

4. Breakdown of Direct Cost

Part A Facilities for the Engineer

A(1)a Provision of Combined Field Office/Laboratory Bldg. and Living Quarter

Unit: 1.00 L.S.

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
W3001	Site Preparation for Engineer's Field Office and Living Quarters	m2	1,800.00	1.5%	8.2%	90.3%	54.4%	45.6%	2,530.00	68.31	373.43	4,112.26	2,477.48	2,076.52	4,554.00	
W0105	Excavation, Backhoe 0.61m3	m3	181.28	4.4%	8.4%	87.2%	52.9%	47.1%	40.90	326.23	622.81	6,485.31	3,920.61	3,493.74	7,414.35	
W0111	Disposal of Surplus Soil (backhoe loading)	m3	52.77	8.1%	14.8%	77.1%	51.5%	48.5%	93.00	399.72	724.01	3,783.88	2,526.14	2,381.47	4,907.61	
W0132	Backfill B	m3	128.51	7.7%	10.0%	82.3%	51.3%	48.7%	111.00	1,091.51	1,428.48	11,744.62	7,313.52	6,951.09	14,264.61	
W0181	Gravel Foundation Fill	m3	59.98	24.1%	13.3%	62.6%	39.5%	60.5%	409.00	5,913.33	3,267.02	15,351.47	9,700.72	14,831.10	24,531.82	
W0203	Concrete (Class A, 21MPa, max agg. 38mm)	m3	16.93	2.5%	80.6%	16.9%	56.7%	43.3%	1,610.00	684.55	21,962.47	4,610.28	15,468.16	11,789.14	27,257.30	
W0202	Concrete (Class B, 17MPa, max agg. 50mm)	m3	54.00	3.0%	76.4%	20.6%	56.1%	43.9%	1,380.00	2,231.14	56,944.81	15,344.05	41,837.69	32,682.31	74,520.00	
W0232	Concrete Pouring by Pump Vehicle (reinforced concrete)	m3	70.93	15.5%	0.2%	84.3%	45.2%	54.8%	257.00	2,831.93	35.74	15,361.34	8,232.16	9,996.85	18,229.01	
W0237	Concrete Curing (reinforced concrete)	m3	70.93	74.6%	7.6%	17.8%	14.0%	86.0%	4.21	222.85	22.73	53.04	41.67	256.95	298.62	
W0241	Formwork (reinforced concrete H(4m)	m2	138.16	59.3%	39.9%	0.8%	2.9%	97.1%	224.00	18,347.75	12,357.36	242.73	903.07	30,044.77	30,947.84	
W0251	Reinforcement Grade 40, cutting, bending & assembly	kg	2,584.50	15.2%	77.0%	7.8%	54.0%	46.0%	23.30	9,145.34	46,371.76	4,701.75	32,515.13	27,703.72	60,218.85	
W3002	150mm Thick Concrete Hollow Block Wall	m2	116.80	12.5%	84.4%	3.1%	36.5%	63.5%	331.00	4,806.19	32,390.12	1,199.68	14,019.39	24,376.61	38,396.00	
W3002a	100mm Thick Concrete Hollow Block Wall	m2	44.88	13.6%	83.0%	3.4%	37.5%	62.5%	305.00	1,858.58	11,358.08	471.74	5,128.05	8,560.35	13,688.40	
W3003	Structural Steel Fabrication and Erection for Engineers Office and Living Quarter	t	21.31	7.6%	66.0%	26.4%	60.1%	39.9%	39,900.00	64,584.98	560,882.58	224,801.45	510,657.86	339,611.15	850,269.00	
W3004	Prepainted Corrugated C.I. Roofing Fabrication & Erection	m2	526.19	8.2%	79.4%	12.4%	54.4%	45.6%	161.00	6,928.69	67,256.65	10,531.25	46,067.73	38,648.86	84,716.59	
W3005	Prepainted Steel Wall Panels on Steel Frames with Insulation	m2	150.27	2.5%	92.9%	4.6%	62.1%	37.9%	628.00	2,337.00	87,715.93	4,316.63	58,624.05	35,745.51	94,369.56	
W3006	Prepainted Steel Wall Partitions on Steel Frames with Insulation (Double Walling)	m2	152.31	2.5%	92.9%	4.6%	62.1%	37.9%	624.00	2,369.17	88,299.31	4,372.96	59,055.05	35,986.39	95,041.44	
W3007	Plain Cement Floor Finish	m2	312.00	7.6%	85.3%	7.1%	54.3%	45.7%	63.50	1,505.56	16,893.79	1,412.64	10,760.63	9,051.37	19,812.00	
W3008	Plain Cement Floor Finish with non skid cement with groove lines	m2	204.00	8.1%	84.8%	7.1%	54.0%	46.0%	63.80	1,047.95	11,042.16	925.09	7,034.28	5,980.92	13,015.20	
W3009	Unglazed Tile Finish (8" x 8")	m2	24.00	1.6%	97.9%	0.5%	60.2%	39.8%	589.00	233.07	13,832.95	69.98	8,514.82	5,621.18	14,136.00	
W3010	Gypsum Board Ceiling	m2	336.00	1.6%	97.9%	0.5%	60.2%	39.8%	351.00	1,944.46	115,407.70	583.84	71,038.71	46,897.29	117,936.00	
W3013	Doors & Windows for Engineer's Field Office and Living Quarters	L.S.	1.00	5.2%	90.7%	4.1%	41.3%	58.7%	355,000.00	18,636.48	321,979.49	14,384.02	146,761.79	208,238.21	355,000.00	
W3014	Lighting and Powers	L.S.	1.00	5.0%	93.5%	1.5%	56.6%	43.4%	138,000.00	6,913.31	129,057.28	2,029.41	78,158.91	59,841.09	138,000.00	
W3015	Sewer Water line	L.S.	1.00	4.4%	94.9%	0.7%	49.8%	50.2%	115,000.00	5,106.03	109,096.94	797.03	57,252.15	57,747.85	115,000.00	
W3016	Septic Tank	each	1.00	14.3%	63.6%	22.0%	44.2%	55.8%	20,700.00	2,969.94	13,174.78	4,555.29	9,146.29	11,553.71	20,700.00	
W3017	Cyclone Fence and Gate for the Engineer's Office	m	40.00	3.2%	93.2%	3.6%	49.1%	50.9%	1,840.00	2,350.45	68,620.14	2,629.41	36,133.15	37,466.85	73,600.00	
W3018	Barbed Wire Fence for the Engineer's Office	m	130.00	5.4%	92.8%	1.7%	14.7%	85.3%	127.00	895.76	15,325.71	288.52	2,418.94	14,091.06	16,510.00	
W3019	Temporary Office Rental	month	3.00	0.0%	0.0%	100.0%	15.0%	85.0%	18,000.00	0.00	0.00	54,000.00	8,100.00	45,900.00	54,000.00	
	Miscellaneous	LS	1.00							0.00	0.00	0.00	0.00	0.00	0.00	0.0%
	<b>Total</b>									165,750.29	1,806,444.24	409,139.67	1,253,808.14	1,127,526.06	2,381,334.20	
	<b>Components (%)</b>									7.0%	75.9%	17.2%	52.7%	47.3%	100.0%	
	<b>Unit Rate</b>	L.S.								165,657.42	1,805,432.14	408,910.44	1,253,105.67	1,126,894.33	2,380,000.00	

A(1)b Maintenance of Field Office/Laboratory Bldg. and Living Quarter

Unit: 1.00 month

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
L020	Unskilled Labor	md	122.50	100.0%	0.0%	0.0%	0.0%	100.0%	314.00	38,465.00	0.00	0.00	0.00	38,465.00	38,465.00	
L020	Unskilled Labor	md	50.00	100.0%	0.0%	0.0%	0.0%	100.0%	314.00	15,700.00	0.00	0.00	0.00	15,700.00	15,700.00	
L019	Skilled Labor	md	25.00	100.0%	0.0%	0.0%	0.0%	100.0%	403.00	10,075.00	0.00	0.00	0.00	10,075.00	10,075.00	
L020	Unskilled Labor	md	25.00	100.0%	0.0%	0.0%	0.0%	100.0%	314.00	7,850.00	0.00	0.00	0.00	7,850.00	7,850.00	
M01009	Electric Supply	kWh	2,200.00	0.0%	100.0%	0.0%	50.0%	50.0%	4.00	0.00	8,800.00	0.00	4,400.00	4,400.00	8,800.00	
M01010	Water Supply	m3	20.00	0.0%	100.0%	0.0%	10.0%	90.0%	66.20	0.00	1,324.00	0.00	132.40	1,191.60	1,324.00	
M01020	Propane Gas	kg	25.00	0.0%	100.0%	0.0%	50.0%	50.0%	32.60	0.00	815.00	0.00	407.50	407.50	815.00	
W3101	Miscellaneous for Office & Living Quarter Maintenance	month	1.00	0.0%	82.9%	17.1%	34.5%	65.5%	1,040.00	0.00	862.30	177.70	358.97	681.03	1,040.00	
	Miscellaneous	L.S.	1.00							0.00	0.00	0.00	0.00	0.00	0.00	0.0%
Total										72,090.00	11,801.30	177.70	5,298.87	78,770.13	84,069.00	
Components (%)										85.8%	14.0%	0.2%	6.3%	93.7%	100.0%	
Unit Rate			month							72,116.58	11,805.65	177.76	5,300.83	78,799.17	84,100.00	

A(1)c Provision of Furniture and Fixtures for the Field Office/Laboratory and Living Quarter

Unit: 1.00 L.S.

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
W3102	Furniture and Fixtures for Field Office	L.S.	1.00	0.1%	99.1%	0.8%	34.5%	65.5%	332,000.00	493.07	328,877.23	2,629.70	114,671.09	217,328.91	332,000.00	
W3105	Furniture and Fixtures for Living Quarter	L.S.	1.00	0.1%	99.1%	0.8%	31.9%	68.1%	217,000.00	322.28	214,958.91	1,718.81	69,301.41	147,698.69	217,000.00	
	Miscellaneous	L.S.	1.00							0.00	0.00	0.00	0.00	0.00	0.00	0.0%
Total										815.35	543,836.14	4,348.51	183,972.49	365,027.51	549,000.00	
Components (%)										0.1%	99.1%	0.8%	33.5%	66.5%	100.0%	
Unit Rate			L.S.							815.35	543,836.14	4,348.51	183,972.49	365,027.51	549,000.00	

A(1)d Provision of Equipment and Appliances for the Field Office/Laboratory Bldg. and Living Quarter

Unit: 1.00 L.S.

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
W3103	Equipment and Appliances for Field Office	L.S.	1.00	0.1%	99.1%	0.8%	73.0%	27.0%	225,000.00	334.16	222,883.68	1,782.18	164,318.33	60,683.67	225,000.00	
W3106	Equipment and Appliances for Living Quarter	L.S.	1.00	0.1%	99.1%	0.8%	39.8%	60.2%	87,600.00	130.10	86,776.04	693.86	34,892.75	62,707.25	87,600.00	
	Miscellaneous	L.S.	1.00							0.00	0.00	0.00	0.00	0.00	0.00	0.0%
Total										464.26	309,659.70	2,476.04	199,209.08	113,390.92	312,600.00	
Components (%)										0.1%	99.1%	0.8%	63.7%	36.3%	100.0%	
Unit Rate			L.S.							464.85	310,055.94	2,479.21	199,463.99	113,536.01	313,000.00	

A(1)e Provision of Office Supplies and Consumable

Unit: 28.00 month

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
W3111	Office & Living Quarter Supplies	L.S.	1.00	0.3%	98.1%	1.6%	50.9%	49.1%	14,300.00	42.06	14,033.63	224.31	7,275.31	7,024.69	14,300.00	
W3112	Office & Living Quarter Consumables	month	28.00	0.3%	98.1%	1.6%	35.6%	64.4%	16,200.00	1,334.12	445,150.59	7,115.29	161,419.97	292,180.03	453,600.00	
	Miscellaneous	L.S.	1.00							0.00	0.00	0.00	0.00	0.00	0.00	0.0%
Total										1,376.18	459,184.22	7,339.61	168,695.28	299,204.72	467,900.00	
Components (%)										0.3%	98.1%	1.6%	36.1%	63.9%	100.0%	
Unit Rate			month							49.12	16,388.92	261.96	6,020.97	10,679.03	16,700.00	

A(1)f Provide/Operate/Maintain Communication Equipment

Unit: 28.00 month

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
	Office Telephone	set	1.00	0.0%	100.0%	0.0%	80.0%	20.0%	1,000.00	0.00	1,000.00	0.00	800.00	200.00	1,000.00	
	Facsimile Machine	set	1.00	0.0%	100.0%	0.0%	80.0%	20.0%	27,000.00	0.00	27,000.00	0.00	21,600.00	5,400.00	27,000.00	
	Radio System (1 base + 4 portable receiver)	set	1.00	0.0%	100.0%	0.0%	80.0%	20.0%	41,000.00	0.00	41,000.00	0.00	32,800.00	8,200.00	41,000.00	
	Electrician	md	1.00	100.0%	0.0%	0.0%	0.0%	100.0%	421.00	421.00	0.00	0.00	0.00	421.00	421.00	
M01015	Telecommunication Fare	min	84,000.00	0.0%	100.0%	0.0%	45.0%	55.0%	1.00	0.00	84,000.00	0.00	37,800.00	46,200.00	84,000.00	
	Miscellaneous	L.S.	1.00	5.0%	55.0%	40.0%	55.0%	45.0%		76.71	843.82	613.68	843.82	690.39	1,534.21	1.0%
Total										497.71	153,843.82	613.68	93,843.82	61,111.39	154,955.21	
Components (%)										0.3%	99.3%	0.4%	60.6%	39.4%	100.0%	
Unit Rate			month							17.76	5,490.34	21.90	3,349.07	2,180.93	5,530.00	

Miscellaneous covers the costs for cables & wires, maintenance, etc.

A(2)a Provision of vehicles (sedan) for the Engineer (Rental including operation & maintenance)

Unit: 1.00 veh-m

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Remarks	
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		Total (PP)
	Mazda B2200 double cab (diesel)	month	1.00	0.0%	0.0%	100.0%	85.0%	15.0%	52,800.00	0.00	0.00	52,800.00	44,880.00	7,920.00	52,800.00	
1.004	Driver	md	34.38	100.0%	0.0%	0.0%	0.0%	100.0%	368.00	12,651.84	0.00	0.00	0.00	12,651.84	12,651.84	
M01006	Gasoline	ltr	375.00	0.0%	100.0%	0.0%	65.0%	35.0%	14.20	0.00	5,325.00	0.00	3,461.25	1,863.75	5,325.00	
	Miscellaneous	LS	1.00	10.0%	55.0%	35.0%	55.0%	45.0%		70.78	389.27	247.72	389.27	318.50	707.77	1.0%
	<b>Total</b>									12,722.62	5,714.27	53,047.72	48,739.52	22,754.09	71,484.61	
	Components (%)									17.8%	8.0%	74.2%	68.2%	31.8%	100.0%	
	Unit Rate	veh-m								12,725.36	5,715.50	53,059.14	48,741.01	22,758.99	71,500.00	

Miscellaneous covers the cost for ancillaries, maintenance expense, extra overtime, etc.  
Bare Monthly Rental Cost = 52,800.00 PP/month

A(2)b Provision of vehicles (wagon) for the Engineer (Rental including operation & maintenance)

Unit: 1.00 veh-m

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Remarks	
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		Total (PP)
	Nissan Pathfinder, 4x4	month	1.00	0.0%	0.0%	100.0%	85.0%	15.0%	67,800.00	0.00	0.00	67,800.00	57,630.00	10,170.00	67,800.00	
1.004	Driver	md	34.38	100.0%	0.0%	0.0%	0.0%	100.0%	368.00	12,651.84	0.00	0.00	0.00	12,651.84	12,651.84	
M01006	Gasoline	ltr	375.00	0.0%	100.0%	0.0%	65.0%	35.0%	14.20	0.00	5,325.00	0.00	3,461.25	1,863.75	5,325.00	
	Miscellaneous	LS	1.00	10.0%	55.0%	35.0%	55.0%	45.0%		85.78	471.77	300.22	471.77	386.00	857.77	1.0%
	<b>Total</b>									12,737.62	5,796.77	68,100.22	61,563.02	25,071.99	86,634.61	
	Components (%)									14.7%	6.7%	78.6%	71.1%	28.9%	100.0%	
	Unit Rate	veh-m								12,732.53	5,794.46	68,073.01	61,538.43	25,061.57	86,600.00	

Miscellaneous covers the cost for ancillaries, maintenance expense, extra overtime, etc.  
Bare Monthly Rental Cost = 67,800.00 PP/month

A(2)c Provision of vehicles (pick-up) for the Engineer (Rental including operation & maintenance)

Unit: 1.00 veh-m

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Remarks	
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		Total (PP)
	Isuzu Pickup 2 door	month	1.00	0.0%	0.0%	100.0%	85.0%	15.0%	31,550.00	0.00	0.00	31,550.00	26,817.50	4,732.50	31,550.00	
1.004	Driver	md	34.38	100.0%	0.0%	0.0%	0.0%	100.0%	368.00	12,651.84	0.00	0.00	0.00	12,651.84	12,651.84	
M01006	Gasoline	ltr	375.00	0.0%	100.0%	0.0%	65.0%	35.0%	14.20	0.00	5,325.00	0.00	3,461.25	1,863.75	5,325.00	
	Miscellaneous	LS	1.00	10.0%	55.0%	35.0%	55.0%	45.0%		49.53	272.40	173.34	272.40	222.87	495.27	1.0%
	<b>Total</b>									12,701.37	5,597.40	31,723.34	30,551.15	19,470.96	50,022.11	
	Components (%)									25.4%	11.2%	63.4%	61.1%	38.9%	100.0%	
	Unit Rate	veh-m								12,695.75	5,594.92	31,709.32	30,537.64	19,462.36	50,000.00	

Miscellaneous covers the cost for ancillaries, maintenance expense, extra overtime, etc.  
Bare Monthly Rental Cost = 31,550.00 PP/month

A(3) Provision of Testing Equipment, Apparatus and Publications

Unit: 1.00 L.S.

