-1771	Saptakoshi	OPC	Chisang Khola	19-Mar-19	23-Mar-19	16-Apr-19		8.78	7.5
173	R-2	MR-1772	Saptakoshi	OPC	Chisang Khola	19-Mar-19	26-Mar-19	16-Apr-19		8.11	7.5
174	R-44	MR-1773	Saptakoshi	OPC	Chisang Khola	19-Mar-19	26-Mar-19	16-Apr-19		9.19	7.5
175	R-2	MR-1774	Saptakoshi	OPC	Chisang Khola	19-Mar-19	26-Mar-19	16-Apr-19		9.19	7.5
176	R-23	MR-1775	Saptakoshi	OPC	Chisang Khola	19-Mar-19	26-Mar-19	16-Apr-19		8.38	7.5
177	T1L5	MR-1776	Saptakoshi	OPC	Chisang Khola	19-Mar-19	26-Mar-19	16-Apr-19		8.51	7.5
178	T3L23C	MR-1777	Saptakoshi	OPC	Chisang Khola	19-Mar-19	26-Mar-19	16-Apr-19		9.19	7.5
179	R-2	MR-1778	Saptakoshi	OPC	Chisang Khola	20-Mar-19	27-Mar-19	17-Apr-19		8.11	7.5
180	R-44	MR-1779	Saptakoshi	OPC	Chisang Khola	20-Mar-19	27-Mar-19	17-Apr-19		8.65	7.5
181	T2L19B	MR-1780	Saptakoshi	OPC	Chisang Khola	20-Mar-19	27-Mar-19	17-Apr-19		8.78	7.5
182	T3L25B	MR-1781	Saptakoshi	OPC	Chisang Khola	20-Mar-19	27-Mar-19	17-Apr-19		7.84	7.5
183	R-23	MR-1782	Saptakoshi	OPC	Chisang Khola	20-Mar-19	21-Mar-19	17-Apr-19		9.19	7.5
184	T1L5	MR-1783	Saptakoshi	OPC	Chisang Khola	20-Mar-19	27-Mar-19	17-Apr-19		8.92	7.5
185	R-84	MR-1784	Saptakoshi	OPC	Chisang Khola	20-Mar-19	27-Mar-19	17-Apr-19		8.24	. 7.5
186	R-44	MR-1785	Saptakoshi	OPC	Chisang Khola	20-Mar-19	27-Mar-19	17-Apr-19		9.19	7.5
187	R-110	MR-1786	Saptakoshi	OPC	Chisang Khola	20-Mar-19	27-Mar-19	17-Apr-19		8.24	7.5
188	Rani-Site	MR-1787	Saptakoshi	OPC	Chisang Khola	20-Mar-19	27-Mar-19	17-Apr-19		8.92	7.5
189	R-23	MR-1788	Saptakoshi	OPC	Chisang Khola	20-Mar-19	25-Mar-19	17-Apr-19		9.73	7.5
190	R-110	MR-1789	Saptakoshi	OPC	Chisang Khola	20-Mar-19	27-Mar-19	17-Apr-19		9.19	7.5
191	R-44	MR-1790	Saptakoshi	OPC	Chisang Khola	21-Mar-19	28-Mar-19	18-Apr-19		8.24	7.5
192	T2L23C	MR-1791	Saptakoshi	OPC	Chisang Khola	21-Mar-19	28-Mar-19	18-Apr-19		9.19	7.5
193	R-110	MR-1792	Saptakoshi	OPC	Chisang Khola	21-Mar-19	28-Mar-19	18-Apr-19		8.24	7.5
194	T2L23C	MR-1793	Saptakoshi	OPC	Chisang Khola	21-Mar-19	28-Mar-19	18-Apr-19		8.97	7.5
195	R-23	MR-1794	Saptakoshi	OPC	Chisang Khola	21-Mar-19	28-Mar-19	18-Apr-19		7.97	7.5
196	R-2	MR-1795	Saptakoshi	OPC	Chisang Khola	21-Mar-19	28-Mar-19	18-Apr-19		9.19	7.5
197	T1L5	MR-1796	Saptakoshi	OPC	Chisang Khola	21-Mar-19	28-Mar-19	18-Apr-19		8.51	7.5
198	T2L24E	MR-1797	Saptakoshi	OPC	Chisang Khola	21-Mar-19	28-Mar-19	1/8-Apr-19		7.84	7.5

ZHONGHENG CONSTRUCTION GROUP INTERNATIONAL ENGINEERING CO.

LTD

Contractor

Consultant

BUILDING DESIGN AUTHORITY (2) LTD IN JOINT VENTURE WITH B.N. CONSULTANCY TVT. LTD AND PLUS ENGINEERS & ARCHITECTS (2) LTD, KATHMANDU,

\* NEPALN

Checked By

Engineer Pushpak Pradhan Submitted By

Contract Manager Rabindra Kr. Thakur Verified By

Expert Qty Surveyor/CSE H.K. Mandal Approved By Team Leader

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

								No. of the last of			
								Year			019
							Descri	ption of Samp	ple	Bric	k Wall
S.N.	Location	Lab	Type of Cement	Brand of	Source of Sand	Date of	Date o	f Testing	Strength		Type
		Ref.no.		Cement		Casting	7 Days	28 Days	7 Days	28 Days	Grad
199	R-23	MR-1798	Saptakoshi	OPC	Chisang Khola	21-Mar-19	28-Mar-19	18-Apr-19		9.05	7.5
200	R-44	MR-1799	Saptakoshi	OPC	Chisang Khola	22-Mar-19	29-Mar-19	19-Apr-19		9.19	7.5
201	T2L19B	MR-1800	Saptakoshi	OPC	Chisang Khola	22-Mar-19	29-Mar-19	19-Apr-19		8.24	7.5
202	R-84	MR-1801	Saptakoshi	OPC	Chisang Khola	22-Mar-19	29-Mar-19	19-Apr-19		8.24	7.5
203	T2L24E	MR-1802	Saptakoshi	OPC	Chisang Khola	22-Mar-19	29-Mar-19	19-Apr-19		8.38	7.5
204	T2L25B	MR-1803	Saptakoshi	OPC	Chisang Khola	22-Mar-19	29-Mar-19	19-Apr-19		8.51	7.5
205	T1L5	MR-1804	Saptakoshi	OPC	Chisang Khola	22-Mar-19	23-Mar-19	19-Apr-19		8.24	7.5
206	T3L23C	MR-1805	Saptakoshi	OPC	Chisang Khola	22-Mar-19	29-Mar-19	19-Apr-19		9.05	7.5
207	R-110	MR-1806	Saptakoshi	OPC	Chisang Khola	23-Mar-19	30-Mar-19	20-Apr-19		7.97	7.5
208	R-23	MR-1807	Saptakoshi	OPC	Chisang Khola	23-Mar-19	30-Mar-19	20-Apr-19		8.11	7.5
209	R-110	MR-1808	Saptakoshi	OPC	Chisang Khola	23-Mar-19	30-Mar-19	20-Apr-19		7.97	7.5
210	R-44	MR-1809	Saptakoshi	OPC	Chisang Khola	23-Mar-19	30-Mar-19	20-Apr-19		9.19	7.5
211	T2L19B	MR-1810	Saptakoshi	OPC	Chisang Khola	23-Mar-19	23-Feb-19	20-Apr-19		8.65	7.5
212	R-2	MR-1811	Saptakoshi	OPC	Chisang Khola	23-Mar-19	30-Mar-19	20-Apr-19		8.65	7.5
213	R-44	MR-1812	Saptakoshi	OPC	Chisang Khola	23-Mar-19	30-Mar-19	20-Apr-19		8.24	7.5
214	T2L19B	MR-1813	Saptakoshi	OPC	Chisang Khola	23-Mar-19	30-Mar-19	20-Apr-19		9.19	7.5
215	T3L25B	MR-1814	Saptakoshi	OPC	Chisang Khola	23-Mar-19	30-Mar-19	20-Apr-19		9.19	7.5
216	T1L5	MR-1815	Saptakoshi	OPC	Chisang Khola	23-Mar-19	21-Mar-19	20-Apr-19		7.84	7.5
217	T3L23C	MR-1816	Saptakoshi	OPC	Chisang Khola	23-Mar-19	30-Mar-19	20-Apr-19		8.24	7.5
218	R-23	MR-1817	Saptakoshi	OPC	Chisang Khola	23-Mar-19	30-Mar-19	20-Apr-19		8.51	7.5
219	R-110	MR-1818	Saptakoshi	OPC	Chisang Khola	23-Mar-19	30-Mar-19	20-Apr-19		7.97	7.5
220	R-2	MR-1819	Saptakoshi	OPC	Chisang Khola	23-Mar-19	30-Mar-19	20-Apr-19		8.11	7.5
221	R-44	MR-1820	Saptakoshi	OPC	Chisang Khola	24-Mar-19	31-Mar-19	21-Apr-19		8.24	7.5
222	R-2	MR-1821	Saptakoshi	OPC	Chisang Khola	24-Mar-19	25-Mar-19	21-Apr-19		9.05	7.5
223	T3L25B	MR-1822	Saptakoshi	OPC	Chisang Khola	24-Mar-19	31-Mar-19	21-Apr-19		8.78	. 7.5
224	R-82	MR-1823	Saptakoshi	OPC	Chisang Khola	24-Mar-19	31-Mar-19	21-Apr-19		9.19	7.5
225	T3L6	MR-1824	Saptakoshi	OPC	Chisang Khola	24-Mar-19	31-Mar-19	21-Apr-19		9.59	7.5
226	R-44	MR-1825	Saptakoshi	OPC	Chisang Khola	24-Mar-19	31-Mar-19	21-Apr-19		8.65	7.5
227	R-2	MR-1826	Saptakoshi	OPC	Chisang Khola	25-Mar-19	1-Apr-19	22-Apr-19	6.32	8.92	7.5
228	R-110	MR-1827	Saptakoshi	OPC	Chisang Khola	25-Mar-19	1-Apr-19	22-Apr-19	5.91	9.32	7.5
229	R-2	MR-1828	Saptakoshi	OPC	Chisang Khola	25-Mar-19	1-Apr-19	22-Apr-19	6.05	9.05	7.5
230	R-44	MR-1829	Saptakoshi	OPC	Chisang Khola	25-Mar-19	1-Apr-19	22-Apr-19	6.46	9.46	7.5
231	R-21	MR-1830	Saptakoshi	OPC	Chisang Khola	25-Mar-19	1-Apr-19	22-Apr-19	5.91	9.32	7.5
		14	17-145	7.4				PI		/	
		Contr	actor			/	Consult	ant			
	11		TRUCTION O		VENTURE V	NG DESIG VITH B.N. ERS & ARG	CONSULT	ANCYPV S(P) LTD,	T. LTI	AND	PLU

