

4. ITEM OF PROCESS COST

LA UNION PORT DEVELOPMENT PROJECT

1A01

Mobilization of dredging fleet and associated equipment for dredging work

From El Salvador to North America 6,222km

UNIT

FC: YEN

LC: US\$

Total estimate for 1 L.S

US\$=¥120

No.	Work Item	Unit	Quantity	Basic Price		Unit Cost		Total in YEN
				FC	LC	Amount		
						FC	LC	
1A0101	Dredging fleet	LS	1	41,599,272	116,380	41,599,272	116,380	55,564,872
1A0102	Dredging fleet	LS	1	38,920,968	98,035	38,920,968	98,035	50,685,192
	Total					80,520,240	214,415	106,250,064
				Total		80,520,240	214,415	106,250,064

LA UNION PORT DEVELOPMENT PROJECT

1A0101

Mobilization of dredging fleet and associated equipment for dredging work

From North America to El Salvador 6,222km

UNIT

FC: YEN

LC: US\$

Total estimate for 1 LS

US\$=¥120

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		Total in YEN	
				Material		Labor		Equipment		Amount			
				FC	LC	FC	LC	FC	LC	FC	LC		
1	Material												
	TSH Dredger 8000m3	dayunit	11	0	9,200					0	101,200	12,144,000	
	Sub Total									0	101,200	12,144,000	
2	Labor												
	TSH Dredger 8000m3	dayunit	11			543,600	0			5,979,600	0	5,979,600	
	Sub Total									5,979,600	0	5,979,600	
3	Equipment												
	TSH Dredger 8000m3	dayunit	11					2,744,880	0	30,193,680	0	30,193,680	
	Sub Total									30,193,680	0	30,193,680	
	Total									36,173,280	101,200	48,317,280	
Total										36,173,280	101,200	48,317,280	
Unit Price per 1 LS										36,173,280	101,200	48,317,280	
INDIRECT COST										15%	5,425,992	15,180	7,247,592
TOTAL UNIT COST											41,599,272	116,380	55,564,872

LA UNION PORT DEVELOPMENT PROJECT

1A0102

Mobilization of dredging fleet and associated equipment for dredging work
From North America to El Salvador 6,222km

UNIT

FC: YEN

LC: US\$

Total estimate for 1 LS

US\$=¥120

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		Total in YEN	
				Material		Labor		Equipment		Amount			
				FC	LC	FC	LC	FC	LC	FC	LC		
1	Material												
	Tug Boat 4000PS	dayunit	12	0	6,700					0	80,400	9,648,000	
	Submersible Pontoon 10000	dayunit	12	0	140					0	1,680	201,600	
	Sub Total									0	82,080	9,849,600	
2	Labor												
	Tug Boat 4000PS	dayunit	12			228,000	132			2,736,000	1,584	2,926,080	
	Submersible Pontoon 10000	dayunit	12			24,000	132			288,000	1,584	478,080	
	Sub Total									3,024,000	3,168	3,404,160	
3	Equipment												
	Tug Boat 4000PS	dayunit	12					963,960	0	11,567,520	0	11,567,520	
	Submersible Pontoon 10000	dayunit	12					1,604,400	0	19,252,800	0	19,252,800	
	Sub Total									30,820,320	0	30,820,320	
	Total									33,844,320	85,248	44,074,080	
Total										33,844,320	85,248	44,074,080	
Unit Price per 1 LS										33,844,320	85,248	44,074,080	
INDIRECT COST													
										15%	5,076,648	12,787	6,611,112
TOTAL UNIT COST													
										38,920,968	98,035	50,685,192	

LA UNION PORT DEVELOPMENT PROJECT

1A02

Demobilization of dredging fleet and associated equipment for dredging work
From El Salvador to North America 6,222km

UNIT

FC: YEN

LC: US\$

Total estimate for 1 LS

US\$=¥120

No.	Work Item	Unit	Quantity	Basic Price		Unit Cost		Total in YEN
				FC	LC	Amount		
						FC	LC	
1A0201	Dredging fleet	LS	1	41,599,272	116,380	41,599,272	116,380	55,564,872
1A0202	Dredging fleet	LS	1	38,920,968	98,035	38,920,968	98,035	50,685,192
	Total					80,520,240	214,415	106,250,064
				Total		80,520,240	214,415	106,250,064

LA UNION PORT DEVELOPMENT PROJECT

1A0201

Demobilization of dredging fleet and associated equipment for dredging work

From El Salvador to North America 6,222km

UNIT

FC: YEN

LC: US\$

Total estimate for 1 LS

US\$=¥120

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		Total in YEN	
				Material		Labor		Equipment		Amount			
				FC	LC	FC	LC	FC	LC	FC	LC		
1	Material												
	TSH Dredger 8000m3	dayunit	11	0	9,200					0	101,200	12,144,000	
	Sub Total									0	101,200	12,144,000	
2	Labor												
	TSH Dredger 8000m3	dayunit	11			543,600	0			5,979,600	0	5,979,600	
	Sub Total									5,979,600	0	5,979,600	
3	Equipment												
	TSH Dredger 8000m3	dayunit	11					2,744,880	0	30,193,680	0	30,193,680	
	Sub Total									30,193,680	0	30,193,680	
	Total									36,173,280	101,200	48,317,280	
Total										36,173,280	101,200	48,317,280	
Unit Price per 1 LS										36,173,280	101,200	48,317,280	
INDIRECT COST										15%	5,425,992	15,180	7,247,592
TOTAL UNIT COST											41,599,272	116,380	55,564,872

LA UNION PORT DEVELOPMENT PROJECT
1A0202

Demobilization of dredging fleet and associated equipment for dredging work
From El Salvador to North America 6,222km

UNIT
FC: YEN
LC: US\$

Total estimate for 1 LS US\$=¥120

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		Total in YEN	
				Material		Labor		Equipment		Amount			
				FC	LC	FC	LC	FC	LC	FC	LC		
1	Material												
	Tug Boat 4000PS	dayunit	12	0	6,700					0	80,400	9,648,000	
	Submersible Pontoon 10000	dayunit	12	0	140					0	1,680	201,600	
	Sub Total									0	82,080	9,849,600	
2	Labor												
	Tug Boat 4000PS	dayunit	12			228,000	132			2,736,000	1,584	2,926,080	
	Submersible Pontoon 10000	dayunit	12			24,000	132			288,000	1,584	478,080	
	Sub Total									3,024,000	3,168	3,404,160	
3	Equipment												
	Tug Boat 4000PS	dayunit	12					963,960	0	11,567,520	0	11,567,520	
	Submersible Pontoon 10000	dayunit	12					1,604,400	0	19,252,800	0	19,252,800	
	Sub Total									30,820,320	0	30,820,320	
	Total									33,844,320	85,248	44,074,080	
Total										33,844,320	85,248	44,074,080	
Unit Price per 1 LS										33,844,320	85,248	44,074,080	
INDIRECT COST										15%	5,076,648	12,787	6,611,112
TOTAL UNIT COST										38,920,968	98,035	50,685,192	

LA UNION PORT DEVELOPMENT PROJECT

1A0301 and 1A0302

Mobilization of other construction plant and equipment

From North America to El Salvador 6,222km

UNIT

FC: YEN

LC: US\$

Total estimate for 1 LS

US\$=¥120

No.	Work Item	Unit	Quantity	Basic Price		Unit Cost		Total in YEN
				FC	LC	Amount		
						FC	LC	
1A0301	Other construction Plant	LS	1	38,920,968	98,035	38,920,968	98,035	50,685,192
1A0302	Other construction Plant	LS	1	38,920,968	98,035	38,920,968	98,035	50,685,192
	Total					77,841,936	196,070	101,370,384
						77,841,936	196,070	101,370,384

LA UNION PORT DEVELOPMENT PROJECT

1A0301 and 1A0302

Mobilization of other construction plant and equipment

From North America to El Salvador 6,222km

UNIT

FC: YEN

LC: US\$

Total estimate for 1 LS

US\$=¥120

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		Total in YEN
				Material		Labor		Equipment		Amount		
				FC	LC	FC	LC	FC	LC	FC	LC	
1	Material											
	Tug Boat 4000PS	dayunit	12	0	6,700					0	80,400	9,648,000
	Submersible Pontoon 10000	dayunit	12	0	140					0	1,680	201,600
	Sub Total									0	82,080	9,849,600
2	Labor											
	Tug Boat 4000PS	dayunit	12			228,000	132			2,736,000	1,584	2,926,080
	Submersible Pontoon 10000	dayunit	12			24,000	132			288,000	1,584	478,080
	Sub Total									3,024,000	3,168	3,404,160
3	Equipment											
	Tug Boat 4000PS	dayunit	12					963,960	0	11,567,520	0	11,567,520
	Submersible Pontoon 10000	dayunit	12					1,604,400	0	19,252,800	0	19,252,800
	Sub Total									30,820,320	0	30,820,320
	Total									33,844,320	85,248	44,074,080
										Total		
										33,844,320	85,248	44,074,080
										Unit Price per 1 LS		
										33,844,320	85,248	44,074,080
	INDIRECT COST								15%	5,076,648	12,787	6,611,112
	TOTAL UNIT COST									38,920,968	98,035	50,685,192

LA UNION PORT DEVELOPMENT PROJECT

1A0401 and 1A0402

Demobilization of other construction plant and equipment

From El Salvador to North America 6,222km

UNIT

FC: YEN

LC: US\$

Total estimate for 1 LS

US\$=¥120

No.	Work Item	Unit	Quantity	Basic Price		Unit Cost		Total in YEN
				FC	LC	Amount		
						FC	LC	
1A0401	Other construction Plant	LS	1	31,136,774	78,428	31,136,774	78,428	40,548,154
1A0402	Other construction Plant	LS	1	31,136,774	78,428	31,136,774	78,428	40,548,154
	Total					62,273,549	156,856	81,096,307
				Total		62,273,549	156,856	81,096,307

LA UNION PORT DEVELOPMENT PROJECT
 1A0401 and 1A0402
 Demobilization of other construction plant and equipment
 From El Salvador to North America 6,222km

UNIT
 FC: YEN
 LC: US\$

Total estimate for 1 LS US\$=¥120

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		Total in YEN
				Material		Labor		Equipment		Amount		
				FC	LC	FC	LC	FC	LC	FC	LC	
1	Material											
	Tug Boat 4000PS	dayunit	9.6	0	6,700					0	64,320	7,718,400
	Submersible Pontoon 10000	dayunit	9.6	0	140					0	1,344	161,280
	Sub Total									0	65,664	7,879,680
2	Labor											
	Tug Boat 4000PS	dayunit	9.6			228,000	132			2,188,800	1,267	2,340,864
	Submersible Pontoon 10000	dayunit	9.6			24,000	132			230,400	1,267	382,464
	Sub Total									2,419,200	2,534	2,723,328
3	Equipment											
	Tug Boat 4000PS	dayunit	9.6					963,960	0	9,254,016	0	9,254,016
	Submersible Pontoon 10000	dayunit	9.6					1,604,400	0	15,402,240	0	15,402,240
	Sub Total									24,656,256	0	24,656,256
	Total									27,075,456	68,198	35,259,264
										Total		
										27,075,456	68,198	35,259,264
										Unit Price per 1 LS		
										27,075,456	68,198	35,259,264
	INDIRECT COST								15%	4,061,318	10,230	5,288,890
	TOTAL UNIT COST									31,136,774	78,428	40,548,154

LA UNION PORT DEVELOPMENT PROJECT

1B01

Provision of temporary jetty

UNIT

FC: YEN

LC: US\$

Total estimate for 905 m2

US\$=¥120

No	Work Item	Unit	Quantity	Basic Price		Unit Cost		Total in YEN
						Amount		
				FC	LC	FC	LC	
1B01	Provision of temporary jetty	m2	905	11,955	94.55	10,818,859	85,570	21,087,214
	Total					10,818,859	85,570	21,087,214
						10,818,859	85,570	21,087,214

LA UNION PORT DEVELOPMENT PROJECT
1B01

UNIT
FC: YEN
LC: US\$

Total estimate for 100 m2

US\$=¥120

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		Total in YEN	
				Material		Labor		Equipment		Amount			
				FC	LC	FC	LC	FC	LC	FC	LC		
1	Material												
	Rubble stone	m3	430	0	5.16					0	2,219	266,256	
	Guide pile H350x350x12(15%)	ton	4.772	7200	0					34,358	0	34,358	
	Guide beam H300x300(15%)	ton	1.43	7200	0					10,296	0	10,296	
	Steel Deck(15%)	m2	100	5250	0					525,000	0	525,000	
	Wasted steel(5%)	ton	0.31	7200	0					2,232	0	2,232	
	Bolt & Nut	pcs	48	0	1.25					0	60	7,200	
	Welding rod	kg	120	300.00	0					36,000	0	36,000	
	Oxygen	m3	24	0	0.62					0	15	1,788	
	Acetylen	kg	48	0	1.05					0	50	6,048	
	Other material	%	5	829.2	0					4,146	0	4,146	
	Fuel Crawler crane 30t	day.unit	8	0	52					0	414	49,738	
	" Generator 100KVA	day.unit	8	0	42					0	333	39,917	
	" Tug boat 250PS	day.unit	8	0	69					0	554	66,528	
	" Backhoe 1.5m3	day.unit	4	0	210					0	840	100,742	
	Sub Total									612,032	4,485	1,150,247	
2	Labor												
	Foreman	man.day	8			0	38.2			0	306	36,872	
	Labour	man.day	64			0	14.3			0	915	109,824	
	Crawler crane 30t	day.unit	8			0	33			0	264	31,680	
	Generator 100KVA	day.unit	8			0	33			0	264	31,680	
	Tug boat 250PS	day.unit	8			0	166			0	1,328	159,360	
	Pontoon 500ton	day.unit	8			0	66			0	528	63,360	
	Backhoe 1.5m3	day.unit	4			0	33			0	132	15,840	
	Sub Total									0	3,737	448,416	
3	Equipment												
	Crawler crane 30t	day.unit	8				13,440	0		107,520	0	107,520	
	Generator 100KVA	day.unit	8				1,800	0		14,400	0	14,400	
	Vibrohammer	day.unit	8				1,800	0		14,400	0	14,400	
	Tug boat 250PS	day.unit	8				11,760	0		94,080	0	94,080	
	Pontoon 500ton	day.unit	8				14,400	0		115,200	0	115,200	
	Welder 500A	day.unit	8				111.6	0		893	0	893	
	Other equipment	%	1				3,240	0		3,240	0	3,240	
	Backhoe 1.5m3	day.unit	4				19,440	0		77,760	0	77,760	
	Sub Total									427,493	0	427,493	
Total										1,039,525	8,222	2,026,156	
Unit Price per No.										10,395.25	82.22	20,261.56	
INDIRECT COST										15%	1,559.29	12.33	3,039.23
TOTAL										11,955	94.55	23,301	

LA UNION PORT DEVELOPMENT PROJECT

1B02

Demolition and clearance of temporary jetty

UNIT

FC: YEN

LC: US\$

Total estimate for 905 m2

US\$=¥120

No	Work Item	Unit	Quantity	Basic Price		Unit Cost		Total in YEN
				Amount		FC	LC	
				FC	LC	FC	LC	
1B02	Demolition and clearance of temporary jetty	m2	905	4.479	59.02	4,053,929	53,413	10,463,534
	Total					4,053,929	53,413	10,463,534

LA UNION PORT DEVELOPMENT PROJECT

1B02

Demolition and clearance of temporary jetty

UNIT

FC: YEN

LC: US\$

Total estimate for 100 m2

US\$=¥120

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		Total in YEN	
				Material		Labor		Equipment		Amount			
				FC	LC	FC	LC	FC	LC	FC	LC		
1	Material												
	Oxygen	m3	24	0	0.62					0	15	1,786	
	Acetylen	kg	48	0	1.05					0	50	6,048	
	Fuel Crawler crane 30t	day.unit	8	0	52					0	414	49,738	
	" Tug boat 250PS	day.unit	8	0	69					0	554	66,528	
	" Backhoe 1.5m3	day.unit	3	0	210					0	630	75,557	
	Sub Total									0	1,664	199,656	
2	Labor												
	Foreman	man.day	8			0	36.2			0	306	36,672	
	Labour	man.day	66			0	14.3			0	944	113,256	
	Crawler crane 30t	day.unit	8			0	33			0	264	31,680	
	Tug boat 250PS	day.unit	8			0	166			0	1,328	159,360	
	Pontoon 500ton	day.unit	8			0	66			0	528	63,360	
	Backhoe 1.5m3	day.unit	3			0	33			0	99	11,880	
	Sub Total									0	3,468	416,208	
3	Equipment												
	Crawler crane 30t	day.unit	8					13,440	0	107,520	0	107,520	
	Vibrohammer	day.unit	8					1,800	0	14,400	0	14,400	
	Tug boat 250PS	day.unit	8					11,760	0	94,080	0	94,080	
	Pontoon 500ton	day.unit	8					14,400	0	115,200	0	115,200	
	Backhoe 1.5m3	day.unit	3					19,440	0	58,320	0	58,320	
	Sub Total									389,520	0	389,520	
Total										389,520	5,132	1,005,384	
Unit Price per No.										3,895.20	51.32	10,053.84	
INDIRECT COST										15%	584.28	7.70	1,508.08
TOTAL										4,479	59.02	11,562	

LA UNION PORT DEVELOPMENT PROJECT

1B03

Shooting of Digital Video Films of the Project

UNIT

FC: YEN

LC: US\$

Total estimate for 36 Mon.

US\$=¥120

No	Work Item	Unit	Quantity	Basic Price		Unit Cost		Total in YEN
				Amount		Amount		
				FC	LC	FC	LC	
1	Video tape	Mon.	36	0	96.00	0	3,456	414,720
3	Video camera	Mon.	36	3,300	0.00	118,800	0	118,800
	Total					118,800	3,456.00	533,520
				Unit Price per Mon.		3,300	96	14,820

LA UNION PORT DEVELOPMENT PROJECT

1B04

Compilation and submission of digital video documentary film of the project

UNIT

FC: YEN

LC: US\$

Total estimate for 1 LS

US\$=¥120

No	Work Item	Unit	Quantity	Basic Price		Unit Cost		Total in YEN
				Amount		FC	LC	
				FC	LC	FC	LC	
1	Compilation at El Salvador	LS	1	0	5,400.00	0	5,400	648,000
Total				0		0	5,400	648,000

LA UNION PORT DEVELOPMENT PROJECT

1C01

Renovation of CEPA's temporary office

UNIT

FC: YEN

LC: US\$

Total estimate for 400 m2

US\$=¥120

No	Work Item	Unit	Quantity	Basic Price		Unit Cost		Total in YEN
						Amount		
				FC	LC	FC	LC	
1	Renovation of CEPA's temporary office	m2	400	0	80	0	32,000	3,840,000
	Total			0		0	32,000	3,840,000
				Unit Price per m2		0	80	9,600

LA UNION PORT DEVELOPMENT PROJECT

1C02

Maintenance for CEPA's temporary office

UNIT

FC: YEN

LC: US\$

Total estimate for 8 Mon.

US\$=¥120

No	Work Item	Unit	Quantity	Basic Price		Unit Cost		Total in YEN
				Amount		Amount		
				FC	LC	FC	LC	
1	Water, electric and telephon fees	Mon.	8	0	1,000.00	0	8,000	960,000
2	Office consumable goods	Mon.	8	0	500.00	0	4,000	480,000
3	Other expense	Mon.	8	0	500.00	0	4,000	480,000
	Total					0	16,000.00	1,920,000.00
						0	2,000	240,000

LA UNION PORT DEVELOPMENT PROJECT

1C03

Construction and furnishing office for the Employer/Engineer

UNIT

FC: YEN

LC: US\$

Total estimate for 1 LS

US\$=¥120

No	Work Item	Unit	Quantity	Basic Price		Unit Cost		Total in YEN
				Amount		Amount		
				FC	LC	FC	LC	
1	Construction office	m2	720	0	300.00	0	216,000	25,920,000
2	Furnishing	LS	1	0	131,485.00	0	131,485	15,778,200
Total						0	347,485	41,698,200

LA UNION PORT DEVELOPMENT PROJECT

1C04

Maintenance for the office of the Employer and the Engineer

UNIT

FC: YEN

LC: US\$

Total estimate for 28 Mon.

