

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 (July, 2015)

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





Biratnagar Sub-Metropolitan City, Nepal

AUSTRALIA | ASIA | MIDDLE EAST | AFRICA | PACIFIC

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

PREPARATION, REVIEW and AUTHORISATION

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SMEC COMPANY DETAILS

| SMEC International Pty Ltd |
|---|
| South Asia Regional Office, H-372, R-6, DOHS Baridhara, Dhaka, Bangladesh |

Tel: +8802 841 3571

Fax: +8802 882 7545

Email: <u>smec@smec.com</u>

www.smec.com

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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 |
| Contractor | CTCE-KALIKA Joint Venture |
| Date of Commencement | 8 December, 2013 |
| Date of Completion | 25 th May, 2016 |
| Contract Period | 900 days from date of commencement |
| Time elapsed till July 2015 | 601 days from date of commencement (66.7%) |
| 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 (Mobilization Advance Payment) |
| Paid Amount of IPC 11 | NRs. 160,083,476,07 |
| Total Paid Amount from IPC 01 to IPC 11 | NRs. 1,006,572,160.01 |
| Variation Order No 2 with 13% VAT (submitted on 2 August 2015 and is under review) | NRs. 258,111,937.92 |
| Total Contract Amount including VO No 02 plus VAT & PS | NRs. 2,749,197,150.40 |



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 7th December 2011. This monthly Progress Report of July, 2015 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 Ioan 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 (Revision 02) 05 December 2014, this has to be revised as the work progress is not consistent. The Contractor is advised to revise the work program and it is expected to receive by the end of August 2015.

3. SUB-PROJECT COMPONENTS

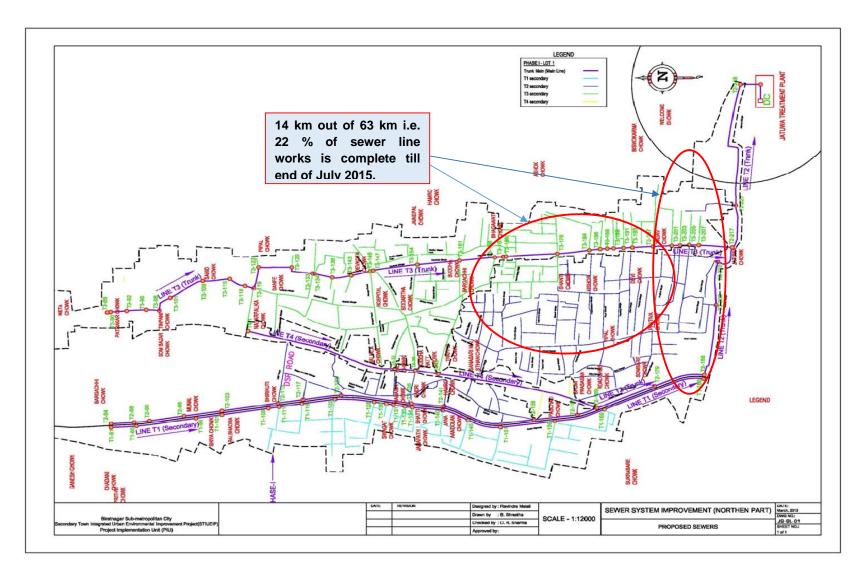
3.1 Sewer Lines

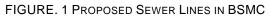
4. The prioritized sewer lines for Final Detailed Engineering Report of BSMC are as follows:

| SN. | Description | Unit | Quantity |
|-----|--|------|----------|
| 1 | Sewerage Pipe Supply and Installation | | 62,835.0 |
| | Reinforced Concrete Pipe laying and jointing | | 15,748.0 |
| | 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 |
| | HDPE laying and jointing | | 47,087.0 |
| | 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 |
| 2 | Manhole (Brick / RCC) | no. | 2,019 |
| 3 | Sewer Inlet | no. | 3,766.00 |
| 4 | House connection | no. | 5,930.00 |
| 5 | Reinstatement of Roads | km | 64.50 |
| L | | | 1 |

 Table 1: Proposed Sewer Lines in BSMC







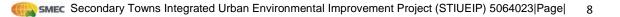


3.2 Storm Water Drains

5. 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 |
|--------|--|------|-----------|
| А | Storm Drain for Northern Parts | | 39,379.00 |
| I | Storm Drain Lines | m | 25,388 |
| II | Culvert | no | 41 |
| | Outfall | no | 15 |
| IV | Rain Inlet | no | 30 |
| V | Manhole | no | 30 |
| VI | Canal Crossing | no | 11 |
| В | Storm Drain for Southern Part | | |
| I | Brick Masonry Drain | m | 13,991 |
| II | Cleaning and Maintenance of Existing Drain | m | 7,273 |
| | Culverts | no | 38 |
| С | Rehabilitation of Existing Drain | | |
| I | Drain Cover | m | 30,467 |
| II | Cleaning and Maintenance of Existing Drain | m | 33,601 |



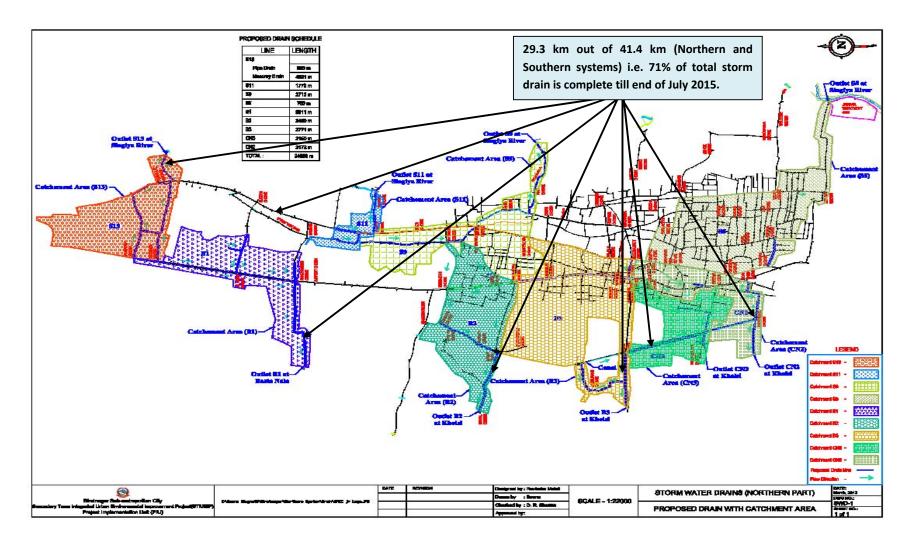


Figure 2: Proposed Storm Water Drains in BSMC (Northern Drainage System)



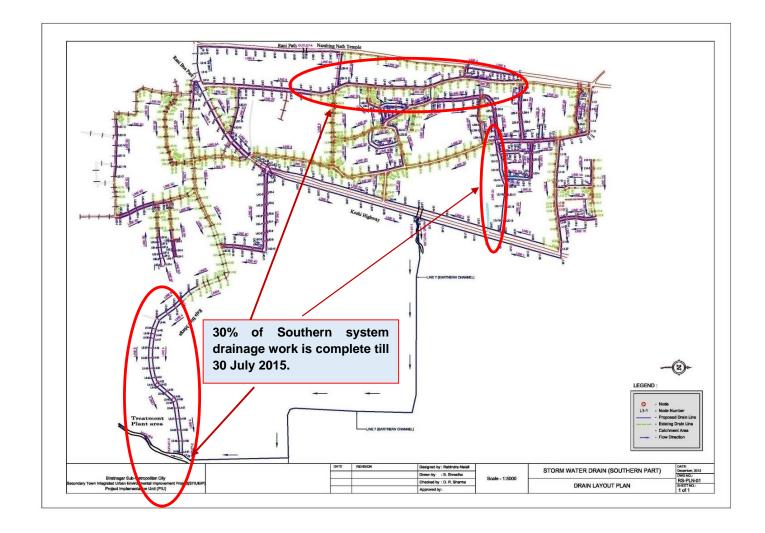


Figure 3: Proposed Storm Water Drains in BSMC (Southern Drainage System)



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 filtration 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:

| S.N. | Description | Unit | No |
|------|--|------|--------|
| | Waste Water Treatment Plant Component | | |
| 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 |

Table 3: Proposed Waste Water Components in BSMC



| 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 |

July 2015

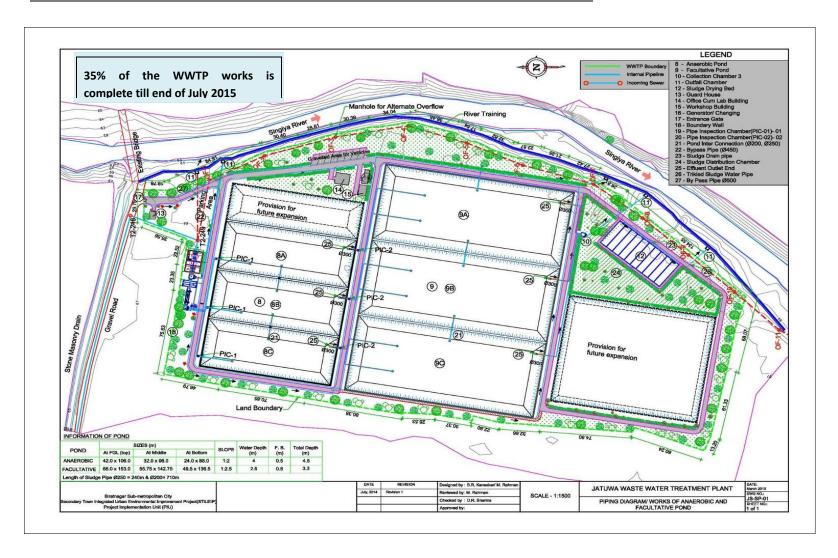


Figure 4: Proposed Waste Water Treatment Plant at Jatuwa in BSMC

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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 Puspalal 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 (Semi-Annual) October 2014 – March 2015 and Quarterly Updated Environmental Report, January – March on 27 May 2015. Recently, the DSC has received comments from PCO to revise semi-annual environmental report. The next Quarterly Updated Environmental Report for the months of April, May and June 2015 and semi –annual report will be submitted soon.

3.6 SOCIAL ASPECT

11. Secondary Towns Integrated Urban Environmental Improvement Project (STIUEIP) in Biratnagar has commenced from 2010 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 STIUEIP in Biratnagar Submetropolitan City (BSMC). Besides this, community development and institutional strengthening components, the two other objective focused components of STIUEIP Biratnagar, are running various social development programs and activities.

Social development component is one of the major components of STIUEIP Biratnagar that comprises of various social development programs and activities like community development program (CDP), awareness raising, skill development, health and sanitation. Social Development Specialist (SDS) in Design and Supervision Consultant (DSC) is deputed to assist the Project Secondary Towns Integrated Urban Environmental Improvement Project (STIUEIP) 5064023|Page| 14

Implementation Unit (PIU) in implementing effectively the social activities to achieve the project goal as envisaged by the project. Monitoring of ongoing social development activities and consultation meetings with community people are the general tasks to be accomplished as regular basis.

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. The eighth meeting of safeguard desk held this month.

The regular monitoring visits have provided insights into the social development aspects of the project to the DSC. The community development programs are going on through the Tole Lane Organizations (TLOs). Almost 130 TLOs of 17 wards of the BSMC have been mobilized for this. Prior to the start of such community development activities, the DSC had analyzed the data of poor and disadvantaged groups (DAGs) living in the various tole/ clusters identified by the poverty mapping by applying the participatory tools. Based on the poverty indicators, all details have 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 includes 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 of meeting No 09; please refer to Annex-6.

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**

| S.N. | Description of Payment | Payment Items | Amount in NRs. |
|------|------------------------|---------------|------------------|
| 1 | M/S CTCE-Kalika JV | IPC 01 | 209,400,000.00 |
| 2 | M/S CTCE-Kalika JV | IPC 02 | 27,853,500.98 |
| 3 | M/S CTCE-Kalika JV | IPC 03 | 47,507,270.95 |
| 4 | M/S CTCE-Kalika JV | IPC 04 | 42,241,392.52 |
| 5 | M/S CTCE-Kalika JV | IPC 05 | 22,035,291.99 |
| 6 | M/S CTCE-Kalika JV | IPC 06 | 85,573,541.38 |
| 7 | M/S CTCE-Kalika JV | IPC 07 | 76,203,672.17 |
| 8 | M/S CTCE-Kalika JV | IPC-08 | 115,297549.23 |
| 9 | M/S CTCE-Kalika JV | IPC-09 | 109,414,317.97 |
| 10 | M/S CTCE-Kalika JV | IPC-10 | 110,962,146.75 |
| 11 | M/S CTCE-Kalika JV | IPC-11 | 160,083,476.07 |
| | | Total in NRs. | 1,006,572,160.01 |
| | | | |

Table 5: Disbursement Record in Construction to Date

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).

PROGRESS OF SUB-PROJECT COMPONENTS

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 affected by less effort observed during this month. The contractor has completed about 29.3 km out of 41.4km, 71%.

5.2 Sewer Lines

18. The Contractor has submitted to the Consultant monthly programs of March and April 2015 for the sewer line works. The Contractor has completed about 14 km out of 63 km (22%) sewer line with HDPE pipes and RCC pipes. The construction of manhole, sewer inlets and house connection chambers are in progress.

The proposal of the precast concrete manholes, sewer inlets and house connection chambers Since Secondary Towns Integrated Urban Environmental Improvement Project (STIUEIP) 5064023 Page 16



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.

Recently, the precast concrete house connection chambers, sewer inlets and manholes are being installed at sites and found to be effective and we are able to open traffic at the shortest possible time and especially where the business center with crowds (in R5 and R65 Roads) are very efficient and effective . This has reduced disturbances to the local people and road users, dumping of construction materials, workers and working for long period. This is found to be environment friendly too. Hence, the adaptation of precast units for sewer lines found to be effective and efficient.

During the site visit of delegate at different time in the construction period from BSMC, PMSC, ADB, PCO, local political representatives, TLO, Executive Director of TDF and the Secretary of Ministry of Urban Development have commended.

The payment for the respective item of works as appropriate is being paid under each IPCs for the cash flow and to account disbursement in ADB's disbursement book. The unconditional approval to proceed with production of precast units will be granted within couple of weeks.

5.3 WASTEWATER TREATMENT PLANT

19. Office cum laboratory building, workshop building and generator / changing house at WWTP, Jatuwa are complete. The Contractor has stopped all activities at WWTP site.

5.4 **ROAD AND LANES IMPROVEMENT WORKS**

20. The Contractor has completed the rehabilitation / repair of existing drain of about 6 km in R2 road. The Contractor has shifted more than 218 numbers of electrical poles and 35 numbers of telephone poles. The shifting of the pole was scheduled to complete by 28th Chaitra 2071 (11 April 2015). But still there are number of poles to be shifted. Currently, the Contractor has started shifting poles and target to complete before start of sub-grade preparation.

The Contractor had started to prepare subgrade and sub-base after discussion held at ADB Office Kathmandu on 25th May 2015. The Contractor had tried to continue with the success if 100m sub-base laying but unfortunately the Contractor has to stop the work due to unfavorable weather condition during those days but there was hardly rain fall occur during this month of July.

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.

Necessary suitability and routine tests for construction materials are being carried out in regular basis. The details of the test results of the month are in summary of Lab test results in Annex-7.

5.7 PHYSICAL PROGRESS TILL END OF JULY 2015

23. There is no work progress during this month. The Contractor had focused on maintenance of roads where sewer lines are being constructed. Hence the progress till end of this month is the same as of end of June 2015. The total physical progress achieved till 30 June 2015 is about 34 % whereas the cumulative planned progress till June 2015 is 57%. The progress of



the work is lagging behind by 23% compared to the planned works till end of June 2015 (based on work scheduled Rev 02).

| Plan Vs Progress | | | | | | | | | | |
|--|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Month | Sep-14 | Oct-14 | Nov-14 | Dec-14 | Jan-15 | Feb-15 | Mar-15 | Apr-15 | May-15 | 15-Jun |
| Cumulative Planned work Rev 01 (%) | 17.098 | 18.514 | 26.588 | 36.398 | 46.281 | 56.947 | 67.003 | 76.728 | 86.593 | 94.037 |
| Cumulative Planned work Rev 02 (%) | | | | 14.04 | 20.11 | 28.74 | 37.22 | 44.94 | 51.60 | 57.295 |
| Cumulative Actual Achievment (%) | 5.81 | 5.98 | 9.29 | 10.77 | 12.57 | 17.57 | 21.82 | 25.25 | 27.85 | 34.317 |
| Progress to date wrt the revised work plan (%) (12.53) (17.30) (3.27) (7.54) (11.17) (15.40) (19.69) (23.75) (22.98) | | | | | | | | | | |

There is no activities for permanent works hence the work progress of the month July is nil, i.e. same as of June 2015. Only the time is elapsed. The contractor is lagging behind by **23** % in his own program whereas **66.70** % of the contract period has already been elapsed till end of July 2015.

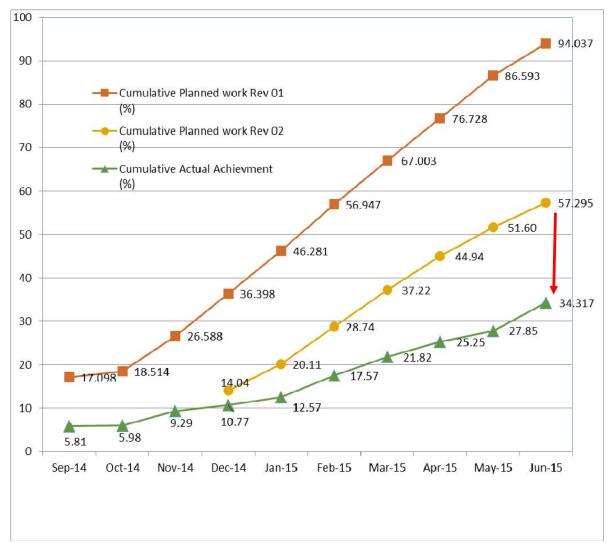


Figure 5: Plan Vs Actual Progress till end of July 2015.

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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 shown below.

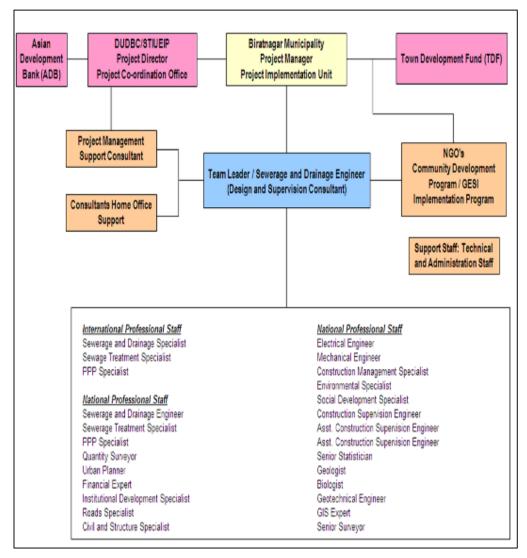


Figure 6: Organization and Staffing of STIUEIP, Biratnagar

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

| | Position |
|--|---|
| Mohan Kumar Tuladhar | Team Leader |
| Dil Bahadur Rana | Construction Supervision Engineer |
| Raj Bahadur Khadka (replaced Jamuna Bahadur Shrestha from 8 th July 2015) | Construction Management Specialist |
| Jay Prakash Yadav | Asst. Construction Supervision Engineer-1 |
| Bhakta Raj Shakya | Asst. Construction Supervision Engineer-2 |
| Bala Ram Mayalu | Social Development Specialist |
| Rajesh Yadav | Junior Engineeer-1 |
| Sujan Shrestha | Junior Engineeer-2 |
| Ashok Kafle | Junior Engineeer-3 |
| Santosh Dahal | Junior Engineeer-4 |
| Saroj Bhattrai | Junior Engineeer-5 |
| Santosh Yadav | Office Manager |
| Ramji Gimire | Driver-1 |
| Suman Ghimire | Driver-2 |
| Ramila Ghimire | Office Assistant |
| | Dil Bahadur Rana Raj Bahadur Khadka (replaced Jamuna Bahadur Shrestha from 8 th July 2015) Jay Prakash Yadav Bhakta Raj Shakya Bala Ram Mayalu Rajesh Yadav Sujan Shrestha Ashok Kafle Santosh Dahal Saroj Bhattrai Santosh Yadav Ramji Gimire Suman Ghimire |

- 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:
 - i. Daily Construction supervision

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- ii. Quality control, cost control and time control
- iii. Measurement and Certification of Interim Payment Certificates (IPC)
- iv. Modification and design of storm drainage and sewer lines, manholes etc.as per site condition and approve working drawings
- 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. Meet obligation of reporting requirement Updated Environmental Progress Report, Updated Resettlement Progress Report, Monthly Progress Report, Semi-Annual Updated Resettlement Progress Report
- ix. Prepare Due Diligence Report of the Project
- x. Prepare Variations Order No 02 in this month
- xi. Maintain correspondences with the Employer and the Contractor
- xii. Assist to PIU

6.10 Key Dates

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

Table 9: Key dates of events /Activities:

| S. No | Date | Activities/Events | Remarks | | | | |
|-------|--------------|-------------------|--|--|--|--|--|
| 1 | 05 July 2015 | Site visit | Mr. Ram Prasad Pokhrel from Ministry of Finance visited site and collected information of the project. A brief discussion/meeting was held at PM's Office, PIU Mr. Ram Prasad concluded his site visit at the contractor's camp at Judi Katahari. He had also remarked that the shifting/relocation or replacement of electric poles is a very difficult task for the project in general. The project has felt less cooperation from NEA. | | | | |

7 DETAILS OF ACTIVITIES CARRIED OUT IN THIS MONTH

7.1 PHYSICAL PROGRESS IN THIS MONTH

| | Physical Progress till 31 July 2015 | | | | | | |
|------|-------------------------------------|---------------|------------------------|----------------------|----------------------|-----------------|--|
| | | Proposed | Progress | | | | |
| S.N. | Location | Length (m) | Up to June 2015 (m) | This Month (m) | Total to date (m) | Progress (%) | |
| 1 | B1 | 3,580.00 | 3,540.00 | | 3,540.00 | 99% | |
| 2 | B2 | 3,742.00 | 3,342.00 | | 3,342.00 | 89% | |
| 3 | B3 | 3,514.00 | 3,326.00 | | 3,326.00 | 95% | |
| 4 | S5 | 740.00 | - | | - | 0% | |
| 5 | S9 | 3,178.00 | 810.00 | | 810.00 | 25% | |
| 6 | S11 | 2,092.00 | 1,434.00 | | 1,434.00 | 69% | |
| 7 | S13 | 5,640.00 | 4,294.00 | | 4,294.00 | 76% | |
| 8 | CN2 | 2,273.00 | 2,216.00 | | 2,216.00 | 97% | |
| 9 | CN3 | 2,170.00 | 1,493.00 | | 1,493.00 | 69% | |
| 10 | Rani Area | 8,483.00 | 2,521.00 | | 2,521.00 | 30% | |
| 11 | R2 (Rehab) | 6,000.00 | 6,325.00 | | 6,325.00 | 105% | |
| | Total | 41,412.00 | 29,301.00 | | 29,301.00 | 71% | |

Table 10: Physical Progress in Storm Water Drains:

Note: There is increment in length of drain in R2 road and some length corrected to S13 from previous monthly progress report, April 2015.