Checked By

Engineer
Pushpak Pradhan

Submitted By

Contract Manager Rabindra Kr. Thakur Verlfied By

Expert Qty Surveyor/CSE H.K. Mandal



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

								Month		A	pril
								Year			019
							Descri	ption of Sam	ple	Brick	k Wall
		Lab		Brand of		Date of		f Testing	Strength,	, N/mm2	Type of
S.N.	Location	Ref.no.	Type of Cement	Cement	Source of Sand	Casting	7 Days	28 Days	7 Days	28 Days	Grade
232	R-46	MR-1831	Saptakoshi	OPC	Chisang Khola	25-Mar-19	1-Apr-19	22-Apr-19	6.18	8.92	7.5
233	R-7	MR-1832	Saptakoshi	OPC	Chisang Khola	25-Mar-19	1-Apr-19	22-Apr-19	6.05	8.78	7.5
234	R-110	MR-1833	Saptakoshi	OPC	Chisang Khola	25-Mar-19	1-Apr-19	22-Apr-19	5.91	9.46	7.5
235	R-2	MR-1834	Saptakoshi	OPC	Chisang Khola	26-Mar-19	2-Apr-19	23-Apr-19	6.05	7.97	7.5
236	T1L5	MR-1835	Saptakoshi	OPC	Chisang Khola	26-Mar-19	2-Apr-19	23-Apr-19	6.60	9.59	7.5
237	T3L12	MR-1836	Saptakoshi	OPC	Chisang Khola	27-Mar-19	3-Apr-19	24-Apr-19	5.91	8.51	7.5
238	R-110	MR-1837	Saptakoshi	OPC	Chisang Khola	27-Mar-19	23-Mar-19	24-Apr-19	6.32	9.46	7.5
239	R-44	MR-1838	Saptakoshi	OPC	Chisang Khola	27-Mar-19	3-Apr-19	24-Apr-19	6.60	8.51	7.5
240	R-2	MR-1839	Saptakoshi	OPC	Chisang Khola	28-Mar-19	4-Apr-19	25-Apr-19	5.91	7.84	7.5
241	Rani site	MR-1840	Saptakoshi	OPC	Chisang Khola	28-Mar-19	4-Apr-19	25-Apr-19	6.87	9.19	7.5
242	R-82	MR-1841	Saptakoshi	OPC	Chisang Khola	28-Mar-19	4-Apr-19	25-Apr-19	5.91	8.38	7.5
243	R-7	MR-1842	Saptakoshi	OPC	Chisang Khola	28-Mar-19	4-Apr-19	25-Apr-19	6.87	9.32	7.5
244	R-44	MR-1843	Saptakoshi	OPC	Chisang Khola	28-Mar-19	4-Apr-19	25-Apr-19	5.91	8.65	7.5
245	T3L12	MR-1844	Saptakoshi	OPC	Chisang Khola	28-Mar-19	4-Apr-19	25-Apr-19	6.87	9.19	7.5
246	R-82	MR-1845	Saptakoshi	OPC	Chisang Khola	28-Mar-19	4-Apr-19	25-Apr-19	6.18	9.59	7.5
247	R-7	MR-1846	Saptakoshi	OPC	Chisang Khola	29-Mar-19	5-Apr-19	26-Apr-19	6.73	8.65	7.5
248	T1L5	MR-1847	Saptakoshi	OPC	Chisang Khola	29-Mar-19	5-Apr-19	26-Apr-19	6.05	9.46	7.5
249	T2L19Y	MR-1848	Saptakoshi	OPC	Chisang Khola	29-Mar-19	5-Apr-19	26-Apr-19	6.73	7.97	7.5
250	R-82	MR-1849	Saptakoshi	OPC	Chisang Khola	30-Mar-19	6-Apr-19	27-Apr-19	5.77	8.92	7.5
251	R-2	MR-1850	Saptakoshi	OPC	Chisang Khola	30-Mar-19	6-Apr-19	27-Apr-19	6.32	9.59	7.5
252	T2L19Y	MR-1851	Saptakoshi	OPC	Chisang Khola	30-Mar-19	6-Apr-19	27-Apr-19	5.91	7.97	7.5
253	R-2	MR-1852	Saptakoshi	OPC	Chisang Khola	31-Mar-19	7-Apr-19	28-Apr-19	6.32	8.11	7.5
254	R-7	MR-1853	Saptakoshi	OPC	Chisang Khola	31-Mar-19	7-Apr-19	28-Apr-19	6.87	9.46	7.5
255	R-110	MR-1854	Saptakoshi	OPC	Chisang Khola	31-Mar-19	7-Apr-19	28-Apr-19	5.91	7.84	7.5
256	R-82	MR-1855	Saptakoshi	OPC	Chisang Khola	31-Mar-19	7-Apr-19	28-Apr-19	6.87	9.05	7.5
257	T3L7	MR-1856	Saptakoshi	OPC	Chisang Khola	1-Apr-19	8-Apr-19	29-Apr-19	6.60	8.78	. 7.5
258	R-44	MR-1857	Saptakoshi	OPC	Chisang Khola	1-Apr-19	8-Apr-19	29-Apr-19	5.91	8.65	7.5
259	R-44	MR-1858	Saptakoshi	OPC	Chisang Khola	2-Apr-19	9-Apr-19	30-Apr-19	5.77	9.19	7.5
260	T1L5	MR-1859	Saptakoshi	OPC	Chisang Khola	2-Apr-19	9-Apr-19	30-Apr-19	6.87	9.59	7.5
261	R-110	MR-1860	Saptakoshi	OPC	Chisang Khola	2-Apr-19	9-Apr-19	30-Apr-19	6.73	9.05	7.5
262	R-2	MR-1861	Saptakoshi	OPC	Chisang Khola	2-Apr-19	9-Apr-19	30-Apr-19	5.77	8.62	7.5
263	T2L22A	MR-1862	Saptakoshi	OPC	Chisang Khola	3-Apr-19	10-Apr-19	1-May-19	6.18	-	7.5
264	R-110	MR-1863	Saptakoshi	OPC	Chisang Khola	3-Apr-19	10-Apr-19	1-May-19	6.87		7.5
		1.3	10000		4		har	ty (p)			
		Contr	actor	×			Consult				
	//	0.170 77 28			DUILDI	NO DECLO	NI STORES	TO HOUSE STORY	TOD TA	TAOIR	TOR

ZHONGHENG CONSTRUCTION GROUP INTERNATIONAL ENGINEERING CO. LTD

BUILDING DESIGN AUTHORITY (FELTD IN JOINT VENTURE WITH B.N. CONSULTANCY PUT. LTD AND PLUS ENGINEERS & ARCHITECTS (P) LTDEKATHMANDU,

Biratnagat

Checked By

Engineer Pushpak Pradhan Submitted By

Contract Manager Rabindra Kr. Thakur Verified By

Expert ty Surveyor/CSE H.K. Mandal

Approved By

Team Leader Giresh Chand



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

								Month		A	pril
								Year		2	019
							Descri	ption of Samp	ole	Bric	k Wall
C NT		Lab	T. 60	Brand of	0.00	Date of		Testing	Strength,	, N/mm2	Туре
S.N.	Location	Ref.no.	Type of Cement	Cement	Source of Sand	Casting	7 Days	28 Days	7 Days	28 Days	Grade
265	R-2	MR-1864	Saptakoshi	OPC	Chisang Khola	4-Apr-19	11-Apr-19	2-May-19	5.63		7.5
266	R-110	MR-1865	Saptakoshi	OPC	Chisang Khola	4-Apr-19	11-Apr-19	2-May-19	5.77		7.5
267	R-110	MR-1866	Saptakoshi	OPC	Chisang Khola	4-Apr-19	11-Apr-19	2-May-19	5.50		7.5
268	R-2	MR-1867	Saptakoshi	OPC	Chisang Khola	5-Apr-19	12-Apr-19	3-May-19	6.87		7.5
269	R-44	MR-1868	Saptakoshi	OPC	Chisang Khola	5-Apr-19	12-Apr-19	3-May-19	6.60		7.5
270	R-44	MR-1869	Saptakoshi	OPC	Chisang Khola	5-Apr-19	12-Apr-19	3-May-19	6.60		7.5
271	R-82	MR-1870	Saptakoshi	OPC	Chisang Khola	6-Apr-19	13-Apr-19	4-May-19	6.60		7.5
272	R-2	MR-1871	Saptakoshi	OPC	Chisang Khola	6-Apr-19	13-Apr-19	4-May-19	6.18		. 7.5
273	T1L5	MR-1872	Saptakoshi	OPC	Chisang Khola	7-Apr-19	14-Apr-19	5-May-19	6.05		7.5
274	R-2	MR-1873	Saptakoshi	OPC	Chisang Khola	7-Apr-19	14-Apr-19	5-May-19	5.91		7.5
275	Rani site	MR-1874	Saptakoshi	OPC	Chisang Khola	8-Apr-19	15-Apr-19	6-May-19	6.87		7.5
276	R-44	MR-1875	Saptakoshi	OPC	Chisang Khola	9-Apr-19	16-Apr-19	7-May-19	6.46		7.5
277	R-2	MR-1876	Saptakoshi	OPC	Chisang Khola	10-Apr-19	17-Apr-19	8-May-19	5.91		7.5
278	R-44	MR-1877	Saptakoshi	OPC	Chisang Khola	10-Apr-19	17-Apr-19	8-May-19	6.60		7.5
279	R-82	MR-1878	Saptakoshi	OPC	Chisang Khola	10-Apr-19	17-Apr-19	8-May-19	5.77		7.5
280	R-110	MR-1879	Saptakoshi	OPC	Chisang Khola	11-Apr-19	18-Apr-19	9-May-19	7.01		7.5
281	R-2	MR-1880	Saptakoshi	OPC	Chisang Khola	12-Apr-19	19-Apr-19	10-May-19	5.91		7.5
282	R-7	MR-1881	Saptakoshi	OPC	Chisang Khola	12-Apr-19	19-Apr-19	10-May-19	6.87		7.5
283	R-110	MR-1882	Saptakoshi	OPC	Chisang Khola	12-Apr-19	19-Apr-19	10-May-19	6.60		7.5
284	T1L5	MR-1883	Saptakoshi	OPC	Chisang Khola	12-Apr-19	19-Apr-19	10-May-19	6.32		7.5
285	R-7	MR-1884	Saptakoshi	OPC	Chisang Khola	12-Apr-19	19-Apr-19	10-May-19	6.46		7.5
286	T1L5	MR-1885	Saptakoshi	OPC	Chisang Khola	13-Apr-19	20-Apr-19	11-May-19	7.15		7.5
287	Rani site	MR-1886	Saptakoshi	OPC	Chisang Khola	14-Apr-19	21-Apr-19	12-May-19	5.91		7.5
288	R-2	MR-1887	Saptakoshi	OPC	Chisang Khola	15-Apr-19	22-Apr-19	13-May-19	6.87		7.5
289	T2L19Y	MR-1888	Saptakoshi	OPC	Chisang Khola	15-Apr-19	22-Apr-19	13-May-19	5.91		7.5
290	R-110	MR-1889	Saptakoshi	OPC	Chisang Khola	15-Apr-19	22-Apr-19	13-May-19	6.32		7.5
291	R-2	MR-1890	Saptakoshi	OPC	Chisang Khola	15-Apr-19	22-Apr-19	13-May-19	7.15		7.5
292	T1L5	MR-1891	Saptakoshi	OPC	Chisang Khola	16-Apr-19	23-Apr-19	14-May-19	5.77		7.5
293	Rani site	MR-1892	Saptakoshi	OPC	Chisang Khola	17-Apr-19	24-Apr-19	15-May-19	6.46		7.5
294	T3L7	MR-1893	Saptakoshi	OPC	Chisang Khola	17-Apr-19	24-Apr-19	15-May-19	7.15		7.5
295	R-110	MR-1894	Saptakoshi	OPC	Chisang Khola	17-Apr-19	24-Apr-19	15-May-19	5.77		7.5
296	T2L19Y	MR-1895	Saptakoshi	OPC	Chisang Khola	17-Apr-19	24-Apr-19	15-May-19	7.01		7.5
297	R-46	MR-1896	Saptakoshi	OPC	Chisang Khola	18-Apr-19	25-Apr-19	16-May-19	6.60		7.5