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Remarks	
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		Total (PP)
	Testing equipment & apparatus for soil & aggregates	L.S.	1.00	0.0%	100.0%	0.0%	70.0%	30.0%	318,000.00	0.00	318,000.00	0.00	222,600.00	95,400.00	318,000.00	
	Testing equipment & apparatus for concrete	L.S.	1.00	0.0%	100.0%	0.0%	75.0%	25.0%	447,000.00	0.00	447,000.00	0.00	335,250.00	111,750.00	447,000.00	
	Testing equipment & apparatus for bituminous materials	L.S.	1.00	0.0%	100.0%	0.0%	70.0%	30.0%	250,000.00	0.00	250,000.00	0.00	175,000.00	75,000.00	250,000.00	
	Publication	L.S.	1.00	0.0%	100.0%	0.0%	100.0%	0.0%	20,700.00	0.00	20,700.00	0.00	20,700.00	0.00	20,700.00	
	Miscellaneous	LS	1.00	15.0%	15.0%	70.0%	45.0%	55.0%		776.78	776.78	3,624.95	2,330.33	2,848.18	5,178.50	0.5%
	<b>Total</b>									776.78	1,036,476.78	3,624.95	755,880.33	284,998.18	1,040,878.50	
	Components (%)									0.1%	99.6%	0.3%	72.6%	27.4%	100.0%	
	Unit Rate	L.S.								776.12	1,035,601.99	3,621.89	755,242.36	284,757.64	1,040,000.00	

Miscellaneous covers the costs for delivery, installation, etc.

A(4) Progress Photographs Unit: 100.00 each

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
L019	Skilled Labor	md	1.00	100.0%	0.0%	0.0%	0.0%	100.0%	403.00	403.00	0.00	0.00	0.00	0.00	403.00	
M15101	Film ASA 400 x 36	each	11.11	0.0%	100.0%	0.0%	70.0%	30.0%	169.00	0.00	1,877.59	0.00	1,314.31	563.28	1,877.59	Loss 300.0%
M15102	Film Development	each	11.11	0.0%	100.0%	0.0%	15.0%	85.0%	45.00	0.00	499.95	0.00	74.99	424.96	499.95	Loss 300.0%
M15103	Picture Prints	each	1,400.00	0.0%	100.0%	0.0%	15.0%	85.0%	6.00	0.00	4,400.00	0.00	1,260.00	7,140.00	8,400.00	Loss 300.0%
	Miscellaneous	LS	1.00	0.0%	90.0%	10.0%	55.0%	45.0%	0.00	0.00	503.12	55.90	307.46	251.56	559.03	5.0%
	Total									403.00	11,280.66	55.90	2,956.77	8,782.80	11,739.57	
	Components (%)									3.4%	96.1%	0.5%	25.2%	74.8%	100.0%	
	Unit Rate	each								4.02	112.43	0.56	29.47	87.53	117.00	

Miscellaneous covers the cost for album, glue, scissors, etc.  
Number of copies to be submitted = 10

Part C Earthwork

100(1) Clearing and Grubbing Unit: 1.00 ha

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
W0001	Grass Cutting	m2	10,000.00	90.0%	0.0%	8.2%	4.5%	95.5%	1.09	9,909.09	99.09	891.82	495.45	10,404.55	10,900.00	
W0002	Tree Cutting	m2	1,000.00	92.6%	0.7%	6.7%	3.7%	96.3%	0.91	845.37	6.76	60.87	33.81	879.19	913.00	
W0003	Grubbing	m2	1,000.00	4.0%	7.9%	88.1%	53.0%	47.0%	24.90	996.74	1,975.41	21,927.85	13,208.68	11,691.32	24,900.00	
W0004	Burning	m2	1,000.00	100.0%	0.0%	0.0%	0.0%	100.0%	1.90	1,900.00	0.00	0.00	0.00	1,900.00	1,900.00	
	Miscellaneous	LS	1.00						0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0%
	Total									13,651.20	2,081.26	22,880.53	13,737.95	24,875.05	38,613.00	
	Components (%)									35.4%	5.4%	59.3%	35.6%	64.4%	100.0%	
	Unit Rate	ha								13,646.61	2,080.56	22,872.83	13,733.33	24,866.67	38,600.00	

100(3) Individual Removal of Trees, small (150mm ≤ φ < 900mm) Unit: 30.00 each

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
L002	Foreman	md	0.88	100.0%	0.0%	0.0%	0.0%	100.0%	566.00	498.08	0.00	0.00	0.00	498.08	498.08	
L019	Skilled Labor	md	1.65	100.0%	0.0%	0.0%	0.0%	100.0%	403.00	664.95	0.00	0.00	0.00	664.95	664.95	
L020	Unskilled Labor	md	3.26	100.0%	0.0%	0.0%	0.0%	100.0%	314.00	1,023.64	0.00	0.00	0.00	1,023.64	1,023.64	
L020	Unskilled Labor	md	0.82	100.0%	0.0%	0.0%	0.0%	100.0%	314.00	257.48	0.00	0.00	0.00	257.48	257.48	
	Miscellaneous	LS	1.00	0.0%	10.0%	90.0%	55.0%	45.0%	0.00	0.00	19.55	175.98	107.54	87.99	195.53	8.0%
	Total									2,444.15	19.55	175.98	107.54	2,532.14	2,639.68	
	Components (%)									92.6%	0.7%	6.7%	4.1%	95.9%	100.0%	
	Unit Rate	each								81.49	0.65	5.87	3.59	84.41	88.00	

Miscellaneous covers the cost for chain saw, ax, etc.

100(4) Individual Removal of Trees, large (φ > 900mm) Unit: 25.00 each

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
L002	Foreman	md	1.01	100.0%	0.0%	0.0%	0.0%	100.0%	566.00	571.66	0.00	0.00	0.00	571.66	571.66	
L019	Skilled Labor	md	2.13	100.0%	0.0%	0.0%	0.0%	100.0%	403.00	858.39	0.00	0.00	0.00	858.39	858.39	
L020	Unskilled Labor	md	3.53	100.0%	0.0%	0.0%	0.0%	100.0%	314.00	1,108.42	0.00	0.00	0.00	1,108.42	1,108.42	
L020	Unskilled Labor	md	0.82	100.0%	0.0%	0.0%	0.0%	100.0%	314.00	257.48	0.00	0.00	0.00	257.48	257.48	
	Miscellaneous	LS	1.00	0.0%	10.0%	90.0%	55.0%	45.0%	0.00	0.00	22.37	201.31	123.02	100.65	223.68	8.0%
	Total									2,795.95	22.37	201.31	123.02	2,896.60	3,019.63	
	Components (%)									92.6%	0.7%	6.7%	4.1%	95.9%	100.0%	
	Unit Rate	each								112.04	0.90	8.07	4.93	116.07	121.00	

Miscellaneous covers the cost for chain saw, ax, etc.

101(1) Removal of Structures and Obstructions Unit: 1.00 L.S.

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
W0011	Demolition by Crawler Drill (lightly Reinforced Structures)	m3	79.8	11.6%	6.3%	82.0%	48.7%	51.3%	624.00	5,789.37	3,161.94	40,843.89	24,233.35	25,561.85	49,795.20	
W0025	Disposal of Demolished Debris	m3	79.8	16.2%	12.9%	70.9%	46.9%	53.1%	137.00	1,776.31	1,409.21	7,747.08	5,124.89	5,807.71	10,932.60	
	Miscellaneous	LS	1.0	0.0%	15.0%	85.0%	55.0%	45.0%	0.00	0.00	910.92	5,161.86	3,340.03	2,732.75	6,072.78	10.0%
	Total									7,565.68	5,482.07	53,752.83	32,698.27	34,102.31	66,800.58	
	Components (%)									11.3%	8.2%	80.5%	48.9%	51.1%	100.0%	
	Unit Rate	L.S.								7,565.61	5,482.02	53,752.37	32,697.99	34,102.01	66,800.00	

Miscellaneous covers the cost for earthworks, clearing, etc.

101(2)a Removal of Existing Pedestrian Bridge (San Jose, at Bridge No.2)

Unit: 1.00 each

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
W0012	Demolition by Crawler Drill (Heavily Reinforced Structures)	m3	44.80	12.5%	7.5%	80.0%	48.2%	51.8%	1,280.00	7,173.19	4,316.52	45,854.29	27,627.18	29,716.82	57,344.00	
W0025	Disposal of Demolished Debris	m3	44.80	16.2%	12.9%	70.9%	46.9%	53.1%	137.00	997.23	791.14	4,349.24	2,877.13	3,260.47	6,137.60	
	Miscellaneous	LS	1.00	0.0%	15.0%	85.0%	55.0%	45.0%		0.00	476.11	2,697.97	1,745.74	1,428.34	3,174.08	5.0%
	<b>Total</b>									8,170.42	5,583.77	52,901.50	32,250.05	34,405.63	66,655.68	
	<b>Components (%)</b>									12.3%	8.4%	79.4%	48.4%	51.8%	100.0%	
	<b>Unit Rate</b>	each								8,175.85	5,587.48	52,936.67	32,271.49	34,428.51	66,700.00	

Miscellaneous covers the cost for clearing, extra earthworks, etc.

101(2)b Removal of Existing Bridge (Plaridel at Bridge No.9)

Unit: 1.00 each

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
W0012	Demolition by Crawler Drill (Heavily Reinforced Structures)	m3	68.25	12.5%	7.5%	80.0%	48.2%	51.8%	1,280.00	10,927.90	6,575.95	69,856.15	42,088.28	45,271.72	87,360.00	
W0025	Disposal of Demolished Debris	m3	68.25	16.2%	12.9%	70.9%	46.9%	53.1%	137.00	1,519.22	1,205.25	6,625.79	4,383.13	4,967.12	9,350.25	
	Miscellaneous	LS	1.00	0.0%	15.0%	85.0%	55.0%	45.0%		0.00	725.33	4,110.19	2,659.53	2,175.98	4,835.51	5.0%
	<b>Total</b>									12,447.12	8,506.52	80,592.12	49,130.94	52,414.82	101,545.76	
	<b>Components (%)</b>									12.3%	8.4%	79.4%	48.4%	51.6%	100.0%	
	<b>Unit Rate</b>	each								12,502.80	8,544.67	80,952.63	49,350.71	52,649.29	102,000.00	

Miscellaneous covers the cost for clearing, extra earthworks, etc.

101(3)a Removal of Existing PCC Pavement

Unit: 10.00 m2

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
W0015	Demolition of PCC Pavement by Crawler Drill	m2	10.00	3.4%	6.5%	90.1%	53.2%	46.8%	56.50	19.16	36.57	509.27	300.59	261.41	565.00	
W0025	Disposal of Demolished Debris	m3	2.50	16.2%	12.9%	70.9%	46.9%	53.1%	137.00	55.65	44.15	242.70	160.55	181.95	342.50	
	Miscellaneous	LS	1.00							0.00	0.00	0.00	0.00	0.00	0.00	0.0%
	<b>Total</b>									74.81	80.72	751.97	461.15	446.35	907.50	
	<b>Components (%)</b>									8.2%	8.9%	82.9%	50.8%	49.2%	100.0%	
	<b>Unit Rate</b>	m2								7.48	8.08	75.24	46.14	44.66	90.80	

101(3)b Removal of Existing Gravel Pavement

Unit: 10.00 m2

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
W0016	Excavation of Gravel Pavement	m3	2.50	4.4%	8.4%	87.2%	52.9%	47.1%	10.30	1.13	2.16	22.45	13.62	12.13	25.75	
W0025	Disposal of Demolished Debris	m3	2.50	16.2%	12.9%	70.9%	46.9%	53.1%	137.00	55.65	44.15	242.70	160.55	181.95	342.50	
	Miscellaneous	LS	1.00							0.00	0.00	0.00	0.00	0.00	0.00	0.0%
	<b>Total</b>									56.78	46.31	265.16	174.17	194.08	368.25	
	<b>Components (%)</b>									15.4%	12.6%	72.0%	47.3%	52.7%	100.0%	
	<b>Unit Rate</b>	m2								5.67	4.63	26.50	17.41	19.39	36.80	

101(4)a Removal of Existing Fence (Net Fence with Barbed Wire and Wooden Posts)

Unit: 100.00 m

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
L002	Foreman	md	0.50	100.0%	0.0%	0.0%	0.0%	100.0%	566.00	283.00	0.00	0.00	0.00	283.00	283.00	
L009	Welder	md	1.00	100.0%	0.0%	0.0%	0.0%	100.0%	500.00	500.00	0.00	0.00	0.00	500.00	500.00	
L020	Unskilled Labor	md	1.50	100.0%	0.0%	0.0%	0.0%	100.0%	314.00	471.00	0.00	0.00	0.00	471.00	471.00	
W0025	Disposal of Demolished Debris	m3	4.32	16.2%	12.9%	70.9%	46.9%	53.1%	137.00	96.16	76.29	419.39	277.44	314.40	591.84	
	Miscellaneous	LS	1.00							0.00	0.00	0.00	0.00	0.00	0.00	1.0%
	<b>Total</b>									1,350.16	76.29	419.39	277.44	1,568.40	1,864.30	
	<b>Components (%)</b>									72.4%	4.1%	22.5%	14.9%	84.1%	100.0%	
	<b>Unit Rate</b>	m								13.47	0.76	4.18	2.77	15.65	18.60	

Miscellaneous covers the cost for wire cutter, acetylene gas, etc.

101(4)b Removal of Existing Fence (Net Fence with Barbed Wire and Concrete Posts)

Unit: 100.00 m

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
L002	Foreman	md	0.50	100.0%	0.0%	0.0%	0.0%	100.0%	566.00	283.00	0.00	0.00	0.00	283.00	283.00	
L009	Welder	md	1.00	100.0%	0.0%	0.0%	0.0%	100.0%	500.00	500.00	0.00	0.00	0.00	500.00	500.00	
L020	Unskilled Labor	md	1.50	100.0%	0.0%	0.0%	0.0%	100.0%	314.00	471.00	0.00	0.00	0.00	471.00	471.00	
R0204-020	Pneumatic Breaker, Handheld	day	0.09	0.0%	0.0%	100.0%	54.3%	45.7%	457.00	0.00	0.00	41.13	22.33	18.80	41.13	
W0025	Disposal of Demolished Debris	m3	5.76	16.2%	12.9%	70.9%	46.9%	53.1%	137.00	128.22	101.72	559.19	369.92	419.20	789.12	
	Miscellaneous	LS	1.00	0.0%	20.0%	80.0%	55.0%	45.0%		0.00	4.17	16.67	11.46	9.38	20.84	1.0%
	<b>Total</b>									<b>1,382.22</b>	<b>105.89</b>	<b>616.99</b>	<b>403.71</b>	<b>1,701.38</b>	<b>2,105.09</b>	
	<b>Components (%)</b>									<b>65.7%</b>	<b>5.8%</b>	<b>29.3%</b>	<b>19.2%</b>	<b>80.8%</b>	<b>100.0%</b>	
	<b>Unit Rate</b>	m								<b>13.85</b>	<b>1.06</b>	<b>6.18</b>	<b>4.05</b>	<b>17.05</b>	<b>21.10</b>	

Miscellaneous covers the cost for wire cutter, acetylene gas, etc.

101(4)c Removal of Existing Fence (Concrete Hollow Block)

Unit: 100.00 m

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
L002	Foreman	md	1.30	100.0%	0.0%	0.0%	0.0%	100.0%	566.00	735.80	0.00	0.00	0.00	735.80	735.80	
L019	Skilled Labor	md	4.86	100.0%	0.0%	0.0%	0.0%	100.0%	403.00	1,958.58	0.00	0.00	0.00	1,958.58	1,958.58	
L020	Unskilled Labor	md	3.32	100.0%	0.0%	0.0%	0.0%	100.0%	314.00	1,042.48	0.00	0.00	0.00	1,042.48	1,042.48	
R0204-020	Pneumatic Breaker, Handheld	day	3.40	0.0%	0.0%	100.0%	54.3%	45.7%	457.00	0.00	0.00	1,553.80	843.61	710.19	1,553.80	
W0025	Disposal of Demolished Debris	m3	27.00	16.2%	12.9%	70.9%	46.9%	53.1%	137.00	601.01	476.80	2,621.19	1,733.98	1,965.02	3,699.00	
	Miscellaneous	LS	1.00							0.00	0.00	0.00	0.00	0.00	0.00	0.0%
	<b>Total</b>									<b>4,337.87</b>	<b>476.80</b>	<b>4,174.99</b>	<b>2,577.60</b>	<b>6,412.06</b>	<b>8,989.66</b>	
	<b>Components (%)</b>									<b>48.3%</b>	<b>5.3%</b>	<b>46.4%</b>	<b>28.7%</b>	<b>71.3%</b>	<b>100.0%</b>	
	<b>Unit Rate</b>	m								<b>43.38</b>	<b>4.77</b>	<b>41.75</b>	<b>25.78</b>	<b>64.12</b>	<b>89.90</b>	

101(5)a Removal of Existing Guardrails

Unit: 100.00 m

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
L020	Unskilled Labor	md	8.70	100.0%	0.0%	0.0%	0.0%	100.0%	314.00	2,731.80	0.00	0.00	0.00	2,731.80	2,731.80	
R0601-006	Dump Truck, 6.0-9.0 cu-yds (4.6-6.9m3)	hr	2.25	10.0%	17.9%	72.1%	50.8%	49.2%	603.00	135.68	242.86	978.22	688.93	667.82	1,356.75	
	Miscellaneous	LS	1.00	0.0%	20.0%	80.0%	55.0%	45.0%		0.00	16.35	65.42	44.97	36.80	81.77	2.0%
	<b>Total</b>									<b>2,867.48</b>	<b>259.21</b>	<b>1,043.63</b>	<b>733.90</b>	<b>3,436.42</b>	<b>4,170.32</b>	
	<b>Components (%)</b>									<b>68.8%</b>	<b>6.2%</b>	<b>25.0%</b>	<b>17.6%</b>	<b>82.4%</b>	<b>100.0%</b>	
	<b>Unit Rate</b>	m								<b>28.67</b>	<b>2.59</b>	<b>10.44</b>	<b>7.34</b>	<b>34.36</b>	<b>41.70</b>	

Miscellaneous covers the cost for minor tools such as hammer, shovels, carts, etc.