US\$=¥120

No	Work Item	Unit	Quantity	Basic Price		Unit Cost		Total in YEN
						Amount		
				FC	LC	FC	LC	
1	Water, electric and telephon fees	Mon.	28	0	1,000.00	0	28,000	3,360,000
2	Office consumable goods	Mon.	28	0	1,000.00	0	28,000	3,360,000
3	Other expense	Mon.	28	0	500.00	0	14,000	1,680,000
	Total					0	70,000.00	8,400,000
				Unit Price per Mon.		0	2,500	300,000

LA UNION PORT DEVELOPMENT PROJECT

1C05

Renovation before hand over for the office of the Employer/Engineer

UNIT

FC: YEN

LC: US\$

Total estimate for 720 m2

US\$=¥120

No	Work Item	Unit	Quantity	Basic Price		Unit Cost		Total in YEN
				Amount		Amount		
				FC	LC	FC	LC	
1	Renovation for the office of Employer/Engineer	m2	720	0	27	0	19,440	2,332,800
	Total					0	19,440	2,332,800
				Unit Price per m2		0	27	3,240

LA UNION PORT DEVELOPMENT PROJECT

1C06

Renovation of laboratory

UNIT

FC: YEN

LC: US\$

Total estimate for 1 L.S

US\$=¥120

No	Work Item	Unit	Quantity	Basic Price		Unit Cost		Total in YEN
				Amount		Amount		
				FC	LC	FC	LC	
1	Renovation of laboratory	LS	1	0	1,600	0	1,600	192,000
Total						0	1,600	192,000

LA UNION PORT DEVELOPMENT PROJECT

1C07

Provision and maintenance of laboratory equipment

UNIT

FC: YEN

LC: US\$

Total estimate for 36 Mon.

US\$=¥120

No	Work Item	Unit	Quantity	Basic Price		Unit Cost		Total in YEN
				Amount		Amount		
				FC	LC	FC	LC	
1	Equipment	Mon.	36	0	224.00	0	8,064	967,680
2	Laboratory Engineer	Mon.	36	0	500.00	0	18,000	2,160,000
3	Laboratory assistant labor	Mon.	36	0	900.00	0	32,400	3,888,000
4	Others	Mon.	36	0	26	0	936	112,320
	Total					0	59,400	7,128,000
				Unit Price per Mon.		0	1,650	198,000

LA UNION PORT DEVELOPMENT PROJECT

1C08

Provision, maintenance and services of boats for the Engineer

UNIT

FC: YEN

LC: US\$

Total estimate for 36 Mon.

US\$=¥120

No	Work Item	Unit	Quantity	Basic Price		Unit Cost		Total in YEN
				Amount		Amount		
				FC	LC	FC	LC	
1	Boats	Mon.	36	0	800.00	0	28,800	3,456,000
2	High class crew	Mon.	36	0	700.00	0	25,200	3,024,000
3	Low class crew	Mon.	36	0	900.00	0	32,400	3,888,000
	Total					0	86,400	10,368,000
				Unit Price per Mon.		0	2,400	288,000

LA UNION PORT DEVELOPMENT PROJECT

1C09, 1C10, 1C11 and 1C12

Provision of vehicles

UNIT

FC: YEN

LC: US\$

Total estimate for 4 Nos.

US\$=¥120

No	Work Item	Unit	Quantity	Basic Price		Unit Cost		Total in YEN
						Amount		
				FC	LC	FC	LC	
1C09	Provision of vehicle Type-A	Nos.	1	0	34,400.00	0	34,400	4,128,000
1C09	Above for insurance and others	Nos.	1	0	3,300.00	0	3,300	396,000
1C10	Provision of vehicle Type-B	Nos.	2	0	23,900.00	0	47,800	5,736,000
1C10	Above for insurance and others	Nos.	2	0	3,040.00	0	6,080	729,600
1C11	Provision of vehicle Type-C	Nos.	6	0	32,700.00	0	196,200	23,544,000
1C11	Above for insurance and others	Nos.	6	0	3,850.00	0	23,100	2,772,000
1C12	Provision of vehicle Type-D	Nos.	4	0	27,200.00	0	108,800	13,056,000
1C12	Above for insurance and others	Nos.	4	0	3,350.00	0	13,400	1,608,000
Total						0	433,080	51,969,600

LA UNION PORT DEVELOPMENT PROJECT

1C13

Maintenance of vehicles for Type-A,B,C and D

UNIT

FC: YEN

LC: US\$

Total estimate for 36 Mon.

US\$=¥120

No	Work Item	Unit	Quantity	Basic Price		Unit Cost		Total in YEN
						Amount		
				FC	LC	FC	LC	
1	Fuel and lubricant	Mon.	36	0	1,989.00	0	71,604	8,592,480
2	Driver	Mon.	36	0	1,625.00	0	58,500	7,020,000
	Total					0	130,104	15,612,480
Total						0	3,614	433,680

LA UNION PORT DEVELOPMENT PROJECT

1C14

Provision and maintenance of Engineer's survey equipment

UNIT

FC: YEN

LC: US\$

Total estimate for 36 Mon.

US\$=¥120

No	Work Item	Unit	Quantity	Basic Price		Unit Cost		Total in YEN
						Amount		
				FC	LC	FC	LC	
1	Equipment	Mon.	36	0	775.00	0	27,900	3,348,000
2	Laboratory Engineer	Mon.	36	0	650.00	0	23,400	2,808,000
3	Laboratory assistant labor	Mon.	36	0	900.00	0	32,400	3,888,000
	Total					0	83,700	10,044,000
				Total		0	2,325	279,000

LA UNION PORT DEVELOPMENT PROJECT

1D01

UNIT

FC: YEN

LC: US\$

Demolition and clearance of the building foundation and others in the project site

Total estimate for 18000 m3

US\$=¥120

No	Work Item	Unit	Quantity	Basic Price		Unit Cost		Total in YEN
				Amount		FC	LC	
				FC	LC			
1	Demolition and clearance	m3	18,000	118	2.11	2,124,000	37,980	6,681,600
	Total					2,124,000	37,980	6,681,600
				Unit Price per m3		118	2	371

LA UNION PORT DEVELOPMENT PROJECT

1D02

UNIT

FC: YEN

LC: US\$

Total estimate for 1 LS

US\$=¥120

Demolition and clearance of the existing berth and others in the project site

No	Work Item	Unit	Quantity	Basic Price		Unit Cost		Total in YEN
				Amount		Amount		
				FC	LC	FC	LC	
1	Demolition and clearance of land side	m3	1,510	118	2,11	178,180	3,186	560,512
2	Demolition and clearance of sea side	LS	1	394,594	5,572.44	394,594	5,572	1,063,287
Total						572,774	8,759	1,623,799

LA UNION PORT DEVELOPMENT PROJECT

1D03

UNIT

FC: YEN

LC: US\$

Total estimate for 1000 m3

US\$=¥120

Demolition and clearance of the tree and others in the project site

No	Work Item	Unit	Quantity	Basic Price		Unit Cost		Total in YEN
				Amount		FC	LC	
				FC	LC			
1	Demolition and clearance of the tree and others	m3	1,000	79	1.45	79,000	1,450	253,000
	Total					79,000	1,450	253,000
				Total		79	1	253

LA UNION PORT DEVELOPMENT PROJECT
2A01

UNIT
FC: YEN
LC: US\$

Outer Channel Dredging (-14.5) Offshore Dumping

Total estimate for 659750m3

US\$=¥120

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		Total in YEN	
				Material		Labor		Equipment		Amount			
				FC	LC	FC	LC	FC	LC	FC	LC		
1	Material												
	TSH Dredger 8000m3	dayunit	25	0	9,200					0	229,990	27,598,800	
	Working Boat 480PS	"	25	0	140					0	3,500	419,970	
	Passenger Boat 100PS	"	25	0	40					0	991	1,111	
	Survey Boat 70PS	"	25	0	20					0	510	61,212	
	Sub Total									0	234,991	28,081,093	
2	Labor												
	TSH Dredger 8000m3	dayunit	25			1,087,200	0			27,180,000	0	27,180,000	
	Working Boat 480PS	"	25			24,000	66			600,000	1,650	798,000	
	Passenger Boat 100PS	"	25			0	66			0	1,650	198,000	
	Survey Boat 70PS	"	25			0	132			0	3,300	396,000	
	Sub Total									27,780,000	6,600	28,572,000	
3	Equipment												
	TSH Dredger 8000m3	dayunit	25					2,744,880	0	68,622,000	0	68,622,000	
	Working Boat 480PS	"	25					142,920	0	3,573,000	0	3,573,000	
	Passenger Boat 100PS	"	25					3,480	0	87,000	0	87,000	
	Survey Boat 70PS	"	25					2,280	0	57,000	0	57,000	
	Sub Total									72,339,000	0	72,339,000	
	Total									100,119,000	241,591	128,992,093	
Total										100,119,000	241,591	128,992,093	
Unit Price per m3										151.75	0.37	195.52	
INDIRECT COST										15%	22.76	0.05	29.33
TOTAL UNIT COST										175	0.42	225	

LA UNION PORT DEVELOPMENT PROJECT
2A02

UNIT
FC: YEN
LC: US\$

Total estimate for 609,000m3

US\$=¥120

Outer Channel Dredging (-14.5) Onshore Dumping

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		Total in YEN	
				Material		Labor		Equipment		Amount			
				FC	LC	FC	LC	FC	LC	FC	LC		
1	Material												
	Bolt and Nut	Nes	800	0	0.55					0	440	52,800	
	Vinyl Sheet	m2	1000	0	0.8					0	800	96,000	
	Over Flow	LS	1	0	11,500					0	11500	1,380,000	
	Silt Protector	LS	1	0	11,900					0	11900	1,428,000	
	TSH Dredger 8000m3	dayunit	25	0	9,200					0	229,990	27,598,800	
	Working Boat 480PS	"	25	0	140					0	3,500	419,970	
	Passenger Boat 100PS	"	25	0	40					0	991	1,111	
	Survey Boat 70PS	"	25	0	20					0	510	61,212	
	Bulldozer 21t	"	50	0	187					0	8,328	999,108	
	Backhoe 1.6m3	"	25	0	244					0	8,093	731,148	
	Generator 45KVA	"	25	0	40					0	1,005	120,582	
	Sub Total									0	275,055	32,888,731	
2	Labor												
	Foremen	manday	75			0	38.2			0	2865	343,800	
	Labor	manday	300			0	14.3			0	4290	514,800	
	TSH Dredger 8000m3	dayunit	25			1,087,200	0			27,180,000	0	27,180,000	
	Working Boat 480PS	"	25			24,000	66			600,000	1,650	798,000	
	Passenger Boat 100PS	"	25			0	66			0	1,650	198,000	
	Survey Boat 70PS	"	25			0	132			0	3,300	396,000	
	Bulldozer 21t	"	50			0	33			0	1,650	198,000	
	Backhoe 1.6m3	"	25			0	33			0	825	99,000	
	Generator 45KVA	"	25			0	33			0	825	99,000	
	Sub Total									27,780,000	17,055	29,826,600	
3	Equipment												
	TSH Dredger 8000m3	dayunit	25					2,744,880	0	68,822,000	0	68,822,000	
	Working Boat 480PS	"	25					142,920	0	3,573,000	0	3,573,000	
	Passenger Boat 100PS	"	25					3,480	0	87,000	0	87,000	
	Survey Boat 70PS	"	25					2,280	0	57,000	0	57,000	
	Bulldozer 21t	"	50					12,360	0	618,000	0	618,000	
	Backhoe 1.6m3	"	25					19,440	0	488,000	0	488,000	
	Generator 45KVA	"	25					1,080	0	27,000	0	27,000	
	Floater 5m x 1500mm	Nos	800					1,119.60	0	671,760	0	671,760	
	Steel Pipe 6m x 800mm	Nos	2,400					285.60	0	685,440	0	685,440	
	Ruber Sleeve 1.7m x 800mm	Nos	600					829.20	0	497,520	0	497,520	
	Curve Pipe	Nos	60					273.60	0	16,416	0	16,416	
	Sub Total									75,341,136	0	75,341,136	
	Total									103,121,136	292,110	138,056,467	
Total											103,121,136	292,110	138,056,467
Unit Price per m3											169.33	0.48	226.69
INDIRECT COST											15%	25.40	34.00
TOTAL UNIT COST											195	0.55	261

LA UNION PORT DEVELOPMENT PROJECT

2B0404 and 2C0404

Concrete Work for Caisson Production

UNIT

FC: YEN

LC: US\$

Total estimate for 1118m3

US\$=¥120

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		Total in YEN	
				Material		Labor		Equipment		Amount			
				FC	LC	FC	LC	FC	LC	FC	LC		
1	Material												
	Ready mixed concrete	cu.m	1118	0	70.00					0	78,260	9,391,200	
	Wasted concrete(2.5%)	cu.m	22	0	70.00					0	1,565	187,824	
	Metal form	sq.m	5818	0	6.50					0	37,817	4,538,040	
	Other materials	%	2	0	756					0	756	90,761	
	Fuel Generator 100KVA	dayunit	12	0	44					0	531	63,677	
	" Truck mixer 4.5m3	dayunit	30	0	53					0	1,594	191,268	
	" Truck crane 16t	dayunit	24	0	31					0	752	90,288	
	Sub Total									0	121,275	14,553,058	
2	Labor												
	Foreman	man.day	30			0	38.20			0	1,146	137,520	
	Labor	man.day	600			0	14.30			0	8,580	1,029,600	
	Generator 100KVA	man.day	12			0	33			0	396	47,520	
	Truck crane 16t	man.day	24			0	33			0	792	95,040	
	Truck mixer 4.5m3	man.day	30			0	33			0	990	118,800	
	Concrete pump 45m3/h	man.day	6			0	66			0	396	47,520	
	Sub Total									0	11,904	1,476,000	
3	Equipment												
	Generator 100KVA	dayunit	12					1,800	0	21,600	0	21,600	
	Vibrator	dayunit	24					120	0	2,880	0	2,880	
	Truck crane 16t	dayunit	24					9,480	0	227,520	0	227,520	
	Concrete pump 45m3/h	dayunit	6					9,120	0	54,720	0	54,720	
	Truck mixer 4.5m3	dayunit	30					5,280	0	158,400	0	158,400	
	Sub Total									465,120	0	465,120	
Total										465,120	133,179	16,494,178	
Unit Price per m3										416.03	119.12	14753.29	
INDIRECT COST										15%	62.40	17.87	2212.99
TOTAL										478	136.99	16,966	

LA UNION PORT DEVELOPMENT PROJECT

2B05 and 2C05

Temporary Anchoring of Caisson

UNIT

FC: YEN

LC: US\$

Total estimate for 2Nos

US\$=¥120

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		Total in YEN	
				Material		Labor		Equipment		Amount			
				FC	LC	FC	LC	FC	LC	FC	LC		
1	Material												
	Floating Dock 6000t	day	1	0	110					0	110	13,194	
	Tug boat 250PS	day	2	0	70					0	141	16,872	
	Anchor boat 400PS	day	1	0	120					0	120	14,386	
	Generator 100KVA	day	2	0	45					0	90	10,853	
	Others	L.S.	1	0	230					0	230	27,652	
	Sub Total									0	691	82,957	
2	Labor												
	Foreman	man.day	2			0	38.2			0	76	9168	
	Labour	man.day	8			0	14.3			0	114	13728	
	Floating Dock	day	1			114,000	66			114,000	66	121,920	
	Tug boat 250PS	day	2			12,000	66			24,000	132	39,840	
	Anchor boat 400PS	day	1			24,000	66			24,000	66	31,920	
	Generator 100KVA	day	2			0	33			0	66	7,920	
	Sub Total									162,000	521	224,496	
3	Equipment												
	Floating Dock	day	1					367,800	0	367,800	0	367,800	
	Tug boat 250PS	day	2					11,760	0	23,520	0	23,520	
	Anchor boat 400PS	day	1					91,200	0	91,200	0	91,200	
	Generator 100KVA	dayunit	2					1,800	0	3,600	0	3,600	
	Submersible pump 11kw	dayunit	8					2.97	0	24	0	24	
	Sub Total									486,144	0	486,144	
Total										648,144	1,212	793,595	
Unit Price per No.										324,072	606.05	396,798	
INDIRECT COST										15%	48,611	90.91	59,520
TOTAL										372,683	696.96	456,318	

LA UNION PORT DEVELOPMENT PROJECT

2B06 and 2C06

Placing of Caisson

UNIT

FC: YEN

LC: US\$

Total estimate for 1No.

