

4. ITEM OF PROCESS COST

LA UNION PORT DEVELOPMENT PROJECT
3A01 PORT ADMINISTRATION BUILDING
Earth Works

UNIT
FC: YEN
LC: US\$

Total m3 = 345

US\$=¥120

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		Total in YEN	
				Material		Labour		Equipment		Amount			
				FC	LC	FC	LC	FC	LC	FC	LC		
3A0101	Excavation for pile cap												
1	Material												
	Excavation for pile cap	m3	345	0	0.00					0	0	0	
	Fuel backhoe 0.8m3	day	1.5	0	95					0	143	17,100	
	Fuel dump truck 10t	day	1.5	0	105					0	158	18,900	
	Sub Total									0	300	36,000	
2	Labour												
	Foreman	man.day	1.5			0	38.20			0	57	6,876	
	Labour	man.day	12			0	14.30			0	172	20,592	
	Backhoe 0.8m3	man.day	1.5			0	33			0	50	5,940	
	Dump truck 10t	man.day	1.5			0	33			0	50	5,940	
	Sub Total									0	328	39,348	
3	Equipment												
	Backhoe 0.8m3	day	1.5					11,280	0	16,920	0	16,920	
	Dump truck 10t	day	1.5					6720	0	10,080	0	10,080	
	Sub Total									27,000	0	27,000	
Total										27,000	628	102,348	
Unit Price per m3										78.26	1.82	296.66	
INDIRECT COST										15%	11.74	0.27	44.50
TOTAL										90.00	2.09	341.16	

LA UNION PORT DEVELOPMENT PROJECT
 3A01 PORT ADMINISTRATION BUILDING
 Earth Works

UNIT
 FC: YEN
 LC: US\$

Total m3 = 550

US\$=¥120

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		Total in YEN	
				Material		Labour		Equipment		Amount			
				FC	LC	FC	LC	FC	LC	FC	LC		
3A0102	Backfilling for Pile Cap & slab (including compaction)												
1	Material												
	Backfilling for beam	m3	257	0	0					0	0	0	
	Backfilling for slab (excavated soil)	m3	88	0	0					0	0	0	
	Backfilling for slab (soil ; deliver from outside)	m3	205	43	4.94					8,856	1,013	130,380	
	Fuel backhoe 0.8m3	day	2	0	95					0	190	22,800	
	Fuel dump truck 10t	day	2	0	105					0	210	25,200	
	Sub Total									8,856	1,413	178,380	
2	Labour												
	Foreman	man.day	2			0	38.20			0	76	9,168	
	Labour	man.day	16			0	14.30			0	229	27,456	
	Backhoe 0.8m3	man.day	2			0	33			0	66	7,920	
	Dump truck 10t	man.day	2			0	33			0	66	7,920	
	Sub Total									0	437	52,464	
3	Equipment												
	Backhoe 0.8m3	day	2					11,280	0	22,560	0	22,560	
	Dump truck 10t	day	2					6,720	0	13,440	0	13,440	
	Sub Total									36,000	0	36,000	
Total										44,856	1,850	266,844	
Unit Price per m3										81.56	3.36	485.17	
INDIRECT COST										15%	12.23	0.50	72.78
TOTAL										93.79	3.87	557.95	

LA UNION PORT DEVELOPMENT PROJECT
 3A01 PORT ADMINISTRATION BUILDING
 Earth Works

UNIT
 FC: YEN
 LC: US\$

Total m3 = 145.92

US\$=¥120

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		Total in YEN	
				Material		Labour		Equipment		Amount			
				FC	LC	FC	LC	FC	LC	FC	LC		
3A0103	Rubble stone for foundation & slab												
1	Material												
	Rubble stone for foundation and slab	m3	145.92	0	6.4					0	934	112,067	
	Fuel backhoe 0.8m3	day	3	0	95					0	285	34,200	
	Fuel dump truck 10t	day	3	0	105					0	315	37,800	
	Sub Total									0	1,534	184,067	
2	Labour												
	Foreman	man.day	3			0	38.20			0	115	13,752	
	Labour	man.day	24			0	14.30			0	343	41,184	
	Backhoe 0.8m3	man.day	3			0	33			0	99	11,880	
	Dump truck 10t	man.day	3			0	33			0	99	11,880	
	Sub Total									0	656	78,696	
3	Equipment												
	Backhoe 0.8m3	day	3					11,280	0	33,840	0	33,840	
	Dump truck 10t	day	3					6720	0	20,160	0	20,160	
	Sub Total									54,000	0	54,000	
Total										54,000	2,190	316,763	
Unit Price per m3										370.07	15.01	2170.80	
INDIRECT COST										15%	55.51	2.25	325.62
TOTAL										425.58	17.26	2,496.42	

LA UNION PORT DEVELOPMENT PROJECT
 3A02 PORT ADMINISTRATION BUILDING
 PILE Works

UNIT
 FC: YEN
 LC: US\$

US\$=¥120

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		Total in YEN	
				Material		Labour		Equipment		Amount			
				FC	LC	FC	LC	FC	LC	FC	LC		
3A0201	Precast Prestressed Concrete Pile												
1	Material & others												
	Precast Concrete Pile L.5m 450*450mm*43nos		215.00	0	284.31					0	61,127	7,335,198	
	Cutting off pile head	nos	43	0	10.00					0	430	51,600	
	Other materials	day/unit	1	0	0					0	0	0	
	Fuel Truck Crane 16 ton	day	3	0	30.00					0	90	10,800	
	Sub Total									0	61,647	7,397,598	
2	Labour												
	Foreman	man.day	3			0	38.20			0	115	13,752	
	Labour	man.day	12			0	14.30			0	172	20,592	
	Crane operator	man.day	3			0	33.00			0	99	11,880	
	Sub Total									0	385	46,224	
3	Equipment												
	Truck crane 16ton	day	3					9,480	0	28,440	0	28,440	
	Sub Total									28,440	0	28,440	
Total										28,440	62,032	7,472,262	
Unit Price per m										132.28	288.52	34754.71	
INDIRECT COST										15%	19.84	43.28	5213.21
TOTAL										152	331.80	39,968	

LA UNION PORT DEVELOPMENT PROJECT
3A02 PORT ADMINISTRATION BUILDING
PILE Works

UNIT
FC: YEN
LC: US\$

US\$=¥120

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		Total in YEN	
				Material		Labour		Equipment		Amount			
				FC	LC	FC	LC	FC	LC	FC	LC		
3A0202	Precast Prestressed Concrete Pile												
1	Material & others												
	Precast Concrete Pile L.5m 500*500mm*30nos	m	150.00	0	351.4					0	52,710	6,325,200	
	Cutting off pile head	nos	30	0	10.00					0	300	36,000	
	Other materials	dayunit	1	0	0					0	0	0	
	Fuel Truck Crane 16ton	day	2	0	30.00					0	60	7,200	
	Sub Total									0	53,070	6,368,400	
2	Labour												
	Foreman	man.day	2			0	38.20			0	76	9,168	
	Labour	man.day	8			0	14.30			0	114	13,728	
	Crane operator	man.day	2			0	33.00			0	66	7,920	
	Sub Total									0	257	30,816	
3	Equipment												
	Truck crane 16ton	day	2					9,480	0	18,960	0	18,960	
	Sub Total									18,960	0	18,960	
Total										18,960	53,327	6,418,176	
Unit Price per m										126.40	355.51	42787.84	
INDIRECT COST										15%	18.96	53.33	6418.18
TOTAL										145	408.84	49,206	

LA UNION PORT DEVELOPMENT PROJECT
 3A03 PORT ADMINISTRATION BUILDING
 Concrete Works

UNIT
 FC: YEN
 LC: US\$

Total m3 = 25.52

US\$=¥120

No.	Work Item	Unit	Quantity	Basic Price						Unit Cost		Total in YEN	
				Material		Labour		Equipment		Amount			
				FC	LC	FC	LC	FC	LC	FC	LC		
3A0301 Lean concrete for foundation													
1 Material													
	Lean Concrete Fc=180kg/cm ²												
	to Pile Cap	m3	9.00	0	67.00				0	603.00		72,360	
	to Foundation Beam	m3	16.52	0	67.00				0	1,106.84		132,821	
	Fuel Concrete Pump 45m3	day	1	0	10.00				0	10.00		1,200	
	Fuel Generator 45KV	day	1	0	14.20				0	14.20		1,704	
	Sub Total								0	1,734		208,085	
2 Labour													
	Foreman	man.day	1			0	38.20		0	38.20		4,584	
	Labour	man.day	5			0	14.30		0	71.50		8,580	
	Concrete Pump	man.day	1			0	33.00		0	33.00		3,960	
	Sub Total								0	142.70		17,124	
3 Equipment													
	Concrete Pump 45m3	day	1					9,120	0	9,120	0	9,120	
	Generator 45KV	day	1					2,280	0	2,280	0	2,280	
	Sub Total									11,400	0	11,400	
Total										11,400	1,877	236,609	
Unit Price per m3										446.71	73.54	9271.50	
INDIRECT COST										15%	67.01	11.03	1390.73
TOTAL											514	84.57	10,662

Conc.Placement by Conc. Pump 25m3/day ,12.5m3/hr ,2hr/day

LA UNION PORT DEVELOPMENT PROJECT
3A03 PORT ADMINISTRATION BUILDING
Concrete Works

UNIT
FC: YEN
LC: US\$

Total m3 = 394.39

US\$=¥120

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		Total in YEN
				Material		Labour		Equipment		Amount		
				FC	LC	FC	LC	FC	LC	FC	LC	
3A0302	Concrete below 1FL											
1	Material											
	Ready Mixed Concrete Fc=210kg/cm ³											
	to Pile Cap	m3	101.26	0	70.00				0	7,088		850,584
	to Foundation Beam ,Colu	m3	150.81	0	70.00				0	10,557		1,266,804
	to 1F Slab	m3	142.32	0	70.00				0	9,962		1,195,488
	Fuel Concrete Pump 45m3	day	4	0	33.00				0	132		15,840
	Fuel Generator 45KV	day	4	0	20.00				0	80		9,600
	Sub Total								0	27,819		3,338,316
2	Labour											
	Foreman	man.day	8			0	38.20		0	306		36,672
	Labour	man.day	80			0	14.30		0	1,144		137,280
	Concrete Pump	man.day	4			0	33.00		0	132		15,840
	Sub Total								0	1,582		189,792
3	Equipment											
	Vibrator 4nos	day	36					120	0	4,320	0	4,320
	Concrete Pump 45m3	day	4					9,120	0	36,480	0	36,480
	Generator 45KV	day	4					2,280	0	9,120	0	9,120
	Sub Total									49,920	0	49,920
Total									49,920	29,401		3,578,028
Unit Price per m3									126.58	74.55		9072.31
INDIRECT COST									15%	18.99	11.18	1360.85
TOTAL									146	85.73		10,433

Conc.Placement to Beam and Slab by Conc. Pump 75m3/day ,12.5m3/hr ,6hr/day

LA UNION PORT DEVELOPMENT PROJECT
3A03 PORT ADMINISTRATION BUILDING
Concrete Works

UNIT
FC: YEN
LC: US\$

Total m3 = 896.90

US\$=¥120

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		Total in YEN	
				Material		Labour		Equipment		Amount			
				FC	LC	FC	LC	FC	LC	FC	LC		
3A0304 Concrete above 1FL													
1	Material												
	Ready Mixed Concrete Fc=280kg/cm ³	m3	896.90	0	75.00					0	67.268	8,072,100	
	Fuel truck crane 45ton	day	11	0	62.37					0	686	82,328	
	Fuel Concrete Pump 45m3	day	10	0	33.00					0	330	39,600	
	Fuel Generator 45KV	day	10	0	20.00					0	200	24,000	
	Sub Total									0	68,484	8,218,028	
2	Labour												
	Foreman	man.day	21			0	38.20			0	802	96,264	
	Labour	man.day	210			0	14.30			0	3,003	360,360	
	Crane Operator	man.day	11			0	33.00			0	363	43,560	
	Concrete Pump	man.day	10			0	33.00			0	330	39,600	
	Sub Total									0	4,498	539,784	
3	Equipment												
	Truck Crane 45ton	day	11					22,320	0	245,520	0	245,520	
	Vibrator 4nos	day	84					120	0	10,080	0	10,080	
	Concrete Pump 45m3	day	10					9120	0	91,200	0	91,200	
	Generator 45KV	day	10					23	0	228	0	228	
	Sub Total									347,028	0	347,028	
Total										347,028	72,982	9,104,840	
Unit Price per m3										386.92	81.37	10151.46	
INDIRECT COST										15%	58.04	12.21	1522.72
TOTAL										445	93.58	11,674	

Conc.Placement to Column by Crane & Bucket ; Average 15m3/day ,3.6m3/hr ,4hr/day

Conc.Placement to Slab & Beam by Concrete Pump ; Average 50m3/day ,12.5m3/hr ,4hr/day

