



Building Design Authority (P) Ltd

in joint Venture with

B.N. Consultancy Pvt. Ltd and

PLUSH Engineering & architects (P) Ltd Kathmandu.

Semi Annual Progress Report

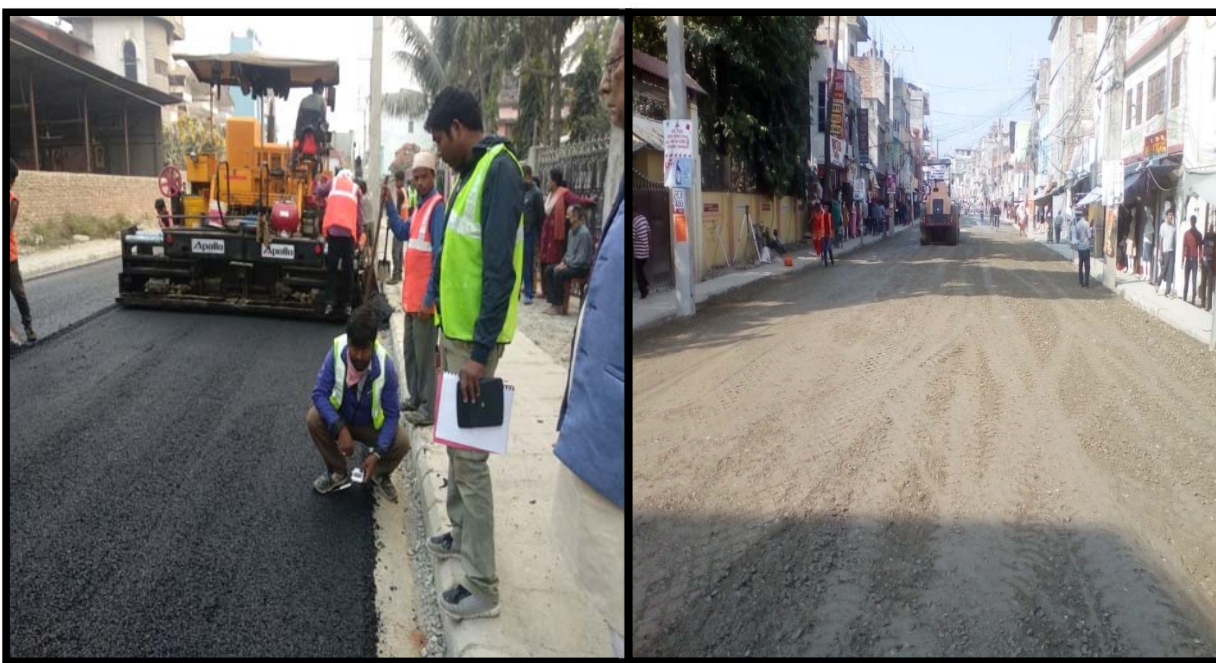
(Period cover: from July 2019 to December 2019)

Regional Urban Development Project (RUDP)

Project Implementation Unit

Biratnagar, Nepal

ADB Loan No.47252-NEP



January 2020

Biratnagar Metropolitan City (BMC), Nepal

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EXECUTIVE SUMMARY

This Project Monitoring Report mainly covers the Progress achieved in the component of Regional Urban Development Project (RUDP) in Biratnagar Metropolitan City, Nepal. The information has been provided 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 28th 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)
Executing Agency	Government of Nepal,
	Ministry of Urban Development
	Department of Urban Development and Building Construction (DUDBC)
Implementing Agency	Biratnagar Metropolitan City, Biratnagar
Funded By	Asian Development Bank & Government of Nepal
Package	Construction and Completion of Sewerage, Drainage, Road, Footpath and Road furniture works
Contract No.	RUDP/ICB/BRT/2
Location	Biratnagar Metropolitan City, Biratnagar
Consultant	Building Design Authority (P) LTD in Joint Venture With B.N. consultancy Pvt and PLUS Engineers and Architects (P) Ltd Kathmandu.
Date of Sign of Design and Supervision Consulting Service	28th August 2017
Date of Commencement of Design and Supervision Consulting Service	6th September 2017
Date of Completion	5th September 2020
Contractor	ZHONGHENG Construction Group International Engineering Co Ltd. Beijing, China.
Date of Agreement Made	10 th October 2017
Date of Commencement	2 nd November 2017
Date of Completion (Scheduled)	1 st November 2019
Date of Completion (after EOT-1)	18 th May 2020
Contract Amount including PS and VAT	NRs. 2,611,092,249.63
Contract Amount including PS and VAT (Corrected)	NRs. 2,611,088,390.60
Contract Amount including PS and VAT (after VO-1)	NRs. 2,760,853,674.59
Additional Financing 100% funded by BMC after VO-1 (provisional items)	NRs. 39,999,893.49



General Features	
Progress during Jan-Dec, 2019	after VO-1
Road Rehabilitation (Asphalt)	16.68%
Sewer Line	3.46%
Storm Drain	0.00%
Road Side Drain	11.98%
Integrated Solid Waste Management (ISWM) Design	<p>Inception Report as well as Stakeholder's Analysis, Communication Strategy and Consultation Plan for Integrated Solid Waste Management (ISWM) has already been submitted.</p> <p>Due to Socio Environment Problem, Progress of Integrated Solid Waste Management (ISWM) design has been hindered.</p>
Physical Progress during Jul-Dec, 2019	<p>With respect to Revised Work Program-02:</p> <p>Planned: 6.92%%, Actual: 13.26%; Lead (+) or Lag (-) by (-) 6.34% Lead, during Jul-Dec, 2019 wrt VO-01.</p>
Financial Progress during Jul-Dec, 2019 (<i>on the basis of IPC forwarded for disbursement excluding PA</i>)	<p>In Percentage: 14.70%, In Figure: NRs. 405,747,740.47 (including VAT and PS) wrt to VO-1.</p> <p>In Words: NRs. Four Hundred Five Millions Seven Hundred Forty Seven Thousand Seven Hundred Forty and Forty Seven Paise Only.</p>

3. SUMMARY OF PROGRESS STATUS OF ALL MAJOR COMPONENTS

S. No.	Description	Unit	Quantity VO-1	Progress till Jul 2019	Progress till Dec 2019	Progress status during Jul-Dec 2019	Progress Status expressed in (%) wrt VO-1	Remarks
1	Sewer Line							
a	HDPE/RCC	m	18,559.80	17,818.50	18,459.80	641.30	3.46%	
b	Manhole	No.	606.00	549.00	604.00	55.00	9.08%	
c	Sewer Inlet	No.	1,010.00	595.00	627.00	32.00	3.17%	
d	House Connection	No.	3,784.00	1,307.00	1,576.00	269.00	7.11%	
2	Storm Water Drain							
a	RCC Drain	m	585.00	585.00	585.00	0.00	0.00%	



S. No.	Description	Unit	Quantity VO-1	Progress till Jul 2019	Progress till Dec 2019	Progress status during Jul-Dec 2019	Progress Status expressed in (%) wrt VO-1	Remarks
b	Piles	No.	138.00	138.00	138.00	0.00	0.00%	
3	Road							
a	Sub grade	m	66,718.00	45,509.41	53,226.93	7,717.52	11.57%	
b	Sub base	m	66,718.00	45,369.21	53,226.93	7,857.72	11.78%	
c	Base	m	66,718.00	39,575.22	48,987.98	9,412.76	14.11%	
d	Prime	m	66,718.00	35,431.14	46,559.11	11,127.97	16.68%	
e	Asphalt	m	66,718.00	35,431.14	46,559.11	11,127.97	16.68%	
4	Road Side Drain	m	35,424.00	27,382.19	31,626.69	4,244.50	11.98%	

3.1. SUB PROJECT COMPONENTS

3.1.1. SEWER LINES

Trunk Line T1 & T2 were 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. Almost all the lines were completed except some of T3 secondary sewer lines.

Details of proposed sewer lines and progress are as illustrated below: -



Table 1: PROPOSED ALL MAJOR COMPONENTS OF THE PROJECT

S. No.	Description	Unit	Original Quantity	Quantity after VO-1
1	Sewerage Pipe Supply and Installation	m	20,082.00	18,559.80
	Reinforced Concrete Pipe laying and jointing		2241.00	1,967.50
	Line T2 (Secondary)	m	206.00	205.00
	Line T3 (Trunk)	m	1905.00	1,632.50
	Line T4 (Trunk)	m	130.00	130.00
	HDPE laying and jointing	m	17,841.00	16,592.30
	Line T1 (Secondary)	m	1,825.00	1,743.20
	Line T2 (Secondary)	m	3,927.00	3,153.40
	Line T3 (Secondary)	m	9,997.00	9,643.80
	Line T4 (Secondary)	m	2,092.00	2,051.90
2	Manhole (Brick / RCC)	no.	685.00	606.00
3	Sewer Inlet	no.	1,010.00	1,010.00
4	House Connection	no.	3,784.00	3,784.00
5	Reinstatement of Roads	km	73.86	66.718
6	Road side Drain	Km	26.05	35.424
7	Storm Water Drain	m	652.8	585.00

Table: - 2 PHYSICAL PROGRESS IN SEWER LINES during Jul-Dec, 2019

SN	Description	Quantity as per VO-01		till Jul 2019		till Dec 2019		Total during Jul-Dec 2019		Progress %
		Length (m)	Manhole (Nos.)	Length (m)	Manhole (Nos.)	Length (m)	Manhole (Nos.)	Length (m)	Manhole (Nos.)	
Hume Pipe:										
1	Hume pipe (T2)	205.00	6.00	205.00	6.00	205.00	6.00	-	-	
2	Hume pipe (T3)	1,632.50	25.00	1,632.50	25.00	1,632.50	25.00	-	-	
3	Hume Pipe (T4)	130.00	4.00	130.00	4.00	130.00	4.00	-	-	
Subtotal in (m)		1,967.50	35.00	1,967.50	35.00	1,967.50	35.00	-	-	
HDPE Pipe:										
1	HDPE (T1)	1,743.20	54.00	1,743.20	54.00	1,743.20	54.00	-	-	
2	HDPE (T2)	3,153.40	121.00	3,153.40	121.00	3,153.40	121.00	-	-	
3	HDPE (T3)	9,643.80	340.00	8,902.50	283.00	9,543.80	338.00	641.30	55.00	
4	HDPE (T4)	2,051.90	56.00	2,051.90	56.00	2,051.90	56.00	-	-	
Subtotal in (m)		16,592.30	571.00	15,851.00	514.00	16,492.30	569.00	641.30	55.00	



SN	Description	Quantity as per VO-01		till Jul 2019		till Dec 2019		Total during Jul-Dec 2019		Progress %
		Length (m)	Manhole (Nos.)	Length (m)	Manhole (Nos.)	Length (m)	Manhole (Nos.)	Length (m)	Manhole (Nos.)	
Total		18,559.80	606.00	17,818.50	549.00	18,459.80	604.00	641.30	55.00	3.46%

SN	Description	Quantity as per VO-01	till Jul 2019	till Dec 2019	Total during Jul-Dec 2019	Progress %
1	Sewer inlet	1,010.00	595.00	627.00	32.00	3.17
2	House connection	3,784.00	1,307.00	1,576.00	269.00	7.11



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. The detail of the progress is shown in the table:

Table: 3 PROPOSED and PHYSICAL PROGRESS in STORM WATER DRAINS during Jul-Dec, 2019.

