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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. 25

31 DECEMBER 1984



**AMMANN & WHITNEY**  
CONSULTING ENGINEERS  
NEW YORK

in association with



**WORLDWIDE ENGINEERS LTD.**  
ARCHITECT-ENGINEERS  
DHAKA



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AMMANN & WHITNEY  
CONSULTING ENGINEERS

AMMANN & WHITNEY  
88, MOTIJHEEL C. A.  
P. O. BOX 348  
DHAKA, BANGLADESH

WAREHOUSES PHASE III

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

724-4.1.1/2720

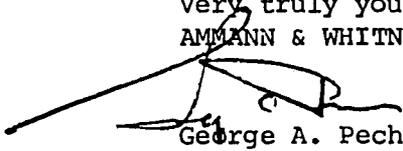
05 January 1985

Subject : Monthly Progress Report No.25  
- December 1984

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 (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.  
Mr. David E. Warner, PO, AID/D w/encl.(6)  
File 724-1.4.2 w/encl.

AMMANN & WHITNEY  
Consulting Engineers

FERTILIZER WAREHOUSES - PHASE III

Monthly Progress Report No. 25  
Month of December 1984

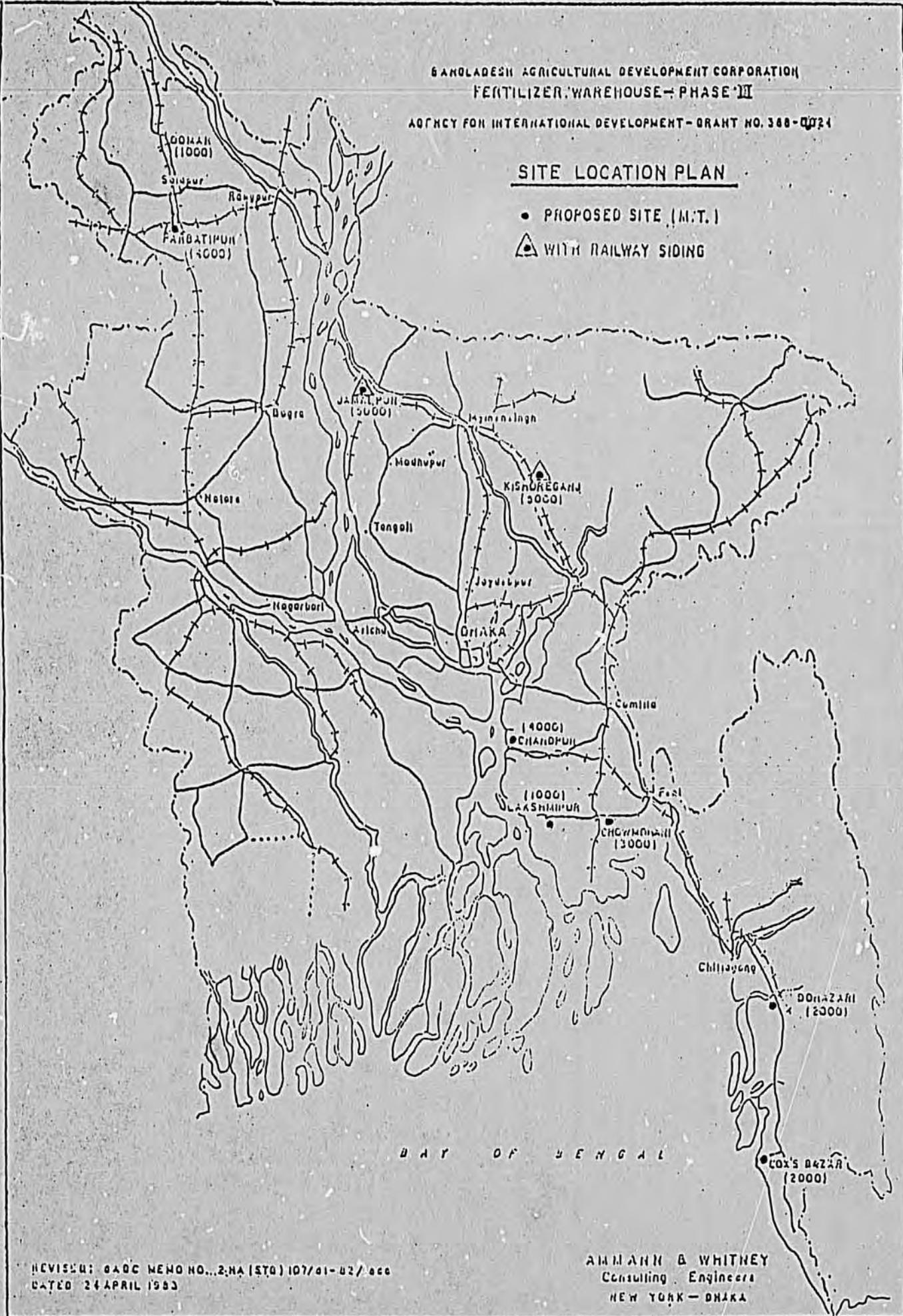
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BANGLADESH AGRICULTURAL DEVELOPMENT CORPORATION  
 FERTILIZER WAREHOUSE - PHASE III  
 AGENCY FOR INTERNATIONAL DEVELOPMENT - GRANT NO. 368-0024

SITE LOCATION PLAN

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



REVISION: SAOC MEMO NO. 2-NA (STO) 107/01-02/000  
 DATED 24 APRIL 1983

AMMANI & WHITNEY  
 Consulting Engineers  
 NEW YORK - DHAKA

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)
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)

## I. CONTRACTOR'S ACTIVITIES

### CONSTRUCTION PHASE

#### 1. Summary of Contractor's Activities

The first godown roof was placed at Lakshmipur. A partial roof pour will be made at Cox's Bazar in January.

The work on all godowns progressed at a slow pace except for Chandpur where work came to a complete standstill.

The ancillary building construction proceeded slowly.

The total percentage of work completed during this month was 5.8%. It should have been about 10%, if all contractors performed to their revised schedule and extended completion date.

The total percent complete is 41% against 58% scheduled..

Only one contractor, Technocon Ltd, made a determined effort to complete both of his projects - Lakshmipur and Chowmuhani - on time. He brought in the required manpower and materials to work on all parts of his projects at the same time to accomplish the required progress.

All other contractors fell further behind schedule during December because they did not commit sufficient manpower and resources to them.

The performance of Elite Engineers Ltd. of Parbatipur was so disorganized that the Engineer, in agreement with BADC and USAID, decided to post Mr. Y.O.Kim, an Ammann & Whitney Project Engineer, to Parbatipur to assist the contractor as a Construction Advisor.

#### Kishoreganj:

All godown footings were cast; work on columns and walls proceeds. The progress on the ancillary buildings is slow. R1 was excavated. No slab was cast at R2. Some interior work continues as does the work on the boundary wall.

The progress of work has dropped from 8% last month to 4% for December, it should be 10%. After a one-month span the contractor returned to his old slow pace and is falling further behind the schedule.

#### Jamalpur:

The foundation, column and brick work, on the godowns continues. Bricks were laid at R1, some structural and interior work is going on.

The progress with only 3% of work completed this month is much too slow. About 11% should have been done to achieve completion in June 85. For a time the contractor had only 5 masons working. After repeated prodding by the Engineer he increased the amount of masons. The godown roof formwork should have been started this month especially since this contractor will work with 3 form set-ups. But no form materials has been purchased at this time.

Dohazari:

The godown construction continues with columns being cast and brick being laid. The work on the ancillary buildings progressed. No fill was placed. The work accomplished was 3% this month. The contractor fell further behind schedule. The Engineer notified the contractor to speed up the work. There were no other reasons for the contractor's delay than his lack of effort.

Cox's Bazar:

The ancillary buildings are close to being finished. The first part of the godown roof was formed and will be cast soon. The roof formwork was long delayed due to faults of the contractor; slow purchasing and bad organization. Pavement, river access and deep tubewell are the main items not yet started.

Chowmuhani:

Godown footings, grade beams and columns progress; the brick walls were started. The work at all three ancillary buildings continues at a good pace. The site filling slowed down some due to a lack of labor.

With 8% work completed this month this contractor tries to overcome previous shortfalls.

Lakshmipur:

The godown roof was poured at the end of December. The preparation for the road pavement and the placing of pavement concrete continue. The finishing of all other work is in progress.

The contractor put a lot of manpower at this project to complete it on time. The substantial completion by the end of February 85 seems obtainable.

Chandpur:

Work proceeded on the ancillary buildings, the river retaining wall and the boundary wall. No work was done at the godown. Since 2½ months the roof formwork could have been started but no shuttering is brought to the site. No more walls are built at the godown for lack of bricks. The Engineer has informed the contractor various times to start the godown roof formwork.

The work completed this month was 5%. It should have been over 10% to reach the completion date of 30.6.85.

Parbatipur:

The godown foundations and columns are being cast. The surcharge has been removed. Brick work on R3 and interior work on R1 and R2 continue. The broad gauge track embankment is being placed. The construction of the boundary wall progresses.

The Contractor has continued to fall behind schedule and in the Engineer's opinion without a drastic change in organization, management, procurements, and laborer requirements the completion of the work by 30.06.85 cannot be met. The Engineer decided to make one more effort, beyond the scope of his contractual obligations, to try and remedy the situation. A Directive was issued on 15.12.84 to the Contractor (agreed and accepted on 26.12.84) to post Mr. Y.O. Kim, Project Engineer, to Parbatipur to assist the Contractor as Construction Advisor in planning and scheduling of all work; planning and scheduling ordering and procurement of materials, equipment and laborers; and, planning and scheduling execution of the work.

Parbatipur: - cont'd.

Since posting of Mr. Kim there has been a slight improvement but Contractor's action in implementing procurement of materials, increase of skilled laborers (carpenters and masons), increase in unskilled laborers and preparation of working drawings are not up to recommended levels.

2. Railway Siding

Kishoreganj

BADC has deposited Tk.1,35,150.00 toward license fee for 0.61 acres of land at Kishoreganj. Physical demarcation of the area is to be done by the Estate office of BR so that the boundary wall can be constructed by the contractor. BADC to follow up.

Speed restriction boards are to be fixed at Kishoreganj by BR. Follow up by BADC is requested. Refer letter No.724-4.1.1/2466 dated 27.10.84.

Jamalpur

Contractor has started stripping of the area outside BADC property for doing earthwork in Rly embankment.

Parbatipur

BADC is requested to resolve the issue arising out of lease of Rly land including existing dead end meter gauge track to Coal Directorate. The existing dead end track is required for access to the BADC warehouse. Refer letter No.724-4.1.1/2495 dated 3.11.84.