Contractor

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

\* Biratnagat

Consultant

Checked By

Engineer Pushpak Pradhan Submitted By

Contract Manager Rabindra Kr. Thakur Verified By Expert Qty Surveyor/CSE

H.K. Mandal

Approved By Team Leader



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

								Month			pril
							- n	Year		-	019
								ption of Sam	1		k Wall
S.N.	Location	Lab Ref.no.	Type of Cement	Brand of Cement	Source of Sand	Date of Casting		f Testing	Strength.	N/mm2 28	Type of
							7 Days	28 Days	7 Days	Days	
298	R-82	MR-1897	Saptakoshi	OPC	Chisang Khola	18-Apr-19	25-Apr-19	16-May-19	6.05		7.5
299	R-110	MR-1898	Saptakoshi	OPC	Chisang Khola	18-Apr-19	25-Apr-19	16-May-19	6.60		. 7.5
300	R-2	MR-1899	Saptakoshi	OPC	Chisang Khola	18-Apr-19	25-Apr-19	16-May-19	5.91		7.5
301	R-46	MR-1900	Saptakoshi	OPC	Chisang Khola	19-Apr-19	26-Apr-19	17-May-19	6.32		7.5
302	R-42	MR-1901	Saptakoshi	OPC	Chisang Khola	19-Apr-19	26-Apr-19	17-May-19	6.87		7.5
303	R-110	MR-1902	Saptakoshi	OPC	Chisang Khola	19-Apr-19	26-Apr-19	17-May-19	5.91		7.5
304	T3L7	MR-1903	Saptakoshi	OPC	Chisang Khola	19-Apr-19	26-Apr-19	17-May-19	6.46		7.5
305	Rani site	MR-1904	Saptakoshi	OPC	Chisang Khola	19-Apr-19	26-Apr-19	17-May-19	5.77		7.5
306	R-46	MR-1905	Saptakoshi	OPC	Chisang Khola	20-Apr-19	27-Apr-19	18-May-19	6.32		7.5
307	T1L5	MR-1906	Saptakoshi	OPC	Chisang Khola	20-Apr-19	27-Apr-19	18-May-19	6.05		7.5
308	R-46	MR-1907	Saptakoshi	OPC	Chisang Khola	21-Apr-19	28-Apr-19	19-May-19	5.63		7.5
309	R-42	MR-1908	Saptakoshi	OPC	Chisang Khola	21-Apr-19	28-Apr-19	19-May-19	6.60		7.5
310	R-110	MR-1909	Saptakoshi	OPC	Chisang Khola	21-Apr-19	28-Apr-19	19-May-19	5.91		7.5
311	R-46	MR-1910	Saptakoshi	OPC	Chisang Khola	22-Apr-19	29-Apr-19	20-May-19	6.18	-	7.5
312	R-46	MR-1911	Saptakoshi	OPC	Chisang Khola	22-Apr-19	29-Apr-19	20-May-19	7.15		7.5
313	R-82	MR-1912	Saptakoshi	OPC	Chisang Khola	23-Apr-19	30-Apr-19	21-May-19	6.87		7.5
14	R-110	MR-1913	Saptakoshi	OPC	Chisang Khola	23-Apr-19	30-Apr-19	21-May-19	6.87		7.5
15	R-110	MR-1914	Saptakoshi	OPC	Chisang Khola	23-Apr-19	30-Apr-19	21-May-19	5.91		7.5
316	R-46	MR-1915	Saptakoshi	OPC	Chisang Khola	23-Apr-19	30-Apr-19	21-May-19	6.32		7.5
	10 10	111111111111111111111111111111111111111	Suprancom	OTC	Cinsuing renora	23-11p1-13	30=/4p1=13	21-iviay-19	0.32		1,5
						1 6 6		-4"			
					P EGFN	. 11		Ly water			
					· Par						
					- 13.						
-											
									-		
_											
_	-		25 25				-				
		1×					Nuthority	10.			
		-			-						
	-	Contr	aetor		DYINY DY	NO PECIO	) Comment				-
	11		TRUCTION OF ENGINEERING		VENTURE V	ERS & ART	CONSULT CHITECTS	MNCYPV S(P) Lato,	T. LTE	AND	PLU
0	Nahr		A	y	Monge	>	* Biratna		<i>C</i>	K	
ngin	ceked By Submitted By ineer Contract Manager Rabindra Kr. Thákur				Verified By Approve Expert Qty Surveyor/CSE Team Let						



			REGIONA	Biratnagar l Contract No:-	EVELOPMENT PE Metropolitan City RUDP/ICB/BRT-02 Of Monthly Test Report	ROJECT		
					16 25	Month	April	
						Year	2019	
						Type of Material	Brick	
.N.	Lab Ref.No.	Testing Date	Source of Brick	Name Of Brick	Water Absorption of Brick(%)	Strength of Brick(N/mm²)	Remarks	
1	1	6-Apr-19	Dadarbairya	STAR	14.45	14.34		
2	2	6-Apr-19	Dadarbairya	STAR	11.20	18.89		
3	3	6-Apr-19	Dadarbairya	STAR	10.80	15.10		
4	4	6-Apr-19	Dadarbairya	STAR	9.16	19.10		
_								
					-			
			-					
			Sp. Limit		<20% /	>8 to 10 N/mm²		
Con	nments:-	Contractor			Authority	(P)		
	ZHONGHEI	NG CONSTRUCT	NING CO. LTD	BUILDING DESIGN AU	JTHORITY (P) LTD IN JOINT VENTURE ENGINEERS & ARCHITECTS (P) LTD	100	LTD AND PLUS	
		NOUN MIERINA PLOU	ia Horra	col	# Biratnag	ar x Ni		
(	Pladha	in ,	te duy	Mono		O		
	Checked By Engineer Shpak Pradhan		Submmitd by Contract Manager Rabindra Kr.Thakur	Verified by Expert Qty Surveyor/CSE H.K.Mandal		Approved Br Team Leade Giresh Chan-	r	

## **ANNEX-4: SOCIAL & ENVIRONMENT SAFEGUARD**

**Monitoring Formats Attached – April 2019** 



## <u>Environmental Monitoring Format</u> 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: April 2019

Checklist

SN	Activity	Description/Present Status (Compliance/Partially Compliance/Non Compliance	Remarks/ Corrective actions for Non-Compliance
1 1.1	Training Health, Safety and EMP trainings and awareness	Yes	
1.2	Others awareness and skill trainings	No	
<b>2</b> 2.1	Occupational health and safety 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	DDC, Kanchanbari,	1
3.1 3.2	Location  First aid facilities available at camp and worksites	Shanti Chowk, Rani	
3.3	Drinking water supply and sanitation facilities/ pit latrines	Yes	
3.4	Waste Disposal and Management facilities	Tap water/ Hand Pump Yes	<b>S</b>
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	No any disturbance to pedestrians & traffic	SUCTON SERVE WESTAMORAL



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

Subproject Road: -RUDP/ICB/BRT/2

Month/Year:April 2019

Name of Contractor :-ZHONGGHENG Construction GroupInternational Engineering Co pvt Beijing Chaina.

Contract Package: RUDP/ICB/BRT/2

		Co	mpliance Sta	tus	Implementing	Note of	
S.N	Key Social Issuse	Full	Partial	None	Agency	Remarks	Deadline
1	Availability of drinking water services	٧					
2	Availability of toilet facility in campsite	٧	4-7		-4,		
3	Legal source of fuel wood use			٧			
4	Legal document of fuel wood source			٧	-		
5	Use of safety accessories	٧					
6	Availability of first aid facility	٧		2			
7	Basic wage rate to construction workers	٧					
8	Equal wage rate to male and female workers		٧				
9	Compensation of temporarily occupied land	٧					
10	Compensation of temporarily occupied buildings	√ V			<u></u>		
11	Legal document of temporarily occupied assets	٠ ٧ ;	No.			X	
12	Non use of child labour in construction activities	٧.	7.				



