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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. 28

31 MARCH 1985



AMMANN & WHITNEY
CONSULTING ENGINEERS
NEW YORK

in association with



WORLDWIDE ENGINEERS LTD.
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DHAKA



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

WAREHOUSES PHASE III

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

724-4.1.1/3096
07 April 1985

Subject : Monthly Progress Report No.28
- March 1985

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

Encl: Eleven (11) copies

GAP/neh


George A. Pecht
Project Manager

cc: Chariman, BADC w/encl. (1)
Member-Director (Irri) BADC w/encl. (1)
Member-Director (Storage) BADC w/encl.(1)
Chief Engineer (C) BADC w/encl. (1)
Mr. David E. Warner, CE, AID/D w/encl. (6)
File 724-1.4.2 w/encl.

AMMANN & WHITNEY
Consulting Engineers

FERTILIZER WAREHOUSES - PHASE III

Monthly Progress Report No.28
Month of March 1985

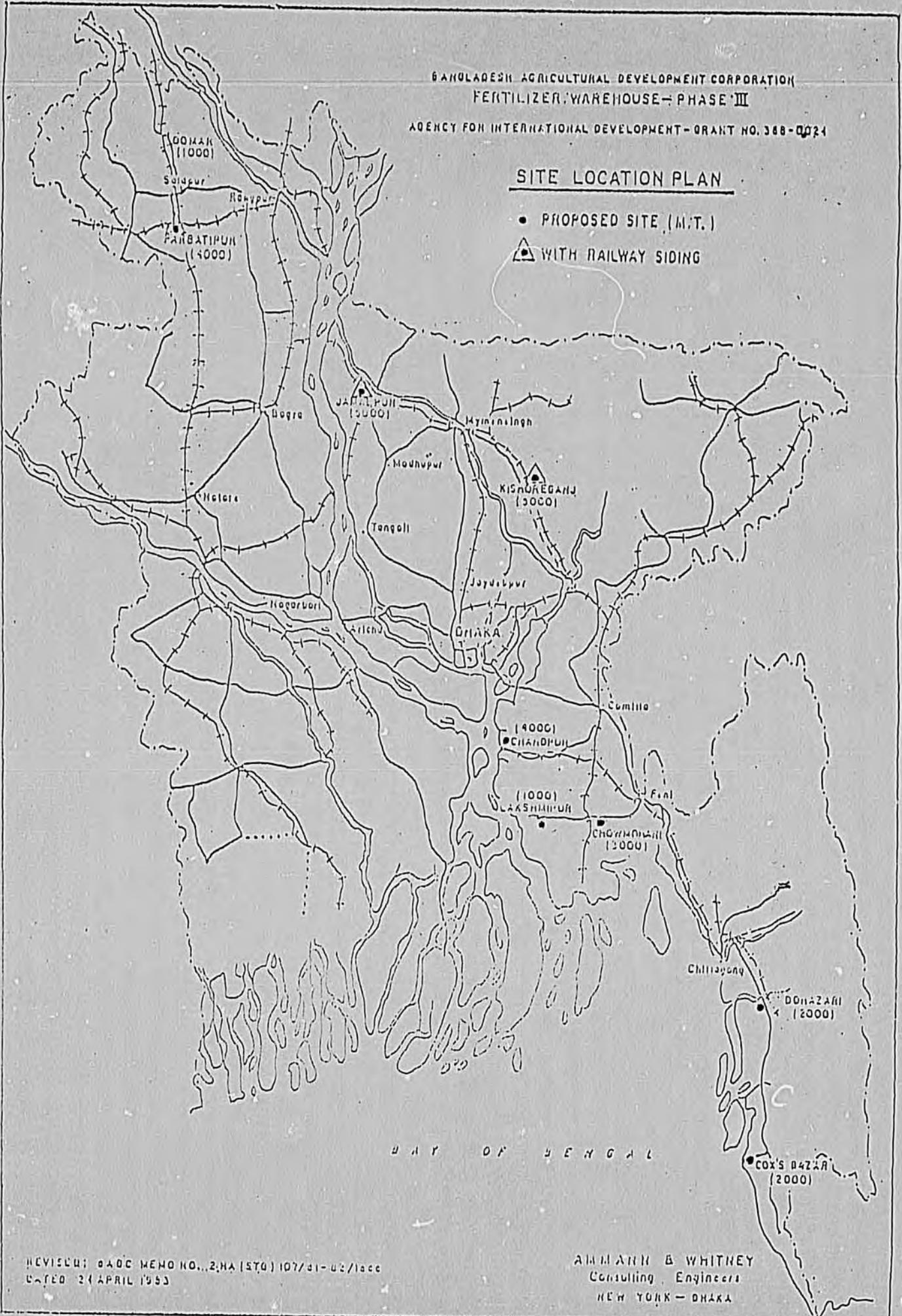
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BANGLADESH AGRICULTURAL DEVELOPMENT CORPORATION
 FERTILIZER WAREHOUSE - PHASE III
 AGENCY FOR INTERNATIONAL DEVELOPMENT - GRANT NO. 388-0024

SITE LOCATION PLAN

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



REVISION: DAOC MEMO NO. 2/NA (STG) 107/31-42/1acc
 DATED 21 APRIL 1953

AMMAN & 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' (26,100 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	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 total percentage of work completed this month was 58% and work and material 65.4%. This compares to 51% and 59.9% respectively for last month. It is a good 7% improvement for work completed. The total percentage of work and material completed is 65% against 86% scheduled, a gap of 21%.

The work at most sites has improved somewhat, At four sites (Kishoreganj, Jamalpur, Chowmuhani and Chandpur) godown roof casting was started. No roofs have yet been cast at Dohazari and Parbatipur. The godown roof at Cox's Bazar was completed during this month. The Lakshnipur site was handed over to BADC on 6 March 1985.

Kishoreganj

The first 15% (1½ of 10 bays) of the godown roof (north half) were cast; additional one bay area was formed. The slab is scheduled to be placed 3 April. The godown brick wall (south half) proceeded to 85% and will be completed next month if the Contractor completes the three remaining canopies and bottom vents. Since much effort was put to the work at the godown, the work in the ancillary buildings was slightly neglected. The brick work at R1 was brought to the first floor level; the form work for ground floor ceiling is nearly completed. All structural works of R2 and R3 buildings are complete and the finishing work continues. Some work was done on filling of parking areas and railway embankment.

The work completed to 7% this month from 5% in February. It is probable that the work will be completed by 30 June.

Jamalpur

The progress of work on filling and placing guard walls for the access road proceeded nicely. The brick paving will start next month. The first two concrete pours covering 20% of the total roof area were placed for 3500 ton godown. Forming and placing of reinforcing for additional area is in process. The brick flooring for the 1500 Ton godown and a part of the 3500 ton godown was laid. All masonry walls for the godowns were completed. The finishing of the ancillary buildings continued with plastering and installation of windows and door frames.

8% of work was completed, a good deal of improvement over last month. Completion by 30 June 1985 is possible.

Dohazari

The filling of access road and parking areas continued. The brick pavement for the parking areas was started from the east side. The godown walls and columns were completed but very little formwork for 50% roof slab was placed during the month. Sufficient slab forms are not at site. It is not probable that 50% of roof slab will be poured early May. The Contractor has been in contact with the Cox's Bazar contractor to obtain his formwork/scaffolding. The finishing of the ancillary buildings continued.

The work completed this month amounts to only 5%, a poor performance, for no particular reason. The possibility of contractor completing the work by 30 June is very marginal.

The test well for the deep tube well was completed and the depth of well determined after test of water samples.

Cox's Bazar

After a good deal of delays caused by lack of active and positive management on the contractor's part, the last 60% of the godown roof were cast. The bituminous roofing was nearing completion. The contractor placed up to 70% of the pavement around the godown. The finishing of the ancillary buildings continues.

The test well for the deep tube well was completed and the depth of well determined after test of water samples.

The land for the river access was handed over by BADC to the contractor. He has cleared this area and will commence work in April.

The work done this month was 10% for total to date of 80%. The completion date for the project is 30 April 1985.

Chowmuhani

The contractor has put a great effort into all phases of this project. This is the best managed site in the project. The Contractor daily starts early and work late. In two large pours he placed 50% of the roof slab. The filling of parking area and between ancillary buildings progressed. Brick paving of the parking area was started. Finishing of the ancillary buildings with a large amount of plastering, door frame installation, plumbing and electrical work was a good show.

This month work completed was a satisfactory 11%. Completion by 30 June can easily be attained.

Lakshmipur:

This work at this site is substantially completed and was handed over to the Regional Manager (Storage) on 6 March 1985. The handing over was properly documented. During this month the contractor was working on punch list items. The filling of the pond (low lying area) at BADC's request to prevent unauthorised access resulted in additional work and issuing of change order.

The contractor hopes to complete all punch list items by 15 April 1985.

Chandpur

The Mehta Road fill was 80% completed. The Sen Gupta Road retaining wall was largely completed. The river side retaining wall was being backfilled. A test pile was driven for the bridge. One quarter of the godown roof slab (west side) was poured. Further form work is in progress. The structural work of the ancillary buildings progressed slowly.

The contractor has more people working this month than during the previous months. His efforts through are still not enough to complete the work on time. Delivery of acceptable bricks remains a problem as does the management and the quality of the work performed. The work accomplished during this month was 6% only.

Parbatipur

The filling of railway road and parking has progressed to 85% completion. The pavement of the access road was started but delayed due to lack of materials (cement) and skilled labor. Godown columns were cast and masonry walls placed. Roof forms were not erected because shuttering was not purchased timely. The roof slab of ancillary building R3 was cast after a delay due to lack of cement. The finishing of buildings R1 and R2 continues slowly.

There is still a lack of forcefull management and skilled labor. Materials are not at site when needed. The Construction Advisor has to guide the contractor at every step.

The contractor completed 5% of work during this month, he should have done twice as much. At present pace, the work may not be completed until August 1985.

2. RAILWAY SIDINGS

Kishoreganj

Railway land has been taken over and there are no apparent land problems with railway.

Jamalpur

Contractor has started railway embankment earthwork outside BADC property. No apparent railway land problems.

Parbatipur

BADC is requested to resolve the issue arising out of lease of Railway land including existing dead end meter gauge track to Coal Directorate. The existing dead end track is required for access to BADC warehouse (724-4.1.1/2495, 03.11.84).