US\$=¥120

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		Total in YEN	
				Material		Labor		Equipment		Amount			
				FC	LC	FC	LC	FC	LC	FC	LC		
1	Material												
	Tug boat 250PS	day	2	0	70					0	141	16,872	
	Anchor boat 400PS	day	1	0	120					0	120	14,386	
	Generator 100KVA	day	1	0	45					0	45	5,426	
	Others	L.S.	1	0	153					0	153	18,342	
	Sub Total									0	459	55,026	
2	Labor												
	High class crew	manday	2			45000	0			90000	0	90000	
	Middle class crew	manday	2			12000	0			24000	0	24000	
	Foreman	man.day	1			0	38.2			0	38	4584	
	Labor	man.day	4			0	14.3			0	57	6864	
	Pontoon 1000t	day	1			0	66			0	66	7,920	
	Tug boat 250PS	day	2			12,000	66			24,000	132	39,840	
	Anchor boat 400PS	day	1			24,000	66			24,000	66	31,920	
	Generator 100KVA	day	1			0	33			0	33	3,960	
	Sub Total									162,000	392	209,088	
3	Equipment												
	Pontoon 1000t	day	1					25,080	0	25,080	0	25,080	
	Tug boat 250PS	day	2					11,760	0	23,520	0	23,520	
	Anchor boat 400PS	day	1					91,200	0	91,200	0	91,200	
	Generator 100KVA	dayunit	1					1,800	0	1,800	0	1,800	
	Submersible pump 11kw	dayunit	4					360	0	1,440	0	1,440	
	Sub Total									143,040	0	143,040	
Total										305,040	851	407,154	
Unit Price per No.										305040	851	407154	
INDIRECT COST										15%	45756.00	127.64	61073.10
TOTAL										350,796	978.59	468,227	

LA UNION PORT DEVELOPMENT PROJECT
 2B07 and 2C07
 Sand Filling into CAISSON

UNIT
 FC: YEN
 LC: US\$

Totalestimate for 4975m3 US\$=¥120

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		Total in YEN	
				Material		Labor		Equipment		Amount			
				FC	LC	FC	LC	FC	LC	FC	LC		
1	Material												
	Sand	m3	4975	0	4.00					0	19,900	2,388,000	
	Wasted Sand(10%)	m3	498	0	4.00					0	1,992	239,040	
	Crushed stone	m3	200	0	8.40					0	1,680	201,600	
	Self-propelled Hopper B.850	day	4	0	620					0	2,480	297,590	
	Others	L.S.	1	0	0					0	0	0	
	Sub Total									0	26,052	3,126,230	
2	Labor												
	Foreman	man.day	4			0	38.2			0	153	18336	
	Labor	man.day	16			0	14.3			0	229	27456	
	Self-propelled Hopper B.850	day	4			93,000	132			372,000	528	435,360	
	Sub Total									372,000	910	481,152	
3	Equipment												
	Self-propelled Hopper B.850	day	4					288,720	0	1,154,880	0	1,154,880	
	Sub Total									1,154,880	0	1,154,880	
Total										1,526,880	26,962	4,762,262	
Unit Price per m3										306.91	5.42	957.24	
INDIRECT COST										15%	46.04	0.81	143.59
TOTAL										353	6.23	1,101	

LA UNION PORT DEVELOPMENT PROJECT

2B08 and 2C08

Covere Concrete of Caisson

UNIT

FC: YEN

LC: US\$

Total estimate for 164m3

US\$=¥120

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		Total in YEN	
				Material		Labor		Equipment		Amount			
				FC	LC	FC	LC	FC	LC	FC	LC		
1	Material												
	Ready mixed concrete	m3	164	0	65.00					0	10,660	1,279,200	
	Wasted concrete(2.5%)	m3	4.1	0	65.00					0	267	31,980	
	Other material	%	2	0	218.53					0	219	26,224	
	Fuel Concrete pump	day	1.5	0	0					0	0	0	
	" Generator 125KVA	day	1.5	0	45					0	67	8,080	
	" Truck crane 16t	day	1.5	0	30					0	45	5,364	
	Sub Total									0	11,257	1,350,848	
2	Labor												
	Foreman	man.day	1.5			0	38.20			0	57	6,876	
	Labor	man.day	15			0	14.30			0	215	25,740	
	Truck crane 16t	man.day	1.5			0	33			0	50	5,940	
	Generator 125KVA	man.day	1.5			0	33			0	50	5,940	
	Concrete pump 45m3	man.day	1.5			0	33			0	50	5,940	
	Sub Total									0	321	50,436	
3	Equipment												
	Generator 125KVA	day	1.5					2,280	0	3,420	0	3,420	
	Truck crane 16t	day	1.5					9,480	0	14,220	0	14,220	
	Concrete pump 45m3	day	1.5					9,120	0	13,680	0	13,680	
	Vibrator	dayunit	6					120	0	720	0	720	
	Sub Total									32,040	0	32,040	
Total										32,040	11,578	1,433,324	
Unit Price per m3										195.37	70.60	8,739.78	
INDIRECT COST										15%	29.30	10.59	1,310.97
TOTAL										225	81.19	10,051	

LA UNION PORT DEVELOPMENT PROJECT
2B09 and 2C09
Coping concrete

UNIT
FC: YEN
LC: US\$

Total estimate for 278m3(20m)

US\$=¥120

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		Total in YEN	
				Material		Labor		Equipment		Amount			
				FC	LC	FC	LC	FC	LC	FC	LC		
1	Material												
	Ready mixed concrete	cu.m	278	0	70.00					0	19,460	2,335,200	
	Wasted concrete(2.5%)	cu.m	7.0	0	70.00					0	487	58,380	
	Elas tigh board	sq.m	13.2	0	8.33					0	110	13,145	
	Reinforcement	ton	18.7	0	360					0	6,732	807,840	
	Wasted reinforcement(2%)	ton	0.4	0	360					0	135	16,157	
	Metal form(10%)	sq.m	234	0	3.83					0	896	107,546	
	Other material	%	2	0	524					0	524	62,861	
	Corner protection	m	20	0	23					0	460	0	
	Fuel Concrete pump	day	5	0	0					0	0	0	
	" Generator 125KVA	day	5	0	45					0	224	26,934	
	" Truck crane 16t	day	5	0	30					0	149	17,879	
	Sub Total									0	29,176	3,445,942	
2	Labor												
	Foreman	man.day	5			0	38.20			0	191	22,920	
	Labor	man.day	50			0	14.30			0	715	85,800	
	Truck crane 16t	man.day	5			0	33			0	165	19,800	
	Generator 125KVA	man.day	5			0	33			0	165	19,800	
	Concrete pump 45m3	man.day	5			0	33			0	165	19,800	
	Sub Total									0	1,071	168,120	
3	Equipment												
	Generator 125KVA	day	5					2,280	0	11,400	0	11,400	
	Truck crane 16t	day	5					9,480	0	47,400	0	47,400	
	Concrete pump 45m3	day	5					9,120	0	45,600	0	45,600	
	Vibrator	dayunit	20					120	0	2,400	0	2,400	
	Sub Total									106,800	0	106,800	
Total										106,800	30,247	3,720,862	
Unit Price per m3										384.17	108.80	13,384.40	
INDIRECT COST										15%	57.63	16.32	2,007.66
TOTAL										442	125.12	15,392	

LA UNION PORT DEVELOPMENT PROJECT

2B10 and 2C10

Apron Concrete Pavement

UNIT

FC: YEN

LC: US\$

Total estimate for 180 m3

US\$=¥120

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		Total in YEN	
				Material		Labor		Equipment		Amount			
				FC	LC	FC	LC	FC	LC	FC	LC		
1	Material												
	Ready mixed concrete	cu.m	180	0	70.00					0	12,600	1,512,000	
	Wasted concrete(2.5%)	cu.m	4.55	0	70.00					0	319	38,220	
	Other material	%	2	0	258.37					0	258	31,004	
	Elasti board	sq.m	63	0	8.33					0	525	62,975	
	Fuel Concrete pump	day	2.0	0	0					0	0	0	
	" Generator 125KVA	day	2.0	0	45					0	90	10,774	
	" Truck crane 16t	day	2.0	0	30					0	60	7,152	
	Sub Total									0	13,851	1,662,125	
2	Labor												
	Foreman	man.day	2			0	38.20			0	76	9,168	
	Labor	man.day	6			0	14.30			0	86	10,296	
	Truck crane 16t	man.day	2			0	33			0	66	7,920	
	Generator 125KVA	man.day	2			0	33			0	66	7,920	
	Concrete pump 45m3	man.day	2			0	33			0	66	7,920	
	Sub Total									0	228	43,224	
3	Equipment												
	Generator 125KVA	day	2					2,280	0	4,560	0	4,560	
	Truck crane 16t	day	2					9,480	0	18,960	0	18,960	
	Concrete pump 45m3	day	2					9,120	0	18,240	0	18,240	
	Vibrator	dayunit	6					120	0	720	0	720	
	Sub Total									42,480	0	42,480	
Total										42,480	14,079	1,747,829	
Unit Price per m3										236	76.22	9,710	
INDIRECT COST										15%	35	11.73	1,457
TOTAL										271	89.95	11,167	

LA UNION PORT DEVELOPMENT PROJECT

2B11 and 2C11

Sand Protection Sheet

UNIT

FC: YEN

LC: US\$

Total estimate for 120m

US\$=¥120

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		Total in YEN	
				Material		Labor		Equipment		Amount			
				FC	LC	FC	LC	FC	LC	FC	LC		
1	Material												
	Protection sheet	m	120	540	0.00					64800	0	64,800	
	Steel plate	kg	144	5280	0.00					760320	0	760,320	
	Drive, pin	nos.	480	9.6	0.00					4,608	0	4,608	
	Fuel Crawler crane 16t	day	2.00	0	30					0	61	7,296	
	Tug boat 250PS	day	0.10	0	140					0	14	1,675	
	Sub Total									829,728	61	838,699	
2	Labor												
	Diver	man.day	1			0	100.00			0	100	12,000	
	Labour	man.day	2			0	14.30			0	29	3,432	
	Crawler crane 16t	day.unit	1			0	33			0	33	3,960	
	Tug boat 250PS	day.unit	0.1			0	166			0	17	1,992	
	Sub Total									0	178	21,384	
3	Equipment												
	Crawler crane 16t	day.unit	1					8,640	0	8,640	0	8,640	
	Pontoon 500t	day.unit	1					14,400	0	14,400	0	14,400	
	Tug boat 250PS	day.unit	0.1					11,760	0	1,176	0	1,176	
	Sub Total									24,216	0	24,216	
Total										853,944	239	884,299	
Unit Price per m										7116.20	1.99	7369.16	
INDIRECT COST										15%	1067.43	0.30	1105.37
TOTAL										8,184	2.29	8,475	

LA UNION PORT DEVELOPMENT PROJECT
2B12 and 2C12
Backfilling behind CAISSON

UNIT
FC: YEN
LC: US\$

Total estimate for 4538m3 US\$=¥120

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		Total in YEN		
				Material		Labor		Equipment		Amount				
				FC	LC	FC	LC	FC	LC	FC	LC			
1	Material													
	Rubble stone	m3	4,538	0	5.16					0	23,416	2,809,930		
	Wasted rubble stone(25%)	m3	1,135	0	5.16					0	5,854	702,482		
	Geotextile	m2	620	0	1.47					0	911	109,368		
	Fuel Tug boat 450PS	day	19.0	0	130					0	2,465	295,807		
	" Backhoe 1.2m3	day	19.0	0	180					0	3,411	409,351		
	" Working boat	day	19.0	0	60					0	1,148	137,803		
	Sub Total									0	37,206	4,464,742		
2	Labor													
	Foreman	manday	19.0			0	38.2			0	726	87,096		
	Labor	manday	76.0			0	14.3			0	1,087	130,416		
	Diver	manday	38.0			0	100			0	3,800	456,000		
	Tug boat 450PS	day	19.0			0	166			0	3,154	378,480		
	Pontoon 500t	dayunit	38.0			0	66			0	2,508	300,960		
	Backhoe 1.2m3	day	19.0			0	33			0	627	75,240		
	Working boat	day	19.0			0	66			0	1,254	150,480		
	Sub Total									0	13,156	1,578,672		
3	Equipment													
	Tug boat 450PS	day	19.00					19,320	0	367,080	0	367,080		
	Pontoon 500t	day.unit	38.00					14,400	0	547,200	0	547,200		
	Backhoe 1.2m3	day	19.00					15,240	0	289,560	0	289,560		
	Working boat	day	19.00					3,480	0	66,120	0	66,120		
	Sub Total									1,269,960	0	1,269,960		
Total										1,269,960	50,362	7,313,374		
Unit Price per m3										279.85	11.10	1611.59		
INDIRECT COST											15%	41.98	1.66	241.74
TOTAL										322	12.76	1,853		

LA UNION PORT DEVELOPMENT PROJECT
 2B13 and 2C13
 Driving of Steel Pipe Pile for Crane Rail Foundation

UNIT
 FC: YEN
 LC: US\$

Total estimate for 1No. US\$=¥120

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		Total in YEN
				Material		Others		Equipment		Amount		
				FC	LC	FC	LC	FC	LC	FC	LC	
2B1301 2C1301	SUPPLY AND TRANSPORT STEEL PIPE PILE									569,774	0.00	569,774
2B1302 2C1302	FABICATION OF PILING									1,255	29.67	4,815
2B1303 2C1303	INSTALLATION AND REMOVAL OF GUID BEAM									28,296	245.11	57,709
2B1304 2C1304	DRIVING STEEL PIPE PILE									53,924	150.30	71,960
2B1305 2C1305	STEEL PIPE PILE REINFORCEMENT OF EDGE									6,257	16.19	8,200
	Total									659,506	441.27	712,458

LA UNION PORT DEVELOPMENT PROJECT
2B1301 and 2C1301
Supply and Transport Steel Pipe Pile

UNIT
FC: YEN
LC: US\$

Total estimate for 10 Nos. US\$=¥120

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		Total in YEN	
				Material		Others		Equipment		Amount			
				FC	LC	FC	LC	FC	LC	FC	LC		
1	Material												
	Steel Pipe Pile	ton	47.50	48,000	0					2,280,000	0	2,280,000	
	Other material	%	1	22,800	0					22,800	0	22,800	
	Sub Total									2,302,800	0	2,302,800	
2	Others												
	Loading & Unloading Fee	FT	160	4560	0					729,600	0	729,600	
	Transportation fee by ship	FT	160	12000	0					1,920,000	0	1,920,000	
	Miscellaneous	LS	1	2160	0					2,160	0	2,160	
	Sub Total									2,651,760	0	2,651,760	
Total										4,954,560	0	4,954,560	
Unit Price per No.										495,456.00	0	495,456.00	
INDIRECT COST										15%	74318.40	0	74318.40
TOTAL											569,774	0	569,774

LA UNION PORT DEVELOPMENT PROJECT

2B1302 and 2C1302

Fabrication of Piling

UNIT

FC: YEN

LC: US\$

Total estimate for 10 Nos.

US\$=¥120

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		Total in YEN	
				Material		Labor		Equipment		Amount			
				FC	LC	FC	LC	FC	LC	FC	LC		
1	Material												
	Oxygen	m3	1.88	0	0.62					0	1	140	
	Acetylen	kg	0.90	0	1.05					0	1	113	
	Timber	cu.m	0.19	0	380					0	72	8,664	
	Fuel Trailer 28t	day	0.50	0	50					0	25	2,990	
	" Truck crane 25t	day	0.50	0	70					0	35	4,218	
	Sub Total									0	134	16,125	
2	Labor												
	Foreman	man.day	0.5			0	38.20			0	19	2,292	
	Labor	man.day	5.00			0	14.30			0	72	8,580	
	Trailer 28t	man.day	0.5			0	33			0	17	1,980	
	Truck crane 25t	man.day	0.5			0	33			0	17	1,980	
	Sub Total									0	124	14,832	
3	Equipment												
	Trailer 28t	day	0.5					8,760	0	4,380	0	4,380	
	Truck crane 25t	day	0.5					12,960	0	6,480	0	6,480	
	Other equipment	%	0.5					54	0	54	0	54	
	Sub Total									10,914	0	10,914	
Total										10,914	258	41,872	
Unit Price per No.										1091.43	25.80	4187.16	
INDIRECT COST										15%	163.71	3.87	628.07
TOTAL										1,255	29.67	4,815	

LA UNION PORT DEVELOPMENT PROJECT

2B1303 and 2C1303

Installation and removal of guide beam

UNIT

FC: YEN

LC: US\$

Total estimate for 10 Nos.

US\$=¥120

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		Total in YEN	
				Material		Labor		Equipment		Amount			
				FC	LC	FC	LC	FC	LC	FC	LC		
1	Material												
	Guide pile H350x350x12(15%)	ton	4.772	7200	0					34,358	0	34,358	
	Guide beam H300x300(15%)	ton	1.43	7200	0					10,296	0	10,296	
	Wasted steel(5%)	ton	0.31	7200	0					2,232	0	2,232	
	Bolt & Nut	pcs	48	0	1.25					0	60	7,200	
	Welding rod	kg	120	300.00	0					36,000	0	36,000	
	Oxygen	m3	24	0	0.62					0	15	1,786	
	Acetylen	kg	48	0	1.05					0	50	6,048	
	Fuel Crawler crane 30t	day.unit	4	0	60					0	241	28,867	
	" Generator 45KVA	day.unit	4	0	20					0	82	9,830	
	" Tug boat 250PS	day.unit	4	0	70					0	281	33,744	
	Sub Total									82,886	729	170,362	
2	Labor												
	Foreman	man.day	4			0	38.2			0	153	18,336	
	Labor	man.day	32			0	14.3			0	458	54,912	
	Crawler crane 30t	day.unit	4			0	33			0	132	15,840	
	Generator 45KVA	day.unit	4			0	33			0	132	15,840	
	Tug boat 250PS	day.unit	4			0	66			0	264	31,680	
	Pontoon 500ton	day.unit	4			0	66			0	264	31,680	
	Sub Total									0	1,402	168,288	
3	Equipment												
	Crawler crane 30t	day.unit	4					13,440	0	53,760	0	53,760	
	Generator 45KVA	day.unit	4					1,080	0	4,320	0	4,320	
	Tug boat 250PS	day.unit	4					11,760	0	47,040	0	47,040	
	Pontoon 500ton	day.unit	4					14,400	0	57,600	0	57,600	
	Welder 500A	day.unit	4					111.6	0	446	0	446	
	Sub Total									163,166	0	163,166	
Total										246,053	2,131	501,816	
Unit Price per No.										24,605.28	213.14	50,181.60	
INDIRECT COST										15%	3,690.79	31.97	7,527.24
TOTAL										28,296	245.11	57,709	

LA UNION PORT DREDGING PROJECT
2A03

UNIT
FC: YEN
LC: US\$

Inner channel dredging (-14) Offshore Dumping

Total estimate for 613000m3

US\$=¥120

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		Total in YEN	
				Material		Labor		Equipment		Amount			
				FC	LC	FC	LC	FC	LC	FC	LC		
1	Material												
	TSH Dredger 8000m3	dayunit	25	0	9,200					0	229,990	27,598,800	
	Working Boat 480PS	"	25	0	140					0	3,500	419,970	
	Passenger Boat 100PS	"	25	0	40					0	991	118,950	
	Survey Boat 70PS	"	25	0	20					0	510	61,212	
	Sub Total									0	234,991	28,198,932	
2	Labor												
	TSH Dredger 8000m3	dayunit	25			1,087,200	0			27,180,000	0	27,180,000	
	Working Boat 480PS	"	25			24,000	66			600,000	1,650	798,000	
	Passenger Boat 100PS	"	25			0	66			0	1,650	198,000	
	Survey Boat 70PS	"	25			0	132			0	3,300	396,000	
	Sub Total									27,780,000	6,600	28,572,000	
3	Equipment												
	TSH Dredger 8000m3	dayunit	25					2,744,880	0	68,622,000	0	68,622,000	
	Working Boat 480PS	"	25					142,920	0	3,573,000	0	3,573,000	
	Passenger Boat 100PS	"	25					3,480	0	87,000	0	87,000	
	Survey Boat 70PS	"	25					2,280	0	57,000	0	57,000	
	Sub Total									72,339,000	0	72,339,000	
	Total									100,119,000	241,591	129,109,932	
Total										100,119,000	241,591	129,109,932	
Unit Price per m3										163.33	0.39	210.62	
INDIRECT COST										15%	24.50	0.06	31.59
TOTAL UNIT COST										188	0.45	242	

LA UNION PORT DEVELOPMENT PROJECT
2A04

UNIT
FC: YEN
LC: US\$

Total estimate for 650,000m3

US\$=¥120

Inner Channel Dredging (-14.5) Onshore Dumping

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		Total in YEN	
				Material		Labor		Equipment		Amount			
				FC	LC	FC	LC	FC	LC	FC	LC		
1	Material												
	Bolt and Nut	Nos	800	0	0.55					0	440	52,800	
	Vinyl Sheet	m2	1000	0	0.8					0	800	96,000	
	Over Flow	LS	1	0	11,500					0	11,500	1,380,000	
	Silt Protector	LS	1	0	11,900					0	11,900	1,428,000	
	TSH Dredger 8000m3	dayunit	25	0	9,200					0	229,990	27,598,800	
	Working Boat 480PS	"	25	0	140					0	3,500	419,970	
	Passenger Boat 100PS	"	25	0	40					0	991	1,111	
	Survey Boat 70PS	"	25	0	20					0	510	61,212	
	Bulldozer 21t	"	50	0	187					0	8,326	999,108	
	Backhoe 1.6m3	"	25	0	244					0	6,093	731,148	
	Generator 45KVA	"	25	0	40					0	1,005	120,582	
	Sub Total									0	275,055	32,888,731	
2	Labor												
	Foremen	manday	75			0	38.2			0	2865	343,800	
	Labor	manday	300			0	14.3			0	4290	514,800	
	TSH Dredger 8000m3	dayunit	25			1,087,200	0			27,180,000	0	27,180,000	
	Working Boat 480PS	"	25			24,000	86			600,000	1,650	798,000	
	Passenger Boat 100PS	"	25			0	66			0	1,650	198,000	
	Survey Boat 70PS	"	25			0	132			0	3,300	396,000	
	Bulldozer 21t	"	50			0	33			0	1,650	198,000	
	Backhoe 1.6m3	"	25			0	33			0	825	99,000	
	Generator 45KVA	"	25			0	33			0	825	99,000	
	Sub Total									27,780,000	17,055	29,626,800	
3	Equipment												
	TSH Dredger 8000m3	dayunit	25				2,744,880	0		69,822,000	0	68,622,000	
	Working Boat 480PS	"	25				142,920	0		3,573,000	0	3,573,000	
	Passenger Boat 100PS	"	25				3,480	0		87,000	0	87,000	
	Survey Boat 70PS	"	25				2,280	0		57,000	0	57,000	
	Bulldozer 21t	"	50				12,360	0		618,000	0	618,000	
	Backhoe 1.6m3	"	25				19,440	0		486,000	0	486,000	
	Generator 45KVA	"	25				1,080	0		27,000	0	27,000	
	Floater 5m x 1500mm	Nos	600				1,119.60	0		671,760	0	671,760	
	Steel Pipe 6m x 800mm	Nos	2,400				285.60	0		695,440	0	685,440	
	Ruber Sleeve 1.7m x 800mm	Nos	600				829.20	0		497,520	0	497,520	
	Curve Pipe	Nos	80				273.60	0		16,416	0	16,416	
	Sub Total									75,341,136	0	75,341,136	
	Total									103,121,136	292,110	138,056,467	
Total										103,121,136	292,110	138,056,467	
Unit Price per m3										158.65	0.45	212.39	
INDIRECT COST										15%	23.80	0.07	31.86
TOTAL UNIT COST										182	0.52	244	