BADC to request BR to take action for removal of box cars, carriages etc. from portion of alignment of the proposed siding at Parbatipur to enable the contractor to do the embankment work uninterrupted.

Cost Estimates

Cost estimates for Jamalpur and Kishoreganj received from BR have been sent to BADC with Engineer's comments. BADC is requested to resolve the issues arising out of provisions made in the estimates to which Engineer could not agree since they were exorbitant.

Cost estimate for Parbatipur has not yet been received from BR. BADC is requested to obtain the estimate for Parbatipur from BR.

## Contractor's Activities

Date : 31 December 1984

CONSTRUCTION CONTRACT AND FINANCIAL SUMMARY

	<u>L.C. Amount US \$</u>	<u>L.C. Equivalent (Tk)</u>	<u>Revised Contract Amount (Tk)</u>	<u>Retention (Tk)</u>	<u>Accumulated Amount Invoiced (Tk)</u>
Invitation No.1	B1-Kishoreganj	National Construction & Consult Ltd.			
L.C. 388-002403	797,885.00	1,98,40,012.82	-		
Change Order B1-G1*		(- 88,848.31)	1,97,51,164.51	5,71,366.51	78,85,153.58
Invitation No.2	C3-Jamalpur	Mostafa Brothers (Pvt) Ltd.			
L.C. 388-002404	711,599.00	1,76,94,451.01	-	5,25,416.40	69,99,565.18
Invitation No.3	F1-Dohazari	The Eastern Engineers Consortium Ltd.			
L.C. 388-002405	625,317.00	1,55,48,978.95	-	5,85,563.57	63,40,572.19
Invitation No.4	F3-Cox's Bazar	Builders The Best Ltd.			
L.C. 388-002406	400,731.00	99,64,470.85	-		
Change Order F3-01 *		5,01,819.78	1,04,66,290.63	4,87,043.96	53,37,395.62
Invitation No.5	H2-Chowmuhani	Technocon Limited			
L.C. 388-002407	567,863.00	1,41,20,342.60	-		
Change Order H2-01		6,680.00	1,41,27,022.00	1,85,339.79	48,07,208.16
Change Order H2-02*		3,80,099.25	1,45,07,121.25		

CONSTRUCTION CONTRACT AND FINANCIAL SUMMARY - cont'd

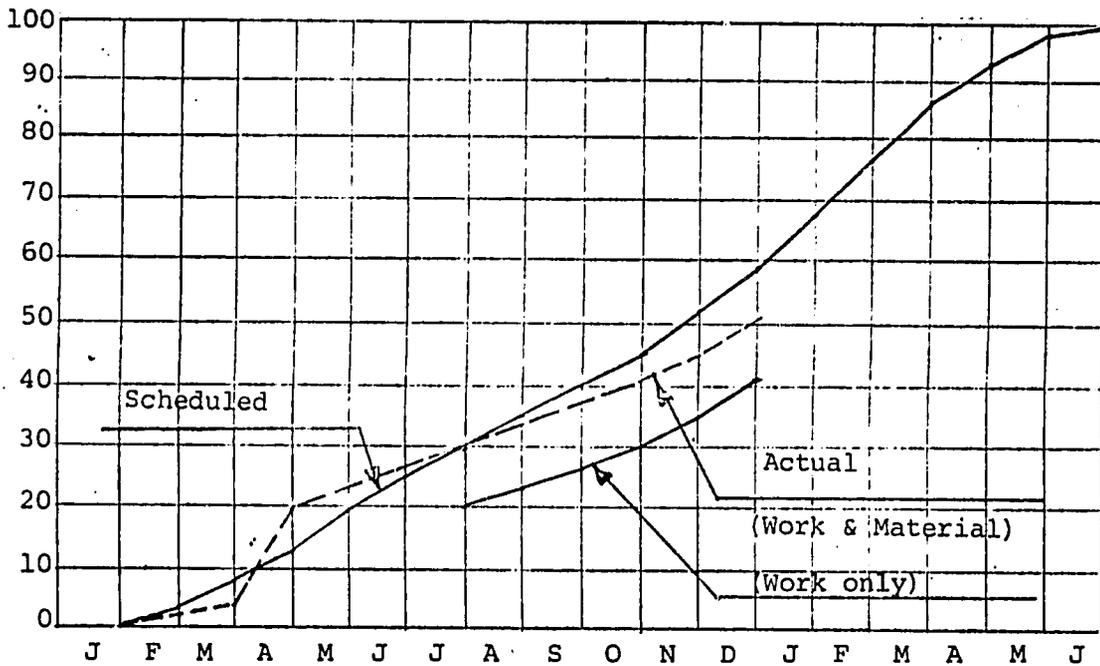
	<u>L.C. Amount US \$</u>	<u>L.C. Equivalent (Tk)</u>	<u>Revised Contract Amount (Tk)</u>	<u>Retention (Tk)</u>	<u>Accumulated Amount Invoiced (Tk)</u>
Invitation No.6	H3-Lakshmipur	Technocon Limited			
L.C. 388-002408	224,858.00	55,91,275.35	-		
Change Order H3-01		5,000.00	55,96,275.35		
Change Order H3-02		80,700.00	56,76,975.35	2,44,894.62	29,00,581.63
Change Order H3-03		(- 32,815.00)	56,44,160.35		
Invitation No.7	I4-Chandpur	Fazle Azim Engineers Ltd.			
L.C. 388-002409	686,398.00	1,70,67,822.35	-		
Change Order I4-01		11,440.00	1,70,79,262.35		
Change Order I4-02		2,45,520.00	1,73,24,782.35	5,13,392.93	72,78,536.32
Change Order I4-03*		9,07,240.00	1,82,32,022.35		
Change Order I4-04*		5,39,043.50	1,87,71,065.85		
Change Order I4					
Invitation No.8	I4-Domar	M.S. Khan & Heirs Ltd.			
L.C. 388-002410	301,590.00	74,99,255.00			
Terminated : Engineer's Assessment of Claim			5,83,083.62		
Invitation No.9	05-Parbatipur	The Elite Engineers Ltd.			
L.C. 388-002411	683,759.00	1,70,02,196.40		4,52,800.40	58,31,203.60
<b>TOTAL :</b>	<b>5,000,000.00</b>	<b>12,43,28,805.91</b>	<b>11,99,68,512.57</b>	<b>35,65,813.18</b>	<b>4,73,80,216.28</b>

39.5%

\* Pending Approval

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CONSTRUCTION PROGRESS - ALL SITES



	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	Weighted Percent	Project % Complt.
Kishoreganj	5	11	16	20	25	29	33	35	39	47	56	64	73	82	91	98	100	16.97	8.7
	0	1	20	20	20	26	28	33	35	45	51								
Jamalpur	3	8	14	19	23	27	31	34	39	46	55	63	72	81	90	98	100	15.35	7.7
	0	2	18	19	21	25	31	36	40	44	50								
Dohazari	4	10	16	22	30	38	43	48	51	55	60	69	79	87	94	99	100	13.31	6.5
	0	1	21	24	32	32	34	39	42	47	49								
Cox's Bzr.	2	7	12	18	24	32	40	50	59	67	76	85	93	98	100			8.53	5.5
	0	1	27	37	42	36	41	51	57	60	65								
Chowmuhani	2	8	15	21	28	33	37	40	43	48	54	65	75	84	92	98	100	12.09	5.8
	0	1	13	18	33	33	34	39	39	41	48								
Lakshmipur	2	9	16	22	30	37	46	56	67	77	88	98	100					4.79	3.9
	0	8	30	36	39	39	43	51	54	68	81								
Chandpur	1	4	9	14	19	24	30	35	41	48	56	65	74	84	93	98	100	14.61	7.2
	0	1	11	18	26	29	34	38	43	47	49								
Parbatipur	2	9	16	23	30	33	36	39	42	48	56	65	74	83	92	98	100	14.55	5.5
	0	1	17	17	27	28	29	30	30	32	38								

Note : Schedule based on BADC allowing time extension  
 to February/April/June 1985

Total : 50.8  
 Last Month : 45.7

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CONSTRUCTION PERCENT COMPLETION

Site	- A - SITE DEVELOPMENT	- B - WAREHOUSE	- C - ANCILLARY BUILDINGS	- D - WATER SUPPLY SANITARY	- E - ELECTRICAL	TOTAL
Kishoreganj	71%	22%	34%	5%	5%	40%
Jamalpur	56%	26%	49%	3%	8%	37%
Dohazari	68%	24%	42%	3%	3%	42
Cox's Bazar	69%	52%	71%	32%	26%	58%
Chowmuhani	60%	24%	22%	10%	1%	37%
Lakshmipur	74%	91%	98%	25%	32%	77%
Chandpur	58%	35%	19%	3%	1%	37%
Parbatipur	42%	13%	49%	7%	2%	29%

Overall Project Completion - (Work Items Only): 41%

INVITATION NO. : BL-KISHOREGANJ

CONTRACTOR : National Construction & Consult Ltd.

Total Contract Price : Tk.1,98,40,012.82  
 Change Order/Directives : (-)88,848.31\*  
 Revised Contract Price : Tk.1,97,51,164.51\*  
 L/Com No. : 388-002403  
 Date of L/Com. : 31.01.84  
 Amount of L/Com. : Tk.1,98,40,012.82  
 (\$797,885.00)