Table 11: Physical Progress in Sewer Lines: Till 31 July 2015

| | Physical Progress till 31 July 2015 | | | | | | | |
|------|-------------------------------------|---------------------------|--------------------------|-------------------|----------------------|-----------------|--|--|
| | | Dreneed | Prog | ress | | | | |
| S.N. | Location | Proposed Length (m) | Up to June 2015 (m) M | This Month (m) | Total to date (m) | Progress (%) | | |
| 1 | T1 | 10,912 | | | | 0% | | |
| 2 | T2 | 27,128 | 8,342.00 | | 8,342.00 | 31% | | |
| 3 | Т3 | 23,070 | 5,759.00 | | 5,759.00 | 25% | | |
| 4 | T4 | 2,530 | | | | 0% | | |
| | Total | 63,640 | 14,101.00 | | 14,101.00 | 22% | | |

Table 12: Physical Progress in Manholes: Till 31 July 2015

| | | Pro | | |
|------|---------------------------|------------------------|-------------------|----------------------|
| S.N. | Description | Up to June 2015 (m) | This Month (m) | Total to date (m) |
| 1 | House Connection Chambers | 963.00 | 145.00 | 1,108.00 |
| 2 | Sewer Inlet | 922.00 | 25.00 | 947.00 |
| 3 | Manholes | 700.00 | 110.00 | 810.00 |

Table 13: Physical Progress in Roads and Lanes: Till 31 July 2015

| | | Proposed | Prog | ress | Total to | |
|------|------------------------|----------------|-------------------------|-------------------|-------------|---|
| S.N. | Location | Length (km) | Up to June Month (m) | This Month (m) | date (m) | Progress (%) |
| 1 | T1, T2,T3,T4 and R2 | 65.0 | - | 0 | | The shifting of electric poles in progress |
| | Total | 65.0 | | | | |

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 | |
| 2 | Jatuwa | Excavation of Facultative Pond | 2 nos | No Activities at |
| 3 | Jatuwa | River Training Work | 600 m | WWTP Site in this month |
| 4 | Jatuwa | Boundary Wall | 580 m | |
| 5 | Jatuwa | Office Cum Lab Building | | |
| 6 | Jatuwa | Workshop Building | | |
| 7 | Jatuwa | Generator / Changing House | | |

Table 15: Physical Progress of Precast Concrete Works: Till 31 July 2015

| S.N. | Location | Description | Up to June 2015 | This Month | Total to date | Remarks |
|------|----------|--------------|--------------------|---------------|------------------|---------------------------|
| 1 | Katahari | Precast Slab | 48,417 | 5,083 | 53,500 | Previous qty corrected |
| 2 | Katahari | Precuts | 4,107 | 368 | 4,475 | |
| 3 | Katahari | Kerb Stone | 5,812 | 0 | 5,812 | |

| S.N. | Diameter (mm) (No) | Pipes Required | Up to previous month, June (No) | This Month (No) | Total to date , July 2015 (No) | Pipes to produce (Balance) | Remarks |
|------|--------------------------|-------------------|--|-----------------------|---|----------------------------------|---------|
| 1 | 200 | | 1,562 | 0 | 1,562 | | |
| 2 | 300 | | 203 | 104 | 307 | | |
| 3 | 350 | | 249 | 27 | 276 | | |
| 4 | 400 | | 276 | 52 | 328 | | |
| 5 | 450 | | 201 | 52 | 253 | | |
| 6 | 500 | | 323 | 78 | 401 | | |
| 7 | 600 | | 940 | 108 | 1,048 | | |
| 8 | 700 | | 1,192 | 128 | 1,320 | | |
| 9 | 900 | | 263 | 0 | 263 | | |
| 10 | 1000 | | 612 | 12 | 624 | | |
| 11 | 1600 | | 271 | 0 | 271 | | |
| | Total | | 6,046 | 561 | 6,653 | | |

Table 16: Physical Progress of Hume Pipe (NP3): Production Detail till 31 July 2015 in Numbers

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 | 5 | |
| Quality Control Manager | 1 | |
| Office/Bill Engineer | 1 | |
| Junior Engineer | 10 | |
| Sub Overseers | 6 | |
| Safety Manager / Senior Site Supervisor | 1 | |
| Accountant / Office Manager | 1 | |
| Lab Assistant | 3 | |
| Store Keeper | 1 | |
| Light Drivers | 6 | |
| Machine Operator | 14 | |
| Site Supervisor | 5 | |
| Other Supporting Staff | 10 | |
| Skilled Labor at Site | 25 | M:20; F:5 |
| Unskilled Labor at Site | 80 | M:68; F:12 |
| Total Labour | 105 | M:88 , F : 17 |

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

| Equipment | No | Remarks |
|--------------------------|----|---------|
| Back Hoe JCB | 8 | |
| Loader | 1 | |
| Excavator | 5 | |
| Excavator with Long Boom | 1 | |
| Plate Compactor | 2 | |
| Concrete Mixer | 6 | |
| Concrete Batching Plant | 1 | |
| Kerb Stone Machine | 1 | |
| Trailer | 2 | |
| Transit Mixer | 2 | |
| Water Bowser | 1 | |
| Steel Cutter | 4 | |
| Dumping Tractor | 8 | |
| Monkey Jumper | 1 | |
| Needle Vibrator | 8 | |
| Tipper | 17 | |
| Total Station | 1 | |
| Level Machine | 6 | |
| Jeep | 6 | |
| Motor Bike | 10 | |
| Asphalt Plant | 1 | |
| Asphalt Paver | 1 | |
| Crane | 1 | |
| Tractor | 9 | |
| Concrete Transit Mixture | 3 | |

7.2 Cumulative Progress (S Curve)

Contractor's Revised Cumulative Progress S-Curve (Same as of June 2015)

| Ca | tract Ant | 2.0003432577 | | | | | | | | | _ | | | | | | | | | | | | | | | | | | | | | | _ | |
|-----|--|---------------------|----------------|--------------------|-------|--------|--------|-------|---------|----------|--------------|--------|--------|--------|--------|---------|--------------|--------|-----------------|---------------|----------------|---------|----------|----------------|---------|--------|---------------|---------------------|----------------|--------|----------------|----------------|--------------|----------------|
| Dep | Descripti | Amount | Reissine | Year | 2013 | | | | | 3 | lear | 2014 | ļ. | | | | | | | | | | Year | 2015 | 5 | | | | | | Ye | ar 20 | 16 | _ |
| 26 | 62 62 | (NR4) | Weight in % | Menth | Des | Jac | E-fe | Mar | Apr | Mag | Jun | July | Aug | Sep | Oet | Ner | Dec | Jan | Feb. | Mar | Apr | May | Jun | Jul | Aug | Sep | Oet | Ner | Dee | Jan | Tab | Mar | Apr | May |
| : | Fahrmy miðmai Vein | 12490.000 00 | U.7% | Zao yanan. | | C.335 | 0.01.2 | 0.012 | 0012 | 0.012 | | 012 | 0.01.2 | ••••• | | w.2 | UUT.S | UU15 | | 0.01.5 | UU1.5 | | W13 | | | - | 0016 | | 0.012 | ••••• | | 7.5 | | U.119 |
| | | | | Adusta | 0.000 | C.936 | 0.01.2 | 0,012 | C.012 | 0.012 | | COLS | 0.01.2 | | 0.012 | 0.0.2 | 0.012 | 0.012 | 0.012 | 0.012 | | 0.000 | <u> </u> | 0.000 | 3.000 | 0.000 | 0 000 | 3.000 | 0.000 | 0.000 | 1.000 | | 0.000 | 0.000 |
| 2 | estWada. | 13-2432006 30 | 93.08 | Per pres. | 0.000 | C.005 | 0.508 | 0.369 | C.265 | 1.811 | | C183 | 0.384 | 0.408 | 0.152 | 3.293 | 4.549 134 | 5.857 | 7.607 3.007 | 54 1.5.281 | 7.513 0.000 | | 5.050 | 1 742 0 000 | 2,000 | 0.000 | 0 000 | 3.366 | 6.600 0.000 | 0.02 | 9.0C0 | 6.799 0.000 | 2.61- | 8.000 9.000 |
| H | _ | | | San person | 0.000 | LUN | | | | | | C.003 | 0.070 | | | 0.000 | | | | | | 11.365 | U59 | | 3.000 | | | 3.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 5 | Ele : 190 - 11 o cinacin al Wielen | E-22-4,000 00 | 0.69 | Adapte | 0.000 | C.000 | 0.000 | 0.000 | C.000 | 0.030 | | C00 | 0.030 | ••••• | 0.003 | 0.000 | 0.000 | | | 0.000 | , | | 0.000 | | | 0.000 | 0 000 | 3.000 | 0.000 | 0.000 | | 0.000 | | |
| Н | Pre varenti. | | | Januara Dargena | 0.000 | | | | | | •••• | | | 0.300 | | 0.000 | | | | | | | | | | | | | 0.196 | | | | nar Pre | 12/19/11 |
| ÷ | itean 1-anni 17 an t-Marianti | ear-vear ⇔ | 3.0. | Address of | 0.000 | | | | | | •••• | | 0.030 | | | | | | 2.05 | 0.065 | | | \geq | : | 1.000 | 0.000 | *** | 3.000 | 0.000 | 0.000 | 0.060 | - Ád | ัดได้สี่เกิด | nt |
| Н | Eur. Operature.it Muscanosci | | | 7.0 press. | 0.000 | | | | | 0.030 | | | 0.030 | | | | | | | UI.S | | | | | 1.000 | 0.000 | | 3.000 | 0.000 | 0.000 | 0.000 | 0.000 | 000.0 | 0.000 |
| 5 | eci eci | 34440.000 00 | 1.05 | Adura | 0.001 | r mm | | | r ana | 0.010 | ••••• | r mit | 0.010 | | 0.001 | | | | | 0.000 | | | 0.000 | | 1 000 | 0.000 | | 1 000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| H | Min ziemannen | | | Po grac | 0.000 | C.000 | 0.000 | 0.000 | C.000 | 0.030 | 0.300 | C.003 | 0.030 | 0.300 | 0.003 | 0.000 | 0.000 | 6.002 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0 000 | 2.000 | 0.000 | 0.000 | 3.000 | 0.000 | 0.000 | 8.000 | 0.000 | 0.174 | 8.1.09 |
| 4 | Lebe many Equipment | ***** | 0.29 | | 0.000 | | | 0.000 | | e.exe | | | 0.030 | | 1000 | 0.000 | é. | | | | 0.000 | | | | 2.000 | 0.000 | • • • • • | 3.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| H | Questions | | | 710 jona. | e.cae | | e | 0.000 | | e.e.xe _ | a 202 | C.003 | 0.030 | 0.390 | e.ce:) | e, else | | ್ಷ | | 0.009 | | e | 0.000 | **** | 2.000 | 0.000 | **** | 3.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.289 |
| 7 | | ******* | ¢.28 | Jahana | 1.000 | C.000 | 0.000 | 0.000 | Cargo (| 0.030 | 1.744 J | | - | | 1.00 | 0.000 | a | | | | | 0.000 | 1.000 | | 3.000 | 0.000 | | 1,000 | 8.088 | 9.09C | 8.808 | 0.000 | 0.000 | 0.000 |
| H | | | | Po prez | 0.000 | C.000 | 0.000 | 0.000 | C.000 | 0.03g/ | 6.300 | C.003 | 0.030 | 0.300 | 0.003 | 0.000 | | 1.002 | 0.002 | 0.002 | 0.002 | 0.002 | 0.002 | 0 002 | 2.002 | 0.002 | 0 002 | 3.802 | 0.002 | 0.002 | 0.002 | 8.092 | 0.002 | 0.002 |
| 8 | Engue des | 57.00 C | 0.03 | Advana | 0.000 | C000 | 4.692 | 4,000 | 5.000 | Same | | Ceer | 0.030 | 0.200 | 0.003 | 0.000 | 0.000 | 4.00) | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | **** | 2.000 | 0.000 | • ••• | 1000 | 0.000 | ŝ | 0.000 | 0.000 | 0.000 | 0.000 |
| | Tetal | 2.0005452570 | 100 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | \square | | |
| 0 | riginal | % | ଶ୍ୱକ | | 0.54* | 0.074 | 3.181 | 6.282 | 7.951 | 5.01.7 | 2.219 | 1212 | 0.416 | 2.108 | 3.045 | 5.062 | 5.700 | 4.435 | 4.401 | 469 | 4.456 | 6.681 | 5.802 | 1.166 | 5.018 | 5.65% | ++15 | 5.645 | 5.29- | 4.707 | 4.728 | 5.150 | 2,891 | 0.615 |
| P | ogram | Cumulative | % age | | 0.347 | C.421. | 3.601 | 9,884 | trata | 30.691 | 23 050 | 24.262 | 34,734 | 27.446 | 3051 | 34.754 | 38,454 | 41.889 | 47.390 | 51,750 | 56.206 | 60.60- | 61.109 | 6 <u>4.5</u> | 69.595 | -2.259 | ~€.686 | 60.31.0 | 83.90- | 88.614 | 93.342 | 96.492 | 99.383 | 100.00 |
| | ev iseci | ి లైత | | | 0.005 | C.550 | 0.559 | 0.521 | 1.266 | 6.636 | 4.806 | 1.003 | 0.185 | 0.576 | 1.415 | 6.074 | e.et.e | 4.663 | .0.656 | 10.056 | £-35 | 9.945 | | 238- | 2.3-7 | 0.159 | 0145 | 1.145 | 0.145 | 0.145 | 0.0 - 9 | 0.601 | :.22- | 0.797 |
| Pr | gram-1 | Cumulative % age | | | ÷.## | <.555 | 1.114 | 1,635 | 1.928 | .4.139 | 15 336 | 19.329 | .4.522 | :194 | 18,514 | 3.3 | 34.39* | 46.240 | 26.944 | 47.#P2 | 76,727 | \$4.593 | 94.03T | 96.32. | 94.39* | 94.726 | 96.87. | € ⁻ .016 | e:«: | e305 | PT.326 | P780 | PP.21) | :00.00 |
| | ealaed | * | - 696 | | 0.000 | C.931 | 0.520 | 0.361 | C.967 | 1.623 | 1.921 | C119 | 0.337 | 0.421 | 0.162 | 3.305 | 4,760 | 6.073 | 8.630 | 878 | 7,728 | 6.6% | 5.699 | 2.040 | 1.991 | 0.079 | 0079 | 9.5*** | 6.643 | 9.257 | 8.857 | coo | 3.002 | 0.5 |
| Pr | igram-2 | Cumulative | % age | | 0.000 | 6.351 | 0.651 | 1.292 | 1.540 | 3.553 | 4.983 | 1.995 | 5.999 | 5.853 | 5.975 | 9.281 | 14,040 | 20,110 | 39.740 | 37.21.8 | 4942 | 51.596 | 57.295 | 56.335 | 60.97.6 | 60.295 | 61.074 | 64.650 | -1.294 | 80.551 | 89.438 | 96.40- | 99.410 | :00.0 |
| Ac | leverna | ۹. | oge | | 0.000 | C.337. | 0.520 | 0.361 | C.367 | 1.623 | 1.521 | 6.13 | 0.32 | 0.427. | 0.162 | 3.305 | :4 8 | 97.99 | 92 | 4.560 | 3.200 | 2.688 | 4.540 | 0 000 | 3.000 | 0.000 | e eee | 1.000 | 0.000 | 0.00C | 0.0CO | 0.000 | 0.000 | 0.000 |
| | nt | Cunulative | % age | | 0.000 | C.991 | 0.851 | 1.292 | 1.540 | 3.593 | 4.883 | 1.995 | 5.999 | 5.819 | 5.975 | 9.281 | 10.426 | 19.568 | .r. <i>s</i> te | stare | 25.070 | entere | 32,210 | 91.210 | 12.20e | 92.510 | 91,210 | E.210 | 32.210 | 92.210 | 30.210 | 92.210 | 32.210 | 32.2.0 |

Figure 7: S- Curve of Physical Progress



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

This report records the project implementation performance of social safeguard aspect for the duration of June, 2015 and highlights the key activities undertaken during the period. The activities on the social development during the period are summarized below:

8.1 SOCIAL ISSUES

8.1.1 OPERATIONAL GUIDELINES FOR COMMUNITY MOBILIZATION AND IMPLEMENTATION OF CDP

• VISIT, INTERACTION AND CONSULTATION WITH COMMUNITY PEOPLE

37. Social Development Specialist (SDS) of the DSC is closely monitoring the social issues resulted due to the project activities. Visiting and interacting with people, Tole Lane Organizations (TLOs) and formal and informal consultation meetings are going on in this regard.

The project is regularly disseminating the information and message to community people about the project features, its purpose, methods of use and functionality of infrastructure under construction by the project through such consultation meetings. These meetings are fruitful to provide prior information regarding the project construction activities before execution at the community level. It is an appropriate platform to interact and make dialogue between 4 Cs (The Client, Consultant, Contractor and Community) about the project features, prime objectives, purpose, work methodology and potential threats/ cautions to be adopted during the project implementation.

The visits, meetings and consultations with community people at TLOs have provided many opportunities to obtain people's views and perception towards the project. Community people of those particular localities used to discuss extensively in the project features and have been provided some suggestions for efficient carryover of the project components and assured cooperation and coordination in the project execution in their localities.

Social Development Specialist (SDS)/ DSC along with of PIU, NGO staffs have been actively participated in the meetings. SDS/DSC usually been facilitating the consultation meetings, support to prepare meeting minutes and obtain decisions.

Apart from of this, many field visits and observations with community are also important to disseminate project message and monitor project features in the community. Monitoring visits along with Project Manager (PM), TL/DSC and TL/CDP to the core project area, community development program area and construction sites have been beneficial to make insight to the project progress, its effectiveness and challenges.

• SAFEGUARD DESK

38. A Safeguard Desk established in the project has been effective in planning, monitoring and follow up of all social development/ safeguard issues including the resettlement plan. It has been started as a functional mechanism consisting of PIU, NGO and DSC for this purpose. The desk consists of the 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 the progress, issues, constraints and challenges of social aspects, Community Development Program and implementation of resettlement plan as well as monitoring of social development activities. On 10th June 2015, a regular meeting of the social safeguard desk has been held. The desk meeting reviewed the consultation meeting outputs and the purpose of the meeting that was to address some public concerns regarding on the road, drainage construction and sewerage pipe laying works in the project communities. The meeting perceived that such consultations should be continued to obtain people's feedback, suggestions and idea for way forward. (Meeting Minute in Annex 6)

• TOT ON GENDER AND SOCIAL INCLUSION (GESI) MAINSTREAMING

39. The project has been envisaged a 'Training of Trainers (ToT) on GESI Mainstreaming' for Biratnagar Sub Metropolitan City (BSMC) Office and STIUEIP project staff. The Aide Memoir Report of the ADB Review Mission has also noted about the training to be conducted in Biratnagar for the staff of municipality and related agencies. The Mission has recommended for conducting GESI training relating to urban infrastructure development to staff of municipality, municipal steering committee, PIU, local stakeholder agency and make them accountable for the better results. In line with this, the project is going to conduct Gender and Social Inclusion (GESI) Sensitization Training when it is approved. The revised ToT has been submitted in this month incorporating the comments from PMSC and PCO.

Safeguard desk members discussed and reviewed the proposed 'ToT on GESI Mainstreaming' proposal. Social Development Specialist (SDS) of DSC has reviewed the detail proposal and adjusted budget accordingly for the 'Training of Trainers (ToT)' model. The training arrangement will be decided after the approval of this proposal by the project authority. Primarily it will be a 5 days training focusing mainly on Gender and Social inclusion Action Plan (GESIAP) comprising other project elements. About 35 participants from Biratnagar Sub Metropolitan City (BSMC) office and project staffs will be participated in the training.

• Update of Small Facilities Construction and other Activities in CDP/STIUEIP

40. The latest safeguard desk meeting has reviewed all ongoing and completed small facilities infrastructure and other activities implemented under the Community Development Program (CDP), a component of STIUEIP. It provided a common understanding and status information of infrastructures and activities under the CDP program to all safeguard desk members.

On 21st June, the SDS of DSC attended a meeting organized by PIU/STIUEIP and CDP/FriPAD for appraisal of community development programs. It is an interaction program between User's Committees (UCs), Tole Lane Organizations (TLOs), monitoring committees and project officials. SDS/DSC attended this program and provided feedback and suggestion to the organizer. He also briefed his view in the meeting in a way to make the users committee more inclusive and participatory in terms of Gender Equality and Social Inclusion (GESI). TL/CDP presented the update progress status of each activities implemented under small facilities infrastructure and other awareness activities in that meeting.

A glimpse of community development program has been obtained by the presentation in the appraisal and interaction meeting. Total 7417.36 m. roads and 13246.32 m. drains are under construction through small facilities infrastructure by CDP/STIUEIP. Regarding on the household toilet, total 458 nos. such toilets has been built by May 2015. Similarly 10 hand pumps has been installed, 45 hand pump platforms built and 5 public toilets are constructing.

• Employment in Project

41 The core activities of the project i.e. sewerage pipe laying, drain construction and road/ lane improvement provided employment to about 250 in a day this month. The employed human resources varied from skilled engineer/ project manager to general labor, supervisor, (sub) overseers and mechanics. However, a very few women (16%) are working in the construction activities as skilled and unskilled labor but they are paid equal to men for similar type of work. Three women Assistant Sub-Engineers are also working at construction sites after completing

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OJT (on the job training) successfully at the same sites from different CTEVT affiliated institutes of nearby districts. The contractor has been suggested to increase the work opportunity to women in different types of works.

General

42. Sewer/ Drainage lines are being laid in the public rights of way (RoW). During construction, if any trees or crops or structures demolished, it shall be properly addressed with compensation. Private individuals or shopkeepers will also be looked into if their livelihood is affected by the disturbance during constructions/ pipe laying works.

Apart from this, the project did not encounter any resettlement or re-location and any compensation issue in the month July 2015.

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

43. Following are the key issues affected in progress:

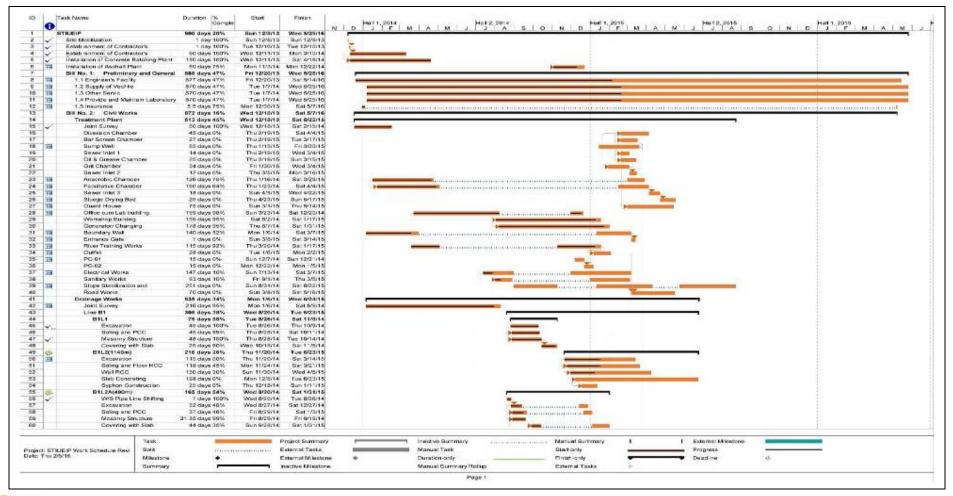
- Limited site possession and access to site within Right of Way (RoW)
- Contractor is lacking with qualified and experienced technical personnel, especially engineers (Civil, Sanitary, Electromechanical and Road Engineer).
- Shifting of electrical poles, transformers and telephone lines are in progress with very slow pace. This is one of the main causes which has directly impacted road works progress.

10 WORK PLAN FOR THE NEXT MONTH

- 44. 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):
 - 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
 - Maintain the existing roads where the sewer lines are already installed plus maintenance of R2 roads.

ANNEX-1: Work Schedule (Rev.02) and Progress July 2015

Note: Please refer to the contractor's progress report for detail and complete work program.





| 0 | Tosk Name | | Duration % Comple | Start | Finish | Най 1,2014 Най 2,2014 Най 1,2015 Най 2,2015 Най 1,2015 Най 1,2015 Най 1,2015 Най 1,2015 Най 1,2016 Полония 1,2 |
|----------|-----------------------------|---------------|-------------------------------|----------------------------|--------------------|--|
| 1 6 | B1L28(135m) | Concerned of | 28 days 0% | Sun 12/28/14 | | 0 |
| 12 | W2S Pipe Li | ne Shitting | 4 days 05% | Sun 12/28/14 | Wed 12/31/14 | |
| 3 | Excavation | | 14 days 0% | Thu 1/1/15 | | · · · · · · · · · · · · · · · · · · · |
| 4 | Soling and I | | 18 days 0% | Sat 1/3/16 | | · |
| 5 | Masonry Sh | | 18 days 0% | Sat 1/3/15 | | · |
| 5 | Covering wi | | 4 days 0% | Wed 1/21/15 | | · · · · · · · · · · · · · · · · · · · |
| 6 | B1L2C(138m) | | 28 days 0% | Thu 1/1/16 | | |
| 1 | W/S Pipe Li | ne Shifting | 4 days 0% | Thu 1/1/15 | | C |
| 2 | Excevation | | 14 days 0% | Mon 1/5/15 | | · · · · · · · · · · · · · · · · · · · |
| | Soling and i | | 16 days 0% | Wed 1/7/15 | | |
| | Mationry St | | 18 days 0% | Wed 1/7/15 | | ······································ |
| 100 | Covering wi B1L2D(498m) | on state | 4 days 0% | Sun 1/25/15 | | |
| | Excevation | | S0 clays 0% | Mon 1/5/15 Mon 1/5/15 | | |
| | Soling and I | 0.00 | 30 days 0% 35 days 0% | Wed 1/7/16 | | |
| 5 | Masanry Sb | | 40 days 0% | Wed 1/7/15 | | |
| | Covering wi | | 8 days 0% | Mon 2/16/15 | | |
| | B1L2F(371m) | u ciao | 77 days 68% | Sun 11/16/14 | | |
| 1 | Excavation | | 30 days 90% | | Mon 12/15/14 | |
| 10.00 | Soling and I | 200 | 32 days 80% | Tue 11/18/14 | | |
| | Masonry St | | 34 days 80% | | Sun 12/21/14 | |
| 1 | Covering wi | | 14 days 70% | | Tue 12/30/14 | |
| 3 | | ing Kanchan | 28 days 0% | Sun 1/4/15 | | |
| 1 | Line E2 | a contraction | 415 days 42% | Tue 2/25/14 | | |
| 5 10- | (5291(69Der) | | 330 days 55% | Tue 2/25/14 | | |
| 1 14 | Excavation | | 80 days 47% | | Sun 12/28/14 | |
| 7 | Soling and I | PCC | 73 days 60% | The 2/27/14 | | |
| | Masonry St | | 75 days 61% | Tue 3/4/14 | | |
| 1 | Covering wi | | 46 days 52% | Wed 4/23/14 | | |
| 1 104 | D2L2(020m) | | 142 days 12% | Tue 11/25/14 | | |
| 1 | Excevation | | 83 days 20% | Tue 11/25/14 | | |
| 2 | Soling and I | Nor RCC | 05 days 20% | Thu 11/27/14 | Fri 2/20/15 | |
| 3 | Wall RCC | | 95 days 14% | Thu 11/27/14 | 8un 3/1/15 | |
| d | Stab Concre | sting | 140 days 0% | Thu 11/27/14 | Wed 4/15/15 | |
| 5 05 | B2L2C(668m) | | 83 days 96% | Tue 2/25/14 | | |
| 8 19 | Excevation | | 45 days 95% | Tue 2/25/14 | Thu 4/10/14 | |
| 7 | Soling and I | PCC | 56 days 96% | Thu 2/27/54 | Wed 4/23/14 | 2 and 2 a |
| 8 | Masonry Sb | ructure | 56 days 95% | Thu 2/27/14 | | |
| 9 | Covering wi | th Slati | 25 days 96% | Thu 4/24/14 | | |
| 10 🛞 | B2L1B(860m) | | 66 days 32% | Sun 11/16/14 | | |
| 1. 1. | Excavation | | 35 days 40% | Bun 11/16/14 | | |
| 32 | Soring and I | | 38 days 36% | Tue 11/18/14 | | Here and the second sec |
| 3 | Masonry Sb | | 40 days 32% | Tue 11/18/14 | | Here and the second sec |
| H | Covering wi | th Slab | 14 days 0% | Sun 12/28/14 | | |
| 6 | Line B3 | | 466 days 66% | Wed 2/12/14 | | |
| 6 6 | B3L1A(410m) | | 65 days 99% | Wed 2/12/14 | | |
| 11 | Excavation | | 28 days 100% | VV00 2/12/14 | | |
| 0 - | Soling and I | | 33 days 100% | Sun 2/16/14 | | |
| 0 1 | Masonry Sb | | 45 days 100% | Sun 2/16/14 | | |
| 0 | Covering wi | | 10 days 96% | Wed 4/2/14 | | |
| 1 6 | B3L1B(410m) | | 65 clays 99% | Wed 2/12/14 | | |
| 2 2 | Excevation Soling and it | 200 | 28 days 100%. 33 days 100% | Wed 2/12/14 Sun 2/16/14 | | |
| 4 4 | Masonry Sb | | 45 days 100% | Sun 2/16/14 | | |
| 5 | Covering wi | | | Wed 4/2/14 | | |
| 5 12 | B35.4(690m) | an oraș | 10 days 95% | Thu 3/20/14 | | |
| 7 11 | Excavation | | 306 days 90% 56 days 99% | Thu 3/20/14 | | |
| 8 | Soling and I | 200 | 68 days 99% | Mon 3/24/14 | | |
| 9 | Masonry Sb | | 55 days 90% | Mon 3/24/14 | | |
| 0 | Covering wi | | 26 days 90% | Set 5/3/14 | | |
| e III | | | CONSISTENCE (| | | |
| | | Task | - | - | Project Summary | Inactive Summary Manual Summary I I Extended Misestone |
| ect ST | UEIP Work Schedule Revi | Sp#: | and the second | mationmana | External Tasks | Manual Task Start-only Programs |
| to Thu 2 | | Milestone | | | External Milestone | e |
| | | Summary | | 2.4 | Inactive Milestone | |
| | | | | | | |