S N	Name of Drain	Length during Jan-Dec, 2019 in m					Length of Covered Drain till date in m	Remarks
		Original	Revised after VO-1	Progress till		During Jul- Dec 2019		
				Jul 2019	Dec 2019		Type- RCC, Closed	
1	CN2- CN3(Chyangh Baari Nala)	652.89	585.00	585.00	585.00	0.00	585.00	100% Completed
2	CN2- CN3(Chyangh Baari Nala)	132 Nos. of piles	138 Nos. of piles	138 Nos. of piles	138 Nos. of piles	0 Nos. of piles	138.00	100% 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.

Out of 73.86 km. about 53.226 Km. has been attempted for Sub Base till Dec 2019.

About 46.559km. Asphalt work is completed till Dec 2019. The summary of physical progress during Jul-Dec, 2019 is presented below in tabular form: -



Table No:-4 PROPOSED and PHYSICAL PROGRESS of pavement works during Jul-Dec, 2019

SN	Road Number	Name of Road	Length in m			Work Completed during Jul - Dec 2019					Remarks
			Progress till		Total during Jul - Dec 2019	Sub-base	Base	Asphalt	RCC	Paint	
			Jul 2019	Dec 2019		m	m	m	m	m	
1	R42	Bhagwati Marg	218.00	229.00	11.00	11.00	11.00	106.00	-	-	
2	R5	College Road	650.00	650.00	-	-	(105.50)	(54.70)	-	-	
3	R5	Chulachuli Road	230.00	196.00	(34.00)	196.00	196.00	196.00	-	-	
4	R5			191.60	191.60	191.60	191.60	191.60	-	-	
5	B2	Gauri Shankar Marg	2,152.00	2,152.00	-	-	-	-	-	-	
6	R65	Satghumti Marg	320.00	320.00	-	-	-	-	-	-	
7	R107		215.00	215.00	-	-	-	174.00	-	-	
8	R107 a		50.00	50.00	-	-	(1.00)	49.00	-	-	
9	R104	VIP Marg	273.00	281.15	8.15	8.15	8.15	8.15	-	-	
10	R8	Madhumara Marg	600.00	553.05	(46.95)	(46.95)	(46.95)	(28.95)	-	-	
11	B1	Kanchan Marg	1,173.00	1,173.00	-	-	-	-	-	-	
12	R21	Pratibha Marg	1,330.00	1,367.10	37.10	37.10	37.10	37.10	-	-	
13	B3	Keshaliya Marg	1,574.00	1,627.75	53.75	53.75	53.75	53.75	-	-	
14	S13		1,617.00	1,687.30	70.30	70.30	270.30	270.30	-	-	



SN	Road Number	Name of Road	Length in m			Work Completed during Jul - Dec 2019					Remarks
			Progress till		Total during Jul - Dec 2019	Sub-base	Base	Asphalt	RCC	Paint	
			Jul 2019	Dec 2019		m	m	m	m	m	
15	R12		1,297.00	880.00	(417.00)	(417.00)	(417.00)	(157.00)	-	-	
16	R12	Kanchha Dai Marg	900.00	900.00	-	-	-	(130.50)	-	-	
17	Rani site	Rani	4,023.00	3,295.60	(727.40)	(727.40)	(727.40)	(727.40)	-	-	
18	R16	Satya Marg	604.00	604.00	-	-	-	12.80	-	-	
19	R26	Pasang Marg	654.00	598.00	(56.00)	(56.00)	(56.00)	(56.00)	-	-	
20	R28	Pustakalaya Marg	635.00	635.00	-	-	(13.80)	200.00	-	-	
21	R27	Peepal Marg	734.32	601.60	(132.72)	(132.72)	(132.72)	(132.72)	-	-	
22	R25	Devi Marg	580.00	580.00	-	-	-	5.10	-	-	
23	R24	Prabhat Marg	518.15	518.15	-	-	-	-	-	-	
24	R37	Banglamukhi Marg	477.00	477.00	-	-	-	-	-	-	
25	R7	Manakamana Marg	542.00	542.00	-	-	-	300.00	-	-	
26	R7	in between R18 to R27		400.00	400.00	400.00	400.00	400.00	-	-	
27	R30	Shanti Marg	123.10	229.50	106.40	106.40	106.40	106.40	-	-	
28	R9	Fadindra Marg	119.00	119.00	-	-	-	-	-	-	
29	R9		230.00	230.00	-	230.00	230.00	140.00	-	-	



SN	Road Number	Name of Road	Length in m			Work Completed during Jul - Dec 2019					Remarks
			Progress till		Total during Jul - Dec 2019	Sub-base	Base	Asphalt	RCC	Paint	
			Jul 2019	Dec 2019		m	m	m	m	m	
30	S11	Samrat Marg	660.00	660.00	-	-	-	-	-	-	
31	R22	Amar Marga	367.65	367.65	-	-	-	-	-	-	
32	R29	Shanti Marg	684.70	838.70	154.00	154.00	154.00	154.00	-	-	
33	R36	Gaurav Marg	220.00	222.00	2.00	2.00	2.00	2.00	-	-	
34	R33	Tarun Marg	280.00	283.00	3.00	3.00	3.00	3.00	-	-	
35	R64	Satya Narayan Marg	121.00	121.00	-	-	-	-	-	-	
36	R8		225.00	225.00	-	-	-	-	-	-	
37	N36		190.00	190.00	-	-	-	-	-	-	
38	R188	Shakti Marg	120.00	116.00	(4.00)	(4.00)	(4.00)	(4.00)	-	-	
39	R2	Main Road	1,085.00	2,800.00	1,715.00	1,715.00	2,254.70	2,254.70	-	-	
40	T3 Line 6A	Pandit Meghnath Marg	220.00	279.00	59.00	59.00	59.00	59.00	-	-	
41	T2 Line 24C	Nava Jyoti Marg	205.00	205.00	-	-	-	-	-	-	
42	T2 Line 24D	Nava Jyoti Marg	210.00	210.00	-	-	-	-	-	-	
43	R63 (DSP Road)	DSP Road	420.00	424.24	4.24	4.24	29.24	29.24	-	-	
44	R90	Shakti Marg	320.00	450.00	130.00	130.00	130.00	130.00	-	-	



SN	Road Number	Name of Road	Length in m			Work Completed during Jul - Dec 2019					Remarks
			Progress till		Total during Jul - Dec 2019	Sub-base	Base	Asphalt	RCC	Paint	
			Jul 2019	Dec 2019		m	m	m	m	m	
45	R77	Arniko Marg	80.00	87.20	7.20	7.20	7.20	7.20	-	-	
46	R76	Mitra Marg	270.00	270.00	-	-	-	-	-	-	
47	R183	Nava Jyoti Marg	240.00	240.00	-	-	-	-	-	-	
48	T1 L16B	Xenial Front	210.00	210.00	-	-	-	-	-	-	
49	T1L16A	Xenial South	180.00	180.00	-	-	-	-	-	-	
50	R114	Dharanidhar Marg	560.00	560.00	-	-	-	-	-	-	
51	R113	Kavi Lekh Marg	740.00	740.00	-	-	-	-	-	-	
52	R5a		370.00	54.70	(315.30)	(315.30)	(315.30)	(315.30)	-	-	
53	R3	Dharamban Marg	2,233.00	2,383.00	150.00	150.00	232.70	-	-	-	
54	R3 - under STIUEIP	Tinpaini to Puspallal chowk	-	-	-	-	-	-	-	4,000.00	
55	R78	Sombare - Highway	92.00	92.00	-	-	-	-	-	-	
56	R84	West of school	473.20	473.20	-	-	-	-	-	-	
57	R84			93.60	93.60	93.60	93.60	93.60	-	-	
58	R85	Machha Line	160.00	160.00	-	-	-	-	-	-	
59	R87	Mahabir Chowk	148.00	154.00	6.00	6.00	44.00	44.00	-	-	



SN	Road Number	Name of Road	Length in m			Work Completed during Jul - Dec 2019					Remarks
			Progress till		Total during Jul - Dec 2019	Sub-base	Base	Asphalt	RCC	Paint	
			Jul 2019	Dec 2019		m	m	m	m	m	
60	R86	Petrol pump side -R12	293.00	200.00	(93.00)	(93.00)	(102.00)	(102.00)	-	-	
61	R11	R18/R86	281.00	281.00	-	-	-	-	-	-	
62	N3	Jatuwa	117.00	122.00	5.00	5.00	122.00	122.00	-	-	
63	N4	Jatuwa	168.00	168.00	-	-	-	-	-	-	
64	R10	Ram Marga	292.00	292.00	-	-	-	-	-	-	
65	R10	R35 to R21		393.00	393.00	393.00	393.00	393.00	-	-	
66	T2L26F	APF	55.00	55.00	-	-	-	-	-	-	
67	T2L27		80.00	80.00	-	-	-	-	-	-	
68	R122		265.55	265.55	-	-	-	-	-	-	
69	N9		220.42	220.42	-	-	-	-	-	-	
70	R17		365.00	373.00	8.00	8.00	8.00	8.00	-	-	
71	R18		370.00	387.00	17.00	17.00	17.00	387.00	-	-	
72	N2		75.84	105.84	30.00	30.00	105.84	-	-	-	
73	T3L6	Moti marga	170.00	170.00	-	-	-	-	-	-	
74	T3L6	Elite club - CDO Office	107.00	107.00	-	-	-	-	-	-	



SN	Road Number	Name of Road	Length in m			Work Completed during Jul - Dec 2019					Remarks
			Progress till		Total during Jul - Dec 2019	Sub-base	Base	Asphalt	RCC	Paint	
			Jul 2019	Dec 2019		m	m	m	m	m	
75	T3L6	Balmandir - Ganesh Mandir	380.00	380.00	-	-	-	-	-	-	
76	T3L6	CDO Office front	49.40	49.40	-	-	-	-	-	-	
77	T3L6A	Golchha Marga	220.00	220.00	-	-	-	-	-	-	
78	T3L23	Madhumara road	541.00	541.00	-	-	-	-	-	-	
79	R45	Bata road	505.00	505.00	-	-	20.00	20.00	-	-	
80	T3L21		400.00	400.00	-	-	-	-	-	-	
81	N5	R16 to R18	70.00	71.00	1.00	1.00	1.00	1.00	-	-	
82	T3L39		400.00	400.00	-	-	(154.20)	(154.20)	-	-	
83	T3L39A		130.00	89.00	(41.00)	(41.00)	(41.00)	(41.00)	-	-	
84	T3L39B		80.00	60.00	(20.00)	(20.00)	(20.00)	(20.00)	-	-	
85	T3L39C			100.00	100.00	100.00	-	-	-	-	
86	R68 - T2L24G		220.00	220.00	-	-	220.00	218.00	-	-	
87	N10		194.00	194.00	-	-	194.00	194.00	-	-	
88	T3L24C		170.00	170.00	-	-	-	-	-	-	
89	T3L9		278.00	278.00	-	-	-	-	-	-	