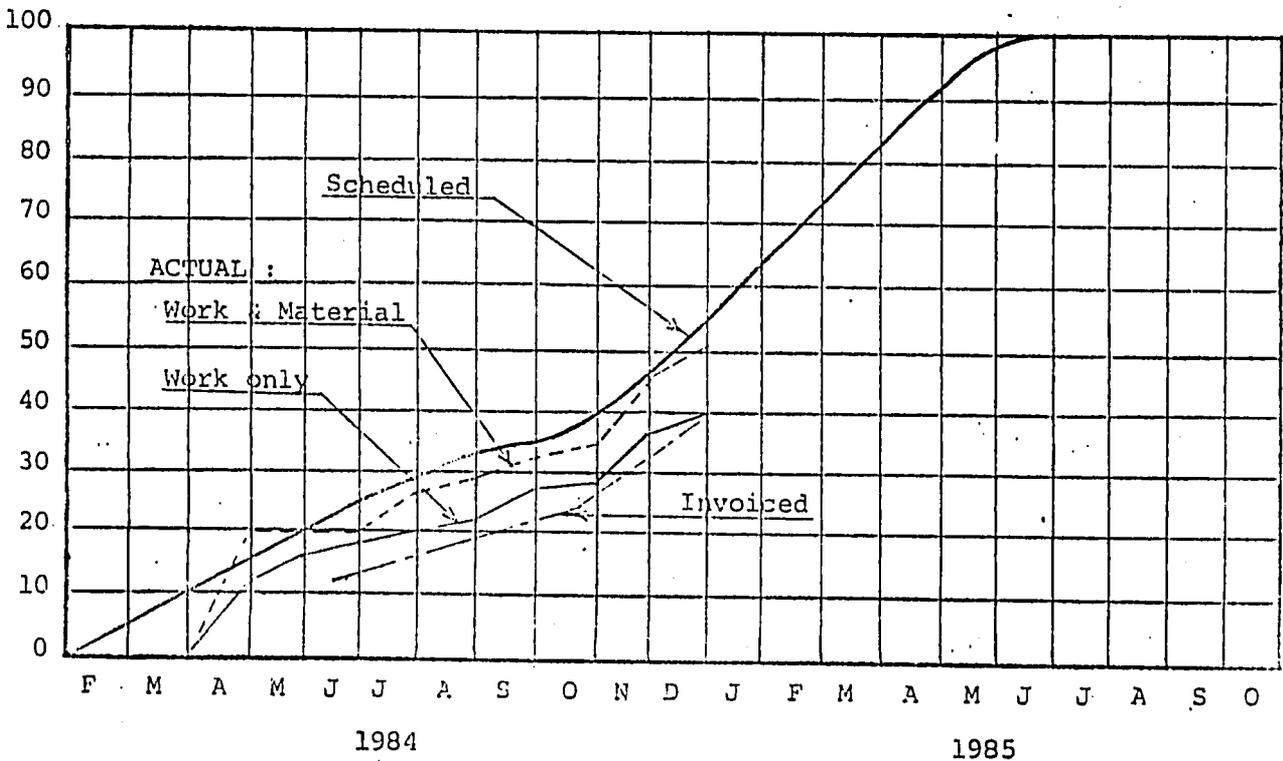
Date of Contract : 16.01.84  
 Site Handed Over : 29.01.84  
 Notice To Proceed : 02.02.84  
 Scheduled Completion: 30.06.85 (494)\*  
 Elapsed Time : 334 days . 68 %

L/Com. Amendment No.1 :  
 Performance Guarantee : ECCT LG 84/75  
 Tk.19,84,002  
 CAR/PL Insurance : DAC/CAR/P-09/4/84  
 30.04.84

%Completion			
Scheduled		Actual	
This Period	To Date	This Period	To Date
9%	56%	6%	51%
	Work :	4%	40%
	Material :	2%	11%

\* Pending Approval

CONSTRUCTION PROGRESS



	<u>This Period.</u>	<u>To Date</u>
A. Site Development	1%	71%
B. Warehouse	8%	22%
C. Ancillary Buildings	1%	34%
D. Water Supply, Sanitary, Plumbing	-	5%
E. Electrical	-	5%

## Activities

At the godown all remaining footings were cast, the column casting continues and the brick walls are in process.

The excavation to waste under the R1 building was completed. The work on ancillary buildings R2 & R3 proceeds very slowly.

After a great spurt of activity the contractor is back at his former slow pace of 4% of work completed against about 10% required to finish on time. The lack of a single electrician is holding up work on the ancillary buildings R2 and R3 (as in previous month) Form work for the godown roof promised by the contractor was not started.

## Action Required

- BADC:
- Request BR to reduce speed of train approaching station during construction period.
  - To pursue the railway to officially turn over land to BADC. The boundary wall can not be built in part because BR does not establish the boundary. The site remains wide open and unprotected.
  - Pursue BR to remove abandoned rails and ties (their property).
  - Have BR review their cost estimate for railway siding (which is inflated).

## Work Scheduled Next Month

At the godown column casting and brick walls will continue. Roof form work may or may not start. The foundations for R1 will be laid. The roof of R2 will be cast (if an electrician can be obtained). The interior work on ancillary buildings R2 and R3 and work on the boundary wall will continue.

## Claims

Contractor's letter AK62 of 19.12.84 Claim B1-8 for excess of tender quantity of select fill.

Rejected by A&W letter #2687 of 29.12.84.

Contractor's letter AK62 of 19.12.84 Claim B1-9 for additional rate for surcharge loading due to late notice to proceed and abnormally heavy rains and flooding.

Rejected by A&W letter #2688 of 29.12.84.

Contractor's letter AK62 of 19.12.84 Claim B1-10 for additional rate for bricks and their transportation to site due to late notice to proceed and to abnormally heavy rains.

Rejected by A&W letter #2689 of 29.12.84.

Contractor's letter AK62 of 19.12.84 Claim B1-13 for disposal of surcharge material.

Rejected by A&W letter #2693 of 30.12.84.

Contractor's letter AK62 of 19.12.84 Claim B1-14 additional costs for the removal of surcharge material due to strike.

Rejected by A&W letter # 2694 of 30.12.84.

Contractor's letter AK62 of 19.12.84 Claim B1-12 for additional cost for disposal of surcharge material due to lack of space.

Rejected by A&W letter #2695 of 30.12.84.

Contractor's letter AK62 of 19.12.84 Claim B1-11 for wind and rain damages to contractor's shed and kitchen.

Rejected A&W letter #2696 of 30.12.84.

Financial

<u>Invoice No.</u>	<u>I t e m</u>	<u>Amount Invoice (Tk)</u>	<u>Payment</u>	<u>USAID Voucher No.</u>
B1-01	Material Prepayment	21,57,900.00 Tk.	21,57,900	1451
B1-02	Progress Payment	28,31,830.22	28,31,830.22	
B1-03	Progress Payment	29,17,240.36		

Variations (Change Orders, Overruns, Underruns)

None this month

CONSOLIDATED MATERIALS TESTING REPORT

Project : Fertilizer Warehouses Phase III

For the month Dec. 1984

Site : Kishoreganj

Material/Test	Spec. No.	No. of Test	No. Approved	No. Dis-Approved	Remarks/Requirement
A. Bricks: Frogmark: GMB	4A.02	10	3	7	
B. Cement	3A.02-a	1	1	0	
C. Field Density Tests: Select Fill	2E.01	34	34	0	90% & 95% MDD

No. of test at

3 days 7 days 28 days

D. Concrete: Compressive Strength Test	3A.03 3A.05	-	41	60	
--	----------------	---	----	----	--

Average 28 day Strength of Concrete:

1. Godown column footings : 3608 PSI (Av. of 32 cylinders)
2. Godown Grade beam & columns : 3301 PSI (Av. of 12 cylinders)
3. Godown columns : 3525 PSI ( AV. of 12 cylinders)
4. R3 stair & R2 lintel : 3233 PSI (AV. of 3 cylinders)

INVITATION NO. : C3-JAMALPUR

CONTRACTOR : Mostafa Brothers (Pvt) Ltd.

Total Contract Price : 1,76,94,451.01

Change Order/Directives :

Revised Contract Price :

L/Com No. : 388-002404

Date of L/Com. : 31.01.84

Amount of L/Com. : Tk.1,76,94,451.01  
(\$711,599.00)

L/Com. Amendment No.1 :

Performance Guarantee : Indosuez PB/TK/010  
Tk.17,69,446

CAR/PL Insurance : DAC/CAR/P-8/84

Fidelity Bond : Indosuez PG/TK/018  
Tk.8,84,720

Date of Contract : 12.01.84

Site Handed Over : 19.01.84

Notice To Proceed : 02.02.84

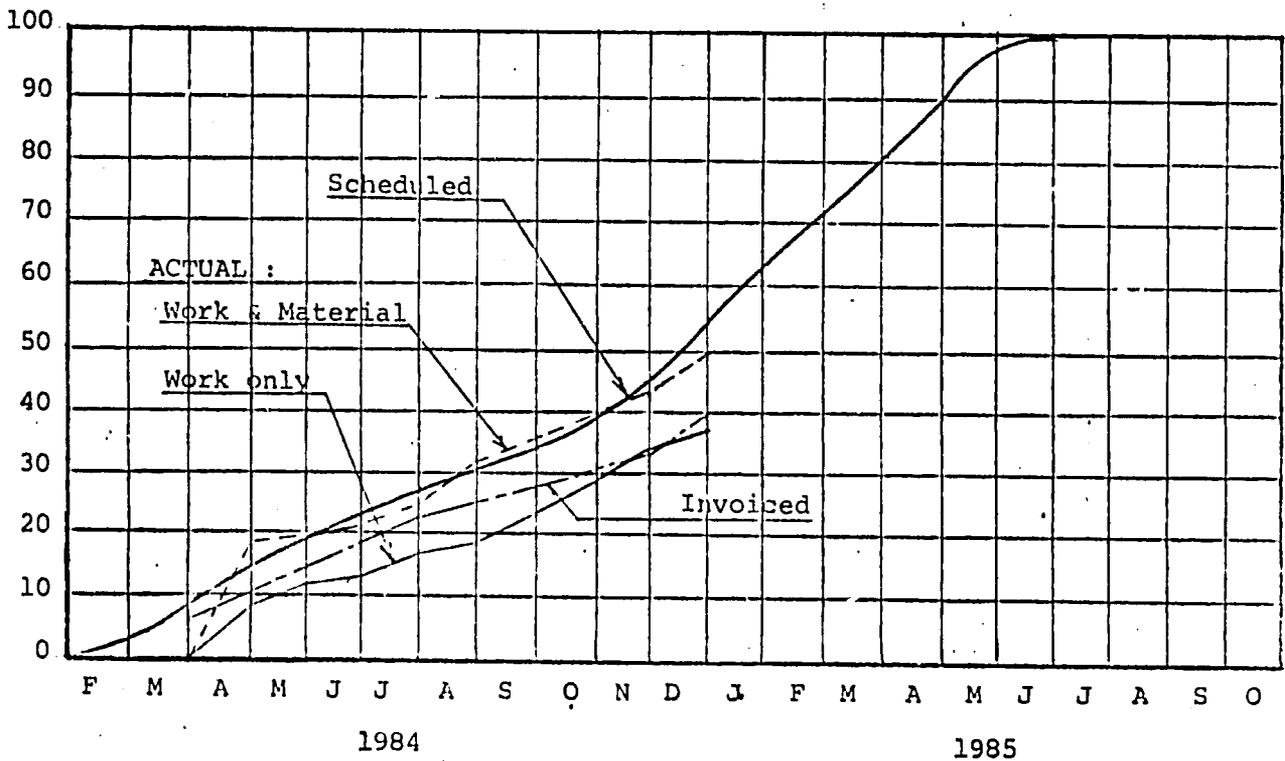
Scheduled Completion: 30.06.85 (494) \*

Elapsed Time : 334 days . 68%

%Completion			
Scheduled		Actual	
This Period	To Date	This Period	To Date
9%	55%	6%	50%
	Work :	3%	37%
	Material :	3%	13%

\* Pending Approval

CONSTRUCTION PROGRESS



	<u>This Period.</u>	<u>To Date</u>
A. Site Development	-	56%
B. Warehouse	4%	26%
C. Ancillary Buildings	4%	49%
D. Water Supply, Sanitary, Plumbing	-	3%
E. Electrical	-	8%

Activities

At the 3,500 M.T. godown all columns were cast, the brick walls are in process. At the 1500 M.T. godown all footings and grade beams are completed and columns are being cast. The brick work for the first floor of the R1 is in progress, the structural work at R2 & R3 was finished.

