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BICOL SECONDARY & FEEDER ROADS
PROJECT, PACKAGE III
PROGRESS REPORT
October, 1981

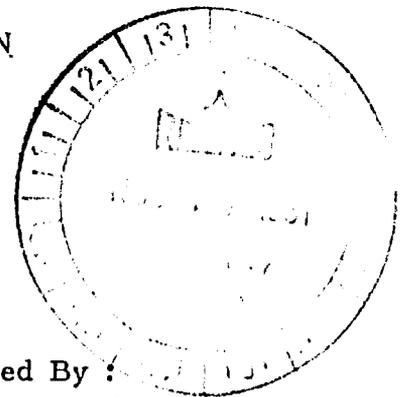


DCCD ENGINEERING CORPORATION

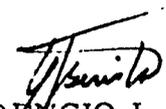
MINISTRY OF PUBLIC WORKS & HIGHWAYS
BRBDP ROAD COMPONENT
PROJECT MANAGEMENT OFFICE

MONTHLY PROGRESS REPORT
OCTOBER, 1981

DCCD ENGINEERING CORPORATION



Prepared By :


GAUDENCIO L. BENITO
Resident Engineer

Submitted By :

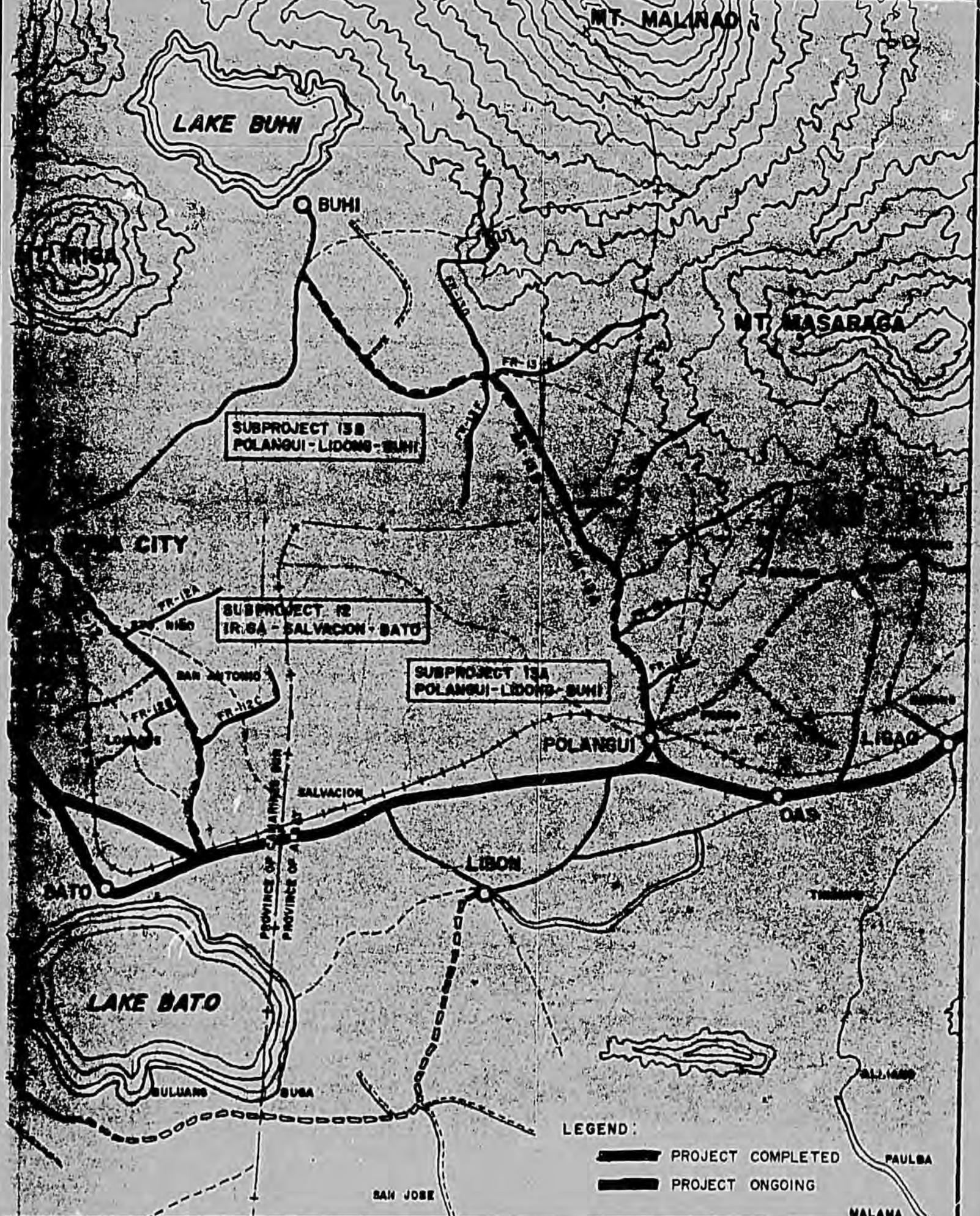

RICARDO S. BASA
Project Manager



PROJ. NO. 77-864

 DCCD ENGINEERING CORPORATION

MINISTRY OF PUBLIC HIGHWAYS
PROJECT MANAGEMENT OFFICE



**SUBPROJECT 13B
POLANGUI-LIDONG-BUHI**

**SUBPROJECT 12
IRIGA-SALVACION-BATO**

**SUBPROJECT 13A
POLANGUI-LIDONG-BUHI**

LEGEND:
 ——— PROJECT COMPLETED
 - - - PROJECT ONGOING

**BICOL SECONDARY AND FEEDER ROADS
 PACKAGE III
 LOCATION MAP**

MONTHLY PROGRESS REPORT
October, 1981

I GENERAL

This report covers the activities for the CONSTRUCTION SUPERVISION of the BICOL SECONDARY and FEEDER ROADS PROJECT, Package III. This Package is composed of Subproject Nos. 7, 8, 12 and 13.

Subproject No. 7 - This project was completed and turned over to the agencies concerned on August. 19, 1981.

Subproject No. 8 - The Contractor did not progress well during the month due to adverse weather condition, breakdown of equipment and shortage in production of crushed aggregates. It is envisaged that if the problems will not be solved by November, the Contractor will not be able to meet the recommended revised completion date in December, 1981.

Subproject No. 12 - Good progress continued during October, 1981. The Contractor is concentrating on improving production of crushed aggregates for items 200 and 314 requirements. Initial delivery of asphalt

for DBST paving has arrived from supplier in Bataan.

Subproject No. 13 - The Contractor has brought in additional equipment to recover delays and catch up with scheduled progress of work. Since the project slippage has surpassed the 20% allowable, the Consultant has served the Contractor a warning and a grace period of 30 days to improve progress before any extreme action is taken.

2 PROGRESS

Subproject No. 8 (Topaz-Palsong-Bula)

The accomplishment for the month is 5.60% making a total completion to date of 86.73% based on the Revised Progress Schedule. The Contractor brought in additional hauling units but works were intermittent due to repeated breakdowns of payloaders. There was also the problem of shortages in production of crushed aggregates after mid month which held down progress of base course laying and DBST paving. A total of 7 suspended days due to adverse weather was recorded during the period.

A. Secondary Road

Roadwork - Subbase shoulder operations on completed

base and asphalted sections is now progressing adequately. Placement of fill materials to improve the approaches to eleven existing barrio roads feeding into the secondary roads is substantially finished. Works on the remaining fill sections of the Bicol River Bridge approach has not yet been completed.

Base Course - A stretch of 100 meters at the Panoypoyan intersection was the only section completed during the month. Stockpiling of binder materials for Item 200 were placed ahead of the crushed aggregates at the remaining 1.1 km. after the Bicol River Bridge. Low production of crushed aggregates were due to shortages of boulders for crushing and repeated breakdowns of payloader at the quarry site.

Surface Courses and Pavement - Production for October was only 1,520 lineal meters of full width asphalt surface course due to inclement weather and shortages of crushed aggregates. The section completed so far is 5.78 kms. out of 11 kms.

length of the road. The proposed two (2) DBST paving operations has so far not been carried out.

Structures (Bridges) - Except for the railings and wingwalls at the first approach, the 86 meters 6 spans Bicol River Bridge is now completed. Removal of falseworks and formworks on completed spans are underway.

Structures (Drainage) - Riprapping works completed during the month were at Km. 8 / 400 to Km. 8 / 480 left side and Km. 8 / 400 to Km. 8 / 440 Right Side. Riprapping works ongoing was at Km. 7 / 600 to Km. 7 / 700, left side.

B. Feeder Roads

Feeder Roads A and B completed.

Feeder Road C

Roadwork - Except for the uncompleted fill section at Km. 2 / 500 to Km. 3 / 000 and compaction works at Km. 4 / 500 to Km. 6 / 003 (end section) the road is virtually completed.

Structure (Drainage) - One line of 0.61mØ pipe culvert was installed and backfilled at Km. 1 7/600 during the month.