101(5)b Relocation of Existing Guardrails

Unit: 100.00 m

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
L020	Unskilled Labor	md	37.70	100.0%	0.0%	0.0%	0.0%	100.0%	314.00	11,837.80	0.00	0.00	0.00	11,837.80	11,837.80	
	Miscellaneous	LS	1.00	0.0%	60.0%	40.0%	55.0%	45.0%		0.00	355.13	236.76	325.54	266.35	591.89	5.0%
	<b>Total</b>									<b>11,837.80</b>	<b>355.13</b>	<b>236.76</b>	<b>325.54</b>	<b>12,104.15</b>	<b>12,429.69</b>	
	<b>Components (%)</b>									<b>95.2%</b>	<b>3.9%</b>	<b>1.9%</b>	<b>2.6%</b>	<b>97.4%</b>	<b>100.0%</b>	
	<b>Unit Rate</b>	m								<b>118.10</b>	<b>3.54</b>	<b>2.36</b>	<b>3.25</b>	<b>120.75</b>	<b>124.00</b>	

Miscellaneous covers the cost for missing fixtures, minor tools such as hammer, shovels, carts, etc.

101(7) Removal of Existing Slope Protection

Unit: 10.00 m3

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
W0011	Demolition by Crawler Drill (Lightly Reinforced Structures)	m3	10.00	11.6%	6.3%	82.0%	48.7%	51.3%	624.00	725.48	496.23	5,118.28	3,036.76	3,203.24	6,240.00	
W0025	Disposal of Demolished Debris	m3	10.00	16.2%	12.9%	70.9%	46.9%	53.1%	137.00	222.60	176.59	970.81	642.22	727.78	1,370.00	
	Miscellaneous	LS	1.00	5.0%	10.0%	85.0%	55.0%	45.0%		3.81	7.61	64.69	41.86	34.25	76.10	1.0%
	<b>Total</b>									<b>951.89</b>	<b>680.44</b>	<b>6,153.78</b>	<b>3,720.83</b>	<b>3,965.27</b>	<b>7,686.10</b>	
	<b>Components (%)</b>									<b>12.4%</b>	<b>7.6%</b>	<b>80.1%</b>	<b>48.4%</b>	<b>51.6%</b>	<b>100.0%</b>	
	<b>Unit Rate</b>	m3								<b>95.24</b>	<b>68.07</b>	<b>615.69</b>	<b>372.27</b>	<b>396.73</b>	<b>769.00</b>	

Miscellaneous covers the cost for earthworks, clearing, etc. as required.



SPL 101(10)b Shutdown Charge for the Relocation of Transmission Line

Unit: 1.00 day

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
L002	Foreman	md	1.00	100.0%	0.0%	0.0%	0.0%	100.0%	566.00	566.00	0.00	0.00	0.00	566.00	566.00	
L012	Electrician	md	2.00	100.0%	0.0%	0.0%	0.0%	100.0%	421.00	842.00	0.00	0.00	0.00	842.00	842.00	
W01009	Electric Supply	kWh	500,000.00	0.0%	100.0%	0.0%	50.0%	50.0%	1.00	0.00	2,000,000.00	0.00	1,000,000.00	1,000,000.00	2,000,000.00	
	Miscellaneous	LS	1.00	15.0%	60.0%	25.0%	30.0%	70.0%		6,004.22	24,016.90	10,007.04	12,008.45	28,019.71	40,028.16	2.0%
	<b>Total</b>									7,412.22	2,024,016.90	10,007.04	1,012,008.45	1,029,427.71	2,041,436.16	
	<b>Components (%)</b>									0.4%	99.1%	0.5%	49.6%	50.4%	100.0%	
	<b>Unit Rate</b>	day								7,407.01	2,022,592.99	10,000.00	1,011,296.50	1,028,703.50	2,040,000.00	

Miscellaneous covers the cost for maintenance expense, compensation, etc.  
 Average daily consumption per household = 100.00 kWh/day  
 Affected number of household = 5,000 household

101(11) Removal of Existing Combination Concrete Curb & Gutter/Side Strip

Unit: 100.00 m

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
W0013	Demolition by Pneumatic Handhold Breaker (Lightly Reinforced Structures)	m3	13.55	27.3%	14.7%	58.0%	40.9%	59.1%	892.00	3,299.87	1,772.15	7,014.58	4,947.10	7,139.50	12,086.60	
W0111	Disposal of Surplus Soil (backhoe loading)	m3	13.55	8.1%	14.8%	77.1%	51.5%	48.5%	93.00	102.64	185.91	971.60	648.65	611.50	1,260.15	
	Miscellaneous	LS	1.00	10.0%	30.0%	60.0%	50.0%	50.0%		13.35	40.04	80.08	66.73	66.73	133.47	1.0%
	<b>Total</b>									3,415.85	1,998.10	8,066.27	5,662.48	7,817.74	13,480.22	
	<b>Components (%)</b>									25.3%	14.8%	59.8%	42.0%	58.0%	100.0%	
	<b>Unit Rate</b>	m								34.21	20.01	80.78	56.71	78.29	135.00	

Miscellaneous covers the costs for recovering, reconnection, etc. of the disturbed base course, cart, shovels, minor tools, etc.

101(12) Relocation of Existing Road Signs

Unit: 10.00 each

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
W0106	Excavation, Backhoe 0.61m3 + Manpower	m3	13.27	24.6%	6.6%	68.8%	41.7%	58.3%	59.50	193.97	52.33	543.26	329.44	460.13	789.57	
W0133	Backfill C	m3	13.27	11.4%	11.8%	76.7%	49.4%	50.6%	145.00	219.74	227.66	1,476.76	950.58	973.57	1,924.15	
W0013	Demolition by Pneumatic Handhold Breaker (Lightly Reinforced Structures)	m3	1.26	27.3%	14.7%	58.0%	40.9%	59.1%	892.00	306.85	164.79	652.28	460.03	663.89	1,123.92	
L002	Foreman	md	0.25	100.0%	0.0%	0.0%	0.0%	100.0%	566.00	141.50	0.00	0.00	0.00	141.50	141.50	
L020	Unskilled Labor	md	0.75	100.0%	0.0%	0.0%	0.0%	100.0%	314.00	235.50	0.00	0.00	0.00	235.50	235.50	
W0106	Excavation, Backhoe 0.61m3 + Manpower	m3	13.27	24.6%	6.6%	68.8%	41.7%	58.3%	59.50	193.97	52.33	543.26	329.44	460.13	789.57	
W0111	Disposal of Surplus Soil (backhoe loading)	m3	1.26	8.1%	14.8%	77.1%	51.5%	48.5%	93.00	9.54	17.29	90.35	60.32	66.86	117.18	
W0133	Backfill C	m3	12.01	11.4%	11.8%	76.7%	49.4%	50.6%	145.00	198.87	206.04	1,336.54	860.32	881.13	1,741.45	
W0203	Concrete (Class A, 21MPa, max agg. 38mm)	m3	1.26	2.5%	80.6%	16.9%	56.7%	43.3%	1,610.00	50.95	1,634.54	343.12	1,151.20	877.40	2,028.60	
W0240	Formwork (plain concrete 11k4m)	m2	12.57	58.9%	40.4%	0.8%	2.9%	97.1%	222.00	1,642.50	1,126.15	21.89	82.02	2,708.52	2,790.54	
L002	Foreman	md	0.80	100.0%	0.0%	0.0%	0.0%	100.0%	566.00	452.80	0.00	0.00	0.00	452.80	452.80	
L020	Unskilled Labor	md	2.60	100.0%	0.0%	0.0%	0.0%	100.0%	314.00	816.40	0.00	0.00	0.00	816.40	816.40	
	Miscellaneous	LS	1.00							0.00	0.00	0.00	0.00	0.00	0.00	0.0%
	<b>Total</b>									4,462.60	3,481.13	5,007.45	4,223.34	8,727.84	12,951.18	
	<b>Components (%)</b>									34.5%	26.9%	38.7%	32.6%	67.4%	100.0%	
	<b>Unit Rate</b>	each								447.94	349.43	502.63	423.93	876.07	1,300.00	

101(13) Removal of Existing Road Signs

Unit: 10.00 each

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
W0106	Excavation, Backhoe 0.61m3 + Manpower	m3	13.27	24.6%	6.6%	68.8%	41.7%	58.3%	59.50	193.97	52.33	543.26	329.44	460.13	789.57	
W0133	Backfill C	m3	13.27	11.4%	11.8%	76.7%	49.4%	50.6%	145.00	219.74	227.66	1,476.76	950.58	973.57	1,924.15	
W0013	Demolition by Pneumatic Handhold Breaker (Lightly Reinforced Structures)	m3	1.26	27.3%	14.7%	58.0%	40.9%	59.1%	892.00	306.85	164.79	652.28	460.03	663.89	1,123.92	
L002	Foreman	md	0.25	100.0%	0.0%	0.0%	0.0%	100.0%	566.00	141.50	0.00	0.00	0.00	141.50	141.50	
L020	Unskilled Labor	md	0.75	100.0%	0.0%	0.0%	0.0%	100.0%	314.00	235.50	0.00	0.00	0.00	235.50	235.50	
	Miscellaneous	LS	1.00							0.00	0.00	0.00	0.00	0.00	0.00	0.0%
	<b>Total</b>									1,097.56	444.78	2,672.38	1,740.04	2,474.60	4,214.64	
	<b>Components (%)</b>									26.0%	10.6%	63.4%	41.3%	58.7%	100.0%	
	<b>Unit Rate</b>	each								109.64	44.43	266.94	173.81	247.19	421.00	



101(14) Removal of Existing Concrete Revetment

Unit: 1.00 U.S.

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
W0011	Demolition by Crawler Drill (Lightly Reinforced Structures)	m3	75.00	11.6%	6.3%	82.0%	48.7%	51.3%	624.00	5,441.13	2,971.75	38,187.12	22,775.71	24,024.29	46,800.00	
W0025	Disposal of Demolished Debris	m3	75.00	16.2%	12.9%	70.9%	46.9%	53.1%	137.00	1,669.47	1,324.45	7,281.09	4,816.62	5,458.38	10,275.00	
	Miscellaneous	LS	1.00	0.0%	15.0%	85.0%	55.0%	45.0%		0.00	856.13	4,851.38	3,139.13	2,568.38	5,707.50	10.0%
	<b>Total</b>									<b>7,110.60</b>	<b>5,152.32</b>	<b>50,519.58</b>	<b>30,731.48</b>	<b>32,051.04</b>	<b>62,782.50</b>	
	<b>Components (%)</b>									<b>11.3%</b>	<b>4.2%</b>	<b>80.5%</b>	<b>48.3%</b>	<b>51.1%</b>	<b>100.0%</b>	
	<b>Unit Rate</b>	U.S.								<b>7,112.58</b>	<b>5,153.76</b>	<b>50,533.66</b>	<b>30,740.02</b>	<b>32,059.98</b>	<b>62,800.00</b>	

Miscellaneous covers the cost for earthworks, clearing, etc.

102(1) Unsuitable Excavation

Unit: 100.00 m3

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
R0101-021	Tractor, crawler w/dozer (Bulldozer, 21t)	hr	0.61	1.5%	8.2%	90.3%	54.4%	45.6%	4,150.00	37.97	207.58	2,285.94	1,377.19	1,154.31	2,531.50	
R0102-061	Backhoe, hydraulic, crawler, 0.61m3	hr	1.77	4.4%	8.4%	87.2%	52.9%	47.1%	1,740.00	135.51	258.70	2,685.59	1,628.58	1,451.24	3,079.80	
R0601-006	Dump Truck, 6.0-9.0 cu-yds (4.6-6.9m3)	hr	11.45	10.0%	17.9%	72.1%	50.8%	49.2%	603.00	690.44	1,235.88	4,978.04	3,505.89	3,398.46	6,904.35	
	Miscellaneous	LS	1.00							0.00	0.00	0.00	0.00	0.00	0.00	0.0%
	<b>Total</b>									<b>863.92</b>	<b>1,702.16</b>	<b>9,949.57</b>	<b>6,511.64</b>	<b>6,004.01</b>	<b>12,515.65</b>	
	<b>Components (%)</b>									<b>6.9%</b>	<b>13.6%</b>	<b>79.5%</b>	<b>52.0%</b>	<b>48.0%</b>	<b>100.0%</b>	
	<b>Unit Rate</b>	m3								<b>8.63</b>	<b>17.00</b>	<b>99.37</b>	<b>65.03</b>	<b>59.97</b>	<b>125.00</b>	

Q = 60·q·f·E/Cm (Bulldozer)

Q : Excavation capacity per hour = 164.04 m3/hr

q : Standard capacity per cycle = 2.81 m3/cycle

f : Volume coefficient = 1.00

E : Efficiency = 0.90

Cm: Cycle Time = 0.027·L + 0.79 = 0.93 min

L : Average pushing distance = 5.00 m

Q = 3600·q·f·E/Cm (Backhoe)

Q : Excavation Volume per hour = 56.64 m3/h

q : Excavation Volume per Cycle = 0.59 m3

f : Volume Coefficient = 1.00

E : Efficiency = 0.80

Cm: Cycle Time = 30.00 sec

Q = q·f·E/Cm (Dump Truck)

Q : Transportation Volume per hour = 8.73 m3/hr

q : Loading Capacity of a Truck = 6.50 m3

f : Volume Coefficient = 1.00

E : Efficiency = 0.90

Cm: Cycle Time = A + 2·L/V = 0.67 hr

V : Vehicle speed = 25.00 km/hr

a : Loading time = 0.27 hr

L : Average Distance to Disposal Point = 5.00 km

102(2) Surplus Common Excavation

Unit: 100.00 m3

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
R0101-021	Tractor, crawler w/dozer (Bulldozer, 21t)	hr	0.61	1.5%	8.2%	90.3%	54.4%	45.6%	4,150.00	37.97	207.58	2,285.94	1,377.19	1,154.31	2,531.50	
R0102-061	Backhoe, hydraulic, crawler, 0.61m3	hr	1.77	4.4%	8.4%	87.2%	52.9%	47.1%	1,740.00	135.51	258.70	2,685.59	1,628.58	1,451.24	3,079.80	
R0601-006	Dump Truck, 6.0-9.0 cu-yds (4.6-6.9m3)	hr	11.45	10.0%	17.9%	72.1%	50.8%	49.2%	603.00	690.44	1,235.88	4,978.04	3,505.89	3,398.46	6,904.35	
	Miscellaneous	LS	1.00							0.00	0.00	0.00	0.00	0.00	0.00	0.0%
	<b>Total</b>									<b>863.92</b>	<b>1,702.16</b>	<b>9,949.57</b>	<b>6,511.64</b>	<b>6,004.01</b>	<b>12,515.65</b>	
	<b>Components (%)</b>									<b>6.9%</b>	<b>13.6%</b>	<b>79.5%</b>	<b>52.0%</b>	<b>48.0%</b>	<b>100.0%</b>	
	<b>Unit Rate</b>	m3								<b>8.63</b>	<b>17.00</b>	<b>99.37</b>	<b>65.03</b>	<b>59.97</b>	<b>125.00</b>	

Q = 60·q·f·E/Cm (Bulldozer)

Q : Excavation capacity per hour = 164.04 m3/hr

q : Standard capacity per cycle = 2.81 m3/cycle

f : Volume coefficient = 1.00

E : Efficiency = 0.90

Cm: Cycle Time = 0.027·L + 0.79 = 0.93 min

L : Average pushing distance = 5.00 m

Q = q·f·E/Cm (Dump Truck)

Q : Transportation Volume per hour = 8.73 m3/hr

q : Loading Capacity of a Truck = 6.50 m3

f : Volume Coefficient = 1.00

E : Efficiency = 0.90

Cm: Cycle Time = A + 2·L/V = 0.67 hr

V : Vehicle speed = 25.00 km/hr

a : Loading time = 0.27 hr

L : Average Distance to Disposal Point = 5.00 km

Q = 3600·q·f·E/Cm (Backhoe Loading)

Q : Excavation Volume per hour = 56.64 m3/h

q : Excavation Volume per Cycle = 0.59 m3

f : Volume Coefficient = 1.00

E : Efficiency = 0.80

Cm: Cycle Time = 30.00 sec

103(1) Structure Excavation		Unit: 100.00 m3														
Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
W0105	Excavation, Backhoe 0.6m3	m3	100.00	4.4%	8.4%	87.2%	52.9%	47.1%	40.90	179.96	343.56	3,566.48	2,162.74	1,927.26	4,090.00	
W0111	Disposal of Surplus Soil (backhoe loading)	m3	31.90	8.1%	14.8%	77.1%	51.5%	48.5%	93.00	241.63	437.67	2,287.39	1,527.08	1,439.62	2,966.70	
W0132	Backfill B	m3	68.10	7.7%	10.0%	82.3%	51.3%	48.7%	111.00	578.41	756.98	6,223.71	3,875.58	3,683.52	7,559.10	
	Miscellaneous	LS	1.00							0.00	0.00	0.00	0.00	0.00	0.00	0.0%
Total										1,000.01	1,538.21	12,077.58	7,565.39	7,050.41	14,615.80	
Components (%)										6.8%	10.5%	82.5%	51.8%	48.2%	100.0%	
Unit Rate			m3							9.99	15.37	120.65	75.57	70.43	146.00	