| 0 | Task Name | | Duration 35 Comple | Stat | Finish | Har 1, 20 | | | 2054 | N L D Hart, 2 | | Har 2 2015 | | |
|------------|-----------------------------|-------------|--|----------------------------|----------------------|-----------|---------------------------------------|-------------------------|--------------------|---|--|----------------------------------|--------|--|
| 121 | Outer | | 18 days 0% | Sun 1/4/15 | Wed 1/21/10 | | | | | | | | | |
| 122 | (). B3L3(579m) | | 106 days 64% | Sat 11/15/14 | | | | ÷ | | | | | | |
| 23 | | | 82 days 95% | Sat 1113/14 | | | | | | | | | 1 | |
| 124. | Soling and | NOT RCC | 85 days 80% | The 11/20/14 | | | | | | | | | | |
| 125 | Well RCC Covering with | | 87 days 75% | Wed 11(26/14 Sun 2/1/19 | | | | - 12 | | | | | 4 | |
| 120 | | n Slab | 28 days 0% | | | | | | | 10 | | | | |
| 128 | Syphon OuSet | | 18 days O'd. | Fri 2/0/16 Tue 12/16/14 | | | | | | | | | 245 | |
| 129 | B3L1(692m) | | 15 days 0% 163 days 12% | Fri 12/12/14 | | | | | | FEIN | | | | |
| 130 | | | 85 days 30% | Fit 12/12/14 | | | | | | 1 C | | | 14. | |
| 131 | Soling and | lass BCC | 65 days 30% | Sun 12/14/14 | | | | 1 | | Sec. | | | 3 | |
| 122 | Wall RCC | KOF HOS | 95 days 10% | The 12/18/14 | | | | | | | | | | |
| 183 | Sab Conor | diam. | 145 days 0% | Tue 12/30/14 | | | | | | | | | | |
| 134 | Outet | ang - | 18 days 0% | Tue 1/13/15 | | | | 80 | | | | | (F) | |
| 135 | (b) B3L2(692m) | | 171 days 49% | Sun 11/16/14 | | | | 10 A | | | | | 14 | |
| | Excervation | | 110 days 50% | Sus 11/18/14 | | | | | | | | | | |
| 137 | Soling and | Timer Birth | 110 days 75% | Tue 11/18/14 | | | | - E. | | | | | 1 | |
| 138 | Wat RCC | Nor HOW | 122 days 70% | Sut 11/22/14 | | | | | | | | | | |
| 199 | Siab Cence | diam. | 165 days 1% | Tue 12/2/14 | | | | | | | _ | | | |
| 140 | Culet | | 18 days 1% | Tue 12/23/14 | | | | | | Acres 1 | | | | |
| 41 | Syphon | | 20 days 0% | The 1/1/15 | | | | | | A second | | | | |
| 14Z | B3L2E(220m) | | 32 days 76% | Thu 11/20/14 | | | | | | | | | | |
| | Excevation | | 16 days 90% | Thu 11/20/14 | | | | 10 | | - | | | | |
| 164 | Soling and | CC . | 18 days 90% | Mon 11/24/14 | | | | | | - | | | | |
| 145 | Masurvy St | | 20 days 80% | Mon 11/24/14 | | | | | | | | | | |
| 146 | Covering with | | 0 days 10% | Sus 12/14/14 | | | | | | | | | 4 | |
| 147 | Line S5 | | 97 days 0% | Fri 1130/16 | | | | 2 | | - | | | | |
| 148 | (364m) | | 48 days 0% | Pri 1130/15 | | | | 10 | | - | | | 21 | |
| | Excavation | | 25 days 0% | Fn 1/30/15 | | | | 4.1 | | | | | 4 | |
| 150 | Brick Drain | | 33 days 0% | Sur 2/1/16 | | | | | | | | | | |
| 191 | Covering w | n State : | 10 days 0% | 734 2119/15 | | | | | | | MORE- | | 21 - E | |
| 152 | Outet | | 10 days 0% | Sen 3/1/15 | Wed 3/18/15 | | | | | | and the second s | | 93 | |
| 153 | S6L19(378m) | | 48 days 0% | Fri 1/30/18 | | | | - | | - | | | 1 | |
| 154 | Excevation | | 28 days 0% | Fn 1/30/15 | | | | | | - | | | | |
| 155 | Brick Drain | | 33 daya 0% | Sun 2/1/15 | | | | 100 | | | and the second se | | 3£. | |
| 156 | Counting with | th Slab | 10 days 0%. | Tea 3119/19 | Sat 2/28/16 | | | ÷. | | | HIE | | (4) | |
| 197 | Outet | | 18 days 0% | Burt 3/1/15 | Wed 3/18/15 | | | | | | and a second sec | | 19 | |
| 158 | Si5L.1 | | 48 days 0% | Fri 2127/15 | Wed 4/15/15 | | | | | | | | | |
| 159 | Excavation | | 28 days 0% | Fri 2(27/15 | Tnu 3/26/15 | | | - E | | | diama (| | 4 | |
| 160 | Brok Drain | | 33 days 0% | Bon 3/1/19 | Thu 4/2/15 | | | | | | HOUSENED | | 1 | |
| 151 | Covering with | th Slab | 10 days 0% | Thu 3/19/15 | | | | P.1 | | | - +== | | 191 | |
| 162 | Outet | | 18 days 0% | Sun 3/29/15 | | | | - 88 | | | all and a second se | | | |
| 163 | SSLEA | | 51 days 0% | Tue 3(17/15 | | | | | | | | | 12 | |
| 154 | | | 28 days 0% | Tue 2/17/15 | | | | 1 | | | P-100000 | | | |
| 65 | Brick Drain | | 33 days 0% | The 3/16/15 | | | | 22 | | | * CONTRACTOR | | | |
| 66 | Covering w | n Slat | 13 days 0% | Mort 4/6/15 | | | | | | | Perm | | 4 | |
| 15? | Outet | | 18 days 0% | Sun 4/19/19 | | | | | | | - | | | |
| 168 | Line 89 | | 462 days 17% | Sun 3/16/14 | | | | | | | | | 4 | |
| 69 | 59L1(2981m) | | 462 days 19% | 5un 3/16/14 | | | - | which has a first owned | | 110110-11020-1 | | | 1 | |
| 70 | | | 140 days 13% | Sun 2/16/14 | | | C | and the second second | | enterna de la composition de la composi | | | 21 | |
| 71 | Brick Drain | | 60 days 75% | Tue 3/18/14 | | | · · · · · · · · · · · · · · · · · · · | | areas and a second | | | | | |
| 72 | HOC Dram | | 122 days 5% | Bus 12(28/14 | | | | | | P m | | | 14 | |
| 73 | Covering wi | an celate | 155 days 16% | Wed 1/7/15 | | | | | | (and () and () | and the second division of the second divisio | | | |
| 24 | Outet | | 28 days 0% | Web. 4/1/15 | | | | | | | | | | |
| 175 | (59L10(195m) | | 33 days 0% | 5un 12/28/14 | | | | | | | | | | |
| 76 | | | 15 days 0% | Sun 12(20/14 | | | | | | (Manual And | | | | |
| 77 | Brick Drain | | 22 days 0% | Sat 1/3/15 | | | | | | Parallel - | | | | |
| 78 | Covering w | a caso | 7 days 0% | Pri 1/23/15 | | | 10 | 10 | | | | | 1 | |
| | Line S11 | | 234 days 67% | Tue 2125/14 | | | - C | | | | | | 3 | |
| 60 | 5 811L 1(1638m) | | 01 days 05% | Tue 2/26/14 | Mon 6/26/14 | | | | | | | | | |
| 1.1 | | | A CONTRACTOR OF A CONTRACTOR O | | | | | 104 OIL | | | | | | |
| | | Task | 10000 | | Project Summary | | 1 Inactive St | mmary | | Manual Summary | 1 | External Milestone | | |
| maner | STILLEIP Work Schedule Revi | Spit | Contraction of the local division of the loc | nine management | External Tasks | - | Manual Ta | sk. | | Stationly | | Piogress | | |
| ana: Ti | 10 2/5/15 | Mitestono | | | External Milestone | | Dunetion-o | | | Frish-only | - | Deadlane | b. | |
| 6 Mar - 10 | | | - | | Inactive Militatione | | | mmary Rollup | | External Tests | 2018 | Organization | 87 B | |
| | | | | | | | | | | | | | | |
| | | Summary | | | Mactive Midatone | | Eddfieldfield | comary eccup | | External Tases | 1990 - C | | | |



ANNEX2: PHOTOGRAPHS – JULY 2015



Road Condition of Pushpalal Road before maintenance



Maintenance Works at R2 roads in progress

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

| Invoice # | Dice # For Month Invoice Amount including VA | | including VAT | Received A | mount | 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 | Received |
| Invoice 04 | March, 2012 | NRs. 537,546.65 | USD 2,276.95 | NRs. 351,430.00 | USD 2,276.95 | Received |
| Invoice 05 | April, 2012 | NRs. 396,065.00 | | NPR 267,810.00 | | 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 | | Received |
| Invoice 08 | June-month Invoice | NRs. 464,430.00 | | NRs 262,160.00 | | Received |
| Invoice09 | Interim Report | | USD 70,295.04 | | USD 70,295.04 | Received |

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| Invoice # | For Month | Invoice Amount | including VAT | Received Amount | | Remarks |
|------------|--------------------------------|-------------------|----------------|-------------------|---------------|----------|
| Invoice 10 | Interim Report | NRs. 2,596,560.10 | | NRs 2,596,560.10 | | Received |
| 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 | | Received |
| Invoice 15 | August month Invoice | NRs. 337,870.00 | USD 000.00 | NPR 314,140.00 | | Received |
| Invoice 16 | September month Invoice | NRs. 328, 830.00 | USD 3, 361.75 | NRs. 314,140.00 | USD 1,854.75 | 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 | 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 | USD. 4,407.00 | Received |
| Invoice 21 | Monthly Invoice-Dec.2012 | NRs. 449,175.00 | US\$ 1,909.70 | Nrs. 350,865.00 | USD 1,909.70 | Received |

Page | 37 Secondary Towns Integrated Urban Environmental Improvement Project (STIUEIP), Biratnagar

| 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 | Received |
| Invoice 26 | Monthly Invoice Feb13 | NRs.324,310.00 | USD 3,051.00 | NRs.324,310.00 | USD 2,203.50 | Received |
| Invoice 27 | Monthly Invoice Mar 13 | NRs. 404,467.68 | USD 4553.90 | NRs. 361,600.00 | NRs. 361,600.00 USD 4553.90 | |
| Invoice 28 | Final Report Invoice | NRs. 3,245,700.13 | USD 87,868.80 | NRs. 3,245,700.13 | USD 85,350.48 | Received |
| Invoice 29 | Monthly Invoice April 13 | NRs. 340,695.00 | USD 1,322.10 | NRs. 324,310.00 | USD 881.40 | Received |
| Invoice 30 | Monthly Invoice May 13 | NRs. 671,951.00 | USD 4,4435.25 | NRs. 576,700.02 | USD 4,4435.25 | Received |
| Invoice 31 | Monthly Invoice June 13 | NRs. 1,107,583.06 | USD 2,203.50 | NRs.448,376.81 | USD 2,203.50 | 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 | Received |

Page | 38 Secondary Towns Integrated Urban Environmental Improvement Project (STIUEIP), Biratnagar

| Invoice 34 | Monthly Invoice August 13 | NRs. 701,094.94 | USD 00.00 | NRs 629,499.89 | USD 0.00 | Received |
|------------|---------------------------|-------------------|--------------|-------------------|----------|----------|
| Invoice 35 | Monthly Invoice Sept. 13 | NRs. 424,773.78 | USD 00.00 | NRs 424,772.45 | USD 0.00 | Received |
| Invoice 36 | Monthly Invoice Oct. 13 | NRs. 458,661.35 | USD 00.00 | NRs 408,710.78 | USD 0.00 | Received |
| Invoice 37 | Monthly Invoice Nov. 13 | NRs. 450,085.78 | USD 0.00 | NRs 431,600.15 | USD 0.00 | Received |
| Invoice 38 | Monthly Invoice Dec. 13 | NRs. 501,084.94 | USD 00.00 | NRs 481,693.01 | USD 0.00 | Received |
| Invoice 39 | Monthly Invoice Jan. 2014 | NRs. 695,501.44 | USD 00.00 | NRs. 609,960.44 | USD 0.00 | Received |
| 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. 961,794.30 | USD 0.00 | Received |
| Invoice 42 | Monthly Invoice Apr. 2014 | NRs. 861,039.32 | USD 00.00 | NRs. 812,918.13 | USD 0.00 | 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. 1,119,306.04 | USD 0.00 | Received |
| Invoice 44 | Monthly Invoice June 2014 | NRs.1,163,214.09 | USD19,313.42 | NRs. 1,098,669.08 | USD 0.00 | Received |

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| Invoice 45 | Monthly Invoice July 2014 | NRs. 854,199.00 | USD18,465.92 | NRs. 812,253.40 | USD 0.00 | Received |
|------------|--------------------------------|------------------|--------------|--------------------------|----------|----------|
| Invoice 46 | Monthly Invoice August 2014 | NRs 865,951.00 | USD 0.00 | NRs. 819,485.40 | USD 0.00 | Received |
| Invoice 47 | Monthly Invoice September 2014 | NRs 777,343.07 | USD 0.00 | NRs. 647,031.02 | USD 0.00 | Received |
| Invoice 48 | Monthly Invoice October 2014 | NRs 841,778.13 | USD 0.00 | NRs. 736,326.53 USD 0.00 | | Received |
| Invoice 49 | Monthly Invoice November 2014 | NRs 1,306,536.89 | USD 0.00 | NRs. 1,020,026.24 | USD 0.00 | Received |
| Invoice 50 | Monthly Invoice December 2014 | NRs 1,348,791.74 | USD 0.00 | NRs. 1,192,968.59 | USD 0.00 | Received |
| Invoice 51 | Monthly Invoice Jan 2015 | NRs 1,255,351.08 | USD 0.00 | NRs. 1,184,301.04 | USD 0.00 | Received |
| Invoice 52 | Monthly Invoice Feb 2015 | NRs 1,319,642.66 | USD 0.00 | NRs. 1,033,834.74 | USD 0.00 | Received |
| Invoice 53 | Monthly Invoice Mar 2015 | NRs 2,414,019.91 | USD 0.00 | NRs. 1,795,604.58 | USD 0.00 | Received |
| Invoice 54 | Monthly Invoice Apr 2015 | NRS 1,483,793.91 | USD 0.00 | | | Received |

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

| S. No. | Agreed Items in ADB Review Mission with DSC on | Status | Responsibility |
|--------|---|---|----------------|
| | 2-4 December 2014 | | |
| 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 March 2015, 2014 and additional Semi-Annual Oct 2014 - March 2015 | |

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

| S.No. | Expert / Position | Total man months Input (as per agreement) | | Man months Used in 2012/013/014/2015 | | | Balance | |
|-------|----------------------------------|--|--------------|--------------------------------------|--------------------|-----------|---------|--|
| A | Professional Staff | Design | Construction | | Up to June 2015 | July 2015 | Total | |
| A1 | International Professional Staff | | | | Up to June | July 2015 | Total | |

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| S.No. | Expert / Position | | nonths Input (greement) | as per | | n months Use 012/013/014/20 | | Balance | |
|-------|--|----|-----------------------------|--------|--------------------|--------------------------------|-------|---------|--|
| | | | | | 2015 | | | | |
| 1 | Sewerage and Drainage Engineer | 8 | 4 | 12 | 7.37 | 0.00 | 7.37 | 4.63 | |
| 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 June 2015 | July 2015 | Total | Balance | |
| 4 | Team Leader/ S-D Engineer | 12 | 24 | 36 | 31.23 | 1.00 | 32.23 | 4.77 | |
| 5 | Sewage Treatment Specialist | 8 | 18 | 26 | 11.0 | 0.00 | 11.0 | 15.00 | |
| 6 | Procurement Specialist | 5 | 2 | 7 | 8.75 | 0.00 | 8.75 | (1.75) | |
| 7 | DTL/ Quantity Surveyor | 9 | | 9 | 10.0 | 0.00 | 10.0 | (1.00) | |
| 8 | Urban Planner | 4 | 2 | 6 | 5.0 | 0.00 | 5.0 | 1.00 | |
| 9 | Financial Expert | 5 | | 5 | 6.0 | 0.00 | 6.0 | (1.00) | |
| 10 | Institutional Development Specialist | 2 | 3 | 5 | 2.0 | 0.00 | 2.0 | 3.00 | |
| 11 | PPP Specialist | 3 | | 3 | 3,0 | 0.00 | 3,0 | 0.00 | |

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| S.No. | Expert / Position Roads Specialist | | Total man months Input (as per agreement) | | | Man months Used in 2012/013/014/2015 | | |
|-------|---------------------------------------|---|--|----|-------|--------------------------------------|-------|--------|
| 12 | | 4 | 8 | 12 | 7.00 | 0.00 | 7.00 | 5.00 |
| 13 | Civil and Structural Specialist | 6 | 2 | 8 | 7.95 | 0.00 | 7.95 | 0.05 |
| 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 | 0.83 | 0.00 | 0.83 | 9.17 |
| 17 | Environmental Specialist | 8 | 12 | 20 | 14.59 | 0.00 | 14.59 | 5.41 |
| 18 | Social Development Specialist | 8 | 15 | 23 | 20.00 | 1.00 | 21.00 | 2.00 |
| 19 | Construction Supervision Engineer | | 30 | 30 | 18.00 | 1.00 | 19.00 | 11.00 |
| 20 | Asst. Construction S Engineer- 1 | | 30 | 30 | 12.50 | 1.00 | 13.50 | 16.50 |
| | Asst. Construction S Engineer- 2 | | 30 | 30 | 14.70 | 1.00 | 15.70 | 14.30 |
| 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) |

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| S.No. | Expert / Position | | Total man months Input (as per agreement) | | | n | Balance |
|-------|-------------------------------|---|--|-------|------|-------|---------|
| 25 | | 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) |
| | Hydrologist | | | 4.00 | 0.00 | 4.00 | (4.00) |
| A-3 | Support Staff | | | | | | |
| 27 | Junior Engineer-1 | | 49 | 42.00 | 1.00 | 43.00 | 6.00 |
| | Junior Engineer-2 | | 49 | 42.00 | 1.00 | 43.00 | 6.00 |
| | Junior Engineer-3 | | 24 | 9.00 | 1.00 | 10.00 | 14.00 |
| | Junior Engineer-4 | | 49 | 5.33 | 1.00 | 6.33 | 44.67 |
| | Junior Engineer-5 | | 49 | 2.70 | 1.00 | 3.70 | 45.30 |
| | CAD Operators | | 20 | 0.00 | 0.00 | 0.00 | 20.00 |
| 28 | Accountant / Office Manager | | 49 | 42.00 | 1.00 | 43.00 | 6.00 |
| 29 | Secretary / Computer Operator | | 49 | 40.25 | 1.00 | 41.25 | 7.25 |
| 30 | Driver-1 | | 49 | 34.27 | 1.00 | 35.27 | 13.73 |

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| S.No. | Expert / Position | Total man months Input (as per agreement) | | Man months Used in 2012/013/014/2015 | | | Balance |
|-------|-------------------|--|----|--------------------------------------|------|-------|---------|
| | Driver-2 | | 49 | 33.10 | 1.00 | 34.10 | 14.90 |
| 30 | Office Assistant | | 49 | 40.50 | 1.00 | 41.50 | 7.50 |

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ANNEX-6: MINUTES OF MEETING – JULY 2015

List of Minute of Meeting

1. Minutes of Meeting No 09- Safeguard Desk, 03 July 2015

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Secondary Towns Integrated Urban Environmental Improvement Project (STIUEIP) Biratnagar

Meeting of Safeguard Desk

Venue : Project Implementation Unit (PIU), Biratnagar Date : July 3, 2015 Time : 14:00-15:00

Participants:

Upendra Prasad Baral- Project Manager/ STIUEIP, Biratnagar

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

Noor Jang Thapa- Team Leader/ CDP, STIUEIP

Bala Ram Mayalu- Social Development Specialist/ DSC, STIUEIP

Discussion and Decisions

The following note summarizes major topics deliberated during the meeting and the decision reached.

| S. No. | Agenda | Discussions and Decisions |
|-----------|--|---|
| 1. | Review of social development initiatives | The 9 th meeting of Safeguard Desk/ STIUEIP Biratnagar held as a regular monthly meeting with review of overall work progress on social development initiatives of the project. |
| | | The meeting reviewed ongoing and completed small facilities infrastructure and other activities implemented under the Community Development Program (CDP), a component of STIUEIP. Team Leader/ CDP presented a brief depiction of community development program in the meeting. As per his short portray of progress status in the meeting total 7,417.36 m. roads and 13,246.32 m. drains are reported under construction through small facilities infrastructure by CDP/STIUEIP. Regarding on the household toilet, total 485 nos. such toilets has been built by May 2015. Similarly 10 hand pumps has been installed, 77 hand pump platforms built. One public toilet has been completed and five are constructing in different places. |
| 2. | GESI Training | Project Manager informed the meeting that the proposal for GESI training has been forwarded to PCO and it is on the way to ADB for review and approval. The training arrangement will be decided after the approval of this proposal by the 'authorized agency. Primarily it will be a 5 days training focusing mainly on Gender and Social inclusion Action Plan (GESIAP) comprising other project elements. About 35 participants from Biratnagar Sub Metropolitan City (BSMC) office and project staffs will be participated in the training. |

1. Wormanter)

ANNEX-7: LABORATORY TEST RESULTS OF JULY 2015

Note: Please refer to the contractor's progress report for detail and complete lab reports.

The Marshall Mix Design for Asphalt Concrete is attached herewith.

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SECONDARY TOWNS INTEGRATED URBAN ENVIRONMENT IMPROVEMENT PROJECT (STIUEIP) BIRATNAGAR, MORANG

REPORT ON ASPHALT CONCRETE WEARING COURSE ON PROVIDED AGGREGATE, MINERAL DUST FILLER & BITUMEN BY MARSHALL METHOD

LOCATION : BIRATNAGAR CITY ROADS

Reference letter No.: SBS-372

CONTRACTOR : CTCE - KALIKA

Submitted by:

VISWA CONSULT PVT. LTD.

P. O. Box 4316, Dillibazar, Kathmandu Tel: 4433156; 4433359 Fax: 977-01-4433359 Email : viswaconsultlab@gmail.com

ASHAD - 2072

Marshall Design Test Report

VISWA CONSULT Pvt. Ltd.

P.O. Box:4316, Dillibazar, Kathmandu

Tel:014433156,4433359 Email:viswaconsultlab@gmail.com

Project : Secondary Towns Integrated Urban Environment Improvement Project (STIUEIP)

Location : Biratnagar Ref. Letter No.: SBS-372

Contractor: CTCE-Kalika JV

Test Carried out for : Bituminous Wearing Course

Design Mix Design Type : Asphalt Concrete Wearing Course by Marshall Method

Asphalt Wearing Course Test Results

1. Sieve analysis test results of the provided aggregates, sand and dust filler :

| Sieve size mm | | % PASS | SING | | |
|---------------|---------------------------------|------------------------|--------------|---------------------|--|
| Sieve size mm | 20 mm down Agg size | 10 mm down Agg size | Natural Sand | Mineral Dust Filler | |
| 20 | 100.00 | 100.00 | 100.0 | 100.00 | |
| 12.5 | 12.44 | 100.00 | 100.0 | 100.00 | |
| 10 | 6.08 | 100.00 | 100.0 | 100.00 | |
| 4.75 | 0.66 | 18.29 | 96.0 | 96.46 | |
| 2 | 0.60 | 2.07 | 87.5 | 72.78 | |
| 1.18 | 0.54 | 1.79 | 69.5 | 55.68 | |
| 0.425 | 0.47 | 1.57 | 31.9 | 36.18 | |
| 0.18 | 0.35 | 1.48 | 9.9 | 27.66 | |
| 0.15 | 0.22 | 0.80 | 6.7 | 26.10 | |
| 0.075 | 0.16 | 0.30 | 4.6 | 24.52 | |
| | 0.16 ix proportions of provi | | | | |

| 20 mm aggregate | = | 30 | % |
|-------------------------------|---|----|---|
| 10 mm aggregate | = | 25 | % |
| Natural Sand (fine aggregate) | = | 15 | % |
| Mineral Dust filler | = | 30 | % |

3. Sieve analysis of the mix aggregates after provided proposed mix proportions :

| Sieve Size mm | % Passing Mix Grading of the Aggregate ,sand and dust filler: | Target Mix % Passing |
|---------------|---|-------------------------|
| 20 | 100.0 | 100 |
| 12.5 | 73.7 | 100 |
| 10 | 71.8 | 75 |
| 4.75 | 48.1 | 60 |
| 2 | 35.7 | 45 |
| 1.18 | 27.7 | 45 |
| 0.425 | 16.2 | 30 |
| 0.18 | 10.3 | 16 |
| 0.15 | 9.1 | 16 |
| 0.075 | 8.2 | 6 |

Approved By:

Page 1 of 2

VISWA CONSULT Pvt. Ltd.

P.O. Box:4316, Dillibazar, Kathmandu Tel:014433156,4433359 Email:viswaconsultlab@gmail.com

Project : Secondary Towns Integrated Urban Environment Improvement Project (STIUEIP) Location : Biratnagar Ref. Letter No.: SBS-372 Contractor: CTCE-Kalika JV Test Carried out for : Bituminous Wearing Course Asphalt Wearing Course Test Results

Design Mix Design Type : Asphalt Concrete Upper Wearing Course by Marshall Method

4. Specific Gravity Test Results of provided aggregates, dust filler and bitumen :

| a. 20 mm size aggregate = | 2.760 |
|------------------------------------|--------|
| b. 10 mm aggregate = | 2.746 |
| c. Natural Sand (Fine aggregate) ≂ | 2.662 |
| d. Mineral Dust Filler = | 2.673 |
| e. Specific gravity of bitumen = | 1.0254 |

5. Proposed Optimum Bitumen Content after Marshall Design Test results analysis :

Optimum Bitumen Content by weight of Total Agg. Mix =

6.100 %

6. A/C Mix Design Results at proposed Optimum Bitumen Content :

| a. Stability at | 6.100 | % | Bitumen Content = | 18.50 | KN |
|--------------------------------------|-------|---|-------------------|-------|-------|
| b. Flow Value at | 6.100 | % | Bitumen Content = | 2.65 | mm |
| c. Bulk Density at | 6.100 | % | Bitumen Content = | 2.390 | gm/cc |
| d. Air Voids at | 6.100 | % | Bitumen Content = | 3.200 | % |
| e. Voids in Mineral Aggregates at | 6.100 | % | Bitumen Content = | 17.3 | % |

Note: Design Results have been provided at one set proportion of the provided sample. Results have been provided of that proportion set and to approve or disapprove the design results should be carried out by the related official authority. Proportion of aggregate and grading % passing size should be as per the provided sample to meet the provided results. It is suggested to carrry out Stability ,Flow value ,Bulk Density and bitumen content in the laboratory during laying works on the loose A/C sample from the site in course of asphalt concrete works. It will provide to compare the design asphalt concrete mix with plant produced . After laying compaction check test should be carried out by core cutting after completion of works. Asphalt concrete design have been carried out on sample passing 19.0 mm size.