Subproject No. 12 (Iriga-Salvacion-Bato)

The accomplishment for the month is 4.19% making a total completion to date of 31.17%. The Contractor is still ahead of schedule by 5.64% but progress slowed down after mid month due to breakdowns of equipment and occurrence of adverse weather.

A. Secondary Road

Roadwork - Progress is still ahead of schedule and no particular problems are foreseen at the moment.

Base Course - Progress is slightly behind schedule. Crusher production was below the expected rated output capacity. A Mechanical Engineer which was hired by the Contractor traced the problems to the weak motors of the vibrating screens and conveyors assembly. No base course laying operations were done during the month.

Surface Courses and Pavement - 120 drums of asphalt materials arrived from supplier in Bataan. The Contractor has no aggregates yet for the asphalt operation. DBST paving is scheduled to start in Dec.

Structures (Drainage) - Progress is ahead of schedule. No particular problems are foreseen at the moment. Pipe culverts installed and backfilled during the period are as follows:

Culvert No.	RCPC NO. 0.91mØ	RCPC NO. 0.61mØ	RCPC NO. 1.07mØ	RCPC NO. 1.22mØ
3	14 pcs.	-	-	-
9	-	-	44 pcs.	-
19	-	-	-	2 pcs.
20	-	-	-	3 pcs.
22	1pc.	-	-	-
25	1 pc.	-	-	-
29	-	3 pcs.	-	-
30	-	3 pcs.	-	-
31	-	8 pcs.	-	-
32	1 pc.	-	-	-
33	-	7 pcs.	-	-
34	-	3 pcs.	-	-
35	-	12 pcs.	-	-
36	9 pcs.	-	-	-

37	-	4 pcs.	-	-
38	-	6 pcs.	-	-

Feeder Road A

Intermittent scrapping and compaction work at the middle and end sections of the road is underway.

Drainage completed were culverts 2 and 3 where 7 and 5 pieces of 0.61mØ pipes were respectively installed and backfilled.

Feeder Road B

Hauling and spreading works on sections deficient in sub-base materials (Item 108) continuing.

Drainage pipe culverts installed and backfilled in the sections are as follows:

Culvert No.	1	5 pcs.	0.61mØ
	4	10 pcs.	0.61mØ
	5	10 pcs.	0.61mØ
	6	10 pcs.	0.61mØ
	7	11 pcs.	0.61mØ
	8	10 pcs.	0.61mØ

Feeder Road C

Hauling and spreading works of subbase material (Item 108) from Km. 1 / 000 to Km. 2 / 500 in progress. No sections were completed due to lack of water truck equipment.

Drainage completed was culvert No. 1, 5 pcs. of 0.61mØ pipes were installed.

Subproject No. 13 (Polangui-Lidong-Buhi)

The accomplishment for the month is 5.26% making a total completion to date of 6.39%. Although the Contractor brought additional equipment, the efforts were still not enough to recover the project slippage which has now totalled to 22.21%. There was also the problem of lack of experienced highway supervisor to direct the operations on base course reparation and DBST paving. Other problems identified have been taken up by the Consultant during regular meetings with the Contractor.

A. Secondary Road

Roadwork - The Contractor has purchased one level and one transit to speed up their survey works. Roadway and drainage excavation at Lallo Bridge first approach is almost finished. About mid month of October the Contractor has negotiated the quarry formerly used by

JPY Contractor for Item 108 requirements and to fill up uncompleted sections after Lallo Bridge up to the end section.

Base Course - The Contractor has brought in a 15 TPH crusher as replacement for the mobile 20 TPD crusher which they returned to Manila. Crushing of stones immediately started after the crusher was set up at Km. 4 / 800. To accelerate further, the base course reparation works additional grader and roller were brought in by the Contractor. The Consultant has advised the Contractor about the correct proportions of fine and crushed items as well as the scarifying of the section to properly blend the aggregates.

Surface Courses and Pavement - DBST paving works started after mid month and the following sections were completed at month end: Km. 1 / 820 to Km. 2 / 200 right side, and Km. 2 / 230 to Km. 2 / 400 left side. Km. 2 / 460 to Km. 2 / 500 right side, prime coat completed. To catch up with schedule and as discussed with the Contractor they must at least have four different areas of operations.

Structures (Bridges) - The Contractor has acquired a compressor and jackhammer equipment to speed up the pier footing excavation of Lallo Bridge. Works at month end again suffered delays due to breaking down of the 3 ton Chain Block which is effective in removing boulders and lack of backhoe or proper equipment in removing debris loosened up by the jackhammer. Meanwhile, fabrication of forms for the pier shaft and preparation of the rebars for the footing is simultaneously being done during the month.

Feeder Road E

Roadway - Roadway and drainage excavation started and on going at Km. 2 / 100 to Km. 2 / 912.20 (end section).

Structures (Drainage) - Box Culvert No. 6 at Km. 0 / 875.50 was completed and the bottom slab of box culvert No. 7 at Km. 2 / 068 was poured during the period.

Feeder Road F

Roadwork - Side ditching and reparation of existing subbase underway.

Structures (Drainage) - Box Culvert No. 8 at Km. 2 / 168 has also been completed during the month. Backfilling at approach to make the section passable has started.

Feeder Road G

Roadwork - No activity yet.

Structures (Drainage) - Remaining apron and wingwall at inlet of Box Culvert No. 13 at Km. 3 / 745 were poured and completed during the month.

9 pieces of 0.91mØ pipe culvert were installed near the end section of the road.

3 MISCELLANEOUS

There were no changes in the Consultant Staff during the month of October, 1981.

**PRIMARY AND FEEDER ROADS
PACKAGE III**

CONTRACT NO. 1

BULA-OMBAO (SUB-PROJECT 7)

PROGRESS CHART

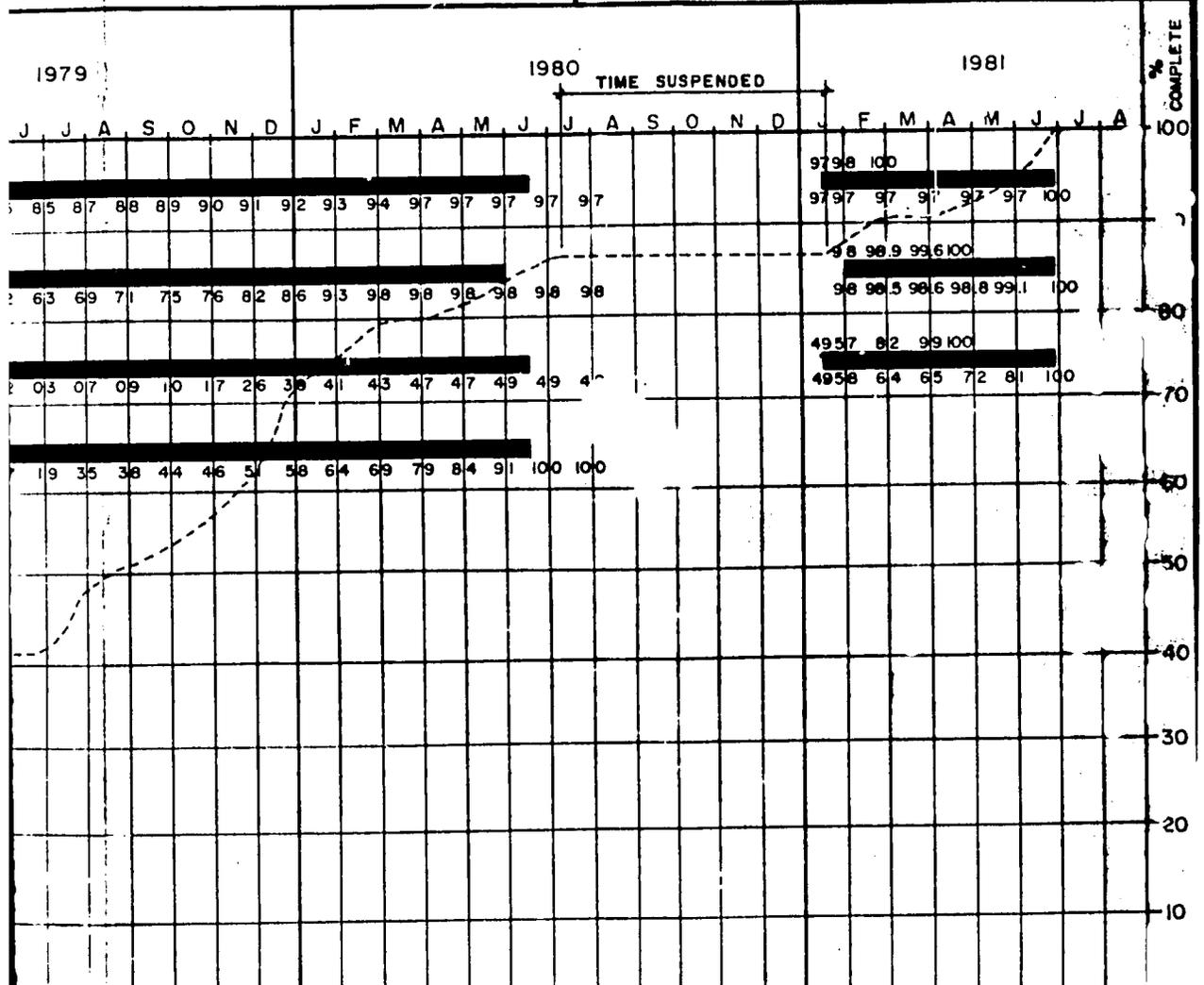
PROGRESS OF WORK

PREPARED BY: GAUDENCIO L. BENITO, R.E.