LA UNION PORT DEVELOPMENT PROJECT
3A03 PORT ADMINISTRATION BUILDING
Concrete Works

UNIT
FC: YEN
LC: US\$

Total ton = 267.90

US\$=¥120

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		Total in YEN	
				Material		Labour		Equipment		Amount			
				FC	LC	FC	LC	FC	LC	FC	LC		
3A0305 Reinforcement													
1	Material												
	Reinforcement Steel Bar	ton	267.90	0	360.00					0	96,444	11,573,280	
	Scaffoldings (Outer)	m ²	3032.00	0	7.00					0	21,224	2,546,880	
	Scaffoldings (Inner)	m ²	510.00	0	4.00					0	2,040	244,800	
	Sub Total									0	119,708	14,364,960	
2	Labour												
	Foreman	man.day	118			0	38.20			0	4,508	540,912	
	Labour	man.day	826			0	14.30			0	11,812	1,417,416	
	Sub Total									0	16,319	1,958,328	
3	Equipment												
	Sub Total												
Total										0	136,027	16,323,288	
Unit Price per ton										0.00	507.75	60930.53	
INDIRECT COST										15%	0.00	76.16	9139.58
TOTAL										0	583.92	70,070	

LA UNION PORT DEVELOPMENT PROJECT
 3A03 PORT ADMINISTRATION BUILDING
 Concrete Works

UNIT
 FC: YEN
 LC: US\$

Total m²= 1247.00 US\$=¥120

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		Total in YEN	
				Material		Labour		Equipment		Amount			
				FC	LC	FC	LC	FC	LC	FC	LC		
3A0307 Precast concrete slab													
1	Material												
	Precast concrete slab w;1200 t;150	m ²	1247.00	0	62.76					0	78,262	9,391,406	
	Fuel truck crane 45ton	day	14	0	62.37					0	873	104,782	
	Sub Total									0	79,135	9,496,188	
2	Labour												
	Foreman	man.day	14			0	38.20			0	535	64,176	
	Labour	man.day	84			0	14.30			0	1,201	144,144	
	Crane Operator	man.day	14			0	33.00			0	462	55,440	
	Sub Total									0	2,198	263,760	
3	Equipment												
	Truck Crane 45ton	day	14					22,320	0	312,480	0	312,480	
	Sub Total									312,480	0	312,480	
Total										312,480	81,333	10,072,428	
Unit Price per m²										250.59	65.22	8077.33	
INDIRECT COST										15%	37.59	9.78	1211.60
TOTAL										288	75.01	9,289	

LA UNION PORT DEVELOPMENT PROJECT
3A04 PORT ADMINISTRATION BUILDING
STRUCTURAL STEEL WORKS

UNIT
FC: YEN
LC: US\$

Total (t) = 10.00 US\$=¥120

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		Total in YEN	
				Material		Labour		Equipment		Amount			
				FC	LC	FC	LC	FC	LC	FC	LC		
3A0401	Structure steel work												
1	Material												
	Structural Steel	ton	10.00	0	1,450.00					0	14,500	1,740,000	
	Rust Resistant paint	m ²		0	0.00					0	0	0	
	Fuel truck crane 16t	day	2	0	30.00					0	60	7,200	
	Sub Total			0	1480					0	14,560	1,747,200	
2	Labour												
	Fitter	man.day	4			0	23			0	92	11,040	
	Truck crane operator	man.day	2			0	33			0	66	7,920	
	Welder	man.day	4			0	23			0	92	11,040	
	Others	man.day	2			0	12.70			0	25.40	3,048	
	Sub Total					0.00	91.70			0.00	275.40	33,048	
3	Equipment												
	Truck crane 16t	day	2					9,480	0	18,960	0.00	18,960	
	Rolling tower scaffolding	nos	2					0	0.79	0	1.58	190	
	Sub Total									18,960	1.58	19,150	
Total										18,960	14,837	1,799,398	
Unit Price per t										1896	1484	179940	
INDIRECT COST										15%	284	223	26991
TOTAL										2,180	1,706.25	206,931	

APPENDIX-3. EQUIPMENT COST
 LA UNION PORT DEVELOPMENT PROJECT
 3A04 PORT ADMINISTRATION BUILDING
 Tempolary Work

UNIT
 FC: YEN
 LC: US\$

US\$=¥120

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		Total in YEN
				Material		Labour		Equipment		Amount		
				FC	LC	FC	LC	FC	LC	FC	LC	
3A0301												
1	Material Rolling tower L:1.83m H:1.70m	day	2	0	0.79					0	1.58	190
	Sub Total			0	0.79					0	1.58	190
2	Labour					0	0			0	0	0
	Sub Total									0	0	0
3	Equipment							0	0	0	0	0
	Sub Total									0	0	0
	Total									0	1.58	190

LA UNION PORT DEVELOPMENT PROJECT
3B01 CONTAINER FRIEGHT STATION
Earth Works

UNIT
FC: YEN
LC: US\$

Total m3 = 969

US\$=¥120

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		Total in YEN	
				Material		Labour		Equipment		Amount			
				FC	LC	FC	LC	FC	LC	FC	LC		
3B0101	Excavation for foundation												
1	Material												
	Excavation for foundation	m3	969	0	0.00					0	0	0	
	Fuel backhoe 0.8m3	day	3	0	95					0	285	34,200	
	Fuel dump truck 10t	day	3	0	105					0	315	37,800	
	Sub Total									0	600	72,000	
2	Labour												
	Foreman	man.day	3			0	38.20			0	115	13,752	
	Labour	man.day	24			0	14.30			0	343	41,184	
	Backhoe 0.8m3	man.day	3			0	33			0	99	11,880	
	Dump truck 10t	man.day	3			0	33			0	99	11,880	
	Sub Total									0	656	78,696	
3	Equipment												
	Backhoe 0.8m3	day	3					11,280	0	33,840	0	33,840	
	Dump truck 10t	day	3					6720	0	20,160	0	20,160	
	Sub Total									54,000	0	54,000	
Total										54,000	1,256	204,696	
Unit Price per m3										55.73	1.30	211.24	
INDIRECT COST										15%	8.36	0.19	31.69
TOTAL										64.09	1.49	242.93	

LA UNION PORT DEVELOPMENT PROJECT
3B0102 CONTAINER FRIEGHT STATION
Earth Works

UNIT
FC: YEN
LC: US\$

Total m3 = 3138

US\$=¥120

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		Total in YEN	
				Material		Labour		Equipment		Amount			
				FC	LC	FC	LC	FC	LC	FC	LC		
1	Material												
	Backfilling for foundation	m3	705	0	0					0	0	0	
	Backfilling for slab (excavated soil)	m3	264	0	0					0	0	0	
	Backfilling for slab (soil ; deliver from outside)	m3	2169	43	4.94					93,701	10,715	1,379,484	
	Fuel backhoe 0.8m3	day	8	0	95					0	760	91,200	
	Fuel dump truck 10t	day	8	0	105					0	840	100,800	
	Sub Total									93,701	12,315	1,571,484	
2	Labour												
	Foreman	man.day	8			0	38.20			0	306	36,672	
	Labour	man.day	64			0	14.30			0	915	109,824	
	Backhoe 0.8m3	man.day	8			0	33			0	264	31,680	
	Dump truck 10t	man.day	8			0	33			0	264	31,680	
	Sub Total									0	1,749	209,856	
3	Equipment												
	Backhoe 0.8m3	day	8					11,280	0	90,240	0	90,240	
	Dump truck 10t	day	8					6720	0	53,760	0	53,760	
	Sub Total									144,000	0	144,000	
Total										237,701	14,064	1,925,340	
Unit Price per m3										75.75	4.48	613.56	
INDIRECT COST										15%	11.36	0.67	92.03
TOTAL										87.11	5.15	705.59	

LA UNION PORT DEVELOPMENT PROJECT
3801 CONTAINER FRIEGHT STATION
Earth Works

UNIT
FC: YEN
LC: US\$

Total m3 = 418.35

US\$=¥120

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		Total in YEN	
				Material		Labour		Equipment		Amount			
				FC	LC	FC	LC	FC	LC	FC	LC		
3B0103	Rubble stone for foundation & slab												
1	Material												
	Rubble stone for foundation	m3	91.65	0	6.4					0	587	70,387	
	Rubble stone for slab	m3	326.70	0	6.4					0	2,091	250,906	
	Fuel backhoe 0.8m3	day	4.0	0	95					0	380	45,600	
	Fuel dump truck 10t	day	8	0	105					0	840	100,800	
	Sub Total									0	3,897	467,693	
2	Labour												
	Foreman	man.day	8			0	38.20			0	306	36,672	
	Labour	man.day	64			0	14.30			0	915	109,824	
	Backhoe 0.8m3	man.day	4			0	33			0	132	15,840	
	Dump truck 10t	man.day	8			0	33			0	264	31,680	
	Sub Total									0	1,617	194,016	
3	Equipment												
	Backhoe 0.8m3	day	4					11,280	0	45,120	0	45,120	
	Dump truck 10t	day	8					6,720	0	53,760	0	53,760	
	Sub Total									98,880	0	98,880	
Total										98,880	5,514	760,589	
Unit Price per m3										236.36	13.18	1818.07	
INDIRECT COST										15%	35.45	1.98	272.71
TOTAL										271.81	15.16	2,090.78	

LA UNION PORT DEVELOPMENT PROJECT
 3B02 CONTAINER FREIGHT STATION
 PILE Works

UNIT
 FC: YEN
 LC: US\$

US\$=¥120

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		Total in YEN	
				Material		Labour		Equipment		Amount			
				FC	LC	FC	LC	FC	LC	FC	LC		
3B0201	Precast Prestressed Concrete Pile												
1	Material & others												
	Precast Concrete Pile L7m 400*400mm*56nos	m	392.00	0	224.37					0	87.953	10,554,365	
	Cutting off pile head	nos	56	0	10.00					0	560	67,200	
	Other materials	dayunit	5	0	0					0	0	0	
	Fuel truck crane 16ton	day	5	0	30.00					0	150	18,000	
	Sub Total									0	88,663	10,639,565	
2	Labour												
	Foreman	man.day	5			0	38.20			0	191	22,920	
	Labour	man.day	20			0	14.30			0	286	34,320	
	Crane operator	man.day	5			0	33.00			0	165	19,800	
	Sub Total									0	642	77,040	
3	Equipment												
	Truck crane 16ton	day	5					9,480	0	47,400	0	47,400	
	Sub Total									47,400	0	47,400	
Total										47,400	89,305	10,764,005	
Unit Price per m										120.92	227.82	27459.20	
INDIRECT COST										15%	18.14	34.17	4118.88
TOTAL										139	261.99	31,578	

LA UNION PORT DEVELOPMENT PROJECT
 3B02 CONTAINER FREIGHT STATION
 PILE Works

UNIT
 FC: YEN
 LC: US\$

US\$=¥120

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		Total in YEN	
				Material		Labour		Equipment		Amount			
				FC	LC	FC	LC	FC	LC	FC	LC		
3B0202	Precast Prestressed Concrete Pile												
1	Material & others												
	Precast Concrete Pile L7m 450*450mm*6nos	m	42.00	0	282.9				0	11,882		1,425,816	
	Cutting off pile head	nos	6	0	10.00				0	60		7,200	
	Other materials	day/unit	1	0	0				0	0		0	
	Fuel truck crane 16ton	day	1	0	30.00				0	30		3,600	
	Sub Total								0	11,972		1,436,616	
2	Labour												
	Foreman	man.day	1			0	38.20		0	38		4,584	
	Labour	man.day	4			0	14.30		0	57		6,864	
	Crane operator	man.day	1			0	33.00		0	33		3,960	
	Sub Total								0	128		15,408	
3	Equipment												
	Truck crane 16ton	day	1					9,480	0	9,480	0	9,480	
	Sub Total								9,480	0		9,480	
				Total						9,480	12,100	1,461,504	
				Unit Price per m						225.71	288.10	34797.71	
INDIRECT COST										15%	33.86	43.22	5219.66
TOTAL										260	331.32	40,017	

LA UNION PORT DEVELOPMENT PROJECT
 3B03 CONTAINER FREIGHT STATION
 Concrete Works

UNIT
 FC: YEN
 LC: US\$

Total m3 = 45.82

US\$=¥120

No	Work Item	Unit	Quantity	Basic Price				Unit Cost		Total in YEN	
				Material		Labour		Equipment			Amount
				FC	LC	FC	LC	FC	LC		
3B0301	Lean concrete for foundation										
1	Material										
	Lean Concrete Fc=180kg/cm ³										
	to Pile Cap	m3	27.82	0	67.00			0	1,863.94	223,673	
	to Foundation Beam	m3	18.00	0	67.00			0	1,206.00	144,720	
	Fuel Concrete Pump 45m3	day	1	0	15.00			0	15.00	1,800	
	Fuel Generator 45KV	day	1	0	21.00			0	21.00	2,520	
	Sub Total							0	3,106	372,713	
2	Labour										
	Foreman	man.day	1			0	38.20	0	38.20	4,584	
	Labour	man.day	5			0	14.30	0	71.50	8,580	
	Concrete Pump	man.day	1			0	33.00	0	33.00	3,960	
	Sub Total							0	142.70	17,124	
3	Equipment										
	Concrete Pump 45m3	day	1					9,120	0	9,120	
	Generator 45KV	day	1					2,280	0	2,280	
	Sub Total							11,400	0	11,400	
Total								11,400	3,249	401,237	
Unit Price per m3								248.80	70.90	8756.80	
INDIRECT COST								15%	37.32	10.64	1313.52
TOTAL								286	81.54	10,070	

