

PD-AAN-837



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.10

SEPTEMBER 1983



AMMANN & WHITNEY
CONSULTING ENGINEERS
NEW YORK

in association with



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AMMANN & WHITNEY
CONSULTING ENGINEERS

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DHAKA, BANGLADESH

WAREHOUSES PHASE III

Project Director, BADC
USAID Construction Project
20, Outer Circular Road
Rajarbagh, Dhaka-17

724-2.1.1/698

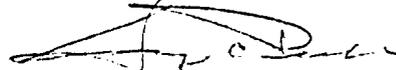
09 October 1983

Subject : Monthly Report No.10
- September 1983

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 the Monthly Report No.10 are submitted to BADC and six (6) copies to USAID.

Very truly yours
AMMANN & WHITNEY



George A. Pecht
Project Manager

Encl: Eleven (11) Copies

GAP/neh

cc: Chairman, BADC w/encl. (1)
Member-Director (Irri), BADC w/encl. (1)
Manager (Storage) BADC w/encl. (1)
Chief Engineer (C) BADC w/encl. (1)
Mr. Paul B. Thorn, AID/Dhaka w/encl. (6)
File 724-1.4.2 w/encl.

AMMANN & WHITNEY
Consulting Engineers

FERTILIZER WAREHOUSES - PHASE III

Monthly Progress Report No.10
Month of September 1983

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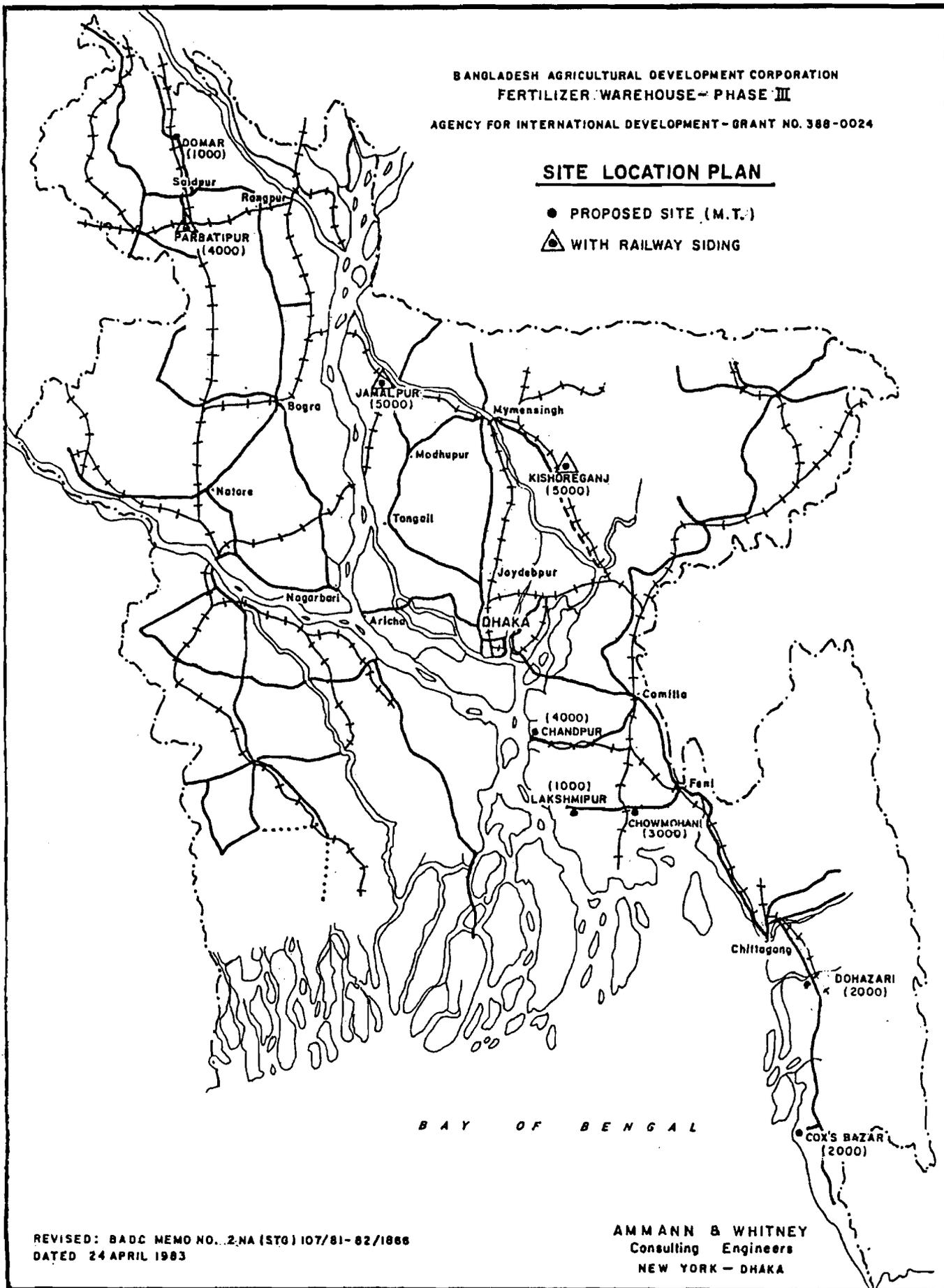
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BANGLADESH AGRICULTURAL DEVELOPMENT CORPORATION
FERTILIZER WAREHOUSE - PHASE III
AGENCY FOR INTERNATIONAL DEVELOPMENT - GRANT NO. 388-0024

