

# **Zila Roads Maintenance and Improvement Project**

(USAID PROJECT NO. 388-0056)

## **PROGRESS REPORT**

FOR THE MONTH OF  
FEBRUARY, 1985.

By  
Wilbur Smith and Associates  
In association with  
Bangladesh Consultants Ltd.  
and  
Public Administration Service

ZILA ROADS MAINTENANCE AND IMPROVEMENT PROJECT

USAID PROJECT NO.388-0056

PROGRESS REPORT

February 1985

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**LIST OF ABBREVIATIONS**

=====

AIT	=	Asian Institute of Technology.
AE	=	Assistant Engineer.
BCL	=	Bangladesh Consultants Limited.
DE	=	District Engineer.
HBB	=	Herring Bone Bond.
LGEB	=	Local Government Engineering Bureau.
PM	=	Project Manager.
PAS	=	Public Administration Services.
P & D Engineer	=	Planning And Design Engineer.
R & H	=	Roads And Highways.
RE	=	Resident Engineer.
RCC	=	Reinforced Cement Concrete.
SRWP	=	Special Rural Works Programme.
USAID	=	United States Agency for International Development.
WSA	=	Wilbur Smith And Associates.
WBM	=	Water Bound Macadam.
XEN	=	Executive Engineer.
ZRMI	=	Zila Roads Maintenance And Improvement Project.

# ZILA ROADS MAINTENANCE AND IMPROVEMENT PROJECT

USAID PROJECT NO. 338 - 0056

## PROGRESS REPORT

February, 1985

### 1.0 GENERAL

The weather and other environmental factors were favorable for good progress in both maintenance and construction work. Faridpur reported some significant loss of time due to shut down of a roller for repairs, but otherwise noted that progress and level of workmanship were generally good. Sylhet reported very favorably on progress and level of workmanship for the construction projects, but found that there was considerable variance in quality of maintenance work within the District. Rangpur has again reported poor progress and generally low level of workmanship.

The Consultant's design and specifications specialist, Mr. G. A. Lugenbeel, arrived in Dhaka during this reporting period. His work to revise and update designs and specifications, estimated to be completed in draft form in early May 1985, should help to resolve several problems which still plague the project.

As yet, there is still no break in the impasse which impedes further progress in the overseas training programs. It is hoped that the parties concerned will soon reach an agreement on scope and venue of future Third Country and USA training programs.

At long last, the local manufacturer has delivered the trailer-mounted water tanks. Hopefully, the project can look forward to early procurement of the balance of the local and international equipment requirements.

### 2.0 ORGANIZATION AND MANAGEMENT

The need for a short term specialist to review and revise the organization and management report submitted late in 1983 has been discussed by all concerned. It is hoped that work on the revision of this manual will soon get underway.

### 3.0 MAINTENANCE SYSTEM AND SUPERVISION

#### 3.1 General

In January 1985, Mr. Gene George, USAID Project Officer, Mr. Hasan, PM, visited the Sylhet Project to discuss maintenance and construction problems and

to agree on how they might be solved. One of the conclusions that came out of these meetings was that maintenance schemes taken up under the 1984 - 1985 program would still be considered as pilot maintenance schemes. Under this concept, and guided by the draft maintenance manual which has been prepared by the Consultant, the three Districts can continue to work toward uniform and standard practices in rural road maintenance.

All three Districts have reported great variations in the quality of maintenance work being done within the respective Districts. This offers further evidence that standard procedures and practices in rural road maintenance must be adopted as quickly as possible. This has been stressed in the rural roads maintenance module which has been presented in all three Districts in both the first and the second training cycles. However, the practices presented during the training sessions must be reinforced by the acceptance of a training manual which will be distributed to all concerned with rural road maintenance.

The roads involved in the District maintenance programs are shown on the respective (old) District maps, which are identified as follows :

- |           |      |   |                   |
|-----------|------|---|-------------------|
| o Exhibit | II   | - | Sylhet District   |
| o Exhibit | V    | - | Rangpur District  |
| o Exhibit | VIII | - | Faridpur District |

### **3.2 Sylhet District**

#### **3.2.1 General**

In view of the decision to treat 1984 - 1985 maintenance projects as "Pilot Projects", the RE has recommended that the selected projects be put into "ideal" condition so that those responsible for maintenance work would all have similar starting conditions. It is felt that this would be of great assistance in establishing uniform standardized practices for maintenance work.

Personnel responsible for maintenance have all attended the ZRMI training courses in Sylhet, and have also been the recipients of on-the-job training efforts by the RE over the past two years. However, since the 1984 - 1985 projects were initiated in December 1984, it has been observed that results have varied from excellent to sub-standard. As mentioned previously, such a variation in results obtained would indicate a need for an approved set of standard maintenance procedures.

A meeting of the Zila Parishad and RE staffs was held on 18-02-1985, The purpose was to resolve some of the problems and misunderstandings regarding maintenance work and payment procedures to be followed. The XEN agreed that standardization was necessary and issued instructions accordingly to the maintenance AE.

Photos of maintenance work in Sylhet may be found in Appendix A.

### **3.2.2 Sylhet Maintenance Projects**

#### **Hatimganj - Dhakadakshin Road - Earth**

Approximately 1.5 km of maintenance at the Dhakadakshin end of this road were handled by the Sylhet D.E. However, results achieved were not satisfactory. Remedial measures required include the excavation of parallel drainage to route runoff water away from the roadbed, and some work on the road surface.

The XEN's work crew has completed about 9 km of preventive maintenance, included was some remedial work of sections previously handled. This road requires the installation of 3 new culverts (not less than 30 cm diameter), and the replacement of a damaged culvert.

#### **Badaghat Road - Mixed**

The lack of a continuous supply of materials has been an obstacle to good progress in the maintenance efforts. It seems that when shingles and pea gravels are in supply, bituminous material and wood for heating it are lacking, and vice versa.

It appears that the responsible SAE believes that maintenance of only the pavement is required, and not the entire roadbed. It is hoped that this way of thinking can be changed within the near future.

Of the total length of 4.5 km, approximately 2 km have been completed with seal coating. Portions of the remaining 2.5 km have had some patching of the sub-base.

#### **Shahbender - Shamsherganj Road - Pavement**

Tenders for the supply of materials have been received, but there was no work during this reporting period.

#### **Munshi Bazar - Kamalganj - Kurma Char Road - Earth**

Of a total length of 16.2 km, approximately 10 km have been worked. The quality of the work on the first 4 km south of Munshi Bazar was good. However, the quality of the next 6 km has deteriorated, due mainly to lack of uniformity.

The Consultants have been informed that about 2 km of this road north of Kamalganj will be paved by the R & II Department as a special project. Two damaged culverts will be reconstructed or replaced by SRWP.

#### **Bahubal - Putijuri - Bijnaghat Road - Mixed**

The earth portion of this road, starting at the culvert at Putijuri and progressing toward Bijnaghat, was being maintained in an excellent and uniform manner, until a shortage of funds seemed to adversely affect the enthusiasm of the workers, or the supervisor. Following a general meeting on funding and operational procedures, on 18 February, this apathy was corrected. The improvement of the roadbed has brought about an increase of heavy traffic of all types. In spite of construction of culverts and bridge slabs in progress, bus service has been extended as far as Digom Bazar.

#### **Dulaikhal - Mirpur Road - Earth**

No progress on this maintenance project.

#### **Nabiganj - Baniachung Road - Earth**

Some progress has been made on this road, but the quality of workmanship has been unsatisfactory. The monitor present feels that the supervisor has not been properly oriented on the procedures to be followed.

#### **Sunamganj - Chhatak Road - Earth**

The RE has recommended that the maintenance on this road be discontinued because of a lack of access to normal traffic. Alternate solutions are being considered, including transfer of the work to the Chhatak end.

#### **Shahbag - Kanaighat Road - Pavement**

No progress during this reporting period.

#### **Fenchuganj - Maijgaon Road - Pavement**

No progress during this reporting period.

#### **Dhakadakshin - Beanibazar Road - Pavement**

The pavement of this road, on the section leading to the ZRMI Project section, is the portion that is to be maintained. It is expected that this work will begin soon, possibly by mid-March.

### Tajpur - Syedpur - Nayabondar Road - Earth

Some maintenance work has been in progress on this road on an intermittent basis, and in several different sites. The maintenance work near the Nayabondar - New Market area was required in order to permit the passage of traffic over the roadbed. Maintenance efforts in the section near Tajpur would have given better benefits if it had been applied on the heavily traveled Goala Bazar section. Near the end of the month, the Goala Bazar spur maintenance work was taken up by the local Chairman under the "Food For Work program. Progress on filling and widening this spur was proceeding at a good rate.

## **3.3 Rangpur District**

### **3.3.1 General**

No great progress was made on maintenance work during this reporting period. The study of the 1984-1985 maintenance schemes was completed on 20/02/1985, and was sent to the XEN for further processing required for implementation of the proposed projects. Table I is a list of the proposed projects.

Photos of maintenance work in Rangpur may be found in Appendix A.

**Table I - PROPOSED MAINTENANCE PROJECTS FOR 1984-1985 (RANGPUR)**

Name of Road	Length (ft.)	Estimated Cost (Tk)
Rangpur - Sundarganj	5,000	838,000
Gaibandha - Barodarga via Sadullahpur	13,500	872,000
Gaibandha - Kamarjani	2,200	243,000
Rangpur - Kaknia	2,500	542,000
Nilphamari - Jaldhaka	6,300	366,000
Mirganj - Jaldhaka	3,800	172,000
Barodarga - Bhendabari	2,860	127,000
Rangpur - Badarganj	3,600	595,000
Total Cost		3,755,000

### **3.3.2 Rangpur Maintenance Projects**

#### **Rangpur - Mahiganj Road**

Earth shoulder dressing and correction of small rain erosion cuts in progress during the first half of this reporting period.

### Rangpur - Badarganj Road

Earth shoulder dressing and correction of small rain erosion cuts in progress during the first half of this reporting period.

### Mahiganj - Damdama Road

Embankment improvement work was 80 percent complete early in this reporting period, but no further work after that time. The earth work was done without the use of any power compaction, and even the hand rammers were under-utilized. Shoulder shaping and slope maintenance work remain to be done.

## **3.4 Faridpur District**

### **3.4.1 General**

Bituminous material was again available during this month, so patching work could be resumed. No authorization has yet been received to take up maintenance of the Sadarpur - Pukuria Road. A request for USAID disbursement was forwarded to Dhaka on 20/02/85; it covered all Pilot Maintenance work through 31/12/84.

### **3.4.2 Faridpur Maintenance Projects**

#### Rajbari - Baliakandi Road

Patching and seal coating of the bituminous pavement between Km 17 + 843 and km 18 + 300 was completed during this reporting period. Work of restoring the existing WBM between KM 13 + 130 and Km 17 + 355 has started. This is the group 8 carpeting contract, but the WBM restoration is being accomplished under the Pilot Maintenance Program. A culvert is being installed at Banibaha Bazar, and a culvert relocation was made at km 18 + 300. In both cases, the culvert work was done by IRWP, but the surfacing will be done by Pilot Maintenance.

#### Talma - Nagarkanda Road

Work of patching and sealcoat resumed on 5 km at the Talma end, and was proceeding satisfactorily. A contract was awarded for the km 2.9 Bridge wingwall restoration, and the work was completed this month.

Because of the flood damage on the Nagarkanda end and the wingwall restoration at Km 2.9, the maintenance costs on this road will be more than originally estimated. It is planned that the deficit will be made up from the surplus expected from the work on the Rajbari- Baliakandi Road.

### **3.5 Maintenance Management**

As yet, no comments have been received on the draft maintenance management report which was submitted in January. It is important that these comments be received from all interested parties as quickly as possible. A standard maintenance manual, approved by LGEB and issued to all personnel engaged in rural road maintenance, is a fundamental first step if maintenance standardization is to be achieved.

## **4.0 PREPARATION OF TECHNICAL SPECIFICATIONS**

### **4.1 Revision Of Specifications**

The Consultant's short-term specifications engineer arrived for duty in mid-February. Basically, he will be responsible for updating and refining draft manuals and designs which he prepared during the last quarter of 1983. More specifically, the items he will address include :

- o Standard Specifications For Road Construction,
- o Road Construction Manual,
- o Soil Survey Manual, and
- o Pavement Design

Immediately following his arrival in Dhaka, the specialist met with the PM to discuss overall objectives of his assignment and to obtain an over-view of the needs and requirements of the LGEB with regard to designs and specifications. In addition, meetings were held with all three RE's as well as the XEN, Rangpur. These meetings provided a valuable opportunity to evaluate both standard specifications presently in use and the draft specifications prepared over a year ago. Information gathered from these meetings, particularly with respect to the impact of existing specifications on on-going projects, will serve as a guide in the revision and finalization of the Design and Specifications manuals.

It is presently envisioned that final designs and manuals will be complete and ready for printing by 01 May 1985.

### **4.2 Schedule Of Rates Revision**

The Sylhet RE advises that the XEN has assigned his P & D. Engineer the task of revising and updating the Schedule Of Rates for the 1985-1986 season. The Consultant was requested to cooperate and assist, particularly with the revision of the English text. It was suggested that the Consultant's short-term specifications engineer should also be consulted on this matter.

## **5.0 TRAINING**

### **5.1 General**

As shown on Exhibit I, the overall progress of the ZRMI Training Program, as of the end of this reporting period, was about 76 percent, compared to a scheduled progress of 81 percent. This slippage reflects a continuing lack of progress in the U.S.A./Third Country Training element, which has a relative weight of 25 percent of the entire program.

### **5.2 On-The-Job Training**

#### **5.2.1 General**

From an examination of Exhibit I, it is estimated that the progress of this activity was 88 percent at the end of this reporting period.

#### **5.2.2 District Soil Laboratory Activities**

Summaries of the activities of the individual soil laboratories are attached as Appendix B to this report.

#### **5.2.3 Maintenance Training**

Sylhet reports that a review of On-The-Job training for maintenance is underway with the XEN staff to assure complete understanding of the requirements of the maintenance program. Faridpur reports that field training in maintenance and construction procedures continues

### **5.3 Domestic (In-Country) Training**

#### **5.3.1 General**

It is estimated that as of the end of this reporting period progress of this activity was about 83 percent.

#### **5.3.2 System Assessment**

This secondary activity is 100 percent complete.

#### **5.3.3 System Design**

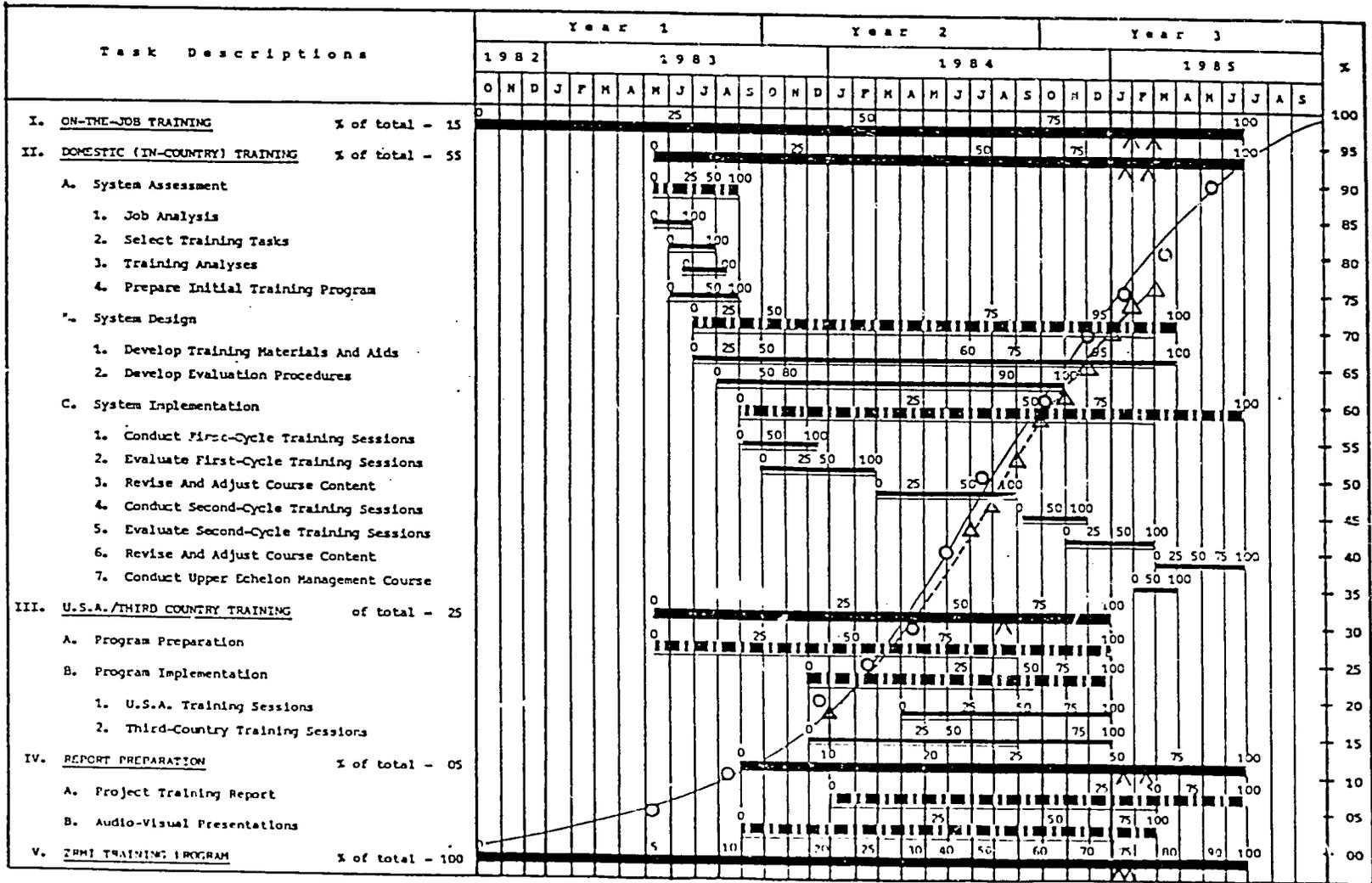
This secondary activity is about 98 percent complete.

#### **5.3.4 System Implementation**

This secondary activity is about 80 percent complete.

Exhibit -1

ZRMI PROJECT TRAINING PROGRAM SCHEDULE AND CURRENT STATUS



First-Cycle Training Sessions - 100 percent complete

First-Cycle Evaluations - 100 percent complete

(First) Course Revision And Adjustment - 100 percent complete

Second-Cycle Training Sessions - 100 percent complete

Second-Cycle Evaluations - 100 percent complete

(Second) Course Revision And Adjustment - No additional work to report at this time.

Upper Echelon Management Course - No further progress to report at this time.

#### **5.4 U.S.A./Third Country Training**

##### **5.4.1 General**

It is estimated that, as of the end of this reporting period, progress of this activity remained unchanged at about 70 percent.

##### **5.4.2 Program Preparation**

Program preparation remains at about 85 percent complete.

The second AIT Training Course still has not been rescheduled.

There is still no consensus for scope or number of participants for the second and succeeding U.S.A observation/training courses.

##### **5.4.3 Program Implementation**

First U.S.A. Session - Considered to be 100 percent complete, although no trip reports have yet been received from any of the three participants.

Second U.S.A. Session - No further progress to report on this segment of the Program.

First AIT Session - Considered to be 100 percent complete, although the only trip report received was that prepared by the DE, Rangpur.

Second AIT Session - There has been no indication of when this session might be rescheduled.

#### **5.5 Report Preparation**

##### **5.5.1 General**

This main segment is about 60 percent complete.

### **5.5.2 Project Training Report**

This secondary activity is right on schedule and is considered to be about 50 percent complete.

### **5.5.3 Audio-Visual Presentations**

This secondary activity is considered to be about 70 percent complete, as compared with a scheduled completion of about 100 percent.

## **6.0 CONSTRUCTION SYSTEM AND SUPERVISION**

### **6.1 General**

Again, both Sylhet and Faridpur report good progress and improvement in the quality of work performed by the contractors. ON the other hand, Rangpur has submitted another very pessimistic report concerning the adverse impact of current poor progress on the possibility of completing any significant number of projects before the next monsoon.

Faridpur reports that one roller was out of action for repairs during this entire reporting period. This has adversely affected the progress rate on some of the projects. To compensate for the schedule slippage, it is now planned to concentrate on the completion of all WBM work by April, when it is expected that the rains will begin.

This month, the names of the individual contractors, and their respective contract amounts, have been included in project report sheets. Where this information has not been included, it was not available to the writer. The respective RE's are requested to supply the missing information for inclusion in the March report.

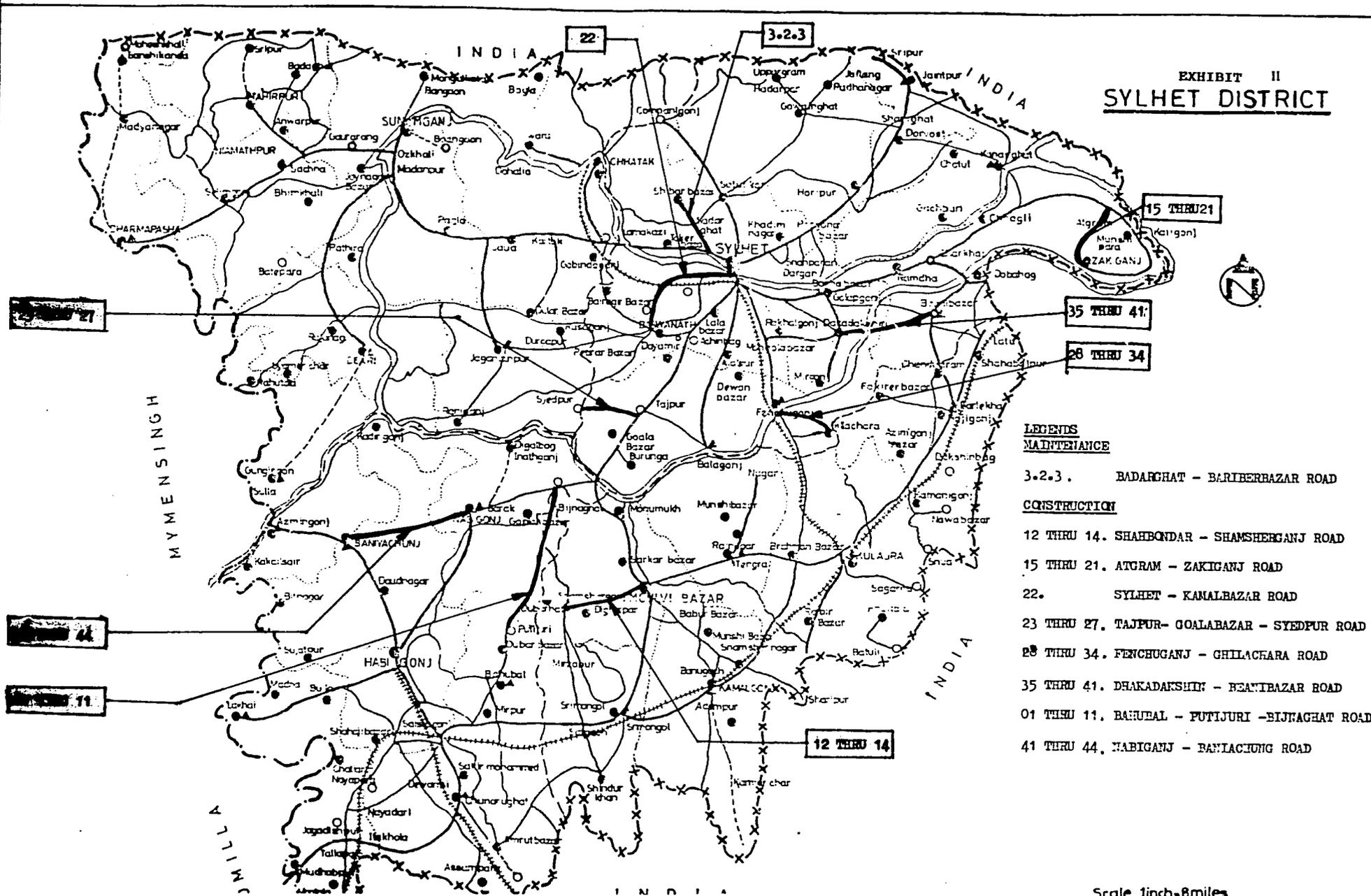
Photographs of construction activities in all three Districts may be found in Appendix C.

### **6.2 Sylhet District**

Exhibit II is a map of the (old) Sylhet District on which have been marked, with appropriate symbols and numbers, both the maintenance and the construction projects in the Sylhet District.

Exhibit III, consisting of 7 sheets, lists all the construction projects in the Sylhet District, by road and by fiscal year in which programmed. The "Serial Number" has no significance other than to serve as a simple symbol for locating the project on its respective map.