Two meetings have now been scheduled to resolve this issue. They took place at the Railway office in Rajshahi and were attended by BADC and Mr. Bose, Ammann & Whitney's railway engineer. At both meetings nobody from the Coal Board attended and the issue could not be resolved. At both times Mr. Bose had to travel from Cox's Bazar to Rajshahi.

BADC to obtain approval from BR for manufacturer's drawing for mixed gauge turnout sent to BR by BADC.

Cost Estimates

BR's cost estimate for Jamalpur and Kishoreganj siding have been finalized in the meeting held with Divisional Engineer/BR, Executive Engineer/BADC and Railway Engineer/Ammann & Whitney on 23.02.85, 24.02.85 and 25.02.85. BR is to submit corrected estimate and detailed drawing for drain to BADC as per decisions taken in the meeting. BADC is continuing to follow up on this matter.

Engineer's comments on BR's cost estimate for Parbatipur siding have been sent to BADC. (724-4.1.1/2896, 16.02.85). BADC is following up finalization of this cost estimate.

Contractor's Activities

CONSTRUCTION CONTRACT AND FINANCIAL SUMMARY

Date : 31 March 1985

	L.C. Amount US \$	L.C. Equivalent (Tk)	Revised Contract Amount (Tk)	Retention (Tk)	Accumulated A. Invoiced (Tk)
Invitation No.1	B1-Kishoreganj	National Construction & Consult Ltd.			
L.C. 388-002403	797,885.00	1,98,40,012.82	-		
Change Order B1-01		(- 88,848.31)	1,97,51,164.51	8,21,469.58	92,93,561.20
Invitation No.2	C3-Jamalpur	Mostafa Brothers (Pvt) Ltd.			
L.C. 388-002404	711,599.00	1,76,94,451.01	1,76,94,451.01	6,00,581.07	76,79,229.62
Invitation No.3	F1-Dohazari	The Eastern Engineers Consortium Ltd.			
L.C. 388-002405	625,317.00	1,55,48,978.95	-	6,75,800.39	70,14,903.54
Change Order F1-01		7,162.50	1,55,56,141.45		
Invitation No.4	F3-Cox's Bazar	Builders The Best Ltd.			
L.C. 388-002406	400,731.00	99,64,470.85	-	5,23,314.50	65,99,839.09
Change Order F3-01		5,01,819.78	1,04,66,290.63		
Change Order F3-02		1,92,790.00	1,06,59,080.63		
Change Order F3-03		40,440.00	1,06,99,520.63		
Invitation No.5	H2-Chowmuhani	Technocon Limited			
L.C. 388-002407	567,863.00	1,41,20,342.60	-	4,98,924.71	62,37,430.44
Change Order H2-01		6,680.00	1,41,27,022.00		
Change Order H2-02		3,80,099.25	1,45,07,121.25		

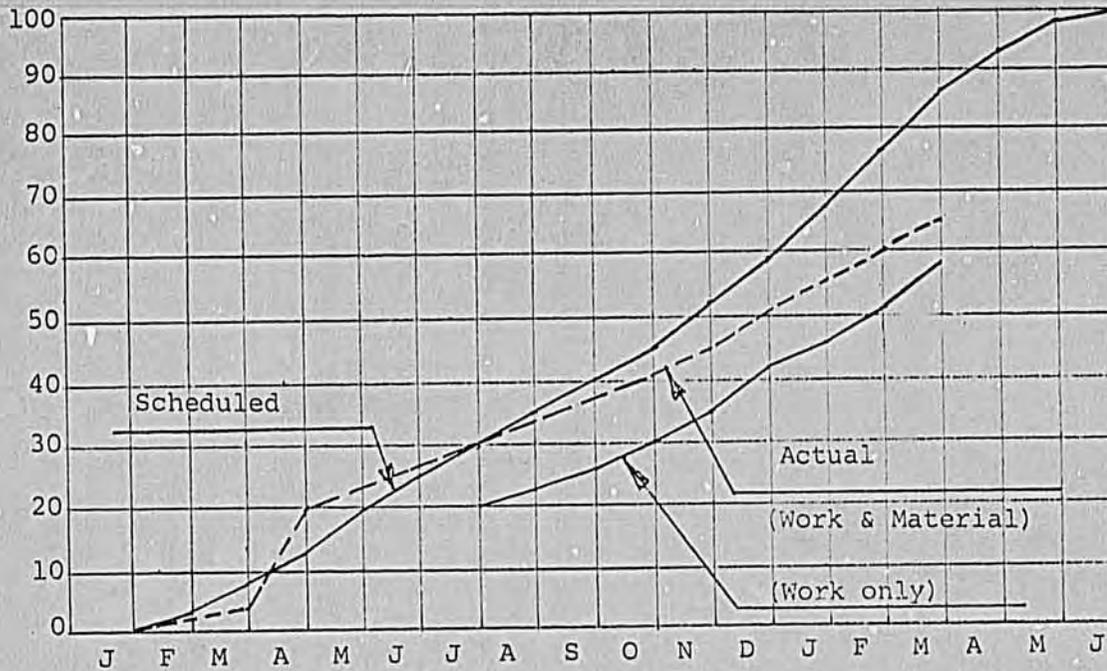
CONSTRUCTION CONTRACT AND FINANCIAL SUMMARY - cont'd

	L.C. Amount US \$	L.C. Equivalent (Tk)	Revised Contract Amount (Tk)	Retention (Tk)	Accumulated Amount Invoiced (Tk)
Invitation No.6	H3-Lakshnipur	Technocon Limited			
L.C. 388-002408	224,858.00	55,91,275.35	-	2,82,208.01	41,73,652.30
Change Order H3-01		5,000.00	55,96,275.35		
Change Order H3-02		80,700.00	56,76,975.35		
Change Order H3-03		(- 32,815.00)	56,44,160.35		
Change Order H3-04		62,876.00	57,07,036.35		
Change Order H3-05		17,500.00	57,24,536.35		
Invitation No.7	I4-Chandpur	Fazle Azim Engineers Ltd.			
L.C. 388-002409	686,398.00	1,70,67,822.35	-	6,31,519.89	82,39,278.99
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		
Change Order I4-03		9,07,240.00	1,82,32,022.35		
Change Order I4-04		5,39,043.50	1,92,46,355.85		
Change Order I4-05*		4,75,290.00	1,92,46,355.85		
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		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		7,37,342.28	78,50,080.02
TOTAL	5,000,000.00	12,76,80,243.05	12,07,64,071.07	47,71,160.43	5,76,71,058.82

* Pending BADC Approval.

47.8%

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	10.9
	0	1	20	20	20	26	28	33	35	45	51	53	58	64					
Jamalpur	3	8	14	19	23	27	31	34	39	46	55	63	72	81	90	98	100	15.35	9.8
	0	2	18	19	21	25	31	36	40	44	50	55	58	64					
Dohazari	4	10	16	22	30	38	43	48	51	55	60	69	79	87	94	99	100	13.31	8.4
	0	1	21	24	32	32	34	39	42	47	49	55	59	63					
Cox's Bzr	2	7	12	18	24	32	40	50	59	67	76	85	93	98	100			8.53	6.8
	0	1	27	37	42	36	41	51	57	60	65	67	73	80					
Chowmuhani	2	8	15	21	28	33	37	40	43	48	54	65	75	84	92	98	100	12.09	7.6
	0	1	13	18	33	33	34	39	39	41	48	52	56	63					
Lakshmipur	2	9	16	22	30	37	46	56	67	77	88	98	100					4.79	4.7
	0	8	30	36	39	39	43	51	54	68	81	89	95*	98*					
Chandpur	1	4	9	14	19	24	27	35	41	48	56	65	74	84	93	98	100	14.61	8.6
	0	1	11	18	26	29	34	38	43	47	49	52	55	59					
Parbatipur	2	9	16	23	30	33	36	39	42	48	56	65	74	83	92	98	100	14.55	8.6
	0	1	17	17	27	28	29	30	30	32	38	43	53	59					

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

Total : 65.4
 Last Month : 59.9

* Substantially complete

CONSTRUCTION PERCENT COMPLETION
(WORK ITEMS ONLY)

B-1

Site	- A - SITE DEVELOPMENT	- B - WAREHOUSE	- C - ANCILLARY BUILDINGS	- D - WATER SUPPLY SANITARY	- E - ELECTRICAL	TOTAL
Kishoreganj	81%	42%	51%	15%	5%	
Jamalpur	57%	52%	79%	17%	7%	54%
Dohazari	73%	42%	69%	8%	5%	57%
Cox's Bazar	83%	82%	90%	41%	31%	78%
Chowmuhani	70%	55%	59%	11%	3%	58%
Lakshmipur	98%	100%	100%	92%	95%	98% *
Chandpur	68%	46%	46%	8%	7%	49%
Parbatipur	67%	35%	69%	13%	2%	51%

Overall Project Completion - (Work Items Only) : 58%
Last Month : 51%

* Substantially complete

2

INVITATION NO. : B1-KISHOREGANJ

CONTRACTOR : National Construction & Consult Ltd.