Conc.Placement by Conc. Pump 45m3/day ,12.5m3/hr ,3.6hr/day

LA UNION PORT DEVELOPMENT PROJECT
3B03 CONTAINER FREIGHT STATION
Concrete Works

UNIT
FC: YEN
LC: US\$

Total m3 = 1061.55

US\$=¥120

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		Total in YEN
				Material		Labour		Equipment		Amount		
				FC	LC	FC	LC	FC	LC	FC	LC	
3B0302 Concrete Below 1FL												
1	Material											
	Ready Mixed Concrete Fc=210kg/cm ²											
	to Pile Cap , Foundation	m3	141.33	0	70.00				0	9,893		1,187,172
	to Found. Beam & Column	m3	309.49	0	70.00				0	21,664		2,599,716
	to 1F Slab	m3	610.73	0	70.00				0	42,751		5,130,132
	Fuel Concrete Pump 45m3	day	11.0	0	33.00				0	363		43,560
	Fuel Generator 45KV	day	11.0	0	20.00				0	220		26,400
	Sub Total								0	74,892		8,986,980
2	Labour											
	Foreman	man.day	11.0			0	38.20		0	420		50,424
	Labour	man.day	110			0	14.30		0	1,573		188,760
	Concrete Pump	man.day	11.0			0	33.00		0	363		43,560
	Sub Total								0	2,356		282,744
3	Equipment											
	Vibrator 4nos	day	44					120	0	5,280	0	5,280
	Concrete Pump 45m3	day	11.0					9,120	0	100,320	0	100,320
	Generator 45KV	day	11.0					2,280	0	25,080	0	25,080
	Sub Total									130,680	0	130,680
Total										130,680	77,248	9,400,404
Unit Price per m3										123.10	72.77	8855.36
INDIRECT COST									15%	18.47	10.92	1328.30
TOTAL										142	83.68	10,184

Conc.Placement to Beam and Slab by Conc. Pump 100m3/day ,12.5m3/hr ,8hr/day

LA UNION PORT DEVELOPMENT PROJECT
 3B03 CONTAINER FREIGHT STATION
 Concrete Works

UNIT
 FC: YEN
 LC: US\$

Total m3 = 36.06

US\$=¥120

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		Total in YEN	
				Material		Labour		Equipment		Amount			
				FC	LC	FC	LC	FC	LC	FC	LC		
3B0303 Concrete Above 1FL													
1 Material													
	Ready Mixed Concrete Fc=280kg/cm ³	m3	36.06	0	75.00					0	2,705	324,540	
	Fuel Concrete Pump 45m3	day	1.0	0	10.00					0	10.00	1,200	
	Fuel Generator 45KV	day	1.0	0	14.20					0	14.20	1,704	
	Sub Total									0	2,729	327,444	
2 Labour													
	Foreman	man.day	1.0			0	38.20			0	38	4,584	
	Labour	man.day	10			0	14.30			0	143	17,160	
	Concrete Pump	man.day	1.0			0	33.00			0	33	3,960	
	Sub Total									0	214	25,704	
3 Equipment													
	Vibrator 4nos	day	4					120	0	480	0	480	
	Concrete Pump 45m3	day	1.0					9,120	0	9,120	0	9,120	
	Generator 45KV	day	1.0					2,280	0	2,280	0	2,280	
	Sub Total									11,880	0	11,880	
Total										11,880	2,943	365,028	
Unit Price per m3										329.45	81.61	10122.80	
INDIRECT COST										15%	49.42	12.24	1518.42
TOTAL										379	93.85	11,641	

Conc.Placement to Column by Conc. Pump ,12.5m3/hr ,3hr/day

LA UNION PORT DEVELOPMENT PROJECT
3B03 CONTAINER FREIGHT STATION
Concrete Works

UNIT
FC: YEN
LC: US\$

Total ton = 156.19

US\$=¥120

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		Total in YEN	
				Material		Labour		Equipment		Amount			
				FC	LC	FC	LC	FC	LC	FC	LC		
3B0304	Reinforcement Steel Bar												
1	Material Reinforcement Steel Bar	ton	156.19	0	360.00					0	56,228	6,747,408	
	Sub Total									0	56,228	6,747,408	
2	Labour												
	Foreman	man.day	82			0	38.20			0	3,132	375,888	
	Labour	man.day	410			0	14.30			0	5,863	703,560	
	Sub Total									0	8,995	1,079,448	
3	Equipment												
	Rolling tower scaffolding	nos	11					0	0.79	0	8.69	0	
	Sub Total									0	9	0	
Total										0	65,232	7,826,856	
Unit Price per ton										0.00	417.65	50111.12	
INDIRECT COST										15%	0.00	62.65	7516.67
TOTAL										0	480.30	57,628	

LA UNION PORT DEVELOPMENT PROJECT
 3B03 CONTAINER FREIGHT STATION
 Concrete Works

UNIT
 FC: YEN
 LC: US\$

Total m²= 289.14

US\$=¥120

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		Total in YEN	
				Material		Labour		Equipment		Amount			
				FC	LC	FC	LC	FC	LC	FC	LC		
3B0306 Precast concrete slab													
1	Material												
	Precast concrete slab w:1200 t:150	m ²	289.14	0	62.76					0	18,146	2,177,571	
	Fuel truck crane 45ton	day	3	0	62.37					0	187	22,453	
	Sub Total									0	18,334	2,200,024	
2	Labour												
	Foreman	man.day	3			0	38.20			0	115	13,752	
	Labour	man.day	18			0	14.30			0	257	30,888	
	Crane Operator	man.day	3			0	33.00			0	99	11,880	
	Sub Total									0	471	56,520	
3	Equipment												
	Truck Crane 45ton	day	3					22,320	0	66,960	0	66,960	
	Sub Total									66,960	0	66,960	
Total										66,960	18,805	2,323,504	
Unit Price per m2										231.58	65.04	8035.91	
INDIRECT COST										15%	34.74	9.76	1205.39
TOTAL										266	74.79	9,241	

LA UNION PORT DEVELOPMENT PROJECT
3B04 CONTAINER FREIGHT STATION
STRUCTURAL STEEL WORKS

UNIT
FC: YEN
LC: US\$

Total (t) = 204.30 US\$=¥120

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		Total in YEN	
				Material		Labour		Equipment		Amount			
				FC	LC	FC	LC	FC	LC	FC	LC		
3B0401	Structure steel work												
1	Material												
	Structural Steel	ton	204.30	0	1,243.25					0	253,996	30,479,517	
	Rust Resistant paint	m ²		0	0.00					0	0	0	
	Fuel truck crane 16t	day	10	0	30.00					0	300	36,000	
	Sub Total			0	1,273.25					0	254,296	30,515,517	
2	Labour												
	Fitter	man.day	20			0	23			0	460	55,200	
	Truck crane operator	man.day	10			0	33			0	330	39,600	
	Welder	man.day	20			0	23			0	460	55,200	
	Others	man.day	10			0	12.70			0	127.00	15,240	
	Sub Total					0.00	91.70			0.00	1,377.00	165,240	
3	Equipment												
	Truck crane 16t	day	10					9,480	0	94,800	0.00	94,800	
	Rolling tower scaffolding	nos	10					0	0.79	0	7.90	948	
	Scaffolding	m ²	2810						20		56,200.00	6,744,000	
	Sub Total									94,800	56,207.90	6,839,748	
Total										94,800	311,881	37,520,505	
Unit Price per t										464	1527	183654	
INDIRECT COST										15%	70	229	27548
TOTAL										534	1,755.57	211,202	

LA UNION PORT DEVELOPMENT PROJECT

3C01 MAINTENANCE AND REPAIR SHOP

Earth Works

UNIT

FC: YEN

LC: US\$

Total m3 = 1740

US\$=¥120

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		Total in YEN	
				Material		Labour		Equipment		Amount			
				FC	LC	FC	LC	FC	LC	FC	LC		
3C0101	Excavation for foundation												
1	Material												
	Excavation for foundation	m3	1740	0	0.00					0	0	0	
	Fuel backhoe 0.8m3	day	4	0	95					0	380	45,600	
	Fuel dump truck 10t	day	4	0	105					0	420	50,400	
	Sub Total									0	800	96,000	
2	Labour												
	Foreman	man.day	4			0	38.20			0	153	18,336	
	Labour	man.day	32			0	14.30			0	458	54,912	
	Backhoe 0.8m3	man.day	4			0	33			0	132	15,840	
	Dump truck 10t	man.day	4			0	33			0	132	15,840	
	Sub Total									0	874	104,928	
3	Equipment												
	Backhoe 0.8m3	day	4					11,280	0	45,120	0	45,120	
	Dump truck 10t	day	4					6,720	0	26,880	0	26,880	
	Sub Total									72,000	0	72,000	
Total										72,000	1,674	272,928	
Unit Price per m3										41.38	0.96	156.86	
INDIRECT COST										15%	6.21	0.14	23.53
TOTAL										47.59	1.11	180.38	

LA UNION PORT DEVELOPMENT PROJECT
3C01 MAINTENANCE AND REPAIR SHOP
Earth Works

UNIT
FC: YEN
LC: US\$

Total m3 = 1463

US\$=¥120

No	Work Item (including compaction)	Unit	Quantity	Basic Price						Unit Cost		Total in YEN	
				Material		Labour		Equipment		Amount			
				FC	LC	FC	LC	FC	LC	FC	LC		
1	Material												
	Backfilling for foundation	m3	280	0	0					0	0	0	
	Backfilling for slab (excavated soil)	m3	1183	0	0					0	0	0	
	Fuel backhoe 0.8m3	day	4	0	95					0	380	45,600	
	Fuel dump truck 10t	day	4	0	105					0	420	50,400	
	Sub Total									0	800	96,000	
2	Labour												
	Foreman	man.day	4			0	38.20			0	153	18,336	
	Labour	man.day	32			0	14.30			0	458	54,912	
	Backhoe 0.8m3	man.day	4			0	33			0	132	15,840	
	Dump truck 10t	man.day	4			0	33			0	132	15,840	
	Sub Total									0	874	104,928	
3	Equipment												
	Backhoe 0.8m3	day	4					11,280	0	45,120	0	45,120	
	Dump truck 10t	day	4					6,720	0	26,880	0	26,880	
	Sub Total									72,000	0	72,000	
Total										72,000	1,674	272,928	
Unit Price per m3										49.21	1.14	186.55	
INDIRECT COST										15%	7.38	0.17	27.98
TOTAL										56.60	1.32	214.54	

LA UNION PORT DEVELOPMENT PROJECT
3C01 MAINTENANCE AND REPAIR SHOP
Earth Works

UNIT
FC: YEN
LC: US\$

Total m3 = 164.44

US\$=¥120

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		Total in YEN	
				Material		Labour		Equipment		Amount			
				FC	LC	FC	LC	FC	LC	FC	LC		
3C0103	Rubble stone for foundation & slab												
1	Material												
	Rubble stone for foundation	m3	55.96	0	6.4					0	358	42,977	
	Rubble stone for slab	m3	108.48	0	6.4					0	694	83,313	
	Fuel backhoe 0.8m3	day	4.0	0	95					0	380	45,600	
	Fuel dump truck 10t	day	3	0	105					0	315	37,800	
	Sub Total									0	1,747	209,690	
2	Labour												
	Foreman	man.day	8			0	38.20			0	306	36,672	
	Labour	man.day	64			0	14.30			0	915	109,824	
	Backhoe 0.8m3	man.day	4			0	33			0	132	15,840	
	Dump truck 10t	man.day	3			0	33			0	99	11,880	
	Sub Total									0	1,452	174,216	
3	Equipment												
	Backhoe 0.8m3	day	4					11,280	0	45,120	0	45,120	
	Dump truck 10t	day	3					6,720	0	20,160	0	20,160	
	Sub Total									65,280	0	65,280	
Total										65,280	3,199	449,186	
Unit Price per m3										396.98	19.46	2731.61	
INDIRECT COST										15%	59.55	2.92	409.74
TOTAL										456.53	22.37	3,141.35	

LA UNION PORT DEVELOPMENT PROJECT
3C02 MAINTENANCE AND REPAIR SHOP
PILE Works

UNIT
FC: YEN
LC: US\$

US\$=#120

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		Total in YEN
				Material		Labour		Equipment		Amount		
				FC	LC	FC	LC	FC	LC	FC	LC	
3C0201	Precast Prestressed Concrete Pile											
1	Material & others											
	Precast Concrete Pile L4m 400*400mm*79nos	m	316.00	0	222.54				0	70,323		8,438,717
	Cutting off pile head	nos	79	0	10.00				0	790		94,800
	Other materials	day/unit	5	0	0				0	0		0
	Fuel truck crane 16ton	day	5	0	30.00				0	150		18,000
	Sub Total								0	71,263		8,551,517
2	Labour											
	Foreman	man.day	5			0	38.20		0	191		22,920
	Labour	man.day	20			0	14.30		0	286		34,320
	Crane operator	man.day	5			0	33.00		0	165		19,800
	Sub Total								0	642		77,040
3	Equipment											
	Truck crane 16ton	day	5					9,480	0	47,400	0	47,400
	Sub Total									47,400	0	47,400
Total									47,400	71,905		8,675,957
Unit Price per m									150.00	227.55		27455.56
INDIRECT COST									15%	22.50	34.13	4118.33
TOTAL										173	261.68	31,574