Tested By:

Approved By:

Checked By:

ANNEX-8: CONTRACTOR'S PROGRESS REPORT- JULY 2015

Government of Nepal Biratnagar Sub-Metropolitan City, Biratnagar, Nepal Secondary Towns Integrated Urban Environment Improvement Project (STIUEIP) Project Implementation Unit (PIU) Biratnagar, Nepal



Project Directorate (ADB)

Sewerage and Drainage Network, Wastewater Treatment Plant, and Road and Lanes Improvement Subproject STIUEIP/W/BRT/ICB-01

Monthly Progress Report – 20

July, 2015

Consultants:

SMEG

in association with

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

Submitted by:



Address: Kalika tower-6thfloor, Baluwatar, Kathmandu, Nepal. Tel: 01-4439152, 4439153, 4439154, Fax: 01-4439155. E-mail: <u>info@kalikagroup.com</u>, Site Office: Katahari Tel. 9852024596 E-mail: <u>kalikabrt@gmail.com</u>

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1 Salient Feature

Г

| A. General Features | |
|----------------------|---|
| | Government of Nepal (GoN), |
| | Ministry of Urban Development |
| Employer | Department of Urban Development and Building Construction |
| Funded By | Asian Development Bank & Government of Nepal |
| | Biratnagar Sub-Metropolitan City |
| | Secondary Towns Integrated Urban Environmental Improveme |
| Project | Project(STIUEIP) |
| Contract No. | STIUEIP/W/BRT/ICB-01 |
| Location | Biratnagar Sub-Metropolitan City |
| Consultant | SMEC-Brisbane-AQUA-BDA-CEMAT |
| Contractor | CTCE-KALIKA JV. |
| Commencement Date | December 8th, 2013 |
| Completion Date | 25 th of May 2016 |
| Contract Period | 30 month |
| Contract amount with | |
| Provisional Sum | NRs 2,119,054,525.90 |
| Add 13% VAT | NRs 272,278,000.00 |
| Grand Total Contract | |
| amount with VAT&PS | NRs 2,391,332,525.90 |

2 Introduction

This Secondary Town Integrated Urban Environmental Improvement Project (STIUEIP), Sewerage and Drainage Network, Wastewater Treatment Plant and Lanes Improvement Subproject Biratnagar is funded by Asian Development Bank and Government of Nepal. The project area is in the Morang district, Biratnagar Sub-metropolitan City which lies in the Eastern Part of Nepal.

3 Sub-Project Components

The Town Integrated Urban Environmental Improvement Project (STIUEIP) consists of following Sub-Project Components:

Sewerage and Drainage Network Subproject

A separate system of storm water drainage and sewer line will be constructed at Biratnagar under this project.

- Wastewater Treatment Plant Subproject A Waste Water Treatment Plant (WWTP) will be constructed at Jatuwa, draining the wastewater finally to Singhiya River.
- Road and Lanes Improvement Subproject Existing road sections at different part of Biratnagar will be upgraded providing proper drainage facility.

4 Scope of works

The activities to be undertaken according to the Contract Agreement are as follows:

- a. To carry out all necessary topographic surveys, soils investigations, laboratory analysis or related investigations where necessary to supplement the data provided by the Employer.
- b. To prepare working drawings for all elements of the Works.
- c. To undertake all steps necessary for upgrading of roads and bridges, all related to access to the Site, or other related matters, where his opinion differ significantly from those produced by the Employer.
- d. Preparation of stockyards for pipes, fittings and other materials and equipment.
- e. To take all steps necessary for the temporary or permanent diversion of services and the maintenance of services during the execution of the Works, including diversion of overhead with underground power lines, telephone ducts, water supply mains and

distribution lines (pipes), sewers and other underground services as required along the route of the pipelines.

- f. To supply all pipes, valves, fittings and other materials and equipment required for construction of the Works. The Contractor's supply items may include manufacture, collection, transportation and delivery to Site. The Contractor will be responsible for ensuring that all procedures are adequately covered and that the materials fully confirm to the Contract requirements. These responsibilities will include all necessary charges or dues related to insurance, freight, taxes (including customs and excise duties, surcharges etc.) and all testing and inspections for quality control.
- g. To provide all necessary staff (including civil engineers, specialists, administrators, site supervision personnel) and workmen (including all necessary specialists, operators, tradesmen, artisans etc. in addition to semi-skilled and unskilled workers)necessary for execution of the Works through to completion. Where appropriate, the contractor shall provide all suitable facilities and accommodation for the staff and workmen and he shall make provision for all costs related to such provisions and for medical, re-location, taxes or other expenses.
- h. To provide all equipment, machinery, tools etc. and related spares, maintenance and consumables necessary for implementation of the Works.
- i. To provide all site offices, stores, workshops and facilities necessary for use by the Employer, Engineer and support staff and for the Contractor himself and his supporting staff
- j. To undertake all operations necessary to complete the Works. These operations shall include: excavation, provision, haulage and installation of suitable bedding and backfill material and disposal of surplus excavated material; distribution, laying adjoining of pipes; installation of all special pipe work, valves etc. and construction of all related concrete or other activities together with all testing and disinfection of completed Works. The Contractor's attention is drawn to the restricted working space between Rajbanshi Chowk to Rani, Biratnagar where the sewer pipes, drains and road/lane is to be laid in a narrow road. In this section work in addition to that associated with the trunk main, will include but not be limited to, removal and replacement of a sewer laid in the road and reinstatement of road surface.
- k. To liaise with other contractors on the site and to ensure harmonious co-operation with them so that conflicts are avoided and areas of common interest, constructional interface or potential overlaps are addressed without cost to the Employer or delays in completion.

- To prepare documentary records of the Works in the form of "as-built" drawings and GIS data, schedules etc., and to train staff of the Employer in the procedures for laying pipes, valves and fittings.
- m. All the above activities shall be performed in a professional way and with good engineering and/or constructional practice. Upon completion of the Works the scheme shall be fully operational with minimum disruption or inconvenience to interested parties, including land owners, and there shall be no outstanding matters requiring attention.

5 Brief on procurement packages

The procurement procedures for construction material have already been started. Agreements have been made with the factories for the procurement of Brick, Cement, Steel, uPVC, HDPE pipe, machinery and equipment, electrical components, manhole covers, rubber rings etc.

s

6 Details of the project execution

- 6.1 Physical Progress (Achievement till the month)
 - a) Storm Water Drain Sub-Project (Work Progress till the date)

| | | | | | Drain Const | ruction (m |) | |
|--------------|----------------|-------------------------|------------|----------|----------------|------------|----------|---------|
| . . | | | Total | Till | | This | Plan for | 1 |
| <u>Drain</u> | Lines | Length | Length (m) | Previous | Till This | Month | Next | Remarks |
| | | | | Month | Month | Work | Month | |
| | B1L1 | 1198.98 | | 1,198.98 | 1,198,98 | - | Month | |
| | B1L2 | 1148.98 | 1 | 720.00 | 720.00 | _ | | |
| B1 | B1L2A | 465.77 | 1 | 490.00 | 490.00 | - | | |
| | B1L2B | 137.09 | 3950 | 137.00 | 137.00 | - | | |
| | B1L2C | 137.09 | 1 | | | - | | |
| | B1L2D | 490.97 | | 500.00 | 500.00 | - | | |
| | B1L2F | 371.22 | | 370.00 | 370.00 | - | | |
| | | | | | | - | | |
| | B2L1 | 1425 | | 1,063.00 | 1,063.00 | - | | |
| B2 | B2L2 | 828.03 | 3742 | 828.00 | 828.00 | - | | |
| | B2L2C | 639.22 | - | 631.00 | 631.00 | - | | |
| | B2L1B | 849.47 | | 850.00 | 850.00 | - | | - |
| | DOI 14 | 100.00 | | 100.00 | 120.00 | - | | - |
| | B3L1A | 422.96 | - | 420.96 | 420.96 | - | | |
| | B3L1B | 421.1 | - | 421.10 | 421.10 | - | | - |
| D 2 | B3L1 | 669.7 | 2514 | 603.00 | 603.00 | - | | - |
| B3 | B3L2 | 691.56 | 3514 | 498.80 | 498.80 | - | | |
| | B3L2E | 220.42 | - | 200.00 | 200.00 | - | | |
| | B3L3 | 578.74 | - | 578.00 | 578.00 | - | | |
| | B3L4 | 509.5 | | 509.50 | 509.50 | - | | |
| | | | | 1 10 00 | | - | | |
| S 9 | S9L1 | 2981.85 | 3178 | 660.00 | 660.00 | - | | |
| ~~ | S9L1D | 195.65 | | | | - | | |
| | | | | | | - | | |
| | S11L1 | 794 | - | 794.00 | 794.00 | - | | |
| S11 | S11L1A | 265.75 | 1817 | 265.75 | 265.75 | - | | |
| | S11L1B | 107.5 | | 107.50 | 107.50 | - | | |
| | S11L2 | 650 | | 650.00 | 650.00 | - | | |
| | | 1001 | | 0.51.00 | | - | | |
| | S13L2 | 1001 | | 951.00 | 951.00 | - | | |
| | S131A | 718.33 | | 768.00 | 768.00 | - | | |
| | S13L1B | 276 | - | 276.00 | 276.00 | - | | |
| S13 | S13L1C | 284 | 4555 | 284.00 | 284.00 | - | | |
| | S13L1D | 535.04 | | 535.04 | 535.04 | - | | |
| | S13L1E | 572.02 | - | 342.02 | 342.02 | - | | |
| | S13L1F | 524 | - | 723.00 | 723.00 | - | | - |
| | Hume Pip | 645 | - | 545.00 | 545.00 | - | | + |
| | CNI2L 2 | 0.40.00 | | 015.00 | 015.00 | - | | - |
| | CN2L2 | 949.23 | - | 915.00 | 915.00 | - | | + |
| CN2 | CN2L1 | 994.5 | 2273 | 325.00 | 325.00 | - | | - |
| | CN2L1A | <u>134.02</u> 195.27 | - | | | - | | - |
| | CN2L1B | 195.27 | | | | - | | - |
| | CND1 1 | 715.01 | | 715.01 | 715.01 | - | | |
| CN3 | CN3L1 CN3L2 | 715.91 | 2170 | 715.91 | 715.91 | - | | 1 |
| | CIN3L2 | 997.5 | | 475.00 | 475.00 | - | | |
| S5 | S5L1A | 364.07 | 740 | | | - | + | + |
| 55 | S5L1A S5L1B | 376 | 740 | | | - | | |
| | SJLID | 570 | | | | | | |
| | | | | 600.00 | 10 0 01 | - | | 1 |
| | L5 | 630 | 4 | 630.00 | 630.00 | - | ļ | ļ |
| | L2M | 166 |] | 141.00 | 141.00 | - | | |
| | L2J | 426 | | 290.00 | 290.00 | - | | |
| _ | L3 | 316 | 1_ | 266.00 | 266.00 | - | 1 | 1 |
| Rani | L3 L4 | 2111 | 7617 | 174.00 | 174.00 | _ | 1 | |
| | | | 1 | | | | | |
| | L4C | 381 | 4 | 381.00 | 381.00 | - | - | |
| | L4D | 381 | 4 | 345.00 | 345.00 | - | | |
| | L6 | 970 | | 349.00 | 349.00 | - | | |
| | | | | | | | | |
| | R2 | 4700 | 4700 | 3,630.00 | 3,630.00 | - | İ | |
| Road Side | R5 | 740 | 740 | 700.00 | 700.00 | - | 1 | |
| Drains | | | | | | | | + |
| | R64 | 121 | 121 | 121.00 | 121.00 | - | | |
| | | | | | | | | |
| | | | | | 25,557.56 | | | |

b) Sewerage Sub-Project (Work Progress till the date)

| | b) Sewerage Sub-Project (Work Progress till the date) | | | | | | | | | | | |
|------------|---|----------------|------------|----------|-----------|-------|------------|------------|-------|----------|--------|------------|
| | | | | | | | er Constru | uction (m) | | , | | |
| Sewer | Lines | Length | Total | Till | Till This | This | Plan for | Total | Sewer | House | uPVC | Remarks |
| Line | Lines | Lengen | Length (m) | | Month | Month | Next | Manholes | Inlet | Connecti | Pipe | ite mur R5 |
| | | | | Month | | Work | Month | mainotes | Inter | ons | Tipe | |
| | | hume pipe | 1729 | 1,815.00 | 1,815.00 | - | 600.00 | 22 | | | | |
| T2 Trunk | | <u> </u> | 518 | 518.00 | 518.00 | - | | 15 | | | | |
| T3 Trunk | | | 1472 | 1,290.00 | 1,290.00 | - | 400.00 | 30 | | | | |
| T3 Trunk | | | 1141 | 187.00 | 187.00 | - | 600.00 | | | | | |
| | | a Hume Pip | | 300.00 | 300.00 | - | 100.00 | 10 | | | | |
| Line T2L | 19 500 dia | a Hume Pip | 45 | 45.00 | 45.00 | - | | 1 | | | | |
| | | | | | | | | | | | | |
| Total leng | th of Hun | <u>ne Pipe</u> | | | 4,155.00 | - | | | | | | |
| | | | | | | | | | | | | |
| T2 Sec | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | 18L | | | 74.70 | 74.70 | - | | 2 | | | | |
| | 18P | | | 139.60 | 139.60 | - | | 5 | | | | |
| | 18Q | | | 195.40 | 195.40 | - | | 7 | | | | |
| | 18R | | | 357.30 | 357.30 | - | | 12 | | | | |
| | 18V | | | 54.80 | 54.80 | - | | 2 | | | | |
| | 18Y | | | 170.80 | 170.80 | - | | 6 | | | | |
| | 18Z | | | 46.60 | 46.60 | - | | 2 | | | | |
| | 19b | | | 272.30 | 272.30 | - | | 9 | | | | |
| | 19c | | | 276.30 | 276.30 | - | | 9 | | | | |
| | 19e | | | 160.50 | 160.50 | - | | 5 | | | | |
| | 19f | | | 204.10 | 204.10 | - | | 7 | 14.00 | | | |
| | 19g | | | 67.80 | 67.80 | - | | 2 | 4.00 | | | |
| | 19h | | | 181.40 | 181.40 | - | | 6 | 12.00 | | | |
| | 19j | | | 355.00 | 355.00 | - | | 12 | 24.00 | 12.00 | | |
| | 19k | | | 172.50 | 172.50 | - | | 6 | | | | |
| | 191 | | | 210.30 | 210.30 | - | | 7 | | | | |
| | 19ma | | | 179.40 | 179.40 | - | | 6 | | | | |
| | 19mb | | | 232.35 | 232.35 | - | | 8 | | | | |
| | 19n | | 17167 | 162.50 | 162.50 | - | | 5 | | | | |
| | 190 | | | 114.70 | 114.70 | - | | 4 | | | | |
| | 19p | | | 140.90 | 140.90 | - | | 5 | | | | |
| | 19q | | | 234.20 | 234.20 | - | | 8 | | | | |
| | 19r | | | 264.20 | 264.20 | - | | 9 | | | | |
| | 19s | | | 271.00 | 271.00 | - | | 9 | | | | |
| | 19t | | | 179.50 | 179.50 | - | | 6 | | 18.00 | 145.00 | |
| | 19u | | | 61.80 | 61.80 | - | | 2 | | | | |
| | 19R | | | 110.70 | 110.70 | - | | 4 | | | | |
| | 19T | | | 137.60 | 137.60 | - | | 5 | | | | |
| | 19U | | | 61.80 | 61.80 | - | | 2 | | | | |
| | 19V | | | 208.30 | 208.30 | - | | 7 | | | | |
| | 19W | | | 50.80 | 50.80 | - | | 2 | | | | |
| | 19X | | | 49.80 | 49.80 | - | | 2 | | | | |
| | 19Y | | | 86.70 | 86.70 | - | | 3 | | | | |
| | 19Z | | | 66.80 | 66.80 | - | | 2 | | | | |
| | 22 | | | 260.10 | 260.10 | - | | 9 | | | | |
| | 23 | | | 217.00 | 217.00 | - | | 7 | 6.00 | | | |
| | 24A | | | 260.70 | 260.70 | - | | 13 | 20.00 | 4.00 | | |
| | | | | | | - | | - | | | | |

| | | | | | | Sew | er Constru | uction (m) | - | | | |
|-----------------------------|-----------|---------|---------------------|---------------------------|--------------------|-----------------------|---------------------------|-------------------|----------------|--------------------------|--------------|---------|
| <u>Sewer</u> <u>Line</u> | Lines | Length | Total Length (m) | Till Previous Month | Till This Month | This Month Work | Plan for Next Month | Total Manholes | Sewer Inlet | House Connecti ons | uPVC Pipe | Remarks |
| T3 Sec | | | | | | - | | - | | | | |
| | | | | | | | | | | | | |
| | 13F | | | 123.60 | 123.60 | - | | 4 | | | | |
| | 25B | | | 201.40 | 201.40 | - | | 7 | | | | |
| | 25C | |] | 139.60 | 139.60 | - | | 5 | 9.00 | | | |
| | 26 | | | 126.50 | 126.50 | - | | 4 | | | | |
| | 26A | | | 65.80 | 65.80 | - | | 2 | | | | |
| | 26B | | | 71.80 | 71.80 | - | | 2 | | | | |
| | 26C | | | 334.10 | 334.10 | - | | 11 | | | | |
| | 26D | | | 50.80 | 50.80 | - | | 2 | | | | |
| | 26E | | | 358.80 | 358.80 | - | | 12 | | | | |
| | 26F | | | 108.60 | 108.60 | - | | 4 | | | | |
| | 26G | | | 70.80 | 70.80 | - | | 2 | | | | |
| | 26H | | | 55.60 | 55.60 | - | | 2 | | | | |
| | 27 | | 22664 | 281.00 | 281.00 | - | | 9 | | | | |
| | 28 | | | 247.10 | 247.10 | - | | 8 | | | | |
| | 29 | | | 73.80 | 73.80 | - | | 2 | | | | |
| | 30 | | | 245.10 | 245.10 | - | | 8 | | | | |
| | 31 | | | 174.40 | 174.40 | - | | 6 | | | | |
| | 31A | | | 171.50 | 171.50 | - | | 6 | | | | |
| | 32 | | | 219.20 | 219.20 | - | | 7 | | | | |
| | 33 | | | 391.80 | 391.80 | - | | 13 | 25.00 | 35.00 | | |
| | 33A | | | 121.20 | 121.20 | - | | 4 | | | | |
| | 33B | | 1 | 161.00 | 161.00 | - | | 5 | | | | |
| | 34 | | 1 | 312.70 | 312.70 | - | | 10 | 14.00 | 12.00 | | |
| | 35 | | 1 | 223.30 | 223.30 | - | | 7 | 14.00 | 15.00 | | |
| | 36 | | 1 | 160.50 | 160.50 | - | | 5 | | | | |
| | 37 | | 1 | 204.30 | 204.30 | - | | 7 | | | | |
| | | | 1 | | | - | | | | | | |
| Total Len | gth of HE | PE Pipe | | | 10,985 | - | | 371 | 152 | 96 | 145 | |

| S.N. | Description of Work | This | Total | Program for Next | Remarks |
|------|----------------------------|--------|------------------|-------------------------|---------|
| | | month | Length/Nos | Month | |
| 1 | Excavation of Ponds- | 0 | 3 nos | | |
| | Anaerobic | | | | |
| 2 | Excavation of Ponds- | 0 | 2 nos | | |
| | Facultative | | | | |
| 3 | River Training Works | 0 | 515m | | |
| 4 | Boundary wall construction | 0 | 580 m | | |
| 5 | Office cum lab building, | All co | mplete except | | |
| | WWTP, Jatuwa | finis | shing works | | |
| 5 | Workshop Building & | All | complete except | | |
| | Generator/Changing | fi | nishing works | | |
| | Building, WWTP, Jatuwa | | | | |
| 6 | Sump Well | Par | tially excavated | | |

c) Wastewater Treatment Plant Sub-Project (Work Progress till the date)

d) Production of Precast Items from Slab Casting Yard, Katahari

| S.N. | Description | Unit | Till Previou s Month | Till This Month | This Month Work | Remarks |
|------|-------------|------|----------------------------|--------------------|-----------------------|---------|
| 1 | Slabs | Nos | 48417 | 53500 | 5083 | |
| 2 | Precuts | Nos. | 4107 | 4475 | 368 | |
| 3 | Kerb Stone | Nos. | 5812 | 5812 | 0 | |

e) Production of Precast Chambers at Yard Katahari

| | | | | Quantity | | |
|------|------------------|------|---------------------------|--------------------|-----------------------|---------|
| S.N. | Description | Unit | Till Previous Month | Till This Month | This Month Work | Remarks |
| 1 | Manhole | Set | 700 | 810 | 110 | |
| 2 | Sewer Inlet | Set | 922 | 947 | 25 | |
| 3 | House Connection | Set | 963 | 1108 | 145 | |

| S.N. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
|-------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|--------|
| Diameter | 200mm | 300mm | 350mm | 400mm | 450mm | 500mm | 600mm | 700mm | 900mm | 1000mm | 1600mm |
| Diameter | Ø | Ø | Ø | Ø | Ø | Ø | Ø | Ø | Ø | Ø | Ø |
| No of Moulds | 38 | 3 | 2 | 2 | 2 | 3 | 8 | 8 | 2 | 4 | 2 |
| Previous Month | 1562 | 203 | 249 | 276 | 201 | 323 | 940 | 1192 | 263 | 612 | 271 |
| Production | 1502 | 205 | 247 | 270 | 201 | 525 | 740 | 1172 | 203 | 012 | 271 |
| This Month | 0 | 104 | 27 | 52 | 52 | 78 | 108 | 128 | 0 | 12 | 0 |
| Production | 0 | 104 | 21 | 52 | 52 | 70 | 100 | 120 | 0 | 12 | 0 |
| Total Production | 1562 | 307 | 276 | 328 | 253 | 401 | 1048 | 1320 | 263 | 624 | 271 |

f) Hume Pipe Production from Hume Pipe Production Factory, Itahari

6.2 Financial Progress and Cash Flow

Detail of payment:

| Installment Number | Net Payble Amount (NRs.) | Remarks |
|--------------------|--------------------------|------------------------|
| IPC 01 | 209,400,000.00 | |
| IPC 02 | 27,853,500.98 | IPC 2 |
| IPC 03 | 47,507,270.95 | IPC 3 |
| IPC 04 | 42,241,392.52 | IPC 04 |
| IPC 05 | 22,035,291.99 | IPC 05 |
| IPC 06 | 85,573,541.38 | IPC 06 |
| IPC 07 | 76,203,672.17 | IPC 07 |
| IPC 08 | 115,297,549.23 | IPC 08 |
| IPC 09 | 109,414,317.97 | IPC 09 |
| IPC 10 | 124,715,663.77 | IPC 10 |
| IPC 11 | 160,430,981.96 | IPC 11 |
| Total= | 811,273,182.92 | Ex. Advance Payment 01 |

7 Details of Safeguard activities

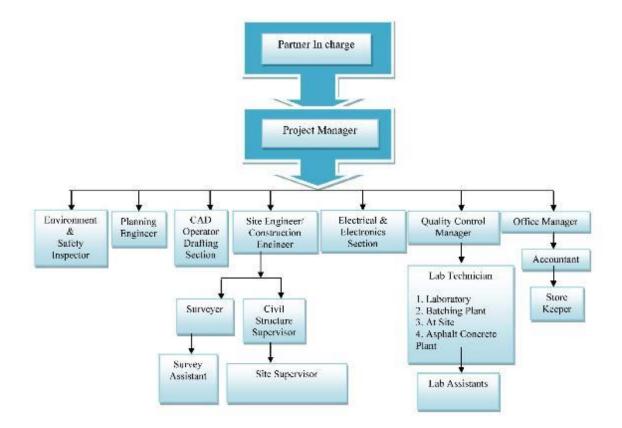
Till the date no such issues have been faced relating to the Social, Environmental and Resettlement matter.

8 Key Issues and Remarks

Following issues were raised and solved as per instruction of Engineer:

- ▶ Works at site has been stopped due to monsoon season from 25 June 2015.
- > Precast units casting (slabs, precast chambers and precuts) at yard is undertaking.

9 Work Plan Professional input



| S.N. | Designation | No. | Remarks |
|------|--|-----|---------|
| 1 | Project/ Contract Manager | 1 | |
| 2 | Planning/ Construction Engineer | 1 | |
| 3 | Construction Engineer | 1 | |
| 4 | Site Engineers | 5 | |
| 5 | Quality Control Manager | 1 | |
| 6 | Office/ Bill Engineer | 1 | |
| 7 | Junior Engineer | 10 | |
| 8 | Sub-Overseer | 6 | |
| 9 | Senior Site Supervisor/Safety Manager | 1 | |
| 10 | Accountant/ Office Manager | 1 | |
| 11 | Lab Assistant | 3 | |
| 12 | Site Supervisor | 5 | |
| 13 | Store Keeper | 4 | |

| 14 | Light Drivers | 6 | |
|----|-------------------------|----|----------|
| 15 | Machine Operator | 14 | |
| 16 | Other Supporting Staffs | 18 | |
| 17 | Skilled Labors | 25 | 20m/ 5f |
| 18 | Unskilled Labors | 80 | 68m/ 12f |

Laborers at site work

The detail of laborers is listed in table below.

