



GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
BANGLADESH AGRICULTURAL DEVELOPMENT CORPORATION



AGENCY FOR INTERNATIONAL DEVELOPMENT
Grant Financed
FERTILIZER DISTRIBUTION IMPROVEMENT - I (388-0024)

ENGINEER CONSULTANT SERVICES FOR CONSTRUCTION
OF BAGGED PRODUCT FERTILIZER WAREHOUSES IN
BANGLADESH-PHASE III

PROGRESS REPORT NO.40

MARCH 1986



AMMANN & WHITNEY
CONSULTING ENGINEERS
NEW YORK

in association with



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DHAKA



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WAREHOUSES PHASE III

Project Director, BADC
USAID Construction Project
20, Outer Circular Road
Rajarbagh, Dhaka

724-4.1.1/4026
6 April 1986

Subject: Monthly Progress Report No. 40
March 1986

Dear Sir,

In compliance with paragraph B.2 of Appendix A, Scope of Work, of Agreement for Engineer Consultant Services--Warehouses Phase III, fifteen (15) copies of subject Monthly Report are submitted to BADC and six (6) copies to USAID.

Very truly yours
AMMANN & WHITNEY

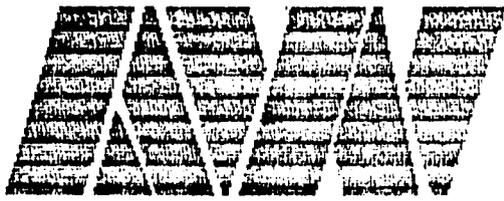


George A. Pecht
Project Manager

Encl: Eleven copies

Distribution:

Chairman, BADC (1)
M-D (Irri), BADC (1)
Chief Engineer (C), BADC (1)
Manager (Storage), BADC (1)
Mr. David E. Warner, CE/USAID (6)
File 724-1.4.2 (1)



ammann & whitney
consulting engineers
dhaka

FERTILIZER WAREHOUSES PHASE III

Monthly Progress Report No. 40
Period Ending 31 March 1986

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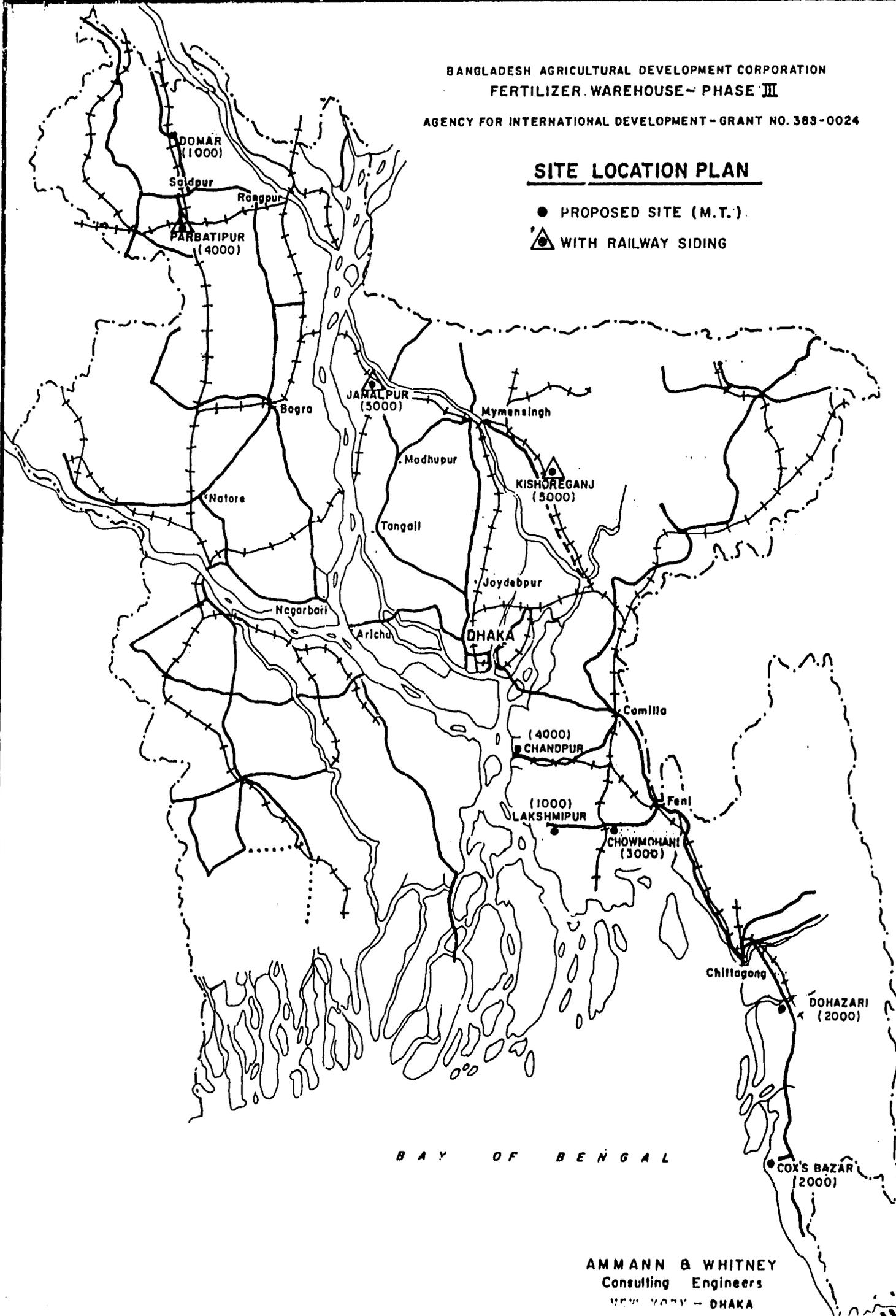
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SITE LOCATION PLAN