LA UNION PORT DEVELOPMENT PROJECT
 3C02 MAINTENANCE AND REPAIR SHOP
 PILE Works

UNIT
 FC: YEN
 LC: US\$

US\$=¥120

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		Total in YEN	
				Material		Labour		Equipment		Amount			
				FC	LC	FC	LC	FC	LC	FC	LC		
3C0202	Precast Prestressed Concrete Pile												
1	Material & others												
	Precast Concrete Pile L4m 450*450mm*44nos	m	176.00	0	280.37					0	49,345	5,921,414	
	Cutting off pile head	nos	44		10.00					0	440	52,800	
	Other materials	day/unit	3	0	0					0	0	0	
	Fuel truck crane 16ton	day	3	0	30.00					0	90	10,800	
	Sub Total									0	49,875	5,985,014	
2	Labour												
	Foreman	man.day	3			0	38.20			0	115	13,752	
	Labour	man.day	12			0	14.30			0	172	20,592	
	Crane operator	man.day	3			0	33.00			0	99	11,880	
	Sub Total									0	385	46,224	
3	Equipment												
	Truck crane 16ton	day	3					9,480	0	28,440	0	28,440	
	Sub Total									28,440	0	28,440	
Total										28,440	50,260	6,059,678	
Unit Price per m										161.59	285.57	34429.99	
INDIRECT COST										15%	24.24	42.84	5154.50
TOTAL										186	328.41	39,594	

LA UNION PORT DEVELOPMENT PROJECT
3C03 MAINTENANCE AND REPAIR SHOP
Concrete Works

UNIT
FC: YEN
LC: US\$

Total m3 = 27.82

US\$=¥120

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		Total in YEN
				Material		Labour		Equipment		Amount		
				FC	LC	FC	LC	FC	LC	FC	LC	
3C0301	Lean concrete for foundation											
1	Material											
	Lean Concrete Fc=180kg/c	m3	27.82	0	67.00				0	1,863.94		223,673
	Fuel Concrete Pump 45m3	day	1	0	10.00				0	10.00		1,200
	Fuel Generator 45KV	day	1	0	14.20				0	14.20		1,704
	Sub Total								0	1,888		226,577
2	Labour											
	Foreman	man.day	1			0	38.20		0	38.20		4,584
	Labour	man.day	5			0	14.30		0	71.50		8,580
	Concrete Pump	man.day	1			0	33.00		0	33.00		3,960
	Sub Total								0	142.70		17,124
3	Equipment											
	Concrete Pump 45m3	day	1					9,120	0	9,120	0	9,120
	Generator 45KV	day	1					2,280	0	2,280	0	2,280
	Sub Total									11,400	0	11,400
Total									11,400	2,031		255,101
Unit Price per m3									409.78	73.00		9169.69
INDIRECT COST									15%	61.47	10.95	1375.45
TOTAL									471	83.95		10,545

Conc.Placement by Conc. Pump 28m3/day ,12.5m3/hr ,2.3hr/day

LA UNION PORT DEVELOPMENT PROJECT
 3C03 MAINTENANCE AND REPAIR SHOP
 Concrete Works

UNIT
 FC: YEN
 LC: US\$

Total m3 = 497.56

US\$=¥120

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		Total in YEN
				Material		Labour		Equipment		Amount		
				FC	LC	FC	LC	FC	LC	FC	LC	
3C0302 Concrete Below 1FL												
1	Material											
	Ready Mixed Concrete Fc=210kg/cm ³											
	to Pile Cap , Foundation	m3	108.60	0	70.00				0	7,602	912,240	
	to Found. Beam & Column	m3	180.20	0	70.00				0	12,614	1,513,680	
	to 1F Slab	m3	208.76	0	70.00				0	14,613	1,753,584	
	Fuel Concrete Pump 45m3	day	5.0	0	33.00				0	165	19,800	
	Fuel Generator 45KV	day	5.0	0	20.00				0	100	12,000	
	Sub Total								0	35,094	4,211,304	
2	Labour											
	Foreman	man.day	5.0			0	38.20		0	191	22,920	
	Labour	man.day	50			0	14.30		0	715	85,800	
	Concrete Pump	man.day	5.0			0	33.00		0	165	19,800	
	Sub Total								0	1,071	128,520	
3	Equipment											
	Vibrator 4nos	day	22					120	0	2,640	2,640	
	Concrete Pump 45m3	day	5.0					9,120	0	45,600	45,600	
	Generator 45KV	day	5.0					2,280	0	11,400	11,400	
	Sub Total									59,640	59,640	
Total										59,640	36,165	4,399,464
Unit Price per m3										119.86	72.69	8842.08
INDIRECT COST									15%	17.98	10.90	1326.31
TOTAL										138	83.59	10,168

Conc.Placement to Beam and Slab by Conc. Pump 100m3/day ,12.5m3/hr ,8hr/day

LA UNION PORT DEVELOPMENT PROJECT
3C03 MAINTENANCE AND REPAIR SHOP
Concrete Works

UNIT
FC: YEN
LC: US\$

Total m3 = 53.93

US\$=¥120

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		Total in YEN	
				Material		Labour		Equipment		Amount			
				FC	LC	FC	LC	FC	LC	FC	LC		
3C0303 Concrete Above 1FL													
1	Material												
	Ready Mixed Concrete Fc=280kg/cm ³	m3	53.93	0	75.00					0	4,045	485,370	
	Fuel Concrete Pump 45m3	day	1.0	0	10.00					0	10.00	1,200	
	Fuel Generator 45KV	day	1.0	0	14.20					0	14.20	1,704	
	Sub Total									0	4,069	488,274	
2	Labour												
	Foreman	man.day	1.0			0	38.20			0	38	4,584	
	Labour	man.day	10			0	14.30			0	143	17,160	
	Concrete Pump	man.day	1.0			0	33.00			0	33	3,960	
	Sub Total									0	214	25,704	
3	Equipment												
	Vibrator 4nos	day	4					120	0	480	0	480	
	Concrete Pump 45m3	day	1.0					9,120	0	9,120	0	9,120	
	Generator 45KV	day	1.0					2,280	0	2,280	0	2,280	
	Sub Total							11,880	0	11,880	0	11,880	
Total										11,880	4,283	525,858	
Unit Price per m3										220.29	79.42	9750.75	
INDIRECT COST										15%	33.04	11.91	1462.61
TOTAL										253	91.33	11,213	

Conc.Placement by Conc. Pump ,12.5m3/hr ,4hr/day

LA UNION PORT DEVELOPMENT PROJECT
 3C03 MAINTENANCE AND REPAIR SHOP
 Concrete Works

UNIT
 FC: YEN
 LC: US\$

Total ton = 76.96

US\$=¥120

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		Total in YEN		
				Material		Labour		Equipment		Amount				
				FC	LC	FC	LC	FC	LC	FC	LC			
3C0304 Reinforcement Steel Bar														
1	Material Reinforcement Steel Bar	ton	76.96	0	360.00					0	27,706	3,324,672		
	Sub Total									0	27,706	3,324,672		
2	Labour													
	Foreman	man.day	18			0	38.20			0	688	82,512		
	Labour	man.day	90			0	14.30			0	1,287	154,440		
	Sub Total									0	1,975	236,952		
3	Equipment													
	Rolling tower scaffolding	nos	10					0	0.79	0	7.90	0		
	Sub Total									0	8	0		
Total										0	29,688	3,561,624		
Unit Price per ton										0.00	385.76	46278.90		
INDIRECT COST											15%	0.00	57.86	6941.83
TOTAL										0	443.62	53,221		

LA UNION PORT DEVELOPMENT PROJECT
3C03 MAINTENANCE AND REPAIR SHOP
Concrete Works

UNIT
FC: YEN
LC: US\$

Total m²= 146.25

US\$=¥120

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		Total in YEN	
				Material		Labour		Equipment		Amount			
				FC	LC	FC	LC	FC	LC	FC	LC		
3C0306 Precast concrete slab													
1	Material												
	Precast concrete slab w:1200 t:150	m ²	146.25	0	62.76					0	9,179	1,101,438	
	Fuel truck crane 45ton	day	2	0	62.37					0	125	14,969	
	Sub Total									0	9,303	1,116,407	
2	Labour												
	Foreman	man.day	2			0	38.20			0	76	9,168	
	Labour	man.day	12			0	14.30			0	172	20,592	
	Crane Operator	man.day	2			0	33.00			0	66	7,920	
	Sub Total									0	314	37,680	
3	Equipment												
	Truck Crane 45ton	day	2					22,320	0	44,640	0	44,640	
	Sub Total									44,640	0	44,640	
Total										44,640	9,617	1,198,727	
Unit Price per m ²										305.23	65.76	8196.42	
INDIRECT COST										15%	45.78	9.86	1229.46
TOTAL										351	75.62	9,426	

LA UNION PORT DEVELOPMENT PROJECT
 3C04 MAINTENANCE AND REPAIR SHOP
 STRUCTURAL STEEL WORKS

UNIT
 FC: YEN
 LC: US\$

Total (t) = 146.71 US\$=¥120

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		Total in YEN	
				Material		Labour		Equipment		Amount			
				FC	LC	FC	LC	FC	LC	FC	LC		
3C0401	Structure steel work												
1	Material												
	Structural Steel	ton	146.71	0	1,255.00					0	184,121	22,094,526	
	Rust Resistant paint	m ²		0	0.00					0	0	0	
	Fuel truck crane 16t	day	8	0	30.00					0	240	28,800	
	Sub Total			0	1285					0	184,351	22,123,326	
2	Labour												
	Fitter	man.day	16			0	23			0	368	44,160	
	Truck crane operator	man.day	8			0	33			0	264	31,680	
	Welder	man.day	16			0	23			0	368	44,160	
	Others	man.day	8			0	12.70			0	101.60	12,192	
	Sub Total					0.00	91.70			0.00	1,101.60	132,192	
3	Equipment												
	Truck crane 16t	day	8					9,480	0	75,840	0.00	75,840	
	Rolling tower scaffolding	nos	8					0	0.79	0	6.32	758	
	Scaffolding	m ²	1932								38,640.00	4,636,800	
	Sub Total									75,840	38,646.32	4,713,398	
Total										75,840	224,109	26,968,916	
Unit Price per t										517	1528	183825	
INDIRECT COST										15%	78	229	27574
TOTAL										594	1,756.70	211,398	

LA UNION PORT DEVELOPMENT PROJECT
 3D01 CONTAINER GATE
 Earth Works

UNIT
 FC: YEN
 LC: US\$

Total m3 = 1155.24 US\$=¥120

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		Total in YEN	
				Material		Labour		Equipment		Amount			
				FC	LC	FC	LC	FC	LC	FC	LC		
3D0101	Excavation for foundation												
1	Material												
	Excavation for foundation	m3	1155.24	0	0.00					0	0	0	
	Fuel backhoe 0.8m3	day	3	0	95					0	285	34,200	
	Fuel dump truck 10t	day	3	0	105					0	315	37,800	
	Sub Total									0	600	72,000	
2	Labour												
	Foreman	man.day	3			0	38.20			0	115	13,752	
	Labour	man.day	24			0	14.30			0	343	41,184	
	Backhoe 0.8m3	man.day	3			0	33			0	99	11,880	
	Dump truck 10t	man.day	3			0	33			0	99	11,880	
	Sub Total									0	656	78,696	
3	Equipment												
	Backhoe 0.8m3	day	3					11,280	0	33,840	0	33,840	
	Dump truck 10t	day	3					6720	0	20,160	0	20,160	
	Sub Total									54,000	0	54,000	
Total										54,000	1,256	204,696	
Unit Price per m3										46.74	1.09	177.19	
INDIRECT COST										15%	7.01	0.16	26.58
TOTAL										54	1.25	203.77	

LA UNION PORT DEVELOPMENT PROJECT
3D01 CONTAINER GATE
Earth Works

UNIT
FC: YEN
LC: US\$

Total m3 = 549.72

US\$=¥120

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		Total in YEN	
				Material		Labour		Equipment		Amount			
				FC	LC	FC	LC	FC	LC	FC	LC		
1	Material												
	Backfilling for pile cap & slab (including compaction)	m3	549.72	0	0					0	0	0	
	Backfilling for foundation	m3		0	0					0	0	0	
	Backfilling for slab (excavated soil)	m3		0	0					0	0	0	
	Fuel backhoe 0.8m3	day	2	0	95					0	190	22,800	
	Fuel dump truck 10t	day	2	0	105					0	210	25,200	
	Sub Total			0						0	400	48,000	
2	Labour												
	Foreman	man.day	2			0	38.20			0	76	9,168	
	Labour	man.day	16			0	14.30			0	229	27,456	
	Backhoe 0.8m3	man.day	2			0	33			0	66	7,920	
	Dump truck 10t	man.day	2			0	33			0	66	7,920	
	Sub Total									0	437	52,464	
3	Equipment												
	Backhoe 0.8m3	day	2					11,280	0	22,560	0	22,560	
	Dump truck 10t	day	2					6,720	0	13,440	0	13,440	
	Sub Total									36,000	0	36,000	
Total										36,000	837	136,464	
Unit Price per m3										65.49	1.52	248.24	
INDIRECT COST										15%	9.82	0.23	37.24
TOTAL										75	1.75	285.48	