NET CONTRACT BID AMOUNT: ₱ 11,488,6

APPROVED REVISED CONT. AMOUNT: ₱ 11,684,096.56

FINAL COST: — — —



BICOL RIVER BASIN SECONDARY & FEEDER ROADS PROJECT
 PACKAGE III

Sub-Project No. 8 (Topaz-Palsong-Bula)

CONTRACTOR'S STAFF
 CAPITOL INDUSTRIAL CONSTRUCTION GROUPS, INC.
As of October 31, 1981

1. Project Manager	1	
2. Superintendent/Staff	2	
3. Field Supervisors	8	
4. Surveyor Aides	3	
5. Control/Logistics	2	
6. Administrative/Accounting	19	
7. Timekeeper	2	
8. Skilled Laborer	60	
9. Unskilled Laborer	<u>83</u>	<u>180</u>
<u>T O T A L</u>		<u>180</u>

BIOOL RIVER BASIN DEVELOPMENT PROGRAM
PROGRAM OFFICE
San Jose, Pili, Camarines Sur

SUMMARY OF MANILA-BASE PERSONNEL AND LOCAL
SUB-CONTRACTORS

As of October 31, 1981

PERSONNEL	TECHNICAL/ ENGINEERING	SKILLED	UNSKILLED	ADMINISTRATIVE	TOTAL
From outside Bicol River Basin Area (Manila-Based, etc.)	11	17	-	5	33
Within BRBD Area (Local/Sub-Contractor etc.)	3	43	83	18	147
T O T A L	14	60	83	23	180

Prepared by:

CAPITOL IND. CONST. GROUPS, INC.
Name of Contractor


QUIMZON D. LIAO
Name

Topaz-Balsong-Bula
Project/Contract Section

Project Manager
Designation

STATUS OF CONTRACTOR'S EQUIPMENT ON SITE
 CAPITOL INDUSTRIAL CONSTRUCTION GROUPS, INC.
As of October 31, 1981

Equipment -----	Available on site	Required for the month	Deficiency -----
1. Crushing Plant	1	1	Low production
2. CAT Dozer D8	1	1	-
3. CAT Dozer D4	1	1	-
4. Payloader	3	3	1 Unit Shutdown
5. Road Grader	2	2	-
6. Backhoe	2	1	1 unit spare
7. Vibratory Compactor	1	2	1
8. Plate Compactor	1	1	-
9. Road Roller	1	2	1
10. Dump Truck 10 w	8	8	-
11. Dump Truck 6w	5	5	-
12. Water Truck	1	2	1
13. Asphalt Kettle	2	3	1
14. 1-bagger mixer	4	4	-
15. Concrete Vibrator	2	2	-
16. Water pump	2	1	1 unit spare
17. Welding machine	3	2	-
18. Generating Set	1	1	-
19. Chain Saw	1	1	-
20. Portalift	1	1	-

STATUS OF ACCOMPLISHMENT FOR THE MONTH OF OCTOBER, 1981
Sub-Project No. 8 (Topaz-Palsong-Bula Section)

Item No.	Description	Contract Quantity	Accomplished Qty. to date	% Accomplishment		Actual	Slippage	Remarks
				This period	Schedule			
4a	Provision of Survey Equipment	14,000.00	14,000.00	-	100	100	-	Completed
4b	Provision of Lab. Equip.	39,000.00	39,000.00	-	100	100	-	Completed
4c	Provision of 4-wheel drive diesel engine vehicle for RE (1 unit)	110,000.00	110,000.00	-	100	100	-	Completed
100	Clearing & Grubbing	63,000 m ²	69,699 m ²	-	100	100	-	Completed
105	Roadway & Drainage Excavation	108,531 m ³	77,182 m ³	-	100	98.41	-1.59	W/underun
105 (5)	Roadway & Drainage Excavation (Removal of Slides)	1,433 m ³	1,433 m ³	-	100	100	-	Completed
105 SPL	Rock Excavation	1,500 m ³	1,500 m ³	-	100	100	-	Completed
106	Excavation for Structures (Drainage)	3,370 m ³	3,205 m ³	1.69	100	95.10	-4.90	-
107	Borrow	45,893 m ³	50,145 m ³	-	100	96.56	-3.44	w/underrun
108	Aggregate Subbase	50,136 m ³	45,733 m ³	9.29	94	91.22	-2.78	-
200	Aggregate Base Course	11,750 m ³	10,146 m ³	6.91	100	86.35	-13.65	-
302 (1)	Bit. Prime Coat	105 mt.	50 mt.	12.38	73	47.62	-25.38	-

2/ Sub-Project No. 3 (Topaz-Palsong-Bula)

314 (1)	Asphalt for Bit Surface Treatment	1,615 m ³	957 m ³	15.36	82	59.26	-22.74	-
314 (3)	Asphalt Cement	212 mt.	106 mt.	12.74	75	50.00	-25	-
402 2.5	Concrete Piles	432 m	431 m	-	100	100	-	Completed
402 2.5b	Concrete Test Piles	75 m	75 m	-	100	100	-	Completed
403	Concrete Railing	172 m	-	-	47	0	-47	Not started
405 3.1a	Class A Concrete	998 m ³	946.40 m ³	11.72	94	94.83	+0.83	-
405 4.21	Falsework	3,846 m ³	3,160 m ³	-	100	82.16	-17.84	-
405 4.21a	Formwork for Bridges	1,140 m ²	1,338 m ²	21.95	100	91.77	-8.23	-
405 4.21b	Formwork for Culverts	2,320 m ²	2,201 m ²	-	100	94.87	-5.13	-
406	Reinforcing Steel	87,760 Kg.	82,993 Kg.	17.10	100	94.57	-5.43	-
407	Structural Steel	380 Kg.	374 Kg.	39.21	100	98.42	-1.58	-
413a	RCPC, 0.61 m. dia.	512 m	556 m	-	100	100	-	Completed
413b	RCPC, 0.91 m. dia.	145 m	145 m	-	100	100	-	Completed
413c	RCPC, 1.07 m. dia.	207 m	184 m	-	100	100	-	W/underrun
413d	RCPC, 1.22 m. dia.	63 m	63 m	-	100	100	-	Completed
500a	Riprap Grouted	1,117 m ³	728 m ³	6.17	65	65.17	+0.17	-
500c	Filter Layer for Riprap	250 m ³	23 m ³	-	09	0	-	-
506	Wood Guardrail	390 m	-	-	0	-	-	Not started

2/ Attachment B-5

ITEMIZED SUMMARY OF ACCOMPLISHMENT
Sub-Project No. 8 (Topaz-Palsong-Bula)

	<u>Description</u>	<u>Contract amount</u>	<u>Amount Accomplished to date</u>	<u>% Accomplishment</u>		<u>R E M A R K S</u>
				<u>This period</u>	<u>To Date</u>	
I	GENERAL	163,000.00	163,000.00	-	100	Completed
II	EARTHWORKS					
	Secondary Road	4,148,220.86	3,916,814.86	1.02	94.42	-
	Feeder Roads:					
	A	579,505.00	579,505.00	-	100	Completed
	B	513,148.00	513,148.00	-	100	Completed
	C	2,197,678.68	1,597,137.78	11.42	72.67	-
III	BASE COURSE					
	Secondary Road	925,900.00	799,504.80	6.91	86.35	-
IV	SURFACE COURSES & PAVEMENT					
	Secondary Road	836,628.60	424,334.50	13.05	50.72	-
V	STRUCTURES (Drainage)					
	Secondary Road	427,789.30	401,651.89	3.46	93.89	-

2/ Subproject No. 8 (Topaz-Palsong-Bula)

Feeder Roads:						
	A	37,229.60	37,229.60	-	100	Completed
	B	26,523.60	26,523.60	-	100	Completed
	C	58,920.00	58,920.00	-	100	Completed
VI	STRUCTURES (Box Culverts)					
Secondary Road:						
	RCBC # 1	202,420.00	201,836.00	-	100	Completed/w/underun
	RCBC # 2	139,224.50	139,224.50	-	100	Completed
	RCBC # 3	91,433.50	91,433.50	-	100	Completed
	RCBC # 4	136,638.00	136,638.00	-	100	Completed
	RCBC # 5	91,644.00	91,644.00	-	100	Completed
VII	STRUCTURES (Bridges)					
	Secondary Road	1,090,246.20	958,189.60	15.81	87.89	-
VIII	INCIDENTAL CONST.					
	Secondary Road	22,035.00	-	-	-	Not started

PHYSICAL ACCOMPLISHMENT OF MAJOR WORK ITEMS

I - <u>ROADS</u>	<u>ACTUAL</u>	<u>PROGRAMMED</u>		<u>ACTUAL</u>	<u>PROGRAMMED</u>
Secondary:			Feeder:		
Subgrade	10.98 Km.	11.019 Km.	Subgrade	11.35 Km.	11.65 Km.
Subbase	10.73 Km.	11.019 Km.	Subbase	11.35 Km.	11.65 Km.
Base Course	9.54 Km.	11.019 Km.			
Pavement or Surfacing	5.78 Km.	11.019 Km.			