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BAY OF BENGAL

PROJECT DESCRIPTION

PROJECT : Construction of Bagged Product Fertilizer Warehouses
in Bangladesh - Phase III

EMPLOYER : Bangladesh Agricultural Development Corporation

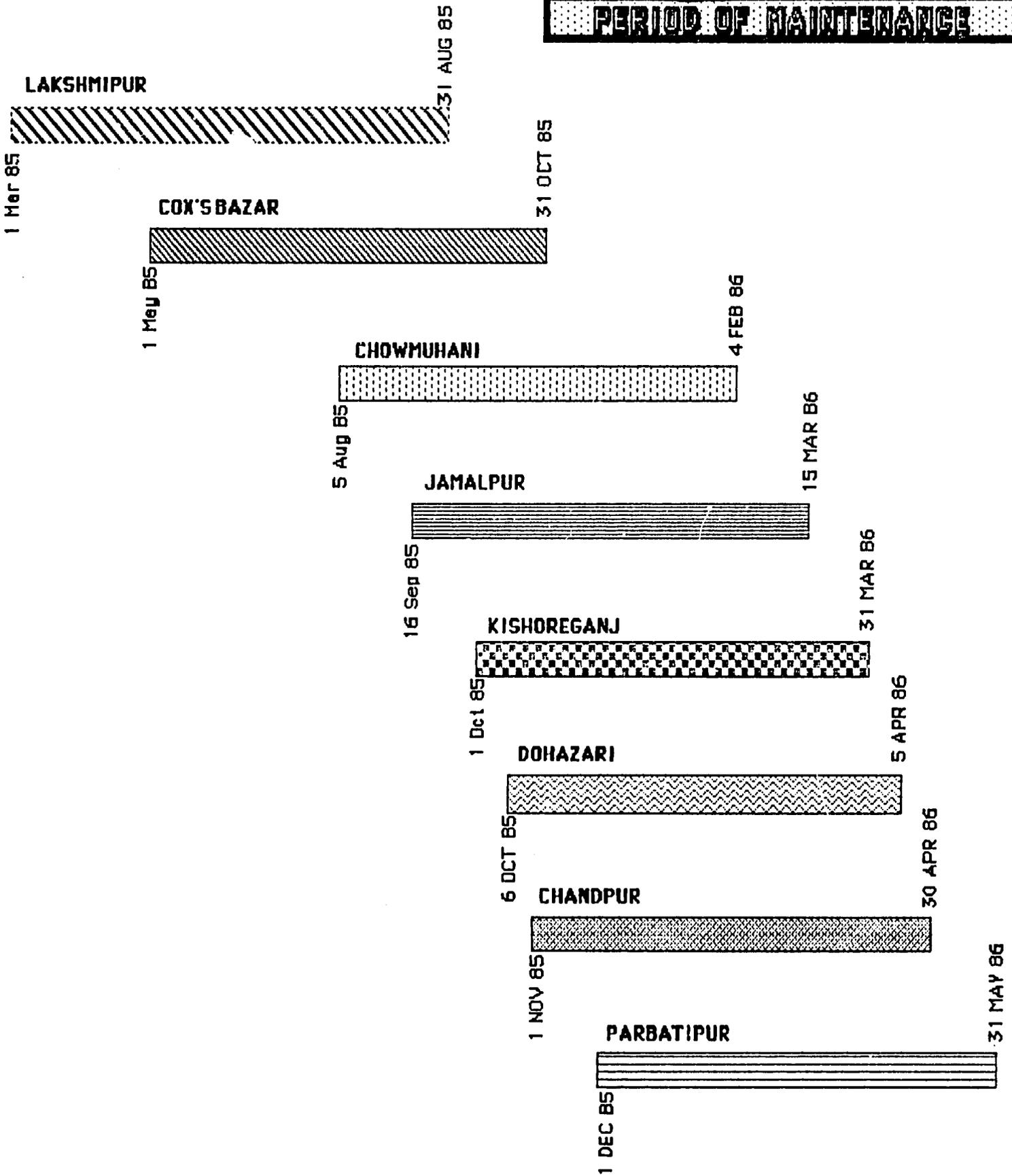
FINANCED : United States Agency For International Development
under Grant
Fertilizer Distribution Improvement-I (388-0024)

ENGINEER : Ammann & Whitney
Consulting Engineers
New York Dhaka

LIST OF SITES AND TONNAGE

<u>NAME OF SITE</u>	<u>TONNAGE</u>	<u>NAME OF DISTRICT</u>	<u>SIZE OF GODOWN</u>
B1 KISHOREGANJ	5000	MYMENSINGH	90' x 300' (27,000 sft)
C3 JAMALPUR	5000 (3500+1500)	JAMALPUR	120'x150', 90'x90' (26,100 sft)
F1 DOHAZARI	2000	CHITTAGONG	90' x 120' (10,800 sft)
F3 COX'S BAZAR	2000	CHITTAGONG	90' x 120' (10,800 sft)
H2 CHOWMUHANI	3000	NOAKHALI	90' x 180' (16,200 sft)
H3 LAKSHMIPUR	1000	NOAKHALI	60' x 90' (5,400 sft)
I4 CHANDPUR	4000	CCMILLA	120' x 180' (21,600 sft)
O5 PARBATIPUR	4000	DINAJPUR	90' x 240' (21,600 sft.)
TOTAL	26,000 M.T.		139,500 sft.
<u>Contract Terminated</u>			
L4-DOMAR	1000	RANGPUR	60' x 90' (5,400 sft)

PERIOD OF MAINTENANCE



Progress Report
Period Ending 31 Mar '86

I. CONTRACTORS' ACTIVITIES

CONSTRUCTION PHASE

Summary of Contractors' Activities

The work at each of the sites has been accepted as substantially complete and the buildings handed over to BADC for their use. The Contractors are completing outstanding work items during their Period of Maintenance.

Outstanding work consists of completion of punch list items and the application of lime terracing roofing material on godown roofs at all the sites except Lakshmipur.

