



In association with

Brisbane City Enterprise Pty Ltd, Australia  
AQUA Consultant and Associates Ltd, Bangladesh  
Building Design Authority, Nepal  
CEMAT Consultants, Nepal

## Monthly Progress Report (February, 2015)

### Secondary Towns Integrated Urban Environmental Improvement Project (STIUEIP), Biratnagar, Nepal

5 March 2015



**Biratnagar Sub-Metropolitan City, Nepal**

Project Name:	Secondary Towns Integrated Urban Environmental Improvement Project (STIUEIP)
Project Number:	56064023
Report for:	Biratnagar Sub Metropolitan City, Nepal

## PREPARATION, REVIEW and AUTHORISATION

Revision	Date	Prepared by	Reviewed by	Approved for Issue by
	5 March 2015	DSC		

## ISSUE REGISTER

Distribution List	Date Issued	Number of Copies
Biratnagar Sub Metropolitan City, Nepal:	5 March 2015	3
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## 1. SALIENT FEATURE of Contract Package: STIUEIP/W/BRT/ICB-01

General Features	
Name of Project	Secondary Towns Integrated Urban Environmental Improvement Project (STIUEIP)
Executing Agency	Government of Nepal, Ministry of Urban Development Department of Urban Development and Building Construction (DUDBC)
Implementing Agency	Biratnagar Sub-Metropolitan City
Funded By	Asian Development Bank & Government of Nepal
Package	Sewerage and Drainage Network, Wastewater Treatment Plant and Road and Lanes Improvement Sub Project
Contract No.	STIUEIP/W/BRT/ICB-01
Location	Biratnagar Sub-Metropolitan City
Consultant	SMEC in association with Brisbane/AQUA/BDA/CEMAT
Contractor	CTCE-KALIKA Joint Venture
Date of Commencement	8 <sup>th</sup> December, 2013
Date of Completion	25 <sup>th</sup> May, 2016
Contract Period	900 days from date of commencement
Time elapsed till <b>February 2015</b>	448 days from date of commencement ( <b>49.8%</b> )
Contract amount with Provisional Sum	NRs. 2,119,054,525.90
Add 13%VAT	NRs. 272,278,000.00
Variation Order No 1 with 13% VAT	NRs 99,753,075.60
Total Contract Amount with VAT & PS	NRs. 2,491,085,601.50
Paid Amount of IPC 01	NRs. 209,400,000.00
Paid Amount of IPC 07	NRs. 76,203,672.17
Total Paid Amount from IPC 01 to IPC 07	<b>NRs. 510,347,334.97</b>

## 2 INTRODUCTION / BACKGROUND

1. SMEC International Pty (Australia) in association with Brisbane City Enterprise Pty Ltd (Australia), AQUA Consultant and Associates Ltd (Bangladesh), Building Design Authority (Nepal) and CEMAT Consultants (Nepal) have entered for a Contract of Consulting Services with Secondary Towns Integrated Urban Environmental Improvement Project (STIUEIP), Project Implementation Unit(PIU), Biratnagar Sub metropolitan City on 7<sup>th</sup> December 2011. This monthly Progress Report of December, 2014 has been submitted to the PIU as per the Work Program proposed in the consultant's technical proposal as well as TOR of the consultant.
2. Secondary Towns Integrated Urban Environmental Improvement Project (STIUEIP), 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 2650-NEP. As per PAM contribution from GoN is 3.99 million USD, Asian Development Bank (ADB) 18.86 million USD and Biratnagar Sub-metropolitan City (BSMC) 1.99 million USD while contingency is 2.88 million USD for Secondary Town Integrated Urban Environmental Improvement Project (STIUEIP), Biratnagar. The cost sharing has been revised in April, 2013 as: Government of Nepal (GoN) is 5.960 Million USD, Asian Development Bank (ADB) 24.214 Million USD, TDF loan 4.098 Million USD and Biratnagar Sub-metropolitan City (BSMC) 2.980 Million USD and in total **37.252** Million USD.
3. 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 proposed project Secondary Towns Integrated Urban Environmental Improvement Project (STIUEIP) is another step forward to promote healthy cities by creating healthier urban environments and was formulated under the PPTA 2010.
  - Contract of consulting services signed on 07 December 2011.
  - Design works commenced on 01 January 2012.
  - Final design works submitted to the Client on March 2013
  - Contract of construction works signed on 02 December 2013
  - Construction works commenced on 08 December 2013
  - Contractor's Work Program approved on 10 February 2014
  - Contractor's Work Program (Revision 02) under review 05 December 2014

## 3. SUB-PROJECT COMPONENTS

### 3.1 Sewer Lines

4. The prioritized sewer lines for Final Detailed Engineering Report of BSMC are as follows:

**Table 1: Proposed Sewer Lines in BSMC**

<b>S N.</b>	<b>Description</b>	<b>Unit</b>	<b>Quantity</b>
<b>1</b>	<b>Sewerage Pipe Supply and Installation</b>		<b>62,835.0</b>
	<b>Reinforced Concrete Pipe laying and jointing</b>		<b>15,748.0</b>
	Line T1 (Secondary)	m	3,788.0
	Line T2 (Trunk)	m	7,506.0
	Line T3 (Trunk)	m	4,136.0
	Line T4 (Secondary)	m	318.0
	<b>HDPE laying and jointing</b>		<b>47,087.0</b>
	Line T1 (Secondary)	m	7,124.0
	Line T2 (Trunk)	m	19,410.0
	Line T3 (Trunk)	m	18,341.0
	Line T4 (Secondary)	m	22,12.0
<b>2</b>	<b>Manhole ( Brick / RCC)</b>	<b>no.</b>	<b>2,019</b>
<b>3</b>	<b>Sewer Inlet</b>	<b>no.</b>	<b>3,766.00</b>
<b>4</b>	House connection	no.	5,930.00
<b>5</b>	Reinstatement of Roads	km	64.50

### 3.2 Storm Water Drains

- Most of the storm drains (S13, S11, S9, S5, B1, B2, B3, CN2, CN3 and southern parts) have been provisioned as Phase I priority works. The major storm drain outlets as planned are 14 numbers and catchment areas and discharges are respectively 1,324.2 Ha and 73.21 cum/sec.

**Table 2: Proposed Storm Water Drains in BSMC**

S. No.	Description	Unit	Quantity
<b>A</b>	<b>Storm Drain for Northern Parts</b>		<b>39,379.00</b>
I	Storm Drain Lines	m	<b>25,388</b>
II	Culvert	no	41
III	Outfall	no	15
IV	House Connection Chamber	no	5,930
V	Rain Inlet	no	500
VI	Manhole	no	2,050
VII	Canal Crossing	no	10
<b>B</b>	<b>Storm Drain for Southern Part</b>		
I	Brick Masonry Drain	m	<b>13,991</b>
II	Cleaning and Maintenance of Existing Drain	m	7,273
III	Culverts	no	38
<b>C</b>	<b>Rehabilitation of Existing Drain</b>		
I	Drain Cover	m	30,467
II	Cleaning and Maintenance of Existing Drain	m	33,601

### 3.3 Waste Water Treatment Plants

6. The quantity of domestic waste water is calculated using water supply rate at 90 liters per person per day in the design year 2035, out of which 80% is converted into waste water. Maximum quantity of waste water is calculated taking peak factor of 1.99 to 2.5. Minimum quantity of sewage is taken as 30% of the average quantity. Commercial / Institutional / Industrial waste water quantity is calculated as 0.10 LPS/ha. While in infiltration quantity is calculated as 0.14 LPS/ha in the design year 2035. The total quantity of commercial / institutional / industrial and infiltration waste water estimated as 237.79 LPS in the design year 2035 which is very large in comparison with domestic waste water quantity of 207.18 LPS. The maximum quantity (peak flow) of waste water in the design year 2035 for both Phase I and Phase II areas is estimated at 650.08LPS. The maximum quantity of the waste water for Phase I areas only is estimated at 213.97 LPS. The capacity of the Phase I WWTP has been adopted as 214LPS. The capacity of the Phase II WWTP will be thus 436LPS. Features of WWTP at Jatuwa are as follows:



**Table 3: Proposed Waste Water Components in BSMC**

S.N.	Description	Unit	No
	<b>Waste Water Treatment Plant Component</b>		
1	By Pass Chamber	no	1
2	Distribution Chamber	no	1
3	Bar Screen Chamber	no	2
4	Sump well with Pumping Station	no	2
5	Collection Chamber1	no	1
6	Oil & Grease Chamber	no	2
7	CollectionChamber2	no	1
8	Grit Chamber	no	2
9	CollectionChamber3	no	1
10	Anaerobic Pond	no	3
11	Facultative Pond	no	3
12	Collection Chamber4	no	1
13	Outfall Structure	no	1
14	Sludge Drying Bed	no	10
15	Enclosure Chamber Shed	no	1
16	Guard House	no	1
17	Office Cum Lab Building	no	1
18	Workshop Building	no	1
19	Generator / Changing House	no	1
20	Entrance Gate	no	1
21	Boundary wall	m	1,340
22	Shallow Tube Well with water Tank	set	1
23	Landscaping and Plantation works	sqm	99,915
24	Site clearance, grubbing, surface dressing	sqm	99,915
25	Road and Drain Improvement	m	1,440
26	River training works	m	600
27	Electro mechanical works	Set	1
28	Lab Equipment and installation	Set	1

### 3.4 Roads and Lanes

7. Most of the roads / lanes in Biratnagar are in a poor state due to lack of periodic maintenance, and need improvement, whereas 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. Almost necessary streets are already constructed and hence the Project has considered on design based on reinstatement,

rehabilitation and upgrading of existing roads and lanes.

**Table 4: Proposed Roads in BSMC**

Description of Item	Quantity
Main Road Improvements (Road from Puspahal Chowk to Bhatta Chowk)	2.5 Km
Reinstatement and Road Improvements (under sewer line installation)	62.0 Km

### 3.5 Environmental Aspect

8. The project is environmental improvement project and mainly constitutes works on sewerage and drainage improvement works in BSMC besides others. As per ADB guidelines on Environmental Assessment requirements, this project is classified as Environment Category B. According to Environmental Protection Guidelines, 2054BS, First Revised (2055BS) schedule-3, IEE is required for Operations of Sewerage Schemes under Schedule 1.h.2.e (pertaining to Rule 3). The final report on IEE was submitted and MUD had approved the IEE on May14, 2013.
9. Installation of functioning sewers and functioning drainage system including roads / lanes improvement in BSMC 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.
10. DSC has prepared and submitted Environmental Progress Reports (Quarterly) July-September 2014 and October –December 2014 on 15 February 2015.

### 3.6 Social Aspect

11. Secondary Towns Integrated Urban Environmental Improvement Project (STIUEIP) in Biratnagar has been commenced from 2010 for improving 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 STIUEIP in Biratnagar Sub-metropolitan City (BSMC). Besides of this, various social development programs and activities are executing through community development and institutional strengthening components which are other two objective focused components of STIUEIP Biratnagar.

In February 2015, DSC focused on monitoring of ongoing social development activities supported by project. As usual in previous months, Design and Supervision Consultant (DSC)/STIUEIP also assisted Project Implementation Unit (PIU) in effective implementation of social activities as and when necessary during this month. The Semi-annual Social Safeguard Report of the project has been prepared and submitted.

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 DSC. The fourth meeting of safeguard desk held in this month has decided a systematic mechanism for skill development trainings, information and project message dissemination, community consultations and different social development activities.

Apart from it, many formal and informal meetings had taken place during this month. DSC had sit together with PIU and NGO in developing procedural document to address the skill development trainings included in updated resettlement plan (November 2014) of the project.

The regular monitoring visits have provided insights of the social development aspects of the project to the DSC. The community development programs are continuing through the Tole Lane Organizations (TLOs) that are almost 119 numbers in 17 wards of BSMC. Prior to the start of such community development activities, DSC has analyzed the data of poor and disadvantaged groups (DAGs) living in the various tole/ clusters identified by the poverty mapping applying participatory tools. Based on the poverty indicators, all details has been documented and shown in the social map. The program area for community development programs has been extended to most poverty stricken area scattered across several wards of the BSMC. The Community Development Program is consisted with meetings, orientation, awareness activities, skill development trainings and health, hygiene and sanitation activities which are conducted and organized by the NGO (FriPAD).

12. DSC has prepared minutes meeting No 4, please refer to Annex-7.

### 3.7 Financial Plan

13. The Sub project cost will be disbursed in three years starting from FY2013/14 to 2015/16. It has estimated that 20 percent of the Sub project cost will be disbursed in first year.

Similarly, in second year, 50 percent will be disbursed. Finally, remaining 30 percent of Sub project cost will be disbursed in third year.

### 3.8 Disbursement Records in Construction

**Table 5: Disbursement Record in Construction to Date**

S.N.	Description of Payment	Payment Items	Amount in NRs.
1	M/S Prabidhi International	Ditch Cleaning Equipment	3,300,000.00
2	M/S CTCE-Kalika JV	IPC 01	209,400,000.00
3	M/S CTCE-Kalika JV	IPC 02	27,853,500.98
4	M/S CTCE-Kalika JV	IPC 03	47,507,270.95
5	M/S CTCE-Kalika JV	IPC 04	42,241,392.52
6	M/S CTCE-Kalika JV	IPC 05	22,035,291.99
7	M/S CTCE-Kalika JV	IPC 06	85,573,541.38
8	M/S CTCE-Kalika JV	IPC 07	76,203,672.17
9	M/S CTCE-Kalika JV	IPC-08	Expected in First week of March 2015
		<b>Total in NRs.</b>	<b>513,647,334.97</b>

## 4. OBJECTIVES AND SCOPE OF WORKS

### 4.1 Objectives

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

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

15. 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

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

- A. Detailed Design and Procurement Assistance Phase
  1. Surveys verification of Feasibility Studies and GIS Base Maps
  2. Finalization of Design Criteria, Preparation of Manuals, Guidelines and Systems.
  3. Specific design requirements for the sub projects
    - Improvement and development of drainage and sewerage systems
    - Improvement of urban roads and lanes
  4. Project Planning and Management Support to PIU

5. Detailed Engineering Design
- B. Construction and Post Construction Management Phase
  1. Construction Management and Contract Administration
  2. Environmental and Social Compliance Monitoring
  3. Implementation of Community Development Program, Community Mobilization and GESI Action Plan
  4. Capacity Building of the Municipality and Service Providers for Operational Sustainability
- C. Communications, Reporting and Deliverables (Inception Report, Monthly Progress Reports, Interim Report for each of the outputs, Annual Progress Report, Draft Final Report for each of the outputs and Final Report).