EXHIBIT II  
SYLHET DISTRICT



**LEGENDS**  
**MAINTENANCE**

- 3.2.3. BADARGHAT - BARIBERBAZAR ROAD
- CONSTRUCTION**
- 12 THRU 14. SHAHBONDAR - SHAMSHERGANJ ROAD
- 15 THRU 21. ATGRAM - ZAKIGANJ ROAD
- 22. SYLHET - KANALBAZAR ROAD
- 23 THRU 27. TAJPUR- GOALABAZAR - SYEDPUR ROAD
- 28 THRU 34. FENCHUGANJ - GHILACHARA ROAD
- 35 THRU 41. DHAKADAKSHIN - BEANTBAZAR ROAD
- 01 THRU 11. BARUEAL - PUTIJURI -BIJTAGHAT ROAD
- 41 THRU 44. HABIGANJ - BANJACONG ROAD

Serial Number	Contract Identification	Description Of Work Order	Percent Complete	Current Comments
<u>Bahubal - Putijuri - Bijnaghat Road</u>				
<u>1982 - 1983 Projects</u>				
01	ZRMI/11/82-83	Bituminous pavement	100	Final bill processed
<u>1983 - 1984 Projects</u>				
02	ZRMI/01/83-84	Bituminous pavement (250 m)	100	Final bill processed
03	ZRMI/02/83-84	Box Culvert (13.3 m) (Futijuri)	100	Final bill being processed
04	ZRMI/03/83-84	Box Culverts, 2 nos. (Resurat & Burigaon)	100	Final site cleanup not yet complete
05	ZRMI/04/83-84	Box Culverts, 3 nos. (Revised) (Fultoli & Kandigaon)	100	Final site cleanup not yet complete
06	ZRMI/05/83-84	Box Culvert (Kargaon)	100	Two running bills processed
07	ZRMI/06/83-84	Box Culverts, 4 nos. (Revised) (Gaznipur, Aingao, & Debpur)	100	Final bill being processed
08	ZRMI/07/83-84	RCC Pipe Culverts, 14 nos. (Revised)	100	Final bill being processed
<u>1984 - 1985 Projects</u>				
09	ZRMI/10/84-85	Bituminous pavement (Putijuri) Contractor: Mr. Abdul Kalliane Contract Price: Tk 1,825,174	<u>35</u>	The contractor has filled, leveled, and cambered the embankment and shoulders over the entire length, but had to stop all work because of lack of roller (which arrived on the site on 19 February).
10	ZRMI/11/84-85	Box Culverts, 3 nos. Contractor: Mr. Bablu Das Contract Price: Tk 693,092	<u>75</u>	Two of the culverts are complete, and the bottom slab of the third was cast on 15/02/85. No attempt has been made to clean the site, nor to construct the approaches to the completed structures. On 04/02/85, the L&M issued a change order to add 2 nos. 1.5 m and 1 3.6 m box culverts. One 1.5 m box is complete, and the bottom slab cast on the second unit. No previous advice made to the Consultant. This work also includes demolition of the old slab and approximately one meter of the old abutments. Three of the reconstructed bridge slabs are complete, another is in progress, and demolition work and construction of diversion roads in progress at the remaining sites. No running bill has been processed.
11	ZRMI/12/84-85	Reconstruct existing bridge slabs, 10 nos. Contractor: Mr. Saleh Ahmed Contract Price : Tk 631,219	<u>50</u>	



Exhibit III - CONSTRUCTION SUPERVISION PROJECTS - SYLHET

Sheet 3 of 7

Serial Number	Contract Identification	Description Of work Order	Percent Complete	Current Comments
<u>At gram - Zakiganj Road</u>				
<u>1982 - 1983 Projects</u>				
15	LAMI/16/82-83	Bituminous pavement (2 km)	100	Final bill processed.
<u>1983 - 1984 Projects</u>				
16	LAMI/09/83-84	Box Culvert (23 m) Contractor: Mr. A. Mumith Khan Contract Price: Tk 546,150	095	Casting of railings and building approaches are in progress. The latter requires a large volume of soil, which is being borrowed from both upstream and downstream of the site. Two running bills processed.
17	LAMI/10/83-84	Bituminous Pavement (1.78 km)	100	Final bill processed.
18	LAMI/11/83-84	Leveling course (4.55 km) Contractor: Mr. Amituzzaman Chowdhury Contract Price: Tk 1,278,722	098	The workmanship and quality of the work has improved markedly, and the contractor has made every effort to complete the work in a timely fashion. Work will be completed by the end of the month. Deadline was 20 February, but 20C lin. m were added. Four running bills processed.
<u>1984 - 1985 Projects</u>				
19	LAMI/13/84-85	Bridge (Revised to Box Culvert) (31 m) Contractor: Mr. Rezaul Karim Contract Price: Tk 963,930	040	Bottom slab cast in a monolithic pour on 16/02/85. Work is in progress on the abutments and wing walls. No running bill processed. This culvert, in the second gap crossed by the road, is considered by the local people to be the most important of the three culvert projects. No progress to date. Contractor has been issued a warning letter by the AEM and given a deadline to "show cause."
20	LAMI/14/84-85	HCC Pipe Culverts, 15 nos. Contractor: J.C. and Co. Contract Price: Tk 258,978		
21	LAMI/15/84-85	Bridge (Revised to 3 nos. Box Culverts) (66 m)		
	15A & C	Box Culverts, 2 nos. (5 m) Contractor: Mr. Abdul Mumith Khan Contract Price: Tk 557,782	030	The bottom slabs and parts of the abutments and wing walls have been cast. If progress continues at the same rate, these should be completed well before the monsoon season. No running bill processed.
	15 B	Box Culvert (24.4 m) Contractor: M/S Mukthakim Corporation Contract Price: Tk 1,022,810	030	The C C slab has been cast. This culvert should also be finished well before the monsoon season if present progress rate continues. No running bill processed.

Exhibit III - CONSTRUCTION SUPERVISION PROJECTS - SYLHET

Sheet 4 of 7

Serial Number	Contract Identification	Description of Work Order	Percent Complete	Current Comments
<u>Sylhet - Kamal Bazar Road</u>				
<u>1982 - 1983 Projects</u>				
22	ZRMI/19/82-83	Bituminous pavement	100	Final bill processed
<u>Tajpur - Goalabazar - Syedpur - Khadimpur Road</u>				
<u>1982 - 1983 Projects</u>				
23	ZRMI/20/82-83	RCC Pipe Culverts, 13 nos. (Revised)	100	Final bill processed
24	ZRMI/21/82-83	Box Culvert	100	Final bill processed
<u>1983 - 1984 Projects</u>				
25	ZRMI/12/83-84	Bituminous pavement (Revised)	100	Final bill processed
26	ZRMI/13/83-84	Box Culvert (10.1 m) (New Market) (Revised) Contractor: Mr. Shahid Chowdhury Contract Price: Tk 746,486	<u>050</u>	<u>All structural work is complete. However, the difficulty in obtaining suitable backfill and approach material has delayed progress on this portion of the work. There also has been a problem of R.O.W. for the approach on the Tajpur side. Two running bills processed.</u>
<u>1984 - 1985 Projects</u>				
27	ZRMI/16/84-85	Bridge (31 m) (Nayabondar) (Revised to 24.4 m Box Culvert) Contractor: Contract Price: Tk 944,150	<u>040</u>	<u>Despite the difficulty in transporting materials to this site, the contractor has stockpiled sufficient material and is making good progress. Most of the bullah piling has been driven. It has been found that one three-meter compartment can be eliminated on the Nayabondar side. No running bill processed.</u>

Exhibit III - CONSTRUCTION SUPERVISION PROJECTS - SYLHET

Sheet 5 of 7

Serial Number	Contract Identification	Description of work Order	Percent Complete	Current Comments
<u>Fenchuganj - Maijgaon - Ghilachara Road</u>				
<u>1982 - 1983 Projects</u>				
28	ZRMI/22/82-83	Bituminous pavement (0.5 miles) (Maijgaon) Contractor: Mr. Ziaul Islam Contract Price: Tk 747,545	<u>100</u>	<u>Final bill being processed. The PM set a deadline of 20/01/85 for the completion of this work, but the work was not finished until early February.</u>
29	ZRMI/23/82-83	RCC Pipe Culverts, 6 nos. Contractor: M/S Ayra and Co. Contract Price: Tk 96,602	<u>090</u>	<u>Five of the six culverts have been placed, and all pipe for the sixth have been cast. The quality of work and progress rate on this work have been exceptional. However, all work has stopped pending a decision to relocate the remaining culvert. One running bill has been processed.</u>
<u>1983 - 1984 Projects</u>				
30	ZRMI/14/83-84	Earthwork and Leveling course (2.8 km) (Revised) Contractor: Mr. Shahid Chowdhuri Contract Price:	<u>075</u>	<u>Due to arrangements with the local Chairman, much of this road has been extensively realigned to eliminate many needless square corners. The material placed on the new alignment has been compacted in layers; resulting in a better-than-ordinary road embankment. The PM set a completion date of 28/02/85, which the contractor made every effort to meet, but completion is not expected until 31/03/85. Two running bills processed.</u>
<u>1984 - 1985 Projects</u>				
31	ZRMI/17/84-85	Bituminous pavement (0.925 km) Contractor: Mr. Shahid Chowdhury Contract Price: Tk 764,537	<u>050</u>	<u>Preparation of the sub-base and base courses in progress; however no bituminous pavement will be placed until the box culvert of ZRMI/19/84-85 has been completed. This will allow pavement of the section left incomplete by ZRMI/22/82-83, which will result in a continuous paved section from Maijgaon. No running bill processed.</u>
32	ZRMI/18/84-85	Leveling course and Earthwork (2.8 km) Contractor: Mr. Masieh Uddin Chowdhury Contract Price: Tk 455,730	<u>050</u>	<u>The contractor has filled and shaped the existing sub-grade, and has spent most of the latter part of the month collecting and breaking aggregates. Much of this contract is cut by simultaneous installations of small box and pipe culverts. No running bills processed.</u>
33	ZRMI/19/84-85	Box Culverts, 2 nos. (6.8m & 3.6 m) Contractor: Mr. Kazi Munif Uddin Ahmed Contract Price: Tk 362,460	<u>070</u>	<u>With the casting of the top slab during the last week of February, the structural work of the large box culvert near Beanibazar has been completed. The foundation slab of the smaller box culvert has also been completed. All work on this contract should be completed no later than April 1985. One running bill processed.</u>
34	ZRMI/20/84-85	Box Culverts, 6 nos. (1.5 m) Contractor: Mr. Abdul Quayum Contract Price: Tk 362,460	<u>080</u>	<u>Five of the six culverts have been completed in an acceptable manner. Adequate diversion roads were constructed and maintained, and, as each culvert became strong enough for traffic, all site cleanup was executed. One running bill processed.</u>

Serial Number	Contract Identification	Description Of work Order	Percent Complete	Current Comments
<u>Dhakadakhshin - Beanibazar Road</u>				
<u>1982 - 1983 Projects</u>				
35	ZKMI/24/82-83	Earthwork and Bituminous pavement (0.75 mile) (Revised) Contractor: Mr. Khalilur Rahman Contract Price: Tk 1,105,408	<u>098</u>	<u>Three running bills processed. The contractor has again undertaken his paving work to complete this contract and the pavement maintenance of Lhakadakhshin Bazar. He has been stockpiling and breaking aggregates and preparing the subgrade on the culvert approaches.</u>
36	ZRMI/25/82-83	RCC Pipe Culverts, 6 nos. (Revised) Contractor: Mr. Habibur Rahman Contract Price: Tk 65,732	<u>100</u>	<u>Final bill processed. When this contract was tendered in 1983, no consideration was given to the need for lateral culverts, side ditches, nor intersections. Because of the delays in the construction activities since that date, it was determined that additional culverts were required in the hilly area of the project. A Change Order was issued which enlarged the scope of work.</u>
<u>1983 - 1984 Projects</u>				
37	ZKMI/15/83-84	Box Culvert (Noakhali) (Revised) Contractor: Mr. Balaul Ahmed Contract Price: Tk 221,025	<u>100</u>	<u>A final partial bill has been processed.</u>
38	ZRMI/16/83-84	Earthwork and Bituminous pavement, (2.45 km) (Revised) Contractor: Mr. Khalilur Rahman Contract Price: Tk 1,981,042	<u>085</u>	<u>Four running bills processed. This contractor has concentrated on quality work rather than just quantity. Even though failure of a detour bridge prevented him from transporting aggregates across the Radhajuri channel, he has utilized the assigned roller to compact the subgrade and shoulder material.</u>
<u>1984 - 1985 Projects</u>				
39	ZRMI/21/84-85	Box Culvert (5.2 m) and Retaining wall (Dhakadakhshin) Contractor: Contract Price: Tk 259,096	<u>100</u>	<u>Final bill processed.</u>
40	ZKMI/22/84-85	Box Culvert (26.5 m) (Lula River) (Revised) Contractor: Contract Price: Tk 940,561	<u>005</u>	<u>No running bill processed. After original contractor indicated lack of interest in building the revised project, tenders were called, and a new work order issued. Mobilization is now underway by the second contractor.</u>
41	ZKMI/23/84-85	bridge (86 m) (Radhajuri)	<u>020</u>	<u>The PM and the COP have both advised that this project has not been approved. Although one running bill has been checked, no reimbursement will be considered until the bridge design has been approved by WSA and USAID has agreed to include the project within the ZRMI program.</u>



E X H I B I T      I V  
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BAR CHARTS AND PROGRESS CURVES

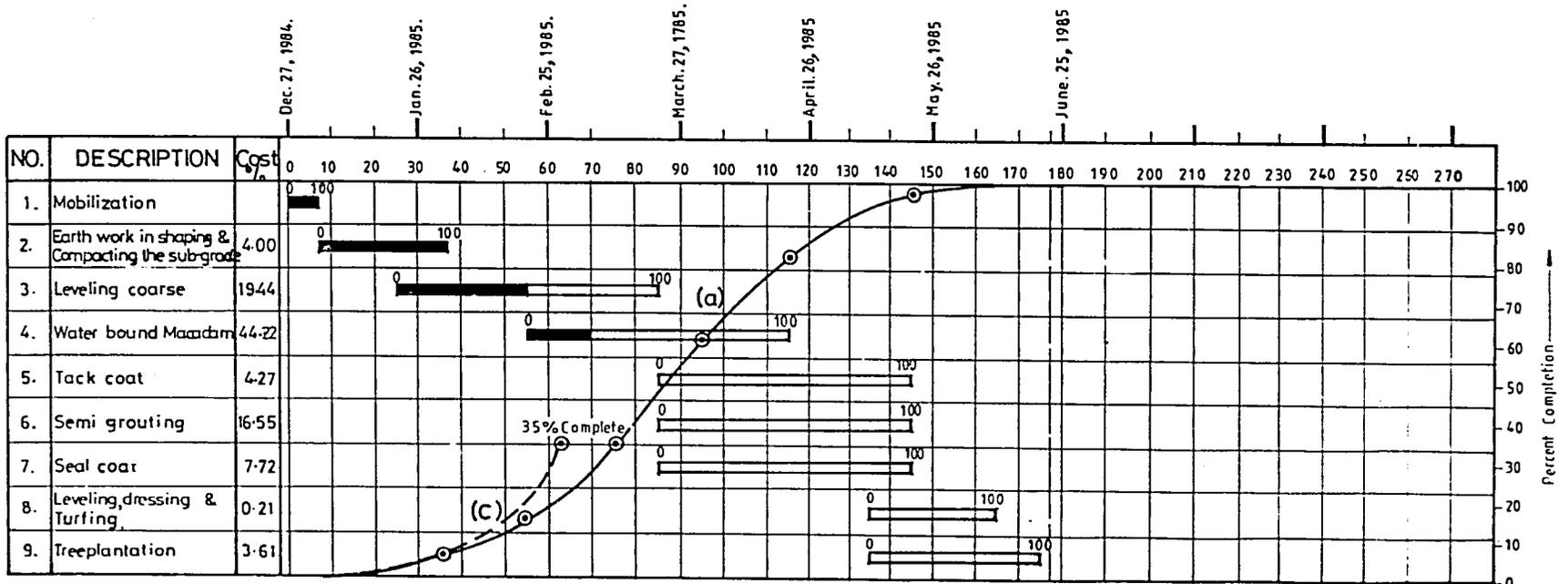
SYLHET

# SYLHET DISTRICT

## Construction of 150km.Bituminous Pavement Work on BAHUBAL-PUTIJURI-BIJNAGHAT ROAD. (ZRMI-10/1984-85)

- (a) ———— Schedule Progress
- (b) - - - - - Revised Schedule
- (c) - - - - - Actual Progress

Estimated Cost : Tk. 16,59,400-00  
 Contract Cost : Tk. 18,25,174.00  
 Scheduled Starting date : Dec. 27, 1984  
 Actual Starting date : Jan. 02, 1985  
 Scheduled Completion date : June. 27, 1985  
 Actual Completion date :  
 Revised Cost : Tk.  
 Date of revision :

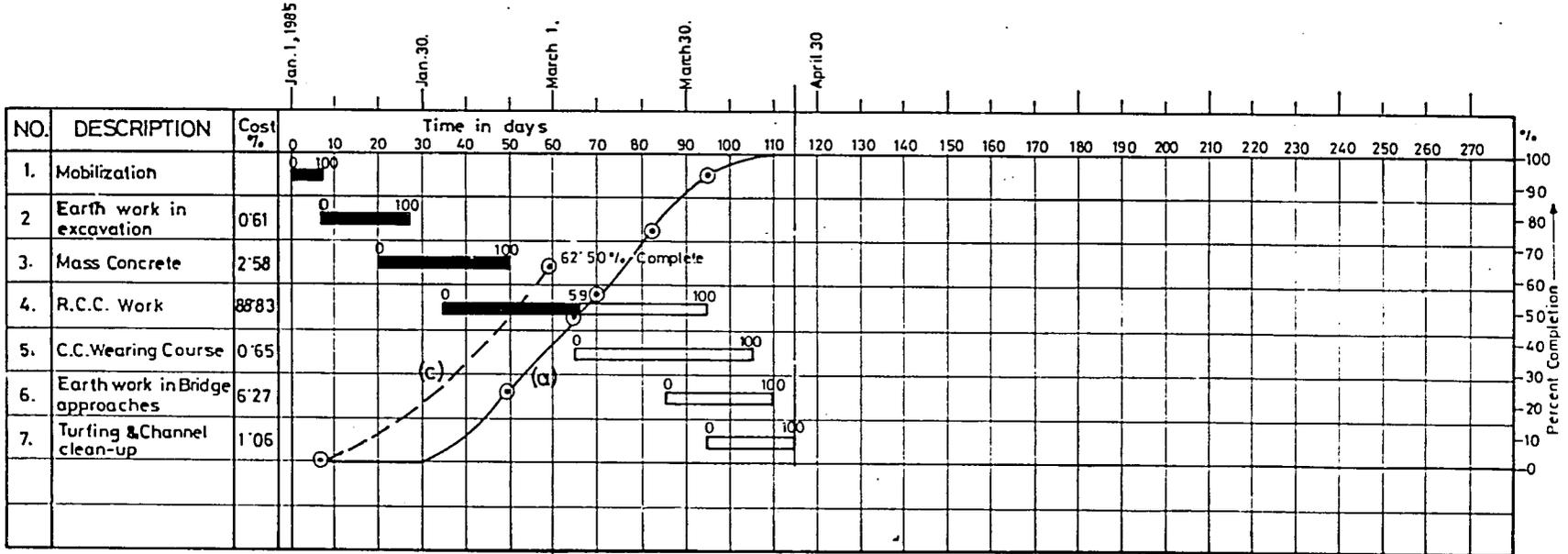


## SYLHET DISTRICT

### Construction of R.C.C. Box Culvert, Size 10'10m.X3'00m. at 7'20&7'40km. (Atgram end) ATGRAM-ZAKIGONJ Road. (ZRMI-15A&C/1984-85)

Estimated Cost: TK. 4,86,000'00  
 Contract Cost: TK. 5,57,782'00  
 Schedule Starting date: Jan.1, 1985  
 Actual Starting date: Jan. 5, 1985  
 Scheduled Completion date: April 28, 1985  
 Revised Completion date:  
 Revised Cost: TK.  
 Date of Revision:

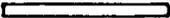
- (a)  ———— Scheaule Progress
- (b)  - - - - - Revised Schedule
- (c)  - - - - - Actual Progress

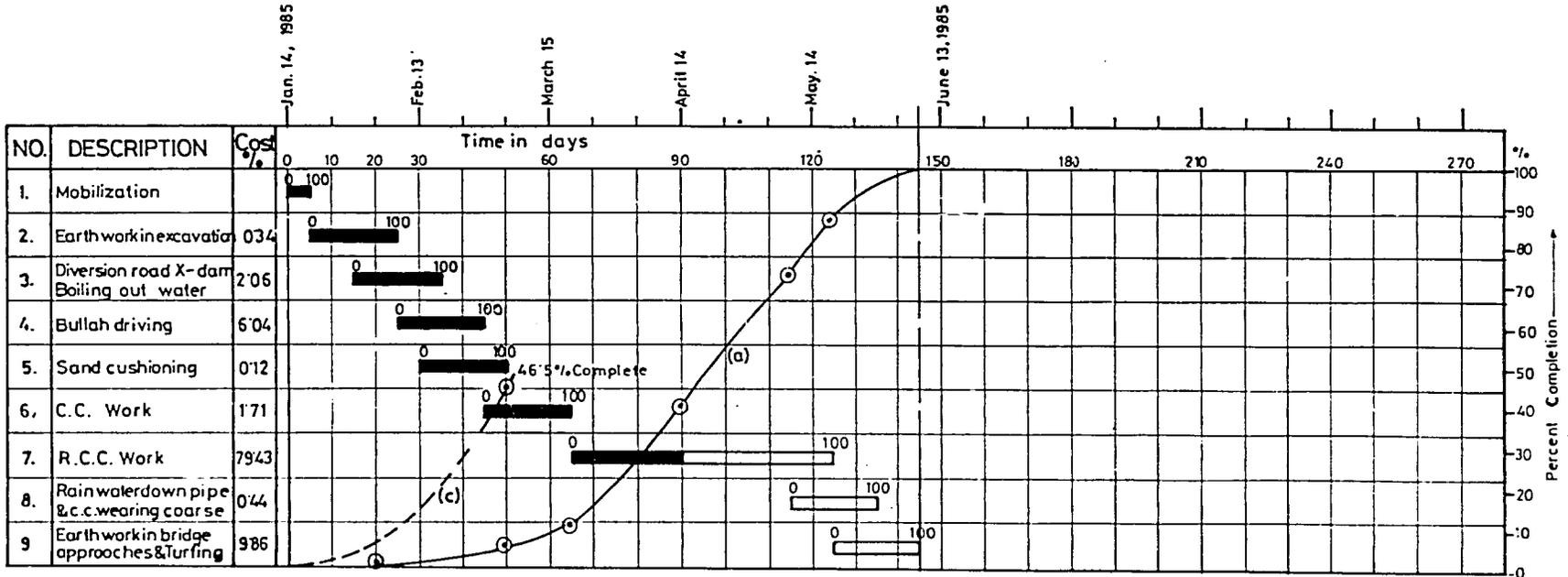


# SYLHET DISTRICT

Construction of R.C.C. Box Bridge. Size 24'5m.X6'5m.  
at 7.3km. on ATGRAM-ZAKIGONJ ROAD(ZRMI-13B/1984-85)

Estimated Cost           TK. 8,89,4000'00  
Contract Cost:           TK.10,22,810'00  
Scheduled Starting date:   Jan.14,1985  
Actual Starting date:      Jan.20,1985  
Scheduled Completion date: June 5, 1985  
Actual Completion date:  
Revised Cost:           TK.  
Date of Revision:

- (a)  Schedule Progress
- (b)  Revised Schedule
- (c)  Actual Progress



## SYLHET DISTRICT

### Construction of R.C.C. Box Culvert Size 10.00m x 5.50m. on NABIGONJ - BANIACHONG ROAD, AT BARAKHAL. (ZRMI-T/24/1984-85)

- (a)  ———— Schedule Progress
- (b)  ———— Revised Schedule
- (c)  - - - - - Actual Progress

Estimated Cost: Tk. 4,39,200.00  
 Contract Cost: Tk. 4,29,128.00  
 Scheduled Starting date: Nov. 20, 1984  
 Actual Starting date: Jan. 07, 1985  
 Scheduled Completion date: Mar. 21, 1985  
 Actual Completion date:  
 Revised Cost: Tk.  
 Date of Revision:

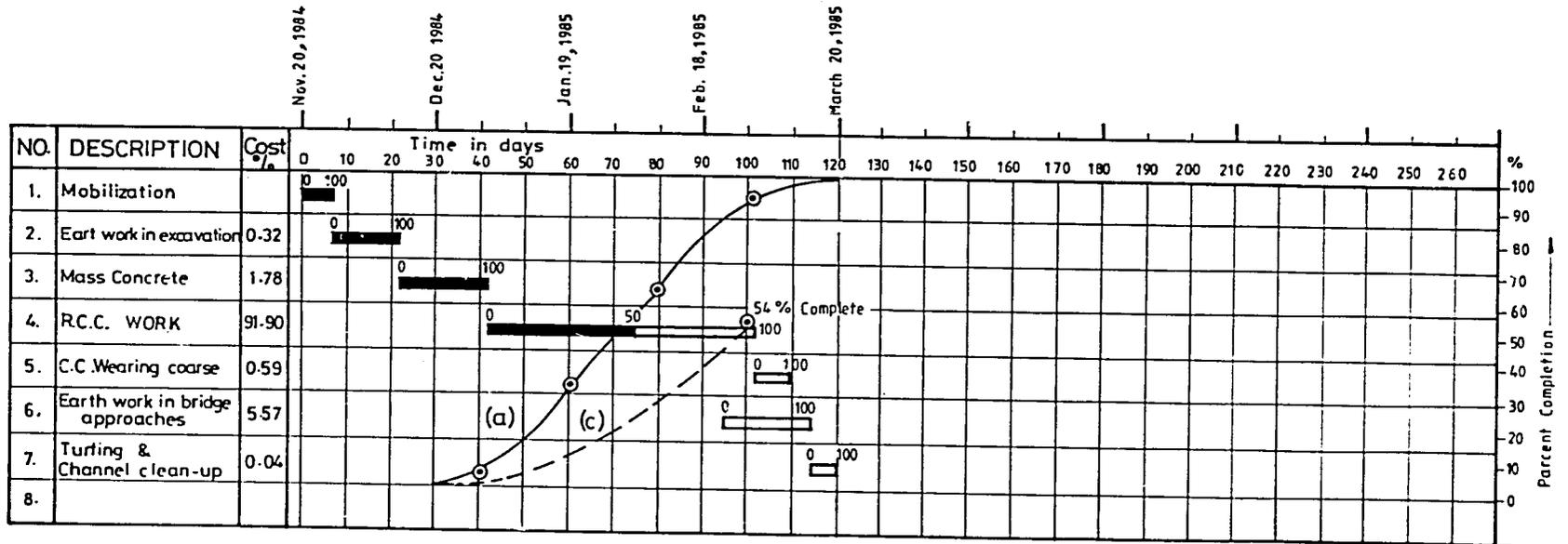


EXHIBIT V.  
RANGPUR DISTRICT



26° 00'

**LEGEND:**  
**MAINTENANCE**

- 3.3.1A RANGPUR-MAHIGANJ ROAD
- 3.3.1B RANGPUR-BADARGANJ ROAD

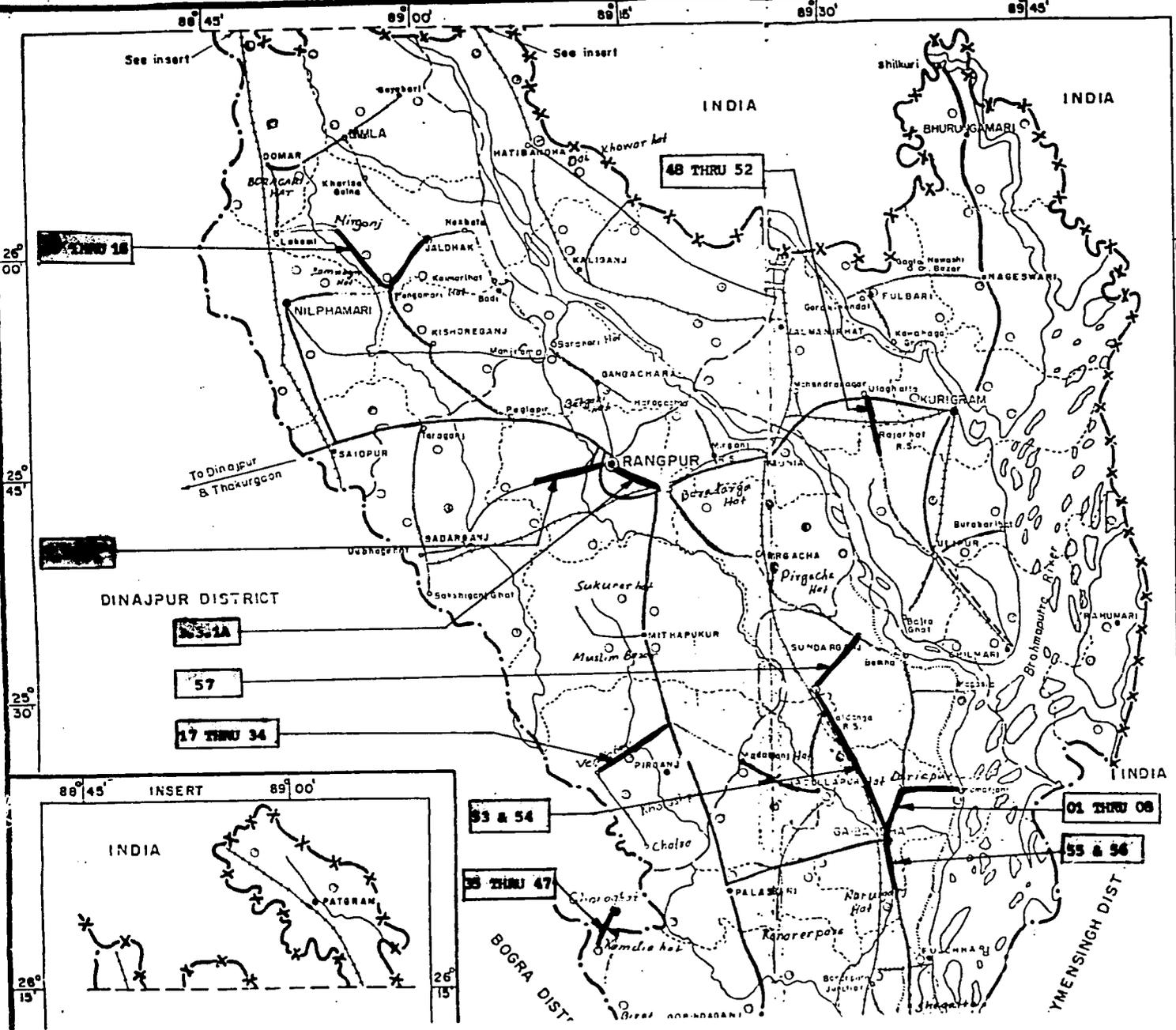
**CONSTRUCTIONS**

- 01 THRU 08 GAIBANDHA-KAMARJANI ROAD
- 09 THRU 16 MIRGANJ-JALDHAKA ROAD
- 17 THRU 34 CHATRA-KHALASHPIR-EHENDABARI ROAD
- 35 THRU 47 KAMDIA-GHORAGHAT ROAD
- 48 THRU 52 RAJARHAT-ULLAGHATA ROAD
- 53 & 54 GAIBANDHA-NALDANGA ROAD
- 55 & 56 GAIBANDHA-SAGHATA ROAD
- 57 BAMANDANGA-SUNDARGANJ ROAD

26° 00'

Scale: 1 inch = 2 Miles (Approx)

10 8 6 4 2 0 10 Miles



Serial Number	Contract Identification	Description Of Work Order	Percent Complete	Current Comments
<u>Gaibandha - Kamarjani Road</u>				
<u>1982 - 1983 Projects</u>				
01		H&B	100	All work completed April 1984. Maintenance still required for eroded earth shoulders.
<u>1983 - 1984 Projects</u>				
02	Group A	Bituminous pavement Contractor: Mr. Shamsul Aziz Contract Price: Tk 585,866	<u>035</u>	<u>WBM completed in October 1984, but no action to date to undertake the bituminous carpeting work. In mid-January, the RE had suggested to the XFN that immediate action be taken against this contractor, but as of the end of this reporting period no activity has been noted at the job site.</u>
03	Group B	Bituminous pavement Contractor: Mr. Shamsul Aziz Contract Price: Tk 585,866	<u>033</u>	<u>WBM work was completed during this reporting period, but no bituminous carpeting work has yet been undertaken. Some earth was placed on the shoulders and slopes, but without proper compaction. No action has yet been taken to correct faulty work previously found.</u>
04	Group C	Bituminous pavement Contractor: Mr. Shahjahan Khan Atou Contract Price: Tk 585,867	<u>032</u>	<u>WBM work and some earth work completed during this reporting period, but the quality of work is very poor. The average thickness of WBM is less than specified, and most of the work needs proper compaction. Inferior material has been used, and this, and other defects, should be corrected as soon as possible.</u>
<u>1984 - 1985 Projects</u>				
05	Group 1A	Bituminous pavement Contractor: Mr. M.N. Nabi Lahu Contract Price: Tk 460,000	<u>009</u>	<u>Progress during this reporting period limited to some khoa spreading.</u>
06	Group 1B	Bituminous pavement Contractor: Mr. Tapan Kumar Sarker Contract Price: Tk 445,840	<u>005</u>	<u>No work underway during this reporting period.</u>
07	C - 4	RCC bridge, 10 ft. (Dariapur) Contractor: Mr. Gelal Uddin Contract Price: Tk 161,500	<u>020</u>	<u>Some brick work for the abutments and wingwalls completed, but the mortar used was sub-standard. Contractor notified on 10 February that the defective work must be corrected, and since that date, the Contractor has not done any more work.</u>
08	B - 6	RCC Bridge, 20.4 m (Kumarpara)	---	<u>No work order issued to date.</u>

Serial Number	Contract Identification	Description Of Work Order	Percent Complete	Current Comments
<u>Mirganj - Jaldhaka Road</u>				
<u>1982 - 1983 Projects</u>				
09	Groups A, B, & C	Bituminous pavement	100	Completed May 1984. Maintenance work should be started.
10	Group D	Bituminous pavement Contractor: Mr. Osmail Contract Price: Tk 292,168	<u>100</u>	<u>work complete, but final dressing of earth shoulders is required.</u>
11	Group E	Bituminous pavement	<u>025</u>	<u>First layer WBM khoa spread over the full reach of 2900 lin. ft. Progress is very slow and site monitoring has revealed that the contractor is not following the instructions of the Zila Parishad SAE, nor the suggestions of the Consultant's SAE.</u>
<u>1983 - 1984 Projects</u>				
12	Group A	Bituminous pavement Contractor: M/S Shahed and Co. Contract Price: Tk 759730	<u>091</u>	<u>WBM complete and bituminous carpeting was 89 percent complete. Earth shoulder improvement was proceeding slowly, but compaction was inadequate. Pea gravel used for seal coating was larger than specified and rolling was delayed too long -- the result was a honeycomb-like surface.</u>
13	Groups B, C-1, & C-2	Bituminous pavement	<u>100</u>	<u>Only minor shoulder improvement works remain to be done.</u>
11	Group E	Bituminous pavement	—	<u>Transferred to 1:82 - 1:83 Projects as Group E</u>
<u>1984 - 1985 Projects</u>				
14	Group J-A	Bituminous pavement Contractor: Mr. Yamulo Ali Contract Price: Tk 566,426.02	<u>005</u>	<u>Shoulder improvement work is 90 percent complete. Contractor has stockpiled some bricks, but no WBM work has been started. Earthwork accomplished needs more compaction. Overall progress rate is very slow.</u>
15	Group J-B	Bituminous pavement Contractor: Mr. Shamsul Haque Contract Price: Tk 633,600.36	<u>010</u>	<u>Shoulder improvement work is 80 percent complete. Sufficient khoa has been stockpiled, but has not yet been utilized. Lifting of edging bricks is underway. Earthwork accomplished to date needs compaction.</u>
16	Group J-C	Bituminous pavement Contractor: Mr. Atiar Rahman Contract Price: Tk 615,472.35	<u>006</u>	<u>Shoulder improvement work is 75 percent complete. Sub-standard brick bats have been placed and should be removed and replaced. Earthwork accomplished to date needs more compaction. Overall progress very slow.</u>

Serial Number	Contract Identification	Description Of work Order	Percent Complete	Current Comments
<u>Barodarga - Bhendawari Road</u>				
<u>1982 - 1983 Projects</u>				
17	Groups A & B	Bituminous pavement	<u>098</u>	<u>Bituminous pavement work is complete, but the surface is undulating and the shoulders are too high. As a result, rain is ponded on the surface. These defects must be corrected quickly to avoid damage to the surface.</u>
18	Groups C, D-1, & D-2	Bituminous pavement	<u>100</u>	<u>Pavement work is complete.</u>
19	Group C-2	Bituminous pavement Contractor: Mr. Momen Bookurs Contract Price: Tk 141,657	<u>100</u>	<u>Pavement work is complete.</u>
<u>1983 - 1984 Projects</u>				
20	Group A	Bituminous pavement Contractor: Mr. Kazi Md. Ish Contract Price: Tk 732,253	<u>090</u>	<u>Pavement work is 50 percent complete; the balance of 300 lin. ft is being delayed by the bridge work of another contractor. The bridge slab was cast in mid-February, so contractor should be able to proceed with paving.</u>
21	Group B	Bituminous pavement Contractor: M/S Eastern Boring Construction Contract Price: Tk 728,636	<u>098</u>	<u>Bituminous carpeting completed in early February. Shoulder improvement work in progress, but requires more compaction.</u>
22	Group C	Bituminous pavement Contractor: Mr. Mukleshur Rahman Contract Price: Tk 670,673	<u>088</u>	<u>2600 lin. ft WBM complete, and 2100 lin. ft bituminous carpeting complete. Progress is very slow and shoulder conditions are poor, especially in the section between the mosque and the bridge.</u>
23	Group D	Bituminous pavement Contractor: Mr. Jahirul Haque Contract Price: Tk 676,548	<u>053</u>	<u>Previous contractor had completed 1290 lin. ft WBM before contract was canceled on 20/12/84. No new contractor yet named for the balance of the work.</u>
24	Group E	Bituminous pavement Contractor: M/S Raihan Construction Contract Price: Tk 666,308	<u>055</u>	<u>Of a total section length of 2420 lin. ft, the contractor has completed 2300 lin. ft WBM and 820 lin. ft bituminous carpeting. Work progress suffers from periodic suspensions.</u>
25	Group F	Bituminous pavement Contractor: M/S Rakaria Khan Contract Price: Tk	<u>035</u>	<u>Of a total section length of 2651 lin. ft, the contractor has completed 2300 lin. ft WBM and has done no carpeting work at all. There was no progress at all during this reporting period.</u>
<u>1984 - 1985 Projects</u>				
26	Group 2(a)A	Bituminous pavement Contractor: M/S National Construction Contract Price: Tk 610,196.13	<u>012</u>	<u>Of a total section length of 1650 lin. ft, 900 lin. ft WBM are complete. However, the work schedule indicates that at this point the progress of the entire job should be 55 percent, which indicates that the work is far behind schedule.</u>
27	Group 2(a)B	Bituminous pavement Contractor: Mr. Ekramul Haque Contract Price: Tk 621,261.87	<u>013</u>	<u>Of a total section length of 1650 lin. ft, 920 lin. ft WBM are complete. This project is also far behind schedule.</u>

Serial Number	Contract Identification	Description of work Order	Percent Complete	Current Comments
<u>Barodarga - Shendabari Road (Cont.)</u>				
<u>1984 - 1985 projects (Cont.)</u>				
28	Group 2(a)C	Bituminous pavement Contractor: Mr. Moklesur Rahman Contract Price: Tk 554,169	—	This contractor did not get any work underway until the very end of this reporting period.
29	Group 2(b)A	Bituminous pavement Contractor: Mr. Shamsul Haque Contract Price: Tk 627, 534.82	002	About 15,000 brick have been accumulated at the site, and the making of khoa was in progress. No other work was in progress.
30	Group 2(b)B	bituminous pavement Contractor: M/S Eastern Builders Contract Price: Tk 612,062.17	002	About 20,000 brick have been stockpiled at the site, but no further work has been initiated.
31	C - 1	RCC Box Culvert, 8 ft (Gurjipara) Contractor: Mr. A. Hamid Contract Price: Tk 110,952	003	Demolition of the existing structure was complete by the first week of February, but no actual construction work has started. Completion date for this structure was 10 February 1985.
32	C - 2	RCC Slab, 13 ft (Gurjipara) Contractor: Mr. A. Hamid Contract Price: Tk 66,759	043	Slab casting was complete by mid-February. Back filling of the downstream area with brick bats is still to be done. Some low quality material has been accumulated for this work, and should be removed.
33	C - 3	Pipe culvert, 50 in. dia (Mile 2) Contractor: Mr. Rezaul Hasan Contract Price: Tk 36,092	004	Demolition of existing structure is complete; the diversion road was also finished, but not according to requirements. The diversion road as now constructed is causing damage to new pavement, and should be corrected. Some sub-standard bricks have been broken into khoa, but this material must be rejected.
34	C - 7	RCC Box Culvert, 10 ft (Mile 1) Contractor: Mr. Abdus Salam Contract Price: Tk 126, 140	002	No progress to report.
34A	Group 2(b)C	Bituminous Pavement Contractor: Mr. Alauddin Khan Contract Price: Tk 623,708.52	—	This work was just getting underway at the end of this reporting period.

Serial Number	Contract Identification	Description Of Work Order	Percent Complete	Current Comments
<u>Kamdia - Ghoraghat Road</u>				
<u>1962 - 1963 Projects</u>				
35	Groups A, C, & D	H&B	100	All work, including shoulder repair work is now complete.
36	Group B	H&B Contractor: Mr. Motlebur Rahman Contract Price: Tk 348,325	100	Shoulder improvement work must be compacted and dressed.
<u>1963 - 1964 Projects</u>				
37	Group A	H&B Contractor: Mr. Amjad Ali Contract Price: Tk 533,500	093	All H&B work is complete, but shoulder improvement work remains to be done.
38	Groups B & C	H&B	097	All H&B and shoulder improvement work is complete, but sand drains must still be provided as per specifications.
39	Group B	H&B Contractor: Mr. Motlebur Rahman Contract Price: Tk 418,738	020	Progress rate is very poor; of a total of 3000 lin. ft, 500 lin. ft of H&B are complete. Moreover, the contractor is using soft bricks for the H&B. Earth thrown onto shoulders consists of clods and is not compacted.
<u>1964 - 1965 Projects</u>				
40	Group 4 (b)A	Bituminous pavement Contractor: Mr. Mahbulo Elahi Contract Price: Tk 750,325	004	Some bricks and some khou have been stockpiled, but no construction work has been undertaken.
41	Group 4 (b)B	Bituminous pavement Contractor: M/S Padma Enterprises Contract Price: Tk 750,375	—	No progress to report.
42	Group 4 (b)C	Bituminous pavement Contractor: M/S United Enterprise Contract Price: Tk 748,417.50	004	Some bricks and some khoa have been stockpiled, but no construction work has been undertaken.
43	Group 4 (b)D	Bituminous pavement Contractor: Mr. Abdullah Al Mahmud Contract Price: Tk 750,375	—	No progress to report.

Serial Number	Contract Identification	Description Of Work Order	Percent Complete	Current Comments
<u>Kamdia - Ghoraghat Road (Cont.)</u>				
<u>1984 - 1985 Projects (Cont.)</u>				
44	Group 4 (a)A	Bituminous pavement Contractor: Mr. Kasim Uddin Sarker Contract Price: Tk 663,165.90	—	<u>No progress to report. Scheduled progress at the end of the reporting period was 55 percent. XEN should take action to accelerate progress rate on this project.</u>
45	Group 4 (a)B	bituminous pavement Contractor: Mr. A.K.M. Showkat Ali Contract Price: Tk 663,167.05	004	<u>Some brick have been stockpiled, but otherwise no progress to report. Scheduled progress rate at the end of this reporting period was 55 percent. XEN should take action to accelerate progress rate on this project.</u>
46	Group 4 (a)C	bituminous pavement Contractor: Mr. Amjad Ali Contract Price: Tk 663,167.05	002	<u>Some brick have been stockpiled, but otherwise no progress to report. Scheduled progress rate at the end of this reporting period was 55 percent. XEN should take action to accelerate progress rate on this project.</u>
<u>1982 - 1983 Projects (Cont.)</u>				
47		Tree aforestation Contractor: Mr. Salaiman Ahmed Contract Price: Tk 16,894	—	<u>Work Order issued 15/12/84; no progress to report.</u>
<u>Rajarhat - Ullaghata Road</u>				
<u>1982 - 1983 Projects</u>				
48	Groups A & D	HBB	088	<u>No work done on these projects during this reporting period.</u>
49	Groups B & C	HBB	—	<u>No new work Orders issued as of the date of this report.</u>
<u>1983 - 1984 Projects</u>				
<u>1984 - 1985 Projects</u>				
50	B - 5	RCC Bridge, 24.4 m (Deulia Beel)	—	<u>No progress to report.</u>

Serial Number	Contract Identification	Description Of Work Order	Percent Complete	Current Comments
<u>Rajarhat - Ullaghata Road (Cont.)</u>				
<u>1984 - 1985 Projects (Cont.)</u>				
51	B - 6	RCC Bridge, 14.2 m (Baddayar Bazar)	---	No progress to report.
52	B - 7	RCC Bridge, 14.2 m (Pangahat)	---	No progress to report.
<u>Gaibandha - Naldanga Road</u>				
<u>1984 - 1985 Projects</u>				
53	B - 1	RCC Bridge, 20 ft Contractor: Mr. Shamsul Huq Contract Price: Tk 281,300	---	No progress to report.
54	B - 3	RCC Bridge, 20 ft (Kholshati) Contractor: Mr. Anwarul Azim Contract Price: Tk 317,724	---	No progress to report.
<u>Gaibandha - Saghhata Road</u>				
<u>1984 - 1985 Projects</u>				
55	B - 2	RCC Bridge, 15 ft Contractor: Mr. Ranjit Bakshi Contract Price: Tk 202,686	---	work order issued on 24/12/84, but otherwise no progress to report.

Exhibit VI - CONSTRUCTION SUPERVISION PROJECTS - RANGPUR

Sheet 8 of 8

Serial Number	Contract Identification	Description Of Work Order	Percent Complete	Current Comments
<u>Chaperhat - Kaliganj Road</u>				
<u>1984 - 1985 Projects</u>				
56	C - 5	RCC Bridge, 10 ft Contractor: Mr. Hofazzal Hossain Contract Price: Tk 140,000	---	<u>Contractor has stockpiled some reinforcing steel at site, but no actual work has yet been undertaken.</u>
<u>Bamandanga - Surdarganj Road</u>				
<u>1984 - 1985 Projects</u>				
57	C - 6	RCC Box Culvert, 10 ft (Saitontola) Contractor: Mr. A.K.M. Kashem Contract Price: Tk 146,000	003	<u>Casting of foundation complete for both sides. Steel fabricator was in progress as of the end of this reporting period.</u>

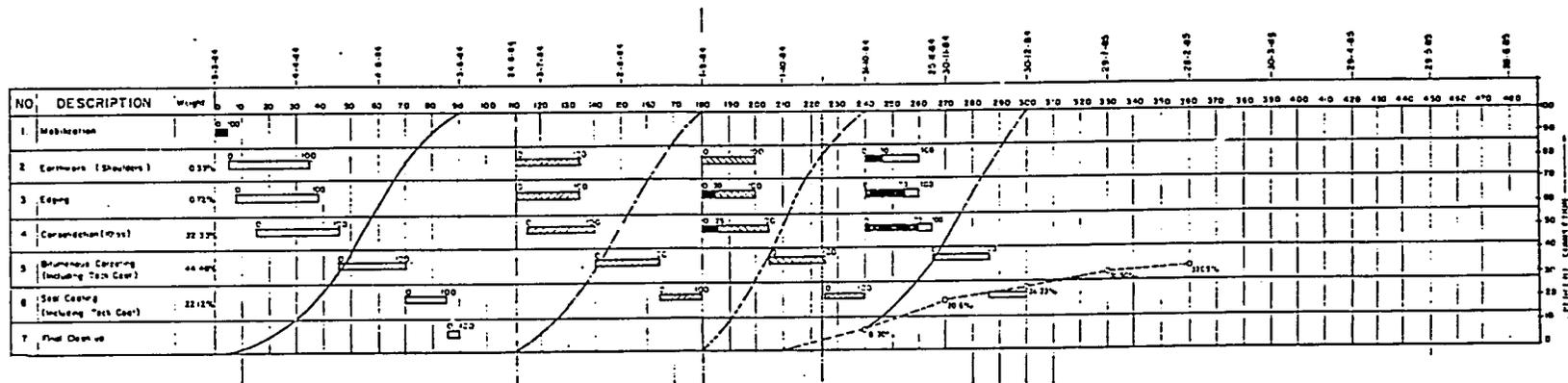
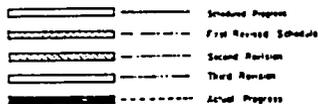
E X H I B I T    V I I  
=====

