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



AGENCY FOR INTERNATIONAL DEVELOPMENT

Grant Financed

FERTILIZER DISTRIBUTION IMPROVEMENT - I (388-0024)

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

PROGRESS REPORT NO. 17

APRIL 1984



AMMANN & WHITNEY
CONSULTING ENGINEERS
NEW YORK

in association with



WORLDWIDE ENGINEERS LTD.
ARCHITECT-ENGINEERS
DHAKA



STHAPATI SANGSHAD LTD.
ARCHITECTS, ENGINEERS & PLANNERS
DHAKA

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

724-4.1.1/1751

12 May 1984

Subject : Monthly Report No.17
- April 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 copies to USAID.

Very truly yours
AMMANN & WHITNEY



George A. Pecht
Project Manager

Encl: Eleven (11) copies

GAP/neh

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

AMMANN & WHITNEY
Consulting Engineer

FERTILIZER WAREHOUSES - PHASE III

Monthly Progress Report No.17
Month of April 1984

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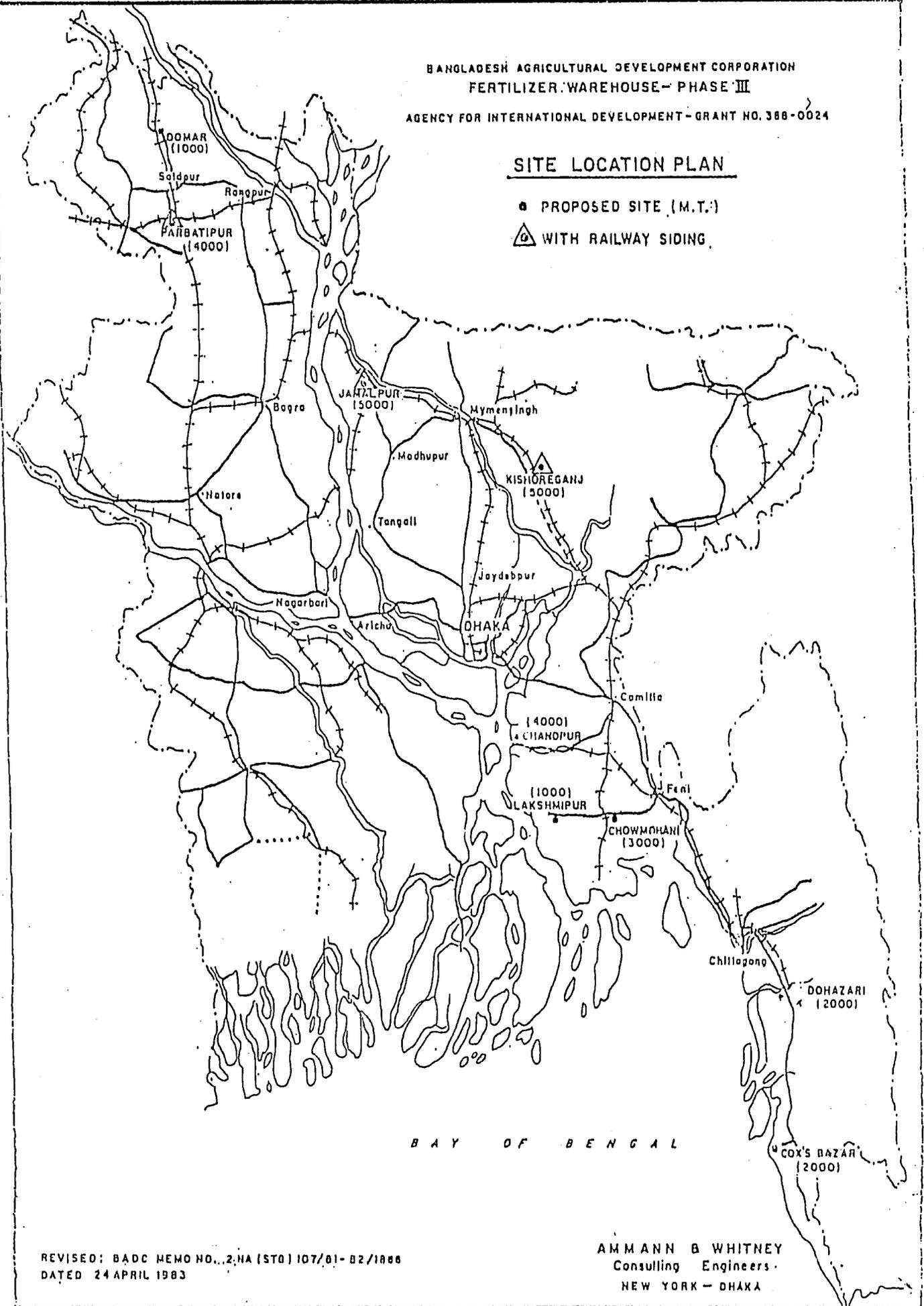
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BANGLADESH AGRICULTURAL DEVELOPMENT CORPORATION
FERTILIZER WAREHOUSE - PHASE III
AGENCY FOR INTERNATIONAL DEVELOPMENT - GRANT NO. 388-0024

SITE LOCATION PLAN

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



REVISED: BADC MEMO NO. 2/NA (STG) 107/01-02/1866
DATED 24 APRIL 1983

AMMANN & WHITNEY
Consulting Engineers
NEW YORK - DHAKA

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PROJECT DESCRIPTION

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

EMPLOYER : Bangladesh Agricultural Development Corporation

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

ENGINEER : Ammann & Whitney
Consulting Engineers
New York Dhaka

LIST OF SITES AND TONNAGE

<u>NAME OF SITE</u>	<u>TONNAGE</u>	<u>NAME OF DISTRICT</u>	<u>SIZE OF GODOWN</u>
B1 KISHOREGANJ	5000	MYMENSINGH	90'x 300' (27,000 sft)
C3 JAMALPUR	5000 (3500+1500)	JAMALPUR	120'x150'; 90'x90' (26,000 sft)
F1 DOHAZARI	2000	CHITTAGONG	90'x 120' (10,800 sft)
F3 COX'S BAZAR	2000	CHITTAGONG	90'x 120' (10,800 sft)
H2 CHOWMUHANI	3000	NOAKHALI	90'x 180' (16,200 sft)
H3 LAKSHMIPUR	1000	NOAKHALI	60'x 90' (5,400 sft)
I4 CHANDPUR	4000	COMILLA	120'x 180' (21,600 sft)
L4 DOMAR *	1000	RANGPUR	60'x 90' (5,400 sft)
O5T PARBATIPUR	4000	DINAJPUR	90'x 240' (21,600 sft)
TOTAL	27,000 M.T.		144,900 sft

* Contract Cancelled by BADC

I. CONTRACTORS' ACTIVITIES

CONSTRUCTION PHASE

1. Summary of Contractors' Activities During Month

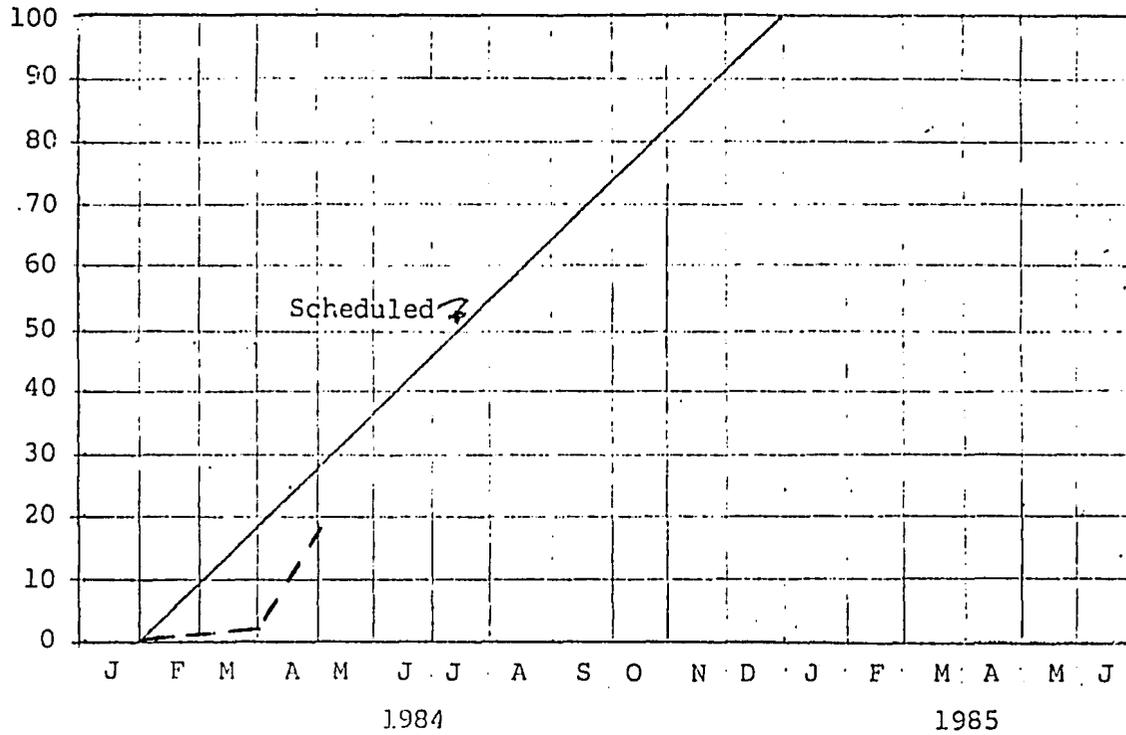
- . This month the percentage completion includes approved materials on-site not incorporated in the work. The percentage of completion is calculated on monetary value of each item of work. Since the unit price includes material, labor, equipment, and preparatory work, the inclusion of materials gives more exact method of calculating progress. As the material is incorporated in the work, the "material percentage progress" will decrease and the "work progress" increased. Reporting progress in this manner is still conservative because no account is made for preparatory work (re-bar bending, formwork, etc.) which is included in the unit price.
- . Generally the work has picked up at all sites except Chandpur. There are still planning difficulties and on-site management requires more improvement.
- . Lack of suitable compaction equipment that is available and operable at all times is a major bottleneck at sites requiring large amounts of fill material.
- . The monsoon rains present another factor which is cause of dislocation of schedules.
- . Labor strikes and wage demands also is a contractor problem which he must negotiate.
- . The contractors have been informed on construction techniques which should benefit the work.
- . Periodic meetings with the contractors both in office and field are held with the Engineer to create awareness of the task undertaken by the contractors and to stimulate them in progressing the work. The contractors have been reminded of their responsibilities in performing the work for which they offered a performance guarantee.