SITE LOCATION PLAN

- PROPOSED SITE (M.T.)
- ▲ WITH RAILWAY SIDING



REVISED: BADC MEMO NO. 2/NA (STG) 107/81-82/1868
DATED 24 APRIL 1983

AMMANN & WHITNEY
Consulting Engineers
NEW YORK - DHAKA

A. 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' (26,000 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	COMILLA	120'x 180' (21,600 sft)
L4 DOMAR	1000	RANGPUR	60'x 90' (5,400 sft)
O5T PARBATIPUR	4000	DINAJPUR	90'x 240' (21,600 sft)
TOTAL	27,000 M.T.		144,900 sft

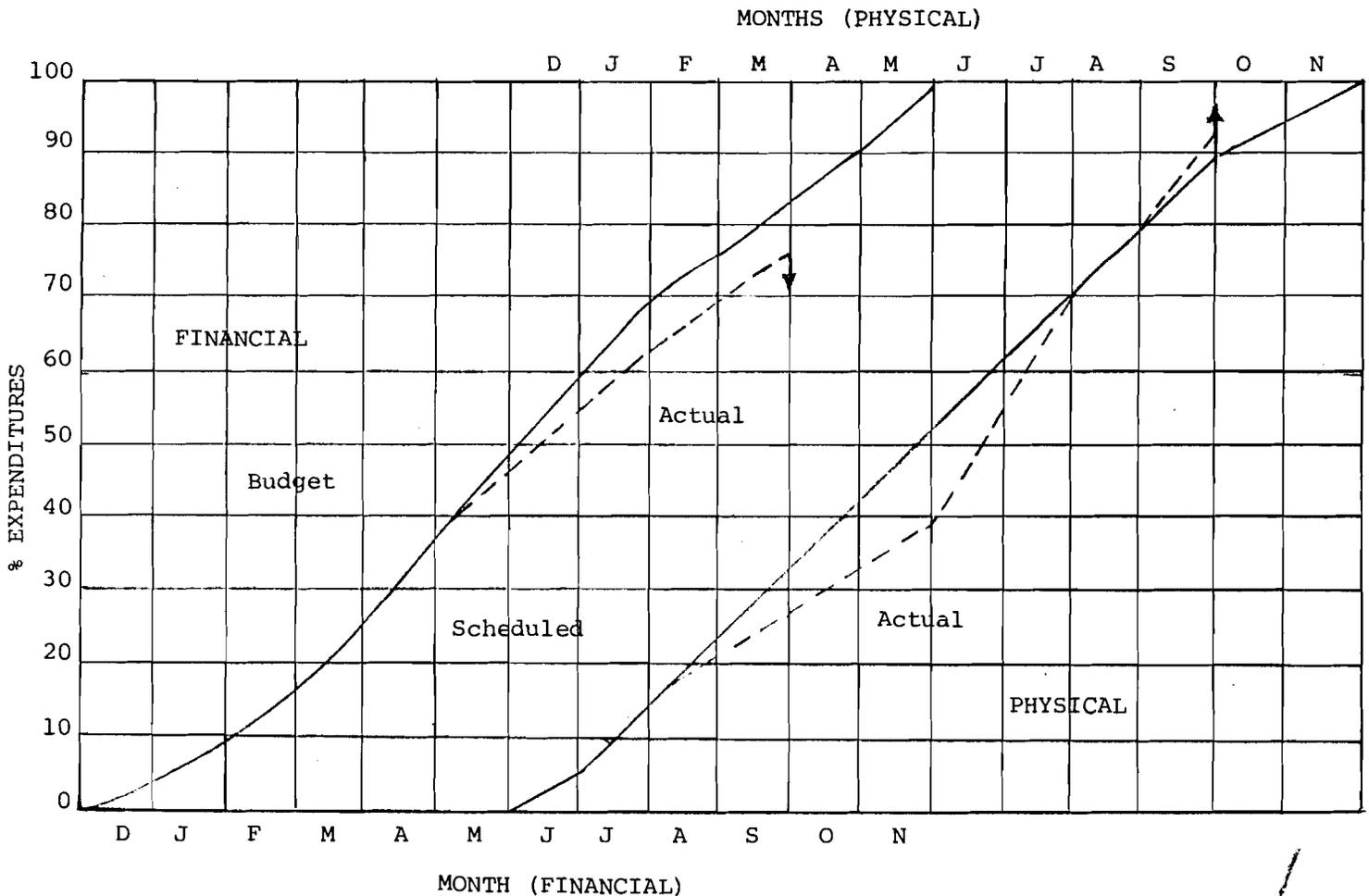
WAREHOUSE PHASE III
FINANCIAL-PROGRESS SCHEDULE