BAR CHARTS    AND    PROGRESS CURVES

RANGPUR

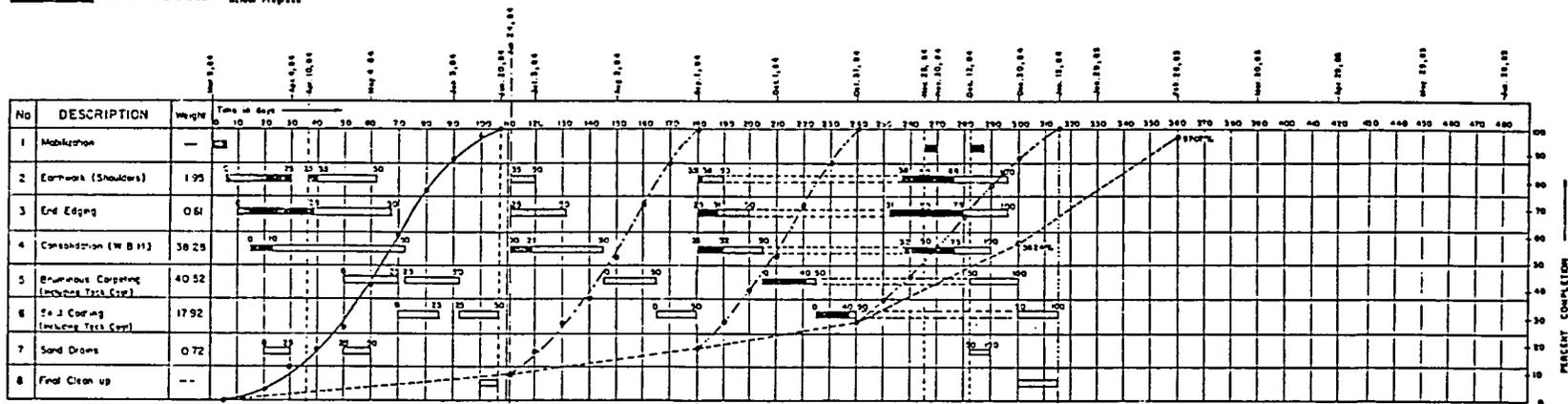
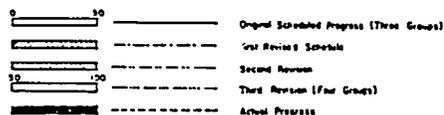
**ZILA ROADS MAINTENANCE AND IMPROVEMENT PROJECT**  
**RANGPUR DISTRICT**  
**IMPROVEMENT OF GAIBANDHA KAMARJANI ROAD 1983-84**  
**KHOA CONSOLIDATION AND BITUMINOUS CARPETING**  
**ON EXISTING H.B.B**

Estimated Cost: Tk. 1690000  
 Approved Cost: Tk. 1125250  
 Scheduled Starting Date: March 5, 1984  
 Actual Starting Date: —  
 Scheduled Completion Date: June 5, 1984  
 First Revised Completion Date: July 31, 1984  
 Second Revised Completion Date: October 31, 1984  
 Third Revised Completion Date: December 31, 1984  
 Date of Revision: June 14, Sept 17,  
 Total Length: 5180 feet



**ZILA ROADS MAINTENANCE AND IMPROVEMENT PROJECT**  
**RANGPUR DISTRICT**  
**IMPROVEMENT OF MIRGONJ-JOLDHAKA ROAD 1983-1984**  
**BITUMINOUS CARPETING**  
**REVISED PROGRESS CHART**

Estimated Cost: Tk. 19,57,235  
 Contracted Cost: Tk. 10,42,450  
 Scheduled Starting Date: See Para (1)  
 Actual Starting Date: See Para (2)  
 Scheduled Completion Date: See Para (3)  
 First Revised Completion Date: August 31, 1984  
 Second Revised Completion Date: January 31, 1984  
 Third Revised Completion Date: December 31, 1984  
 Date of Revision: June 24, Secy. Inr. Oct. 15, 1984  
 Total Length: 6,400 feet

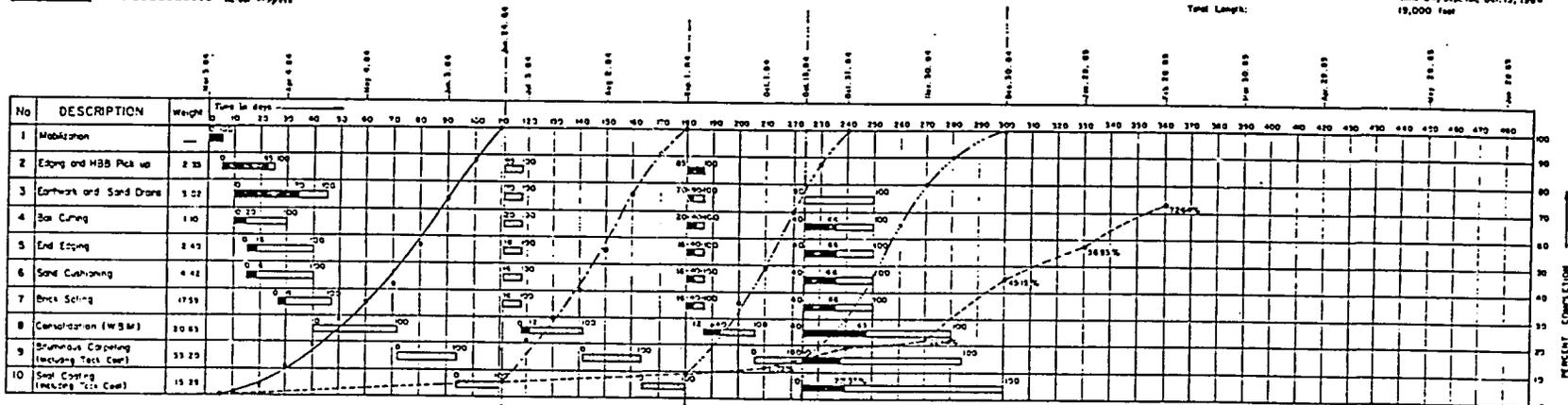


NOTES: (1) Group C-2: March 2, 1984; Group B: April 7, 1984; Group A: December 12, 1984; Group C-1: November 25, 1984. (2) Group C-2: March 10, 1984; Group B: April 17, 1984; Group A: December 12, 1984; Group C-1: November 25, 1984. (3) Group C-2: June 5, 1984; Group B: June 20, 1984; Group A: January 15, 1985; Group C-1: December 31, 1984. (4) Work Order for Group B cancelled by the T.P. Group D will no longer be part of this scheme for 1983-84.

**ZILA ROADS MAINTENANCE AND IMPROVEMENT PROJECT**  
**RANGPUR DISTRICT**  
**IMPROVEMENT OF BARODARGA-BHENDABARI ROAD 1983-1984**  
**BITUMINOUS CARPETING**  
**REVISED PROGRESS CHART**

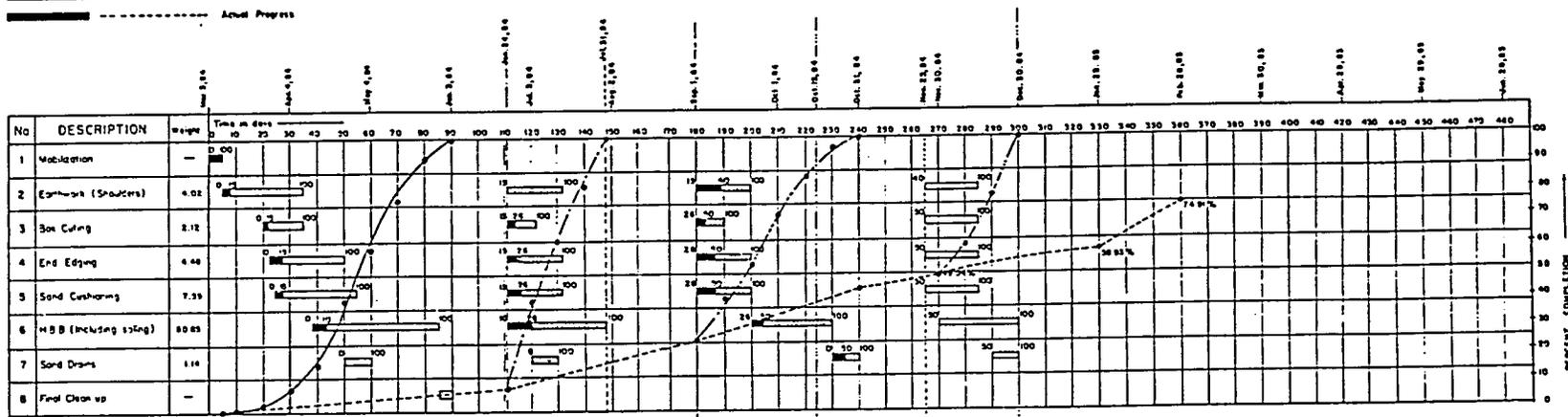
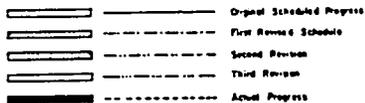
Estimated Cost: Tk. 47,45,833  
 Original Contracted Cost: Tk. 42,02,990  
 Revised Contracted Cost: Tk. 46,39,488  
 Scheduled Starting Date: March 8, 1984  
 Actual Starting Date: March 18, 1984  
 Scheduled Completion Date: June 5, 1984  
 First Revised Completion Date: August 31, 1984  
 Second Revised Completion Date: October 31, 1984  
 Third Revised Completion Date: December 31, 1984  
 Date of Revision: June 24, 1984  
 Total Length: 19,000 feet

Original Scheduled Progress  
 First Revised Schedule  
 Second Revision  
 Third Revision  
 Actual Progress



**ZILA ROADS MAINTENANCE AND IMPROVEMENT PROJECT**  
**RANGPUR DISTRICT**  
**IMPROVEMENT OF KAMDIA-GHORAGHAT ROAD 1983-1984**  
**H.B.B. PAVEMENT**  
**REVISED PROGRESS CHART**

Revised Estimated Cost:	Tk. 16,34,137
Total Contracted Cost:	Tk. 16,23,077
Schedule Starting Date:	See Para (1)
Actual Starting Date:	See Para (2)
Scheduled Completion Date:	See Para (3)
First Revised Completion Date:	July 31, 1984
Second Revised Completion Date:	October 31, 1984
Third Revised Completion Date:	December 31, 1984
Date of Report:	June 24, 1984, Sect. No. Oct. 15, 1984
Total Length:	11,000 feet



NOTES: (1) Groups B and C: March 5, 1984  
 Group A: Nov 23, 1984  
 Group D: Dec. 18, 1984

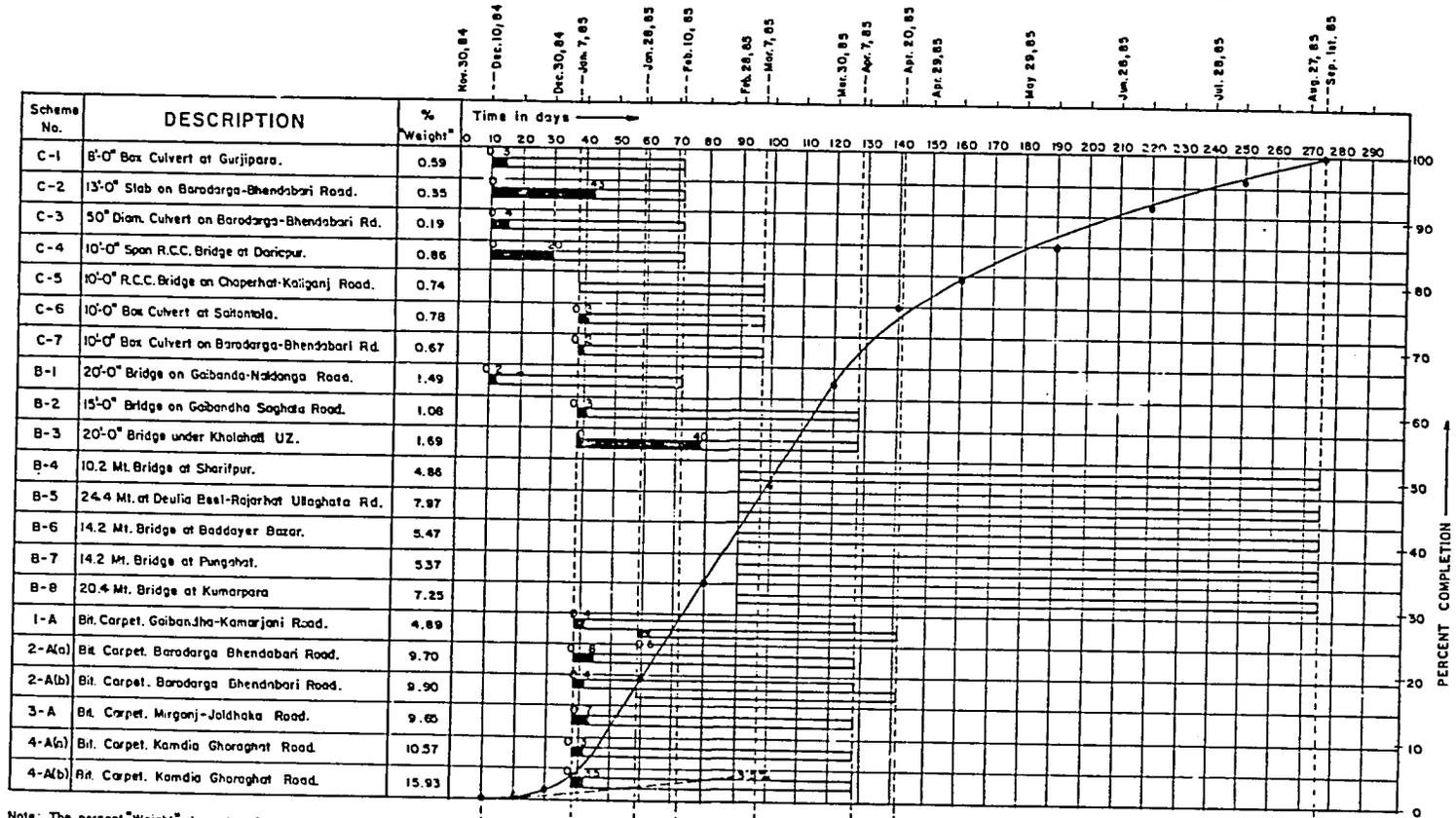
(2) Groups B and C: March 10, 1984  
 Group A: Dec. 4, 1984  
 Group D: Dec. 18, 1984

(3) Groups B and C: June 5, 1984  
 Group A: Dec 31, 1984  
 Group D: Dec. 31, 1984

## RANGPUR DISTRICT SCHEMES 1984-1985 COMBINED PROGRESS CHART

Scheduled Progress  
 Actual Progress

Estimated Cost: Tk. 1,75,85,660  
 Contract Cost: Tk. 1,30,02,457  
 Scheduled Starting Date: Dec. 10, 1984.  
 Actual Starting Date:  
 Scheduled Completion Dates: Sep. 1st., 1985  
 Actual Completion Date:

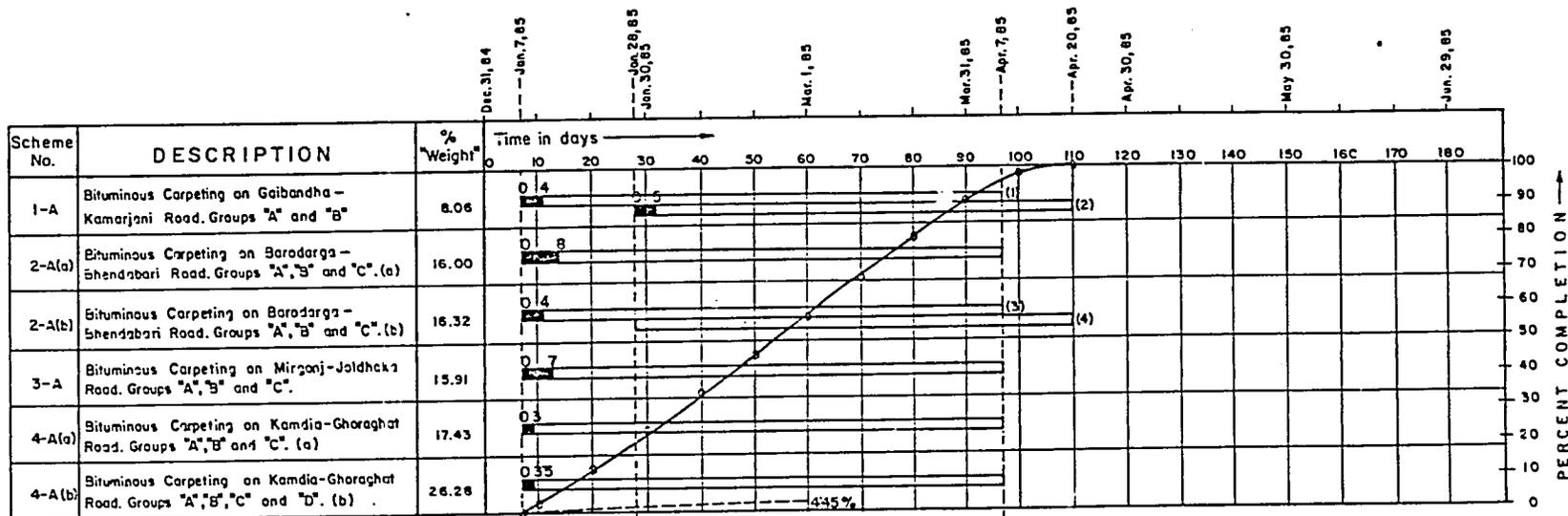


Note: The percent "Weight" shown has been based on the Contract Cost plus the Estimated Cost of Schemes B-4 through B-8, a total of Tk. 1,88,22,457.

## RANGPUR DISTRICT SCHEMES 1984-1985 ROADS CONSTRUCTION

Estimated Cost: Tk. 1,01,75,660  
 Contract Cost: Tk. 1,14,13,313  
 Scheduled Starting Dates: Jan. 7 and 28, 1985  
 Actual Starting Dates:  
 Scheduled Completion Dates: Apr. 7 and 20, 1985  
 Actual Completion Dates:

Scheduled Progress  
 Actual Progress

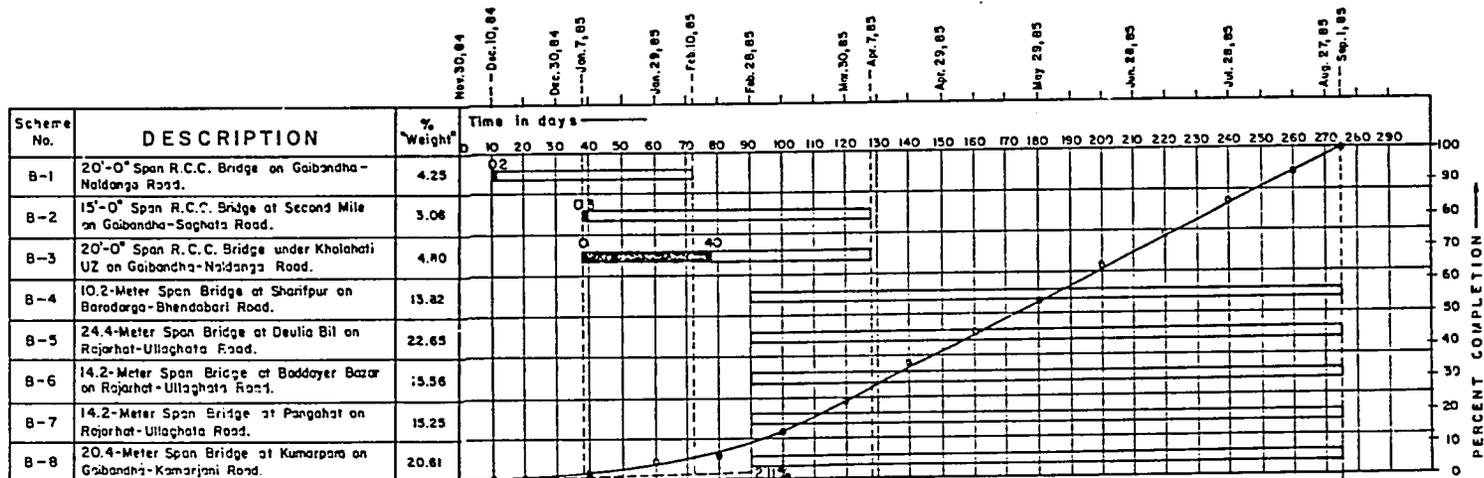


Notes. (1) Group "A". (2) Group "B". (3) Groups "A" and "B". (4) Group "C".  
 (5) Gaibandha-Kamarjani and Kamdia-Ghoraghat Roads have been subdivided into two Schemes each.

## RANGPUR DISTRICT SCHEMES 1984-1985 BRIDGES CONSTRUCTION

Estimated Cost: TL. 65,85,000 (1)  
 Contract Cost: Tk. 8,01,710 (2)  
 Scheduled Starting Dates: Dec.10,84, Jan.7, & Mar.1,85  
 Actual Starting Dates: Feb.10, Apr.7, Sep.1st. 85  
 Scheduled Completion Dates: Feb.10, Apr.7, Sep.1st. 85  
 Actual Completion Dates:

Scheduled Progress  
 Actual Progress

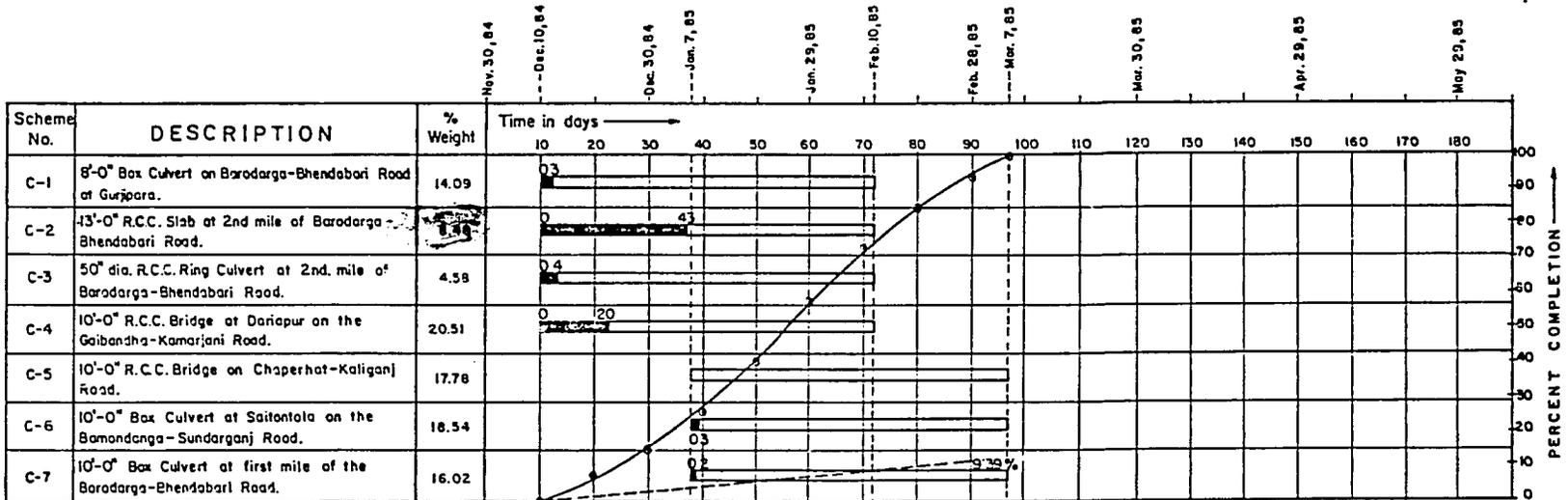


- Notes:
- (1) Including the estimated cost of five bridges designed by B.C.L. which came up to a cost much higher than the originally estimated.
  - (2) The Contract Cost indicated is for three schemes only, i.e. B-1 through B-3, since no tenders have yet been received for Schemes B-4 through B-8.
  - (3) The percent of cost of each Scheme is based on the Contract Cost for Schemes B-1 through B-3, plus the estimated cost for Schemes B-4 through B-8, or a total of Tk.66,21,710.