## 5 PROGRESS OF SUB-PROJECT COMPONENTS

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### 5.1 Storm Water Drains

17. The Contractor has not met the target set for storm water drain construction in this month. The works had been greatly affected by interruption in the supply of bricks/ bandh from political parties and less effort observed to acquire bricks from different sources.

### 5.2 Sewer Lines

18. The Contractor has submitted to the Consultant monthly programs of January and February 2015 for the sewer line works. The Contractor has just completed 3.5 km sewer line with HDEP pipes. The construction of manhole and house connection chambers are in progress. Meanwhile, the contractor has started the production of precast units for house connection chamber, sewer inlets and manholes at Judi, Katahari Yard.

The proposal of the precast concrete manhole, sewer inlets and house connection chambers has been submitted for review and approval. A conditional approval in consultation with the Employer has been given to the Contractor to prepare few numbers and to demonstrate at site. If the proposal comes out to be economical, time effective and environmental friendly and structurally strong enough to carry out the function of their respective items, then the Consultant will release for unconditional approval. Precast concrete house connection, sewer inlets and manholes are being produced as trial at contractor's yard.

### 5.3 Wastewater Treatment Plant

19. Office cum laboratory building, workshop building and generator / changing house at WWTP, Jatuwa are ongoing at final and finishing stage. The doors and windows are being fixed and the painting works is in progress. Excavation of anaerobic ponds (3 nos) and facultative ponds (2 nos) had been already done. One of the facultative pond has to be excavated. The contractor is planning to start the remaining works of WWTP in the coming month. The Contractor has started excavation for sump well.

### 5.4 Road and Lanes Improvement Works

20. The Contractor has completed the rehabilitation / repair of existing drain of 3,850 m in R2 road. The Contractor has shifted 18 numbers of electrical poles. The installation of Kerbs for footpath has been started.

## 5.5 Construction Materials

21. The contractor has stocked sufficient construction materials like coarse aggregates, fine aggregates, cement, reinforcement etc at his yard, Katahari. The fabrication of steel moulds for precast units- manholes, sewer inlets and house connection chamber are in progress.

## 5.6 Construction Material Testing Lab

22. Construction material testing laboratory has been set up at the Contractor's camp at Katahari. The validity of calibration of Lab equipment was until February 2015. Now the Contractor has requested the Nepal Bureau of Standards and Metrology for calibration of the proving rings of different compressive machines and CBR machine. The calibration is scheduled on 3<sup>rd</sup> March 2015.

The two samples of bitumen one from Iranian Company and another from Bharat Petroleum Limited has been sent to the Department of Nepal Bureau of Standard and Metrology, Kathmandu for testing. Necessary suitability and routine tests for construction materials are being carried out in regular basis.

## 5.7 Physical Progress till end of February 2015

23. The total physical progress achieved till 28<sup>th</sup> February 2015 is about 18 % whereas the cumulative planned progress till February 2015 is 29%. The progress of the work is lagging behind by 11% compared to the planned works till end of February 2015(based on work scheduled Rev 02).

**Table 6: Plan Vs Actual Progress**

Secondary Towns Integrated Urban Environmental Improvement Project (STIUEIP), Biratnagar									
Plan Vs Progress									
Month	Sep-14	Oct-14	Nov-14	Dec-14	Jan-15	Feb-15	Mar-15	Apr-15	May-15
Planned Work (%) Rev 01	0.576	1.416	8.074	9.81	9.883	10.666	10.056	9.725	9.865
<b>Cumulative Planned work (%)</b>	<b>17.098</b>	<b>18.514</b>	<b>26.588</b>	36.398	46.281	56.947	67.003	76.728	86.593
Planned Work (%) Rev 02				4.76	6.07	8.63	8.478	7.724	6.654
<b>Cumulative Planned work (%)</b>				<b>14.04</b>	<b>20.11</b>	<b>28.74</b>	<b>37.218</b>	<b>44.94</b>	<b>51.60</b>
Actual achievement (%)	0.421	0.169	3.305	1.48	1.80	5.00			
<b>Cumulative Actual Achievement (%)</b>	<b>5.81</b>	<b>5.98</b>	<b>9.29</b>	<b>10.77</b>	<b>12.57</b>	<b>17.57</b>			
<b>Progress to date wrt the revised work plan (%)</b>		(12.53)	(17.30)	(3.27)	(7.54)	(11.17)			

The contractor is lagging behind by 11.2% in his own program whereas 49.8% time of the contract period has been already elapsed.

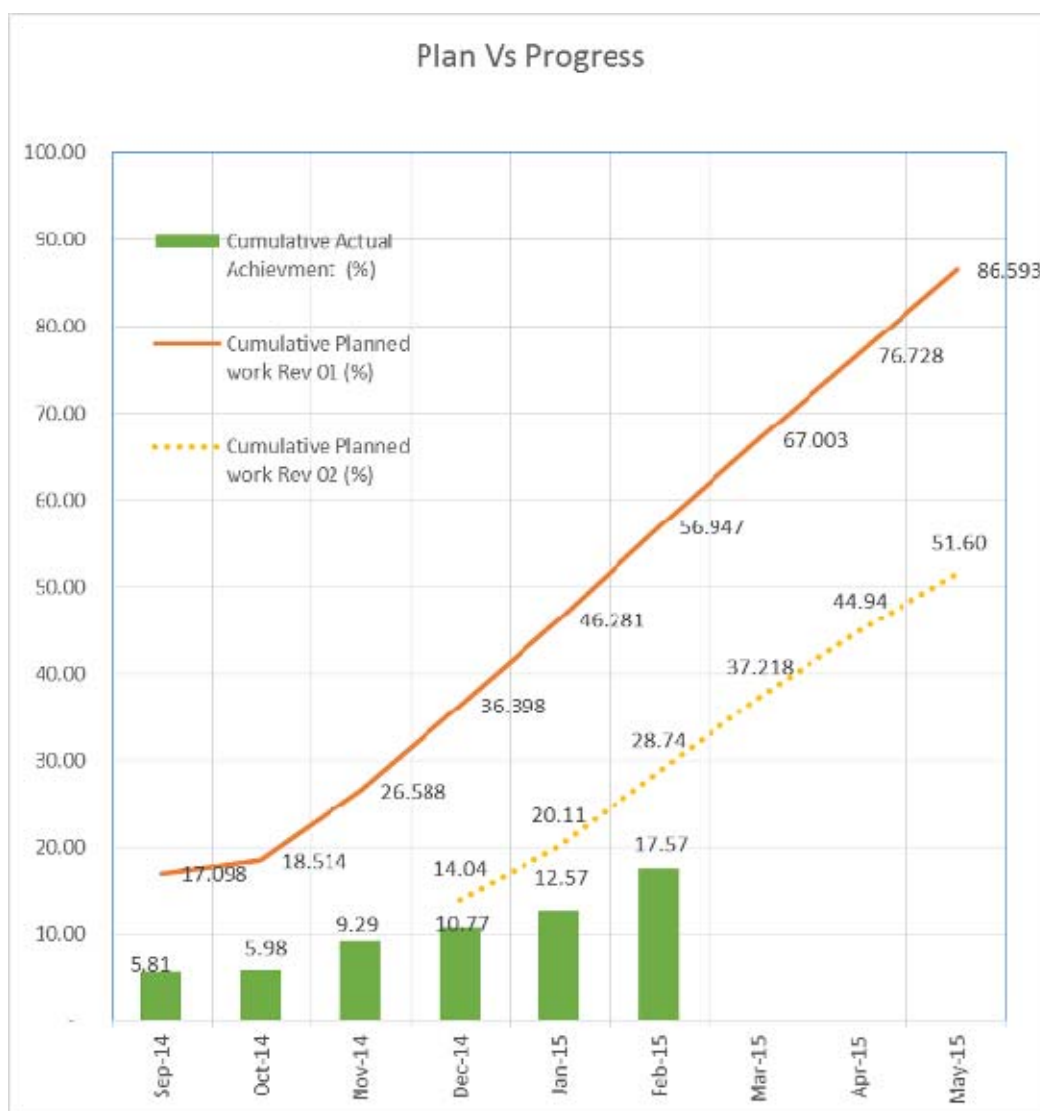
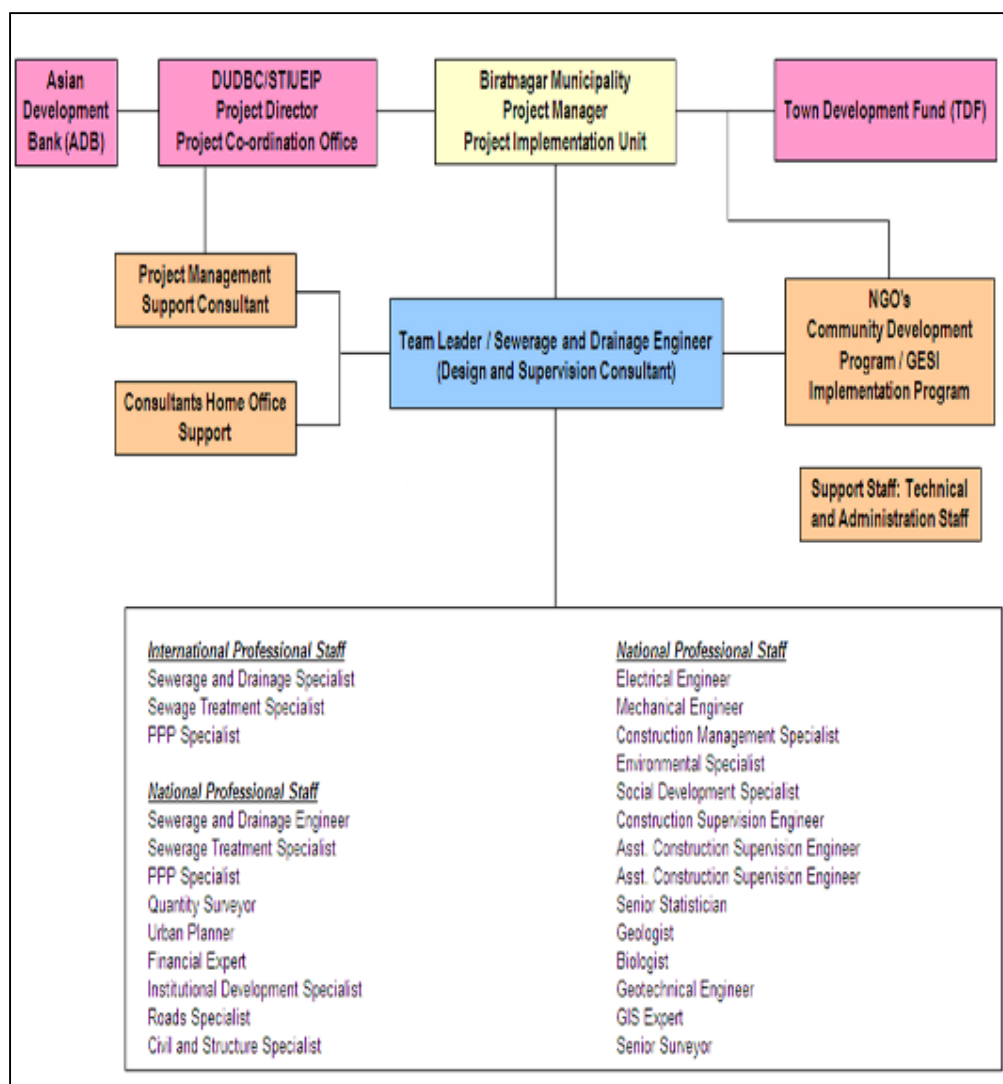


Figure 1: Plan Vs Actual Progress till end of February 2015

## 6 SUMMARY OF ACTIVITIES CARRIED OUT UP TO PREVIOUS MONTHS

### 6.1 Organization and Staffing

The Project has involvement of different organization and the staffing as given in the next page.





## **6.2 Inception Report**

24. The Inception Report was prepared and submitted on 29 February, 2012.

## **6.3 Conceptual Catchment Plan and Design Criteria**

25. The Conceptual Catchment Plan and Design Criteria was prepared and presented in PCO on 30 March, 2012.

## **6.4 Survey**

26. The survey was completed in August, 2012

## **6.5 Design**

27. The design of sewer lines, storm drains, WWTPs and appurtenances and final detailed design and estimates were submitted in March 2013.
28. During construction B2, B3 and S5 alternate design was also submitted. Similarly, CN2 and CN3 were submitted as the community request to reduce the size. The size was reviewed with 1 year return period as per the suggestion made by PMSC during field visit. Minor modifications in drawings are being carried out for considering the site condition and progress.

## **6.6 Pre-construction Activity**

29. After successful completion of one stage two envelope bidding procedure the construction Contract for STIUEIP/W/BRT/ICB-01 was signed on December 2, 2013 with M/S CTCE-Kalika JV, Baluwatar, Kathmandu.

## **6.7 Draft Report**

30. The construction/contract timing schedule was needed to incorporate some additional time of about 4-5 months to account for decision re-making process, tender award procedures.
31. The total cost as per PPTA and earlier designs increased drastically and came to be NRs. 7,274,465,206.69 and therefore needs curtailments and revisions had to be made as per suggestions by PIU in final report.
32. The overall works proposed in the PPTA and the area coverage with connection was thus needed to be phased out.