Verified by:

Monitored by:



Varid         Proden, yard         NON LOCAL         5         18         23         10         5         5           Vup A         Proden, yard         NON LOCAL         10         30         40         0         15         10         5         5           Oup A         Drain         INDIAN         23         40         0         15         10         5         5         10         5         5         10         5         5         10         5         10         5         10         5         10         5         10	Proden, yard	Proden, yard
Proden. yard         INDIAN         5         18         23         10	Prodcn. yard         NON LOCAL         5         18         2.3         10         20           Drain         INDIAN         30         40         0         15         10         30           Drain         INDIAN         40         0         15         10         30         10	Proden, yard         NON LOCAL         5         18         23         23           Drain         INDIAN         10         30         40         0         15         10         9           Drain         INDIAN         40         25         10         <
Drain Drain Drain Drain Drain Drain Drain Drain Drain INDIAN         10 30 40 0 15 10 5 10 5 10 5 10 5 10 5 10 5	Drain         LOCAL LO	Drain InDIAN         LOCAL L
Drain         LOCAL INDIAN INDIAN INDIAN INDIAN INDIAN         10         30         40         0         15         10         5           Drain         INDIAN INDIA	Drain         LOCAL LO	Drain         LOCAL LO
Drain         NON LOCAL         10         30         40         0         15         10         30           Local         TOTAL         40         10	Drain         NON LOCAL         10         30         40         0         15         10         30         40         0         15         10         30         40         10         30         40         10         30         40         10         10         30         40         10	Drain         NON LOCAL         10         30         40         0         15         10         30           Prain         INDIAN         5         20         25         10         10           Drain         INDIAN         25         16         5         1           Drain         INDIAN         4         12         16         5         1           NON LOCAL         4         12         16         5         1           NON LOCAL         16         7         0         0         2           Subgrade         INDIAN         16         7         0         0         2           INDIAN         7         9         4         4         1
Drain         INDIAN         40         10           Drain         LOCAL LOCA	TOTAL	TOTAL
Drain         LOCAL         5         20         25         10           Drain         INDIAN         25         16         5         1           Drain         INDIAN         4         12         16         5         1           Drain         INDIAN         16         5         1           TOTAL         16         5         1           LOCAL         2         7         0         0         2           Subgrade         INDIAN         7         6         2         6         2           TOTAL         7         6         6         2         6         6         6         6         6         6         6         7         6         6         6         6         6         6         7         6         6         7         6         6         6         7         6         6         7         6         6         7         6         7         6         7         6         7         7         7         6         7         7         7         7         7         7         7         7         7         8         7         8         7 <t< td=""><td>Drain         LOCAL LO</td><td>Drain         LOCAL LO</td></t<>	Drain         LOCAL LO	Drain         LOCAL LO
Drain         LOCAL LO	Drain         INDIAN         5         20         25         10           Drain         INDIAN         25         16         5         1           Drain         INDIAN         4         12         16         5         1           TOTAL         16         5         1         1           Non LoCal         2         5         7         0         0         2           Subgrade         INDIAN         7         9         4         1           LOCAL         2         5         7         0         0         2           NON LOCAL         7         9         4         1	p B         Drain InDIAN INDIAN         5         20         25         10           p C         Drain InDIAN         4         12         16         5         1           p C         Drain InDIAN
Drain         LOCAL         5         20         25         AD           Drain         INDIAN         25         16         5         1           Drain         INDIAN         4         12         16         5         1           Subgrade         INDIAN         2         5         7         0         0         2           TOTAL         2         5         7         0         0         2           Subgrade         INDIAN         7         0         0         2         0	Drain         LOCAL LO	Drain         INDIAN         25         20         25         10           Drain         INDIAN         25         16         5         1           Drain         INDIAN         4         12         16         5         1           Subgrade         INDIAN         7         0         0         2         1           Subgrade         INDIAN         7         9         4         4         1           Base Final         NON LOCAL         7         9         4         1
Drain         INDIAN         25         16         5         1           Drain         INDIAN         16         5         1           Drain         INDIAN         16         5         1           LOCAL         2         5         7         0         0         2           Subgrade         INDIAN         7         0         0         2         1	Drain         INDIAN         25         16         5         1           LOCAL         4         12         16         5         1           NON LOCAL         16         5         1           LOCAL         2         5         7         0         0         2           Subgrade         INDIAN         7         9         4         1 <td>Drain         INDIAN         25         16         5         1           Drain         INDIAN         4         12         16         5         1           Drain         INDIAN         16         5         1           INDIAN         16         0         0         2           Subgrade         INDIAN         7         0         0         2           TOTAL         7         0         0         2         0         0         2           NON LOCAL         7         7         9         4         4         1         1         0         0         2         0         0         2         0         0         2         0</td>	Drain         INDIAN         25         16         5         1           Drain         INDIAN         4         12         16         5         1           Drain         INDIAN         16         5         1           INDIAN         16         0         0         2           Subgrade         INDIAN         7         0         0         2           TOTAL         7         0         0         2         0         0         2           NON LOCAL         7         7         9         4         4         1         1         0         0         2         0         0         2         0         0         2         0
Drain         INDIAN         25         16         5         1           Drain         INDIAN         16         5         1           LOCAL         4         12         16         5         1           TOTAL         16         6         0         0         2           Subgrade         INDIAN         7         0         0         2         0           TOTAL         7         7         0         0         2         0         0         2         0 <td< td=""><td>Drain         INDIAN         25         16         5         1           Drain         INDIAN         16         5         1           Subgrade         INDIAN         2         5         7         0         0         2           Subgrade         INDIAN         7         9         4         4         4         4         4         1&lt;</td><td>  TOTAL 25   16   5   1    </td></td<>	Drain         INDIAN         25         16         5         1           Drain         INDIAN         16         5         1           Subgrade         INDIAN         2         5         7         0         0         2           Subgrade         INDIAN         7         9         4         4         4         4         4         1<	TOTAL 25   16   5   1
Drain Drain Subgrade         LOCAL	Drain Drain NoN LOCAL NON LOCAL NON LOCAL INDIAN         4 12 16 5 1         5 1         1           Subgrade INDIAN TOTAL TOTAL INDIAN         2 5 7 0 0 2         2 5 7 0 0 0         2 5 7 0 0           LOCAL TOTAL INDIAN TOTAL INDIAN TOTAL INDIAN         7 9 4         4 4	TOTAL   25   16   5   1
Drain Drain Subgrade         LOCAL	Drain Drain Drain Drain Drain Drain INDIAN         LOCAL L	Drain         LOCAL NON LOCAL INDIAN         4         12         16         5         1           TOTAL TOTAL Subgrade         LOCAL 2         5         7         0         0         2           TOTAL TOTAL Subgrade         INDIAN         7         9         4         4         4           Base Final Base Final Indian         Indian         2         7         9         4         4         4
Drain         INDIAN         16         10         2         2           Subgrade         INDIAN         2         5         7         0         0         2           TOTAL         2         5         7         0         0         2           NON LOCAL         2         5         7         0         0         2           TOTAL         7         7         0         0         2         0	Drain         INDIAN         16         10         2         2           Subgrade         INDIAN         2         5         7         0         0         2           Subgrade         INDIAN         7         9         4         4         1	Drain   LOCAL   4   12   10   5   5   7   10   10   10   10   10   10   10
Drain         NON LOCAL         16         6         7         7         8         7         9         9         2         8         8         8         9         9         10 <td>Drain         NON LOCAL         16         0         0         2           TOTAL         2         5         7         0         0         2           Subgrade         INDIAN         7         0         0         2           TOTAL         7         9         4         4           NON LOCAL         2         7         9         4</td> <td>  Drain   NON LOCAL   16</td>	Drain         NON LOCAL         16         0         0         2           TOTAL         2         5         7         0         0         2           Subgrade         INDIAN         7         0         0         2           TOTAL         7         9         4         4           NON LOCAL         2         7         9         4	Drain   NON LOCAL   16
Subgrade         INDIAN         16         0         0         2           TOTAL         2         5         7         0         0         2           NON LOCAL         2         5         7         0         0         2           TOTAL         7         7         0         0         2         0	Subgrade   INDIAN   16	TOTAL
TOTAL	TOTAL 16   16   16   16   16   16   16   16	Subgrade   TOTAL
LOCAL         2         5         7         0         0         2           NON LOCAL         NON LOCAL         NON LOCAL         INDIAN         INDIAN <td>Subgrade         LOCAL         2         5         7         0         0         2           TOTAL         7         9         4         4</td> <td>Subgrade   LOCAL   2   5   7   0   0   2     NON LOCAL   7   0   0   2     TOTAL   7   9   4     Base Final   NON LOCAL   1   1   1     NON LOCAL   2   7   9   4  </td>	Subgrade         LOCAL         2         5         7         0         0         2           TOTAL         7         9         4         4	Subgrade   LOCAL   2   5   7   0   0   2     NON LOCAL   7   0   0   2     TOTAL   7   9   4     Base Final   NON LOCAL   1   1   1     NON LOCAL   2   7   9   4
Subgrade INDIAN TOTAL TOTAL	Subgrade NON LOCAL TOTAL 7 9 NON LOCAL 2 7 9	Subgrade INDIAN 7 9 1 NON LOCAL 7 9 1 NON LOCAL 2 7 9 1 NON LOCAL
Subgrade INDIAN TOTAL	Subgrade INDIAN 7 9 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Subgrade INDIAN 7 TOTAL 7 Base Final NON LOCAL 2 7 9
TOTAL	TOTAL 7 9 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	TOTAL   7   9
	LOCAL 2 7 9 NON LOCAL	Base Final LOCAL 2 7 9
		Base Final
Base Final		TOTAL 9   1