Refer to section in this report "Lime Terracing" for status of this work.

The Notice to Proceed was issued to the Contractor, Builders the Best Ltd., on 4 March '86 for construction of the additional access road at Parbatipur site. The work is on-going with estimated completion by mid-May.

Refer to the section in this report "Permanent Power Connection" for status of providing of power supply at each site.

Refer to the section in this report "Railway Sidings" for status of this work.

The Engineer has completed reviewing the Contractors' claim for enhancement of contract price and is notifying their decision to each of the Contractors.

The Engineer is engaged in compiling the final quantities of work for each of the sites.

Summary of Individual Sites

Reference is made to Progress Report No. 29, November 1985, for specific contractual information for each site. This information is not repeated herein.

Kishoreganj

Application of lime terracing on godown roof and a few minor punch list items remain to be completed. Estimated completion by 30 April.

BADC to contact Bangladesh Railways to expedite completion of all railway work.

Site connected to permanent power supply.

Jamalpur

Application of lime terracing and punch list items remain to be completed. Estimated completion by 15 April.

BADC to contact Bangladesh Railways to expedite completion of all railway work.

Site connected to permanent power supply.

Dohazari

Application of lime terracing and punch list items remain to be completed. Estimated completion by 15 April.

For the incoming power supply, PDB has installed the transformer and the site will be hooked up when BADC deposit the security money.

Cox's Bazar

The application of lime terracing to godown roof as an additional work and minor repair work are the outstanding items. Estimated completion by 15 April.

Site connected to permanent power supply.

Chowmuhani

The major outstanding items of work remaining to be completed are placing of lime terracing roofing on the godown roof, supply of incoming power and completion of punch list items. Estimated completion by 30 April.

Formalities for power supply are complete and BADC to pursue PDB to obtain hook-up.

Lakshmipur

The site has been certified as final completion. Contractor has received payment of his retention money.

Full payment for incoming power line has been made. BADC to pursue PDB for the supply line.

Chandpur

The major item of work outstanding at this site is placing lime terracing roofing on the godown roof. Estimated completion by 15 April.

Site connected to power supply

Parbatipur

The major items of work remaining to be completed at this site are placing roofing materials over the godown roof and completion of punch list items (refer to Report 39). Estimated completion by 30 April.

Providing of electric power supply outstanding.

The placing of rails, ties, ballast etc. by BR is outstanding.

Parbatipur Access Road

Agreement signed on 23 February 1986 with Builders the Best Ltd. Notice to Proceed issued on 4 March. The Contractor has under preparation 400 ft. of total +/- 570 ft. and completing compaction of 200 ft. (of 400') for laying of concrete pavement.

Domar

BADC terminated the construction contract under Clause 80 of Conditions. The contract has been closed out and final payment made to the Contractor

GODOWN ROOFING--LIME TERRACING

The status of work of lime terracing of the godown roofs follows:

Kishoreganj

- 30% material mixed and under preparation for placing.
- 25,000 bricks for khoa, 900 cft surki and 300 mds of lime at site which material is sufficient for only 40% of roof. The remaining 30% required material is not at site.
- Contractor has been warned by the Engineer and BADC to take up and complete the work in earnest.
- Estimated completion by 30 April '86.

Jamalpur

- Lime terracing of 1500 m.t. godown complete.
- Placing of material on 3500 m. t. continuing.
- Estimated completion by 15 April.

Dohazari

- 40% complete.
- 60% remaining materials under preparation and ready to be placed by 7 April
- Estimated completion by 15 April.

Cox's Bazar

- 50% complete.
- 40% material placed and beating continuing.
- 10% remaining material estimated to be placed on 1 April.
- Estimated completion by 15 April.

Chowmuhani

- 25% complete.
- 50% placed and beating continuing.
- 25% material at site and under preparation.
- Estimated completion by 30 April.

Chandpur

- 90% complete.
- 10% mixed and estimated to be placed on 1 April.
- Estimated completion by 15 April.