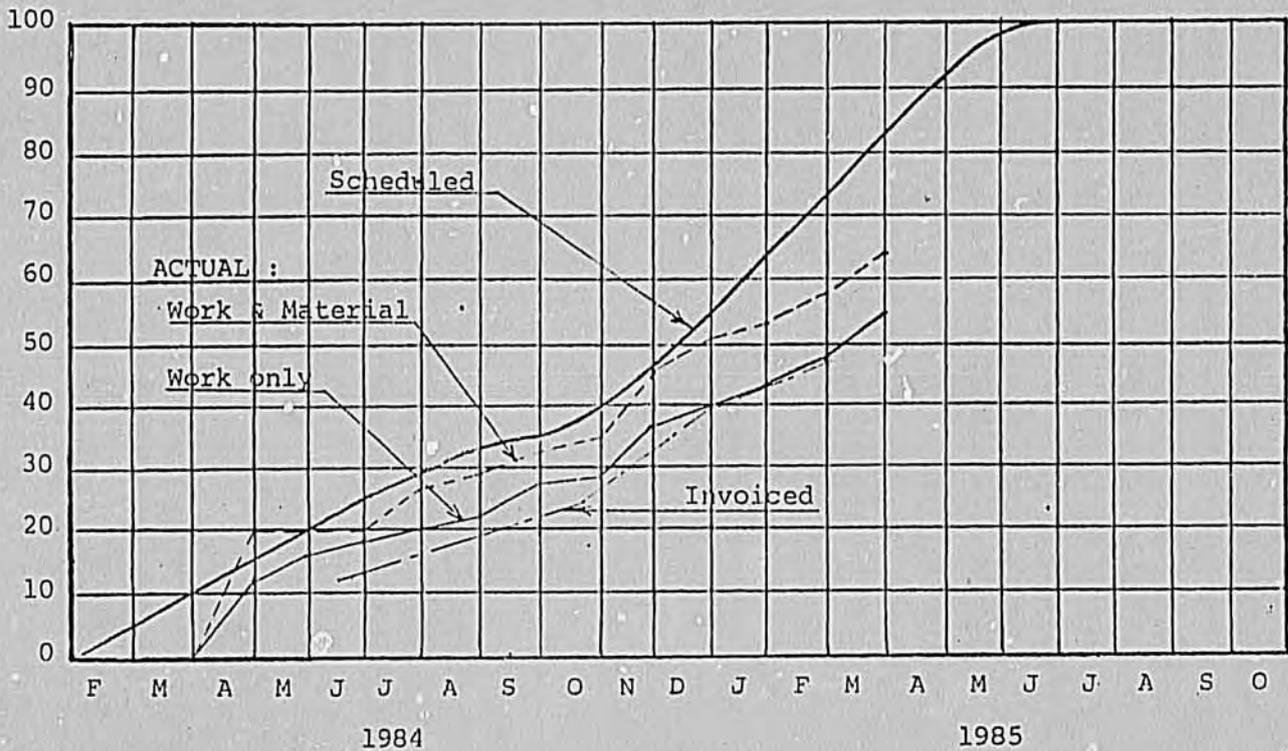
Total Contract Price : Tk.1,98,40,012.82
 Change Order/Directives : (-) 88,848.31
 Revised Contract Price : 1,97,51,164.51
 L/Com No. : 388-002403
 Date of L/Com. : 31.01.84
 Amount of L/Com. : Tk.1,98,40,012.82

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 : 424 days : 86 %

(797,885.00)
 L/Com. Amendment No.1 : 13.02.84
 L/Com. Amendment No.2 : 03.02.85
 Performance Guarantee : BCCI LG 84/75
 Tk.19,84,002
 Extended Expiry : 30.06.85
 CAR/PI Insurance : DAC/CAR/P-09/4/84
 Endorsement : -
 Expiry : 11.03.85

%Completion			
Scheduled		Actual	
This Period	To Date	This Period	To Date
9%	82%	6%	64%
	Work : 7%		55%
	Material : -1%		9%

* Pending Approval CONSTRUCTION PROGRESS



	<u>This Period</u>	<u>To Date</u>
A. Site Development	1%	81%
B. Warehouse	12%	42%
C. Ancillary Buildings	6%	51%
D. Water Supply, Sanitary, Plumbing	7%	15%
E. Electrical	4%	5%

Activities

Work of site development i.e. common fill & select fill of parking area and railway embankment has slowed down as against last month.

During this month the contractor cast 1½ bays or 15% of the godown roof, 20% of the roof area is being formed. The roof form material at the site amount to 35% of the roof area. More of the roof will be cast soon. The brick work at the godown progressed to 85% and will be finished shortly. Some canopies still have to be cast.

In ancillary building R1 the shuttering work for the first floor slab is in progress. Its casting is imminent. 80% of the fill in the building is placed. The plastering of parapets, walls and sunshades for R2 and R3 was completed. The electrical switch boards at both buildings have been installed. All window grilles arrived at site and 35% have been installed 50% of door frames have been manufactured. The plumbing was started at the R3 building. 85% of the soak wells are completed.

The work completed amounts to 7% this month as compared to 5% last month. The contractor increased his efforts and work force.

Action Required

BADC: Pursue BR to remove abandoned rails and ties (their property)
Pursue PDB to lower their estimate for the permanent power connection.

Work Scheduled Next Month

At the godown: casting of remaining canopies, finishing of brick walls and casting of more roof slabs. Brick pavement of godown and parking area. Casting of ground floor slabs at R2 and R3 of the first floor slab at R1. Brick work at R1 up to roof level. Continue finishing work at R2 and R3.

Claim

No Claims

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	21,57,900.00	1451
B1-02	Progress Payment	28,31,830.22	28,10,013.22	171
B1-03	Progress Payment	29,17,240.36	29,17,240.36	0514
B1-04	Progress Payment	14,08,407.62	14,08,407.62	

Variations (Change Orders, Overruns, Underruns)

None this month.

CONSOLIDATED MATERIALS TESTING REPORT

Project : Fertilizer Warehouses Phase III

For the month March 1985

Site : Kishoreganj

Materials/Test	Spec. No.	No. of Tests	No. Approved	No. Dis-Approved	Remarks/Requirement
A. Select Fill	2E.01-a	7	5	2	F.M. > 1.5
B. Concrete Sand	3A.02-b.1	1	1	0	F.M. 2.3 to 3.1
C. Concrete Coarse Aggregate	3A.02-b.2	6	3	3	
D. BRICKS: Frogmark:	4A.02	10	9	1	
E. Field Density Tests: Select Fill	2E.01	29	17	12	90% & 95% MDD

No. of test at
3 days 7 days 28 days

F. Concrete: Compressive Strength Test	3A.03 3A.05	4	33		
--	----------------	---	----	--	--

Average 28 day Strength of Concrete:

1. Godown columns - 4783 PSI (Av. of 18 cylinders)
2. Core Conc. of R.B. wall - 3682 PSI (Av. of 6 cubes)
3. R1 foundation C.C. - 4759 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 :

I/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 : 14.02.84

L/Com. Amendment No.2 : 03.02.85

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

Extended Expiry : 30.06.85

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

Endorsement : DAC/CAR/E-04/2/85

Expiry : 30.06.85

Date of Contract : 12.01.84

Site Handed Over : 19.01.84

Notice To Proceed : 02.02.84

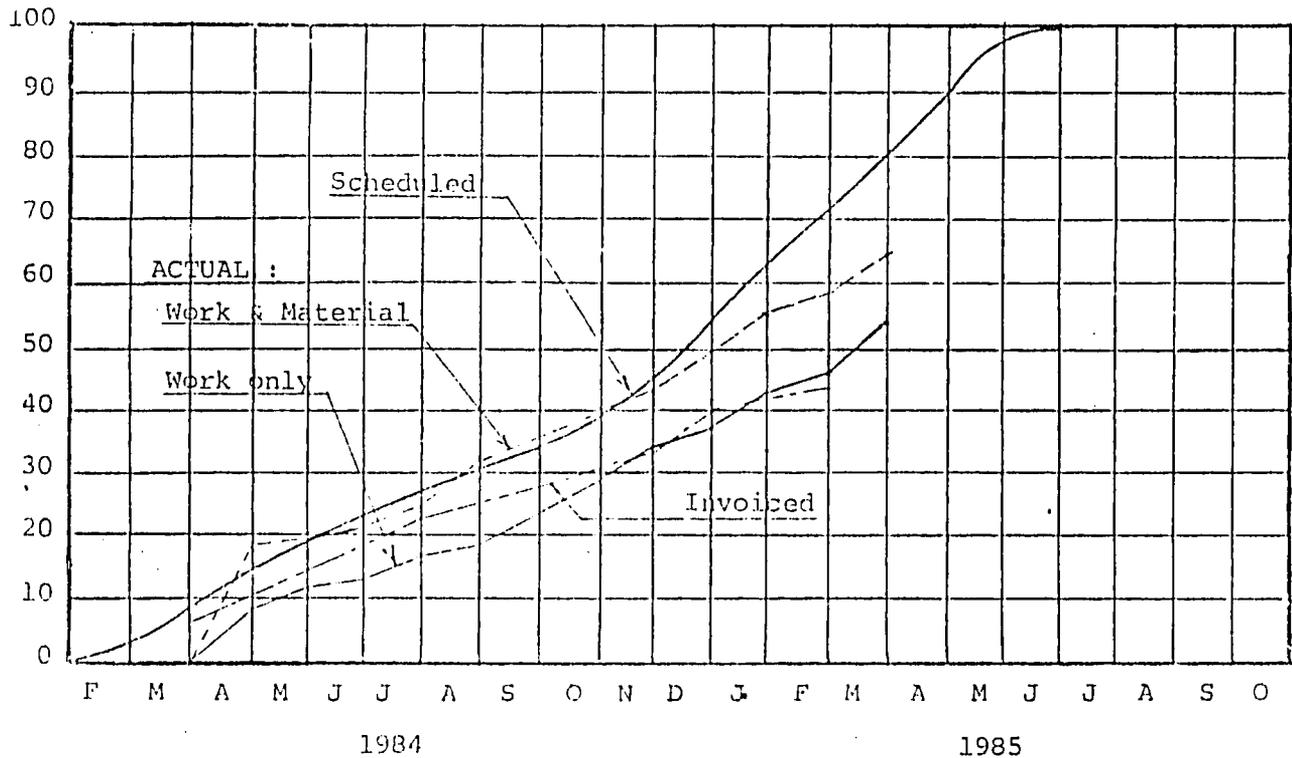
Scheduled Completion: 30.06.85(494)

Elapsed Time : 424 days .86 %

%Completion			
Scheduled		Actual	
This Period	To Date	This Period	To Date
9%	81%	6%	64%
Work	:	8%	54%
Material	:	- 2%	10%

* Pending Approval

CONSTRUCTION PROGRESS



	<u>This Period</u>	<u>To Date</u>
A. Site Development	2%	57%
B. Warehouse	12%	52%
C. Ancillary Buildings	11%	79%
D. Water Supply, Sanitary, Plumbing	2%	17%
E. Electrical	6%	7%

Activities

The filling of the very long access road and the railway siding is in progress. 30% of the guard walls for the access road were completed this month. The contractor is ready to lay brick pavement next month. The finishing of the 95% completed boundary wall made progress. Work on the guard house continued.