Construction and Completion Of Sewerage  LOCATION TYPES OF WORK TYPES OF WORKERS  LOCAL Base NON LOCAL INDIAN TOTAL	Construction and Completion Of Sewerage, Dialingge, Road fortpath and Road Furniture Works (RUDP/ICB/BIA)   Location   Types of Work   Types of Workers   Skulled   Location					Biratna	Biratnagar Metropolitant City	opolitan	ıt City					
Construction and Completion Of Sewerage, Drainage, Road, Footpath and Road Furniture Works (RUDP/ICB/B)   LABOUR DATA   COMPOSITION   LABOUR DATA   ETHNIC COMPOSITION   LOCAL   2   6   8   12	Construction and Completion Of Sewerage, Drainage, Road, Footpath and Road Furniture Works (RUDP/ICB/B)   Independence					Regional	Urban Dev	elopment	Project					
LABOUR DATA   LABOUR DATA   LABOUR DATA   LABOUR DATA   LABOUR	LOCATION   TYPES OF WORKER   TYPES OF WORKERS   TABOUR		Cons	struction and Co	ompletion Of Sewera	age, Drai	nage, Roa	d, Footp	ath and	Road Fu	rniture \	Norks (	RUDP/ICB/B	
LOCATION   TYPES OF WORK   TYPES OF WORKERS   TABOUR	LOCATION   TYPES OF WORK   TYPES OF WORKERS   TABOUR						LABOUR	DATA						
Fig. 64   NORIN Raise   NON LOCAL   2   6   8   8   8   8   8   8   8   8   8	TOCATION   TYPE OF WORKERS   SKILED   UNSKILED   MADHESI					IA	SOUR	COMP	OSITION			ETHNIC	COMPOSITION	
R26	R26   Maintenance   LOCAL   2   6   8     5	NO.	LOCATION	TYPES OF WORK		SKILLED	UNSKILLED	2	FEMALE	JANJATI		MUSLIM	MADHESI	BRAHMIN/CHHETR
R76   Maintenance   INDIAN   8	R26				LOCAL	2	9	8				5	3	
RZ6   Maintenance   INDIAN   8   12	R26   Maintenance   INDIAN   8   12			Base	NON LOCAL									
F76	F76	7	R26	Maintenance	INDIAN									
F76   Asphalt   LOCAL   4   8   12	F76   Asphalt   LOCAL   4   8   12				TOTAL	∞								
R76   Asphalt   NON LOCAL   4   8   12	R76   Asphalt   NON LOCAL   4   8   12				LOCAL									
R76	R76		1		NON LOCAL	4	8	12					12	
S13   DRAIN Raise	S13 DRAIN Raise		R76	Asphalt	INDIAN									
S13   DRAIN Raise	S13   DRAIN Raise				TOTAL	12								
S13   DRAIN Raise   LOCAL   7   16   23	S13   DRAIN Raise			T.										
S13   DRAIN Raise   NON LOCAL   23	S13   DRAIN Raise   NON LOCAL   23				LOCAL	7	16	23					23	
S13   Drain Raise   InDIAN   23	S13   Drain Raise   INDIAN   23				NON LOCAL									
CN2  ORAIN Raise  R21  PRAIN Raise  R05  DRAIN Raise  R05  R05  R05  R05  R05  R05  R05  R0	CN2 DRAIN Raise	6	S13	DKAIN Kaise	INDIAN									
CN2         DRAIN Raise         LOCAL INDIAN         4         8         12         4         8           R21         DRAIN Raise         INDIAN ILOCAL INDIAN         2         6         8         4         8           R05         DRAIN Raise         INDIAN ILOCAL INDIAN         2         7         9         4         4           R05         DRAIN Raise         INDIAN         9         4         4         4	CN2 DRAIN Raise  LOCAL  R21 DRAIN Raise  LOCAL  R23  R05  DRAIN Raise  LOCAL  LOCAL  LOCAL  R05  DRAIN Raise  LOCAL  LOCAL  R05  R05  R05  R05  R07  R07  R07  R07				TOTAL	23								
CN2         DRAIN Raise         LOCAL ROLA LOCAL ROLA LOCAL L	CN2 DRAIN Raise													
CN2         DRAIN Raise         NON LOCAL L	CN2 DRAIN Raise				LOCAL								c	
R21 DRAIN Raise	CONZ   DRAIN Raise   INDIAN   12		2	osica MAda	NON LOCAL	4	∞	12			4		×	
R21   DRAIN Raise   LOCAL   2   6   8	TOTAL   12	0	CINZ	DANIN Naise	INDIAN									
COCAL   COCA	R21   DRAIN Raise   LOCAL   2   6   8				TOTAL	12			-					
R21         DRAIN Raise         NON LOCAL         2         7         9         4           R05         DRAIN Raise         INDIAN         9         4         1	R21         DRAIN Raise         NON LOCAL         2         7         9         4           R05         DRAIN Raise         INDIAN         9         4           TOTAL         9         4				LOCAL	2	9	8					8	
ROS   DRAIN Raise   INDIAN	ROS   DRAIN Raise   INDIAN     ROS   DRAIN Raise   INDIAN   Potential   Pote	10			NON LOCAL									
TOTAL   8   4   4	RO5         DRAIN Raise         INDIAN         9         4           TOTAL         2         7         9         4           TOTAL         9         6         6	$\vdash$	R21	DRAIN Kaise	INDIAN									
RO5         DRAIN Raise         LOCAL INDIAN         2         7         9         4           TOTAL         9         4         4         6	ROS         DRAIN Raise         LOCAL LOCAL LOCAL LOCAL LOCAL LOCAL LOCAL LOCAL LOCAL LOTAL BY LOTAL LO				TOTAL	∞								
R05 DRAIN Raise NON LOCAL INDIAN TOTAL	RO5 DRAIN Raise NON LOCAL 10DIAN 9 10DIAN 10DIAN 9 10DIAN 9 10DIAN 9 10DIAN 10DIAN 9 10DIAN 1				LOCAL	2	7	6			4		5	
R05 DRAIN Raise INDIAN TOTAL	ROS DRAIN Raise INDIAN 9   Contract of the con				NON LOCAL									
	6	7	R05	DRAIN Raise	INDIAN									
	AGI IEEE III III III III III III III III				TOTAL	6						1	TON CONCESSION OF THE PARTY OF	
												4514		MGIW



Talia   Poein   Project    Types or work   Types or works   Rudok				Biratna	Biratnagar Metropolitant City	opolitar	nt City						
Table   Tocation and Completion Of Sewerage, Drainage, Road, Footpath and Road Furniture Works (RUDP/ICB/B)   Incompatibility   Types of works   Types   Types of works   Types   Typ	Construction and Completion Of Sewerage, Drainage, Road, Footpath and Road Furniture Works (RUDP/ICB/B)   International Propertion				Regional	Urban Dev	elopment	: Project					
Talia   Drain   Local   Loca	Talidorno   Types of Workers   Amount   Types of Workers   Amount   Talidorno   Types of Workers   Amount   Types of Workers   Typ	Ŭ	onstruction and C	ompletion Of Sewera	age, Drai	nage, Roa	d, Footp	ath and	Road Fu	rniture	Works (	RUDP/ICB/	BRT)
Table   Types of Workers   Typ	Table   Types of Workers   Types of Workers   Skilled   Male   Fenale   Januari   Januari   Madriesi   Male   Ma		2			LABOUR	DATA						APRIL
T3130   Drain   NON LOCAL   5   12   17   7   5   5   5	T31.0   Drain   NON LOCAL   5   12   17   7   5   5   5				SKILED	SOUR	2	OSITION	IANIATI	DALIT	ETHNIC	COMPOSITIC	BRAHMIN/CHHETE
Drain         NON LOCAL         5         12         17         5         8           House         TOTAL         17         7         5           House         LOCAL         4         5         9         7         5           LoCAL         2         9         11         5         6           Drain         INDIAN         11         0         5         6           Drain         INDIAN         11         0         5         6           LCCAL         3         8         11         0         5         6           Drain         INDIAN         11         0         5         6         6           LCCAL         3         8         11         0         5         6           Drain         INDIAN         11         0         5         1         6           LCCAL         2         3         8         11         5         6         1           House         INDIAN         25         10         5         1         1         1         1         1         1         1         1         1         1         1         1         1<	Drain         NON LOCAL         5         12         17         7         5           House connection         INDIAN         17         17         5         9         7         5           Drain         INDIAN         9         11         5         6         6           Drain         INDIAN         11         5         6         6         6           Drain         INDIAN         11         0         5         6         6           Drain         INDIAN         11         0         5         6         6           INDIAN         11         0         5         6         6         6           INDIAN         11         0         5         6         6         6         6           INDIAN         11         0         5         10         5         6         6           INDIAN         10         11         0         5         10         5         10         5         10         5         10         5         10         5         10         5         10         5         10         10         10         10         10         10         10	-	,	LOCAL									
House   InDIAN   17   17   18   19   19   19   19   19   19   19	House   TOTAL   17	F		NON LOCAL	2	12	17			7	5	5	
House   LOCAL   4   5   9	House   LOCAL   4   5   9	13110		INDIAN									
House   LOCAL   4   5   9	House   LOCAL   4   5   9	5-	8	TOTAL	17								
House   NON LOCAL   4   5   5   5   5	House   NON LOCAL   4   5   5   5			10001	-	u	d					o	
Connection         TOTAL         9         11         5         6           Drain         INDIAN         11         5         6           Drain         INDIAN         11         0         5         6           Drain         INDIAN         11         0         5         6           Drain         INDIAN         11         0         5         6           House         LOCAL         3         8         11         0         5         6           LOCAL         3         8         11         0         5         6         6           LOCAL         3         8         11         0         5         6         6           LOCAL         11         11         0         5         6         6         6         6         6         6         6         6         6         6         6         6         6         6         7         6         7         10         7         10         5         10         7         10         7         10         5         10         5         10         10         10         10         10         10         10	Connection         INDIANA         9         11         5         6           Drain         INDIANA         11         5         6           Drain         INDIANA         11         0         5         6           LOCAL         7         18         25         10         5           House         INDIAN         25         10         5         6           TOTAL         4         8         12         6           TOTAL         12         6		251101	NON LOCAL	1	0	0						
Drain         INDIAN         9         11         5         6           Drain         INDIAN         11         5         6           Drain         INDIAN         11         5         6           Drain         INDIAN         3         8         11         0         5           INDIAN         11         0         5         6         6           INDIAN         11         0         5         6         6           INDIAN         11         0         5         6         6         6           INDIAN         11         0         5         10         5         6         7         6         7         6         7         6         7         7         7         18         25         10         5         7         7         10         <	Drain         LOCAL         2         9         11         5         6           Drain         INDIAN         11         5         6           Drain         INDIAN         3         8         11         0         5           Drain         INDIAN         11         0         5         6           Drain         INDIAN         11         0         5         6           Drain         INDIAN         11         0         5         6           LOCAL         3         8         11         0         5         6           LOCAL         11         11         0         5         6         6           LOCAL         11         11         0         5         6         6         6           House         LOCAL         7         18         25         10         5         6         6         6         6         6         6         6         6         7         7         18         12         10         5         10         5         10         5         10         5         10         5         10         5         10         5         10	R40	nouse	INDIAN LOCAL									
Drain         LOCAL         2         9         11         5         6           Drain         NON LOCAL         3         8         11         0         5         6           Drain         INDIAN         11         0         5         6         6           Drain         INDIAN         11         0         5         6           Drain         INDIAN         11         0         5         6           LOCAL         3         8         11         0         5         6           LOCAL         11         1         0         5         6         6           House         NON LOCAL         7         18         25         10         5           House         NON LOCAL         4         8         12         6           Roundedtion         INDIAN         12         6         6           Ronnection         TOTAL         12         6         6           Ronnection         TOTAL         12         6         7	Drain         LOCAL         2         9         11         5         6           Drain         INDIAN         11         0         5         6           Drain         INDIAN         11         0         5         6           House         INDIAN         25         10         5           House         INDIAN         25         12         6           House         INDIAN         12         6         6		COIIIIECTIOII	NEINTOT	o								
Drain         LOCAL         2         9         11         5         6           NON LOCAL         11         11         0         5         6           LOCAL         3         8         11         0         5         6           NON LOCAL         3         8         11         0         5         6           NON LOCAL         11         0         5         6         6         6           Drain         INDIAN         11         0         5         6         6           LOCAL         11         12         10         5         6         6           House         LOCAL         7         18         25         10         5         6           House         NON LOCAL         4         8         12         6         7         12         6           House         NON LOCAL         4         8         12         6         7         12         6         7         12         12         12         12         12         12         12         12         12         12         12         12         12         12         12         12         12	Drain         LOCAL         2         9         11         5         6           NON LOCAL         11         0         5         6           TOTAL         11         0         5         6           LOCAL         3         8         11         0         5           NON LOCAL         11         0         5         6           LOCAL         11         0         5         6           LOCAL         11         0         5         6           NON LOCAL         7         18         25         10         5           House         NON LOCAL         4         8         12         6           House         NON LOCAL         4         8         12         6           House         NON LOCAL         4         8         12         6           Connection         INDIAN         12         6         6         6			IOIAL	0								
Drain         NON LOCAL         3         8         11         0         5           LOCAL         3         8         11         0         5           NON LOCAL         11         0         5         1           LOCAL         11         0         5         1           LOCAL         11         0         5         1           LOCAL         7         18         25         10         5           House         NON LOCAL         7         18         25         10         5           House         NON LOCAL         4         8         12         10         5           And Local         10         5         10         5         10         5	Drain         NON LOCAL         3         8         11         0         5           LOCAL         3         8         11         0         5           NON LOCAL         11         0         5                     TOTAL         11         0         5                     NON LOCAL         11         0         5                     NON LOCAL         7         18         25         10         5           House         NON LOCAL         7         18         25         10         5           House         NON LOCAL         4         8         12                               House         NON LOCAL         4         8         12                               TOTAL         12			IOCAL	2	6	11		2		9		
Drain         INDIAN         11         0         5           Drain         INDIAN         7         18         25         10         5           House         NON LOCAL         7         18         25         10         5           House         NON LOCAL         4         8         12         10         5           House         NON LOCAL         4         8         12         10         5           TOTAL         25         8         12         12         12         12           TOTAL         12         12         12         12         12         12	Drain         INDIAN         11         0         5           LOCAL         3         8         11         0         5           NON LOCAL         11         0         5         6           TOTAL         11         0         5         6           LOCAL         7         18         25         10         5           NON LOCAL         7         18         25         10         5           House         NON LOCAL         4         8         12         6           House         NON LOCAL         4         8         12         6           INDIAN         12         8         12         6           INDIAN         12         8         12         6           TOTAL         12         12         6         6			NON LOCAL		,	4				,		
Drain         LOCAL         3         8         11         0         5           NON LOCAL         31         8         11         0         5           INDIAN         11         0         5         0           Drain         INDIAN         7         18         25         10         5           House         NON LOCAL         7         18         25         10         5         0           House         NON LOCAL         4         8         12         0         5         0           House         NON LOCAL         4         8         12         0         5         0	Drain         LOCAL         3         8         11         0         5           LOCAL         3         8         11         0         5           INDIAN         11         0         5                     TOTAL         11         0         5                     LOCAL         11         0         5                     NON LOCAL         7         18         25         10         5           House connection         INDIAN         25         12                               TOTAL         4         8         12   House connection         INDIAN         12	T3L24E		INDIAN									
Drain         LOCAL         3         8         11         0         5           NON LOCAL         11         0         5                     TOTAL         11         0         5                     LOCAL         7         18         25         10         5           NON LOCAL         7         18         25         10         5           House         LOCAL         4         8         12                     House         NON LOCAL         4         8         12                               TOTAL         12   TOTAL         12	Drain         LOCAL         3         8         11         0         5           NON LOCAL         11         0         5                     TOTAL         11         0         5                     LOCAL         7         18         25         10         5           NON LOCAL         7         18         25         10         5           TOTAL         25         8         12                               House         NON LOCAL         4         8         12                               Connection         INDIAN         12   TOTAL         12         12   <td></td> <td></td> <td>TOTAL</td> <td>11</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>			TOTAL	11								
Drain         LOCAL         3         8         11         0         5           NON LOCAL         INDIAN         11         0         5                     LOCAL         11         0         5	Drain         LOCAL         3         8         11         0         5           NON LOCAL         11         0         5                     TOTAL         11         0         5                     LOCAL         7         18         25         10         5           NON LOCAL         7         18         25         10         5           House         LOCAL         4         8         12                     House         NON LOCAL         4         8         12                     TOTAL         12   TOTAL         12												
Drain         NON LOCAL         11         1           TOTAL         11         10         5           LOCAL         7         18         25         10         5           NON LOCAL         7         18         25         10         5           TOTAL         25         10         5         10           LOCAL         4         8         12         10           House         NON LOCAL         4         8         12         10           House         NON LOCAL         4         8         12         10         10           TOTAL         12         12         12         10         10         10         10	Drain         NON LOCAL         11         100 InDIAN         10 S			LOCAL	3	∞	11	0	5			9	
Drain         INDIAN         11         10 Feb         11         11         11         11         12         12         12         12         12         12         13         14         15         15         16         17         18         25         10         15         16         17         16	Drain         INDIAN         11         INDIAN           Drain         INDIAN         25         10         5           TOTAL         25         10         5           TOTAL         25         10         5           LOCAL         4         8         12           House         NON LOCAL         4         8         12           Connection         INDIAN         12         6           TOTAL         12         6         6	2070		NON LOCAL									
Drain House         TOTAL LOCAL TOTAL         11         10         5           House connection         TOTAL TOTAL TOTAL         25         10         5           House connection         INDIAN TOTAL T	Drain         LOCAL         7         18         25         10         5           NON LOCAL         7         18         25         10         5           TOTAL         25         10         5         10           House         LOCAL         4         8         12         10           House         NON LOCAL         4         8         12         10         10           TOTAL         12	K103	Drain	INDIAN									
Drain         LOCAL         7         18         25         10         5           TOTAL         25         10         5                     TOTAL         25         10         5                     LOCAL         4         8         12                               House connection         INDIAN         12   TOTAL         12	Drain         LOCAL         7         18         25         10         5           TOTAL         25         10         5         10         5           TOTAL         25         12         12         12         12           House connection         INDIAN         12         12         12         12         12           TOTAL         12 <t< td=""><td></td><td></td><td>TOTAL</td><td>11</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>			TOTAL	11								
Drain         NON LOCAL         7         18         25         10         5           TOTAL         25         10         5         10         5           LOCAL         4         8         12         12         12           House connection         INDIAN         12         12         12         12           TOTAL         12         12         12         12         12         12	Drain         NON LOCAL         7         18         25         10         5           TOTAL         25         10         5         10         5           LOCAL         4         8         12         12         12           House connection         INDIAN         12         12         12         12           TOTAL         12         12         12         12         12         12			LOCAL									
TOTAL 25	TOTAL 25	2.5	.!	NON LOCAL	7	18	25		10	2		10	
TOTAL 25	TOTAL 25	KIIO	Drain	INDIAN									
LOCAL	LOCAL   4   8   12			TOTAL	25								
House NON LOCAL Connection INDIAN 12	House NON LOCAL Connection INDIAN 12			IOCAI	4	oc	12					12	
connection INDIAN TOTAL	connection INDIAN TOTAL		House	NON LOCAL									
TOTAL	TOTAL	R07	connection	INDIAN									
	State of the state			TOTAL	12							January Salar	a marganting and
	Canal											2873	MINE