SN	Road Number	Name of Road	Length in m			Work Completed during Jul - Dec 2019					Remarks
			Progress till		Total during Jul - Dec 2019	Sub-base	Base	Asphalt	RCC	Paint	
			Jul 2019	Dec 2019		m	m	m	m	m	
90	R6		1,228.20	1,228.20	-	-	-	-	-	-	
91	N24		136.00	116.00	(20.00)	(20.00)	(20.00)	(20.00)	-	-	
92	R31		188.70	188.70	-	-	-	-	-	-	
93	Bindabasini Marga		352.28	352.28	-	-	-	-	-	-	
94	Bhattimode to Hartalihaat		166.50	166.50	-	-	-	-	-	-	
95	R73		217.00	217.00	-	-	-	-	-	-	
96	R6 (R41-R44)	Bata Galli	269.00	269.00	-	-	-	269.00	-	-	
97	R6			1,322.00	1,322.00	1,322.00	1,322.00	1,322.00	-	-	
98	R6	Pratibha chowk to N2		510.80	510.80	510.80	510.80	510.80	-	-	
99	R9 (R41-R7)		194.80	194.80	-	-	-	194.80	-	-	
100	R44	Thakurbari Road	357.50	482.50	125.00	125.00	482.50	357.50	-	-	
101	R102	Main	140.00	140.00	-	-	-	140.00	-	-	
102	R102	Branch	71.30	71.30	-	-	71.30	71.30	-	-	
103	R103		170.40	170.40	-	-	170.40	170.40	-	-	



SN	Road Number	Name of Road	Length in m			Work Completed during Jul - Dec 2019					Remarks
			Progress till		Total during Jul - Dec 2019	Sub-base	Base	Asphalt	RCC	Paint	
			Jul 2019	Dec 2019		m	m	m	m	m	
104	R32		188.00	188.00	-	-	-	-	-	-	
105	T2L18Y		116.20	116.20	-	-	116.20	116.20	-	-	
106	R20		108.00	108.00	-	-	108.00	108.00	-	-	
107	R82	Everest School	530.00	530.00	-	-	-	530.00	-	-	
108	T1L5		140.00	140.00	-	-	-	140.00	-	-	
109	T1L5A			533.50	533.50	533.50	533.50	533.50	-	-	
110	T3L23C	Jay Nepal	220.20	272.20	52.00	192.20	(9.80)	65.20	-	-	
111	T3L23C	North to Jay Nepal		82.90	82.90	82.90	82.90	82.90	-	-	
112	T3L25B		195.00	195.00	-	195.00	-	-	-	-	
113	T3L25C		140.00	140.00	-	140.00	-	-	-	-	
114	R3	T3 Trunk	465.00	465.00	-	465.00	370.00	-	-	-	
115	Nagmandir to R3		55.00	55.00	-	-	-	55.00	-	-	
116	R4			220.00	220.00	220.00	-	-	-	-	
117	R75		130.00	143.50	13.50	13.50	13.50	13.50	-	-	
118	R43		250.00	329.40	79.40	79.40	329.40	329.40	-	-	
119	T219P										



SN	Road Number	Name of Road	Length in m			Work Completed during Jul - Dec 2019					Remarks
			Progress till		Total during Jul - Dec 2019	Sub-base	Base	Asphalt	RCC	Paint	
			Jul 2019	Dec 2019		m	m	m	m	m	
				124.80	124.80	124.80	124.80	124.80	-	-	
120	T219Q			113.70	113.70	113.70	113.70	113.70	-	-	
121	R106			130.00	130.00	130.00	120.90	-	-	-	
122	T3L12			80.00	80.00	80.00	50.90	50.90	-	-	
123	R46			340.00	340.00	340.00	-	-	-	-	
124	T3L11E			124.55	124.55	124.55	124.55	124.55	-	-	
125	T3L13D			70.00	70.00	70.00	-	-	-	-	
126	T3L13C			100.00	100.00	100.00	100.00	100.00	-	-	
127	R34			157.00	157.00	157.00	157.00	157.00	-	-	
128	T3L13E			80.00	80.00	80.00	65.00	65.00	-	-	
129	T3L13K			154.00	154.00	154.00	75.90	75.90	-	-	
130	R19			247.00	247.00	247.00	228.00	228.00	-	-	
131	R41			540.00	540.00	540.00	540.00	540.00	-	-	
132	R9B			90.00	90.00	90.00	90.00	83.85	-	-	
133	R67			119.40	119.40	119.40	119.40	119.40	-	-	
134	R74			100.00	100.00	100.00	100.00	100.00	-	-	
135	R9A										



SN	Road Number	Name of Road	Length in m			Work Completed during Jul - Dec 2019					Remarks
			Progress till		Total during Jul - Dec 2019	Sub-base	Base	Asphalt	RCC	Paint	
			Jul 2019	Dec 2019		m	m	m	m	m	
				109.00	109.00	109.00	109.00	109.00	-	-	
136	T2L19F			120.00	120.00	120.00	117.20	117.20	-	-	
137	T3L7A			190.00	190.00	190.00	158.00	158.00	-	-	



Table No:-4.1Footpath (Work Progress during Jul-Dec, 2019)

SN	Road Number	Type*	Progress till in m		Footpath during Jul-Dec 2019			Remarks
			Jul 2019	Dec 2019	Length (m)	Avg. Breadth (m)	Quantity (m ²)	
1	R2	Precast block		602.00	602.00	1.10	662.20	RHS
2	R2	Precast block		602.00	602.00	1.10	662.20	LHS
3	R29	Precast block		330.00	330.00	0.90	297.00	RHS
4	R29	Precast block		330.00	330.00	0.90	297.00	LHS
5	R28	Precast block		322.00	322.00	0.90	289.80	RHS
6	R28	Precast block		335.00	335.00	0.90	301.50	LHS
7	R28	Precast block		341.00	341.00	0.90	306.90	RHS
8	R21	Precast block	280.00	365.00	85.00	1.00	85.00	RHS
9	R21	Precast block		765.00	765.00	1.00	765.00	LHS
10	R78	Precast block		75.00	75.00	1.20	90.00	RHS
11	R78	Precast block		75.00	75.00	1.20	90.00	LHS
12	R77	Precast block		115.00	115.00	0.90	103.50	RHS
13	R77	Precast block		115.00	115.00	0.90	103.50	LHS
14	R76	Precast block		275.00	275.00	0.95	261.25	RHS
15	R76	Precast block		275.00	275.00	0.95	261.25	LHS
16	R75	Precast block		160.00	160.00	0.95	152.00	RHS
17	R75	Precast block		160.00	160.00	0.95	152.00	LHS



SN	Road Number	Type*	Progress till in m		Footpath during Jul-Dec 2019			Remarks
			Jul 2019	Dec 2019	Length (m)	Avg. Breadth (m)	Quantity (m ²)	
18	R10	Precast block		700.00	700.00	0.95	665.00	RHS
19	R10	Precast block		700.00	700.00	0.95	665.00	LHS
20	R31	Precast block		175.00	175.00	0.95	166.25	RHS
21	R31	Precast block		175.00	175.00	0.95	166.25	LHS
22	R32	Precast block		185.00	185.00	0.30	55.50	RHS
23	R32	Precast block		185.00	185.00	0.30	55.50	LHS
24	R33	Precast block		285.00	285.00	0.90	256.50	RHS
25	R33	Precast block		170.00	170.00	0.90	153.00	LHS
26	R16	Precast block	170.00	170.00	-	1.20	-	RHS
27	R16	Precast block	170.00	170.00	-	1.20	-	LHS
28	R6	Precast block	554.00	700.00	146.00	1.20	175.20	RHS
29	R6	Precast block		700.00	700.00	1.20	840.00	LHS
30	B1	Precast block		490.00	490.00	1.20	588.00	RHS
31	B1	Precast block		490.00	490.00	3.40	1,666.00	LHS
32	B2 (2)	Precast block	715.00	715.00	-	0.59	-	RHS
33	B2 (2)	Precast block	715.00	715.00	-	1.65	-	LHS
34	B2 (1)	Precast block	131.00	131.00	-	2.60	-	RHS
35	B2 (1)	Precast block	131.00	131.00	-	0.90	-	LHS



SN	Road Number	Type*	Progress till in m		Footpath during Jul-Dec 2019			Remarks
			Jul 2019	Dec 2019	Length (m)	Avg. Breadth (m)	Quantity (m ²)	
36	B3	Precast block	500.00	670.00	170.00	0.70	119.00	RHS
37	B3	Precast block		670.00	670.00	0.70	469.00	LHS
38	S11	Precast block	112.00	112.00	-	0.95	-	RHS
39	S11	Precast block	75.00	75.00	-	1.21	-	LHS
40	Rani	Precast block	425.00	425.00	-	1.00	-	RHS
41	Rani	Precast block	425.00	425.00	-	1.00	-	LHS
42	R3	Precast block		250.00	250.00	1.10	275.00	RHS
43	R3	Precast block		1,050.00	1,050.00	1.10	1,155.00	LHS
44	R27	Precast block		400.00	400.00	1.10	440.00	RHS
45	R27	Precast block		400.00	400.00	0.85	340.00	LHS
46	R26	Precast block		300.00	300.00	1.23	369.00	RHS
47	R26	Precast block		285.00	285.00	1.10	313.50	LHS
48	R25	Precast block		205.00	205.00	1.00	205.00	RHS
49	R25	Precast block		201.00	201.00	1.00	201.00	LHS

Table No:-4.2 Road improvement Works (Work Progress during Jul-Dec, 2019)

S. No.	Description	Unit	Quantity as per VO-01	Total Up to Jul 2019	Total Up to Dec 2019	Total During Jul-Dec 2019	Progress
1	Subgrade	m	66,718.00	45,509.41	53,226.93	7,717.52	11.57%
2	Sub Base	m	66,718.00	45,369.21	53,226.93	7,857.72	11.78%
3	Base	m	66,718.00	39,575.22	48,987.98	9,412.76	14.11%
4	Prime/Tack	m	66,718.00	35,431.14	46,559.11	11,127.97	16.68%
5	Asphalt	m	66,718.00	35,431.14	46,559.11	11,127.97	16.68%
6	Paint	m	66,718.00	14,395.30	18,895.30	4,500.00	6.74%

3.1.4. ROAD SIDE DRAIN

Most of the roads under this project for upgrading is without drain or existing drain are in poor condition, on instruction from the employer at various stretches the construction works were ongoing and some of them have been completed. The project has provisioned drain at either sides or one side as per available RoW of the road. The contractor has already started drain works at many locations. The progress for the drain works during Jul-Dec, 2019 is listed below:

Table No:-4a PROPOSED and PHYSICAL PROGRESS of Road side drain works during Jul-Dec, 2019.