Details of Labor

| S.N. | Labour Type | N | umbers | Remarks |
|-------|--------------------|--------------|--------|---------|
| | | Skilled Lab | or | |
| 1. | Mason/carpenter | | 2 | |
| 2. | Plumber | | 2 | |
| 3. | Electrician | | 1 | |
| 4. | Bar Bender | | 2 | |
| 5. | Wielder | 2 | | |
| 6. | Scaffold | | 1 | |
| 7. | Drivers | | 10 | |
| | | Unskilled La | lbor | |
| | Labor | Male | Female | |
| 1. | Labors (Skilled) | 5 | 2 | 7 |
| 2. | Labors (Unskilled) | 20 | 5 | 25 |
| Total | | 25 | 7 | |

| S.N. | Name | Designation | Attendance Days |
|------|------------------------|---------------------------------------|-----------------|
| 1 | Ujjwal Prasai | Project Manager | 25 |
| 2 | Santosh Pudasaini | Planning/ Construction Engineer | 10 |
| 3 | Mahesh Subedi | Construction Engineer | 25 |
| 4 | Umesh Kumar Dangol | Site Engineer | 18 |
| 5 | Uddhav Bhatta | Site Engineer | 12 |
| 6 | Roshan Prasad Gupta | Site Engineer | 20 |
| 7 | Surya Kadel | Office Engineer | 12 |
| 8 | Niraj Raut | Site Engineer | 20 |
| 9 | Sujeet Dahal | Office/ Bill Engineer | 20 |
| 10 | Sunil Chaudhary | Quality Control Manager | 25 |
| 11 | Vishwo Bandhu Mainali | Accountant/ Office Manager | 25 |
| 12 | Krishna Adhikari | Jr. Accountant | 25 |
| 13 | Narayan Rijal | Senior Site Supervisor/Safety Manager | 15 |
| 14 | Sagar Shrestha | Junior Engineer | 25 |
| 15 | Dipesh Kumar Chaudhary | Junior Engineer | 10 |
| 16 | Suraj Chaudhary | Junior Engineer | 10 |
| 17 | Suman Tamang | Junior Engineer | 10 |
| 18 | Sujan Singh Thakuri | Junior Engineer | 10 |
| 19 | Bipin Rai | Junior Engineer | 10 |
| 20 | Saroj Shrestha | Junior Engineer | 12 |
| 21 | Suman Shrestha | Junior Engineer | 10 |
| 22 | Bishal Shrestha | Junior Engineer | 15 |
| 23 | Sanjay Shrestha | Junior Engineer | 20 |
| 24 | Sabita Thapa | Sub-Overseer | 8 |
| 25 | Angira Rai | Sub-Overseer | 10 |
| 26 | Rojina LG | Sub-Overseer | 8 |
| 27 | Gaurab Subba | Sub-Overseer | 12 |
| 28 | Prakash Bhattrai | Sub-Overseer | 12 |
| 29 | Pradip Rai | Sub-Overseer | 20 |
| 30 | Ajaya Rai | Site Supervisor | 6 |
| 31 | Uttar Karki | Site Supervisor | 15 |
| 32 | Ishowr Adhikari | Site Supervisor | 25 |

| 33 | Santosh Mukhiya | Site Supervisor | 12 |
|----|--------------------|-----------------------|----|
| 34 | Anil Pokhrel | Site Supervisor | 25 |
| 35 | Prasasan Rajbansi | Site Supervisor | 25 |
| 36 | Tanka Pokhrel | Store Manager | 25 |
| 37 | Manoj Pandit | Store Assistant | 25 |
| 38 | Nirnaya Upreti | Store Assistant | 25 |
| 39 | Gopi Yadav | Store Assistant | 25 |
| 40 | Dipesh Dahal | Lab Assistant | 25 |
| 41 | Ramesh Koirala | Lab Assistant | 25 |
| 42 | Mahakanta Risidev | Lab Assistant | 25 |
| 43 | Sandeep Pyakurel | Light Driver (7621) | 24 |
| 44 | Gurucharan Yadhav | Light Driver (1082) | 14 |
| 45 | Kiran Manandhar | Light Driver (1086) | 25 |
| 46 | Satya Dhimal | Light Driver | 25 |
| 47 | Dip Budathoki | Light Driver | 25 |
| 48 | Mangal Kisku | JCB Operator | 25 |
| 49 | Surya Bdr. Malla | Loader Operator | 17 |
| 50 | Rupana Chaudhary | TM Driver | 25 |
| 51 | Bhabesh Rai | Batching Operator | 20 |
| 52 | Chandan Roy | Pc-200 Operator | 25 |
| 53 | Jeet Bdr Gurung | Teller (4423) Driver | 25 |
| 54 | Ananda Rajbansi | Electrician | 25 |
| 55 | Kamal Yadhav | Electrician | 25 |
| 56 | Pappu Yadav | Mechanic | 25 |
| 57 | Mukesh Mandal | Mechanic | 25 |
| 58 | Bhanu Bhakta Kafle | Plumber | 22 |
| 59 | Ganga Ram Dhital | Plumber | 25 |
| 60 | Niroj K. Puri | TM Driver(7561) | 20 |
| 61 | Dhan Kaji Gurung | TM Helper | 25 |
| 62 | Indra RajBansi | Tractor Driver (6204) | 25 |
| 63 | Kartik Thrau | Tractor Driver (8304) | 25 |
| 64 | Tilak Ghalan | Transit mixer Driver | 25 |
| 65 | Nakkul Paddhar | Tanker Driver | 25 |

| 66 | Udit Narayan | Tanker Driver | 25 |
|----|-----------------|----------------|----|
| 67 | Basudev Yadav | Tractor Driver | 25 |
| 68 | Sudeep Rajbansi | JCB Helper | 25 |
| 69 | Manita Shrestha | Kitchen Helper | 25 |
| 70 | Kalpana Tamang | Kitchen Helper | 25 |
| 71 | Sita Thapa | Kitchen Helper | 25 |
| 72 | Pabitra Rai | Kitchen Helper | 25 |

Details of Equipment

| | | | | | Working St | atus |
|------|---------------------------|-----------------|-------------------|-------------------------|------------|----------------------|
| S.N. | Particular | Model/Type | Capacity | No of used Equipment | Status | Remarks |
| A | Vehicle and Equipment | | | | | |
| A.1 | Excavators | | | | | |
| | Komatsu Long Boom PC200 | PC200 | | 1 | Good | Under maintenance |
| | Komatsu Excavator PC200 | PC200 | | 2 | Good | Under maintenance |
| | Komatsu Excavator PC120 | PC 120 | | 1 | Good | |
| | Kobelko Excavator 75 | Kobelko 75 | | 1 | Good | Under maintenance |
| | Cat Excavator 320 | Caterpillar | | 1 | Good | |
| A.2 | JCB | | | | | |
| | JCB Hydra | JCB | | 1 | Good | |
| | JCB Loader | JCB | | 1 | Good | |
| | JCB Backhoe | JCB | | 6 | Good | |
| A.3 | Grader | | | | | |
| | Komatsu Grader GD405 | Komatsu | | 1 | Good | |
| A.4 | Crane/Teller | | | | | |
| | Crane with Teller | | | 1 | Good | |
| | Teller | | | 2 | Good | |
| A.5 | Water Tanker | | | | | |
| | Water Tanker | | 12000 Lt. | 1 | Good | |
| A.6 | Tractors/Tipper | | | | | |
| | Tractors | Indian | 3 m ³ | 9 | Good | |
| | Tipper | | 15 m ³ | 17 | Good | |
| A.7 | Service Vehicle | | | | Good | |
| | Jeep | Pajero | 5 door | 2 | Good | |
| | Jeep | Landcrusher | 5 door | 1 | Good | |
| | | Indian/Tata | | | | |
| | Jeep | Sumo | 5 door | 1 | Good | |
| | Jeep | Indian/Bolero | 5 door | 1 | Good | |
| | Pickup | Indian/Mahindra | 4 door | 1 | Good | |
| | Motorbike | 125CC | | 10 | Good | |
| A.8 | Other Equipment and Tools | | | | | |
| | Kerb Stone Machine Set | | | 1 | Not Used | |
| | Generator | Jackson | 125KVA | 1 | Good | |
| | Generator | Kirloskar | 25KVA | 1 | Good | |
| | Generator | Kirloskar | 15KVA | 1 | Good | |
| | Generator | Honda | 5KVA | 1 | Good | |

| 1 | Welding Machine | Oswal,India | 650amp | 1 | Good | |
|---|--------------------------------|------------------|------------------|----|----------|--|
| | Welding Machine | | 350amp | 1 | Good | |
| | Welding Machine | | 250amp | 1 | Good | |
| | Diesel tank with Pump | | 60000 Ltr. | 1 | Good | |
| | Stand Drill Machine | India | 1 HP | 1 | Good | |
| | Gas Cutter Set | | | 1 | Good | |
| | Pipe Cutter | | | 1 | Good | |
| | Hand Grinder | | | 1 | Good | |
| | Plate Compactor | | | 2 | Good | |
| | Monkey Jumper | | | 1 | Good | |
| В | Concreting Unit | | | | | |
| | Batching Plant CONMAT all Set | CONMAT, India | 45 m3/ hr | 1 | Good | |
| | Electric Vibrator with Needle | | | 10 | Good | |
| | Bar Bending Machine | | 4 ton/hr | 3 | Good | |
| | Bar Cutter Machine | | 4 ton/hr | 3 | Good | |
| | Isuzu Transit Mixture | | 5 m ³ | 1 | Good | |
| | Concrete Mixture Hydraulic | | | 2 | Good | |
| | Manual Mixture Machine | | | 6 | Good | |
| С | Asphalt Concrete Production | | | | | |
| | Asphalt Concrete Plant | | 50 ton/ hr | 1 | Not Used | |
| | Asphalt Paver Machine | | | 1 | Not Used | |

10 Conclusion

Monsoon has started and most of the sites are closed till outlets. Backfilling has completed and roads are opened for public. All the civil works has been stopped for the monsoon will continue after the monsoon.

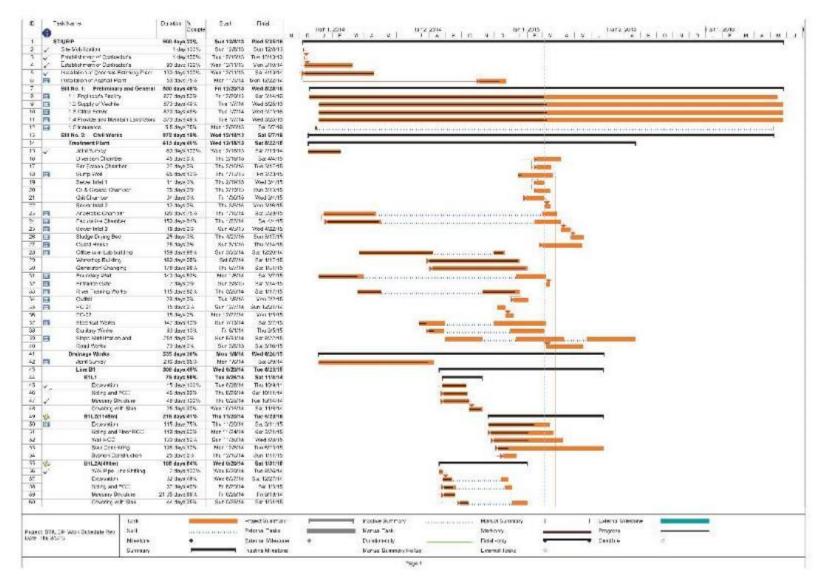
Right of way marking is undertaking throughout the month. It shall continue coming months too.

ANNEX

| Cor | ntract Amt | 2,119,054,525.90 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------|---|---------------------|--------------------|--------------------|-------|-------|-------|-------|----------------|-----------------|--------|-------------------|--------|-------|--------|-----------------|-----------------|----------------|------------------|----------------|--------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|--------|----------------|-----------------|--------------------|------------------------------|-----------------------|------------|
| lte m | Descripti | Amount | Relative Weight | Year | 2013 | | | | | | Year | 2014 | | | | | | | 1 | | | | Year | 2015 | | | | | | | Ye | ear 20 | 16 | |
| No. | on | (NRs) | in % | Month | Dec | Jan | Feb | Mar | Apr | May | Jun | July | Aug | Sep | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May |
| 1 | P reliminary and General Works | 16,850,000.00 | 0.795 | Program | 0.000 | 0.326 | 0.012 | 0.012 | 0.012 | 0.012 | 0.012 | 0.012 | 0.012 | 0.012 | 0.012 | 0.012 | 0.013 | 0.013 | 0.013 | 0.013 | 0.013 | 0.013 | 0.013 | 0.013 | | -0.013 | | | | 0.013 | | 0.013 | 0.013 | |
| \vdash | | | | Achieve Program | 0.000 | 0.326 | 0.012 | 0.012 | 0.012 | 0.012 | 0.012 | 0.012 | 0.012 | 0.012 | 0.012 | 0.012 3.293 | 0.012 4.549 | 0.012 5.859 | 0.012 | 0.012 7.454 | 0.000 | 0.000 6.078 | 0,000 5.050 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 6.433 | 0.000 9.047 | 8,646 | 0.000 6.788 | 0.000 | 0.000 |
| 2 | Civil Works | 1,972,492,008.90 | 93.08 | Achieve | 0.000 | 0.005 | 0.508 | 0.369 | 0.295 | 1.811 | 1.509 | 0.100 | 0.384 | 0.408 | 0.150 | 3.293 | 1.136 | 1.787 | 3.661 | 15.281 | | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | | 0.000 | 0.000 | 0.000 | | 0.000 | 0.000 |
| | Electro- | | | Program | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.365 | 0.438 | 0.088 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 3 | mechanical Works | 18,884,000.00 | 0.89 | Achieve | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.088v | ised _o Bro | er.am-1 |
| 4 | Provisional Items and | 63,741517.00 | 3.01 | Program | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.196 | 0.196 | 0.196 | 0.196 | 0.196 | 0.196 | 0.196 | 0.196) | 0.065 | 0.065 | 0.065 | 0.196 | 0.196 | 0.196 | 0.197 | | 0.197 ieveme | |
| | Provisional Sum | | | Achieve | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.068 | 0.068 | 0.000 | 0.000 | 9.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.0 00) | (0. 0 00 v | ised@rc | ള്ന്മറ്റെ2 |
| 5 | Operation & Maintenanc e Equipment and | 34,450,000.00 | 1.63 | Program | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | Į., | | 0.000 | 9.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| | Machinaries | | | Achieve | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | · · · · · | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 6 | Laboratary Equipment | 6,000,000.00 | 0.28 | Program | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 6.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.109 |
| | Operatio n and | | | Program | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.600 | 0.000 | 0.000 | 9.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.283 |
| 7 | Maintenanc e | 6,000,000.00 | 0.28 | Achieve | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | .000 ⁻ | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 8 | Dayworks | 637,000.00 | 0.03 | Program | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.002 | 0.002 | 0.002 | 0.002 | 0.002 | 0.002 | 0.002 | 0.002 | 0.002 | 0.002 | 0.002 | 0.002 | 0.002 | 0.002 | 0.002 | 0.002 | 0.002 | 0.002 |
| _ | | | | Achieve | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| | Total | 2,119,054,525.90 | 100.00 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Driginal rogram | | age | | 0.347 | 0.074 | 3.181 | 6.282 | 7.931 | 3.017 | 2.219 | 1.212 | 0.476 | 2.710 | 3.643 | 3.662 | 3.700 | 4.435 | 4.401 | 4.460 | 4.456 | 4.401 | 3.802 | 1.168 | 3.018 | 3.658 | 4.413 | 3.645 | 3.597 | 4.707 | 4.728 | 3.150 | 2.891 | 0.616 |
| | _ | Cumulative | %age | | 0.347 | 0.421 | 3.601 | 9.884 | 17.814 | | 23.050 | | 24.738 | | 31.091 | 34.754 | | | 47.290 | | | | 64.409 | | 68.595 | 72.253 | | | 83.907 | | 93.342 | | | 100.00 |
| | ogram-1 | % age Cumulative | | | 0.005 | 0.550 | 0.559 | 0.521 | 2.288 3.924 | 6.606 10.530 | 4.806 | 1.003 | 0.183 | 0.576 | 1.416 | 8.074 26.587 | 9.810 36.397 | 9.883 | 10.666 56.946 | | | 9.865 86.593 | 7.445 94.037 | 2.284 96.321 | 0.247 96.567 | 0.159 96.726 | 0.145 96.871 | | 0.145 | 0.145 97.306 | 0.079 97.386 | 0.601 | 1.227 99.213 | 0.787 |
| \vdash | | % age | age | | 0.003 | 0.333 | | 0.381 | 0.307 | 1.823 | 1.521 | 0.113 | 0.397 | 0.421 | 0.162 | 3.305 | 4.760 | 6.070 | 8.630 | 8.478 | 7.724 | 6.654 | 5.699 | 2.040 | 1.581 | 0.079 | 0.079 | - | 6.643 | 97.300 | 8.857 | 7.000 | 3.002 | 0.577 |
| | Revised ogram-2 | Cumulative | - | | 0.000 | 0.331 | | 1.232 | 1.540 | 3.363 | 4.883 | 4.996 | 5.393 | 5.813 | 5.975 | 9.281 | | | | | | | | | | | | 64.650 | | | | 96.407 | | |
| Ac | hieveme | | age | | 0.000 | 0.331 | 0.520 | 0.381 | 0.307 | 1.823 | 1.521 | 0.113 | 0.397 | 0.421 | 0.162 | 3.305 | 1.148 | 3.139 | 3.742 | 4.560 | 3.200 | 2.600 | 4.540 | 0.350 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| | nt | Cumulative | %age | | 0.000 | 0.331 | 0.851 | 1.232 | 1.540 | 3.363 | 4.883 | 4.996 | 5.393 | 5.813 | 5.975 | 9.281 | 10.429 | 13.568 | 17.310 | 21.870 | 25.070 | 27.670 | 32.210 | 32.560 | 32.560 | 32.560 | 32.560 | 32.560 | 32.560 | 32.560 | 32.560 | 32.560 | 32.560 | 32.560 |

July 2015

Work Schedule and Progress



| ° . | Task Harre | | Durator S Comple | Start | Frish | |
|--------|---------------------------|--------------|------------------------------|-----------------------------|----------------------------|---|
| | 91L28(114m) | 69/15 | 21 days 0% | Sen 12/23/14 | S# 1/24/16 | VIALETTO TELEVAL AND UNITED FIRMATE AND ALCOLOGICAL FIRMARK |
| | Vidis IP pe L | ine Smong | 4 00/01/9 | Sun 12/23/14 | 1:00.12/5/14 | T Contraction of the second |
| | Scavelor | | 14 days 8 4. | TTU 127/15 | 0921/14/15 | 1 · · · · · · · · · · · · · · · · · · · |
| | Soing arc | | 10 days 05. | diat \$75215 | | |
| | Hasonry S | | 18 days 0 % | Sat 1/5/16 | | 100 |
| | Covering x | | -1 days 0 % | Web 1/21/16 | | 1 |
| 25 | | | 26 days 0% | The 12010 | | |
| | | ine Shifting | -1 days 0 % | Tho 12/46 | | |
| | Excavation | | 14 days 0% | Mon 1/5/16 West 1/7/16 | | · · · · · · · · · · · · · · · · · · · |
| | Soling a re National S | | 16 deys 0% 16 deys 0% | Ved 1/7/15 | | |
| | Covering a | | d days 1% | | West 1/20/15 | |
| 45 | B1L2D 454ml | | 50 days 0% | Non 1/5/15 | | the second se |
| - | "xawalan | | 33 days if % | Man 19/15 | | <u> </u> |
| | Soling and | | 37 days 0% | Ved 1/7/15 | | |
| | Washing S | | 41 days 1% | West 177/15 | | |
| | Covering x | | 5 00/0119 | Bon 2718/15 | | |
| 14 | | | 77 daye 68% | Sun 11/16/14 | | |
| | | | 30 days 90%. | | Vion 122 5/14 | |
| | siging are | PCG | 32 00/980% | 100 117:3/14 | | |
| | Waterity S | | 34 days 30%. | Tue 11/18/14 | | A CONTRACT OF A |
| | Covering a | | 1d days 70%. | Cn (252)2 | | 1 |
| | | ang Kanchen | 29 days dik. | Bun 14/16 | | |
| 1 | Line 82 | | 418 daye 44% | Tue 2/25/14 | | |
| 4 | | | 330 days 94% | Tue 3/25/14 | | |
| 3 | | | 60 days 70% | Tup 2/25/14 | | |
| - | Boling and | | 78 days 65% | The 2/27/17 Ten 2/014 | | |
| Η., | Vesatry 5 Contring a | | 75 days 35% 46 days 32% | Wod 423/14 | | The second |
| | | ON S NO | 142 days 12% | Tuo 11/25/14 | | |
| 2 | | | 95 days 20% | Tue 11/25/14 | | |
| 1 | Soling and | | 05 days 20% | Thu 11/27/14 | | |
| 1 | Visi RCC | risk nee | 07 days 14% | Thu 11/27/14 | | |
| | Sleb Cone | cina | *40 days 8% | Thu 11/27/14 | | |
| 10 | | | all days 35% | Tue 2/25/14 | | |
| | | | d5 days 95%. | Tue 2/25/14 | | |
| 7 | Soling are | PCC | Se days 95%. | The 2/27/14 | 39est 4/25/14 | |
| 5 | Withority B | | 55 daya 15%. | TBu 2/27/14 | | |
| | Covering a | | 35 days 95%. | The 4/24/14 | | |
| U 📢 | | | 64 days 32% | Burt 11/18/14 | | |
| 1 | | | 35 days 40%. | Sun 11/15/14 | | |
| 2 | Soling and | | 38 days 35%. | Tua 11/18/14 | | |
| 8 | Vasonty S | | d3 deys 32%. | Tue 11/10/12 | | |
| - | Covering x Line 83 | 010 000 | -1 days (13) | Sun 12/28/1/ Wed 2/12/14 | | |
| | | | 408 days 55%. 45 days 25% | Wed 2/12/14 Wed 2/12/14 | | |
| 7 | | | 25 days 100% | Wot 31214 | | |
| 6 2 | | | 93 days 100% | Bun 21614 | | |
| 5 0 | Vexonry B | | 45 days 100% | Sun 2/16/14 | | |
| 1 | Covering a | | 16 days 05% | Wod 4/2/14 | | |
| 14 | | | 45 days 85% | Wed 2'12/14 | | |
| 12 | Exception | | 25 days 100% | West 2/12/14 | | |
| 10 | Soling uns | | 33 days 100% | Sun 2/16/14 | The 3/20/14 | |
| 2 | Yosany S | | 45 days 100% | Sun 21-6/14 | | |
| | Cteting + | | ~9 days 95%. | West 20/14 | | |
| 5. 19 | | | 368 days 20% | Thu 3/23/14 | | |
| 1 | | | 50 days 99%. | The SOUR | | |
| | Soling and | | 98 days 99%. | Man 3/24/14 | | |
| | Waterity 6 | | 55 days 95%. | Mon 3/34/14 | | Provide the second se |
| | Covering x | th Slab | 26 days/90% | Bat o/S/14 | B# (/*0/15 | Man ar ar ar an ar |
| | | Tizžk | - | | Project Summiny | I tradine Summery |
| 0.8 | UEIP Work Baltedale Revi | Split | 1000000 | | Extornal Tasks | Manual Taux Station Progres |
| | 362.2 | Measure | | | Esternal Milestone | Durationony Tinahanty Deedine 3 |
| 12 | | | | | and a second second second | T T ATTAIN |
| 10 TAU | | Summary | _ | | nacility Westing | Manual Summary Rouse Edema Tasks |

| ° 0 | Task Harre | | Durator 15 Comple | Silari | Tenah | Heri 2014 HAT 2 574 HAT 2015 HAT 2015 HAT 2019 HAT 2019 |
|--------------|--------------------------|----------------------|----------------------|---------------|------------------------|--|
| 21 | Culle | | 10 days 0% | Sun Md/HS | 2 3/wed 1/21/16 | |
| 2 44 | B3L3(675m) | | 106 days 75%. | Bel 11/16/14 | Bat 2/20/16 | |
| 3 | Excervation | | 32 days 95%. | Sat 11/15/14 | Wad 2M/16 | |
| 20 | Going and I | icor MCC2 | Hb days H0% | thu 1052.018 | the 2404/to | and the second se |
| 5 | Ke R00 | | 87 days 80% | 11/25/14 | -# 2/23/16 | Provide and a second seco |
| 30 | Covering wi | dai Siab | 25 days 25% | Sen 217/16 | 84: 2/26/16 | Hereit |
| 2 | Bysro- | | 15 deys 0 % | Fri28015 | Fe 2/20/15 | |
| 8 | Cutter | | 15 daya 05i | Tue 12/16/12 | Fri 1/2/16 | |
| 20 🤹 | B3L1(692m) | | 103 days 12% | Fri 12/12/14 | Sat 5/23/14 | |
| 90 | Expendion | | 05 deys 30% | Fp 12/12/14 | | |
| 31 | Soling time P | four RCG | 05 days 20% | Sun 12/14/14 | Viol 3/11/15 | |
| 32 | Wei ROC | | 95 days 10% | The 12/02/14 | | |
| 99 | Stat: Conce | ting | ~45 deps0% | To: 12/53/14 | 3 - 5/29/16 | - |
| 54 | Culti | | 15 days 0.% | Tus 1/10/15 | | |
| 5 5 | B3L20992ml | | 171 days 48% | Sen 11/16/14 | | |
| 10 | Texterior | | 10 days/80% | Sun 11/18/14 | | |
| | Soling and f | 1000 BLZD | 15 daya 75% | Tug 11/15/14 | | |
| W | Via IROC | | 25 ships 70% | 51 11/22/14 | | |
| 16 | Slub Crinky | sina | (\$5 days 15 | Tes 12/044 | | |
| 30 | Cutter | | 15 00/05% | Tue 12/25/14 | | |
| 1 | System | | 20 days 0% | The Ports | | |
| 12 04 | R3L2F(220rt) | | 33 days 78% | | 9mr13/21/14 | |
| | =X00Verion | | 10 days 90% | 100 11/20/14 | | |
| •0 🔜 | Soling and 1 | 10 | 15 days 90% | Vion 11/2/01- | | |
| 6 | Veeding 210 1 | | 20 deys/80% | Ulon 11/2/14 | | |
| 6 | Covering with | | | | Sun (2/2)/14 | |
| 2 | | 01350 | 6 days 10% | | | |
| | Line 55 | | 97 days 0% | PH 1/30/16 | | |
| 18 (B) | (36dm) | | 46 days 05 | Pri 1/30/15 | | |
| -0 | Excervation | | 29 deve 03- | Fe 1/50/15 | | |
| 50 | Brick Drain | | 33 days 0% | Sen.211/16 | | |
| 5 1 | Covering an | as pixes | 10 days 0 % | The 2/13/15 | | |
| 52 | Cutter | | 18 days 0 % | Sen 3/1/15 | | |
| 53 🥋 | SSL1E(3Tem) | | 48 days 0% | Fri 1/80/14 | | |
| 94 💼 | Externation | | 25 deps 8% | Ep 1/50/16 | | |
| 15 | Thick Drain | | 22 days 0.% | Sun 2/1/15 | | been a second |
| 26 | Coexing x4 | h Slab | 10 days 0%. | The 2/18/15 | | |
| 57 | Cide | | 40 ayoft 61 | Sen:3/1/15 | | |
| *28 | 55L1 | | 48 deye UV, | Fri 2/27/16 | | |
| 9 28 | Excavation | | 05 days 0%. | F# 2/97/15 | | |
| au | Jinsk Eran | | 35 days U.S. | Sen 31715 | | the second se |
| 61 | Covering we | 71 S ISO | no days U.S. | ine shierte | | H |
| 2 | Culter | | 18 days 8%. | Sun 3/22/15 | Wad 4P15/Ho | |
| (3) | SR 2A | | St days 0% | Tue 3/17/10 | | |
| 6 3 | Ecoavation | | 28 days 0 % | Tue 3/17/10 | Mon 4* 3/16 | |
| 06 | Brick Drain | | 33 days 0% | The 3/10/16 | Man 4/20/96 | |
| 00 | Covering set | del 5 leb | 13 de;o 0% | Von 45,15 | Sec 4º 6/15 | |
| 67 | Cutter, | | 15 days 0 % | 5un 4/10/10 | Whole Sells | |
| 00 | Line St | | 462 days 18% | Sun 3/16/14 | | |
| 19 16 | \$90.4(290.6m) | | 462 days 20% | Sun 3/16/14 | | |
| 10 | Ecoverion | | 40 days 12% | Sun 3/16/14 | | |
| 71 | Brick Drain | | 00 days 75% | Tue 3/10/14 | | |
| 2 | RCC Drain | | *22 deys 10% | Sun 12/20/14 | | |
| 12 | Covering wi | ti Sint- | '85 daya 15% | Vitel 1/7/15 | | |
| 76 | Cule | 100000 | 28 days 0% | Weddhild | | |
| 75 10 | 59L1D(195m) | | 33 days 2% | Sun 12/23/14 | | |
| 76 | "x 3W/801 | | 15 days 0% | Sur 12/2014 | | |
| 7 | Trick Drain | | 22 days 1% | Sal 1/5/15 | | |
| 0 | Covering wi | in Siah | 7 days0's | Circl./25/16 | | |
| .0 | Line SII | 11.00 | | Tue 2/20/14 | | |
| | | | 334 deys 87%. | | | |
| 8U 🥋 | \$11 L1(1038m) | 8 | 91 days:35% | Tue 2/25/14 | Non 4/22/14 | |
| | | ()) | | | 1.000 | |
| | Contractory and a second | TINK | - | | Project Summiny | 1 Index Summing |
| in S | UEIP Work Schedule Revi | Split | 2000000 | | Extomal Tasks | Manual Task Station Prozes |
| | | Mestore | | | Esternal Milestone | Durstonony |
| etter Than X | | and the state of the | | | accession to the state | The second secon |
| COLUMN 2 | | Sammare | - | | nacike Weeting | Manual Summary Rouse Eddemat Tasks |

