社会開発協力部報告書

THE REPUBLIC OF THE PHILIPPINES

RE-STUDY OF MAYON VOLCANO SABO AND FLOOD CONTROL PROJECT

DETAILED COST ESTIMATES

MARCH 1983

JAPAN INTERNATIONAL COOPERATION AGENCY

SDS 000000 83-027-4

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JAPAN INTERNATIONAL COOPERATION AGENCY

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RE-STUDY OF MAYON VOLCANO SABO AND FLOOD CONTROL PROJECT

DETAILED COST ESTIMATE

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ANNEX-B BREAKDOWN OF UNIT PRICE (ECONOMIC)

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I. DETAILED COST ESTIMATES

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	(Unit: Pesos)	1 Q			F/C: 790,390 L/C:1.179.500								F/C: 552,620 L/C:1.119.930										
Ŷ	IVBR	Currency Amount		м. 	· . .· · ·	49,000	3,290	140,000	715,710	83,870	185,370	2,260			44,810	46,980	10,410	16,060	170,970	134,190	1,910		107,530
*. *.	QUIRANGAY R	Local Unit Price			;	8.06	12.17	233.33	186.87	215.06	86.22	17.35			8.06	9-85	28.93	12.17	203.54	40.42	17.35		215.06
	DETAILED COST ESTIMATE (FINANCIAL), SABO WORKS, QUIRANGAY RIVER	Currency Amount				88,770	3,750	103,430	531,180	56,160		7,100	- -		81,180	76,370	6,150	18,320	94,920		6,010		72,000
Û	(FINANCIAL)	Foreign (Unit Price				14.60	13.88	172.38	138-69	144.00		54.60			14.60	16.01	17.07	13.88	113.00	• • •	54.60		144.00
	ST ESTIMATE	Quantity				6,080	270	600	3,830	390	2,150	130			5,560	4,770	360	1,320	840	3,320	110		005
·	DETAILED CO	Unit	-	:	. *	cu.m	u no	u-no	cu.m	cu.m	ະດູ - ຫ	89. B	(_ค		cu.m	m-n2	cu.m	cu.m	u.m	sq.m	sq.m		cu.
	TABLE-T.1	Description	1. Contract Cost	(1) Direct Cost	(i) No. 1 Sabo Dam (0=30m)	Excavation, in common	Backfill	Concrete, type A	Rubble concrete	Backfill concrete, type B	Formwork	Joint filler	(ii) No. 1 Training Levee (%=310m)	(a) Levee $(\langle =310m \rangle$	Excavation, in common	Embankment	Riprap bedding	Backfill	Concrete, type B	Formvork	Joint filler	(b) Wet masonry $(2,490m^2)$	Backfill concrete, type B

		+	A	Foreign C	Currency	Locel	Local Currency	- - - - - - - - - - - - - - - - - - -
	Testitute	3 TUO	61 11 11 mn A	Unit Price	Amount	Unit Price	Anount	Kemarks
		-						
· · ·	Rubble stone masonry	н• рх	2,490	19.88	49,500	53.06	132,120	
	Cobble stone	cu.m	1,400	0.77	1,080	61.74	86,440	
	Inter locking mortar	m no	120	245.13	29,420	328.98	39,480	
ં	Concrete Block (174 nos.)	• • •						
. *	Concrete, type B	a uo	066	113.00	111,870	203.54	201,500	
•	Formwork	ы Ъs	3,030			40.42	122,470	
	Reinforcing bar, & 16mm	kg	2,310	2.51	5,800	2.19	5,060	•
(:::)	No. 1 - No. 4 Spur Dike (1,320m)	्रम्				·	· · · ·	F/C:2,710,740
(B)	Supur Dike (1,320m)				- - -			u/ v: J, 00, 00, 070
	Excavation, in common	m no	23,680	14.60	345,730	8,06	190,860	
	Embankment	u no	11,360	16.01	181,870	9.85	111,900	
	Riprap bedding	u no	3,120	17.07	53,260	28.93	90,260	
	Backfill	m.uo	11,200	13.88	155,460	12.17	136,300	
	Concrete, type B	cu.m	3,560	113.00	402,280	203.54	724,600	
	Formwork	យ- ខែន	20,130			40.42	813,650	
	Joint filler	ພ•່ບິ≲	- 029	54.60	36,580	17.35	11,620	
(q)	Wet masonry (20,160m ²)		·					
	Backfill concrete, type B	m ns	4,030	144.00	580,320	215.06	866,690	
	Rubble stone masonry	ង ភ្ន	20,160	19.88	400,780	53.06	1,069,690	
	Cobble stone	u no	11,090	0.77	8,540	61.74	684,700	
	Inter locking mortar	m no		245 13	247 580	278 00	000 000	

10 A

Remarks								P16,142,360	20,390mTx1.2 = 24,500m2					₽20,989,480	
Currency Amount	510,890	309,620 12,830	8,165,320	816,530	538,910	952,080	314,190	10,787.030	4,410	1,614,240	807,120	1,618,050		14.830.850	
Local Unit Price	203.54	40.42 2.19	 			• • • • •			1,800.00	• • •	•	·			
Currency Amount	283,630	14,710	4,053,750	405,380	267,550	472,670	155,980	5,355,330	1 - 1 	. 1 	2 3	803,300		6,158,630	
Foreign Unit Price	113.00	2.51					· · ·		•	· · · · · · · · · · · · · · · · · · ·	2 				
 Quantity	2,510	7,660 5,860							2.45				· ·		
Unit	ສຸ ສຸ ສຸ	8 2 2 2 2 3) 		· · ·	-	(4))		ha.	-	(t m	cem 1)			
Description	(c) Concrete Block (440 nos.) Concrete, type B	Formwork Reinforcing bar, ø 16mm		General (10% of (1))	Supervision and Miscellaneous (6% of (1) to (2))	(4) Profit (10% of (1) to (3))	Contractor's Tax (3% of (1) to (4))	Sub total (Contract Cost)	Right of Way/Site Acquisition	Engineering Cost (10% of Item 1)	Project Management Cost (5% of Item 1)	Contingency) Physical Contingency (15% of Item 1)	Price Escalation Contingency	Total Estimated Project Cost	

(Unit: Pesos)	t												• • • • • • • • • • • • • • • • • • •	· · · · · · · · · · · · · · · · · · ·		P129,280	640m ² x1.2=770m ²				
	l Currency e Amount		-		5,160	13,890	1,460	330	27,900	48,740	4,870		3,220	5,680	1,880	64,390	140	12,930	6,460		
SABO WORKS, TUMPA RIVER	Unit Price				8,06	28.93	12.17	2.19	15.50					- * - -			1,800.00				
	Foreign Currency t Price Amount				9,340	8,190	1,670	380	29,540	49,120	4,910		3,240	5,730	1,890	64,890	1	Ú			
ESTIMATE (FINANCIAL).	Foreign Unit Price				14.60	17.07	13.88	2.51	16.41							•		:			
	Quantity				640	480	120	150	1,800				-				0.08			:	
DETAILED COST	Unit			:	cu.m	cu.m	cu.m	kg	£						(4))	·	ha.		em 1)		
TABLE-1.2	Description	1. Contract Cost	(1) Direct Cost	Consolidation Fence (<u>#=160m</u>)	Excavation, in common	Riprap bedding	Backfill	Reinforcing b ar	Coconut trunk	Sub total (1)	(2) General (10% of (1))	(3) Supervision and Miscellaneous	(6% of (1) to (2))	(4) Profit (10% of (1) to (3))	<pre>(5) Contractor's Tax (3% of (1) to (4))</pre>	Sub total (Contract Cost)	2. Right of Way/Site Acquisition	3. Engineering Cost (10% of Item 1)	4. Project Management Cost (5% of Item 1		

	Remarks	
A second	Local Currency Unit Price Amount	9,660 -
	Currency Amount	9, 730
	Foreign Unit Price	
	Description Unit Quantity	Physical Contingency (15% of Item 1) Price Escalation Total Estimated Contract Cost
		5. Contingency (1) Physical Total Total

Contract Cost	Ouantity Foreign	Foreign Currency	Local	Local Currency	Ramarke
t Cost	- Unit Price	Amount	Unit Frice	Amount	
	· · · · · · · · · · · · · · · · · · ·				
	•		-	· · · · · · · · · · · · · · · · · · ·	
(1) Direct Cost					
(moch=)) IIIS purchased	· ·		• .	· _ ·	
Excavation, in common 64,	4,050 14.60	59,130	8.06	32,640	
Backfill cu.m 3,	3,040 13.88	42,200	12.17	37,000	
Concrete, type B cu.m 2,	2,630 113.00	297,190	203 - 54	535,310	
Reinforcing bar kg l,	1,720 2.51	4,320	2.19	3,770	
Formwork s2.m 4,	4,150		40.42	167,740	
Sub total (1)		402,840		776,460	
General (10% of (1))		40,280		77,650	
Supervision and Miscellaneous (6% of (1) to (2))	·	26,590		51,250	
Frofit (10% of (1) to (3))	· · · · · · · · · · · · · · · · · · ·	46,970		90,540	
Contractor's Tax (3% of (1) to (4))		15,500		29,880	
Sub total (Contract Cost)		532,180		1,025,780	P1,557,960
Right of Way/Site Acquisition 0	0.38	1 1 1	1,800.00	680	3,150m ² x1.2 = 3.800m ²
Engineering Cost (10% of Item 1)		I	· ·	155,800	
Project Management Cost (5% of Item 1)		Ì		006,177	

	Remarks						.040														and the second se			
	 			0			0 <u>P2</u> ,026,040	•					· ·											
	Curr	ce Amount		153.870			1,414,030		-					• • • •	• •	· .								
		Unit Frice						• .		· · ·				•	· ·		•							
	Currency	Amount		79.830			612.010	· · ·						· .	· · ·	•			•					
()	1 1	Unit Price		-	• . •	• • • • •					•													:
	Quantity -	2	•			:		· ·				•	• •	-	•	-	·	·						
	Unit	-		+ - -	14 835						:	•								•				
	Description		Cont in address	(1) Dhinison) Partinganon (15% of Ttom 1)	Enysteen convingency (1.7/2 of a Price Escalation		Total Estimated Project Cost																and a strain of the strain of	
			2 2 2		(5)					7 -	· · · · · · · · · · · · · · · · · · ·													

							(Unit: Pesos)
Describtion	Unit	Ouantity	Foreign	Foreign Currency	Local	Local Currency	
			Unit Price	Amount	Unit Price	Amount	
1. Contract. Cost.							
(1) Direct Cost		· · · · · · · · · · · · · · · · · · ·	• • •• •				
(i) No. 1 Sabo Dam (K=120m)			•				F/C:2,277,210
Excavation, in common	cu.m	18,230	14.60	266,160	8.06	146,930	n/ v:3,410,110
Backtill	cu.m	800	13.88	11,100	12.17	9,740	
Concrete, type A	cu.m	1,260	172.38	217,200	233.33	294,000	
Rubble concrete	cu.m	11,480	138.69	1,592,160	186.87	2,145,270	
Backfill concrete, type B	cu.m	1,170	144.00	168,480	215.06	251,620	
Formvork	R. QS	6,450	· · ·		86.22	556,120	
Joint filler	នចុ ខ្ម	405	54.60	22,110	17.35	7,030	
(ii) No. 1 Spur Dike (310m)		•	:	· · ·.			F/C: 563,620
(a) Spur Dike (310m)	•	: · · ·	- 10 - 10 - 10 - 10 - 10 - 10 - 10 - 10	•			л/с:л, соо, оло
Excavation, in common	u-no	5,570	14.60	81,320	8.06	44,890	
Embankment	cu.m	2,670	16.01	42,750	9.85	26,300	
Riprap bedding	cu.m	730	17.07	12,460	28.93	21,120	
Backfill	cu.m	2,630	13.88	36,500	12.17	32,010	
Concrete, type B	cu.m	830	113.00	93,790	203 . 54	168,540	
Formwork	sq.m	4,750			40.42	192,000	
Joint filler	u•bs	150	54.60	8,190	17.35	2,600	
(b) Wet masonry (3,550m ²)				and the second secon			
Backfill concrete, type B	u-no	710	144.00	102,240	215.06	152,690	
n de la companya de c			: :				

•	11 11		1 0 1 0 1 0 1 0 1	Const terred		LOCAL VALLE AND ST	Pamarice
Description	1 TUN	Vuantity	Unit Price	Amount	Unit Price	Amount	
Rubble stone masonry	m.₽ps	3,550	19.88	70,570	53.06	188,360	
Cobble stone	E.a.	1,980	0.77	1,520	61.74	122,250	
Inter locking mortar	cu.m	180	245.13	44,120	328.99	59,220	
(c) Concrete Block (104 nos.)				 			
Concrete, type B	cu.m	290	113.00	66,670	203.54	120.090	
a second se	sq. m	1,810			40.42	73,160	
Reinforcing bar, p 16mm	kg	1,390	2.51	3,490	2.19	3,040	
(;;;) No. 2 <u>–</u> No. 4 Spur Dike (<i>(</i> =600m)	0 <u>m</u>)	· · ·					F/C:1,086,910
M 81	· · · ·	•	· .	· · · · · · · · · · · · · · · · · · ·			L/C:2,33
Excavation, in common	cu.m	10,780	14.60	157,390	8.06	86,890	
Enbankment	a. 40	5,160	16.01	82,610	9.85	50,830	
Riprap bedding	cu.m	1,410	17.07	24,070	28.93	40,790	
and the second	u-no	5,100	13.88	70,790	12.17	62,070	
Concrete, type B	ш . п.	1,620	113.06	183,060	203 . 54	329,730	
sector	cu.m	9,180			40.42	371,460	
Joint filler	cu.m	300	54.60	16,380	17.35	5,210	
(b) Wet masonry $(6,870m^2)$							
Backfill concrete, type B	cu.m	1,370	144.00	197,280	215.06	294,630	
Rubble stone	នក្នុ ព	6,870	19.88	136,580	53.06	364,520	
Cobble stone	cu.m	3,840	0.77		61.74	237,080	
Inter locking mortar	cu.m	330	245.13	80,890	328.99	108,570	

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Theoristion	Que not it to	TTST 5 7.0.7	Cut.rency	TOCET	LOCEL CUTTEDCY	
		Unit Price	Amount	Unit Price	Amount	- Kemerks
(c) Concrete Block (158 nos.)						
	1_160	113.00	131 080	203 ≤A	711 710	
				40-4 <i>1</i>	1+2,000	
Reinforcing bar, 6 16mm.	2,700	2.51	6,780	2.19	5,910	
Sub total (1)			3,927,740		6,954,270	
(2) General (10% of (1))		· · · · · · · · · · · · · · · · · · ·	392,770		695,430	
<pre>(3) Supervision and Miscellaneous (6% of (1) to (2))</pre>			259.230		458.980	
(4) Profit (10% of (1) to (3))			457,970		810,870	
(5) Contractor's Tax $(3\% \text{ of } (1), \text{ to } (4))$			151,130		267,590	
Sub total (Contract Cost)			5,188,840		9,187,140	£14,375,980
2. Right of Way/Site Acquisition ha.	1.57	· · · · · · · · · · · · · · · · · · ·		1,800.00	2,830	13,060m ² x1.2
		 				= +2, ¹
5. Engracering Cost (10% of 1tem 1)			1		1,437,600	
Project Management Cost (5% of Item 1)			1		718,800	
5. Contineers						
(1) Physical Contingency (15% of Item 1)		-	778,330		1,378,070	
(2) Price Escalation	· · · · · · · · · · · · · · · · · · ·	2 	1			
Potal Retimated Project Cost	New York, yor teaching on the U.Y		5 067 170		10- 704 AAO	0.13 103 810
					<u> </u>	F10 + 074 + 010