LA UNION PORT DEVELOPMENT PROJECT
3D01 CONTAINER GATE
Earth Works

UNIT
FC: YEN
LC: US\$

Total m3 = 92.34

US\$=¥120

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		Total in YEN	
				Material		Labour		Equipment		Amount			
				FC	LC	FC	LC	FC	LC	FC	LC		
3D0103	Rubble stone for foundation & slab												
1	Material												
	Rubble stone for foundation	m3	92.34	0	6.4					0	591	70,917	
	Rubble stone for slab												
	Fuel backhoe 0.8m3	day	3	0	95					0	285	34,200	
	Fuel dump truck 10t	day	3	0	105					0	315	37,800	
	Sub Total									0	1,191	142,917	
2	Labour												
	Foreman	man.day	3			0	38.20			0	115	13,752	
	Labour	man.day	24			0	14.30			0	343	41,184	
	Backhoe 0.8m3	man.day	3			0	33			0	99	11,880	
	Dump truck 10t	man.day	3			0	33			0	99	11,880	
	Sub Total									0	656	78,696	
3	Equipment												
	Backhoe 0.8m3	day	3					11,280	0	33,840	0	33,840	
	Dump truck 10t	day	3					6720	0	20,160	0	20,160	
	Sub Total									54,000	0	54,000	
Total										54,000	1,847	275,613	
Unit Price per m3										584.80	20.00	2984.76	
INDIRECT COST										15%	87.72	3.00	447.71
TOTAL										673	23.00	3,432.48	

LA UNION PORT DEVELOPMENT PROJECT

3D03 CONTAINER GATE

Concrete Works

UNIT

FC: YEN

LC: US\$

Total m3 = 26.28

US\$=¥120

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		Total in YEN	
				Material		Labour		Equipment		Amount			
				FC	LC	FC	LC	FC	LC	FC	LC		
3D0301	Lean concrete for foundation												
1	Material												
	Lean Concrete Fc=180kg/c	m3	26.28	0	67.00					0	1,760.76	211,291	
	Fuel Concrete Pump 45m3	day	1	0	10.00					0	10.00	1,200	
	Fuel Generator 45KV	day	1	0	14.20					0	14.20	1,704	
	Sub Total									0	1,785	214,195	
2	Labour												
	Foreman	man.day	1			0	38.20			0	38.20	4,584	
	Labour	man.day	5			0	14.30			0	71.50	8,580	
	Concrete Pump	man.day	1			0	33.00			0	33.00	3,960	
	Sub Total									0	142.70	17,124	
3	Equipment												
	Concrete Pump 45m3	day	1					9,120	0	9,120	0	9,120	
	Generator 45KV	day	1					2,280	0	2,280	0	2,280	
	Sub Total									11,400	0	11,400	
Total										11,400	1,928	242,719	
Unit Price per m3										433.79	73.35	9235.89	
INDIRECT COST										15%	65.07	11.00	1385.38
TOTAL										499	84.35	10,621	

Conc.Placement by Conc. Pump 22m3/day ,12.5m3/hr ,2hr/day

LA UNION PORT DEVELOPMENT PROJECT
3D03 CONTAINER GATE
Concrete Works

UNIT
FC: YEN
LC: US\$

Total m3 = 299.36

US\$=¥120

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		Total in YEN	
				Material		Labour		Equipment		Amount			
				FC	LC	FC	LC	FC	LC	FC	LC		
3D0302 Concrete Below 1FL													
1	Material												
	Ready Mixed Concrete Fc=210kg/cm ² to Pile Cap , Foundation Found. Beam & Column 1F Slab	m3	299.36	0	70.00					0	20,955	2,514,624	
	Fuel Concrete Pump 45m3	day	4	0	33.00					0	132	15,840	
	Fuel Generator 45KV	day	4	0	20.00					0	80	9,600	
	Sub Total									0	21,167	2,540,064	
2	Labour												
	Foreman	man.day	4			0	38.20			0	153	18,336	
	Labour	man.day	40			0	14.30			0	572	68,640	
	Concrete Pump	man.day	4			0	33.00			0	132	15,840	
	Sub Total									0	857	102,816	
3	Equipment												
	Vibrator 4nos	day	18					120	0	1,920	0	1,920	
	Concrete Pump 45m3	day	4					9,120	0	36,480	0	36,480	
	Generator 45KV	day	4					2,280	0	9,120	0	9,120	
	Sub Total									47,520	0	47,520	
Total										47,520	22,024	2,690,400	
Unit Price per m3										158.74	73.57	8987.17	
INDIRECT COST										15%	23.81	11.04	1348.08
TOTAL										183	84.61	10,335	

Conc.Placement to Beam and Slab by Conc. Pump 75m3/day ,12.5m3/hr ,6hr/day

LA UNION PORT DEVELOPMENT PROJECT
 3D03 CONTAINER GATE
 Concrete Works

UNIT
 FC: YEN
 LC: US\$

Total m3 = 89.02

US\$=¥120

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		Total in YEN	
				Material		Labour		Equipment		Amount			
				FC	LC	FC	LC	FC	LC	FC	LC		
3D0303 Concrete Above 1FL													
1	Material												
	Ready Mixed Concrete Fc=280kg/cm ³	m3	89.02	0	75.00					0	6,677	801,180	
	Fuel Concrete Pump 45m3	day	2	0	10.00					0	20	2,400	
	Fuel Generator 45KV	day	2	0	14.20					0	28	3,408	
	Sub Total									0	6,725	806,988	
2	Labour												
	Foreman	man.day	2			0	38.20			0	76	9,168	
	Labour	man.day	20			0	14.30			0	286	34,320	
	Concrete Pump	man.day	2			0	33.00			0	66	7,920	
	Sub Total									0	428	51,408	
3	Equipment												
	Vibrator 4nos	day	8					125	0	1,000	0	1,000	
	Concrete Pump 45m3	day	2					9,120	0	18,240	0	18,240	
	Generator 45KV	day	2					2,280	0	4,560	0	4,560	
	Sub Total									23,800	0	23,800	
Total										23,800	7,153	882,196	
Unit Price per m3										267.36	80.36	9910.09	
INDIRECT COST										15%	40.10	12.05	1486.51
TOTAL										307	92.41	11,397	

Conc.Placement by Conc. Pump ,12.5m3/hr ,4hr/day

LA UNION PORT DEVELOPMENT PROJECT
3D03 CONTAINER GATE
Concrete Works

UNIT
FC: YEN
LC: US\$

Total ton = 66.05

US\$=¥120

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		Total in YEN	
				Material		Labour		Equipment		Amount			
				FC	LC	FC	LC	FC	LC	FC	LC		
3D0304 Reinforcement Steel Bar													
1	Material												
	Reinforcement Steel Bar	ton	66.05	0	360.00					0	23,778	2,853,360	
	Scaffolding	m ²	345.60	0	19.17					0	6,625	795,018	
	Sub Total									0	30,403	3,648,378	
2	Labour												
	Foreman	man.day	20			0	38.20			0	764	91,680	
	Labour	man.day	200			0	14.30			0	2,860	343,200	
	Sub Total									0	3,624	434,880	
3	Equipment												
	Sub Total									0	0	0	
Total										0	34,027	4,083,258	
Unit Price per ton										0.00	515.17	61820.72	
INDIRECT COST										15%	0.00	77.28	9273.11
TOTAL										0	592.45	71,094	

LA UNION PORT DEVELOPMENT PROJECT

3D03 CONTAINER GATE

Concrete Works

UNIT

FC: YEN

LC: US\$

Total m³= 42.60

US\$=¥120

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		Total in YEN	
				Material		Labour		Equipment		Amount			
				FC	LC	FC	LC	FC	LC	FC	LC		
3D0306 Precast concrete slab													
1	Material												
	Precast concrete slab w:1200 t:150	m ³	42.60	0	62.76					0	2,674	320,829	
	Fuel truck crane 45ton	day	1	0	62.37					0	62	7,484	
	Sub Total									0	2,736	328,314	
2	Labour												
	Foreman	man.day	1			0	38.20			0	38	4,584	
	Labour	man.day	6			0	14.30			0	86	10,296	
	Crane Operator	man.day	1			0	33.00			0	33	3,960	
	Sub Total									0	157	18,840	
3	Equipment												
	Truck Crane 45ton	day	1					22,320	0	22,320	0	22,320	
	Sub Total									22,320	0	22,320	
Total										22,320	2,893	369,474	
Unit Price per m3										523.94	67.91	8673.09	
INDIRECT COST										15%	78.59	10.19	1300.96
TOTAL										603	78.10	9,974	

LA UNION PORT DEVELOPMENT PROJECT
3D04 CONTAINER GATE
STRUCTURAL STEEL WORKS

UNIT
FC: YEN
LC: US\$

Total (t) = 49.47 US\$=¥120

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		Total in YEN	
				Material		Labour		Equipment		Amount			
				FC	LC	FC	LC	FC	LC	FC	LC		
3D0401	Structure steel work												
1	Material												
	Structural Steel	ton	49.47	0	1,200.00					0	59,364	7,123,680	
	Rust Resistant paint	m ²		0	0.00					0	0	0	
	Fuel truck crane 16t	day	2.8	0	30.00					0	84	10,080	
	Sub Total			0	1230					0	59,448.00	7,133,760	
2	Labour												
	Fitter	man.day	6			0	23			0	138	16,560	
	Truck crane operator	man.day	3			0	33			0	99	11,880	
	Welder	man.day	6			0	23			0	138	16,560	
	Others	man.day	3			0	12.70			0	38.10	4,572	
	Sub Total					0.00	91.70			0.00	413.10	49,572	
3	Equipment												
	Truck crane 16t	day	2.8					9,480	0	26,544	0.00	26,544	
	Scaffolding	m ²	936.8						20		18,736.00	2,248,320	
	Sub Total									26,544	18,736.00	2,274,864	
Total										26,544	78,597	9,458,196	
Unit Price per t										537	1589	191191	
INDIRECT COST										15%	80	238	28679
TOTAL										617	1,827	219,869	

LA UNION PORT DEVELOPMENT PROJECT

3E01 CARGO GATE

Earth Works

UNIT

FC: YEN

LC: US\$

Total m3 = 690.12

US\$=¥120

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		Total in YEN	
				Material		Labour		Equipment		Amount			
				FC	LC	FC	LC	FC	LC	FC	LC		
3E0101	Excavation for foundation												
1	Material												
	Excavation for foundation	m3	690.12	0	0.00					0	0	0	
	Fuel backhoe 0.8m3	day	2	0	95					0	190	22,800	
	Fuel dump truck 10t	day	2	0	105					0	210	25,200	
	Sub Total									0	400	48,000	
2	Labour												
	Foreman	man.day	2			0	38.20			0	76	9,168	
	Labour	man.day	16			0	14.30			0	229	27,456	
	Backhoe 0.8m3	man.day	2			0	33			0	66	7,920	
	Dump truck 10t	man.day	2			0	33			0	66	7,920	
	Sub Total									0	437	52,464	
3	Equipment												
	Backhoe 0.8m3	day	2					11,280	0	22,560	0	22,560	
	Dump truck 10t	day	2					6,720	0	13,440	0	13,440	
	Sub Total									36,000	0	36,000	
Total										36,000	837	136,464	
Unit Price per m3										52.16	1.21	197.74	
INDIRECT COST										15%	7.82	0.18	29.66
TOTAL										60	1.40	227.40	

LA UNION PORT DEVELOPMENT PROJECT
3E01 CARGO GATE
Earth Works

UNIT
FC: YEN
LC: US\$

Total m3 = 342.18

US\$=¥120

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		Total in YEN	
				Material		Labour		Equipment		Amount			
				FC	LC	FC	LC	FC	LC	FC	LC		
3E0102	Backfilling for pile cap & slab (including compaction)												
1	Material												
	Backfilling for foundation	m3	342.18	0	0					0	0	0	
	Backfilling for slab (excavated soil)												
	Fuel backhoe 0.8m3	day	2	0	95					0	190	22,800	
	Fuel dump truck 10t	day	2	0	105					0	210	25,200	
	Sub Total									0	400	48,000	
2	Labour												
	Foreman	man.day	2			0	38.20			0	76	9,168	
	Labour	man.day	16			0	14.30			0	229	27,456	
	Backhoe 0.8m3	man.day	2			0	33			0	66	7,920	
	Dump truck 10t	man.day	2			0	33			0	66	7,920	
	Sub Total									0	437	52,464	
3	Equipment												
	Backhoe 0.8m3	day	2					11,280	0	22,560	0	22,560	
	Dump truck 10t	day	2					6,720	0	13,440	0	13,440	
	Sub Total									36,000	0	36,000	
Total										36,000	837	136,464	
Unit Price per m3										105.21	2.45	398.81	
INDIRECT COST										15%	15.78	0.37	59.82
TOTAL										121	2.81	458.63	

LA UNION PORT DEVELOPMENT PROJECT
 3E01 CARGO GATE
 Earth Works

UNIT
 FC: YEN
 LC: US\$

Total m3 = 60.07

US\$=¥120

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		Total in YEN	
				Material		Labour		Equipment		Amount			
				FC	LC	FC	LC	FC	LC	FC	LC		
3E0103	Rubble stone for foundation & slab												
1	Material												
	Rubble stone for foundation	m3	60.07	0	6.4					0	384	46,134	
	Rubble stone for slab									0	285	34,200	
	Fuel backhoe 0.8m3	day	3.0	0	95					0	315	37,800	
	Fuel dump truck 10t	day	3	0	105					0			
	Sub Total									0	984	118,134	
2	Labour												
	Foreman	man.day	3			0	38.20			0	115	13,752	
	Labour	man.day	24			0	14.30			0	343	41,184	
	Backhoe 0.8m3	man.day	3			0	33			0	99	11,880	
	Dump truck 10t	man.day	3			0	33			0	99	11,880	
	Sub Total									0	656	78,696	
3	Equipment												
	Backhoe 0.8m3	day	3					11,280	0	33,840	0	33,840	
	Dump truck 10t	day	3					6,720	0	20,160	0	20,160	
	Sub Total									54,000	0	54,000	
Total										54,000	1,640	250,830	
Unit Price per m3										898.95	27.31	4175.62	
INDIRECT COST										15%	134.84	4.10	626.34
TOTAL										1,034	31.40	4,801.97	