## **6.8 Final Report**

33. The DSC submitted the Final Reports adopting cost reduction exercise by phasing out of the works. The estimated cost of the Project was reduced and kept as NRs. 3, 278, 140, 000, 00 with a lot of exercises in March 2013.
34. The sharing of cost by concerned institutions is as follows

**Table 7: Agency-wise Financial Contribution to BSMC**

Contributors	Amount (US\$)	Amount (NRs.)	%
Government of Nepal (GoN)	5,960,256	524,502,513	16.00%
Asian Development Bank (ADB)	24,213,539	2,130,791,460	65.00%
Biratnagar Sub-Metropolitan City (BSMC)	2,980,128	262,251,257	8.00%
Town Development Fund (TDF)	4,097,676	360,595,478	11.00%

## 6.9 Consultant's Activities in Construction Phase

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

**Table 8: Consultant's Staff at Project Site, Biratnagar**

S. No	Name	Position
1	Mohan Kumar Tuladhar	Team Leader
2	Dil Bahadur Rana	Construction Supervision Engineer
3	Jay Prakash Yadav	Asst. Construction Supervision Engineer-1
4	Bhakta Raj Shakya	Asst. Construction Supervision Engineer-2
5	Jamuna Bahadur Shrestha	Construction Management Specialist
6	Bala Ram Mayalu	Social Development Specialist
7	Dr. Subodh Sharma	Environment Specialist
8	Rajesh Yadav	Junior Engineer-1
9	Sujan Shrestha	Junior Engineer-2
10	Gaurab Muni Bajracharya	Junior Engineer-3
11	Santosh Dahal	Junior Engineer-4
12	Umesh Bartaula	Office Manager
13	Ramji Gimire	Driver-1
14	Suman Ghimire	Driver-2
15	Ramila Ghimire	Office Assistant

36. 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 as listed below:
- Daily Construction supervision
  - Quality control, cost control and time control
  - Measurement and Certification of Interim Payment Certificates (IPC)
  - Modification and design of storm drainage and sewer lines, manholes etc.as per site condition and approve working drawings
  - Supervise construction material testing and sampling
  - Monitor Environment Management Plan and its compliance
  - Monitor Social safeguard and Resettlement Plan
  - Meet obligation of reporting requirement – Updated Environmental Progress Report, Updated Resettlement Progress Report, Monthly Progress Report, Semi-Annual Updated Resettlement Progress Report
  - Prepare Variations Order
  - Maintain correspondences with the Employer and the Contractor
  - Assistance to PIU

## 6.10 Key Dates

The consultant has noted the following key dates for the month of February 2015

**Table 9: Key dates of events /Activities:**

S. No	Date	Activities/Events	Remarks
1	2-3 Feb 2015	Three Members visited project sites by National Vigilance Centre, Kathmandu and meeting with BMSC, PIU and Consultant	
2	3-4 Feb 2015	Site Visited by PMSC- Mr. Prayaga L Joshi and Mr. Prakash Siwakoti; Meeting with BMSC/PIU/Consultant	
3	06 Feb 2015	Meeting with BMSC/PIU and Consultant	
4	20 Feb 2015	An Accident with Concrete Transit Mixture at B3 (turned over into storm drain )	Drive was safe and only minor injury occurred.
5	25 Feb 2015	Meeting with Employer/ Consultant and Contractor	
6	24-25 Feb 2015	Dr. Mahendra Nath Subedi, TA Consultant , Snr.Environmentalist, ADB, NRM visited site	

## 7 DETAILS OF ACTIVITIES CARRIED OUT IN THIS MONTH

### 7.1 Physical Progress in this month

**Table 10: Physical Progress in Storm Water Drains:**

Physical Progress till 28th February 2015						
S.N.	Location	Proposed Length (m)	Progress		Total to date (m)	Progress (%)
			Up to Jan 2015 (m)	This Month (m)		
1	B1	3,950.00	2,205.00	244.00	2,449.00	62%
2	B2	3,742.00	2,231.00	260.00	2,491.00	67%
3	B3	3,514.00	2,742.00	384.00	3,126.00	89%
4	S5	740.00	-	-	-	0%
5	S9	3,178.00	516.00	72.00	588.00	19%
6	S11	2,092.00	1,404.00	-	1,404.00	67%
7	S13	3,910.00	2,434.00	727.00	3,161.00	81%
8	CN2	2,273.00	620.00	130.00	750.00	33%
9	CN3	2,170.00	720.00	74.00	794.00	37%
10	Rani Area	8,483.00	330.00	377.00	707.00	8%
11	R2 (Rehab)	6,000.00	3,850.00	1,040.00	4,890.00	82%
	<b>Total</b>	<b>40,052.00</b>	<b>17,052.00</b>	<b>15,273.00</b>	<b>20,360.00</b>	<b>51%</b>

**Note:** There is increment in length of drain in R2 road from Bhatta Chowk to Panitanki, hence total length has been revised from previous monthly progress report.

**Table 11: Physical Progress in Sewer Lines:**

S.N.	Location	Proposed Length (m)	Progress		Total to date (m)	Progress (%)
			Up to Jan 2015 (m)	This Month (m)		
1	T1	10,912	-	-	-	0%
2	T2	27,128	1,970.00	493.00	2,463.00	9%
3	T3	23,070	1,569.00	316.00	1,885.00	8%
4	T4	2,530	-	-	-	0%
	<b>Total</b>	<b>63,640</b>	<b>3,539.00</b>	<b>809.00</b>	<b>4,348.00</b>	<b>7%</b>

**Table 12: Physical Progress in Manholes:**

S.N.	Description	Progress		Total to date (No)
		Up to Jan 2015 (No)	This Month (No)	
1	House Connection Chambers	24.00	11.00	<b>35.00</b>
2	Sewer Inlet	-	12.00	<b>12.00</b>
3	Manholes	58.00	17.00	<b>75.00</b>

**Table 13: Physical Progress in Roads and Lanes:**

S.N.	Location	Proposed Length (km)	Progress		Total to date (m)	Progress (%)
			Up to Previous Month (m)	This Month (m)		
1	T1, T2,T3,T4 and R2	65.0	-	0	0	Installation of Kerbs in progress
	<b>Total</b>	<b>65.0</b>				

**Table 14: Physical Progress in Waste Water Component at WWTP, Jatuwa:**

S.N.	Location	Description	Completed Items to Date	Progress in %
1	Jatuwa	Excavation of Anaerobic Pond	3 nos	Ongoing
2	Jatuwa	Excavation of Facultative Pond	2 nos	Ongoing
3	Jatuwa	River Training Work	480 m	Additional one layer of 327m gabion is complete.
4	Jatuwa	Boundary Wall	580 m	
5	Jatuwa	Office Cum Lab Building		Electrical fittings/Doors and Windows installation in progress,
6	Jatuwa	Workshop Building		White wash in progress
7	Jatuwa	Generator / Changing House		White wash /Painting in progress

**Table 15: Physical Progress of Precast Concrete Works:**

S.N.	Location	Description	Up to Previous Month	This Month	Total to date	Remarks
1	Katahari	Precast Slab	20,215	1,550	21,765	
2	Katahari	Precuts	3,610	540	4,150	
3	Katahari	Kerb Stone	5,258	850	6,108	

**Table 16: Physical Progress of Hume Pipe (NP3): Production Detail**

S.N.	Diameter (mm)	Pipes Required	Up to previous month	This Month	Total to date	Pipes to produce (Balance)	Remarks
1	200		1,562.00	0	1,562.00		
2	300		128.00	12	140.00		
3	350		90.00	20	110.00		
4	400		110.00	31	141.00		
5	450		52.00	21	73.00		
6	500		126.00	37	163.00		
7	600		475.00	101	576.00		
8	700		590.00	126	716.00		
9	900		150.00	34	184.00		
10	1000		370.00	64	434.00		
11	1600		169.00	16	185.00		
	<b>Total</b>		<b>3,822.00</b>	<b>428.00</b>	<b>4,250.00</b>		

**Contractor's Manpower:****Table 17: Contractor's key staffs:**

Designation	No	Remarks
Project / Contract Manager	1	
Planning Engineer/Construction Engineer	1	
Construction Engineer	1	
Site Engineers	7	
Quality Control Manager	1	
Office/Bill Engineer	1	
Junior Engineer	13	
Sub Overseers	3	
Safety Manager / Senior Supervisor	1	
Accountant / Office Manager	1	
Lab Assistant	3	
Store Keeper	1	
Light Drivers	5	
Machine Operator	5	
Site Supervisor	1	
Other Supporting Staff	22	
Skilled Labour at Site	86	M:78; F:8
Unskilled Labour at Site	189	M:154; F:35

**Contractor's Equipment:****Table 18: Contractor's Equipment:**

Equipment	No	Remarks
Back Hoe JCB	3	
Loader	3	
Excavator	2	
Excavator with Long Boom	1	
Plate Compactor	2	
Concrete Mixer	5	
Concrete Batching Plant	1	
Kerb Stone Machine	1	
Trailer	1	
Transit Mixer	2	
Water Bowser	2	
Steel Cutter	4	
Dumping Tractor	8	
Monkey Jumper	1	
Needle Vibrator	8	
Tipper	2	
Total Station	1	
Level Machine	6	
Jeep	5	
Motor Bike	10	

### Contractor's Revised Cumulative Progress S-Curve





## 8 DETAILS OF SAFEGUARD ACTIVITIES (SOCIAL, ENVIRONMENTAL AND RESETTLEMENT ACTIVITIES AND ISSUES)

### 8.1 Social Issues

#### 8.1.1 Operational Guidelines for Community Mobilization and Implementation of CDP

37. The NGO (fri-PAD) working for the project is responsible for implementing community development activities at various ward/tole levels of BSMC. The programs are complying with the Operational Guideline for Community Mobilization and Implementation of the Community Development Program (CDP) that has been prepared by DSC. The Guideline has covered the role and responsibilities of different stakeholders, scope and procedure of Community Development Program (CDP) and possible steps and process for community mobilization.

- **Visit, Interaction and Consultation with Community People**

3.8 Social Development Specialist (SDS) of DSC is closely monitoring the social issues that are consequent with the project activities. Visiting and interacting with people, Tole Lane Organisations (TLOs) and formal and informal consultation meetings are ongoing in this regard. In February, a meeting with Ram Janaki TLO at Jatuwa is important to disseminate project features to the community. Monitoring visits with Environment Specialist, TL/DSC and TL/CDP to the Hartali Hat Public Toilet construction site has been beneficial to discuss and consult the community development programs that are ongoing within project area.

- **Training and Capacity Enhancement**

39. In line with the project objectives, several skill development and awareness trainings are organizing within Community Development Programs (CDP) by NGO/STIUEIP. In January and February, 4 nos. of women awareness trainings in different ward and clusters of BSMC have been conducted by CDP/NGO with support of external training facilitators/ experts. SDS/DSC visited the Women Awareness Trainings with PM/PIU and TL/CDP. SDS at that moment provided positive feedbacks for better outcome of that type of trainings. The visits were good platform for interaction and consultation with community women from poverty stricken area of BSMC which were selected based on the poverty mapping. At the closing session of such training, SDS with PM/PIU distributed sanitary kits to the training participants provided by the project within training budgets.

- **Informative Project Message Display/ Dissemination**

40. The project has been planned to disseminate the information and message to community people about the project features, its purpose, and methods of use and functionality of infrastructure under construction by the project. Social Development Specialist of DSC has prepared and presented some outlines of such informative messages to the Project Implementation Office (PIU) proposing to display in the public places regarding of the usage and its purpose of storm drainage system and sewerage system separately.

## 8.2 Environmental Issues

41. IEE notice was published in newspaper Kantipur national daily on 2069/6/20 in this month. Baseline data for IEE has been collected from the project site during last dry season. TOR was approved on September 12, 2012 by MUD and PIU informed on September 19, 2012. Draft IEE report submitted to PIU. IEE Report presented at MUD on March 22, 2013. Final Report submitted to PIU on April 10, 2013. IEE report/proposal was approved by MUD on May 14, 2013. Updated Environmental Progress and Monitoring Report submitted to PIU on February 26, 2013. Environmental orientation/training has been organized on 30 April, 2014. Updated Environmental Progress and Monitoring Reports (Quarterly) for the months of July –September 2014 and October to December 2014 submitted to PIU on 15 February 2015

## 8.3 Resettlement Issues

### 42. Functional Safeguard Desk

A Safeguard Desk is established in the project for planning, monitoring and follow up of all social development/ safeguard issues including of resettlement plan. It has been started a functional mechanism consisted with PIU, NGO and DSC for this purpose. The desk consist with Social Development Chief of PIU, Team Leader of CDP/ NGO and SDS of DSC with close consultation and guidance of PM/ PIU. It is in compliance with the Aide Memoire of last ADB Mission (21 April-12 May 2014). It is decided that the desk will review, update and discuss of progress, issues, constraints and challenges of social aspects, Community Development Program and implementation of resettlement plan as well as monitoring of social development activities.

In February, a regular meeting of social safeguard desk has been organized. The meeting (6 February, 2015) reviewed the progress status and planned for upcoming programs. (Meeting Minute in Annex 7)

### 43. People's Concern

People of Jatuwa (BSMC, Ward no. 18) nearby of the under constructing Waste Water Treatment Plant (WWTP) has raising concerns on the existing drainage of the village. The concerns came to front at the time when underground Hume Pipe laying works has been started at that area. People obstructed the Hume Pipe laying works demanding the covered drain at the side of road. Chief Executive Officer of BSMC, officials of PIU and the community people discussed on the issues and negotiated in a point with a written agreement between Shree Ram Janaki Tole Lane Organization (TLO) and BSMC. DSC along with the PIU and NGO facilitated the consultation and agreement in this regard.

### 44. General

Sewer/ Drainage lines are being carried primarily on public rights of way. During construction however, if there is any area affected namely trees or crops or structures demolished, it shall be properly addressed with compensation. Similarly, private individuals or shopkeepers will also be looked into if their livelihood is affected by the disturbance during constructions/ pipe laying works. Due Diligence study on this regard is being carried out in this month. SDS/DSC is preparing Due Diligence report and submitting to PIU/STIUEIP.

Apart from this, the project does not encounter any resettlement or re-location and any compensation issue.