Parbatipur

- 35% placed and beating continuing.
- 25% material under preparation and estimated to be place by 4 April.
- 40% required remaining material not at site.
- Estimated completion by 30 April.

Bitumen, pea gravel and sand required for bituminous roofing were brought to site by the Contractors. With the change of specifications to lime terracing this material is surplus. Some of the Contractors have requested payment for this material. In the review meeting held on 31 March it was decided to request the contractors to take over the materials and arrange for disposal. Contractors to submit any monetary loss incurred for Engineer's review prior to disposal.

One consideration is to use materials to apply two seal coats on Lakshmipur warehouse roof where lime terracing was not placed. Work can be performed by Chowmuhani contractor (who also constructed the Lakshmipur godown) and payment made under Chowmuhani contract. USAID has no objection to include this extra work in change order for Chowmuhani.

Materials at site:

	Bitumen (drums)	Pea Gravel (cft)	Sand (cft)
Jamalpur	10 (Tk28,900)	150 (Tk4,750)	1500 (Tk 15,000)
Dohazari	20 (Tk56,802)	750 (Tk27,250)	Nil
Chandpur	Nil	1000 (Tk30,000)	600 (Tk6,000)
Parbatipur	Nil	1000 (Tk25,000)	Nil
Total	30	2,900	2,100
Estimated Cost: Tk. 1,93,702			

Progress Report
Period Ending 31 Mar '86

PERMANENT POWER CONNECTION

The following sites are connected to permanent electric supply line: Kishoreganj, Jamalpur, Cox's Bazar, and Chandpur. For the remaining sites the condition is the same as reported last month.

Dohazari

PDB has installed the transformer supplied by BADC and completed H. T. line work. Power will be supplied upon PDB's receipt from BADC of security deposit.

Chowmuhani

The necessary funds have been deposited with PDB for the installation of transformer and hook-up of site to supply line. BADC is pursuing the matter.

Lakshmiipur

The necessary funds have been deposited with PDB for complete installation of power line including transformer and materials. BADC is pursuing the matter with PDB.

Parbatipur

BADC, the Engineer, and the Contractor are pursuing PDB to submit a revised estimate, based on existing field conditions, for power supply. PDB has finally agreed to submit revised estimate for the H. T. work. Regional Manager, BADC, Dinajpur and the Engineer are pursuing the matter.

RAILWAY SIDINGS

Kishoreganj

The railway siding has been opened for traffic on 14 October 1985. The Engineer has reviewed and commented on BR's drainage plan. As reported last month the ballasting of track and drainage work have not been completed by BR. BADC should follow-up to ensure completion of all works during this dry period.

Tracks placed. Approval of tender for ballast issued by BADC.

Jamalpur

The railway embankment is completed. BR has placed tracks. Placing of ballast and other works pending BR's action.

Tender for ballast approved by BADC.

Parbatipur

BADC to pursue BR to begin construction of the railway sidings.

BR requires that the level of the embankment be raised to the level equal to the final top of ballast elevation. This would require several lac Takas of expenditure. The material would have to be removed when ballast is placed. BR remarked that ballast may or may not be placed. BADC to take up the matter with BR.

Tender for ballast approved by BADC.

Phase II

BG & MG Rails were already in place and wagons with fertilizer are being transported by BADC in all 14 sites.

Six (6) sidings completed in all respects including placement of ballast.

Tenders called for supply of ballast at Melandah Bazar, Comilla, Bogra, Mohendra Nagar, Santahar, Amnura and Rohanpur. BADC has approved these tenders (7 nos.)

Tender for Rangpur not yet called by BR.

Under PIL No. 63 revised to PIL No. 69, the Consultant is required to inspect works completed by BR and certify for payment. To date BR has not notified

BADC of the sites completed or requested final inspection. BADC has advanced BR Tk 50 lacs for FAR works. BADC by Memo /3101 dated 18.03.86 has urged BR to complete all work and request final inspection prior to PACD date of 26 July.