The contractor cast 30% of the roof slab for the 3,500T godown, the forms and reinforcing for 20% more of the 3,500T godown roof are nearly ready to be cast. The contractor has shuttering material at site for 45% of the total roof area (3,500T + 1,500T godown). The brick walls of the 1,500T godown were completed this month. The brick floor for this godown was also installed. 4,500 sq. ft. of brick flooring in the 3,500T godown were rejected by the Engineer. The contractor started to replace the flooring.

At the ancillary buildings the contractor worked on the slabs on grade. He plastered these buildings (50% of this work done this month to 75% completion), installed windows, wooden door frames and shutters, all about 80% completed. Soakwells were continued.

The 8% of work completed this month shows the contractor's increased efforts.

Actions Required

None

Work Scheduled Next Month

Construction of access road and parking area. Roof casting of the 3,500 T godown. Placing of lime concrete for the ancillary buildings.

Claims

None this month.

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	8,84,720.00	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	8,62,230.32	127
C3-04	Progress Payment	9,13,152.12	9,13,152.12	322
C3-05	Progress Payment	11,46,930.49	11,46,930.49	0578
C3-06	Progress Payment	6,79,664.48	6,79,664.48	

Variations (Change Orders, Overruns, Underruns)

None this month.

CONSOLIDATED MATERIALS TESTING REPORT

Project : Fertilizer Warehouses Phase III

For the month March 1985

Site : Jamalpur

Material/Test	Spec. No.	No. of Tests	No. App- roved	No. Dis- Approved	Remarks/Requirement
A. Concrete Sand	3A.02-b.1	1	1	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	2	2	0	
D. Bricks: Frogmark: Shaon	4A.02	5	4	1	
E. Field Density Tests: Select Fill	2E.01	67	65	2	95% MDD

No. of test at
3 days 7 days 28 days

F. Concrete: Compressive Strength Test	3A.03 3A.05	5	6		
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Average 28 days Strength of Concrete:

1. 1500 MT Godown columns - 3384 PSI (Av. of 3 cylinders)
2. 1500 MT Godown canopy - 3575 PSI (Av. of 3 cylinders)

MONTH ENDING
31 March 1985

INVITATION NO. : F1-DOHAZARI

CONTRACTOR : The Eastern Engineers Consortium Ltd.

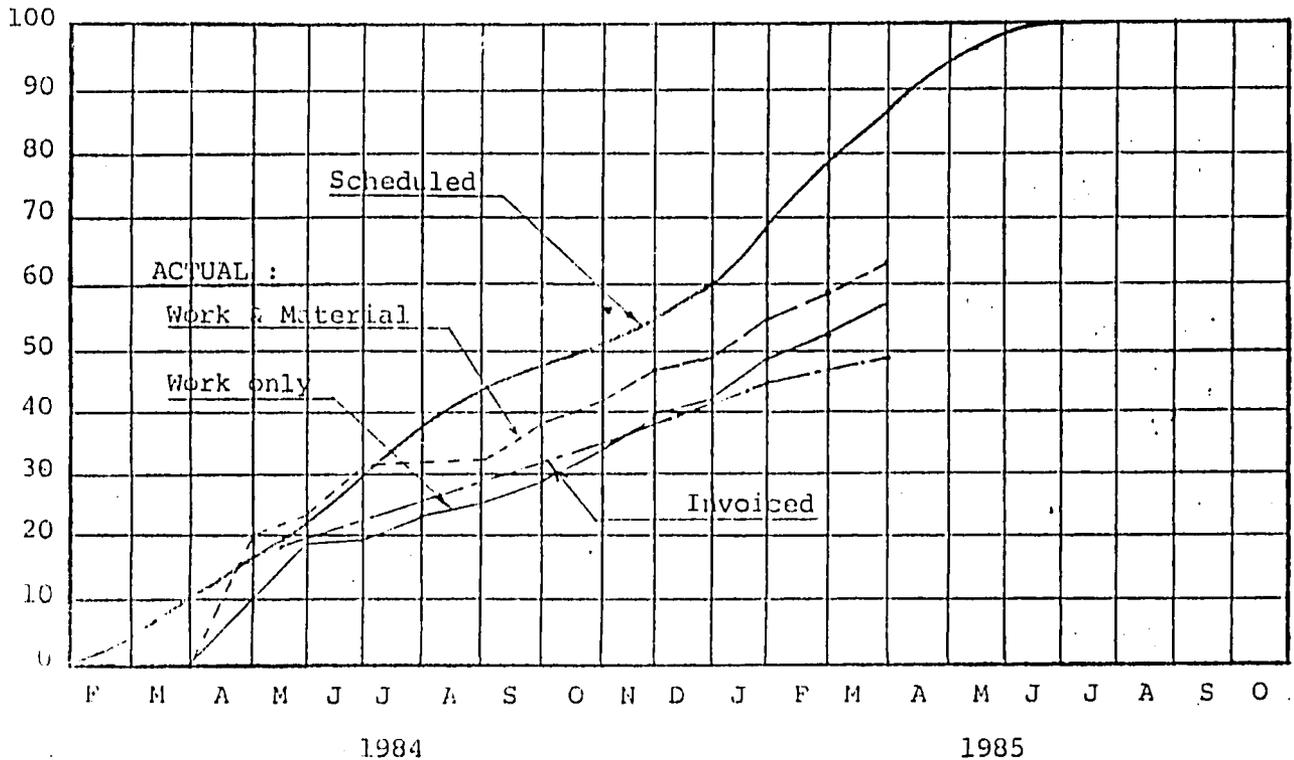
Total Contract Price	: Tk.1,55,48,978.95	Date of Contract	: 16.01.84
Change Order/Directives	: 7,162.50	Site Handed Over	: 26.01.84
Revised Contract Price.	: 1,55,56,141.45	Notice To Proceed	: 02.02.84
L/Com No.	: 388-002405	Scheduled Completion:	30.06.85 (494) d
Date of L/Com.	: 31.01.84	Elapsed Time	: 424 days 86 %

Amount of L/Com.	: Tk.1,55,48,978.95
	(\$625,317.00)
L/Com. Amendment No.1	: 14.02.84
L/Com. Amendment No.2	: 03.02.85
Performance Guarantee	: Agrani 001/84
	Tk.15,54,900
Extended Expiry	: 30.06.85
CAR/PL Insurance	: DAC/CAR/P-12/5/84
Endorsement	: DAC/CAR/E-08/3/85
Expiry	: 30.06.85

%Completion			
Scheduled		Actual	
This Period	To Date	This Period	To Date
8%	87%	4%	63%
	Work	: 5%	57%
	Material	: -1%	6%

* Pending Approval

CONSTRUCTION PROGRESS



	<u>This Period</u>	<u>To Date</u>
A. Site Development	2%	73%
B. Warehouse	6%	42%
C. Ancillary Buildings	10%	69%
D. Water Supply, Sanitary, Plumbing	-	8%
E. Electrical	-	5%

Activities

At the north and east side parking the filling was completed. At the access road filling is still in progress with about 60% of this work done. The access road fill should be completed next month. The brick pavement for the parking area was started and 14% was done. A good part of the godown apron curb was cast.

The godown brick wall, all columns, bottoms vents and canopies are completed. But very little progress was made on the roof shuttering of this relatively small godown. Some beam and girder forms for half of the godown roof were installed but no slab forms were erected. The contractor did not purchase enough shuttering material. He has now made arrangements with Cox's Bazar to obtain enough forms from there to complete the whole godown. A roof pour for this job is not anticipated before May.

The finishing of the ancillary buildings continued with about 33% of plastering done this month (to 45% completion) and about 35% of window frames with grilles and door frames installed during March. All structural work was completed.

The progress of this project is slow for no particular reason. The contractor may be short of funds. Only 5% of work was completed during this month, a poor performance.

Action Required

BADC : Clear last 10' of river access land from cultivation. The cultivator claims it is his land.

Work Scheduled Next Month

Continue paving of parking areas. The godown roof forming will continue and the first slab may be cast this month. The lime terracing shall be done at the ancillary buildings, their finishing will continue.

Claims

None

Financial

<u>Invoice No.</u>	<u>Item</u>	<u>Amount Invoice (Tk)</u>	<u>Payment</u>	<u>USAID Voucher No.</u>
F1-01	Material Prepayment	27,15,000.00	27,15,000.00	1281
F1-02	Progress Payment	11,71,789.83	11,71,780.00	1853
F1-03	Progress Payment	13,50,596.94	13,50,564.27	242
F1-04	Progress Payment	11,03,195.15	11,03,195.15	
F1-05	Progress Payment	6,74,331.36		

Variations (Change Orders, Overruns, Underruns)

A3	Excavation to Waste	- 1,06,874.50
A4	Excavation	- 89,830.87
A6	Filling with imported materials (Select)	- 10,86,002.50
A21	Surcharge	- 46,970.00
	Total Underrun	- 13,29,677.87

CONSOLIDATED MATERIALS TESTING REPORT

Project: Fertilizer Warehouses Phase III

For the month March 1985

Site : Dohazari

Material/Test	Spec. No.	No. of Test	No. App- roved	No. Dis- Approved	Remarks/Requirement
A. Concrete Sand	3A.02-b.1	1	1	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	2	2	0	
D. Bricks: Frogmark:	4A.02	5	5	0	
E. Field Density Tests: Select Fill	2E.01	138	124	14	90% & 95% MDD

No. of test at
3 days 7 days 28 days

F. Concrete: Compressive Strength Test	3A.03 3A.05	2	8		
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Average 28 day Strength of Concrete:

1. Godown canopy East side - 3888 PSI (Av. of 3 cylinders)
2. R3 Pent house roof slab - 3623 PSI (Av. of 3 cylinders)
3. Conc. core of R.B. Wall - 3343 PSI (Av. of 2 cylinders)

INVITATION NO. : F3-COX'S BAZAR

CONTRACTOR : Builders The Best Ltd.
 Total Contract Price : Tk.99,64,470.85
 Change Order/Directives : 7,35,049.78
 Revised Contract Price : 1,06,99,520.63
 L/Com No. : 388-002406
 Date of L/Com. : 31.01.84
 Amount of L/Com. : Tk.99,64,470.85
 (\$400,731.00)