45. Latest Updated Semi-Annual Report of Resettlement and Social Aspect on 14 January 2015.

## 9 KEY ISSUES AND REMARKS / REASON FOR DEVIATION (IF ANY) AFFECTING PROGRESS

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46. Following are the key issues affected in progress:

- Limited site possession and Right of Way (RoW)
- Shifting of electrical poles and transformers
- Dispute from local people
- Localized disturbances at construction sites by local people for designed alignment and RoW Standards from BSMC

## 10 WORK PLAN FOR THE NEXT MONTH

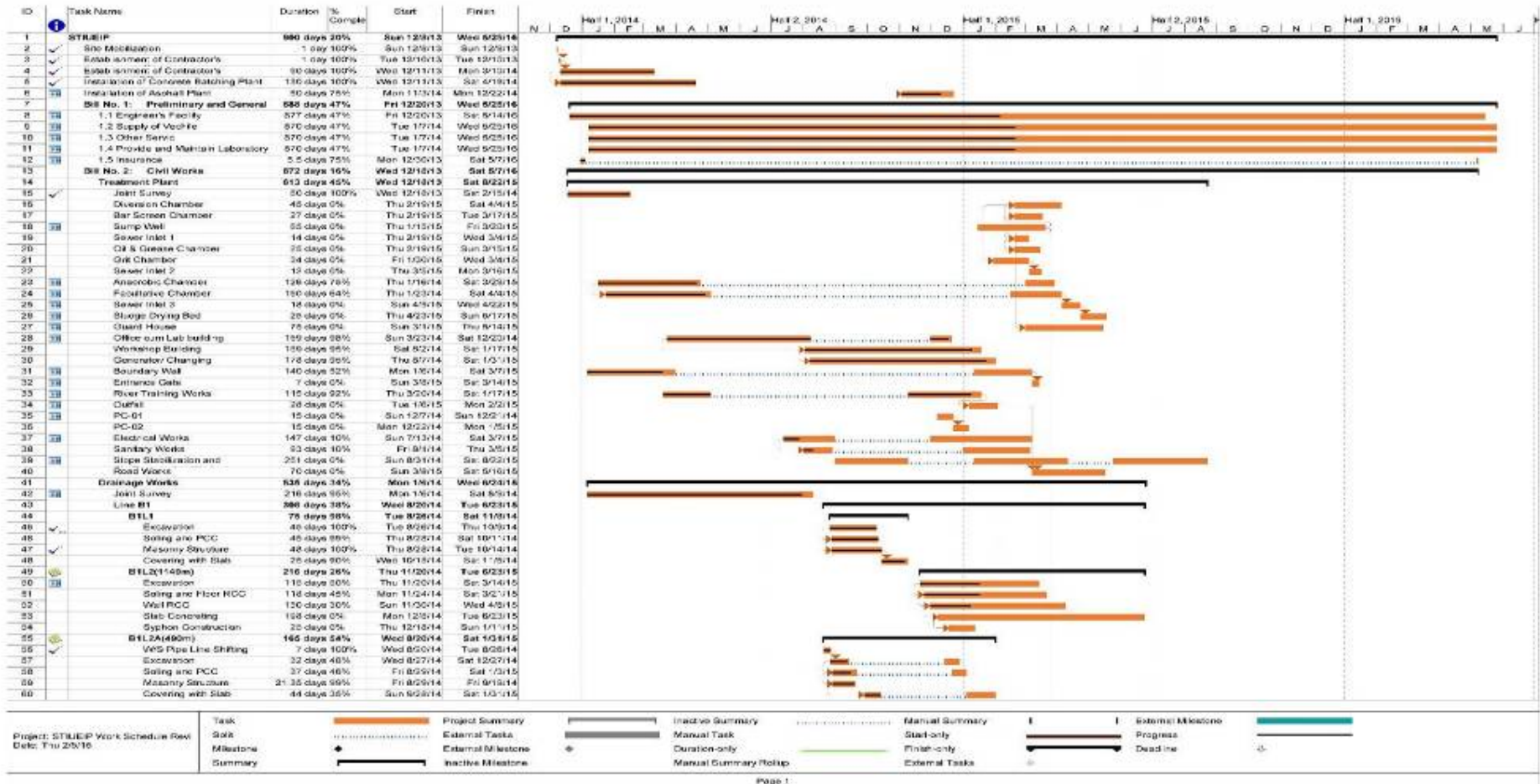
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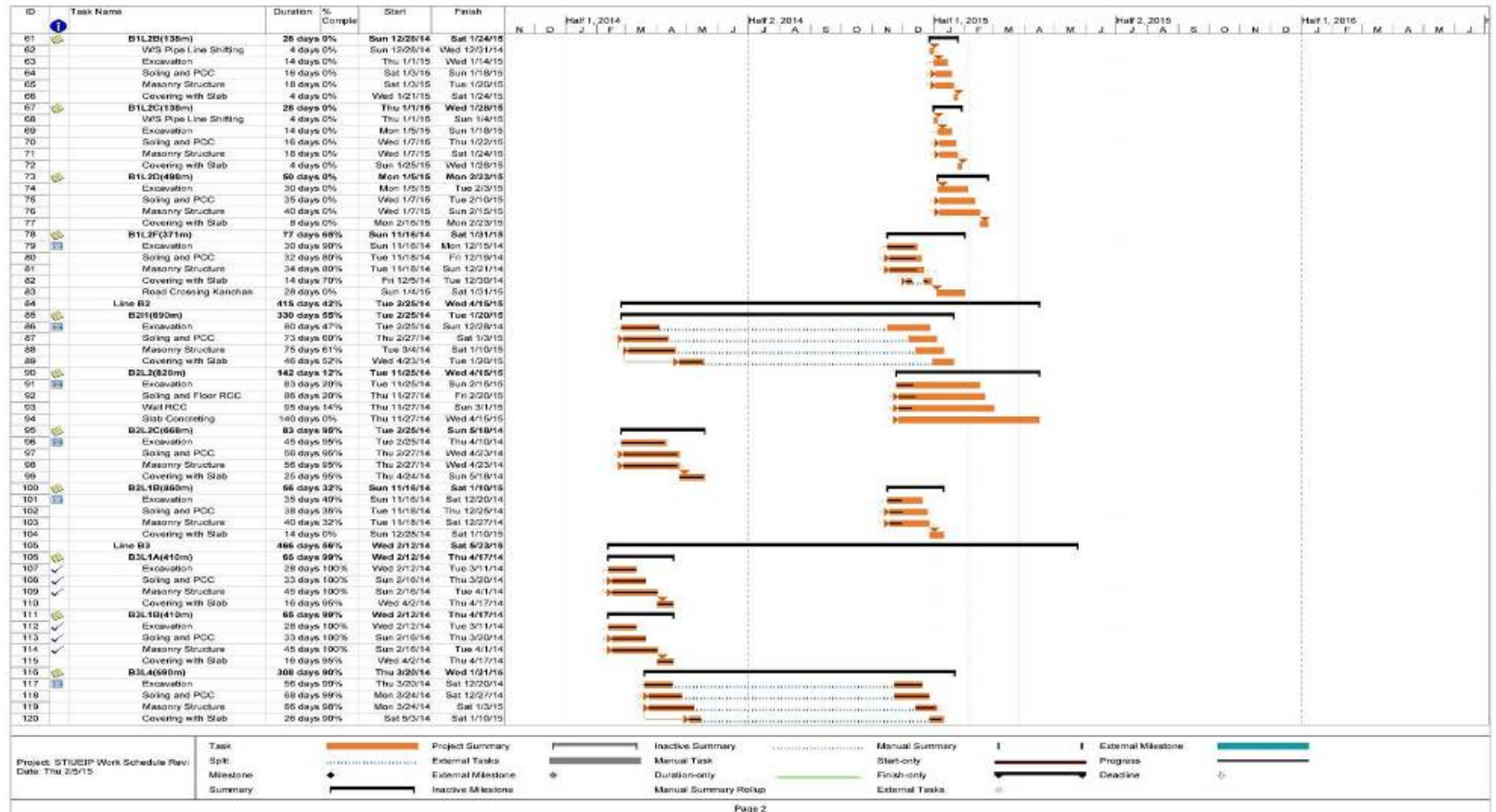
47. Following are the Contractor's works in the next month **(Please refer to the contractor's progress report for quantitative plan works for next month):**

- Continuation of storm water drains
- Continuation of sewer pipe lines T3 Trunk Line and Secondary Lines including manholes, sewer inlet chambers and house connecting chambers
- Construction at WWTP, Jatuwa
- Cover drains with precast slabs and construction of slab guards.
- Start Construction of footpath
- Road construction from Pushpalal Chowk to Bhatta Chowk
- Production of precast RCC items (hume pipe, kerb stone, chamber, manhole, drain cover slab etc)
- Suitability tests and routine tests of construction materials at Lab and at site

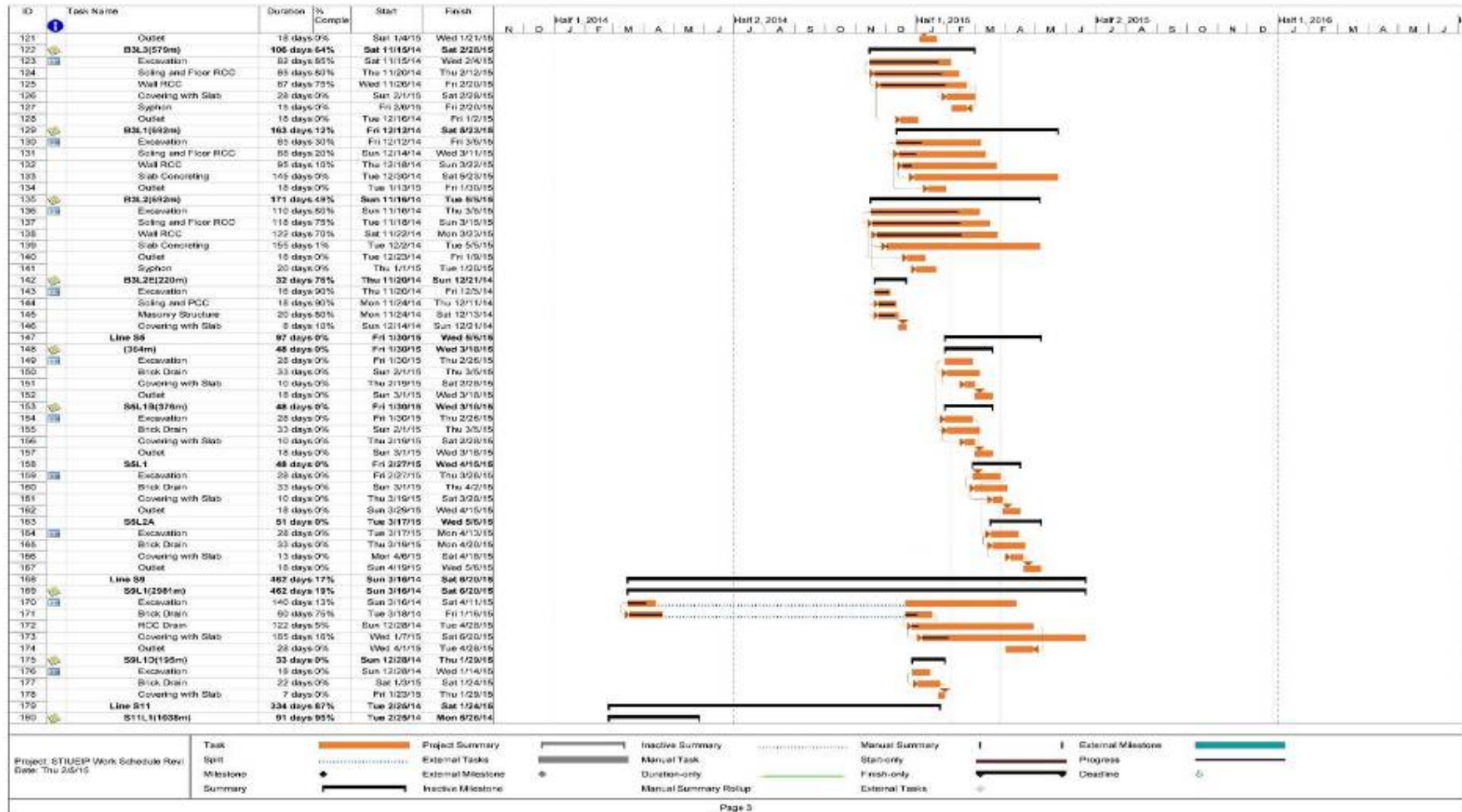
## ANNEX-1: Work Schedule (Rev.02) (Under Review) and Progress

Note: Please refer to the contractor's progress report for details program.









## ANNEX2: Photographs



Drain Cover with Pre-cast slab guards at R2 Road(Pushpalal Road)



700mm dia RCC Pipe Laying with shoring at T3 (Trunk)Line ,Yadav Chowk- Devkota Chowk





Brick Manhole at Center with Precast Sewer Inlet on Either Sides T3 Seondary Line



Laying of 200mm Dia. HDPE Pipes as Secondary Sewer Line





Inspection of Precast Manholes, Sewer Inlets and House Connction Chambers During Site visit of Mr Parag Kayastha, Project Dy.Director



Three Edge Bearing Tests of RCC at Hume Pipe Factory at Itahari



Excavation of Trench for 1,600mm Dia. RCC pipe at S13 Storm Drainage



Site Visit by Mr. Prayag L Joshi, Dy. Team Leader, PMSC –Inspection of Manhole





Storm Drainage at B3



Storm Drainage at Rani Area in Progress (West Side of Koshi Highway)

### ANNEX-3: FINANCIAL STATUS (DETAILS OF SUBMITTED INVOICES AND RECEIPT OF PAYMENTS WITH KEY DATES)

Invoice #	For Month	Invoice Amount including VAT		Received Amount		Remarks
Invoice 01	Advance	NRs. 9,866,160.40	USD 104,621.20	NRs. 9,866,160.40	USD 104,621.20	Received
Invoice 02	Inception Report	NRs. 1,947, 420.08	USD 52,721.00	Rs. 1,947, 420.08	USD 52,721.00	Received
Invoice 03	Jan +Feb, 2012-months Invoice	NRs. 2,387,262.11	USD 4, 243.15	NRs.2,329,310.81	USD 4, 243.15	Partly received
Invoice 04	March, 2012	NRs. 537,546.65	USD 2,276.95	NRs. 351,430.00	USD 2,276.95	Partly received
Invoice 05	April, 2012	NRs. 396,065.00		NPR 267,810.00		Partly received
Invoice 06	Vehicle Invoice	NRs. 8,000,000.00		NRs. 8,000,000.00		Received
Invoice 07	May- month Invoice	NRs. 502,324.55		NRs 250,860.00		Partly received
Invoice 08	June-month Invoice	NRs. 464,430.00		NRs 262,160.00		Partly received
Invoice09	Interim Report		USD 70,295.04		USD 70,295.04	
Invoice 10	Interim Report	NRs. 2,596,560.10		NRs 2,596,560.10		Received