Standard   Trick drain   Tri	LOCAT  Wadhu  Yar  Koshi '  Tale  Rani Haa  haa  aree	LOCA1 Madhu			Dilatilo	gal Ivieu	ороштап	Biratnagar Metropolitant City					
Construction and Completion Of Sewerage, Drainage, Road, Footpath and Road Furniture Works (RUDP/ICS/B)   International Process	LOCA1 Nadhu Yar Koshi Tatuch Rani Ha	LOCA1 Madhu Yar			Regional	Urban Deve	elopment	Project					
LOCATION   TYPES OF WORKER   LABOUR DATA   LOCAL   L	LABOUR DATA   LABOUR   LABOUR DATA   LABOUR DATA   LABOUR DATA   LABOUR DATA   LABOUR   LABOUR   LABOUR   SKIILED   UNSKILLED   NALE   FEMALE   ANJATI   DALIT   MAIN   LOCAL   Rani Hartali   Tick drain   NON LOCAL   LOCA	LOCATION Madhumara Yard	ction and Co	ompletion Of Sewera	age, Drair	nage, Roa	d, Footp	ath and I	Road Fu	rniture	Works (	RUDP/ICB/E	3RT)
The soft work	Tocation   Types of Workers   Skilled   INSKILLED   INSKILLED   INSKILLED   INSKILLED   INSKILLED   INSKILLED   INSKILLED   INDIAN	LOCATION Madhumara Yard	7			LABOUR	DATA						APRIL
Madhumara   Asphajit   LOCAL   SMILED   MALE   FEMALE   JANJAN   JAMIN   MADINA	Madhumara         Asphalt         LOCAL         SMILED ONSKILED ONSKILED ONSKILED ON MALE         FEMALE PRIVATE         JANUAL DALI MOSLING           Koshi Yard         NON LOCAL         10         22         32         10         2           Koshi Yard         NON LOCAL         8         25         33         3         10           T1LSA         Prodc.Yard         NON LOCAL         5         17         22         2         10           T3Truck Line         Sewer Line         NON LOCAL         3         5         8         5           Rani Hartali         Tick drain         NON LOCAL         4         12         16         5         1           Rani B Mills         Drain Gr A         NON LOCAL         5         12         7         5           Rani B Mills         Drain Gr A         NON LOCAL         5         12         7         5           Rani B Mills         Drain Gr A         NON LOCAL         5         12         7         5           Rani B Mills         Drain Gr A         NON LOCAL         5         12         7         5		PES OF WORK	TYPES OF WORKERS	LAB	our	COMPC	NOITISC		1	ETHNIC	COMPOSITIO	N
Madhumara         Asphalt         Non Local         10         22         32         10         2           Yard         Vard         INDIAN         32         3         10         2           Koshi Yard         Prodc.Vard         INDIAN         8         25         33         3         10           T1LSA         Prodc.Vard         INDIAN         5         17         22         2         10           T1LSA         Drain         INDIAN         22         17         22         2         10           T3Truck Line         Sewer Line         INDIAN         8         5         8         5         1           Rani Hartali         Tick drain         INDIAN         16         5         1         5         1           Rani B Mills         Drain GrA         10 Drain GrA         5         12         7         5         1           Rani B Mills         Drain GrA         10 Drain GrA         17         7         5         1	Madhumara         Asphalt         Non LOCAL         10         22         32         10         2           Koshi Yard         Prodc.Vard         INDIAN         32         33         3         10         2           T1LSA         Prodc.Vard         NON LOCAL         5         17         22         2         10           T3Truck Line         Sewer Line         INDIAN         3         5         8         5         1           Rani Hartali hast         Tick drain         INDIAN         8         12         16         5         1           Rani B Mills         Drain GrA         10 CAL         5         12         7         5           Rani B Mills         Drain GrA         10 CAL         5         12         7         5			10001	SKILLED	UNSKILLED	MALE	FEIVIALE	JAMAII	DALII	MIOSCIIM	MADHESI	DRAHIVIIIV/CHREIN
Yard	Yard			NON LOCAL	10	22	32		10	2		20	
Koshi Yard         LOCAL         8         25         33         3         10           T1L5A         Drain         INDIAN         22         10         10           T3Truck Line         Sewer Line         INDIAN         3         5         12         10           Rani Hartali haat         Tick drain         INDIAN         8         5         1         5         1           Rani B Mills area         Tick drain         INDIAN         16         5         1         5         1         5           Rani B Mills area         Tick drain         INDIAN         16         7         5         1         5         1         1         5         1         1         1         5         1         1         1         1         1         5         1	Frodc Yard   Frodc Yard   Frodc Yard   Frodc Yard   Frodc Yard   INDIAN   TILSA   Frodc Yard   INDIAN   TILSA   Frodc Yard   INDIAN   TILSA	Asphalt	INDIAN	24	77	70		2	1		2	A CONTRACT OF THE PROPERTY OF	
Koshi Yard         Prode.Yard         LOCAL         8         25         33         3         10           T1LSA         Drain         INDIAN         33         17         22         2         10           T3Truck Line         Sewer Line         INDIAN         3         5         8         5         1           Rani Hartali hat         Tick drain         INDIAN         4         12         16         5         1           Rani B Mills         Drain Gr A         INDIAN         5         12         7         5           Rani B Mills         Drain Gr A         INDIAN         16         7         5         1           Rani B Mills         Drain Gr A         INDIAN         17         7         5         1	Koshi Yard         Prode.Yard         LOCAL INDIAN         8         25         33         10           T1L5A         Drain Figure Line haat         Drain GrA         TOTAL S IT 22		2.8	TOTAL	32								
Koshi Yard   Prodc.Yard   NON LOCAL   8   25   33   3   10	Frode Cyard   NON LOCAL   8   25   33   3   10   10   10   10   10   10												
Koshi Yard         Prodc.Yard         NON LOCAL INDIAN         8         25         33         3         10           T1L5A         Drain         LOCAL INDIAN         5         17         22         2         10           T3Truck Line         Sewer Line         INDIAN         3         5         8         5         1           Rani Hatali h	Koshi Yard         Prodc.Yard         NON LOCAL         8         25         33         3         10           T1L5A         Drain         LOCAL         5         17         22         2         10           T3Truck Line         Sewer Line         LOCAL         3         5         8         5         1           Rani Hartali hasat         Tick drain         NON LOCAL         8         5         1         5         1           Rani B Mills         Trick drain         NON LOCAL         5         12         5         1         5         1         6         5         1         6         5         1         6         7         6         7         6         7         6         7         6         7         6         7         6         7         6         7         7         6         7         7         6			LOCAL									
Table   Total   Tota	Total   Tota	, P	7	NON LOCAL	∞	25	33		3	10		20	
TOTAL   33	Total   Tota	KOSNI Yard	Prodc. rard	INDIAN									
T1L5A   Drain   LOCAL   S   17   22   10	T1L5A   Drain   LOCAL   5   17   22   10	4	*	TOTAL	33								
T1L5A   Drain   LOCAL   5   17   22   2   10	T1L5A   Drain   LOCAL   5   17   22   2   10		No.										
T1L5A   Drain   NON LOCAL   5   17   22   2   10	T1L5A   Drain   NON LOCAL   5   17   22   10			LOCAL									
TOTAL   22	TOTAL   123	_		NON LOCAL	5	17	22		2	10		10	
TOTAL   LOCAL   Sewer Line   NON LOCAL   S   S   S   S   S   S   S   S   S	TOTAL   22		Drain	INDIAN									
T3Truck Line   Sewer Line   LOCAL   3   5   8   5   5   8   5   8   5   5   8   8	T3Truck Line   Sewer Line   NON LOCAL   3 5 8 5 5   1			TOTAL	22								
T3Truck Line   Sewer Line   LOCAL   3   5   8   5   5   8   5   8   5   5   8   5	T3Truck Line   Sewer Line   LOCAL   3   5   8   5   5   8   5   8   5   5   8   8												
Sewer Line         NON LOCAL         3         5         8         5         8         5         8         5         8         5         8         5         8         5         8         5         8         5         8         5         8         5         8         6         6         6         6         7         8         7         8         7         8         7         8         7         8         7         8         7         8         7         8         9	Sewer Line         NON LOCAL         3         5         8         5         8         5         8         5         8         5         8         5         8         5         8         5         8         8         8         8         8         8         8         8         8         8         8         8         9			LOCAL									1 12
STITUCK LINE   Sewer Line   INDIAN   S	TOTAL LINE   TOTAL   8	owil Journater	200	NON LOCAL	3	5	8			2		3	
Rani Hartali         Tick drain haat         LOCAL LOCAL         4         12         16         5         1           Rani B Mills area         Drain Gr A INDIAN         16         5         1         1           Rani B Mills area         TOTAL	Rani Hartali	ו און מכע דווום	Jewel Lille	INDIAN									
Rani Hartali haat haat haat area         Tick drain haat haat         LOCAL LOC	Rani Hartali haat         Tick drain haat         LOCAL LOCAL         4         12         16         5         1           Rani B Mills area         Toral Grain			TOTAL	8								
Rani Hartali         Tick drain         NON LOCAL         16         7         5           Rani B Mills area         Drain Gr A         INDIAN         17         7         5           TOTAL         17         7         5         12	Rani Hartali         Tick drain         NON LOCAL         16         5         12         17         7         5           Rani B Mills         Drain Gr A         INDIAN         17         7         5         12         17         7         5         12         14         14         14         15         14         15         14         14         14         14         14         14         14         14         14         14         14         14         15         14         15         14         15         14         15         15         15         15         16         16         16         16         16         16         16         16         16         16         16         16         16         16         16         17         17         17         16 </td <td></td> <td></td> <td>LOCAL</td> <td>4</td> <td>12</td> <td>16</td> <td></td> <td>2</td> <td>Н</td> <td></td> <td>10</td> <td></td>			LOCAL	4	12	16		2	Н		10	
haat         lick drain         INDIAN         16         7         5           Rani B Mills area         Drain Gr A INDIAN         17         7         5           TOTAL         17         7         5	haat         IICK drain         INDIAN         16         5         12         17         7         5           Rani B Mills         Drain Gr A         INDIAN         17         5         12         17         7         5           TOTAL         17         17         17         6         6         6         6		i i	NON LOCAL									
TOTAL 16	TOTAL 16   15   17   7   5		lick drain	INDIAN									
Rani B Mills         Drain Gr A         LOCAL         5         12         17         7         5           area         INDIAN         INDIAN         17         6	Rani B Mills         Drain Gr A         LOCAL         5         12         17         7         5           area         TOTAL         17         7         5			TOTAL	16								
Rani B Mills   Drain Gr A   NON LOCAL   S   12   17   S   S   S   S   S   S   S   S   S	Rani B Mills         Drain Gr A         NON LOCAL         3         12         17         3           area         TOTAL         17         18			14001		7	1,		1			u	
area Drain Gr A INDIAN TOTAL	area Drain Gr A INDIAN TOTAL	0::00		LOCAL	0	77	77					0	
TOTAL	TOTAL	NAIII D IVIIIIS	Drain Gr A	NON LOCAL									
		area		INDIAN									
NGM COM				TOTAL	17				3			- Constant	On Control
												SNO	AGIA