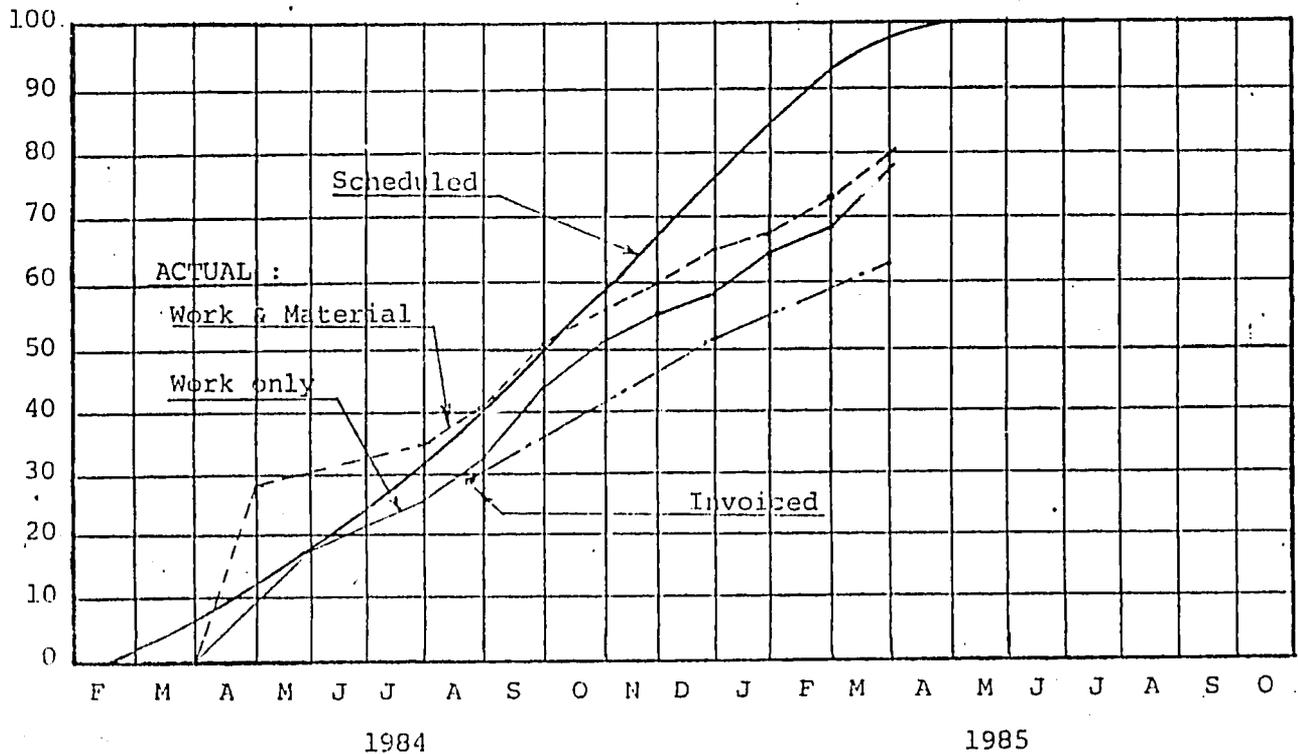
Date of Contract : 12.01.84
 Site Handed Over : 26.01.84
 Notice To Proceed : 23.02.84
 Scheduled Completion:30.04.85(433)
 Elapsed Time : 403 days . 93 %

L/Com. Amendment No.1 :
 Performance Guarantee : Indosuez PB/TK/009
 Tk.10,00,000
 Extended Expiry : 30.06.85
 CAR/PL Insurance : DAC/CAR/P-13/5/85
 Endorsement : DAC/CAR/E-18/12/84
 Expiry : 30.04.85

%Completion			
Scheduled		Actual	
This Period	To Date	This Period	To Date
5%	98%	7%	80%
Work		10%	78%
Material		3%	2%

* Pending Approval

CONSTRUCTION PROGRESS



	<u>This Period</u>	<u>To Date</u>
A. Site Development	1%	83%
B. Warehouse	18%	82%
C. Ancillary Buildings	4%	90%
D. Water Supply, Sanitary, Plumbing	-	41%
E. Electrical	-	31%

22

Activities

The placement of the pavement around the godown continued. It is 70% completed. The remainder will be cast in April. The Engineer determined the depth of the deep tube well. The deep tube well drilling was started during this month. After the removal of some latrines and fences the land for the river access was handed over to the contractor by BADC. The area was cleared of debris, tree stumps, vegetation and rubbish. Boundary post casting has been started.

After an unnecessary delay in the forming of the last 60% of the godown roof, caused by a lack of support posts, this part of the roof shuttering was finally completed, the reinforcing installed and the roof cast. No finishing of the previously completed 40% of the roof has yet been done by the contractor. The bituminous roofing was started and nearly completed during this month.

At the ancillary building the precast louvers were installed, the lime terrazing was completed, the painting and white washing is in progress and about 40% complete.

The work completed this month was 10%. Work and material are upto 80%. To complete the remaining 20% the contractor has only one month to the contractual completion date of 30.4.85.

Action Required

None

Work Scheduled Next Month

Remove roof shoring. Cast godown floor. Finishing of godown concrete roof.
Finish pavement around godown. Bring in deep tube well.

Claim

Contractor's letter 43/85 of 18.3.85, claim for 17 days time extension due to transport strike and hartals.

Financial

<u>Invoice No.</u>	<u>Item</u>	<u>Amount Invoice(Tk.)</u>	<u>Payment</u>	<u>USAID Voucher No.</u>
F3-01	Progress Payment	29,70,417.00	29,40,711.36	1854
F3-02	Progress Payment	23,66,978.68	20,56,826.46	0513
F3-03	Progress Payment	16,02,201.27	16,02,201.27	

Variations (Change Orders, Overrun, Underrun)

Original Contract Price	Tk. 99,64,470.85
Change Order F3-01	5,01,819.78
Change Order F3-02 (Proposed) River Access	1,92,790.00
Change Order F3-03 (Proposed) Boundary Posts	40,440.00
	Tk. 1,06,99,520.63

CONSOLIDATED MATERIALS TESTING REPORT

Project: Fertilizer Warehouses Phase III

For the month March 1985

Site : Cox's Bazar

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	2.3 to 3.1
B. Concrete Coarse Aggregate	3A.02-b.2	1	1	0	
C. Field Density Tests: Select Fill	2E.01	21	18	3	95% MDD

No. of test at
3 days 7 days 28 days

D. Concrete: Compressive Strength Test	3A.03 3A.05	36	26		
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Average 28 day Strength of Concrete:

1. 4" concrete pavement, Eastern side - 4117 PSI (Av. of 15 cylinders)
2. 4" concrete pavement south side - 4358 PSI (Av. of 9 cylinders)
3. Concrete core of R.B. Wall - 3271 PSI (Av. of 2 cubes)

INVITATION NO. : H2-CHOWMUHANI

CONTRACTOR : Technocon Limited

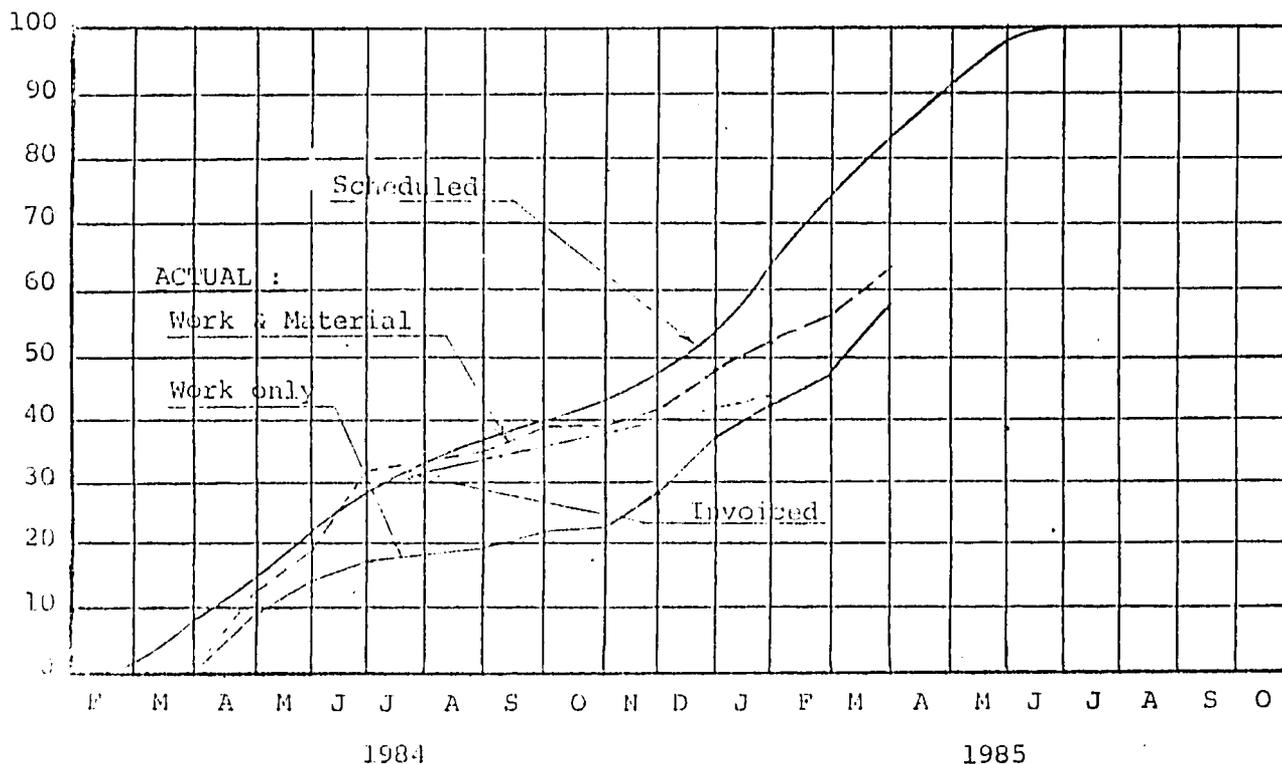
Total Contract Price : Tk. 1,41,20,342.60
 Change Order/Directives : 3,86,779.25
 Revised Contract Price : 1,45,07,121.85
 L/Con No. : 388-002407
 Date of L/Com. : 31.01.84
 Amount of L/Com. : Tk.1,41,20,342.60
 (\$567,863.00)

Date of Contract : 12.01.84
 Site Handed Over : 31.01.84
 Notice To Proceed : 23.02.84
 Scheduled Completion: 30.06.85(494)
 Elapsed Time : 403 days . 82 %

L/Com. Amendment No.1 : 03.02.85
 Performance Guarantee : Indosuez PB/TK/006
 Tk.14,12,035
 Extended Expiry : 30.06.85
 CAR/PL Insurance : DAC/CAR/P-07/84
 Endorsement : DAC/CAR/E-17/12/84
 Expiry : 30.06.85

%Completion			
Scheduled		Actual	
This Period	To Date	This Period	To Date
9%	84%	7%	63%
	Work	: 11%	58%
	Material	: - 4%	5%

CONSTRUCTION PROGRESS



	<u>This Period</u>	<u>To Date</u>
A. Site Development	6%	70%
B. Warehouse	22%	55%
C. Ancillary Buildings	5%	59%
D. Water Supply, Sanitary, Plumbing	-	11%
E. Electrical	1%	3%

25

Activities

Filling with ordinary fill at the south side of the ancillary buildings is in progress. The specifications for the material to be used here were relaxed somewhat, coupled with a reduction in price. Select fill was placed at the north side parking. About 97% of all select fill for this project has been placed. The brick pavement for the parking was started and 5% of it was completed this month. 16% of the concrete curb was placed during March. The work on the public toilet continued.