## Monthly Progress Report

February 2015

Invoice 11	April-June,2012		USD 1,270.00		USD 1,270.00	Received
Invoice 12	July-month Invoice		USD 2,015.00		USD 2,015.00	Received
Invoice 13	Survey Invoice I	NRs. 2,166,775.00		NRs. 2,166,775.00		Received
Invoice 14	July-month Invoice	NRs. 669,751.00		NRs. 321,146.00		Partly received
Invoice 15	August month Invoice	NRs. 337,870.00	USD 0.00	NPR 314,140.00	USD 0.00	
Invoice 16	September month Invoice	NRs. 328, 830.00	USD 3, 361.75	NRs. 314,140.00	USD1854.75	Partly received
Invoice 17	Survey Works Invoice II	NRs. 1,166,775.00		NRs. 1,166,775.00		Received
Invoice 18	Monthly Invoice Oct.12	NRs. 357,080.00	USD 2,895.00	NRs. 324,310.00	USD 2,895.00	Not received
Invoice 19	Environmental Base line survey	NRs.144,634.35		NRs. 125,769.00		Received
Invoice 20	Monthly Invoice Nov.12	NRs. 331,090.00	US\$. 4,407.00	NRs. 324,310.00	US\$. 4,407.00	Partly received
Invoice 21	Monthly Invoice-Dec.2012	NRs. 449,175.00	US\$ 1,909.70	Nrs. 350,865.00	US\$ 1,909.70	Partly received
Invoice 22	Draft Report Invoice	NRs. 5,193,120.21	US\$140,590.08	NRs. 5,193,120.21	USD 91,587.31	Received
Invoice 23	Geotechnical Investigation Invoice	NRs. 191,741.23		NRs.166,731.00		Received
Invoice 24	Vehicle hard top Invoice	NRs. 707,125.70		NRs. 707,125.70		Received
Invoice 25	Monthly Invoice Jan13	NRs. 410,868.00	USD 4,327.90	NRs. 380,923.00	USD 3103.40	Partly received

## Monthly Progress Report

February 2015

Invoice 26	Monthly Invoice Feb13	NRs.324,310.00	USD 3,051.00	NRs.324,310.00	USD 2,203.50	Partly received
Invoice 27	Monthly Invoice Mar 13	NRs. 404,467.68	USD 4553.90	NRs. 361,600.00	USD 4553.90	Partly received
Invoice 28	Final Report Invoice	NRs. 3,245,700.13	USD 87,868.80	NRs. 3,245,700.13	USD 85,350.48	Partly received
Invoice 29	Monthly Invoice April 13	NRs. 340,695.00	USD 1,322.10	NRs. 324,310.00	USD 881.40	Partly received
Invoice 30	Monthly Invoice May 13	NRs. 671,951.00	USD 4,4435.25	NRs. 576,700.02	USD 4,4435.25	Partly received
Invoice 31	Monthly Invoice June 13	NRs. 1,107,583.06	USD 2,203.50	NRs.448,376.81	USD 2,203.50	Partly received
Invoice 32	Additional Survey	NRs. 1,050,052.00				Not received
Invoice 33	Monthly Invoice July 13	NRs. 589,490.49	USD 1,542.45	NRs 481,693.01	USD 1,101.75	Partly received
Invoice 34	Monthly Invoice August 13	NRs. 701,094.94	USD 00.00	NRs 629,499.89	USD 0.00	Partly received
Invoice 35	Monthly Invoice Sept. 13	NRs. 424,773.78	USD 00.00	NRs 424,772.45	USD 0.00	Not received
Invoice 36	Monthly Invoice Oct. 13	NRs. 458,661.35	USD 00.00	NRs 408,710.78	USD 0.00	Not received
Invoice 37	Monthly Invoice Nov. 13	NRs. 450,085.78	USD 0.00	NRs 431,600.15	USD 0.00	Partly received
Invoice 38	Monthly Invoice Dec. 13	NRs. 501,084.94	USD 00.00	NRs 481,693.01	USD 0.00	Partly received
Invoice 39	Monthly Invoice Jan. 2014	NRs. 695,501.44	USD 00.00	NRs. 609,960.44	USD 0.00	Partly received

# Monthly Progress Report

February 2015

Invoice 40	Monthly Invoice Feb. 2014	NRs. 613,180.94	USD 00.00	NRs. 613,180.94	USD 0.00	Received
Invoice 41	Monthly Invoice Mar. 2014	NRs.1,308,022. 46	USD 00.00	NRs. 599,281.94	USD 0.00	Partly received
Invoice 42	Monthly Invoice Apr. 2014	NRs. 861,039.32	USD 00.00	NRs. 716,817.76	USD 0.00	Partly received
Invoice 42	Geotechnical Inv. II	NRs. 549,989.85	USD 00.00	NRs. 546,232.96	USD 0.00	Received
Invoice 43	Monthly Invoice May 2014	NRs. 1,170,291.64	USD 00.00	NRs. 965,435.84	USD 0.00	Partly received
Invoice 44	Monthly Invoice June 2014	NRs.1,163,214. 00	USD19,313.42	NRs. 950,892.74	USD 0.00	Partly received
Invoice 45	Monthly Invoice July 2014	NRs. 854,199.00	USD18,465.92	NRs. 719,321.84	USD 0.00	Partly received
Invoice 46	Monthly Invoice August 2014	NRs 865,951.00	USD 0.00	NRs.726,553.84	USD 0.00	Partly received
Invoice 47	Monthly Invoice September 2014	NRs 777,343.07	USD 0.00	NRs 584,568.89	USD 0.00	Partly received
Invoice 48	Monthly Invoice October 2014	NRs 841,778.13	USD 0.00	NRs 657,106.30	USD 0.00	Partly received
Invoice 49	Monthly Invoice November 2014	NRs 1,306,536.89	USD 0.00	NRs 768,654.25	USD 0.00	Partly received
Invoice 50	Monthly Invoice December 2014	NRs 1,348,791.74	USD 0.00	NRs 987,178.63	USD 0.00	Partly received
Invoice 51	Monthly Invoice Jan 2015	NRs 1,255,351.08	USD 0.00	NRs 988,789.39	USD 0.00	Partly received

### **ANNEX-4: STATUS OF ACTIONS AGREED WITH PREVIOUS ADB LOAN REVIEW MISSION**

<b>S. No.</b>	<b>Agreed Items in ADB Review Mission with DSC on 2-4 December 2014</b>	<b>Status</b>	<b>Responsibility</b>
1	Updated Semi-Annual Resettlement and Social Aspect Report	Report Submitted on 14 January 2015	DSC/PMSC
2	DSC will review its construction supervision plan (including international experts inputs) against the contractors approved scheduled and submit it to PIU.	Draft Plan submitted	DSC
3	Submission of implementation status of EMP to ADB in quarterly basis	Report Submitted till December, 2014	DSC/PMSC

### **ANNEX-5: PROFESSIONAL INPUT AS PER CONTRACT VS INPUT USED TILL THIS REPORTING PERIOD**

<b>S.No.</b>	<b>Expert / Position</b>	<b>Total man months Input (as per agreement)</b>			<b>Man months Used in 2012/013/014/2015</b>			<b>Balance</b>
A	Professional Staff	Design	Construction	Total	Up to Jan. 2015	Feb. 2015	Total	
A1	International Professional Staff							
1	Sewerage and Drainage Engineer	8	4	12	7.37	0.00	7.37	4.63



S.No.	Expert / Position	Total man months Input (as per agreement)			Man months Used in 2012/013/014/2015			Balance
2	Sewage Treatment Specialist (1 day at May, 2014)	5	4	9	6.01	0.00	6.01	2.99
3	PPP Specialist	2		2	2.00	0.00	2.0	0.00
A2	Domestic Professional Staff				Up to Jan.2015	Feb 2015	Total	Balance
4	Team Leader/ S-D Engineer	12	24	36	26.23	1.00	27.23	9.77
5	Sewage Treatment Specialist	8	18	26	10.50	0.00	10.5	15.50
6	Procurement Specialist	5	2	7	8.75	0.00	8.75	(1.75)
7	DTL/ Quantity Surveyor	9		9	10.00	0.00	10.0	(1.00)
8	Urban Planner	4	2	6	5.00	0.00	5.0	1.00
9	Financial Expert	5		5	6.00	0.00	6.0	(1.00)
10	Institutional Development Specialist	2	3	5	2.00	0.00	2.0	3.00
11	PPP Specialist	3		3	3.00	0.00	3,0	0.00
12	Roads Specialist	4	8	12	6.45	0.00	6.45	4.55
13	Civil and Structural Specialist	6	2	8	7.95	0.00	7.95	0.05

S.No.	Expert / Position	Total man months Input (as per agreement)			Man months Used in 2012/013/014/2015			Balance
14	Electrical Engineer	3	1	4	3.50	0.00	3.50	0.50
15	Mechanical Engineer	3	1	4	3.90	0.00	3.90	0.10
16	Construction Management Specialist		10	10	0.00	0.00	0.00	10.00
17	Environmental Specialist (Feb 2015)	8	12	20	11.20	1.00	12.20	7.80
18	Social Development Specialist	8	15	23	15.00	1.00	16.00	7.00
19	Construction Supervision Engineer		30	30	13.00	1.00	14.00	16.00
20	Asst. Construction S Engineer- 1		30	30	7.50	1.00	8.50	21.50
	Asst. Construction S Engineer- 2		30	30	9.70	1.00	10.70	19.30
21	Senior Statistician	4		4	4.00	0.00	4.00	0.00
22	Geologist	1		1	1.00	0.00	1.00	0.00
23	Biologist	1		1	1.00	0.00	1.00	0.00
24	Geo-technical Engineer	1		1	2.40	0.00	2.40	(1.40)
25	GIS Expert	2		2	4.00	0.00	4.00	(2.00)
26	Senior Surveyor	2		2	2.00	0.00	2.00	0.00
	Network Modular				8.00	0.00	8.00	(8.00)

S.No.	Expert / Position	Total man months Input (as per agreement)			Man months Used in 2012/013/014/2015			Balance
	Hydrologist				4.00	0.00	4.00	(4.00)
A-3	Support Staff							
27	Junior Engineer-1			49	37.00	1.00	38.00	11.00
	Junior Engineer-2			49	37.00	1.00	38.00	11.00
	Junior Engineer-3			24	4.00	1.00	5.00	19.00
	Junior Engineer-4			49	0.33	1.00	1.33	47.67
	CAD Operators			20	0.00	0.00	0.00	20.00
28	Accountant / Office Manager			49	37.00	1.00	38.00	11.00
29	Secretary / Computer Operator			49	35.75	1.00	36.25	12.25
30	Driver-1			49	30.27	1.00	31.27	17.73
	Driver-2			49	29.10	1.00	30.10	18.90
30	Office Assistant			49	36.50	1.00	37.50	11.50

## **ANNEX-6: MINUTES OF MEETING**

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### List of Minutes of Meeting

1. Minutes of Meeting - 4<sup>th</sup> February 2015
2. Minutes of Meeting - 6<sup>th</sup> February 2015
3. Minutes of Meeting - 25<sup>th</sup> February 2015
4. Minutes of Meeting No 4- Safeguard Desk





# Secondary Towns Integrated Urban Environmental Improvement Project (STIUEIP), Biratnagar

## MEETING NOTES

Sewerage and Drainage Network, Wastewater Treatment Plant, and Roads and Lanes  
Improvement Subproject

(Contract # STIUEIP/W/BRT/ICB-01)

Meeting held:      Date : 06 February 2015  
                            Time : 11:00 PM  
                            Venue : PM's Office, PIU, STIUEIP ,Biratnagar

Subject :      Progress Meeting No 03

Client      BSMC , STIUEIP , Government of Nepal

### Present

Mr. Gopal Prasad Regmi, Chief & Executive Officer (CEO), BSMC

Mr. Upendra Prasad Baral, Project Manager (PM), PIU

Mr. Bharat Neupane, Deputy Project Manager(DPM), PIU

Mr. Prakash Chaudhary, Project Engineer(PE), PIU

Mr. Ghanendra Katuwal, Project Engineer(PE), PIU

Mr. Anil Singh, Project Engineer(PE), PIU

Mr. Mohan Kumar Tuladhar, Team Leader(TL), Consultant

Mr. Dil Bahadur Rana, Construction Supervision Engineer (CSE), Consultant



	ACTION by
<p>The meeting was chaired by Mr. Gopal Prasad Regmi, CEO.</p> <p><b>1) Site Possession/ Rights of Way:</b></p> <p>Mr. Baral (PM) raised the concern about slow progress and delay, and how the work progress can be increased and improved. Mr. Tuladhar (TL) expressed that one of the prominent /obvious reason for slow progress is due to site possession of few sites and the Contractor has got opportunity to raise this issue time and again. TL mentioned that the Contractor should have complete site possession but still the Contractor is requesting to arrange possession of site to the Contractor on as of 31<sup>st</sup> January 2015(420days out of 900 days,i.e.47% time elapsed).</p> <p>TL requested Mr. Neupane (DPM) to lead and take initiation for the site clearance/RoW marking and acquire RoW of remaining sites. The issue of RoW has been discussed and the meeting has decided that DPM will lead the group for RoW activities from tomorrow and complete the task with mile stone of 15<sup>th</sup> February and 7<sup>th</sup> March 2015 as indicated in the attached drawing (Complete site possession from Shanti Chowk to Waste Water Treatment Plant site by 15<sup>th</sup> February 2015 and from Traffic Chowk to Shanti Chowk by 7<sup>th</sup> March 2015) respectively. DPM also mentioned that R5 road does not have any obstruction to proceed the construction of storm drain and sewerage works. TL assured that the other technical works will be handled/solved between the Contractor and the Consultant for the progress of the works. The Consultant will closely monitor the work progress and inform/report to the PM, PIU on regular basis.</p> <p><b>2) Additional Works – S5 Storm Drains(Way to Waste Water Treatment Plant , Jatuwa) and Road Works:</b></p> <p>TL expressed his serious concern that DSC is waiting for the instruction from PIU to initiate the design and cost estimate for the additional works of covered storm drain S5 on left side from Jatuwa Chowk to WWTP site, Jatuwa and about 300m on right side as per demand of the local community and the demand agreed by BSMC (Please refer to the attached meeting notes dated B.S. 9 Magh 2071 (23 January 2015) between BSMC and Ram Janaki Tole Committee, Biratnagar-18, Jatuwa). The delay in decision of this request may affect the smooth work progress of sewer works on T2 line with dia. 1,000mm RCC pipes at Jatuwa site. At the same time, TL suggested this work can be started from the original BoQ, while the process of Variation Order No 2 will be underway. <u>The meeting agreed to proceed for construction of the S5 drains from the current BoQ while VO - 2 will be underway soon.</u></p>	<p>BSMC/PIU/ Consultant</p> <p>BSMC/PIU/ Consultants</p>

*BSMC/PIU*

*Mr. Tuladhar*

*[Signature]*

Similarly, the change in the concept of reinstatement to improvement of the road condition; and the quantities deficits identified as errors in estimates during design phase will be included in Variation Order No 2.