Allocate Old to table Old to table 314,480 8.06 173,610 314,480 9.85 101,650 48,140 28.93 81,580 165,220 9.85 101,650 48,140 28.93 81,580 141,580 12.17 124,130 366,120 203.54 659,470 366,120 203.54 659,470 366,120 203.54 659,470 32,760 17.35 10,410 32,760 17.35 10,410 32,760 17.35 10,410 32,760 17.35 10,410 32,760 17.35 10,410 32,760 217.35 227,000 273,150 53.06 742,720 169,140 328.99 227,000 257,640 203.54 464,070 257,640 203.54 464,070 13,350 11,650 219 13,350 2.19 11,650		Description	Unit	Quantity -	Foreign (Currency	Local	Local Currency	Remarks
3. 6 Spur Dite (1:200m) (1,200m) (1,200m) cuim 21,540 14.60 314,480 8.06 173,610 t cuim 10,320 16.01 165,220 9.85 101,650 t cuim 10,320 16.01 165,220 9.85 101,650 t cuim 10,200 13.88 141,580 12.17 124,130 t cuim 3,820 17.07 48,140 28,93 81,580 t cuim 3,240 113.00 366,120 203.54 659,470 t sq.m 10,200 13.88 141,580 12.17 124,130 t cuim 3,240 113.00 366,120 203.54 659,470 t sq.m 10,200 13.2760 17.35 10,410 124,130 t sq.m 5,360 201.17.07 48,1400 28.99 10,420 t t sq.m 5,750 144.00 32,750 10,410 10,410 t t t									
0. 6 Spur Dike (1.200m) 1.1,200m) 1.1,1,200m) 1.1,1,200m) 1.1,1,200m) 1.1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1	Con	tract Cost		· . ·					
No. i - No. 6 Spur Dike (1.200m) Spur Dike (1,200m) Spur Dike (1,200m) Spur Dike (1,200m) cum Excention, in common cum Excention cum Section 2,820 17,07 Backfill 2,820 113.00 366,120 Concrete, type B cum 3,240 113.00 366,120 Joint filler 39,00 17.350 10,410 Vet mesonry (13,740m ²) sq.m 37,500 10,422 Wet mesonry (13,740m ²) Sq.m 37,500 10,414 Wet mesonry (13,740m ²)	(I)	Direct Cost		· · · · · · · · · · · · · · · · · · ·		*. 			
No. $1 - No. 6$ Spur Dike (1,200m) Spur Dike (1,200m) cu.m 21,540 14.60 314,480 8.06 173,610 Excavation, in common cu.m 21,540 14.60 314,480 8.06 173,610 Excavation, in common cu.m 10,320 16.01 165,220 9.85 101,650 Embankment cu.m 10,320 17.07 48,140 28.93 81,580 Embankment cu.m 10,200 13.88 141,580 12.17 124,130 Backfill ou.m 3,240 113.00 36,120 20.357 659,470 Formwork au.m 3,240 113.00 36,120 20,420 10,410 Joint filler 600 54.60 32,760 17.35 10,410 Vet messonry 13,740 19.88 273,150 53.06 729,040 Joint filler 600 54.60 28.93 277,000 10,410 Vet messonry 13,740 19.88 273,150			· · ·						05 001 0-0/a
Spur Dike $(1,200m)$ Spur Dike $(1,200m)$ Spur Dike $(1,200m)$ Excervation, in commoncu.m $21,540$ 14.60 $314,480$ 8.06 $175,610$ Embankmentcu.m $10,320$ 16.01 $165,220$ 9.85 $101,650$ Embankmentcu.m $10,320$ 17.07 $48,140$ 28.93 $81,580$ Eachtillcu.m $2,820$ 17.07 $48,140$ 28.93 $81,580$ Backfillcu.m $3,240$ 113.00 $366,120$ 203.54 $659,470$ Concrete, type Bcu.m $3,240$ 113.00 $366,120$ 203.54 $659,470$ Formworksq.m $18,360$ $32,400$ 113.00 $366,120$ 203.54 $659,470$ Formworksq.m $18,360$ 54.60 $22,760$ 17.35 $10,410$ Joint fillersq.m $13,740$ 19.88 $273,150$ $217,420$ Joint fillercu.m $2,750$ 144.00 $350,000$ 215.06 $591,420$ Rubble stone masonrysq.m $13,740$ 19.88 $273,150$ $217,60$ $729,040$ Cobble stonecu.m $7,690$ 0.77 $5,920$ 61.74 $474,780$ Inter locking mortarcu.m 690 245.113 $169,140$ 328.99 $227,000$ Coble stoneElsock (400 nos.)cu.m $2,920$ 61.74 $64,070$ Concrete , type Bcu.m $2,920$ 61.74 $64,070$ Concrete , type Bcu.m $2,920$	ન	<u>No. 1 - No. 6 Spur Dike (1,200m)</u>		· .				· · · ·	L/C:4 672 240
Excavation, in common cu.m 21,540 14.60 314,480 8.06 Embandment cu.m 10,320 16.01 165,220 9.85 Riprap bedding cu.m 2,820 17.07 48,140 28.93 Backfill cu.m 2,820 17.07 48,140 28.93 Backfill cu.m 3,820 17.07 48,140 28.93 Concrete, type B cu.m 3,240 113.00 366,120 203.54 Contrifiler 3,240 113.60 366,120 203.54 40.42 Joint filler sq.m 5,240 13.56 17.35 40.42 Vet masonry 13,740 18,360 32,760 17.35 60 Wet masonry li3,740 19.88 273,150 53.06 61.74 Rubble stone masonry sq.m 7,60 17.35 60 17.35 Iter locking mortar cu.m 7,50 144.00 53.06 61.74 Cobble stone masonry	() ()	Spur Dike (1,200m)	· ·		:		· · · · · ·		
Embandamentcu.m $10,320$ $16,01$ $165,220$ 9.85 Riprap beddingcu.m $2,820$ 17.07 $48,140$ 28.93 Backfillcu.m $10,200$ 13.88 $141,580$ 12.17 Concrete, type Bcu.m $3,240$ 113.00 $366,120$ 203.54 Formworksq.m $3,240$ 113.00 $366,120$ 203.54 Yoint filler $3,240$ 113.00 $366,120$ 203.54 Joint filler $3,240$ 113.00 $366,120$ 203.54 Vet masonry ($13,740m^2$) $8q.m$ $8,360$ 54.60 $32,760$ Backfill concrete, type Bcu.m $2,750$ 17.35 Rubble stone masonry $13,740$ 19.88 $273,150$ 53.06 Rubble stone masonrycu.m $7,690$ 0.777 $5,920$ 61.74 Inter locking mortarcu.m $7,690$ 0.777 $5,920$ 61.74 Concrete type Bcu.m $2,730$ 245.13 $169,140$ 328.99 Concrete type Bcu.m $7,690$ 0.777 $5,920$ 61.74 Concrete type Bcu.m $2,730$ 245.13 $169,140$ 328.99 Concrete type Bcu.m $5,320$ 245.13 $169,140$ 328.99 Concrete type Bcu.m $2,730$ 245.13 $169,140$ 203.54 Formorksq.m $5,320$ $2,51$ 40.42 Reinforcing bar, ϕ 16mm $5,320$ $2,51$ $13,350$ $2,19$		Excavation, in common	cu.m	21,540	14.60	314,480	8.06	173,610	
Riprap bedding cu.m 2,820 17.07 48,140 28.93 Backfill cu.m 10,200 13.88 141,580 12.17 Doncrete, type B cu.m 3,240 113.00 366,120 203.56 Formwork sq.m 18,360 366,120 203.56 Formwork sq.m 18,360 366,120 203.56 Formwork sq.m 18,360 366,120 203.56 Joint filler 3,240 113.00 366,120 203.56 Joint filler 5,240 113.00 366,120 203.56 Joint filler 600 54.60 32,760 17.35 Met masonry (13,740m ²) eu.m 2,750 144.00 32,760 17.35 Backfill concrete, type B cu.m 2,740 19.88 273,150 53.06 Rubble stone masonry 0.0 19.88 273,150 53.06 Cobble stone cu.m 7,690 0.77 5920 61.74 Inter loc		Embankment	cu.m	10,320	16.01	165,220	9-85	101,650	
Backfill cum 10,200 13.88 141,580 12.17 Concrete, type B cum 3,240 113.00 366,120 203.54 Formwork sq.m 3,240 113.00 366,120 203.54 Formwork sq.m 18,360 54.60 32,760 17.35 Vet masonry (13,740m ²) 600 54.60 32,760 17.35 Wet masonry (13,740m ²) cu.m 2,750 144.00 396,000 215.06 Rabble stone masonry asonry 13,740 19.88 273,150 53.06 Rubble stone cu.m 7,690 0.77 5,920 61.74 Inter locking mortar cu.m 7,690 0.77 5,920 61.74 Cobble stone cu.m 7,690 0.77 5,920 61.74 Inter locking mortar cu.m 2,800 113.00 257,640 203.54 Concrete, type B cu.m 2,800 113.00 257,640 203.54 Reinforcing bar, 6 16		Riprap bedding	cu.m	2,820	17.07	48,140	28.93	81,580	
Concrete, type B cu.m 3,240 113.00 366,120 203.56 Formwork sq.m 18,360 40.42 40.42 Joint filler sq.m 600 54.60 32,760 17.35 Wet masonry (13,740m ²) sq.m 5,750 144.00 396,000 215.06 Backfill concrete, type B cu.m 2,750 144.00 396,000 215.06 Rubble stone masonry sq.m 13,740 19.88 273,150 53.06 Rubble stone masonry cu.m 7,690 0.77 5,920 61.74 Inter locking mortar cu.m 7,690 0.77 5,920 61.74 Cobble stone cu.m 2,280 113.00 257,640 203.54 Formvork sq.m 5,320 2.51 169,140 203.54 Concrete, type B cu.m 2,280 113.00 257,640 203.54 Reinforcing bar, blocm kg 5,320 2.51 13,350 2.19		BROKETI	cu.m	10,200	13.88	141,580	12.17	124,130	
Formwork sq.m 18,360 40.42 Joint filler sq.m 600 54.60 32,760 17.35 Wet masoury (13,740m ²) sq.m 57.60 32,760 17.35 Backfill concrete, type B cu.m 2,770 144.00 396,000 215.06 Rubble stone masonry 13,740 19.88 273,150 53.06 Rubble stone masonry cu.m 7,690 0.77 5,920 61.74 Inter locking mortar cu.m 7,690 0.77 5,920 61.74 Concrete Block (400 nos.) cu.m 2,580 113.00 257,640 203.54 Reinforcing bar, & l6m kg 5,320 2.51 13,350 2.19		Concrete, type B	cı.m	3,240	113.00	366,120	203.54	659,470	
Joint fillersq.m60054.6032,76017.35Wet masoury (13,740m²)Net masoury (13,740m²)396,000215.06Backfill concrete. type Bcu.m2,770144.00396,000Rubble stone masonrysq.m13,74019.88273,15053.06Rubble stone masonrycu.m7,6900.775,92061.74Inter locking mortarcu.m7,6900.775,92061.74Inter locking mortarcu.m690245.13169,140328.99Concrete Block (400 nos.)cu.m2,280113.00257,640203.54Reinforcing bar, & 16mmkg5,3202.5113,3502.19		Portmovile	a- ps	18,360		1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	40.42	742,110	
Wet masonry (13,740m ²) Wet masonry (13,740m ²) Backfill concrete, type B cu.m 2,750 144.00 396,000 215.06 Rubble stone masonry sq.m 13,740 19.88 273,150 53.06 Rubble stone masonry cu.m 7,690 0.77 5,920 61.74 Inter locking mortar cu.m 7,690 0.77 5,920 61.74 Inter locking mortar cu.m 7,690 0.77 5,920 61.74 Cobble stone cu.m 2,520 110 328.99 9 Concrete Block (400 nos.) cu.m 2,280 113.00 257,640 203.54 Concrete, type B cu.m 2,280 113.00 257,640 203.54 Formvork sq.m 5,920 203.54 40.42 Reinforcing bar, \$ 16mm kg.m 5,320 2.51 13,350 2.19		Joint filler	sq.m	600	54.60	32,760	17.35	10,410	
Backfill concrete, type B cu.m 2,750 144.00 396,000 215.06 Rubble stone masonry sq.m 13,740 19.88 273,150 53.06 Rubble stone cu.m 7,690 0.77 5,920 61.74 Cobble stone cu.m 7,690 0.77 5,920 61.74 Inter locking mortar cu.m 690 245.13 169,140 328.99 Concrete Block (400 nos.) cu.m 2,280 113.00 257,640 203.54 Concrete, type B cu.m 2,280 113.00 257,640 203.54 Formvork sq.m 5,320 2.51 13,350 2.19	(q)	Wet masonry (13,740m ²)							
Rubble stone masonry sq.m 13,740 19.88 273,150 53.06 Cobble stone cu.m 7,690 0.77 5,920 61.74 Inter locking mortar cu.m 7,690 245.13 169,140 328.99 Concrete Block (400 nos.) cu.m 2,280 113.00 257,640 203.54 Concrete, type B cu.m 2,280 113.00 257,640 203.54 Formwork sq.m 6,960 2.51 13,350 2.19		6	cu.m	2,750	144.00	396,000	215.06	591,420	
Cobble stone cu.m. 7,690 0.77 5,920 61.74 Inter locking mortar cu.m 690 245.13 169,140 328.99 Concrete Block (400 nos.) cu.m 2,280 113.00 257,640 203.54 Concrete, type B cu.m 2,280 113.00 257,640 203.54 Formwork sq.m 6,960 2.51 13,350 20.42		Rubble stone masonry	ន	13,740	19.88	273,150	53.06	729,040	
Inter locking mortar cu.m 690 245.13 169,140 328.99 Concrete Block (400 nos.) cu.m 2,280 113.00 257,640 203.54 Concrete, type B cu.m 2,280 113.00 257,640 203.54 Formwork sq.m 6,960 13.00 257,640 203.54 Reinforcing bar, \$ 16mm kg 5,320 2.51 13,350 2.19		Cobble stone	cu.m	7,690	0-77	5,920	61.74	474,780	
Concrete Block (400 nos.) Concrete Block (400 nos.) Concrete, type B cu.m 2,280 113.00 257,640 203.54 Formwork sq.m 6,960 13.00 257,640 40.42 Reinforcing bar, \$16mm kg 5,320 2.51 13,350 2.19		Inter locking mortar	cu.m	690	245.13	169,140	328.99	227,000	
cu.m 2,280 113.00 257,640 203.54 sq.m 6,960 40.42 kg 5,320 2.51 13,350 2.19	(c) (c)	Concrete Block (400 nos.)							
sq.m 6,960 kg 5,320 2.51 13,350 2.19		Concrete, type B	cu.m	2,280	113.00	257,640	203.54	464,070	
			sq.m	6,960			40.42	281,320	
	a second and second	Reinforcing bar, 6 16mm	kg	5,320	2.51	13,350	2.19	11,650	
计数据分词 化磷酸磷酸盐 化消化剂 化氯化化物 化化合物 化分子 化合金 机合金 化合金 化合金 化合金 化合金 化合金 化合金 经利益 化合金									

		Remarks						P13,112,030	20,900m~x1.2 = 25,100						₽17,050,160	
)		Local Currency	Amount	671,980	443,500	783,520	258,560	8,877,320	4,520	1,311,200	655,600		1,331,600	• • • •	12,180,240	· · · · · · · · · · · · · · · · · · ·
	and the second se	Local	Unit Price				•		1,800.00	• • • •	.,		 	· · · · · · · · · · · · · · · · · · ·		
		Foreign Currency	Amount	320,550	211,560	373,760	123,340	4,234,710	l		1		635,210	€ 4 5 1 1 1 1 1	4,869,920	
0		Foreign	Unit Price			• • • • •	. <u>.</u>						- 	•		
		Q	fo to trank			•			2.51							
			Jescription Only	0% of (1))	Supervision and Misellaneous (6% of (1) to (2))	<pre>(4) Profit (10% of (1) to (3))</pre>	(5) Contractor's Tax (3% of (1) to (4))	Sub total (Contract Cost)	Right of Way/Site Acquisition ha.	Engineering Cost (10% of Item 1)	Project Management Cost (5% of Item 1)		(1) Physical Contingency (15% of Item 1)	lation	Total Estimated Project Cost	
				(2) General (10% of (1))	<pre>(3) Supervision (6% of (1)</pre>	(4) Profit (105	(5) Contractor	Sub tot.	2. Right of Way/:	3. Engineering C	4. Project Manage	5. Contingency	(1) Physical C	(2) Price Escalation	Total E	

n Unit Quantity <u>Foreign Currency</u> <u>Local</u> <u>or Dam (#2200m</u>) (230m) (230m) n (230m) n (230m) n (230m) n (230m) n (230m) n (230m) n (230m) n (1200 14.60 189,800 8.06 cu.m 1,500 138.85 20,820 12.17 cu.m 3,560 172.38 613,670 233.33 cu.m 1,570 138.85 1,446,540 186.87 cu.m 3,560 172.38 613,670 233.33 cu.m 1,550 144.00 126,720 215.06 sq.m 5,320 24.60 16,930 17.35 sq.m 1,550 14.60 47,160 8.06 cu.m 1,550 14.60 47,160 8.05 sq.m 2,750 15.01 24,820 9.85 cu.m 1,550 113.03 24,60 17.170 28.93 cu.m 1,550 113.00 55,370 203.54 sq.m 2,750 24.60 23.20 sq.m 2,750 24.60 23.00 17.35 sq.m 2,750 24.60 23.00 12.17 sq.m 2,750 24.60 23.00 203.54 sq.m 2,750 24.60 23.00 203.54 sq.m 2,750 24.60 23.00 23.54 sq.m 2,750 24.60 23.54 sq.m 2,750 24.60 23.54 sq.m 2,750 24.60 24.60 23.54 sq.m 2,750 24.60 24.60 23.54 sq.m 2,750 24.60 24.60 24.50 23.54 sq.m 2,750 24.60 24.60 23.54 sq.m 2,750 24.60 24.60 23.54 sq.m 2,750 24.60 24.60 23.54 sq.m 2,750 24.60 24.60 23.54 sq.m 2,750 24.60 24.50 23.54 sq.m 2,750 24.60 24.50 23.55 sq.m 2,750 24.60 24.60 23.55 sq.m 2,750 24.60 24.60 23.55 sq.m 2,750 24.60 24.60 24.50 23.55 sq.m 2,750 24.60 24.50 24.
$= \frac{1}{2} $
$= \frac{1}{2} \sum_{i=1}^{n} $
Description Lescription act Cost rect Cost rect Cost No. 1 Consolidation Dam (230m) Excavation, in common Backfill concrete, type B Rubble concrete type B Rubble concrete type B Rothfill concrete, type B Spur Dike (180m) Excavation, in common Excavation, in common Excavation, in common Backfill Concrete, type B Formwork Voint filler Vet masonry (2,060m ²) Backfill concrete, type B Formwork

		LIGHALKS			F/C:2,558,970	L/C:3,897,060				•	· · · · · · · · · · · · · · · · · · ·												and the second	
Ð	Currency	Amount	000-12	32,900			105,020	18,260	832,990	1,949,050	189,250	544,910	5,380		23,130	13,590	10,990	16,550	87,520	99,030	1,390			
	Local	Unit Price	61_74	328.99			8,06	12.17	23.3.33	186.87	215.06	86.22	17.35	· · · · · · · · · · · · · · · · · · ·	8.06	9.85	28.93	12.17	203 - 54	40.42	17.35			
	Currency	Amount	890	24,510		:	190,240	20,820	615,400	1,446,540	126,720		16,930	:	41,900	22,090	6,490	18,880	48,590		4;370			
	Foreign	Unit Price	0.77	245.13			14.60	13.88	172.38	138.69	144.00		54.60		14.60	16-01	17.07	13.88	113.00	· · · ·	54.60			
		ליידיינושטא	1 150	100	1 		13,030	1,500	3,570	10,430	880	6,320	310		2,870	1,380	380	1,360	430	2,450	80			
	111-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-	9 THO	₩. (Le	u-no	(=230m)	· .	° m.⁺ no	cu.m.	m.uo	พ -มว	cu.m	m sq. m	នឮ . ៣		u-no	cu.m	u no	. m *no	cu.m	a. ps	u∙ъs	•		
		THE SCITT DIA TOT	Cobble stone	Inter locking mortar	No. 2 Consolidation Dam (/=230m)	Consolidation Dam (230m)	Excavation	Backfill	Concrete, type A	Rubble concrete	Backfill concrete, type B	Formwork	Joint filler	Spur Dike (160m)	Excavation, in common	Embankment	Riprap bedding	Backfill	Concrete, type B	Formwork	Juint filler		a de la companya de La companya de la comp	
					(ii)	(a)					<u>-</u>	15		(q)										

	Description	Unit	Quantity	Foreign Currency Unit Price Amou	Currency Amount	Unit Price	Local Currency Price Amount	Remarks
(iii)	<u>No. 1 - No. 3 Ground Sill ((=690m)</u>	Om)						P/C-2 877 25
(v)	Ground Sill (690m)							L/C=5,017,08C
	Excavation, in common	cu.m	42,540	14.60	621,080	8.06	342,870	
:	Backfill	cu.m	6,900	13.88	95,770	12.17	83,970	
	Concrete, type A	cu.m	7,590	126.88	963,020	216.37	1,642,250	
	Formwork	æ•ðs	5,970		· ·	40.42	241,310	· .
•	Joint filler	m.₊ps	390	54.60	21,290	17.35	6,770	
(q)	Spur Dike (960m)	·						
	Excavation, in common	cu.m	8,610	14.60	125,710	8.06	69,400	
	Enbankment	cu.m	4,140	16.01	66,280	9.85	40,780	
	Riprap bedding	cu.m	1,140	17.07	19,460	28.93	32,980	
	Backfill	m.us	4,080	13.88	56, 630	12.17	49,650	
	Concrete, type B	m • n 0	1,290	113.00	145,770	203.54	262,570	
	Formwork	ឌ- ទទ	7,350	5.		40.42	297,090	· · · · · · · · · · · · · · · · · · ·
	Joint filler	sq.•m	360	54 . 60	19,660	17.35	6,250	
(o)	Wet masonry $(5,490m^2)$	-						· · · · · · · · · · · · · · · · · · ·
	Concrete, type B	ш . цо	1,100	144.00	158,400	215,06	236,570	
÷,	Rubble stone masonry	យ • ភ្នំន	5,490	19.88	109,140	53.06	291,300	• • •
	Cobble stone	cu.m	3,060	0.77	2,360	61.74	188,920	
•	Inter locking mortar	cu.m	270	245.13	66,190	328.99	88,230	
(g)	-		• •		•	4 		
	Concrete, type B	ш . по	3,420	113.00	386,460	203.54	696,110	
			•					