LA UNION PORT DREDGING PROJECT
2A05,2A07,2A08 and 2A09

UNIT
FC: YEN
LC: US\$

Turning Basin dredging (-14) Offshore Dumping

Total estimate for 567000m3

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												
	TSH Dredger 8000m3	dayunit	25	0	9,200					0	229,990	27,598,800	
	Working Boat 480PS	"	25	0	140					0	3,500	419,970	
	Passenger Boat 100PS	"	25	0	40					0	991	118,950	
	Survey Boat 70PS	"	25	0	20					0	510	61,212	
	Sub Total									0	234,991	28,198,932	
2	Labour												
	TSH Dredger 8000m3	dayunit	25			1,087,200	0			27,180,000	0	27,180,000	
	Working Boat 480PS	"	25			24,000	66			600,000	1,650	798,000	
	Passenger Boat 100PS	"	25			0	66			0	1,650	198,000	
	Survey Boat 70PS	"	25			0	132			0	3,300	396,000	
	Sub Total									27,780,000	6,600	28,572,000	
3	Equipment												
	TSH Dredger 8000m3	dayunit	25					2,744,880	0	68,622,000	0	68,622,000	
	Working Boat 480PS	"	25					142,920	0	3,573,000	0	3,573,000	
	Passenger Boat 100PS	"	25					3,480	0	87,000	0	87,000	
	Survey Boat 70PS	"	25					2,280	0	57,000	0	57,000	
	Sub Total									72,339,000	0	72,339,000	
	Total									100,119,000	241,591	129,109,932	
Total										100,119,000	241,591	129,109,932	
Unit Price per m3										176.58	0.43	227.71	
INDIRECT COST										15%	26.49	0.06	34.16
TOTAL UNIT COST										203	0.49	262	

LA UNION PORT DEVELOPMENT PROJECT
2A06

UNIT
FC: YEN
LC: US\$

Total estimate for 673,750m³

US\$=¥120

Turning Basin Dredging (-14.5) Offshore Dumping

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		Total in YEN
				Material		Labor		Equipment		Amount		
				FC	LC	FC	LC	FC	LC	FC	LC	
1	Material											
	Bolt and Nut	Nos	800	0	0.55					0	440	52,800
	Vinyl Sheet	m2	1000	0	0.8					0	800	96,000
	Over Flow	LS	1	0	11,500					0	11,500	1,380,000
	Silt Protector	LS	1	0	11,900					0	11,900	1,428,000
	TSH Dredger 8000m3	dayunit	25	0	9,200					0	229,990	27,598,800
	Working Boat 480PS	"	25	0	140					0	3,500	419,970
	Passenger Boat 100PS	"	25	0	40					0	991	1,111
	Survey Boat 70PS	"	25	0	20					0	510	61,212
	Bulldozer 21t	"	50	0	167					0	8,328	999,108
	Backhoe 1.6m3	"	25	0	244					0	8,093	731,148
	Generator 45KVA	"	25	0	40					0	1,005	120,582
	Sub Total									0	275,055	32,888,731
2	Labor											
	Foremen	manday	75			0	38.2			0	2865	343,800
	Labor	manday	300			0	14.3			0	4290	514,800
	TSH Dredger 8000m3	dayunit	25			1,087,200	0			27,180,000	0	27,180,000
	Working Boat 480PS	"	25			24,000	66			800,000	1,650	798,000
	Passenger Boat 100PS	"	25			0	66			0	1,650	198,000
	Survey Boat 70PS	"	25			0	132			0	3,300	396,000
	Bulldozer 21t	"	50			0	33			0	1,650	198,000
	Backhoe 1.6m3	"	25			0	33			0	825	99,000
	Generator 45KVA	"	25			0	33			0	825	99,000
	Sub Total									27,780,000	17,055	29,926,800
3	Equipment											
	TSH Dredger 8000m3	dayunit	25					2,744,880	0	68,622,000	0	68,622,000
	Working Boat 480PS	"	25					142,920	0	3,573,000	0	3,573,000
	Passenger Boat 100PS	"	25					3,480	0	87,000	0	87,000
	Survey Boat 70PS	"	25					2,280	0	57,000	0	57,000
	Bulldozer 21t	"	50					12,360	0	618,000	0	618,000
	Backhoe 1.6m3	"	25					19,440	0	486,000	0	486,000
	Generator 45KVA	"	25					1,080	0	27,000	0	27,000
	Floater 5m x 1500mm	Nos	600					1,119.60	0	671,760	0	671,760
	Steel Pipe 6m x 800mm	Nos	2,400					285.80	0	685,440	0	685,440
	Ruber Sleeve 1.7m x 800mm	Nos	600					829.20	0	497,520	0	497,520
	Curve Pipe	Nos	60					273.80	0	16,416	0	16,416
	Sub Total									75,341,136	0	75,341,136
	Total									103,121,136	292,110	138,056,467
Total										103,121,136	292,110	138,056,467
Unit Price per m³										153.06	0.43	204.91
INDIRECT COST										15%	22.96	30.74
TOTAL UNIT COST										176	0.50	236

LA UNION PORT DEVELOPMENT PROJECT
2A10,2A11 and 2A12
Removal of Soft Soil

UNIT
FC: YEN
LC: US\$

Total estimate for 270,000m3

US\$=¥120

No	Work Item	Unit	Quantity	Unit Cost						Unit Cost		Total in YEN	
				Material		Labor		Equipment		Amount			
				FC	LC	FC	LC	FC	LC	FC	LC		
1	Material												
	Grab Bucket Dredger 20m3	dayunit	25	0	2,652					0	66,295	7,955,400	
	Pusher Boat 3000PS	"	25	0	3,177					0	79,413	9,529,500	
	Anchor Boat 480PS	"	25	0	140					0	3,500	419,970	
	Hopper Barge 3500m3	"	50	0	0					0	0	0	
	Passenger Boat 100PS	"	25	0	40					0	991	118,950	
	Survey Boat 70PS	"	25	0	20					0	510	510	
	Sub Total									0	150,709	18,024,330	
2	Labor												
	Grab Bucket Dredger 20m3	dayunit	25			300,000	198			7,500,000	4,950	8,094,000	
	Pusher Boat 3000PS	"	25			81,000	66			2,025,000	1,650	2,223,000	
	Anchor Boat 480PS	"	25			24,000	66			600,000	1,650	2,223,000	
	Hopper Barge 3500m3	"	50			0	66			0	3,300	396,000	
	Passenger Boat 100PS	"	25			0	66			0	1,650	198,000	
	Survey Boat 70PS	"	25			0	66			0	1,650	198,000	
	Sub Total									10,125,000	14,850	13,332,000	
3	Equipment												
	Grab Bucket Dredger 20m3	dayunit	25					986,760	0	24,669,000	0	24,669,000	
	Pusher Boat 3000PS	"	25					164,880	0	4,122,000	0	4,122,000	
	Anchor Boat 480PS	"	25					142,920	0	3,573,000	0	3,573,000	
	Hopper Barge 3500m3	"	50					195,000	0	9,750,000	0	9,750,000	
	Passenger Boat 100PS	"	25					3,480	0	87,000	0	87,000	
	Survey Boat 70PS	"	25					2,280	0	57,000	0	57,000	
	Sub Total									42,258,000	0	42,258,000	
Total										52,383,000	165,559	73,614,330	
Unit Price per m3										194.01	0.61	272.65	
INDIRECT COST										15%	29.10	0.09	40.90
TOTAL UNIT COST										223	0.71	314	

LA UNION PORT DEVELOPMENT PROJECT
2A13

UNIT

FC: YEN

LC: US\$

Total estimate for 119160m3

US\$=¥120

Temporary revetment and bund for onshore dumping

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		Total in YEN		
				Material		Labor		Equipment		Amount				
				FC	LC	FC	LC	FC	LC	FC	LC			
1	Material													
	Rubble rock 10-500kg	m3	16,520	0	6.35					0	117,602	14112240		
	Wasted rubble rock(30%)	m3	5,556	0	6.35					0	35,281	4,233,672		
	Sand	m3	116,230	0	4.10					0	476,543	57,185,160		
	Wasted sand (30%)	m3	34,869	0	4.10					0	142,963	17,155,548		
	Geotextile	m2	22,090	0	1.47					0	32,472	3896676		
	Fuel Bulldozer 21t	day	1,788	0	143					0	256,077	30,729,283		
	" Backhoe 1.5m3	dayunit	1,788	0	212					0	378,841	45,460,973		
	Sub Total									0	1,439,780	172,773,552		
2	Labor													
	Foreman	manday	596			0	38.2			0	22,767	2,732,064		
	Labour	manday	7,152			0	14.3			0	102,274	12,272,832		
	Bulldozer 21t	day	1,788			0	33			0	59,004	7,080,480		
	Backhoe 1.5m3	dayunit	1,788			0	33			0	59,004	7,080,480		
	Sub Total									0	243,049	29,165,856		
3	Equipment													
	Bulldozer 21t	day	1,788					12,360	0	22,099,680	0	22,099,680		
	Backhoe 1.5m3	dayunit	1,788					15,240	0	27,249,120	0	27,249,120		
	Sub Total									49,348,800	0	49,348,800		
Total										49,348,800	1,682,828	251,288,208		
Unit Price per m3										49348800.00	1,682,828.40	251288208.00		
INDIRECT COST											15%	7402320.00	252,424.26	37693231.20
TOTAL										56,751,120	1,935,252.66	288,981,439		

LA UNION PORT DEVELOPMENT PROJECT

2B01 and 2C01

Rubble Mound of Caisson

UNIT

FC: YEN

LC: US\$

Total estimate for 1000m3

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											
	Rubble rock	cu.m	1,000	0	5.16					0	5.160	619200
	Wasted rubble rock(25%)	cu.m	250	0	5.16					0	1,290	154,800
	Fuel Tug boat 450PS	day	5.0	0	130					0	649	77,844
	" Backhoe 1.2m3	day	5.0	0	180					0	898	107,724
	" Crawler crane 30t	day	5.0	0	90					0	451	54,096
	" Working boat	day	5.0	0	55					0	277	33,264
	Sub Total									0	8,724	1,046,928
2	Labour											
	Foreman	manday	5.0			0	38.2			0	191	22,920
	Labour	manday	20.0			0	14.3			0	286	34,320
	Diver	manday	20.0			0	100			0	2,000	240,000
	Tug boat 450PS	day	5.0			0	166			0	830	99,600
	Pontoon 500t	dayunit	10.0			0	66			0	660	79,200
	Backhoe 1.2m3	day	5.0			0	33			0	165	19,800
	Crawler crane 30t	day	5.0			0	33			0	165	19,800
	Working boat	day	5.0			0	66			0	330	39,600
	Sub Total									0	4,627	555,240
3	Equipment											
	Tug boat 450PS	day	5.00					19,320	0	96,600	0	96,600
	Pontoon 500t	day.unit	10.00					14,400	0	144,000	0	144,000
	Backhoe 1.2m3	day	5.00					15,240	0	76,200	0	76,200
	Crawler crane 30t	day	5.00					13,440	0	67,200	0	67,200
	Working boat	day	5.00					3,480	0	17,400	0	17,400
	Sub Total									401,400	0	401,400
Total										401,400	13,351	2,003,568
Unit Price for m3										401.40	13.35	2003.57
INDIRECT COST											15%	
TOTAL										462	15.35	2,304

LA UNION PORT DEVELOPMENT PROJECT
2B02 and 2C02
Asphalt Mat

UNIT
FC: YEN
LC: US\$

Total estimate for 1000m2 US\$=¥120

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		Total in YEN	
				Material		Labor		Equipment		Amount			
				FC	LC	FC	LC	FC	LC	FC	LC		
1	Material												
	Asphalt Mat 17mx4.8mx5mm	pcs	13.00	0	3,000.00					0	39,000	4,680,000	
	Fuel Crawler crane 16t	day	1.00	0	26					0	26	3,168	
	Fuel Tug boat 250PS	day	0.5	0	17					0	9	1,040	
	Sub Total									0	39,035	4,684,208	
2	Labor												
	Foreman	man.day	1			0	38.20			0	38	4,584	
	Labor	man.day	4.0			0	14.30			0	57	6,864	
	Diver	man.day	2.0			0	22.06			0	44	5,294	
	Crawler crane 16t	man.day	1			0	33			0	33	3,960	
	Tug boat 250PS	man.day	0.5			0	133			0	67	7,980	
	Pontoon 100t	man.day	1			0	29			0	29	3,432	
	Sub Total									0	239	32,114	
3	Equipment												
	Crawler crane 16t	day	1					8,640	0	8,640	0	8,640	
	Tug boat 250PS	day	0.5					11,760	0	5,880	0	5,880	
	Pontoon 100t	day	1					4,200	0	4,200	0	4,200	
	Sub Total									10,080	0	18,720	
Total										10,080	39,274	4,735,042	
Unit Price per m2										10.08	39.27	4,735.04	
INDIRECT COST										15%	1.51	5.89	710.26
TOTAL										12	45.17	5,445	

LA UNION PORT DEVELOPMENT PROJECT
2B03 and 2C03
Armour Stone

UNIT
FC: YEN
LC: US\$

Total estimate for 1000m3 US\$=¥120

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		Total in YEN	
				Material		Labor		Equipment		Amount			
				FC	LC	FC	LC	FC	LC	FC	LC		
1	Material												
	Armour stone	cu.m	1,000	0	6.2					0	6,200	744,000	
	Wasted armour stone(25%)	cu.m	250	0	6.2					0	1,550	186,000	
	Fuel Tug boat 450PS	day	5.9	0	130					0	765	91,856	
	" Backhoe 1.2m3	day	5.9	0	180					0	1,059	127,114	
	" Working boat	day	5.9	0	60					0	357	42,792	
	Sub Total									0	9,931	1,191,762	
2	Labor												
	Foreman	manday	5.9			0	38.2			0	225	27,046	
	Labor	manday	23.6			0	14.3			0	337	40,498	
	Diver	manday	11.8			0	100			0	1,180	141,600	
	Tug boat 450PS	day	5.9			0	166			0	979	117,528	
	Pontoon 500t	dayunit	11.8			0	66			0	779	93,456	
	Backhoe 1.2m3	day	5.9			0	33			0	195	23,364	
	Working boat	day	5.9			0	66			0	389	46,728	
	Sub Total									0	4,085	490,219	
3	Equipment												
	Tug boat 450PS	day	5.90					19,320	0	113,988	0	113,988	
	Pontoon 500t	day.unit	11.80					14,400	0	169,920	0	169,920	
	Backhoe 1.2m3	day	5.90					15,240	0	89,916	0	89,916	
	Working boat	day	5.90					3,480	0	20,532	0	20,532	
	Sub Total									394,356	0	394,356	
Total										394,356	14,017	2,076,337	
Unit Price per m3										394.36	14.02	2076.34	
INDIRECT COST										15%	59.15	2.10	311.45
TOTAL										454	16.12	2,388	

LA UNION PORT DEVELOPMENT PROJECT

2B0401

Requirement for Caisson Production Facility such as Floating Dock

UNIT

FC: YEN

LC: US\$

Total estimate for 378days

US\$=¥120

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		Total in YEN		
				Material		Labor		Equipment		Amount				
				FC	LC	FC	LC	FC	LC	FC	LC			
1	Material													
	Floating Dock	day	378	0	110					0	41,561	4,987,332		
	Others	L.S.	1	0	382					0	382	45,840		
	Sub Total									0	41,943	5,033,172		
2	Labor													
	Floating Dock	day	378			114,000	66			43,092,000	24,948	46,085,760		
	Pontoon 1000t	day	378			0	66							
	Sub Total									43,092,000	24,948	46,085,760		
3	Equipment													
	Floating Dock	day	378					367,800	0	139,028,400	0	139,028,400		
	Pontoon 1000t	day	378					25,080	0					
	Sub Total									139,028,400	0	139,028,400		
Total										182,120,400	66,891	190,147,332		
Unit Price per day										481800.00	176.96	503035.27		
INDIRECT COST											15%	72270.00	26.54	75455.29
TOTAL										554,070	203.50	578,491		

LA UNION PORT DEVELOPMENT PROJECT

2B0402 and 2C0402

Fabrication and Removal of Scaffolding

UNIT

FC: YEN

LC: US\$

Total estimate for 1900m2

US\$=¥120

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		Total in YEN	
				Material		Labor		Equipment		Amount			
				FC	LC	FC	LC	FC	LC	FC	LC		
1	Material												
	Scaffolding(Outer)	m2	1300	0	7.0					0	9,100	1,092,000	
	Scaffolding(Inner)	m2	600	0	4.0					0	2,400	288,000	
	Other material	%	10	0	1,150.0					0	1,150	138,000	
	Fuel Generator 45KVA	day	1.2	0	20					0	25	2,949	
	" Truck crane 30t	day	1.2	0	65					0	78	9,412	
	" Tug boat 250PS	day	1.2	0	70					0	84	10,123	
	" Truck 8t with crane	day	1.2	0	41					0	49	5,892	
	Sub Total									0	12,837	1,546,377	
2	Labor												
	Foreman	man.day	6			0	38.2			0	229	27,504	
	Labor	man.day	60			0	14.3			0	858	102,960	
	Generator 45KVA	day	1.2			0	33			0	40	4,752	
	Truck crane 30t	day	1.2			0	33			0	40	4,752	
	Truck 8t with crane	day	1.2			0	33			0	40	4,752	
	Tug boat 250PS	day	1.2			12,000	66			0	79	9,504	
	Pontoon 500t	day	1.2			0	66			0	79	9,504	
	Sub Total									0	1,285	163,728	
3	Equipment												
	Generator 45KVA	day	1.2					960	0	1,152	0	1,152	
	Truck 8t with crane	day	1.2					5,520	0	6,624	0	6,624	
	Truck crane 30t	day	1.2					16,200	0	19,440	0	19,440	
	Pontoon 500t	day	1.2					14,400	0	17,280	0	17,280	
	Tug boat 250PS	day	1.2					11,760	0	14,112	0	14,112	
	Sub Total									58,608	0	58,608	
Total										58,608	14,122.57	1,768,713	
Unit Price per m2										30.85	7.43	931	
INDIRECT COST										15%	4.63	1.11	140
TOTAL										35	8.55	1,071	

LA UNION PORT DEVELOPMENT PROJECT
2B0403 and 2C0403

UNIT
FC: YEN
LC: US\$

Total estimate for 170ton

US\$=¥120

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		Total in YEN	
				Material		Labor		Equipment		Amount			
				FC	LC	FC	LC	FC	LC	FC	LC		
CP-02	Fabrication of reinforcement bar												
1	Material												
	Reinforcement bar D13	ton	25.60	0	360					0	9,216	1,105,920	
	Reinforcement bar D13-D25	ton	144.40	0	340					0	49,096	5,891,520	
	Wasted steel bar D16(2%)	ton	3.4	0	340					0	1,156	138,720	
	Small size steel	kg	2175	0	0.408					0	887	106,488	
	Welding rod	kg	7.2	3.2	0					23	0	23	
	Fuel Generator 100KVA	dayunit	55	0	45					0	2,487	298,452	
	" Truck crane 16t	dayunit	10	0	31					0	314	37,620	
	" Trailer 28ton	dayunit	10	0	49					0	488	58,608	
	" Tug boat	dayunit	5	0	70					0	352	42,180	
	Sub Total									23	63,996	7,679,531	
2	Labor												
	Foreman	man.day	55		0	38.20				0	2,101	252,120	
	Labor	man.day	1100		0	14.30				0	15,730	1,887,600	
	Welder	man.day	110		0	23.10				0	2,541	304,920	
	Generator 100KVA	day	55		0	33				0	1,815	217,800	
	Truck crane 16t	day	10		0	33				0	330	39,600	
	Trailer 28	day	10		0	33				0	330	39,600	
	Pontoon 500t	day	5		0	66				0	330	39,600	
	Tug boat	day	5		12,000	66				60000	330	99,600	
	Sub Total									60000	23,507	2,880,840	
3	Equipment												
	Generator 100KVA	dayunit	55					1,800	0	99,000	0	99,000	
	Welder 300A	dayunit	110					1	0	110	0	110	
	Bar cutter	dayunit	55					1	0	55	0	55	
	Bar bender	dayunit	55					1	0	55	0	55	
	Truck crane 16t	dayunit	10					9,480	0	94,800	0	94,800	
	Trailer 28t	dayunit	10					8,760	0	87,600	0	87,600	
	Pontoon 500t	dayunit	5					14,400	0	72,000	0	72,000	
	Tug boat 250PS	dayunit	5					11,760	0	58,800	0	58,800	
	Sub Total									412,420	0	412,420	
Total										472,443	87,503	10,972,791	
Unit Price per ton										2779.08	514.72	64545.83	
INDIRECT COST										15%	416.86	77.21	9681.87
TOTAL										3,186	591.93	74,228	

LA UNION PORT DEVELOPMENT PROJECT

2B1304 and 2C1304

Driving Steel Pipe Pile

UNIT

FC: YEN

LC: US\$

Total estimate for 10 Nos.