DPM expressed that road inventory should be carried out to sort out the different types of the road surfaces (gravel or bituminous road) and the requirement of road side drains as well. The Consultant will prepare the list of roads and joint verification with PIU will be carried out for finalization of the top of road surface which will help to fix the top of manholes.

Mr. Gopal Prasad Regmi (CEO) requested Project Engineers of PIU to cooperate and support to complete the task of site possession with diligent efforts.

Consultants/  
PIU

PE/PIU

**Distribution:** To the Client, Contractor and Consultant

The meeting was adjourned at 1:15 PM.

*M. K. ...*

*B. ...*

*[Signature]*



# Secondary Towns Integrated Urban Environmental Improvement Project (STIUEIP), Biratnagar

## MEETING NOTES

Sewerage and Drainage Network, Wastewater Treatment Plant, and Roads and Lanes  
Improvement Subproject

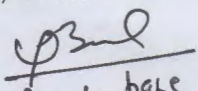
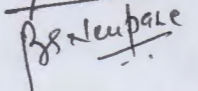

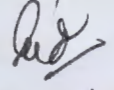
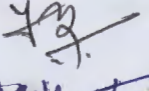
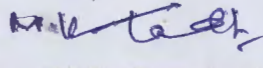

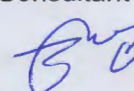
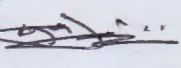
(Contract # STIUEIP/W/BRT/ICB-01)


Meeting held: Date : 25 February 2015  
Time : 4:00 PM  
Venue : PM's Office, PIU, STIUEIP ,Biratnagar

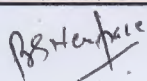
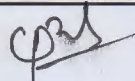
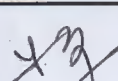
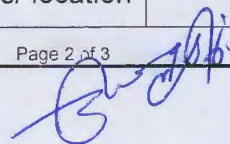
Subject : Progress Meeting No 04

Client BSMC , STIUEIP , Government of Nepal

### Present

1. Mr. Gopal Prasad Regmi, Chief & Executive Officer (CEO), BSMC
2. Mr. Upendra Prasad Baral, Project Manager (PM), PIU 
3. Mr. Bharat Neupane, Deputy Project Manager(DPM), PIU 
4. Mr. Anil Singh, Project Engineer(PE), PIU 
5. Mr. Ghanendra Katuwal, Project Engineer(PE), PIU 
6. Mr. Punam Dahal, Community Development Chief, PIU 
7. Mr. Mohan Kumar Tuladhar, Team Leader, Consultant 
8. Mr. Dil Bahadur Rana, Construction Supervision Engineer (CSE), Consultant 
9. Mr. Ujjwal Prasai, Project Manager, CTCE- Kalika JV, Contractor 
10. Mr. Mahesh Subedi, Construction Engineer, CTCE- Kalika, Contractor 

	ACTION by
<p>The meeting was chaired by Mr. Gopal Prasad Regmi, CEO.</p> <p>The meeting was open by Mr. Upendra Prasad Baral, PM.</p> <p>Mr. Baral expressed his concern regarding the followings</p> <ol style="list-style-type: none"> <li>1. Slow work progress of overall work activities- sewer lines, storm drainage , WWTP, work activities (roads, side drain, footpath, transfer of Electric poles etc) on R2 road</li> <li>2. Site possession –is a critical activity in current situation of work progress, contractor's preparation for the works and the consultant's supervision activities</li> </ol> <p>Mr. Baral had requested the consultant and the contractor to aim the following works to be completed before the onset of the rainy season:</p> <ol style="list-style-type: none"> <li>I. Completion of storm drainages - B1,B2, B3, CN2, CN3, S13, S11 and southern drainage system(Rani Area). These storm drainage should be completed with outfall structures so that these must be functional during this rainy season.</li> <li>II. At WWTP area- Completion of buildings, river training works, compound walls, Bio-engineering works along bank of Singiya River where newly gabion walls are constructed and plantation within the WWTP.</li> <li>III. Completion of sewer lines – WWTP Jatuwa to Yadav Chowk – Birat Science (Koshi Highway); Yadav Chowk to Devkota Chowk</li> <li>IV. The road with completed manholes and sewer inlets should be improved at least gravel standard for serviceability and minimize the disturbances to the local people. The contractor was made aware to start the gravel works immediately on those roads where works were carried out about two months before.</li> </ol>	<p>Contractor Consultant</p>
<p>Mr. Baral also informed that Mangadh Water Supply is ready to support technically and financially to change the pipes and accessories which may be encountered during our road works on R2 road. Mr. Baral informed the Mangadh Water Supply that the STIUEIP will support to repair the relevant water supply works disturbed during construction.</p> <p>Mr. Prasai requested the meeting to arrange a meeting to discuss item of works, support and mode of payment during the change of pipes/shifting of pipes/ location</p>	<p>Employer/ Contractor/ Consultant</p>



<p>of change of pipes and accessories of the Mangadh Water Supply system. The meeting has realised to have a meeting with the committee of Mangadh Water Supply soon.</p>	Employer /Consultant /Contractor
<p>In response to the slow work progress, Mr. Prasai raised the main issues that the work progress is being suffered /hampered due to lack of complete site possession till today. Mr. Prasai requested the Employer to provide complete site possession so that he can get the work done as per his work program. Mr. Prasai also confirmed that there will be more excavators for the works of sewer lines soon to start from Yadav Chowk to Koshi Highway.</p>	Contractor
<p>Mr. Neupane(DPM) expressed his continuous efforts to mark Rights of Way(RoW) and demolition of structures within RoW are being carried out diligently. Mr. Neupane also emphasized that the site possession has been in progress and will be completed as per discussion and decision take at the meeting of 6<sup>th</sup> February 2015 (the minutes of meeting of 6<sup>th</sup> February 2015 attached).</p>	Employer
<p>Mr. Regmi also informed the consultant to provide the minutes of meeting dated 6<sup>th</sup> February 2015 to the Contractor.</p>	Consultant
<p>Mr. Regmi asked his team to start clearance of right of way along National Trading Office from tomorrow. He also emphasized to clear the obstruction at the outlet/outfall of B2 on day after tomorrow (27<sup>th</sup> February 2015)</p>	Employer/ DPM/PEs
<p>Mr. Tuladhar/TL requested Mr. Baral (PM)/PIU to formalize the approval of the construction of additional storm drainage at S5 to replace the existing trapezoidal drain (refer to letter dated 16<sup>th</sup> Febraury 2015, ref SBS-342). Mr.Baral informed the meeting that this matter has already been put forward to PCO and ADB. The meeting has confirmed and agreed that the Consultant can instruct the Contractor to proceed ahead for this drain works and also proceed to include this work in Variation Order No 2.</p>	Employer/ Consultant
<p>Mr. Regmi also commented that the alignment of the storm drain should not be deviated from design alignment to acquire a few centimetre/inches of RoW. But this issue may create dispute at local level/localized problem may be created.</p>	Consultant/ Contractor
<p><b>Distribution:</b> To the Client, Contractor and Consultant</p>	

The meeting was closed at 5:15 PM.

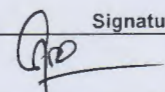
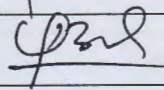
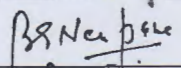
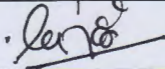
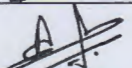
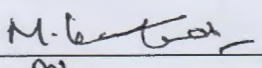

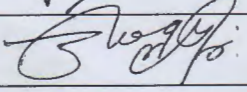
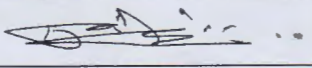
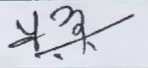
**Secondary Towns Integrated Urban Environmental Improvement Project (STIUEIP), Biratnagar**

(Contract # STIUEIP/W/BRT/ICB-01)

Date: 25 February 2015

Sewerage and Drainage Network, Wastewater Treatment Plant, and Roads and Lanes Improvement Subproject

**MEETING ATTENDANCE**

S. No	Name	Designation	Organization	Signature
1	Gopal Prasad Regmi	Chief Executive Officer	BSMC	
2	Upendra Prasad Baral	Project Manager	PIU	
3	Bharat Neupane	DPM	PIU	
4	Ghanendra Katuwal	Project Engineer	PIU	
5	Anil Singh	Project Engineer	PIU	
6	Mohan K. Tuladhar	Team Leader	DSC	
7	Dil Bahadur Rana	CSE	DSC	
8	Ujjwal Prasai	PM (Contractor)	CTCE/Kalika	
9	Mahesh Subedi	Construction Engineer	CTCE/Kalika	
10	Punam Kumar Dahal	STIUEIP/C.D.	STIUEIP/PIU	
11				
12				
13				
14				
15				



# Meeting of Safeguard Desk for Planning Monitoring and Follow up of Resettlement Plan/ STIUEIP Biratnagar

**Venue:** Project Implementation Unit (PIU)/ STIUEIP, Biratnagar

**Date:** 8 February 2015

**Time:** 11:15- 13:15

## Attended:

Upendra Prasad Baral- Project Manager/ STIUEIP, Biratnagar

Punam Kumar Dahal- Chief, Social Development/ PIU, STIUEIP Biratnagar

Noor Jang Thapa- Team Leader/ CDP, STIUEIP (NGO)

Bala Ram Mayalu- Social Development Specialist/ DSC, STIUEIP

## Discussion Agenda:

1. Review / Follow up of previous meeting discussion/ decisions and actions
2. Informative project message display/ dissemination
3. Community Consultation for Storm Drainage Construction Works
4. Reports of Gender and Social inclusion Action Plan (GESI AP)
5. Resettlement Plan Update Report

## Discussion and Decisions

S.No.	Agenda	Discussions and Decisions	Notes/ Remarks
1.	Review / Follow up of previous meeting discussion/ decisions and actions	<p>The fourth safeguard desk meeting of STIUEIP Biratnagar reviewed all previous discussions, decisions and actions regarding on social safeguard and community development component of the project. It is a functional mechanism of STIUEIP established for planning, monitoring and follow up of all social/ community development activities of project.</p> <p>The desk reviewed the skill development training need assessment procedure and planned to</p>	<p>Next meeting: 6 March 2015</p> <p>Input and feedback anticipated up to 4PM; 15 February</p>

		organize a meeting of the committee formed for developing new criteria, selection of participants and support in execution of training program in future. Mr. Punam Dahal/ PIU will arrange and call first meeting of this committee within a week for this purpose.	
2.	Informative project message display/ dissemination	<p>The project has been planned to disseminate the information and message to community people about the project features, its purpose, and methods of use and functionality of infrastructure under construction by the project. Social Development Specialist of DSC presented some outlines of such informative messages in the meeting proposing to display in the public places regarding of the usage and its purpose of storm drainage system and sewerage system separately. The options and alternative titles and texts are also depicted in this outline. He requested all to go thoroughly on it and review its appropriateness prior to finalize and implement.</p> <p>PM of STIUEIP and the desk members to review the outline and decide in next meeting for display board in terms of text, message, place, budget size and others.</p>	SDS/DSC: Forward the digital copies of the message outline to PM and desk members
3.	Community Consultation for Storm Drainage Construction Works	This agenda is related to the prior information to be provided in project construction activities before execution at the community. The storm drainage construction works are ongoing in the HartaliHat locality of Rani, Biratnagar and prior information through announcement and public consultation is needed for proper awareness of people of that area. Sufficient consultation meetings with the TLOs and community have been conducted by PIU, NGO and DSC. TLOs have requested for additional efforts to inform all people through announcement on the Tole/clusters. This meeting requested to BSMC for such arrangement so that all people be informed about the project activities in their area.	
4.	Reports of Gender and Social inclusion Action Plan (GESI AP)	As decided in the last meeting, DSC has got the copy of updated report of Gender and Social inclusion Action Plan (GESI AP), Oct-Dec 2014.	
5.	Resettlement Plan Update Report	SDS of DSC informed in the meeting that he has prepared and submitted the semi-annual update report (August- December 2014) of social safeguard aspect based on resettlement plan of STIUEIP Biratnagar within stipulated time.	