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30,250m^fx1.2 P28,111,320 **₽36,551,250** Remarks = 36,300 6,530 Amount 24,189,540 17,480 17,362,010 1,532,390 505,690 2,811,130 1,405,570 2,604,300 1,314,230 867,390 421,980 13,142,310 Local Currency Û Unit Price 40.42 2,19 1,800.00 Amount 10,749,310 12,361,710 20,030 537,030 313,090 1,612,400 8,136,760 813,680 948,750 Foreign Currency 1 Unit Price 2.51 0 3.63 Quantity 7,980 10,440 Unit sq.m ha. <u></u> Х (1) Physical Contingency (15% of Item 1) Project Management Cost (5% of Item 1) Contractor's Tax (3% of (1) to (4)) Total Estimated Project Cost Supervision and Miscellaneous (6% of (1) to (2)) Engineering Cost (10% of Itom 1) Sub total (Contract Cost) Right of Way/Site Acquisition Profit (10% of (1) to (3)) Reinforcing bar, ø 16mm Description General (10% of (1)) Sub total (1) Price Escalation Formwork 5. Contingency ં ભ (2) <u>4</u> ણ Θ 4 4 - 17

	routten vurtency it Price Amount Unit Price Amount			F/C:1,139,810 L/C:1,707,030	133,150 8.06 73,510	5,550 12.17 4,870	108,600 233.33 147,000	796,080 186.87 1,072,630	215.06 215.06 2126,890 212	86.22 278,490	11,470 17.35 3,640	F/C: 252,100	- 1 - L	71,980 8.06 39,740	11,100 12.17 9,740	111,650 216.37 190,410	40.42 27,890	2,730 17.35 870		51,980 203.54 93,630	40,820	2,660 2.19 2,320
Toreion	Unit Price				14.60	13.88	172.38	138.69	144.00		54.60			14.60	13.88	126.88	· · · ·	54.60		113.00		2.51
	Quantity			· · · · · · · · · · · · · · · · · · ·	9,120	400	630	5,740	290	3,230	210			4,930	800	880	069	20		460	1,010	1,060
	version of the second			=60m), Anuling (1)	men cu.	cu.m	c	cu.m	type B cu.m	a • Ďs	E. S.	A) (80m). Anuling (1)		mon cu.m	a. u.	cu	8.• os	m.s S	nos.)	cu	ш•Ъs	kg
	Description	Contract Cost	(1) Direct Cost	(i) <u>No. 1 Sabo Dam ((=60m).</u>	Excavation, in common	Backfill	Concrete, type A	Rubble concrete	Backfill concrete, type B	Formwork	Joint filler	(ii) No.1 Ground Sill (A)		Excavation, in common	Backfill	Concrete, type A	Formwork	Joint filler	(b) Concrete block (80 nos.	Concrete, type B	Formwork	Reinforcing bar

 i) No. 2 Ground Sill (A=130m) a) Ground Sill (A=130m) a) Ground Sill (130m) a) Ground Sill (130m) backfill backfill cu.m backfill cu.m 	Foreign Currency Unit Price Amoun 14.60 116,95 13.88 116,95 126.88 181,44	urrency Amount 116,950 181,440 181,440	Local (Unit Price 8.06 12.17	Local Currency Price Amount .06 64,560 .17 15,820 .87 309,410 .42 45,270	Remarks F/C: 530,970 L/C: 921,410
(<u>(</u> =130m) mon cu.m 8, cu.m 1, sq.m 1, sq.m 1, cu.m cu.m cu.m	14.60 13.88 126.88	116,950 18,040 181,440	8.06 12.17	64,560 15,820 309,410 45,270	
сс. сс. в сс. в сс. в т сс. в т т сс. в т т сс. в сс. т т т сс. т т т сс. т т т т с сс. т т т т	14.60 13.88 126.88	116,950 18,040 181,440	8.06 12.17	64,560 15,820 309,410 45,270	
Excavation, in common cu.m 8, Backfill common cu.m 1, Concrete, type A cu.m 1, Formwork sq.m 1, Joint filler sq.m 1, Spur Dike (170m) sq.m 1, Excavation, in common cu.m 1, Excavation in common cu.m Riprap bedding cu.m Concrete, type B cu.m	14.60 13.88 126.88	116,950 18,040 181,440	8.06	64,560 15,820 309,410 45,270	
Backfill Concrete, type A cu.m 1, Formwork sq.m 1, Joint filler sq.m 1, Spur Dike (170m) Excavation, in common cu.m 1, Excavation, in common cu.m Riprap bedding cu.m Riprap bedding cu.m Concrete, type B cu.m	13.88 126.88	18,040 181,440	12.17	15,820 309,410 45,270	
Concrete, type A cu.m 1, Formwork Sq.m 1, Joint filler Sq.m 1, Spur Dike (170m) cu.m 1, Excavation, in common cu.m 1, Excavation, en cu.m 1, Riprap bedding cu.m cu.m Concrete, type B cu.m	126.88	181,440		309,410 45,270	
Formwork Joint filler Spur Dike (170m) Excavation, in common Embankment Riprap bedding Riprap bedding Concrete, type B Concrete, type B			216.87	45,270	
Joint filler sq.m Spur Dike (170m) Excavation, in common cu.m Embankment cu.m Riprap bedding cu.m Backfill concrete, type B cu.m			40.42	1010	
Spur Dike (170m) Excavation, in common Embankment Riprap bedding Backfill Concrete, type B cu.m	54.60	3,820	17.35	7,241	
ommon cu.m cu.m cu.m cu.m cu.m			•		
u.u. cu.m. cu.cu.cu.cu.cu.cu.cu.cu.cu.cu.cu.cu.cu.c	14.60	22,190	8 06	12,250	
n n n n n n n n n n n n n n n n n n n	16.01	11,690	9.85	7,190	
ເກ.ສ ເ	17.07	3,410	28.93	5,790	
cu.m	13.88	9,990	12.17	8,760	
	113.00	25,990	203.54	46,810	
Formwork 1,300			40.42	52,550	
Joint filler 60	54.60	3,280	17.35	1,040	
(c) Wet masonry (970m ²)					
Concrete, type B cu.m 190	144.00	27,360	215.06	40,860	
Rubble stone masoury cu.m 970	19.88	19,280	53,06	51,470	
Cobble stone 540	0.77	420	61.74	33,340	
Inter locking mortar cu.m 50	245.13	12,260	328.99	16,450	
					an a

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Lescription		•			ヘリギャ イイシン・イタノンス		
	1 tan	Quantity	Unit Price	Amount	Unit Price	Amount	Remarks
AV CONCREVE DIOCK (ILO NOS.)							
Concrete, type B	cu. m	630	113.00	71,190	203.54	128,230	
Formwork	ย ้ ว่ะ ร	1,910	• • • •		40.42	77,200	
Reinforcing bar øl6mm	kg	1,460	2,51	3,660	2.19	3,200	
			•				T/C. 771 700
(iv) No. 1 Training Levee (600m), An	Anuling (1	7				•	L/C:1.758.240
(a) Leves (600m)		* .					
Excavation, in common	cu m	4,500	14.60	65,700	8.06	36,270	
Enbankment	cu m	3,600	16.01	57,640	9.85	35,460	· ·
Riprap bedding	cu.⊨m	006	17.07	15,360	28.93	26,040	· · ·
Beckfill	cu.m.	3,570	13.88	49,550	12.17	43,440	
Concrete, type B	a.uo	1,140	113.00	128,820	203.54	232,040	
Formwork	80 B	6,420	· ·	- - - - -	40 . 42	259,500	
Joint filler	ឌ•២ន	210	54.60	11,470	17.35	3,640	
(b) Wet masonry (4800m ²)							· -
Backfill concrete, type B	cu.m.	- 096	144.00	138,240	215.06	206,460	
Rubble stone masonry	sq. m	4,800	19.88	95,420	53.06	254,690	
Cobble stone	cu.m	2,690	0.77	2,070	61.74	166,080	
Inter locking mortar	cu.m	240	245.13	58,830	328,99	78,960	
(c) Concrete Block (220 nos.)				•.			
Concrete, type B	eu.m	1,250	113.00	141,250	203.54	254,430	
Formvork	sq.m	3,830		•	40.42	154,810	
Reinforcing bar, øl6mm	kg	2,930	2.51	7,350	2.19	6,420	

Currency Remember	Amount	F/C: 947,460	L/C:2,028,6		75,280	44,130	35,290	53,790	284,960	321,740	4,510		255,920	316,240	206,210	98,700		203, 540	123,280	5,100	F/C:1,033,270	L/C:2,139,7	69.480	
	Unit Price			•	8 . 06	9.85	28.93	12.17	203.54	40.42	17.35		215.06	53.06	61.74	328.99		203.54	40.42	2.19	- - -		8.06 v	
Currency	Amount				136,360	71,720	20,830	61,350	158,200	· ·	14,200		171,360	118,480	2,570	73,540		113,000		5,850			125.850	1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.
	Unit Price				14.60	16.01	17.07	13.38	113.00	-	54.60	-	144.00	19.88	0.77	245.13		113.00		2.51	· · · ·		14.60	
Quentity.	×****		z (1)		9,340	4,480	1,220	4,420	1,400	7,960	260	:	1,190	5,960	3,340	300	~	1,000	3,050	2,330	. *		8.620	
110 4 4	~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~), Anuling	• •	cu.m	cu.m.	cu.m	cu.m	cu.m	sq.•m.	ສ ບິສ ຮູ	- 	cu.m	ແ•້ວຣ	cu.m	u•no		cu.m	sq.m	, kg			cu.,	
Decrintion			No. 1 & No. 2 Spur Dike (520m),	Spur Dike (520m)	Excavation, in common	Embaultment	Riprap bedding	Backfill	Concrete, type B	угомштод	Joint filler	Wet masoury $(5,960m^2)$	Backfill concrete, type B	Rubble stone masonry	Cobble ston3	Inter locking mortar	Concrete Block (175 nos.)	Concrete, type B	Formwork	Reinforcing bar, øl6mn	· ·	1.1	Spur Dike (400m) Excavation. in common	
				(a)								(q)	•	•			(c)		• •	· · ·			(1)	

Description Embenkment Embenkment Backfill Concrete, type B Concrete, type B Formwork Formwork Joint filler Sq.m (b) Wet masonry (5,500m ²) Backfill concrete, type B Rubble stone Rubble stone Cobble stone Cobble stone	4,130 1,130 1,130 1,300 7,340 7,340 240 1,100 5,500	Unit Frice Amou 16.01 66,1 17.07 19,2 13.88 56,6 113.00 146,9 54.60 13,1 144.00 158,4	Amount 66,120 19,290 56,630 146,900	Unit Price 9.85	Amount	Nemerks
A	4,130 1,130 4,080 7,340 7,340 240 1,100 5,500	16.01 17.07 13.88 113.00 54.60 144.00	66,120 19,290 56,630 146,900	9.85		
μ Δ	1,130 4,080 7,340 7,340 2,100 5,500	17.07 13.88 113.00 54.60 144.00	19,290 56,630 146,900		40,680	
μ A	4,080 1,300 7,340 240 1,100 5,500	13.88 113.00 54.60 144.00	56,630 146,900	28.93	32,690	
μ	1,300 7,340 240 1,100 5,500	113.00 54.60 144.00	146,900	12.17	49,650	· ·
р р	7,340 240 1,100 5,500	54.60 144.00		203.54	264,600	
e e	240 1,100 5,500	54.60 144.00		40.42	296,680	
é A	1,100	144_00	13,100	17.35	4,160	
р С	1,100 5,500	144.00	· · · ·			
	5,500		158,400	215.06	236,570	
		19.88	109,340	53.06	291,830	•
	3,080	0.77	2,370	61.74	190,160	
	280	245.13	68,640	328.99	92,120	
(c) Ground Sill (240m)						•
Excavation, in common cu.m	1,760	14.60	25,700	8.06	14,190	
Backfill	. 600	13.88	8,300	12.17	7,300	
Concrete, type A cu.m	960	126.88	121,800	216.37	207,720	
ш•ъз	960	1.4 1. 1. 1.	•	40.42	38,800	
Joint filler sq.m	48	54.60	2,620	17.35	830	
(d) Concrete Block (160 nos.)			·	- - - - - - - -		
Concrete, type B cu.m	016	113.00	102,830	203.54	185,220	
Formwork	2,780			40.42	112,370	
Reinforcing bar, øl6mm kg	2,130	2.51	5,350	2.19	4,660	

	Description	110.4		Foreign Currency	urrency	Local C	Local Currency	
		3 7770	Aunut	Unit Price	Amount	Unit Price	Amount	Remarks
								1 .
(たた)	No. 4 Spur Dike (170m), Anuling	(T)			·			F/C: 316,280 1./C: 671 110
(a.)	Spur Dike (170m)			• • • •	·			
	Excavation, in common	u.u.	3,340	14.60	48,760	8.06	26.920	
	Embankment	cu.m	1,460	16.01	23,370	9.85	14,380	
	Riprap bedding	cu.m	400	17.07	6,830	28.93	11.570	
•	Beckrill	u+no	1,440	13.88	19,990	12.17	17,520	· . ·
·	Concrete, type B	сц. П	460	113.00	51,980	203.54	93,630	
	Formwork	น• ธร	2,600			40.42	105,090	
	Joint filler	នចុំត្	85	54.60	4,640	17.35	1.470	ал 1911 1911 1911
(q)	Wet masonry (1,950m ²)			•	.	•	•	
	Backfill concrete, type B	cu no	390	144.00	56,160	215.06	83.870	
	Rubble stone masonry	щ - рх	1,950	19.88	38,770	53.06	103.470	
	Cobble stone	cu.m	1,090	0.77	840	61.74	67.350	
·	Inter locking mortar	cu.m	100	245.13	24,510	328,99	32.900	
(ບ ເ	Concrete Block (60 nos.)		. :		•			
	Concrete, type B	ш•по	340	113.00	38,420	203.54	69,200	
	Formwork	щ•bs	1,040		· • · ·	40.42	42,040	
	Reinforcing bar, øl6mm	kg	800	2.51	2,010	2.19	1,750	
		:					•	
		۰.,						

Description	Unit	Quantity	r ore 1gn	roreign currency	Local C	Currency	Demonto
		2	Unit Price	Amount	Unit Price	Amount	wemer ka
				-			
(viii) No. 5 Spur Dike (170m), Anuling	g (1)						L/C: 510,200
(a) Spur Dike (170m)	- - 						
Excavation, in common	cu.m	3,340	14.60	48,760	8.06	26.920	
Embankment	cu.m	1,460	16.01	23,370	9.85	14.380	
Riprap bedding	cu.m	400	17.07	6,830	28.93	11.570	
Buckfill	cu.m	1,440	13_88	19,990	12.17	17,520	
Concrete, type B	cu.m	460	113.00	51,980	203.54	93,630	
Formwork	m-ps	2,600			40.42	105,090	
Joint filler	u•bs	82	54.60	4,640	17.35	1.470	· · · · · · · · · · · · · · · · · · ·
(b) Wet masoury (1,950m ²)				•			
Backfill concrete, type B	cu.m	390	144.00	56,160	215.06	83,870	
Rubble stone masonry	sq.m	1,950	19.88	38,770	53.06	103,470	
Cobble stone	cu.m	1,090	0.77	840	61.74	67,300	
Inter locking	cu.m	100	245.13	24,510	328.99	32,900	
(c) Concrete Block (60 nos.)			• 4				
Concrete, type B	cu m	340	113.00	38,420	203.54	69,200	
Formwork	ຮູ້ມ	1,040		· . · ·	40.42	42,040	• • •
Reinforcing bar, øl6mm	kg	800	2.51	2,010	2.19	1,750	
(ix) No. 1 Sabo Dam (70m). Anuling ((2)				•		
							r/C:1,988,060
EXCaVation, in common	cu.m	10,630	14.60	155,200	8.06	85,680	
Backfill	cu.m	460	13.85	6,380	12.17	5,600	

Description	Thit - Ouesti		Foreign Currency	Local	Local Currency	•
1)	לאדא לממוואדאל	Unit Price	Amount	Unit Price	Amount	Remarks
Concrete, type A	cu.m 730	172.38	125,840	233.33	170.330	
Rubble concrete	cu.m 6,700	00 138.69	929,220	186.87	1,252,030	
Backfill concrete, type B	cu.m 61	680 144.00	97,920	215.06	146.240	
Formwork	sq.m 3,760	50		86.22	324,190	· · ·
Joint filler	sq.m	230 54.60	12,560	17-35	3,990	
(x) <u>No. 1 & N</u> o. 2 Spur Dike (540m)			:			F/C: 981,000
						L/C:2,100,32(
Excavation, in common	cu.m 9.700	0 14.60	141,620	8.06	78.180	
Embaniment	cu.m 4,640		74,290	9.85	45.700	
Riprap bedding	cu.m 1,260	70-71 0	21,510	28.93	36,450	
Backfill	cu.m 4,600	0 13.88	63,850	12.17	55,980	
Concrete, type B	cu.m 1,460	0 113.00	164,980	203.54	297,170	
Formwork	sq.m 8,260	Q	• • •	40.42	333,870	
· .	sq.m 270	0 54-60	14,740	17.35	4.680	
(b) Wet masonry (6,180m ²)	•					
Backfill concrete, type B	cu.m 1,240	0 144.00	178,560	215.06	266.670	
Rubble stone masonry	sq.m 6,180	0 19.88	122,860	53.06	327.910	
Cobble stone	cu.m 3,46	0 0.77	2,660	61.74	213.620	
Inter locking mortar	cu.m 300	. તે	73.540	328-99	98. 700	
(c) Concrete Block (180 nos.)			· · ·		> > > >	
Concrete, type B	cu.m 1,030	0 113.00	116,390	203.54	209,650	

Remarks								P29,073,090	0 36,940m ² x1.2=						<u>77.802,980</u>	
Local Currency Unit Price Amount	40.42 126,510	2.19 5,230	14,391,100	1,439,110	949,810	1,678,000	553,740	<u>19,011,760</u>	,800.00	2,907,310	1,453,650		2,851,760		26, 232, 450	
Currency Amount		6,000	7,615,990	761,600	502,660	888,030	293,050	10,061,330			3		1,509,200		<u>11,570,530</u>	
Unit Quantity Foreign Unit Price	sq.m	kg 2,390 2.51			(6% of (1) to (2))		(4))		ha 4, 43		tem 1)		com 1.)		20st	
Description	Pormwork, and see the second	Reinforcing bar, \$16mm	Sub total (1)	General (10% of (1))	Supervision and Miscellaneous	Profit (10% of (1) to (3))	Contractor's Tax (3% of (1) to (4))	Sub total (Contract Cost)	Right of way/Site Acquisition	Engineering Cost (10% of Item 1)	Project Management Cost (5% of Item 1	Contingency	Physical Contingency (15% of Item 1	Price Escalation	Total Estimated Project Cost	

	(Unit: Pesos)		Renarks		F/C:1,708,050 1./C-2 558 150								F/C: 396,190 L/C: 894.840											
		Currency	Amount			110,180	7,300	221,660	1,607,080	189,250	417,300	5,380			24,180	23,640	17,360	28,960	154,690	173,000	2,430		137,640	
	UDIAO RIVER	Local	Unit Price			8.06	12.17	233,33	186.87	215.06	86.22	17.35			8.06	9.85	28.93	12.17	203.54	40.42	17.35		215.06	
	SABO WOKKS, BUDIAO RIVER	Currency	Amount			199,580	8,330	163,760	1,192,730	126,720		16,930			43,800	38,420	10,240	33,030	85,880		7,640	· · · · · · · · · · · · · · · · · · ·	72,960	
0	DETAILED COST ESTIMATE (FINANCIAL).		Unit Price			14.60	13.88	172.38	138.68	144.00	· · · · ·	54.60			14.60	16.01	17.07	13.88	113.00		54.60		114.00	
	ESTIMATE (Onantitur				13,670	600	950	8,600	880	4,840	310			3,000	2,400	600	2,380	760	4,280	140		640	
	AILED COST	+ + + + + + + + + + + + + + + + + + +	A TTIA		· * .	cu.m	a. no	cu.m	u-no	u-no	m•ps	a. Sq. H	-		u∎"no	cu.m	u.•m	cu.m	cc.m	ы. So.	a, a, a, a, a, a, a, a, a, a, a, a, a, a	-	cu.m	
	TABLE-I.8 DET	Description		Contract Cost	<pre>(1) Direct Cost (i) No.l Sabo Dam (90m)</pre>	Excavation, in common	Backfil	Concrete, type A	Rubble concrete	Backfill concrete, type B	Formwork	Joint filler	i) No. 1 Training Levee (400m)	(a) Levee (400m)	Excavation	Embeniment	Riprap bedding	Beckfill	Concrete, type B	Formvork	- 1 ¹	(b) Wet masoury (3,200m ⁴)	Backfill concrete, type B	
				C.	c t	· · · · ·						27	(ii)	ξ								U		