II - STRUCTURES (Bridges)

Bicol River:

a) Sub-structures	86 m	86 m
b) Super-structure	79 m	86 m

WEATHER REPORT FOR THE MONTH OF OCTOBER, 1981

Subproject No. 8 (Topaz-Palsong-Bula)

Date	Weather Condition	Remarks	Time Extension
			Recommended
October 1	Fair	Workable	None
2	Cloudy to fair	-do-	-do-
3	Cloudy to fair	-do-	-do-
4	Cloudy w/slight rain in P.M.	-do-	-do-
5	Cloudy w/slight rain in P.M.	-do-	-do-
6	Cloudy w/scattered rainshower	-do-	-do-
7	Cloudy to fair	-do-	-do-
8	Rainy	Unworkable	-1 day
9	Rainy	-do-	-1 day
10	Cloudy to fair	Workable	None
11	Fair	-do-	-do-
12	Rainy	Unworkable	-1 day
13	Heavy rain	-do-	-1 day
14	Fair	Workable	None
15	Fair	-do-	-do-
16	Cloudy w/scattered rainshower	-do-	-do-
17	Fair	-do-	-do-
18	Fair	-do-	-do-
19	Fair	-do-	-do-
20	Cloudy to fair	-do-	-do-
21	Fair	-do-	-do-
22	Fair	-do-	-do-
23	Fair to cloudy	-do-	-do-
24	Rainy	Unworkable	-1 day
25	Rainy	-do-	-1 day
26	Rainy	-do-	-1 day
27	Cloudy	Workable	None
28	Fair	-do-	-do-
29	Fair	-do-	-do-
30	Fair	-do-	-do-
31	Fair	-do-	-do-

EXTENSION RECOMMENDED 7 days

BICOL RIVER BASIN SECONDARY & FEEDER ROADS PROJECT
PACKAGE III

Subproject No. 8 (Topaz-Palsong-Bula Section)

CAPITOL INDUSTRIAL CONSTRUCTION GROUPS, INC.
As of October 31, 1981

a) Contractor's Staff

Project Manager	:	Quimzon D. Liao
Field Engineer	:	Paul Fernandez
Drainage Supervisor	:	Julio E. Acabado
Structural Supervisor	:	Roberto Lorenzo
Earthwork Supervisor	:	George Zeumert

b) Percent Time Elapsed : 104.17 base on approved Revised Progress Schedule
94.19% based on recommended Revised Progress Schedule.

c) Cause/Causes of (-) Slippage

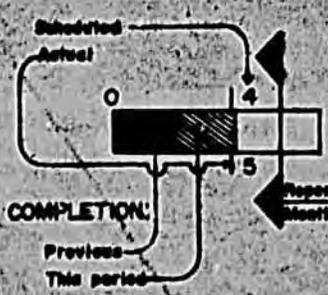
Unfavorable weather conditions, frequent breakdown of equipment and insufficient supply of base course and Aggregate for bit. surface treatment.

CONTRACTOR: CAPITOL INDUSTRIAL CONST GROUPS
 BIDDING DATE: MARCH 21, 1979
 OFFICIAL STARTING DATE: MARCH 11, 1980
 ORIGINAL COMPLETION DATE: SEPTEMBER 01, 1981
 RECOMM'D COMP. DATE: a) 1st Revision: OCT. 07, 1981, Approved
 PROBABLE COMPLETION DATE:

**BICOL SECONDARY
 PACKA**
 CONTRA
 TOPAZ - PALSONG - BUL
PROGRES

ITEM	% CONTRACT VALUE	% ITEM COMPLETE	% PROJECT COMPLETE	1980																		
				M	A	M	J	J	A	S	S	S	S	S	S							
I GENERAL	1.41	100	1.41	0	00	31																
II EARTHWORK	63.88	88.47	57.11	0	00	06	11	23	30	47	57	67										
III BASE COURSE	8.04	86.35	6.92																			
IV SURFACE COURSES AND PAVEMENT	7.23	50.72	3.67																			
V STRUCTURES	18.33	95.87	18.53			06	12	22	28	30	31											
VI INCIDENTAL CONSTRUCTION	0.19	0.00	0.00																			
TOTAL	100																					

PROGRESS:



ACTUAL 87.64
 SCHEDULED 100

LEGEND:

- ORIGINAL PROGRESS SCHEDULE
- REVISED PROGRESS SCHEDULE
- ACTUAL PROGRESS

**LARY AND FEEDER ROADS
PACKAGE III**

CONTRACT NO. I
NG-BULA (SUB-PROJECT 8)

MONTHLY PROGRESS REPORT AS OF: OCT. 31, 1981

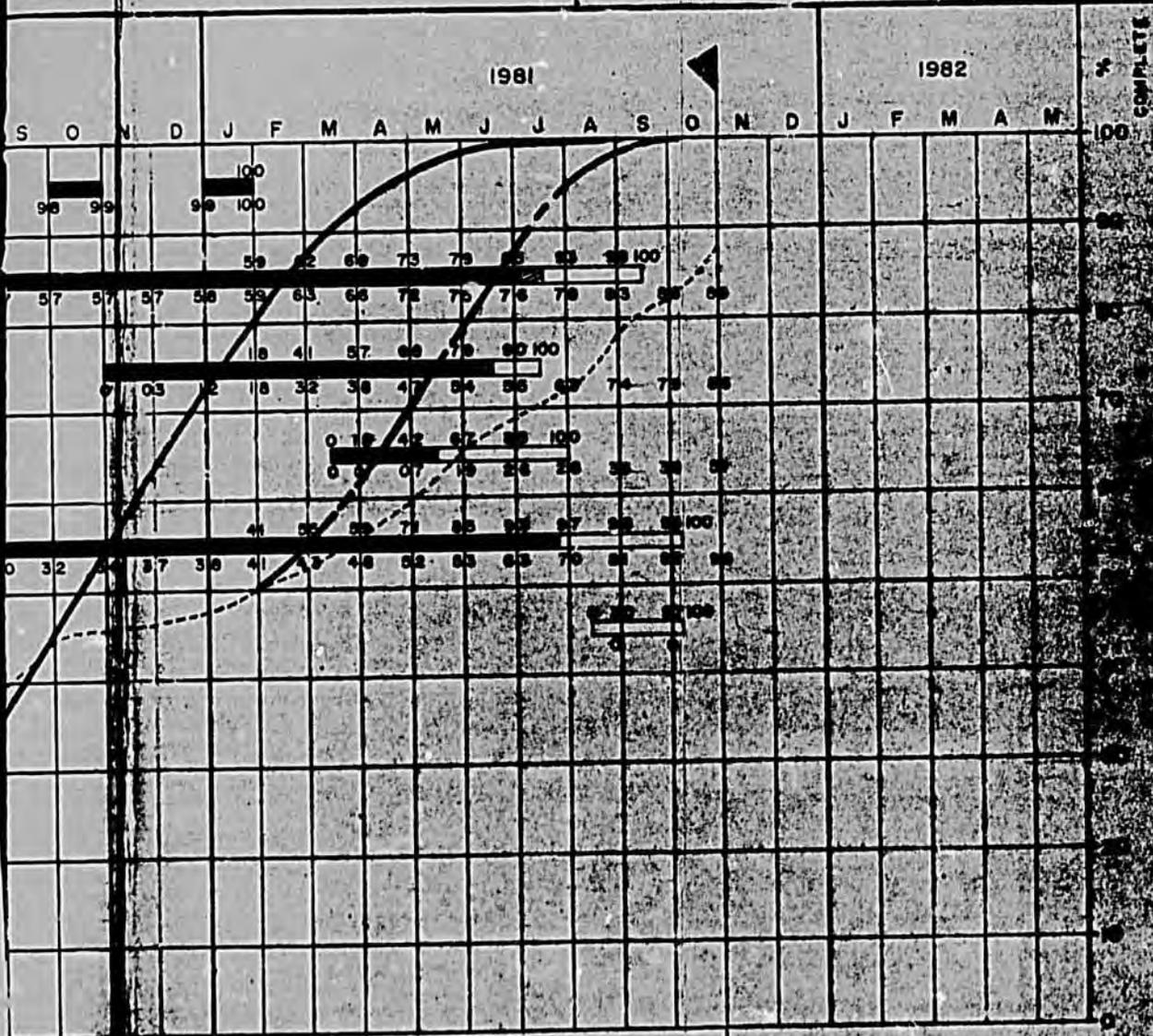
PREPARED BY: GAUDENCIO L. BENITO, R.E.