Talian   T					Biratn	Biratnagar Metropolitant City	opolitar	nt City					
Construction and Completion Of Sewerage, Drainage, Road, Footpath and Road Furniture Works (RUDP/ICS/B)   International Propertion					Regional	Urban Deve	elopment	: Project					
Taliza		Cons	struction and Co	Impletion Of Sewer	age, Drai	nage, Roa	d, Footp	ath and	Road Fui	rniture	Works (	RUDP/ICB/	BRT)
Talaba   Types of Workers   Types of Workers   Skulled   Male   Female   Januari   Dati   Mushima   Madries   Januari   Dati   Mushima   Madries   Januari   Dati   Mushima   Madries   Januari   Dati   Mushima   Madries   Januari   Jan	,		£.			LABOUR	DATA						
Pani B Mills   Drain Gr B   NON LOCAL   S   17   22   5   10   7   10   10   10   10   10   10	0	LOCATION	TYPES OF WORK	TYPES OF WORKERS	LAI	SOUR		OSITION				COMPOSITION	N
Fani B Mills   Drain Gr B			-		SKILLED	UNSKILLED		FEMALE	JANJATI			MADHESI	BRAHMIN/CHHET
Ranib B Mills   Drain Gr B   NON LOCAL   5   17   22   5   10   7		eri .		LOCAL									
T3L25B		Rani B Mills		NON LOCAL	5	17	22		5	10	7		
T3L256   DRAIN   LOCAL   S   15   20   S   10		area	Dialii Gi b	INDIAN									
T3L25B   DRAIN   LOCAL   5   15   20   5   10			. 8.	TOTAL	22								
T3L2B   DRAIN   NON LOCAL   5   15   20   5   10													
T31.25B   DRAIN   NON LOCAL   S   15   20   5   10				LOCAL									
T3L22A   Sewer   INDIAN   Z0   T0TAL   Z0   Z0   Z0   Z0   Z0   Z0   Z0   Z	U	TOLOGO	Nivac	NON LOCAL	2	15	20		5	10		2	
T3L22A   Sewer   LOCAL   1   4   5   3	0	131,235	URAIN	INDIAN									
T3L22A   Sewer   LOCAL   1   4   5   3   3			*	TOTAL	20								
T3122A   Sewer   LOCAL   1   4   5   3   3			4										
T3L2A   Sewer Inlet   T0TAL   Sewer   INDIAN   Sewer   INDIAN   Sewer   INDIAN   Sewer   INDIAN   T0TAL   Sewer   INDIAN   T0TAL   Sewer   INDIAN   T0TAL				LOCAL									
13L2A   Sewer Inlet   INDIAN   5		-		NON LOCAL	1	4	5		3			2	
T3L6   DRAIN   LOCAL   4   18   22   7   3		13L22A		INDIAN									
T3L6   DRAIN   NON LOCAL   4   18   22   7   3				TOTAL	5								
T316 DRAIN NON LOCAL 4 18 22 7 3 6 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1													
T3L6   DRAIN   NON LOCAL   4   18   22   7   3	2			LOCAL					-				
TOTAL   22	~	T316	DRAIN	NON LOCAL	4	18	22		7	3		12	
T3L6 Kerbstone	1	25		INDIAN									
T3L6 Kerbstone				TOTAL	22								
T3L6 Kerbstone				LOCAL									
T3L10E Sewer Inlet TOTAL 17   3 4   10TAL 10TAL 1   3   4   10TAL 1   10TAL	,	, or	404207	NON LOCAL	5	12	17		7			10	
T3L10E Sewer Inlet INDIAN TOTAL 1 3 4 TOTAL 1 3 TOTAL 1 3 TOTAL 1 TOTA	D	1310	Kerpstone	INDIAN									
T3L10E Sewer Inlet		E**		TOTAL	17								
T3L10E Sewer Inlet													
T3L10E Sewer Inlet				LOCAL									
TOTAL		T3110F	Sewer Inlet	NON LOCAL	1	3	4		4				
	)			INDIAN									
Middle State of the State of th				TOTAL	4							Action to the tenter in	In the state of th
												Mist	SHEIN
													Text for