At the godown the canopies and all masonry walls were completed. 50% of the godown roof slab was completed in two days with the largest pours done yet, each 2,200 cft. and completed before night fall. An impressive accomplishment. Preparations to lay the brick floor in the second half of the godown are in progress.

The pent house and parapets at the ancillary buildings were completed. About 45% of all plastering was done of these buildings this month. 50% of all door frames were placed. Concrete louvers, plumbing, sanitary fixtures and electrical conduits were installed during March.

The contractor, with a determined effort, completed 11% of the work this month, the most any contractor ever accomplished in one month.

Action Required

None

Work Scheduled Next Month

Pavement in parking areas, filling at ancillary buildings. Prepare forms and reinforcing for the second part of the godown roof. Continue with finishing of ancillary buildings, especially lime terracing.

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
H2-02	-do-	14,30,222.28	14,30,222.28	

Variations

None

CONSOLIDATED MATERIALS TESTING REPORT

Project: Fertilizer Warehouses Phase III

For the month March 1985

Site : Chowmuhani

Material/Test	Spec. No.	No. of Tests	No. Approved	No. Dis-Approved	Remarks/Requirement
A. Select Fill	2E.01-a	5	4	1	F.M. > 1.5
B. Concrete Sand	3A.02-b.1	4	3	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	4	2	2	
E. Ordinary Fill	2E.01-b	3	3	0	Max. 20% passing sieve No. 200
F. Field Density Tests:					
Select Fill	2E.01-a	14	12	2	90% & 95% MDD
Ordinary Fill	2E.01-b	18	17	1	85% MDD

No. of test at
3 days 7 days 28 days

G. Concrete:					
Compressive	3A.03	-	16	43	
Strength Test	3A.05	-			

Average 28 day Strength of Concrete:

1. R3 - Roof slab	-	3690 PSI (Av. of 3 cylinder)
2. R2 - Roof slab	-	3467 PSI (Av. of 3 cylinder)
3. Godown columns	-	3485 PSI (Av. of 18 cylinder)
4. Godown canopy	-	3451 PSI (Av. of 6 cylinder)
5. R1 - Roof slab	-	3472 PSI (Av. of 3 cylinder)

INVITATION NO. : H3-LAKSHMIPUR

CONTRACTOR : Technocon Limited

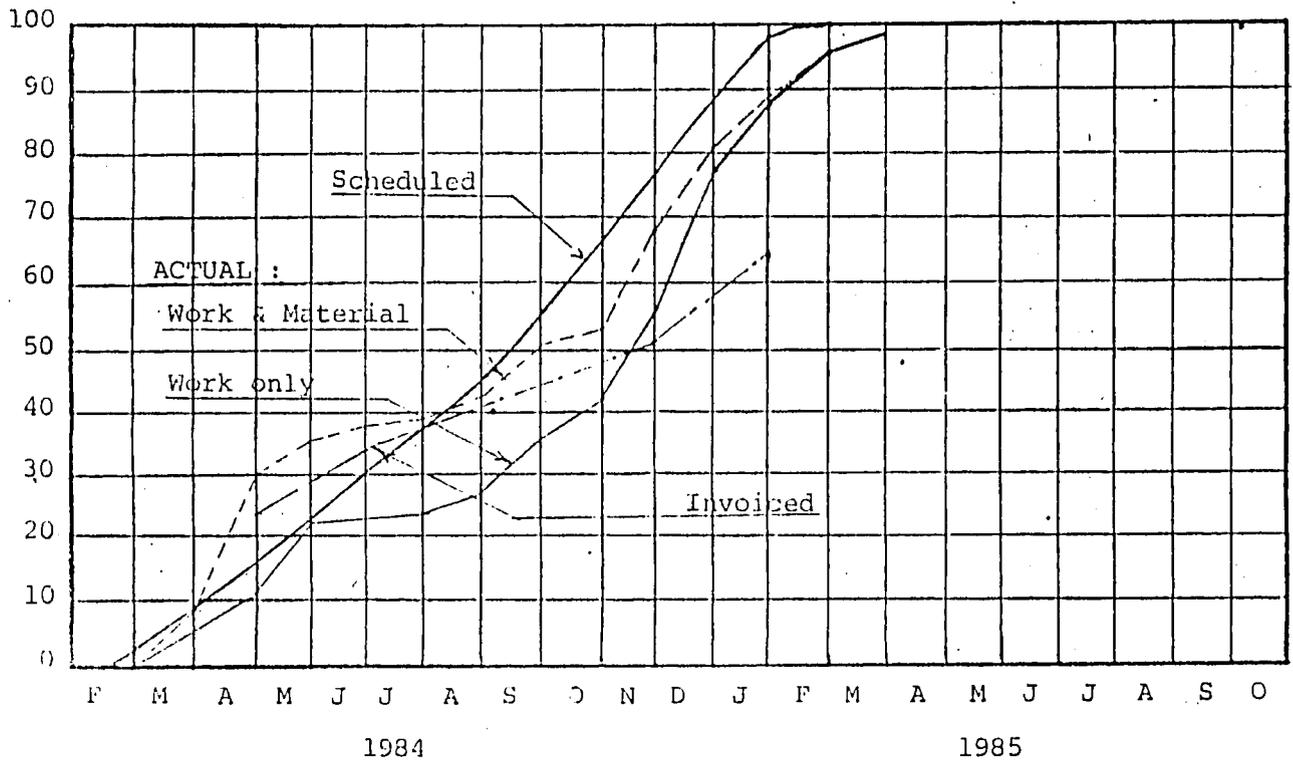
Total Contract Price : Tk.55,91,275.35
 Change Order/Directives : 1,33,261.00
 Revised Contract Price. : 57,24,536.35
 I/Com No. : 388-002408
 Date of L/Com. : 31.01.84
 Amount of L/Com. : Tk.55,91,275.35
 (\$224,858.00)

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 :402 days 100%⁺

L/Com. Amendment No.1 :
 Performance Guarantee : Indosuez PB/TK/007
 Tk.5,59,130
 Extended Expiry : 28.02.85
 CAR/PL Insurance : DAC/CAR/P-06/4/84
 Endorsement : -
 Expiry : 11.03.85

%Completion			
Scheduled		Actual	
This Period	To Date	This Period	To Date
-	100%	3%	98%
Work	:	3%	98%
Material	:	-	-

CONSTRUCTION PROGRESS



	<u>This Period</u>	<u>To Date</u>
A. Site Development	-	98%
B. Warehouse	-	100%
C. Ancillary Buildings	-	100%
D. Water Supply, Sanitary, Plumbing	28%	92%
E. Electrical	32%	95%

Activities

This project is substantially completed. The "Handing Over Possession" took place on 6 March 1985. The contractor handed over the project to BADC's Regional Manager Maizdi. A punch list signed at that occasion together with the Handing Over Possession document lists the work still to be completed or to be repaired.

In the meantime the Army made the old and new BADC facilities their marshal law administrative headquarters for Lakshmipur. The contractor was able to continue his work in spite of minor interference.

He is working on the punch list items. Many were finished during March. A new item was added at BADC's request with Change Order H3-05: The filling of the pond, to prevent access below the type B boundary wall.

Apart from this change order the main items still to be done are: Completion of the pump house and installation of the deep tube well pump (in process), removal of the contractor's facilities and obtaining the permanent power connection from PDB.

The contractor believes he will finish his work around 15 April 1985. The Engineer considers this project to be 98% complete.

Action Required

None

Work Schedule Next Month

The pump house has to be finished. The contractor's facilities have to be removed. The pond has to be filled. The contractor will continue to try to obtain the permanent power connection from PDB.

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	9,11,814.00	416
H3-04	Progress to 17.01	7,00,681.64	7,00,681.64	
H3-05	Progress to 27.02	5,72,389.03		

Variations (Change Orders, Overruns, Underruns)

Added this period:

Change Order H3-05 (Filling of pond)

Tk. 17,500.00

INVITATION NO. : I4-CHANDPUR

CONTRACTOR : Fazle Azim Engineers Ltd.