CONSTRUCTION CONTRACTS- FINANCIAL SUMMARY

	L/Com Amount Dollars	L/Com Amount Taka	Change Order Taka	Revised Contract Amount Tk	Retention Tk	Payments Tk	% Pay/Rev
B1-KISHOREGANJ				19840012 82			
L/C 388-002403 (1)	\$726829 00	19852001.73					
C.O. B1-01/02 (1)			11988 91	19852001 73	989983 11	16158903 92	81.40%
C3-JAMALPUR							
L/C 388-002404	\$711599 00	17694451.01		17694451 01			
C O C3-01			-5532 50				
C O C3-02			-580 93	17688337 58	884445 90	15403112 57	87.00%
F1-DOHAZARI							
L/C 388-002405(1)	\$566709 00	15607351 45		15548978 95			
C O F1-1			7162 50				
C O F1-2			51210 00				
C O F1-3			-668 12	15606683 33	780370 00	12545942 84	80.39%
F3-COX'S BAZAR							
L/C 388-002407	\$400731 00	9964470 85		9964470 85			
C O F3-1			501819 78				
C O F3-2			192790 00				
C O F3-3			40440 00				
C O F3-4			-383261 25	10336259 38	512000 00	9728139 50	94.12%
H2-CHOWMUHANI							
L/C 388-002407	\$567883 00	14120342 60		14120342 60			
C.O. H2-01			6680 00				
C.O. H2-02			380099 25				
C.O. H2-03			285743 10				
C.O. H2-04			-225956 90	14566908 05	728345 00	13108173 35	89.99%
(1)--Revised L/Com							

CONSTRUCTION CONTRACTS- FINANCIAL SUMMARY

	L/Com Amount	L/Com Amount	Change Order	Revised Contract Amount	Retention	Payments	%
			Tr	Tr	Tr	Tr	Pay/Rev
H3-LAKSHMIPUR							
L/C 388-002408	\$224656.00	5591275.35		5591275.35			
C.O H3-1			5000.00				
C.O H3-2			80700.00				
C.O H3-3			-32815.00				
C.O H3-4			62876.00				
C.O H3-5			17500.00				
C.O H3-6			-268664.83				
C.O H3-7			223120.00	5678991.52		5678991.52	100.00%
I4-CHANDPUR							
L/C 388-002409	\$656396.00	17067822.35		17067822.35			
C.O I4-1			11440.00				
C.O I4-2			245520.00				
C.O I4-3			907240.00				
C.O I4-4			539043.50				
C.O I4-5			-31544.42	18739521.43	936975.99	14193894.06	75.74%
I4-DOMAR							
L/C 388-002410	\$301590.00	7499255.00		7499255.00			
TERMINATED			-6916171.38	583083.62		583083.62	100.00%
O5-PARBATIPUR							
L/C 388-002411	\$663759.00	17002196.40		17002196.40			
C.O O5-1			-500.00	17001696.40	850084.82	15036969.09	88.44%
TOTAL ALL CONTRACT:	14870336.00	124399166.74		120053483.04	5682204.82	102437210.47	85.33%
(I)-Revised L/Com							

II. CONSULTANT'S ACTIVITIES

A. FINANCIAL-PROGRESS SCHEDULE

Financial--Project Expenditures

	<u>Revised Budget</u>	<u>This Month</u>	<u>Cumulative</u>
Services in Bangladesh	\$ 948,000	\$ 8,496	\$ 929,099
Services in Home Office	176,900	-	161,698
International Travel, etc.	50,700	-	40,091
Housing, Per Diem, etc.	108,500	704	102,392
Logistic Cost	166,100	2,849	154,049
Supporting Staff	400,400	6,994	385,034
Miscellaneous Direct Cost	20,800	-	17,224
Special Project Activity	126,000	132	118,584
Balance (Contingency)	57,205	--	--
Sub-Total	\$2,054,605	\$19,139	\$1,908,267
Fixed Fee	205,460	--	205,460
Total	\$2,260,065	\$19,139	\$2,113,727