US\$=¥120

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		Total in YEN	
				Material		Labor		Equipment		Amount			
				FC	LC	FC	LC	FC	LC	FC	LC		
1	Material												
	Fuel Piling barge D-72	day.unit	1.25	0	240					0	300	35,954	
	" Tug boat 250PS	day.unit	1.25	0	70					0	88	10,545	
	" Anchor boat 180PS	day.unit	1.25	0	12					0	15	1,832	
	" Crawler crane 50t	day.unit	1.25	0	70					0	88	10,556	
	Sub Total									0	491	58,886	
2	Labor												
	Foreman	man.day	1.25			0	38.2			0	48	5,730	
	Labour	man.day	7.50			0	14.3			0	107	12,870	
	Crawler crane 50t	man.day	1.25			0	33			0	41	4,950	
	Piling barge D-72	man.day	1.25			69000	198			0	248	29,700	
	Tug boat 250PS	man.day	1.25			12000	66			0	83	9,900	
	Anchor boat 180PS	day.unit	1.25			0	166			0	208	24,900	
	Pontoon 1000t	man.day	1.25			0	66			0	83	9,900	
	Sub Total									0	816	97,950	
3	Equipment												
	Pile driving barge D-72	day.unit	1.25					266,160	0	332,700	0	332,700	
	Pontoon 1000t	day.unit	1.25					25,080	0	31,350	0	31,350	
	Tug boat 250PS	day.unit	1.25					11,760	0	14,700	0	14,700	
	Anchor boat 180PS	day.unit	1.25					49,800	0	62,250	0	62,250	
	Crawler crane 50t	day.unit	1.25					22,320	0	27,900	0	27,900	
	Sub Total									468,900	0	468,900	
Total										468,900	1,307	625,736	
Unit Price per No.										46,890.00	130.70	62,573.55	
INDIRECT COST										15%	7033.50	19.60	9386.03
TOTAL										53,924	150.30	71,960	

LA UNION PORT DEVELOPMENT PROJECT
2B1305 and 2C1305
Steel Pile reinforcement of edge

UNIT
FC: YEN
LC: US\$

Total estimate for 10 Nos.

US\$=¥120

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		Total in YEN	
				Material		Labor		Equipment		Amount			
				FC	LC	FC	LC	FC	LC	FC	LC		
1	Material												
	Steel bar D13-D25	ton	1.125	40800	0					45,900	0	45,900	
	Wasted steel(2%)	ton	0.0225	40800	0					918	0	918	
	Welding rod	kg	5.25	300.00	0					1,575	0	1,575	
	Oxygen	m3	2.25	0	0.62					0	1	167	
	Acetylen	kg	0.9	0	1.05					0	1	113	
	Fuel Generator 100KVA	dayunit	0.4	0	50					0	20	2,380	
	" Truck crane 25t	dayunit	0.4	0	70					0	28	3,374	
	Sub Total									48,393	50	54,428	
2	Labor												
	Mechanic	man.day	0.4			0	31.00			0	12	1,488	
	Welder	man.day	1			0	23.10			0	23	2,772	
	Labor	man.day	2			0	14.30			0	29	3,432	
	Generator 100KVA	man.day	0.4			0	33			0	13	1,584	
	Truck crane 25t	man.day	0.4			0	33			0	13	1,584	
	Sub Total									0	91	10,860	
3	Equipment												
	Generator 100KVA	day	0.4					1,800	0	720	0	720	
	Truck crane 25t	day	0.4					12,960	0	5,184	0	5,184	
	Welder	day.unit	1					111.60	0	112	0	112	
	Sub Total									6,016	0	6,016	
Total										54,409	141	71,304	
Unit Price per No.										5440.86	14.08	7130.36	
INDIRECT COST										15%	816.13	2.11	1069.55
TOTAL										6,257	16.19	8,200	

LA UNION PORT DEVELOPMENT PROJECT

2B14 and 2C14

Concrete for Crane Rail Foundation

UNIT

FC: YEN

LC: US\$

Total estimate for 480m3

US\$=¥120

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		Total in YEN	
				Material		Labor		Equipment		Amount			
				FC	LC	FC	LC	FC	LC	FC	LC		
1	Material												
	Ready mixed concrete	m3	480	0	70.00					0	33,600	4,032,000	
	Wasted concrete(2.5%)	m3	12	0	70.00					0	840	100,800	
	Elasti board	m2	48	0	8.33					0	400	47,981	
	Reinforcement	ton	34.00	0	360.00					0	12,240	1,468,800	
	Wasted reinforcement(2%)	ton	0.68	0	360.00					0	245	29,376	
	Metal form(10%)	m2	637	0	3.83					0	2,440	292,765	
	Crushed stone	m3	27	0	5.16					0	139	16,718	
	Lean concrete	m3	27	0	65.00					0	1,755	210,600	
	Fuel Concrete pump	day	7.00	0	0					0	0	0	
	" Generator 125KVA	day	7.00	0	63					0	444	53,324	
	" Truck crane 16t	day	7.00	0	36					0	250	30,012	
	Sub Total									0	52,353	6,282,376	
2	Labor												
	Foreman	man.day	7			0	38.20			0	267	32,088	
	Labor	man.day	70			0	14.30			0	1,001	120,120	
	Concrete pump	day.unit	7			0	33			0	231	27,720	
	Generator 125KVA	day.unit	7			0	33			0	231	27,720	
	Truck crane 16t	day.unit	7			0	33			0	231	27,720	
	Sub Total									0	1,961	235,368	
3	Equipment												
	Generator 125KVA	day.unit	7					2,280	0	15,960	0	15,960	
	Truck crane 16t	day.unit	7					9,480	0	66,360	0	66,360	
	Concrete pump 45m3	day.unit	7					9,120	0	63,840	0	63,840	
	Vibrator	day.unit	31					120	0	3,720	0	3,720	
	Sub Total									149,880	0	149,880	
Total										149,880	54,315	6,667,624	
Unit Price per m3										312.25	113.16	13890.88	
INDIRECT COST										15%	46.84	16.97	2083.63
TOTAL										359	130.13	15,975	

LA UNION PORT DEVELOPMENT PROJECT
2B15 and 2C15
Crane Rail with Accessories

UNIT
FC: YEN
LC: US\$

Total estimate for 1m 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	
2B1501 2C1501	Installation of Crane Rail									19,461	3.86	19,925
2B1502 2C1502	Placing of Asphalt									0	9.83	1,179
2B1503 2C1503	Placing Corner Angle									13	8.15	991
	Total									19,474	21.84	22,095

LA UNION PORT DEVELOPMENT PROJECT
2B1501 and 2C1501
Installation of Crane Rail

UNIT
FC: YEN
LC: US\$

Total estimate for 320m

US\$=¥120

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		Total in YEN	
				Material		Labor		Equipment		Amount			
				FC	LC	FC	LC	FC	LC	FC	LC		
1	Material												
	Crane Rail 73kg	ton	24	138720	0.00					3,329,280	0	3,329,280	
	Accessories	L.S	1	2035200	0.00					2,035,200	0	2,035,200	
	Fuel Truck crane 16t	day	3	0	30					0	89	10,728	
	" Truck 8t	day	3	0	40					0	119	14,260	
	" Trailer 20t	day	1.5	0	50					0	75	8,971	
	Sub Total									5,364,480	283	5,398,438	
2	Labor												
	Foreman	man.day	3			0	38.20			0	115	13,752	
	Labor	man.day	30			0	14.30			0	429	51,480	
	Truck crane 16t	man.day	3			0	33			0	99	11,880	
	Truck 8t	man.day	3			0	33			0	99	11,880	
	Trailer 20t	man.day	1.5			0	33			0	50	5,940	
	Sub Total									0	791	94,932	
3	Equipment												
	Truck crane 16t	day	3					9,480	0	28,440	0	28,440	
	Truck 8t	day	3					3,480	0	10,440	0	10,440	
	Trailer 20t	day	1.5					7,320	0	10,980	0	10,980	
	Other equipment	%	2					997	0	997	0	997	
	Sub Total									50,857	0	50,857	
Total										5,415,337	1,074	5,544,228	
Unit Price per m										16,922.93	3.36	17,325.71	
INDIRECT COST										15%	2,538.44	0.50	2,598.86
TOTAL										19,461	3.86	19,925	

LA UNION PORT DEVELOPMENT PROJECT
2B1502 and 2C1502
Placing of Asphalt

UNIT
FC: YEN
LC: US\$

Total estimate for 320 m US\$=¥120

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		Total in YEN	
				Material		Labor		Equipment		Amount			
				FC	LC	FC	LC	FC	LC	FC	LC		
1	Material												
	Asphalt mixture	ton	26	0	84.75					0	2,204	264,420	
	Miscellaneous	L.S.	1	0	220.35					0	220	26,442	
	Sub Total									0	2,424	290,862	
2	Labor												
	Foreman	man.day	1			0	38.20			0	38	4,584	
	Labor	man.day	10			0	14.30			0	143	17,160	
	Sub Total									0	181	21,744	
3	Equipment												
	Miscellaneous	L.S.	1					0	130	0	130	15,600	
	Sub Total									0	130	15,600	
Total										0	2,735	328,206	
Unit Price per m										0.00	8.55	1,025.64	
INDIRECT COST										15%	0.00	1.28	153.85
TOTAL										0	9.83	1,179	

LA UNION PORT DEVELOPMENT PROJECT

2B1503 and 2C1503

Placing Corner Angle

UNIT

FC: YEN

LC: US\$

Total estimate for 320m

US\$=¥120

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		Total in YEN	
				Material		Labor		Equipment		Amount			
				FC	LC	FC	LC	FC	LC	FC	LC		
1	Material												
	Corner Angle 100*100*4.5	ton	3	0	463.30					0	1,390	166,788	
	Steel bar D13*250	ton	0.21	0	360.00					0	76	9,072	
	Miscellaneous	LS	1	0	29					0	29	3,517	
	Fuel Generator 45KVA	day	3	0	20					0	61	7,373	
	Sub Total									0	1,556	186,750	
2	Labor												
	Foreman	man.day	3			0	38.20			0	115	13,752	
	Labor	man.day	30			0	14.30			0	429	51,480	
	Welder	man.day	3			0	23.09			0	69	8,312	
	Generator 45KVA	man.day	3			0	33			0	99	11,880	
	Sub Total									0	712	85,424	
3	Equipment												
	Generator 45KVA	day	3					1,080	0	3,240	0	3,240	
	Welder 500A	day	3					111.6	0	335	0	335	
	Sub Total									3,575	0	3,575	
Total										3,575	2,268	275,749	
Unit Price per m										11.17	7.09	861.72	
INDIRECT COST										15%	1.68	1.06	129.26
TOTAL										13	8.15	991	

LA UNION PORT DEVELOPMENT PROJECT
2B16 and 2C16
Cable Trench

UNIT
FC: YEN
LC: US\$

Total estimate for 1 LS US\$=¥120

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		Total in YEN	
				Material		Labor		Equipment		Amount			
				FC	LC	FC	LC	FC	LC	FC	LC		
1	Material												
	Ready mixed concrete	cu.m	0.48	0	70.00					0	34	4,032	
	Metal form (10%)	sq.m	8.08	0	3.83					0	31	3,714	
	Corner Angle 100*100*4.5	ton	6.00	0	360.00					0	2,160	259,200	
	Steel bar D13*250	ton	1.64	0	360.00					0	590	70,848	
	Other material	%	2	0	28.15					0	56	6,756	
	Fuel Generator 45KVA	day	3.00	0	20					0	61	7,373	
	" Truck 8t	day	3.00	0	60					0	179	21,510	
	" Truck crane 16t	day	1.00	0	65					0	65	7,764	
	Sub Total									0	3,177	381,196	
2	Labor												
	Foreman	man.day	3			0	38.20			0	115	13,752	
	Labor	man.day	60			0	14.30			0	858	102,960	
	Welder	man.day	3			0	14.30			0	43	5,148	
	Generator 45KVA	day.unit	3			0	33			0	99	11,880	
	Truck 8t	day.unit	3			0	33			0	99	11,880	
	Truck crane 16t	day.unit	1			0	33			0	33	3,960	
	Sub Total									0	1,247	149,580	
3	Equipment												
	Generator 45KVA	day.unit	3					1,080	0	3,240	0	3,240	
	Truck crane 16t	day.unit	1					9,480	0	9,480	0	9,480	
	Truck 8t	day.unit	3					3,480	0	10,440	0	10,440	
	Vibrator	day.unit	3					127.2	0	382	0	382	
	Bar cutter	day.unit	1					270	0	270	0	270	
	Bar bender	day.unit	1					270	0	270	0	270	
	Welder 300A	day.unit	3					68.4	0	205	0	205	
	Sub Total									23,542	0	24,287	
Total										23,542	4,423	555,063	
Unit Price per LS										23541.60	4,423.14	555063.04	
INDIRECT COST										15%	3531.24	663.47	83259.46
TOTAL										27,073	5,086.61	638,322	

LA UNION PORT DEVELOPMENT PROJECT
2B17
Jack-up base

UNIT
FC: YEN
LC: US\$

Total estimate for 16 Nos. US\$=¥120

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		Total in YEN	
				Material		Labor		Equipment		Amount			
				FC	LC	FC	LC	FC	LC	FC	LC		
1	Material												
	Steel Plate	Nos	16.00	12000	0.00					192000	0	192,000	
	Base angle	Nos	32	360	0.00					11520	0	11,520	
	Fuel Truck with crane 8t	day	2.00	0	45					0	90	10,781	
	Sub Total									203520	90	214,301	
2	Labor												
	Foreman	man.day	2			0	38.20			0	76	9,168	
	Labor	man.day	8			0	14.30			0	114	13,728	
	Truck with crane 8t	day.unit	2			0	33			0	66	7,920	
	Sub Total									0	257	30,816	
3	Equipment												
	Truck with crane 8t	day.unit	2					5,520	0	11,040	0	11,040	
	Sub Total									11,040	0	11,040	
Total										214,560	347	256,157	
Unit Price per No.										13410.00	21.67	16009.80	
INDIRECT COST										15%	2011.50	3.25	2401.47
TOTAL										15,422	24.91	18,411	

LA UNION PORT DEVELOPMENT PROJECT
2B18
End stopper

UNIT
FC: YEN
LC: US\$

Total estimate for 4Nos.

US\$=¥120

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		Total in YEN	
				Material		Labor		Equipment		Amount			
				FC	LC	FC	LC	FC	LC	FC	LC		
1	Material												
	Steel Plate and Bolt	Nos	4	44160	0.00					176640	0	176,640	
	Concrete	m3	3	0	70.00					0	210	25,200	
	Fuel Truck with crane 8t	day	2	0	45					0	90	10,781	
	Sub Total									176640	300	212,621	
2	Labor												
	Foreman	man.day	1			0	38.20			0	38	4,584	
	Labor	man.day	4			0	14.30			0	57	6,864	
	Truck with crane 8t	day.unit	1			0	33			0	33	3,960	
	Sub Total									0	128	15,408	
3	Equipment												
	Truck with crane 8t	day.unit	1					5,520	0	5,520	0	5,520	
	Sub Total									5,520	0	5,520	
Total										182,160	428	233,549	
Unit Price per No.										45540.00	107.06	58387.20	
INDIRECT COST										15%	6831.00	16.06	8758.08
TOTAL										52,371	123.12	67,145	

LA UNION PORT DEVELOPMENT PROJECT

2B19

Socket block

UNIT

FC: YEN

LC: US\$

Total estimate for 8 Nos.

US\$=¥120

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		Total in YEN	
				Material		Labor		Equipment		Amount			
				FC	LC	FC	LC	FC	LC	FC	LC		
1	Material												
	Steel Plate & Bolt	Nos	8	44160	0.00					353280	0	353,280	
	Concrete	m3	1.2	0	70.00					0	84	10,080	
	Fuel Truck with crane 8t	day	2.00	0	45					0	90	10,781	
	Sub Total									353280	174	374,141	
2	Labor												
	Foreman	man.day	1			0	38.20			0	38	4,584	
	Labour	man.day	4			0	14.30			0	57	6,864	
	Truck with crane 8t	day.unit	1			0	33			0	33	3,960	
	Sub Total									0	128	15,408	
3	Equipment												
	Truck with crane 8t	day.unit	1					5,520	0	5,520	0	5,520	
	Sub Total									5,520	0	5,520	
Total										358,800	302	395,069	
Unit Price per No.										44850.00	37.78	49383.60	
INDIRECT COST										15%	6727.50	5.67	7407.54
TOTAL										51,578	43.45	56,791	

LA UNION PORT DEVELOPMENT PROJECT

2B20

Crane anchoring frame

UNIT

FC: YEN

LC: US\$

Total estimate for 16 Nos.

US\$=¥120

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		Total in YEN	
				Material		Labor		Equipment		Amount			
				FC	LC	FC	LC	FC	LC	FC	LC		
1	Material												
	Steel Plate & Bolt	Nos	16	43200	0.00					691200	0	691,200	
	Angle & Re-bar	kg	308	4200	0.00					1293600	0	1,293,600	
	Fuel Truck with crane 8t	day	2	0	45					0	90	10,781	
	Sub Total									1984800	90	1,995,581	
2	Labor												
	Foreman	man.day	2			0	38.20			0	76	9,168	
	Labor	man.day	4			0	14.30			0	57	6,864	
	Truck with crane 8t	day.unit	2			0	33			0	66	7,920	
	Sub Total									0	200	23,952	
3	Equipment												
	Truck with crane 8t	day.unit	2					5,520	0	11,040	0	11,040	
	Sub Total									11,040	0	11,040	
Total										1,995,840	289	2,030,573	
Unit Price per No.										124740.00	18.09	126910.80	
INDIRECT COST										15%	18711.00	2.71	19036.62
TOTAL										143.451	20.80	145,947	

LA UNION PORT DEVELOPMENT PROJECT

2B21 and 2C20

Fender

UNIT

FC: YEN

LC: US\$

Total estimate for 35Nos.