| | July | 2015 |
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| | Tarek Matri e | | Durator 16 Comple | Start | Tittah | karn 2014, kanz kanz kann 2015, kann 2015, kann 2016, kann 2016, kann 2016, kann 2016, kann 2016, kann 2016, ka |
|---|--|----------------|----------------------|-------------------------|-----------------------------------|---|
| 101 | Detection | | d1 days 100% | Tue 2/25/14 | The de Dita | D J F Y A K J J A S D N D J F N A Y J J A S O N D J F N A K |
| 12 | Hings Litter | | 55 00/0 100% | 100.2/24/14 | | |
| 13 | Covering with | n Siab : | 56 days \$5%. | Mon 2/17/14 | | |
| 4 1 | Cutlet | | 15 days 50%. | Man a ^M 2/12 | | |
| 6 48 | -511L1A(298m) | | 26 days 31% | | Wed 12/31/14 | |
| 0 | Eccavation | | 15 days 10% | | Sun (2/21/17) | |
| 2 | Brick Erwin | | 15 deya 30% | Tun 125/14 | | |
| 8 | Covering with | h Siab | 5 daya 10% | | Vised 12/5/714 | |
| 0 . | SITLIB(19Em) | | 28 days 100% | Tue 2/25/14 | | |
| 0 - | Extendion | | 15 days 100% | Tu: 2/25/14 | Thu 3/9/14 | |
| 1 4 | Britsk Dimin | | 12 theya 100% | The 2/27/14 | Box 2/10/14 | |
| 2 1 | Covering with | h Slab | 6 stays 100% | Tue 0/1-014 | Sue 3/ 6/14 | |
| 59 45 | 511L2(924m) | | 49 days 80% | Sun 12/7/14 | Set 1/24/15 | |
| 94 V | "stawation | | 25 days 100% | Sub 12/7/14 | Yea1 12/51/14 | |
| 15 - | Brick Drain | | 32 days 100% | The 12/11/14 | Sun 1/11/15 | |
| 18 W | Covering with | h Siab . | 5 days 100% | Sun 14/15 | Ten 1/8/15 | |
| 7 23 | CUBE | | 21 days 10% | Sun 194/15 | 86.1774/15 | |
| in . | Line 513 | | 382 daye \$2% | TUS 2/28/14 | Fri 243/16 | |
| 89 PB | Bt3Lt(789m) | | 73 days 20% | Mon 1245/14 | | |
| U 📑 | 503090100 | | 55 days 229. | Mon 12/15/14 | 807.227/16 | |
| 1. 22 | Hame Pipels | | 50 days 20% | Sun 12/25/14 | | the second se |
| 2 | Vannole con | druction . | 50 days 155. | Wed \$7715 | | |
| 2 3 | CUBH | | 22 00/530% | Sub 22/16 | | |
| CM 🥵 | \$13L1A(645/H) | | 318 days 34% | Tue 2/25/14 | | |
| 15 V | Eccaverion | | 50 deya 100% | Tus 2/25/17 | | |
| 16 | Brick Erein | | 73 days 05% | Thi 3/27/14 | | |
| 17 | RCC Drain | | 20 days 0 % | Sun 11/80/17 | | |
| 8 | Covering set | | 75 deys/80% | Man 3/17/14 | | |
| 0 😪 | \$1aL1B(276m) | | 78 days 94% | Fit 3/23/14 | | |
| 10 1 | Excendion | | 45 days 100% | Fi(2/23/14 | | |
| 11 | Britte Desire | | 58 daya 95%. | Son 3/2/14 | | |
| 12 | Contring with | | 20 daya 0.0% | Sun 4/27/14 | | - |
| 13. 4. | 513L1C(284m) | | 37 days 100% | | Thu 12/25/14 | |
| 14 🖌 | Externation | | 20 days 199% | Vies 11/19/14 | | |
| 15 🗸 | Thick Drain | | 25 daya 100% | | 90n 127 3/14 | · · · · · · · · · · · · · · · · · · · |
| 16 🗸 | Conecting will | | 10 days 100% | | The 12/25/14 | • |
| 17 15 | B13L1D(535m) | | 44 days 33% | Wed 11/19/14 | | |
| 18 🗸 | "x30x60800 | | 25 daya 100% | Knet 11/10/14 | | |
| 19 | Siles Drain | | 33 days 90%. | | Gen 12/22/14 | |
| NU 🔳 | Covering set | | 10 days IBNs | Tue 12/2012 | | |
| 21 🤣 | 513L1E(640m) | (| 48 days 21% | Tub 12/30/14 | | |
| 22 📑 | EXCervation | | 30 days 30%. | Tua (2/50/14 | | |
| a | drick Erwin | | 35 days 30% | The 197015 | | |
| E | Covering xit | n 6 80 | 12 days 0 % | Thu 2/5/16 | | |
| 5 6 | \$13L1P(\$24m) | | 46 days 619. | Pri 1/2/16 | | |
| 20 7 | Economics | | 35 dega 20% | Fn 1/2/15 | | |
| 7 | Brick Droin | 14213 | 35 days 50% | San 19916 | | |
| .0 | Covering with | n e lab | 12 days 40% | Sin 219/16 | | |
| a 🤞 | 513L2(1082m) | | 106 days 20% | Fri 11/28/14 | | |
| 0 | Experient | | 62 develop35 | Fit 11/20/14 | | |
| 9 | Brick Drain | | 65 days 45% | Sun 11/30214 | | |
| 2 | REC Drain | 1267 | 95 deyo 03i | Tac 2/3/15 | | |
| 3 | Contring with | i Sinte | 20 theys 0% | Tip 2/3/15 | | |
| × | Citter | | 25 days 0% | Tue 2/3/15 | | |
| 5 68 | 513L2A(170m) | | 20 deys 0%. | Mon 1/28/15 | | |
| | TX 3W TRUE | | 15 days 0%. | March 1728/15 | | |
| 8 🗐 | Trick Explo | | "C stays 1% | Wed 1/2/1/15 | | |
| 8 🗐 | | n Silab | 8 days 0 %. | Fit 2/15/15 | | |
| к 🎒 7 8 | Covering with | | 74 deys 0% | Thu 12/10/14 | | |
| 8 🗿 9 9 | | _ | (D days US. | Ibu 12218/14 | | |
| 58 🕋 57 20 20 🐢 | Covering with \$13L3(\$3\$m) | 8 | it's days 0%. | (hu 12/18/14 | 0.05000.000 | |
| 56 🕋 57 50 20 🐵 | Covering with \$13L3(\$3\$m) | Tirák | 45 days(0% | | Project Summiny | tradite Summy |
| 738 🗿 1877 1988 1999 1999 1999 1999 | Covering with ST3L2(535m) Externation | Tinak Solit | - | _ | | trache Sumary |
| 738 🗿 1877 1988 1999 1999 1999 1999 | Covering with S13L3(535m) Excavation ELP Work Bulkedule Frenk | Solt | - | _ | Project Summary External Tasks | Manual Taos Starkon Progress |
| 28 29 20 20 20 20 20 20 20 20 20 20 20 20 20 | Covering with S13L3(535m) Excavation ELP Work Bulkedule Frenk | | - | _ | Project Summary | |

| 0 | sat filmre | | Duration S Complet | Silari | Tenah | 411 3014 412,504 411 3015 412,5015 411 3015 412,5015 411 3005 411 3005 |
|----------|--------------------------|--------------|-----------------------|---------------|--------------------|--|
| 1 | Brick Crain | 0.511 | 50 days 0% | Se: 12/2014 | T# 2H3/15 | |
| 2 | Covering ke | m 5 teo | e dayo da | Set 2/14/16 | Sun 3/1/16 | |
| 6 | CLIEF | | 25 days 84. | Sa: 12/20/14 | Tue 1/13/16 | i i i i i i i i i i i i i i i i i i i |
| 3 | Line CN2 | | 397 days 25% | Thu 3/20/14 | Sel 3/21/16 | |
| 48 | GN21.1(336rm) | | 97 days 0 % | FR12/5/14 | #ed 3/11/16 | |
| 1 | Excavation | | 77 days life | F6 (2/5/1/ | The 27 0/16 | |
| | Brick Drein | | 75 deya@% | Bun 12/7/14 | Tru 2* 9/15 | House and a second s |
| C I | RECORE | | 50 daya 0% | Mon 12/22/12 | Thu 2* 0/16 | Harmonia Anna Anna Anna Anna Anna Anna Anna A |
| 5 | Covering wi | dai Siab | 20 days 0% | F#2/23/16 | 3400 3/11/10 | |
| 5 | Syre- | | 15 deys U.S. | Thu 25/15 | The 219/15 | |
| | Cutht | | 15 theyal 0% | Thu25/15 | | |
| 2 | CN2L1A(134m | ٥ | 28 days 0% | Fil1215/14 | Mon 12/29/14 | |
| | Examplion | | 15 depuil % | Fir 12/5/14 | Red 12/ 7/14 | |
| | Third Druth | | 15 days ITS. | Sub 12/7/14 | Suri 12/21/14 | |
| 1 | Covering of | Hi State | 0 days 0% | Mar 12/22/14 | 90n-12/29/14 | |
| 1 | CN2L18(175m | | 32 days 3% | Fri 12/5/14 | | |
| | "x30v01001 | 5 | 17 days it 9 | | Ban 1227/14 | |
| | Takes Eroki | | 20 abays 0% | Sup 12/7/14 | | |
| | Covering wi | ih Siah | 10 days 0.5 | Se. 19/27/14 | | |
| 62 | GN2L2(349m) | | 367 deys 43% | The 3/23/14 | | |
| 12 | EXCENTION . | | "20 days /0% | 1hu 3/20/14 | | |
| | Brick Crain | | 132 days 855. | Sat 3/22/14 | | |
| | RECURIN | | HE days U.S. | Sun 12/7/14 | | |
| | Covering kit | th Siste | 55 days 30% | Wid-32/14 | | |
| | System | | 40 days 0 5 | Wed 125/15 | | |
| | Cutter | | 16 days 0% | Vad 24/15 | | |
| | Line CN3 | | 141 0296 27% | Bun 11/2/14 | | |
| - 122 | CN3L1(756m) | | 42 days 50% | Thu 11/20/14 | | |
| | Excertision | | 57 days 87% | Thu 11/23/14 | | |
| - | | | | Sa: 11-22/14 | | |
| | Brick Drain | | 7: days 05% | | | |
| | Covering an | TI DINER | 20 daya 79% | Thu 1/22/15 | | |
| Z | Skinon | | 42 days 0% | Sun 12/2/14 | | |
| 9 | Cutot | | 19 days 0% | West 1/14/15 | | |
| - 8 | CN3L1A(828m | ¢ | 97 daye 0%. | Tue 12/15/14 | | |
| 5 📠 | Telaworiter | | 85 dayari % | Tun 12/18/14 | | |
| 6 | Thick Fasio | | All stays 0% | The 12/2018 | | |
| 7 💷 | RCCDwr | | 55 days (1% | 34an 1/5/15 | | |
| 8 | Costing xt | ID \$100 | 22 days(11%) | 5un3/1/15 | | |
| 6 | CN3L2(286m) | | 108 days 23% | Sun 11/2/14 | | |
| 1 3 | incoverion. | | 77 days 40%. | Sun 11/2/12 | | |
| 1 | shos uran | | /5 days 30% | 1001114/14 | Sec 17 7/16 | |
| 2 1 | Covering se | th Stab | 25 days 20%. | Sun (/18/15 | 6 Sa: 27 4/10 | The second se |
| 1 38 | System | | 50 days 0.5 | Kred 12/24/17 | Geed 2411/15 | |
| | Cutter | | a5 days 0% | The 1/6/16 | Viet 2/1/16 | |
| | Southarn System | í. | 206 days 3%. | Pri 11/23/14 | | |
| 2 | L1(20dm) | | 37 days 0% | Thu 12/10/14 | PH 1/23/15 | |
| | Excevetion | | 22 days 0% | Thu 12/15/14 | Thu 1/9/16 | |
| | Soling and I | 900 | 23 days 0% | Thu 12/10/14 | | Name of the second s |
| 1 | Brick Desin | | 25 theyard to | Bs: 12/23/14 | | |
| 1 | Covering with | th Simb | 10 days 0 % | Wed 1/14/15 | | |
| - | Cutter | | 17 days 0% | 32: 12/27/14 | | |
| | L2(2032m) | | 176 days 05. | Tue 12/23/14 | | |
| 4 | Examples | | 150 days 0% | Tu: 12/23/14 | | |
| | Soling and I | 900 | :52 days 0% | Tue 12/23/14 | | |
| 3 | Birs Drain | 500 | 155 days (1%) | Tut 19/25/14 | | |
| | Covering at | n Slob | 15 days 0.% | Web577/15 | | |
| 100 | L3(2347mt | 202223 | 196 days 0% | Fri 1242/14 | | |
| 12 | Externion | | 170 days 0% | 76 12/13/14 | | |
| | Soing pro l | 10 | 12 00/019 | 11/12/12/14 | | |
| 120 | clines Drain | N9' | 1/b days 0% | 10.12/12/14 | | |
| 1200 | Shos Litain | | An only a new | -012-246 | Tipeseis | |
| | | 10 | 114 | | | |
| | | Tinik | - | 1.0 | Project Summiny | Inados Surmay |
| N. 5-11 | EIP Work Bulketikle Revi | Split | 2010.010 | | Exformal Tasks | Manual Taos Startoniv Progress |
| r Thu MS | | Dissons | | | Esternal Milestone | Datationomy Final-only Deadine 3 |
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| | | Sammare | | | | |

| | ut blarr e | | Durator 16 Comple | Silari | Tetah | |
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| 1 | Covering with | h Silabi | 23 days 85 | 7105/15 | Nec 60alls | DJEWAKJJAS DNDJENAY JJAS DNDJENA |
| 12 62 | L4(2111m) | | 177 days 0% | Fn 12/13/14 | | |
| 3 | Excervation | | '52 days 0%. | 11 12/12/14 | | |
| 4 | Going and M | ce. | 152 days 05 | 10.12/18/14 | | a second s |
| 1) I | Brick Erein | | 155 days 0.% | Fit 12/18/14 | | House and the second |
| | Covering with | i Siab | 22 days 0 % | Sat 6/23/16 | | |
| 2 4 | L0(819m) | | 45 days 32% | Fri 11/23/14 | | |
| 8 3 | Excavation | | 55 daya 30% | Fit 11/29/12 | | |
| 0 | Soling and P | 00 | 65 days 85% | Fit 11/25/14 | | |
| 10 | Brick Drein | 1000 | 55 deys 30% | Fn 11/22/14 | | |
| 11 📰 | Coving with Cutlet | 1 S IND | 10 days 0% 20 days 0% | Size 1/26/15 Tae 1/0/15 | | |
| | L6(970-) | | 32 days 0% | The 1/22/15 | | |
| 19 🌼 | | | 84 days U.S. | The 1/22/15 | | |
| 5 🚎 | Soling also P | 00 | of days 0% | The 1/22/15 | | |
| 18 🔳 | Write Dealer | | 87 days 1% | The 1/22/45 | | |
| 7 | Covering with | 5100 | 15 daya 11 9 | MOR 3230/15 | | |
| 0.00 | CUIH | | 25 days 0% | The 25/15 | | |
| 19 | Severage Works | | 685 days 5% | West 7/2/14 | | |
| U I | RHI: BURVES | | 187 days 80%- | 04007/2/14 | | |
| 21 | Line Ti (Trunk) | | 397 days 3% | Sun 345.46 | | |
| 2 00 | T1 (460 150 - 40 | 344 | 64 days 0% | Sun 34546 | The \$17/16 | |
| 3 I | EXCOVIDIO | Cag. | 41 days 0.9 | 6un 3/15/16 | | |
| 24 | Non Laying | | 45 days US | 5un 3/15/16 | | |
| 2 | ðæski ing | | -00 deya 0 % | 5un 345/15 | | |
| 36 | Yannois Cor | struction | 50 days 0 % | Mon 346/16 | | Normal Control of Cont |
| 2 | Seveninket | 90 | 40 days 0 % | Wed 3/16/16 | | |
| 8 | House Corrs | | 50 de, a 0 % | Thu:3952/15 | | |
| 80 QS | T1 (400 cla - 23 | 9m) | 40 days 0% | Fit 4/24/15 | | |
| 90 | Excavuation | | 29 days 0% | Fii:424/16 | | |
| 1 | Tele Leying | | 52 days 0% | Fi: 4/24/15 | | |
| 12 | Statikit Ing | and and and | 35 days 0% | Fil 424/15 | | |
| 4 | Numble Car Sever Hilet | STREET. | 29 days 0% | Sun 426/16 | | |
| 5 | Sever Filet buse Const | | 20 days 0% 37 days 0% | Mon 4/27/15 Mon 4/27/15 | | |
| 5 6 | T1 4450 dia - 69 | | Til dave d% | Fri 4/24/16 | | |
| 17 99 | Traveline | 10 | ST days (% | E 404/15 | | |
| 8 | Pick Loying | | 55 digall's | CE424/15 | | |
| 59 | Statuti ing | | 57 days 0% | Di 420/15 | | |
| 50 | Vatrice Cor | struction | 65 days U.S. | West 4/28/15 | | |
| 1 | Severimet | | SU days U.S. | +net/16 | | |
| 2 | -pute Com | 10101 | 55 days 0%. | mervis | | |
| 9 Q | T1 (560 cia - 07 | 786 | 118 days 0% | Non 11/2/16 | Set 2/27/16 | |
| 9 33 | Excavation | | 85 days 0 % | Mon 1 1/2/16 | | |
| 5 | Pipe Lasing | | 00 days 0 % | Man 11:2216 | | |
| -0 | Beckti Ing | | 92 de;a 0% | Mon 112/15 | | |
| 7 | Hannole Con | struction | 10 days 0 % | Sat 11/7/16 | | |
| 10 | Sower Inici | 1000 | 05 days 0% | Mon 11/0/16 | | |
| 8 | House Com | | 11 deya U% | blas 11/5/15 | | |
| 20 🤹 11 - | T1 4660 cla - 17 | . ageb | 117 days 0% | Sun 12/20/16 | | |
| 2 | Extantion | | 00 days 0% | Sun 12/23/15 | | |
| 52 | Pipe Laying Backfilling | | 05 deys 0% 03 deys 0% | Man 12/21/15 Tue 12/22/15 | | |
| 54 | Manhole Cor | materia | - 37 days 0% | Sur 12/22/15 | | |
| 6 | Severine: | | 99 days 11% | Tue 19/23/15 | | |
| 8 | SMIRCON | and the second sec | "35 daya d % | Tun 12/23/15 | | |
| 17 | Line Ti (Secondar | | 298 days 0% | Sun 315/16 | | |
| 0 02 | T1L6(200 (6e-5) | | 22 days 0% | Sust 345/16 | | |
| 0 | =2000/0100 | | 10 00/009 | 540 37 5/16 | | |
| U. | the Lesing | | 0" days U.S. | Sun 345/15 | | |
| and the | | - | Contract and a state of the | | | |
| | 1 | TINK | | | Project Summary | Timedala Suntanay |
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| | IP Work Bulketlale Revi | Solit | Surgin | Commentario - | Exformal Tasks | Manual Taos Startion Pluatos |
| jev. 87 US | Deliver to be considered and | | | | External Milestone | Destination y Final-only Destine 3 |
| ijeva: 87 US na Thu 36/ | • | Distances | | | | NO STREAM ST |
| jev: 67 US 17 Thu 262 | | Summary | - | | native Westing | Manual Summary Roup External Takes |

| | Task Hoer e | | Durator 16 Comple | Silari | Tetah | |
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| | Backhing. | | 12 days 8% | Sun 5215/45 | Thu 3/25/15 | D J F W A K J J A S D N D J F W A W J J A S D N D J F W A K |
| | Wannole Cor | noticition . | Plickeb c' | Mon 3/15/16 | | |
| | Sewer Intel | | 33 days 84. | Tue 3/17/15 | | |
| | Tours Com | A2103 | 20 days 05 | Ine 341/215 | Sun dfallta | |
| 13 | T1L6(200 die -44 | sem) | 22 days 0% | #e6-3/25/16 | | |
| | Excavation | | 12 days 0 % | Wed 3/25/16 | | |
| | Pipe Leging | | 13 de;#0% | West 3/25/15 | | |
| 2 | Backfilling | | 04 daya 05i | Vet 3/25/16 | | |
| | Vannole Cor | nstruction . | 15 days 0 % | Thu 3/25/16 | | >= |
| 3 | Sever liket | | 22 de/s 0 % | The 3/26/15 | | |
| | House Com | | 22 depart % | The 3/26/15 | | • • • • • • • • • • • • • • • • • • • |
| 4 | T1L7(200 dia-64 | 01m) | 41 days 0% | Mon 4/5/16 | | |
| 202 | Extendion | | 23 days(0%) | Man 418/15 | | |
| | Pice Losing | | 2" daya 0% | ¥50-48/15 | | |
| 8 | Backti Ing | | 22 days 0% | Man 48015 | | |
| 1 | Mannoie Cor | esin-ckin | 25 days 0% | Tat 4/7/15 | | |
| | Seworl/Kei | 2000 | 41 daya 11 % | Tel: 49795 | | |
| 100 | Dasie Crim | | 40 days 0% | Tue #7715 | | A CONTRACT OF A |
| 80 | T1L8(210 (82.5) | 60em) | 41 days 0% | Stat 4/28/16 | | |
| 1 | Exploration | 2000 Mar. | 20 00/014 | 549 4/25/15 | | |
| | Ape Laying Backhing | | 2° days 0% 30 days 0% | Sun 4/25/15 Nun 4/25/15 | | |
| | Backti Ing kannoe Cor | and the second | 25 days 8 s | Mon 4/2//16 | | |
| 1 | Bawer Initia | (automicfi | 42 days 0% | Mon 4/27/16 Mon 4/27/16 | | |
| | Tours Com | | 40 daya U.S. | Man 4/27/15 | | |
| 0 | TILN2ED ON -6 | | 14 0198.09 | 5# 6/18/16 | | |
| 10 | Eccavation | sini) | é daye0 % | Bar 6/16/16 | | |
| | Pice Lesing | | 2 days U.S. | Set 51015 | | |
| | Backfilling. | | 8 days 0% | Sat 5/16/15 | | |
| | Marrole Co | active from | 12 days 0% | Sun 5'17/15 | | |
| | Sever Filel | Pressen. | B days 0 % | Bre 5/17/15 | | |
| | -base Com | | 0 days 0% | Sun 5/17/15 | | |
| * | TIL16(200 das | | 21 days 0% | Fil 6/22/16 | | |
| 1.00 | Externation | | 10 depail % | Fe 5/22/15 | | |
| 8 | Pick Lising | | T dayart % | Fil5/22/15 | | |
| | Task1 ing | | 17 days fills | F#522/15 | | |
| | Mannole Cor | istricken | 15 days (1% | 84 62245 | | |
| | Siewer Priet | | PT dayall % | 86 523/15 | | |
| | House Com | ection | 00 days 0% | Sal \$23/15 | | |
| 48 | T1L11(269m) | | 21 days 0% | Sun 346/16 | | |
| | =2038/0100 | | 10 days U.s. | 5un 3/16/16 | | |
| | for Laying | 5 | 11 days U.S. | Sun \$25/15 | Web 3/25/16 | |
| | dackt ing | | 12 days U.S. | Sun 345015 | The 3/21215 | |
| | Vatrois Cor | naturation | -5 days 0 % | Mon 346/16 | | |
| | Sever1net | E.S. | 20 days 0% | Mon 3/16/16 | | |
| 1. | House Com | action . | 20 de;#0% | Man 3/16/15 | | |
| 1 | T1L12(20840 | | 21 days 09. | Ales 3/25/16 | | |
| | Excavation | | 10 days 0% | Wei#3/25/16 | | · · · · · · · · · · · · · · · · · · · |
| | Pipe Leang | | 1° depathto | West 3/25/15 | | |
| | Backfilling | | 12 devel0% | Wo#3/25/15 | | |
| | Yunnee Co | istruction | 10 days 0% | The 3/20/15 | | • • • • • • • • • • • • • • • • • • • |
| | Sever links | | 25 deys 0% | The 3/20/15 | | 1 · · · · · · · · · · · · · · · · · · · |
| 10 | House Com | | 20 deva 0% | The 3/26/15 | | |
| 4 | T1L18(200 dia- | 49460) | 23 days 8% | Sat 4/4/16 | | |
| | Tation/file) | | 12 days if % | 84 4445 | | |
| | Picelasing | | 13 dayad % | Sit 49015 | | · · · · · · · · · · · · · · · · · · · |
| | Ta:st1ing | 100 | 14 days RS- | Sal 650/15 | | |
| | Wannole Co | HYD. CROD | 20 days 0 % | Sun 45215 | | |
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| | Hpuse Conn | 4C101 | 22 days 0% | San 4/5/15 | Sun 4925/15 | |
| | | A CONTRACTOR | 100 | | 1.000.000.0000.000.000 | |
| | CONTRACTOR MILLION | TINK | - | | Project Summiny | I inadme Summing |
| 1.81 | UEIP Work Bidleslule Revi | Split | 201010 | | Extomal Tasks | Manual Taux Starton Progres |
| t Thu M | 3. 5 | Disatore | | | Esternal Milestone | Cursion-ony Finsh-only Deadline 3 |
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| 0 | ast Natre | | Durator S Comple | Start | Tetah | |
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| 08 | T1L14200 da.4 | (Infile | 31 days 0% | Thu 418/16 | SH 51616 | DJEWAKJJAS DIN DJENANJJAS DN DJENAK |
| | =X00V0100 | S. 1874. | Pleyeb a | 100 4/15/16 | -06/016 | |
| 8 | Pipe Loying | | 17 days 84. | The WIS/15 | Sat 5/2/15 | |
| | stackhing | | 16 days 05. | 1hu 446/15 | San afailta | |
| | Vacrois Cor | atruation : | 25 days 0.% | Fit 4/17/16 | | |
| 3 | Severinet | | s) days 0 № | Fill 4/17/16 | | Press 1 |
| 3 | House Com | i cuion | S2 days 0 % | Fe 44 7/15 | | |
| 18 | T1L15(200 dte- | (2766) | J1 days 0% | Set \$12.15 | | |
| | Eccavation | | 16 days 0% | Sat 6:2/16 | | |
| | Piere Leging | | 17 deys 0% | Set 5(2)15 | | |
| | Becket Ing | | 15 depart % | Set 5/2/15 | | |
| | Marnole Cor | sindan | 25 days 0% | San 5/3/15 | | |
| | Sever litlet | | S0 depoil % | San 5/5/15 | | A CONTRACTOR OF |
| | Build Cont | | 22 million 0.6 | Sen 5/2/15 | | Here and the second |
| 4 | TIL16(200 dia- | 1-50 mil | 61 days 0% | Non 6/18/14 | | |
| 181 | Technology | | 27 days 0% | Mod 525/15 | | |
| | Pice Laying | | 3. m/uua | 60/16/15/15 | | |
| | Tack1 ing | 10002000 | 35 days fills | Mar 522015 | | |
| | Vanhole Cor | sincline | 50 days 0 S | Toe ShallS | | ÷ |
| | Sewerinet | 2112111 | 95 00/0 64 | Tue 5/18/15 | | |
| 1 | House Conn | | BD days 0% | 149 0/19/15 | | |
| * | THL:17 500 div.4 | 54) | di daye.0% | F6 11/27/16 | | |
| 3 | =008W0100 | | 25 00/5 0 % | | 1:00 127 to 16 | |
| 100 | Non Laying | | 21 days 05. | Fit (1/27/16 | | |
| | Beckfiling | 11111 | 22 days 0 % | n 11,2645 | | |
| | Yannole Cor | anicien | 30 days 0 % | 54: 11/25/16 | | |
| | Seveninket | | 10 days 0 % | Ba: 11/25/16 | | |
| | House Cores | 12301 | 40 de , a 0 % | Se: 11/25/15 | | |
| | Line T2 (Trunk) | | 465 days 85; | Wed 1/14/15 | | |
| 2 | T2 (600 cla - 10 | 42460 | 117 days 0% | Tuz 11/17/16 | | |
| 3 | Extension | | 70 daya 0% | Tue 11/17/15 | | |
| 3 | Figs Lasing | | 72 daya 0% | Yest 11/10/15 | | |
| 1 | Backfi Ing | | 74 days 0% | Thu 11/10/16 | | |
| | Mantole Con | istructure i | 95 days 0% | Fit 11/23/15 | | Provide the second s |
| 3 | Sever Inits | | 105 daya 0% | Tun 11/24/15 | | |
| 100 | Case Comp | | 10 days fills | Tue 11/24/15 | | |
| | T2 (760 cita - 27 | 25m) | 142 days 8% | Tue 11/12/16 | | |
| | 7x30x50800 | | 137 daya 209- | Tué 11/17/15 | | |
| | Pipe Laying | | 104 days 30%. | Yead 11/15/15 | | |
| | Mackhing | | 106 days 30%. | Thu 11213/15 | | |
| + | Varrole Cor | arruation | 25 days 0.9. | -in 11/23/16 | | Parameter and a second s |
| | Sever 1- let | Lanan | 140 days 8%. | Tua 11/2/015 | | |
| 2 | House Conv | | 155 days U.S. | Tue 11/24/15 | | Provenue and a second se |
| 50 | T2 (100 cla - 43 | 2001 | -Mi daya Jin | SUR 610.16 | | |
| 100 | Excavation | | 85 days 0 % | Bue 6/12/10 | | |
| | Piece Lasing | | 36 de;a 3% | Man 5417/15 | | |
| 4 | Backfling | 1000 | 35 days 0% | Tue 6/12/16 | | |
| | Vannoie Col | BUTCEDU | 45 days 6% | Web 5/18/16 | | |
| | Sever linket | | 50 dega 0.% | Bue 5/17/15 | | |
| 1 | -Supp Com | | 52 days 0% | S/n 5117/15 | | |
| 190 | T2 (1000 dk 1 | (200) | 168 days 14% | Wed 1/14/16 | | |
| 1 | Externation | | 16 days 30% | West 1/14/15 | | |
| | File Lasing | | 10 deys 30% | The 1/15/15 Fe 1/16/15 | | |
| | Backfiling | | *2* days 10% | | | |
| | Manapie Car | is n rein | • 43 days 5% | 28 1/17/15 | | |
| | Sever Iniel | 224 | 50 dépail % | The 1/22/15 | | |
| | Toure Com | | 57 days 0% | The 1/27/15 | | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 |
| | Line T2 [Secondar | M | 603 days 2% | Bank 15/7/14 | | |
| age. | T2L7(310 clis) | _ | 27 deys 0% | Thu 12/17/16 | | |
| | CC2M/MRM | | 10 days 05. | 100 124 7/15 | Set 12/23/15 | |
| | 1 | 2.62 | 10. | 125 | | |
| | 10111111111111111111111111 | TINK | | | Project Summary | I radne Summy |
| 18-1 | EIP Work Baltedule Revi | Split | 201210 | C | Extornal Tasks | Manual Taos Statutos Pugges |
| Thu 26 | | Distant | | | sourced M lamates | Durationony Final-only Deadline 3 |
| | | | | | nactive Wiestone | Manual Summary Rouse External Taxes |
| | 1 | Sammare | | | | |