	Description	13m i t	Quants to	Foreign C	Currency	Local Currency	rrency	B
	10 A A A A		لات مع المعالم	Unit Price	Amount	Unit Price	Amount	Kembiks
	Rubble stone masonry	m •ุ ม	3,200	19.88	63,620	53.06	169,790	
•	Cobble stone	cu.m	1,790	0.77	1,380	61.74	110,510	
	Inter locking mortar	cu n	160	245.13	39,220	328.99	52,640	
		1.			· · · · ·			F/C: 491.330
(111)	(iii) No. 1 Spur Dike (270m)			- - 				L/C:1,051,490
(છ)	Spur Dike (270m)				·			
	Excavation, in common	cu.m	4,850	14.60	70,810	8.06	39,090	
	Embankment	cu.m	2,320	16.01	37,140	9.85	22,850	
*. 3	Riprap bedding	cu.m	630	17.07	10,750	28.93	18,230	
	Backfill	cu.m	2,300	13.88	31,920	12.17	27,990	
	Concrete, type B	cu.m	730	113.00	82,490	203.54	148,580	
	Formwork	ш•bs	4,130		- - - -	40.42	166,930	
-	Joint filler	ย ชื่ รู	140	54.60	7,640	17.35	2,430	
(P)	Wet masonry (3,090m ²)		-					
	Backfill concrete, type B	cu.m	620	144.00	89,280	215.06	133,340	
	Rubble stone	យ ភ្នំ	3,090	19.88	61,430	53 . 06	163,960	
	Cobble stone	cu+m	1,730	0.77	1,330	61.74	106,810	
	Inter locking mortar	a. a.	150	245.13	36,770	328.99	49,350	
(o)	Concrete Block (90 nos.)							
· . · - · -	Concrete, type B	cu.m	520	113.00	58,760	203.54	105,840	
	Formvork	sq.m	1,570			40.42	63,460	
1	Reinforcing bar, ø16mm	kg	1,200	2,51	3,010	2.19	2,630	
		•					- 1	

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Description	Unit Ouentity	Foreign	Currency	Local	Currency	Ramarke
		Unit Price	Amount	Unit Price	Amount	
(iv) <u>No. 2 Spur</u> Dike (270m)		•				r/C: 463,360 L/C:1.027.040
(a) Spur Dike (270m)			- 			
Excevation, in common	cu.m 4,850	14.60	70,810	8.06	39,090	
Embankment	cu.m 2,320	-	37,140	9.85	22,850	
Riprap bedding	cu.m 630	7.07	10,750	28.93	18,230	
Bakfill	cu.m 230	0 13.88	3,190	12.17	2,800	
Concrete, type B	cu.m 730	00.511 0	82,490	203.54	148,580	
Fromwork	sq.m 4,130			40.42	166,930	
Joint fill	sq.m 135	54.60	7,370	17.35	2,340	
(b) Wet masoury (3,090m ²)						
Backfill concrete, type B	cu.m 618	3 144.00	88,990	215.06	132,910	
Rubble stone masonry	sq.m 3,090	19.88	61.430	53.06	163,960	
Cobble stone	cu.m. 1,730	0.77	1,330	61.74	106,810	
Inter locking mortar	sq.m 160	0 245.13	39,220	328.99	52,640	
(c) Concrete Block (90 nos.)						
Concrete, type B	cu.m 510	0 113.00	57,630	203.54	103,810	
Cobble stone		•				
Formwork	sq.m 1,570			40.42	63,460	
Reinforcing bar, øl6mm	kg 1,200	2.51	3,010	2.19	2,630	1. 東京 小学 かんしょう 一日
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				Unit Price	Amount	Unit Price	Amount	
								F/C: 833,91
•	(v) No.3 Spur Dike (400m)							L/C:1,737,550
<u>ت</u>	(a) Spur Dike							
	Excavation, in common	cu.m	7,180	14.60	104,830	8.06	57,870	
	Embankment	u-n5	3,440	16.01	55,070	9.85	33,880	
	Riprap bedding	ш•л 70	940	17.07	16,050	28.93	27,190	
	Backfill	u.u.	3,400	13,88	47,190	12.17	41,380	
	Concrete, type B	cu.m	1,080	113.00	122,040	203.54	219,820	
	Formwork	m. So.	6,120			40.42	247,370	
	Joint filler	sq.m	200	54.60	10,920	17.35	3,470	
(q)	b) Wet masonry (4,580m ²)							
	Backfill concrete, type B	cu.m	920	144.00	132,480	215.06	197,860	· · · ·
	Rubble stone	m•ps	4,580	19.88	91,050	53.06	243,010	
	Cobble stone	cu.m	2,560	0.77	1,970	61.74	158,050	
	Inter locking mortar	cu.m	230	245.13	56,380	328.99	75,670	· · ·
(°)		· · · ·	• .		•			
	Excavation, in common	eu.m	1,170	14.60	17,080	8.06	9,430	· · · · · · · · · · · · · · · · · · ·
	Backfill	cu.m	400	13.88	5,550	12.17	4,870	• • •
	Concrete, type A	ш• กว	640	126.88	81,200	216.37	138.480	
	Formwork	ы. Sq. н	640			40°42	25,870	
	Joint filler	sq.m	32	54 . 60	1,750	17.35	560	
(q)	 Concrete Block (134 nos.) 	· · ·						
	Concrete, type B	cu.m	760	113.00	85,880	203 . 54	154,690	

Foreign Currency Unit Frice Amount Unit Frice Amount	40.42	• • •		14.60 73,440 8.06 40.540	16.01 38,580 9.85 23,740	17.07 11,270 28.93 19,090	13.88 33,030 12.17 28,960	113.00 85,880 203.54 154,690		54.60 7,640 17.35 2,430		144.00 92,160 215.06 137,640	19.88 63,620 53.06 169,790		245.13 39,220 328.99 52.640		113.00 59,890 203.54 107,880	40,42	
Quantity	2,330	1,780	· .	5,030	2,410	660	2,380	760	4,290	140		640	3,200	1,800	160	. * - -	530	1,620	1 240
Unit	ដ ស ខ្លួន	lsg		eu.m	cu.m	cu∙m	cu.m		щ•bs	a. Sq.		พ° กว	ส ⁼บั ร	cu.m	cu.m		cu.m	ะราว เ	ko
Description	Formwork	Reinforcing bar, øl6mm	 (a.) Spur Dike (280m)	Excavation, in common	Embankment	Riprar bedding	Backfill	Concrete, type B	Formwork	Joint filler	(b) Wet masoury (3,210m ²)	Backfill concrete, type B	Rubble stone masonry	Cobble stone	Inter locking mortar	(c) Concrete Block (93 nos.)	Concrete, type B	Formwork	Reinforcing bar. di6mm

<pre>(feneral (10% of (1))</pre>	Description Unit Quantity -	Foreign Currency Unit Price Amount	Local Currency Unit Price Amount	Remarks
Supervision and Miscellaneous (6% of (1) to (2)) 290,540 551,710 Profit (10% of (1) to (3)) 513,280 974,680 Ocntractor's Tax (3% of (1) to (4)) 513,280 321,650 Sub total (contract Cost) 5,815,480 11,043,160 Sub total (contract Cost) 5,815,480 11,043,160 Rgiht of way/Site Acquisition ha 3.01 - 1,800.00 5,420 Rgiht of way/Site Acquisition ha 3.01 - 1,800.00 5,420 Rgint of way/Site Acquisition ha 3.01 - 1,800.00 5,420 Rgineering Cost (10% of Item 1) - 3.01 - 1,800.00 5,420 Project Management Cost (5% of Item 1) - 1,800.00 5,420 1,656,470 Project Management Cost (5% of Item 1) * * 1,656,470 1,656,470 Project Management Cost (5% of Item 1) * * 1,656,470 1,656,470 1,656,470 Project Management Cost (5% of Item 1) * * 1,656,470 1,656,470 1,656,470 Project Escalation fotal Estimated Froject Cost	<pre>ceneral (10% of (1))</pre>	T T		320
) Frontit (10% of (1) to (3)) 513,280 974,680)) 169,380 221,650) Sub total (Contract Cost) 231,640 221,650 Sub total (Contract Cost) 5,815,480 11.043,160 5,420 Rgiht of way/Site Acquisition ha 3.01 - 1,800.00 5,420 Bagineering Cost (10% of Item 1) - 1,800.00 5,420 842,930 Engineering Cost (10% of Item 1) - 1,800.00 5,420 842,930 Project Management Cost (5% of Item 1) - 1,800.00 1,656,470 Physical Contingency (15% of Item 1) 872,330 1,656,470 Physical Contingency 15% of Item 1) 872,330 1,656,470 Price Escalation 1 6.667,800 1,556,470 Price Escalation 1 1,553,840 1,556,470	1) Supervision and Miscellaneous (6% of (1) to (2))	290,540	551,	012
 (antractor's Tax (3% of (1) to (4)) (b) total (Contract Cost) (b) total (Contract Cost) (c) (1,05,420 (c) (1,06, of Item 1) (c) (1,060,00 <li(c) (1,060,00<="" li=""> (c) (</li(c)>	(4) Profit (10% of (1) to (3))	513,280	974,	880
Sub total (Contract Cost) 5,815,480 11.043.160 Rgiht of way/Site Acquisition ha 3.01 - 1,800.00 5,420 Engineering Cost (10% of Itom 1) - 3.01 - 1,685,860 842,930 Froject Management Cost (5% of Item 1) - 872,320 1,656,470 842,930 Project Management Cost (5% of Item 1) - 872,320 1,656,470 1,656,470 Project Management Cost (15% of Item 1) - 872,320 1,656,470 1,656,470 Price Escalation - 1 1,656,470 1,656,470 1,656,470 Price Escalation - - 1 1,656,470 1,656,470	(5) Contractor's Tax (3% of (1) to (4))	169,380	321,	550
Rgiht of way/Site Acquisition ha 3.01 - 1,800.00 5,420 Engineering Cost (10% of Item 1) - 1,685,860 842,930 842,930 Froject Management Cost (5% of Item 1) - 842,930 1,656,470 Ontingency 1) Physical Contingency (15% of Item 1) 872,320 1,656,470) Physical Contingency (15% of Item 1) 872,320 1,656,470) Physical Lontingency (15% of Item 1) 872,320 1,656,470) Price Escalation 1,656,470 1,656,470	Sub total (Contract Cost)	5,815,480	11,043,	
Bngineering Cost (10% of Item 1) - 1,685,860 Froject Management Cost (5% of Item 1) - 842,930 Contingency 872,320 1,656,470 Physical Contingency (15% of Item 1) 872,320 1,656,470 Price Escalation 1 6,687,800 15,233.840	2. Rgiht of way/Site Acquisition ha 3.01	3		
 Project Management Cost (5% of Item 1) Contingency Contingency (15% of Item 1) (1,656,470 (1,656,	3. Engineering Cost (10% of Item 1)		1,685,	· · · · .
Contingency Physical Contingency (15% of Item 1) Price Escalation Total Estimated Froject Cost <u>6,687,800</u> <u>15,233,840</u> <u>F21</u>		1	842,	330
Physical Contingency (15% of Item 1) Price Escalation Total Estimated Project Cost <u>15,233.840</u> <u>15,233.840</u>	0			
Froject Cost [5,687,800]		872,320	1,656,	470
	Total Estimated Project Cost	6,687,800	15,233.	F21.

(Unit: Pesos)	Remarks		F/C:1,517,840 L/C:2,277,700								F/C:1,260,190 L/C:1,901,100								
RIVER	Currency Amount	:		94,300	8,210	0,470	1,429,560	167,750	370,750	4,680		54,810.	9,490	433,990	1,016,570	98,930	284,530	2,780	and the second secon
PAWA BURABOD RIVER	Local Unit Price			8.06	54.73	233.33	186,87	215.06	86.22	17.35		8.06	12.17	233.33	186.87	215.06	86.22	17.35	
SABO WORK.	Currency Amount			170,820	6,820	144,800	1,060,980	112,320		14,740		99,280	10,830	320,630	754,470	66,240		8,740	
 DETAILED COST ESTIMATE (FINANCIAL),	Foreign (Unit Price			14.60	45.48	172.38	138.69	144.00		54.60	۲۰۰۰ ۱۰ ۱۰ ۱۰ ۱۰	14.60	13.88	172.88	138.69	144.00		54.60	
T ESTIMATE	Quantity			11,700	150	840	7,650	780	4,300	270	•	6,800	780	1,860	5,440	460	3,300	160	
TAILED COS	Unit			cu.m	น•ทว	сч.п сч.п	cu.m	cu.m	sq.m	ะ รู รู		cu.m	ш•лэ	cu.m	cu.m	cu.m	ង•ps	នា.	
TABLE-I.9 DE	Description	Contract Cost) Direct Cost (i) No. 1 Sabo Dam (80m)	Excavation, in common	Excavation, in rock	Concrete, type A	Rubble concrete	Backfill concrete, type B	Formwork	Joint filler	(ii) No. 1 Consolidation Dam (120m)	Excavation, in common	Backfill	Concrete, type A	Rubble concrete	Backfilll concrete, type B	Pormvork	Joint filler	
		.	(1)					·	21	:				• • •					

No. 1 & No. 2 Spur Dile (500m) No. 1 & No. 2 Spur Dile (500m) Spur Dile (500m) Cu.m 9,160 14.60 133,740 8.06 73,830 Experiment Cu.m 4,900 14.60 133,740 8.06 73,830 Experiment Cu.m 4,900 14.60 133,740 8.06 73,830 Experiment Cu.m 1,130 17.07 20,140 28.93 34,140 Experiment Cu.m 1,300 17.07 20,140 28.93 34,140 Eackrill Currete, type 3 Cu.m 1,300 17.07 20,140 27,610 Formorit Sq.m 7,550 131.00 13,550 17.17 27,510 Formorit Sq.m 250 54.60 13,650 17.75 4,340 For tiassonry Sq.m 2,720 19.88 111,710 53.06 203,350 For tiassonry Sq.m 5,720 19.88 111,710 53.06 203,500 Roble stone C	Description	Unit	Quantity	roreign Unit Price	roreign currency t Price Amount	Unit Price	Local Currency Price Amount	Remarks
cu.m 9,160 14.60 133,740 8.06 73,830 cu.m 4,300 16.01 68,840 9.85 42,360 cu.m 1,180 17.07 20,140 28.93 34,140 cu.m 1,360 13.88 59,130 12.17 51,840 cu.m 1,360 13.88 59,130 12.17 51,840 cu.m 1,360 113.00 153,680 203.54 276,810 sq.m 7,650 13,650 13,650 17.35 4,340 sq.m 7,650 13,650 17.35 4,340 sq.m 7,650 13,650 17.35 4,340 sq.m 7,650 13,650 17.35 4,340 sq.m 5,720 19,88 113,710 53.06 203,500 sq.m 5,720 19,88 113,710 53.06 203,500 cu.m 3,200 0,77 2,460 61.74 197,420 cu.m 280 245,113 68,640 238.99 92,120 sq.m 2,960	1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1							F/C: 909,780 L/C:1,950,610
9,160 14.60 $133,740$ 8.06 $73,830$ cum $4,300$ 16.01 $68,8400$ 9.85 $42,560$ cum $1,180$ 17.07 $20,140$ 28.93 $34,140$ cum $1,180$ 17.07 $20,140$ 28.93 $34,140$ cum $1,360$ 113.00 $153,680$ 203.54 $276,810$ squm $7,650$ 133.680 203.54 $276,810$ $34,140$ cum $1,360$ 113.00 $153,650$ $12,17$ $51,840$ squm $7,650$ 133.650 $12,17$ $51,840$ $30,210$ squm $2,50$ 113.00 $153,650$ 17.35 $4,740$ squm $5,720$ 1944.00 $165,600$ 217.35 $477,220$ squm $32,00$ 0.77 $2,460$ 61.74 $303,500$ squm $5,720$ $197,710$ 53.06 $203,500$ cum 3200 0.777 $2,460$ 61.74 $307,500$ squm <t< td=""><td>1.1</td><td> </td><td></td><td>· · · ·</td><td></td><td></td><td></td><td></td></t<>	1.1	 		· · · ·				
cu.m 4,300 16.01 68,840 9.85 42,360 cu.m 1,180 17.07 20,140 28.93 34,140 cu.m 4,260 13.88 59,130 12.17 51,840 cu.m 1,360 13.88 59,130 12.17 51,840 cu.m 1,360 113.00 153,650 203.54 276,810 sq.m 7,650 54.60 13,650 17.35 4,340 sq.m 7,650 144.00 165,600 215.06 247,320 sq.m 5,720 19.88 113,710 53.06 303,500 sq.m 3,200 0.77 2,460 61.74 197,570 cu.m 230 245.13 68,640 328.99 92,120 sq.m 2,30 2,450 109,610 203.56 2197,43	Excavation, in common	eu.m		14-60	133,740	8 . 06	73,830	
cu.m 1,180 17.07 $20,140$ 28.93 $34,140$ cu.m 4,260 13.88 $59,130$ 12.17 $51,840$ cu.m 1,360 113.00 153,680 203.54 $276,810$ sq.m 7,650 54.60 13,650 203.54 $276,810$ sq.m 7,650 144.00 15,650 17.35 $4,340$ sq.m 250 54.60 13,650 17.35 $4,340$ sq.m 250 54.60 13,650 17.35 $4,340$ sq.m 250 54.60 13,650 203.500 $237,920$ sq.m 3,200 0.77 $2,460$ 61.74 $197,570$ cu.m 3,200 0.77 $2,460$ 61.74 $197,570$ cu.m 3,200 0.77 $2,460$ 61.74 $197,570$ cu.m 270 213,00 203.54 $197,570$ 238.99 $92,120$ sq.m 2,960 2.51 580 203.560 203.560 $197,430$ sq.m	Embankment	cu.m	4,300	16.01	68,840	9.85	42,360	
cu.m 4,260 13.88 59,130 12.17 51,840 cu.m 1,360 113.00 153,680 203.54 276,810 sq.m 7,650 54.60 13,650 203.54 276,810 sq.m 7,650 54.60 13,650 17.35 4,340 sq.m 250 54.60 13,650 17.35 4,340 sq.m 250 54.60 13,650 17.35 4,340 sq.m 5,720 19.88 113,710 53.06 303,500 sq.m 5,720 19.88 113,710 53.06 303,500 cu.m 3,200 0.77 2,460 61.74 197,570 cu.m 3,200 0.77 2,460 61.74 197,570 cu.m 280 245.13 68,640 328.99 92,120 sq.m 2,960 109,610 203.54 197,430 sq.m 2,960 2.51 580 500 sq.m 2,960 2.51 580 2.19,640 sq.m 2,960 <	Riprap bedding	cu.m	1,180	17.07	20,140	28.93	34,140	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Backfill	m•no	4,260	13,88	59,130	12,17	51,840	
sq.m 7,650 sq.m 7,650 sq.m 250 54.60 13,650 17.35 4,340 sq.m 250 54.60 13,650 215.06 247,320 sq.m $5,720$ 19.88 113,710 53.06 303,500 cu.m $3,200$ 0.77 $2,460$ 61.74 197,570 cu.m 280 245.13 $68,640$ 328.99 92,120 sq.m 270 113.00 109,610 203.54 197,430 sq.m 2,960 sq.m 2,960 2.51 580 2.19 500	Concrete, type B	cu.m	1,360	113.00	153,680	203 . 54	276,810	
sq.m 250 54.60 13,650 17.35 4,340 e B cu.m 1,150 144.00 165,600 215.06 247,320 sq.m 5,720 19.88 113,710 53.06 303,500 cu.m 3,200 0.77 2,460 61.74 197,570 cu.m 280 245.13 68,640 328.99 92,120 cu.m 970 113.00 109,610 203.54 197,430 sq.m 2,960 2.51 580 2.19 500	Portuna State	sq.m	7,650	· · ·	. ;	40.42	309,210	
0e B cu.m 1,150 144.00 165,600 215.06 247,320 sq.m 5,720 19.88 113,710 53.06 303,500 cu.m 3,200 0.77 2,460 61.74 197,570 cu.m 3,200 0.77 2,460 61.74 197,570 cu.m 280 245.13 68,640 328.99 92,120 cu.m 970 113.00 109,610 203.54 197,430 sq.m 2;960 2.51 580 203.54 197,430 kg 230 2.51 580 2.19 900	Joint filler	sq.m	250	54.60	13,650	17.35	4,340	
0e B cu.m 1,150 144.00 165,600 215.06 247,320 sq.m 5,720 19.88 113,710 53.06 303,500 cu.m 3,200 0.77 2,460 61.74 197,570 cu.m 3,200 0.77 2,460 61.74 197,570 cu.m 3,200 0.77 2,460 61.74 197,570 cu.m 280 245.13 68,640 328.99 92,120 os. 970 113.00 109,610 203.54 197,430 sq.m 2,960 2.51 580 2.19 92,120 hkg 230 2.51 580 2.19 92,120		•					· · · · · · · · · · · · · · · · · · ·	
sq.m 5,720 19.88 113,710 53.06 303,500 cu.m 3,200 0.77 2,460 61.74 197,570 cu.m 230 245.13 68,640 328.99 92,120 cu.m 970 113.00 109,610 203.54 197,430 sq.m 2,960 2.51 580 2.19 500	ê G	u-no	1,150	144.00	165,600	215.06	247,320	
cu.m 3,200 0.77 2,460 61.74 197,570 cu.m 280 245.13 68,640 328.99 92,120 cu.m 970 113.00 109,610 203.54 197,430 sq.m 2,960 kg 230 2.51 580 2.19 500	Rubble stone masoury	sq.m	5,720	19.88	113,710	53.06	303,500	
cu.m 280 245.13 68,640 328.99 92,120 cu.m 970 113.00 109,610 203.54 197,430 sq.m 2,960 2.51 580 2019,640 40.42 119,640 kg 230 2.51 580 2.19 500	Cobble stone	cu.m	3,200	12.0	2,460	61 . 74	197,570	· · ·
s.) cu.m 970 113.00 109,610 203.54 197,430 sq.m 2,960 40.42 119,640 kg 230 2.51 580 2.19 500 500 2.19	Inter locking mortar	cu.m	280	245.13	68,640	328.99	92,120	
cu.m 970 113.00 109,610 203.54 197,430 sq.m 2,960 40.42 119,640 kg 2.19,640 500 2.19							- 1	
sq.m 2,960 kg 230 2.51 580 2.19 500 500	Concrete, type B	cu.m	016	113.00	109,610	203-54	197,430	
kg 230 2.51 580 2.19 500	"Formwork."	ຂ ີ ດ ແ	2,960	· .		40°42	119,640	
	Reinforcing bar, pl6mm	kg	230	2.51	580	2.19	500	•
						·, ·		F/C: 436,030
Spur Dike (240m)	(iv) No. 3 Spur Dike (240m)							
	Spur Dike (240m)		•					
	(a) Excavation, in common	cu.m	4,310	14.60	62,930	8.06	34,740	