LA UNION PORT DEVELOPMENT PROJECT
 3E03 CARGO GATE
 Concrete Works

UNIT
 FC: YEN
 LC: US\$

Total m3 = 14.93 US\$=¥120

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		Total in YEN	
				Material		Labour		Equipment		Amount			
				FC	LC	FC	LC	FC	LC	FC	LC		
3E0301	Lean concrete for foundation												
1	Material												
	Lean Concrete Fc=180kg/c	m3	14.93	0	67.00					0	1,000.31	120,037	
	Fuel Concrete Pump 45m3	day	1	0	10.00					0	10.00	1,200	
	Fuel Generator 45KV	day	1	0	14.20					0	14.20	1,704	
	Sub Total									0	1,025	122,941	
2	Labour												
	Foreman	man.day	1			0	38.20			0	38.20	4,584	
	Labour	man.day	5			0	14.30			0	71.50	8,580	
	Concrete Pump	man.day	1			0	33.00			0	33.00	3,960	
	Sub Total									0	142.70	17,124	
3	Equipment												
	Concrete Pump 45m3	day	1					9,120	0	9,120	0	9,120	
	Generator 45KV	day	1					2,280	0	2,280	0	2,280	
	Sub Total									11,400	0	11,400	
Total										11,400	1,167	151,465	
Unit Price per m3										763.56	78.18	10145.02	
INDIRECT COST										15%	114.53	11.73	1521.75
TOTAL										878	89.91	11,667	

Conc.Placement by Conc. Pump ,12.5m3/hr ,1hr/day

LA UNION PORT DEVELOPMENT PROJECT
 3E03 CARGO GATE
 Concrete Works

UNIT
 FC: YEN
 LC: US\$

Total m3 = 193.82

US\$=¥120

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		Total in YEN
				Material		Labour		Equipment		Amount		
				FC	LC	FC	LC	FC	LC	FC	LC	
3E0302 Concrete Below 1FL												
1	Material											
	Ready Mixed Concrete Fc=210kg/cm ³											
	Pile Cap , Foundation	m3	193.82	0	70.00				0	13,567	1,628,088	
	Found. Beam & Column											
	1F Slab											
	Fuel Concrete Pump 45m3	day	3	0	33.00				0	99	11,880	
	Fuel Generator 45KV	day	3	0	20.00				0	60	7,200	
	Sub Total								0	13,726	1,647,168	
2	Labour											
	Foreman	man.day	3			0	38.20		0	115	13,752	
	Labour	man.day	30			0	14.30		0	429	51,480	
	Concrete Pump	man.day	3			0	33.00		0	99	11,880	
	Sub Total								0	643	77,112	
3	Equipment											
	Vibrator 4nos	day	12					120	0	1,440	1,440	
	Concrete Pump 45m3	day	3					9,120	0	27,360	27,360	
	Generator 45KV	day	3					2,280	0	6,840	6,840	
	Sub Total									35,640	35,640	
Total									35,640	14,369	1,759,920	
Unit Price per m3									183.88	74.14	9080.18	
INDIRECT COST									15%	27.58	11.12	1362.03
TOTAL									211	85.26	10,442	

Conc.Placement to Beam and Slab by Conc. Pump 75m3/day ,12.5m3/hr ,6hr/day

LA UNION PORT DEVELOPMENT PROJECT
3E03 CARGO GATE
Concrete Works

UNIT
FC: YEN
LC: US\$

Total m3 = 72.83

US\$=¥120

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		Total in YEN	
				Material		Labour		Equipment		Amount			
				FC	LC	FC	LC	FC	LC	FC	LC		
3E0303 Concrete Above 1FL													
1	Material												
	Ready Mixed Concrete Fc=280kg/cm ³	m3	72.83	0	75.00					0	5,462	655,470	
	Fuel Concrete Pump 45m3	day	2	0	10.00					0	20.00	2,400	
	Fuel Generator 45KV	day	2	0	14.20					0	28.40	3,408	
	Sub Total									0	5,511	661,278	
2	Labour												
	Foreman	man.day	2			0	38.20			0	76	9,168	
	Labour	man.day	20			0	14.30			0	286	34,320	
	Concrete Pump	man.day	2			0	33.00			0	66	7,920	
	Sub Total									0	428	51,408	
3	Equipment												
	Vibrator 4nos	day	8					120	0	960	0	960	
	Concrete Pump 45m3	day	2					9,120	0	18,240	0	18,240	
	Generator 45KV	day	2					2,280	0	4,560	0	4,560	
	Sub Total									23,760	0	23,760	
Total										23,760	5,939	736,446	
Unit Price per m3										326.24	81.55	10111.85	
INDIRECT COST										15%	48.94	12.23	1516.78
TOTAL										375	93.78	11,629	

Conc.Placement by Conc. Pump ,12.5m3/hr ,3hr/day

LA UNION PORT DEVELOPMENT PROJECT
 3E03 CARGO GATE
 Concrete Works

UNIT
 FC: YEN
 LC: US\$

Total ton = 45.10

US\$=¥120

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		Total in YEN	
				Material		Labour		Equipment		Amount			
				FC	LC	FC	LC	FC	LC	FC	LC		
3E0304	Reinforcement Steel Bar												
1	Material												
	Reinforcement Steel Bar	ton	45.10	0	360.00					0	16,236	1,948,320	
	Scaffolding	m ²	345.60	0	19.17					0	6,625		
	Sub Total									0	22,861	1,948,320	
2	Labour												
	Foreman	man.day	14			0	38.20			0	535	64,176	
	Labour	man.day	140			0	14.30			0	2,002	240,240	
	Sub Total									0	2,537	304,416	
3	Equipment												
	Sub Total									0	0	0	
Total										0	25,398	2,252,736	
Unit Price per m3										0.00	563.15	49949.80	
INDIRECT COST										15%	0.00	84.47	7492.47
TOTAL										0	647.62	57,442	

LA UNION PORT DEVELOPMENT PROJECT
3E04 CARGO GATE
STRUCTURAL STEEL WORKS

UNIT
FC: YEN
LC: US\$

Total (t) = 28.05 US\$=¥120

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		Total in YEN	
				Material		Labour		Equipment		Amount			
				FC	LC	FC	LC	FC	LC	FC	LC		
3E0401	Structure steel work												
1	Material												
	Structural Steel	ton	28.05	0	1,200.00					0	33,660	4,039,200	
	Rust Resistant paint	m ²		0	0.00					0	0	0	
	Fuel truck crane 16t	day	1.5	0	30.00					0	45	5,400	
	Sub Total			0	1230					0	33,705	4,044,600	
2	Labour												
	Fitter	man.day	3			0	23			0	69	8,280	
	Truck crane operator	man.day	1.5			0	33			0	50	5,940	
	Welder	man.day	3			0	23			0	69	8,280	
	Others	man.day	1.5			0	12.70			0	19.05	2,286	
	Sub Total					0.00	91.70			0.00	206.55	24,786	
3	Equipment												
	Truck crane 16t	day	1.5					9,480	0	14,220	0.00	14,220	
	Scaffolding	m ²	611						20		12,220.00	1,466,400	
	Sub Total									14,220	12,220.00	1,480,620	
Total										14,220	46,132	5,550,006	
Unit Price per t										507	1645	197861	
INDIRECT COST										15%	76	247	29679
TOTAL										583	1,891	227,540	

LA UNION PORT DEVELOPMENT PROJECT
 3F01 POWER SUPPLY STATION
 Earth Works

UNIT
 FC: YEN
 LC: US\$

Total m3 = 304.80 US\$=¥120

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		Total in YEN	
				Material		Labour		Equipment		Amount			
				FC	LC	FC	LC	FC	LC	FC	LC		
1	Material												
	Excavation for foundation	m3	304.80	0	0.00					0	0	0	
	Fuel backhoe 0.8m3	day	1	0	95					0	95	11,400	
	Fuel dump truck 10t	day	1	0	105					0	105	12,600	
	Sub Total									0	200	24,000	
2	Labour												
	Foreman	man.day	1			0	38.20			0	38	4,584	
	Labour	man.day	8			0	14.30			0	114	13,728	
	Backhoe 0.8m3	man.day	1			0	33			0	33	3,960	
	Dump truck 10t	man.day	1			0	33			0	33	3,960	
	Sub Total									0	219	26,232	
3	Equipment												
	Backhoe 0.8m3	day	1					11,280	0	11,280	0	11,280	
	Dump truck 10t	day	1					6,720	0	6,720	0	6,720	
	Sub Total									18,000	0	18,000	
Total										18,000	419	68,232	
Unit Price per m3										59.06	1.37	223.86	
INDIRECT COST										15%	8.86	0.21	33.58
TOTAL										68	1.58	257.44	

LA UNION PORT DEVELOPMENT PROJECT
3F01 POWER SUPPLY STATION
Earth Works

UNIT
FC: YEN
LC: US\$

Total m3 = 315.49

US\$=¥120

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		Total in YEN	
				Material		Labour		Equipment		Amount			
				FC	LC	FC	LC	FC	LC	FC	LC		
1	Material												
	Backfilling for pile cap & slab (including compaction)	m3	315.49	0	0					0	0	0	
	Backfilling for foundation	m3		0	0					0	0	0	
	Backfilling for slab (excavated soil)	m3											
	Fuel backhoe 0.8m3	day	2	0	95					0	190	22,800	
	Fuel dump truck 10t	day	2	0	105					0	210	25,200	
	Sub Total									0	400	48,000	
2	Labour												
	Foreman	man.day	2			0	38.20			0	76	9,168	
	Labour	man.day	16			0	14.30			0	229	27,456	
	Backhoe 0.8m3	man.day	2			0	33			0	66	7,920	
	Dump truck 10t	man.day	2			0	33			0	66	7,920	
	Sub Total									0	437	52,464	
3	Equipment												
	Backhoe 0.8m3	day	2					11,280	0	22,560	0	22,560	
	Dump truck 10t	day	2					6,720	0	13,440	0	13,440	
	Sub Total									36,000	0	36,000	
Total										36,000	837	136,464	
Unit Price per m3										114.11	2.65	432.55	
INDIRECT COST										15%	17.12	0.40	64.88
TOTAL										131	3.05	497.43	

LA UNION PORT DEVELOPMENT PROJECT
 3F01 POWER SUPPLY STATION
 Earth Works

UNIT
 FC: YEN
 LC: US\$

Total m3 = 59.45

US\$=¥120

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		Total in YEN	
				Material		Labour		Equipment		Amount			
				FC	LC	FC	LC	FC	LC	FC	LC		
3F0103	Rubble stone for foundation & slab												
1	Material												
	Rubble stone for foundation	m3	59.45	0	6.4					0	380	45,658	
	Rubble stone for slab												
	Fuel backhoe 0.8m3	day	2.0	0	95					0	190	22,800	
	Fuel dump truck 10t	day	2	0	105					0	210	25,200	
	Sub Total									0	780	93,658	
2	Labour												
	Foreman	man.day	2			0	38.20			0	76	9,168	
	Labour	man.day	16			0	14.30			0	229	27,456	
	Backhoe 0.8m3	man.day	2			0	33			0	66	7,920	
	Dump truck 10t	man.day	2			0	33			0	66	7,920	
	Sub Total									0	437	52,464	
3	Equipment												
	Backhoe 0.8m3	day	2					11,280	0	22,560	0	22,560	
	Dump truck 10t	day	2					6720	0	13,440	0	13,440	
	Sub Total									36,000	0	36,000	
Total										36,000	1,218	182,122	
Unit Price per m3										605.55	20.48	3063.44	
INDIRECT COST										15%	90.83	3.07	459.52
TOTAL										696	23.55	3,522.96	

LA UNION PORT DEVELOPMENT PROJECT
3F02 POWER SUPPLY STATION
PILE Works

UNIT
FC: YEN
LC: US\$

US\$=¥120

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		Total in YEN	
				Material		Labour		Equipment		Amount			
				FC	LC	FC	LC	FC	LC	FC	LC		
3F0201	Precast Prestressed Concrete Pile												
1	Material & others												
	Precast Concrete Pile L7m 400*400mm*21nos	m	147.00	0	224.62					0	33,019	3,962,297	
	Cutting off pile head	nos	11	0	10.00					0	110	13,200	
	Other materials	dayunit	2	0	0					0	0	0	
	Fuel truck crane 16ton	day	2	0	30.00					0	60	7,200	
	Sub Total									0	33,189	3,982,697	
2	Labour												
	Foreman	man.day	2			0	38.20			0	76	9,168	
	Labour	man.day	8			0	14.30			0	114	13,728	
	Crane operator	man.day	2			0	33.00			0	66	7,920	
	Sub Total									0	257	30,816	
3	Equipment												
	Truck crane 16ton	day	2					9,480	0	18,960	0	18,960	
	Sub Total									18,960	0	18,960	
Total										18,960	33,446	4,032,473	
Unit Price per m										128.98	227.52	27431.79	
INDIRECT COST										15%	19.35	34.13	4114.77
TOTAL										148	261.65	31,547	