PRE-CONSTRUCTION PHASE (PCP)

TOTAL PROCUREMENT BUDGET *	\$1,953,445		THIS MONTH	TO DATE
ESTIMATED BUDGET FOR PRECONSTRUCTION PHASE	\$ 825,000	ELAPSED CONTRACT TIME (DAYS)	30	295
TOTAL EXPENDITURES TO DATE	\$ 628,390 **	PERCENT PCP COMPLETED	13%	93%
% EXPENDITURE TO TOTAL BUDGET	32.2%	DAYS TO SCHEDULED PCP COMPLETION ^{1/}	-	55
% EXPENDITURE TO PCP	76.2%	PROJECTED DAYS TO ACTUAL PCP COMPLETION ^{2/}		66
* Excludes \$306,620 for Special Project Activity		DAYS EARLY (LATE)		
** Estimated and excludes \$53,033 for Special Project Activity		PROJECTED PCP COMPLETION		(11)

^{1/} 24 November 1983

^{2/} 5 December 1983. Refer to Schedule of Events



SCHEDULE OF EVENTS (Revision #1)

- | | | |
|--|-----|-----------------|
| 1. Transmit documents to prequalified contractors upon receipt of their request (Issue Date) | ... | 09 October '83 |
| 2. Pre-bid Conference | ... | 18 October '83 |
| 3. Receipt and Opening of Bids | ... | 03 November '83 |
| 4. Consultant's Recommendation of Award | ... | 13 November '83 |
| 5. BADC/USAID Approval of Award | ... | 20 November '83 |
| 6. Award Contract(s) | ... | 30 November '83 |
| 7. USAID Issues Letter of Commitment and Engineer Issues Notice To Proceed | ... | 05 December '83 |
| 8. Commence Construction Work | ... | 20 December '83 |

B. ADMINISTRATION

1. The Consultant's Agreement

- . Contract Agreement Signed - 09 December 1982
- . Effective Date - 09 December 1982
- . AID Letter of Commitment
No. 388-0024-3-30381 - 15 December 1982
- . Duration - 28 February 1985

2. Expatriate Staff

		<u>Man-Months</u>	
		<u>Allocated</u>	<u>Utilized</u>
George A. Pecht	- Project Manager	27	9.25
Harry S. Allen	- Chief Construction Engineer	25	7.40
Samuel Heyman	- Foundation Engineer	8	7.58
Colin G. Landrigan	- Structural Engineer	6	4.91

Mr. Sam Heyman returned to the U.S.A. on 30 September upon completion of his present assignment

3. Contract Administration

3.1 For action by BADC:

- . Amendment No.1 to Consultant's Agreement extending duration to 30 June 1985.
- . Obtain T&T approval for wireless license for radio communication. (2NA(STG)139/81-82/1776, 4 April 83)
- . Approval to procure project vehicles. Refer 724-1.1.11/522, 4.8.83 and /550, 25.8.83.

4. Meetings

- . Consultant's weekly project review meetings held each Sunday.
- . Project review meetings held with BADC and USAID.