| | Tauk Hlatre | | Duration 16 Complet | Starl | Tinah | |
|----------------|--------------------------|--------------|------------------------|------------------|--------------------|--|
| 1 | File Laying | 2 | 11 days 0% | Thu 1247/15 | Sun 12/27/15 | |
| 2 | daosti ing | | Plickeb Sh | | Vion 12/25/16 | |
| s | Varinole Co | nativellan | 14 days 0 %. | Thu 12/17/15 | 12/S0/15 | |
| 4 | Sever triet | | 2" days 05 | Se: 12/19/15 | 111 8.55716 | |
| 6 | -DIEG COM | erion. | 25 days 0.5 | St: 124 a/16 | Tue 1/ 2/16 | |
| 0 6 | T2L18(200, 26) | 335, 385, | 121 days 0% | Red 1/25/16 | Thu 6/25/16 | |
| 8 | Externation | | 75 de;x0% | West 1/25/15 | | |
| 9 | =ipe Lasing | | 75 daya 0% | Vet 1/29/16 | 3/66 4/15/16 | |
| 90 | Backfilling | | 65 days 0 % | Web 1/25/16 | | |
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| 1 | Sewer In ket | | 102 depart % | The 1/23/15 | | House and the second seco |
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| 2 80 | T2L19(A,Z,9.9) | (7838m-200 | 148 Days 7% | SUR 12/7/14 | | |
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| 10 | Flat: Lasing | | 34 days 12% | Bun 12/7/14 | | |
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| 12 | Sever Inlet | | 35 days 0.% | Mun 1283/14 | | to the second |
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| 14 🥵 | T2L26(286m-2 | 20tilie) | 21 days 0% | Wed 21315 | | |
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| 16 | Pipe Laying | | T days 1%. | Wed 2/10/15 | | |
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| 6 | Basitting | | 12" days 0.5 | Thu 11/18/16 | Fn 3/18/16 | |
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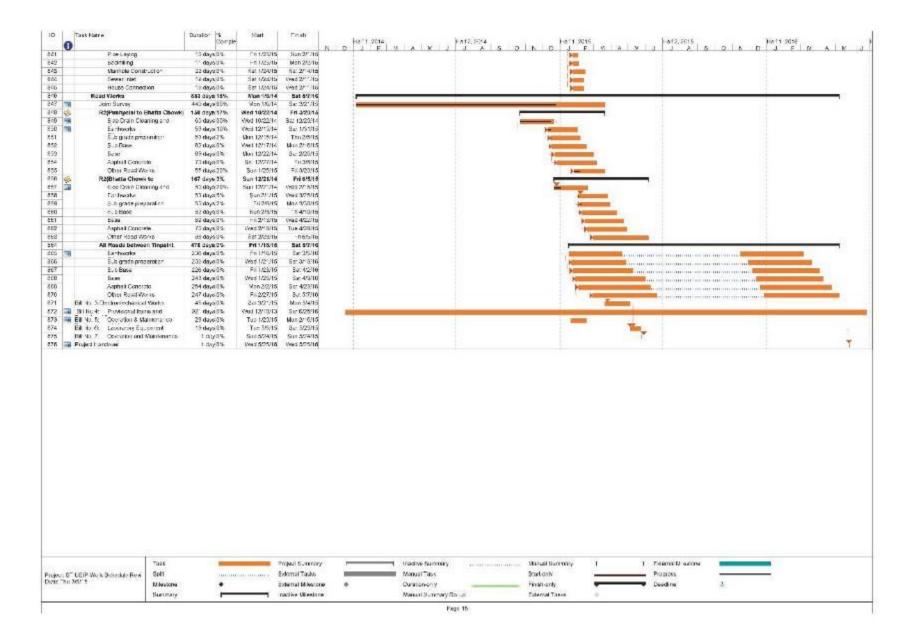
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Photographs of the Month



Figure 1 Road maintenance at Pushpalal Road (R2)



Figure 2 Draining road surface water to the side drain at Pushpalal Road (R2)



Figure 3 Gravel deposited for road maintenance



Figure 4 Maintenance of road by JCB



Figure 5 Road maintenance at sewer line road



Figure 6 Draining of road surface water

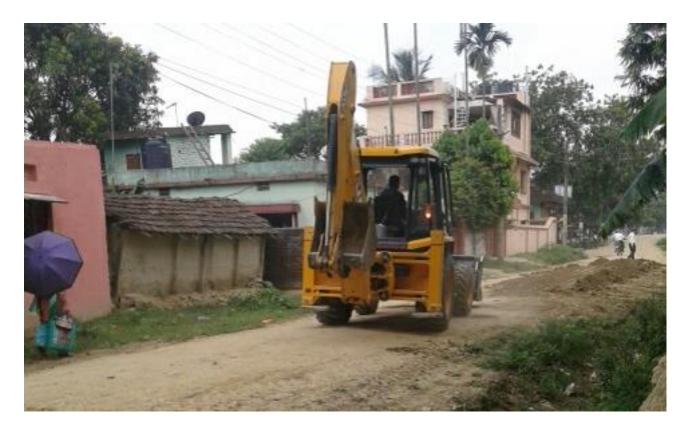


Figure 7 Road maintenance using JCB



Figure 8 Road maintenance at Sewer site



Figure 9 Road maintenance at R2 road



Figure 10 Slabs being cured at Katahari Yard

July 2015

Site-Specific EMAP Monitoring Checklist

Name of Contractor:M/S CTCE-KALIKA J.V.Contract No:STIUEIP/W/BRT/ICB-01For the Month of July 2015Consulting Engineers:SMEC-Brisbane-AQUA-BDA-CEMATFor the Month of July 2015

(Insert sign $\sqrt{}$, or scale where applicable)

| Project stage | Project Activity | Potential Environmental Impacts | Proposed mitigation measures | Mitigation Compliance | Mitigation Effectiveness | | DSC | Rema | rks | |
|---------------------------------|---|--|---|--------------------------|-----------------------------|-------|------------|------------------------------|------------|----|
| Preparation for construction | | | | Indicate in 1-5 scale | Indicate in 1-5 scale | Non C | | e (C); iance (ble (NA | () | |
| | | | | | | | С | | NC | NA |
| | | | | | | <25% | 25- 50% | >75% | | |
| | Identify the temporary areas required by the project and locate them with proper marking | May result social tensions | Prepare the details of temporary land acquisition and other private properties | 2 | 2 | | | | | |
| | locate them with proper marking | | Submit to Supervising Engineer | 2 | 2 | | | | | |
| | | | Follow RAP for temporary acquisition | 2 | 2 | | | | | |
| | Submit applications to get an approval Submit such agreement and permits to Supervising Engineers for official information | May result social conflict and legal obstructions resulting in delay of work | Obtain Letters of Approval and Agreement for (i) temporary acquisition of land and properties (ii) relocation of religious site, foot trails, (iii) disruption of water supply, and others | 2 | 2 | | | | | |
| | | May result social conflict and legal obstructions resulting in delay of work | Pegging of all constructions site and labor camp | 2 | 2 | | | | | |
| | | Pegging of project area | Maintain records of trees and other properties likely to be affected | 2 | 2 | | | | | |
| | | Haphazard camps resulting in social stress and degradation of local environment | Establish workforce camp at designated site only | 2 | 2 | | | | | |
| | | Local people may be deprived of opportunities, Minors may be employed | Employ local people (not under age 14) especially SPAF, and PAF in jobs | 2 | 2 | | | | | |
| | | | Settle wage rate based on DWEC and provide the list of employees to Supervising Engineer | 2 | 2 | | | | | |

| Project stage | Project Activity | Potential Environmental Impacts | Proposed mitigation measures | Mitigation Compliance | Mitigation Effectiveness | | DSC | c Rema | rks | |
|--------------------------------|--|---|---|--------------------------|-----------------------------|------------------------|------------|--------|-----|----|
| | | | | Indicate in 1-5 scale | Indicate in 1-5 scale | Comp Non (Not a | A) | | | |
| | | | | | | С | | | NC | NA |
| | | | | | | <25% | 25- 50% | >75% | | |
| Construction | Construction Activity | | | | | | | | | |
| Phase: Physical Environment | Adopt cut and fill principle during earthworks Disposal of excess materials in | Soil Erosion sedimentation and slope instability | Adopt 'cut and fill' approach, wherever possible | 2 | 2 | | | | | |
| | designated area | | Avoid works during monsoon | 2 | 2 | | | | | |
| | Apply Bio-engineering for controlling of erosion and Gully | | Provide proper drainage facilities | 3 | 3 | | | | | |
| | | | Stockpile top soil for reuse | 2 | 3 | | | | | |
| | | | Adopt gully control and bioengineering | 2 | 3 | | | | | |
| | | | Procure aggregates from already existing sites | 2 | 2 | | | | | |
| | | | Dispose spoil in designated area | 2 | 3 | | | | | |
| | Quarrying from river bed | Change in River Hydrology and River Morphology | Avoid Quarrying/Mining activity in river/streams for extraction of materials required for project shall not be done so that change the river cross sections and longitudinal profile do not occur | 2 | 2 | | | | | |
| | | | Ensure care so that irrigation canal/channel are not adversely affected by the project construction | 2 | 1 | | | | | |
| | | | Ensure care of stone spout in order not to disturb the existing flow. | 2 | 1 | | | | | |

| Project stage | Project Activity | Potential Environmental Impacts | Proposed mitigation measures | Mitigation Compliance | Mitigation Effectiveness | | DSC | Rema | rks | |
|---------------|--|------------------------------------|---|---------------------------|-----------------------------|-------|------------|------------------------------|------------|----|
| | | | | Indicate in 1- 5 scale | Indicate in 1-5 scale | Non (| pplica | e (C); iance (ble (NA | A) | |
| | | | | | | | C | | NC | NA |
| | | | | | | <25% | 25- 50% | >75% | | |
| | C | Water Pollution | Avoid camping facility within drainage | 1 | 1 | | | | | |
| | Dumping of waste in the river Construct of toilets in the camps | | Prohibition on dumping of wastes in the water source | 2 | 2 | | | | | |
| | Storing of materials in the project area | | Provision of sanitary facility and prohibition on defecation in open areas | 2 | 2 | | | | | |
| | Handling of toxic materials Dumping of excess materials Quarry operation | | Proper storage of construction aggregates, hazardous, and toxic materials and proper disposal of chemical containers, packaging materials, plastic bags provide training to workforce on safe handling of toxic materials | 2 | 2 | | | | | |
| | | | Disposal of waste in the designated area | 2 | 2 | | | | | |
| | | | provide dumping site and waste treatment facility | 2 | 3 | | | | | |
| | | | Avoid excessive mining from riverbed. | 2 | 2 | | | | | |
| | Movement of vehicles Operation of crusher Earthworks | Air Quality deterioration | Spraying of water in dry season at construction site and disposal site (Three time a day) | 2 | 2 | | | | | |
| | Stockpiling of construction waste and construction materials | | | | | | | | | |

| Project stage | Project Activity | Potential Environmental Impacts | Proposed mitigation measures | Mitigation Compliance | Mitigation Effectiveness | | DSC | c Rema | arks | |
|---------------|---|------------------------------------|--|---------------------------|-----------------------------|------------------------|------------|--------|------|----|
| | | | | Indicate in 1- 5 scale | Indicate in 1-5 scale | Comj Non (Not a | A) | | | |
| | | | | | | С | | | | NA |
| | | | | | | <25% | 25- 50% | >75% | | |
| | | | Limit speed of construction vehicle | 2 | 2 | | | | | |
| | | | Safe place | 2 | 2 | | | | | |
| | | | Regularly maintain equipment and cover the stockpile | 2 | 3 | | | | | |
| | | | Compliance of vehicles with National Vehicle Mass Emission Standards, 2756 BS | 2 | 2 | | | | | |
| | | | Arrange proper ventilation in confined working areas | 3 | 2 | | | | | |
| | Movement of vehicles | Noise and vibration | Fit mufflers to control noise | | | | | | | |
| | Operation of crusher Operation of construction | | speed limit of construction vehicle | 2 | 2 | | | | | |
| | machineries and equipment | | Use light horn in vehicles | 2 | 2 | | | | | |
| | Horn honking | | Maintenance of equipment | 2 | 2 | | | | | |
| | | | Prohibit the operation of crushing plant between 7 PM to 6 AM | 3 | 2 | | | | | |
| | | | Compensate the damages caused by vibration | 3 | 3 | | | | | |

| Project stage | Project Activity | Potential Environmental Impacts | Proposed mitigation measures | Mitigation Compliance | Mitigation Effectiveness | | DSC | c Rema | rks | |
|----------------------------------|---|------------------------------------|---|---------------------------|-----------------------------|------------------------|-----|--------|-----|---|
| | | | | Indicate in 1- 5 scale | Indicate in 1-5 scale | Comj Non (Not a | 4) | | | |
| | | | | | | <25% | C | >75% | NC | |
| | Scrapping of top spoil | Effect on Soil quality | Stockpile reusable top soil properly in safe yard | 1 | 2 | | 50% | | | |
| | Storage of fuel, lubricating oil, chemicals etc. | Solid waste problems, health risk | Store all materials, toxic, non-toxic and hazardous materials in safe place (warehouse) | 1 | 1 | | | | | |
| | Project activities producing wastes such as used tyres, lubricating oil, exhausted battery etc | | Collect, segregate and dispose waste at designated area | 2 | 2 | | | | | |
| Construction | Construction Activity | | | | | | | - | | - |
| Phase: Biological Environment | vegetation clearance for construction of project structures | Vegetation clearance | Cut only marked trees | 2 | 1 | | | | | |
| | Fuel wood and NTFPs collection by workforce | Loss of vegetation species | Prohibit fuel wood and timber collection | 2 | 1 | | | | | |
| | vegetation clearance for | | Prohibit illegal NTFPs collection and Trade | 3 | 2 | | | | | |
| | construction of project structures and compensation to | | Provide LPG/kerosene to workforce | 3 | 2 | | | | | |
| | them | | Stockpile the felled trees and take permission from concerned authority for its use | 2 | 3 | | | | | |
| | | | Plant trees @ 5 times of each felled trees | 2 | 3 | | | 1 | | 1 |
| | | | Compensate for affected trees from private and community forests | 3 | 3 | | | | | |

| Project stage | Project Activity | Potential Environmental Impacts | Proposed mugation measures Co Ind Ind | Mitigation Compliance Indicate in 1- 5 scale | Mitigation Effectiveness Indicate in 1-5 scale | s DSC Remarks Compliance (C); Non Compliance (NC) Not applicable (NA) | | | | | |
|--|---|---|---|---|---|--|------------|------|--|----|--|
| | | | | | | | С | | | NA | |
| | | | | | | <25% | 25- 50% | >75% | | | |
| Construction Phase: Socio-Economic Environment | compensation and Rehabilitation as per RAP | Land Intake and compensation to affected people | Avoid involuntary displacement | 3 | 3 | | | | | | |
| | | | Compensation, Rehabilitation and employment opportunity to the affected people | 2 | 3 | | | | | | |
| | | | Provide all possible assistance to the displaced people until the displaced people are settled | 3 | 3 | | | | | | |
| | | | Provide disturbance and rehabilitation cost | 3 | 4 | | | | | | |
| | | | Protect traditional rights of locals | 1 | 1 | | | | | | |
| | | | Compensate for any loss of crops, trees and other natural resources | 3 | 3 | | | | | | |
| | | | Establish technical committee to assess damage caused by vibration for compensation | 3 | 3 | | | | | | |
| | Reinstatement of damaged community services and infrastructures | mirastructures | Compensate or reinstate community assets such as temples, bridges and irrigation canals, electricity poles, telephone lines, drinking water pipes, sewerage lines, roads, trails, cremation sites etc | 3 | 3 | | | | | | |

| Project stage | Project Activity | Potential Environmental Impacts | Proposed mitigation measures | Mitigation Compliance | Mitigation Effectiveness | DSC Remarks | | | | | |
|---------------|---|---|---|---------------------------|-----------------------------|-------------|-----------------------------|---------|------------|----|--|
| | | | | Indicate in 1- 5 scale | Indicate in 1-5 scale | Non | oliance Compli pplica | iance (| A) | | |
| | | | | | | <25% | C | . 750/ | | NA | |
| | | | | | <25% | 25- 50% | >75% | | | | |
| | Influx of outside workforce, money and disharmony activity | Increase in crime and community stress | Instruct Workforce for not to indulge in Gambling and drinking alcohol | 3 | 2 | | | | | | |
| | | | Prohibit Visiting of workers to nearby village after 7 pm and living outside | 3 | 2 | | | | | | |
| | | | Instruct workforce to respect local culture, tradition, rights etc. | 3 | 2 | | | | | | |
| | | | Request police to patrol in the camp site and adjoining villages | 3 | 2 | | | | | | |
| | | | Launch awareness programs concerning the human trafficking and possibility of spread of STDs and HIV/AIDS | 3 | 2 | | | | | | |
| | Project Activities relating to health and safety issues at work areas | Health and hygiene (unsafe working conditions, accidents, fire hazard, transmission of communicable disease) | Provide facilities of health check, proper sanitation and hygiene, health care, control of epidemic diseases to workforce | 2 | 1 | | | | | | |
| | | | Provide awareness on STD, HIV/AIDS | 2 | 1 | | | | | | |
| | | | Place adequate warning system, signboard, hoarding post and prohibit visiting risky area as necessary | 2 | 1 | | | | | | |
| | | | Make available first aid kits ambulance and fire fighting gears | 1 | 1 | | | | | | |
| | | | Make available protection gears to all construction workers and compensate for the loss of life or any type of injuries | 1 | 1 | | | | | | |
| | Dislocation of archaeological artifacts, if any | | Protect archaeological and cultural sites In case of relocation, consult local community | 3 | 2 | | | | | | |

| Project stage | Project Activity | Potential Environmental Impacts | Proposed mitigation measures | Mitigation Compliance | Mitigation Effectiveness | DSC Remarks | | | | |
|---------------------------------|---|---|--|---------------------------|-----------------------------|-------------|------------|--------------------|--|----|
| Preparation for construction | | | | Indicate in 1- 5 scale | Indicate in 1-5 scale | Non C | | ance (l ble (NA | | NA |
| | | | | | | <25% | 25- 50% | >75% | | |
| | Demolition of unnecessary structures | Decline in aesthetics and inconvenience to people | Remove all unnecessary structures and reinstall the facilities and others to the original condition | 3 | 2 | | | | | |
| | Traffic management at construction sites | | Provide information about construction schedule to the local people | 3 | 2 | | | | | |

Space for additional remarks (if any):

Prepared by: CTCE/KALIKA JV

Submitted to: SMEC-Brisbane-AQUA-BDA-CEMAT

Date of submission: August, 2014

Note: Scale 1. Very Good (all implemented); 2. Good (the majority implemented); 3. Fair (some implemented); 4. Poor (few implemented); 5. Very Poor (very few or no implemented)

LAB REPORT SUMMARY

SECONDARY TOWNS INTEGRATED URABAN ENVIRONMENTAL IMPROVEMENT PROJECT Biratnagar Sub-Metropolitant City SUMMARY OF CUBE COMPRESSIVE STRENGTH TEST M30/20 MAN HOLE CASTING WORK MIX FOR THE MONTH OF JULY 2015 S.N Lab Ref Deatails of Mix Location Ratio by MASS Materials Cube Crushing .N/mm2 Remarks Date of No Casting Structure Water Cement Sand Aggregate Cement Brand Apprepate/Sand 7 days 28-Days 1 MR33 7/6/2015 M30 Work mix MANHOLE YARD 0.36 1 1.28 2.14 SHIVAM Om shree C/plant 26.8 31.0 2 MR34 25/6/2015 M30 Work mix MANHOLE YARD 0.36 1.28 2.14 SHIVAM Om shree C/plant 26.8 31.4 2/7/2015 SHIVAM Om shree C/plant 27.3 31.1 3 MR35 M30 Work mix MANHOLE YARD 0.36 1.28 2.14 SHIVAM Om shree C/plant 4 MB36 17/6/2015 M30 Work mix MANHOLE YARD 0.36 1.28 2.14 24.2 30.9 5 MR37 MANHOLE YARD 0.36 SHIVAM Om shree C/olant 22.1 30.2 19/0/2015 M30 Work mix 1.28 2.14 Total cube crushed 30 NOS Specifacation Limit Table For M30/20 on 7 days Age Min 67% of Total Compressive Strength Min Required 20.1 30 SMEC-Brisbane-AQUA-RDA CTCE-KALIKA J/V Submitted by Project Manager Approved by Construction Supervision Engineer/CSE Test checked by Junior Engineer Test conducted by Q.C Manager Sur