Description	Unit	t Ouentity	COMPANNO AGENER	TTETCY		POCAL VALLENCY	0
			Unit Price	Amount	Unit Price	Amount	Nemarks
Embankment	Cu.		16.01	32 980	ur oc		
						× × × × × ×	
Riprap bedding	cu.m	520		8,880	28. 93	15,040	
Backfill	cu.m	-		28,320	12.17	24,830	
Concrete, type B	m.u.		113.00	73,450	203.54	132,300	• •
Formwork	E *ðs	в 3,530			40.42	142,680	
Joint filler	u. • ₽ S		54.60	6,550	17.35	2,080	
(b) Wet masonry (2,750m ²)	om ²)					•	
Backfill concrete, type	, type B cu.m	m 550	144.00	79,200	215.06	118,280	
Rubble stone masonry	m-ps yru	2,7	19.83	54,670	53.06	145,920	
Cobble stone	cu.m.	m 1,540	0.77	1,190	61.74	95,080	
Inter locking mortar	tax cu.m	п 140	245.13	34, 330	328.99	46,060	
(c) Concrete Block (180 mos.	80 mos.)		· · ·	· · ·	· · · · · · ·		
Concrete, type B	c.r.+ m	в 450	113_00	50,850	203.54	91,950	
Formwork	sg.m	m 1,390			40.42	56,180	
Reinforcing bar, øl6mm	ø16mm kg	1,070	2.51	2,690	2.19	2,340	· · · · ·
(v) <u>No.</u> 4 Spur Dike (260m)	260m)		•				F/C: 475,660
(a) Spur Dike (260m)		•					· () +) / + ·) / ·
Excavation, in common	mmon. cu.m	m 4,670	14.60	68,180	8.06	37,640	
Embankment	cu.n	m 2,240	16.01	35,860	9.85	22,060	
Riprap bedding	ສ -ສວ		17.07	10,410	28.93	17,650	
Backfill	CC .	а 2,210	13.88	30,670	12.17	26,900	
		•					

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Description	Nnit.	Onantitu	Foreign Currency	urrency	Local C	Local Currency	
			Unit Price	Amount	Unit Price	Amount	
Concrete, type B	a D	200	113.00	79,100	203 - 54	142.480	
Pormwork	ม • บีร	3,980			40.42	160-870	
Joint filler	sq.m	130	54.60	7.100	17.35	2.260	
(b) Wet masonry (2,980m ²)						· · · · · · · · · · · · · · · · · · ·	
Backfill concrete, type B	# ° กว	600	144.00	86,400	215.06	129,040	
Rubble stone masonry	н°Ъs	2,980	19.88	59,240	53.06	158,120	
Cobble stone	u no	1,670	0.77	1,290	61.74	103.110	
Inter locking mortar	cu.m	150	245.13	36,770	328 . 99	49,350	
(c) Concrete Block (90 nos.)			• .	· · ·			
Concrete, type B	ແະນວ	210	113.00	57,630	203.54	103,810	
Formwork	sq.m	1,570			40.42	63,460	
Reinforcing bar, øl6mm	lsg	1,200	2.51	3,010	2.19	2,630	
(vi) <u>No. 5 Spur Dike (500m)</u>							F/C:1,009,540 L/C:2.108 500
(a) Spur Dike (500m)							
Excavation, in common	cu.m	8,970	14.60	130,960	8.06	72,300	
Embankment	ш г	4,300	16.01	68,840	9.85	42,360	
Riprap bedding	u no	1,170	17.07	19,970	28.93	33,850	
Backfill	cu.m	4,260	13.88	59,130	12.17	51.840	
Concrete, type B	cu.m	1,360	113.00	153,680	203.54	276.810	•
Formwork	sqom	7,660	•	: .	40.42	309,620	
Joint filler	ແ ້ວ	250	54.60	13,650	17.35	4,340	
	•						

ne De cr	Decrintion	11	Quan+ i + . r	Foreign	Currency	Local C	Local Currency	2 2
	** ** ** ***	> + 11 >	50 TO 11072	Unit Price	Amount	Unit Price	Amount	Nemarks
(b) Wet masor	Wet masoury (5,730m ²)							
Backfill	Backfill concrete, type B	cu.•m.	1,150	144.00	165,600	265.06	247,320	•
Rubble st	Rubble stone masonry	sq.m	5,730	19.88	113,910	53.06	304,030	
Cobble stone	tone	cuem	3,210	0.77	2,470	61.74	198,190	
Inter loc	Inter locking mortar	cu.m	290	245.13	71,090	328.99	95,410	
(c) Ground si	Ground sill (160m)							
Excavatic	Excavation, in common	cuem	1,170	14.60	17,080	8.06	9,430	
Backfill		cu,m	400	13.88	5,550	12.17	4,870	
Concrete, type A	, type A	cu.m	640	126.88	81,200	216.37	138,480	
Formvork		ទ ភ្ល ស	640			40.42	25,870	
Joint filler	ller	8. • Co S	32	54.60	1,750	17.35	560	
(d) Concrete	Concrete Block (156 nos.)							
Concrete, type B	, type B	cu.m	880	113.00	99,440	203.54	179,120	
Formwork		80°8	2,710			40.42	109,540	
Reinforci	Reinforcing bar, øl6mm	kg	2,080	2.51	5,220	2.19	4,560	
(vii) No.6 Spur	No.6 Spur Dike (250m)	•						F/C: 642,890 1/C:1 368 130
	ə (250m)							
Excavatic	Excavation, in common	cu.m.	4,490	14.60	65,550	8.06	36,190	
Embankment		cu.m	2,150	16.01	34,420	9.85	21,180	
Riprap. bedding	edding	una.	580	17.07	006.6	28.93	16,780	
Backfill		cu.m	2,130	13.88	29,560	12.17	25,920	
and the second	(a) an instruction of the constructional state of the the term of the term of the state of th		and the second secon			A Company and the second s		

	VC IBULKS																			F/C: 783,520 L/C:1,654,820	1		and we want to be a set of the se
Local Currency	Amount	138,410	154,400	2,260		122,580	151,750	98,780	46,060		10,640	5,480	155,790	29,100	069		215,750	130,960	5,410			50,620	
Local	Unit Price	203.54	40.42	17.35		215-06	53.06	61.74	328.99		8.06	12,17	216.37	40.42	17.35		203.54	40.42	2.19			8.06	
Currency	Amount	76,840		7,100		82,080	56,860	1,230	34,320		19,270	6,250	91,250		2,180		119,780		6,200			91,690	
Foreign (Unit Price	00-EII		54.60		144.00	19.88	0.77	245.13		14.60	13.88	126.88		54.60		113.00		2.51			14.60	· · · · · · · · · · · · · · · · · · ·
Minutitu.		680	3,820	130		270	2,860	1,600	140		1,320	450	720	720	40		1,060	3,240	2,470			6,280	
11n ÷ +	> + + + + + + + + + + + + + + + + + + +	cu.m	sq.m	sq.m		cu.m	รจุษท	cu.m	cu.m		cn°m	cu.m	cu	sq.m	sq.n	· · · · ·	แรง	ដ•្ឋ ខ្មុំ	kg			cu.m	
		Concrete, type B	Pormark	Joint filler	(b) Wet masonry $(2,860m^2)$	Backfill concrete, type B	Rubblestone	Cobble stone	Inter locking mortar	(c) Ground sill (180m)	Excavation, in common	Backfill	Concrete, type A	Formwork	Joint tiller	(d) Concrete Block (186 nos.)	Concrete, type B	Formwork	Reinforcing bar, øl6mm	viii) <u>No. 7 Spur Dike (350m)</u>	(a). Spur Dike (350m)	Excavation, in common	
					q)					ی (د	38	-				((viii)	(a ,		· · ·

Description	Unit	Ouantity	Foreign	Currency	Local	. Currency	Damanlar
			Unit Price	Amount	Unit Price	Amount	
Embankment	u"no	3,020	16.01	48.350	9.85	29.750	
Riprap bedding	cu.m	820	17.07	14,000	28°93	23,720	
Backfill	cu.m	2,980	13.08	41,360	12.17	36,270	
Concrete, type B	cu.m	950	113.00	107,350	203.54	193,360	
Formwork	sq.m	5,350			40.42	216,250	
Joint filler	sq. m	180	54.60	9,830	17.35	3,120	
(b) Wet masonry $(4,000m^2)$	-			: ; .: ;			
Backfill concrete, type B	cu.m	800	144.00	115.200	215.06	172,050	
Rubble stone masonry	sq.m	4,000	19.88	79,520	53.06	212,240	
Cobble stone	a.u.	2,230	0.77	1,720	61.74	137,680	
Inter locking mortar	Cu. II	500	245.13	49,030	328.99	65,800	
(c) Ground sill (160m)	• • • •						
Excavation, in common	cu.m	1,170	14.60	17,080	8.06	9,430	
Backfill	cu.m	400	13.88	5,550	12.17	4,870	
Concrete, type A	cu.m	640	126.88	81,200	216.37	138,480	
Formwork	ដ ទី ទី	640			40.42	25,870	
Joint filler	sq.m	30	54.60	1,640	17.35	520	
(d) Concrete Block (176 nos.)	. ·						
Concrete, type B	cu.m	010'1.	113.00	114,130	203.54	205,580	
	ш•bs	3,070			40.42	124,090	
Reinforcing bar, øl6mm.	ga	2,340	2.51	5,870	2.19	5,120	a sometime of a solution of the
Sub total (1)				7,035,450		13,207,650	

Description	t Quantity	Foreign Currency Unit Price Amoun	urrency Amount	Unit Price	Local Currency Price Amount	Remarks
(2) General (17% of (1))			703,550		1,320,770	
(3) Supervision & Miscellaneous (6% of (1) to (2))	io (2))		464,340		871,700	
(4) Profit (10% of (1) to (2))			820,330		1,540,010	
(5) Contractor's Tax $(3\% \text{ of } (1) \text{ to } (4))$			270,710		508,200	
Sub Total (Contracto Cost)			9,294,380		17,448,330	226,742,710
2. Right of Way/Site Acquisition ha	3.65			1,800.00	6,570	30,440 ^{m2} x1.2= 36,500
3. Engineering Cost (10% of Item 1)					2,674,270	
4. Project Management Cost (5% of Item 1)					1,337,140	
. Contingency						
 (1) Enysical Contingency (10% of 10em 1) (2) Price Escalation 			г, 294, 100 -			
Total Estimated Project Cost			10,688,540		24,083,560	234,772,100

	(Unit: Pesos)	Remarks			F/C: 710,910	11 V-4-74-4-5											F/C: 427,460 1./C: 796 240						and the second secon	
)		Currency	2 HIDOHY			035. 04	21.900	53,670	571,820	70,970	60,220	150,890	2,430	74,280	48,160	23.030		12,090	95,670	229,850	113.980	70,700	870	
L	BUANG RIVER	Local	OLLY VILCE		· · · ·	č	54.73	233.33	186.87	215-06	215+06	86.22	17.35	53.06	61-74	328.99		8.06	233.33	186.87	215.06	86.22	17.35	
	SABO WORK,	Currency	Amount			009 28	18,200	39,650	424,390	47,520	40,320	· · · · · · · · · · · · · · · · · · ·	7,640	27,830	600	17,160		21,900	70,680	170,590	76, 320		2,730	
)	DETAILED COST ESTIMATE (FINANCIAL),	reign	ODIT FILCE			C Y F	45.49	172,38	138.69	144.00	144.00		54.60	19.88	0.77	245.13		14.60	172.38	138.69	144.00		54.60	and a second
· ·	T ESTIMATE	Quantity		: •.			400	230	3,060	330	280	1,750	140	1,400	780	70		1,500	410	1,230	530	820	50	the second s
	DETATLED COS	Unit						cu.m	cu.m	u-no	cu.m	ы. Sq. H	sq.m	sq. m	ш•по cn	5 . B	4	cu.m	u-n-	cu.m	u.n.	a- ₂ s	a s c s c	er en landeren er en en landeren inte
	TABLE-I.10	Description		Contract Cost	Direct Cost	Pycerro + or vy vymmox	Excevation. in rock	Concrete, type A	Rubble concrete	Backfill concrete, type B	Backfill concrete, type B	Formvorl	Joint filler	Rubble stone masonry	Cobble stone	Inter locking mortar	Consolidation Dam No.1- No.4	Excavation, in common	Concrete, type A	Rubble concrete	Backfill concrete, type B	Formwork	Joint filler	an a
				1. Cont							-	1												

Poreign Currency Local Currency Unit Price Amount Unit Price Amount	52,280 53.06	1,130 61.74 90,760 31,830 328.99 42,770	1,138,370 1,921,970	113,840 192,200	75,130 126,850	720 224,100	73, 950	<u>7</u> 0	1,800.00	404, 290	202,150		380,860	3,527,050	
Currency Local Local Vnit Price	52,280	1,130 31,830 3	1,138,370	113,840	5,130	720	8	22	1,800,00						
Curr			1,138,370	113,840	5,130	720	8	۶ı	. A			an La chuirte		· · · ·	
Foreign Unit Price	00 k				4	132,720	43,800	1,503,870		1			225,580	1,729,450	
	<u>н</u> ,	0-77 245.13								4					
Quentity	2,630	1,470 130		• •	。(2))				0.38						
Description	masonry	CoDDLe stone cu.m Inter locking	Sub total (1)	(2) General (10% of (1))	(3) Supervision and Miscellaneous (6% of (1) to	(4) Profit (10% of (1) to (3))	(5) Contractor's Tax (3% of (1) to (4))	Sub total (Contract CostO	2. Right of way/Site Acquisition ha	3. Engineering Cost (10% of Item 1)	4. Project Management Cost (5% of Item 1)	5. Contingency	 Physical Contingency (15% of Item 1) Price Escalation 	Total Estimated Project Cost	

Description Contract Cost (1) Direct Cost	Unit	Quantity -	Foreign Unit Price	Poreign Currency t Price Amount	Local Unit Prico	Local Currency	lcmarks
Quinali (A) River Excavation, in common	E n S	1,738,000	31 . 64	54,990,320	15.48	26,904,240	
Embankment Sod facing	cu.m sq.m	3,706,000 1,493,000	16.06	59,518,360	8.77 23.66	32,501,620 35,324,380	
Slope protection Talisav River	E. or N	299,000	17.32	5,178,680	46.56	13,921,440	
Excavation, in common Embankment Sod facing	ย * ช ม * ส ว ม ว	31,000 1,327,000 640,000	19.53 16.06	605,430 21,311,620	9.73 8.77 23.66	301,630 11,637,790 15,142,400	
Slope protection Masisi River	E 5 0 0	128,000	17.32	2,216,960	46.56	5,959,680	
Excavation, in common Embankment Sod facing	ее яло хо хо хо хо хо	901,000 252,000 267.000	29.67 16.06	26,732,670 4,047,120	14.98 8.77 23.66	13,496,980 2,210,040 6 317 220	
Slope protection		53,000	17.32	917,960	46.56	2,467,680	