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Contractor's ActivitiesCONSTRUCTION
CONTRACT AND FINANCIAL SUMMARY

<u>Invitation No.</u>	<u>Site</u>	<u>Contractor</u>	<u>Contract Amount (Tks)</u>	<u>Last Invoice No.</u>	<u>Accumulated Amount (Tk)</u>	<u>Accumulated Payments (Tk)</u>
1	B1-Kishoreganj	National Construction & Consult Ltd.	1,98,40,012.82			
2	C3-Jamalpur	Mostafa Brothers	1,76,94,451.01	C3-01	13,27,696.00	
3	F1-Dohazari	Eastern Engineers Consortium Ltd.	1,55,48,978.95	F1-01	27,15,000.00	
4	F3-Cox's Bazar	Builders The Best Ltd.	99,64,470.85			
5	H2-Chowmuhani	Technocon Ltd.	1,41,20,342.60			
6	H3-Lakshmipur	Technocon Ltd.	55,91,275.35	H3-01	12,72,681.70	
7	I4-Chandpur	Fazle Azim Engineers	1,70,67,822.35	I4-01	22,59,791.12	8,53,391.12
9	O5-Parbatipur	Elite Engineers Ltd.	1,70,02,196.40	O5-01	14,96,000.00	
		Total	Tk. 11,68,29,550.33		Tk. 90,71,168.82	8,53,391.12
		(24.87)	(\$ 4,697,609.58)			
8	L4-Domar	M.S.Khan & Heirs Ltd.	74,99,255.58			Contract Terminated

CONSTRUCTION PROGRESS - ALL SITES



																		Weighted Percent	Project % Complt.
Kishoreganj	8	18	27	36	45	54	63	72	82	91	100							16.97	3.4
	0	1	20																
Jamalpur	8	18	27	36	45	54	63	72	82	91	100							15.15	2.7
	0	2	18																
Dohazari	8	18	27	36	45	54	63	72	82	91	100							13.31	2.8
	0	1	21																
Cox's Bazar	2	12	22	32	41	51	61	71	80	90	100							8.53	2.3
	0	1	27																
Chowmuhani	2	12	22	32	41	51	61	71	80	90	100							12.09	1.6
	0	1	13																
Lakshmipur	2	12	22	32	41	51	61	71	80	90	100							4.79	1.4
	0	8	30																
Chandpur	2	12	22	32	41	51	61	71	80	90	100							14.61	1.6
	0	1	11																
Parbatipur	2	12	22	32	41	51	61	71	80	90	100							14.55	2.5
	0	1	17																
Total																		18.3%	

30 April 1984

INVITATION NO.1 : B1-KISHOREGANJ

CONTRACTOR : National Construction & Consult Ltd.

Total Contract Price	: Tk. 1,98,40,012.82	Date of Contract	: 16.01.84
Change Order	: Tk.	Site Handed Over	: 29.01.84
Revised Contract Price	: Tk. 1,98,40,012.82	Notice To Proceed	: 02.02.84
Payments To Date	: Tk.	Scheduled Completion	: 31.12.84(333)
Retention To Date	: Tk.	Elapsed Time	: <u>89</u> days <u>26.7%</u>
L/Com. No.	: 388-002403	<u>% Completion</u>	
Date of L/Com.	: 31.01.84	Scheduled Actual	
Issue Date of L/Com.	: 02.02.84	This This	
Amount of L/Com.	: Tk. 1,98,40,012.82	Period	To Date
	(\$797,885.00)		
L/Com. Amendment No.1	: 13.02.84	9%	27%
Performance Guarantee	: BCCI LG 84/75	Work	: 12.5%
	Tk.19,84,002	Material	: 7.0%
	DAC/CAR/COV-44/4/84		

1.0 Site Personnel

Engineer	: Senior Field Engineer	- A.O. Khan
	Field Engineer	- A.H. Nazrul Islam
	Asst. Technician	- Kamrul Hossain
Contractor	: Site Engineer	- Ataur Rahman
	Site Manager	- Md. Emadul Hoque
	SAE	- Mizanur Rahman
	Foreman	- Abdul Zabbar
		- Mostafa Kamal

2.0 Contractor's Activities

A. Site Development

A1 Mobilization and Demobilization

- . R.T. roller on site and in operation
- . Adequate water supply arrangement now provided
- . Engineer's field office 85% complete

A2 Preparation of Site

- . The Contractor has completed clearing and grubbing for the area of godown and ancillary buildings.

A4 Excavation

- . Removal of topsoil from godown area, paved area and ancillary buildings completed.
- . Removal of unsuitable material to depth of 5 feet from R2 and R3 building completed.

A6 Filling with Imported Material (Select Fill)

- . Backfilled area for R2 and R3 excavated under A4.
- . Completed filling of godown area to 2 ft. depth. Approximately 3 ft. plus surcharge required to be completed.

A10 Boundary Wall - Type A

- . 800 ft. of foundation concrete placed.
- . 100 ft. of wall to 3 ft. height acceptable.

D. Water Supply, Sanitary and Plumbing

D7 Inspection Pit. One under construction

D8 Septic Tank. One Type B completed except cover.

D9 Soak Well. One completed to 15 ft. depth.

General:

The Contractor's work activities to date has been totally unsatisfactory. The Contractor has been placed on notice that his persistent and flagrant neglect to carry out the work will result in the Engineer recommending voiding the contract. The Contractor has to 9 May 1984 to comply with contract documents.

The performance surety was notified of the default of the contractor.

The contractor has been notified by the Engineer (724-4.5.1/1604) to take steps necessary to expedite the work in accordance with Clause 46 of Conditions of Contract.

The % completion reported reflects the values of approved materials on-site. This has been included since % completion is based on monetary terms.

2.1 Approved Materials On-Site

Portland Cement	-	1,260 bags
Reinforcing Steel, Deformed	-	-
Bricks, 1st Class	-	70,000 nos.
Boulders	-	10,000 cft.
Sand, Coarse	-	25,000 cft.
Sand, Fine (For Filling)	-	136,000 cft

2.2 Major Equipment On-Site

- 1- Concrete Mixer
- 2- Water Pump
- 1- R.T. Roller (On-Site from 21.04.84)
- 1- Farm Tractor

3.0 Problems

- . Railway land has not been officially handed over to BADC. Require railway estate office to demarcate railway right-of-way in the field and have the Engineer's surveyors confirm location.
- . Abandoned railway siding track to be removed by BR.
- . T&T to take action in raising of telephone lines.

3.1 Delays

- . Project delays are caused by contractor's lack of effective site management, procurement of sub-standard materials which have been disapproved, and unacceptable workmanship.

- . The Engineer's Field Office scheduled for completion by 17 March is only 85% complete.
- . Contractor's procrastination in submitting shop drawings for approval will result in delay in his carrying out the works.

4.0 Actions Required

- BADC : . Finalize location of right-of-way with BR
- . Follow-up with BR for removal of abandoned railroad ties and track.
 - . Follow-up with T&T to remove/relocate telephone lines.
 - . Follow-up on obtaining incoming power line.
- Contractor : . Submit shop drawings, weekly and monthly reports, schedule of events, and time vs. completion schedule. (/1285, 06.03.84)
- . Improve site management and have them participate in the planning.
 - . Organize and properly stockpile materials at site.
 - . Remove from site materials not approved.
 - . Complete Engineer's Field Office
 - . Submit sequence of construction of embankment construction and surcharge preloading and its removal and disposal, Section 2Z.
 - . Submit concrete mix design.

5.0 Claims

No claims submitted to date.

6.0 Work Scheduled Next Month

- A4 Excavation (Ancillary Buildings)
- A6 Continue Filling with Imported Material
- A10 Continue construction of boundary wall
- A21 Surcharge For Preloading
- C1 Brick flat soling (R2 and R3)
- C2 Plain Concrete (footing) (R2 and R3)
- C3 Brickwork in Foundation (R2 and R3)
- C6 & C9 Reinforced Concrete (footing) (R2 and R3)

7.0 Shop Drawings

<u>Drawing No.</u>	<u>Date</u>	<u>Title</u>	<u>Action</u>
K-S2	12.04.84	Bar Schedule of Engineer's Field Office	C

8.0 Financial

Nil

CONSOLIDATED MATERIALS TESTING REPORT

Project : Fertilizer Warehouses Phase III

For the month April 1984

Site : B1-Kishoreganj

Materials/Test	Spec. No.	No. of Tests	No. Approved	No. Dis-approved	Remarks/Requirements
A. Select Fill	2E.01-a	63	23	40	Requires F.M. Greater than 1.5 and less than 5% passing sieve No. 200
B. Concrete Sand	3A.02-b.1	1	1	-	
C. Mortar Sand	4A.03	1	1	-	
D. Concrete Coarse Aggregate	3A.02-b.1	2	-	2	Requires Screening
E. Bricks: Frogmark: P.E.I.	4A.02	3	3	-	Requires extensive sorting tested from site stack
F. Laboratory compaction test: Select Fill	2E.02	2			To determine maximum dry density
G. Field Density Tests: Select Fill	2E.01	93	83	10	90% and 95% MDD
H. Ordinary Fill	2E.01-b	5	-	5	Requires less than 20% passing sieve No.200
		<u>No. of test at</u>			
		<u>7 days 28 days</u>			
I. Concrete: Compressive Strength Test	3A.03 3A.05	6	4		Min. required strength is 3000 PSI at 28 days

INVITATION NO.2 : C3-JAMALPUR

CONTRACTOR : Mostafa Brothers (Pvt) Ltd.

Total Contract Price : Tk. 1,76,94,451.01

Change Orders : Tk.

Revised Contract Price : Tk. 1,76,94,451.01

Payments To Date : Tk.

Retention To Date : Tk.

L/Com. No. : 388-002474

Date of L/Com. : 31.01.84

Issue Date of L/Com. : 02.02.84

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

L/Com. Amendment No.1 : 13.02.84

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

Insurance: CAR/PL : DAC/CAR/P-8/4/84

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 : 31.12.84 (333)

Elapsed Time: 89 days 26.7 %

% Completion			
Scheduled		Actual	
This Period	To Date	This Period	To Date
9%	27%	16 %	18 %
	Work	: 6%	8%
	Materials	: 10%	10%

1.0 Key Site Personnel

Engineer : Senior Field Engineer - A.O. Khan
Field Engineer - Mostahar Ali
Inspector - Sikander Ali
Technician - A. Wahed

Contractor : Project Director - A.B.M. Siddique Rahman
Field Engineer - Manik Lal Mondal
- Saiful Islam Khan

2.0 Contractor's ActivitiesA. Site DevelopmentA1 Mobilization and Demobilization

- . Contractor's office, godown and laborer's shed completed.
- . Engineer's field office brickwork and roof casting completed.
Installation of windows, doors, C.I. roof sheeting and woodwork in progress.

A2 Preparation of Site

- . 90% completed.