LA UNION PORT DEVELOPMENT PROJECT
 3F03 POWER SUPPLY STATION
 Concrete Works

UNIT
 FC: YEN
 LC: US\$

Total m3 = 15.60

US\$=¥120

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		Total in YEN	
				Material		Labour		Equipment		Amount			
				FC	LC	FC	LC	FC	LC	FC	LC		
3F0301 Lean concrete for foundation													
1	Material												
	Lean Concrete Fc=180kg/c	m3	15.60	0	67.00					0	1,045.20	125,424	
	Fuel Concrete Pump 45m3	day	1	0	10.00					0	10.00	1,200	
	Fuel Generator 45KV	day	1	0	14.20					0	14.20	1,704	
	Sub Total									0	1,069	128,328	
2	Labour												
	Foreman	man.day	1			0	38.20			0	38.20	4,584	
	Labour	man.day	5			0	14.30			0	71.50	8,580	
	Concrete Pump	man.day	1			0	33.00			0	33.00	3,960	
	Sub Total									0	142.70	17,124	
3	Equipment												
	Concrete Pump 45m3	day	1					9,120	0	9,120	0	9,120	
	Generator 45KV	day	1					2,280	0	2,280	0	2,280	
	Sub Total									11,400	0	11,400	
Total										11,400	1,212	156,852	
Unit Price per m3										730.77	77.70	10054.62	
INDIRECT COST										15%	109.62	11.65	1508.19
TOTAL										840	89.35	11,563	

Conc.Placement by Conc. Pump 28m3/day ,12.5m3/hr ,2.3hr/day

LA UNION PORT DEVELOPMENT PROJECT
3F03 POWER SUPPLY STATION
Concrete Works

UNIT
FC: YEN
LC: US\$

Total m3 = 193.28

US\$=¥120

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		Total in YEN	
				Material		Labour		Equipment		Amount			
				FC	LC	FC	LC	FC	LC	FC	LC		
3F0302 Concrete Below 1FL													
1	Material												
	Ready Mixed Concrete Fc=210kg/cm ³ to Pile Cap, Foundation Found. Beam & Column 1F Slab	m3	193.28	0	70.00					0	13,530	1,623,552	
	Fuel Concrete Pump 45m3	day	3	0	33.00					0	99	11,880	
	Fuel Generator 45KV	day	3	0	20.00					0	60	7,200	
	Sub Total									0	13,689	1,642,632	
2	Labour												
	Foreman	man.day	3			0	38.20			0	115	13,752	
	Labour	man.day	30			0	14.30			0	429	51,480	
	Concrete Pump	man.day	3			0	33.00			0	99	11,880	
	Sub Total									0	643	77,112	
3	Equipment												
	Vibrator 4nos	day	12					120	0	1,440	0	1,440	
	Concrete Pump 45m3	day	3					9,120	0	27,360	0	27,360	
	Generator 45KV	day	3					2,280	0	6,840	0	6,840	
	Sub Total									35,640	0	35,640	
Total										35,640	14,331	1,755,384	
Unit Price per m3										184.40	74.15	9082.08	
INDIRECT COST													
										15%	27.66	11.12	1362.31
TOTAL										212	85.27	10,444	

Conc.Placement to Beam and Slab by Conc. Pump 75m3/day, 12.5m3/hr, 6hr/day

LA UNION PORT DEVELOPMENT PROJECT
 3F03 POWER SUPPLY STATION
 Concrete Works

UNIT
 FC: YEN
 LC: US\$

Total m3 = 91.82

US\$=¥120

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		Total in YEN	
				Material		Labour		Equipment		Amount			
				FC	LC	FC	LC	FC	LC	FC	LC		
3F0303 Concrete Above 1FL													
1	Material												
	Ready Mixed Concrete Fc=280kg/cm ³	m3	91.82	0	75.00					0	6,887	826,380	
	Fuel Concrete Pump 45m3	day	2	0	10.00					0	20.00	2,400	
	Fuel Generator 45KV	day	2	0	14.20					0	28.40	3,408	
	Sub Total									0	6,935	832,188	
2	Labour												
	Foreman	man.day	2			0	38.20			0	76	9,168	
	Labour	man.day	20			0	14.30			0	286	34,320	
	Concrete Pump	man.day	2			0	33.00			0	66	7,920	
	Sub Total									0	428	51,408	
3	Equipment												
	Vibrator 4nos	day	8					120	0	960	0	960	
	Concrete Pump 45m3	day	2					9,120	0	18,240	0	18,240	
	Generator 45KV	day	2					2,280	0	4,560	0	4,560	
	Sub Total									23,760	0	23,760	
Total										23,760	7,363	907,356	
Unit Price per m3										258.77	80.19	9881.90	
INDIRECT COST										15%	38.82	12.03	1482.28
TOTAL										298	92.22	11,364	

Conc.Placement by Conc. Pump ,12.5m3/hr ,4hr/day

LA UNION PORT DEVELOPMENT PROJECT
3F03 POWER SUPPLY STATION
Concrete Works

UNIT
FC: YEN
LC: US\$

Total ton = 35.38

US\$=¥120

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		Total in YEN	
				Material		Labour		Equipment		Amount			
				FC	LC	FC	LC	FC	LC	FC	LC		
3F0304 Reinforcement Steel Bar													
1	Material												
	Reinforcement Steel Bar	ton	35.38	0	360.00					0	12,737	1,528,416	
	Scaffolding	m ²	256.00	0	19.17					0	4,908	588,902	
	Sub Total									0	17,644	2,117,318	
2	Labour												
	Foreman	man.day	12			0	38.20			0	458	55,008	
	Labour	man.day	120			0	14.30			0	1,716	205,920	
	Sub Total									0	2,174	260,928	
3	Equipment												
	Sub Total									0	0	0	
Total										0	19,819	2,378,246	
Unit Price per m3										0.00	560.17	67220.08	
INDIRECT COST										15%	0.00	84.03	10083.01
TOTAL										0	644.19	77,303	

APPENDIX - 1,2,3

APPENDIX-1 LABOUR COST

PORT REACTIVATION PROJECT IN LA UNION PROVINCE

Code No.	Particular	Unit	Unit Price(per day)
			US\$
1	Foreman	man/day	38.17
2	Skilled Labor	man/day	14.29
3	Common Labor	man/day	11.77
4	Unskilled Labor	man/day	12.7
5	Operator A Heavy	man/day	32.69
6	Operator B Light	man/day	30.86
7	Assistant Operator	man/day	19.54
8	Driver	man/day	22.06
9	Mechanician	man/day	30.86
10	Electrician	man/day	31.09
11	Welder	man/day	23.09
12	Plumber	man/day	20.91
13	Painter	man/day	20.91
14	Plant Operator	man/day	20.91
15	Carpenter	man/day	14.29
16	Concrete Worker	man/day	20.91
17	Steel Bender	man/day	14.29
18	Mason	man/day	31.09
19	Senior Civil Engineer	man/mon.	5,876.57
20	Junior Civil Engineer	man/mon.	2939.43
21	Archtect	man/mon.	5488.00
22	Building Engineer	man/mon.	5,488.00
23	Surveyor	man/mon.	1136.00
24	Adomistrator	man/mon.	3,712.00
25	Accountant	man/mon.	1,547.43
26	Office Clerk	man/mon.	2,784.00
27	Secretary	man/mon.	1,197.71
28	Typist	man/mon.	772.57
29	CAD Operator	man/mon.	1661.71
30	Office boy	man/mon.	729.14
31	Cleaner	man/day	324.57
32	Security(Guardman)	man/mon.	361.14
33	Crew High Class (Foreigner)	man/day	375.00
34	Crew Middle Class	man/day	100.00
35	Crew Low Class	man/day	33.00
36	Off-shore Foreman	man/day	38.17
37	Off-shore Skilled L	man/day	14.29
38	Off-shore Common L	man/day	11.77

APPENDIX-2 MATERIAL COST (1/4)

PORT REACTIVATION PROJECT IN LA UNION PROVINCE

	Code No.	Name	Class/Type	Unit	Unit Cost	
					Forein(US\$)	Local(US\$)
Fuel & Others						
1		Fuel	Diesel Heavy Oil	liter	-	0.31
2		Fuel	Diesel Light Oil(Kerosine)	liter	-	0.28
3		Fuel	Gasoline/Petrol	liter	-	0.51
4		Fuel	Marine heavy oil (turbine)	liter	-	0.19
5		Fuel	Marine light oil (diesel engine)	liter	-	0.33
6		Lubricant		liter	-	1.42
7		Acetylene Gas		kg	-	1.05
8		Oxygen		m3	-	0.62
9		Water		m3	-	
Sand, Aggregate & Rock						
10		Sand	for Reclamation	m3	-	4.00
11		Sand	for Concrete	m3	-	8.23
12		Sand	for Replacement	m3	-	6.00
13		Course Aggregate	40mm	m3	-	18.85
14		Course Aggregate	25mm	m3	-	21.31
15		Quarry Run	10-50kg	m3	-	7.54
16		Crushed Stone	5.0-100kg	m3	-	6.40
17		Crushed Stone	100-300kg	m3	-	5.16
18		Armor Stone	0.5-1 ton	m3	-	9.04
19		Armor Stone	1-2 ton	m3	-	7.75
20		Armor Stone	2 ton	m3	-	6.20
21		Sub base course	CBR 30	m3	-	9.04
22		Base course	CBR 80	m3	-	9.04
23		Cement treatment Macadam		m3	-	33.78

APPENDIX-2 MATERIAL COST (2/4)

PORT REACTIVATION PROJECT IN LA UNION PROVINCE

	Code No.	Name	Class/Type	Unit	Unit Cost	
					Forein(US\$)	Local(US\$)
Asphalt						
24		Asphalt concrete	Dense	ton	-	64.00
25		Asphalt concrete	Coarse	ton	-	64.00
26		Straight Asphalt		kg	-	0.57
27		Asphalt bitumen	for Asphalt concrete	kg	-	0.25
28		Asphalt bitumen	for Prime coat	liter	-	0.25
29		Asphalt bitumen	for Tack coat	liter	-	0.25
Concrete						
30		Portland cement	bag	ton	-	102.85
31		Portland cement	bulk	ton	-	65.00
32		Mortar		m3	-	75.00
33		Ready mixed concrete	270kg/cm2	m3	-	75.00
34		Ready mixed concrete	240kg/cm2	m3	-	70.00
35		Ready mixed concrete	180kg/cm2	m3	-	67.00
36		Ready mixed concrete	120kg/cm2	m3	-	65.00
37		Admixture, AE Agent		kg	-	4.73
Steel						
38		Steel Pipe Pile	Dia 1200 t=14mm	ton	995.36	-
39		Steel Pipe Pile	Dia 900 t=12mm	ton	973.83	-
40		H-Shaped steel	400x400x13x21x6m length 172kg/m	ton	-	400
41		H-Shaped steel	350x350x12x19x6m length 135kg/m	ton	-	400
42		H-Shaped steel	300x300x10x15x6m length 93kg/m	ton	-	400
43		H-Shaped steel	250x250x9x14x6m length 72kg/m	ton	-	400
44		L-Shaped steel	50x50x6x6m length 4.43kg/m	ton	-	410
45		L-Shaped steel	75x75x9x6m length 9.96kg/m	ton	-	410
46		Reinforcement bar(round)	less than 13mm	ton	-	360
47		Reinforcement bar(round)	16-25mm	ton	-	340
48		Reinforcement bar(round)	29-32mm	ton	-	350
49		Reinforcement bar(Deformed)	less than 13mm	ton	-	360

APPENDIX-2 MATERIAL COST (3/4)

PORT REACTIVATION PROJECT IN LA UNION PROVINCE

	Code No.	Name	Class/Type	Unit	Unit Cost	
					Forein(US\$)	Local(US\$)
Steel						
	50	Reinforcement bar(Deformed)	16-25mm	ton	-	360.00
	51	Reinforcement bar(Deformed)	29-32mm	ton	-	350.00
	52	Steel plate	t=20mm	ton	-	330.00
	53	Steel plate	t=10mm	ton	-	330.00
	54	Wire rope	Dia 32mm	m	-	0.63
	55	Wire rope	Dia 26mm	m	-	0.63
	56	Rail	70.0kg/m	ton	-	113.00
	57	Rail	50.0kg/m	ton	-	113.00
	58	Channel steel	11x 250x90	ton	-	380.00
	59	Channel steel	12x300x90	ton	-	380.00
	60	Anchor bolt	M16x200mm	pc	-	9.62
	61	Bolt/Nut	M24x65	pc	-	6.61
	62	Bolt/Nut	M16x65	pc	-	2.84
	63	Welding rod	1/8	kg	-	2.07
	64	Welding rod	5/32	kg	-	2.07
	65	Welding rod	3/16	kg	-	2.07
Timber etc.						
	66	Timber	1'*1' - 2'*8' (treated)	m3	-	397.00
	67	Board	t=18mm	m3	-	821.00
	68	Board	t=15mm	m3	-	909.00
	69	Board	t=6mm	m3	-	1038.00
Products of Concrete						
	70	R.C. Pipe	Dia 500mm t=50mm	m	-	18.44
	71	R.C. Pipe	Dia 600mm t=65mm	m	-	29.48
	72	R.C. Pipe	Dia 800mm t=80mm	m	-	46.53
	73	Interlocking block	250kg/cm2	m2	-	4.80
	74	Interlocking block	400kg/cm2	m2	-	18.00