Only 3% work was done this month against about 11% required to reach completion in June 1985. For more than half of December only 5 masons were working. The godown roof form should have been started in December. No material has even been purchased at this time.

Action Required

BADC : . Obtain revised estimate for siding from BR.

Work Scheduled Next Month

At the godowns the column and brick work will continue. Start of the roof form work is urgently required . The structural work on R1 should be finished and the roof slab should be placed. The interior work at R2 and R3 will continue.

Claims

Mostafa Brother's letter 522 of 24.12.84 reinstated losses due to riot.

Mostafa Brother's letter 525 of 26.12.84 claim for unspecified price increases due to hartal.

Financial

<u>Invoice No.</u>	<u>I t e m</u>	<u>Amount</u> <u>Invoice (Tk)</u>	<u>Payment</u>	<u>USAID</u> <u>Voucher No.</u>
-	Mobilization Advance	8,84,720.00	8,84,720.00	1059
C3-01	Material Prepayment	13,27,696.00	13,27,696.00	1226
C3-02	Progress Payment	18,64,836.23	18,64,836.23	1607
C3-03	Progress Payment	8,62,230.34	8,62,230.34	
C3-04	Progress Payment	9,13,152.12	9,13,152.12	
C3-05	Progress Payment	11,46,930.49		

Variations (Change Orders, Overruns, Underruns)

None this month.

CONSOLIDATED MATERIALS TESTING REPORT

Project : Fertilizer Warehouses Phase III

For the month Dec. 1984

Site : Jamalpur

Material/Test	Spec. No.	No. of Tests	No. Approved	No. Dis-Approved	Remarks/Requirement
A. Concrete Sand	3A.02-b.1	2	2	0	F.M. 2.3 to 3.1
B. Mortar Sand	4A.03	2	2	0	F.M. 1.8 to 2.8
C. Concrete Coarse Aggregate	3A.02-b.2	5	2	3	
D. Bricks: Frogmark: RBC	4A.02	5	4	1	
E. Field Density Tests: Select Fill	2E.01	25	22	3	95% MDD

No. of test at  
3 days 7 days 28 days

F. Concrete: Compressive Strength Test	3A.03 3A-05	-	20	55	
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Average 28 day Strength of Concrete:

1. 3500 M.T. Godown column 1st lift : 4140 PSI (Av. of 5 cylinders)
2. 3500 M.T. Godown column 2nd lift : 3554 PSI (Av. of 11 cylinders)
3. 3500 M.T. Godown column 3rd lift : 3762 PSI (Av. of 5 cylinders)
4. 1500 M.T. Godown column footing : 3984 PSI (Av. of 15 cylinders)

31 December 1984

INVITATION NO. : F1-DOHAZARI

CONTRACTOR : The Eastern Engineers Consortium Ltd.

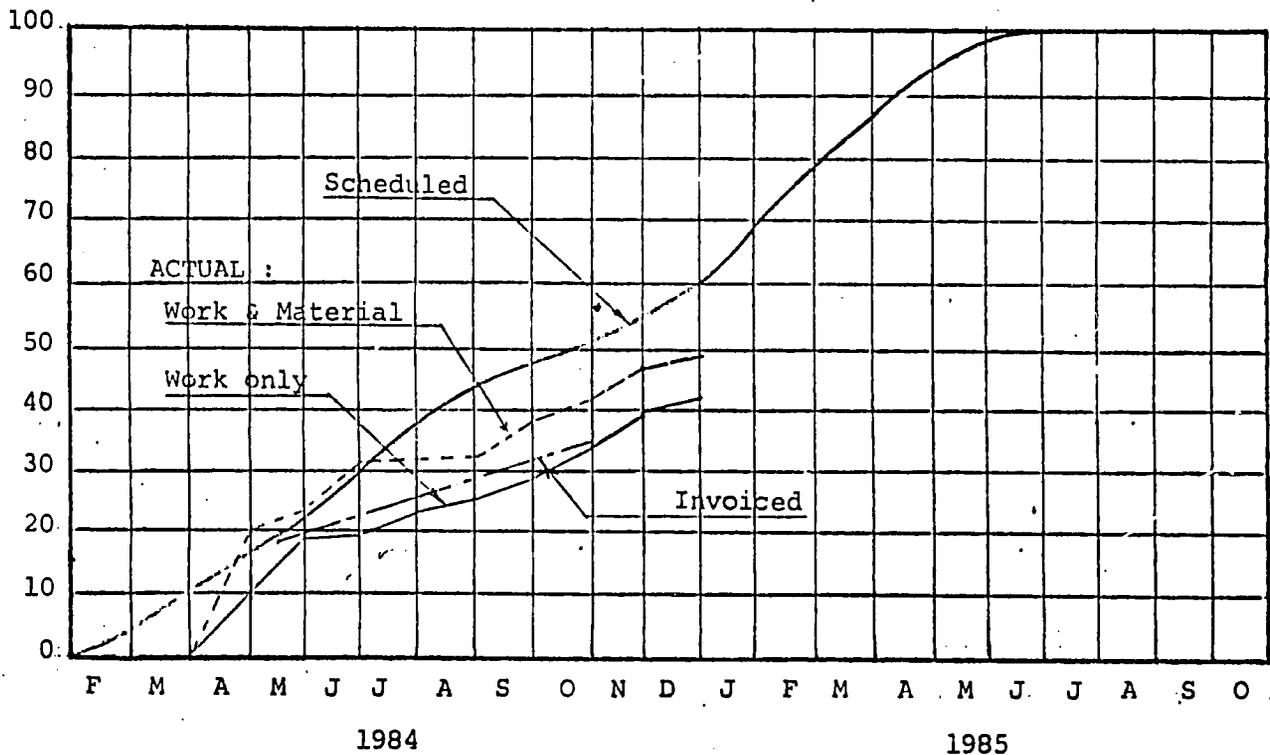
Total Contract Price	: Tk.1,55,48,978.95	Date of Contract	: 16.01.84
Change Order/Directives	:	Site Handed Over	: 26.01.84
Revised Contract Price	:	Notice To Proceed	: 02.02.84
L/Com No.	: 388-002405	Scheduled Completion	: 30.06.85 (494) *
Date of L/Com.	: 31.01.84	Elapsed Time	: 334 days 68%
Amount of L/Com.	: Tk.1,55,48,978.95 (\$625,317.00)		

L/Com. Amendment No.1 :  
 Performance Guarantee : Agrani 001/84  
 Tk.15,54,900  
 CAR/PL Insurance : DAC/CAR/P-12/5/84

%Completion			
Scheduled		Actual	
This Period	To Date	This Period	To Date
5%	60%	2%	49%
	Work	: 3%	42%
	Material	: -1%	7%

\* Pending Approval

CONSTRUCTION PROGRESS



	<u>This Period</u>	<u>To Date</u>
A. Site Development	-	68%
B. Warehouse	5%	24%
C. Ancillary Buildings	9%	42%
D. Water Supply, Sanitary, Plumbing	-	3%
E. Electrical	1%	3%

20

### Activities

The contractor cast godown columns and worked on shear walls. At R1, R2 and R3 one slab was poured and the brick work continued. Laying of the culvert pipe is in progress. No fill was placed this month. This site is falling further behind schedule as can be seen from the graph. The work completed during this month amounted to only 3% ! The contractor was notified to speed up the work, continue to place select fill again and start with the brick paving.

### Action Required

None

### Work Scheduled Next Month

Column and wall construction at the godown will proceed. The brick work and casting of roof slabs at the ancillary buildings will continue. Hopefully the access road construction will be taken up again.

### Claims

None

### Financial

<u>Invoice No.</u>	<u>I t e m</u>	<u>Amount Invoice (Tk)</u>	<u>Payment</u>	<u>USAID Voucher No.</u>
F1-01	Material Prepayment	27,15,000	27,15,500	1281
F1-02	Progress Payment	11,71,789.83	11,71,780	1853
F1-03	Progress Payment	13,50,596.94	13,50,596.94	
F1-04	Progress Payment	11,03,195.15		

### Variations (Change Orders, Overruns, Underruns)

A3	Excavation to waste	-	1,06,874.50
A4	Excavation	-	89,830.87
A6	Filling with imported material (select)	-	10,86,002.50
A21	Surcharge	-	46,970.00
	<b>Total Underrun:</b>	-	<b>13,29,677.87</b>

CONSOLIDATED MATERIALS TESTING REPORT

Project : Fertilizer Warehouses Phase III

For the month Dec. 1984

Site : Dohazari

Material/Test	Spec. No.	No. of Tests	No. App- roved	No. Dis- Approved	Remarks/Requirement
A. Concrete Sand	3A.02-b.1	2	2	0	F.M. 2.3 to 3.1
B. Mortar Sand	4A.03	2	2	0	F.M. 1.8 to 2.8
C. Concrete Coarse Aggregate	3A.02-b.2	3	2	1	
D. Pea-gravel	4A.05	1	1	0	
E. Field Density Tests: Select Fill	2E.01	8	8	0	95% MDD

No. of test at  
3 days 7 days 28 days

F. Concrete: Compressive Strength Test	3A.03 3A.05	-	20	36	
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Average 28 day Strength of Concrete:

1. Godown Grade beam : 3867 PSI ( Av. of 3 cylinders)
2. Godown columns : 3551 PSI ( Av. of 21 cylinders)
3. R2 Floor slab : 3472 PSI ( Av. of 3 cylinders)
4. R3 floor slab : 3572 PSI ( Av. of 3 cylinders)
5. R3 Porch & R1 column: 3678 PSI ( Av. of 3 cylinders)
6. R3 G.F. Lintel : 3290 PSI ( Av. of 3 cylinders)