A6 Filling with Imported Material (Select Fill)

- . Filling (3500) completed to 4.47 ft. Approximately 110,000 cft.
- . Filling (1500) ½ portion, completed to 1.5 ft. Approximately 7,500 cft.
- . Filling of low area (pond) completed. 8,500 cft.
- . Filling R2 and R3 buildings under wall foundation.

A10 Boundary Wall - Type A

- . 360 rft completed. 250 rft to ground level.

General:

The Contractor and his Surety were notified of their default in carrying out their responsibilities. The Engineer informed the Contractor that if there is not a vast improvement in carrying out the works, action will be taken under Clause 63(d) of Conditions of Contract.

2.1 Approved Materials On-Site

Portland Cement	- 50 T.
Reinforcing Steel, Deformed	- 60 T.
Bricks, 1st Class	- 433,500 nos.
Boulders	- 4,234 cft.
Sand, Coarse	- 8,700 cft.
Sand, Fine (For Filling)	- 284,000 cft.

2.2 Major Equipment On-Site

- 1- Tire Roller
- 2- Water Pumps (1-electrical; 1-diesel)
- 1- Concrete Mixer
- 1- Vibrator

3.0 Problems

- . Municipality objecting to location of boundary wall on eastern side. Demanding additional 10 ft. for providing a roadway.
- . Railway land not officially handed over to BADC
- . Contractor to take effective measures to expedite the construction work.

3.1 Delays

- . The Engineer's office schedule for completion by 17 March is still incomplete. No further payments will be made to Contractor until 100% completed.
- . Labour strikes.

4.0 Actions Required

BADC	: . Settle dispute with Municipality on eastern boundary location. . Process obtaining incoming power line.
Contractor	: . Submit required reports. . Take positive action to expedite the work. . Complete Engineer's Field Office. . Submit sequence of construction of godown surcharge loading as per Specification Section 2Z.

5.0 Claims

- . Contract Time Extension (Issuing Letter of Commitment)
- . Time Extension (Strike on 1 March)

6,0 Work Scheduled Next Month

	<u>% Completion</u>	<u>Scheduled Completion</u>	<u>Days To Complete</u>
Engineer's Field Office	60%	17.03	20
Filling of Site (Initial)	25%	30.04	60
Road & Railway Embankment (Initial)	0%	30.04	60
Boundary Wall	15%	31.05	80
Surcharge Preloading	0%	20.06	90

7.0 Shop Drawings

<u>Drawing No.</u>	<u>Date</u>	<u>Title</u>	<u>Action</u>
401/84	11.4.84	Bar Schedule for EFO	B
JR1/01	29.4.84	Rebar Details Footing, Column, Lintel, Sunshade	-
JR/02-1	26.4.84	Reinf. Stairs R1, R2, R3	-
JR/02-2	30.4.84	Reinf. Stairs R1, R2, R3	-

8.0 Financial

	<u>Invoice</u>	<u>Payment</u>
Mobilization Advance	Tk. 8,84,722.55	Tk. 8,84,722.55
Material Prepayment	13,27,696.00	Pending USAID

30 April, 1984

INVITATION NO.3 : F1-DOHAZARI

CONTRACTOR : The Eastern Engineers Consortium Ltd.

Total Contract Price	: Tk. 1,55,48,978.95	Date of Contract	: 16.01.84
Change Orders	: Tk.	Site Handed Over	: 26.01.84
Revised Contract Price	: Tk. 1,55,48,978.95	Notice To Proceed	: 02.02.84
Payments To Date	: Tk.	Scheduled Completion	31.12.84(333)
Retention To Date	: Tk.	Elapsed Time:	89 days 26.7%
L/Com. No.	: 388-002405		
Date of L/Com.	: 31.01.84		
Issue Date of L/Com.	: 02.02.84		
Amount of L/Com.	: Tk. 1,55,48,978.95 (\$625,317.00)		
L/Com. Amendment No.1	: 13.02.84		
Performance Guarantee	: Agrani 001/84 Tk.15,54,900		
Insurance	: DAC/CAR/COV-43/4/84		

% Completion			
Scheduled		Actual	
This Period	To Date	This Period	To Date
9 %	27 %	20 %	21 %
	Work	9%	10%
	Materials	11%	11%

1.0 Key Site Personnel

Engineer	: Project Engineer	- Y.O. Kim
	Field Engineer	- Shahid Uddin Ahmed
	Lab. Technician	- Meer Khurshid Ali
Contractor	: Project Engineer	- Khondakar Anwar Hossain
	Site Manager	- Afzal Hossain Khan
	Site Supervisor	- Mohammad Ali
	Site Supervisor	- Abdul Jali
	Site Supervisor	- Salim Ahmed
	Store Keeper	- A. Ali

2.0 Contractor's Activities

A. Site Development

A1 Mobilization & Demobilization

. Temporary labour toilet	- Constructed
. Temporary cement godown	- "
. Concrete Mixing Platform	- "
. Brick soaking tank	- "
. Engineer's Field Office	- Up to ground floor lintel level brick work.

A4 Excavation

. Topsoil excavation completed except river access.

A6 Filling with Imported Materials (Select Fill)

Quantity Completed This Month	- 148,795 cft (19%)
To Date	- 276,346 cft (35%)
Elevation Fill Godown Area	- 28.50
Ancillary Buildings	- 24.00
East side road area	- 25.19

A10 Boundary Wall, Type A

. 243 ft. foundation completed plus 132 ft. to 3 ft. height completed

D. Water Supply, Snitary and Plumbing

D8 Septic Tank

1- Type B at EFO in progress.

D9 Soak Well

One in progress

General

The Contractor accelerated his filling work, but he is still 424,000 cft., includes surcharge, short of target and work is constantly rejected. The Contractor was directed to replace them.

2.1 Approved Materials On-Site

Portland Cement	- 70 bags
Reinforcing Steel, Deformed	- 40 ton
Bricks, 1st Class	- 210,000 nos.
Boulders	- 328 cft.
Sand, Coarse	- 370 cft.
Sand, Fine (For Filling)	- 210,000 cft.

2.2 Major Equipment On-Site

1- Bulldozer
 2- Pumps
 1- Concrete Mixer

3.0 Problems

. See action required.

3.1 Delays

. Contractor notes that unfavorable weather and problems with bulldozer hamper his work.
 . Unskilled masons requiring re-doing work has delayed completion of of EFO and boundary wall.
 . EFO scheduled for completion on 17 March still incomplete.

4.0 Actions Required

BADC : . Finalize obtaining land for access to river.
 . Take action to obtain incoming power line.

Contractor : . Obtain additional compaction equipment.

5.0 Claims

. Time extension due to late receipt of Notice To Proceed and land problems.

6.0 Work Scheduled Next Month

	<u>% Completion</u>	<u>Scheduled Completion</u>	<u>Days To Complete</u>
Filling including Surcharge	35%	30.04	45
Surcharge Period (30 days)	0%	-	-
Preparation forms, etc.			
for grade beam and columns	0%	31.05	20
Engineer's Field Office	30%	17.03	25
Boundary Wall	10%	30.05	30

7.0 Shop Drawings

<u>Drawing No.</u>	<u>Date</u>	<u>Title</u>	<u>Action</u>
004	18.04.84	EFO Bar Schedule	A
005	19.04.84	Sequence Surcharge Preload Construction	C
006	21.04.84	Footing & Column R1	C
007/008	27.04.84	Bar schedule for footing, column and grade beam of godown	-
009	22.04.84	Lintel and sunshade Bar schedule - R1	-

8.0 Financial

	<u>Invoice</u>	<u>Payment</u>
Material Prepayment	Tk.27.15,000	Pending USAID

18

CONSOLIDATED MATERIALS TESTING REPORT

Project: Fertilizer Warehouses Phase III

For the month April 1984

Site : F1-Dohazari

Material/Test	Spec. No.	No. of Tests	No. Approved	No. Dis-Approved	Remarks/Requirement
A. Select Fill	2E.01-a	12	11	1	Requires F.M. greater than 1.5 and less than 5% passing sieve No.200
B. Concrete Sand	3A.02-b.1	2	2	-	3 part sylhet sand blended with 1 part local sand
C. Mortar Sand	4A.03	1	1	-	60% sylhet sand blended with 30% local sand
D. Concrete Coarse Aggregate	3A.02-b.2	1	1	-	
E. Bricks: Frogmark: RBM KBM	4A.02	2	2	-	Requires sorting at site
F. Cement	3A.02-a	2	2	-	Brand name: Tigaroda Chittagong Clinker
G. Laboratory compaction test: Select Fill	2E.02	1	-	-	To determine maximum dry density
H. Field Density Tests: Select Fill	2E.01	192	188	4	90% and 95% MDD
<u>No. of test at</u> <u>7 days 28 days</u>					
I. Concrete: Compressive Strength Test	3A.03 3A.05	6	1		Min. required strength is 3000 PSI at 28 days

PROJECT: 0716-FSCP
 LOCATION: DHAZARI-FI
 WORK ITEM: SITE DEVELOPMENT

SCHEDULE OF EVENTS
 FOR MAY 1984

EVENT	DESCRIPTION OF WORKS	TIME ESTIMATE	SCHEDULED		ACTUAL		REMARKS
			START	FINISH	START	FINISH	
1.	Ab. b. Filling with imported materials (select fill) @ 190' x 1666' Section surcharge area upto From 28.50 To 31.50 EL. Spreading, watering and Compaction.	10 days	1st May 84	10th May 84			
	① Ancillary Building Area upto FROM EL. 24.00 + upto 28.50. Spreading, watering and Compaction.	20 days.	1st May 84	20th May 84			
2.	<u>ENGINEER'S FIELD OFFICE</u>						
	Lintel and Sunshade Complete	2 days	1st May 84	2nd May 84			
	Remaining brick works upto bottom of 1st floor	3 days	3rd May 84	5th May 84			
	Preparation of wood work	12 days	1st May 84	12th May 84			
	1st floor brick works upto lintel level	5 days	7th May 84	11th May 84			
	Lintel and Sunshade (1st floor) Complete	3 days	12th May 84	14th May 84			
	Remaining Brick work upto roof Complete	3 days	15th May 84	17th May 84			
	Roof Casting Complete including c.i. roofing	8 days	18th May 84	25th May 84			
	Septic tank, soak well, sanitary and plumbing fixture Complete	20 days	1st May 84	20th May 84			
	Plastering work and Electrical fittings Complete	7 days 21st May 84	19th May 84	25th May 84			
	Floor Casting Complete	3 days	18th May 84	20th May 84			
	Boundary wall ^{3sides} Complete	30 days	1st May 84	30th May 84			

PL-5

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INVITATION NO.4 : COX'S BAZAR

CONTRACTOR : Builders The Best Ltd.