## RANGPUR DISTRICT SCHEMES 1984-1985 CULVERTS CONSTRUCTION

Estimated Cost: TL 8,25,000  
 Contract Cost: TL 7,87,434  
 Scheduled Starting Dates: Dec. 10, 84 and Jan. 7, 85  
 Actual Starting Dates:  
 Scheduled Completion Dates: Feb. 10 and Mar. 7, 85  
 Actual Completion Dates:

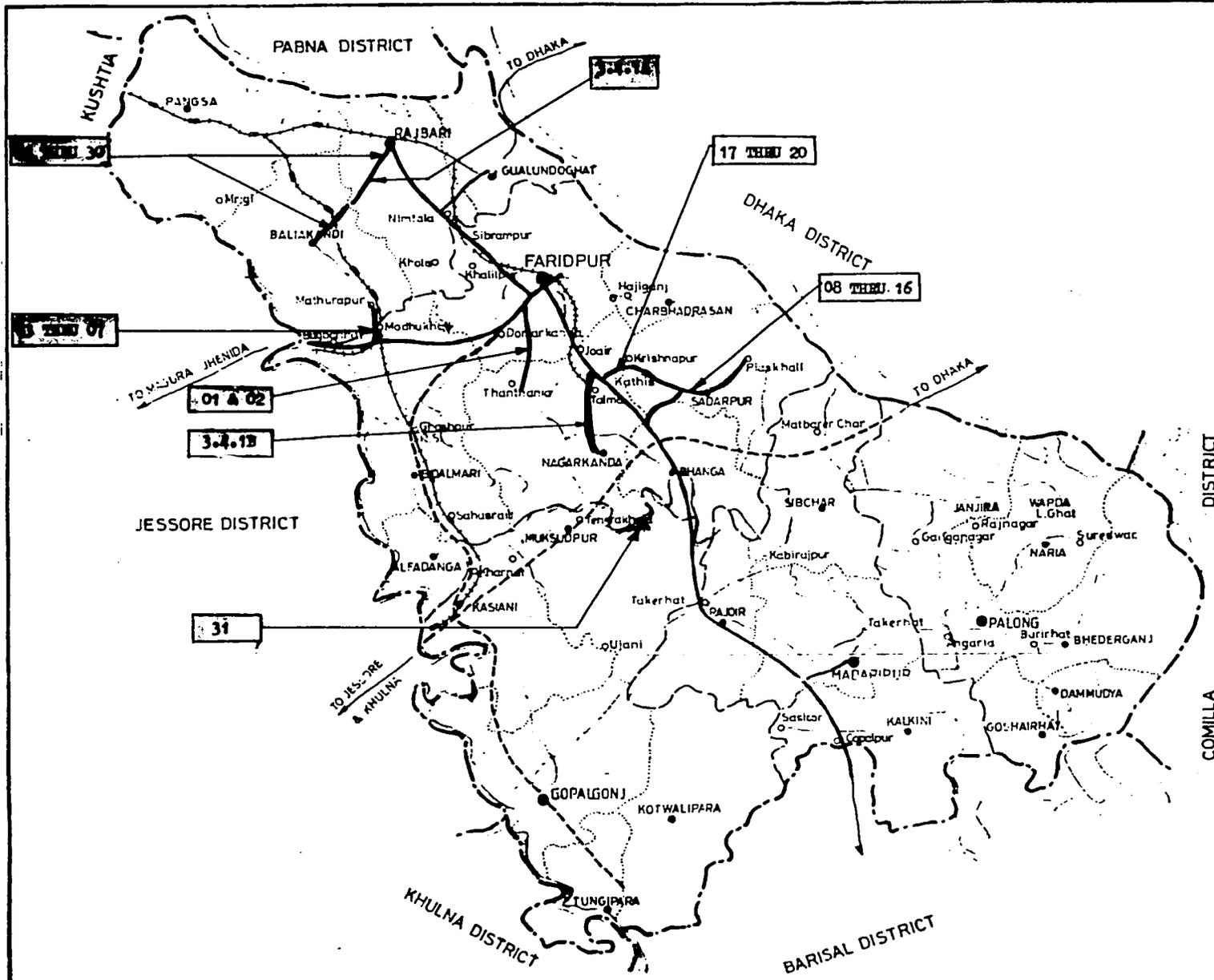
Scheduled Progress  
 Actual Progress



Note: All Structures with span below 15 feet, are considered as Culverts, regardless the type of design.

EXHIBIT VIII  
**FARIDPUR DISTRICT**

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**LEGEND**  
**MAINTENANCE**

- 3.4.1A. RAJBARI - BALIAKANDI ROAD
- 3.4.1B. TALMA - NAGARKANDA ROAD

**CONSTRUCTION**

- 01 & 02. BADARPUR - SALTHA ROAD
- 03 THRU 07. MADTUGHALI - BALIAKANDI ROAD
- 08 THRU 16. MATKRISNAPUR - PAJICHALI ROAD
- 17 THRU 20. TALMA - MATKRISNAPUR ROAD
- 21 THRU 30. BALIAKANDI - RAJBARI ROAD
- 31. DIGNAGAR - MUNSUDPUR ROAD

Scale 1 inch = 8 Miles



Serial Number	Contract Identification	Description Of Work Order	Percent Complete	Current Comments
<u>Badarpur - Saltha Road</u>				
<u>1982 - 1983 Projects</u>				
01		Bituminous pavement	100	Final payment processed
<u>1983 - 1984 Projects</u>				
02		Bituminous pavement	100	Final payment processed
<u>Madhukhali - Baliakandi Road</u>				
<u>1982 - 1983 Projects</u>				
03		Bituminous pavement	100	Final payment processed
<u>1983 - 1984 Projects</u>				
04	Groups E, F, G, H, & I	Bituminous pavement	100	Final payment processed
05	Group J	Bituminous pavement	100	Final payment being processed.
<u>1984 - 1985 Projects</u>				
06	ZRHIF/01/84-85, Group K	Bituminous pavement Contractor: Mr. Atiar Rahman Contract Price: Tk 1,400,397	100	All pavement work complete, but no request for payment has been received.
07	ZRHIP/02/84-85, Group L	Bituminous pavement Contractor: M/S M.N. and Co. Contract Price: Tk 1,169,735	018	No work done during the month because the roller was down for repairs. The WBM still requires final compaction.
<u>Hatkrishnapur - Sadarpur - Piajkhali Road</u>				
<u>1983 - 1984 Projects</u>				
08	ZRHIP/01/83-84, Group A	HBB	100	Final payment being processed.
09	ZRHIP/10/83-84, Group D	HBB	100	Final payment being processed.
10	ZRHIP/13/83-84, Group E		100	Final bill being processed.

Exhibit IX - CONSTRUCTION SUPERVISION PROJECTS - FARIDPUR

Serial Number	Contract Identification	Description Of work under	Percent Complete	Current	Comments
<u>Hatkrishnapur - Sadarpur - Pajkhali Road (Cont.)</u>					
<u>1984 - 1985 Projects</u>					
11	ZKIP/10/84-85, Group B	Bituminous pavement Contractor: Mr. A. Karim Miah Contract Price: Tk 2,755,614	—		<u>Contractor has kiln in operation, and he has bricks stockpiled. No road work yet underway.</u>
12	ZKMF/11/84-85, Group C	Bituminous pavement Contractor: Mir Akter Hossain and Co. Contract Price: Tk 1,400,389	—		<u>Contractor has kiln in operation, and he has bricks stockpiled. No road work yet underway.</u>
13	ZKMF/25/84-85	RCC bridge, 30 ft (Najunder) Contractor: Mr. Atiar Rahman Contract Price: Tk 587,860	—		<u>No progress to report</u>
14	ZKMF/26/84-85	RCC Bridge, 30 ft (Taltala) Contractor: Mr. K.M. Ibrahim Contract Price: Tk 624,015	—		<u>No progress to report</u>
15	ZKIP/50/84-85	RCC bridge, 40 ft Contractor: M/S Mir Akter hossain and Ltd. Contract Price: Tk 980,400	—		<u>No progress to report</u>
16	ZKIP/27/84-85	RCC Bridge, 30 ft (Khaigo) Contractor: M/S S.S. Construction Contract Price: Tk 564,604	<u>010</u>		<u>Both abutment footings have been poured.</u>

Serial Number	Contract Identification	Description Of Work Order	Percent Complete	Current Comments
<u>Talma - Hatkrishnapur Road</u>				
<u>1984 - 1985 Projects</u>				
17	ZRHIP/05/84-85, Group A	Bituminous Pavement Contractor: Mr. A. Rahim Miah Contract Price: Tk 1,838,114	<u>025</u>	<u>1200 lin. m of excavation and 700 m of sand cushion, edging, and soling are complete.</u>
18	ZRHIP/06/84-85, Group B	Bituminous Pavement Contractor: M/S Mir Akter Hossain and Co. Contract Price: Tk 1,645,590	<u>040</u>	<u>The contractor has completed excavation, sand cushion, edging, and soling for entire reach, and 1500 lin. m of WBM. Contractor was re-</u> <u>quired to pick up 250 lin. ft of soling and replace the sand cushion and bricks.</u>
19	ZRHIP/07/84-85, Group C	Bituminous Pavement Contractor: Mr. K.H. Erayet Hossain Contract Price: Tk 1,633,024	<u>048</u>	<u>This contractor has completed all WBM and a running bill is in process.</u>
20	ZRHIP/08/84-85, Group D	Bituminous Pavement Contractor: M/S Mir Akter Hossain and Co. Contract Price: Tk 1,298,460	<u>003</u>	<u>100 lin. m of excavation are complete.</u>
<u>Baliakandi - Rajbari Road</u>				
<u>1984 - 1985 Projects</u>				
21	ZRHIP/14/84-85, Group 1	Bituminous pavement Contractor: K.H. Nazmul Hossain and Co. Contract Price: Tk 2,035,185	<u>010</u>	<u>Contractor has completed all excavation, 900 lin. m of sand cushion, edging and soling, and 500 lin. m of WBM.</u>
22	ZRHIP/15/84-85, Group 2	Bituminous pavement Contractor: Mr. Taser Ali Bepari Contract Price: Tk 1,744,350	<u>025</u>	<u>The contractor has completed all excavation and 1300 lin. m of sand cushion, edging, and soling, and 900 lin. m of WBM.</u>
23	ZRHIP/16/84-85, Group 3	Bituminous pavement Contractor: M/S Ghose Brother Contract Price: Tk 1,613,765	<u>020</u>	<u>Contractor has completed all excavation and 1200 lin. m of sand cushion, edging, and soling. He is presently lifting 100 lin. ft of soling made of low quality brick.</u>

Exhibit IX - CONSTRUCTION SUPERVISION PROJECTS - FARIDPUR

Sheet 4 of 5

Serial Number	Contract Identification	Description Of Work Order	Percent Complete	Current Comments
<u>Baliakandi - Rajbari Road (Cont.)</u>				
<u>1984 - 1985 Projects (Cont.)</u>				
24	LRMIP/17/84-85, Group 4	Bituminous pavement Contractor: Mr. Kazi Faradat Ali Contract Price: Tk 1,826,280	022	The Contractor has completed 1100 m of excavation and 900 lin m of WBM.
25	LRMIF/18/84-85, Group 5	Bituminous pavement Contractor: Mr. Kazi Faradat Ali Contract Price: Tk 2,035,185	019	Contractor has completed 1200 lin m of excavation and 350 lin. m of sand cushion, soling, and edging. He is presently engaged in removing 10 loads of bad sand and poor bricks from the site.
26	LRMIF/19/84-85, Group 6	Bituminous pavement Contractor: Mr. Akbar Ali Contract Price: Tk 1,699,550	048	This project is complete through WBM.
27	LRMIF/20/84-85, Group 7	Bituminous pavement Contractor: Mr. N.K. Mukharjee Contract Price: Tk 557,802	048	This project is complete through WBM.
28	LRMIF/21/84-85, Group 8	Bituminous pavement over existing WBM Contractor: Mr. N.K. Mukharjee Contract Price: Tk 705,878		Awaiting delivery of bituminous material and the availability of a roller to start paving operations.
29	LRMIP/22/84-85,	Bridge approach, Horai Bridge Contractor: Mr. Emdadul Hoq Contract Price: Tk 704,001	038	Embankment is complete. Present plans are to eliminate the brick matressing and use more turf on the side slopes.
30	LRMIF/23/84-85	Bridge approach, Matiapara Bridge Contractor: Mr. Emdadul Hoq Contract Price: Tk 290,225	038	The embankment is complete. Present plans are to eliminate the brick matressing and use more turf on the side slopes.

Exhibit IX - CONSTRUCTION SUPERVISION PROJECTS - FARIDPUR

Sheet 5 of 5

Serial Number	Contract Identification	Description of work Order	Percent Complete	Current Comments
<u>Dignagar - Mukshudpur Road</u>				
<u>1984 - 1985 Projects</u>				
31	CRMIP/24/84-85	Bridge approach, Banagram Bridge Contractor: Mr. A. Bari Mia Contract Price: Tk 885,000	<u>038</u>	<p>The approaches to this bridge have been changed to 50 ft spans. When the original embankment was completed so that the politicians could drive across the bridge, it was noted that the deck joints were closing. The embankment is being removed and a change order sent to the contractor requiring 2 columnar abutments and two 50 ft spans to be installed.</p>

**EXHIBIT X**  
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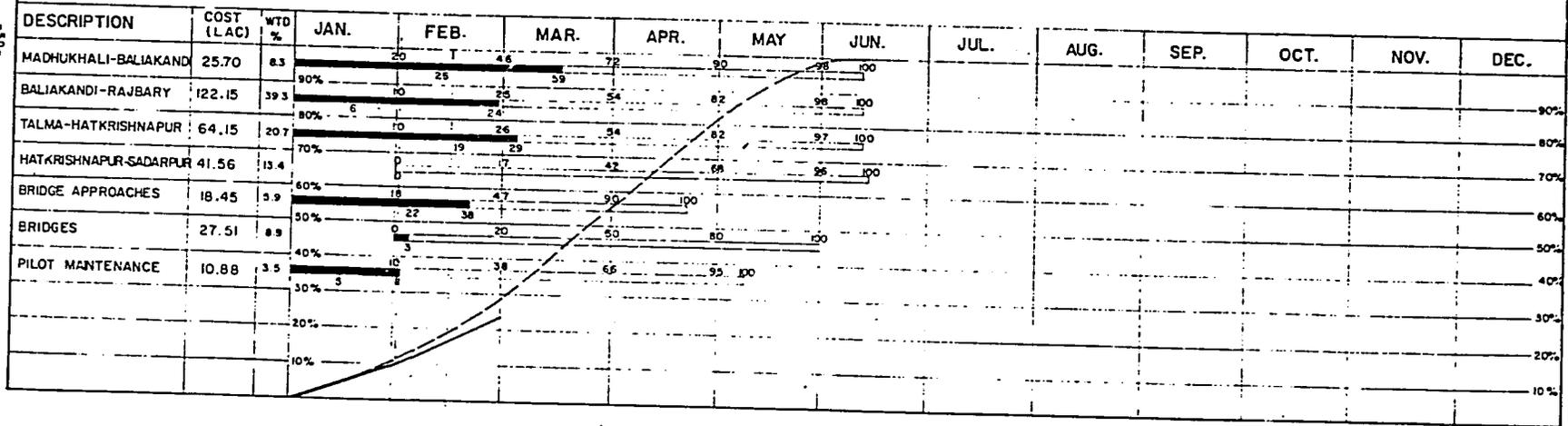
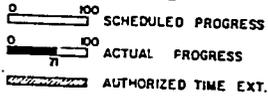
**BAR CHARTS AND PROGRESS CURVES**

**FARIDPUR**

FARIDPUR  
ALL SCHEMES  
AND  
MAINTENANCE  
84-85

DATE: 28 FEB. 85  
% COMPLETION:  
SCHEDULED = 28%  
ACTUAL = 23%

LEGEND



**FARIDPUR  
MADHUKHALI-BALIAKANDI  
ROAD  
ALL GROUPS  
84-85 SCHEMES**

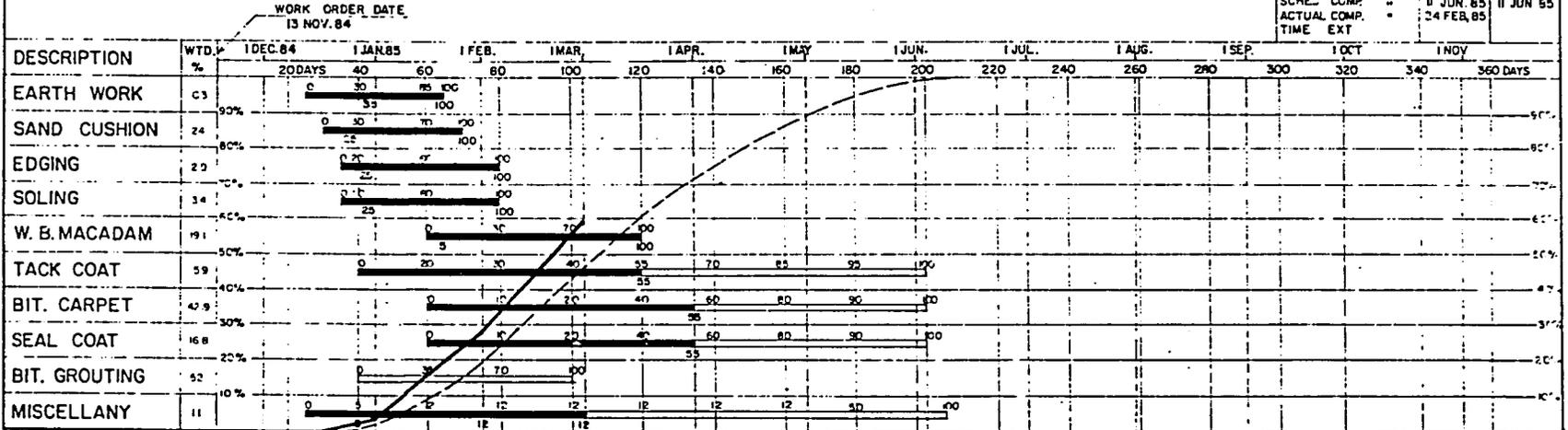
**DATE: 28 FEB. 85**  
**% COMPLETION:**  
 SCHEDULED = 47%  
 ACTUAL = 59%

**LEGEND**

 SCHEDULED PROGRESS  
 ACTUAL PROGRESS  
 AUTHORIZED TIME EXT.

**CONTRACT DATA**

TOTAL	GROUP	K	L
9782 L.F.	LENGTH	5328 L.F.	4454 L.F.
25,70,32	COST (TK)	14,00,397	11,69,736
WORK ORDER DATE	18 NOV 84	18 NOV 84	
BEGIN WORK	13 DEC 84	13 DEC 84	
SCHL. COMP.	11 JUN 85	11 JUN 85	
ACTUAL COMP.	24 FEB 85		
TIME EXT.			



**FARIDPUR  
TALMA-HATKRISHNAPUR  
ROAD  
ALL GROUPS  
84-85 SCHEMES**

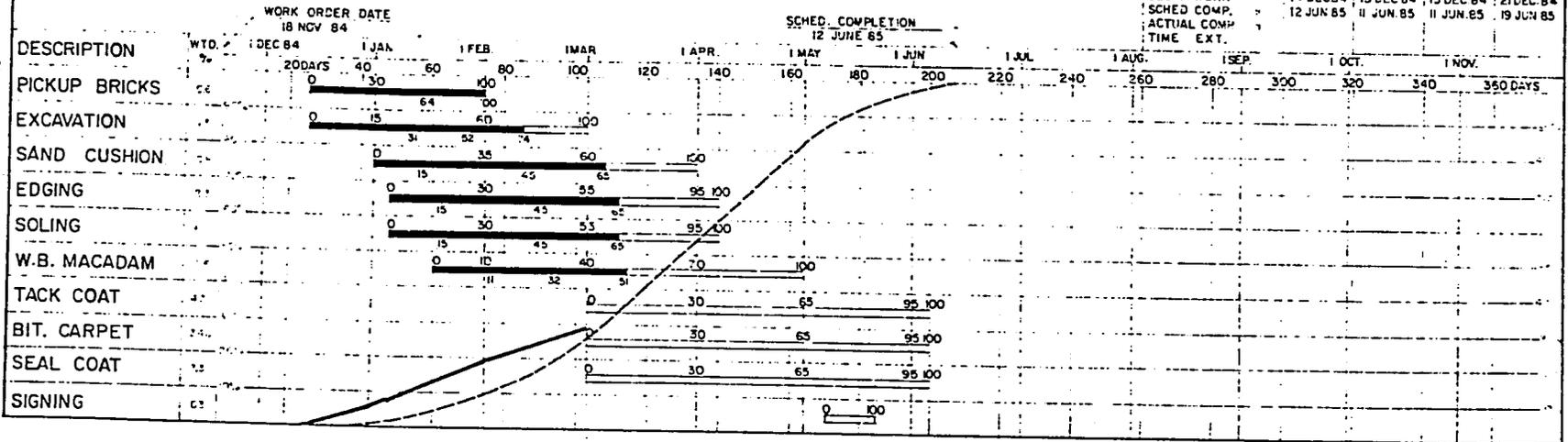
**DATE: 28 FEB. 85**

**% COMPLETION:**

SCHEDULED = 26%  
ACTUAL = 29%

**LEGEND**  
 SCHEDULED PROGRESS  
 ACTUAL PROGRESS  
 AUTHORIZED TIME EXT.

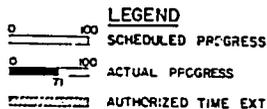
CONTRACT		DATA			
TOTAL	GROUPS	A	B	C	D
19,914 L.F.	LENGTH	5280 L.F.	5280 L.F.	5280 L.F.	4074 L.F.
64,15,188	COST (TK)	16,38,114	16,33,024	16,65,590	12,98,460
WORK ORDER DATE	19 NOV 84	15 NOV 84	18 NOV 84	12 NOV 84	12 NOV 84
BEGIN WORK	14 DEC 84	13 DEC 84	13 DEC 84	21 DEC 84	21 DEC 84
SCHED COMP.	12 JUN 85	11 JUN 85	11 JUN 85	19 JUN 85	19 JUN 85
ACTUAL COMP.					
TIME EXT.					



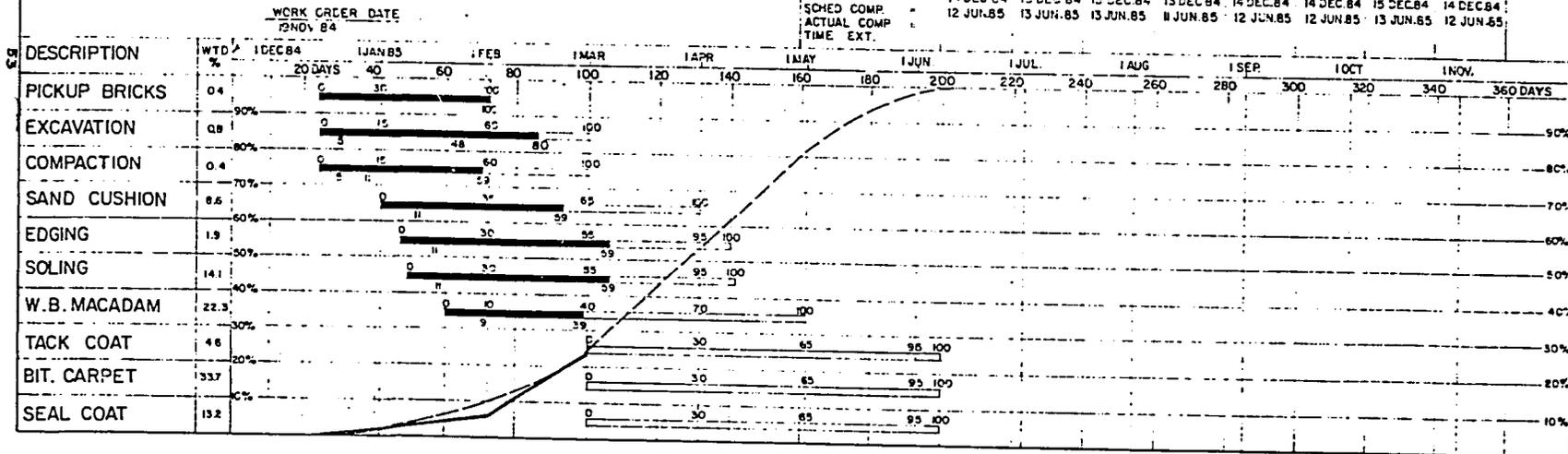
52

**FARIDPUR**  
**BALIAKANDI-RAJBARY**  
**ROAD**  
**ALL GROUPS**  
**84-85 SCHEMES**

**DATE : 28 FEB. 85**  
**% COMPLETION :**  
**SCHEDULED = 24%**  
**ACTUAL = 24%**

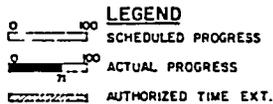


		CONTRACT DATA							
TOTAL	GROUP	1	2	3	4	5	6	7	8
11563 m.	LENGTH	1600 m	1600 m	1600 m	1600 m	1600 m	1600 m	540 m	1423 m.
122,53,395	COST (TK)	20,35,85	17,41,350	16,13,765	18,26,280	20,31,785	16,99,950	5,57,802	7,05,878
WORK ORDER	DATE	19 NOV 84	20 NOV 84	20 NOV 84	18 NOV 84	19 NOV 84	19 NOV 84	20 NOV 84	19 NOV 84
BEGN WORK	DATE	14 DEC 84	15 DEC 84	15 DEC 84	13 DEC 84	14 DEC 84	14 DEC 84	15 DEC 84	14 DEC 84
SCHED COMP	DATE	12 JUN 85	13 JUN 85	13 JUN 85	11 JUN 85	12 JUN 85	12 JUN 85	13 JUN 85	12 JUN 85
ACTUAL COMP	DATE								
TIME EXT.									