INVITATION NO. : F3-COX'S BAZAR

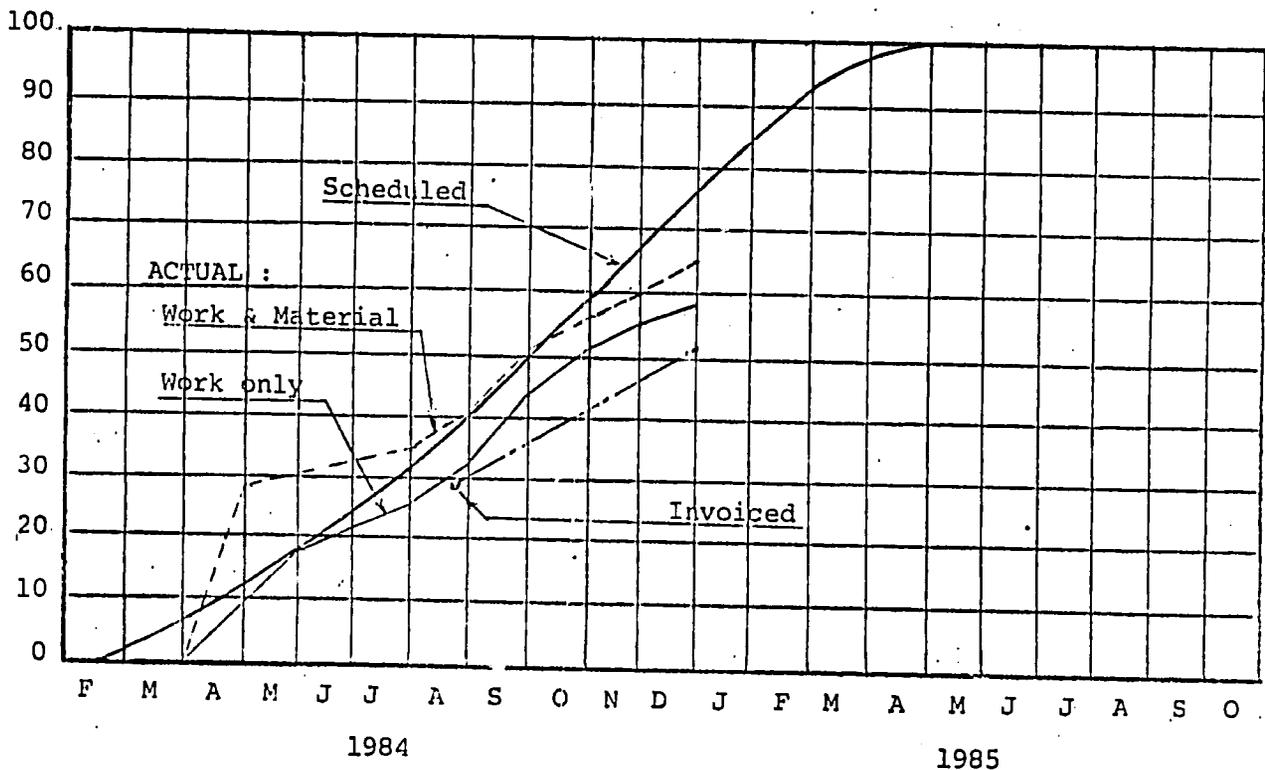
CONTRACTOR : Builders The Best Ltd.  
 Total Contract Price : Tk.99,64,470.85  
 Change Order/Directives : 5,10,819.78\*  
 Revised Contract Price : Tk.1,04,66,290.63\*  
 L/Com No. : 388-002406  
 Date of L/Com. : 31.01.84  
 Amount of L/Com. : Tk.99,64,470.85  
 (\$400,731.00)  
 L/Com. Amendment No.1 :  
 Performance Guarantee : Indosuez PB/TK/009  
 Tk.10,00,000  
 CAR/PL Insurance : DAC/CAR/P-13/5/84

Date of Contract : 12.01.84  
 Site Handed Over : 26.01.84  
 Notice To Proceed : 23.02.84  
 Scheduled Completion:30.04.85(433) \*  
 Elapsed Time :313 days . 72 %

%Completion			
Scheduled		Actual	
This Period	To Date	This Period	To Date
7%	76%	5%	65%
Work	:	3%	58%
Material	:	2%	7%

\* Pending Approval

CONSTRUCTION PROGRESS



	<u>This Period.</u>	<u>To Date</u>
A. Site Development	2%	69%
B. Warehouse	7%	52%
C. Ancillary Buildings	5%	71%
D. Water Supply, Sanitary, Plumbing	5%	32%
E. Electrical	7%	26%

Activities

The first half of the godown beam and roof slab forms are done and the reinforcing for the roof is being placed. The finishing work of the ancillary buildings continues. It has taken the contractor over two month to purchase and place the roof forms. They were then placed without approved shop drawings and had to be changed in part. All this causing unnecessary delays.

Action Required

BADC : . Hand over river access area  
. Approval of new river access design.

Work Schedule Next Month

Forming of godown roof slab. Casting of 40% of roof slab. Finishing work for Ancillary Buildings. Pouring of pavement.

Claims:

None

Financial

<u>Invoice No.</u>	<u>I t e m</u>	<u>Amount Invoice (Tk)</u>	<u>Payment</u>	<u>USAID Voucher No.</u>
F3-01	Progress Payment	Tk.29,70,417	29,40,711	1854
F3-02	" "	23,66,978.68		

Variations (Change Orders, Overrun, Underrun)

None this months

CONSOLIDATED MATERIALS TESTING REPORT

Project : Fertilizer Warehouses Phase III

For the month Dec. 1984

Site : Cox's Bazar

Material/Test	Spec. No.	No. of Tests	No. App- roved	No. Dis- Approved	Remarks/Requirement
A. Select Fill	2E.01-a	4	4	0	F.M. > 1.5
B. Concrete Sand	3A.02-b.1	1	1	0	F.M. 2.3 to 3.1
C. Mortar Sand	4A.03	1	1	0	F.M. 1.8 to 2.8
D. Plaster Sand	9B.02	1	1	0	F.M. > 1.6
E. Field Density Tests: Select Fill	2E.01	41	41	0	95% MDD

No. of test at  
3 days 7 days 28 days

F. Concrete: Compressive Strength Test	3A.03 3A.05	-	-	26	
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Average 28 day Strength of Concrete:

1. Godown column & Canopy : 3758 PSI (Av. of 6 cylinder)
2. R1 Stair 6th flt., 2nd floor roof slab, Pent house roof, parapet wall : 3768 PSI (Av. of 14 cylinder)
3. Public Toilet floor : 3616 (Av. of 2 cylinder)
4. Conc. Core of godown R.B. wall : 3529 (Av. of 4 cubes )

31 December 1984

INVITATION NO. : H2-CHOWMUHANI

CONTRACTOR : Technocon Limited

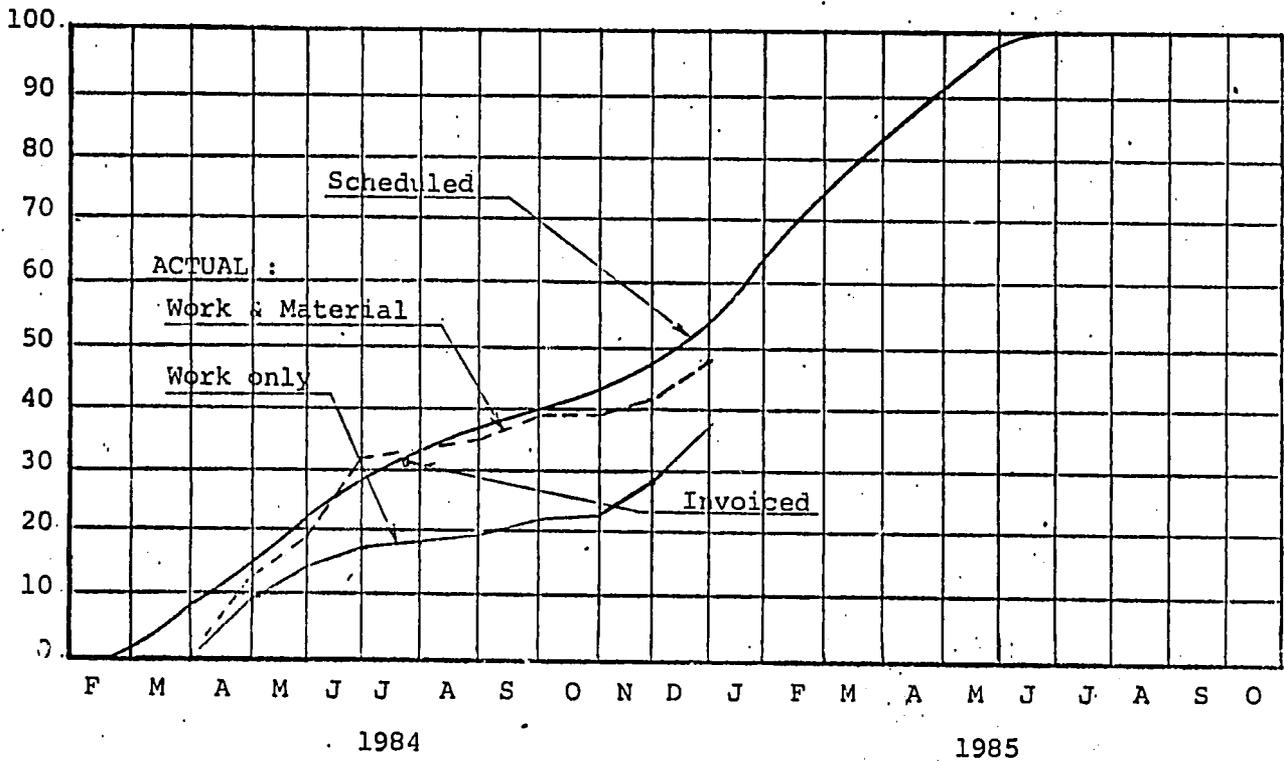
Total Contract Price	: Tk. 1,41,20,342.60	Date of Contract	: 12.01.84
Change Order/Directives	: 3,86,779.25*	Site Handed Over	: 31.01.84
Revised Contract Price:	: 1,45,07,121.85.	Notice To Proceed	: 23.02.84
L/Com No.	: 388-002407	Scheduled Completion:	: 30.06.85(494) *
Date of L/Com.	: 31.01.84	Elapsed Time	: 313 days . 63%
Amount of L/Com.	: Tk.1,41,20,342.60 (567,863.00)		

L/Com. Amendment No.1 :  
 Performance Guarantee : Indosuez PB/TK/006  
 Tk.14,12,035  
 CAR/PL Insurance : DAC/CAR/P-07/84

%Completion			
Scheduled		Actual	
This Period	To Date	This Period	To Date
6%	54%	7%	48%
Work	:	9%	37%
Material	:	- 2%	11%

\* Pending Approval

CONSTRUCTION PROGRESS



	<u>This Period.</u>	<u>To Date</u>
A. Site Development	1%	60%
B. Warehouse	16%	24%
C. Ancillary Buildings	15%	22%
D. Water Supply, Sanitary, Plumbing	-	10%
E. Electrical	1%	1%

Activities

The larger part of godown footings and grade beams have been cast, the columns are in progress, the brick work was started but slowed down by a temporary lack of bricks, now over come. The ancillary buildings progressed well: The floor slab of R3 was cast, the shuttering is done at R2 and at R1 the brick work is up to the lintel level. Boundary wall coping continued. The placing of compacted fill slowed down because much labor was occupied in the rice harvest. A trial well was drilled for the deep tube well.