103(2)a Bridge Excavation above OWL (Common Soil)		Unit: 100.00 m3														
Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
W0105	Excavation, Backhoe 0.6m3	m3	100.00	4.4%	8.4%	87.2%	52.9%	47.1%	40.90	179.96	343.56	3,566.48	2,162.74	1,927.26	4,090.00	
W0111	Disposal of Surplus Soil (backhoe loading)	m3	33.60	8.1%	14.8%	77.1%	51.5%	48.5%	93.00	254.51	461.00	2,408.29	1,608.46	1,516.34	3,124.80	
W0132	Backfill B	m3	66.40	7.7%	10.0%	82.3%	51.3%	48.7%	111.00	563.97	738.09	6,068.34	3,778.83	3,591.57	7,370.40	
	Miscellaneous	LS	1.00							0.00	0.00	0.00	0.00	0.00	0.00	0.0%
Total										998.44	1,542.64	12,044.11	7,550.03	7,035.17	14,585.20	
Components (%)										6.8%	10.6%	82.5%	51.8%	48.2%	100.0%	
Unit Rate			m3							9.99	15.44	120.66	75.58	70.42	146.00	

103(2)b Bridge Excavation above OWL (Rocky Soil)		Unit: 100.00 m3														
Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
W0108	Excavation, Backhoe 0.6m3 + Crawler Drill	m3	100.00	3.4%	6.5%	90.1%	53.2%	46.8%	185.00	627.26	1,197.50	16,475.23	9,842.39	8,657.61	18,500.00	
W0111	Disposal of Surplus Soil (backhoe loading)	m3	100.00	8.1%	14.8%	77.1%	51.5%	48.5%	93.00	757.47	1,372.02	7,170.51	4,787.07	4,512.93	9,300.00	
W0132	Backfill B	m3	0.00	7.7%	10.0%	82.3%	51.3%	48.7%	111.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0%
	Miscellaneous	LS	1.00							0.00	0.00	0.00	0.00	0.00	0.00	0.0%
Total										1,384.73	2,569.52	23,645.75	14,629.46	13,170.54	27,800.00	
Components (%)										5.0%	9.2%	85.3%	52.6%	47.4%	100.0%	
Unit Rate			m3							13.85	25.70	238.46	146.29	131.71	278.00	

103(2)c Bridge Excavation below OWL (Common Soil)		Unit: 100.00 m3														
Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
W0401	Temporary Sheet Pile Driving for excavation. (Vibro Hammer, Common Soil)	m2	123.90	10.2%	13.5%	76.3%	49.9%	50.1%	199.00	2,517.41	3,328.53	18,810.16	12,309.83	12,346.27	24,656.10	
W0403	Temporary Sheet Pile Removal for excavation. (Vibro Hammer)	m2	123.90	10.2%	13.5%	76.3%	49.9%	50.1%	169.00	2,135.95	2,824.87	15,978.27	10,454.89	10,484.21	20,939.10	
W0411	Temporary Struts & Supports Installation	t	1.98	33.7%	9.5%	56.9%	36.9%	63.1%	1,390.00	926.75	260.44	1,565.01	1,015.04	1,737.16	2,752.20	
W0412	Temporary Struts & Supports Removal	t	1.98	35.3%	9.1%	55.5%	35.7%	64.3%	827.00	578.41	149.46	909.59	585.19	1,052.27	1,637.46	
W05031	Temporary Sheet Pile Depreciation	t-d	520.20	0.0%	100.0%	0.0%	50.0%	50.0%	33.30	0.00	17,322.66	8.00	8,661.33	8,661.33	17,322.66	
W05041	Temporary Steel Shanes Depreciation	t-d	55.60	0.0%	100.0%	0.0%	50.0%	50.0%	31.30	0.00	1,740.28	0.00	870.14	870.14	1,740.28	
W0105	Excavation, Backhoe 0.6m3	m3	100.00	4.4%	8.4%	87.2%	52.9%	47.1%	40.90	179.96	343.56	3,566.48	2,162.74	1,927.26	4,090.00	
W0111	Disposal of Surplus Soil (backhoe loading)	m3	23.30	8.1%	14.8%	77.1%	51.5%	48.5%	93.00	176.49	319.68	1,670.73	1,115.39	1,051.51	2,166.90	
W0132	Backfill B	m3	76.70	7.7%	10.0%	82.3%	51.3%	48.7%	111.00	651.46	852.58	7,009.67	4,365.01	4,148.69	8,513.70	
W0431	Temporary Drain Pump Installation & Removal	set	0.72	46.2%	7.1%	46.6%	29.9%	70.1%	2,880.00	958.77	148.01	966.82	620.84	1,452.76	2,073.60	
W0432	Temporary Drain Pump Operation	day	20.10	8.2%	20.8%	71.1%	51.3%	48.7%	1,190.00	1,949.86	4,963.39	17,005.75	12,280.39	11,638.61	23,919.00	
	Miscellaneous	LS	1.00							0.00	0.00	0.00	0.00	0.00	0.00	0.0%
Total										10,075.07	32,253.45	67,482.48	54,440.78	55,370.22	109,811.00	
Components (%)										9.2%	29.4%	61.5%	49.6%	50.4%	100.0%	
Unit Rate			m3							100.92	323.09	675.99	545.34	554.66	1,100.00	

103(2)d Bridge Excavation below OWL (Rocky Soil)

Unit: 100.00 m3

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
W0402	Temporary Sheet Pile Driving for excavation, (Vibro Hammer, Rocky Soil)	m2	123.90	10.2%	13.5%	76.3%	49.9%	50.1%	255.00	3,227.96	4,267.38	24,099.16	15,773.01	15,821.49	31,594.50	
W0403	Temporary Sheet Pile Removal for excavation, (Vibro Hammer)	m2	123.90	10.2%	13.5%	76.3%	49.9%	50.1%	169.00	2,135.95	2,824.87	15,978.27	10,454.89	10,484.21	20,939.10	
W0411	Temporary Struts & Supports Installation	t	1.98	33.7%	9.5%	56.9%	36.9%	63.1%	1,390.00	926.75	260.44	1,565.01	1,015.04	1,737.16	2,752.20	
W0412	Temporary Struts & Supports Removal	t	1.98	35.3%	9.1%	55.5%	35.7%	64.3%	827.00	578.41	149.45	909.59	585.19	1,052.27	1,637.46	
W05031	Temporary Sheet Pile Depreciation	t-d	520.20	0.0%	100.0%	0.0%	50.0%	50.0%	33.30	0.00	17,322.66	0.00	8,661.33	8,661.33	17,322.66	
W05041	Temporary Sheet Piles Depreciation	t-d	55.60	0.0%	100.0%	0.0%	50.0%	50.0%	31.30	0.00	1,740.29	0.00	870.14	870.14	1,740.28	
W0108	Excavation, Backhoe 0.6m3 + Crawler Drill	m3	100.00	1.4%	6.5%	90.1%	53.2%	46.8%	185.00	627.26	1,197.50	16,675.23	9,842.39	8,657.61	18,500.00	
W0111	Disposal of Surplus Soil (backhoe loading)	m3	100.00	8.1%	14.8%	77.1%	51.5%	48.5%	93.00	757.47	1,372.02	7,170.51	4,787.07	4,512.93	9,300.00	
W0132	Backfill B	m3	0.00	7.7%	10.0%	82.3%	51.3%	48.7%	111.00	0.00	0.00	0.00	0.00	0.00	0.00	
W0431	Temporary Drain Pump Installation & Removal	set	0.72	46.2%	7.1%	46.6%	29.9%	70.1%	2,480.00	958.77	148.01	966.82	620.84	1,452.76	2,073.60	
W0432	Temporary Drain Pump Operation	day	20.10	8.2%	20.8%	71.1%	51.3%	48.7%	1,190.00	1,949.86	4,963.39	17,005.75	12,280.39	11,638.61	23,819.00	
	Miscellaneous	LS	1.00							0.00	0.00	0.00	0.00	0.00	0.00	0.0%
	<b>Total</b>									11,162.44	31,246.00	84,370.36	64,890.29	64,888.51	129,778.80	
	<b>Components (%)</b>									8.6%	26.4%	65.0%	50.0%	50.0%	100.0%	
	<b>Unit Rate</b>	m3								111.81	343.04	845.14	650.01	649.99	1,300.00	

103(3)a Gravel Foundation Fill

Unit: 10.00 m3

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
L019	Skilled labor	md	0.30	100.0%	0.0%	0.0%	0.0%	100.0%	403.00	120.90	0.00	0.00	0.00	120.90	120.90	
L020	Unskilled labor	md	1.80	100.0%	0.0%	0.0%	0.0%	100.0%	314.00	565.20	0.00	0.00	0.00	565.20	565.20	
W0122	Crushed Aggregate, transported	m3	12.00	9.1%	15.7%	75.2%	47.2%	52.8%	274.00	300.58	515.32	2,472.09	1,553.07	1,734.93	3,288.00	Loss 20.0%
	Miscellaneous	LS	1.00	0.0%	20.0%	80.0%	55.0%	45.0%		0.00	23.84	95.38	65.57	53.65	119.22	3.0%
	<b>Total</b>									986.68	539.17	2,567.47	1,618.64	2,474.68	4,093.32	
	<b>Components (%)</b>									24.1%	13.2%	62.7%	39.5%	60.5%	100.0%	
	<b>Unit Rate</b>	m3								98.67	53.92	256.75	161.86	247.47	409.33	

Miscellaneous covers the cost for depreciation of compaction equipment, fuel, etc.

103(3)b Selected Sand Bedding

Unit: 10.00 m3

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
L019	Skilled Labor	md	0.30	100.0%	0.0%	0.0%	0.0%	100.0%	403.00	120.90	0.00	0.00	0.00	120.90	120.90	
L020	Unskilled Labor	md	1.80	100.0%	0.0%	0.0%	0.0%	100.0%	314.00	565.20	0.00	0.00	0.00	565.20	565.20	
W0128	Selected Sand, transported	m3	12.00	12.5%	19.9%	67.6%	44.1%	55.9%	180.00	270.24	429.89	1,459.87	952.76	1,207.24	2,160.00	Loss 20.0%
	Miscellaneous	LS	1.00	0.0%	20.0%	80.0%	55.0%	45.0%		0.00	17.08	68.31	46.96	38.42	85.38	3.0%
	<b>Total</b>									956.34	446.97	1,528.18	999.72	1,931.76	2,931.48	
	<b>Components (%)</b>									32.6%	15.2%	52.1%	34.1%	65.9%	100.0%	
	<b>Unit Rate</b>	m3								95.63	44.70	152.82	99.97	193.18	293.15	

Miscellaneous covers the cost for depreciation of compaction equipment, fuel, etc.

103(6) Pipe Culverts and Drain Excavation

Unit: 100.00 m3

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
W0105	Excavation, Backhoe 0.6m3	m3	100.00	4.4%	8.4%	87.2%	52.9%	47.1%	40.90	179.96	343.56	3,566.48	2,162.74	1,927.26	4,090.00	
W0111	Disposal of Surplus Soil (backhoe loading)	m3	83.90	8.1%	14.8%	77.1%	51.5%	48.5%	93.00	635.52	1,151.12	6,016.06	4,016.35	3,786.35	7,802.70	
W0133	Backfill C	m3	16.10	11.4%	11.8%	76.7%	49.4%	50.6%	145.00	266.60	276.21	1,791.69	1,153.30	1,181.20	2,334.50	
	Miscellaneous	LS	1.00							0.00	0.00	0.00	0.00	0.00	0.00	0.0%
	<b>Total</b>									1,082.08	1,770.89	11,374.23	7,332.39	6,894.81	14,227.20	
	<b>Components (%)</b>									7.6%	12.4%	79.9%	51.5%	48.5%	100.0%	
	<b>Unit Rate</b>	m3								10.82	17.68	113.52	73.32	68.82	142.02	

103(7) Granular Backfill for Pipe Culverts										Unit: 10.00 m <sup>3</sup>						
Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Remarks	
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local	Labor	Material	Equipment	Foreign	Local	Total (PP)		
W0128	Selected Sand, transported	m <sup>3</sup>	12.00	12.5%	19.9%	67.6%	44.1%	55.9%	180.00	270.24	429.89	1,459.87	952.76	1,207.24	2,160.00	Loss 20.0%
L020	Unskilled Labor	md	1.90	100.0%	0.0%	0.0%	0.0%	100.0%	314.00	596.60	0.00	0.00	596.60	596.60		
R0307-000	Plate Compactor	day	0.16	0.0%	17.7%	82.3%	56.2%	43.8%	780.00	0.00	22.09	102.71	70.14	54.66	124.80	
R0306-006	Vibration Rammer, 6in	day	0.27	0.0%	49.4%	50.6%	59.7%	40.3%	158.00	0.00	21.07	21.59	25.46	17.20	42.66	
	Miscellaneous	LS	1.00							0.00	0.00	0.00	0.00	0.00	0.0%	
Total										866.84	473.06	1,584.17	1,848.36	1,875.70	2,924.06	
Components (%)										29.6%	16.2%	51.2%	35.9%	64.1%	100.0%	
Unit Rate			m <sup>3</sup>							86.68	47.31	158.42	184.84	187.57	292.41	

104(1) Embankment from Excavated Soil										Unit: 100.00 m <sup>3</sup>						
Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Remarks	
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local	Labor	Material	Equipment	Foreign	Local	Total (PP)		
W0101	Excavation, Bulldozer 21t	m <sup>3</sup>	120.00	1.5%	8.2%	90.3%	54.4%	45.6%	26.30	45.54	248.95	2,741.51	1,651.65	1,384.35	3,036.00	Loss 20.0%
W0123	Excavated Soil, transported	m <sup>3</sup>	120.00	7.3%	13.4%	79.3%	51.8%	48.2%	65.00	573.00	1,045.04	6,181.96	4,038.33	3,761.67	7,800.00	Loss 20.0%
W0141	Filling & laying, bulldozer 15t	m <sup>3</sup>	100.00	3.0%	7.8%	89.2%	53.6%	46.4%	27.50	82.50	214.50	2,453.00	1,473.42	1,276.58	2,750.00	
W0147	Compaction, tire roller 8~20t	m <sup>3</sup>	100.00	4.3%	8.0%	87.7%	52.7%	47.3%	10.40	44.72	83.20	912.08	548.38	491.62	1,040.00	
W0151	Slope Formation by Bulldozer	m <sup>2</sup>	10.45	7.5%	7.4%	85.1%	51.1%	48.9%	39.60	30.87	30.79	352.15	211.52	202.30	413.82	
	Miscellaneous	LS	1.00							0.00	0.00	0.00	0.00	0.00	0.0%	
Total										776.63	1,622.48	12,640.70	7,923.32	7,116.50	15,039.82	
Components (%)										5.2%	10.8%	84.0%	52.7%	47.3%	100.0%	
Unit Rate			m <sup>3</sup>							7.75	16.18	126.07	79.02	70.98	150.00	

104(3) Embankment from Borrow Soil										Unit: 100.00 m <sup>3</sup>						
Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Remarks	
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local	Labor	Material	Equipment	Foreign	Local	Total (PP)		
W0121	Borrow Soil, transported	m <sup>3</sup>	120.00	6.0%	25.8%	68.2%	45.5%	54.5%	116.00	828.60	3,595.33	9,496.07	6,330.18	7,589.82	13,920.00	Loss 20.0%
W0141	Filling & laying, bulldozer 15t	m <sup>3</sup>	100.00	3.0%	7.8%	89.2%	53.6%	46.4%	27.50	82.50	214.50	2,453.00	1,473.42	1,276.58	2,750.00	
W0147	Compaction, tire roller 8~20t	m <sup>3</sup>	100.00	4.3%	8.0%	87.7%	52.7%	47.3%	10.40	44.72	83.20	912.08	548.38	491.62	1,040.00	
W0151	Slope Formation by Bulldozer	m <sup>2</sup>	10.45	7.5%	7.4%	85.1%	51.1%	48.9%	39.60	30.87	30.79	352.15	211.52	202.30	413.82	
	Miscellaneous	LS	1.00							0.00	0.00	0.00	0.00	0.00	0.0%	
Total										986.70	3,923.82	13,219.30	8,563.51	9,560.31	18,123.82	
Components (%)										5.4%	21.7%	72.9%	47.3%	52.7%	100.0%	
Unit Rate			m <sup>3</sup>							9.85	39.19	131.96	85.52	95.48	181.00	

104(4) Embankment from Borrow (Selected Granular Material) for Bridge										Unit: 100.00 m <sup>3</sup>						
Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Remarks	
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local	Labor	Material	Equipment	Foreign	Local	Total (PP)		
W0128	Selected Sand, transported	m <sup>3</sup>	120.00	12.5%	19.9%	67.6%	44.1%	55.9%	180.00	2,702.35	4,298.92	14,598.73	9,527.57	12,072.43	21,600.00	Loss 20.0%
W0141	Filling & laying, bulldozer 15t	m <sup>3</sup>	100.00	3.0%	7.8%	89.2%	53.6%	46.4%	27.50	82.50	214.50	2,453.00	1,473.42	1,276.58	2,750.00	
W0145	Compaction, bulldozer 15t	m <sup>3</sup>	100.00	3.0%	7.8%	89.2%	53.6%	46.4%	24.00	72.00	187.20	2,140.80	1,285.90	1,114.10	2,400.00	
W0151	Slope Formation by Bulldozer	m <sup>2</sup>	10.45	7.5%	7.4%	85.1%	51.1%	48.9%	39.60	30.87	30.79	352.15	211.52	202.30	413.82	
	Miscellaneous	LS	1.00							0.00	0.00	0.00	0.00	0.00	0.0%	
Total										2,887.72	4,731.41	19,544.69	12,498.42	14,665.40	27,163.82	
Components (%)										10.6%	17.4%	72.0%	46.0%	54.0%	100.0%	
Unit Rate			m <sup>3</sup>							28.92	47.38	195.71	125.15	146.85	272.00	