SN	Road Number	Name of Road	Length in (m)			Work Completed during Jul-Dec 2019		Remarks
			Progress till		Total during Jul-Dec 2019	Brick	RCC	
			Jul 2019	Dec 2019		m	m	
1	B1	Kanchan Marg	90.00	90.00	-	-		
2	R29	Shanti Marg	256.52	256.52	-	-		
3	N36		185.88	185.88	-	-		
4	R8		219.83	219.83	-	-		
5	R7	Devi Marg and Pipal Marg	89.58	149.58	60.00	60.00		
6	R63	DSP Road	418.79	418.79	-	-		
7	R9	Baglamukhi path	103.20	103.20	-	-		
8	S13	Udaya Marga	158.10	158.10	-	-		
9	N33		70.00	70.00	-	-		
10	R28	Pustakalaya Marg	278.00	278.00	-	-		
11	R90	Shakti Marg	313.25	313.25	-	-		
12	R114	Dharanidhar Marg	312.33	312.33	-	-		
13	R11	Om Shiv Marg	225.17	225.17	-	-		
14	R18		381.50	381.50	-	-		
15	R17		75.00	75.00	-	-		
16	R113	Kavi Lekhnath Marg	72.45	72.45	-	-		
17	R77	Arniko Marg	80.00	80.00	-	-		
18	R76	Mitra Marg	270.00	270.00	-	-		



SN	Road Number	Name of Road	Length in (m)			Work Completed during Jul-Dec 2019		Remarks
			Progress till		Total during Jul-Dec 2019	Brick	RCC	
			Jul 2019	Dec 2019		m	m	
19	N9	Devi Marga	22.70	22.70	-	-		
20	N4		146.38	146.38	-	-		
21	R33	Tarun Marg	264.48	264.48	-	-		
22	R36	Gaurav Marg	216.45	216.45	-	-		
23	R86	Janpath Marg	187.55	187.55	-	-		
24	R183	Nava Jyoti Marg	211.05	211.05	-	-		
25	R7a		65.00	65.00	-	-		
26	Rani site	Rani B	530.00	530.00	-	-		
27	Rani site	Rani A	270.00	270.00	-	-		
28	N3		110.00	110.00	-	-		
29	N5		65.00	65.00	-	-		
30	R21	Binayak Marga	388.25	388.25	-	-		
31	R2	Main Road	1,992.50	2,182.50	190.00	190.00		
32	T1L16B	Xenial Front	205.68	205.68	-	-		
33	T1L16A	Xenial South	150.20	150.20	-	-		
34	R75	Tintoliya Marga	127.50	127.50	-	-		
35	R122	Amar Marga	250.48	250.48	-	-		
36	R18 Branch		30.00	30.00	-	-		
37	R7(b) (Neuro to sidhartha chowk)	Siddhartha Marga	330.00	330.00	-	-		
38	R12	Sukra Path	290.00	290.00	-	-		
39	R42	Jahada Marga	171.00	171.00	-	-		
40	R6	Shahi Marg	760.00	760.00	-	-		-
41	R21(a)	DharamBadh Junction	80.00	80.00	-	-		
42	R78	Binayak Marga	70.00	70.00	-	-		
43	R188	Shakti Marg	115.60	115.60	-	-		



SN	Road Number	Name of Road	Length in (m)			Work Completed during Jul-Dec 2019		Remarks
			Progress till		Total during Jul-Dec 2019	Brick	RCC	
			Jul 2019	Dec 2019		m	m	
44	R40	Brahma Kumari Marga	350.00	350.00	-	-		
45	Rani Site C		97.50	97.50	-	-		
46	Rani Site D		131.45	131.45	-	-		
47	T3L21	Moti Marga	360.95	385.95	25.00	25.00		
48	T3L39	Gaheli Marga	340.00	340.00	-	-		
49	T3 Line 39A		90.00	90.00	-	-		
50	T3 L39B		90.00	90.00	-	-		
51	T2L27	Bhumi Prashasan Junction	79.50	79.50	-	-		
52	T4 Line 1	Sailesh Marg	100.00	100.00	-	-		
53	N2		95.00	95.00	-	-		
54	T2 Line 26E	College Road	90.00	90.00	-	-		
55	T2 Line 18C	Maisthan Marga	102.00	102.00	-	-		
56	T2Line 18A	Makalu Marga	60.00	60.00	-	-		
57	R6 (T3L11i)		247.50	247.50	-	-		
58	R9 (T3L11k)	Tathasthu Marga	180.00	180.00	-	-		
59	R45 (T3Line10D)	Dadhiram Marga	260.00	260.00	-	-		
60	R9, T2 L19	Fanindra Marga	380.00	380.00	-	-		
61	R7c (Neuro to Shanti Chowk	Siddhartha Marga	305.00	305.00	-	-		
62	R84	School Marga	663.00	663.00	-	-		
63	R85	Lekhanath Marga	150.00	150.00	-	-		
64	R87	Byas Marga	150.00	150.00	-	-		
65	Rani B (Bus park)		90.00	90.00	-	-		
66	R8(a)	Madhumara Marg	285.00	285.00	-	-		
67	T3L23A		100.00	280.00	180.00	180.00		



SN	Road Number	Name of Road	Length in (m)			Work Completed during Jul-Dec 2019		Remarks
			Progress till		Total during Jul-Dec 2019	Brick	RCC	
			Jul 2019	Dec 2019		m	m	
68	Rani E		85.00	85.00	-	-		
69	R102	Hamro Marg	132.50	132.50	-	-		
70	R10/R10a	Ram Marga	740.36	940.36	200.00	200.00		
71	N10	APF	150.00	150.00	-	-		
72	R23	Bani Marg	200.00	200.00	-	-		
73	R103	Vibuti Marga	162.50	162.50	-	-		
74	T3L6	Sahid Marga	350.00	350.00	-	-		
75	P1, T3L6A	Pandit Meghnath Marga	260.00	260.00	-	-		
76	T2 L24C & D	Hanuman Das Marga	130.00	165.00	35.00	35.00		
77	R99	APF	187.00	187.00	-	-		
78	T2 L25		150.00	300.00	150.00	150.00		
79	R20		60.00	60.00	-	-		
80	T2L24F		60.00	60.00	-	-		
81	R105		150.00	150.00	-	-		
82	R34	Prabhu Marg	158.35	158.35	-	-		
83	R35	Garima Marg	138.00	138.00	-	-		
84	R107		160.00	160.00	-	-		
85	T3L13D		70.63	70.63	-	-		
86	T3L13E		62.40	62.40	-	-		
87	T3L11E		110.00	110.00	-	-		
88	B2		76.50	76.50	-	-		
89	R78		35.00	35.00	-	-		
90	R7b	in between R26 & R27	288.50	288.50	-	-		
91	T3L21A		25.00	25.00	-	-		



SN	Road Number	Name of Road	Length in (m)			Work Completed during Jul-Dec 2019		Remarks
			Progress till		Total during Jul-Dec 2019	Brick	RCC	
			Jul 2019	Dec 2019		m	m	
92	R74		96.00	96.00	-	-		
93	R46		120.00	232.00	112.00	112.00		
94	R101		160.00	160.00	-	-		
95	T3L7A		125.00	125.00	-	-		
96	T3L8		75.00	75.00	-	-		
97	R20		100.00	100.00	-	-		
98	R5		200.00	274.00	74.00	74.00		
99	R67		110.00	110.00	-	-		
100	R82		350.00	350.00	-	-		
101	T1L13A		100.00	100.00	-	-		
102	T1L14A		150.00	150.00	-	-		
103	R68		200.00	200.00	-	-		
104	T3L22A		335.00	335.00	-	-		
105	T3L22B		120.00	120.00	-	-		
106	T3L25C		130.00	130.00	-	-		
107	T3L11B		60.00	60.00	-	-		
108	T3L11M		50.00	50.00	-	-		
109	R106		70.00	70.00	-	-		
110	R41		520.00	520.00	-	-		
111	T2L19B		110.00	110.00	-	-		
112	R30		180.00	180.00	-	-		
113	T3L13C		225.00	225.00	-	-		
114	T3L13J		72.53	72.53	-	-		
115	T2L18Y		100.00	100.00	-	-		
116	T2L19P		114.38	114.38	-	-		



SN	Road Number	Name of Road	Length in (m)			Work Completed during Jul-Dec 2019		Remarks
			Progress till		Total during Jul-Dec 2019	Brick	RCC	
			Jul 2019	Dec 2019		m	m	
117	T2L19Q		126.55	126.55	-	-		
118	R9A		208.73	208.73	-	-		
119	R9B		25.00	25.00	-	-		
120	T3L7	Sahid Marga	355.00	355.00	-	-		
121	T2L18K		40.00	40.00	-	-		
122	T3L23C		105.00	105.00	-	-		
123	T2L24E	Mahabir Marga	60.00	60.00	-	-		
124	R44		390.00	390.00	-	-		
125	R110		150.00	150.00	-	-		
126	Parichaya Marga		130.00	130.00	-	-		
127	T3L25B		200.00	200.00	-	-		
128	T1L5, 5A		590.00	590.00	-	-		
129	R82		110.00	110.00	-	-		
130	T2L19Y		150.00	150.00	-	-		
131	T3 Trunk	Tinpaini to Devkota Chowk	520.00	1,175.00	655.00	655.00		
132	T2L19F		55.00	55.00	-	-		
133	T2L18D		20.00	20.00	-	-		
134	R19		175.00	175.00	-	-		
135	R83	Shiva Marga	125.00	125.00	-	-		
136	T310B, T3L7D (R46)	Rangeli Road	320.00	400.00	80.00	80.00		
137	T2L19G		45.00	60.00	15.00	15.00		
138	R4 (T2 Trunk)	Jatuwa Marga	25.00	186.00	161.00		161.00	
139	T3L22	Rangeli Road	25.00	70.00	45.00	45.00		
140	T3L25B, Outlet	Madhumara	96.00	96.00	-	-		



SN	Road Number	Name of Road	Length in (m)			Work Completed during Jul-Dec 2019		Remarks
			Progress till		Total during Jul-Dec 2019	Brick	RCC	
			Jul 2019	Dec 2019		m	m	
141	T3L7B	Matrika Marga	75.00	75.00	-	-		
142	T3L5	Sanihat Marga		280.00	280.00	280.00		
143	T2L19X	Parichaya Marga		210.00	210.00	210.00		
144	T2L19H			75.00	75.00	75.00		
145	R181			150.00	150.00	150.00		
146	N38			165.00	165.00	165.00		
147	T3L10C	Paurakh Marga		110.00	110.00	110.00		
148	T3L10F			135.00	135.00	135.00		
149	T3L10			170.00	170.00	170.00		
150	R47 (T3L10A)	Matrika Marga		125.00	125.00	125.00		
151	R12	Kanchhadai Marga		200.00	200.00	200.00		
152	R8 (b)	Sahayogi Marga		65.00	65.00	65.00		
153	T1L7A	Piyush Marga		40.00	40.00	40.00		
154	R39	Maisthan Marga		50.00	50.00	50.00		
155	N7	Amar Marga		90.00	90.00	90.00		
156	N8	Amar Marga		120.00	120.00	120.00		
157	R26	Amar Marga		140.00	140.00	140.00		
158	T3L25A	Bhakti Marga		137.50	137.50	137.50		
	Total		27,382.19	31,626.69	4,244.50	4,083.50	161.00	



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 with the owner of crusher plant 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 similarly excess construction materials are stocked at Madhumara site and at the open space of north side 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 equipment 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.

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 Chisyang.

Since the contractor has made agreement with the owner of crusher plant for the supply of required materials from the crusher, no approval for quarry and borrow sites are required till date certainly minimize the dust pollution.

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 about 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 inhabitants and facilitate transportation. Nevertheless, it is imperative to look into positive as well as negative impacts of such infrastructure development works in the urban area.



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

A regular monitoring visit by DSC was carried out 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 (Nine) grievances have been registered formally which have immediately been addressed and resolved. This month, some grievances for some stretches were received verbally and were addressed immediately. Refer semi - annual report for details.

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 1st, 2nd and 3rd December, 2018 following issues were found. Social Safeguard revisited the site on 29th, 30th and 31st December.

- 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.
- 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.
- 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.
- 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 equipment's.

The implementation of Social and Environmental Safeguard measures during this month were found partially satisfactory.