Total Contract Price	: Tk. 99,64,470.85	Date of Contract	: 12.01.84																				
Change Orders	: Tk.	Site Handed Over	: 26.01.84																				
Revised Contract Price	: Tk. 99,64,470.85	Notice To Proceed	: 23.02.84																				
Payments To Date	: Tk.	Scheduled Completion:	31.12.84 (312)																				
Retention To Date	: Tk.	Elapsed Time:	68 days 21.8 %																				
L/Com. No.	: 388-002406	% Completion																					
Date of L/Com.	: 31.01.84	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="2" style="text-align: center;">Scheduled</th> <th colspan="2" style="text-align: center;">Actual</th> </tr> <tr> <th style="text-align: center;">This Period</th> <th style="text-align: center;">To Date</th> <th style="text-align: center;">This Period</th> <th style="text-align: center;">To Date</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">9%</td> <td style="text-align: center;">22 %</td> <td style="text-align: center;">26 %</td> <td style="text-align: center;">27 %</td> </tr> <tr> <td></td> <td style="text-align: center;">Work</td> <td style="text-align: center;">9%</td> <td style="text-align: center;">10%</td> </tr> <tr> <td></td> <td style="text-align: center;">Materials:</td> <td style="text-align: center;">17%</td> <td style="text-align: center;">17%</td> </tr> </tbody> </table>		Scheduled		Actual		This Period	To Date	This Period	To Date	9%	22 %	26 %	27 %		Work	9%	10%		Materials:	17%	17%
Scheduled		Actual																					
This Period	To Date	This Period	To Date																				
9%	22 %	26 %	27 %																				
	Work	9%	10%																				
	Materials:	17%	17%																				
Issue Date of L/Com.	: 23.02.84																						
Amount of L/Com.	: Tk. 99,64,470.85 (Tk.400,731.00)																						
Performance Guarantee	: Indosuez PB/TK/009 Tk.10,00,000																						
Insurance	: DAC/CAR/COV-45/4/84																						

1.0 Key Site Personnel

<p>Engineer</p> <p>Contractor</p>	<p>: Project Engineer Field Engineer Technician</p> <p>: Site Engineer Field Engineer</p>	<p>- Y.O. Kim - M.M. Matiur Rahman - A. Rashid - Ataul Latif Md. Helal Ahsan - Abdul Baki Miah</p>
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2.0 Contractor's Activities

A. Site Development

A1 Mobilization and Demobilization

- . Contractor's temporary facilities completed.
- . Engineer's Field Office 85% complete.
- . Procuring and stockpiling material.
- . 2-tubewells completed.

A2 Preparation of Site

- . Cleaning and grubbing completed.
- . Existing boundary removed.

A3 Excavation to Waste

- . Organic topsoil and unsuitable materials about 85% complete.
Remianing 15% on access to river area yet to be handed over.

A4 Excavation

- . Excavation exterior godown footings complete.
- . Foundation R1, R2 and R3 completed.

A6 Filling with Imported Materials (Select Fill)

- . Subgrade compaction completed and accepted.
- . Placing select fill 30% complete.

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A10 Boundary Wall

. 80% completed.

C. Ancillary Buildings

C1 Brick Flat Soling : Completed R1, R2 and R3

C2 Plain Concrete (Fdn) : Completed R1, R2 and R3

C3 Brickwork in Foundation : Completed to plinth level R1, R2 and R3.

D. Water Supply, Sanitary and Plumbing

D8 Septic Tank

1- TypeB completed.

D9 Soak Well

1- completed.

General:

The Contractor's delay in submitting shop drawings will effect his work schedule. His preparatory work (formwork, re-bar bending) if not accelerated will also have a bearing on completion. Several items of work for warehouse and ancillary buildings scheduled to be in progress have not been started.

2.1 Approved Materials On-Site

Portland Cement	- 1070 bags
Reinforcing Steel, Deformed	- 56.41 tons
Bricks, 1st Class	- 170,000 nos.
Boulders	- 1,200 cft.
Sand, Coarse	- 2,660 cft.
Sand, Fine (For Filling)	- 76,725 cft.
Stone Chips	- 2,875, cft.
Lime	- 12 ton
M.S. Rod, Plain	- 13 cwt.

2.2 Equipment On-Site

- 1- Concrete Mixer (8 cft)
- 1- Vibrator
- 1- Water Pump (1 HP)
- 1- Water Pump (2 HP)
- 1- Water Pump (6 HP)
- 1- Compactor (Tamper) Not operable

3.0 Problems

- . Barb wire angle on boundary wall obstructed by buildings/shops overhang. Solution is to place bar vertical.
- . People using property as thoroughfare.

3.1 Delays

- . Late submittal of shop drawings
- . Lack of full-time management
- . Lack of shuttering material
- . Lack of adequate compaction equipment
- . Engineer's field office scheduled for completion by 7 April still incomplete.

4.0 Actions Required

- BADC : . Negotiate land for access to river.
 . Resolve thoroughfare problem.
 . Obtain incoming power line.
- Contractor : . Obtain adequate compation equipment
 . Complete Engineer's Field Office
 . Submit reports.
 . Submit shop drawings sufficiently in advance of scheduled construction.

5.0 Claims

No claims submitted to date

6.0 Work Scheduled Next Month

	<u>%Completion</u>	<u>Scheduled Completion</u>	<u>Days To Complete</u>
Site Development			
Filling with Imported Material	30%	30.06	60
Boundary Wall	80%	30.06	60
Warehouse			
Foundation Work to Plinths	0%	20.05	50
Superstructure to Canopy Level	0%	20.06	50
RCC Roof (1st half)	0%	10.08	110
Electrical	0%	On-going	
Ancillary Buildings (R1,R2,R3)			
Brickwork & RCC to lintel including sunshades	0%	10.06	60
Casting 1st Floor	0%	31.07	90
Electrical		On-going	

7.0 Shop Drawings

<u>Drawing No.</u>	<u>Date</u>	<u>Title</u>	<u>Action</u>
BBL/WH/9/84	5.4.84	Reinforcement Steel Details Col.Footing C1,C2A,C2B & C3 & Doors Col.with footing	C
		Grade Beam GBL, GB2 Side Wall (R.B.Wall)	
BBL/WH/10/84	5.4.84	Reinforcing Details Col.Footing,C1,C2A,C2B & C2	B
		Canopy Beam & Canopy	-
		Loading Platform (Roadway)	-
		Concrete Formwork	
		Grade Beams, Columns	-
		Canopy Beam & Canopy	-

7.0 Shop Drawings - cont'd

<u>Drawing No.</u>	<u>Date</u>	<u>Title</u>	<u>Action</u>
BBL/WH/11/84	5.4.84	Engineer's Field Office (Roof Truss & Slab) Formwork and Reinf.	B
BBL/WH/12/84	15.4.84	Details of Wooden Door, Steel Windows Grill & Wooden Floor Door Frame Joint, Post and Beam Joint	A
BBL/WH/13/84	26.4.84	Rebar Schedule of Col. C1,C2A,C2B CA and Door Column	-

8.0 Financial

Nil

CONSOLIDATED MATERIALS TESTING REPORT

Project: Fertilizer Warehouses Phase III

For the Month April 1984

Site : Cox's Bazar

Material/Test	Spec. No.	No. of Tests	No. Approved	No. Dis-Approved	Remarks/Requirement												
A. Select Fill	2E.01-a	3	2	1													
B. Concrete Sand	3A.02-b.1	3	3	-	Blending allowed with 3 part sylhet sand and one part Rubber garden sand.												
C. Mortar Sand	4A.03	1	1	-	One part sylhet sand blended with one and half part Rubber garden sand.												
D. Coarse Aggregate for concrete	3A.02-b.2	2	1	1													
E. Bricks: Frogmark O.R.B4	4A.02	1	1	-	Needs extensive sorting												
F. Cement	3A.02-a	1	1	-	Brand name: Rebar												
G. Laboratory Compaction test select fill	2E.02	2	-	-	To determine maximum dry density												
H. Field Density Tests: Select Fill	2E.01	41	21	20	95% MDD												
<table border="0"> <tr> <td colspan="2"></td> <td align="center" colspan="2"><u>No. of test at</u></td> <td colspan="2"></td> </tr> <tr> <td colspan="2"></td> <td align="center">7 days</td> <td align="center">28 days</td> <td colspan="2"></td> </tr> </table>								<u>No. of test at</u>						7 days	28 days		
		<u>No. of test at</u>															
		7 days	28 days														
I. Concrete: Compressive Strength Test	3A.03 3A.05	9	3		Mix proportion: 1:2.08:3.7 (by vol) is provisionally approved												

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SCHEDULE OF EVENTS

Project Warehouse Phase-III Period from 1.5.84 to 15.5.84
 Location : F3- Cox's Bazar
 Work item : Site Development, Warehouse & Anc. buildings.

Builders the best Ltd.
 844, Dhanmondi R/A,
 Road No. 24, Dhaka.



Item No.	Description of Works	Time estimate	Schedule		Actual		Remarks
			Start	Finish	Start	Finish	
	<u>Site development</u>						
A1	Mobilization & Demobilization :-						
	a. Making, fitting & Fixing of floor decking including beams, verandah post, and C.I. sheet roofing	15 days	1.5.84	15.5.84			
F3-6	b. Doors & Window fitting, Sanitary & Plumbing work including Electrical wiring works	8 days	8.5.84	15.5.84			
A6	Filling with imported materials :-						
	b. Select fill 10,000 cft -	15 days	1.5.84	15.5.84			
	i) Collection of Select fill materials 15,000 cft	15 days	1.5.84	15.5.84			
A10	Making of M.S. Angle post and collection of barbed wire for Boundary wall	7 days	9.5.84	15.5.84			

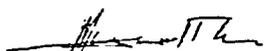
M. A. Z.
 Managing Director
 Builders the best Ltd.

Contd..P/ 23

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Item No.	Description of works	Time estimate	Schedule		Actual		Remarks
			Start	Finish	Start	Finish	
<u>WIRE HOUSE</u>							
B2	Fabrication of reinforcement and casting of external column footing 10 Numbers	15 days	1.5.84	15.5.84			
<u>ANC. BUILDINGS</u>							
G5	Brick work upto lintel level.	5 days	1.5.84	5.5.84			
G6	Making, fitting & Fixing of formwork including placement of reinforcement for lintel in ground floor	8 days	8.5.84	15.5.84			


 Managing Director
 Builders the best Ltd.