105(1) Subgrade Preparation (Common Soil)										Unit: 100.00 m <sup>2</sup>					
Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Remarks
				Component (%)						Component (PP)					
				Lab.	Mat.	Equip.	For.	Local	Labor	Material	Equipment	Foreign	Local	Total (PP)	
L020	Unskilled Labor	md	0.13	100.0%	0.0%	0.0%	0.0%	100.0%	314.00	40.82	0.00	0.00	0.00	40.82	40.82
R0301-371	Motor Grader, 3.7m	hr	0.26	3.6%	6.9%	89.5%	53.2%	46.8%	2,230.00	20.87	40.01	518.92	308.27	271.53	579.80
R0305-106	Vibratory Tandem Smooth Drum 10.6t (Vibration Roller, tandem, 8~10t)	hr	0.17	4.0%	9.0%	87.0%	53.2%	46.8%	2,030.00	13.80	31.06	300.24	183.62	161.48	345.10
R0304-016	Four Tamping Foot Wheels (Tire Roller) 16t	hr	0.17	4.3%	8.0%	87.7%	52.7%	47.3%	1,970.00	14.40	26.79	293.71	176.59	158.31	334.90
R1103-450	Water Wagon/Pump Truck 500-1000 gal (2200-4500 ltr)	hr	0.11	11.3%	24.6%	64.1%	50.8%	49.2%	545.00	6.77	14.75	38.43	30.46	29.49	59.95
	Miscellaneous	LS	1.00							0.00	0.00	0.00	0.00	0.00	0.0%
Total										96.67	112.60	1,151.29	698.94	661.63	1,360.57
Components (%)										7.1%	8.3%	84.6%	51.4%	48.6%	100.0%
Unit Rate			m <sup>2</sup>							0.97	1.13	11.51	6.99	6.61	13.60

105(2) Subgrade Preparation (Existing Gravel Surface)		Unit: 100.00 m2														
Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local	Labor	Material	Equipment	Foreign	Local			
L020	Unskilled Labor	md	0.13	100.0%	0.0%	0.0%	0.0%	100.0%	314.00	40.82	0.00	0.00	0.00	40.82	40.82	
R0301-371	Motor Grader, 3.7m	hr	0.26	3.6%	6.9%	89.5%	53.2%	46.8%	2,230.00	20.87	40.01	518.92	308.27	271.53	579.80	
R0305-106	Vibratory Tandem Smooth Drum 10.6t (Vibration Roller, Tandem, 8~10t)	hr	0.17	4.0%	9.0%	87.0%	53.2%	46.8%	2,030.00	13.80	31.06	300.24	183.62	161.48	345.10	
R0304-016	Four Tamping Foot Wheels (Tire Roller) 16t	hr	0.17	4.3%	8.0%	87.7%	52.7%	47.3%	1,970.00	14.40	26.79	293.71	176.59	158.31	334.90	
R1103-450	Water Wagon/Pump Truck 500-1000 gal (2200-4500 ltr)	hr	0.11	11.3%	24.6%	64.1%	50.8%	49.2%	545.00	6.77	14.75	38.43	30.46	29.49	59.95	
	Miscellaneous	LS	1.00							0.00	0.00	0.00	0.00	0.00	0.00	0.0%
Total										96.67	112.60	1,151.29	698.94	661.63	1,360.57	
Components (%)										7.1%	8.3%	84.6%	51.4%	48.6%	100.0%	
Unit Rate										0.97	1.13	11.51	6.99	6.61	13.60	

Part D Subbase and Base Course

200(1) Aggregate Subbase Course		Unit: 100.00 m3														
Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local	Labor	Material	Equipment	Foreign	Local			
L020	Unskilled Labor	md	1.36	100.0%	0.0%	0.0%	0.0%	100.0%	314.00	427.04	0.00	0.00	0.00	427.04	427.04	
R0301-371	Motor Grader, 3.7m	hr	2.48	3.6%	6.9%	89.5%	53.2%	46.8%	2,230.00	199.09	381.60	4,949.71	2,940.39	2,590.01	5,530.40	
R0305-106	Vibratory Tandem Smooth Drum 10.6t (Vibration Roller, Tandem, 8~10t)	hr	2.08	4.0%	9.0%	87.0%	53.2%	46.8%	2,030.00	168.90	380.02	3,673.49	2,246.70	1,975.70	4,222.40	
R0304-016	Four Tamping Foot Wheels (Tire Roller) 16t	hr	2.08	4.3%	8.0%	87.7%	52.7%	47.3%	1,970.00	176.20	327.81	3,593.60	2,160.62	1,936.98	4,097.60	
R1103-450	Water Wagon/Pump Truck 500-1000 gal (2200-4500 ltr)	hr	1.36	11.3%	24.6%	64.1%	50.8%	49.2%	545.00	83.76	182.34	475.11	376.56	364.64	741.20	
#0122	Crushed Aggregate, transported	m3	128.00	9.1%	15.7%	75.2%	47.2%	52.8%	274.00	3,206.24	5,496.77	26,368.99	16,566.04	18,505.96	35,072.00	Loss 28.0%
	Miscellaneous	LS	1.00							0.00	0.00	0.00	0.00	0.00	0.00	0.0%
Total										4,261.22	6,768.52	39,060.89	24,290.31	25,800.33	50,090.64	
Components (%)										8.5%	13.5%	78.0%	48.5%	51.5%	100.0%	
Unit Rate										42.62	67.70	390.68	242.95	258.05	501.00	

Thickness = 0.250 m  
Compaction layer thickness = 0.200 m

200(2) Aggregate Subbase Course using materials born by removal of existing gravel pavement		Unit: 100.00 m3														
Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local	Labor	Material	Equipment	Foreign	Local			
L020	Unskilled Labor	md	1.36	100.0%	0.0%	0.0%	0.0%	100.0%	314.00	427.04	0.00	0.00	0.00	427.04	427.04	
R0301-371	Motor Grader, 3.7m	hr	2.48	3.6%	6.9%	89.5%	53.2%	46.8%	2,230.00	199.09	381.60	4,949.71	2,940.39	2,590.01	5,530.40	
R0305-106	Vibratory Tandem Smooth Drum 10.6t (Vibration Roller, Tandem, 8~10t)	hr	2.08	4.0%	9.0%	87.0%	53.2%	46.8%	2,030.00	168.90	380.02	3,673.49	2,246.70	1,975.70	4,222.40	
R0304-016	Four Tamping Foot Wheels (Tire Roller) 16t	hr	2.08	4.3%	8.0%	87.7%	52.7%	47.3%	1,970.00	176.20	327.81	3,593.60	2,160.62	1,936.98	4,097.60	
R1103-450	Water Wagon/Pump Truck 500-1000 gal (2200-4500 ltr)	hr	1.36	11.3%	24.6%	64.1%	50.8%	49.2%	545.00	83.76	182.34	475.11	376.56	364.64	741.20	
	Miscellaneous	LS	1.00							0.00	0.00	0.00	0.00	0.00	0.00	0.0%
Total										1,054.98	1,271.76	12,691.90	7,724.27	7,294.37	15,018.64	
Components (%)										7.0%	8.5%	84.5%	51.4%	48.6%	100.0%	
Unit Rate										10.54	12.70	126.76	77.15	72.85	150.00	

Thickness = 0.250 m  
Compaction layer thickness = 0.200 m

201(1) Aggregate Base Course Unit: 100.00 m<sup>3</sup>

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
L020	Unskilled Labor	md	1.76	100.0%	0.0%	0.0%	0.0%	100.0%	314.00	552.64	0.00	0.00	0.00	552.64	552.64	
R0301-371	Motor Grader, 3.71m	hr	2.48	3.6%	6.9%	89.5%	53.2%	16.8%	2,230.00	199.09	381.60	4,949.71	2,940.39	2,590.01	5,530.40	
R0305-106	Vibratory Tandem Smooth Drum 10.6t (Vibration Roller, tandem, 8~10t)	hr	2.64	4.0%	9.0%	87.0%	53.2%	16.8%	2,030.80	214.37	482.33	4,862.50	2,851.58	2,507.62	5,359.20	
R0304-016	Four Tamping Foot Wheels (Tire Roller) 16t	hr	2.64	4.3%	8.0%	87.7%	52.7%	17.3%	1,970.00	223.63	416.08	4,561.10	2,742.33	2,458.47	5,200.80	
R1103-450	Water Wagon/Pump Truck 500-1000 gal (2200-4500 ltr)	hr	1.68	11.3%	24.6%	64.1%	50.8%	19.2%	545.00	103.45	225.24	586.90	465.17	450.43	915.60	
W0122	Crushed Aggregate, transported	m <sup>3</sup>	128.00	9.1%	15.7%	75.2%	47.2%	52.8%	274.00	3,206.24	5,496.77	26,368.99	16,566.04	18,505.96	35,072.00	Loss 28.0%
	Miscellaneous	LS	1.00							0.00	0.00	0.00	0.00	0.00	0.00	0.0%
	<b>Total</b>									4,499.44	7,002.00	41,129.21	25,565.50	27,065.14	52,630.64	
	<b>Components (%)</b>									8.5%	13.3%	78.1%	48.6%	51.4%	100.0%	
	<b>Unit Rate</b>									44.97	69.95	411.05	255.51	270.49	526.00	

Thickness = 0.250 m  
Compaction layer thickness = 0.150 m

204(1) Cement Stabilized Sand Base Course Unit: 100.00 m<sup>3</sup>

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
L020	Unskilled Labor	md	1.67	100.0%	0.0%	0.0%	0.0%	100.0%	314.00	524.38	0.00	0.00	0.00	524.38	524.38	
W0128	Selected Sand, transported	m <sup>3</sup>	120.75	12.5%	19.9%	67.6%	44.1%	55.9%	180.00	2,719.24	4,325.79	14,689.98	9,587.12	12,147.88	21,735.00	Loss 28.0%
W03011	Portland Cement, ordinary	t	5.77	0.0%	100.0%	0.0%	60.0%	40.0%	3,375.00	0.00	19,473.75	0.00	11,684.25	7,789.50	19,473.75	Loss 2.0%
R0402-005	Truck Crane, Hydraulic 2-5t	hr	1.90	17.9%	10.9%	71.2%	45.7%	54.3%	412.00	140.12	85.33	557.35	357.90	424.90	782.80	
R0382-000	Soil Stabilizer/Road Reclaimer	hr	2.00	1.4%	4.2%	94.4%	54.0%	46.0%	5,840.00	163.52	490.56	11,025.92	6,303.36	5,376.64	11,680.00	
R0301-371	Motor Grader, 3.71m	hr	1.67	3.6%	6.9%	89.5%	53.2%	16.8%	2,230.00	134.07	256.96	3,333.07	1,980.02	1,744.08	3,724.10	
R0304-016	Four Tamping Foot Wheels (Tire Roller) 16t	hr	1.67	4.3%	8.0%	87.7%	52.7%	17.3%	1,970.00	141.47	263.19	2,885.24	1,734.73	1,555.17	3,289.90	
	Miscellaneous	LS	1.00							0.00	0.00	0.00	0.00	0.00	0.00	0.0%
	<b>Total</b>									3,822.80	24,895.57	32,491.56	31,647.38	29,582.55	61,209.93	
	<b>Components (%)</b>									6.2%	40.7%	53.1%	51.7%	48.3%	100.0%	
	<b>Unit Rate</b>									38.22	248.92	324.86	316.42	296.58	612.00	

Thickness = 0.300 m Cement 6.0%

Part E Surface Courses

300(1) Gravel Surface Course Unit: 100.00 m<sup>3</sup>

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
L020	Unskilled Labor	md	2.20	100.0%	0.0%	0.0%	0.0%	100.0%	314.00	690.80	0.00	0.00	0.00	690.80	690.80	
R0301-371	Motor Grader, 3.71m	hr	3.10	3.6%	6.9%	89.5%	53.2%	16.8%	2,230.00	248.87	477.00	6,187.14	3,675.48	3,237.52	6,913.00	
R0305-106	Vibratory Tandem Smooth Drum 10.6t (Vibration Roller, tandem, 8~10t)	hr	3.30	4.0%	9.0%	87.0%	53.2%	16.8%	2,030.00	267.96	602.91	5,828.13	3,564.47	3,134.53	6,699.00	
R0304-016	Four Tamping Foot Wheels (Tire Roller) 16t	hr	3.30	4.3%	8.0%	87.7%	52.7%	17.3%	1,970.00	279.54	520.08	5,701.38	3,427.91	3,073.09	6,501.00	
R1103-450	Water Wagon/Pump Truck 500-1000 gal (2200-4500 ltr)	hr	2.10	11.3%	24.6%	64.1%	50.8%	19.2%	545.00	129.33	281.55	733.62	581.46	563.04	1,144.50	
W0129	Gravel/Stone, transported	m <sup>3</sup>	132.00	11.6%	18.6%	69.8%	45.3%	54.7%	212.00	3,235.61	5,210.87	19,537.52	12,680.09	15,303.91	27,984.00	Loss 32.0%
	Miscellaneous	LS	1.00							0.00	0.00	0.00	0.00	0.00	0.00	0.0%
	<b>Total</b>									4,852.11	7,092.40	37,887.79	23,929.41	26,002.89	49,932.30	
	<b>Components (%)</b>									9.7%	14.3%	76.1%	47.9%	52.1%	100.0%	
	<b>Unit Rate</b>									48.49	70.88	379.63	239.14	259.86	499.00	

Thickness = 0.200 m  
Compaction layer thickness = 0.150 m

301(1) Prime Coat Unit: 1.00 t

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
L020	Unskilled Labor	md	0.40	100.0%	0.0%	0.0%	0.0%	100.0%	314.00	125.60	0.00	0.00	0.00	125.60	125.60	
M07011	Prime Coat	t	1.00	0.0%	100.0%	0.0%	65.0%	35.0%	22,635.00	0.00	22,635.00	0.00	14,712.75	7,922.25	22,635.00	
	Miscellaneous	LS	1.00	0.0%	10.0%	90.0%	50.0%	50.0%		0.00	22.76	204.85	113.80	113.80	227.61	1.0%
	Total									125.60	22,657.76	204.85	14,826.55	8,161.65	22,988.21	
	Components (%)									0.5%	98.6%	0.9%	64.5%	35.5%	100.0%	
	Unit Rate	t								125.66	22,669.39	204.95	14,834.16	8,165.84	23,000.00	

Miscellaneous covers the costs for minor tools, cleaning, etc.

302(1) Tack Coat Unit: 1.00 t

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
L020	Unskilled Labor	md	0.47	100.0%	0.0%	0.0%	0.0%	100.0%	314.00	147.58	0.00	0.00	0.00	147.58	147.58	
M07012	Tack Coat	t	1.00	0.0%	100.0%	0.0%	65.0%	35.0%	22,635.00	0.00	22,635.00	0.00	14,712.75	7,922.25	22,635.00	
	Miscellaneous	LS	1.00	0.0%	10.0%	90.0%	50.0%	50.0%		0.00	22.78	205.04	113.91	113.91	227.83	1.0%
	Total									147.58	22,657.78	205.04	14,826.66	8,183.74	23,010.41	
	Components (%)									0.8%	98.5%	0.9%	64.4%	35.6%	100.0%	
	Unit Rate	t								147.51	22,647.54	204.95	14,819.96	8,180.04	23,000.00	

Miscellaneous covers the costs for minor tools, cleaning, etc.

310(1) Bituminous Concrete Surface Course, hot laid Unit: 10.00 t

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
L002	Foreman	md	0.03	100.0%	0.0%	0.0%	0.0%	100.0%	566.00	16.98	0.00	0.00	0.00	16.98	16.98	
L019	Skilled Labor	md	0.18	100.0%	0.0%	0.0%	0.0%	100.0%	403.00	72.54	0.00	0.00	0.00	72.54	72.54	
L020	Unskilled Labor	md	0.18	100.0%	0.0%	0.0%	0.0%	100.0%	314.00	56.52	0.00	0.00	0.00	56.52	56.52	
R0802-047	Asphalt Paver/Finisher, 4.7m	hr	0.28	3.2%	4.3%	92.5%	53.1%	46.9%	2,420.00	21.68	29.14	626.78	359.89	317.71	677.60	
R0305-106	Vibratory Tandem Smooth Drum 10.6t (Vibration Roller, Tandem, 8~10t)	hr	0.28	4.0%	9.0%	87.0%	53.2%	46.8%	2,030.00	22.71	51.16	494.51	302.44	265.96	568.40	
R0304-016	Four Tamping Foot Wheels (Tire Roller) 16t	hr	0.28	4.3%	8.0%	87.7%	52.7%	47.3%	1,970.00	23.72	44.13	483.75	290.85	260.75	551.60	
M07021	Asphalt Mixture	t	11.20	0.0%	100.0%	0.0%	65.0%	35.0%	2,500.00	0.00	28,400.00	0.00	18,200.00	9,800.00	28,000.00	Loss 12.0%
	Miscellaneous	LS	1.00	0.0%	20.0%	80.0%	50.0%	50.0%		0.00	59.89	239.55	149.72	149.72	299.44	1.0%
	Total									214.18	28,184.31	1,844.59	19,302.90	10,940.18	30,243.08	
	Components (%)									0.7%	93.2%	6.1%	63.8%	36.2%	100.0%	
	Unit Rate	t								21.39	2,814.42	184.20	1,927.54	1,092.46	3,020.00	

Miscellaneous covers the cost for spraying equipment, heating fuel, formwork, etc.