**FARIDPUR  
BRIDGE APPROACHES  
BONAGRAM - HORAI - MATIAPARA  
84 - 85 SCHEMES**

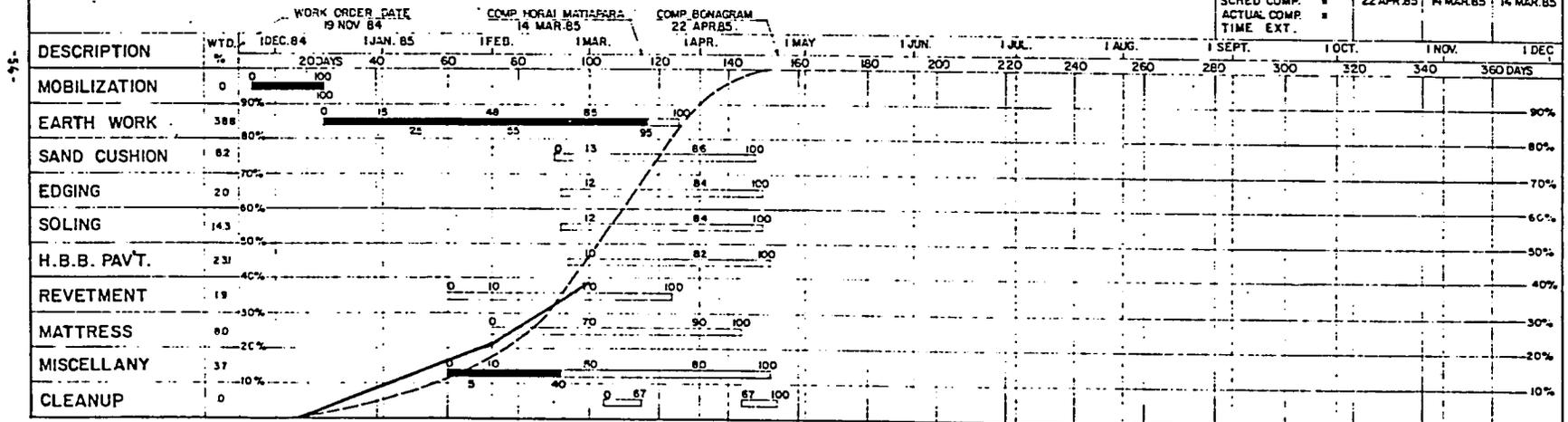
DATE: 28 FEB. 85  
% COMPLETION:  
SCHEDULED = 46%  
ACTUAL = 38%



**NOTES:**  
1. BONAGRAM APPROACHES CHANGED  
TO R.C. SPANS.

**CONTRACT DATA**

TOTAL	BRIDGE	BONAGRAM	HORAI	MATIAPARA
1045 m.	LENGTH	410 m.	410 m.	225 m.
18,45,165	COST (TK)	8,85,000	6,69,940	2,90,225
WORK ORDER DATE	29 NOV 84	19 NOV 84	19 NOV 84	19 NOV 84
BEGIN WORK	23 DEC 84	14 DEC 84	14 DEC 84	14 DEC 84
SCHED COMP.	22 APR 85	14 MAR 85	14 MAR 85	14 MAR 85
ACTUAL COMP.				
TIME EXT.				



9/1

Exhibit IV, consisting of 6 sheets, contains the bar charts and progress curves for those projects that are currently active.

### **6.3 Rangpur District**

Exhibit V is a map of the (old) Rangpur District on which have been marked, with appropriate symbols and numbers, both the maintenance and the construction projects in the Rangpur District.

Exhibit VI, consisting of 8 sheets, lists all the construction projects in the Rangpur District, by road and by fiscal year in which programmed. The "Serial Number" has no significance other than to serve as a simple symbol for locating the project on its respective map.

Exhibit VII, consisting of 4 sheets, contains the bar charts and progress curves for those projects that are currently active.

### **6.4 Faridpur District**

Exhibit VIII is a map of the (old) Faridpur District on which have been marked, with appropriate symbols and numbers, both the maintenance and the construction projects in the Faridpur District.

Exhibit IX, consisting of 5 sheets, lists all the construction projects in the Faridpur District, by road and by fiscal year in which programmed. The "Serial Number" has no significance other than to serve as a simple symbol for locating the project on its respective map.

Exhibit X, consisting of 5 sheets, contains the bar charts and progress curves for those projects that are currently active.

## **7.0 PROCUREMENT OF EQUIPMENT**

### **7.1 Local Procurement**

#### **7.1.1 Tar Boilers**

Still waiting for authorization from LGEB to purchase 12 units.

#### **7.1.2 Trailer-Mounted Water Tanks**

Six (6) units, 350 gal. capacity, were delivered by the manufacturer on 18 February 1985.

### **7.2 International Procurement**

#### **7.2.1 Heavy Equipment, Vehicles, And Tools**

Still waiting for authorization from LGEB to undertake final procurement proceedings.

### **7.2.2 WSA Office Vehicles**

To date, the two WSA Office vehicles, a sedan and a minibus, have not been purchased. No immediate resolution to the problem can be expected in the near future.

## **8.0 PERSONNEL**

The current status of all personnel (WSA/BCL/PAS) is shown in tabular form in Appendix D. Problems in connection with the personnel assignments are discussed in the following section.

## **9.0 PROBLEMS AND PROPOSED SOLUTIONS**

### **9.1 Organization And Management**

In the Progress Report for December 1984, a series of ten problems which were common to all three Districts, and which have been sources for complaints throughout the life of the project, were presented and discussed. In the Progress Report for January 1985, it was noted that many of these same problems were still present, especially in the Rangpur District. It was suggested then that if these problems could be discussed and resolved in a manner acceptable to all concerned in both Sylhet and Faridpur, then they could surely be solved in Rangpur as well. Again in this monthly report, it is admonished that to actively seek a solution in Rangpur will certainly be of benefit to all concerned.

### **9.2 Maintenance System And Supervision**

Problems in connection with this work have been discussed in the review of the individual maintenance projects. However, it would be well to repeat here that the sooner the comments on the draft of the maintenance manual are received, the sooner it can be finalized, printed, and made available to all concerned with maintenance of rural roads.

### **9.3 Preparation Of Technical Specifications**

Now that the Consultant's short-term specifications engineer has come on board, many of the problems connected with design and specifications for rural roads and appurtenant structures should be resolved. The draft of the revised documents is due in early May. It would be very beneficial for the project if all comments could be received within a reasonable time so that the manual can be finalized and made available to all concerned.

**9.4 Training**

As pointed out previously in this report, the principal problems here are those associated with scope and venue of any future overseas training courses.

**9.5 Construction System And Supervision**

Problems in connection with this work have been discussed in the review of the individual construction projects.

**9.6 Procurement Of Equipment**

As pointed out previously, the Consultant is still waiting for the necessary authorizations from LGEB to proceed with procurement.

**9.7 Personnel**

Problems associated with the undue lapse of time between request for approval of a short-term specialist and receipt of approval were discussed in the Progress Report for January 1985. It is hoped that this problem has now been resolved.

**9.8 Miscellaneous**

There are no specific problems of this category.

**10.0 MISCELLANEOUS**

The Monthly Financial Statement may be found in Appendix E.

  
Fred L. Barnes  
Chief of Party

APPENDIX A  
=====

PHOTOS OF MAINTENANCE ACTIVITIES

SYLHET DISTRICT

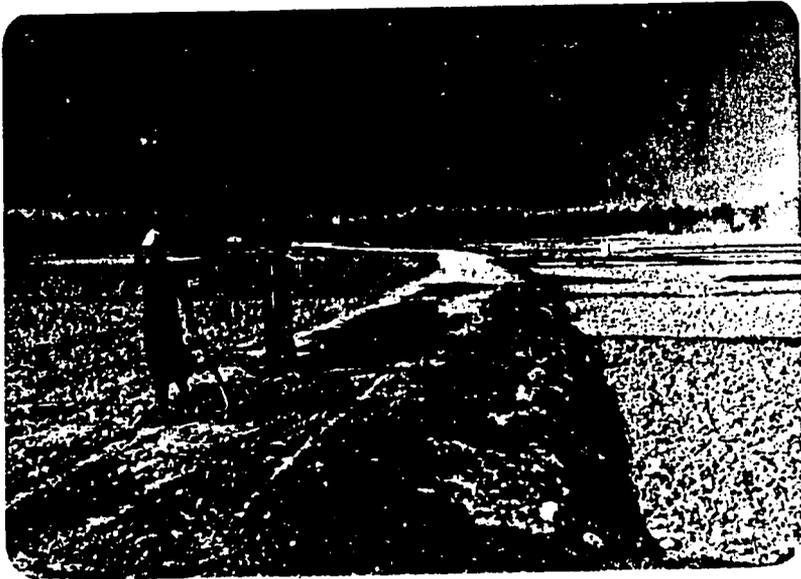
RANGPUR DISTRICT

FARIDPUR DISTRICT

SYLHET DISTRICT

Maintenance Activities

Tajpur - Syedpur - Nayabondar Road - Earth.



A view of the maintenance work in progress. Note the completed portion where water has been added to the pothole filling to aid in compaction. The worker in the foreground is levelling and dressing the material, while the second worker compacts it with a hand tamper.

RANGPUR DISTRICT

Maintenance Activities

Rangpur- Badarganj Pilot Maintenance Scheme (83-84)



A section of the road having the maintenance work completed.

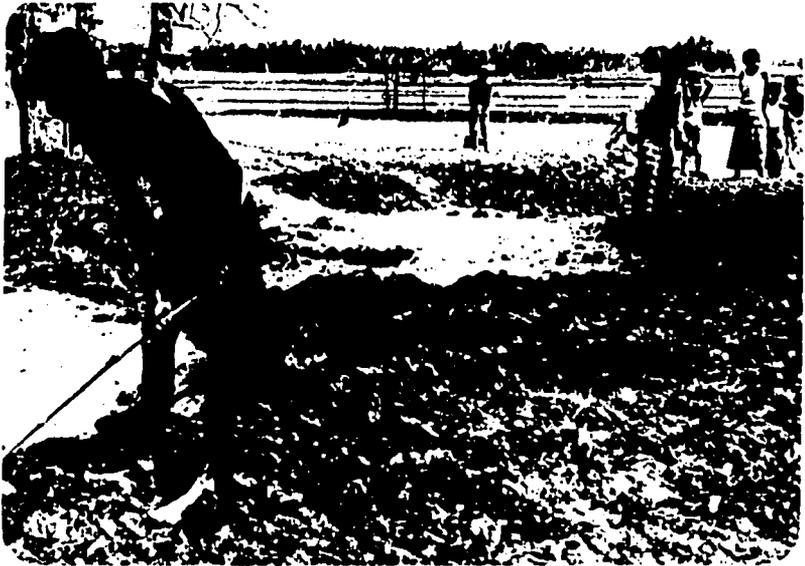
Mahiganj- Damdama Maintenance Scheme (84-85)



Earth work is in progress but no proper compacti n provided. No roller was found in the site on Feb.5, 1985.

RANGPUR DISTRICT

Maintenance Activities



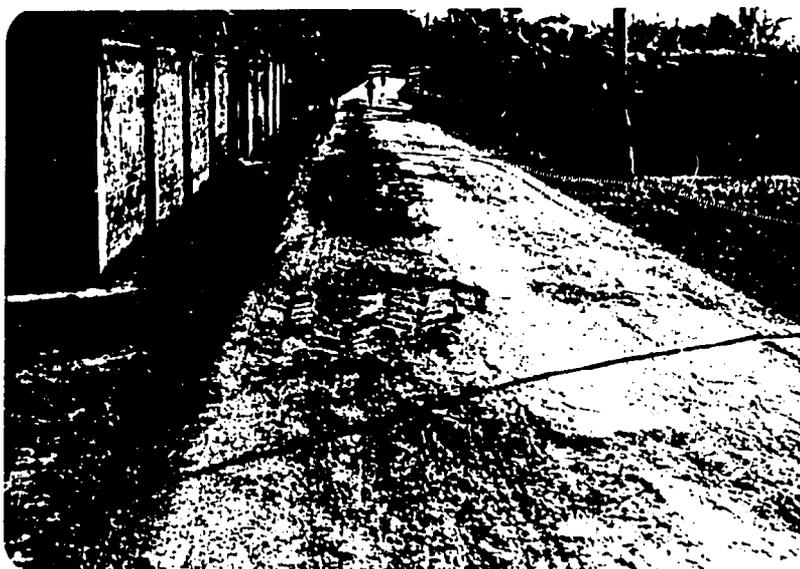
Embankment improvement by earth work was going on on Feb.5, 1985; problem with compacti n can be seen.



Hand rammer being used for clod breaking and earth compaction. Without a mechanical compactor, good compaction cannot be attained.

RANGPUR DISTRICT  
Maintenance Activities

Rangpur - Kaknia Road (84-85)



A view of the selected maintenance scheme road; it is approximately 500 ft after the Honumantola Road Junction Point (adjacent to Police Line, Rangpur).

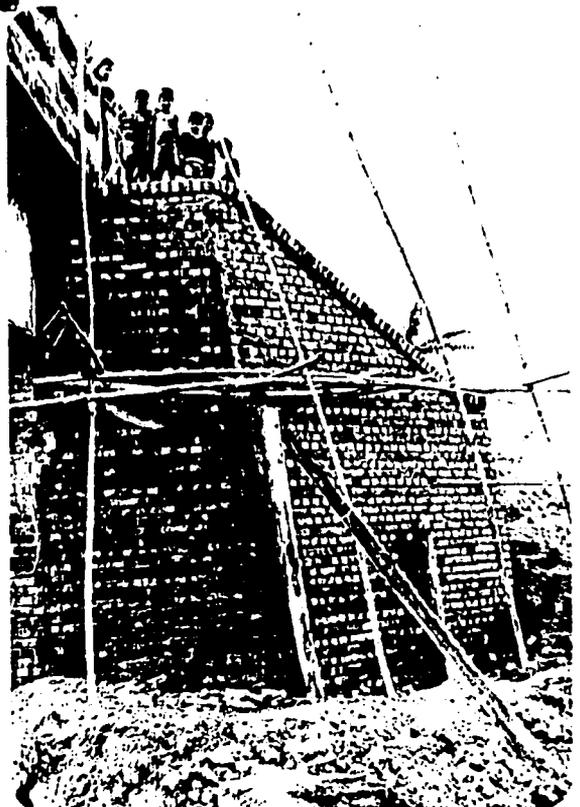
FARIDPUR DISTRICT  
Maintenance Activities

Talma - Nagarkanda Road



February'85. Excavation complete for reconstruction of a bridge wing wall which was washed out during the last flooding.

February'85. Reconstruction of damaged wing wall is complete.



FARIDPUR DISTRICT  
Maintenance Activities

Talma - Nagarkanda Road



Laying of seal coat on damaged portion  
of existing pavement.

APPENDIX B  
=====

DISTRICT SOIL LABORATORY  
ACTIVITIES

LABORATORY ACTIVITIES OF SYLHET DISTRICT FOR THE  
MONTH OF FEB.'85

Name of road and location from where materials collected	Sample no.	Wt. of Cube/ Cylinder.	Size of sample.	Slump.	Proportion of mix.	Age in days.	Load in lbs.	Compressive strength in PSI	Remarks.
Tajpur- Syedpur Road (Top Slab).	S <sub>13</sub>	2600	6"x6"	3"	1:2:4	28	88,000	2,444	Fine aggregates(F.M.= 1.80/1.98) + Coarse aggregates (20 mm-30mm down graded + Chatak cement.
		8650	6"x6"	3"	1:2:4	28	83,000	2,306	
Fenchuganj-Gilachara Road(Top Slab).	S <sub>14</sub>	12,200	6"Øx12"	3"	1:2:4	39	85,000	3,008	-ditto-
		12,350	6"Øx12"	3"	1:2:4	39	84,000	2,972	
Dhakadakshin-Beanibazar Road-(Top Slab).	S <sub>15</sub>	8,200	6"x6"	2½"	1:2:4	28	90,000	2,500	-ditto-
		8,300	6"x6"	2½"	1:2:4	28	92,000	2,556	
Atgram-Zakiganj Road. (Top Slab).	S <sub>16</sub>	8,400	6"x6"	3"	1:2:4	21	87,000	2,417	-ditto-
		8,300	6"x6"	3"	1:2:4	21	84,000	2,333	

LABORATORY ACTIVITIES OF SYLHET DISTRICT FOR THE  
MONTH OF FEB.'85

Name of road/khal and location.	Test Result	Sieve /Hydro-meter analysis.			Atterberg limits.			Field density.		Compaction test.		% Compaction.		C.B.R. (%)		Remarks.
		Sand (%)	Silt (%)	Clay (%)	L.L. (%)	P.L. (%)	P.I. (%)	$\gamma_d$ kg/m <sup>3</sup>	W (%)	M.D.D. (kg/m <sup>3</sup> )	O.M.C (%)	Modified.	Standard.	Unsoaked.	Soaked.	
Dhakadakshin-Beani Bazar Road. (Gap between consolidation, and 1st Box culvert towards Beani Bazar. Depth: 0.15m-0.305m) Sample no. S <sub>85</sub>	-	-	-	-	-	-	-	1740.26	14.08	1941.47	15.16	89	-	-	-	This is the 2nd sample collected from the well compacted sub-grade.
Dhakadakshin-Beani Bazar Road. (Gap between 1st & 2nd Box culvert towards Beani Bazar. Depth: 0.15m-0.305m) Sample no. S <sub>86</sub>	-	-	-	-	-	-	-	1729.42	17.63	1980.09	15.59	87	-	-	-	This is the 2nd sample collected from the compacted subgrade.
Dhakadakshin-Beani Bazar Road. (Shari sand)- Sample no. S <sub>87</sub>	F.M=1.97	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Sample tested for RCC.work in Radhajuri Bridge.
Dhakadakshin-Beani Bazar Road. (Kushiara sand)- Sample no. S <sub>88</sub>	F.M.=1.73	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Sample tested for RCC.work in Radhajuri Bridge.

$\gamma_d$  = Dry density.  
W = Water content.  
MDD = Max dry density.  
O.M.C = Optimum water content.

# LABORATORY ACTIVITIES OF RANGPUR DISTRICT FOR THE MONTH OF FEB'85

Name of road and location from where materials collected.	Test Result	Grading of pea gravels and stone chips by % of finer by sieve analysis.												Remarks.
		Sieve 1"	Sieve 3/4"	Sieve 1/2"	Sieve 3/8"	Sieve 1/4"	Sieve no.4	Sieve no.8	Sieve no.10	Sieve no.16	Sieve no.40	Sieve no.80	Sieve no.200.	
Gaibandha at the place of Saitontola-10'Span Box Culvert.	F.M.=1.42	-	-	-	-	-	-	-	-	-	-	-	-	Does not follow the specification.
Barodarga-Bhendabari Rd. in place of Gurjiparahat 13'-5"Bridges Slab.	=1.83	-	-	-	-	-	-	-	-	-	-	-	-	-do-
-do- -do- ...	=3.31	-	-	-	-	-	-	-	-	-	-	-	-	-do-
-do- -do- ...	=2.65	-	-	-	-	-	-	-	-	-	-	-	-	Follow the specification.
Sundarganj-Bamondanga Road at the site of Khola-hati 20'Span Bridge.	=1.98	-	-	-	-	-	-	-	-	-	-	-	-	Test result O.K. for cc and brick work.
Gaibandha at the site of Saitontola, 10'Span box culvert.	=1.82	-	-	-	-	-	-	-	-	-	-	-	-	-do-
Kamdia-Ghoraghat Road, Group C in 1984-85.....	=0.96	-	-	-	-	-	-	-	-	-	-	-	-	May be used for the Sand cushioning.
-do-(Group D).....	=0.71	-	-	-	-	-	-	-	-	-	-	-	-	Does not follow the specification.
Barodarga-Bhendabari Rd. (Group F) in 1983-84.....	-	100	90.00	72.5	-	-	7.5	-	2.5	-	1.50	0.75	0.25	Does not follow the specification.
Barodarga-Bhendabari Rd. a(A). Year 1983-85.....	0.96.	-	-	-	-	-	-	-	-	-	-	-	-	May be used for the sand cushioning.
Mirganj-Jaldhaka Road. Near the Tangonmarihat.	1.66.	-	-	-	-	-	-	-	-	-	-	-	-	Suitable for the sand cushioning work.
Barodarga-Bhendabari Road. Gr-b(B)-Year 1984-85....	=0.72	-	-	-	-	-	-	-	-	-	-	-	-	Does not follow the specification.

LABORATORY ACTIVITIES OF FARIDPUR DISTRICT FOR THE  
MONTH OF FEB.'85

Name of road/dial and location.	Test Result	Sieve /Hydro- meter analysis.			Atterberg limits.			Field density.		Compaction test.		% Compac- tion.		C.B.R. (%)		Remarks.
		Sand (%)	Silt (%)	Clay (%)	L.L. (%)	P.L. (%)	P.I. (%)	Yd kg/m <sup>3</sup>	W (%)	M.D.D. (kg/m <sup>3</sup> )	O.M.C (%)	Modi- fied.	Stan- dard.	Unsoa- ked.	Soa- ked.	
Rajbari-Baliakandi Road. (Group 4).     ...	F.M. =0.80.	-	-	-	-	-	-	1546.5	21.7	1649.5	20.7	-	93.7	-	-	Local sand.
-ditto- (Group 3).     ...	F.M. =0.96.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	"
-ditto- (Group 2).     ...	F.M. =0.83.	-	-	-	-	-	-	1628.4	18.0	1782.5	14.1	-	91.3	-	-	"
-ditto- (Group 5).     ...	-	-	-	-	-	-	-	1609.2	16.4	1697.4	16.3	-	94.8	-	-	"
Talma-Nagarkanda Road.     ...	F.M. =1.86.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Sand for Wing wall repair.
-ditto- ...	F.M. =1.73.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	"
Talma-Hatkrishnapur Road. (Group A).     ...	F.M. =1.07.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Local sand.

Yd = Dry density.  
W = Water content.  
MDD = Max dry density.  
O.M.C = Optimum water content.

LABORATORY ACTIVITIES OF FARID PUR DISTRICT FOR THE  
MONTH OF FEB.'85

Name of road/Khal and location.	Test Result	Sieve /Hydro-meter analysis.			Atterberg limits.			Field density.		Compaction test.		% Compaction.		C.B.R. (%)		Remarks.
		Sand (%)	Silt (%)	Clay (%)	L.L. (%)	P.L. (%)	P.I. (%)	γ <sub>d</sub> kg/m <sup>3</sup>	W (%)	M.D.D. (kg/m <sup>3</sup> )	O.M.C (%)	Modified.	Standard.	Unsoaked.	Soaked.	
Talma- Hatkrishnapur Road. (Group B). ...	F.M. =1.01.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Local sand.
-ditto- (Group B). ...	F.M. =0.67	-	-	-	-	-	-	-	-	-	-	-	-	-	-	"
Piajkhali Bridge Site. ...	F.M. =2.67.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Sylhet sand.
Talma-Hatkrishnapur Rd. Motakchar Khal .	Sp.Gr. =2.65	11	81	8	-	-	-	-	-	-	-	-	-	-	-	Depth.- 5'-6"
Hole no.1. ....	=2.62	6	72	22	-	-	-	-	-	-	-	-	-	-	-	20'-6"
Hole no.2. ....	=2.61	6	76	18	-	-	-	-	-	-	-	-	-	-	-	15'-6"
Hatkrishnapur-Piajkhali Road. (Khaigo Khal Bridge). ....	Sp.Gr. =2.64.	2	88	10	-	-	-	-	-	-	-	-	-	-	-	5'-6"
Talma-Hatkrishnapur Road.(Group B). ....	F.M. =2.67.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Sylhet sand.
-ditto- (Group A). ...	-	-	-	-	-	-	-	1594.9	8.3	1643.1	18.0	-	97.1	-	-	
Rajbari-Baliakandi Rd. (Group 5). ...	F.M. =0.635.	-	-	-	-	-	-	1593.2	20.6	1705.4	15.4	-	93.4	-	-	
										Stand.						

γ<sub>d</sub> = Dry density.  
W = Water content.  
MDD = Max dry density.  
O.M.C = Optimum water content

APPENDIX C  
=====

PHOTOS OF CONSTRUCTION ACTIVITIES

SYLHET DISTRICT

RANGPUR DISTRICT

FARIDPUR DISTRICT

SYLHET DISTRICT  
Construction Activities

Bahubal - Putijuri - Bijnaghat Road  
ZRMI/10/84-85 - 1.5 Km. Bituminous pavement

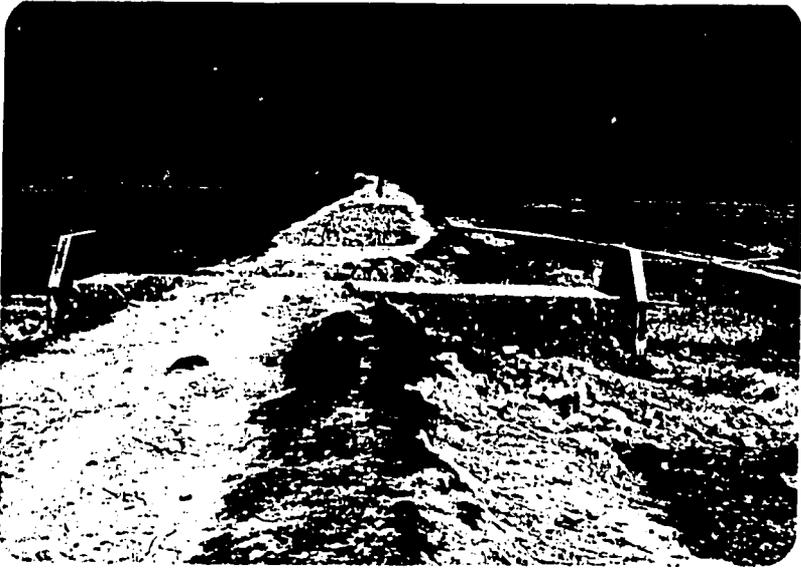


An illustration of the prepared subgrade with stockpiled sub-base material ready for placing; portion of which may be seen in the background.