5. Supporting Bangladeshi Personnel

5.1 WEL and SSL Personnel (Sub-contract)

<u>Designation</u>	<u>Man-Month</u>	
	<u>Allocated</u>	<u>Utilized</u>
Deputy Project Manager	27	9.3641
S&M Engineer	24	8.6364
Structural Engineer	9	7.3024
Architect	4	3.8389
Electrical Engineer	6	1.5238
Railway Engineer	24	6.9089
Office Engineer	26	8.9091
Land Procurement Officer	12	6.5457
Surveyor	25	7.7548
Instrument Man	25	7.6119
Rodman	25	5.6048
Chainman	25	7.3191
Draftsman	69	34.1733
Laboratory Technician	56	12.7744
Laboratory Assistant	56	-
Estimator	48	9.3229
Senior Field Engineer	60	8.0000
Field Engineer	80	-
Inspectors	128	-
Drivers	94	-
Messenger	34	-
Peon	34	-
Guard	68	-
Office Superintendent/Accountant	34	-
Clerk	34	-
Typist	34	-

5.2 Administrative Personnel

Administrative Manager	27	9.4546
Senior Accountant	27	9.5844
Assistant Accountant	44	8.2472
Secretary	27	9.7273
Printer	27	7.9524
Typist	72	25.1319
Clerk	45	9.5844
Drivers	103	35.2322
Messenger	45	6.9091
Peon	72	20.5888
Guard	90	38.9091
Radio Operator	48	-

6, Project Expenditures
 (Estimated Project Cost Incurred)

<u>Item</u>	<u>Budget</u>	<u>This Month</u>	<u>Cumulative</u>
Services in Bangladesh	\$ 746,188	\$ 24,739	\$ 277,859
Services in Home Office	176,178	677	104,698
International Travel, etc.	85,740	-	11,482
Housing Allowances, Per Diem etc.	91,075	5,135	41,589
Logistic Costs	223,400	4,402	44,098
Supporting Staff	382,404	7,284	64,888
Misc. Direct Costs	43,000	2,334	7,676
Fixed Fee	205,460	7,610	76,100
	<u>\$1,953,445</u>	<u>\$52,181</u>	<u>\$628,390</u>
Percent of Estimated Budget		2.67%	32.17%
Percent Contract Time			31.45%
Special Project Activity	\$ 306,620	\$12,405	\$ 53,033

7. Billing and Payments

<u>Invoice</u>	<u>Period Ending</u>	<u>Letter No. & Date</u>	<u>Billing</u>	<u>Payment</u>
01 - 06	31 Jul 83	-	\$ 504,960.72	\$502,917.16

8. Reports

. Monthly Progress Report No.9 for August 1983 submitted by letter /565, 06 September 1983.

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C. TECHNICAL

1. Summary of Consultant's Activities During The Month:

The Consultant held discussion with BADC and USAID officials regarding the Consultant's recommended list of prequalified contractors transmitted by letter /557 dated 30 August 1983. BADC and USAID accorded their approval and the Consultant informed the prequalified contractors of their rating.

The Consultant held meetings with BADC and AID officials to review specifications and drawings. Applicable comments were incorporated in the final documents.

Contract drawings and other documents are in the process of being printed and scheduled to be issued to prequalified contractors by 9 October 1983. The Bill of Quantities for each site have been completed on the basis of approved drawings and technical specification.

PDB (electrical), PWD (designs and cost), KSB (for pumps), GEC (for motors, fans), PHE (for deep tube well) and BISF (for sanitary wares) were contacted for information in respective fields to prepare documents to meet local conditions and to use local products.

Consultant's personnel visited on-going warehouse construction projects to see the nature of construction and availability of materials in order to form an opinion on the use and performance of certain materials used.

The Consultant's Project Manager accompanied BADC official's visit to Jamalpur site.

The survey party surveyed the access road and boundary line (as per latest BADC acquisition) at Jamalpur.

2. Identification of Sites

BADC has informed that Dhaka site at Demra will not be included in Phase III. (Memo No.2NA(STG)107/81-82/Part/188, dated 06.09.83)

Mr. George A. Pecht (Project Manager) accompanied Mr. A.K.M. Shahjahan, Manager (Storage) on 13 September 1983 to Jamalpur to inspect the site. BADC has acquired 55 decimal area of land between Monument #14, and #11. The Project Manager suggested to review location of R2 and R3 in this area; move position of boundary wall on the east to property line and construct the wall 6 feet inside property line for provision of a path between wall and property line; and, construct brick roadway from existing brick road to site, a distance of about 1,250 feet.