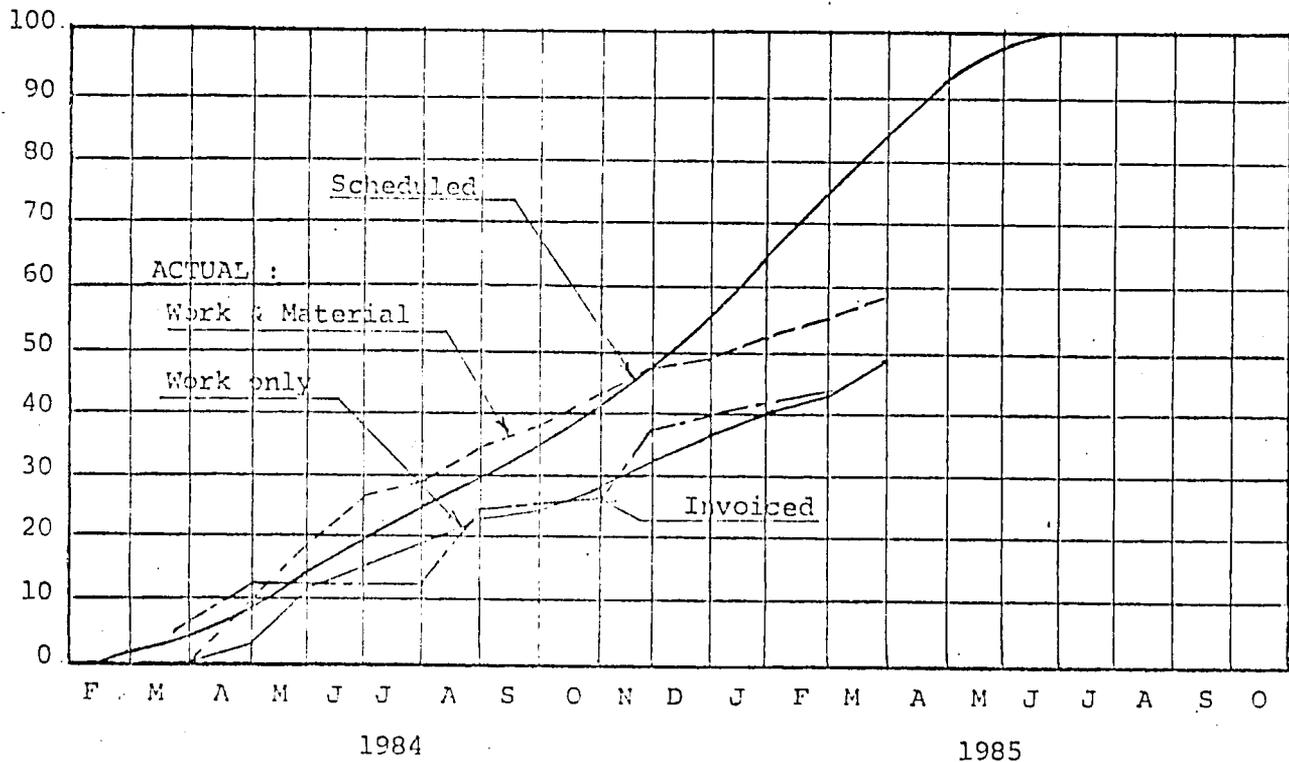
Total Contract Price : Tk.1,70,67,822.35
 Change Order/Directives : 21,78,533.50
 Revised Contract Price : 1,92,46,355.85
 L/Com No. : 388-002409
 Date of L/Com. : 31.01.84
 Amount of L/Com. : (\$686,398.00)

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 : 403 days . 83 %

L/Com. Amendment No.1 : 01.04.84
 L/Com. Amendment No.2 : 03.02.85
 Performance Guarantee : Janata MCH/002/84
 Tk.17,10,000
 Extended Expiry : 30.06.85
 CAR/PL Insurance : DAC/CAR/P-10/84
 Endorsement : DAC/CAR/E-19/12/84
 Expiry : 30.06.85

%Completion			
Scheduled		Actual	
This Period	To Date	This Period	To Date
10%	84%	4%	59%
	Work	: 6%	49%
	Material	: - 2%	10%

CONSTRUCTION PROGRESS



	<u>This Period</u>	<u>To Date</u>
A. Site Development	-	68%
B. Warehouse	6%	46%
C. Ancillary Buildings	7%	46%
D. Water Supply, Sanitary, Plumbing	-	8%
E. Electrical	3%	7%
F. Change Orders	24%	38%

Activities

At the Metha Road (C.O.#2) 50% of the earth embankment was placed during this month, reaching 80% completion. The foundation for the retaining wall along the Sen Gupta Road (C.O. #4) was excavated and placed. Most of the brick gravity wall was laid. Repairs on the existing retaining wall were started. The test pile for the bridge (C.O. #3) was driven. The results were good enough to reduce the anticipated length of some piles. The contractor started to cast the piles and completed 50% of them. The filling of the river side retaining wall was completed. Work on the public toilet continued.

The first 25% of the godown roof slab were placed in 2 pours. The forming of the next 25% is in slow progress, i.e. up to the expansion joint. Since 24 Feb'85 no bricks have been laid at the yet unfinished second half of the godown because the contractor did not purchase acceptable bricks.

At the ancillary buildings the roof slab of R3 was cast, the brick work of R1 progressed to the first floor, at R2 upto roof level. The work at the ancillary building was slowed down by a lack of bricks and attention to other parts of the project.

There was a constant lack of acceptable bricks. The work force was considerably increased during this month but the contractor is unable to work on all phases of this rather large site at the same time. The quality of work remained a problem. Work completed amounted to only 6% during March.

Action Required

BADC: Remove one shop at the Sen Gupta Road next to the bridge.

Work Scheduled Next Month

Finish Metha Road fill and Gupta Road retaining wall. Drive piles for the bridge. Continue with godown roof slab and godown brick work. Finish structural work of R1, R2, R3 and start finishing these buildings. Start pavement casting.

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	8,53,381.12	8,53,391.12	0097
I4-01	Material Prepayment	14,06,400.00	14,06,000.00	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	2001
I4-06	Progress Payment	9,60,742.67	9,60,742.67	

^{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)

Unchanged from previous month.

CONSOLIDATED MATERIALS TESTING REPORT

Project : Fertilizer Warehouses Phase III

For the month March 1985

Site : Chandpur

Material/Test	Spec. No.	No of Tests	No. App- roved	No. Dis- Approved	Remarks/Requirement
A. Select Fill	2E.01-a	4	3	1	F.M. > 1.5
B. Concrete Sand	3A.02-b.1	4	4	0	F.M. 2.3 to 3.1
C. Mortar Sand	4A.03	1	1	0	F.M. 1.8 to 2.8
D. Concrete Coarse Aggregate	3A.02-b.2	3	1	2	
E. Bricks: JBC Frogmark: ARS	4A.02	10 10	6 9	4 1	
F. Field Density Tests: Select Fill	2E.01-a	10	10	0	95% MDD
Ordinary Fill	2E.01-b	30	20	10	85% MDD

No. of test at
7 days 14 days 28 days

G. Concrete: Compressive Strength Test	3A.03 3A.05	22	5	45	
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Average 28 day Strength of Concrete:

1. Retaining wall stair - 4037 PSI (Av. of 4 cylinders)
2. Test pile - 5340 SI (Av. of 3 cylinders)
3. R2 Floor - 3630 PSI (Av. of 3 cylinders)
4. R1 Roof slabs - 3841 PSI (Av. of 3 cylinders)

INVITATION NO. : 05-PARBATIPUR

CONTRACTOR : The Elite Engineers Ltd.

Total Contract Price : Tk.1,70,02,196.40

Change Order/Directives : -500.00

Revised Contract Price : Tk.1,70,01,696.40

L/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 :

L/Com. Amendment No.2 : 06.02.85

Performance Guarantee : LG 84/42 BCCI
Tk.17,00,220

Extended Expiry : 08.07.85

CAR/PL Insurance : DAC/CAR/P-11/5/84

Endorsement : DAC/CAR/E-01/1/85

Expiry : 30.06.85

Date of Contract : 12.01.84

Site Handed Over : 26.01.84

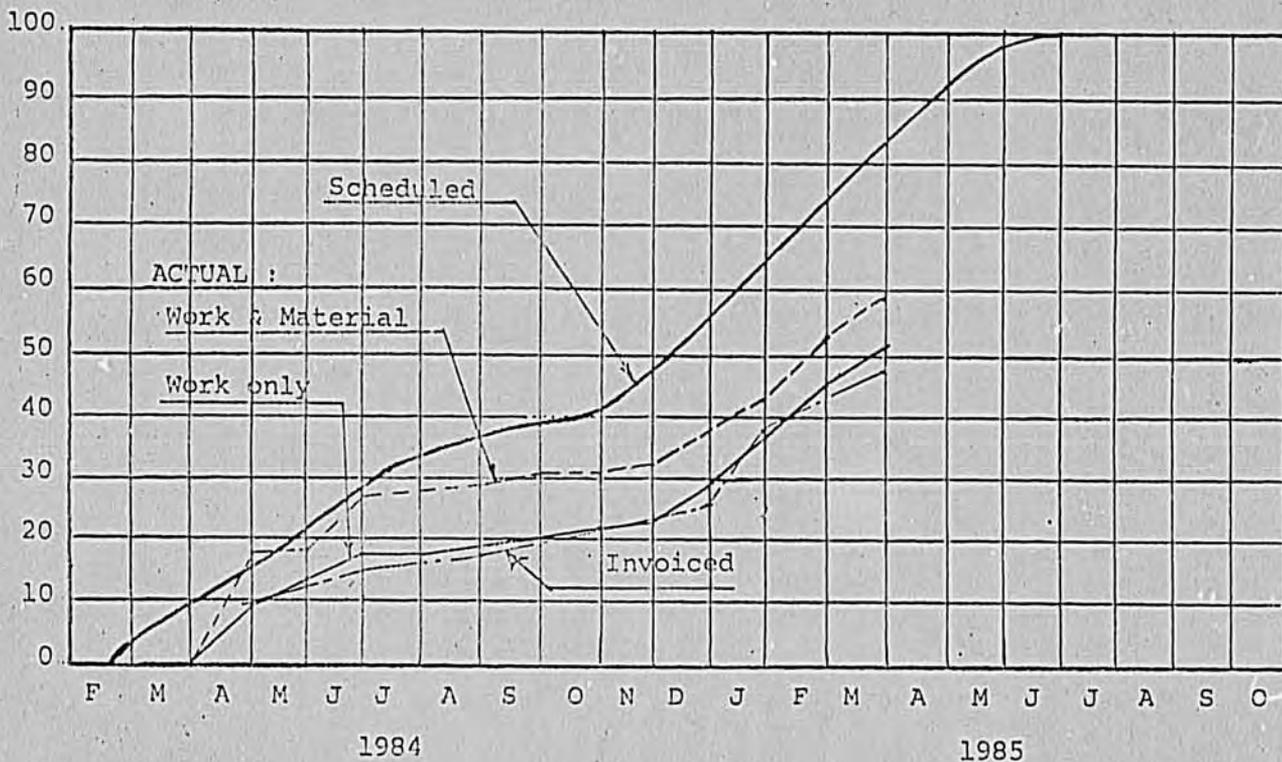
Notice To Proceed : 23.02.84

Scheduled Completion:30.06.85(494)

Elapsed Time : 403 days . 82 %

%Completion			
Scheduled		Actual	
This Period	To Date	This Period	To Date
9%	83%	6%	59%
Work	:	5%	51%
Material	:	1%	8%

CONSTRUCTION PROGRESS



	<u>This Period</u>	<u>To Date</u>
A. Site Development	3%	67%
B. Warehouse	7%	35%
C. Ancillary Buildings	6%	69%
D. Water Supply, Sanitary, Plumbing	-	13%
E. Electrical	-	2%

Activities

Select filling of railway embankment, parking and permanent access road is coming closer to completion. Only about 15% of select fill remains to be placed. The first pavement for the access road - about 15% - was poured this month. The progress here was slow due to lack of forms and skilled workers. The construction of boundary walls type A and B continues with 2% and 7% completed this month. Some work on the guard house and gate was accomplished.