The 9% work completed this month shows that the contractor is trying to catch up and over come previous delays.

Action Required

None

Work Scheduled Next Month

Continue columns and brick work at the godown, brick work to the roof at R2 and R3 casting of floor slab at R1. The placing of select fill will have to continue.

Claims

None

Financial

<u>Invoice No.</u>	<u>I t e m</u>	<u>Amount Invoice (Tk)</u>	<u>Payment (Tk)</u>	<u>USAID Voucher No.</u>
H2-01	Progress Payment	48,07,208.61	48,07,208.61	1572

Variations

None

CONSOLIDATED MATERIALS TESTING REPORT

Project : Fertilizer Warehouses Phase III

For the month Dec. 1984

Site : Chowmuhani

Material/Test	Spec. No.	No. of Tests	No. Approved	No. Dis-Approved	Remarks/Requirement
A. Select Fill	2E.01-a	21	21	0	F.M. > 1.5
B. Concrete Sand	3A.02-b.1	2	1	1	F.M. 2.3 to 3.1
C. Mortar Sand	4A.03	2	2	0	F.M. 1.8 to 2.8
D. Concrete Coarse Aggregate	3A.02-b.2	3	1	2	
E. Ordinary Fill	2E.01-b	5	1	4	Max. 20% passing sieve No. 200
F. Field Density Tests: Select Fill	2E.01	16	15	1	90% & 95% MDD

No. of test at

3 days 7 days 28 days

G. Concrete: Compressive Strength Test	3A.03 3A.05	-	43	28
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Average 28 day Strength of Concrete:

1. Godown column footings : 5028 PSI (Av. of 10 cylinders)
2. R3 Building Foundation c.c.: 4444 PSI (Av. of 3 cylinders)
3. R2 Building Foundation : 3913 PSI (Av. of 3 cylinders)
4. East head wall of pipe Culvert: 3913 PSI (Av. of 3 cylinders)
5. West head wall of P.C. and R2 column footing : 4267 PSI (Av. of 3 cylinders)

INVITATION NO. : H3-LAKSHMIPUR

CONTRACTOR : Technocon Limited

Total Contract Price : Tk.55,91,275.35

Change Order/Directives : 52,885.00

Revised Contract Price : Tk.56,44,160.35

L/Com No. : 388-002408

Date of L/Com. : 31.01.84

Amount of L/Com. : Tk.55,91,275.35  
(\$224,858.00)

L/Com. Amendment No.1 :

Performance Guarantee : Endosuez PB/TK/007

Tk.5,59,130

CAR/PL Insurance : D&C/CAR/P-06/4/84

Date of Contract : 12.01.84

Site Handed Over : 31.01.84

Notice To Proceed : 23.02.84

Scheduled Completion: 28.02.85(371) \*

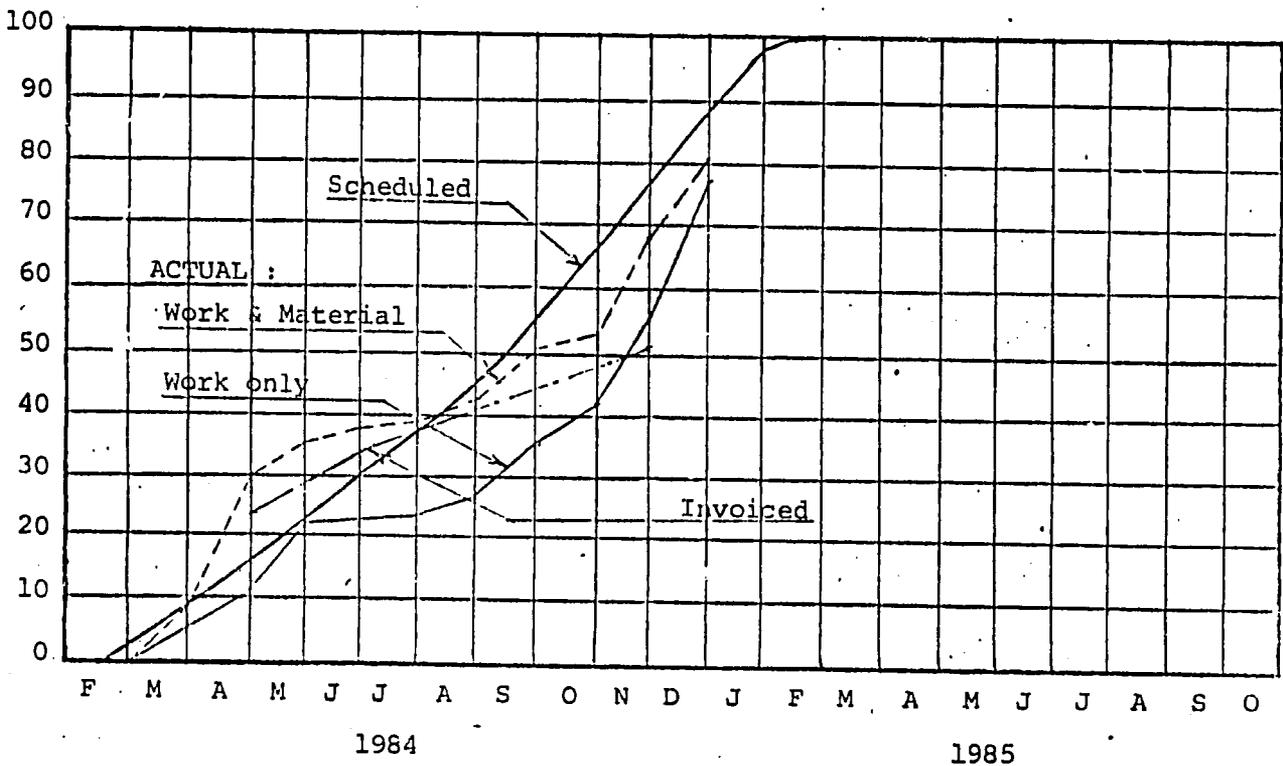
Elapsed Time : 313 days 84%

%Completion

Scheduled		Actual	
This Period	To Date	This Period	To Date
11%	88%	12%	81%
Work	:	21%	77%
Material	:	-9%	4%

\* Pending Approval

CONSTRUCTION PROGRESS



	<u>This Period.</u>	<u>To Date</u>
A. Site Development	5%	74%
B. Warehouse	37%	91%
C. Ancillary Buildings	5%	9%
D. Water Supply, Sanitary, Plumbing	5%	25%
E. Electrical	24%	32%

### Activities

The godown roof was placed in three days at the end of December. The compaction of road base continues. The road concrete pavement was started. The finishing of all work continues. A second test well was drilled and the exact depth of the deep tube well was determined.

The progress of this project was impressive. It should be substantially completed by the end of February.

### Action Required

None

### Work Scheduled Next Month

The godown roof vent will be cast. Form removal will be started. The asphalt roofing should also be started. Road pavement work will continue. The deep tube well should be drilled. The finishing of all other work should be driven forward.

### Claims

None

### Financial

<u>Invoice No.</u>	<u>I t e m</u>	<u>Amount Invoice (Tk)</u>	<u>Payment</u>	<u>USAID Voucher No.</u>
H3-01	Material Prepayment	12,72,681.70	12,72,681.70	1248
H3-02	Progress to 16.06	7,16,085.93	7,16,085.93	1597
H3-03	Progress to 26.11	9,11,814.00		

### Variations (Change Orders, Overruns, Underruns)

H3-01	Kitchen Chimney		+ Tk. 5,000.00
H3-02	Boundary Wall pending USAID's concurrence		+ Tk. 80,700.00
H3-03	Change Order - Underrun, Various items		- Tk. 32,815.00
			<u>+ Tk. 52,885.00</u>

CONSOLIDATED MATERIALS TESTING REPORT

Project : Fertilizer Warehouses Phase III

For the month Dec 1984

Site : Lakshmipur

Material/Test	Spec. No.	No. of Tests	No. Approved	Do. Dis-Approved	Remarks/Requirement
A. Select Fill	2E.01-a	12	10	2	F.M. 1.5
B. Concrete Sand	3A.02-b.1	9	6	3	F.M. 2.3 to 3.1
C. Concrete Coarse Aggregate	3A.02-b.2	3	3	0	
D. Field Density Tests: Select Fill	2E.01	33	11	22	95% MDD

No. of test at  
3 days 7 days 28 days

E. Concrete: Compressive Strength Test	3A.03 3A.05	-	27	73	
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Average 28 day Strength of Concrete:

1. Godown floor slab : 3815 PSI (Av. of 21 cylinders)
2. Godown Apron slab : 3741 PSI (Av. of 14 cylinders)
3. Guide wall & platform: 3486 PSI (Av. of 19 cylinders)
4. Core concrete of Godown R.B. wall : 3365 PSI (Av. of 6 cylinders )

INVITATION NO. : I4-CHANDPUR

CONTRACTOR : Fazle Azim Engineers Ltd.