APPENDIX-2 MATERIAL COST (4/4)

PORT REACTIVATION PROJECT IN LA UNION PROVINCE

	Code No.	Name	Class/Type	Unit	Unit Cost	
					Forein(US\$)	Local(US\$)
Others						
75		Brick		pc	-	0.28
76		PVC pipe	Dia 100mm	m	-	15.97
77		Geotextile sheet		m2	-	1.47
78		Fender	V-1000H*2000L	pc	11,000	-
79		Fender	HOM-600H	pc	8,000	-
80		Mooring Bitt	100ton	pc	7,500	
81		Mooring Bitt	75ton	pc	5,000	
82		Elas tigh board		m2		8.33

APPENDIX-3 LIST OF DEPRECIABLE VALUE OF EQUIPMENT (1/4)

$$E=A(1+C/100+D/100)$$

$$F=1/12\text{month/year} \times (30-5)\text{day/month} \times \text{Byear}$$

120

No.	Equipment	Specification	PS	A	B	C	D	E	F	G	Remarks
				Purchase Co (US\$)	Economic life of equipment (year)	Total rate of Maint. cost (%)	Annual rate of owning cost (%)	Total Cost of Economic life (US\$)	Daily depreciation rate	Daily Equipment owning cost (US\$/day)	
1	Grab Bucket Dredger	20m3(11.5m3)	2,800	11,916,667	10	100	7	24,667,500	0.000333333	8,223	
2	Trailing Suction Hopper	8,000m3	10000+3200	52,120,833	18	130	7	123,526,375	0.000185185	22,875	15.3% Repairing
3	Trailing Suction Hopper	5000m3	10,600	33,333,333	14	115	7	74,000,000	0.000238095	17,619	12.2% Repairing
4	Anchor boat	30ton	480	2,241,667	18	180	7	6,433,583	0.000185185	1,191	
5	"	20ton	360	1,550,000	18	180	7	4,448,500	0.000185185	824	
6	"	10ton	180	780,833	18	180	7	2,240,992	0.000185185	415	
7	Tug Boat	450PS	450	406,667	20	130	7	963,800	0.000166667	161	
8	"	250PS	250	248,333	20	130	7	588,550	0.000166667	98	
9	Pusher Boat	3000PS	3,000	2,783,333	16	130	7	6,596,500	0.000208333	1,374	
10	"	1000PS	1,000	1,375,000	16	130	7	3,258,750	0.000208333	679	
11	Passenger Boat	180PS	180	108,333	18	175	7	305,500	0.000185185	57	
12	"	100PS	100	56,167	18	175	7	158,390	0.000185185	29	
13	Survey boat	70PS	70	36,667	18	180	7	105,233	0.000185185	19	
14	Hopper Barge	3000m3		3,150,000	16	120	6	7,119,000	0.000208333	1,483	
15	"	1300m3		1,358,333	16	120	6	3,069,833	0.000208333	640	
16	Self-propelled Hopper B.	850m3,3.0m3	1,500	2,858,333	8	95	7	5,773,833	0.000416667	2,406	
17	"	400m3,1.8m3	800	1,733,333	8	95	7	3,501,333	0.000416667	1,459	
18	Gut Barge	1000m3 3.0m3	400	2,100,000	8	95	7	4,242,000	0.000416667	1,768	
19	Fiat Barge	1000ton		458,333	18	140	6	1,127,500	0.000185185	209	
20	"	500ton		262,500	18	140	6	645,750	0.000185185	120	
21	"	100ton		76,250	18	140	6	187,575	0.000185185	35	
22	Floating Dock	6000t		6,950,000	13	65	7	11,954,000	0.00025641	3,065	
23	"	10000t		11,250,000	13	65	7	19,350,000	0.00025641	4,962	
24	Pile Driving Barge	D-72	550	5,891,667	17	85	7	11,312,000	0.000196078	2,218	
25	"	D-72 with Auger	550	7,483,333	17	85	7	14,368,000	0.000196078	2,817	

APPENDIX-3 LIST OF DEPRECIABLE VALUE OF EQUIPMENT (2/4)

$$E=A(1+C/100+D/100)$$

$$F=1/12\text{month/year} \times (30-5)\text{day/month} \times \text{Byear}$$

120

No.	Equipment	Specification	PS	A	B	C	D	E	F	G	Remarks
				Purchase Co (US\$)	Economic life of equipment (year)	Total rate of Maint. cost (%)	Annual rate of owning cost (%)	Total Cost of Economic life (US\$)	Daily depreciation rate	Daily Equipment owning cost (US\$/day)	
26	Pump Dredger	DE8000PS	13,000	31,083,333	12	70	7	55017500	0.000277778	15,283	
27	Floater	for Dia.800		9,333	4	15	5	11200	0.000833333	9.33	
28	Steel pipe	Dia.800		2,383	4	15	5	2860	0.000833333	2.38	
29	Rubber sleeve	Dia.800		6,425	7	120	6	14520.5	0.00047619	6.91	
30	Valve	Dia.800		4,917	4	20	5	6,146	0.000833333	5.12	
31	Steel curve pipe	Dia.800		2,283	4	15	5	2,740	0.000833333	2.28	
32	Steel T pipe	Dia.800		2,408	4	15	5	2,890	0.000833333	2.41	
33	Bulldozer	21ton	207	188,333	10	55	9	308,867	0.000333333	103	
34	"	15ton	136	114,167	10	55	9	187,233	0.000333333	62	
35	"	11ton	106	85,833	10	55	9	140,767	0.000333333	47	
36	" with ripper	32ton	232	311,667	10	55	9	511,133	0.000333333	170	
37	" with ripper	21ton	177	207,500	10	55	9	340,300	0.000333333	113	
38	Buckhoe	2.0m3	367	388,333	8	45	9	598,033	0.000416667	249	
39	"	1.5m3	303	252,500	8	45	9	388,850	0.000416667	162	
40	"	1.2m3	224	197,500	8	45	9	304,150	0.000416667	127	
41	Wheel loader	3.5m3	218	191,667	10	60	9	323,917	0.000333333	108	
42	"	2.5m3	149	131,667	10	60	9	222,517	0.000333333	74	
43	Shovel loader(crawler)	3.2m3	250	227,500	10	60	9	384,475	0.000333333	128	
44	"	2.0m3	152	135,000	10	60	9	228,150	0.000333333	76	
45	Dump truck	10ton	335	78,667	8	60	12	135,307	0.000416667	56	
46	"	8ton	244	59,833	8	60	12	102,913	0.000416667	43	
47	Truck	8ton	253	52,250	9	40	12	79,420	0.00037037	29	
48	"	4ton	186	31,750	9	40	12	48,260	0.00037037	18	
49	" with crane	8ton 2.9ton	269	82,000	9	40	12	124,640	0.00037037	46	
50	" with crane	4ton 2.9ton	180	50,000	9	40	12	76,000	0.00037037	28	

APPENDIX-3 LIST OF DEPRECIABLE VALUE OF EQUIPMENT (3/4)

$$E=A(1+C/100+D/100)$$

$$F=1/12\text{month/year} \times (30-5)\text{day/month} \times \text{Byear}$$

120

No.	Equipment	Specification	PS	A	B	C	D	E	F	G	Remarks
				Purchase Co (US\$)	Economic life of equipment (year)	Total rate of Maint. cost (%)	Annual rate of owning cost (%)	Total Cost of Economic life (US\$)	Daily depreciation rate	Daily Equipment owning cost (US\$/day)	
51	Trailer	32ton	320	147,500	9	35	9	212,400	0.00037037	79	
52	"	28ton	320	137,500	9	35	9	198,000	0.00037037	73	
53	Crawler crane	50ton	180	362,500	11	60	9	612,625	0.00030303	186	
54	"	30ton	150	219,167	11	60	9	370,392	0.00030303	112	
55	"	16ton	96	140,000	11	60	9	236,600	0.00030303	72	
56	Truck crane	45ton	300+150	360,833	9	30	9	501,558	0.00037037	186	
57	"	30ton	286+150	261,667	9	30	9	363,717	0.00037037	135	
58	"	25ton	274+140	210,000	9	30	9	291,900	0.00037037	108	
59	Truck crane	16ton	230+100	152,500	9	30	9	211,975	0.00037037	79	
60	Forklift	2.5ton	50	18,667	7	35	9	26,880	0.00047619	13	
61	"	1.5ton	36	15,833	7	35	9	22,800	0.00047619	11	
62	Breaker	1300kg		39,083	6	25	7	51,590	0.00055556	29	
63	"	600-800kg		23,917	6	25	7	31,570	0.00055556	18	
64	Hand Hammer	20kg		1,567	5	30	7	2,146	0.00066667	1.43	
65	Leg Hammer	40kg		2,317	5	40	7	3,406	0.00066667	2.27	
66	"	30kg		2,058	5	40	7	3,026	0.00066667	2.02	
67	Motor Grader	2.8m	95	76,333	12	35	9	109,920	0.00027778	31	
68	Road Roller(Macadam)	10-12ton	90	64,417	12	35	9	92,760	0.00027778	26	
69	Tire Roller	8-20ton	96	65,000	12	45	9	100,100	0.00027778	28	
70	Vibration Roller	8-10ton	132	106,667	10	40	9	158,933	0.00033333	53	
71	Tampa & Ranma	60-100kg	4	1,692	5	50	7	2,656	0.00066667	1.77	
72	Truck Mixer	4.5m3	290	76,500	9	45	9	117,810	0.00037037	44	
73	Concrete pump car	45m3/h	112	95,833	8	70	9	171,542	0.000416667	71	
74	Concrete pump	45m3/h	50	118,333	8	45	9	182,233	0.000416667	76	
75	Asphalt Finisher	1.6-3.0m	37	98,333	11	40	9	146,517	0.00030303	44	
76	Asphalt Kettle	3000L		5,617	6	20	7	7,133	0.00055556	3.96	
77	Distributor	2000-3000L	100+10	55,417	11	50	9	88,113	0.00030303	27	
78	Asphalt sprayer(engine)	200L	3	1,417	5	50	7	2,224	0.00066667	1.48	
79	Line Marker	15cm 80-120kg		6,042	8	55	7	9,788	0.000416667	4.08	
80	Water tank lorry	3800L	160	38,583	9	50	9	61,348	0.00037037	23	
81	Air compressor	7.5m3/min	80	26,083	11	35	7	37,038	0.00030303	11	

APPENDIX-3 LIST OF DEPRECIABLE VALUE OF EQUIPMENT (4/4)

$$E=A(1+C/100+D/100)$$

$$F=1/12\text{month/year} \times (30-5)\text{day/month} \times \text{Byear}$$

120

No.	Equipment	Specification	PS	A	B	C	D	E	F	G	Remarks
				Purchase Co (US\$)	Economic life of equipment (year)	Total rate of Maint. cost (%)	Annual rate of owning cost (%)	Total Cost of Economic life (US\$)	Daily depreciation rate	Daily Equipment owning cost (US\$/day)	
82	Submersible pump	100mm 30m	11KW	3,125	9	150	7	8,031	0.00037037	2.97	
83	"	80mm 30m	5.5KW	1,875	9	150	7	4,819	0.00037037	1.78	
84	Submersible sand pump	100mm 25m	11.0KW	3,400	9	160	7	9,078	0.00037037	3.36	
85	Stabilizer	100t/h	44kw	154,167	10	55	9	252,833	0.000333333	84	
86	Concrete Spreader	3~7.5m	45	177,500	10	40	9	264,475	0.000333333	88	
87	Concrete Finisher	3~4.5m	26	145,833	10	45	9	224,583	0.000333333	75	
88	Concrete Planer	3~7.5m	25	218,333	10	40	9	325,317	0.000333333	108	
89	Concrete Cutter	3~7.5m	4	10,500	7	45	7	15,960	0.00047619	8	
90	Concrete Mixer	0.6m3	7.5kw	78,500	8	55	9	128,740	0.000416667	54	
91	Generator	125KVA	158	33,083	9	45	7	50,287	0.00037037	19	
92	"	100KVA	125	26,167	9	45	7	39,773	0.00037037	15	
93	"	45KVA	57	16,417	9	45	7	24,953	0.00037037	9	
94	Welder	500A		1,800	13	95	7	3,636	0.00025641	0.93	
95	"	400A		1,508	13	95	7	3,047	0.00025641	0.78	
96	"	300A		1,108	13	95	7	2,239	0.00025641	0.57	
97	" (semi-auto)	500A		4,583	11	70	7	8,113	0.00030303	2.46	
98	" "	300A		3,250	11	70	7	5,753	0.00030303	1.74	
99	Concrete Vibrator	40mm 0.7KW		983	5	55	7	1,593	0.000666667	1.06	
100	Concrete Vibrator	50mm 0.9KW		1,042	5	55	7	1,688	0.000666667	1.13	
101	Bar Bender			2,083	5	55	7	3,375	0.000666667	2.25	
102	Bar Cutter			2,083	5	55	7	3,375	0.000666667	2.25	