Consultants Reps

Contractors Reps

SECONDARY TOWN INTEGRATED URABAN ENVIRONMENTAL IMPROVEMENT PROJECT

Biratnagar-Sub-Metropolitant City

SUMMERY OF THE MORTAR WORK MIX CUBE

FOR THE MONTH OFJULY 2015

| | | SOMME | TOF THE MORTAR V | VORK MIX CUI | DE | FOR THE MONTH OFJULY 2015 | | | | | | | |
|----------|---------|-------------------|--------------------------|----------------|--------------|---------------------------|--------------|-------------|-------------|--------------|---------------|-----------------|---------|
| S.N. | Cube | Name of Cement | Location/Structure | Details of MIX | Casting | | ncy & Settin | | | be Crushing | | be crushing | Remarks |
| | No. | | | | | Norm. Const. | Intial(min.) | Final(min.) | Date | Str. N/mm2 | Date | Str. N/mm2 | |
| _1 | 226 | Shivem | CN3 | 1:4 by volume | 3/6/2015 | 33.10 | 290 | 305 | 10/6/2015 | 6.58 | 1/7/2015 | 7.62 | |
| 2 | 227 | Shivam | S13L1F | 1:4 by volume | 3/6/2018 | 33.10 | 290 | 305 | 10/6/2015 | 6.17 | 1/7/2015 | 7.21 | |
| 3 | 228 | Shivam | CN3 | 1:4 by volume | 4/6/2015 | 33.10 | 290 | 305 | 11/6/2015 | 6.17 | 2/7/2016 | 8.67 | |
| 4 | 229 | Shivam | RAN | 1:4 by volume | 5/5/2015 | 33.10 | 290 | 305 | 12/8/2015 | 6.80 | 3/7/2015 | 8.84 | |
| _6 | 230 | Shivam | RANI | 1:4 by volume | 6/6/2015 | 33.10 | 290 | 305 | 12/6/2015 | 6.80 | 3/7/2015 | 10.88 | |
| 6 | 231 | Shivam | RS | 1:4 by volume | 6/6/2015 | 33.10 | 290 | 306 | 13/6/2015 | 7.35 | 3/7/2015 | 9.39 | |
| 7 | 232 | Shivam | RAN | 1:4 by volume | 6/6/2015 | 33.10 | 290 | 305 | 13/6/2015 | 8.67 | 3/7/2015 | 8,67 | |
| 8 | 233 | Shivam | RANI | 1:4 by volume | 8/8/2016 | 33.10 | 290 | 306 | 15/6/2015 | 6.39 | 5/7/2015 | 8.03 | |
| 9 | 234 | Shivam | CN2 | 1:4 by volume | 8/8/2015 | 33.10 | 290 | 305 | 15/6/2016 | 6.39 | 5/7/2015 | 7.62 | |
| 10 | 235 | Shivam | RANI | 1:4 by volume | 11/6/2015 | 33.10 | 290 | 305 | 18/6/2015 | 6.60 | 8/7/2015 | 8.16 | |
| 11 | 236 | Shivam | RANI | 1:4 by volume | 11/6/2015 | 33.10 | 290 | 305 | 18/6/2015 | 6.44 | 8/7/2015 | 7.35 | |
| 12 | 237 | Shivam | Rő | 1:4 by volume | 13/8/2016 | 33.10 | 290 | 305 | 20/6/2015 | 7.62 | 11/7/2015 | 8.03 | |
| 13 | 238 | Shivam | RANI | 1:4 by volume | 13/6/2015 | 33.10 | 290 | 305 | 20/6/2015 | 7.21 | 11/7/2015 | 9.26 | |
| 14 | 239 | Shivam | RANI | 1:4 by volume | 14/8/2016 | 33.10 | 290 | 305 | 21/8/2015 | 7.21 | 12/7/2015 | 9.66 | |
| 16 | 240 | Shivam | RANI | 1:4 by volume | 14/6/2015 | 33.10 | 290 | 305 | 21/6/2016 | 7,21 | 12/7/2015 | 9.25 | |
| 16 | 241 | Shivam | B2 MAN HOLE | 1:4 by volume | 15/6/2016 | 33.10 | 290 | 305 | 22/8/2015 | ,6.53 | 13/7/2015 | 8.12 | |
| 17 | 242 | Shivam | RANI | 1:4 by volume | 16/8/2015 | 33.10 | 290 | 305 | 22/6/2015 | 5.85 | 13/7/2016 | 7.62 | |
| 18 | 243 | Shivam | RAN | 1:4 by volume | 16/6/2015 | 33.10 | 290 | 305 | 23/6/2015 | 6.94 | 14/7/2016 | 8.98 | |
| 19 | 244 | Shivam | B2 MAN HOLE | 1:4 by volume | 16/6/2015 | 33.10 | 290 | 305 | 23/6/2015 | 6.12 | 14/7/2015 | 8.57 | |
| 20 | 245 | Shivam | RANI | 1:4 by volume | 17/8/2016 | 33.10 | 290 | 305 | 24/6/2015 | 6.67 | 15/7/2015 | 9.12 | |
| 21 | 246 | Shivam | B2 MAN HOLE | 1:4 by volume | 19/6/2015 | 33.10 | 290 | 305 | 26/6/2015 | 6.53 | 16/7/2015 | 9.80 | |
| 22 | 247 | Shivam | B2 | 1:4 by volume | 19/6/2015 | 33.10 | 290 | 305 | 26/6/2015 | 6.39 | 16/7/2015 | 9.62 | |
| 23 | 248 | Shivam | \$13L1# | 1:4 by volume | 21/6/2015 | 33.10 | 290 | 305 | 28/6/2015 | 7.35 | 17/7/2015 | 9.52 | |
| | | | According to is 225 | 0-1981 | | | MIN 45m | Max 600m | Required st | rength on 28 | davs not less | than 6 or 7.5 N | MM2 |
| SMEC-B | risbane | -AQUA-BD | A-CEMAT | | CTCE- | ALIKA JA | | | | | | | |
| Approve | d by Co | instruction | Supervision Engineer/CSE | Submitte | ed by Projec | t Manager | Sul | <i>,</i> | | | | | |
| fest Che | cked b | y Junior En | gineer | Test con | ducted by C | l.C Man∎g | er | | | | | | |
| Consulta | ants Re | os | | | Contra | Contractore Reps | | | | | | | |

| | | Mo | RATNAGAR Sul | tory Tes | sting Re | oport | | | STIUEIP |
|--------|-----------------------------------|---------------------------|--|--------------|----------------|--------|----------------------|--------------------------------------|--------------|
| ons | ultants:SMEC-Brisbane-AQUA | | or The Mon | th OF.I | ULY 20 | | ctors: CT | CE- KALIKA | J/V |
| | | | | 1 | lest Performed | | | | |
| S. No. | Description of Material | Type of tass | Tetal No. of Test upto previous month | No. of Tests | Passed | Failed | Retest Recemended | Total No. of Test upto This month | Remarks |
| 1 | Granular Material/Gravel material | Sleve analysis | 2 | 0 | 0 | 0 | | 2 | |
| | | MDD & OMC | | 1 | | | | | |
| | | C.8.R | | | | | | | |
| | 1 | Field Density | | | | ****** | | ****** | |
| 2 | SUB GRADE Preparation | MDD & DMC | 4 | 0 | 0 | 0 | | 4 | |
| | asPere Specifacation | Field density | 10 | 0 | 0 | Ö | | 10 | |
| | | C.B.R | 5 | 0 | 0 | 0 | | 5 | |
| 3 | BRICK WORK | Water Absorption | 185 | 0 | 0 | 0 | | 185 | |
| | Required Test | Compressive Strength | 1333 | 0 | 0 | 0 | ******* | 1333 | |
| 4 | Masonry Mortar (CM 7.05) | Compressive strength | 1314 | 138 | 138 | 0 | | 1452 | |
| 6 | CONCRETE AGGREGATE | Southeaster maniful | 1014 | 100 | 100 | | | 1402 | |
| | Coarse aggregate (20 mm) | Sieve analysis (20 mm) | 93 | 0 | 0 | 0 | | 93 | 1 |
| | course appregate (20 min) | LAA | 58 | ő | 0 | Ő | | 58 | |
| | 1 | Specific Gravity | 15 | 0 | 0 | õ | ****** | 15 | |
| | | FI / EI | 80 | ŏ | ŏ | ő | | 80 | |
| | | ACV | 87 | 0 | 0 | 0 | | 87 | |
| | | 555 | 01 | | · · · · | | | 0/ | |
| | 1 . | | 2 | | ····· | | | | |
| | | Unit weight | 84 | 0 | 0 | 0 | | <u> </u> | |
| | Fine appregate (Sand) | Sieve analysis | | | | | | 84 | |
| | | Sand Equivalent Test(S.E) | 2 | 0 | | Ö | | | |
| - | | Unit weight | | | 0 | | | 2 | |
| 6 | CONCRETE MIX DESIGN | Concrete mix Design | 75 | 0 | 0 | 0 | | 75 | |
| | | Compressive strength | 738 | 0 | 0 | 0 | | 738 | |
| _ | M25/20,6M30/20 | Siump test | 72 | 0 | 0 | 0 | | 72 | |
| 7 | CEMENT Required Test | | | | . 1 | | | | |
| | OPC Cement | Setting time | 38 | 0 | 0 | 0 | | 38 | |
| | | Normal Consistency | 38 | 0 | 0 | 0 | | 38 | |
| _ | | Compressive strength | 38 | 0 | 0 | 0 | | 38 | |
| 8 | CONCRETE | | | | | | | | |
| _ | Work Mix Test M15,M20,M25,M30 | Compressive strength | 2575 | 198 | 198 | 0 | | 2773 | |
| 9 | REINFORCEMENT | Required Test | | | | | | | 8,10,12,16 |
| | Reinforcement tora steel | As per Specification | 5 | 0 | 0 | 0 | | 5 | 20,25 mm dia |
| 10 | PAVEMENT MATERIALS | | | | | | | | |
| | Sub Base Materials | Sieve analysis | 5 | 0 | 0 | 0 | | 5 | |
| | | MDD & OMC | 2 | 0 | 0 | 0 | | 2 | |

SECONDARY TOWNS INTEGRATED URABAN ENVIRONMENTAL IMPROVEMENT PROJECT BIRATNAGAR Sub-Metropolitant City

Monthly Laboratory Testing Report

(For The Month OFJULY 2015)

STIUEIP

Consultants:SMEC-Brisbane-AQUA-CEMAT-BDA

Contractors: CTCE- KALIKA J/V

| | | | | | Test Performe | d for this mor | Yth | | |
|--------|-------------------------|---------------------------|--|--------------|---------------|----------------|-----------------------|--------------------------------------|---------|
| S. No. | Description of Material | Type of test | Total No. of Test upto previous month | No. of Tests | Passed | Failed | Retost Recommonded | Total No. of Test upto This month | Remarks |
| | | PI | 2 | 0 | 0 | 0 | | 2 | |
| | | CBR | 2 | 0 | 0 | 0 | | 2 | |
| | | Field density | | | | | | | |
| 11 | Back Fill Material | Slove analysis | | | | | | | |
| | | MOD & OMC | | | | | | | |
| ! | | Field density | | | | | | | |
| | | CBR | | | | | | | |
| 12 | CS Base | Slove analysis | 2 | 0 | 0 | 0 | | 2 | |
| | Crushed Stone Base | MOD & OMC | 2 | 0 | 0 | 0 | | 2 | |
| | Material Laying | C.B.R | 2 | 0 | 0 | | | 2 | |
| | | Fi + El | 1 | 0 | 0 | 0 | | 1 | |
| | | LAA | 1 | 0 | 0 | | | 1 | |
| | | 855 | 0 | 0 | 0 | 0 | | 0 | |
| | | ACV/AIV | 1 | 0 | 0 | 0 | | 1 | |
| | | Field Density | | | | | | | |
| 13 | ASHPHALT CONCRETE. | Sleve analysis | | | | | | | |
| · · | Combine Mixed | P17.00 1 | | | | <u>۱</u> | | | 1 |
| | | AGV | | | | | | | |
| | Individual Ca&FA Test | LAA | | | | | | | |
| ÷. | | Unit weight | | | | | | | |
| | | \$55 | - | 0 | ä | | | - | |
| | BITUMEN TEST | Penetration at25.c | 2 | 0 | 0 | | | 2 | |
| | 90(100 Bitumen | Softeing point(ring ball) | 2 | 0 | 0 | | | 2 | |
| | As per DORbook section | Flash point/Fite Point | 2 | · · | 0 | | | 2 | |
| | 600 Table 6.14/is 73 | Ductility at25.c | 2 | 0 | 0 | | | 2 | |
| | | Specific at 25.c | 2 | 0 | 0 | | | 2 | |

SECONDARY TOWNS INTEGRATED URABAN ENVIRONMENTAL IMPROVEMENT PROJECT

BIRATNAGAR Sub-Metropolitant City Monthly Laboratory Testing Report

(For The Month OFJULY 2015)

STIUE

Consultants:SMEC-Brisbane-AQUA-CEMAT-BDA

Contractors: CTCE- KALIKA J/V

| | | | | | Test Performer | d for this mor | ith | Total No. of Test | | |
|----------|---------------------------------------|---------------------------------|--|------------------------|----------------|------------------|-----------------------|-------------------|------------------------|--|
| 8. No. | Description of Material | Type of Inst | Total No. of Test upto previous month | No. of Yests | Passed | Falled | Ratest Recommended | upto This month | Remarks | |
| - | | Water Content | 2 | 0 | 0 | | | 2 | | |
| | | Loss on Heating for 5 hrs | 2 | 0 | 0 | | | 2 | | |
| | 1 | Pen- of residue after loss or | Heating | 0 | 0 | | | 2 | | |
| | | Solubility in trickproetitylese | 2 | 0 | 0 | | | 2 | | |
| 16 | Humpipe Test | Three Edge Bearing Load Test | 2 | 0 | 0 | | | 2 | 200mm to 1600mm 1 each | |
| 16 | Marshall Stability Test | Bulk density | | | | | | | | |
| | | Stability | | | | | | | | |
| 1 | | Flow | | | | | | | | |
| | | Air voides | | | | | | | | |
| | | Bitumen extraction | | | | | | | | |
| | | Voids in Mineral Agg | | | | | | | | |
| | | Job mix in AC Plant | | | | | | | | |
| | | Core Field Density | | | | | | | | |
| 17 | INTUMEN SPREAD TEST | | | | | | | | | |
| | Prime coat | Application rate | | | | | | | | |
| | Teck coat | Application rate | | | | | | | | |
| 18 | Machines/Equipment | | | | | | | | | |
| | Caliberation of compressive | | 2 | | | | | | 2 | |
| | Testing machine | | | | | | | | | |
| | 10005500 KN Menuali | | | | | | | | | |
| 19 | MISCELLANEOUS | | | | - | | | _ | | |
| | GJ Wire(Gablon Boxes) | | 5 | | | | | | 5 | |
| | Factory Test Report of Cement | | 8 | | | | | | 8 | |
| | Factory Test Report of Iron Steel | | 4 | | | | | | 4 | |
| | Factory Test Report of 80/100 Bitumen | | 2 | 0 | 2 | | | | 2 | |
| | Factory Test Report of UPVC/HDP Pipe | | 2 | 2 | 2 | | | | 2 | |
| MDD/OMC | = Max Dry Dennsity | LAA = Los Angeles Abrasie | | | AlV=Aggrego | ite Impact Va | lue | | | |
| | Optimum Moisture Content | SE=Sand Equivglant | | | JMC=Job MI | ix Formula | | | | |
| 555 = So | aum Sulphate Soundness | SMEC-Bris | bane-AQUA-BD | A-CEMAT | | С | CE-KALIKA | 1/V | | |
| ACV = Aq | areglae Grushing Value | Approved by C.S.E | | | | Submi | tted by Pro | ject Manage | r , | |
| | fornia Bearing Ratio | Checked by Junior | | Prepaid by Q.C Manager | | | | | | |
| | | Consultan | | | | Contractors Reps | | | | |
| | | | | | | | | . / | / | |

SECONDARY TOWNS INTEGRATED URABAN ENVIRONMENTAL. IMPROVEMENT PROJECT Biranagar sub-metropolitan City SUMMARY OF CUBE COMPRESSIVE STRENGTH TEST M20/208 M25/20 Work Mix FOR THE MONTH OF JULY 2015

| | | | | | | | | 1 OOLI | | | | | |
|---|--------|------------|--------------|--|-------------------------------|--------|----------|--------------|----------------|-------------------|--------------|---------------|--------|
| S.N. Ref Date of Deatails of Mix Location | | | | | Rati | o by V | OLUME | | Тура | of Material | Cube Cru | shing ,N/mm2 | Remark |
| | No. | Casting | | Structure | Water | Ceme | nt Sand | Aggregate | Cement Brand | Aggregate/Sand | 7 days | 28-Days | |
| 1 | 300 | 3/6/2015 | M20 Work mix | B1 L1 SHEAR WALL CONCRETE | 0.60 | 1 | 2 | 3.5 | Shivam | Om shree C/plant | 17.26 | 22.89 | |
| 2 | 301 | 3/8/2015 | M20 Work mix | B3 L1 SHEAR WALL CONCRETE | 0.50 | 1 | 2 | 3.5 | Shivam | Om shree Ciplant | 15.63 | 23.11 | _ |
| 3 | 302 | 11/6/22015 | M20 Work mix | R2 Road pcc bed | 0.50 | 1 | 2 | 3.6 | Shivam | Om shree C/plant | 16.10 | 22.95 | |
| 4 | 303 | 11/6/2015 | M20 Work mix | B3 L1 SHEAR WALL CONCRETE | 0.60 | 1 | 2 | 3.6 | Shivam | Om shree C/plant | 17.19 | 22.37 | *1 |
| 6 | 304 | 13/6/2015 | M25 Work mix | B2L1 RCC TOP SLAB | 0.46 | 1 | 1.87 | 3.25 | Shivam | Om shree C/plant | 17.93 | 26.74 | |
| 8 | 305 | 13/6/2015 | M25 Work mix | B1L1 RCC TOP SLAB | 0.46 | 1 | 1.87 | 3.25 | Shivam | Om shree Ciplant | 17.85 | 27.26 | |
| 7 | 306 | 14/6/2015 | M26 Work mix | B2L1 RCC TOP SLAB | 0.48 | 1 | 1.87 | 3.25 | Shivam | Om shree C/plant | 18.74 | 27.19 | |
| 8 | 307 | 14/8/2015 | M26 Work mix | B3 L1 SHEAR WALL CONCRETE | 0.46 | 1 | 1.87 | 3.25 | Shivam | Om shree C/plant | 18.81 | 27.33 | |
| 9 | 308 | 14/6/2015 | M25 Work mix | B2L1 RCC TOP SLAB | 0.46 | 1 | 1.87 | 3.25 | Shivam | Orn shree C/plant | 18.15 | 27.41 | _ |
| 10 | 309 | 16/6/2016 | M25 Work mix | B2L1 RCC TOP SLAB | 0.46 | 1 | 1.87 | 3.26 | Shivam | Om shree C/plant | 18.45 | 27.48 | |
| 11 | 310 | 18/6/2015 | M25 Work mix | B3L1 RCC TOP SLAB | 0.46 | 1 | 1.87 | 3.25 | Shivam | Om shree C/plant | 19.04 | 27.58 | |
| 12 | 311 | 17/6/2015 | M26 Work mix | B3L1 RCC TOP SLAB | 0.46 | 1 | 1.87 | 3.25 | Shivam | Om shree C/plant | 19.28 | 28.00 | |
| 13 | 312 | 18/6/2016 | M25 Work mix | B1L1 RCC TOP SLAB | 0.46 | 1 | 1.87 | 3.25 | Shivam | Om shree C/plant | 19.33 | 27.41 | |
| 14 | 313 | 18/6/2015 | M25 Work mix | B2L1 RCC TOP SLAB | 0.48 | 1 | 1.87 | 3.25 | Shivam | Om shree C/plant | 18.52 | 29.19 | _ |
| 15 | 314 | 19/6/2015 | M20 Work mix | B3 L1 SHEAR WALL CONCRETE | 0.50 | 1 | 2 | 3.6 | Shivarn | Om shree C/plant | 18.59 | 22.96 | |
| 16 | 315 | 19/6/2015 | M25 Work mix | B2L1 RCC TOP SLAB | 0.46 | 1 | 1.87 | 3.25 | Shivam | Om shree C/plant | 19.04 | 27.41 | |
| 17 | 316 | 22/8/2016 | M25 Work mix | B2L1 RCC TOP SLAB | 0.46 | 1 | 1.87 | 3.25 | Shivam | Om shree G/plant | 17.19 | 27.11 | |
| 18 | 317 | 23/6/2015 | M20 Work mix | B1 L1 SHEAR WALL CONCRETE | 0.50 | 1 | 2 | 3.6 | Shivam | Om shree C/plant | 16.30 | 23.56 | |
| | | | | | | | | · · | | | | , | |
| | _ | | | | | _ | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | Total | 108 NOS cube | crushed on JU | |
| _ | _ | | | ecilacation Limit Table For M20/20 on | | | | | | Min Required | 13.4 | 20 | |
| | _ | | 5 | ecifatiation Limit Table For M25/20 on | 7 days Ag | e Min | 57% of T | otal Compres | ssive Strength | Min Required | 16.75 | 25 | _ |
| ME | C-Brit | sbane-AQ | UA-BDA | [0] | CTCE | -KAI | JKA J | īv | | 22 | | | |
| ppr | oved | by Const | ruction Supe | rvision Engineer/CSE | Subm | itted | by Pr | oject Ma | nager 🦯 | 32 | | | |
| est | checi | ked by Ju | nior Enginee | r | Test conducted by Q.C Manager | | | | | | | | |
| ons | ultan | ts Reps | | | Contra | acto | rs Rep | s | | 6/ | | | |

| | | | DARY TOWN | E COMPRE | Bira | STRE | ING1 | b-Metro | opolitant | City | | | | | | |
|------|-----------|----------------|-----------------------|----------------------|------------|-------------------------------|-------|-----------|--------------|------------------|-------------|---|---|--|--|--|
| S.N | ab Ref | Date of | Deatails of Mix | Location | Ra | tio by VOL | UME | | Ma | iterials | Cube Cru | ING WORK MIX State Crushing _Kimm2 Remarks days _ 226_202; 223 17.3 223 17.2 22.4 17.2 22.4 17.2 22.4 17.3 21.6 17.4 22.1 16.7 21.8 16.6 21.6 16.7 22.8 17.2 22.4 | | | | |
| 5.N. | No. | Casting | | Structure | Water | Cement | Sand | Aggregate | Cement Brand | Aggregate/Sand | 7 days | 28-Days | | | | |
| 1 | 101 | 3/8/2015 | M20 Work mix | SLAB YARD | 0.50 | 1 | 2 | 3.5 | SHIVAM | Om shree G/plant | 17.3 | 22.3 | | | | |
| 2 | 102 | 6/6/2015 | M20 Work mix | SLAB YARD | 0.50 | 1 | 2 | 3.5 | SHIVAM | Om shree C/plant | 17.3 | 21.8 | | | | |
| 3 | 103 | 8/6/2015 | M20 Work mix | SLAB YARD | 0.50 | 1 | 2 | 3.6 | SHIVAM | Om shree C/plant | 17.2 | 22.4 | | | | |
| 4 | 104 | 11/6/2015 | M20 Work mix | SLAB YARD | 0.50 | 1 | 2 | 3.5 | SHIVAM | Om shree C/plant | 17.2 | 21.6 | | | | |
| 5 | 105 | 12/6/2015 | M20 Work mix | SLAB YARD | 0.50 | 1 | 2 | 3.5 | SHIVAM | Om shree C/plant | 17.8 | 22.4 | | | | |
| 6 | 106 | 14/6/2015 | M20 Work mix | SLAB YARD | 0.60 | 1 | 2 | 3.5 | SHIVAM | Om shree C/plant | 16.3 | 22.1 | _ | | | |
| 7 | 107 | 18/8/2015 | M20 Work mix | SLAB YARD | 0.50 | 1 | 2 | 3.6 | SHIVAM | Om shree C/plant | 16.7 | 21.9 | | | | |
| 8 | 108 | 18/8/2015 | M20 Work mix | SLAB YARD | 0.50 | 1 | 2 | 3.6 | SHIVAM | Om shree C/plant | 16.6 | 21.6 | - | | | |
| 9 | 109 | 20/6/2015 | M20 Work mix | SLAB YARD | 0.50 | 1 | 2 | 3.6 | SHIVAM | Om shree C/plant | 16.6 | 21.6 | | | | |
| 10 | 110 | 20/6/2015 | M20 Work mix | SLAB YARD | 0.50 | 1 | 2 | 3.6 | SHIVAM | Om shree C/plant | 17.2 | 22.3 | | | | |
| - | - | | | | - | _ | _ | | | | | | - | | | |
| 1 | | _ | | | - | _ | + | _ | | | + | | _ | | | |
| | | | | | | | | | | Total cube crush | ed 60 Nos c | n JULY | | | | |
| 1 | specifaci | etion Limit Te | ble For M20/20 on 7 d | ays Agn Min 67% of T | otal Compr | essive Str | ength | | | Ain Required 1 | 3.4 | 20 | | | | |
| | | ane-AQUA-B | DA | De¢r/CBE | Subn | | y Pro | ject Man | C | S.E. | | | | | | |
| est | checked | d by Junior E | Engineer | | | Test conducted by Q.C Manager | | | | | | | | | | |
| on | ultants | Reps | | | Cont | ractors | Reps | | 191 | / | | | | | | |

| | Secondary Town Integrated Urban Environmental Improvement Project | | | | | | | | | | | | | | |
|---|---|----------|---------|----------|-----------------------------------|------------------|---------------|---------|--------------|--|--|--|--|--|--|
| Biratnagar Sub-Metropolitan city | | | | | | | | | | | | | | | |
| 1 | | | | | Contract Package: | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | DAILY WEATHER RECORD | | | | | | | | | | | | | | |
| | FOR THE MONTH OF JULY 2015 | | | | | | | | | | | | | | |
| Date | | | | | WEATHER Recon | rd. | | Temp.c | | | | | | | |
| Date | Sunny | Foggy | Windy | Cloudy | Murning Rain HRS | Night Rain Ilrs. | Day Rain Hrs. | 9:00 AM | Rain fall mm | | | | | | |
| L | Sunny | | | _ | | | | 34 | | | | | | | |
| 2 | Sanny | | | | | | | 36 | | | | | | | |
| 3 | Sunny | | | | | Night Rain Hrs. | | 36 | 16mm | | | | | | |
| 4 Sunnay Night Rain Irs. 36 26mm | | | | | | | | | | | | | | | |
| 5 Sunny 38 | | | | | | | | | | | | | | | |
| 6 | Sunny | _ | | - | | | | -40 | | | | | | | |
| 7 | Sunny | - | | | | | | 39 | | | | | | | |
| 8 | Sunny | | _ | - | | Night Rain IIrs. | | 38 | 16mm | | | | | | |
| 9 | Sunny | - | - | | | | | 40 | | | | | | | |
| 10 | Sunny | | - | <u> </u> | | | | 39 | | | | | | | |
| 91 | Sunny | <u> </u> | - | | | | | 39 | | | | | | | |
| 12 | _ | - | - | Cloudy | | Night Rain Hrs. | Day Rain Hrs. | 34 | <u>64mm</u> | | | | | | |
| 13 | Sunny | - | - | Cloudy | | | | 36 | | | | | | | |
| 14 | - | - | - | Cleudy | | Night Rain Rrs. | Day Rain Hrs. | 32 | 80mm | | | | | | |
| 15 | Sunny | _ | | - | | | | 39 | | | | | | | |
| 16 | Sunny | - | - | Cloudy | Morning Rain EIRS | | | | 18mm | | | | | | |
| 18 | | | - | Cloudy | -norming point tipes | | | 36 | Tomm | | | | | | |
| 19 | Sunny Sunny | - | - | | | | - / | 39 | | | | | | | |
| 20 | Sunny | - | - | - | | - | | 38 | | | | | | | |
| 21 | Sunny | | - | - | | <u> </u> | | 38 | | | | | | | |
| 22 | Sunny | - | - | - | | | | 30 | | | | | | | |
| 23 | Sunny | - | - | | | | | 36 | | | | | | | |
| 24 | Sunny | - | | _ | | | | 34 | | | | | | | |
| 25 | Sunny | | | - | | | | 32 | | | | | | | |
| 26 | Sunny | | | | | | | 32 | | | | | | | |
| 27 | Sunny | | | | | | | 32 | | | | | | | |
| 28 | Sanny | | | | | | | 38 | | | | | | | |
| 29 | Sunny | | | | | | | 39 | | | | | | | |
| 30 | Sunny | | | | | | | 38 | | | | | | | |
| 31 | Suony | | | | | | | 30 | | | | | | | |
| SMEC-Briedum-AQTA-BDA-CEMET CTCE-KALIKA JV Approved by CSE M Submitted by Project Manager Re | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| Record Checked by Junior Engineer Record Reported by Q.C Manager | | | | | | | | | | | | | | | |
| 1 | Con | sultan | ts Repe | s | Consultants Reps Contractors Reps | | | | | | | | | | |