US\$=¥120

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		Total in YEN	
				Material		Labor		Equipment		Amount			
				FC	LC	FC	LC	FC	LC	FC	LC		
1	Material												
	Rubber Fender	Nos	35	1200000	0.00					42000000	0	42,000,000	
	Fender breast & Breast bed	ton	16.6	46200	0.00					766920	0	766,920	
	Anchor bolt & other	L.S.	1	939360	0.00					939360	0	939,360	
	Steel bar	ton	3.50	0	360.00					0	1,260	151,200	
	Other material	%	2	0	25.20					0	25	3,024	
	Fuel Generator 45KVA	day	7.00	0	20					0	139	16,640	
	" Truck crane 16t	day	7.00	0	65					0	453	54,348	
	" Truck 8t	day	7.00	0	40					0	277	33,272	
	Sub Total									43706280	2,154	43,964,765	
2	Labor												
	Foreman	man.day	7			0	38.20			0	267	32,088	
	Labor	man.day	35			0	14.30			0	501	60,060	
	Generator 45KVA	day.unit	7			0	33			0	231	27,720	
	Truck crane 16t	day.unit	7			0	33			0	231	27,720	
	Truck 8t	day.unit	7			0	33			0	231	27,720	
	Sub Total									0	1,461	175,308	
3	Equipment												
	Generator 45KVA	day.unit	7					1,080	0	7,560	0	7,560	
	Truck crane 16t	day.unit	7					9,480	0	66,360	0	66,360	
	Truck 8t	day.unit	7					3,480	0	24,360	0	24,360	
	Welder 500A	day.unit	31					111.6	0	3,460	0	3,460	
	Misxellaneous	%	2					2,035	0	2,035	0	2,035	
	Sub Total									103,774	0	103,774	
Total										43,810,054	3,615	44,243,847	
Unit Price per No.										1251715.84	103.28	1264109.92	
INDIRECT COST										15%	187757.38	15.49	189616.49
TOTAL										1,439,473	118.78	1,453,726	

LA UNION PORT DEVELOPMENT PROJECT
2B22 and 2C21
Bollard

UNIT
FC: YEN
LC: US\$

Total estimate for 14 Nos. US\$=¥120

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		Total in YEN		
				Material		Labor		Equipment		Amount				
				FC	LC	FC	LC	FC	LC	FC	LC			
1	Material													
	Bollard 100t with anchor bollard	Nos	14	600000	0.00					8400000	0	8,400,000		
	Other material	%	2	46200	0.00					168000	0	168,000		
	Fuel Generator 45KVA	day	4.00	0	20					0	79	9,509		
	" Truck crane 16t	day	4.00	0	65					0	259	31,056		
	" Truck 8t	day	4.00	0	40					0	158	19,013		
	Sub Total									8568000	496	8,627,578		
2	Labor													
	Foreman	man.day	4			0	38.20			0	153	18,336		
	Labor	man.day	20			0	14.30			0	286	34,320		
	Generator 45KVA	day.unit	4			0	33			0	132	15,840		
	Truck crane 16t	day.unit	4			0	33			0	132	15,840		
	Truck 8t	day.unit	4			0	33			0	132	15,840		
	Sub Total									0	835	100,176		
3	Equipment													
	Generator 45KVA	day.unit	4					1,080	0	4,320	0	4,320		
	Truck crane 16t	day.unit	4					9,480	0	37,920	0	37,920		
	Truck 8t	day.unit	4					3,480	0	13,920	0	13,920		
	Welder 500A	day.unit	4					111.6	0	446	0	446		
	Misxellaneous	%	2					1,132	0	1,132	0	1,132		
	Sub Total									57,739	0	57,739		
Total										8,625,739	1,331	8,785,492		
Unit Price per No.										616124.18	95.09	627535.15		
INDIRECT COST											15%	92418.63	14.26	94130.27
TOTAL										708,543	109.36	721,665		

LA UNION PORT DEVELOPMENT PROJECT

2B23 and 2C22

Ladder

UNIT

FC: YEN

LC: US\$

Total estimate for 7 Nos.

US\$=¥120

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		Total in YEN	
				Material		Labor		Equipment		Amount			
				FC	LC	FC	LC	FC	LC	FC	LC		
1	Material												
	Ladder	Nos	7	612000	0.00					4284000	0	4,284,000	
	Other material	%	2	46200	0.00					85680	0	85,680	
	Fuel Generator 45KVA	day	2.00	0	20					0	40	4,754	
	" Truck crane 16t	day	2.00	0	65					0	129	15,528	
	" Truck 8t	day	2.00	0	40					0	79	9,506	
	Sub Total									4369680	248	4,399,469	
2	Labor												
	Foreman	man.day	2			0	38.20			0	76	9,168	
	Labor	man.day	4			0	14.30			0	57	6,864	
	Generator 45KVA	day.unit	2			0	33			0	66	7,920	
	Truck crane 16t	day.unit	2			0	33			0	66	7,920	
	Truck 8t	day.unit	2			0	33			0	66	7,920	
	Sub Total									0	332	39,792	
3	Equipment												
	Generator 45KVA	day.unit	2					1,080	0	2,160	0	2,160	
	Truck crane 16t	day.unit	2					9,480	0	18,960	0	18,960	
	Truck 8t	day.unit	2					3,480	0	6,960	0	6,960	
	Welder 500A	day.unit	2					111.6	0	223	0	223	
	Misxellaneous	%	2					566	0	566	0	566	
	Sub Total									28,869	0	28,869	
Total										4,398,549	580	4,468,130	
Unit Price per No.										628364.18	82.83	638304.29	
INDIRECT COST										15%	94254.63	12.43	95745.64
TOTAL										722,619	95.26	734,050	

LA UNION PORT DEVELOPMENT PROJECT

2C0401

Requirement for Caisson Production Facility such as Floating Dock

UNIT

FC: YEN

LC: US\$

Total estimate for 252 days

US\$=¥120

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		Total in YEN	
				Material		Labor		Equipment		Amount			
				FC	LC	FC	LC	FC	LC	FC	LC		
1	Material												
	Floating Dock	day	252	0	110					0	27,707	3,324,888	
	Others	L.S.	1	0	350					0	350	42,000	
	Sub Total									0	28,057	3,366,888	
2	Labor												
	Floating Dock	day	252			114,000	66			28,728,000	16,632	30,723,840	
	Pontoon 1000t	day	252			0	66						
	Sub Total									28,728,000	16,632	30,723,840	
3	Equipment												
	Floating Dock	day	252					367,800	0	92,685,600	0	92,685,600	
	Pontoon 1000t	day	252					25,080	0		0		
	Sub Total									92,685,600	0	92,685,600	
Total										121,413,600	44,889	126,776,328	
Unit Price per day										481800.00	177.34	503080.67	
INDIRECT COST										15%	72270.00	26.60	75462.10
TOTAL										554,070	203.94	578,543	

LA UNION PORT DEVELOPMENT PROJECT

2C17

End stopper

UNIT

FC: YEN

LC: US\$

Total estimate for 2 Nos.

US\$=¥120

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		Total in YEN	
				Material		Labor		Equipment		Amount			
				FC	LC	FC	LC	FC	LC	FC	LC		
1	Material												
	Angle and Re-bar	kg	52.0	33.6	0.00					1747.2	0	1,747	
	Concrete & Sand	m3	8	0	15.3					0	122	14,688	
	Fuel Truck with crane 8t	day	1	0	45					0	45	5,390	
	Sub Total									1747.2	167	21,826	
2	Labor												
	Foreman	man.day	1			0	38.20			0	38	4,584	
	Labor	man.day	2			0	14.30			0	29	3,432	
	Truck with crane 8t	day.unit	1			0	33			0	33	3,960	
	Sub Total									0	100	11,976	
3	Equipment												
	Truck with crane 8t	day.unit	1					5,520	0	5,520	0	5,520	
	Sub Total									5,520	0	5,520	
Total										7,267	267	39,322	
Unit Price per No.										3633.60	133.56	19660.80	
INDIRECT COST										15%	545.04	20.03	2949.12
TOTAL										4,179	153.59	22,610	

LA UNION PORT DEVELOPMENT PROJECT

2018

Socket block

UNIT

FC: YEN

LC: US\$

Total estimate for 4 Nos.

US\$=¥120

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		Total in YEN	
				Material		Labor		Equipment		Amount			
				FC	LC	FC	LC	FC	LC	FC	LC		
1	Material												
	Angle and Re-bar	kg	73.0	33.6	0.00					2452.8	0	2,453	
	Concrete and sand	m3	0.6	0	17.20					0	10	1,238	
	Fuel Truck with crane 8t	day	1.00	0	45					0	45	5,390	
	Sub Total									2452.8	55	9,082	
2	Labor												
	Foreman	man.day	1			0	38.20			0	38	4,584	
	Labor	man.day	4			0	14.30			0	57	6,864	
	Truck with crane 8t	day.unit	1			0	33			0	33	3,960	
	Sub Total									0	128	15,408	
3	Equipment												
	Truck with crane 8t	day.unit	1					5,520	0	5,520	0	5,520	
	Sub Total									5,520	0	5,520	
Total										7,973	184	30,010	
Unit Price per No.										1993.20	45.91	7502.40	
INDIRECT COST										15%	298.98	6.89	1125.36
TOTAL										2,292	52.80	8,628	

LA UNION PORT DEVELOPMENT PROJECT

2C19

Crane anchoring frame

UNIT

FC: YEN

LC: US\$

Total estimate for 8 Nos.

US\$=¥120

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		Total in YEN	
				Material		Labor		Equipment		Amount			
				FC	LC	FC	LC	FC	LC	FC	LC		
1	Material												
	Concrete & Sand	m3	6.80	0	7.10					0	48	5,794	
	Angle & Re-bar	kg	154	4200	0.00					646800	0	646,800	
	Fuel Truck with crane 8t	day	1	0	45					0	45	5,390	
	Sub Total									646800	93	657,984	
2	Labor												
	Foreman	man.day	1			0	38.20			0	38	4,584	
	Labour	man.day	2			0	14.30			0	29	3,432	
	Truck with crane 8t	day.unit	1			0	33			0	33	3,960	
	Sub Total									0	100	11,976	
3	Equipment												
	Truck with crane 8t	day.unit	1					5,520	0	5,520	0	5,520	
	Sub Total									5,520	0	5,520	
Total										652,320	193	675,480	
Unit Price per No.										81540.00	24.13	84435.00	
INDIRECT COST										15%	12231.00	3.62	12665.25
TOTAL										93,771	27.74	97,100	

LA UNION PORT DEVELOPMENT PROJECT

2D01

Driving of Steel Pipe Pile

UNIT

FC: YEN

LC: US\$

Total estimate for 37Nos.

US\$=¥120

No	Work Item	Unit	Quantity	Basic Price		Unit Cost		Total in YEN
						Amount		
				FC	LC	FC	LC	
2D0701	Supply & Transport Steel Pipe Pile	Nos.	37	814,416.32	0.00	30,133,404	0.00	30,133,404
2D0702	Welding Joint of Steel Pipe Pile	Nos.	37	4,784.74	57.31	177,035	2,120.63	431,511
2D0703	Fabrication of Piling	Nos.	37	1,606.58	38.11	59,444	1,410.18	228,665
2D0704	Installation and removal of guide beam	Nos.	37	47,909.60	496.66	1,772,655	18,376.49	3,977,834
2D0705	Driving Steel Pipe Pile	Nos.	37	234,117.00	498.91	8,662,329	18,459.81	10,877,506
2D0706	Steel Pipe Pile reinforcement of edge	Nos.	37	8,116.26	21.78	300,302	805.74	396,990
	Total					41,105,169	41,172.84	46,045,910
				Unit Price per No.		1,110,951	1,112.78	1,244,484

LA UNION PORT DEVELOPMENT PROJECT

2D0101

UNIT

FC: YEN

LC: US\$

Total estimate for 10 Nos

US\$=¥120

Supply and Transport Steel Pipe Pile

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		Total in YEN	
				Material		Others		Equipment		Amount			
				FC	LC	FC	LC	FC	LC	FC	LC		
1	Material												
	Steel Pipe Pile	ton	315	48,000	0					15,120,000	0	15,120,000	
	Other material	%	1	151,200	0					151,200	0	151,200	
	Sub Total									15,271,200	0	15,271,200	
2	Others												
	Loading & Unloading Fee	FT	660	4560						3,009,600	0	3,009,600	
	Transportation fee by ship	FT	660	12000						7,920,000	0	7,920,000	
	Miscellaneous	LS	1	2160						2,160	0	2,160	
	Sub Total									10,931,760	0	10,931,760	
Total										26,202,960	0	26,202,960	
Unit Price per No.										708,188.11	0	708,188.11	
INDIRECT COST										15%	106228.22	0	106228.22
TOTAL										814,416		814,416	

LA UNION PORT DEVELOPMENT PROJECT
2D0102

UNIT
FC: YEN
LC: US\$

Total estimate for 10 Nos. US\$=¥120

Welding Joint of Steel Pipe Pile

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		Total in YEN	
				Material		Labor		Equipment		Amount			
				FC	LC	FC	LC	FC	LC	FC	LC		
1	Material												
	Welding rod	kg	58	300.00	0					17,400	0	17,400	
	Oxygen	m3	5	0	0.620					0	3	372	
	Acetylen	kg	3	0	1.050					0	3	315	
	Fuel Generator 100KVA	day	1.5	0	42					0	62	7,484	
	" Truck crane 25t	day	1.5	0	69					0	104	12,474	
	Sub Total									17,400	172	38,045	
2	Labor												
	Mechanic	man.day	1.5			0	31			0	47	5,580	
	Welder	man.day	7			0	23.1			0	159	19,127	
	Labour	man.day	1.5			0	14.3			0	21	2,574	
	Generator 100KVA	man.day	1.5			0	33			0	50	5,940	
	Truck crane 25t	man.day	1.5			0	33			0	50	5,940	
	Sub Total									0	326	39,161	
3	Equipment												
	Generator 100KVA	day	1.5					1,800	0	2,700	0	2,700	
	Truck crane 25t	day	1.5					12,960	0	19,440	0	19,440	
	Sem-Auto Welder	day.unit	7					295.20	0	2,066	0	2,066	
	Sub Total									24,206	0	24,206	
Total										41,606	498	101,413	
Unit Price per No.										4160.64	49.84	10141.26	
INDIRECT COST										15%	624.10	7.48	1521.19
TOTAL										4,785	57.31	11,662	

LA UNION PORT DEVELOPMENT PROJECT
2D0103
Fabrication of Piling

UNIT
FC: YEN
LC: US\$

Total estimate for 10 Nos. US\$=¥120

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		Total in YEN	
				Material		Labor		Equipment		Amount			
				FC	LC	FC	LC	FC	LC	FC	LC		
1	Material												
	Oxygen	m3	2.50	0	0.62					0	2	186	
	Acetylen	kg	1.20	0	1.05					0	1	151	
	Timber	cu.m	0.25	0	380					0	95	11,400	
	Fuel Trailer 28t	day	0.64	0	49					0	31	3,726	
	" Truck crane 25t	day	0.64	0	69					0	44	5,322	
	Sub Total									0	173	20,785	
2	Labor												
	Foreman	man.day	0.64			0	38.20			0	24	2,934	
	Labour	man.day	6.40			0	14.30			0	92	10,982	
	Trailer 28t	man.day	0.64			0	33			0	21	2,534	
	Truck crane 25t	man.day	0.64			0	33			0	21	2,534	
	Sub Total									0	158	18,985	
3	Equipment												
	Trailer 28t	day	0.64					8,780	0	5,606	0	5,606	
	Truck crane 25t	day	0.64					12,960	0	8,294	0	8,294	
	Other equipment	%	0.5					240	0	70	0	70	
	Sub Total									13,970	0	13,970	
Total										13,970	331	53,740	
Unit Price per No.										1,397.03	33.14	5,374.03	
INDIRECT COST										15%	209.55	4.97	806.10
TOTAL										1,607	38.11	6,180	

LA UNION PORT DEVELOPMENT PROJECT
200104

UNIT
FC: YEN
LC: US\$

Total estimate for 10 Nos. US\$=¥120

Installation and Removal of Guide Beam

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		Total in YEN	
				Material		Labor		Equipment		Amount			
				FC	LC	FC	LC	FC	LC	FC	LC		
1	Material												
	Guide pile H350x350x12(15%)	ton	4.772	7200	0					34,358	0	34,358	
	Guide beam H300x300(15%)	ton	1.43	7200	0					10,296	0	10,296	
	Wasted steel(5%)	ton	0.31	7200	0					2,232	0	2,232	
	Bolt & Nut	pcs	48	0	1.25					0	60	7,200	
	Welding rod	kg	120	300.00	0					36,000	0	36,000	
	Oxygen	m3	24	0	0.62					0	15	1,786	
	Acetylen	kg	48	0	1.05					0	50	6,048	
	Other material	%	5	829.2	0					4,146	0	4,146	
	Fuel Crawler crane 30t	day.unit	8	0	52					0	414	49,738	
	" Generator 45KVA	day.unit	8	0	18					0	148	17,741	
	" Tug boat 250PS	day.unit	8	0	69					0	554	66,528	
	Sub Total									87,032	1,242	236,072	
2	Labor												
	Foreman	man.day	8			0	38.2			0	306	36,672	
	Labour	man.day	64			0	14.3			0	915	109,824	
	Crawler crane 30t	day.unit	8			0	33			0	264	31,880	
	Generator 45KVA	day.unit	8			0	33			0	264	31,880	
	Tug boat 250PS	day.unit	8			0	168			0	1,328	159,360	
	Pontoon 500ton	day.unit	8			0	66			0	528	63,360	
	Sub Total									0	3,077	432,576	
3	Equipment												
	Crawler crane 30t	day.unit	8				13,440	0		107,520	0	107,520	
	Generator 45KVA	day.unit	8				1,080	0		8,640	0	8,640	
	Tug boat 250PS	day.unit	8				11,760	0		94,080	0	94,080	
	Pontoon 500ton	day.unit	8				14,400	0		115,200	0	115,200	
	Welder 500A	day.unit	8				111.6	0		893	0	893	
	Other equipment	%	1				3,240	0		3,240	0	3,240	
	Sub Total									329,573	0	329,573	
Total										416,605	4,319	998,221	
Unit Price per No.										41,660.52	431.88	99,822.12	
INDIRECT COST										15%	6,249.08	64.78	14,973.32
TOTAL										47,910	496.66	114,795	

LA UNION PORT DEVELOPMENT PROJECT
2D0105
Driving Steel Pipe Pile

UNIT
FC: YEN
LC: US\$

Total estimate for 10 Nos. US\$=¥120

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		Total in YEN	
				Material		Labor		Equipment		Amount			
				FC	LC	FC	LC	FC	LC	FC	LC		
1	Material												
	Fuel Piling barge D-72	day.unit	5.0	0	229					0	1,143	137,214	
	" Tug boat 250PS	day.unit	5.0	0	69					0	347	41,580	
	" Anchor boat 180PS	day.unit	1.0	0	75					0	75	8,950	
	" Crawler crane 50t	day.unit	5.0	0	62					0	312	37,422	
	Sub Total									0	1,876	225,166	
2	Labor												
	Foreman	man.day	5			0	38.2			0	191	22,920	
	Labor	man.day	20			0	14.3			0	286	34,320	
	Crawler crane 50t	man.day	5			0	33			0	165	19,800	
	Piling barge D-72	man.day	5			69000	198			0	990	118,800	
	Tug boat 250PS	man.day	5			0	166			0	830	99,600	
	Anchor boat 180PS	man.day	1			0	166			0	166	19,920	
	Pontoon 1000t	man.day	5			0	66			0	330	39,600	
	Sub Total									0	2,462	354,960	
3	Equipment												
	Pile driving barge D-72	day.unit	5					338,040	0	1,690,200	0	1,690,200	
	Pontoon 1000t	day.unit	5					25,080	0	125,400	0	125,400	
	Tug boat 250PS	day.unit	5					11,760	0	58,800	0	58,800	
	Anchor boat 180PS	day.unit	1					49,800	0	49,800	0	49,800	
	Crawler crane 50t	day.unit	5					22,320	0	111,600	0	111,600	
	Sub Total									2,035,800	0	2,035,800	
Total										2,035,800	4,338	2,615,926	
Unit Price per No.										203,580.00	433.84	261,592.56	
INDIRECT COST										15%	30537.00	65.08	39238.88
TOTAL										234,117	498.91	300,831	