Asphalt Pavement Thickness = 50.000 mm Unit Weight = 2.35 t/m3

310(2) Asphalt Mixture Wearing Course (t=50mm) for bridge pavement Unit: 100.00 m2

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
L002	Foreman	md	0.04	100.0%	0.0%	0.0%	0.0%	100.0%	566.00	22.64	0.00	0.00	0.00	22.64	22.64	
L019	Skilled Labor	md	0.21	100.0%	0.0%	0.0%	0.0%	100.0%	403.00	84.63	0.00	0.00	0.00	84.63	84.63	
L020	Unskilled Labor	md	0.21	100.0%	0.0%	0.0%	0.0%	100.0%	314.00	65.94	0.00	0.00	0.00	65.94	65.94	
R0802-047	Asphalt Paver/Finisher, 4.7m	hr	0.33	3.2%	4.3%	92.5%	53.1%	46.9%	2,420.00	25.56	34.34	738.71	424.15	374.45	798.60	
R0305-106	Vibratory Tandem Smooth Drum 10.6t (Vibration Roller, Tandem, 8~10t)	hr	0.33	4.0%	9.0%	87.0%	53.2%	46.8%	2,030.00	26.80	60.29	582.81	356.45	313.45	669.90	
R0304-016	Four Tamping Foot Wheels (Tire Roller) 16t	hr	0.33	4.3%	8.0%	87.7%	52.7%	47.3%	1,970.00	27.95	52.01	570.14	342.79	307.31	650.10	
M07012	Tack Coat	t	0.04	0.0%	100.0%	0.0%	65.0%	35.0%	22,635.00	0.00	905.40	0.00	588.51	316.89	905.49	
M07021	Asphalt Mixture	t	13.16	0.0%	100.0%	0.0%	65.0%	35.0%	2,500.00	0.00	32,900.00	0.00	21,385.00	11,515.00	32,900.00	Loss 12.0%
	Miscellaneous	LS	1.00	0.0%	20.0%	80.0%	50.0%	50.0%		0.00	72.19	288.78	180.49	180.49	360.97	1.0%
	Total									253.52	34,024.23	2,180.43	23,277.38	13,180.80	36,458.18	
	Components (%)									0.7%	93.3%	6.0%	63.8%	36.2%	100.0%	
	Unit Rate	m2								2.54	340.63	21.81	233.04	131.96	365.00	

Miscellaneous covers the cost for spraying equipment, heating fuel, formwork, etc.

Asphalt Pavement Thickness = 50 mm Unit Weight = 2.35 t/m3  
Tack Coat = 0.428 t/m2 Unit Weight = 1.00 t/m3

310(3) Waterproofing Layer for Pampanga Deck Slab Unit: 100.00 m2

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
L002	Foreman	md	0.50	100.0%	0.0%	0.0%	0.0%	100.0%	566.00	283.00	0.00	0.00	0.00	283.00	283.00	
L019	Skilled Labor	md	1.20	100.0%	0.0%	0.0%	0.0%	100.0%	403.00	403.00	0.00	0.00	0.00	403.00	403.00	
L020	Unskilled Labor	md	0.70	100.0%	0.0%	0.0%	0.0%	100.0%	314.00	219.80	0.00	0.00	0.00	219.80	219.80	
M07051	Rubberized Asphalt Agent	kg	52.50	0.0%	100.0%	0.0%	65.0%	35.0%	24.40	0.00	1,281.00	0.00	832.65	448.35	1,281.00	Loss 5.0%
M07052	Rubberized Asphalt	kg	42.00	0.0%	100.0%	0.0%	65.0%	35.0%	18.70	0.00	785.40	0.00	510.51	274.89	785.40	Loss 5.0%
	Miscellaneous	LS	1.00	0.0%	10.0%	90.0%	50.0%	50.0%		0.00	15.25	137.38	76.32	76.32	152.64	5.0%
	<b>Total</b>									986.40	2,081.65	137.38	1,418.48	1,785.96	3,205.44	
	<b>Components (%)</b>									30.8%	64.9%	4.3%	44.3%	55.7%	100.0%	
	<b>Unit Rate</b>	m2								9.88	20.85	1.38	14.21	17.89	32.10	

Miscellaneous covers the costs for asphalt kettle, generator, air compressor, sponge roller, brushes, minor tools, etc.

311(1)a PCC Pavement (Plain), t=280mm Unit: 100.00 m2

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
L002	Foreman	md	0.40	100.0%	0.0%	0.0%	0.0%	100.0%	566.00	226.40	0.00	0.00	0.00	226.40	226.40	
L019	Skilled Labor	md	1.67	100.0%	0.0%	0.0%	0.0%	100.0%	403.00	673.01	0.00	0.00	0.00	673.01	673.01	
L020	Unskilled Labor	md	6.71	100.0%	0.0%	0.0%	0.0%	100.0%	314.00	2,106.94	0.00	0.00	0.00	2,106.94	2,106.94	
W0211	Concrete (for PCC Pavement, 24. MPa, max agg. 50mm)	m3	28.84	2.7%	78.5%	18.8%	57.1%	42.9%	1,520.00	1,195.29	34,397.78	8,243.72	25,043.10	18,793.70	43,836.80	Loss 3.0%
M07103	Joint Filler (bituminous t=18mm)	m2	0.83	0.0%	100.0%	0.0%	60.0%	40.0%	514.00	0.00	426.82	0.00	255.97	170.85	426.82	
M07113	Joint Sealant (18x18mm)	m	3.18	0.0%	100.0%	0.0%	60.0%	40.0%	103.00	0.00	327.54	0.00	196.52	131.02	327.54	
M07117	Joint Sealant (liquid type)	kg	10.20	0.0%	100.0%	0.0%	60.0%	40.0%	96.20	0.00	981.24	0.00	588.74	392.50	981.24	
M02011	Structural Steel (Round Bar, SS400)	kg	94.49	0.0%	100.0%	0.0%	70.0%	30.0%	21.80	0.00	2,059.88	0.00	1,441.92	617.96	2,059.88	
M08700	Steel Gas Pipe, φ 20	m	1.42	0.0%	100.0%	0.0%	60.0%	40.0%	76.70	0.00	108.91	0.00	65.35	43.56	108.91	
Q0705-075	Concrete Spreader, 3~7.5m	hr	1.15	2.2%	1.5%	96.3%	52.9%	47.1%	3,260.00	82.28	57.03	3,609.69	1,983.76	1,785.24	3,749.00	
R0706-090	Concrete Paver/Finisher	hr	1.15	5.0%	9.6%	85.4%	52.6%	47.4%	1,400.00	80.50	154.56	1,374.94	847.44	762.58	1,610.00	
R0402-025	Truck Crane, Hydraulic 21-25t	hr	1.71	5.5%	6.8%	87.7%	52.0%	48.0%	1,330.00	125.09	154.65	1,994.56	1,181.76	1,092.54	2,274.30	
	Miscellaneous	LS	1.00	0.0%	30.0%	70.0%	50.0%	50.0%		0.00	1,050.87	2,451.99	1,751.42	1,751.42	3,502.84	6.0%
	<b>Total</b>									4,489.50	39,719.07	17,674.91	33,355.98	28,527.50	61,883.48	
	<b>Components (%)</b>									7.3%	64.2%	28.6%	53.9%	46.1%	100.0%	
	<b>Unit Rate</b>	m2								44.91	397.30	176.80	333.65	285.35	619.00	

Miscellaneous covers the cost for formwork, truck, concrete cutter, curing materials, chairs, biding wires, etc.  
Thickness = 0.280 m

311(1)b PCC Pavement (Plain), t=250mm Unit: 100.000 m2

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
L002	Foreman	md	0.40	100.0%	0.0%	0.0%	0.0%	100.0%	566.00	226.40	0.00	0.00	0.00	226.40	226.40	
L019	Skilled Labor	md	1.67	100.0%	0.0%	0.0%	0.0%	100.0%	403.00	673.01	0.00	0.00	0.00	673.01	673.01	
L020	Unskilled Labor	md	6.71	100.0%	0.0%	0.0%	0.0%	100.0%	314.00	2,106.94	0.00	0.00	0.00	2,106.94	2,106.94	
W0211	Concrete (for PCC Pavement, 24. MPa, max agg. 50mm)	m3	26.00	2.7%	78.5%	18.8%	57.1%	42.9%	1,520.00	1,077.59	31,010.49	7,431.93	22,676.99	16,943.01	39,520.00	Loss 4.0%
M07103	Joint Filler (bituminous t=18mm)	m2	0.74	0.0%	100.0%	0.0%	60.0%	40.0%	514.00	0.00	380.36	0.00	228.22	152.14	380.36	
M07113	Joint Sealant (18x18mm)	m	3.18	0.0%	100.0%	0.0%	60.0%	40.0%	103.00	0.00	327.54	0.00	196.52	131.02	327.54	
M07117	Joint Sealant (liquid type)	kg	10.20	0.0%	100.0%	0.0%	60.0%	40.0%	96.20	0.00	981.24	0.00	588.74	392.50	981.24	
M02011	Structural Steel (Round Bar, SS400)	kg	94.49	0.0%	100.0%	0.0%	70.0%	30.0%	21.80	0.00	2,059.88	0.00	1,441.92	617.96	2,059.88	
M08700	Steel Gas Pipe, φ 20	m	1.42	0.0%	100.0%	0.0%	60.0%	40.0%	76.70	0.00	108.91	0.00	65.35	43.56	108.91	
Q0705-075	Concrete Spreader, 3~7.5m	hr	1.15	2.2%	1.5%	96.3%	52.9%	47.1%	3,260.00	82.28	57.03	3,609.69	1,983.76	1,785.24	3,749.00	
R0706-090	Concrete Paver/Finisher	hr	1.15	5.0%	9.6%	85.4%	52.6%	47.4%	1,400.00	80.50	154.56	1,374.94	847.44	762.58	1,610.00	
R0402-025	Truck Crane, Hydraulic 21-25t	hr	1.71	5.5%	6.8%	87.7%	52.0%	48.0%	1,330.00	125.09	154.65	1,994.56	1,181.76	1,092.54	2,274.30	
	Miscellaneous	LS	1.00	0.0%	30.0%	70.0%	50.0%	50.0%		0.00	972.32	2,268.74	1,620.53	1,620.53	3,241.05	6.0%
	<b>Total</b>									4,371.80	36,206.08	16,679.86	30,731.23	26,527.40	57,258.63	
	<b>Components (%)</b>									7.6%	63.2%	29.1%	53.7%	46.3%	100.0%	
	<b>Unit Rate</b>	m2								43.75	362.33	166.92	307.53	265.47	573.00	

Miscellaneous covers the cost for formwork, truck, concrete cutter, curing materials, chairs, biding wires, etc.  
Thickness = 0.250 m



311(l)c PCC Pavement (Plain), t=230mm		Unit: 100.00 m2														
Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local	Labor	Material	Equipment	Foreign	Local			
L002	Foreman	md	0.40	100.0%	0.0%	0.0%	0.0%	100.0%	566.00	226.40	0.00	0.00	0.00	226.40	226.40	
L019	Skilled Labor	md	1.67	100.0%	0.0%	0.0%	0.0%	100.0%	403.00	673.01	0.00	0.00	0.00	673.01	473.01	
L020	Unskilled Labor	md	6.71	100.0%	0.0%	0.0%	0.0%	100.0%	314.00	2,106.94	0.00	0.00	0.00	2,106.94	2,106.94	
W0211	Concrete (for PCC Pavement, 24.1MPa, max agg. 50mm)	m3	23.92	2.7%	78.5%	18.8%	57.1%	42.9%	1,520.00	991.38	28,529.65	6,837.37	20,770.83	16,587.57	36,358.40	Loss 4.0%
M07103	Joint Filler (bituminous t=18mm)	m2	0.67	0.0%	100.0%	0.0%	60.0%	40.0%	514.00	0.00	344.38	0.00	206.63	137.75	344.38	
M07113	Joint Sealant (18x18mm)	m	3.18	0.0%	100.0%	0.0%	60.0%	40.0%	103.00	0.00	327.54	0.00	196.52	131.02	327.54	
M07117	Joint Sealant (liquid type)	kg	10.20	0.0%	100.0%	0.0%	60.0%	40.0%	96.20	0.00	96.20	0.00	588.74	392.50	981.24	
M02011	Structural Steel (Round Bar, SS400)	kg	97.02	0.0%	100.0%	0.0%	70.0%	30.0%	21.80	0.00	2,115.04	0.00	1,480.53	634.51	2,115.04	
M08700	Steel Gas Pipe, φ20	m	1.42	0.0%	100.0%	0.0%	60.0%	40.0%	76.70	0.00	108.91	0.00	65.35	43.56	108.91	
Q0705-075	Concrete Spreader, 3~7.5m	hr	1.15	2.2%	1.5%	96.3%	52.9%	47.1%	3,260.00	82.28	57.03	3,809.69	1,983.76	1,765.24	3,749.00	
R0706-090	Concrete Paver/Finisher	hr	1.15	5.0%	9.6%	85.4%	52.6%	47.4%	1,400.00	80.50	154.66	1,374.94	847.44	762.56	1,610.00	
R0402-025	Truck Crane, Hydraulic 21-25t	hr	1.71	5.5%	6.8%	87.7%	52.0%	48.0%	1,330.00	125.09	154.65	1,994.56	1,181.76	1,092.54	2,274.30	
	Miscellaneous	LS	1.00	0.0%	30.0%	70.0%	50.0%	50.0%	0.00	0.00	915.75	2,136.76	1,526.25	1,526.25	3,052.51	6.0%
Total										4,285.59	33,688.76	15,953.33	28,947.82	25,079.85	63,927.67	
Components (%)										7.9%	62.5%	29.6%	53.5%	46.5%	100.0%	
Unit Rate									m2	42.83	336.71	159.45	288.33	250.67	639.00	

Miscellaneous covers the cost for formwork, truck, concrete cutter, curing materials, chairs, biding wires, etc.  
Thickness = 0.230 m

311(l)d PCC Pavement (Plain), t=180mm		Unit: 100.00 m2														
Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local	Labor	Material	Equipment	Foreign	Local			
L002	Foreman	md	0.40	100.0%	0.0%	0.0%	0.0%	100.0%	566.00	226.40	0.00	0.00	0.00	226.40	226.40	
L019	Skilled Labor	md	1.67	100.0%	0.0%	0.0%	0.0%	100.0%	403.00	673.01	0.00	0.00	0.00	673.01	473.01	
L020	Unskilled Labor	md	6.71	100.0%	0.0%	0.0%	0.0%	100.0%	314.00	2,106.94	0.00	0.00	0.00	2,106.94	2,106.94	
W0211	Concrete (for PCC Pavement, 24.1MPa, max agg. 50mm)	m3	18.72	2.7%	78.5%	18.8%	57.1%	42.9%	1,520.00	775.86	22,327.55	5,350.99	16,255.44	12,198.96	28,454.40	Loss 4.0%
M07103	Joint Filler (bituminous t=18mm)	m2	0.51	0.0%	100.0%	0.0%	60.0%	40.0%	514.00	0.00	262.14	0.00	157.28	104.86	262.14	
M07113	Joint Sealant (18x18mm)	m	3.18	0.0%	100.0%	0.0%	60.0%	40.0%	103.00	0.00	327.54	0.00	196.52	131.02	327.54	
M07117	Joint Sealant (liquid type)	kg	10.20	0.0%	100.0%	0.0%	60.0%	40.0%	96.20	0.00	96.20	0.00	588.74	392.50	981.24	
M02011	Structural Steel (Round Bar, SS400)	kg	114.78	0.0%	100.0%	0.0%	70.0%	30.0%	21.80	0.00	2,502.20	0.00	1,751.54	750.66	2,502.20	
M08700	Steel Gas Pipe, φ20	m	1.42	0.0%	100.0%	0.0%	60.0%	40.0%	76.70	0.00	108.91	0.00	65.35	43.56	108.91	
Q0705-075	Concrete Spreader, 3~7.5m	hr	1.15	2.2%	1.5%	96.3%	52.9%	47.1%	3,260.00	82.28	57.03	3,809.69	1,983.76	1,765.24	3,749.00	
R0706-090	Concrete Paver/Finisher	hr	1.15	5.0%	9.6%	85.4%	52.6%	47.4%	1,400.00	80.50	154.66	1,374.94	847.44	762.56	1,610.00	
R0402-025	Truck Crane, Hydraulic 21-25t	hr	1.71	5.5%	6.8%	87.7%	52.0%	48.0%	1,330.00	125.09	154.65	1,994.56	1,181.76	1,092.54	2,274.30	
	Miscellaneous	LS	1.00	0.0%	30.0%	70.0%	50.0%	50.0%	0.00	0.00	778.97	1,817.60	1,298.28	2,596.56	459.00	6.0%
Total										4,070.07	27,654.79	14,147.78	24,326.12	21,546.52	45,872.64	
Components (%)										8.9%	60.3%	30.8%	53.0%	47.0%	100.0%	
Unit Rate									m2	40.73	276.71	141.56	243.41	215.59	459.00	

Miscellaneous covers the cost for formwork, truck, concrete cutter, curing materials, chairs, biding wires, etc.  
Thickness = 0.180 m

SPL 311(l)e PCC Pavement (Lean Mix Concrete)		Unit: 10.00 m3														
Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local	Labor	Material	Equipment	Foreign	Local			
L002	Foreman	md	0.33	100.0%	0.0%	0.0%	0.0%	100.0%	566.00	186.78	0.00	0.00	0.00	186.78	186.78	
L019	Skilled Labor	md	1.39	100.0%	0.0%	0.0%	0.0%	100.0%	403.00	560.17	0.00	0.00	0.00	560.17	560.17	
L020	Unskilled Labor	md	5.59	100.0%	0.0%	0.0%	0.0%	100.0%	314.00	1,755.26	0.00	0.00	0.00	1,755.26	1,755.26	
W0202	Concrete (Class B, 17MPa, max agg. 50mm)	m3	10.40	3.0%	76.4%	20.6%	56.1%	43.9%	1,380.00	429.70	10,967.15	2,955.15	8,057.63	6,294.37	14,352.00	Loss 4.0%
Q0705-075	Concrete Spreader, 3~7.5m	hr	0.96	2.2%	1.5%	96.3%	52.9%	47.1%	3,260.00	68.68	47.61	3,043.31	1,656.01	1,473.59	3,129.60	
R0706-090	Concrete Paver/Finisher	hr	0.96	5.0%	9.6%	85.4%	52.6%	47.4%	1,400.00	67.20	129.02	1,447.78	707.43	636.57	1,344.00	
R0402-025	Truck Crane, Hydraulic 21-25t	hr	1.43	5.5%	6.8%	87.7%	52.0%	48.0%	1,330.00	104.60	129.33	1,667.97	988.26	913.64	1,901.90	
	Miscellaneous	LS	1.00	0.0%	30.0%	70.0%	50.0%	50.0%	0.00	0.00	418.13	975.65	696.89	696.89	1,393.78	6.0%
Total										3,172.40	11,691.24	9,759.85	12,106.22	12,517.27	24,623.49	
Components (%)										12.9%	47.5%	39.6%	49.2%	50.8%	100.0%	
Unit Rate									m3	316.94	1,168.01	975.05	1,209.47	1,250.53	2,460.00	