3. Status of Sites

The following outlines the outstanding items which must be completed before start of construction:

B1-Kishoreganj

1. BADC to take over possession of 2.05 acres of Sugar Mill land.
2. Obtain B.R. clearance on railway siding.
3. BADC has arranged (2NA(STG)107/81-82/Part/158, 06.09.83) to relocate (provide 10 ft. min. horizontal clearance from centreline of track) and raise (provide 21 ft. vertical clearance from top of rail) telephone line as required to clear proposed railway siding.
4. Raise telephone line on west side of property to clear proposed entrance to site.

C3-Jamalpur

1. Obtain clearance from B.R. on siding.
2. Evict inhabitants in acquired area.

F1-Dohazari

1. Obtain access to river. Funds for acquisition of 32 decimal of land has been placed with District Manager, Chittagong (2NA(STG)107/81-82/Part/188, dated 06.09.83)

F3-Cox's Bazar

1. Remove existing structures.
2. Shift power line. (Cheque of Tk.41,700 handed over to District Manager in favour Dy. Director (Accounts) PDB, Chittagong for work)
3. Obtain access to river.

H2-Chowmuhani

1. Resurvey property lines when flood water recedes.

H3-Lakshmipur

No problem

I4-Chandpur

1. Remove designated existing structures.
2. Obtain clearance for relocating canal.

L4-Domar

1. Take over possession of land from S.M. Farm.

O5T-Parbatipur

1. Obtain clearance for siding from B.R.

4. Planning/Design/Production Phase

- a. Topographic and land surveys for each site have been completed. In addition re-survey of access road and boundary of newly acquired land at Jamalpur was completed this month. The property corners at Dohazari and Chowmuhani will require re-survey when the flood water recede.
- b. Soil investigation at all sites has been completed and final report with recommendation of type of foundation, godown floor, and pavement was submitted to BADC and USAID.
- c. The Land Plan and Site Layout drawings for each site have been approved by BADC.
- d. Warehouse and ancillary building design and contract drawings have been completed. BADC's and USAID's comments on the contract drawings and specifications were reviewed and accepted changes incorporated in the final documents.
- e. The Bill of Quantities for each site have been completed and cost estimates are under preparation based on site-wise rate analysis of schedule items in Bill of Quantities.
- f. The proposed construction schedule is under review.
- g. BADC's and USAID's comments on the contract drawings and specifications were reviewed and accepted changes incorporated in the final documents.
- h. The Consultant's personnel during their field trip and site surveys have collected prices of construction materials to be used for the work.

Certain materials such as deformed bars, sanitary fixtures, electrical items, timber specified may not be available in several local areas but these can be transported to site from nearest district headquarters or from Dhaka or Chittagong.

As of September 1983 there appears to be no difficulty in obtaining construction materials recommended for this project.

5. Railway Sidings

BADC has transmitted to Bangladesh Railway for their approval the site layout drawings for Kishoreganj, Jamalpur and Parbatipur showing the proposed railway sidings.

Supplemental drawings to scale of 1" = 20' showing detailed siding geometry are being finalized.

The proposed siding lengths are:

Kishoreganj		1305 ft.	0.247 mile
Jamalpur		1461 ft.	0.277 mile
Parbatipur	MG	2646 ft.	0.501 mile
	BG	2124 ft.	0.402 mile

An estimate of materials required to be procured for the construction of railway sidings under Phase III have been transmitted to BADC.

6. Prequalification of Contractors

Twenty-two contractors including two American contractors, have been informed that they are prequalified to submit a proposal to their rating limit.

7. Bid/Contract Phase

The prequalified contractors have been notified of their rating and most of them in turn have indicated invitation (site location) they are interested in for submitting a proposal. The IFB will be available from 9 October with bid opening on 3 November. A pre-bid conference will be held on 18 October and all participating contractors are invited to attend.

Scheduled trips to the various sites with interested contractors are also programmed during the bid period. No bid documents will be sold from 29 October.

8. Scheduled October Events

1. Review Contract Drawings and Technical Specifications
2. Prepare Engineer's Construction Cost Estimate
3. Prepare supplementary drawings of railway siding layouts
4. Complete scheduling of construction
5. Pre-bid Conference to be held on 18 October
6. Attend site inspection trips with contractors
7. Prepare Construction Manual
8. Prepare for Preconstruction Conference
9. Complete estimate of quantity of cement and reinforcing steel required and inform TCB and Chittagong Steel Mill of material requirements.
10. Continue monitoring availability of construction materials.