LA UNION PORT DEVELOPMENT PROJECT
2D0108

UNIT
FC: YEN
LC: US\$

Total estimate for 10 Nos. US\$=¥120

Steel Pipe Pile Reinforcement of Edge

No	Work Item	Unit	Quantity	Basic Price				Unit Cost		Total in YEN		
				Material		Labor		Equipment			Amount	
				FC	LC	FC	LC	FC	LC		FC	LC
PD-6	Steel Pipe Pile reinforcement of edge											
1	Material											
	Steel bar D13-D25	ton	1.50	40800	0			61,200	0	61,200		
	Wasted steel(2%)	ton	0.03	40800	0			1,224	0	1,224		
	Welding rod	kg	7	300.00	0			2,025	0	2,025		
	Oxygen	m3	3	0	0.62			0	2	186		
	Acetylen	kg	1.2	0	1.05			0	1	151		
	Fuel Generator 100KVA	dayunit	0.4	0	42			0	17	1,996		
	" Truck crane 25t	dayunit	0.4	0	69			0	28	3,326		
	Sub Total							64,449	47	70,108		
2	Labor											
	Mechanic	man.day	0.4		0	31.00		0	12	1,488		
	Welder	man.day	2		0	23.10		0	46	5,544		
	Labour	man.day	4		0	14.30		0	57	6,864		
	Generator 100KVA	man.day	0.4		0	33		0	13	1,584		
	Truck crane 25t	man.day	0.4		0	33		0	13	1,584		
	Sub Total							0	142	17,064		
3	Equipment											
	Generator 100KVA	day	0.4				1,800	0	720	720		
	Truck crane 25t	day	0.4				12,960	0	5,184	5,184		
	Welder	day.unit	2				111.60	0	223	223		
	Sub Total							6,127	0	6,127		
Total								70,576	189	93,300		
Unit Price per No.								7057.62	18.94	9329.96		
INDIRECT COST								15%	1058.64	2.84	1399.49	
TOTAL								8,116	21.78	10,729		

LA UNION PORT DEVELOPMENT PROJECT

2D02

Superstructure

UNIT

FC: YEN

LC: US\$

Total estimate for 823m3

US\$=¥120

No	Work Item	Unit	Quantity	Basic Price		Unit Cost		Total in YEN
				Amount				
				FC	LC	FC	LC	
2D0201	Installation and removal of scaffold for beam concrete	sq.m	900	980.12	10.73	882,112	9,659.18	2,041,214
2D0202	Fabrication of reinforcement	ton	91	13,296.07	654.96	1,209,942	59,601.52	8,362,125
2D0203	Placing of concrete	cu.m	823	1,144.37	156.67	941,812	128,940.23	16,414,640
	Total					3,033,867	198,200.93	26,817,979
				Unit Price per m3		2,939	191.98	25,976

LA UNION PORT DEVELOPMENT PROJECT

2D0201

Installation and removal of scaffold for beam concrete

UNIT

FC: YEN

LC: US\$

Total estimate for 900m2

US\$=¥120

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		Total in YEN	
				Material		Labor		Equipment		Amount			
				FC	LC	FC	LC	FC	LC	FC	LC		
1	Material												
	Scaffold pile H350x350(15%)	ton	30	0	60					0	1,800	216,000	
	Scaffold beam H300x300(15%)	ton	11	0	60					0	660	79,200	
	Wasted steel(5%)	ton	2.05	0	60					0	123	14,760	
	Bolt & Nut	pcs	200	0	1.02					0	204	24,480	
	Welding rod	kg	500	226.8	0					113,400	0	113,400	
	Oxygen	m3	100	0	0.07					0	7	840	
	Acetylen	kg	200	0	0.21					0	42	5,040	
	Other material	%	5	1134	28.36					5,670	142	22,686	
	Fuel Crawler crane 50t	day	9	0	48					0	434	52,091	
	" Crawler crane 30t	day	9	0	40					0	362	43,410	
	" Generator 125KVA	day	9	0	63					0	571	68,559	
	" Tug boat 250PS	day	9	0	67					0	603	72,349	
	Sub Total									119,070	4,948	712,816	
2	Labor												
	Foreman	man.day	9			0	38.20			0	344	41,256	
	Labor	man.day	36			0	14.30			0	515	61,776	
	Welder	man.day	9			0	23.09			0	208	24,937	
	Crawler crane 50t	day	9			0	33			0	297	35,640	
	Crawler crane 30t	day	9			0	33			0	297	35,640	
	Generator 125KVA	day	9			0	33			0	297	35,640	
	Tug boat 250PS	day	9			0	166			0	1,494	179,280	
	Sub Total									0	3,451	414,169	
3	Equipment												
	Generator 125KVA	day	9					2280	0	20,520	0	20,520	
	Welder 500A	day	18					120	0	2,160	0	2,160	
	Crawler crane 50t	day	9					22,320	0	200,880	0	200,880	
	Crawler crane 30t	day	9					13,440	0	120,960	0	120,960	
	Vibro-Hammer 60KW	day	9					7,200	0	64,800	0	64,800	
	Pontoon 500t	day	9					14,400	0	129,600	0	129,600	
	Tug boat 250PS	day	9					11,760	0	105,840	0	105,840	
	Other equipment	%	0.5					6,448	0	3,224	0	3,224	
	Sub Total									647,984	0	647,984	
Total										767,054	8,399	1,774,969	
Unit Price per m2										852.28	9.33	1972.19	
INDIRECT COST										15%	127.84	1.40	295.83
TOTAL										980	10.73	2,268	

LA UNION PORT DEVELOPMENT PROJECT

2D0202

Fabrication of Reinforcement for Concrete Beam

UNIT

FC: YEN

LC: US\$

Total estimate for 100ton

US\$=¥125

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		Total in YEN
				Material		Labor		Equipment		Amount		
				FC	LC	FC	LC	FC	LC	FC	LC	
1	Material											
	Plate & Ribband	ton	2.90	0	330					0	957	119,625
	Steel bar D10-D13	ton	100.00	0	360					0	36,000	4,500,000
	Wasted steel bar D8(2%)	ton	2	0	360					0	720	90,000
	Small size steel	kg	1,237	0	0.36					0	445	55,665
	Welding rod	kg	396	236.25	0					93,555	0	93,555
	Fuel Generator 125KVA	day	25	0	63					0	1,587	198,378
	" Crawler crane 30t	day	25	0	40					0	1,005	125,606
	" Tug boat 250PS	day	25	0	67					0	1,675	209,344
	Sub Total									93,555	42,389	5,392,173
2	Labor											
	Foreman	man.day	25			0	38.20			0	955	119,375
	Labor	man.day	425			0	14.30			0	6,078	759,688
	Welder	man.day	75			0	23.09			0	1,732	216,469
	Generator 125KVA	day	25			0	33			0	825	103,125
	Crawler crane 30t	day	25			0	33			0	825	103,125
	Tug boat 250PS	day	25			0	166			0	4,150	518,750
	Sub Total									0	14,564	1,820,531
3	Equipment											
	Generator 125KVA	day.unit	25					2,280	0	57,000	0	57,000
	Welder 300A	day.unit	75					125	0	9,375	0	9,375
	Bar cutter	day.unit	25					125	0	3,125	0	3,125
	Bar bender	day.unit	25					125	0	3,125	0	3,125
	Crawler crane 30t	day.unit	25					13,440	0	336,000	0	336,000
	Pontoon 500t	day.unit	25					14,400	0	360,000	0	360,000
	Tug boat 250PS	day.unit	25					11,760	0	294,000	0	294,000
	Sub Total									1,062,625	0	1,062,625
Total										1,156,180	56,953	8,275,329
Unit Price per T										11561.80	570	82753.29
INDIRECT COST										1734.27	85.43	12412.99
TOTAL										13,296	654.96	95,166

LA UNION PORT DEVELOPMENT PROJECT

2D0203

Placing of Concrete

UNIT

FC: YEN

LC: US\$

Total estimate for m3

US\$=¥125

No	Work Item	Unit.	Quantity	Basic Price						Unit Cost		Total in YEN	
				Material		Labor		Equipment		Amount			
				FC	LC	FC	LC	FC	LC	FC	LC		
1	Material												
	Ready mixed concrete	m3	100	0	73.35					0	7,335	916,875	
	Wasted concrete(2.5%)	m3	2.5	0	73.35					0	183	22,922	
	Metal form bottom	m2	82	0	3.60					0	295	36,900	
	side	m2	162	0	5.46					0	885	110,565	
	Other material	%	2	0	87.37					0	175	21,843	
	Coner Protection	m	162	0	23.00					0	3,726	465,750	
	Fuel Generator 125KVA	day	2.00	0	63					0	127	15,870	
	Crawler crane 30t	day	2.00	0	40					0	80	10,049	
	Tug boat 250PS	day	2.00	0	67					0	134	16,748	
	Sub Total									0	12,940	1,617,521	
2	Labor												
	Foreman	man.day	2			0	38.20			0	76	9,550	
	Labor	man.day	10			0	14.30			0	143	17,875	
	Generator 125KVA	day.unit	2			0	33			0	66	8,250	
	Crawler crane 30t	day.unit	2			0	33			0	66	8,250	
	Tug boat 250PS	day.unit	2			0	166			0	332	41,500	
	Sub Total									0	683	85,425	
3	Equipment												
	Generator 125KVA	day.unit	2					2,280	0	4,560	0	4,560	
	Concrete mixer 0.6m3	day.unit	2					7,750	0	15,500	0	15,500	
	Vibrator	day.unit	2					125	0	250	0	250	
	Crawler crane 30t	day.unit	2					13,440	0	26,880	0	26,880	
	Pontoon 500t	day.unit	2					14,400	0	28,800	0	28,800	
	Tug boat 250PS	day.unit	2					11,760	0	23,520	0	23,520	
	Sub Total									99,510	0	99,510	
Total										99,510	13,624	1,802,456	
Unit Price per m3										995.10	136.24	18024.56	
INDIRECT COST										15%	149.27	20.44	5407.37
TOTAL										1,144	156.67	23,432	

LA UNION PORT DEVELOPMENT PROJECT

2D03

Corrosion-Proof

UNIT

FC: YEN

LC: US\$

Total estimate for 37 Nos.

US\$=¥120

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		Total in YEN	
				Material		Labor		Equipment		Amount			
				FC	LC	FC	LC	FC	LC	FC	LC		
1	Material												
	Aluminum Alloy 3.5A x 20year	Nos	12	144,960	0.00					1739520	0	1,739,520	
	" 3.0A x 20year	Nos.	31	123,600	0.00					3831600	0	3,831,600	
	" other materials	L.S.	1	180000	0.00					180000	0	180,000	
	Measurement instrument	No.	1	138,000	0.00					138000	0	138,000	
	Petrolatum-lining with Accessory	m2	414	30600	0.00					12668400	0	12,668,400	
	Fuel Generator 45KVA	day	1.00	0	20					0	20	2,377	
	" Truck crane 16t	day	1.00	0	65					0	65	7,764	
	" Truck 8t	day	1.00	0	40					0	40	4,753	
	Sub Total									18,557,520	124	18,572,414	
2	Labor												
	Foreman	man.day	37			0	38.20			0	1,413	169,608	
	Diver	man.day	74			0	100.00			0	7,400	888,000	
	Generator 45KVA	day.unit	37			0	33			0	1,221	146,520	
	Truck crane 16t	day.unit	37			0	33			0	1,221	146,520	
	Truck 8t	day.unit	37			0	33			0	1,221	146,520	
	Sub Total									0	12,476	1,497,168	
3	Equipment												
	Generator 45KVA	day.unit	37					1,080	0	39,960	0	39,960	
	Truck crane 16t	day.unit	37					9,480	0	350,760	0	350,760	
	Truck 8t	day.unit	37					3,480	0	128,760	0	128,760	
	Welder 500A	day.unit	37					111.6	0	4,129	0	4,129	
	Misxellaneous	%	2					5,236	0	10,472	0	10,472	
	Sub Total									534,081	0	534,081	
Total										19,091,601	12,601	20,603,664	
Unit Price per No.										515989.23	340.55	556855.78	
INDIRECT COST										15%	77398.38	51.08	83528.37
TOTAL										593,388	391.64	640,384	

LA UNION PORT DEVELOPMENT PROJECT
2D04
Catwalk

UNIT
FC: YEN
LC: US\$

Total estimate for 2 Nos. US\$=¥120

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		Total in YEN	
				Material		Labor		Equipment		Amount			
				FC	LC	FC	LC	FC	LC	FC	LC		
1	Material												
	Grating	kg	1500	0	3.3					0	4,950	594,000	
	Base steel	kg	8580	0	0.66					0	5,663	679,536	
	Pipe rail	kg	738	0	3.0					0	2,214	265,680	
	Welding rod	kg	58	0	2.5					0	145	17,400	
	Oxygen	m3	5	0	0.620					0	3	372	
	Acetylen	kg	3	0	1.050					0	3	315	
	Fuel Trailer 28t	day	1.5	0	49					0	73	8,732	
	" Truck crane 25t	day	1.5	0	69					0	104	12,474	
	" Generator 45KVA	day	1.5	0	18					0	28	3,326	
	Sub Total									0	13,182	1,581,835	
2	Labor												
	Mechanic	man.day	1.5			0	31			0	47	5,580	
	Welder	man.day	7			0	23.1			0	159	19,127	
	Labour	man.day	1.5			0	14.3			0	21	2,574	
	Generator 45KVA	man.day	1.5			0	33			0	50	5,940	
	Truck crane 25t	man.day	1.5			0	33			0	50	5,940	
	Trailer 28t	man.day	1.5			0	33			0	50	5,940	
	Sub Total									0	376	45,101	
3	Equipment												
	Trailer 28t	day	1.5					8,760	0	13,140	0	13,140	
	Truck crane 25t	day	1.5					12,960	0	19,440	0	19,440	
	Generator 45KVA	day	1.5					1,080	0	1,620	0	1,620	
	Sem-Auto Welder	day.unit	7					295.20	0	2,066	0	2,066	
	Sub Total									36,266	0	36,266	
Total										36,266	13,558	1,663,202	
Unit Price per No.										18133.20	6,778.90	831601.20	
INDIRECT COST										15%	2719.98	1,016.84	124740.18
TOTAL										20,853	7,795.74	956,341	

LA UNION PORT DEVELOPMENT PROJECT

2D05

Fender

UNIT

FC: YEN

LC: US\$

Total estimate for 4 Nos.

US\$=¥120

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		Total in YEN	
				Material		Labor		Equipment		Amount			
				FC	LC	FC	LC	FC	LC	FC	LC		
1	Material												
	Rubber Fender	Nos	4	744000	0.00					2976000	0	2,976,000	
	Fender breast & Breast bed	ton	0.4	46200	0.00					18480	0	18,480	
	Anchor bolt & other	L.S.	1	107400	0.00					107400	0	107,400	
	Steel bar	ton	0.40	0	360.00					0	144	17,280	
	Other material	%	2	0	2.88					0	3	346	
	Fuel Generator 45KVA	day	1.00	0	20					0	20	2,377	
	" Truck crane 16t	day	1.00	0	65					0	65	7,764	
	" Truck 8t	day	1.00	0	40					0	40	4,753	
	Sub Total									3,101,880	271	3,134,400	
2	Labor												
	Foreman	man.day	1			0	38.20			0	38	4,584	
	Labor	man.day	5			0	14.30			0	72	8,580	
	Generator 45KVA	day.unit	1			0	33			0	33	3,960	
	Truck crane 16t	day.unit	1			0	33			0	33	3,960	
	Truck 8t	day.unit	1			0	33			0	33	3,960	
	Sub Total									0	209	25,044	
3	Equipment												
	Generator 45KVA	day.unit	1					1,080	0	1,080	0	1,080	
	Truck crane 16t	day.unit	1					9,480	0	9,480	0	9,480	
	Truck 8t	day.unit	1					3,480	0	3,480	0	3,480	
	Welder 500A	day.unit	2					111.6	0	223	0	223	
	Misxellaneous	%	2					143	0	285	0	285	
	Sub Total									14,548	0	14,548	
Total										3,116,428	480	3,173,992	
Unit Price per No.										779107.12	119.93	793498.12	
INDIRECT COST										15%	116866.07	17.99	119024.72
TOTAL										895,973	137.91	912,523	

LA UNION PORT DEVELOPMENT PROJECT
2D06
Bollard

UNIT
FC: YEN
LC: US\$

Total estimate for 8 Nos.

US\$=¥120

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		Total in YEN	
				Material		Labor		Equipment		Amount			
				FC	LC	FC	LC	FC	LC	FC	LC		
1	Material												
	Bollard 100t with anchor bolt	Nos	8	625000	0.00					5000000	0	5,000,000	
	Bitt 15t with anchor bolt	Nos	2	100000	0.00					200000	0	200,000	
	Moring ring with attachment	Nos	9	10800	0.00					97200	0	97,200	
	Fuel Generator 45KVA	day	2.00	0	20					0	40	4,754	
	" Truck crane 16t	day	2.00	0	65					0	129	15,528	
	" Truck 8t	day	2.00	0	40					0	79	9,506	
	Sub Total									5,297,200	248	5,326,989	
2	Labor												
	Foreman	man.day	2			0	38.20			0	76	9,168	
	Labor	man.day	10			0	14.30			0	143	17,160	
	Generator 45KVA	day.unit	2			0	33			0	66	7,920	
	Truck crane 16t	day.unit	2			0	33			0	66	7,920	
	Truck 8t	day.unit	2			0	33			0	66	7,920	
	Sub Total									0	417	50,088	
3	Equipment												
	Generator 45KVA	day.unit	2					1,080	0	2,160	0	2,160	
	Truck crane 16t	day.unit	2					9,480	0	18,960	0	18,960	
	Truck 8t	day.unit	2					3,480	0	6,960	0	6,960	
	Welder 500A	day.unit	2					111.6	0	223	0	223	
	Misxellaneous	%	2					283	0	566	0	566	
	Sub Total									28,869	0	28,869	
Total										5,326,069	666	5,405,946	
Unit Price per No.										665758.66	83.21	675743.26	
INDIRECT COST										15%	99863.80	12.48	101361.49
TOTAL										765,622	95.69	777,105	

LA UNION PORT DEVELOPMENT PROJECT

2D07

Access Bridge

UNIT

FC: YEN

LC: US\$

Total estimate for 10 Nos.