SYLHET DISTRICT  
Construction Activities

Bahubal- Putijuri- Bijnaqhat Road

ZRMI/11/84-85 - 3 Nos.Box culverts(revised)



Two views of completed box culverts left with no attempt made to finish the work. Both of these installations must have the approaches built, channels cleaned, diversion roads removed, etc. This Contractor has been repeatedly advised that the finishing work is a part of his contract, and that this type of work is an integral portion of the installation.

SYLHET DISTRICT  
Construction Activities

Atgram- Zakiganj Road

ZRMI/9/83-84 - 22.98 meter Box culvert



A view of the construction progress on 11 February showing the top slab formwork still in place. Top slab was cast on 30 January.



An overall view showing the extent of the approach work and progress as of 11 February.

SYLHET DISTRICT  
Construction Activities

Atqram - Zakiganj Road

ZRMI/9/83-84 (Con't)



A view of the approach work progress on 19 February.  
Note that the top slab formwork is being removed.

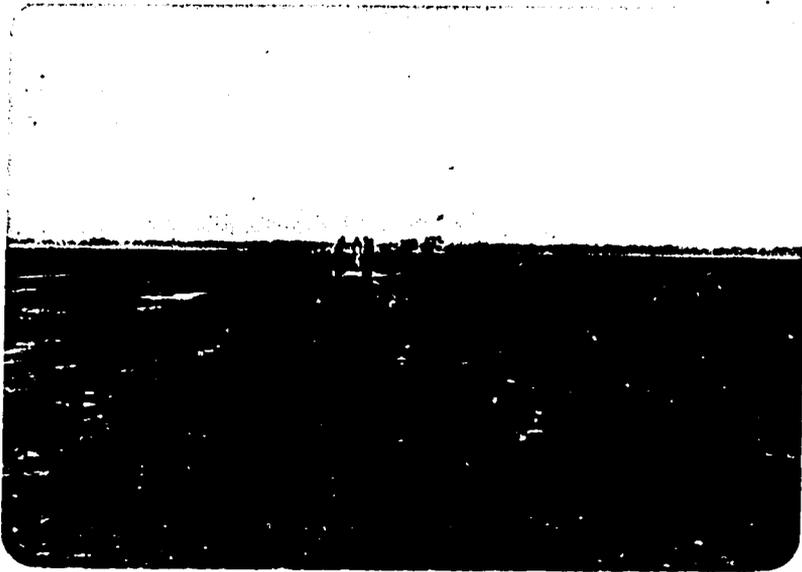


A view of the completed approach embankment taken on 1 March  
during the COP's visit. Planting for slope protection was in  
progress.

SYLHET DISTRICT  
Construction Activities

Atgram- Zakiganj Road

ZRMI/9/83-84 (Con't)



A view of the approach embankment at road level. Workers in the background are engaged in constructing the railings. Note the slope protection planting at right.

SYLHET DISTRICT  
Construction Activities

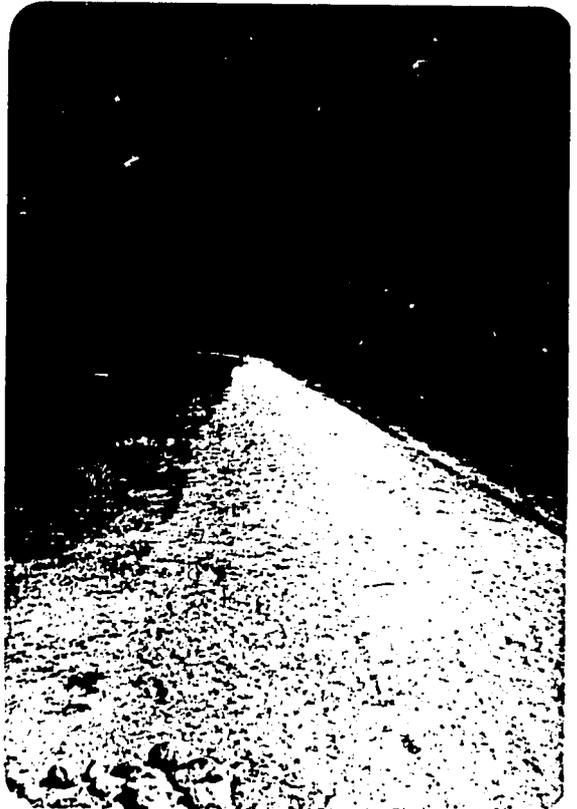
Atgram- Zakiganj Road

ZRMI/11/83-84 - 4.55 Km. Levelling course



A view of recently compacted levelling course and reconstructed shoulders to obtain uniform slopes. These shoulders have since been compacted.

A section of compacted levelling course that had been constructed at an earlier date.



SYLHET DISTRICT  
Construction Activities

Atgram- Zakiganj Road

ZRMI/11/83-84 (Con't).

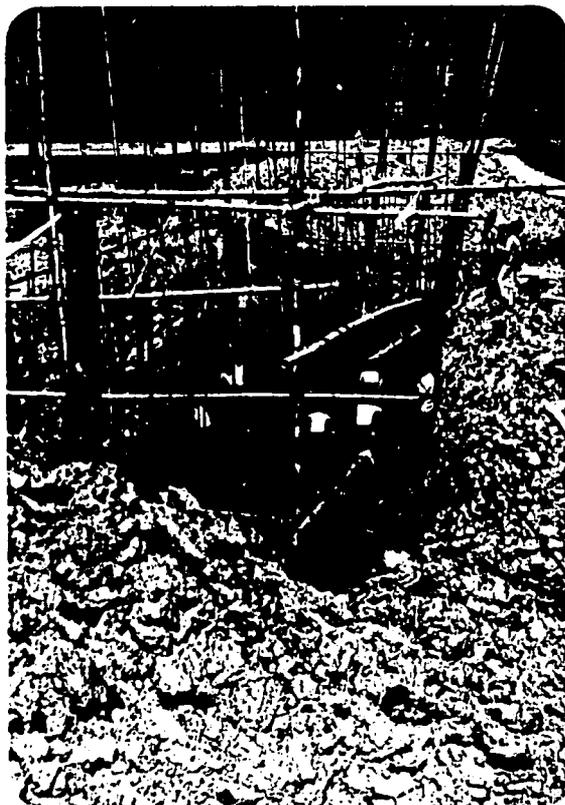


A view of the final section of this contract under construction. The contract was to terminate at the culvert in the foreground, but was extended to include the bridge approach in the extreme background, at no additional cost, due to a savings in the volume of earthwork required.

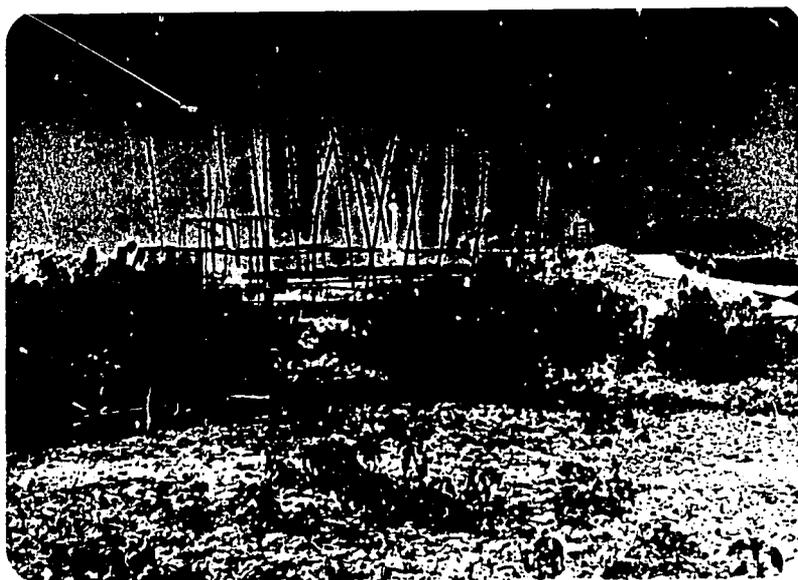
SYLHET DISTRICT  
Construction Activities

Atgram- Zakiganj Road

ZRMI/13/84-85 - 24.4 meter Box culvert



A view of the progress on 11 February showing the workers placing and tying rebars for the bottom slab and piers.



A view of the gap to be filled by this structure, with the improved embankments of each side.

SYLHET DISTRICT  
Construction Activities

Atgram- Zakiganj Road

ZRMI/13/84-85 (Con't)

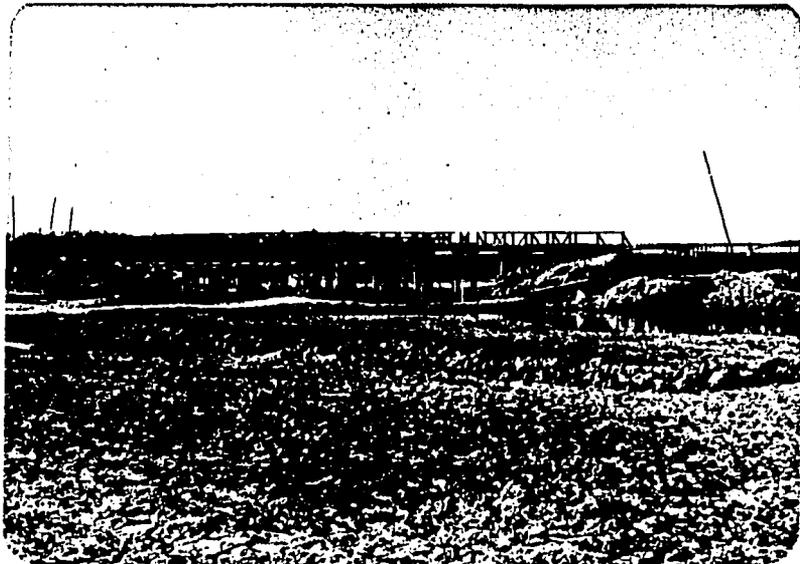


A view of the completed bottom slab, taken on 19 February. The workmanship and finishing of this contractor is excellent.

SYLHET DISTRICT  
Construction Activities

Atgram- Zakiganj Road

ZRM/15 A,B,& C/84-85- 3 Nos.Box culverts



An overall view of the jobsite showing the old wooden bridge (never used) over the main channel, and the ongoing work of the two smaller culverts at each end on 11 February.



A closer view of this same jobsite with the excavation of 15-C at the left. Photo taken 11 February.

SYLHET DISTRICT  
Construction Activities

Atgram- Zakiganj Road  
ZIRMI/15/84-85 (Con't)



A view of the excavation progress for the main 24.4 meter Box culvert. Bridge columns in place will be driven to refusal for added support of the foundation. Photo taken on 11 February.



Sand filling and preparation for the casting of the C C slab of the base and wing walls. Old bridge supports within the construction area will be driven to refusal.

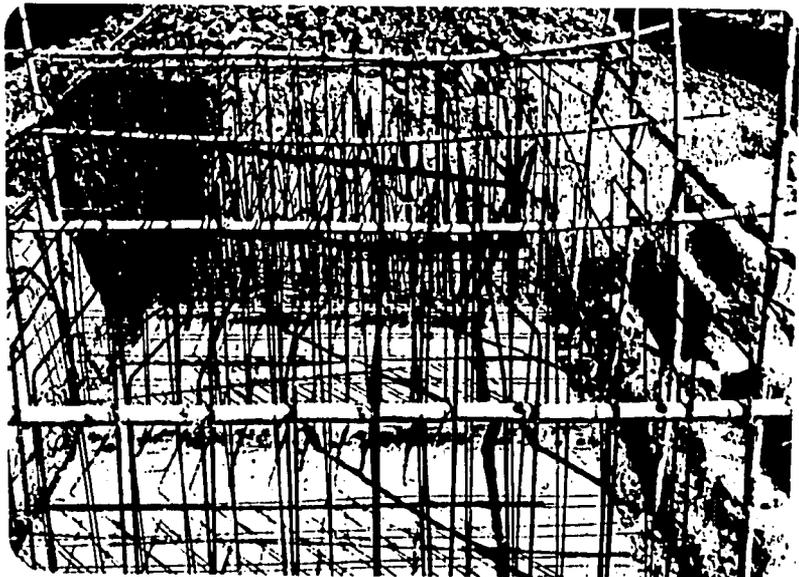
SYLHET DISTRICT  
Construction Activities

Atgram- Zakiganj Road

ZRMI/15/84-85 (Con't)



Checking the rebar placement and spacing before allowing the casting of the bottom slab. Progress as of 11 February.

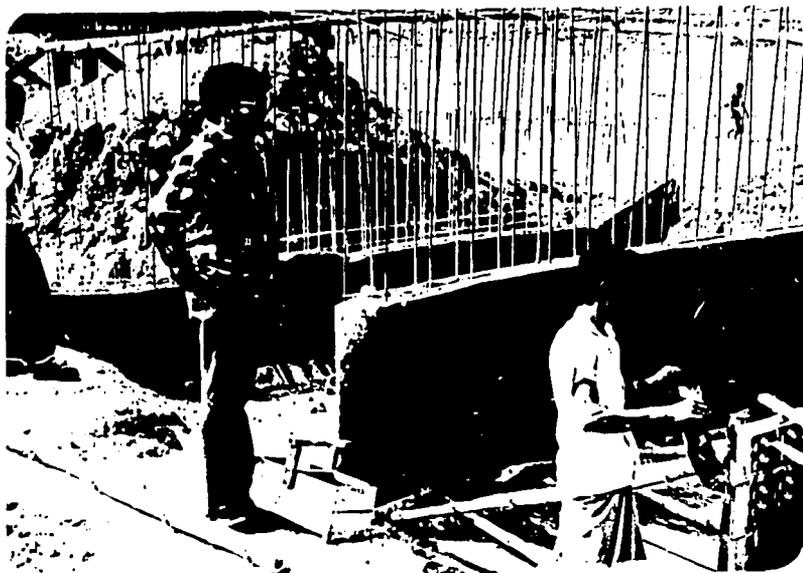


Completed bottom slab as of 19 February.

SYLHET DISTRICT  
Construction Activities

Atgram- Zakiganj Road

ZR41/15/84-85 (Con't)



Two views of the quality of workmanship and concrete of one of the smaller (10.1 meter) culverts of this contract. Note the blockouts on the top surface to unite the next left with the previous left. Progress as of 1 March.

SYLHET DISTRICT  
Construction Activities

Tajpur- Syedpur- Nayabandar Road

ZRMI/13/83-84 - 10.1 meter Box culvert

Recently emplaced embankment material for the approach to the culvert shown below. Congested village area and lack of R.O.W. has resulted in complicated negotiations for adequate and sufficient fill material.

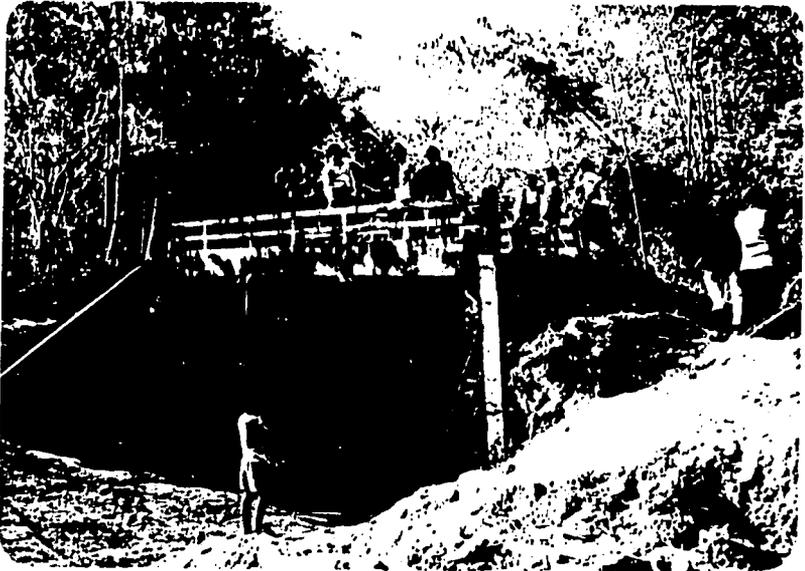


Completed box culvert requiring approach embankment material. Photos taken on 20 February.

SYLHET DISTRICT  
Construction Activities

Tajpur- Syedpur- Nayabandar Road

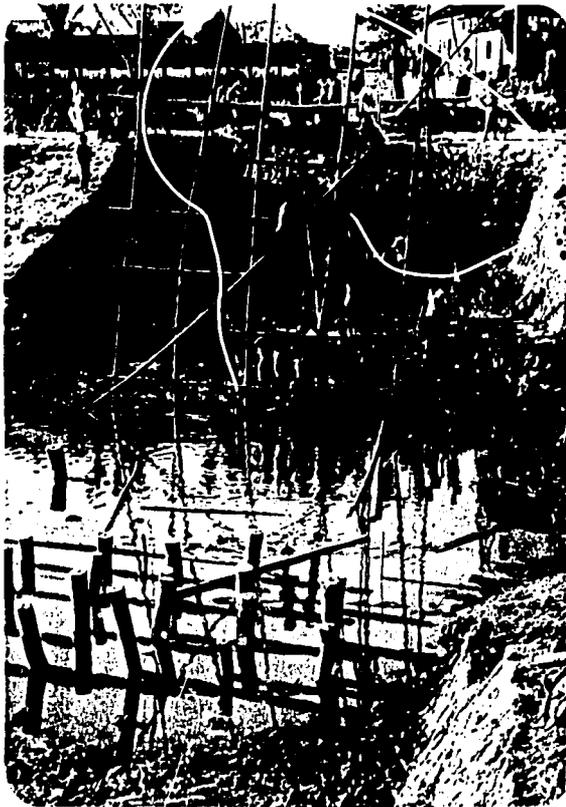
ZRMI/13/83-84 (Con't)



A view of the completed culvert and approach progress on 20 February. During the COP's visit of 28 February, sufficient approach material had been placed to permit the passage of vehicles.

SYLHET DISTRICT  
Construction Activities

Tajpur- Syedpur- Nayabandar Road  
ZRMI/16/84-85 - 24.4 meter Box culvert at Nayabanda.



A view of the excavation and bullah piling progress on 20 February. The piling in the foreground has been driven to refusal and the workers in the background are placing another pile. Further site investigation and excavation for culvert foundation has permitted the shortening of this structure by three meters.

SYLHET DISTRICT  
Construction Activities

Dhakadakshin - Beani Bazar Road

ZRMI/25/82-83 - 6 nos. RCC Pipe culverts(revised)



A view of the last two-foot diameter pipe culvert placed under this contract. Backfilling and widening of the embankment has been in progress since this picture was taken on 10 February.

SYLHET DISTRICT  
Construction Activities

Dhakadakshin - Beani Bazar Road

ZRRI/16/83-84 - 2.45 Km. Bituminous pavement



Workers brushing loose material from the base material (WEM) just prior to applying prime and tack coating.



An illustration of the placing and compaction of reinforced shoulder material. Subsequent work improved the shoulder to proper slope and width.

SYLHET DISTRICT  
Construction Activities

Dhakadkshin - Beani Bazar Road

ZRMI/16/83-84 (Con't)

Completed earth embankment.  
Side slopes have been failed  
to obtain stabilization for  
planting. Shoulders will  
receive rolling for compaction.



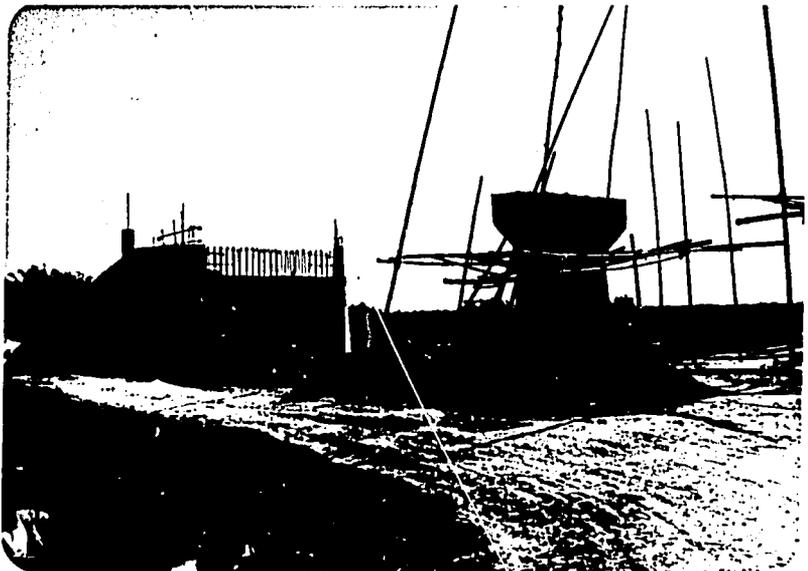
Levelling course (sub-base)  
placed for stabilization by  
local traffic. Additional material  
will be added and then rolled  
before WEM is placed.

SYLHET DISTRICT  
Construction Activities

Dhakadakshin - Beani Bazar Road

ZRMI/23/84-85 - 86 meter Girder bridge at Radhajuri

A view of the old method of wing wall casting. Mortar would be applied to obtain a smooth finish. However, all structure contractors have been instructed to finish the surface during the construction process.



A view of the cast abutment and pier no.1 on  
19 February.

SYLHET DISTRICT

Construction Activities

Dhakadakshin - Beani Bazar Road

ZRMI/23/84-85 (Con't)



Another view of the progress on 19 February. The east abutment, pier no.1 and portions of pier no.2 complete.



Workers engaged in the driving of tullah piling for pier foundation of pier no.4 on 1 March.

SYLHET DISTRICT

Construction Activities

Dhakadakshin Beani Bazar Road

ZRMI/23/84-85 (Con't)



Mr.H.Jack Leonard dis-  
-cussing the merits  
of the Rachajuri bridge  
with the XEN and COP on  
1 March.



The XEN, Mr. Leonard, and the COP examining and  
discussing the foundation excavation for pier no.5  
on 1 March.

RANGPUR DISTRICT

Construction Activities

Gaibandha- Kamarjani Road (83-84)



Thickness of WBM in Group C being checked by local Z.P. and WSA SAE's. Average thickness was found to be only 3.33 inches on Feb 4, 1985.

RANGPUR DISTRICT

Construction Activities

Gaibandha- Kamarjani Road



Surface condition of WBM in one section of Group C. Loose material coming out under traffic of only small vehicles like rickshaw, bicycle, bullock cart, etc. No proper compaction was provided for the work in this section of the road.



Loose and sub-standard WBM work in Group C; this condition was found on February 10, 1985.

RANGPUR DISTRICT  
Construction Activities

Mirganj- Jaldhaka Road



A view of a completed section of bituminous carpeting in Group A (82-83).



A view of sub-standard earth work in Group B(84-25). No clods were broken and no compaction provided for earth work.

RANGPUR DISTRICT  
Construction Activities

Mirganj - Jaldhaka Road



Shoulder improvement almost complete in  
Group A (84-85).

Barodarga- Bhendabari Road



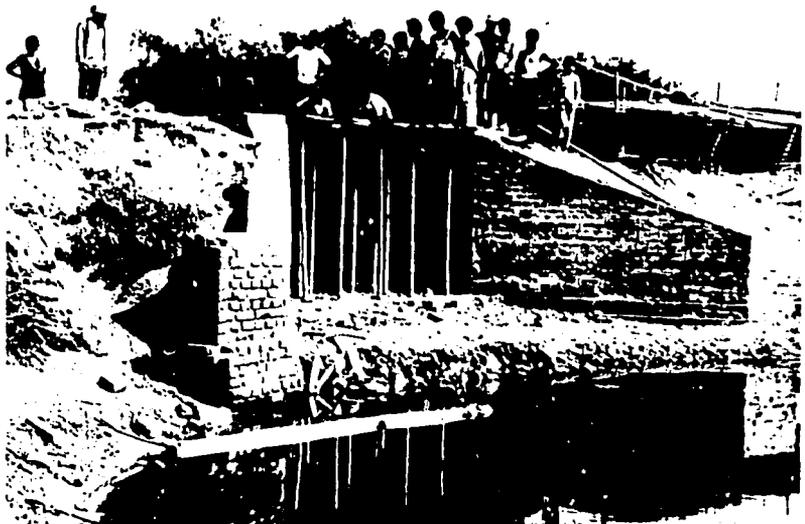
Over-sized and sub-standard khoa being picked up from  
the spread material in Group A(b), 1984-85 work.