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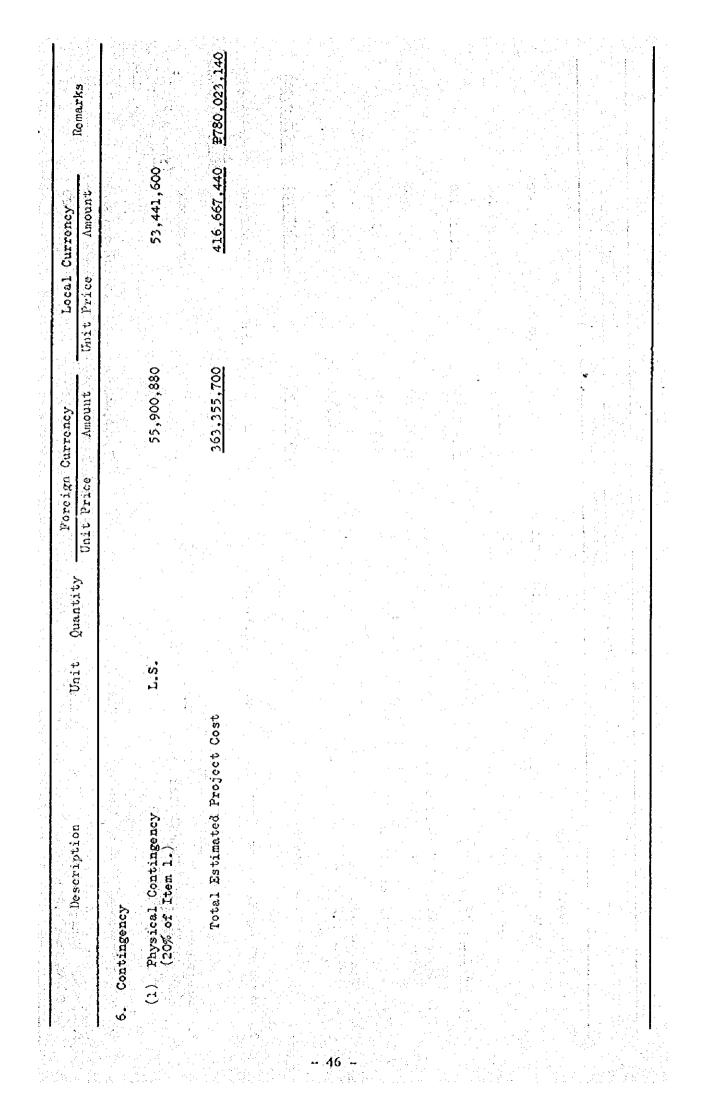
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Description	Unit Ç	Quantity	roreign currency Unit Price Amou	Amount	Unit Price Amoun	rrency Amount
Removal of Existing Head Works						
South-Quinali head works	m-no	260	61.34	15,950	94.93	24,680
San Agustin head works	m-no	230	61.34	14,110	94.93	21,830
Agus Sta. Cruz head works	ส- มว	200	61.34	12,270	94.93	18,990
		· · · · ·				
re ta ting o tructures						
Sluiceway	- sou	01	29,400	294,000	29,700	297,000
	•					
	•	· · ·				
(a) Quinali (A) River	• •					
Matacon Bridge	E	359	17,500	6,282,500	17,500	6,282,500
Quinali Bridge	Æ	318	17,500	5,565,000	17,500	5,565,000
Tagpo Bridge	£	196	17,500	3,430,000	17,500	3,430,000
Busac Bridge	E	270	17,500	4,725,000	17,500	4,725,000
Oas Bridge	£	270	17,500	4,725,000	17,500	4,725,000
(b) Nasisi River						
Binatagan Bridge	E	94	17,500	1,645,000	17,500	1,645,000
Gamot Bridge	E	94	17,500	1,645,000	17,500	1,645,000
(c) Talisay River	· .					
Bacolod Bridge	E	200	17,500	3,500,000	17,500	3,500,000
Bailey Bridge	E	200	17,500	3,500,000	17,500	3,500,000
	•	•••				
					- - - -	

			100	510	200	llo	760	980 <u>P546.712.360</u>	040 Irr.riceland: 2nd class (126-164cavans)	400 (Type A:F115,000) (Type B:F 29,000) (Type C:F 2,900)	800	620
Currenter	Amount	700,000	202,265,100	20,226,510	13,349,500	23,584,110	7,782,760	267,207,980	17,668,040	24,293,400	26,720,800	27,335,620
ruf Iandi		7,000						.	15,860			
Curronov	Amount	700,000	211,572,950	21,157,300	13,963,820	24,669,410	8,140,900	279,504,380	1 (1) (1) (1) (1) (1) (1) (1) (1) (1) (1		27,950,440	
Pore i m		7,000		•				 			· · · · · · · · · · · · · · · · · · ·	
	Quantity -	100		· ·	• • •			· · · · · ·	1,114.0			
	Unit	£							ъå Ц	י. ד	L.S.	т. С.
	Description	(d) National Railway Nasisi Bridge	Sub total (1)	(2) General (10% of (1))	<pre> .) Supervision and Miscellaneous (6% of (1) to (2)) </pre>	(4) Profit (10% of (1) to (3))	<pre>contractor's Tax (3% of (1) to (4))</pre>	Sub total (Contract Cost)	Right of Way/Site Acquisition	Resettlement (Type A: 113 nos., Type B: 322 nos., Type C: 676 nos.)	Engineering Cost (10% of Item 1.)	Project Management Cost (5% of Item 1.)
				Ci	(3)	4	(2)		ri.	'n	4	i.



(Unit: Pesos)	Romarkes																		
	urreney Amount				16,927,400	6,533,650	10,788,960	4,236,960		7,624,820	1,245,340	5,583,760	2,281,440		1,408,120	780,530	3,217,760	1,257,120	
OUTNALF (B)	Local Currency Unit Price Amoun				14.98	8.77	23.66	46.56		14.98	8.77	23.66	46.56		14.98	8.77	23.66	46.56	
VENENT WORKS,					33,527,100	11,964,700		1,576,120		15,102,030	2,280,520		848, 680		2,788,980	1,429,340		467,640	
RIVER IMPRC	Poreign Currency Unit Price Amou				29-62	16.06		17.32		29.67	16.06		17.32		29.67	16.06		17.32	
(FINANCIAL).	Quantity <mark>U</mark>				1,130,000	745,000	456,000	000'16		509,000	142,000	236,000	49,000		94,000	89,000	136,000	27,000	
ST ESTIMATE	Unit				cu.m	ш•n)	sq.m	sq.m		сц. по	u•n.o	sq.m	ຮູດ.ສ		u•nɔ	cu.m	នក្នុង	ଞ ଟ ୪	
TABLE-I.12 DETAILED COST ESTIMATE (FINANCIAL), RIVER IMPROVEMENT WORKS, OUTNALF (B) RIVER	Description	1. Contract Cost	(1) Direct Cost	Quinali (B) River	Excavation, in common	Embankment	Sod facing	Slope protection	San Francisco River	Excevation, in common	Embantment	Sod facing	Slope protection	San Vicente River	Excavation, in common	Embankment	Sod facing	Slope protection	

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Remarks		000	000	800	860	590		10	180	<u>950</u> <u>7201,399,640</u>	980 Irr.riceland 2nd class	
rrency Amount		4,725,000	3,850,000	1,715,000	72,175,860	7,217,590	4 763 610	8,415,710	2,777,180	95,349,950	3,604,980	877,600
Local Currency Unit Price Amou		17,500	17,500	17,500							15,860	
Foreign Currency & Price Amount		4,725,000	3,850,000	1,715,000	80,275,110	8,027,510	5.298.160	9,360,080	3,088,830	106,049,690	•	
Foreign Unit Price		17,500	17,500	17,500								
Quantity -		270	220	8 8							227.3	
Unit		E	E	на н				· ·			ha	г. З
Description	<u>Infrastructure</u> (a) Ouinali (B) River	Balza Bridge	Labnig Bridge	(b) San Francisco River Tuliw Birdge	Sub total (1)	(2) General (10% of (1))	<pre>(3) Supervision and Miscellaneous (6% of (1) to (2))</pre>	(4) Profit (10% of (1) to (3))	<pre>(5) Contractor's Tax (3% of (1) to (4))</pre>	Sub total (Contract Cost)	Right of Way/Site Acquisition	Resettlemont (Type A: 4 nos., Type B: 12 nos., Type C: 24 nos.)

10,604,970 - 10,069,980	21,209,940		<u>137,864,600</u> <u>2276;372,100</u>		
	21,209,940		137, 864, 600		
	אי בי	Н			
Engineering Cost (10% of Item 1.) Project Management Cost (5% of Item 1.)	Contingency () Physical Contingency (20% of Item 1.)	2) Price Escalation (F/C: 7%, L/C: 13%)	Total Estimated Project Cost		
	 Froject Management Cost (5% of Item 1.) 			Price Price	Project Project Prove Pr

cu.m 317,000 16.06 5,091,020 8.77 2,780,090 sq.m 217,000 16.06 5,091,020 8.77 2,780,090 sq.m 217,000 16.06 5,091,020 8.77 2,780,090 sq.m 217,000 16.06 5,091,020 8.77 2,780,090 sq.m 43,000 17.32 744,760 46.56 2,002,080 and m 196 17,500 3,430,000 17,500 3,430,000 al (1) 955,780 17,500 1,346,590 1,346,590 and Miscellameous m 196 17,500 3,430,000 1,556,190 of (1) 0 925,780 1,346,590 1,346,590 1,354,640 and Miscellameous 611,540 880,560 0 1,356,590 1,356,590 of (1) 10 030,390 1,080,390 1,556,530 1,556,540 0 of (1) 0 1,080,390 1,080,390 1,556,550 1,556,540 0 of (4) . . 1,080,390 1,080,390 <	ction 317,000 16.06 5,091,020 8.77 stim 217,000 15.06 5,091,020 8.77 stim 217,000 17.32 744,760 46.56 ction stim 43,000 17,500 3,430,000 17,500 al (1) 9,265,780 9,265,780 and Miscellaneous and (1) to (3)) al (contract CostO al (contract CostO	and the second se	0n 1 t	Quantity -	Poreign Carceney Unit Price Amou	nerency Mioutt	Uni t. Pri.co	Local Currency Price Amount	Romarks
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	cu.m 317,000 16.06 5,091,020 8.77 2,780,090 st.m 217,000 16.06 5,091,020 8.77 2,780,090 st.m 217,000 17.32 744,760 45.56 2,002,080 st.m 43,000 17.32 744,760 46.56 2,002,080 al. n 196 17,500 3,430,000 3,430,000 al. n 196 17,500 3,430,000 17,500 3,430,000 al. n 196 17,500 3,430,000 17,500 3,430,000 al. (1) 9,265,730 17,500 13,346,390 13,346,390 al. (1) 9,265,730 17,500 13,346,390 13,346,390 and Miscellameous n 196 17,500 3,565,730 1,334,640 co (1) 10 (3)) 1,080,390 1,556,190 1,556,190 co (2)) 1,010 1,080,390 1,556,510 1,556,190 1,556,190 al. (Contract CostO (1) 1,080,390 1,600,390 </th <th>Contract Cost</th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th>	Contract Cost							
Xave Brive Xave Brive Street 2.7760.000 5.091,020 5.77 2.780.000 5.114.220 5.114.200 5.115.200 5.1	Tars Rive: Tars Rive: Cu.m 317,000 16.06 5,091,020 8.17 2,780,090 Babandment sq.m 217,000 16.06 5,091,020 8.17 2,780,090 Sod facing sq.m 217,000 17.32 744,760 4.56 5,002,080 Slope protection sq.m 196 17.32 744,760 4.56 2,002,080 Entrace m 196 17,500 3,430,000 17,500 3,430,000 Sub total 10 9,265,780 17,500 3,430,000 13,346,390 General (10) 0.1 9,265,780 1,394,640 80,860 1,334,640 Supervision and Macellaneous m 196 17,500 3,430,000 1,346,390 General (10) of (1) 0.01 9,265,780 1,334,640 80,860 Supervision and Macellaneous 611,540 800,390 1,556,190 66,650 1,556,190 Contract (10) for (3)) total (0ontract 0ost0 1,080,390 1,566,590 1,556,190	(1) Direct Cost							
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	cu.m 317,000 16.06 5,091,020 8.77 2,780,090 sq.m 217,000 23.66 5,134,220 sq.m 217,000 17.32 744,760 46.56 5,134,220 sq.m 196 17,500 3,430,000 17,500 3,430,000 17,500 3,430,000 m 196 17,500 3,430,000 17,500 3,430,000 17,500 3,430,000 m 196 17,500 3,430,000 17,500 3,430,000 17,500 3,430,000 m 196 17,500 3,430,000 17,500 3,430,000 17,500 3,450,000 outs 611,540 9,265,780 1,334,640 880,860 1,334,640 outs 611,540 9,080,390 1,080,390 1,556,190 3,556,530 5,135,540 std 1,080,390 1,080,390 1,080,390 1,556,190 5,135,540 std 2,13,540 3,56,530 1,566,190 5,135,540 5,135,540 std 2,265,530 2,265,530 1,566,190 1,565,160 5,135,540	Tawa River							
sq.m 217,000 23.66 5,114,220 sq.m 43,000 17.32 744,760 46.56 2,002,080 m 196 17,500 3,430,000 17,500 3,430,000 9,265,780 13,346,990 926,580 1,334,640 1,334,640 926,580 1,334,640 1,534,640 1,556,190 1,556,190 1,556,190 1,556,190 1,556,190	sq.m 217,000 23.66 5,134,220 sq.m 43,000 17.32 744,760 46.56 2,002,080 m 196 17,500 3,430,000 17,500 3,430,000 m 196 17,500 3,430,000 17,500 3,450,000 outs 611,540 880,860 1,3346,390 880,860 outs 611,540 81,640 880,860 outs 1,080,390 1,556,190 stdo 1,080,390 1,556,540 stdo 1,256,530 1,556,540 stdo 1,256,530 1,561,6520	Enbankment	a. no	317,000	16.06	5,091,020	8.77	2,780,090	
sq.m 43,000 I7.32 744,760 46.56 2,002,080 m 196 17,500 3,430,000 17,500 3,430,000 9,265,780 11,5346,390 926,580 1,334,640 611,540 880,860 1,080,390 1,556,190 356,530 513,540 356,530 17,500 1,556,190	sq.m 43,000 17.32 744,760 46.56 2,002,080 m 196 17,500 3,430,000 17,500 3,430,000 9,265,780 17,500 1,3246,390 9,265,780 1,3246,390 1,324,640 830,860 1,080,390 1,556,190 356,530 1,556,190 1,	Sod facing	ឌ. ភ្ល	217,000			23.66	5,134,220	
m 196 17,500 3,430,000 17,500 3,430,000 0,3,45,390 0,265,780 1,2346,390 1,234,640 9,265,780 1,234,640 1,534,640 1,556,190 1,550	m 196 17,500 3,430,000 17,500 3,430,000 13,346,390 9,265,780 1,3346,390 9,265,550 1,394,640 830,850 1,546 13,540 1,556,130 1,556,130 1,556,130 513,540 513,540 513,540 513,540 513,540 513,540 513,540 1,556,130 513,540 514 514 514 514 514 514 514 514 514 514	Slope protection	ឌ. ខ្មុ	43,000	17.32	744,760	46.56	2,002,080	
Sub total (1) 9,265,780 13,346,390 General (10% of (1)) 926,580 1,334,640 Supervision and Miscellaneous 611,540 880,860 Supervision and Miscellaneous 611,540 880,860 Frofit (10% of (1) to (2)) 1,080,390 1,556,190 Contractor's fax 356,530 1,556,190 Sub total (Contract Cost0 12,240,820 17,631,620	Sub total (1) 9,265,780 13,346,390 General (10% of (1)) 926,580 1,334,640 Supervision and Miscellaneous 611,540 880,860 (6% of (1) to (2)) 1,080,390 1,556,190 Profit (10% of (1) to (3)) 1,080,390 1,556,190 Sub total (10% of (1) to (3)) 1,080,390 1,556,190 Sub total (Contractor's Tax 356,530 13,540 Sub total (Contract Cost0 12.240,820 17,631,620	<u>Infrastructure</u> Yawa Bridge		196	17,500	3,430,000	17,500	3,430,000	
General (10% of (1)) 926,580 1,334,640 Supervision and Miscellaneous 611,540 830,860 6% of (1) to (2)) 1,080,390 1,556,190 Profit (10% of (1) to (3)) 1,080,390 1,556,190 Profit (10% of (1) to (3)) 356,530 513,540 Sub total (Contract Cost0 12,240,820 17,631,620	General (10% of (1)) 926,580 1,334,640 Supervision and Miscellaneous 611,540 880,860 Gen (1) to (2)) 611,540 880,860 Profit (10% of (1) to (3)) 1,080,390 1,556,190 Profit (10% of (1) to (4)) 556,530 1,556,190 Sub total (Contract CostD 12.240,820 17,631,620	Sub total (1)				9,265,780		13,346,390	
Supervision and Miscellaneous 611,540 830,860 (6% of (1) to (2)) 1,080,390 1,556,190 Profit (10% of (1) to (3)) 1,080,390 1,556,190 Contractor's Tax 356,530 513,540 Sub total (Contract Cost0 12.240,820 17,631,620	Supervision and Miscellaneous 611,540 830,860 (6% of (1) to (2)) 1,080,390 1,556,190 Profit (10% of (1) to (3)) 1,080,390 1,556,190 Contractor's Tax 356,530 513,540 (3% of (1) to (4)) 356,530 17,631,620 Sub total (Contract Cost0 12.240,820 17,631,620	General (10% of (1))			· '.	926, 580		1,334,640	
Profit (10% of (1) to (3)) 1,080,390 1,556,190 Contractor's Tax 356,530 513,540 (3% of (1) to (4)) 356,530 513,540 Sub total (Contract Cost0 12,240,820 17,631,620	to (3)) 1,080,390 356,530 513,540 17,631,620 17,631,620 17,631,620	Supervision and Miscellaneous (6% of (1) to (2))				611,540		830, 860	
Contractor's Tax (3% of (1) to (4)) Sub total (Contract CostO Sub total (Contract CostO	Contractor's Tax (3% of (1) to (4)) Sub total (Contract OostO Sub total (Contract OostO	Profit (10% of (1) to (3))				1,080,390		1,556,190	
17,631,620						356,530		513,540	
		Sub total (Contract CostO		•		12,240,820		17,631,620	P29,872,490

Currency Local Currency Remarks Amount Unit Price Amount		L (Type A: F115,000) (Type B: F 29,000) (Type C: F 2,900)	1,224,080 1,763,160	- 1,493,620		2,448,160 3,526,320		15,913,060 25,938,580 241,851,640	
Unit Quantity Price Curr	ha. 24.6	S	L. S.			LS			
Description	2. Right of Way/Site Acquisition	3. Resettlement (Type A: 6 nos., Type B: 14 nos., Type C: 13 nos.)	4. Engineering Cost (10% of Item 1.)	5. Project Management Cost (5% of Item 1.)	6. Contingency	(1) Physical Contingency(20% of Item 1.)	(2) Price Escalation (F/C: 7%, L/C: 13%)	Total Estimated Project Cost	

Description Description	Una t	Ouantity	Rorolky Currency	hrrency	Local Currency	Irroncy	้ใก้คณษาเรร
		2,51	Unit Price	ႏွင့္လွန္ကာစံၾကိဳင္လုိင္ပါ	Unit Price	Amount	
1 Contract Cost							(Unit: Pesos)
(1) Direct Cost							
Quinali (A) River							
Excevation, in common	cu.m	211,000	31.64	6,676,040	15.48	3,266,280	
Embankment	cu.m	2,006,000	16.06	32,216,360	8.77	17,592,620	
Sod facing	sq.m	833,000			23.66	19,708,780	
Slope protection	m•ps	167,000	17.32	2,892,440	46.56	7,775,520	
Concrete weir, type B concrete	cu.m	12,000	113.00	1,356,000	203.54	2,442,480	
Sheet pile	E	2,750	160.64	441,760	106.51	292,900	
			•				
Lalisay Kiver							
Excavation, in common	cu.m	9,524,000	19.53	186,003,720	9.73	92,668,520	
Embankment	cu.m	834,000	16.06	13,394,040	8.77	7,314,180	
Sod facing	m-ps	768,000	· · · · · · · · · · · · · · · · · · ·		23.66	18,170,880	
Slope protection	e os	154,000	17.32	2,667,280	46.56	7,170,240	
Nove States and States				•			
Excavation, in common	cu.m	000,100	29.67	26,732,670	14.98	13,496,980	
Embentment	cu.m	252,000	16.06	4,047,120	8.77	2,210,040	
Sodifacing	ш- рх	267,000			23.66	6,317,220	
Slope protection	sq.m	53,000	17.32	096,719	46.56	2,467,680	
				a particular and a second s			