Miscellaneous covers the cost for joints, formwork, truck, concrete cutter, curing materials, chairs, biding wires, etc.  
Average Thickness = 0.120 m

SPL 311(2) PCC Pavement (Reinforced), t=300mm (Approach Slab)

Unit: 100.00 m<sup>2</sup>

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
W0203	Concrete (Class A, 21MPa, max agg. 38mm)	m <sup>3</sup>	33.66	2.5%	80.6%	16.9%	56.7%	43.3%	1,610.00	1,361.02	43,665.49	9,166.88	30,753.59	23,439.01	54,192.60	Loss 2.0%
W0232	Concrete Pouring by Pump Vehicle (reinforced concrete)	m <sup>3</sup>	33.00	15.5%	0.2%	84.3%	45.2%	54.8%	257.00	1,317.55	16.63	7,146.82	3,829.99	4,651.01	8,481.00	
W0237	Concrete Curing (reinforced concrete)	m <sup>3</sup>	33.00	74.6%	7.6%	17.8%	14.0%	86.0%	4.21	103.68	10.58	24.68	19.39	119.54	138.93	
W0241	Formwork (reinforced concrete <4m)	m <sup>2</sup>	18.62	59.3%	39.9%	0.8%	2.9%	97.1%	224.00	2,472.75	1,665.42	32.71	121.71	4,049.17	4,170.88	
W0251	Reinforcement Grade 40, cutting, bending & assembly	kg	1,444.40	15.2%	77.0%	7.8%	54.0%	46.0%	23.30	5,111.06	25,915.79	2,627.67	18,171.74	15,482.78	33,654.52	
W0252	Reinforcement Grade 60, cutting, bending & assembly	kg	3,805.50	14.5%	77.9%	7.7%	54.5%	45.5%	24.50	13,484.40	72,597.63	7,152.72	50,794.49	42,440.26	93,234.75	
M07102	Joint Filler (bituminous t=12mm)	m <sup>2</sup>	9.27	0.0%	100.0%	0.0%	60.0%	40.0%	343.00	0.00	3,179.61	0.00	1,907.77	1,271.84	3,179.61	
M07112	Joint Sealant (12x12mm)	m	32.20	0.0%	100.0%	0.0%	60.0%	40.0%	75.20	0.00	75.20	0.00	1,452.86	968.58	2,421.44	
M02011	Structural Steel (Round Bar, SS400)	kg	118.89	0.0%	100.0%	0.0%	70.0%	30.0%	21.80	0.00	2,591.89	0.00	1,814.26	777.54	2,591.80	
	Miscellaneous	LS	1.00	10.0%	20.0%	70.0%	50.0%	50.0%		404.13	808.26	2,828.92	2,020.66	2,020.66	4,041.31	2.0%
Total										24,254.58	152,872.65	28,979.61	110,886.45	95,220.39	206,106.84	
Components (%)										11.8%	74.2%	14.1%	53.8%	46.2%	100.0%	
Unit Rate			m <sup>2</sup>							242.42	1,527.93	289.65	1,109.29	951.71	2,060.00	

Miscellaneous covers the cost for surface finishing, minor tools, etc.  
Thickness = 0.300 m

Part F Bridge Construction

400(3)a Steel H Piles (450mmx260kg/m), furnished

Unit: 100.00 m

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
L002	Foreman	md	0.20	100.0%	0.0%	0.0%	0.0%	100.0%	566.00	113.20	0.00	0.00	0.00	113.20	113.20	
L009	Welder	md	1.00	100.0%	0.0%	0.0%	0.0%	100.0%	500.00	500.00	0.00	0.00	0.00	500.00	500.00	
L019	Skilled Labor	md	1.00	100.0%	0.0%	0.0%	0.0%	100.0%	403.00	403.00	0.00	0.00	0.00	403.00	403.00	
W02015	Structural Steel (Plates, SS400)	kg	25,396.80	0.0%	100.0%	0.0%	70.0%	30.0%	20.20	0.00	513,015.36	0.00	359,110.75	153,904.61	513,015.36	Loss 4.0%
R0901-025	Welding Machine 250A	day	1.00	0.0%	39.8%	60.2%	58.6%	41.4%	588.00	0.00	234.02	353.98	344.48	243.52	588.00	
R1001-150	Generator 101-150 kW	day	1.00	0.0%	52.2%	47.8%	59.9%	40.1%	3,610.00	0.00	1,884.42	1,725.58	2,164.17	1,445.83	3,610.00	
R0402-020	Truck Crane, Hydraulic 16-20t	hr	0.61	6.9%	7.7%	85.4%	51.5%	48.5%	1,070.00	45.04	50.26	567.41	335.83	316.87	652.70	
R0604-020	Trailer 20t	hr	15.85	3.8%	10.7%	85.5%	53.3%	46.7%	1,670.00	1,005.84	2,832.24	22,631.42	14,109.88	12,359.62	26,468.50	
	Miscellaneous	LS	1.00	10.0%	20.0%	70.0%	50.0%	50.0%		13,633.79	27,267.59	95,436.56	68,168.97	68,168.97	136,337.94	25.0%
Total										15,700.87	545,283.89	120,704.94	444,234.09	237,455.61	681,689.70	
Components (%)										2.3%	80.0%	17.7%	65.2%	34.8%	100.0%	
Unit Rate			m							157.08	5,455.32	1,207.60	4,444.36	2,375.64	6,820.00	

Miscellaneous covers the cost for fabricator's overhead, facilities, etc.

400(4)a Precast RC Concrete Pile (400mm x 400mm), furnished

Unit: 100.00 m

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
W0206	Concrete (Class AA2, 28MPa, max agg. 20mm)	m <sup>3</sup>	15.94	2.1%	83.5%	14.4%	57.9%	42.1%	1,840.00	630.58	24,483.87	4,215.15	16,977.96	12,351.64	29,329.60	Loss 2.0%
W0232	Concrete Pouring by Pump Vehicle (reinforced concrete)	m <sup>3</sup>	15.63	15.5%	0.2%	84.3%	45.2%	54.8%	257.00	624.04	7.88	3,385.00	1,814.02	2,202.89	4,016.91	
W0237	Concrete Curing (reinforced concrete)	m <sup>3</sup>	15.63	74.6%	7.6%	17.8%	14.0%	86.0%	4.21	49.10	5.01	11.69	9.18	56.62	65.80	
W0251	Reinforcement Grade 40, cutting, bending & assembly	kg	4,696.70	15.2%	77.0%	7.8%	54.0%	46.0%	23.30	16,619.44	84,269.39	8,544.29	59,088.34	50,344.77	109,433.11	
R0402-025	Truck Crane, Hydraulic 21-25t	hr	0.59	5.5%	6.8%	87.7%	52.0%	48.0%	1,330.00	43.16	53.36	688.18	407.74	376.96	784.70	
R0604-020	Trailer 20t	hr	1.29	3.8%	10.7%	85.5%	53.3%	46.7%	1,670.00	81.86	230.51	1,841.93	1,148.38	1,005.92	2,154.30	
	Miscellaneous	LS	1.00	5.0%	25.0%	70.0%	50.0%	50.0%		583.14	2,915.69	8,163.93	5,831.38	5,831.38	11,662.75	8.0%
Total										18,631.32	111,965.70	26,850.16	85,277.00	72,170.17	157,447.17	
Components (%)										11.8%	71.1%	17.1%	64.2%	45.8%	100.0%	
Unit Rate			m							185.78	1,116.48	267.74	850.35	719.65	1,570.00	

Miscellaneous covers the cost for mould, forms, maintenance of fabrication yard, minor tools and devices, etc.

400(4)b Precast RC Concrete Pile (450mmx450mm) furnished

Unit: 100.00 m

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
W0206	Concrete (Class A42, 28MPa, max agg. 20mm)	m3	20.04	2.1%	83.5%	14.4%	57.9%	42.1%	1,840.00	792.77	30,781.48	5,299.35	21,344.94	15,528.66	36,873.60	Loss 2.0%
W0232	Concrete Pouring by Pump Vehicle (reinforced concrete)	m3	19.65	15.5%	0.2%	84.3%	45.2%	54.8%	257.00	784.54	9.90	4,255.61	2,280.59	2,769.46	5,050.05	
W0237	Concrete Curing (reinforced concrete)	m3	19.65	74.6%	7.6%	17.8%	14.0%	86.0%	4.21	61.74	6.30	14.69	11.55	71.18	82.73	
W0251	Reinforcement Grade 40, cutting, bending & assembly	kg	5,985.30	15.2%	77.0%	7.8%	54.0%	46.0%	23.30	21,179.19	107,389.78	18,888.52	75,299.98	64,157.51	139,457.49	
R0402-025	Truck Crane, Hydraulic 21-25t	hr	0.74	5.5%	6.8%	87.7%	52.0%	48.0%	1,330.00	54.13	66.93	863.14	511.41	472.79	984.20	
R0604-020	Trailer 20L	hr	1.82	3.8%	10.7%	85.5%	53.3%	46.7%	1,670.00	102.81	289.48	2,313.12	1,442.15	1,263.25	2,705.40	
	Miscellaneous	LS	1.00							740.61	3,703.07	10,368.59	7,406.14	7,406.14	14,812.28	8.0%
Total										23,715.79	142,246.92	34,003.03	108,296.74	91,669.00	199,965.75	
Components (%)										11.9%	71.1%	17.8%	54.2%	45.8%	100.0%	
Unit Rate			m							237.20	1,422.71	340.09	1,083.15	916.85	2,000.00	

Miscellaneous covers the cost for mould, forms, maintenance of fabrication yard, minor tools and devices, etc.

400(10)a Steel H Piles (450mmx260kg/m), driven

Unit: 100.00 m

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
L002	Foreman	md	1.40	100.0%	0.0%	0.0%	0.0%	100.0%	566.00	792.40	0.00	0.00	0.00	792.40	792.40	
L009	Welder	md	1.40	100.0%	0.0%	0.0%	0.0%	100.0%	500.00	700.00	0.00	0.00	0.00	700.00	700.00	
L019	Skilled Labor	md	2.80	100.0%	0.0%	0.0%	0.0%	100.0%	403.00	1,128.40	0.00	0.00	0.00	1,128.40	1,128.40	
L020	Unskilled Labor	md	1.40	100.0%	0.0%	0.0%	0.0%	100.0%	314.00	439.60	0.00	0.00	0.00	439.60	439.60	
R0501-025	Diesel Hammer w/o Crane, 2.5t	hr	8.80	0.0%	0.0%	100.0%	55.6%	44.4%	1,670.00	0.00	0.00	14,696.00	8,173.10	6,522.90	14,696.00	
R0461-035	Crawler Crane, 31-35t	hr	8.80	4.3%	9.8%	85.9%	52.9%	47.1%	1,680.00	635.71	1,448.83	12,699.46	7,822.46	6,961.54	14,784.00	
W0201	Reinforcing Bars, Grade 40	kg	938.40	0.0%	100.0%	0.0%	85.0%	35.0%	16.00	0.00	15,014.40	0.00	9,759.36	5,255.04	15,014.40	Loss 2.0%
R0402-025	Truck Crane, Hydraulic 21-25t	hr	5.28	5.5%	6.8%	87.7%	52.0%	48.0%	1,330.00	386.23	477.52	6,158.64	3,648.95	3,373.45	7,022.40	
R0901-050	Welding Machine 500A	day	1.40	0.0%	60.4%	39.6%	60.6%	39.4%	1,470.00	0.00	1,243.03	814.97	1,247.90	810.10	2,058.00	
R1001-150	Generator 101-150 kW	day	1.40	0.0%	52.2%	47.8%	59.9%	40.1%	3,610.00	0.00	2,638.19	2,415.81	3,029.84	2,024.16	5,054.00	
	Miscellaneous	LS	1.00	5.0%	20.0%	75.0%	50.0%	50.0%		30.84	123.38	462.67	308.45	308.45	616.89	1.0%
Total										4,113.19	20,945.35	37,247.55	33,990.06	28,316.03	62,306.09	
Components (%)										6.6%	33.6%	59.8%	54.6%	45.4%	100.0%	
Unit Rate			m							41.13	209.43	372.44	339.87	283.13	623.00	

Miscellaneous covers the cost for welding rods, scaffolding, lubricant, etc.

$T_c = (T_h + T_w + T_p) / F$   
 $T_c$ : Cycle time per pile = 26.39 min  
 $T_h$ : Driving Time =  $K \cdot \alpha \cdot L \cdot \beta$  = 5.75 min  
 $T_w$ : Welding Time =  $17 \cdot n$  = 0.00 min  
 $T_p$ : Preparation Time =  $6 \cdot (n+1) + 12$  = 18.00 min  
 $F$ : Efficiency =  $0.9 + (f_1 + f_2 + f_3)$  = 0.90  
 $K$ : Pile Coefficient = 1.00  
 $\alpha$ : Soil factor = 1.15  
 $\beta$ : Hammer factor = 1.00  
 $L$ : Pile Driving Length = 5.00 m  
 $D$ : Pile size = 0.45 m  
 $n$ : number of joint = 0.00  
 $f_1$ : Obstruction factor = 0.00  
 $f_2$ : Space factor = 0.00  
 $f_3$ : Volume factor = 0.00  
 $T$ : Daily Operation hour = 6.29 hr  
 Pile head re-bars = 46.00 kg/each

400(13)a Precast Concrete Piles (400mm x 400mm), driven

Unit: 100.00 m

Item No.	Description	Unit	Quantity	Unit Rate						Amount						Remarks
				Component (%)					Total (PP)	Component (PP)					Total (PP)	
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
L002	Foreman	md	0.98	100.0%	0.0%	0.0%	0.0%	100.0%	566.00	564.68	0.00	0.00	0.00	554.68	554.68	
L009	Welder	md	0.98	100.0%	0.0%	0.0%	0.0%	100.0%	500.00	490.00	0.00	0.00	0.00	490.00	490.00	
L019	Skilled Labor	md	1.96	100.0%	0.0%	0.0%	0.0%	100.0%	403.00	789.88	0.00	0.00	0.00	789.88	789.88	
L020	Unskilled Labor	md	0.98	100.0%	0.0%	0.0%	0.0%	100.0%	314.00	307.72	0.00	0.00	0.00	307.72	307.72	
R0501-025	Diesel Hammer w/o Crane, 2.5t	hr	6.17	0.0%	0.0%	100.0%	55.6%	44.4%	1,670.00	0.00	0.00	10,303.90	5,730.45	4,573.45	10,303.90	
R0401-035	Crawler Crane, 31-35t	hr	6.17	4.3%	9.8%	86.9%	52.9%	47.1%	1,680.00	445.72	1,015.83	8,904.05	5,484.61	4,880.99	10,365.60	
R0402-025	Truck Crane, Hydraulic 21-25t	hr	3.70	5.6%	6.8%	87.7%	52.0%	48.0%	1,330.00	270.66	334.63	4,315.72	2,557.03	2,363.97	4,921.00	
R0901-050	Welding Machine 500A	day	0.98	0.0%	60.4%	39.6%	80.6%	39.4%	1,470.00	0.00	870.12	570.48	873.53	567.07	1,440.60	
R1001-150	Generator 101-150 kW	day	0.98	0.0%	52.2%	47.8%	59.9%	40.1%	3,610.00	0.00	1,846.73	1,691.07	2,120.89	1,416.91	3,537.80	
	Miscellaneous	LS	1.00	5.0%	20.0%	75.0%	55.0%	45.0%		16.36	65.42	245.33	179.91	147.20	327.11	
Total										2,875.01	4,132.73	26,030.55	16,946.43	16,091.86	33,038.29	
Components (%)										8.7%	12.5%	78.8%	51.3%	48.7%	100.0%	
Unit Rate			m							28.72	41.28	260.00	169.27	160.73	330.00	

Miscellaneous covers the cost for welding rods, scaffolding, lubricant, etc.

$T_c = (T_b + T_w + T_p) / F$

$T_c$ : Cycle time per pile = 43.10 min

$T_b$ : Driving Time =  $K \cdot \alpha \cdot L \cdot \beta$  = 20.79 min

$T_w$ : Welding Time =  $17 \cdot n$  = 0.00 min

$T_p$ : Preparation time =  $6 \cdot (n+1) + 12$  = 18.00 min

$F$ : Efficiency =  $0.9 + (f_1 + f_2 + f_3)$  = 0.90

$K$ : Pile Coefficient = 1.60

$\alpha$ : Soil factor = 1.15

$\beta$ : Hammer factor = 0.97

$L$ : Pile Driving Length = 11.65 m

$D$ : Pile size = 0.40 m

$n$ : number of joint = 0.00

$f_1$ : Obstruction factor = 0.00

$f_2$ : Space factor = 0.00

$f_3$ : Volume factor = 0.00

$T$ : Daily Operation hour = 6.29 hr

400(13)b Precast Concrete Piles (450mm x 450mm), driven

Unit: 100.00 m

Item No.	Description	Unit	Quantity	Unit Rate						Amount						Remarks
				Component (%)					Total (PP)	Component (PP)					Total (PP)	
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
L002	Foreman	md	1.04	100.0%	0.0%	0.0%	0.0%	100.0%	566.00	588.64	0.00	0.00	0.00	588.64	588.64	
L009	Welder	md	1.04	100.0%	0.0%	0.0%	0.0%	100.0%	500.00	520.00	0.00	0.00	0.00	520.00	520.00	
L019	Skilled Labor	md	2.08	100.0%	0.0%	0.0%	0.0%	100.0%	403.00	838.24	0.00	0.00	0.00	838.24	838.24	
L020	Unskilled Labor	md	1.04	100.0%	0.0%	0.0%	0.0%	100.0%	314.00	326.56	0.00	0.00	0.00	326.56	326.56	
R0501-025	Diesel Hammer w/o Crane, 2.5t	hr	6.54	0.0%	0.0%	100.0%	55.0%	44.4%	1,670.00	0.00	0.00	10,921.80	6,074.10	4,847.70	10,921.80	
R0401-035	Crawler Crane, 31-35t	hr	6.54	4.3%	9.8%	85.9%	52.9%	47.1%	1,680.00	472.45	1,076.75	9,438.00	5,813.51	5,173.69	10,987.20	
R0402-025	Truck Crane, Hydraulic 21-25t	hr	3.92	5.6%	6.8%	87.7%	52.0%	48.0%	1,330.00	286.75	354.52	4,572.33	2,709.07	2,504.53	5,213.60	
R0901-050	Welding Machine 500A	day	1.04	0.0%	60.4%	39.6%	60.6%	39.4%	1,470.00	0.00	923.40	605.40	927.01	601.79	1,528.80	
R1001-150	Generator 101-150 kW	day	1.04	0.0%	52.2%	47.8%	59.9%	40.1%	3,610.00	0.00	1,959.80	1,794.60	2,250.74	1,503.66	3,754.40	
	Miscellaneous	LS	1.00	5.0%	20.0%	75.0%	55.0%	45.0%		17.34	69.36	260.09	190.74	156.06	346.79	
Total										3,049.98	4,383.82	27,592.23	17,965.17	17,060.87	35,026.03	
Components (%)										8.7%	12.5%	78.8%	51.3%	48.7%	100.0%	
Unit Rate			m							30.48	43.81	275.72	179.52	170.48	350.00	

Miscellaneous covers the cost for welding rods, scaffolding, lubricant, etc.