At the godown the brick work for the eastern half of the godown was completed. At the western half canopy and column casting as well as brick work are in progress. The form fabrication started this month. The contractor did not procure shuttering material in time. The percentages of completion are; Columns 71, canopies 60, masonry walls 64.

The roof slab of ancillary building R3 was cast after delays caused by lack of cement on site. Concrete floors on grade were poured for buildings R2 and R3. Cement finishing of the floors is in progress. The installation of door frames and windows continued with 40% and 46% of work completed.

The contractor completed only 5% of work during this month. He is unable to manage the site properly. There was a lack of materials especially cement and shuttering materials which slowed down the work. The contractor could not even perform a simple task like laying out the access road. He has to be urged on continuously by the Construction Adviser, provided by the Engineer, who has to plan a good part of the work for him.

Action Required

- BADC: . To resolve issue arising out of lease of Railway land to the Coal Directorate.
- . To obtain BR's approval for manufacturer's drawings for mixed gauge turnout.

Work Scheduled For Next Month

Paving of access road and Parking areas. Construction of boundary wall type B. Casting of remaining godown columns and laying of brick walls. Start to form godown roof. Continue finishing work at R1, R2 and R3.

Claim : 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>
05-01	Material Prepayment	14,96,000.00	14,96,000.00	1225
05-02	Material Prepayment	12,16,750.00	12,16,750.00	1271
05-03	Progress Payment	16,45,747.00	16,45,071.71	1875
05-04	Progress Payment	1,78,402.39	1,78,402.39	4.7
05-05	Progress Payment	12,94,979.50	12,94,979.50	0518
05-06	Progress Payment	6,94,771.00	6,94,771.00	
05-07	Progress Payment	13,24,105.92		

Variations (Change Orders, Overruns, Underruns)

Unchanged from last month.

CONSOLIDATED MATERIALS TESTING REPORT

Project : Fertilizer Warehouses Phase III

For the month March 1985

Site : Parbatipur

Material/Test	Spec. No.	No. of Tests	No. Approved	No. Dis-Approved	Remarks/Requirement
A. Select Fill	2E.01-a	2	2	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. Concrete Coarse Aggregate	3A.02-b.2	2	1	1	
E. Bricks: Frogmark:	4A.02	5	5	0	
F. Field Density Tests: Select Fill	2E.01	35	26	9	

No. of test at
3 days 7 days 28 days

G. Concrete: Compressive Strength Test	3A.03 3A.05	36	51		
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Average 28 day Strength of Concrete:

1. Godown columns - 3629 PSI (Av. of 27 cylinders)
2. Godown grade beam - 4020 PSI (Av. of 3 cylinder)
3. Godown canopy - 3849 PSI (Av. of 3 cylinders)
4. R1 Floor - 3666 PSI (Av. of 3 cylinders)

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INVITATION NO.8 : I4-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

Date of Contract : 12.01.84

Site Handed Over : 25.01.84

Notice To Proceed : 02.02.84

Date Terminated : 04.03.84

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

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

CONTRACT CLOSED OUT

FINAL PAYMENT CLAIM SETTLEMENT

AID Voucher No. AID-0544

Tk. 5,83,083.62 (\$22,479.29)

II. CONSULTANT'S ACTIVITIES

A. FINANCIAL - PROGRESS SCHEDULE

FINANCIAL

Total Procurement Budget	-	\$ 2,117,343
Special Project Activity	-	\$ 142,722
Total Contract Budget	-	\$ 2,260,065
Estimated Expenditures To-date	-	\$ 1,681,558
% Expenditure to Total Contract Budget	-	\$ 74.4%

PROGRESS

Elapsed Contract Time	(31.03.85)	-	843 days
Remaining Contract Time	(30.06.85)	-	91 days
% Elapsed Time	Amendment No. 1	-	90.3%
Remaining Contract Time	Amendment No. 2(31.12.85)	-	275 days
% Elapsed Time #2		-	75.4%

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 (Amendment No.1 dated 28.03.84) - 30 June 1985(30.74)mos.
- (Amendment No.2 (Pending)) - 31 Dec. 1985(36.74)mos.
- . Months Completed - 27.74

2. Expatriate Staff

		<u>Man-Months</u>	
		<u>Allocated*</u>	<u>Utilized</u>
George A. Pecht	- Project Manager	31	24.22
Klaus Thieme	- Chief Construction Engineer	26	21.32
-	- Foundation Engineer	11.2	11.17
-	- Structural Engineer	5	4.91
Y.O. Kim	- Project Engineer	18	12.52

3. Contract Administration

- . USAID extending Project Assistance Completion Date (PACD) to July 28, 1986 (AID Letter No.671, 03.05.84)
- . Pending BADC's action in executing amendment No.2 to Consultant's agreement. USAID has concurred with Consulnat's proposal.

4. Meetings

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

* Allocated as per Amendment No.2 (Pending)

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5. Supporting Bangladeshi Personnel5.1 WEL and SSL Personnel (Sub-Contractor)

<u>Designation</u>	<u>Man-Months</u>	
	<u>Allocated*</u>	<u>Utilized</u>
Deputy Project Manager	33	26.6278
S&M Engineer	33.5	29.2728
Structural Engineer	9	9.0388
Architect	4	3.8389
Electrical Engineer	10	10.1287
Railway Engineer	31	24.9089
Office Engineer	27	26.8656
Land Procurement Officer	24	24.1366
Surveyor	26.5	20.3879
Instrument Man	19	18.5664
Rodman	13	12.8222
Chainman	28	24.9663
Draftsman	79.5	67.1014
Laboratory Technician	117	89.8182
Laboratory Assistant	92	62.1951
Estimator	45	31.8943
Senior Field Engineer	93	68.9947
Field Engineer	77	61.4992
Inspectors	121	101.2535
Drivers	95	61.7760
Messenger	-	-
Peon	-	-
Guard	-	-
Clerk	-	-
Typist	-	-

5.2 Administrative Personnel

Administrative Manager	33.5	27.2324
Senior Accountant	34	27.3548
Assistant Accountant	32	25.5688
Secretary	34	27.3164
Printer	30	25.7291
Typist	72	63.5247
Clerk	48	39.8765
Drivers	116	97.5320
Messenger	31	24.8160
Peon	93	74.4294
Guard	159	125.7518
Radio Operator	-	-
Office Superintendent/Asst. Accountant	19	14.3478

* Allocated as per Amendment No.2 (Pending)

II. Consultant's Activities

Project Expenditures
(Estimated Project Cost Incurred)

<u>I t e m</u>	<u>Agreement Budget</u>	<u>Adjusted Budget #2</u>	<u>This Month</u>	<u>Cumulative</u>
Services In Bangladesh	\$ 746,188	\$ 858,524	\$ 22,671	\$ 702,151
Service in Home Office	176,178	191,922	-	142,731
International Travel, etc.	85,740	71,438	-	32,027
Housing Allowance Per Diem etc.	91,075	99,294	2,339	80,053
Logistic Cost	223,400	166,633	5,463	119,284
Supporting Staff	382,404	359,626	12,290	272,875
Misc. Direct Costs	43,000	164,446	127	16,731
Fixed Fee	205,460	205,460	-	205,460
	<u>\$ 1,953,445</u>	<u>\$ 2,117,343</u>	<u>\$ 42,890</u>	<u>\$ 1,571,312</u>
Percent of Estimated Budget			2.03%	74.21%
Percent Contract Time (To 30.06.85)				90.24%
Special Project Activity	\$. 306,620	\$ 142,722	\$ 2,250	\$ 110.246
	<u>\$ 2,260,065</u>	<u>\$ 2,260.065</u>	<u>\$ 45,140</u>	<u>\$ 1,681,558</u>

Billing and Payment

<u>Invoice</u>	<u>Period Ending</u>	<u>Billing</u>	<u>Payment</u>
01-23	31 Jan. 1985	\$ 1,524,522.11	\$ 1,509,289.36
24	28 Feb. 1985	59,407.35	Under Process

Reports

- Monthly Progress Report No. 27 for February 1985 submitted by letter /2990, 05 March 1985.

C. TE CAL

Summary of Consultant's Activities During This Month

The Engineer continued monitoring the construction work of the Contractors at each of the sites.

Testing of materials (bricks, 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 from 17.12.84.

In the office the Engineer is engaged in checking working (shop) drawings submitted by the contractor; 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 of directive issued.
- Prepare instruction for Contractor's and Engineer's personnel guidance in control of work and materials.
- Make Contractors aware of requirements for timely procurement of materials and sequence of operation to accelerate the construction work.

II. Consultant's Activities

- Prepare and submit Monthly Progress Report.
- Monitor resolution of site possession and removal of obstructions.
- Keep Manager (Storage) BADC informed of onstructions and other problems at site.
- Held scheduled meetings with each of Contractors and Consultant's key personnel.
- Continue site inspection, construction surveillance, and filing reports for action by key staff members.
- Continue monitoring availability of construction materials.
- Spot check materials and work approved by field staff.
- Check shop drawings submitted.
- Monitor contractors' progress against their construction schedules.
- Review contractors' work schedule.
- Process contractor's invoices for payments.
- Items requiring follow-up:
 - Monitor field testing procedures and test results
 - Monitor activity and performance of field staff
 - Monitor compliance to field message issued by field staff
 - Resolving land problems by BADC
 - Obtain clearance from BR by BADC
 - BADC's action in obtaining incoming power line to sites