US\$=¥120

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		Total in YEN	
				Material		Labor		Equipment		Amount			
				FC	LC	FC	LC	FC	LC	FC	LC		
1	Material												
	Concrete	m3	16.6	0	70.00					0	1.162	139.440	
	Form	m2	27.8	0	3.83					0	106	12,777	
	Reinforcement bar and Angle	ton	5.6	0	360.00					0	2,016	241,920	
	Lifting Bar & Plate	kg	142	0	0.46					0	65	7,838	
	Rubber Shoe	m	40	0	8.00					0	320	38,400	
	Fuel Truck crane 25t	day	2.00	0	73					0	147	17,592	
	Trailer 28t	day	2.00	0	49					0	97	11,642	
	Sub Total									0	3,913	469,610	
2	Labor												
	Foreman	man.day	2			0	38.20			0	76	9,168	
	Labor	man.day	4			0	14.30			0	57	6,864	
	Truck crane 25t	day.unit	2			0	33			0	66	7,920	
	Trailer 28t	day.unit	2			0	33			0	66	7,920	
	Sub Total									0	266	31,872	
3	Equipment												
	Truck crane 25t	day.unit	2					12,960	0	25,920	0	25,920	
	Trailer 28t	day.unit	2					8,760	0	17,520	0	17,520	
	Sub Total									43,440	0	43,440	
Total										43,440	4,179	544,922	
Unit Price per No.										4344.00	417.90	54492.17	
INDIRECT COST										15%	651.60	62.69	8173.83
TOTAL										4,996	480.59	62,666	

LA UNION PORT DEVELOPMENT PROJECT

2D08

Ladder

UNIT

FC: YEN

LC: US\$

Total estimate for 7 Nos.

US\$=¥120

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		Total in YEN	
				Material		Labor		Equipment		Amount			
				FC	LC	FC	LC	FC	LC	FC	LC		
1	Material												
	Ladder	Nos	7	612000	0.00					4284000	0	4,284,000	
	Other material	%	2	46200	0.00					85680	0	85,680	
	Fuel Generator 45KVA	day	2.00	0	20					0	40	4,754	
	" Truck crane 16t	day	2.00	0	65					0	129	15,528	
	" Truck 8t	day	2.00	0	40					0	79	9,506	
	Sub Total									4369680	248	4,399,469	
2	Labor												
	Foreman	man.day	2			0	38.20			0	76	9,168	
	Labour	man.day	4			0	14.30			0	57	6,864	
	Generator 45KVA	day.unit	2			0	33			0	66	7,920	
	Truck crane 16t	day.unit	2			0	33			0	66	7,920	
	Truck 8t	day.unit	2			0	33			0	66	7,920	
	Sub Total									0	332	39,792	
3	Equipment												
	Generator 45KVA	day.unit	2				1,080	0		2,160	0	2,160	
	Truck crane 16t	day.unit	2				9,480	0		18,960	0	18,960	
	Truck 8t	day.unit	2				3,480	0		6,960	0	6,960	
	Welder 500A	day.unit	2				111.6	0		223	0	223	
	Misellaneous	%	2				566	0		566	0	566	
	Sub Total									28,869	0	28,869	
Total										4,398,549	580	4,468,130	
Unit Price per No.										628364.18	82.83	638304.29	
INDIRECT COST													
										15%	94254.63	12.43	95745.64
TOTAL										722,619	95.26	734,050	

LA UNION PORT DEVELOPMENT PROJECT
2E0101

UNIT
FC: YEN
LC: US\$

Total estimate for 1000m3 US\$=¥120

Rubble Stone including Geotextile

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		Total in YEN	
				Material		Labor		Equipment		Amount			
				FC	LC	FC	LC	FC	LC	FC	LC		
1	Material												
	Rubble rock	m3	1,000	0	5.16					0	5,160	619,200	
	Wasted rubble rock(25%)	m3	250	0	5.16					0	1,290	154,800	
	Filter rock	m3	17.5	0	14.20					0	249	29,820	
	Geotextile	m2	130.0	0	1.47					0	191	22,932	
	Fuel Tug boat 450PS	day	4.2	0	130					0	545	65,389	
	" Backhoe 1.2m3	day	4.2	0	180					0	754	90,488	
	" Working boat	day	4.2	0	60					0	254	30,462	
	Sub Total									0	8,442	1,013,091	
2	Labor												
	Foreman	manday	4.2			0	38.2			0	160	19,253	
	Labor	manday	16.8			0	14.3			0	240	28,829	
	Diver	manday	8.4			0	100			0	840	100,800	
	Tug boat 450PS	day	4.2			0	166			0	697	83,664	
	Pontoon 500t	dayunit	8.4			0	66			0	554	66,528	
	Backhoe 1.2m3	day	4.2			0	33			0	139	16,632	
	Working boat	day	4.2			0	66			0	277	33,264	
	Sub Total									0	2,908	348,970	
3	Equipment												
	Tug boat 450PS	day	4.20					19,320	0	81,144	0	81,144	
	Pontoon 500t	day.unit	8.40					14,400	0	120,960	0	120,960	
	Backhoe 1.2m3	day	4.20					15,240	0	64,008	0	64,008	
	Working boat	day	4.20					3,480	0	14,616	0	14,616	
	Sub Total									280,728	0	280,728	
Total										280,728	11,351	1,642,788	
Unit Price per m3										280.73	11.35	1,643	
INDIRECT COST										15%	42.11	1.70	246
TOTAL										323	13.05	1,889	

LA UNION PORT DEVELOPMENT PROJECT
2E0102 and 2E0202
Armour Stone

UNIT
FC: YEN
LC: US\$

Total estimate for 1000m3

US\$=¥120

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		Total in YEN	
				Material		Labor		Equipment		Amount			
				FC	LC	FC	LC	FC	LC	FC	LC		
1	Material												
	Armour stone	cu.m	1,000	0	6.2					0	6,200	744,000	
	Wasted armour stone(25%)	cu.m	250	0	6.2					0	1,550	186,000	
	Fuel Tug boat 450PS	day	5.9	0	130					0	765	91,856	
	" Backhoe 1.2m3	day	5.9	0	180					0	1,059	127,114	
	" Working boat	day	5.9	0	60					0	357	42,792	
	Sub Total									0	9,931	1,191,762	
2	Labor												
	Foreman	manday	5.9			0	38.2			0	225	27,046	
	Labor	manday	23.6			0	14.3			0	337	40,498	
	Diver	manday	11.8			0	100			0	1,180	141,600	
	Tug boat 450PS	day	5.9			0	166			0	979	117,528	
	Pontoon 500t	dayunit	11.8			0	66			0	779	93,456	
	Backhoe 1.2m3	day	5.9			0	33			0	195	23,364	
	Working boat	day	5.9			0	66			0	389	46,728	
	Sub Total									0	4,085	490,219	
3	Equipment												
	Tug boat 450PS	day	5.90					19,320	0	113,988	0	113,988	
	Pontoon 500t	day.unit	11.80					14,400	0	169,920	0	169,920	
	Backhoe 1.2m3	day	5.90					15,240	0	89,916	0	89,916	
	Working boat	day	5.90					3,480	0	20,532	0	20,532	
	Sub Total									394,356	0	394,356	
Total										394,356	14,017	2,076,337	
Unit Price per m3										394.36	14.02	2076.34	
INDIRECT COST										15%	59.15	2.10	311.45
TOTAL										454	16.12	2,388	

LA UNION PORT DEVELOPMENT PROJECT

2E0103

Concrete Block

UNIT

FC: YEN

LC: US\$

Total estimate for 155m3

US\$=¥120

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		Total in YEN	
				Material		Labor		Equipment		Amount			
				FC	LC	FC	LC	FC	LC	FC	LC		
1	Material												
	Ready mixed concrete Type A	m3	42	0	70.00					0	2,940	352,800	
	Ready mixed concrete Type B	m3	53	0	70.00					0	3,710	445,200	
	Ready mixed concrete Type C	m3	60	0	70.00					0	4,200	504,000	
	Wasted concrete(2.5%)	m3	4	0	70.00					0	280	33,600	
	Metal form(10%)	m2	226	0	3.83					0	866	103,870	
	Other material	%	2.5	0	108.40					0	271	32,550	
	Fuel Crawler crane 50t	day	3	0	89					0	266	31,957	
	" Trailer 28t	day	2	0	49					0	98	11,722	
	" Truck crane 25t	day	2	0	69					0	139	16,632	
	" Tug boat 250PS	day	2	0	17					0	35	4,158	
	Sub Total									0	12,769	1,532,330	
2	Labor												
	Foreman	man.day	3			0	38.20			0	115	13,752	
	Labor	man.day	30			0	14.30			0	429	51,480	
	Diver	man.day	30			0	14.30			0	429	51,480	
	Crawler crane 50t	day	3			0	33			0	99	11,880	
	Trailer 28t	day	3			0	33			0	99	11,880	
	Truck crane 25t	day	3			0	33			0	99	11,880	
	Tug boat 250PS	day	3			0	133			0	399	47,880	
	Pontoon 500t	day	3			0	66			0	198	23,760	
	Sub Total									0	1,072	152,352	
3	Equipment												
	Crawler crane 50t	day	3					22,320	0	66,960	0	66,960	
	Trailer 28t	day	3					8,760	0	26,280	0	26,280	
	Truck crane 25t	day	3					12,960	0	38,880	0	38,880	
	Tug boat 250PS	day	3					11,760	0	35,280	0	35,280	
	Pontoon 500t	day	3					14,400	0	43,200	0	43,200	
	Vibrator	dayunit	6					120	0	720	0	720	
	Sub Total									211,320	0	211,320	
Total										211,320	13,841	1,896,002	
Unit Price per m3										1,363.35	89.30	12232.27	
INDIRECT COST										15%	204.50	13.39	1834.84
TOTAL										1,568	102.69	14,067	

LA UNION PORT DEVELOPMENT PROJECT
2E0104
Concrete Wall

UNIT
FC: YEN
LC: US\$

Total estimate for 100 m3 US\$=¥120

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		Total in YEN	
				Material		Labor		Equipment		Amount			
				FC	LC	FC	LC	FC	LC	FC	LC		
1	Material												
	Ready mixed concrete	m3	100	0	70.00					0	7,000	840,000	
	Wasted concrete(2.5%)	m3	2.5	0	70.00					0	175	21,000	
	Elas tigh board	m2	5.6	0	8.33					0	47	5,598	
	Metal form(10%)	m2	133	0	3.83					0	509	61,127	
	Other material	%	2	0	104.00					0	208	24,960	
	Fuel Concrete pump	day	3	0	0					0	0	0	
	" Generator 125KVA	day	3	0	50					0	150	17,960	
	" Truck crane 16t	day	3	0	30					0	89	10,728	
	Sub Total									0	8,178	981,373	
2	Labor												
	Foreman	man.day	3			0	38.20			0	115	13,752	
	Labor	man.day	30			0	14.30			0	429	51,480	
	Truck crane 16t	man.day	3			0	33			0	99	11,880	
	Generator 125KVA	man.day	3			0	33			0	99	11,880	
	Concrete pump 45m3	man.day	3			0	33			0	99	11,880	
	Sub Total									0	643	100,872	
3	Equipment												
	Generator 125KVA	day	3					2,280	0	6,840	0	6,840	
	Truck crane 16t	day	3					9,480	0	28,440	0	28,440	
	Concrete pump 45m3	day	3					9,120	0	27,360	0	27,360	
	Vibrator	dayunit	12					120	0	1,440	0	1,440	
	Sub Total									64,080	0	64,080	
Total										64,080	8,821	1,146,325	
Unit Price per m3										640.80	88.21	11463.25	
INDIRECT COST										15%	96.12	13.23	1719.49
TOTAL										737	101.44	13,183	

LA UNION PORT DEVELOPMENT PROJECT
2E0201

UNIT
FC: YEN
LC: US\$

Total estimate for 1000m3 US\$=#120

Rubble Stone including Geotextile

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		Total in YEN		
				Material		Labor		Equipment		Amount				
				FC	LC	FC	LC	FC	LC	FC	LC			
1	Material													
	Rubble rock	m3	1,000	0	5.16					0	5,160	61,920		
	Wasted rubble rock(25%)	m3	250	0	5.16					0	1,290	15,800		
	Filter rock	m3	17.5	0	14.20					0	249	2,920		
	Geotextile	m2	147.0	0	1.47					0	216	2,593		
	Fuel Tug boat 450PS	day	4.2	0	130					0	545	65,389		
	" Backhoe 1.2m3	day	4.2	0	180					0	754	90,488		
	" Working boat	day	4.2	0	60					0	254	30,462		
	Sub Total									0	8,467	1,016,090		
2	Labor													
	Foreman	manday	4.2			0	38.2			0	160	19,253		
	Labor	manday	16.8			0	14.3			0	240	28,829		
	Diver	manday	8.4			0	100			0	840	100,800		
	Tug boat 450PS	day	4.2			0	166			0	697	83,664		
	Pontoon 500t	dayunit	8.4			0	66			0	554	66,528		
	Backhoe 1.2m3	day	4.2			0	33			0	139	16,632		
	Working boat	day	4.2			0	66			0	277	33,264		
	Sub Total									0	2,908	348,970		
3	Equipment													
	Tug boat 450PS	day	4.20					19,320	0	81,144	0	81,144		
	Pontoon 500t	day.unit	8.40					14,400	0	120,960	0	120,960		
	Backhoe 1.2m3	day	4.20					15,240	0	64,008	0	64,008		
	Working boat	day	4.20					3,480	0	14,616	0	14,616		
	Sub Total									280,728	0	280,728		
Total										280,728	11,375	1,645,787		
Unit Price per m3										280.73	11.38	1,645.79		
INDIRECT COST											15%	42.11	1.71	246.87
TOTAL										323	13.08	1,893		

LA UNION PORT DEVELOPMENT PROJECT
2E0203
Concrete Wall

UNIT
FC: YEN
LC: US\$

Total estimate for 100 m³ US\$=¥122

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		Total in YEN	
				Material		Labor		Equipment		Amount			
				FC	LC	FC	LC	FC	LC	FC	LC		
1	Material												
	Ready mixed concrete	m ³	100	0	70.00					0	7,000	854,000	
	Wasted concrete(2.5%)	m ³	2.5	0	70.00					0	175	21,350	
	Elas tigh board	m ²	6.5	0	8.33					0	54	6,606	
	Metal form(10%)	m ²	125	0	3.83					0	479	58,408	
	Other material	%	2	0	104.00					0	208	25,376	
	Fuel Concrete pump	day	3	0	0					0	0	0	
	" Generator 125KVA	day	3	0	50					0	150	18,260	
	" Truck crane 16t	day	3	0	30					0	89	10,906	
	Sub Total									0	8,155	994,905	
2	Labor												
	Foreman	man.day	3			0	38.20			0	115	13,981	
	Labor	man.day	30			0	14.30			0	429	52,338	
	Truck crane 16t	man.day	3			0	33			0	99	12,078	
	Generator 125KVA	man.day	3			0	33			0	99	12,078	
	Concrete pump 45m ³	man.day	3			0	33			0	99	12,078	
	Sub Total									0	643	102,553	
3	Equipment												
	Generator 125KVA	day	3					2,280	0	6,840	0	6,840	
	Truck crane 16t	day	3					9,480	0	28,440	0	28,440	
	Concrete pump 45m ³	day	3					9,120	0	27,360	0	27,360	
	Vibrator	dayunit	12					122	0	1,464	0	1,464	
	Sub Total									64,104	0	64,104	
Total										64,104	8,798	1,161,563	
Unit Price per m³										641.04	87.98	11615.63	
INDIRECT COST										15%	96.16	13.20	1742.34
TOTAL										737	101.17	13,358	

LA UNION PORT DEVELOPMENT PROJECT

2F01

Land reclamation including fill material supply

UNIT

FC: YEN

LC: US\$

Total estimate for 10,000m3

US\$=¥120

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		Total in YEN	
				Material		Labor		Equipment		Amount			
				FC	LC	FC	LC	FC	LC	FC	LC		
1	Material												
	Sand (behind project site)	m3	9,500	0	0								
	Sand	m3	500	0	4.10					0	2,050	246,000	
	Wasted sand (30%)	m3	150	0	4.10					0	615	73,800	
	Fuel Bulldozer 21t	day	10	0	143					0	1,432	0	
	" Backhoe 1.5m3	dayunit	20	0	212					0	4,238	0	
	" Dump truck 10t	dayunit	60	0	129					0	7,763	931,536	
	Sub Total									0	16,098	1,251,336	
2	Labor												
	Foreman	manday	10			0	38.2			0	382	45,840	
	Labour	manday	40			0	14.3			0	572	68,640	
	Bulldozer 21t	day	10			0	33			0	330	39,600	
	Backhoe 1.5m3	dayunit	20			0	33			0	660	79,200	
	Dump truck 10t	dayunit	60			0	33			0	1,980	237,600	
	Sub Total									0	3,924	470,880	
3	Equipment												
	Bulldozer 21t	day	10					12,360	0	123,600	0	123,600	
	Backhoe 1.5m3	dayunit	20					15,240	0	304,800	0	304,800	
	Dump truck 10t	dayunit	60					6,720	0	403,200	0	403,200	
	Sub Total									831,600	0	831,600	
Total										831,600	20,022	2,553,816	
Unit Price per m3										83.16	2.00	255.38	
INDIRECT COST										15%	12.47	0.30	38.31
TOTAL										96	2.30	294	

LA UNION PORT DEVELOPMENT PROJECT
 2G01
 Concrete pavemen type 1 for RTG traffic lane

UNIT

FC: YEN

LC: US\$

Total estimate for 5000 m2

US\$=¥120

No	Work Item	Unit	Quantity	Basic Price		Unit Cost		Total in YEN
				Amount		Amount		
				FC	LC	FC	LC	
2G0101	Subgrade preparation	m2	5,000	24.84	1.27	124,200	6,366	888,124
2G0102	Subbase course	m2	5,000	26.30	2.13	131,514	10,641	1,408,491
2G0103	Base course	m2	5,000	17.64	4.50	88,182	22,523	2,790,987
2G0104	Prim coating	m2	5,000	2.32	0.47	11,592	2,328	290,934
2G0105	Concrete slab	m2	5,000	37.40	36.53	186,990	182,673	22,107,766
	Total					542,478	224,532	27,486,302
				Unit Price per m2		108	44.91	5,497

LA UNION PORT DEVELOPMENT PROJECT
2G0101

UNIT
FC: YEN
LC: US\$

Total estimate for 5000 m2 US\$=¥120

Subgrade preparation

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		Total in YEN	
				Material		Labor		Equipment		Amount			
				FC	LC	FC	LC	FC	LC	FC	LC		
1	Material												
	Mechanical stabilized course	m3	500	0	6.00					0	3,000	360000	
	Wasted " (10%)	m3	50	0	6.00					0	300	36,000	
	Fuel Steel roller 10-12t	day	5	0	40					0	201	24174	
	" Tire roller 10t	day	5	0	40					0	200	23,958	
	" Bulldozer 21t	day	5	0	120					0	599	71,904	
	" Vibration roller 10t	day	1	0	55					0	55	6,574	
	" Motor grader 2.8m	day	2	0	55					0	110	13,152	
	Sub Total									0	4,465	535,762	
2	Labor												
	Foreman	manday	5			0	38.2			0	191	22,920	
	Labor	manday	20			0	14.3			0	286	34,320	
	Steel roller 10-12t	day	5			0	33			0	165	19,800	
	Tire roller 10t	day	5			0	33			0	165	19,800	
	Bulldozer 21t	day	5			0	33			0	165	19,800	
	Vibration roller 10t	day	1			0	33			0	33	3,960	
	Motor grader 2.8m	day	2			0	33			0	66	7,920	
	Sub Total									0	1,071	128,520	
3	Equipment												
	Steel roller 10-12t	dayunit	5					3,120	0	15,600	0	15,600	
	Tire roller 10t	day.unit	5					3,360	0	16,800	0	16,800	
	Bulldozer 21t	dayunit	5					12,360	0	61,800	0	61,800	
	Vibration roller 10t	dayunit	1					6,360	0	6,360	0	6,360	
	Motor grader 2.8m	dayunit	2					3,720	0	7,440	0	7,440	
	Sub Total									108,000	0	108,000	
Total										108,000	5,536	772,282	
Unit Price per m2										21.60	1.11	154.46	
INDIRECT COST										15%	3.24	0.17	23.17
TOTAL										25	1.27	178	