3.4.5. STATUS OF RELOCATION OF SERVICES

Relocation of water supply pipe lines were completed at T3L39, T3L39A, T3L39B, T3L23C, T3L10, R44, R2, B1 & T3 Trunk, etc. The status of Labor at Site has been submitting along with each MPR, status is for Dec, 2019 is tabulated below:

Table – 5: Status of Labor at Site

Labour class	Labour		Composition		Ethnic composition				
	Skilled	Unskilled	Male	Female	Janjati	Dalit	Muslim	Madhesi	Brahmin/Chhetri
Local	21	72	93	0	5	18	8	62	0
Non local	74	279	328	25	56	58	25	214	0
Indian	2	7	9	0	0	5	4	0	0
TOTAL	97	358	430	25	61	81	37	276	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	Covering date	Submitted Amount During Jan-Dec, 2019 (NRs)	Remarks
1	IPC 01	15 th October 2017		339,105,000.00	Mobilization Advance
6	IPC 10	11 th July 2019	1 st June 2019 to 30 th June 2019	67,863,056.59	
7	IPC 11	30 th September 2019	1 st July 2019 to 30 th September 2019	95,296,297.30	
8	IPC 12	3 rd November 2019	1 st October 2019 to 31 st October 2019	53,113,369.86	
9	IPC 13	30 th November 2019	4 th June 2019 to 30 th June 2019	125,965,923.87	
10	IPC 14	31 st December 2019	1 st December 2019 to 31 st December 2019	63,509,092.84	
Total amount excluding PA & Mobilization advance till date =				405,747,740.47	

Note: IPC - 10 to IPC - 14 have been recommended during the period from Jul to Dec, 2019.



4. OBJECTIVES AND SCOPE OF WORKS

4.1. OBJECTIVES

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

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

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

4.2. SCOPE OF WORKS

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

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

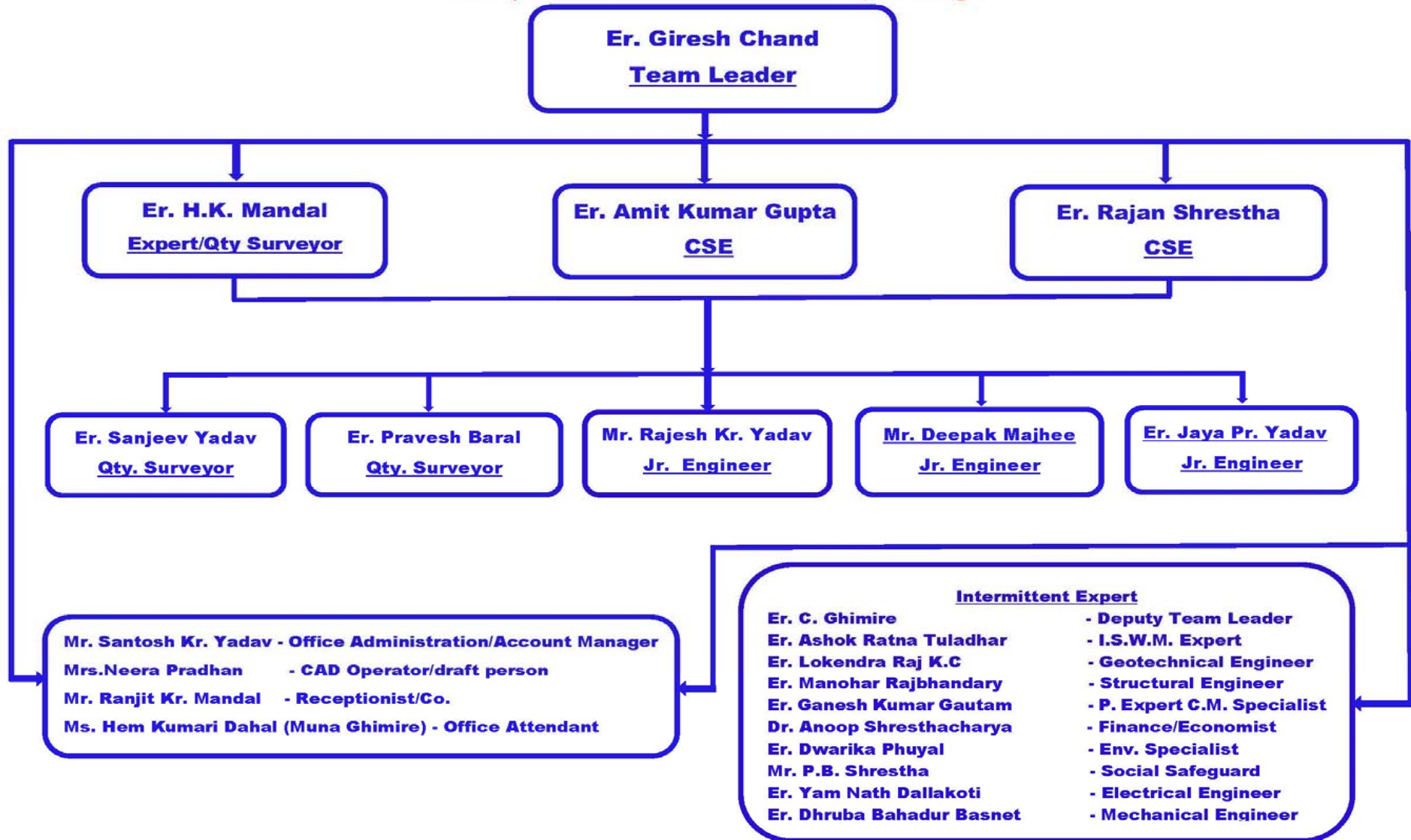


4.3. ORGANIZATION AND STAFFING

Attached

ORGANIZATION CHART

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



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	Mr. Giresh Chand	Team Leader	6 th Sep 2017	
2	Mr. Ashok RatnaTuladhar	ISWM (Designer)	6 th Sep 2017	Intermittent
3	Mr. DwarikaPhuyal	Environmental Safeguard Expert	1 Nov 2017	Intermittent
4	Mr. Prakash Bhakata Shrestha	Social Safeguard Monitoring Expert	26 th dec-2017	Intermittent
5	Mr. Hare Krishna Mandal	Expert/Quantity surveyor	1 st Nov 2017	
6	Mr. Amit Kumar Gupta	Construction Supervision Engineer	1 st March 2018	
7	Mr. Rajan Shrestha	CSE/Quantity Surveyor	7 th Nov 2017	Working as CSE from 1 st May 2019.
8	Mr. Rajesh Kumar Yadav	Junior Engineer-1	6 th Sep 2017	
9	Mr. Sanjeev Yadav	Qty. Surveyor	5 th Nov 2017	
10	Mr. Santosh Kumar Yadav	Office Administration/Account Manager	6 th Sep 2017	
11	Mr. Hem KumariDahal (Muna Ghimire)	Office Attendant	6 th Sep 2017	
12	Mr. Ranjit Kumar Mandal	Receptionist	10 th Dec 2017	
13	Mr. Pravesh Baral	Junior Engineer-2	10 th Dec 2017	
14	Mr. J.P Yadav	Junior Engineer-3	1 st March 2018	
15	Mr. Deepak Majhi	Junior Engineer-4	1 st March 2018	
16	Mrs. Neera Pradhan	CAD operator/Draft Person	10 th Dec 2017	
17	Mr. 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 three production yards at Koshi project, Madhumara and Judi contractor camp for pre-cast items like Kerb stone, drain cover slab, sewer precast elements, etc. but as more than 75% work done so that the production yard at Koshi project has been closed and production are 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 has been tested in presence of consultant TL, PIU and contractor representative.

5.2. PROGRESS ACHIEVED TILL DATE

Month	Target This Month		Achievement This Month		Leading		Lagging		Remarks
	Monthly	Accumulated	Monthly	Accumulated	Monthly	Accumulated	Monthly	Accumulated	
July-18	0.15%	25.17%	0.78%	25.18%	0.63%	0.01%			Leading
August-18	0.15%	25.32%	2.32%	27.50%	2.17%	2.18%			Leading
September-18	5.71%	31.03%	1.22%	28.72%				-2.31%	Lagging
October-18	7.72%	38.75%	2.30%	31.03%				-7.72%	Lagging
November-18	7.72%	46.47%	5.20%	36.22%				-10.25%	Lagging
December-18	7.95%	54.41%	3.40%	39.62%				-14.79%	Lagging
January-19	7.96%	62.37%	5.65%	45.27%				-17.10%	Lagging
February-19	7.96%	70.33%	5.11%	50.38%				-19.95%	Lagging
February-19 (after Revision)	5.33%	50.03%	5.11%	50.38%		0.35%			Leading
March -19	7.75%	57.77%	7.84%	58.21%		0.44%			Leading
April-19	6.82%	64.59%	4.53%	62.74%				-1.85%	Lagging
May-19	6.49%	71.08%	4.54%	67.28%				-3.80%	Lagging
June-19	3.95%	75.03%	2.05%	69.33%				-5.70%	Lagging



Month	Target This Month		Achievement This Month		Leading		Lagging		Remarks
	Monthly	Accumulated	Monthly	Accumulated	Monthly	Accumulated	Monthly	Accumulated	
July-19	3.90%	78.93%	2.19%	71.52%				-7.41%	Lagging
August-19	4.97%	83.90%	2.01%	73.53%				-10.37%	Lagging
September-19	7.45%	91.35%	4.97%	78.50%	NA	NA	-2.48%	-12.85%	Lagging
October-19	8.56%	99.91%	1.14%	79.64%	NA	NA	-7.42%	-20.27%	Lagging
November-19	0.09%	100.00%	0.33%	79.97%	0.24%	NA	NA	-20.03%	Lagging
December-2019 (after Revision-2)	5.00%	72.98%	5.14%	73.12%	0.14%	0.14%	NA	NA	Leading

5.3. KEYEVENTS

The consultant has noted the following key dates for this month.

Table 8: KEY DATES of EVENTS / ACTIVITIES

S. No.	Date	Activities/Events	Remarks
1		Frequent visit of sites by the representatives of the employer.	
2	23 rd – 26 th July 2019	Site visited by Mr Indu Dhakal, Project Monitoring Engineer, ADB consultant.	STIUEIP & RUDP both.
3	28 th July 2019	Meeting held at PIU in the presence of Mayor, Mr. Bhim Parajuli	Minutes of meeting No.:- 26
4	11 th August, 2019	Final Variation order – 1 under RUDP has been already submitted to the Project Implementation Office (PIU) to peruse and processing toward approval on 11 th August, 2019.	<ul style="list-style-type: none"> Draft report on Variation order – 1 sent to PIU on 30th December 2018.
5	23 rd - 24 th September, 2019	ADB Review Mission led by Senior Project Officer, Mr. Naresh Giri with his team. Team members were the representatives from PCO with Project Director and the representatives from PMC with team leader.	Conducted site visit and various meetings to improve the status of projects – RUDP as well as STIUEIP.



S. No.	Date	Activities/Events	Remarks
6	10 th November 2019	Expert visit to Biratnagar Site, Prof. Dr. Bhagwan Ratna Kansakar, Wastewater Treatment Specialist, Mr. Lokendra K.C., Geotechnical Engineer and Mr. Ganesh Gautam, Contract Management specialist from BDA.	