21,830 18,990 3,216,000 3,482,500 1,890,000 1,890,000 1,645,000 1,645,000 1,645,000	94.93 94.93 94.93 17,500 17,500 17,500 17,500 17,500 17,500 17,500	14,110 14,110 12,270 4,824,000 3,482,500 1,890,000 3,430,000 3,430,000 1,645,000 1,645,000 1,645,000	61.34 61.34 61.34 61.34 61.34 17,500 17,500 17,500 17,500 17,500	200 200 200 200 200 200 200 200 200 200	
7,350,000	17,500	7,350,000	17,500	420	£
7,350,000	17,500	000,066,1	00C *7 T) 1	
7,350,000	17,500	7,350,000	L(,, 2UU	4 S	H
7.050	17 500	7 350 000	17.500	420	E
1,645,00	17,500	1,645,000	17,500	46	£
1,645,00	17,500	1,645,000	17,500	94	E
					· · · · · · · · · · · · · · · · · · ·
4,725,00	17,500	4,725,000	17,500	270	E
3,430,00	17,500	3,430,000	17,500	196	E
1,890,00	17,500	1,890,000	17,500	108	E
3,482,50	17,500	3,482,500	17,500	199	E
				• •	
			· · · · · · · · · · · · · · · · · · ·		
3,216,00		4,824,000			L.S.
18,99	94.93	12,270	61.34	200	cu.m
21,83	94.93	14,110	61.34	230	8- no
	VULL ISTOF				
	21,836 21,836 3,216,000 3,482,500 1,890,000 1,645,000 1,645,000 1,645,000 7,350,000	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	Junta Lance Junc 94.93 94.93 94.93 94.93 94.93 94.93 17,500 1,8 17,500 1,6 17,500 1,6 17,500 1,6 17,500 1,6 17,500 1,6 17,500 1,6 17,500 1,6 17,500 1,6 17,500 1,6 17,500 1,6 17,500 1,6 17,500 1,6	.34 14,110 94.93 .34 12,270 94.93 .34 12,270 94.93 .34 12,500 17,500 3,4 .4,824,000 17,500 1,8 .4,824,000 17,500 1,6 .4,725,000 17,500 1,6 1,645,000 17,500 1,6 1,645,000 17,500 1,6 1,645,000 17,500 1,6 1,645,000 17,500 1,6 1,645,000 17,500 1,6 1,645,000 17,500 1,6 1,645,000 17,500 1,6 1,645,000 17,500 1,6 1,645,000 17,500 1,6 1,645,000 17,500 1,6 7,555,000 17,500 1,6	61.34 14,110 94.93 61.34 12,270 94.93 61.34 12,270 94.93 12,270 94.93 3,4 17,500 3,482,500 17,500 3,4 17,500 1,890,000 17,500 1,8 17,500 1,645,000 17,500 1,6 17,500 1,645,000 1,7 17,500 1,7 17,500 1,7 17,500 1,645,000 1,7 17,500 1,7 1

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Local Currency [Prmarks	rice	00,000	236, 543, 640	23,654,360	15,611,880	27,580,990	9,101,730	<u>312,492,600</u> F728,088,250) 16,481,710 Irr.riceland 2nd class	13,603,700 (Type A: (Type B:	31,249,260	36,404,410
	Amonate Construction Prince	700,000 7,000	314,588,270	31,458,830	20,762,830	36,680,990	12,104,730	415,595,650	- 15,860		41,559,570	
	Una Grance	100							L, 039. 2			
Unit Qu									e t t	÷.		
Description		(d) National Railway Nasisi Bridge	Sub total (1)	(2) General (10% of (1))	(3) Supervision and Miscellaneous (6% of (1) to (2))	(4) Profit (10% of (1) to (3))	<pre>(5) Contractor's Tax (3% of (1) to (4))</pre>	Sub total (Contract Cost)	Right of Way/Site Acquisition	Resettlement (Type A: 64 nos., Type B: 177 nos. Type C: 383 nos.)	Engineering Cost (10% of Item 1.)	Project Management Cost (5% of Item 1.)

Romarics.		₽1,013,004,420			
Local Currency Unit Price Anount	62,498,520	- 472,730,200			
	83,119,000	540.274,220			
Foreign Currency Unit Price Amoun					
t Quantity					
Description	 6. Contingency (1) Physical Contingency (20% of Item 1.) (2) Price Escalation (2) (P/C. 75 (7/C. 354) 	Total Estimatica Project Cost	55		

Description	Unit	Quantity -	Foreign Currency	urrency	Local (Local Currency	Remarks
			ONT & LTTCC	D'U D'OIBV	00 TTT 1. TUO	Anount Contraction	
	-						
(1) Direct Cost		•	•				
Irrigetion Canal and Farm Road	•						
(a) Main Canal							
Stripping	ะ รุ	420,000	3.94	1,654,800	2.01	844.200	
Excavation, in common	m.us	120,000	10.33	1,239,600	5,53	663.600	
Embankment	cu.m	233,000	5.84	1,360,720	33.22	7,740,000	
(b) Lateral Canal	· · ·						
Stripping	sq.m	610,000	3.94	2,403,400	2.01	1.226.100	
Excavation, in common	cu.m	96,000	10.33	991,680	5-53	530.880	
Embankment	cu.m	165,000	5.84	963,600	33.22	5,481,300	
							and the second se
<u>Kelated Structure for Main Canal</u> & Lateral Canal							
Concrete, type A	cu.m	7,070	126.88	897,040	216.37	1,529,740	
Concrete, type B	cu.m	3,880	113.00	438,440	203.54	789,740.	
Metal	ton	220	12,000.00	2,640,000	8,000.00	1,760,000	
Reinforcing bar	ton	512	2.509.08	1.284.650	2.190.80	1.121 690	
R.C. Pipe, 1350mm dia.	£	350	6.48	2,270	809.44	283.300	

Currency	Διμομη		1,714,300	455,590		432,740	162,830	320,000	208,130	46,770		290,040	412,170	643,200			568,750	893,750	
Local Ct	Unit Price		5.53	15.71		216.37	203 . 54	8,000.00	2,190.80	935.40		203 . 54	203.54						
Currency	n nomV.		3,202,300	1		253,760	90,400	480,000	238,360	83,790	 	161,030	228,830	557,300			2,275,000	3,575,000	
Poreign Cu	Unit Prico		10.33		· · · ·	126.88	113.00	12,000.00	2,509.08	1,765.80		113.00	113.00	· ·		· · · · ·	•		
Omntitv -			310,000	29,000		2,000	800	40	56	20		1,425	2,025						
Unit.			cu.m	m.us		u-10	cu.n	ton	ton	ha		cu.m	m.uo	L.S.		:	L.S.	N L L	
Deserintion		Drainage Canal	Excavation, in common	Field drain	Related Structures for Drainage Canal	Concrete, type A	Concrete, type B	Metal	Reinforcing bar	Land Clearing and Grading	nead works	Cabilogan head works	South Quinali head works	Relating structures	(16 nos. sluiceway, 8 nos. irrigation intake)	<u>Gate Work</u>	Cabilogan head works (35mx2.5m)	South Quinall head works (55mx2.5m)	

Description	Unit Quantity	Poreign Currency Unit Price Anou	n't Una t	Currency Amount	Remarks
(2) Coneral (10% of (1))			l 8		
(3) Supervision and Miscellaneous(6% of (1) to (2))			1,651,450	1.855.840	
(4) Profit (10% of (1) to (3))			2,917,560	3.278.650	
(5) Contractor's Tax (3% of (1) +0 (4))		• • •			
			962,800	1,081,960	
<pre>// contract Cost)</pre>		• • •	33,055,980	<u>37.147.150</u>	P 70,203,13
. Engineering Cost (10% of Item 1.)				7,020,310	
. Project Management Cost (5% of Item 1.)					
				3,7210,160	
Contingency					
(i) Physical Contingency(20% of Item 1.)			6,611,200	7 - 420	
<pre>(2) Price Escalation (F/C: 7%, L/C: 13%)</pre>					
Total Estimated Project Cost		· · ·	39,667,180	55.107.050 P 04	P04 774 230
		· .			

IRRIGATION WORKS, QUINALI (B) RIVER BASIN AREA (Unit: Pesos)	Poreign Currency Local Currency Remarks t Price Amount Unit Price Amount			705,260 2.01 359,790	681,780 5.53	455,520 33.22 2,591,160		1,075,620 2.01 548,730	557,820	630,720 33.22 3,587,760		304 510 316 27 510 200	169,500 203.54	8,000.00	526,910 2,190-80	1,170 809.44 145,700		
	Quantity Poreign Unit Price			179,000 3.94	66,000 10.33	78,000 5.84		273,000 3.94	54,000 10.33	108,000 5.84		2 400 126 88		90 12,000.00	210 2,509.08	180 6.48		
TABLE-I.16 DETAILED COST ESTIMATE (FINANCIAL),	Unit Q		arm Road	ដា ខ្លួន	mon cu.m	ม มากว	· · · · · · · · · · · · · · · · · · ·	m•₽s	mon cu.m	ca.m	Main Cenal		cu+n	ton	ton	1		
TABLE-I.16	Doscription	 Contract Cost Direct Cost 	Irrigation Canal and Farm Road (a) Main Canal	Stripping	Excavation, in common	Emberntment	(b) Lateral Canal	Stripping	Excavation, in common	Embankment	Related Structures for Main Canal	& Lateral Canal Concrete, type A	Concrete, type B		Reinforcing bar	R.C. pipe, 1350mm dia.		

Unit Frice Amount Unit Frice Amount cu.m 60,500 10.33 624,970 5.53 334,570 cu.m 9,600 10.33 624,970 5.53 334,570 cu.m 9,600 126.58 36,800 216.37 62,750 cu.m 290 126.58 36,800 216.37 62,750 cu.m 290 126.58 35,190 24,420 cu.m 120 113.00 72,000 35,450 cu.m 14 2,509.08 35,190.20 355,450 cu.m 14 2,509.08 35,190.20 355,450 modiling ha 380 1,765.80 671,000 935.40 355,450 modiling ha 380 1,765.80 671,000 935.450 637,000 m 19 304.00 2,548,000 203.54 167,920 m 19 204.00 5,750 203.54 167,920 m 19	Jeseritta a	Unit	Ouantitv -		Currency	Local Co	Local Currency	
$\frac{\text{mal}}{\text{curme for}} = \frac{\text{curm}}{9,600} = \frac{10.33}{10.33} = \frac{624,970}{5.53} = \frac{5.53}{5.571} = \frac{115.71}{11} = 115.71$		- F		Unit Price	Amount	Unit Price	Amount	Lomar KS
cu.m. $60,500$ 10.33 $624,970$ $5,53$ 2 cu.m. $9,600$ $$ 15.71 1 cuttures for $9,600$ 126.38 $36,800$ 216.37 15.71 1 $\frac{mL}{mL}$ cu.m. 290 126.48 $36,800$ 216.37 2 $\frac{mL}{m}$ cu.m. 290 126.58 $35,800$ 216.37 3 $\frac{mL}{m}$ cu.m. 290 126.88 $36,800$ 216.37 3 $\frac{mL}{m}$ cu.m. 120 113.00 $13,560$ 203.54 3 $\frac{mL}{m}$ 14 $2,509.08$ $35,130$ $2,190.80$ 3 3 $\frac{m}{m}$ 14 $2,509.08$ $35,130$ 203.40 3 3 $\frac{m}{m}$ 14 $2,509.08$ $35,130$ 203.54 1 $\frac{m}{m}$ $11,765.80$ $671,000$ 935.40 3 $\frac{m}{m}$ $1.1,65.80$ $374,00$ 303.54 1 $\frac{m}{m}$ $10,289,280$ <	Drainage Canal	•						
cu.m 9,600 15.71 1 uctures for cu.m 290 126.58 36,800 216.37 YPe B cu.m 290 126.48 36,800 216.37 YPe B cu.m 120 113.00 13,560 203.54 YPe B cu.m 120 113.00 13,560 203.54 1 Mar ton 14 2,509.08 35,130 2,190.80 3 Mar ton 14 2,509.08 35,130 2,190.80 3 3 1 Mar ton 14 2,509.08 1,765.80 671,000 93.54 1 Md Works cu.m 282 113.00 93.230 203.54 1 Md <works< th=""> cu.m 19 304.00 5,780 <</works<>	Excavation	m.u.	60,500	10.33	624,970	5.53	334,570	
$\frac{ucturres for}{mbl} \frac{1}{mbl} \frac{1}{100} 1$	Field drain	cu.m	9,600			15.71	150,820	
$\text{multures for the four the four the four the four the formula for the formula formula for the formula for$			ar e					
Type A cu.m 290 126.38 36,800 216.37 Type B cu.m 120 113.00 13,560 203.54 Dar ton 6 12,000.00 72,000 8,000.00 3 Dar ton 14 2,509.08 35,130 2,190.80 3 Dar and Grading ha 380 1,765.80 671,000 935.40 3 Rad works cu.m 380 1,765.80 671,000 935.40 3 Rd works cu.m 380 1,765.80 671,000 935.40 3 Rd works cu.m 325 113.00 93,230 203.54 1 M L.S. 2.548,000 93,230 203.54 1 1 M L.S. 130.400 93,230 203.54 1 to L.S. 130.400 93,230 203.54 1 to 10,289,280 1,1100 93,230 203.54 1 to 10,299,280 1,1100 93,230	artes							· ·
ype B cu.m 120 113.00 13,560 203.54 bar ton 6 12,000.00 72,000 8,000.00 bar ton 14 2,509.08 35,130 2,190.180 ng and Grading ha 380 1,765.80 671,000 935.40 3 nd works cu.m 380 1,765.80 671,000 935.40 3 td m 390 1,765.80 671,000 93.230 203.54 1 td t.s. 19 304.00 5,748,000 6 1 tol 10,289,280 1,181.00 11,7	Concrete, type A	cu.m	290	126.38	36,800	216.37	62,750	· · · · · · · · · · · · · · · · · · ·
bar ton 6 12,000.00 72,000 8,000.00 bar ton 14 2,509.08 35,130 2,190.80 ng and Grading ha 380 1,765.80 671,000 935.40 3 nd works cu.m 825 113.00 93,220 203.54 1 nd works cu.m 825 113.00 93,230 203.54 1 t m 19 304.00 5,780 1,181.00 tol. m 19 304.00 5,780 1,181.00	Concrete, type B	cum	120	113.00	13,560	203.54	24,420	
bar ton 14 2,509.08 35,130 2,190.80 ng and Grading ha 380 1,765.80 671,000 9355.40 3 ad works cu.m 825 113.00 93,230 203.54 1 kim $L.S.$ $2,548,000$ $5,780$ 1,181.00 t m 19 304.00 5,780 1,181.00 t $\frac{1}{1,1,1}$	Motol Transferred Strength	ton	ý.	12,000.00	72,000	8,000.00	48,000	
$\frac{ng \text{ and } Grading}{kim}$ ha 380 1,765.80 671,000 935.40 335.40 3 ad works cum 25 113.00 93,230 203.54 1 kim 1.5. 2,548,000 5,780 1,181.00 t 1.1,7 t 10,289,280 1,181.00 11,7 t 10,289,280 1,108 1,10	Reinforcing bar	ton	14	2,509.08	35,130	2,190.80	30,670	
ng and Grading ha 380 1,765.80 671,000 935.40 ad works xim) L.S. 825 113.00 93,230 203.54 xim) m 19 304.00 5,780 1,181.00 t 11, 10,289,280 11,								
ad works curm 825 113.00 93,230 203.54 kim) $\operatorname{L.S.}$ 19 304.00 5,780 1,181.00 tol (1) tol (1)	Land Clearing and Grading	ha	380	1,765.80	671,000	935-40	355,450	
ad works cu.m. 825 113.00 93,230 203.54 klm) L.S. 19 304.00 5,780 1,181.00 t 10,289,280 1,181.00 11,			. -				· · · · · · · · · · · · · · · · · · ·	· · · ·
cu.m 825 113.00 93,230 203.54 L.S. 13.00 2,548,000 5,780 1,181.00 10,289,280 1,181.00	Head Works			• • •				
$Im) \qquad \qquad$	Bantayan head works			-	- : . :			•
Lm) 2,548,000 5,780 1,181.00 5,780 1,181.00 10,289,280 1,181.00 11,	Concrete	u-no	825	113.00	93,230	203.54	167,920	· · · · · · · · · · · · · · · · · · ·
m 19 304.00 5,780 1,181.00 11,7	Gate (98mx1m)	Ľ.S.			2,548,000		637,000	
m 19 304.00 5,780 1,181.00 11,7			-	· · · · · · · · · · · · · · · · · · ·	•	. · · · · · · · · · · · · · · · · · · ·		•
	L'He curvert	e	61	304.00	5,780	1,181.00	22,440	
	Sub total (1)	. *1.			10 289 280		11 725 150	
					· · · · · · · · · · · · · · · · · · ·		0046001674	
					•			

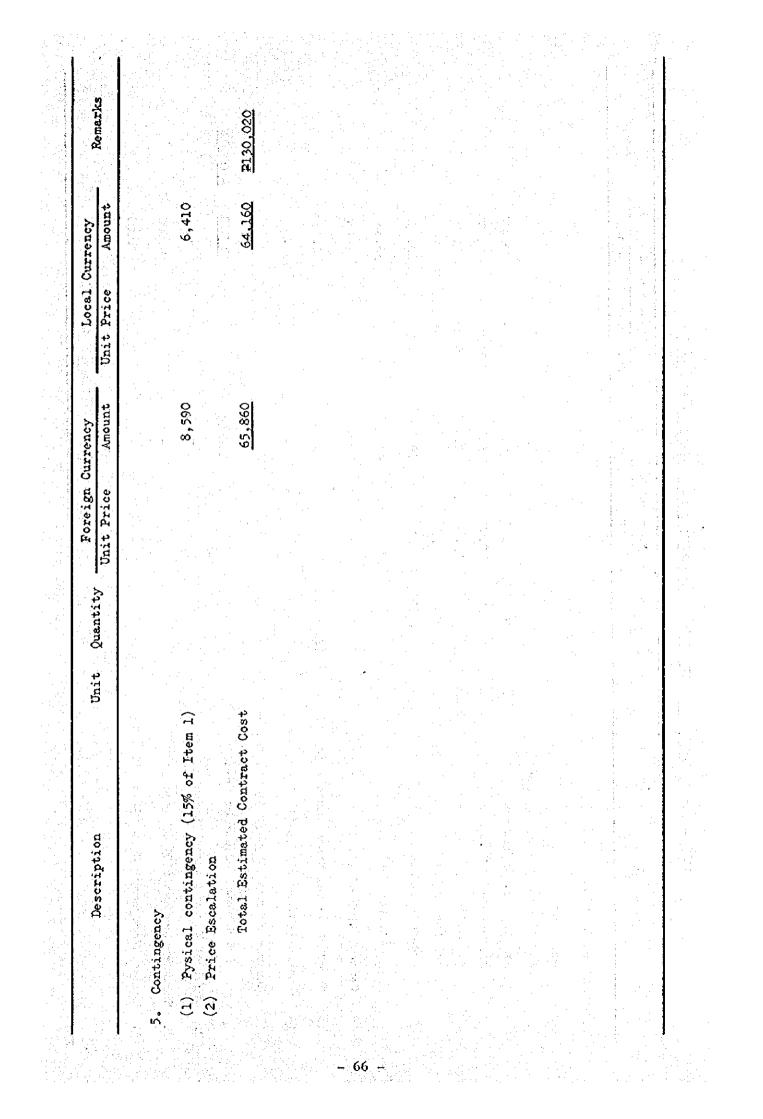
Remarks.		0	6		006.390	0					22,968,600 ¥39,280,130	
Local Currency Unit Prico Amount	1,173,550	774,540	1,368,350	451,550	15.503.450	2,909,640	1,454,820		3,100,690		22,968,60	
Currency	1,028,930	060,090	1,199,730	395,910	<u>13,592,940</u>	1,359,290			2,718,590	•	<u>16,311,530</u>	
t Quantity Unit Price												
Description	General (10% of (1))	Supervision and Miscellaneous (6% of (1) to (2))	Profit (10% of (1) to (3))	Contractor's Tax (3% of (1) to (4))	Sub total (Contract Cost)	Engineering Cost (10% of Item 1.)	Project Management Cost (5% of Item 1.)	Contingency	Physical Contingency (20% of Item 1.)	Price Escalation (F/C: 7%, L/C: 13%)	Total Estimated Project Cost	