INVITATION NO.5 : H2-CHOWMUHANI

CONTRACTOR : Technocon Limited
 Total Contract Price : Tk.1,41,20,342.60
 Change Orders : Tk.
 Revised Contract Price : Tk.1,41,20,342.60
 Payments To Date : Tk.
 Retention To Date : Tk.
 L/Com. No. : 388-002407
 Date of L/Com. : 31.01.84
 Issue Date of L/Com. : 23.02.84
 Amount of L/Com. : Tk.1,41,20,342.60
 (\$567,863.00)
 Performance Guarantee : Indosuez PB/TK/006
 Tk.14,12,035
 Insurance : DAC/CAR/P-07/4/84

Date of Contract : 12.01.84
 Site Handed Over : 31.01.84
 Notice To Proceed : 23.02.84
 Scheduled Completion 31.12.84(312)
 Elapsed Time: 68 days 21.8%

% Completion			
Scheduled		Actual	
This Period	To Date	This Period	To Date
10 %	22 %	12 %	13 %
	Work	: 9%	10%
	Material	: 3%	3%

1.0 Key Site Personnel

Engineer	: Senior Field Engineer	- J. Alam
	Field Engineer	- M. Anwarul Huq
	Asst. Technician	- A. Rouf
Contractor	: Site Engineer	- A.K.M. Habibur Rahman
	Asst.Site Engineer	- Md. Jahangir Alam

2.0 Contractor's Activities

	<u>% Complete</u>
A. Site Development	
A1 Mobilization and Demobilization	45%
. Construction Contractor's temporary bamboo shed	
. Installed 2 hand tubewells (water saline)	
. Hired R.T. Roller (10 ton)	
. Construction Engineer's Field Office started.	
A2 Preparation of Site	100%
. Clearing and grubbing complete.	
A4 Filling with Imported Material	65%
. Spreading and compacting of select fill in godown and parking area to 3 ft. height.	
A10 Boundary Wall	8%
. 614 ft. concrete 15" foundation complete	
A21 Surcharge for Preloading	0%
. Erected 5 settlement platforms.	
A23 48 inch R.C.Pipe Culvert	0%
. 6-8 ft lengths on site.	

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D. Water Supply, Sanitary and Plumbing

D8 Septic Tank	35%
1- Type B under construction	
D9 Soakwell	15%
1- under construction	

General:

With new site management knowing what is going on at Site the works has accelerated. The Contractor was informed to remove 10,000 cft of material not meeting specification from site. It was suggested that he either test material at source or submit representative sample for testing prior to delivery.

2.1 Approved Materials On-Site

Portland Cement	- 20 bags.
Reinforcing Steel, Deformed	- 0.75 T.
Bricks, 1st Class	- 53,500 nos.
Boulders	- 5,600 cft.
Sand, Coarse	- 2,000 cft.
Sand, Fine (For Filling)	- 165,000 cft.

2.2 Major Equipment On-Site

- 1- R.T. Roller
- 1- Bulldozer

3.0 Problems

- . Inadequate "sweet" water not available at site. Contractor required to sink deep tubewell. During monsoon water may be available from nearby canal, but before use the Engineer will test.
- . Non-completion of Engineer's Field Office scheduled for 7 April completion presenting a hardship to personnel.
- . Blending of select fill is slowing down program of filling.

3.1 Delays

- . No reportable delays.

4.0 Actions Required

- | | | |
|------------|---|---|
| BADC | : | . Settle dispute with owner of land contiguous to west property line. |
| | | . Obtain incoming power line. |
| Contractor | : | . Install adequate water supply system for compaction. |
| | | . Complete Engineer's Field Office |
| | | . Lease land for temporary facilities and for stockpiling of select fill and other materials. |
| | | . Complete installation of RCC pipe culvert. |
| | | . Expedite blending, placement and compaction of select fill. |
| | | . Install deep tubewell for sweet water. |

5.0 Claims

Time extension due to late issuance of Notice To Proceed.

6.0 Work Scheduled Next Month

- . Refer to contractor's schedule of events.
- . From Project Schedule

	<u>% Completion</u>	<u>Scheduled Completion</u>	<u>Days To Complete</u>
Site Development			
Filling w/imported material	65%	01.06	32
Boundary Wall	8%	01.06	32
Surcharge Preloading	0%	22.05	22
48" R.C. Pipe	0%	12.04	40

7.0 Shop Drawings

<u>Drawing No.</u>	<u>Date</u>	<u>Title</u>	<u>Action</u>
CH-012	18.03.84	Bar Schedule for Engineer's Field Office	H
CH-013 A	18.03.84	Bar Schedule of Column & Footing	B
CH-014	18.03.84	Bar Schedule of Grade Beam, Tie Beam, Canopy Beam, Canopy Slab of warehouse	C
CH-015	18.03.84	Bar Schedule for Beam of Godown	C
CH-016	21.03.84	Formwork of Public Toile and Guard House	H
CH-017	25.03.84	Schedule of Bar of Warehouse	C
CH-018 A	11.04.84	Schedule of Bars of Guard House & Public Toilet	B
CH-019 A	22.04.84	Bar Schedule of Pump House	A
CH-020	23.04.84	Bar Schedule for Septic Tank, Inspection Pit & Soak well	C

8.0 Financial

Nil

CONSOLIDATED MATERIALS TESTING REPORT

Project : Fertilizer Warehouses Phase III

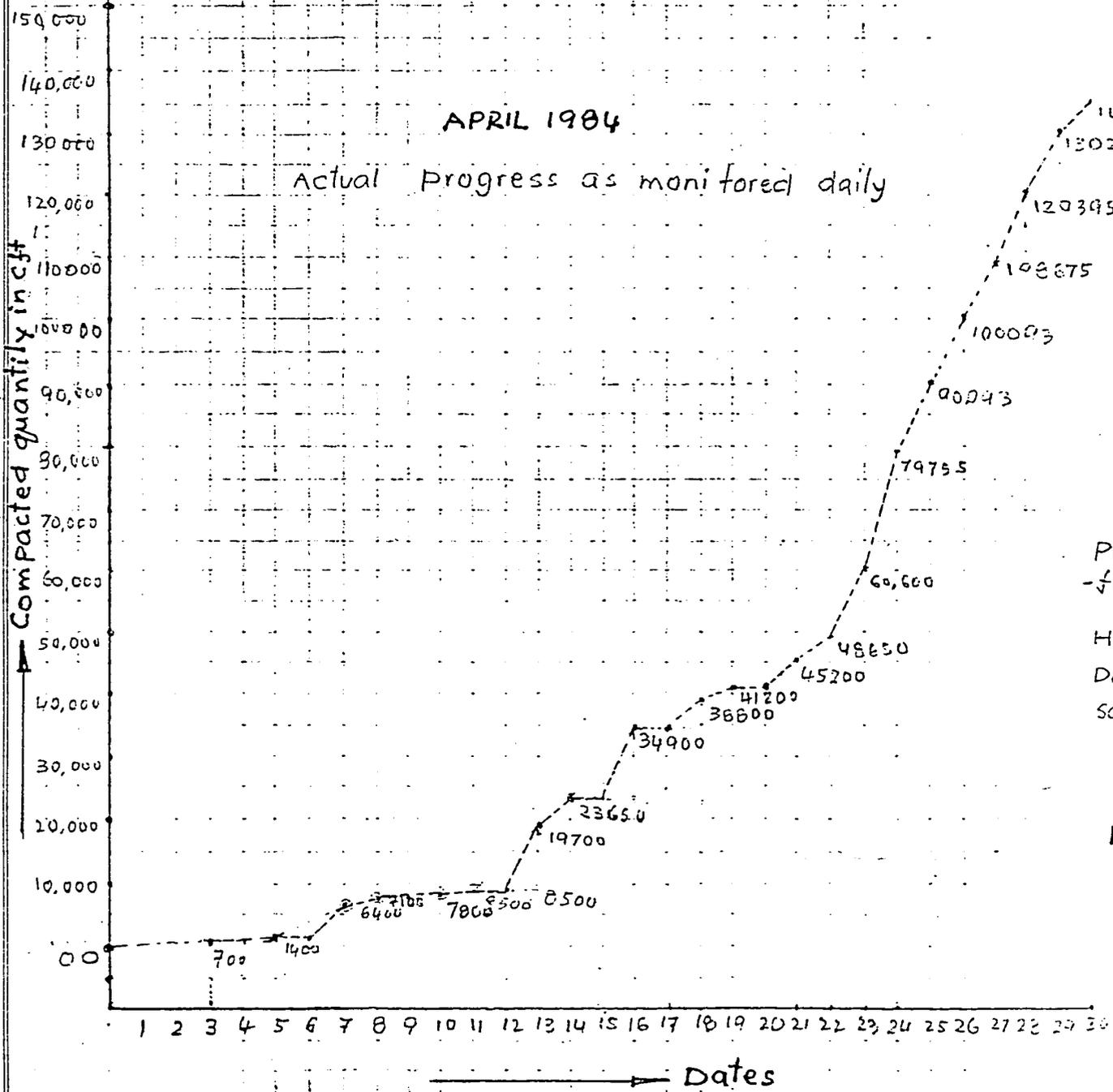
For the Month April 1984

Site : H2-Chowmuhani

Material/Test	Spec. No.	No. of Tests	No. App- roved	No. Dis- approved	Remarks/Requirements
A. Select Fill	2E.01-a	40	37	3	F.M. Greater than 1.5 and less than 5% passing No. 200 sieve blending required
B. Concrete Coarse Aggregate	3A.02-b.2	1	-	1	Outside grading limit
C. Mortar Sand	4A.03	1	1	-	
D. Bricks: Frogmark: BBM MTBM	4A.02	2	-	2	Compressive strength less than specified 2200 PSI
E. Field Density Tests:					
Subgrade	2E.01	4	4	-	90% MDD
Select Fill		153	134	19	90% and 95% MDD
F. Concrete:					
Compressive Strength Test	3A.03 3A.05	8	-		Min. required strength is 3000 PSI at 28 days

No. of test at
7 days 28 days

Compacted quantity in cft



Progress chart for Selected-fill Compaction.

H2- Chowmuhani

Date: 1-5-84

Scale: Vert. → 1 div ≡ 5000 cft

Hor'z. → 1 div ≡ 1 day

Prepared by: *M. Anwarul H. Q.*
MD. ANWARUL HUS
Field Engineer.

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SCHEDULE OF EVENTS

PROJECT : FERTILIZER WARE HOUSES PHASE - III
 LOCATION: H2-CHC MUTANI/~~HARRISFIELD~~
 WORK ITEM:

TECHNOCON LTD
 Dhaka.
 Period from..1.5.84...to..31.5.84..

EVENT	DESCRIPTION OF WORK	TIME ESTIMATE	SCHEDULED		ACTUAL		REMARKS
			START	FINISH	START	FINISH	
	<u>Site development</u>						
	a) Filling and compaction of select fill materials at godown and other area	80 days	28.3.84	15.6.84	4.4.84		- Filling at preloading area may be completed by May 15, 1984, others area to be continued.
	b) Boundary wall	65 days	28.3.84	31.5.84	25.3.84		- Due to land dispute at west side, work may delay at boundary wall.
	c) 48" dia.R.C. pipe culvert	40 days	1.5.84	10.6.84	25.3.84		- To be continued.
	d) Engineers' Field Office construction						- Work may be completed by May 25, 1984.
	e) Septic tank, Soak well for Engineers Field Office & public toilet						- May be completed by May 25, 1984.
	<u>Ancillary building</u>						
	a) Filling and compaction of R2 & R3 Bldg. upto foundation bottom	18 days	28.4.84	15.5.84			-
	<u>Materials procurement</u>						
	All to be continued						- To be continued.