6. DETAILS OF PRE CAST ACTIVITIES.

Table 9: PHYSICAL PROGRESS in PRODUCTION OF PRECAST ITEMS during Jul-Dec, 2019

Physical Progress till date							
S.N.	Description	Unit	Progress			Total during Jul-Dec 2019	Remarks
			BoQ	Jul 1019	Dec 2019		
1	Precast Slab	No		57,871.00	81,871.00	24,000.00	Under progress
2	Kerb Stone	Rm	147,729.68	79,293.30	96,293.30	17,000.00	11.50%

Table 10: PHYSICAL PROGRESS in PRODUCTION/PURCHASE OF RCC Hume Pipe at Itahari during Jul-Dec, 2019,

Physical Progress till date							
S.N.	Description	Diameter (mm)	Progress			Total during Jul-Dec 2019	Remarks
			BoQ (RM)	Jul 1019	Dec 2019		
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	-	

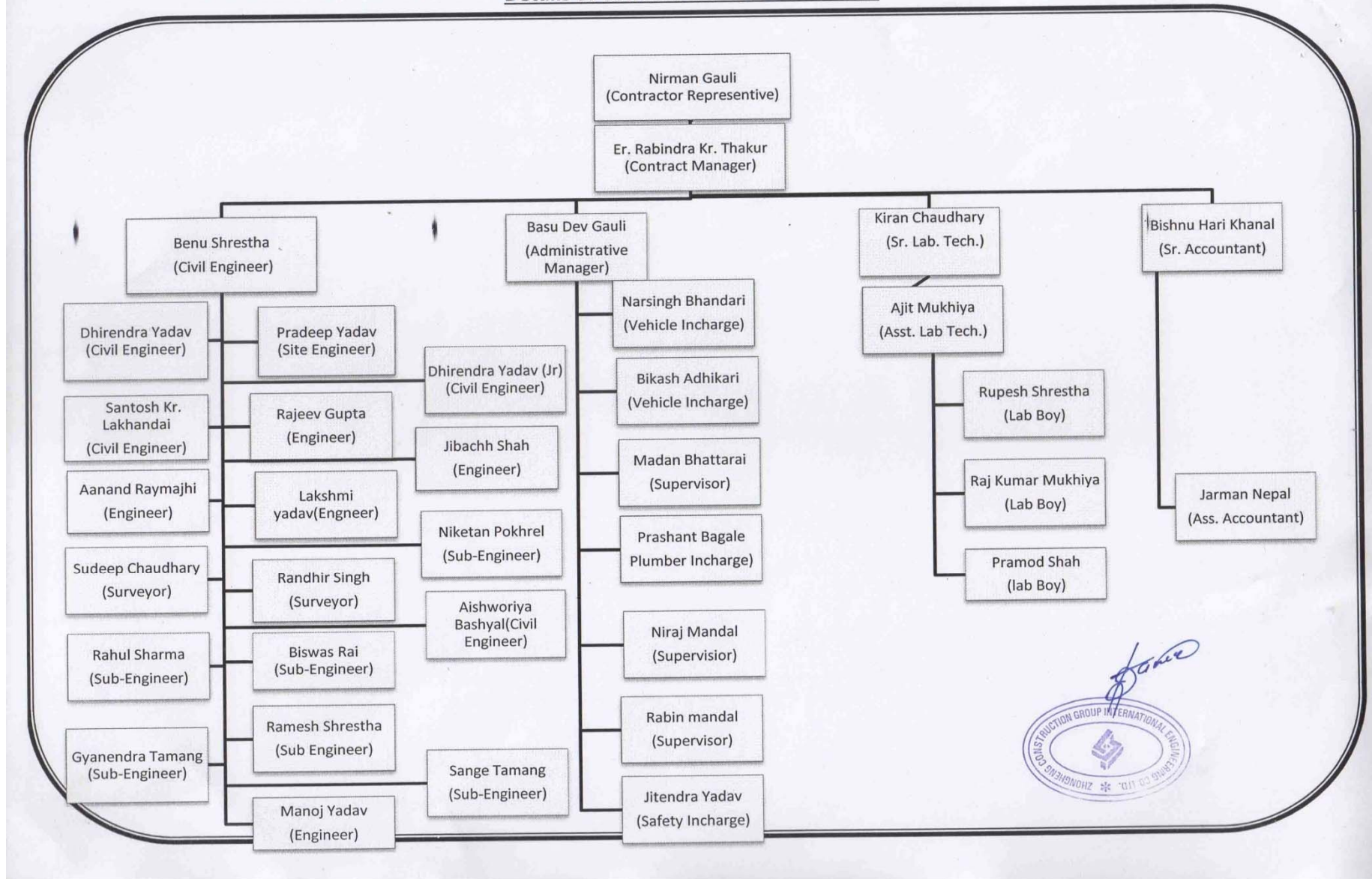
Table 11: PHYSICAL PROGRESS in PRODUCTION/PURCHASE OF HDPE Pipe during Jul-Dec, 2019.

<i>Physical Progress till date</i>							
S.N.	Description	Diameter (mm)	Progress			Total during Jul-Dec 2019	Remarks
			BoQ (RM)	Jul 1019	Dec 2019		
1	HDPE Pipe	110.00	1,987.20	4,487.20	4,487.20	-	Under process
2	HDPE Pipe	200.00	16,656.00	16,500.00	16,500.00	-	
3	HDPE Pipe	250.00	115.00	450.00	450.00	-	

Table 12: PHYSICAL PROGRESS in PRODUCTION/PURCHASE OF UPVC Pipe during Jul-Dec, 2019.

<i>Physical Progress till date</i>							
S.N.	Description	Diameter (mm)	Progress			Total during Jul-Dec 2019	Remarks
			BoQ (RM)	Jul 1019	Dec 2019		
1	UPVC Pipe	160.00	5,050.00	5,050.00	5,050.00	-	
2	UPVC Pipe	110.00	5,050.00	5,050.00	5,050.00	-	

Details of Contractor's Site Personnel's



7. CONTRACTOR'S MANPOWER

Table 13: CONTRACTOR'S KEY STAFFS for DEC, 2019

S. No.	Position	Minimum Number Required as per Contract	ZHONGHENG CONSTRUCTION Group	Remarks
1	Project/Contract Manager (1 No) 15/10 Yrs. (Total/Similar Exp.)	1	1	
2	Civil Engineer-10/6	2	2	
3	Sanitary Engineer- (1no.)-12/8	1	-	
4	Road Engineer-(1no.)-12/8	1	1	
5	Electromechanical Engineer-(1no)- 10/5	1	-	
6	Safety Engineer	-	1	
7	Site Engineer	-	8	
8	Sub- Engineer	-	7	
9	Accountant	-	3	
10	Lab Technician	-	6	
11	Store Keeper	-	1	
12	Vehicle In charge	-	2	
13	Skilled Labors		97	
14	Unskilled Labors		358	

Note: Each month reports were attached in MPR of every month.

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	1	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	1	
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	9	
12	Chips spreader	1	-	
13	Bitumen decanter minimum 4000 Litres. (preheating container)	2	2	
	Air compressor	2	2	
14	Tipping Trucks	5	2	
15	Service vehicle	15	4	
16	Survey equipment (Total	2	1	



S. No.	Equipment Type and Characteristics	Min Number required as per Contract	ZHONGHENG CONSTRUCTION Group	Remarks
	station with accessories)			
17	Theodolite	1	-	
18	Levelling	2	27	
19	Mobile Generator 15-20 KVA	5	10	
20	Mixer Machine	3	5	
21	Concrete Batching Plant	1	-	
22	Concrete pump	1	-	
23	Drain cleaner/ Nala cleaner	2	-	
24	Broomer	-	1	
25	Motor Bike	-	11	
26	Plate Compactor	-	5	
27	Water Pump	-	14	

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.
- Road works
- Precast elements production works at contractor's yard.
- Road Side drain works.
- Laying of Kerb Stone, cover slab and interlocking tiles.
- Placement of Sewer inlet and House Connection works.
- Relocation of electric poles and water supply works, etc.



ANNEX-1: Photographs of July-December, 2019

(Most of the photographs attached in each MPR separately but some of them are attached in this report for references)





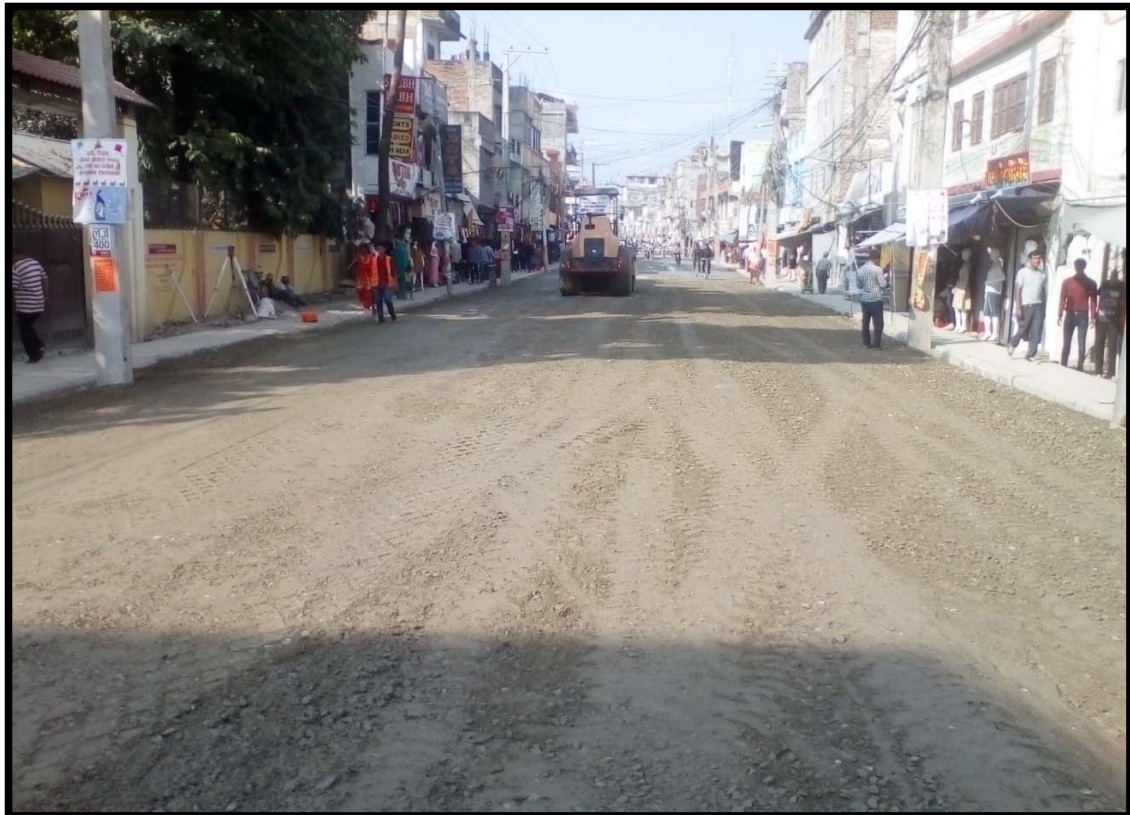
Precast element's casting at contractor's yard