*[Handwritten signatures and initials]*

## **ANNEX-7: LABORATORY TEST RESULTS OF FEBRRARY 2015**



**Secondary Towns Integrated Urban Environment Improvement Project**

Biratnagar Sub-Metropolitan City

**TEST RESULT SUMMARY SHEET For the Month of FEBRUARY 2015**

**STIUEIP**

**COMPRESSIVE STRENGTH OF BRICKS (Process Control Test)**

Ref. STIUEIP LAB/	Date of Testing	Location	Change	BRAND NAME 1 st class brick	Water Absorption	Compressive Strength N/mm <sup>2</sup>	SCALE OF Sample From
MR63	2/2/2015	R2 Road	1+150	HIMAL		12.08	4500 Nos-5 Nos
MR 64	2/2/2015	R2 Road	1+170	AMBEY		11.65	6000 Nos-5 Nos
MR65	2/2/2015	S13L1F	0+600to 0+620	AAKASH		13.84	4500 Nos-5 Nos
MR66	2/2/2015	S13L1F	0+600 to 0+620	AMBEY		11.98	4500 Nos-5 Nos
MR67	2/2/2015	S13L1F	0+600 to 0+620	PRANAM		12.66	6000 Nos -5Nos
MR 68	2/2/2015	S13L1F	0+600 to 0+620	PRANAM	7.30	13.0	3000 Nos -5Nos
MR69	2/2/2015	CN3	0+400	AAKASH		14.4	6000 Nos-5 Nos
MR 70	2/2/2015	L5L4 RANI	0+110	SHREE		12.69	6000 Nos-5 Nos
MR 71	3/2/2015	L5L4 RANI	0+140	SHREE	5.86	13.5	3000 Nos-5 Nos
MR 72	3/2/2015	L5L4 RANI	0+880	T&B		12.03	3000 Nos-5 Nos

Remarks:

Specification	IS1077,IS2180or NSI/2035	10%<	> 10N/MM2 ±5%
<div>SMEC-Brisbane-AQUA-BDA-CEMAT</div> <div>Approved by Construction Supervision Engineer</div> <div>Test checked by Junior Engineer</div> <div>Consultant Reps</div>	<div>CTCE-KALIKA J/V</div> <div>Submitted by Project Manager</div> <div>Test conducted by Q.C Manager</div> <div>Contractor Reps</div>		

Secondary Towns Integrated Urban Environment Improvement Project Biratnagar Sub-Metropolitan City <b>TEST RESULT SUMMARY SHEET For the Month of FEBUARY 2015</b> COMPRESSION STRENGTH OF BRICKS (Process Control Test)							
Ref. STIUEIP LAB/	Date of Testing	Location	Change	BRAND NAME 1 st class brick	Water Absorption	Compressive Strength N/mm <sup>2</sup>	SCALE OF Sample From
MR73	3/2/2015	L5L4 RANI	0+140	AMBEY		13.95*	3000 Nos-5 Nos
MR74	3/2/2015	L5L4 RANI	0+140	AMBEY		12.56	3000 Nos-5 Nos
MR 75	3/2/2015	L5L4 RANI			6.39		SAME
MR 76	3/2/2015	L5L4 RANI	0+140	SHREE		11.59	3000 Nos-5 Nos
MR 77	3/2/2015	L5L4 RANI	0+140	SHREE	5.23		SAME
MR 78	5/2/2015	R2 Road	2+350	SHREE		13.1	3000 Nos-5 Nos
MR 79	5/2/2015	R2 Road	3+300	HIMAL		13.3	3000 Nos-5 Nos
MR80	5/2/2015	CN3	0+350	T&B		12.73	3000 Nos-5 Nos
MR 81	7/2/2015	R2 Road	3+150	AMBEY		13.8	3000 Nos-5 Nos
MR 82	8/2/2015	L5L4 RANI	0+800	AANKIT		15.68	3000 Nos-5 Nos
Remarks:							
Specification				IS1077,IS2180or NSI/2035			
				10%< > 10N/MM2 ±5%			
SMEC-Brisbane-AQUA-BDA-CEMAT Approved by Construction Supervision Engineer Test checked by Junior Engineer Consultant's Reps				CTCE-KALIKA J/V Submitted by Project Manager Test conducted by Q.C Manager Contractor Reps			



Secondary Towns Integrated Urban Environment Improvement Project Biratnagar Sub-Metropolitan City <b>TEST RESULT SUMMARY SHEET For the Month of FEBUARY 2015</b> <b>COMPRESSIVE STRENGTH OF BRICKS (Process Control Test)</b>							
Ref. STIUEIP LAB/	Date of Testing	Location	Chanage	BRAND NAME 1 st class brick	Water Absorption	Compressive Strength N/mm2	SCALE OF Sample From
MR 83	8/2/2015	S13L1F	0+580	T&B		14.35	3000 Nos-5 Nos
MR84	8/2/2015	S13L1F	0+600	ANAND		14.97	3000 Nos-4 Nos
MR 85	8/2/2015	R2 Road	1+160	AMBEY		16.37	4500 Nos -5 Nos
MR 86	8/2/2015	R2 Road	3+370	AMBEY		12.75	6000 Nos-5 Nos
MR 87	11/2/2015	R2 Road	3+450	SHREE		13.48	3000 Nos-5 Nos
MR 88	11/2/2015	R2 Road	3+460	SHREE		12.6	3000 Nos-5 Nos
MR 89	13/2/2015	R2 Road	3+450	AMBEY		12.2	3000 Nos-5 Nos
MR 90	13/2/2015	R2 Road	3+450	AMBEY		14.09	3000 Nos-5 Nos
MR 91	14/2/2015	R2 Road	3+400	AMBEY		13.0	3000 Nos-5 Nos
MR 92	14/2/2015	S13 L1F	0+200 to 0+205	T&B	1.19	16.25	3000 Nos-5 Nos
Remarks:							
Specification				IS1077,IS2180or NSI/2035			
				10%< > 10N/MM2 ±5%			
SMEC-Brisbane-AQUA-BDA-CEMAT Approved by Construction Supervision Engineer Test chwcked by Junior Engineer <i>Consultantr Reps</i>				CTCE-KALIKA J/V Submitted by Project Manager Test conducted by Q.C Manager <i>Contractor Reps</i>			



<p align="center"><b>Secondary Towns Integrated Urban Environment Improvement Project</b>  <b>Biratnagar Sub-Metropolitan City</b>  <b>TEST RESULT SUMMARY SHEET For the Month of FEBUARY 2015</b>  <b>COMPRESSIVE STRENGTH OF BRICKS (Process Control Test)</b></p>							
Ref. STIUEIP LAB/	Date of Testing	Location	Chanage	BRAND NAME 1 st class brick	Water Absorption	Compressive Strength N/mm2	SCALE OF Sample From
MR 93	15/2/2015	R2 Road	2+150	SHREE		16.68	4500 Nos-5 Nos
MR 94	15/2/2015	R2 Road	3+450	T&B		12.06	4500 Nos-5 Nos
MR95	16/2/2015	CN2	CN2 L2 Sourth side	AMBEY		13.04	4500 Nos-5 Nos
MR96	16/2/2015	CN2	CN2 L2 Sourth side	AMBEY		14.77	4500 Nos-5 Nos
MR 97	17/2/2015	R2 Road	1+250	AMBEY		13.54	4500 Nos-5 Nos
MR98	17/2/2015	R2 Road	1+250	T&B		12.48	4500 Nos-3 Nos
MR99	17/2/2015	R2 Road	2+790	AMBEY		13.48	4500 Nos-3 Nos
MR100	17/2/2015	R2 Road	3+500	SHREE		11.36	4500 Nos-3 Nos
MR 101	19/2/2015	Rani western south side	0+465,0+535	SHREE		14.43	4500 Nos-3 Nos
MR 102	19/2/2015	Rani western south side	0+465,0+535	HIMAL		14.12	4500 Nos-5 Nos
Remarks:							
Specification				IS1077,IS2180or NSI/2035			
				10%< > 10N/MM2 ±5%			
<p align="center">SMEC-Brisbane-AQUA-BDA-CEMAT</p> <p align="center">Approved by Construction Supervision Engineer</p> <p align="center">Test chwcked by Junior Engineer</p> <p align="center">Consultantr Reps</p>				<p align="center">CTCE-KALIKA J/V</p> <p align="center">Submitted by Project Manager</p> <p align="center">Test conducted by Q.C Manager</p> <p align="center">Contractor Reps</p>			

<b>Secondary Towns Integrated Urban Environment Improvement Project</b> <b>Biratnagar Sub-Metropolitan City</b> <b>TEST RESULT SUMMARY SHEET For the Month of FEBUARY 2015</b> <b>COMPRESSIVE STRENGTH OF BRICKS (Process Control Test)</b>							
Ref. STIUEIP LAB/	Date of Testing	Location	Chanage	BRAND NAME 1 st class brick	Water Absorption	Compressive Strength N/mm2	SCALE OF Sample From
MR 103	20/2/2015	R2 Road	3+600	SHREE		13.91	4500 Nos-5 Nos
MR104	20/2/2015	R2 Road	3+600	AMBEY		13.86	4500 Nos-5 Nos
MR105	22/2/2015	R2 Road	1+240	T&B		11.87	4500 Nos-5 Nos
MR 106	22/2/2015	R2 Road	1+240	T&B		13.54	4500 Nos-5 Nos
MR 107	22/2/2015	R2 Road	1+240	T&B		12.37	4500 Nos-5 Nos
MR 108	22/2/2015	R2 Road	3+600	T&B		11.04	4500 Nos-5 Nos
MR 109	22/2/2015	R2 Road	3+600	AMBEY		14.00	4500 Nos-5 Nos
MR 110	24/2/2015	R2 Road	3+600	T&B		13.39	4500 Nos-5 Nos
MR 111	24/2/2015	R2 Road	1+850	T&B		15.81	4500 Nos-5 Nos
MR 112	24/2/2015	R2 Road	2+100	HIMAL		11.32	4500 Nos-5 Nos
Remarks:							
Specification				IS1077,IS2180or NSI/2035			
				10%< > 10N/MM2 ±5%			
SMEC-Brisbane-AQUA-BDA-CEMAT Approved by Construction Supervision Engineer Test checked by Junior Engineer Consultant's Reps				CTCE-KALIKA J/V Submitted by Project Manager Test conducted by Q.C Manager Contractor Reps			



<p align="center"><b>Secondary Towns Integrated Urban Environment Improvement Project</b>  <b>Biratnagar Sub-Metropolitan City</b>  <b>TEST RESULT SUMMARY SHEET For the Month of FEBUARY 2015</b>  <b>COMPRESSIVE STRENGTH OF BRICKS (Process Control Test)</b></p>							
Ref. STIUEIP LAB/	Date of Testing	Location	Change	BRAND NAME 1 st class brick	Water Absorption	Compressive Strength N/mm2	SCALE OF Sample From
MR 113	24/2/2015	S13L1F	0+200	T&B		11.68	3000 Nos-5 Nos
MR114	26/2/2015	R2 Road	3+680	SHREE		14.35	3000 Nos-5 Nos
MR 115	26/2/2015	R2 Road	3+700	SHREE		12.49	3000 Nos-5 Nos
MR 116	26/2/2015	R2 Road	3+650	AMBEY		10.52	1500 Nos-5 Nos
MR 117	26/2/2015	R2 Road	3+660	AMBEY		12.23	1500 Nos-5 Nos
MR 118	26/2/2015	R2 Road	4+00	AMBEY		10.50	1500 Nos-5 Nos
MR119	27/2/2015	R2 Road	4+00	AMBEY	7.6	10.91	1500 Nos-5 Nos
MR120	27/2/2015	R2 Road	3+080	SHREE	7.54	11.57	1500 Nos-5 Nos
Remarks:							
Specification				IS1077,IS2180or NSI/2035			
				10%< > 10N/MM2 ±5%			
SMEC-Brisbane-AQUA-BDA-CEMAT				CTCE-KALIKA J/V			
Approved by Construction Supervision Engineer Test checked by Junior Engineer <i>Consultant's Reps</i>				Submitted by Project Manager Test conducted by Q.C Manager <i>Contractor Reps</i>			



## SECONDARY TOWN INTEGRATED URBAN ENVIRONMENT IMPROVEMENT PROJECT

## Biratnagar-Sub-Metropolitan City

SUMMARY OF THE <sup>MORTAR</sup> MOTAR WORK MIX CUBE

FOR THE MONTH OF FEBRUARY 2015

S.N.	Cube No.	Name of Cement	Location/Structure	Details of MIX	Casting Date	Consistency & Setting Time			7 day's cube Crushing		28 day's cube crushing		Remarks
						Norm. Const.	Initial(min.)	Final(min.)	Date	Str. N/mm2	Date	Str. N/mm2	
1	98	Shivam	0+500 B2L2 DPS	1:4 by volume	18/01/2015	28.50	250	330	15/02/2015	6.70	15/02/2015	7.35	
2	99	Shivam	0+500 B2 Trimurti chowck	1:4 by volume	18/01/2015	28.50	250	330	25/01/2015	8.20	15/02/2015	10.00	
3	100	Shivam	0+500 B2 Trimurti chowck	1:4 by volume	18/01/2015	28.50	250	330	25/01/2015	8.16	15/02/2015	10.00	
4	101	Shivam	T3L35t,T3L34/T3L33 Seware line	1:4 by volume	18/01/2015	28.50	250	330	25/01/2015	6.12	15/02/2015	7.55	
5	102	Shivam	S13L2A 0+600	1:4 by volume	19/01/2015	28.50	270	330	26/01/2015	5.60 8.5	15/2/2015	9.80	
6	103	Shivam	0+427 B2L2(DPS)	1:4 by volume	20/01/2015	28.50	270	330	27/01/2015	9.80	17/2/2015	9.59	
7	104	Koshi	R2 Road 2+100	1:4 by volume	26/01/2015	33.00	255	325	26/01/2015	6.53	23/2/2015	10.00	
8	105	Koshi	B2L2 0+530 Trimurti chowck	1:4 by volume	27/01/2015	33.00	255	325	3/2/2015	6.90	24/2/2015	7.76	
9	106	Koshi	R2 Road 2+300 RHS	1:4 by volume	27/01/2015	33.00	255	325	3/2/2015	8.00	24/2/2015	9.80	
10	107	Koshi	R2 Road LHS 2+300	1:4 by volume	28/01/2015	33.00	255	325	4/2/2015	5.71	25/2/2015	6.53	
11	108	Koshi	R2 Road 2+250	1:4 by volume	28/01/2015	33.00	255	325	4/2/2015	3.50	25/2/2015	9.59	
12	109	Koshi	R2 Road 2+550	1:4 by volume	29/01/2015	33.00	255	325	5/2/2015	6.30	26/2/2015	8.98	
13	110	Koshi	CN3 0.565	1:4 by volume	30/01/2015	33.00	255	325	6/1/2015	N/C	27/02/2015	8.78	
14	111	Koshi	R2 Road 2+450	1:4 by volume	31/01/2015	33.00	255	325	7/2/2015	6.50	28/2/2015	10.00	
15	112	Koshi	CN3 0+450	1:4 by volume	31/01/2015	33.00	255	325	7/2/2015	6.33	28/2/2015	11.22	
16	113	Koshi	R2 Road 2+400 to 2+250	1:4 by volume	1/2/2015	33.00	255	325	8/2/2015	6.94	1/3/2015		
17	114	Koshi	R2 Road 2+300	1:4 by volume	2/2/2015	33.00	255	325	9/2/2015	N/C	2/3/2015		
18	115	Koshi	R2 Road 2+350	1:4 by volume	3/2/2015	33.00	255	325	10/2/2015	N/C 2.04	3/3/2015		
19	116	Koshi	CN3 0+950	1:4 by volume	5/2/2015	33.00	255	325	12/2/2015	10.41	5/3/2015		
20	117	Koshi	R2 Road 1+450	1:4 by volume	5/2/2015	33.00	255	325	12/2/2015	9.80	5/3/2015		
Total cube crushed												80	