H2-6

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MONTH ENDING
30 April, 1984

INVITATION NO.6 : H3-LAKSHMIPUR

CONTRACTOR : Technocon Limited		Date of Contract : 12.01.84																					
Total Contract Price : Tk.55,91,275.35	Change Orders : Tk.	Site Handed Over : 31.01.84	Notice To Proceed : 23.02.84																				
Revised Contract Price : Tk.55,91,275.35	Payments To Date : Tk.	Scheduled Completion: 31.12.84(312)	Elapsed Time: 68 days 21.8%																				
Retention To Date : Tk.	L/Com. No. : 388-002408	% Completion																					
Date of L/Com. : 31.01.84	Date of L/Com. : 31.01.84	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="2">Scheduled</th> <th colspan="2">Actual</th> </tr> <tr> <th>This Period</th> <th>To Date</th> <th>This Period</th> <th>To Date</th> </tr> </thead> <tbody> <tr> <td>9%</td> <td>22%</td> <td>22%</td> <td>30%</td> </tr> <tr> <td></td> <td>Work</td> <td>: 4%</td> <td>12%</td> </tr> <tr> <td></td> <td>Material</td> <td>: 18%</td> <td>18%</td> </tr> </tbody> </table>		Scheduled		Actual		This Period	To Date	This Period	To Date	9%	22%	22%	30%		Work	: 4%	12%		Material	: 18%	18%
Scheduled		Actual																					
This Period	To Date	This Period	To Date																				
9%	22%	22%	30%																				
	Work	: 4%	12%																				
	Material	: 18%	18%																				
Issue Date of L/Com. : 23.02.84	Amount of L/Com. : Tk.55,91,275.35 (\$224,858.00)																						
Performance Guarantee : Indosuez PB/TK/007 Tk. 5,59,130	Insurance : DAC/CAR/P-07/4/84																						

1.0 Key Site Personnel

Engineer	: Project Engineer	- Y.O. Kim
	Sr. Field Engineer	- Jahangir Alam
	Inspector	- Mozaharul Islam
	Technician	- S. Khan
Contractor	: Project Engineer	- Liakat Ali Sikder
	Sr. Field Engineer	- Rezaul Haque
	Site Manager	- Abul Kashem
	Foreman	- M.M. Hossain

2.0 Contractor's Activities

A. Site Development (24.02%)

A1 Mobilization and Demobilization (74%)

- . Completed contractor's temporary facilities
- . Procurement of construction materials in progress

A2 Preparation of Site (90%)

- . Breaking of existing boundary wall extended portion at gate for construction of guard house.

A3 Excavation (70%)

A6 Filling with Imported Material, Select Fill (13%)

- . Select fill spreading and compaction of all exterior footings completed up to bottom of footing.
- . C1: Elev. 94.63; C2B: Elev. 95.13; Door Col. Elev. 95.13

A10 Boundary Wall (25%)

- . 230 rft boundary wall complete to 4 ft. height
- . 150 rft foundation brick complete.

A16 Public Toilet (50%)

. Brickwork to lintel level. Filling interior with select material completed to Elev.97.00.

B. Warehouse

B2 RCC in Footing : Footing tie beam, Grade beam (6%)

Footing No.- A1, A2, A3, A4 casted with door coi. P&Q

B11 Reinforcing Steel (5%)

Re-steel work for above columns and other columns in progress.

C. Ancillary Building (22.85%)

C5 Brickwork Above Plinth Level (85%)

Complete to lintel level.

C6 Reinforcing Concrete (15%)

Stairway up to 1st floor level

Lintel and sunshade casting complete

C9 Reinforcing Steel (8%)

For work under C6.

C10 Removal Lime Terracing (100%)

D. Water Supply, Sanitary and Plumbing (2.52%)

D8 Septic Tank, Type B (100%)

D9 Soak Well (6%)

General:

The Contractor was directed to engage masons with ability and to improve the quality of brickwork.

2.1 Approved Materials On-Site

Portland Cement	- 70 bags.
Reinforcing Steel, Deformed	- 53.75 T
Bricks, 1st Class	- 23,500 nos.
Boulders	- 4,675 cft.
Sand, Coarse	- 5,800 cft.
Sand, Fine (For Filling)	- 20,160 cft.

2.2 Major Equipment On-Site

1- Concrete Mixer
1- Vibrator
1- Water Pump (Out-of Order from 22.04)
1- Pick-up Truck

3.0 Problems

- . Pourasava wrote letter to DM(F) about the position of boundary wall in south side. But till todate no clearance received from DM(F) and the construction in this area is stopped.
- . Need more labourer for breaking of stone chips.

3.1 Delays

- . Progress delays due to poor management of contractor.
- . Procurement of specified bricks and skilled mason.
- . Late submission of shop drawings.
- . Inadequate labour forces.

4.0 Actions Required

- BADC : . To finalize with Pourasava the location of boundary wall on south side.
- . Relocate the power line from in front of godown area.
- Contractor : . Engage good mason and adequate labour forces.
- . Procure bricks meeting specification.
 - . Install deep tubewell.
 - . Gear up the progress of work.
- Engineer : . Review construction of boundary wall for S-W corner (ditch area).
- . Location of guard house.

5.0 Claims

Nil

6.0 Work Scheduled Next Month

7.0 Shop Drawings

<u>Drawing No.</u>	<u>Date</u>	<u>Title</u>	<u>Action</u>
F-12 A	1.04.84	Formwlrk of canopy and stairway of Darwan's Quarter	A
F-12 B	1.04.84	Formwork for canopy Beam with Slab	A
FW-18	7.04.84	Concrete formwork for Beam B5 & B6	H Revise & Resubmit
FW-19	7.04.84	Concrete formwork for Girder G3, G4	H Revise & Resubmit
FW-20	7.04.84	Formwork for roof slab	H Revise & Resubmit
FW-22	16.04.84	Concrete formwork for SP1, SP2 Warehouse	E

7.0 Shop Drawings - cont'd.

<u>Drawing No.</u>	<u>Date</u>	<u>Title</u>	<u>Action</u>
FW-23	16.04.84	Concrete formwork for roof slab, stair roof slab & beam of Darwan's Quarter	H Revise & Resubmit
C-GB-09A	11.04.84	Schedule of column footing Grade beam, canopy beam & slab of Warehouse	B
GB-10	14.03.84	Bar Schedule For Warehouse Beams	C
D/Qrt/16A	2.04.84	Bar Schedule for Lintels, Stair Slab of Darwan's Qrt.	B
M 1	11.04.84	Schedule of bars of Guard house Public Toilet	B
S-SW	15.04.84	Bar Schedule of Inspection Pit, Soshwell, Septic Tank	B
SPH 24	16.04.84	Bar Schedule for Pump House	A
SP-V-13	25.03.84	Reinforcement Schedule of Spandrel & Vents	Pending
RF-14	27.03.84	Reinforcement Schedule Roof Slab and Floor Slab	C
M25	18.04.84	Bar Schedule Reinforced Masonry Wall, Loading Platform, etc.	Pending

8.0 Financial

	<u>Period To</u>	<u>Invoice</u>	<u>Payment</u>
Progress Payment H3-1	07.04	Tk.12,72,681.70	Pending USAID

PROJECT : FERTILIZER WARE HOUSES PHASE - III
 LOCATION : ~~XXXXXXXXXXXX~~/H3-LAKSHMIPUR
 WORK ITEM :

SCHEDULE OF EVENTS

TECHNOCON LTD
 Dhaka.
 Period from..1.5.84...to..31.5.84...

EVENT	DESCRIPTION OF WORK	TIME ESTIMATE	SCHEDULED		ACTUAL		REMARKS
			START	FINISH	START	FINISH	
	<u>Site development</u>						
	a) Boundary wall	50 days	20.3.84	9.5.84	1.4.84		Due to land dispute at southside work may delay at boundary wall.
	b) Public toilet, Soakwell and Septic tank	39 days	25.3.84	25.4.84	25.3.84		Work will be completed by May 30, 1984.
	<u>Ware house</u>						
	a) Compaction of select fill at godown area	20 days	10.5.84	30.5.84			
	b) Casting of column footing grade beam	20 days	23.3.84	12.4.84	30.4.84		Footing casting will be completed by May 9, 1984. Grade beam casting may start on 15 May 1984 and will be completed by 25 May 1984.
	<u>Ancillary Building</u>						
	a) Brick work above lintel upto roof		10.5.84				Work delayed due to brick problem.
	b) Stairs upto 2nd floor roof		15.5.84	31.5.84			
	<u>Materials procurement</u>						
	a) Select sand						To be continued
	b) Brick						"
	c) Cement						"
	d) Boulders						"
	e) Ordinary fill						"

H3-6

bc

30 April; 1984

INVITATION NO.7 : I4-CHANDPUR

CONTRACTOR : Fazle Azim Engineers Ltd.

Total Contract Price : Tk.1,70,67,822.35

Change Orders : Tk.

Revised Contract Price : Tk.1,70,67,822.35

Payments To Date : Tk.

Retention To Date : Tk.

L/Com. No. : 388-002409

Date of L/Com. : 31.01.84

Issue Date of L/Com. : 23.02.84

Amount of L/Com. : Tk.1,70,67,822.35
(\$686,398.00)Performance Guarantee : Janata MCK/002/84
Tk.17,10,000Insurance : DAC/CAR/COC-42/4/84
dt. 02.04.84Fidelity Bond : MCK:004:84, 06.03.84
Tk.8,53,400

Date of Contract : 16.01.84

Site Handed Over : 31.01.84

Notice To Proceed : 23.02.84

Scheduled Completion:31.12.84 (312)

Elapsed Time: 68 days 21.8%

% Completion			
Scheduled		Actual	
This Period	To Date	This Period	To Date
9%	22%	10%	11%
	Work	: 2%	3%
	Material	: 8%	8%

1.0 Key Site Personnel

Engineer	: Senior Field Engineer	- J. Alam
	Field Engineer	- Alamgir Bhuiyan
	Asst. Technician	- A. Nader
Contractor	: Project Engineer	- Nazimul Huq Bhuiyan
	Field Engineer	- Abul Kalam Patwary
	Inspector	- Tajul Islam Bhuiyan

2.0 Contractor's ActivitiesA. Site Development (10%)A1 Mobilization and Demobilization (57%)

- . Construction of Contractor's workshed and office completed.
- . Completed construction of Contractor's storage shed and office shed.
- . Provided toilets for laborers and for contractor's staff.
- . Fixed 7 nos. window frames ground floor Engineer's Field Office.
- . Brickwork EFO up to 1st floor lintel level.