Total Contract Price : Tk.1,70,67,822.35  
 Change Order/Directives : 17,03,243.50\*  
 Revised Contract Price. : 1,87,71,065.85\*  
 L/Com No. : 388-002409  
 Date of L/Com. : 31.01.84  
 Amount of L/Com. : (\$686,398.00)

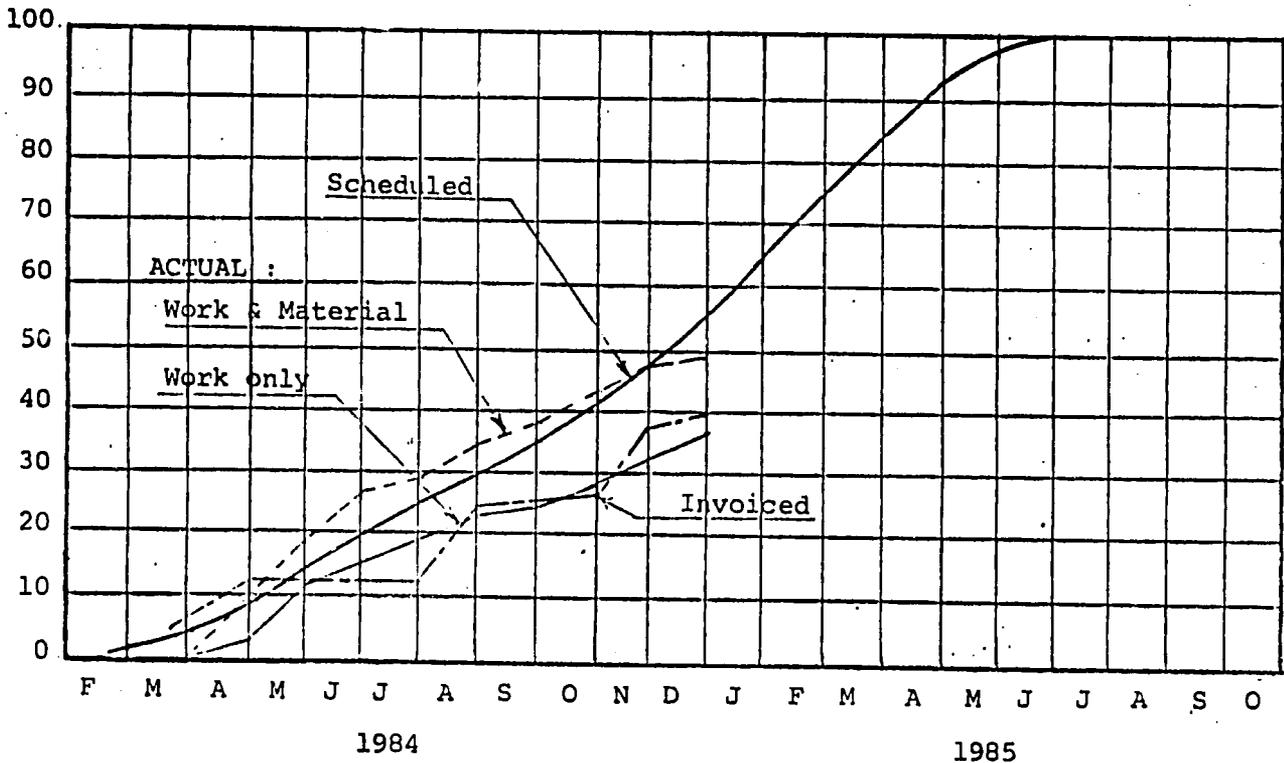
Date of Contract : 16.01.84  
 Site Handed Over : 31.01.84  
 Notice To Proceed : 23.02.84  
 Scheduled Completion: 30.06.85 (494) \*  
 Elapsed Time : 313 days 63 %

L/Com. Amendment No.1 :  
 Performance Guarantee : Janata MCK/002/84  
 Tk.17,10,000  
 CAR/PL Insurance : DAC/CAR/P-10/84  
 Fidelity Bond : MCK:004:84,06.03.84  
 Tk.8,53,400

%Completion			
Scheduled		Actual	
This Period	To Date	This Period	To Date
8%	56%	2%	49%
Work		: 5%	37%
Material		: - 3%	12%

\* Pending Approval

CONSTRUCTION PROGRESS



	<u>This Period.</u>	<u>To Date</u>
A. Site Development	11%	58%
B. Warehouse	-	35%
C. Ancillary Buildings	10%	19%
D. Water Supply, Sanitary, Plumbing	-	3%
E. Electrical	1%	1%

### Activities

The work on the godown has come to a complete standstill. The formwork could have been started two and one half month ago. The contractor does not procure shuttering material. The Engineer notified the contractor various times to proceed with the form work.

The ground floor brick walls were laid in ancillary building R2 and R3. At R1 foundations were placed and brick work at the ground floor level was started.

At the river side retaining wall the base slab was completed. The wall is in process or completed. A larger section of boundary wall was constructed.

This project is falling further and further behind schedule as can be seen from the 5% of work done against 8% as per schedule, if the contractor is unable to make up for previous delays. The notice to proceed for the access bridge was given on 9.12.84.

### Action Required

BADC and USAID : Approve cost estimate and retaining wall at Sen Gupta Road.

### Work Schedule Next Months:

Formwork for the eastern half of the godown. Brick work of ancillary buildings R1, R2 and R3. Boundary wall and retaining wall at river to continue, pile casting of the bridge to start.

### Claims

None

### Financial

<u>Invoice No.</u>	<u>I t e m</u>	<u>Amount Invoice (Tk)</u>	<u>Payment</u>	<u>USAID Voucher No.</u>
-	Mobilization Advance	8,53,391.12	8,53,391.12	0097
I4-01	Material Prepayment	14,06,400.00	14,06,400.00	1249
I4-02	Material Prepayment	6,26,500.00	(-6,26,500.00) 1/	1753
I4-03	Progress Payment	24,68,664.86	24,68,664.86	1855
I4-04	Progress Payment	18,19,286.50	18,19,286.50	0209
I4-05	Progress Payment	7,30,793.84	7,30,793.84	

1/ Amount recovered against Mobilization Advance Interest, to be determined by USAID, payable by Contractor on outstanding advance and delayed repayment.

Variations (Change Orders, Overruns, Underruns)

As per November Progress Report.

CONSOLIDATED MATERIALS TESTING REPORT

Project : Fertilizer Warehouses Phase III

For the month Dec. 1984

Site : Chandpur

Material/Test	Spec. No.	No. of Tests	No. Approved	No. Dis-Approved	Remarks/Requirement
A. Select Fill	2E.01-a	6	5	1	F.M. > 1.5
B. Concrete Sand	3A.02-b.1	2	2	0	F.M. 2.3 to 3.1
C. Mortar Sand	4A.03	2	2	0	F.M. 1.8 to 2.8
D. Bricks: Frogmark: G.C.L.	4A.02	5	5	0	Min. Av. compressive Strength is 2200 PSI
E. Field Density Tests: Select Fill	2E.01	45	41	4	95% MDD

No. of test at

3 days 7 days 28 days

F. Concrete: Compressive Strength Test	3A.03 3A.05	-	29	37
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Average 28 day Strength of Concrete:

1. Retaining Wall : 3637 PSI (Av. of 14 cylinders)
2. Boundary Wall c.c.: 3338 PSI (Av. of 5 cylinders)
3. R2 Building Fdn' : 3614 PSI (Av. of 9 cylinders)
4. R3 Building Fdn. : 3766 PSI (Av. of 6 cylinders)

INVITATION NO. : 05-PARBATIPUR

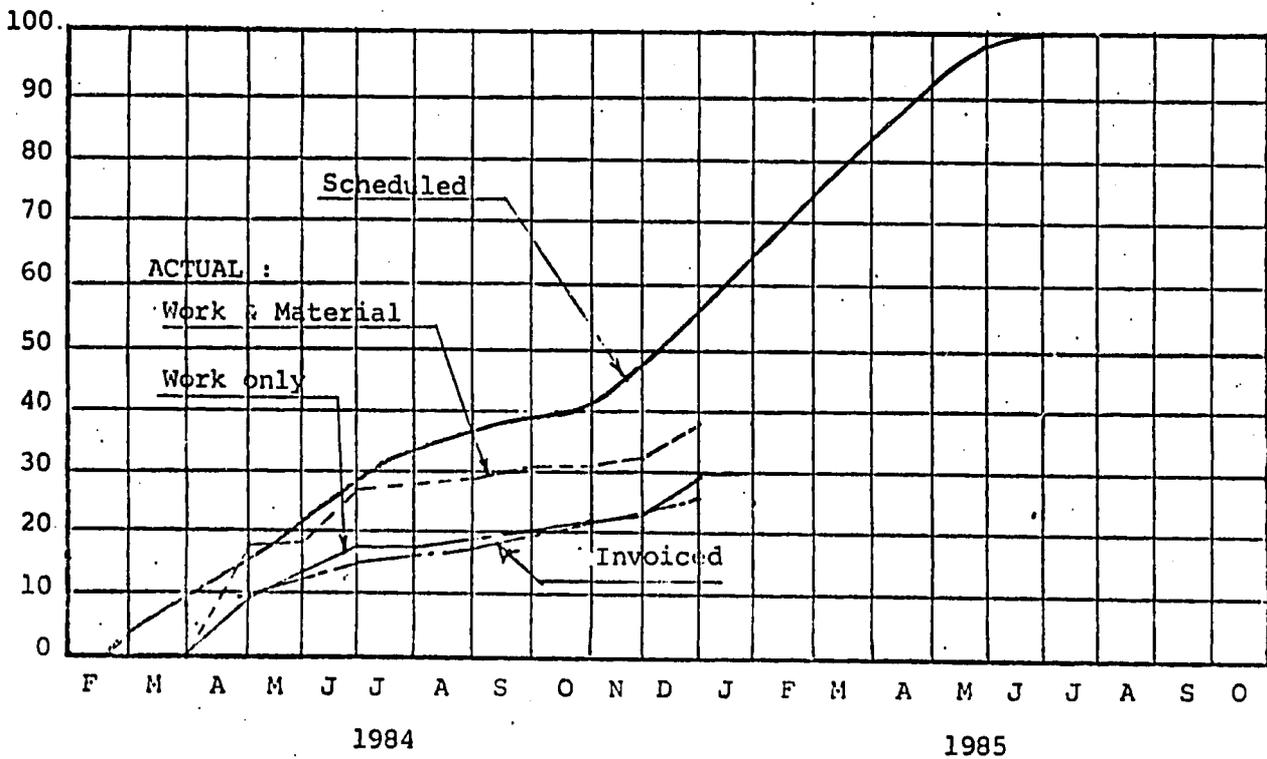
CONTRACTOR : The Elite Engineers Ltd.  
 Total Contract Price : Tk.1,70,02,196.40  
 Change Order/Directives : -  
 Revised Contract Price : Tk.1,70,02,196.40  
 I/Com No. : 388-002411  
 Date of L/Com. : 31.01.84  
 Amount of L/Com. : Tk.1,70,02,196.40  
 (\$683,759.00)  
 L/Com. Amendment No.1 :  
 Performance Guarantee : LG 84/42 BCCI  
 Tk.17,00,220  
 CAR/PL Insurance : DAC/CAR/P-11/5/84

Date of Contract : 12.01.84  
 Site Handed Over : 26.01.84  
 Notice To Proceed : 23.02.84  
 Scheduled Completion:30.06.85(494) \*  
 Elapsed Time : 313 days . 63 %

%Completion			
Scheduled		Actual	
This Period	To Date	This Period	To Date
8%	56%	6%	38%
Work	:	6%	29%
Material	:	-	9%

\* Pending Approval

CONSTRUCTION PROGRESS



	<u>This Period.</u>	<u>To Date</u>
A. Site Development	5%	42%
B. Warehouse	10%	13%
C. Ancillary Buildings	4%	49%
D. Water Supply, Sanitary, Plumbing	-	7%
E. Electrical	-	2%

### Activities

The surcharge was removed from the godown. The material is placed in the railroad embankment. Godown columns and footings are being placed. Some finishing work is going on in ancillary building R1 & R2. The brick work on R3 has proceeded to the lintel level. Construction of the boundary wall continues. In spite of all the work to be accomplished the contractor still employs only 2 carpenters. The Contractor is changing his site manager. The Engineer has suggested as a last resort to have Mr. Kim, an Ammann & Whitney engineer, installed as a Construction Advisor to get this project organized and moving. The Contractor has agreed to this. Mr. Kim has been in Parbatipur since the 17.12.84.