According to is 2250-1981

Min 45m

Max 600m

Required strength on 28 days not less than 5 or 7.5 N/MM2

SMEC-Brisbane-AQUA-BDA-CEMAT

Approved by Construction Supervision Engineer/CSE

Test Checked by Junior Engineer

Consultants Reps

CTCE-KALIKA J/V

Submitted by Project Manager

Test conducted by Quality controll Manager

Contractore Reps







**Biratnagar Sub-Metropolitan City**

FOR THE MONTH OF FEBRUARY 2015

Total cube crushed	56 nos
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Min Required	13.4	20
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**Contractors Reps**



Biratnagar Sub-Metropolitan City

**SUMMARY OF CUBE COMPRESSIVE STRENGTH TEST M20/20& M25/20 Work Mix**

S.N.	Lab Ref No.	Date of Casting	Deatails of Mix	Location Structure	Ratio by VOLUME				Source		Cube Crushing ,N/mm2		Remarks
					Water	Cement	Sand	Aggregate	Cement Brand	Aggregate/Sand	7 days	28-Days	
1	154	4/1/2015	M20 Work mix	B3L3 0+310 to 0+322 Shre wall pannel	0.50	1	2	3.5	Shivam	Om shree C/plant	16.18	26.67	
2	155	4/1/2015	M20 Work mix	B3L2 0+244 Share wall pannel	0.50	1	2	3.5	Shivam	Om shree C/plant	15.00	25.00	
3	156	5/1/2015	M20 Work mix	B3L3 0+253 Share wall pannel 12	0.50	1	2	3.5	Shivam	Om shree C/plant	15.11	20.00	
4	157	5/1/2015	M20 Work mix	Share wall pannel no 11 0+337	0.50	1	2	3.5	Shivam	Om shree C/plant	18.33	26.67	
5	158	5/1/2015	M25 Work mix	B1L1 RCC bed 2+300to 2+100	0.46	1	1.68	3.15	Shivam	Om shree C/plant	21.11	28.89	
6	159	6/1/2015	M20 Work mix	B3L3 0+300to 0+312	0.50	1	2	3.5	Shivam	Om shree C/plant	16.22	23.56	
7	160	6/1/2015	M20 Work mix	B3L3 0+712	0.50	1	2	3.5	Shivam	Om shree C/plant	16.67	22.67	
8	161	7/1/2015	M20 Work mix	B3L3 0+280to 0+292 share wall no 14	0.50	1	2	3.5	Shivam	Om shree C/plant	17.11	20.44	
9	162	7/1/2015	M20 Work mix	B2L2 DPS share wall	0.50	1	2	3.5	Shivam	Om shree C/plant	15.33	20.22	
10	163	11/1/2015	M20 Work mix	B2L2 DPS share wall	0.50	1	2	3.5	Shivam	Om shree C/plant	17.89	21.11	
11	164	19/1/2015	M20 Work mix	R2 Road 1+950to 2+00 pcc bed	0.50	1	2	3.5	Shivam	Om shree C/plant	20.00	22.11	
12	165	27/01/2015	M20 Work mix	CN3 0+450 to 0+480 pcc bed	0.50	1	2	3.5	Shivam	Om shree C/plant	20.67	27.78	
13	166	28/1/2015	M20 Work mix	CN30+950 to 0+970 pcc bed	0.50	1	2	3.5	Shivam	Om shree C/plant	15.33	29.44	
14	167	28/1/2015	M20 Work mix	B3L1 1+390 Share wall	0.50	1	2	3.5	Shivam	Om shree C/plant	17.78	24.56	
15	168	28/1/2015	M20 Work mix	S13L1 share wall pannel no 12	0.50	1	2	3.5	Shivam	Om shree C/plant	17.78	30.56	
16	169	28/1/2015	M20 Work mix	B2L2 DPS LINE share wall	0.50	1	2	3.5	Shivam	Om shree C/plant	16.22	23.33	
										Total cube crushed	64.00	64.00	128.00

Min Required	13.4	20
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Min Required	16.75	25
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**Contractors Reps**



# Secondary Town Integrated Urban Environment Improvement Project

Biratnagar Sub-Metropolitan city

Contract Package: STIUEIPW/BRT/ICB-01

## DAILY WEATHER RECORD

Month: FEB

Year: 2015

Date	WEATHER Record							Temp.c	
	Sunny	Foggy	Windy	Cloudy	Morning Rain HRS	Night Rain Hrs.	Day Rain Hrs.	9:00 AM	Rain fall mm
1		Foggy						18.5	
2		Foggy						19.1	
3	Sunny							18.2	
4	Sunny							19.5	
5	Sunny							20.1	
6		Foggy						19.8	
7	Sunny							20.2	
8		Foggy						19.8	
9	Sunny							18.2	
10	Sunny							19.9	
11	Sunny							20.1	
12	Sunny							20.5	
13	Sunny							20.8	
14	Sunny							20.2	
15	Sunny							19.9	
16	Sunny							20.9	
17	Sunny							21.2	
18	Sunny							20.2	
19	Sunny							19.9	
20	Sunny							18.9	
21	Sunny					Night hours		20.1	10mm
22	Sunny							19.5	
23	Sunny							20.5	
24	Sunny							19.8	
25	Sunny							20.1	
26	Sunny							19.2	
27	Sunny							20.2	
28	Sunny							20.5	

SMEC-Brisbane-AQUA-BDA-CEMAT

Approved by CSE

Record Checked by Junior Engineer

Consultants Reps

CTCE-KALIKA J/V

Submitted by Project Manager

Record Reported by Q.C Manager

Contractors Reps



# SECONDARY TOWNS INTEGRATED URBAN ENVIRONMENT IMPROVEMENT PROJECT

Biratnagar Sub-Metropolitan City

## SUMMARY OF CUBE COMPRESSIVE STRENGTH TEST M20/20& M25/20 Work Mix

FOR THE MONTH OF FEBRUARY 2015

S.N.	Lab Ref No.	Date of Casting	Deatails of Mix	Location Structure	Ratio by VOLUME				Source		Cube Crushing ,N/mm2		Remarks
					Water	Cement	Sand	Aggregate	Cement Brand	Aggregate/Sand	7 days	28-Days	
17	170	29/1/2015	M20 Work mix	B3L1 Share wall 1+400.5	0.50	1	2	3.5	Shivam	Om shree C/plant	12.78	21.78	
18	171	1/2/2015	M15 Work mix	B3L1 Leaneare concrete pcc bed 1+145 to 1+160	0.52	1	2.33	4.17	Koshi	Om shree C/plant	7.33		
19	172	2/2/2015	M15 Work mix	B3L1 Leaneare concrete pcc bed 1+160 to 1+180	0.52	1	2.33	4.17	Koshi	Om shree C/plant	5.56		
20	173	3/2/2015	M15 Work mix	B3L1 Leaneare concrete pcc bed 1+185 to 1+195	0.52	1	2.33	4.17	Koshi	Om shree C/plant	6.11		
21	174	3/2/2015	M20 Work mix	B3L1 share wall 1+441	0.50	1	2	3.5	Koshi	Om shree C/plant	13.89		
22	175	5/2/2015	M20 Work mix	B3L1 1+431 share wall	0.50	1	2	3.5	Koshi	Om shree C/plant	13.11		
23	176	5/2/2015	M20 Work mix	B3L2 1+438	0.50	1	2	3.5	Koshi	Om shree C/plant	16.67		
24	177	9/2/2015	M20 Work mix	B3L1 1+140 Share wall	0.50	1	2	3.5	Koshi	Om shree C/plant	16.89		
25	178	10/2/2015	M25 Work mix	B1L2 Rcc Bed	0.46	1	1.68	3.15	Koshi	Om shree C/plant	20.00		
26	179	14/2/2015	M15 Work mix	B1L1 PCC Bed	0.52	1	2.33	4.17	Koshi	Om shree C/plant	8.89		
27	180	14/2/2015	M25 Work mix	B3L1 House crossing RCC	0.46	1	1.68	3.15	Koshi	Om shree C/plant	17.22		
28	181	14/2/2015	M25 Work mix	R2 Road Road crossing Top slab 1+700,1+500,1+850 LHS/RHS	0.46	1	1.68	3.15	Koshi	Om shree C/plant	20.33		
29	182	15/2/2015	M15 Work mix	R2 Road footh path 2+150 to 2+180	0.52	1	2.33	4.17	Koshi	Om shree C/plant	12.78		
30	183	17/2/2015	M25 Work mix	B3L1 House crossing Top slab 1+160,1+180,0+100	0.46	1	1.68	3.15	Koshi	Om shree C/plant	26.56		Near Cement Godam
31	184	18/2/2015	M20 Work mix	S9 Share wall	0.50	1	2	3.5	Koshi	Om shree C/plant	12.89		
32	185	19/2/2015	M20 Work mix	RANI 0+500 PCC Bed	0.50	1	2	3.5	Koshi	Om shree C/plant	16.67		
33	186	19/2/2015	M20 Work mix	S13L1F 0+210 to 0+250 pcc bed	0.50	1	2	3.5	Koshi	Om shree C/plant	15.67		

Note:28 days cube test awaiting to be

Total cube crushed 70.00 66 Remains

Specifacation Limit Table For M20/20 on 7 days Age Min 67% of Total Compressive Strength

Min Required 13.4 20

Specifacation Limit Table For M25/20 on 7 days Age Min 67% of Total Compressive Strength

Min Required 16.75 25

SMEC-Brisbane-AQUA-BDA

Approved by Construction Supervision Engineer/CSE

Test checked by Junior Engineer

Consultants Reps

CTCE-KALIKA J/V

Submitted by Project Manager

Test conducted by Quality Controll Manager

Contractors Reps



# SECONDARY TOWNS INTEGRATED URBAN ENVIRONMENT IMPROVEMENT PROJECT

Biratnagar Sub-Metropolitant City

Summary of (Fine Aggregate concrete Sand)

FOR THE MONTH OF FEBUARY 2015

S.N.	DESCRIPTION / LOCATION	LAB	Grain Siza Distribution							Sp	Water	Unit Weight gm/cc	REMARKS
		REF. NO:	10	4.75	2.36	1.18	0.6	0.3	0.15	Gr	Absorption %		
1	From R2 Road	MR10	100	99.5	92.03	70.43	51.66	18.6	4.49			1416kg/m3	source
2	From R2 Road	MR11	100	99.27	90.64	70.28	49.72	18.17	4.59				om shree
													crusher
													plant
			100-100	90-100	75-100	55-90	35-59		0-10				
	SPECIFICATION LIMIT	IS 383-1970(Zone-2)											

SMEC-BRISBANE-AQUA-CEMAT-BDA  
Construction Supervision Engineer/CSE  
Test Checked by Junior Engineer  
Consultant Reps

CTCE-KALIKA JV  
Submitted by Project Manager  
Test Conducted by Q.C Manager  
Contractor Reps

**FOR THE MONTH OF FEBUARY 2015**

S.N.	Lab Ref No.	Date of Casting	Deatails of Mix	Location Structure	Ratio by VOLUME				Source		Cube Crushing ,N/mm2		Remarks
					Water	Cement	Sand	Aggregate	Cement Brand	Aggregate/Sand	7 days	28-Days	
1	8K	7/2/2015	M20 Work mix	KERB STONE YARD	0.50	1	2	3.5	SHIVAM	Om shree C/plant	16.00	0.00	
2	9K	20/2/2015	M20 Work mix	KERB STONE YARD	0.50	1	2	3.5	SHIVAM	Om shree C/plant	17.00	0.00	
3	10K	21/2/2015	M20 Work mix	KERB STONE YARD	0.50	1	2	3.5	SHIVAM	Om shree C/plant	16.90	0.00	
4	11K	22/2/2015	M20 Work mix	KERB STONE YARD	0.50	1	2	3.5	KOSHI	Om shree C/plant	0.00	0.00	
5	12K	24/02/2015	M20 Work mix	KERB STONE YARD	0.50	1	2	3.5	KOSHI	Om shree C/plant	0.00	0.00	
6	13K	27/2/2015	M20 Work mix	KERB STONE YARD	0.50	1	2	3.5	KOSHI	Om shree C/plant	0.00	0.00	
									<b>Total cube crushed</b>		12 nos		
<b>Specifacation Limit Table For M30/20 on 7 days Age Min 67% of Total Compressive Strength</b>										<b>Min Required</b>		20.1	30

SMEC-Brisbane-AQUA-BDA

Approved by Construction Supervision Engineer/CSE

Test checked by Junior Engineer *[Signature]*


Consultants Reps

CTCE-KALIKA J/V

Submitted by Project Manager

Test conducted by Quality Control Manager

Contractors Reps *[Signature]*



*[Signature]*



**SECONDARY TOWNS INTEGRATED URBAN ENVIRONMENT IMPROVEMENT PROJECT**

**Biratnagar Sub-Metropolitan City**

**Summery of(Coarse Concrete Crushed Aggregate 20mm down )**

FOR THE MONTH OF FEBUARY 2015

S.N.	DESCRIPTION / SOURCE	TYPE OF MAT.	LAB REF. NO.	Grain Siza Distribution				FI %	LAA %	ACV	SSS	Unit Wt %	Sp. Gr.	water Absorpt ion %	REMARKS
				25	20	10	4.75								
1	From Contractor yard stock pile	Cr Aggregates	MR 11	100	98.58	31.48	11.83								Aggregates
2	From Contractor yard stock pile	Cr Aggregates	MR12	100	97.03	34.55	11.12								Source
															Om shree
															Crusher
															Plant
	REQUIREMENT LIMITS	AVG		100.0	97.8	33.0	11.5								Absorbed 1.5%
	Section 900:IS 383-1970	Gradednominal size 20mm		100	95-100	25-55	0-10	Less 25%	Less 35%	Less 30%					Finer

NOTE :Sample collected from  
R2 Road For PCC Bed concrete  
20mm 65% & 10mm 35 % mixed

SMEC -BRISBANE-AQUA-CEMAT-BDA

Approved by C.S.E



Consultant Reps

Test Checked by Junior Engineer

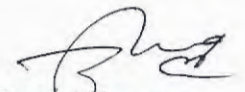
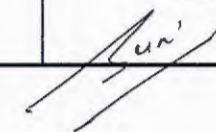


CTCE-KALIKA J/V

Quality controll Manager

Contractors Reps

Project Manager



**Biratnagar Sub-Metropolitan City**

FOR THE MONTH OF FEBRUARY 2015

**Specifacation Limit Table For M30/20 on 7 days Age Min 67% of Total Compressive Strength**

Min Required	20.1	30
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## Consultants Reps

**Contractors Reps**

## **ANNEX-8: CONTRACTOR'S PROGRESS REPORT**