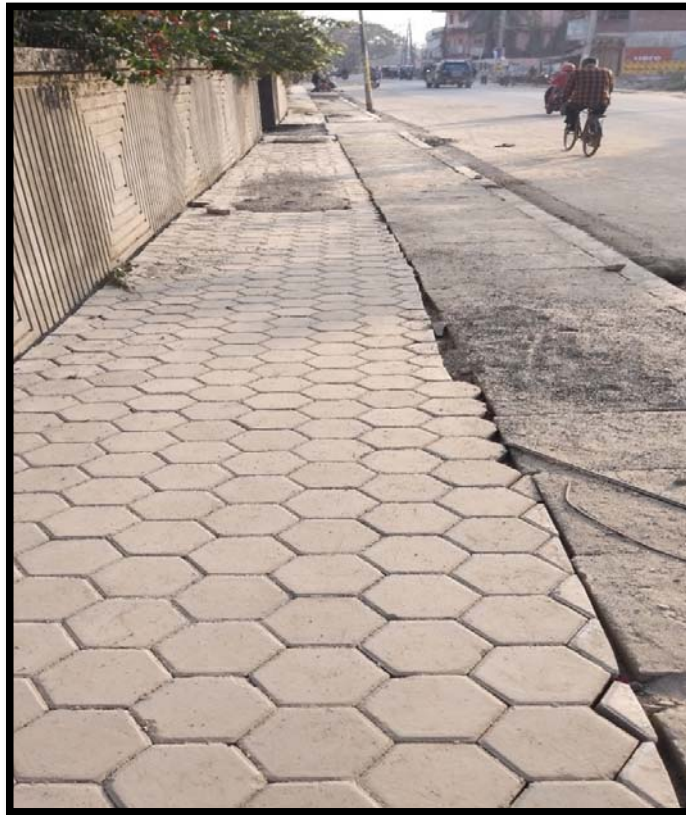
Laying of Base at R20



Footpath finishing works at B2



R2 Lane – Base laying



Footpath R2



Precast element's casting at Contractor's yard

ANNEX-2: Minutes of Meeting July-December, 2019

(The minutes of meetings were attached in every MPR for references)



ANNEX-3: Laboratory Test Results of July-December,
2019

(Lab reports were attached in MPR, refer those separately for each month)



ANNEX-4: SOCIAL & ENVIRONMENT SAFEGUARD

(Social & Environment Safeguard monitoring formats were attached in MPR, some of them are attached in this report for references)



Regional Urban Development Project (RUDP) Project Implementation Unit (PIU) Biratnagar, Nepal <u>LABOUR DATA SUMMARY</u>											
LABOUR CLASS	LABOUR		COMPOSITION		ETHNIC COMPOSITION						
	SKILLED	UNSKILLED	MALE	FEMALE	JANJATI	DALIT	MUSLIM	MADHESI	BRAHMIN/CHHETRI		
LOCAL	26	84	110	0	10	5	0	95	0		
NON LOCAL	50	201	251	0	43	59	10	139	0		
INDIAN	2	7	9	0	0	0	0	9	0		
TOTAL	78	292	370	0	53	64	10	243	0		



Regional Urban Development Project (RUDP) Project Implementation Unit (PIU) Biratnagar, Nepal													
LABOUR DATA												Month/Year: August 2019	
S.NO	LOCATION	TYPES OF WORK	TYPES OF WORKERS	LABOUR	COMPOSITION		ETHNIC COMPOSITION			MUSLIM	MADHESI	BRAHMIN/CHHETRI	
				SKILLED	UNSKILLED	MALE	FEMALE	JANJATI	DALIT				
1	Madhumara Yard	Production	LOCAL										
			NON LOCAL	8	41	49			15	5		29	
			INDIAN										
			TOTAL	49									
2	T3L5	Drain	LOCAL	3	15	18					18		
			NON LOCAL										
			INDIAN										
			TOTAL	18									
3	R181A	Drain	LOCAL	2	13	15			5		10		
			NON LOCAL										
			INDIAN										
			TOTAL	15									
4	T3 Trunk line (Group 'A')	Drain	LOCAL										
			NON LOCAL	5	13	18			5	5		8	
			INDIAN										
			TOTAL	18									
5	R9	Site Clearance	LOCAL	2	5	7					7		
			NON LOCAL										
			INDIAN										
			TOTAL	7									
6	T3 Trunk line (Group 'B')	Drain	LOCAL										
			NON LOCAL	3	12	15			3	7		5	
			INDIAN										
			TOTAL	15									



7	T3 Trunk line (Group 'C')	Drain	LOCAL NON LOCAL INDIAN TOTAL	4 20	16	20		5	5	10		
8	R7	Sub-base	LOCAL NON LOCAL INDIAN TOTAL	3 9	6	9				9		
9	T116	Drain	LOCAL NON LOCAL INDIAN TOTAL	2 12	10	12				12		
10	T3L11E	House Connection	LOCAL NON LOCAL INDIAN TOTAL	3 7	4	7				7		
11	R107	House Connection	LOCAL NON LOCAL INDIAN TOTAL	4 13	9	13		2		11		
12	B1	Drain Rising	LOCAL NON LOCAL INDIAN TOTAL	3 12	9	12				12		
13	R46	Kerb Stone Laying	LOCAL NON LOCAL INDIAN TOTAL	4 16	12	16		5		11		
14	B1	Weep Hole	LOCAL NON LOCAL INDIAN TOTAL	2 8	6	8				8		





Regional Urban Development Project (RUDP)

Social Safeguard Monitoring

Status of Key Social Issues Compliance

Subproject Road : -RUDP/ICB/BRT/2

Month/Year: August 2019

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

Contract Package: RUDP/ICB/BRT/2

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



Prepared by:

Verified by:

Monitored by:



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

Name of Sub Project: RUDP/ Biratnagar

Contract Package: RUDP/ICB/BRT/02

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

Month: August 2019

Checklist

SN	Activity	Description/Present Status (Compliance/Partially Compliance/Non Compliance)	Remarks/ Corrective actions for Non-Compliance
1	Training		
1.1	Health, Safety and EMP trainings and awareness	Yes	
1.2	Others awareness and skill trainings	No	
2	Occupational health and safety		
2.1	Insurance for workers	Yes	
2.2	Personal Protective Equipment (PPE) provided to labors and is using (helmet, facemasks, muffles, gloves, boots, jacket, goggles etc.)	Daily Provided	
2.3	Public notification Safety and warning signs and informative signboards in working sites for work safety	Yes Provided	
2.4	Use of barricades, caution tape and flag	Daily Used	
3	Campsite management		
3.1	Location	Pichra, Judi, Shanti Chowk, Rani	
3.2	First aid facilities available at camp and worksites	Yes	
3.3	Drinking water supply and sanitation facilities/ pit latrines	Tap water/ Hand Pump	
3.4	Waste Disposal and Management facilities	Yes	
3.5	Type of fuel used for cooking	L.P.G	
4	Spoil and Construction material Management		
4.1	Cut and fill balance maintained or not, Reuse of spoil materials	Cut & Fill balance maintained	
4.2	Use of safe spoil disposal locations	Not Applicable	
4.3	Disturbance to Pedestrian and traffic movement	No any disturbance to pedestrians & traffic	



4.4	Use of private land and agreement with land owners	movement Yes	
5	Air, Noise and Water Pollution		
5.1	Dust emission and Noise pollution sites	Water sprinkled by tanker on such sites.	
5.2	Water quality monitoring result and locations	ok	
5.3	Block age of natural drainages ,water logging, drain water discharge into farmland/risky areas	Not Applicable	
6	Quarrying of construction materials and Plants Installment		
6.1	Quarry/borrow operation sites	Not Applicable	
6.2	Crusher plant and Asphalt plant operation restoration	Asphalt Plant	
7	Impact/Disruption of Private properties		
7.1	Building structures	Not Applicable	
7.2	Other utilities	Not Applicable	
8	Impact/disruption of public infrastructures		
8.1	Irrigation canal	Not Applicable	
8.2	Water supply pipe	Not Applicable	
8.3	Access road	Not Applicable	
8.4	Electric/Telephone pole	Not Applicable	
8.5	Others	Not Applicable	
9	Sites for cultural and religious values		
9.1	Cultural and religious sensitive spots (if any)	Not Applicable	
10	Forest and vegetation		
10.1	Number of trees removal	00	
10.2	No of tree plantation (Roadside)	Not Applicable	
11	Accident cases and records	No any records	
12	Employment to local people		
12.1	Men and women	Yes, both men and women	
12.2	Child labor (if any)	No	
13	Establishment of Safeguard desk and meeting	Yes	
14	Grievances from local people and addressed	Yes	



Regional Urban Development Project (RUDP)
Project Implementation Unit (PIU)
Biratnagar, Nepal
LABOUR DATA SUMMARY

LABOUR CLASSIFICATION	LABOUR		COMPOSITION		ETHNIC COMPOSITION			
	SKILLED	UNSKILLED	MALE	FEMALE	JANJATI	DALIT	MUSLIM	MADHESI
LOCAL	19	38	57	0	2	6	0	49
NON LOCAL	46	143	189	0	70	22	9	88
INDIAN	8	22	30	0	0	0	8	22
TOTAL	73	203	276	0	72	28	17	159
								0



Regional Urban Development Project (RUDP) Project Implementation Unit (PIU) Biratnagar, Nepal LABOUR DATA														Month/Year: At Oct. 2019		
S.NO	LOCATION	TYPES OF WORK	TYPES OF WORKERS	LABOUR SKILLED	COMPOSITION			ETHNIC COMPOSITION			MUSLIM	MADHESI	BRAHMIN/CHHETRI			
					UNSKILLED	MALE	FEMALE	JANJATI	DALIT							
1	Kalika yard+D.D.C	Production	LOCAL													
			NON LOCAL	12	40	52	0	30	5			5	12	0		
			INDIAN													
			TOTAL	52												
2	Madhumara Yard	Production	LOCAL													
			NON LOCAL	8	33	41	0	10	8			0	23			
			INDIAN													
			TOTAL	41												
3	R7	Weep Whole	LOCAL	3	6	9	0	0	0			0	9			
			NON LOCAL													
			INDIAN													
			TOTAL	9												
4	R9	Prime	LOCAL													
			NON LOCAL	3	8	11	0	4	0			0	7	0		
			INDIAN													
			TOTAL	11												
5	R2	House connection Group A	LOCAL	4	9	13	0	0	6			0	7	0		
			NON LOCAL													
			INDIAN													
			TOTAL	13												
6	R2	House connection Group B	LOCAL	5	9	14	0	0	0			0	14	0		
			NON LOCAL													
			INDIAN													
			TOTAL	14												
7	R84	House connection Group C	LOCAL	3	6	9	0	2	0			0	7	0		
			NON LOCAL													
			INDIAN													
			TOTAL	9												



Regional Urban Development Project (RUDP) Project Implementation Unit (PIU) Biratnagar, Nepal LABOUR DATA														Month/Year: At Oct. 2019	
8	R2	Electrical	LOCAL	5	10	15	0	4	5	0	6	0			
			NON LOCAL												
			INDIAN												
			TOTAL	15											
9	R2	M.H. Rise	LOCAL	2	3	5	0	0	0	0	5	0			
			NON LOCAL												
			INDIAN												
			TOTAL	5											
10	R44	Drain	LOCAL												
			NON LOCAL	5	11	16	0	4	4	0	8	0			
			INDIAN												
			TOTAL	16											
11	R8	Drain	LOCAL												
			NON LOCAL	4	14	18	0	0	0	0	18	0			
			INDIAN												
			TOTAL	18											
12	R3	Drain	LOCAL												
			NON LOCAL	3	10	13	0	3	0	0	10	0			
			INDIAN												
			TOTAL	13											
13	T3L5	Sewer inlet	LOCAL	2	5	7	0	0	0	0	7	0			
			NON LOCAL												
			INDIAN												
			TOTAL	7											
14	R7	Base final	LOCAL												
			NON LOCAL	3	7	10	0	0	0	0	6	0			
			INDIAN												
			TOTAL	10											