NET CONTRACT BID AMOUNT: ₱ 11,567,162.25

REVISED CONTRACT AMOUNT:

CURRENT ESTIMATED FINAL COST:

GRESS CHART



SCHEDULE
SCHEDULE (1st REVISION)

BICOL RIVER BASIN SECONDARY & FEEDER ROADS PROJECT
PACKAGE IIISub-Project No. 12 (Iriga-Salvacion-Bato)CONTRACTOR'S STAFF
MOONROCK CONSTRUCTION
As of October 31, 1981

1.	General Manager	1	
2.	Project Manager	1	
3.	Superintendent/Staff	2	
4.	Field Supervisor	3	
5.	Surveyor/Aides	9	
6.	Administrative/Accounting	4	
7.	Skilled Laborer	35	
8.	Unskilled Laborer	<u>63</u>	<u>118</u>

T O T A L 118

BICOL RIVER BASIN DEVELOPMENT PROGRAMME
PROGRAM OFFICE
San Jose, Pili, Camarines Sur

SUMMARY OF MANILA-BASED PERSONNEL AND LOCAL
SUB-CONTRACTORS

As of October 31, 1981

PERSONNEL	TECHNICAL/ ENGINEERING	SKILLED	UNSKILLED	ADMINISTRATIVE	TOTAL
From outside Bicol River Basin Area (Manila-Based, etc.)	-	-	-	-	-
Within BRBD Area (Local/Sub-Contractor, etc.)	11	35	63	9	118
TOTAL	11	35	63	9	118

Prepared by:



J. ANTONIO P. DILANCO

MOONROCK CONSTRUCTION
Name of Contractor

Iriga-Salvacion-Bato
Project/Contract Section

Project Manager
Designation

STATUS OF CONTRACTOR'S EQUIPMENT ON SITE
 MOONROCK CONSTRUCTION
As of October 31, 1981

Equipment -----	Available on site	Required for the month	Deficiency -----
1. Bulldozer D6	1	1	-
2. Bulldozer D7	1	1	-
3. Road Grader	2	2	-
4. Payloader	2	2	-
5. Road Roller	1	1	-
6. Mini Road Roller w/ Prime Mover	1	1	-
7. Water Truck	-	2	2
8. Dump Truck	7	10	3
9. Stake Truck	6	-	-
10. Concrete Vibrator	1	1	-
11. Water Pump	1	1	-
12. Bar Cutter and Bender	1	1	-
13. Vibratory Compactor	-	1	1
14. Rock Crushing Plant 60 Tph	1	1	-
15. Concrete Mixer (1-bagger)	3	1	-
16. Backhoe	-	1	1
17. Service Vehicles	6	-	-

STATUS OF ACCOMPLISHMENT FOR THE MONTH OF OCTOBER, 1981
Sub-Project No. 12 (Iriga-Salvacion-Bato Section)

Item No.	Description	Contract Quantity	Accomplished Qty. to date	% Accomplishment		Actual	Slippage	Remarks
				This period	Schedule			
100	Clearing & Grubbing	384 m ²	384 m ²	-	100	100	-	Completed
105	Rdway. and Drainage Excavation	14,692 m ³	9,332 m ³	-	49.00	63.52	+14.52	-
106	Excavation Structures (Drainage)	1,763 m ³	1,224.50 m ³	21.19	54.00	69.46	+15.46	-
107	Borrow	8,901 m ³	7,081 m ³	15.60	51.00	79.55	+28.55	-
108	Aggregate Subbase	21,056 m ³	6,890.50	1.35	26.00	32.72	+ 6.72	-
113	Repreparation of Existing Road (Subbase)	9.20 Km.	8.596 Km.	3.48	100	93.44	- 6.56	W/underrun
200	Aggregate Base Course	9,800 m ³	-	-	1.00	-	1.00	Not started
302 (1)	Bit. Prime Coat	85 mt.	-	-	-	-	-	Not started
314 (1)	Aggregate for Bit Surface Treatment	1,140 m ³	-	-	-	-	-	Not started
314 (3)	Asphalt Cement	170 mt.	-	-	-	-	-	Not started

2/ Sub-Project No. 12 (Iriga-Salvacion-Bato)

405 (3.1a)	Class A Concrete	166 m ³	188 m ³	10.24	100.00	113.25	+13.25	W/overrun
405 (4.21b)	Formwork for Box Culverts	690 m ²	634 m ²	10.14	100.00	91.88	- 8.12	W/underrun
406	Reinforcing Steel	13,529 Kg.	13,527 Kg.	7.11	100.00	99.99	- 0.01	W/underrun
413a	RCPC, 0.61 m. dia.	346 m	186 m	33.82	42.00	53.76	+11.76	-
413b	RCPC, 0.91 m. dia.	93 m	45 m	7.53	42.00	48.39	+ 6.39	-
413c	RCPC, 1.07 m. dia.	106 m	71 m	5.66	42.00	66.98	+24.98	-
413d	RCPC, 1.22 m. dia.	192 m	106 m	13.54	42.00	55.21	+13.21	-
500a	Riprap Grouted	681 m ³	234 m ³	18.65	42.00	34.36	- 7.64	-
500c	Filter Layer for Riprap	176 m ³	19 m ³	9.09	42.00	10.80	-31.20	-
506	Wood Guardrail	484 m	-	-	-	-	-	Not started

ITEMIZED SUMMARY OF ACCOMPLISHMENT
Sub-Project No. 12 (Iriga-Salvacion-Bato)

Description	Contract amount	Amount Accomplished to date	% Accomplishment		REMARKS
			This period	To Date	
I EARTHWORKS					
Secondary Road	1,008,008.35	455,974.40	6.49	45.24	-
Feeder Road:					
A	304,583.05	203,081.08	1.69	66.68	-
B	405,572.94	266,208.98	1.54	65.64	-
C	735,498.94	223,976.36	0.70	31.13	-
II BASE COURSE					
Secondary Road	1,034,390.00	-	-	-	Not started
III SURFACE COURSES & PAVEMENT					
Secondary Road (DBST)	1,427,019.90	-	-	-	Not started
IV STRUCTURES (Drainage)					
Secondary Road	645,689.98	345,790.91	16.62	53.55	-

2/ project No. 12 (Iriga-Salvacion-Bato)

Feeder Roads:

A	43,664.13	21,647.58	8.73	49.58	-
B	43 ,829.34	38,860.00	66.10	88.66	-
C	63,013.06	3,122.00	4.95	4.95	-

V STRUCTURES
(Box Culverts)

Secondary Road

# 1	168,682.52	169,705.00	18.80	100.61	Completed w/overrun
# 2	166,244.76	176,527.44	--	106.18	-

VI INCIDENTAL CONST.

Secondary Road	81,592.72	-	-	-	Not started
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PHYSICAL ACCOMPLISHMENT OF MAJOR WORK ITEMS

I - ROADS

	<u>ACTUAL</u>	<u>PROGRAMMED</u>		<u>ACTUAL</u>	<u>PROGRAMMED</u>
Secondary:			Feeder:R		
Subgrade	10.85 Km.	9.217 Km.	Subgrade	4.58 Km.	7.382 Km.
Subbase	5.05 Km.	9.217 Km.	Subbase	2.70	7.382 Km.
Base Course	0 Km.	9.217 Km.			
Pavement or Surfacing (DBST)	0	9.217 Km.			

WEATHER REPORT FOR THE MONTH OF OCTOBER, 1981

Sub-Project No. 12 (Iriga-Salvacion-Bato)

Date	Weather Condition	Remarks	Time Extension
			Recommended
October 1	Fair to cloudy in afternoon	Workable	None
2	Fair	-do-	-do-
3	Fair	-do-	-do-
4	Fair	-do-	-do-
5	Fair	-do-	-do-
6	Cloudy w/isolated rainshower	-do-	-do-
7	Fair	-do-	-do-
8	Fair	-do-	-do-
9	Cloudy w/slight rain	-do-	-do-
10	Fair	-do-	-do-
11	Fair	-do-	-do-
12	Cloudy to fair	-do-	-do-
13	Cloudy w/slight rain	-do-	-do-
14	Fair	-do-	-do-
15	Fair	-do-	-do-
16	Fair to cloudy in afternoon	-do-	-do-
17	Fair	-do-	-do-
18	Fair	-do-	-do-
19	Fair	-do-	-do-
20	Cloudy w/occasional rain	-do-	-do-
21	Fair	-do-	-do-
22	Fair	-do-	-do-
23	Fair	-do-	-do-
24	Rainy	-do-	-do-
25	Rainy	-do-	-do-
26	Fair	-do-	-do-
27	Fair	-do-	-do-
28	Fair	-do-	-do-
29	Fair	-do-	-do-
30	Fair	-do-	-do-
31	Fair	-do-	-do-

EXTENSION RECOMMENDED None

BICOL RIVER BASIN SECONDARY & FEEDER ROADS PROJECT
PACKAGE III

Sub-Project No. 12 (Iriga-Salvacion-Bato)

MOONROCK CONSTRUCTION
As of October 31, 1981

a) Contractor's Staff

General Manager	:	Julio D. Ceguera
Project Manager	:	J. Antonio P. Dilanco
Superintendent/Staff	:	Gerardo C. Agawa
Field Supervisor	:	Sofronio A. Baldoza, Jr.
Surveyor/Aides	:	Telesforo P. Abejero
Structural Foreman	:	Ulpiano Orolfo
Earthwork Foreman	"	Roger M. Naperi

b) Percent Time Elapsed : 30%

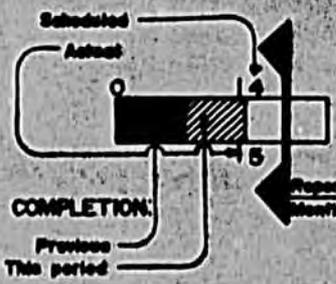
Time elapsed is 30% as of October 31, 1981.