A2 Preparation of Site (80%)A3 Excavation To Waste (85%)A4 Excavation (75%)

- . Excavation for retaining wall foundations
- . Excavation R1, R2 and R3 foundations

A6 Filling with Imported Material (12%)

- . Compaction of godown foundation subgrade by hand rammer and one small mechanical tamper. Very slow progress.

A10 Boundary Wall (40%)

- . West side wall brick work to GL.
- . Concrete foundation bed on east side complete; and, 219 rft to GL and 192 rft 15" complete.

A22 Retaining Wall and Steps (0%)

- . Preparing re-steel

D. Water Supply, Sanitary and Plumbing (2%)

D8 Septic Tank (21%)

One partially complete (90%)

D9 Soak Well (22%)

One partially complete (90%)

General

The Contractor's site planning is very poor. He has excavated for retaining wall, all ancillary buildings, and godown area and with the coming monsoon rains he is realizing difficulties in maintaining the excavation and incurring costs in pumping out.

The labour force at site is minimal and the contractor required a more experienced site-in-charge. The Contractor's procrastination in submitting shop drawings will have a marked effect on his progress of work.

As note in 6.0 below the Contractor is at least 6 weeks behind schedule.

2.1 Approved Material at Site:

Portland Cement	- 56.50 MT
Reinforcing Steel, Deformed	- 60 MT
Bricks, 1st Class	- 65,000 nos.
Boulders	- -
Sand, Coarse	- -
Sand, Fine (For Filling)	- 9,000 cft.

2.2 Major Equipment On-Site

- 1- Rammer
- 1- Concrete Mixer
- 1- Vibrator (Electrical)
- 1- Water Pump (1 HP)

3.0 Problems

- . Chairman, Purasava, has not granted easement for access road connection to Sen Gupta Road and removal of shops obstructing this connection.
- . Chairman, Poursava has suspended granting of easement for access road to Sen Gupta Road and relocating the canal by a letter issued to SDM, BADC.
- . Removal by BADC of two existing sheds within work area required.

3.1 Delays

- . Shortage of adequate equipment and approved construction materials.
- . Construction of Engineer's Field Office.
- . Construction of retaining wall for adequate labour force.
- . Filling of godown area for shortage of select fill.

4.0 Actions Required

- BADC : . Resolve issue of access road with Municipality.
 . Remove existing sheds within work area.
- Contractor : . Mobilize adequate construction equipment.
 . Complete Engineer's Field Office.
 . Submit time vs. percentage completion schedule.
 . Submit monthly progress report.
 . Supply approved select fill and other construction material
 . Increase labour force
- Engineer : . Review construction of boundary wall at monument #12 which falls in existing canal.
 . Complete pricing contractor's extra work (Refer to claims)

5.0 Claims

- . Contractor's claim under clause 51(1)(c) for removal of masonry and concrete foundation within the godown area as per instruction (FAEL-BADC/AW/84/2303 dated 26.4.84). The material was to be removed by the removal contractor engaged by BADC.
- . Contract time extension (FAEL-ADC/AW/84/2388, 23.04.84)

6.0 Work Scheduled Next Month

- . Contractor has not submitted a schedule of events.
- . From Project Schedule

	<u>% Completion</u>	<u>Scheduled Completion</u>	<u>Days To Complete</u>
48# Culvert Pipe	Pending easement from Purasava		
Retaining Wall		31.07	122
Excavation	80%	07.05	See 2.0 General
Pour Concrete, Stem & Step 1st Lift	0%	-	-
Site Development			
Filling with On-Site Material		On-going	
Filling with Off-Site Material		On-going	
Warehouses			
Footing, Tie Beam, Grade Beam	0%	21.05	42
Interior Columns upto 6 ft.	0%	07.06	35
Brick Wall upto 6 ft.	0%	30.06	42
Ancillary Buildings R1, R2, R3			
Concrete Work: Footings & Col. Ftgs.	0%	21.05	21
Brick Work & Cols. to Plinth	0%	07.96	28
Filling Plinth	0%	21.06	28
Brickwork & Cols. to Lintel	0%	30.06	35
Stairing to 1st landing	0%	30.06	35

7.0 Shop Drawings

<u>Drawing No.</u>	<u>Date</u>	<u>Title</u>	<u>Action</u>
S-01 R1	03.04	Bar Schedule EFO	H
S-1A R1	25.03	Bar Schedule Retaining Wall	H
S-Lb R1	25.03	Bar Schedule Retaining Wall	H
S-03	27.03	Floor and Roof Shuttering EFO	B
S-04 R2	27.03	Bar Schedule Column, Footing, Dowels	A
S-05 R1	06.04	Reinforcement Schedule & Formwork for Roof Shuttering - Public Toilet	B
S-06 R2	15.04	Reinforcement Schedule & Plan Shuttering Guard House	B
S-07	15.04	Bar Schedule For Footings Ancillary Bldgs. R1 & R2	A
S-08 R1	21.04	Bar Schedule Grade Beams, Canopy beam and Canopy Slab	A

8.0 Financial

	<u>Invoice</u>	<u>Payment</u>
Material Prepayment I4-01	Tk.14,06,400	Pending USAID
Mobilization Advance -	8,53,391.12	Tk.8,53,391.12

CONSOLIDATED MATERIALS TESTING REPORT

Project : Fertilizer Warehouses Phase III

For the Month April 1984

Site : I4-Chandpur

Material/Test	Spec. No.	No. of Tests	No. Approved	No. Dis-approved	Remarks/Requirement
A. Select Fill	2E.01-a	10	6	4	F.M. greater than 1.5 and less than 5% passing No.200 sieve. Blending suggested
B. Concrete Coarse Aggregate	3A.02-b.2	3	1	2	
C. Bricks: Frogmark: SBF	4A.02	1	-	1	
D. Cement	3A.02-a	6	6	-	Brand name: Asia, Rebar, Olympia, Universal, Bulcem and Tigaroda
E. Field Density Tests: Subgrade:	2E.01	55	30	25	90% MDD
			<u>No. of Test at</u> <u>7 days 28 days</u>		
F. Concrete: Compressive Strength test	3A.03 3A.05	15	-		Min required strength is 3000 PSI at 28 days

INVITATION NO.9 : 05-PARBATIPUR

CONTRACTOR : The Elite Engineers Ltd.

Total Contract Price : Tk.1,70,02,196.40
 Change Orders : Tk.
 Revised Contract Price : Tk.1,70,02,196.40
 Payments To Date : Tk.
 Retention To Date : Tk.
 L/Com. No. : 388-002411
 Date of L/Com. : 31.01.84
 Issue Date of L/Com. : 23.02.84
 Amount of L/Com. : Tk.1,70,02,196.40
 (\$683,759.00)

Date of Contract : 12.01.84
 Site Handed Over : 26.01.84
 Notice To Proceed : 23.02.82
 Scheduled Completion: 31.12.84 (312)
 Elapsed Time: 68 days 21.3%

% Completion			
Scheduled		Actual	
This Period	To Date	This Period	To Date
9.6%	29.8%	16.0%	17.0%
	Work :	7%	8%
	Materials :	9%	9%

1.0 Key Site Personnel

Engineer : Sr. Field Engineer - A. Debnath
 Inspector - N. Islam
 Asst. Technician - S. Rahma
 Contractor : Project Engr. (Part Time) - M. Rahman
 Site Superintendent - G.M.R. Alam.
 Site Engineer - G. Mostafa

2.0 Contractor's Activities

A. Site Development

A1 Mobilization & Demobilization

- . Two 2" dia tubewell constructed to obtain water for filling operation. Surface water source exhausted.
- . Brick waling platform and a 20'x 10' soak tank constructed near R1 building.
- . Brickwork of engineer's field office constructed up to wooden deck level. Form work for R.C. slab continued.

A3 Excavation To waste

No work this month

A4 Excavation

Excavation for two soak well in progress.

A6 Filling with Imported Material (Select Fill)

- . 8th layer each 6" thick (loose) (El.115.22) select fill placed and completed in godown area.
- . 3rd layer select fill 6" thick placed and compacted in R2 and R3 area.
- . Engineer's field office inside and outside 5th layer 6" thick placed.

A10 Boundary Wall Type A

- . 400 rft of trenching and plain concrete completed south property line length. Brick work has just started.

A16 Public Toilet

- . Brick work of public toilet completed up to lintel level.

C. Ancillary Buildings

C1 Brick flat soling, one course

- . Complete for building R1.

C2 Plain concrete

- . Footing completed for building R1.

C3 Brick work in foundation

- . In progress

D. Water Supply, Sanitary and Plumbing

D8 Septic tank

- . Brick work of Type A (One) septic tank completed near R2 and R3 building
- . One Type B septic tank for engineer's field office and public toilet constructed.

D9 Soak Well

- . One completed without top slab. Excavation of two others underway.

General:

The Contractor had scheduled for completion the filling and surcharge loading by end of April. The Contractor has about 2 ft. more of filling plus the surcharge loading to complete before the preloading time commences. This item is on the critical path and it is anticipated that unless the contractor expedites the work, which in the monsoon season and lack of adequate compaction equipment is difficult, he will be at least 30 days off schedule.

The Contractor has been awarded a construction contract with railway which is diverting his attention.

The Contractor has been directed to under Clause 46 of Conditions of to expedite the work.

2.1 Approved Materials On-Site

Portland Cement	- 15 ton
Reinforcing Steel	- 25 ton
Bricks, 1st Class	- 160,000 nos.
Boulders	- 13,000 cft
Sand, Coarse	- 14,500 cft.
Select Fill	- 260,000 cft
Ordinary Fill	- 95,000 cft
Mortar Sand	- 3,800 cft
Lumber (Woodwork)	- 80 cft.
Lime	- 30 bags.
C.I.Sheet	- 13.25 bundles

2.2 Major Equipment On-Site

- 1- Concrete mixer (hopper has broken down)
- 1- Water pump (Diesel)
- 1- Water pump (Electrical)
- 2- Vibrator
- 1- Rubber tyre roller (Taken by RHD on 26.4.84 for a week)
- 1- Baby steel roller

3.0 Problems

- . Boundary line in the north side still in dispute.
- . Good masons left site because contractor unwilling to pay wage befitting the workmanship wanted.
- . Sufficient water is not available from one tubewell now working for sprinkling on select fill.
- . Contractors' neglect to start construction of embankment on railway alignment before monsoon.