Regional Urban Development Project (RUDP) Project Implementation Unit (PIU) Biratnagar, Nepal LABOUR DATA													Month/Year: At Oct. 2019
15	R2	Asphalt	LOCAL										
			NON LOCAL										
			INDIAN	4	8	12	0	0	0	0	8	4	0
			TOTAL	12									
16	T3L10F	Drain	LOCAL										
			NON LOCAL	3	12	15	0	5	0	0	10	10	0
			INDIAN										
			TOTAL	15									
17	R3	Tiles	LOCAL										
			NON LOCAL	4	12	16	0	10	0	0	6	6	0
			INDIAN										
			TOTAL	16									



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


Name of Sub Project: RUDP/ Biratnagar

Contract Package: RUDP/ICB/BRT/02

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

Month: Oct. 2019

Checklist

SN	Activity	Description/Present Status (Compliance/Partially Compliance/Non Compliance)	Remarks/ Corrective actions for Non-Compliance
1	Training		
1.1	Health, Safety and EMP trainings and awareness	Yes	
1.2	Others awareness and skill trainings	No	
2	Occupational health and safety		
2.1	Insurance for workers	Yes	
2.2	Personal Protective Equipment (PPE) provided to labors and is using (helmet, facemasks, muffles, gloves, boots, jacket, goggles etc.)	Daily Provided	
2.3	Public notification Safety and warning signs and informative signboards in working sites for work safety	Yes Provided	
2.4	Use of barricades, caution tape and flag	Daily Used	
3	Campsite management		
3.1	Location	Pichra, Judi, Shanti Chowk, Rani	
3.2	First aid facilities available at camp and worksites	Yes	
3.3	Drinking water supply and sanitation facilities/ pit latrines	Tap water/ Hand Pump	
3.4	Waste Disposal and Management facilities	Yes	
3.5	Type of fuel used for cooking	L.P.G	
4	Spoil and Construction material Management		
4.1	Cut and fill balance maintained or not, Reuse of spoil materials	Cut & Fill balance maintained	
4.2	Use of safe spoil disposal locations	Not Applicable	
4.3	Disturbance to Pedestrian and traffic movement	No any disturbance to pedestrians & traffic	



4.4	Use of private land and agreement with land owners	movement Yes	
5	Air, Noise and Water Pollution		
5.1	Dust emission and Noise pollution sites	Water sprinkled by tanker on such sites.	
5.2	Water quality monitoring result and locations	ok	
5.3	Block age of natural drainages ,water logging, drain water discharge into farmland/risky areas	Not Applicable	
6	Quarrying of construction materials and Plants Installment		
6.1	Quarry/borrow operation sites	Not Applicable	
6.2	Crusher plant and Asphalt plant operation restoration	Asphalt Plant	
7	Impact/Disruption of Private properties		
7.1	Building structures	Not Applicable	
7.2	Other utilities	Not Applicable	
8	Impact/disruption of public infrastructures		
8.1	Irrigation canal	Not Applicable	
8.2	Water supply pipe	Not Applicable	
8.3	Access road	Not Applicable	
8.4	Electric/Telephone pole	Not Applicable	
8.5	Others	Not Applicable	
9	Sites for cultural and religious values		
9.1	Cultural and religious sensitive spots (if any)	Not Applicable	
10	Forest and vegetation		
10.1	Number of trees removal	00	
10.2	No of tree plantation (Roadside)	Not Applicable	
11	Accident cases and records	No any records	
12	Employment to local people		
12.1	Men and women	Yes, both men and women	
12.2	Child labor (if any)	No	
13	Establishment of Safeguard desk and meeting	Yes	
14	Grievances from local people and addressed	Yes	




Regional Urban Development Project (RUDP)

Social Safeguard Monitoring

Status of Key Social Issues Compliance

Subproject Road : -RUDP/ICB/BRT/2

Month/Year: Oct. 2019

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

Contract Package: RUDP/ICB/BRT/2

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

Prepared by:

Verified by:

Monitored by:



Staffs Name List

SN.	Name	Position	Contact No	Remarks
1	Ravindra kumar Thakur	CM	9801159860	
2	Benu Shrestha	Engineer	9801159861	
3	Dhirendra Yadav	Engineer	9801225283	
4	Randhir Singh	Engineer	9801159918	
5	Rajeev Gupta	Engineer	9801159598	
6	Govind Jha	Engineer	9801157340	
7	Pradeep Yadav	Engineer	9801159896	
8	Jibachha Sah	Engineer	9805932183	
9	Dhirendra yadav jr	Engineer	9805913881	
10	Aanand Rayamajhi	Engineer	9801157317	
11	Santosh Kr Lakandae	Engineer	9801159863	
12	Sakir Alam	Engineer	9801160993	
13	Lakshmi Yadav	Engineer	9819008932	
14	Manoj kumar yadav	Engineer	9815714239	
15	Rahul Kr Sharma	Sub-Engineer	9801159862	
16	Adarsh Karn	Sub-Engineer		
17	Sudip Chaudhary	Surveyor	9801159859	
18	Biswas Rai	Sub-Engineer	9801159920	
19	Gyanendra Tamang	Sub-Engineer	9811357918	
20	Sange Tamang	Sub-Engineer		
21	Niketan Pokhrel	Sub-Engineer		
22	Ramesh Shrestha	Sub-Engineer		
23	Jitendra Yadav	Safety incharge	9801160166	
24	Prashant Bagale	Plumbing Supervisor	9801159842	
25	Kiran Chaudhary	SLT	9801225281	
26	Rupesh Shrestha	LT	9811316006	
27	Ajit Mukhiya	LT	9827369882	
28	Pramod shah	LT	9815779383	
29	Raj kr Mukhiya	LT		
30	Bishnu Hari Khanal	Chief Accountant	9801157314	
31	Aasish Khanal	Assistant Accountant	9801159867	
32	Jarmān Nepal	Assistant Accountant		
33	Bikash Adhikari	Vehicle incharge	9801159868	
34	Narsingh Bhandari	Vehicle incharge	9801157318	
35	Madan Bhattarai	Store Keeper	9801159634	
36	Niraj Mandal	Supervisor		
37	Rabin Mandal	Supervisor		



B. Details of Equipment at Site / Contractor's yard

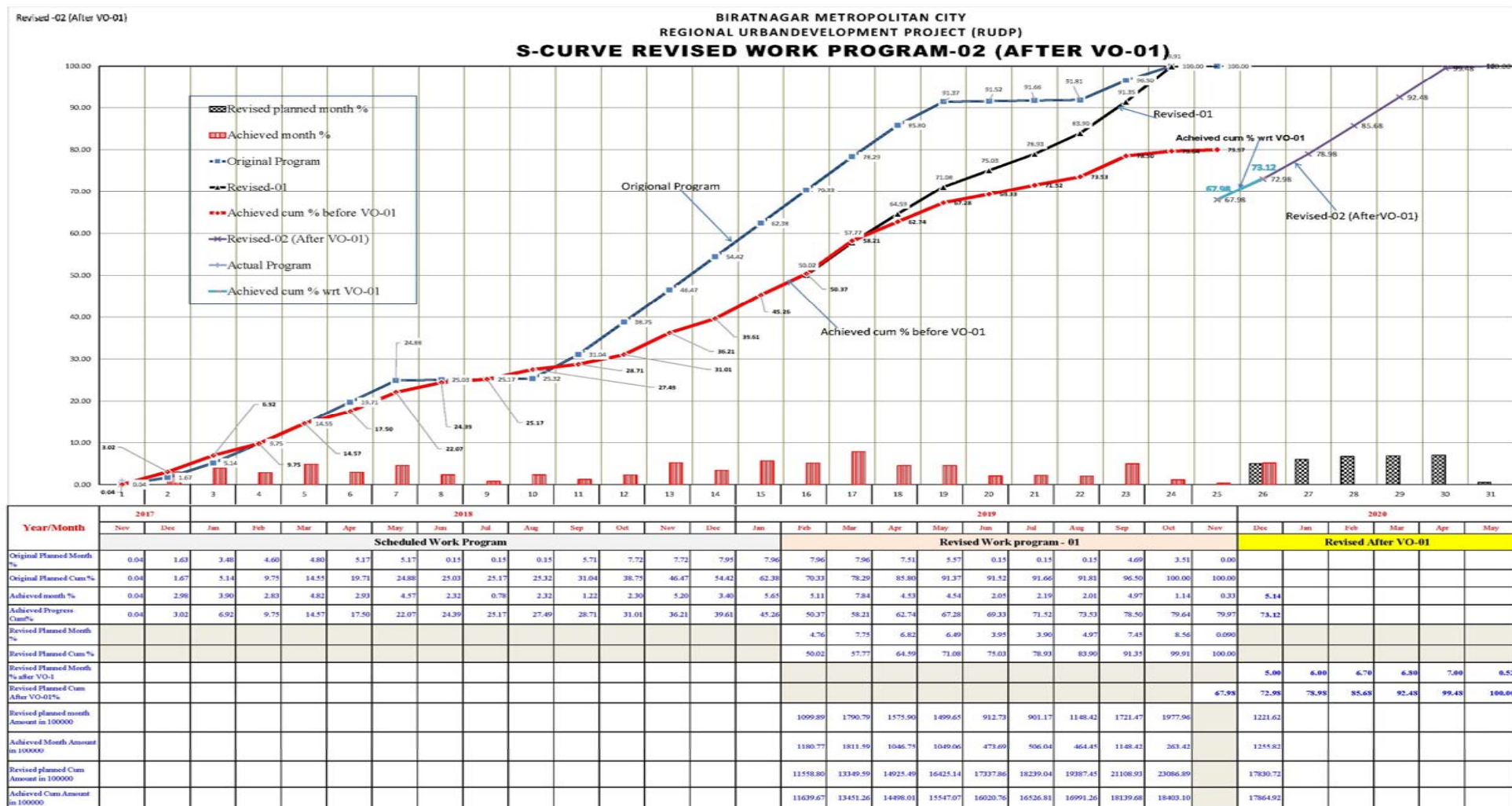
S.N	Equipment Type and Characteristics	ZHONGHENG CONSTRUCTION GROUP
1	Excavator	1
2	Backhoe Loader	9
3	Asphalt plant of adequate capacity	1
4	Asphalt pavers	1
5	Vibrating roller	4
6	Pneumatic tyre roller 8 to 10 ton	1
7	Smooth wheeled roller 8 to 10 ton	1
8	Tipper	4
9	Crane	1
10	Water Tank	3
11	Grader	3
12	Bitumen distributor (4 to 6 Kilo litre)-	2
13	Water browser (minimum 5000 Litres)	9
14	Chips spreader	0
15	Bitumen decanter minimum 4000 Litres.	2
16	Air compressor	2
17	Tipping Trucks	2
18	Service vehicle	4
19	Total station	1
20	Auto Level	30
21	Mobile Generator 15-20 Kva	10
22	Mixer Machine	5
23	Broomer	2
24	Plate Compactor	6
25	Water Pump	12
26	Motorbike	12
27	Tractor	22



ANNEX-5: S-Curve

ATTACHED – till Dec, 2019





Annex-6: Master Plan of RUDP Project