CONTRACTOR: MOONROCK CONSTRUCTION
 BIDDING DATE: MAY 31, 1981 (THRU SEALED BID)
 OFFICIAL STARTING DATE: JULY 25, 1981
 ORIGINAL COMPLETION DATE: JUNE 19, 1982
 RECOMM'D COMP. DATE:
 PROBABLE COMP. DATE:

**BICOL SECONDARY
 PACKA**
 CONTR
 IRIGA - SALVACION - S
PROGRES

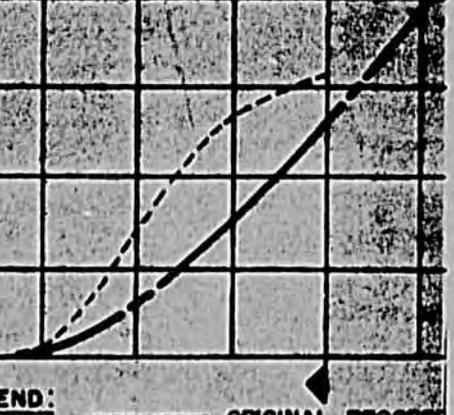
ITEM	% CONTRACT VALUE	% ITEM COMPLETE	% PROJECT COMPLETE	1981				
				J	A	S	O	N
I EARTHWORK	40.04	47.04	18.84	0.00	25	44	47	
II BASE COURSE	16.88	0.00	0.00					
III SURFACE COURSES AND PAVEMENT	23.29	0.00	0.00					
IV STRUCTURES	18.48	85.81	12.33		15	48	67	
V INCIDENTAL CONSTRUCTION	1.38	0.00	0.00					
TOTAL	100							

PROGRESS:



ACTUAL	31.17
SCHEDULED	25.53

LEGEND:
 — ORIGINAL PROGRES
 - - - ACTUAL PROGRES



**RY AND FEEDER ROADS
KAGE III**

TRACT NO. 1
- BATO (SUE-PROJECT NO.12)

MONTHLY PROGRESS REPORT AS OF: OCT. 31, 1981

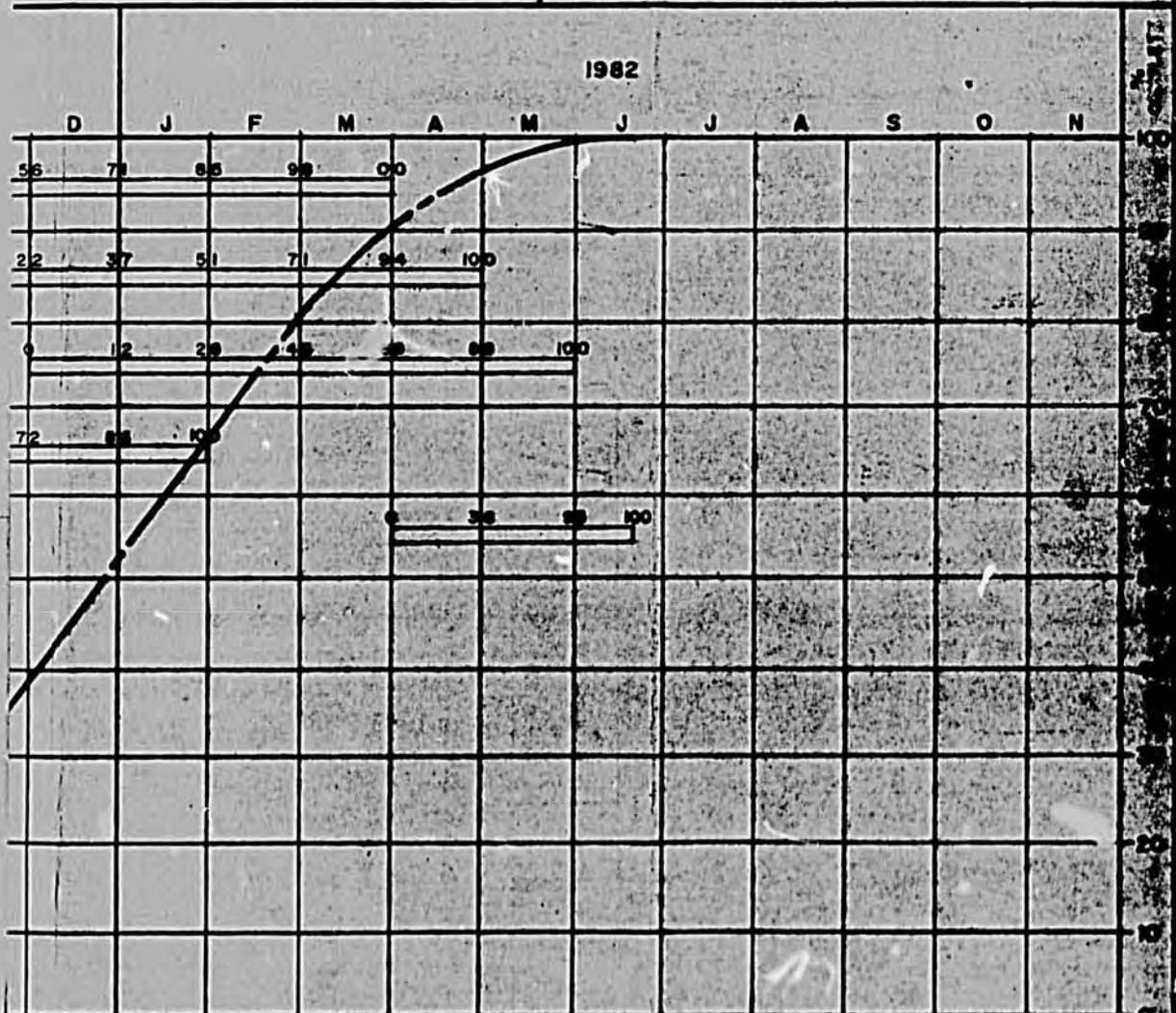
PREPARED BY: GAUDENCIO L. BENITO, R.E.

NET CONTRACT BID AMOUNT: ₱ 6,127,789.69

REVISED CONT. AMOUNT:

CURRENT ESTIMATED FINAL COST:

GRESS CHART



GRESS SCHEDULE
RESS

BICOL RIVER BASIN SECONDARY & FEEDER ROADS PROJECT
PACKAGE IIISub-Project No. 13 (Polangui-Lidong-Buhi)CONTRACTOR'S STAFF
L.A.L CONSTRUCTION
As of October 31, 1981

1. Engineers	5	
2. Foreman	5	
3. Surveyor/Aides	7	
4. Administrative/Accounting	12	
5. Skilled Laborer	16	
6. Unskilled Laborer	76	
7. Time Keeper/Checker	3	
8. Security Guard	<u>3</u>	<u>127</u>
<u>TOTAL</u>		<u>127</u>

BICOL RIVER BASIN DEVELOPMENT PROGRAMME
PROGRAM OFFICE
San Jose, Pili, Camarines Sur

SUMMARY OF MANILA-BASED PERSONNEL AND LOCAL
SUB-CONTRACTORS

As of October 31, 1981

PERSONNEL	TECHNICAL/ ENGINEERING	SKILLED	UNSKILLED	ADMINISTRATIVE	TOTAL
From outside Bicol River Basin Area (Manila-Based, etc.)	1	-	-	-	1
Within BRBD Area (Local/Sub-Contractors etc.)	5	33	76	12	126
TOTAL	6	33	76	12	127

Prepared by:



LORENZO C. TOLENTINO
Name

L.A.L. CONSTRUCTION
Name of Contractor

Polangui-Lidong-Buhi
Project/Contract Section

Asst. Project Engineer
Designation

STATUS OF CONTRACTOR'S EQUIPMENT ON SITE
L.A.L CONSTRUCTION
As of October 31, 1981

Equipment -----	Available on site	Required for the month	Deficiency -----
1. Payloader	2	2	-
2. Road Roller (Steel)	1	2	1
3. Road Roller Pneumatic	1	1	-
4. Graders	2	2	-
5. Trucks (G&S)	5	8	3
6. Dump Trucks	2	10	8
7. Asphalt Kettles	2	4	2
8. Concrete Mixers (1 bagger)	4	2	-
9. Concrete Vibrator	1	2	1
10. Compactor (Vibratory) 8 HP	1	-	-
11. Bull Dozer	1	2	1
12. Rock Crusher 10-15 (T.PH)	1	2	1
13. Service Vehicle	2	2	-
14. Chain Block 3 tone	1	1	under repair
15. Transit	1	2	-
16. Level	1	2	1
17. Welding Machine	1	-	-
18. Jack Hammer	1	1	-
19. Compressor (Air) 2600 RPM	1	1	-
20. Bar Cutter	2	2	-
21. Water Pump	2	3	-
22. Conc. Buggies	4	4	-
23. Water Sprinkles/Truck	1	2	1