### Action Required

BADC : Establish the boundary to the north or the boundary wall can not be built.

### Work Scheduled for Next Month

Continue godown foundations and columns, construction of structural work of ancillary building R3 and interior work of R1 and R2. Filling of both railway tracks and continuation of boundary wall construction.

### Claim

None

### Financial

<u>Invoice No.</u>	<u>I t e m</u>	<u>Amount Invoice (Tk)</u>	<u>Payments (Tk)</u>	<u>USAID Voucher No.</u>
05-01	Material Prepayment	14,96,000	14,96,000	1225
05-02	Material Prepayment	12,16,750	12,16,750	1571
05-03	Progress Payment	16,45,747	16,45,071.71	1875
05-04	" "	1,78,402.39		
05-05	" "	12,94,979.50		

### Variations (Change Orders, Overruns, Underruns)

None

CONSOLIDATED MATERIALS TESTING REPORT

Project : Fertilizer Warehouses Phase III

For the month Dec. 1984

Site : Parbatipur

Material/Test	Spec. No.	No. of Tests	No. Approved	No. Dis-Approved	Remarks/Requirement
A. Select Fill	2E.01-1	1	1	0	F.M. > 1.5
B. Concrete Coarse Aggregate	3A.02-b.1	3	3	0	
C. Bricks:	4A.02	15	9	6	Min. Av. Compressive Strength is 2200 PSI
D. Field Density Tests: Select Fill	2E.01	35	26	9	90% & 95% MDD

No. of test at  
3 days 7 days 28 days

E. Concrete: Compressive Strength Test	3A.03 3A.05	-	24	27	
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Average 28 day Strength of Concrete:

1. Godown column footings : 4027 PSI (Av. of 12 cylinders)
2. R1 Pent house roof slab : 3914 PSI (Av. of 3 cylinders)
3. R2 " " " " : 3796 PSI (Av. of 3 cylinders)
4. R3 Foundation C.C. : 3984 PSI (Av. of 3 cylinders)

MONTH ENDING

31 December 1984

INVITATION NO.8 : L4-DOMAR

CONTRACTOR : M.S. Khan & Heirs Ltd.

Total Contract Price : Tk. 74,99,255.00

Change Orders : Tk.

Revised Contract Price : Tk. 74,99,255.00

Payments To Date : Tk.

Retention To Date : Tk.

L/Com. No. : 388-002410

Date of L/Com. : 31.01.84

Issue Date of L/Com. : 02.02.84

Amount of L/Com. : Tk.74,99,255.00  
(\$301,590.00)

L/Com. Amendment No.1 : 14.02.84

Date of Contract : 12.01.84

Site Handed Over : 25.01.84

Notice To Proceed : 02.02.84

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CONTRACT TERMINATED by CE Memo No.2995, 04.03.84 under Clause 80 of Conditions of Contract.

The Engineer made his final assessment and the Contractor has accepted the award. Acceptance by BADC is pending their action.

II. CONSULTANT'S ACTIVITIES

A. FINANCIAL - PROGRESS SCHEDULE

FINANCIAL

Total Procurement Budget	- \$ 2,014,567
Special Project Activity	- \$ 245,498
Total Contract Budget	- \$ 2,260,065
Estimated Expenditures To-Date	- \$ 1,523,470
% Expenditure to Total Contract Budget	- 67.4%

PROGRESS

Elapsed Contract Time (30.11.84)	- 753 days
Remaining Contract Time (30.06.85)	- 181 days
% Elapsed Time)	- 80.6%

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 - 30 June 1985\*  
(30.74 mos.)
  
- . Months Completed - 24.74

\* Amendment No.1 dated 28.03.84

2. Expatriate Staff

		<u>Man-Months</u>	
		<u>Allocated</u>	<u>Utilized</u>
George A. Pecht	- Project Manager	27	21.64
Klaus Thieme	- Chief Construction Engineer	25	18.46
-	- Foundation Engineer	11	11.17
-	- Structural Engineer	6	4.91
Y.C. Kim	- Project Engineer	16	9.65

3. Contract Administration

- . USAID extending Project Assistance Completion Date (PACD) to July 28, 1986 (AID Letter No.671, 03.05.84)

4. Meetings

- . BADC/USAID/A&W monthly review meetings
- . Consultant's periodic staff review meetings
- . Meetings with construction contractors

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## II. Consultant's Activities

### 5. Supporting Bangladeshi Personnel

#### 5.1 WEL and SSL Personnel (Sub-Contractor)

<u>Designation</u>	<u>Man-Months</u>	
	<u>Allocated</u>	<u>Utilized</u>
Deputy Project Manager	27	23.7106
S&M Engineer	24	26.2728
Structural Engineer	9*	9.0388
Architect	4	3.8389
Electrical Engineer	6	6.0000
Railway Engineer	24	21.9089
Office Engineer	26	23.8656
Land Procurement Officer	24*	21.1366
Surveyor	25	20.3879
Instrument Man	25	18.5664
Rodman	25	12.8222
Chainman	25	22.0939
Draftsman*	69*	61.4025
Laboratory Technician	56	75.1432
Laboratory Assistant	56	50.0080
Estimator	48	28.8943
Senior Field Engineer	60	57.1486
Field Engineer	80	49.6931
Inspectors	128	78.7835
Drivers	94	46.9765
Messenger	34	-
Peon	34	-
Guard	68	-
Clerk	34	-
Typist	34	-

#### 5.2 Administrative Personnel

Administrative Manager	27	24.2324
Senior Accountant	27	24.5844
Assistant Accountant	44	22.6410
Secretary	27	24.3514
Printer	27	22.9069
Typist	72	57.6054
Clerk	45	34.0015
Drivers	103	88.7091
Messenger	45	21.8160
Peon	72	65.5110
Guard	90	110.7518
Radio Operator	48	-
Office Superintendent/Asst. Accountant	34	11.3478

\* Adjusted

II. Consultant's Activities

6. Project Expenditures  
(Estimated Project Cost Incurred)

<u>I t e m</u>	<u>Agreement Budget</u>	<u>Adjusted Budget</u>	<u>This Month</u>	<u>Cumulative</u>
Services in Bangladesh	\$ 746,188	\$ 790,172	\$ 24,076	\$ 621,963
Services in Home Office	176,178	176,178	-	141,480
International Travel, etc.	85,740	85,740	-	32,027
Housing Allowance Per Diem etc	91,075	102,775	1,397	71,944
Logistic Cost	223,400	223,400	2,137	107,435
Supporting Staff	382,404	387,842	12,556	235,059
Misc. Direct Costs	43,000	43,000	137	16,340
Fixed Fee	205,460	205,460 <sub>9</sub>	7,610	190,250
	<u>\$ 1,953,445</u>	<u>\$ 2,014,567</u>	<u>\$ 47,913</u>	<u>\$ 1,416,498</u>
Percent of Estimated Budget			2.38%	70.31%
Percent Contract Time (To 30.06.85)				80.48%
Special Project Activity	<u>306,620</u>	<u>245,498</u>	<u>2,150</u>	<u>106,972</u>
	2,260,065	2,260,065	50,063	1,523,470

7. Billing and Payment

<u>Invoice</u>	<u>Period Ending</u>	<u>Billing</u>	<u>Payment</u>
01-19	30 Sept 84	\$ 1,305,235.83	\$ 1,293,294.62
20 & 21	30 Nov 84	\$ 115,029.54	Under Process

8. Reports

- Monthly Progress Report No.24 for November 1984 submitted by letter /2606, 05 December 1984

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C. TECHNICAL

Summary of Consultant's Activities During This Month

The Engineer continued monitoring the construction work of the Contractors at each of the sites. Concrete cylinders were prepared from each concrete pour and tested at 7-day and 28-day to determine if strength conformed to specification requirements.

Testing of brick samples continues to determine if they meet specification requirements as to strength and dimensions.

Testing of other materials (select fill, mortar sand, cement) continues in the field and Dhaka laboratory to determine acceptance level for the project.

The Project Manager and Deputy Project Manager, supplement the site monitoring by the Chief Construction and Project Engineer by weekly site inspection trips.

The Engineer posted Mr. Y.O. Kim, Project Engineer, as Construction Advisor in Parbatipur starting 17.12.84.

In the office the Engineer is engaged in checking working (Shop) drawings submitted by the contractors, preparing supplemental and clarifying details, preparing Change Orders, and construction administrative functions. Work at each site is monitored by daily thru radio communication network and timely decisions made on site problems or questions raised.

Comments by BADC and USAID personnel on their site inspection visits receive immediate attention of the Project Manager.

- Analyzing contractor's claims and informing contractors of Engineer's decision.
- Preparing Change Orders as required.
- Determine variations (overruns and underruns) due to changed field conditions.
- Continuing testing at central laboratory and in field of materials to be incorporated in permanent work.
- Issued reminders to the contractors to comply with the Conditions of Contract and Technical Specifications by submitting required documents.
- Issued field message giving directions to contractors as required.
- Follow up on compliance with field message.
- Prepare instruction for contractors' and Engineer's personnel guidance in control of work and materials.

## II. Consultant's Activities

- Prepare and submit Monthly Progress Report.
- Monitoring resolution of site possession and removal of obstructions.
- Kept Manager (Storage) BADC, informed of obstructions and other problems at site.
- Held scheduled meetings with each of Contractors' and Consultant's key personnel.
- Continued site inspection, construction surveillance, and filing reports for action by key staff members.
- Continued monitoring availability of construction materials.
- Key staff members continuing inspecting sites and instructing Engineer's and Contractors' personnel on procedures.
- Spot checking materials and work approved by field staff.
- Checking shop drawings submitted.
- Monitoring contractors' progress against their construction schedules.
- Reviewing contractors' revised work schedule.
- Processing contractors' invoices for payments.
- Monitoring settlement platform elevations at sites surcharged.
- Items requiring follow-up:
  - . Monitoring field testing procedures and test results
  - . Monitoring activity and performance of field staff
  - . Monitoring compliance to field message issued by field staff
  - . Resolving of land problems by BADC
  - . Obtaining clearance from BR by BADC
  - . BADC action in obtaining incoming power line to sites
  - . Continue monitoring results of settlement platforms
  - . Review drainage design at each site on basis of experience during this monsoon period
  - . Review methods of stabilizing soils from erosion and rain-cuts.