3.1 Delays

- . No good mason at site. Brickwork on Engineer's office, public toilet and RL stopped. Only two masons working on boundary wall brickwork.
- . Tyre roller compactor taken by RHD for a week. One 1-ton baby steel roller is not adequate for 95% compaction.
- . Contractor's personnel seems busy on other project work. Attendance is also not punctual and regular.
- . No approved shop drawing at site.

4.0 Actions Required

- BADC : . To arrange removal of condemned railway wagons and rails from the siding alignment so that the embankment can be started.
- . Remove existing boundary wall and latrine.
 - . To arrange land from BR as per siding layout.
 - . Arrange for incoming electric power line.
 - . Location of boundary line on north of godown objected to by local farmers.
- Contractor : . Submit shop drawings.
- . Complete Engineer's Field Office.
 - . Obtain insurance
 - . Submit Schedule of Events.
 - . Submit concrete mix design.
 - . Submit sequence of construction of embankment construction, and surcharge preloading and its removal and disposal prior to starting work. (Section 2Z)
 - . Comply with contract documents.
 - . Submit time vs. percent completion schedule
 - . Submit monthly report.

4.0 Actions Required - cont'd

- Engineer
- . Continue monitoring the contractor's activities.
 - . Take test of materials entering upon the site prior to placement in stockpiles.
 - . Follow-up on instructions/non-compliance messages issued to Contractor.

5. Claims

Time extension due to late issue of Letter of Commitment (Notice To Proceed). PBT/433, 11.3.84. Engineer is finalizing his review.

6.0 Work Schedule for Next Month

	<u>% Completion</u>	<u>Scheduled Completion</u>	<u>Days To Complete</u>
. Engineer's Field Office	20%	28.04	30
. Boundary Wall	2%	30.06	90
. Guard House	0%	10.05	90
. Public Toilet	0%	10.05	90
. Surcharge Loading	0%	30.04	30
. Preloading (90 days)	0%	-	-
. Filling Ancillary Bldgs.	30%	30.04	20
. Filling Railway & Roadway	10%	31.07	90
. Ancillary Buildings			
R1	0%	15.11	250
R2	0%	15.11	250
R3	0%	15.11	250

7.0 Shop Drawing:

<u>Drawing No.</u>	<u>Date</u>	<u>Title</u>	<u>Action</u>
		Rebar Schedule Engineer's Field Office	B
		Drawing For Fixing Wooden Beams	B
PBT-8		Beam Joint Details For EFO	B
R1/SPD		Footing, Column, Lintel, Stair, Porch of R1 Building	

8.0 Financial

Payment :

Material Prepayment Invoice : Tk. 14,96,000

CONSOLIDATED MATERIALS TESTING REPORT

Project : Fertilizer Warehouses Phase III

For the Month April 1984

Site : 05-Parbatipur

Material/Test	Spec. No.	No. of Tests	No. Approved	No. Dis-approved	Remarks/Requirements
A. Select Fill	2E.01-a	3	3	-	Requires F.M. greater than 1.5 and less than 5% passing No. 200 sieve.
B. Concrete Sand	3A.02-b.1	2	-	2	Needs screening to meet grading requirement
C. Mortar Sand	4A.03	1	1	-	
D. Bricks: Frogmark: KGB	4A.02	1	1	-	
E. Laboratory compaction test: Select Fill	2E.02	1	-	-	To determine max. dry density
F. Field Density Tests: Subgrade: Select Fill	2E.01	9 86	4 63	5 23	90% MDD 90% and 95% MDD
		<u>No. of test at</u> <u>7 days 28 days</u>			
G. Concrete: Compressive Strength Test	3A.03 3A.05	10	3		Min. required strength is 3000 psi at 28 days

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	- \$ 1,087,268
% Expenditure to Total Contract Budget	- 48.1%

PROGRESS

Elapsed Contract Time	- 508 days
Remaining Contract Time	- 426 days
% Elapsed Time	- 54.4%

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 - 30 June 1985* (30.74 mos.)
- . Months Completed - 16.74 months

* 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	15.52
Harry S. Allen	- Chief Construction Engineer	25	13.12
C.N. McCormick	- Foundation Engineer	11	8.78
-	- Structural Engineer	6	4.91
Y.O. Kim	- Project Engineer	16	2.21

3. Contract Administration

- . Procured project vehicles.
- . Consultant procured wireless licenses.
- . Foundation Engineer arrived and monitoring project sites extensively.

4. Meetings

- . Consultant's weekly staff review meetings.
- . Meetings with Construction contractors.
- . Progress Meeting USAID/BADC/Engineer/Contractors in office of Chairman, BADC on 22 April.

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II. Consultant's Activities

5. Supporting Bangladeshi Personnel

5.1 WEL and SSL Personnel (Sub-Contract)

<u>Designation</u>	<u>Man-Month</u>	
	<u>Allocated</u>	<u>Utilized</u>
Deputy Project Manager	27	15.9012
S&M Engineer	24*	18.2728
Structural Engineer	9	9.0388
Architect	4	3.8389
Electrical Engineer	6	6.0000
Railway Engineer	24	13.9089
Office Engineer	26	15.8656
Land Procurement Officer	12	13.1366
Surveyor	25	14.7072
Instrument Man	25	14.5664
Rodman	25	8.8222
Chainman	25	14.3191
Draftsman	69 *	47.9434
Laboratory Technician	56	26.5115
Laboratory Assistant	56	13.7852
Estimator	48	20.8943
Senior Field Engineer	60	23.9048
Field Engineer	80	11.1698
Inspectors	128	21.2588
Drivers	94	7.4984
Messenger	34	-
Peon	34	-
Guard	68	-
Clerk	34	-
Typist	34	-

5.2 Administrative Personnel

Administrative Manager	27	16.4546
Senior Accountant	27	16.5844
Assistant Accountant	44	15.0156
Secretary	27	16.5368
Printer	27	14.9069
Typist	72	41.6417
Clerk	45	18.6217
Drivers	103	61.6648
Messenger	45	13.8160
Peon	72	41.5433
Guard	90	70.7518
Radio Operator	48	-
Office Superintendent/Asst. Accountant	34	3.3478

* Adjusted

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II. Consultant's Activities

6. Project Expenditures
(Estimated Project Cost Incurred)

<u>Item</u>	<u>Agreement Budget</u>	<u>Adjusted Budget</u>	<u>This Month</u>	<u>Cumulative</u>
Services in Bangladesh	\$ 746,188	\$ 790,172	\$ 36,083	\$ 429,408
Services in Home Office	176,178	176,178	-	133,499
International Travel, etc.	85,740	85,740	401	19,480
Housing Allowances, Per Diem etc.	91,075	102,775	1,872	56,035
Logistic Costs	223,400	223,400	5,083	80,932
Supporting Staff	382,404	387,842	13,080	132,674
Misc. Direct Costs	43,000	43,000	522	9,067
Fixed Fee	205,460	205,460	7,610	129,370
	<u>\$1,953,445</u>	<u>\$2,014,567</u>	<u>\$ 64,651</u>	<u>\$ 990,465</u>
Percent of Estimated Budget			3.21%	49.17%
Percent Contract Time (To 30.06.85)				54.46%
Special Project Activity	\$ 306,620	\$ 245,498	\$ 1,139	\$ 96,803
	<u>\$2,260,065</u>	<u>\$2,260,065</u>	<u>\$ 65,790</u>	<u>\$1,087,268</u>

7. Billing and Payment

<u>Invoice</u>	<u>Period Ending</u>	<u>Billing</u>	<u>Payment</u>
01-12	31 January 84	\$ 854,856.86	\$ 851,447.68
13	29 February 84	\$ 44,959.18	Under Process

8. Reports

- . Monthly Progress Report No.16 for March 1984 submitted by letter /1589, 11 April 1984.

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C. TECHNICAL

1. Summary of Consultant's Activities During This Month

- 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.
- Installing radio communication network.
- Issued field message giving directions to contractors as required.
- Follow up on compliance with field messages.
- Prepare forms and instruction for Contractors and Engineers personnel guidance in control of work and materials.
- Prepare and submitted Monthly Progress Report.
- Kept Manager (Storage) BADC informed of obstructions and other problems at site.
- Held scheduled meetings with each of the 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.
- Monitoring resolution of site possession and removal of obstructions.
- Key staff members (Project Manager, Deputy Project Manager, Chief Construction Engineer, Project Engineer) continuing inspecting sites and instructing Engineer's and Contractors' personnel on procedures.
- Checking shop drawings submitted.
- Monitoring contractors' progress against their construction schedules.
- Sample format for progress payments transmitted to contractors.
- Processing contractors' invoices for payments.
- Calibrating all compression testing equipment by Central Testing Laboratory.
- Continuing testing of coarse aggregate from Chittagong area. Unable, to date, to find any experience record on these bounders.

II. Consultant's Activities

- Reviewing performance of field staff.
- Monitoring settlement platforms at sites surcharged.
- Processing contractor's claims.
- Testing of deformed re-steel at BUET.
- Items requiring follow-up
 - . Monitoring field testing procedures and test results
 - . Monitoring activity and performance of field staff
 - . Monitoring compliance to field messages issued by field staff
 - . Resolving of land problems by BADC
 - . Obtainign clearance from BR by BADC
 - . BADC action in obtaining incoming power line to sites.
 - . Review the design, effectiveness, and founding elevation of soak wells at each site.
 - . Review with BADC the location of access to Chandpur site.
 - . Review effectiveness of blending select fill in-place vs. blending in-stockpile.
 - . Review subsoil conditions at Chandpur encountered after excavation for R2 ancillary building foundation.
 - . Review design of tally office in light of experience on Phase II
 - . Continue monitoring results of settlement platforms.
 - . Review design of boundary wall at sites where embankment fills may possibly be placed against wall.
 - . Review BOQ and determine overruns and/or underruns.
 - . Assist contractor at Lakshmipur to develop sequence of paving operations so not to hinder off-take/on-take of fertilizer.

2. Railway Siding

The siding layouts for Jamalpur and Parbatipur have been approved by BR. BADC to obtain copies of the approved drawings from BR and send to Engineer for record.

Follow up by the Engineer on layout plan and approval by BR of Kishoreganj siding.

BADC to request BR to take action for removal of box cars carriages etc. from portion of alignment of the proposed siding to enable the Contractor to do the embankment work uninterrupted. The following are to be removed:

i. For the unused meter gauge track

Wagon - 2 nos.

Wheel and axle - 15 nos.

Carriage under frame - 2 nos.

Boulder stack - 10 ft. away from the center of track

Rails lying without ties

ii. From the ditch in the alignment of proposed Broad Gauge Track

Wagons - 3 nos.

Carriage under frame - 7 nos.

Wheel and axlw - 6 nos.

BADC to confirm with BR whether the abandoned structure to the south of the take-off point of the meter gauge siding shown on BR's drawing No.S&D 39/83/PXC will be dismantled. If not, an adjustment in location of siding will be necessary.

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