STATUS OF ACCOMPLISHMENT FOR THE MONTH OF OCTOBER, 1981
Sub-Project No. 13A (Polangui-Lidong Section)

Item No.	Description	Contract Quantity	Accomplished Qty. to date	% Accomplishment		Actual	Slippage	Remarks
				This period	Schedule			
100	Aggregate Subbase	2,837 m ³	-	-	42	0	-42	Not started
118	Repreparation of Existing Road (Base Course)	10.35 Km.	3 Km.	22.22	26	28.99	+2.99	
302 (1)	Medium Curing Cutback Asphalt Grade MC-70	100 mt.	01 mt.	01	16	0	-15	
314 (1)	Aggregate for Bit. Surface Treatment (Hot Asphalt Type)	1,409 m ³	-	-	14	0	-14	Not started
314 (3)	Asphalt Cement Penetration Grade 85-100 for Bit. Surface Treatment	205 mt.	-	--	13	0	-13	Not started

Attachment D-5 (Polangui-Lidong Section)

CONTRACTOR: LAL CONSTRUCTION
 BIDDING DATE: MAY 31, 1981 (THRU SEALED BID)
 OFFICIAL STARTING DATE: AUGUST 11, 1981
 ORIGINAL COMPLETION DATE: MARCH 9, 1982
 RECOMM'D COMP. DATE :
 PROBABLE COMPLETION DATE :

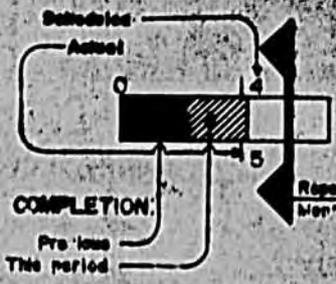
**BICOL SECONDARY
 PACKA**

CONTRACT
 POLANGUI-LIDONG - BU

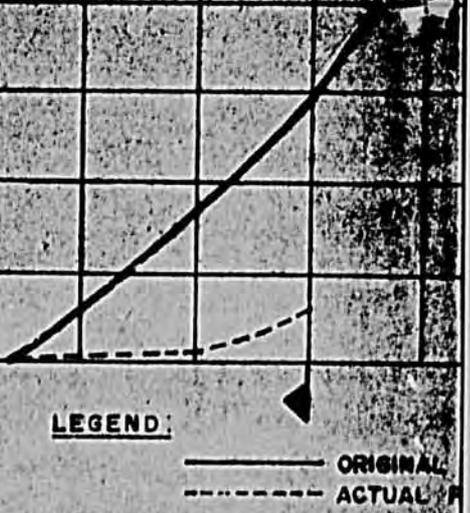
PROGRESS

ITEM	% CONTRACT VALUE	% ITEM COMPLETE	% PROJECT COMPLETE	1981			
				A	S	O	N
I EARTHWORK	14.53	2.82	0.41	0	04	20	40
II BASE COURSE	4.40	5.00	0.22	0	05	12	20
III SURFACE COURSES AND PAVEMENT	55.75	0.15	0.08	0	04	09	14
IV STRUCTURES	25.20	22.53	5.68	0	14	35	56
V INCIDENTAL CONSTRUCTION	0.12	0	0				
TOTAL		100					

PROGRESS :



ACTUAL	6.39
SCHEDULED	28.60



LEGEND:

———— ORIGINAL
 - - - - - ACTUAL

**NDARY AND FEEDER ROADS
PACKAGE III**

CONTRACT NO. 1
DONG - BUHI (SUB-PROJECT 13)

GROSS CHART

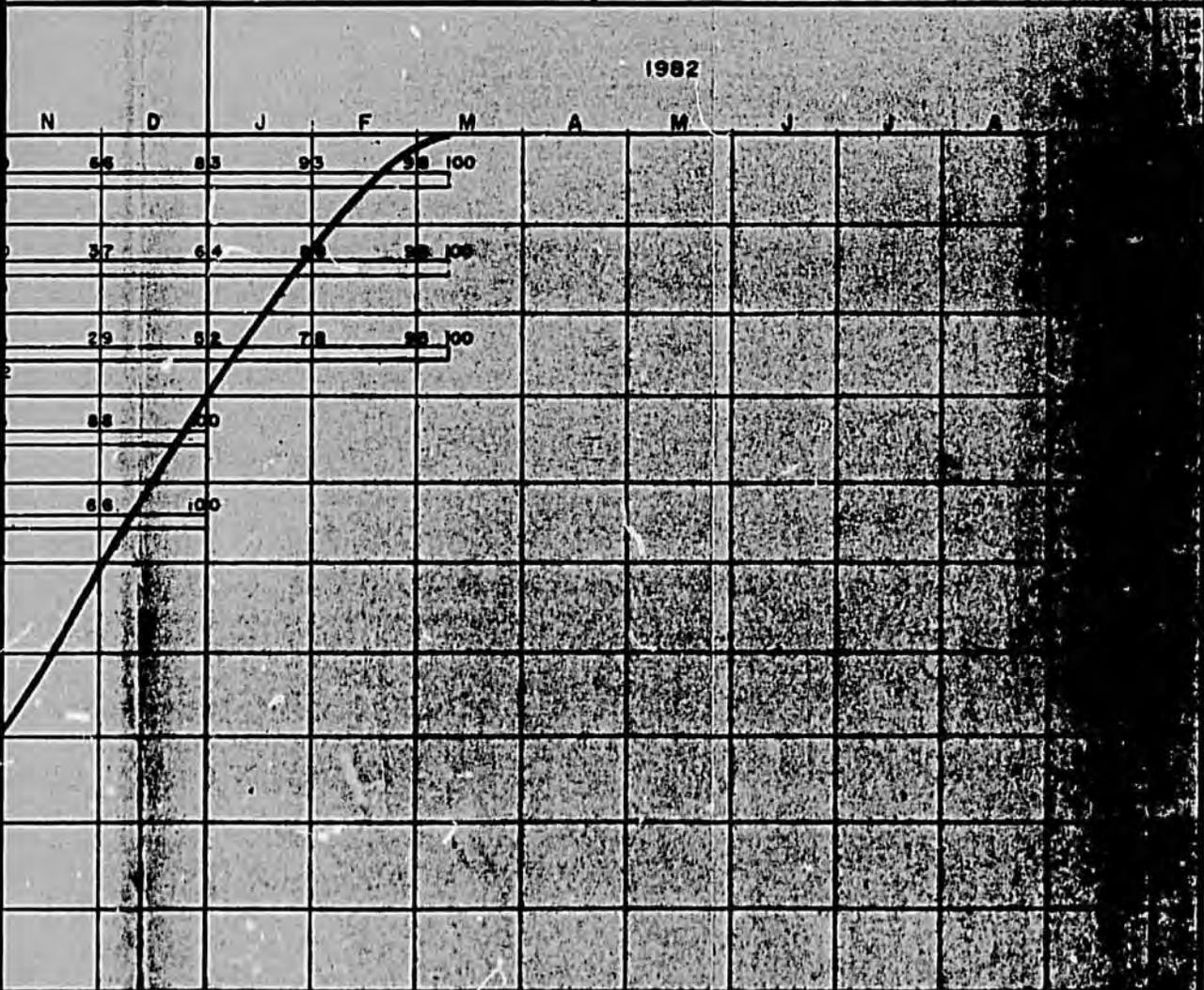
MONTHLY PROGRESS REPORT AS OF: OCT. 31, 1981

PREPARED BY: GAUDENCIO L. BENITO, R.E.

NET CONTRACT BID AMOUNT ₱ 6,135,119.50

REVISED CONT. AMOUNT:

CURRENT ESTIMATED FINAL COST:



NOTE: PROGRESS FOR
 ORIGINAL PROGRESS SCHEDULE POLANQUI - LIBONG SECTION = 0.48%
 ACTUAL PROGRESS LIDONG - BUHI SECTION = 5.91%
 TOTAL = 6.39%

STATUS OF ACCOMPLISHMENT FOR THE MONTH OF OCTOBER, 1981
Sub-Project No. 13B (Lidong-Buhi Section)

Item No.	Description	Contract Quantity	Accomplished Qty. to date	% Accomplishment This period	Schedule	Actual	Slippage	Remarks
105	Roadway & Drainage Excavation	11,542 m ³	60 m ³	-	46	0.52	-45.48	-
106 (1)	Excavation for Structures (Drainage Structures)	660 m ³	240 m ³	10.61	81	36.36	-44.64	-
106 (3)	Excavation for Structures (Bridges)	80 m ³	40 m ³	-	100	50	-50	-
108	Aggregate Subbase	4,395 m ³	-	-	42	0	-42	-
118	Repreparation of Existing Road (Base Course)	0.96 Km.	-	-	26	0	-26	-
200	Aggregate Base Course	3,000 m ³	150 m ³	-	20	5	-15	-
302 (1)	Medium Curing Cut Back Asphalt Grade MC-70 for Bit. Prime Coat	86 mt.	-	-	16	0	-16	Not started
314 (1)	Aggregate for Bit. Surface Treatment (hot Asphalt Type)	1,219 m ³	-	-	14	0	-14	Not started
314 (3)	Asphalt Cement Penetration Grade CS-100 for Bit. Surface Treatment (hot Asphalt Type)	177 mt.	-	-	13	0	13	Not started
403	Concrete Railing	66 m	-	-	0	0	0	Not started