RANGPUR DISTRICT  
Construction Activities

Barodarga- Bhendabari Road



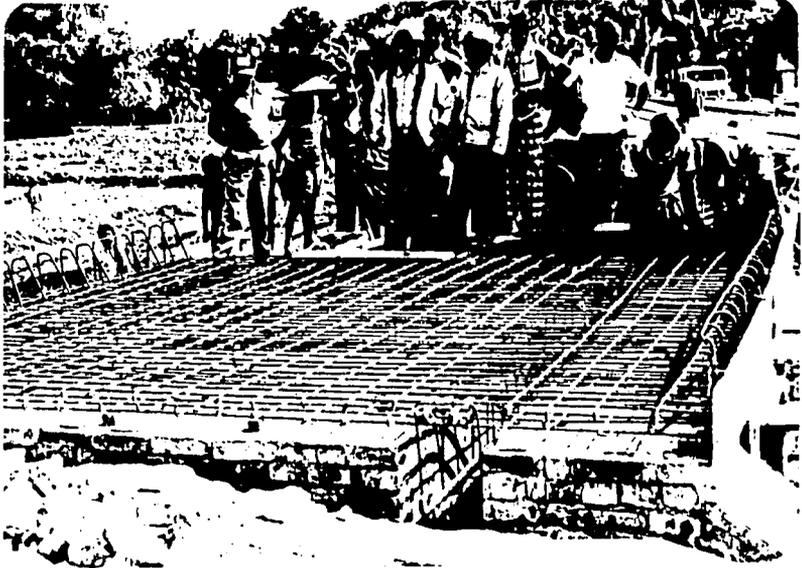
Form work going on for 13'-0" RCC slab casting at Gurjipara on February 5, 1985.



Down stream side of the bridge to be protected by filling the depression. Form work was going on February 5, 1985 for the casting of the slab of the bridge shown above.

RANGPUR DISTRICT  
Construction Activities

Barodarga- Bhendabari Road



Placing of reinforcing bars, on February 11, 1985,  
13'-0" RCC slab at Curjipara.



Slump test for the 13'-0" RCC slab. Increase in the water  
content was suggested.

RANGPUR DISTRICT  
Construction Activities

Barodarga- Bhendabari Road  
13' RCC Slab at Gurjipara



Casting of 13' 0" slab started on February, 14, 1985.



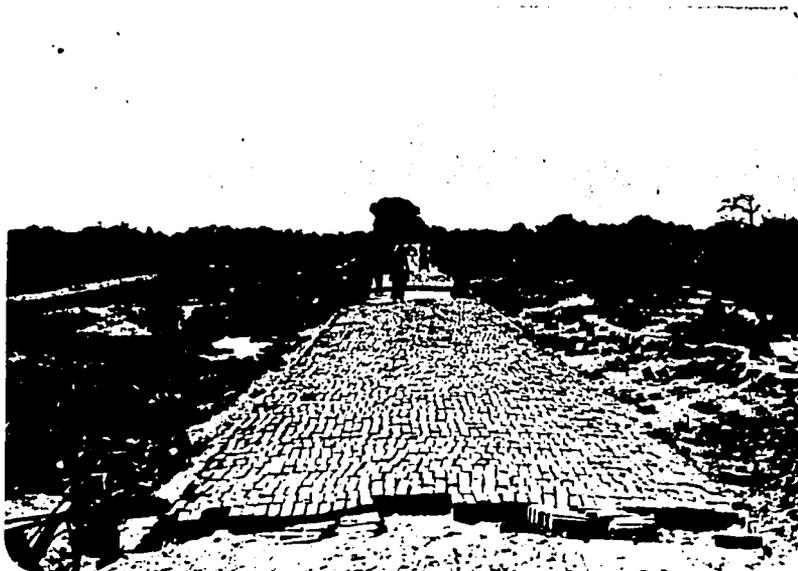
Slump test with a new batch of concrete at 13' span slab site at Gurjipara. More water was used in the mixture. It was suggested to maintain the proper water cement ratio.

RANGPUR DISTRICT  
Construction Activities

Kamdia- Ghoraghat Road



HBB work completed in Group B(83-84).



HBB work started in Group D(83-84), bricks placed on road bed before HBB work.

RANGPUR DISTRICT  
Construction Activities

Kamdia - Ghoraghat Road



In Group A(83-84), effort was being made to compact the sand sub-base by the use of a camber board instead of rammer or a roller.

Culverts And Bridges Under Gaibandha Zone



Dariapur 10'-0" span bridge. Construction progress on February 10, 1985.

RANGPUR DISTRICT  
Construction Activities

Culverts And Bridges Under Gaibandha Zone



Another view of the same works of previous photo. Mortar used in the brick work was found to be inadequate.



A view of 10'-0" span RCC Box culvert at Saitontola, Bamon-danga- Sundarganj Road. Poor quality khoa accumulated for concrete work. Removal of the inferior quality materials was suggested.

RANGPUR DISTRICT  
Construction Activities

Culverts And Bridges Under Gaibandha Zone  
10'-0" Span RCC Box culvert at Saitantola



Progress of work is very poor. This work should have been completed on February 10, 1985 according to the contract.



20'-0" Span RCC Bridge at Naldanga on Gaibandha-Naldanga Road. No work was going on on February 10, 1985. No progress of work observed up to the end of the month.

RANGPUR DISTRICT

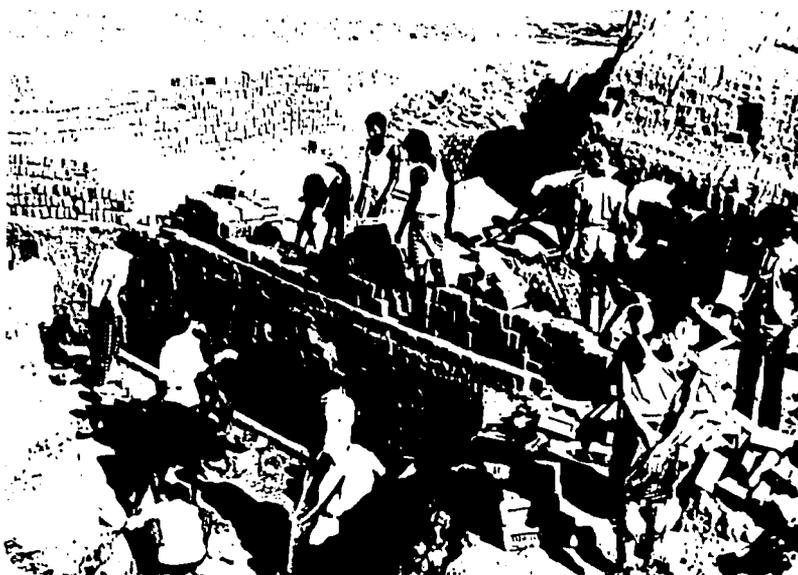
Construction Activities

Culverts And Bridges Under Gaibandha Zone

20'-0" RCC Bridge - Kholahat



Foundation casting complete for one side, brick work started for abutment and wing wall on 10.2.85.



Another view of the same bridge shown above. Quality of work done upto 10.2.85 is adequate.

FARIDPUR DISTRICT

Construction Activities

Rajbari- Ballakandi Road



Compaction of sand cushion.



Compaction of WEM.

FARIDPUR DISTRICT  
Construction Activities

Rajbari- Baliakandi Road



Camber being checked on sand cushion.  
Found to be unsatisfactory.



Khoa has been spread for first layer of WBM.

FARIDPUR DISTRICT  
Construction Activities

Rajbari- Baliakandi Road



Spreading of khoa is complete and waiting for roller for compaction.



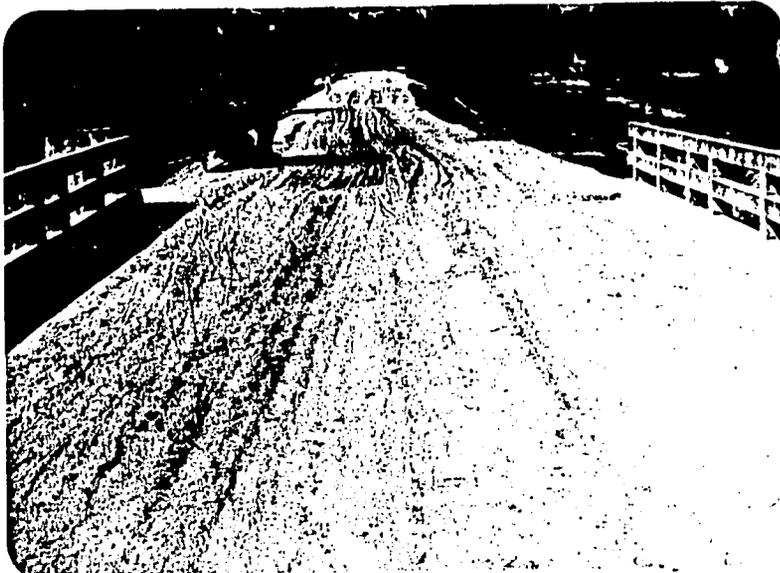
Camber being checked on sand cushion.  
Found to be satisfactory.

FARIDPUR DISTRICT  
Construction Activities

Rajbari- Baliakandi Road



Earthwork on Matiapara bridge approach  
is complete.



Earthwork on Morai bridge approach  
is complete.

FARIDPUR DISTRICT  
Construction Activities

Talma - Hatkrishnapur Road



Box-cutting in progress.



Compaction of sand cushion and preparation of soling.

FARIDPUR DISTRICT  
Construction Activities

Talma - Hatkrishnapur Road



Field density test on completed sub-grade.



Preparation of sand cushion.

FARIDPUR DISTRICT

Construction Activities

Talma - Hatkrishnapur Road



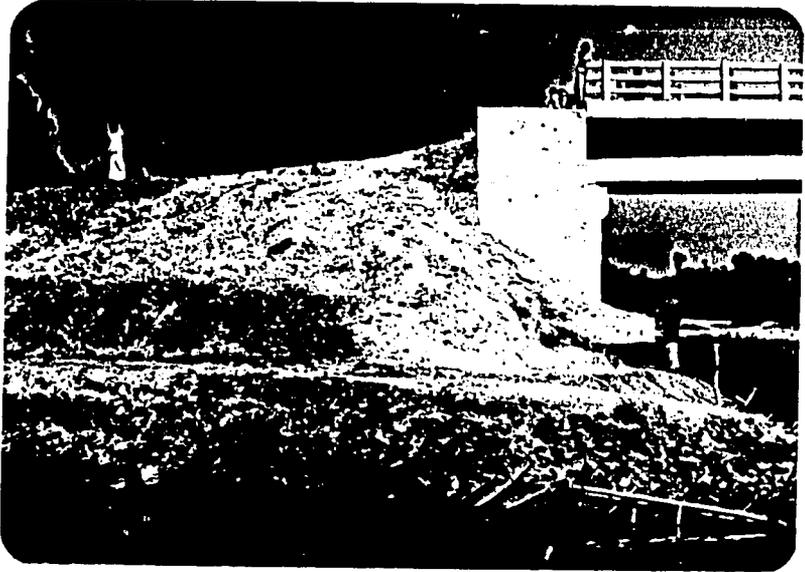
Picking up oversize and poor quality khoa.



Spreading of khoa for first layer is complete for long stretch of road.

FARIDPUR DISTRICT  
Construction Activities

Bonogram Bridge Approach



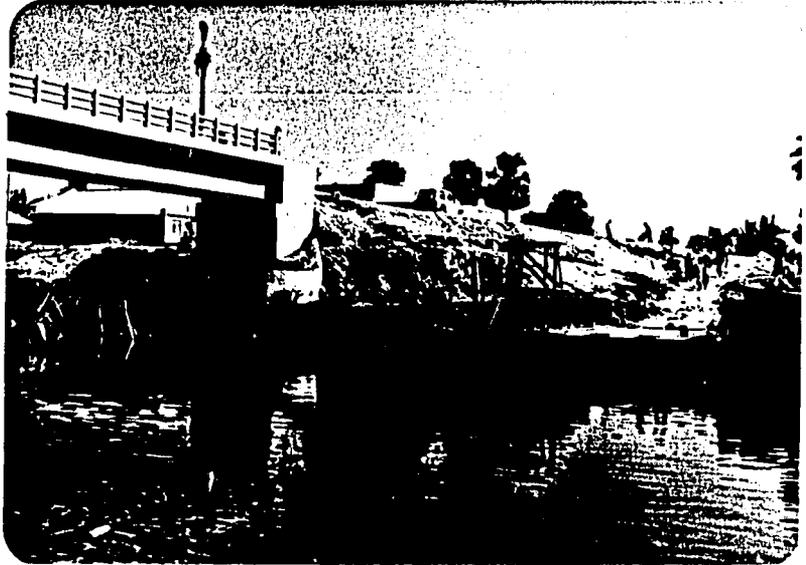
Earthwork in progress on the south side of the river.



Earthwork on the south side. Earth placed in front of the abutment effectively reduces the waterway.

FARIDPUR DISTRICT  
Construction Activities

Bonogram Bridge Approach



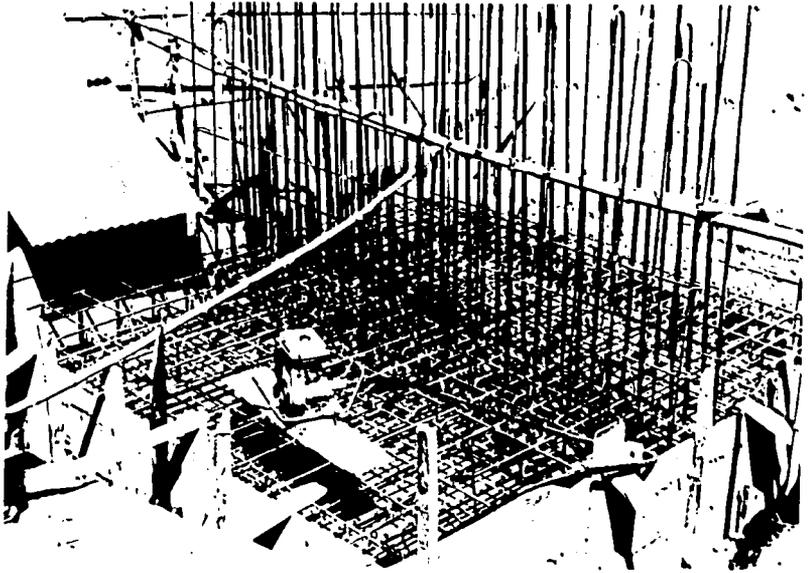
Earthwork almost complete on the north side of the river. A slip failure, due to inadequate compaction, can be seen.



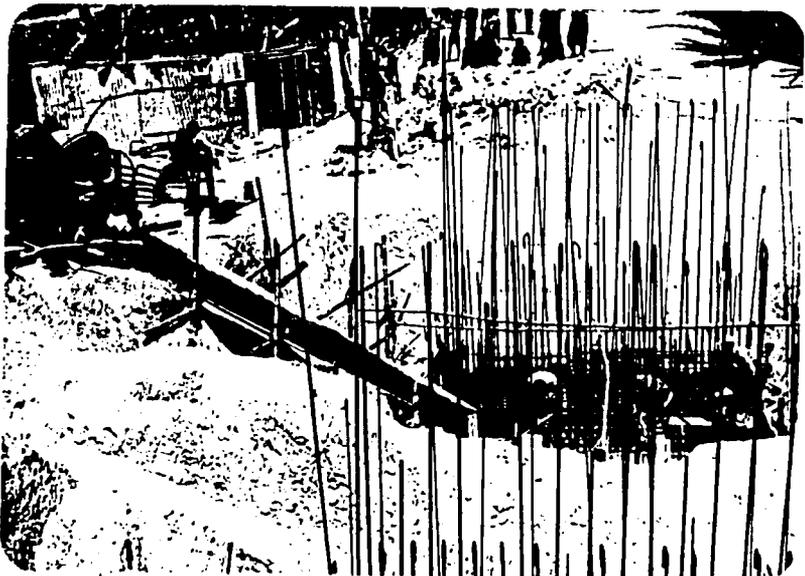
Bamboo palasiding improperly done. It has failed even before total earth load has been applied.

FARIDPUR DISTRICT  
Construction Activities

Khaigo Khal Bridge



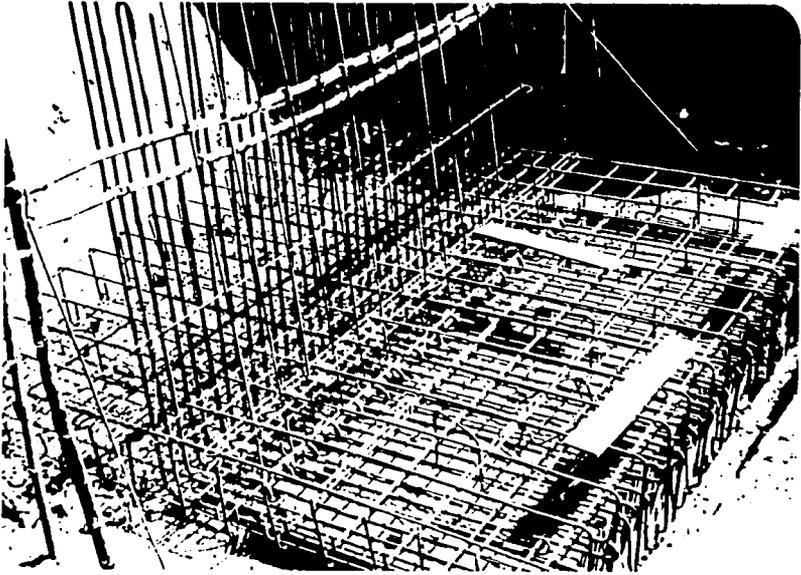
A view of reinforcement of the west footing prior to casting concrete.



Casting of west footing concrete. Slump being checked and concrete cubes being prepared at the site.

FARIDPUR DISTRICT  
Construction Activities

Khaigo Khal Bridge



East footing ready for concrete casting.

A P P E N D I X    D  
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CURRENT STATUS OF PERSONNEL

## CURRENT STATUS OF PERSONNEL.

Sheet 1 of 2.

Title.	Name.	Status.	Comments.
D H A K A O F F I C E.			
Chief of Party.	Fred L. Barnes.	On duty 01/02-28/02.	-
Training Adviser.	Gifford E. Rogers.	On duty 01/02-28/02.	-
Specification Engr.	G. Lugenthal	On duty 12/02-28/02.	Arrived Dhaka on 12.02.85
Associate C.O.P.	K.M. Huque.	On duty 01/02-28/02.	Total 08 working days.
Soil/Materials Lab.			
Training Specialist.	M. Majid.	On duty 01/02-28/02.	Total 16 working days.
Structural Engineer.	M.A. Aziz.	On duty 01/02-28/02.	Total 7 working days.
Project Engineer/ Training Coordinator.	A.H.M. Abdullah.	On duty 01/02-28/02.	-
Office Engineer.	G.S.M. Habibur Rahman.	On duty 01/02-28/02.	-
Asstt. Engineer.	Dr. Kamruzzaman.	On duty 01/02-28/02.	Total 5 working days.
Laboratory Engineer.	A. Islam.	On duty 01/02-28/02.	-
Draftsman.	Nazimuddin Ahmed.	On duty 01/02-28/02.	-
Draftsman.	Md. Shafi.	On duty 01/02-28/02.	Total 5 working days.
Draftsman.	Mir Syed Ali.	On duty 01/02-28/02.	Total 22 working days.
Administrative Assistant.	Md. Harun.	On duty 01/02-28/02.	-
Accountant.	A.K.M.A. Taher.	On duty 01/02-28/02.	-
A/cs. Assistant.	M.M. Mohiuddin.	On duty 01/02-28/02.	-
Secretary.	Fahmida Chowdhury.	On duty 01/02-28/02.	-
Typist.	Andre Sarker.	On duty 01/02-28/02.	-
Driver.	E. Hossain.	On duty 01/02-28/02.	-
Driver.	F. Rahman.	On duty 01/02-28/02.	-
Messenger.	A. Majid.	On duty 01/02-28/02.	-
Guard.	S.A. Khalifa.	On duty 01/02-28/02.	-
Guard.	Md. Jamal Uddin.	On duty 01/02-28/02.	-
Caretaker.	Mokfaruddin Skr.	On duty 01/02-28/02.	-
Cleaner.	Anwara.	On duty 01/02-28/02.	-
Gardener.	N. Zaman.	On duty 01/02-28/02.	-
F A R I D P U R.			
Resident Engineer.	N. Ziegler.	On duty 01/02-28/02.	-
Assistant Resident Engineer.	A.N.M.R. Habib.	On duty 01/02-28/02.	-
Asstt. Engineer.	A.Z.M. Amirul Islam.	On duty 01/02-28/02.	-
Inventory Engineer.	Shah A. Newaz.	On duty 01/02-28/02.	-
Laboratory Techni- cian.	Mizanur Rahman.	On duty 01/02-28/02.	-
Surveyor.	Tajul Islam.	On duty 01/02-28/02.	-
Sub-Asstt. Engineer.	S. Afrad.	On duty 01/02-28/02.	-
Sub-Asstt. Engineer.	A. Sayed.	On duty 01/02-28/02.	-
Sub-Asstt. Engineer.	S. Islam.	On duty 01/02-28/02.	-
Draftsman.	M. Rahman.	On duty 01/02-28/02.	-
Office Manager/ Accountant.	A.B.M. Kamaluddin.	On duty 01/02-28/02.	-
Secretary/Typist.	K.R. Faruk.	On duty 01/02-28/02.	-
Driver.	B.A. Mollah.	On duty 01/02-28/02.	-
Driver.	N. Ali.	On duty 01/02-28/02.	-
Messenger.	S. Alam.	On duty 01/02-28/02.	-
Gardener.	J.K. Shill.	On duty 01/02-28/02.	-
Guard.	N. Khan.	On duty 01/02-28/02.	-
Guard.	I. Ali.	On duty 01/02-28/02.	-

## CURRENT STATUS OF PERSONNEL.

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## R A N G P U R.

Resident Engineer.	R.Andres Tavel.	On duty 01/02-28/02.	-
Assistant Resident Engineer.	S.S. Ahmed.	On duty 01/02-28/02.	-
Assistant Engineer.	M.A. Samad.	On duty 01/02-28/02.	-
Sub-Assistant Engineer.	N.K.Das.	On duty 01/02-28/02.	-
Sub-Assistant Engineer.	A.B.M.Zahiruddin.	On duty 01/02-28/02.	-
Sub-Assistant Engineer.	Alauddin.	On duty 01/02-28/02.	-
Laboratory Technician.	B. Hossain.	On duty 01/02-28/02.	-
Surveyor.	Z. Abedin.	On duty 01/02-28/02.	-
Draftsman.	S. Hossain.	On duty 01/02-28/02.	-
Office Manager/Accountant.	A.H.Majumdar.	On duty 01/02-28/02.	-
Typist.	R.Kabir.	On duty 01/02-28/02.	-
Messenger.	A.F.M.M.Haque.	On duty 01/02-28/02.	-
Driver.	Mahbubur Rahman.	On duty 01/02-28/02.	-
Guard.	A.Rahman.	On duty 01/02-28/02.	-
Guard.	M. Hossain.	On duty 01/02-28/02.	-
Caretaker.	G.C.Das.	On duty 01/02-28/02.	-
Cleaner/Gardener.	Rashida Begum.	On duty 01/02-28/02.	-

## S Y L H E T.

Resident Engineer.	Alex E.Neilson.	On duty 01/02-28/02.	-
Assistant Resident Engineer.	K.M.Hasan.	On duty 01/02-28/02.	-
Sub-Asstt.Engineer.	N.Nabi.	On duty 01/02-28/02.	-
Sub-Asstt.Engineer.	M.A. Sobhan.	On duty 01/02-28/02.	-
Sub-Asstt.Engineer.	K.S. Ahmed.	On duty 01/02-28/02.	-
Surveyor.	Aminul Karim.	On duty 01/02-28/02.	-
Surveyor.	Abu Musa Mia.	On duty 01/02-28/02.	-
Laboratory Technician.	N.M.Siddique.	On duty 01/02-28/02.	-
Laboratory Technician.	Amjadul Hawue.	On duty 01/02-28/02.	-
Draftsman.	M.Giasuddin.	On duty 01/02-28/02.	-
Office Manager/Accountant.	Azizul Haque.	On duty 01/02-28/02.	-
Typist.	A.K.M.Munir Ahmed.	On duty 01/02-28/02.	-
Driver.	Fakrul Islam.	On duty 01/02-28/02.	-
Messenger.	Elias Ali.	On duty 01/02-28/02.	-
Guard.	A.A.Jamadar.	On duty 01/02-28/02.	-
Guard.	S.Alam.	On duty 01/02-28/02.	-
Cleaner/Gardener/Caretaker.	Ahmed Minh.	On duty 01/02-28/02.	-

APPENDIX E

MONTHLY FINANCIAL STATEMENT

SUMMARY FISCAL REPORT

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Wilbur Smith And Associates, Inc.

Zila Roads Maintenance And Improvement Project.

(US-AID CONTRACT NO. 368-0056-02-HCC)

Project Components.	Budget amounts.		Previous expenditures.		Expenditures-Current reporting-February, 1985.		Cumulative expenditures.	
	\$.	Taka.	\$.	Taka.	\$.	Taka.	\$.	Taka.
	Dollars.		Dollars.		Dollars.		Dollars.	
1. Technical Assistance... ..	2,709,030	22,715,634	2,032,174	14,631,532	59,389	631,204	2,091,563	15,262,736
2. Equipment.... ..	674,299	-	56,295	-	-	-	56,295	-
3. Training US-AID BDG	300,000	1,110,850 394,500	63,240	1,017,818	-	-	63,240	1,017,818
4. Road Maintenance Financed by BDG.	-	23,095,800	-	-	-	-	-	-
5. Road Development Fund- US-AID BDG.	3,949,182 -	- 35,629,050	- -	29,465,252 -	- -	4,610,663 -	- -	34,075,915 -