% Expenditures of Total Contract 93.5%

Billings and Payments

	<u>Period To</u>	<u>Billings</u>	<u>Payments</u>
Invoices 01-36	31 Jan 86	\$2,066,049.16	\$2,060,329.38
Invoice 37	28 Feb 86	22,066.25	Pending

Progress

Elapsed Contract Time (28.02.86) 1208 days
 Remaining Contract Time (30.06.86) 91 days

% Elapsed Contract Time 93.0%

Remarks

The Engineer is continuing handing over to BADC equipment and furnishings no longer required for the project.

B. ADMINISTRATION

Consultant's Agreement

Contract Agreement Signed	09 Dec 82
Effective Date	09 Dec 82
USAID Letter of Commitment	388-0024-3-30381
Dated	15 Dec 82
Amendment No. 1	08 Apr 84
Amendment No. 2	09 Jun 85
Amendment No. 3	26 Jan 86
Duration	30 Jun 86

Expatriate Staff

		<u>Person-Months</u>	
		<u>Allocated/Utilized</u>	
Project Manager	George A. Pecht	4	2.6713

Contract Administration

Project Assistance Completion Date (PACD) 28 Jul 86.

Meetings

BADC/USAID/A&W monthly review meetings.
Meetings with construction contractors.

Reports

Monthly Progress Report No. 39 for February 1986 submitted.

II. CONSULTANT'S ACTIVITIES

Supporting Bangladesh Personnel

<u>Technical</u>	<u>Allocated</u>	<u>Utilized</u>
Deputy Project Manager	4	2.1497
Soils & Materials Engineer	3	2.2556
Electrical Engineer	1.5	0.9281
Railway Engineer	6	3.0000
Draftsman	6	2.9067
Laboratory Technician	3	3.0000
Laboratory Assistant	5	3.0000
Estimator	5	3.0000
Senior Field Engineer	10	4.5418
Field Engineer	10	4.8031
Drivers	18	10.0315

Administrative Personnel

Administrative Manager	6	2.6166
Senior Accountant	6	3.0000
Assistant Accountant	3	2.7782
Secretary	6	2.9122
Printer	1	0.9326
Typist	3	2.9637
Clerk	3	2.9667
Drivers	18	6.0000
Messenger	3	2.9689
Peon	18	8.4812
Guard	18	9.0000
Office Superintendent/Asst. A/C	6	3.0000

II. CONSULTANT'S ACTIVITIES

C. TECHNICAL

Summary of Consultant's Activities During This Month

In the field:

- The Engineer continued monitoring and inspecting for compliance all outstanding work at each of the construction sites during the period of maintenance.
- Inspection services in the application of roofing material.
- Inspection and testing services for the construction of the access road and railway siding at Parbatipur and sidings at Jamalpur and Kishoreganj.
- Inspect incoming power supply line and test internal electrification work when site is hooked up to PDB.

In the office:

- Performing administrative functions.
- Provide professional advice and solutions to BADC for all discrepancies or faults, if any, found on completion of construction.
- Determine variations (overruns/underruns) to quantities due to changed field conditions.
- Preparing Change Orders.
- Issue reminders to the contractors to comply with term of the contract documents.
- Follow-up on compliance of directives issued to the contractors.
- Prepare and submit monthly progress report.
- Process contractor's invoices for payment.
- For the 14 railway siding sites in Phase II and the 3 sites in Phase III process invoices for BR local procurement and submit to AID for payment and certify BR's invoices for FAR amounts and transmit to AID for payment processing.
- Certifying final quantities of work and contractor's vouchers for payment.
- Reviewing contractors' claims.
- Prepare as-built drawings.
- Prepare final report.
- Close-out the construction contracts.

At completion of Period of Maintenance

- Provide final certification of each site at the expiration of the six month period of maintenance.
- Deliver to BADC a Maintenance Certificate stating that the Works have been completed and have or have not been maintained to the Consultant's satisfaction.