2/ Sub-¹ Project No. 13B (Lidong-Buhi)

405 (3.1a)	Class "A" Concrete	545 m ³	175 m ³	29.54	47	32.11	-14.89	-
405 (4.21a)	Falsework	1,217 m ³	-	-	63	0	-63	Not started
405 (4.21b)	Formwork for Bridges	1,960 m ²	51 m ²	2.60	78	2.60	-75.40	-
405 (4.21c)	Formwork for Box Culvert	1,114 m ⁴	570 m ²	40.13	70	51.17	-18.83	-
406	Reinforcing Steel	56,915 Kg.	13,488 Kg.	19.22	59	23.70	-35.30	-
407	Structural Steel	1,520 Kg.	-	-	58	0	-58	Not started
413a	RCPC, 0.61 m Ø	12 m	-	-	100	0	-100	Not started
413b	RCPC, 0.91 m Ø	6 m	-	-	100	0	-100	Not started
413c	RCPC, 1.07 m Ø	8 m	8 m	100	100	100	0	Completed
413d	RCPC, 1.22 m Ø	27 m	-	-	100	0	-100	Not started
500a	Riprap Grouted	595 m ³	50 m ³	8.40	24	8.40	-15.60	
500c	Filter Layer	160 m ³	-	-	39	0	39	Not started
506	Wood Guardrail	60 m	-	-	0	-		Not started

ITEMIZED SUMMARY OF ACCOMPLISHMENT
Sub-Project No. 13 A (Polangui-Lidong)

Description	Contract amount	Amount Accomplished to date	% Accomplishment		REMARKS
			This period	To Date	
I EARTHWORKS					
Secondary Road	281,162.30	23,934.00	6.53	8.51	-
II SURFACE COURSES & PAVEMENT					
Secondary Road	1,836,409.00	5,290.33	0.29	0.29	-

PHYSICAL ACCOMPLISHMENT OF MAJOR WORK ITEMS

I - <u>ROADS</u>	<u>ACTUAL</u>	<u>PROGRAMMED:</u>
Secondary:		
Subgrade	10.35	10.35
Subbase	10.35	10.35
Base Course	10.35	10.35
Pavement	-	10.35

ITEMIZED SUMMARY OF ACCOMPLISHMENT
Sub-Project No. 13 B (Lidong-Buhi)

	Description	Contract amount	Amount Accomplished to date	% Accomplishment		REMARKS
				This period	To Date	
I	EARTHWORKS					
	Secondary Road	123,362.88	1,200.00	-	0.97	-
	Feeder Road	486,610.00	-	-	-	Not started
II	BASE COURSE					
	Secondary Road	270,000.00	13,500.00	-	05	-
III	SURFACE COURSES & PAVEMENT					
	Secondary Road	1,584,118.78	-	-	-	Not started
IV	STRUCTURES (Drainage)					
	Secondary Road	28,833.50	-	-	-	Not started
	Feeder Road	53,692.20	4,480.00	8.34	8.34	-

Attachment D-6 (Lidong-Buhi Section)

2/ Su bject No. 13B (Lidong-Buhi)

V	STRUCTURES (Box Culverts)					
	Secondary Road	116,043.00	-	-	-	Not started
	Feeder Road	412,095.00	315,952.50	65	76.67	-
VI	STRUCTURES (Bridges)					
	Secondary:					
	Lallo Bridge	866,462.50	16,387.50	1.73	1.89	-
	Batang Bridge	35,238.00	11,450.00	32.49	32.49	-
	Araga Bridge	33,892.50	-	-	-	Not started
VII	INCIDENTAL CONST.	7,200.00	-	-	-	Not started

% Project complete (Polangui-Lidong Road Section) = 0.48%

% Project complete (Lidong-Buhi Road Section) = 5.91%

TOTAL = 6.39%

PHYSICAL ACCOMPLISHMENT OF MAJOR WORK ITEMS

I - <u>ROADS</u>	<u>ACTUAL</u>	<u>PROGRAMMED</u>		<u>ACTUAL</u>	<u>PROGRAMMED</u>
Secondary:			Feeder:		
Subgrade	8.714 Km.	8.964 Km.	Subgrade	20.503 Km.	22.361 Km.
Subbase	8.714 Km.	8.964 Km.	Subbase	19.203 Km.	22.361 Km.
Base Course	8.260 Km.	8.964 Km.			
Pavement	0	8.964 Km.			
II - <u>STRUCTURES (Bridge)</u>					
Lallo Bridge:			Batang Bridge:		
a) Sub-structure	33. L.m.	33 L.m.	Sub-structure	33.61 L.m.	33.61 L.m.
b) Super-structure	0	33 L.m.	Super-structure	33.61 L.m.	33.61 L.m.
Araga Bridge:					
a) Sub-structure	18. L.m.	18 L.m.			
b) Super-structure	18 L.m.	18 L.m.			

WEATHER REPORT FOR THE MONTH OF OCTOBER, 1981

Sub-Project No. 13 (Polangui-Lidong-Buhi)

Date	Weather Condition	Remarks	Time Extension
			Recommended
October 1	Fair	Workable	None
2	Cloudy to fair	-do-	-do-
3	Cloudy to fair	-do-	-do-
4	Cloudy w/slight rain in P.M.	-do-	-do-
5	Cloudy wslight rain in P.M.	-do-	-do-
6	Cloudy w/scattered rainshower	-do-	-so-
7	Cloudy to fair	-do-	-do-
8	Rainy	-do-	-do-
9	Rainy	-do-	-do-
10	Cloudy to fair	-do-	-do-
11	Fair	-do-	-do-
12	Fair	-do-	-do-
13	Heavy rain	-do-	-do-
14	Fair	-do-	-do-
15	Fair	-do-	-do-
16	Cloudy w/scattered rainshower	-do-	-do-
17	Fair	-do-	-do-
18	Fair	-do-	-do-
19	Fair	-do-	-do-
20	Cloudy to Fair	-do-	-do-
21	Fair	-do-	-do-
22	Fair	-do-	-do-
23	Fair to cloudy	-do-	-do-
24	Cloudy to Fair	-do-	-do-
25	Rainy	-do-	-do-
26	Cloudy	-do-	-do-
27	Cloudy	-do-	-do-
28	Fair	-do-	-do-
29	Fair	-do-	-do-
30	Fair	-do-	-do-
31	Fair	-do-	-do-

EXTENSION RECOMMENDED None

BICOL RIVER BASIN SECONDARY & FEEDER ROADS PROJECT
PACKAGE III

Subproject No. 13 (Polangui-Lidong-Buhi Section)

L.A.L CONSTRUCTION
As of October 31, 1981

a) Contractor's Staff

Project Engineer	:	Julian T. Regalado
Asst. Project Engineer	:	Lorenzo C. Tolentino
Bridge Engineer	:	Artemio Antonio
Material Engineer	:	Ramon Regalado

b) Percent Time Elapsed : 39.05%

c) Cause/Causes (-) Slippage

1. Lack of appropriate equipments for pier foundation excavation and for roadwork.
2. Toosmall crusher to supply different aggregates requirement.
3. Poor coordination of work activities.

DCCD ENGINEERING CORPORATION
BICOL RIVER BASIN SECONDARY & FEEDER ROADS PROJECT
PACKAGE III

CONSULTANT'S STAFF
As of October 31, 1981

CONSULTANT TECHNICAL STAFF

Key Staff

1. Project Manager	1	
2. Resident Engineer	1	
3. Deputy Resident Engineer	<u>1</u>	3

Support Staff

1. Asst. Civil Engineer	3	
3. Inspectors	3	
3. Survey Aides	3	
4. Sr. Lab. Technician	1	
5. Draftsman	<u>1</u>	11

Administrative Staff and Support Personnel

1. Administrative Officer	1	
2. Administrative Assistant	1	
3. Accountant	1	
4. Clerk/Typist	1	
5. Utility Men/Janitor	1	
6. Drivers	2	
7. Security Guards	<u>2</u>	9

T O T A L 23

BICOL RIVER BASIN DEVELOPMENT PROGRAMME
San Jose, Pili, Camarines Sur

EMPLOYMENT GENERATION SURVEY (SS3)

NAME OF CONSULTANT DCCDDENGINEERING CORPORATION

FOR THE MONTH OF OCTOBER, 1981

		Administrative/ Finance	Engineering/ Technical	Skilled	Unskilled
Manila-Based	1/	3	7	1	1
Local-Hired	2/	1	3	7	
Sub-Contractors	3/				
TOTAL		4	10	8	1

- 1/ Included permanent employees
- 2/ Employees residing within the Basin Area
- 3/ Local Hired Only

Submitted by:


RICARDO Z. BASA
Project Manager