								Unit: Fesos)
	Description	Unit	Quantity	Foreign Currency Unit Price Amoun	Currency Amount	Local Unit Price	Local Currency Price Amount	Remarks
1. Cont	Contract Cost							
ሻ (T)	(1) Direct Cost		•					
(२)	No. 1 Sabo Dam (0=30m)	· · ·						r/c: 190,390 L/C: 968,680
	Excavation, in common	cu.m	6,080	14.60	88,770	4.62	28,090	
	Backfill	cu.m	270	13.88	3,750	9.20	2,480	
	Concrete, type A	cu.m	600	172.38	103,430	186.31	111,790	
	Rubble concrete	cu.m.	3,830	138.69	531,180	149.35	572,010	
	Backfill cocrete, type B	cu m	390	144,00	56,160	175.55	68,460	
	Formwork	ะ จะ	2,150		•	86.22	185,370	
	Joint filler	н рх	130	54.60	7,100	3.70	480	
(F)	No. 1 Training Levee ((=310m)			· .				F/C: 552,620 L/C: 975,620
(a)	Levee (<i>f</i> =310m)				· · ·			
·····	Excavation, in common	u.n	5,560	14.60	81,180	4.62	25,690	
	Embendement	cu.m.	4,770	16.01	76,370	6.08	29,000	
	Riprap bedding	cu m	360	17.07	6,150	24.90	8,960	
	Backfill	cu.m	1,320	13,88	18,320	9.20	12,140	
1	Concrete, type B	cu.m	840	113.00	94,920	171.35	143,930	
	Formwork	ຮູ້ພ	3,320			40.42	134,190	
	Joint filler	sq.m	110	54.60	6,010	3.70	410	
(p)	Wet masonry (2,490m ²)							
	Backfill concrete, type B	cu.m	200	144.00	72,000	175.55	87,780	
•••		•			•	·		

				Foreign	Currency	Local	Local Currency	¢
	Description	5 tun	Quantity	Unit Price	Amount	Unit Price	Amount	
				с. А.				
	Rubble stone masonry	ы. Sq. н	2,490	19.88	49,500	48.75	121,390	
	Cobble stone	cu.m	1,400	0.77	1,080	61.61	86,250	
	Inter locking mortar	cu.m	120	245.13	29,420	255.45	30,650	
ં	Concrete Block (174 nos.)	. * . * •				· . ·		
•	Concrete, type B	сч . в	066	113.00	111,870	171.35	169,640	
	Formvork	sq.•m	3,030	· · ·		40.42	122,470	
2	Reinforcing bar, øl6mm	ЪŚ	2,310	2.51	5,800	1 . 35	3,120	
(iii)	<u>No. 1 - No. 4 Spur Dike (1,320m)</u>	(<u></u>						F/C=2,710,740 L/C=5,164,480
(a)	Spur Dike (1,320m)		. · · ·					
	Excavation, in common	cu.m	23,680	14.60	345,730	4.62	109,400	
	Embankment	cu.m	11,360	16.01	181,870	6.08	69,070	
	Riprap bedding	ш-no	3,120	17.07	53,260	24,90	77,690	
	Backfill	u.no	11,200	13.88	155,460	9.20	103,040	
- -	Concrete, type B	cu.m	3,560	113.00	402,280	171.35	610,010	
	Formvork	sq.m	20,130			40.42	813,650	
	Joint filler	н•Ъs	029	54.60	36,580	3.70	2,480	
(q)	Wet masoury (20,160m ²)				2 			
· · ·	Backfill concrete, type B	cu.m	4,030	144.00	580,320	175.55	707,470	
	Rubble stone masonry	sq.m	20,160	19.88	400,780	48.75	982,800	
	Cobble stone	cu.m.	11,090	0.77	8,540	61.01	683,250	the second respective of the second respective
	Inter locking mortar	m. tro	1,010	245 13	747 580	266 AS	258 AM	

	E E Š			I'mi + Dui ad	Dusiae Amonat	Remarks
$ \begin{array}{ccccc} \text{cum} & 2,510 & 113.00 & 283,630 & 171.35 \\ \text{sq.m} & 7,660 & 2.51 & 14,710 & 1.35 \\ \text{kg} & 5,860 & 2.51 & 14,710 & 1.35 \\ & 405,380 & 405,380 & 1.35 \\ & & 405,380 & 267,550 & 7, \\ & & & & & & & \\ & & & & & & & & \\ & & & & & & & & \\ & & & & & & & & \\ & & & & & & & & \\ & & & & & & & & \\ & & & & & & & & \\ & & & & & & & & \\ & & & & & & & & \\ & & & & & & & & \\ & & & & & & & & \\ & & & & & & & & \\ & & & & & & & & \\ & & & & & & & & \\ & & & & & & & & \\ & & & & & & & & \\ & & & & & & & & \\ & & & & & & & & \\ & & & & & & & & \\ & & & & & & & & \\ & & & & & & & & \\ & & & & & & & & \\ & & & & & & & & \\ & & & & & & & \\ & & & & & & & & \\ & & & & & & & & \\ & & & & & & & \\ & & & & & & & \\ & & & & & & & & \\ & & & & & & & \\ & & & & & & & \\ & & & & & & & \\ & & & & & & & & \\ & & & & & & & & \\ & & & & & & & & \\ & & & & & & & & \\ & & & & & & & & \\ & & & & & & & & \\ & & & & & & & & \\ & & & & & & & & & \\ & & & & & & & & & \\ & & & & & & & & & \\ & & & & & & & & & \\ & & & & & & & & & \\ & & & & & & & & & \\ & & & & & & & & \\ & & & & & & & & & \\ & & & & & & & & \\ & & & & & & & & \\ & & & & & & & & \\ & & & & & & & & \\ & & & & & & & & \\ & & & & & & & & \\ & & & & & & & & \\ & & & & & & & & \\ & & & & & & & & \\ & & & & & & & & \\ & & & & & & & & \\ & & & & & & & & & \\ & & & & & & & & & \\ & & & & & & & & \\ & & & & & & & & & \\ & & & & & & & & & \\ & & & & & & & & & \\ & & & & & & & & & \\ & & & & & & & & & \\ & & & & & & & & & \\ & & & & & & & & & \\ & & & & & & & & & \\ & & & & & & & & & \\ & & & & &$	n sq.∎ kg				Amount	
cum 2,510 113.00 283,630 171.35 sq.m 7,660 2.51 14,710 1.35 kg 5,860 2.51 14,710 1.35 4.053,750 $4.053,750$ $7,405,380$ $2.57,550$ $1,35405,380$ $2.51,50$ $1,35 1, 1,705,000$ $1,$						
sq.m 7,660 kg 5,860 2.51 14,710 1.35 40.42 (1) to (2)) 267,550 2.51 14,710 1.35 7, 7, 405,380 (1) to (2)) 267,550 $\frac{4.726,680}{$	He Sy	: 11	283,630	171.35	430,090	
kg 5,860 2.51 14,710 1.35 f (1) to (2)) $267,550$ 7.0 4,053,750 7. 405,380 2.51 1.35 - 1, - 1, - 1, 709,000 1, 5,435,680 11.				40.42	309,620	
4,053,750 405,380 267,550 			14,710	1.35	7,910	
(1) to (2)) 267,550 4.726,680 709,000 709,000	otal (l)		4,053,750		7,108,780	
	ő of (l))		405,380		710,880	
	and Miscellaneous (6% of (1) to (2))		267,550		469.180	
	of (1) to (3))				•	
	<pre>5 Tax (3% of (1) to (4))</pre>				•	
	otal (Contract Cost)		4,726,680		8,288,840	₽13,015,520
709,000	Site Acquisition		I		•	
- 709,000 5,435,680	sst (10% of Item 1)				1,301,550	
709,000	ment Cost (5% of Item 1)	- - - - - -	I		650,780	
709,000		-				·. ·
t Cost	itingency (15% of Item 1)		709,000		1,243,330	•
5,435,680	stion Contingency	•	-		•	
	Estimated Project Cost		5,435,680		11,484,500	₽16,920,180

TABLE-I.18 DETA	DETAILED COST ESTIMATE	1	(ECONOMIC), SABO WORKS,	S. TUMPA RIVER	RIVER		(Unit: Pesos)
Becnintion	Mnit Onantity		Curr				Remarks
UCSCI IN VILLE	1	V Unit Price	1. I 1.	Amount C	Unit Price	Amount	
1. Contract Cost							
	ر بر ب						
(1) Direct Cost	• • • •		· · ·	• •			
	E E	640 14-60	- 4 - - -	9_340	4.62	2-960	•
	•			8_190	24.90	11.950	
terrer vectores Referil				1.670	9.20	1.100	
Reinfocing bar	•			380	1.35	500	
Coconut trunk	÷.	н		29,540	11.36	20,450	
Sub total (1)			49,	49,120		36,660	
(2) General (10% of (1))	۰۰۰ ۱۰۰ ۱۰۰		4	4,910		3,670	
(3) Supervision and Miscellaneous (6% of (1) to	of (1) to (2))	•	ŕ	3,240		2,420	
(4) Profit (10% of (1) to (3))	- : - - -		•				
(5) Contractor's Tax (3% of (1) to (4)	(•				
Sub total (Contract Cost)			57	57,270		42,750	P100.020
2. Right of Way/Site Acquisition		· .	•	•			
3. Engineering Cost (10% of Item 1)					:	10,000	
4. Project Management Cost (5% of Item 1)	1)		•	I		5,000	



(Unit: Pesos)	Remarks											21,247,890				
	Currency Amount		18,710	27,970	450,650 2,320	167,740	667,390	66,740	44,050			778,180		124,790	62,390	
IINILA RIVER	Local Unit Price		4.62	9.20	171.35 1.35	40.42		· · · · · · · · · · · · · · · · · · ·		· · ·	·. · ·					
ABO WORK, MAN	Currency Amount		59,130	42,200	297,190 4,320		402,840	40,280	26,590	1		469,710	i	•		
DETAILED COST ESTIMATE (ECONOMIC), SABO WORK, MANINILA RIVER	Foreign (Unit Price		14.60	13.88	113.00 2.51	-							· · ·			
st estimate	Quantity -		4,050	3,040	2,630 1,720	4,150			((2))							
AILED COS	Unit		au • B	cu.m	แ รช ห	sq. B			% of (1) t	· · ·	((1				ст с	
TABLE-I.19 DET	Description	 Contract Cost (1) Direct Cost 	Ground Sill ((=450m) Excavation, in common	Backfill	Concrete, type B Reinforcing bar	Formwork	Sub total (1)	(2) General (10% of (1))	(3) Supervision and Miscellaneous (6% of (1) to (2)	(4) Profit (10% of (1) to (3))	(5) Contractor's Tax (3% of (1) to (4)	Sub total (Contract Cost)	2. Right of Way/Site Acquisition	3. Engineering Cost (10% of Item 1)	4. Project Management Cost (5% of Item 1)	

	•	(Unit: Pesos)	ਸ਼ਿ			F/C:2,277,210 L/C:2,803,880								F/C: 563,620 L/C:1.060.930									sources and the second seco		
•			Local Currency Price Amount		، ، ، ، ، ،		84,220	7,360	234,750	1,714,540	205,390	556,120	1,500		· ·	25,730	16,230	18,180	24,200	142,220	192,000	560		124,640	an an an far an
. •		ARAWAG RIVER	Local Unit Price				4.62	9.20	186.31	149.35	175.55	86.22	3.70	·	· ·	4.62	6.08	24.90	9.20	171.35	40.42	3.70		175.55	
		UETALLED COST ESTIMATE (ECONOMIC), SABO WORKS, MASARAWAG RIVER	Currency Amount				266,160	11,100	217,200	1,592,160	168,480		22,110			81,320	42,750	12,460	36,500	93,790		8,190		102,240	(1) The second s second second seco second second sec
		ECONOMIC), SI	Foreign Unit Price				14.60	13.88	172.38	138.69	144.00	- <u></u>	54.60			14.60	16.01	17.07	13.88	113.00		54.60		144.00	
		ESTIMATE (Quantity		••••	•	18,230	800	1,260	11,480	1,170	6,450	405			5,570	2,670	730	2,630	830	4,750	150		710	a na serie na serie de la s
		TALLED COST	Unit			• • •	cu.m	cu.m	cu.m	u-n2	cuem	នក្នុង	sq.m	- - -	- - 	u.m	cu.m	cu.m	cu.m	ແ•ກວ	н. С.	sq.		cu.m	
			Description	Contract Cost	(1) Direct Cost	No. 1 Sabo Dam ((=120m)	Excavation, in common	Backfill	Concrete, type A	Rubble concrete	Backfill concrete, type B	Formwork	Joint filler	No.1 Spur Dike (310m)	Spur Dike (310m)	Excavation, in common	Embankment	Riprap bedding	Backfill	Concrete, type B	Formwork	Joint filler	Wet masonry (3,550m ²)	Backfill concrete, type B	
				1. Con	\Box	(ī)		•	• • •			- - -		(ii)	(æ)	منتقد ا							(q)		

	Description	Unit	Quantity	Foreign Unit Price	Foreign Currency t Price Amount	Local Unit Price	Currency	Remarks
an an An an An an	Rubble stone masonry	u-bs	3,550	19.88	70,570	48.75	173,060	
· .	Cobble stone	cu.m	1,980	0.77	1,520	61.61	121,990	
	Inter locking mortar	cu.m	180	245.13	44,120	255.45	45,980	
(c)	Concrete Block (104 nos.)							
	Concrete, type B	cu.m	290	113.00	66,670	171.35	101,100	
	Formwork	m°ps	1,810	•		40.42	73,160	
	Reinforcing bar, øl6mm	kg	1,390	2-51	3,490	1.35	1,880	
(iii)	No. 2 - No. 4 Spur Dike ((=600m)	600m)		· · · · · · · · · · · · · · · · · · ·				F/C:1,086,910 L/C:2.055.160
(a)	Spur Dike (600m)	• •						
	Excavation, in common	си•т	10,780	14.60	157,390	4.62	49,800	
	Embankment	cu.m	5,160	16.01	82,610	6,08	31,370	
	Riprap bedding	m.us	1,410	17.07	24,070	24.90	35,110	
·	Backfill	u.u.	5,100	13.88	70,790	9.20	46,920	
	Concrete, type B	cu.m	1,620	113.00	183,060	171.35	277,590	
	Formvork	cu.m	9,190		· · · · · · · · · · · · · · · · · · ·	40.42	371,460	
	Joint filler	cu.m	200	54.60	16,380	3.70	1,110	
(q)	Wet masonry (6,870m ²)							
	Backfill concrete, type B	cu.,m	1,370	144.00	197,280	175.55	240,500	
	Rubble stone	ш+bs	6,870	19.88	136,580	48.75	334,910	
	Cobble stone	cu.m	3,840	0.77		61.61	236,580	
	Inter locking mortar	u•n.o	330	245.13	80,890	255.45	84,300	

Description	Unit	Ouantity	Foreign Currency	urrency	Local	Local Currency	
			Unit Price	Amount	Unit Price	Unit Price Amount	
Contract Cost							
	•	• •					
(1) Direct Cost	, ,						
(i) No.1-No.6 Spur Dike (1200 m)		•••			.:		F/C: 2.183.500
(a) Spur Dike (1200 m)		· · ·					L/C: 4,107,630
Excevation, in common	cu m	21,540	14.60	314,480	4.62	99,510	
Embankment	cu.m	10, 320	16.01	165,220	6 . 08	62,750	
Riprep bedding	u.u.	2,820	17.07	48,140	24.90	70,220	
Backfill	u"no	10,200	13.88	141,580	9.20	93,840	
Concrete, type B	cu.m	3,240	113.00	366,120	171.35	555,170	
Formvork	н. ps	18,360			40.42	742,110	
Joint filler	E • 0 ×	600	54.60	32,760	3.70	2,220	
(b) Wet masonry (13,740 m^2)							
Backfill concrete, type B	u°10	2,750	144.00	396,000	175.55	482,760	
Rubble stone masonry	a. p.s	13,740	19.88	273,150	48.75	669,830	
Cobble stone		7,690	0.77	5,920	61.61	473,780	
Inter locking mortar	cu.m	690	245.13	169,140	255.45	176,260	
(c) Concrete Block (400 nos.)		· · ·	•		· ·		
Concrete, type B	cu.m	2,280	113.00	257,640	171.35	390,680	Andre Santa and an a
Formvork	E os	6,960			40.42	281,320	
Reinforcing bar, øl6 mm	kg	5,320	2.51	13,350	1.35	7,180	
				· · · ·			
	• •						

				Foreion (Currenov	Tona Lona	Tona Cirmanoir	
	Description	Unit	Quantity		Amount	Unit Price	Amount	Remarks
(रंग)	No.1-No.7 Jetty (560 m)		•					
(a)	Jetty (560 m)							L/C: 1,367,250
	Excavation, in common	cu.m	8,040	14.60	117,380	4.62	37,140	
	Embankment	u*no	3,850	16.01	61,640	6.08	23,410	
	Riprap bedding	cu.m	1,050	17.07	17,920	24.90	26,150	
· ·	Backfill	cu.m	3,800	13.88	52,740	9.20	34,960	
	Concrete, type B	cu.m	1,210	113.00	136,730	171.35	207,330	
	Formwork	sq.m	6,850			40.42	276,880	
· · ·	Joint filler	80°.	220	54.60	12,010	3.70	810	
	Coconut trunk	E	8,400	16.41	137,840	11.36	95,420	
(q)	Wet masonry $(5,130 \text{ m}^2)$			• .				
	Backfill concrete, type B	cu m	1,030	144.00	148,320	175.55	180,820	
· .	Rubble stone masonry	ដ ខ្លួន	5,130	19.88	101,980	48.75	250,090	
	Cobble stone	u • no	2,870	0.77	2,210	61.61	176,820	
· · ·	Inter locking mortar	cu m	260	245.13	63,730	255.45	66,420	
(iii)	Ground sill (Crib work) (X= 260 m, 1,040 nos.)		:					F/C: 169,500 L/C: 410,020
	Excavation	cu m	2,340	14.60	34,160	4.62	10,810	
•	Backfill	cu.m	260	13.88	3,610	9.20	2,390	
	Cobble stone	cu.m	5,090	0.77	3,920	61.61	313,590	
	Reinforcing bar, & 9mm	kg	13,520	2.51	33,940	1.35	18,250	
· · · ·					and the second second of the first	A DESCRIPTION OF A DESC		

y Remarks	64,980	900	490	400			790 P10,599.400		940	970		270	970 P13,779,220	
Local Currency. Unit Price 3 Amount	11.36	5,884,900	588,490	388,400			6,861,790		1,059,940	529,970		1,029,270	9,480,970	
Currency. Amount	93,870	3,205,500	320,550	211,560	l	i I I	3,737,610		ţ	l		560,640	4,298,250	
Foreign Unit Price	16.41					- 	•							
Quantity	5,720						 							
Unit	Coconut trunk	Sub total (1)	(2) General (10% of (1))	(3) Supervision and Miscellaneous(6% of (1) to (2))	(4) Profit (10% of (1) to (3))	(5) Contractor's Tax $(3\% \text{ of } (1) \text{ to } (4))$	Sub total (Contract Cost)	2. Right of Way/Site Acquisition	3. Engineering Cost (10% of Item 1)	4. Project Management Cost (5% of Item 1)	5. Contingency	 Physical Contingency (15% of Item 1) Price Escalation 	Total Estimated Project Cost	