Construction and Completion Of Sewerage, Drainage, Road, Footpath and Road Furniture Works (RUDP/ICB/BIA)   Location   Types of work   Types of Workerse   LABOUR DATA   LABOUR DATA   LABOUR DATA   LABOUR DATA   LOCAL   L	Construction and Completion Of Sewerage, Dainage, Road Furniture Morks (RUDP/ICB/BRT)   Cocation   Types of Workers   Composition   Cocation					Biratn	Biratnagar Metropolitant City	opolitan	it City					
Construction and Completion Of Sewerage, Drainage, Road, Footpath and Road Furniture Works (RUDP/ICB/Bite)   Incomparison	Construction and Completion Of Sewerage, Drainage, Road, Footpath and Road Furniture Works (RUDP/ICB/Bit   IABOUR DATA   IABOU					Regional	Urban Dev	elopment	Project					
LABOURD DATA   LABOURD DATA   LABOURD DATA   LABOURD DATA   LOCATION   TYPES OF WORKER   SKILLED   INSKILLED   MALE   FEMALE   JANIATI   DALIT   MUSLIM   MADHESI   LOCAL   10	Tick Drain   Rick Drain   Ric		Cons	struction and Co	ompletion Of Sewer	age, Drai	nage, Roa	d, Footp	ath and I	Road Fur	niture	Works (	RUDP/ICB/	
LICCATION   TYPES OF WORK READ   TYPES OF WORK READ   TABOUR   T	Incation   Types of Workers   Types of Workers   Skilled in Skilled   Male   Female   Januari   Mushim   Madhesi   Januari	*					LABOUR	DATA						
READER   PARTICAL   A   C   C   C   C   C   C   C   C   C	Road Paint   Roa	9		NGOW TO STOWE		LAI	BOUR	COMPC	NOILISC			ETHNIC	COMPOSITIC	N
R10	R10   Road Paint   LOCAL   4   6   10	9	LOCATION	IYPES OF WORK		SKILLED	UNSKILLED		FEMALE	JANJATI		MUSLIM	MADHESI	BRAHMIN/CHHETR
R10	R10		49		LOCAL									
R10   Hoad Paint   Hobjan   10   10   10   10   10   10   10   1	R10   R0ad Paint   INDIAN   10				NON LOCAL	4	9	10					10	
RB2	R82   Drain   LOCAL   4   13   17   7   1   1   1   1   1   1   1		R10	Road Paint	INDIAN									
R82   Drain   LOCAL   4   13   17   7   7	RB2   Drain   LOCAL   4   13   17   7   1			450	TOTAL	10								
R82         Drain         NON LOCAL         4         13         17         7         17           R6         Brooming         LOCAL         3         9         3         9         3         9         1 <td< td=""><td>  R82   Drain   NON LOCAL   4   13   17   7   7   1   1   1   1   1   1  </td><td></td><td></td><td></td><td>LOCAL</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>	R82   Drain   NON LOCAL   4   13   17   7   7   1   1   1   1   1   1				LOCAL									
R82   Drain   INDIAN   177	R82   Drain   INDIAN   17   17   17   17   17   17   17   1				NON LOCAL	4	13	17		7			10	
R6         Brooming LOCAL INDIAN         3         9         3         9         3         9           R6         Brooming INDIAN INDIAN         LOCAL INDIAN         5         12         17         7         5           R6         Tick Drain INDIAN INDIAN INDIAN INDIAN         LOCAL INDIAN IND	R6   Brooming   LOCAL   3   9   3   9   1   1   1   1   1   1   1   1   1	7	R82	Drain	INDIAN									
R6         Brooming         LOCAL         3         9         3         9         3         9           R6         Brooming         INDIAN         12	R6         Brooming         LOCAL         3         9         3         9         3         9           R6         Brooming         INDIAN         12         12         17         7         5           R6         Tick Drain         INDIAN         5         12         17         7         5           R29         Kerbstone         INDIAN         17         7         5         1           R29         Kerbstone         INDIAN         19         4         5         1           Chyangbari         RCC Drain         INDIAN         3         8         11         5         1           TOTAL         13         11         5         1         5         1         1			y o	TOTAL	17								
R6         Brooming INDIAN         LOCAL LO	R6         Brooming INDIAN         LOCAL LO													
R6         Brooming         NON LOCAL INDIAN         12         1	R6         Brooming INDIAN         12				LOCAL	3	6	3	6				12	
R6   Brooming   INDIAN   12	R6   Brooming   INDIAN   12			**	NON LOCAL									
R6         Tick Drain         LOCAL L	R6   Tick Drain   LOCAL   S   12   17   7   5   1	3	R6	Brooming	INDIAN									
R6         Tick Drain         LOCAL         5         12         17         7         5           R29         Kerbstone         INDIAN         4         15         19         4         5           Chyangbari         RCC Drain         INDIAN         3         8         11         5           TOTAL         13         11         5         11	R6         Tick Drain         LOCAL L				TOTAL	12								
R6         Tick Drain         LOCAL INDIAN         5         12         17         7         5           R29         Kerbstone Chyangbari         RCC Drain         INDIAN         11         12         17         5         17         5         18         11         5         17         17         5         18<	R6         Tick Drain         LOCAL L													
R6         Tick Drain         NON LOCAL         5         12         17         7         5           R29         Kerbstone         INDIAN         4         5           Chyangbari         RCC Drain         INDIAN         11         4         5           TOTAL         13         8         11         5           TOTAL         13         8         11         5           TOTAL         11         5         11         10	R6         Tick Drain         NON LOCAL         5         12         17         7         5           R29         Kerbstone         INDIAN         4         15         19         4         5           Chyangbari         RCC Drain         INDIAN         3         8         11         5           TOTAL         11         11         5         11				LOCAL									
TOTAL   17	R29   Kerbstone   INDIAN   17   19   4   5		90	Tick Orain	NON LOCAL	2	12	17		7	2		2	
TOTAL	R29         Kerbstone         IOCAL         4         15         19         4         5           Chyangbari         RCC Drain         INDIAN         3         8         11         5           TOTAL         13         11         5         11         6	<b>.</b>	QV .	IICK DIAIII	INDIAN									
R29   Kerbstone	R29   Kerbstone   L0CAL   4   15   19   4   5				TOTAL	17								
R29         Kerbstone         NON LOCAL         19         5           TOTAL         19         5         11         5           Chyangbari         RCC Drain         INDIAN         11         5         11           TOTAL         11         11         6         18	R29         Kerbstone         INDIAN         19         5           TOTAL         3         8         11         5           Chyangbari         RCC Drain         INDIAN         11         5           TOTAL         11         6         6				LOCAL	4	15	19		4	2		10	
K29         RefDstone         INDIAN         19         5           TOTAL         19         11         5           Chyangbari         RCC Drain         INDIAN         11         5           TOTAL         11         6	K29         RefDStone         INDIAN         19         5           TOTAL         19         5         5           Chyangbari         RCC Drain         INDIAN         11         5           TOTAL         11         6		0	7	NON LOCAL									
Chyangbari         RCC Drain         TOTAL         19         11         5           TOTAL         3         8         11         5           INDIAN         INDIAN         11         6	Chyangbari         RCC Drain         LOCAL INDIAN         3         8         11         5           TOTAL         11         5         11         5         11         65         11         12         12         12         12         12         12         12         13         11         12         12         12         12         12         12         12         13         14         15         1	2	K29	Kerpstone	INDIAN									
Chyangbari         RCC Drain         LOCAL INDIAN         3         8         11         5           TOTAL         11         5         11         6	Chyangbari         RCC Drain         LOCAL INDIAN         3         8         11         5           TOTAL         11         5         11         6				TOTAL	19								
Chyangbari         RCC Drain         LOCAL         3         8         11         5           TOTAL         11         11         11         13         14         13         14         14         14         15         14         15 <td>Chyangbari RCC Drain INDIAN TOTAL 11 S S 11 S S 11 S S II S S III S S III S S III S S III S S S III S</td> <td></td>	Chyangbari RCC Drain INDIAN TOTAL 11 S S 11 S S 11 S S II S S III S S III S S III S S III S S S III S													
Chyangbari RCC Drain NON LOCAL INDIAN TOTAL	Chyangbari RCC Drain NON LOCAL INDIAN TOTAL				LOCAL	2	x	TT			0			
INDIAN	TOTAL	5	Chyanghari		NON LOCAL									
		t	Ciryangbar		INDIAN								THE POPULATION OF THE POPULATI	No.
THE STATE OF THE S	AST OF STATE		4		TOTAL	11							The state of the s	To the second
													431	ANE

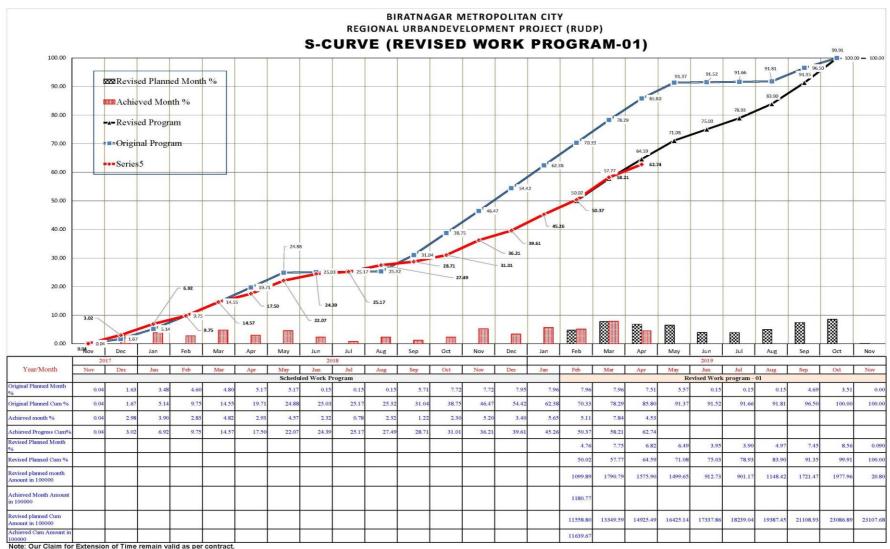




**ANNEX-5: S-Curve** 

ATTACHED – April 2019





Note: Our Claim for Extension of Time remain valid as per contract.



**Annex-6: Master Plan of RUDP Project** 