$T_c = (T_b + T_w + T_p) / F$

$T_c$ : Cycle time per pile = 41.78 min

$T_b$ : Driving Time =  $K \cdot \alpha \cdot L \cdot \beta$  = 19.60 min

$T_w$ : Welding Time =  $18 \cdot n$  = 0.00 min

$T_p$ : Preparation time =  $6 \cdot (n+1) + 12$  = 18.00 min

$F$ : Efficiency =  $0.9 + (f_1 + f_2 + f_3)$  = 0.90

$K$ : Pile Coefficient = 1.60

$\alpha$ : Soil factor = 1.15

$\beta$ : Hammer factor = 1.00

$L$ : Pile Driving Length = 10.65 m

$D$ : Pile size = 0.45 m

$n$ : number of joint = 0.00

$f_1$ : Obstruction factor = 0.00

$f_2$ : Space factor = 0.00

$f_3$ : Volume factor = 0.00

$T$ : Daily Operation hour = 6.29 hr

400(15)a Test Piles (400mm x 400mm), furnished & driven

Unit: 100.00 m

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mnt.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
L002	Foreman	md	0.77	100.0%	0.0%	0.0%	0.0%	100.0%	566.00	435.82	0.00	0.00	0.00	435.82	435.82	
L009	Welder	md	0.77	100.0%	0.0%	0.0%	0.0%	100.0%	500.00	385.00	0.00	0.00	0.00	385.00	385.00	
L019	Skilled Labor	md	1.53	100.0%	0.0%	0.0%	0.0%	100.0%	403.00	616.59	0.00	0.00	0.00	616.59	616.59	
L020	Unskilled Labor	md	0.77	100.0%	0.0%	0.0%	0.0%	100.0%	314.00	241.78	0.00	0.00	0.00	241.78	241.78	
400(4)a	Precast RC Concrete Pile (400mm x 400mm), furnished	m	100.00	11.8%	71.1%	17.1%	54.2%	45.8%	1,570.00	18,578.40	111,647.70	26,773.90	85,034.80	71,965.20	157,000.00	
R0501-025	Diesel Hammer w/o Crane, 2.5t	hr	4.82	0.0%	0.0%	100.0%	55.6%	44.4%	1,670.00	0.00	0.00	8,049.40	4,476.63	3,572.77	8,049.40	
R0401-035	Crawler Crane, 31-35t	hr	4.82	4.3%	9.8%	85.9%	52.9%	47.1%	1,680.00	348.20	793.56	8,955.84	4,284.58	3,813.02	8,097.60	
R0402-025	Truck Crane, Hydraulic 21-25t	hr	2.89	5.5%	6.8%	87.7%	52.0%	48.0%	1,330.00	211.40	261.37	3,370.92	1,997.25	1,846.45	3,843.70	
R0901-050	Welding Machine 500A	day	0.77	0.0%	60.4%	39.6%	60.6%	39.4%	1,470.00	0.00	683.67	448.23	686.35	445.55	1,131.90	
R1001-150	Generator 101-150 kW	day	0.77	0.0%	52.2%	47.8%	59.9%	40.1%	3,610.00	0.00	1,451.00	1,328.70	1,666.41	1,113.29	2,779.70	
	Miscellaneous	LS	1.00	10.0%	20.0%	70.0%	55.0%	45.0%		182.58	365.16	1,278.07	1,004.20	821.62	1,825.81	1.0%
Total										20,999.77	115,202.47	48,205.06	99,150.21	85,257.10	184,407.30	
Components (%)										11.4%	62.5%	26.1%	53.8%	46.2%	100.0%	
Unit Rate			m							209.53	1,149.48	480.99	989.31	850.69	1,840.00	

Miscellaneous covers the cost for welding rods, scaffolding, lubricant, etc.

Tc = (Tb + Tw + Tp) / F	=		Lf: Pile Furnished Length	14.90 m
Tc: Cycle time per pile	=	43.10 min	Ld: Pile Driving Length	11.65 m
Tb: Driving Time = K * α * L * β	=	20.79 min	D: Pile size	0.40 m
Tw: Welding Time = 17 * n	=	0.00 min	n: number of joint	0.00
Tp: Preparation time = 6 * (n+1) * 12	=	18.00 min	f1: Obstruction factor	0.00
F: Efficiency = 0.9 + (f1 + f2 + f3)	=	0.90	f2: Space factor	0.00
K: Pile Coefficient	=	1.60	f3: Volume factor	0.00
α: Soil factor	=	1.15	T: Daily Operation hour	6.29 hr
β: Hammer factor	=	0.97		

400(15)b Test Piles (450mm x 450mm), furnished & driven

Unit: 100.00 m

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mnt.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
L002	Foreman	md	0.80	100.0%	0.0%	0.0%	0.0%	100.0%	566.00	452.80	0.00	0.00	0.00	452.80	452.80	
L009	Welder	md	0.80	100.0%	0.0%	0.0%	0.0%	100.0%	500.00	400.00	0.00	0.00	0.00	400.00	400.00	
L019	Skilled Labor	md	1.59	100.0%	0.0%	0.0%	0.0%	100.0%	403.00	640.77	0.00	0.00	0.00	640.77	640.77	
L020	Unskilled Labor	md	0.80	100.0%	0.0%	0.0%	0.0%	100.0%	314.00	251.20	0.00	0.00	0.00	251.20	251.20	
400(4)b	Precast RC Concrete Pile (450mmx450mm) furnished	m	100.00	11.9%	71.1%	17.0%	54.2%	45.8%	2,000.00	23,719.85	142,271.29	34,008.86	108,315.29	91,684.71	200,000.00	
R0501-025	Diesel Hammer w/o Crane, 2.5t	hr	5.01	0.0%	0.0%	100.0%	55.6%	44.4%	1,670.00	0.00	0.00	8,366.70	4,653.09	3,713.61	8,366.70	
R0401-035	Crawler Crane, 31-35t	hr	5.01	4.3%	9.8%	85.9%	52.9%	47.1%	1,680.00	361.92	824.85	7,230.03	4,453.47	3,963.33	8,416.80	
R0402-025	Truck Crane, Hydraulic 21-25t	hr	3.01	5.5%	6.8%	87.7%	52.0%	48.0%	1,330.00	220.18	272.22	3,510.89	2,080.18	1,923.12	4,003.30	
R0901-050	Welding Machine 500A	day	0.80	0.0%	60.4%	39.6%	60.6%	39.4%	1,470.00	0.00	710.30	465.70	713.09	462.91	1,176.00	
R1001-150	Generator 101-150 kW	day	0.80	0.0%	52.2%	47.8%	59.9%	40.1%	3,610.00	0.00	1,507.54	1,380.46	1,731.34	1,156.66	2,888.00	
	Miscellaneous	LS	1.00	10.0%	20.0%	70.0%	55.0%	45.0%		226.60	453.19	1,586.17	1,246.28	1,019.68	2,265.96	1.0%
Total										26,273.32	146,039.39	56,548.81	123,192.74	105,668.79	228,861.53	
Components (%)										11.5%	63.8%	24.7%	53.8%	46.2%	100.0%	
Unit Rate			m							262.89	1,461.28	565.83	1,232.67	1,057.33	2,290.00	

Miscellaneous covers the cost for welding rods, scaffolding, lubricant, etc.

Tc = (Tb + Tw + Tp) / F	=		Lf: Pile Furnished Length	13.90 m
Tc: Cycle time per pile	=	41.78 min	Ld: Pile Driving Length	10.65 m
Tb: Driving Time = K * α * L * β	=	19.60 min	D: Pile size	0.45 m
Tw: Welding Time = 17 * n	=	0.00 min	n: number of joint	0.00
Tp: Preparation time = 6 * (n+1) * 12	=	18.00 min	f1: Obstruction factor	0.00
F: Efficiency = 0.9 + (f1 + f2 + f3)	=	0.90	f2: Space factor	0.00
K: Pile Coefficient	=	1.60	f3: Volume factor	0.00
α: Soil factor	=	1.15	T: Daily Operation hour	6.29 hr
β: Hammer factor	=	1.00		

400(15)c Test Piles (Steel H Piles 460mmx260kg/m), furnished & driven

Unit: 100.00 m

Item No.	Description	Unit	Quantity	Unit Rate					Amount					Remarks	
				Component (%)					Total (PP)	Component (PP)					
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign		Local
L002	Foreman	md	0.99	100.0%	0.0%	0.0%	0.0%	100.0%	566.00	566.34	0.00	0.00	0.00	566.34	566.34
L009	Welder	md	0.99	100.0%	0.0%	0.0%	0.0%	100.0%	500.00	495.00	0.00	0.00	0.00	495.00	495.00
L019	Skilled Labor	md	1.98	100.0%	0.0%	0.0%	0.0%	100.0%	403.00	397.94	0.00	0.00	0.00	397.94	397.94
L020	Unskilled Labor	md	0.99	100.0%	0.0%	0.0%	0.0%	100.0%	314.00	310.86	0.00	0.00	0.00	310.86	310.86
400(3)a	Steel H Piles (460mmx260kg/m), furnished	m	100.00	2.3%	80.0%	17.7%	65.2%	34.8%	6,820.00	15,708.02	545,532.10	120,759.88	444,436.31	237,563.69	682,000.00
R0501-025	Diesel Hammer w/o Crane, 2.5t	hr	6.24	0.0%	0.0%	100.0%	55.6%	44.4%	1,670.00	0.00	0.00	10,420.80	5,795.47	4,625.33	10,420.80
R0401-035	Crawler Crane, 31-35t	hr	6.24	4.3%	9.8%	85.9%	52.9%	47.1%	1,680.00	450.78	1,027.35	9,005.07	5,546.84	4,936.36	10,483.20
R0402-025	Truck Crane, Hydraulic 21-25t	hr	3.74	5.5%	6.8%	87.7%	52.0%	48.0%	1,330.00	273.58	338.25	4,362.37	2,584.67	2,369.53	4,974.20
R0901-050	Welding Machine 500A	day	0.99	0.0%	60.4%	39.6%	60.6%	39.4%	1,470.00	0.00	879.00	576.30	882.45	572.85	1,455.30
R1001-150	Generator 101-150 kW	day	0.99	0.0%	52.2%	47.8%	59.9%	40.1%	3,610.00	0.00	1,865.68	1,708.32	2,142.53	1,431.37	3,573.90
	Miscellaneous	LS	1.00	10.0%	20.0%	70.0%	55.0%	45.0%		715.07	1,430.14	5,005.50	3,932.89	3,217.82	7,150.72
	Total									19,311.59	551,072.41	151,838.25	465,321.15	266,901.10	722,222.26
	Components (%)									2.7%	76.3%	21.0%	64.4%	35.6%	100.0%
	Unit Rate	m								193.1	5,509.0	1,517.9	4,651.8	2,568.2	7,220.0

Miscellaneous covers the cost for welding rods, scaffolding, lubricant, etc.

$T_c = (T_b + T_w + T_p) / F$   
 $T_c$ : Cycle time per pile = 26.20 min  
 $T_b$ : Driving Time =  $K \cdot \alpha \cdot L \cdot \beta$  = 5.58 min  
 $T_w$ : Welding Time = 18.0 min  
 $T_p$ : Preparation Time =  $6 \cdot (n+1) \cdot t_2$  = 18.00 min  
 $F$ : Efficiency =  $0.9 + (f_1 + f_2 + f_3)$  = 0.90  
 $K$ : Pile Coefficient = 1.00  
 $\alpha$ : Soil factor = 1.15  
 $\beta$ : Hammer factor = 0.97  
 $L_f$ : Pile Furnished Length = 7.00 m  
 $L$ : Pile Driving Length = 5.00 m  
 $D$ : Pile size = 0.40 m  
 $n$ : number of joint = 0.00  
 $f_1$ : Obstruction factor = 0.00  
 $f_2$ : Space factor = 0.00  
 $f_3$ : Volume factor = 0.00  
 $T$ : Daily Operation hour = 6.29 hr

400(16)a Cast-in-place Concrete Bored Piles  $\phi 1000$ mm

Unit: 100.00 m

Item No.	Description	Unit	Quantity	Unit Rate					Amount					Remarks	
				Component (%)					Total (PP)	Component (PP)					
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign		Local
L002	Foreman	md	5.44	100.0%	0.0%	0.0%	0.0%	100.0%	566.00	3,079.04	0.00	0.00	0.00	3,079.04	3,079.04
L019	Skilled Labor	md	9.14	100.0%	0.0%	0.0%	0.0%	100.0%	403.00	3,683.42	0.00	0.00	0.00	3,683.42	3,683.42
L020	Unskilled Labor	md	8.40	100.0%	0.0%	0.0%	0.0%	100.0%	314.00	2,637.60	0.00	0.00	0.00	2,637.60	2,637.60
W0205	Concrete (Class AAL, 28MPa, max agg. 25mm)	m3	84.82	2.3%	82.2%	15.5%	57.7%	42.3%	1,760.00	3,418.48	122,744.61	23,120.11	86,141.00	63,142.20	149,283.20
W0232	Concrete Pouring by Pump Vehicle (reinforced concrete)	m3	78.54	15.5%	0.2%	84.3%	45.2%	54.8%	257.00	3,135.76	39.58	17,009.44	9,115.38	11,069.40	20,184.78
W0251	Reinforcement Grade 40, cutting, bending & assembly	kg	157.00	15.2%	77.0%	7.8%	54.0%	46.0%	23.30	555.55	2,816.93	285.62	1,975.19	1,682.91	3,658.10
W0252	Reinforcement Grade 60, cutting, bending & assembly	kg	21,049.00	14.5%	77.9%	7.7%	54.5%	45.5%	24.50	74,584.98	401,552.37	39,563.15	280,954.73	234,745.77	515,700.50
Q0513-120	All Casing Excavator, $\phi 1200$ max	hr	34.35	1.0%	4.4%	94.6%	55.4%	44.6%	6,200.00	2,167.74	8,303.94	201,498.33	117,997.57	94,972.43	212,970.00
R0401-035	Crawler Crane, 31-35t	hr	30.91	4.3%	9.8%	85.9%	52.9%	47.1%	1,680.00	2,232.94	5,089.02	44,606.84	27,476.40	24,452.40	51,928.80
Q0514-100	Hammer Grab, $\phi 1000$	day	5.28	0.0%	0.0%	100.0%	70.7%	29.3%	5,660.00	0.00	0.00	29,884.88	20,011.07	9,873.73	29,884.80
Q0515-001	Hammer Crown, $\leq \phi 1200$	day	5.28	0.0%	0.0%	100.0%	70.7%	29.3%	1,438.00	0.00	0.00	7,550.48	5,338.53	2,211.87	7,550.40
Q0516-105	Casing Tube, $\phi 1000$ , L=5m	day	116.07	0.0%	0.0%	100.0%	68.5%	31.5%	1,780.00	0.00	0.00	206,604.60	141,572.06	65,032.54	206,604.60
W0111	Disposal of Surplus Soil (backhoe loading)	m3	77.52	8.1%	14.8%	77.1%	51.5%	48.5%	93.00	587.19	1,063.69	5,558.58	3,710.94	3,498.42	7,209.36
	Miscellaneous	LS	1.00	5.0%	30.0%	65.0%	55.0%	45.0%		1,821.56	10,929.37	23,680.30	20,037.18	16,394.06	36,431.24
	Total									97,904.25	553,539.41	699,362.17	714,330.05	536,475.79	1,250,805.84
	Components (%)									7.8%	44.3%	47.9%	57.1%	42.9%	100.0%
	Unit Rate	m								978.41	5,531.83	5,989.76	7,138.70	5,361.30	12,500.00

Miscellaneous covers the cost for stand pipe, tremmy pipe, welder, vessel, slash tank, suction hose, water pump, etc.

$T_c = T_{so} + t_e$   
 $T_c$ : Cycle Time per pile = 573 min/pile  
 $T_{so}$ : Excavation Time =  $46.8 + 11.3 \cdot L$  = 348 min/pile  
 $t_e$ : Excavation Time =  $\sum a_i \cdot x_i$  = 225 min/pile  
 $T$ : Daily Operation hour = 6.50 hr  
 $D$ : Pile diameter = 1.000 m  
 $L$ : Pile length = 27.000 m  
 $L_2$ : Excavation depth = 26.650 m  
 $L$ : Steel Casing length = 24.650 m

	a1	L1	a1xL1
N < 20	8.30	23.650	196.30
N < 40	9.20	2.000	18.40
N > 40	10.20	1.000	10.20
Total		26.650	224.90

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	Por.	Local		Labor	Material	Equipment	Foreign	Local		
L002	Foreman	md	5.62	100.0%	0.0%	0.0%	0.0%	100.0%	566.00	3,180.92	0.00	0.00	0.00	3,180.92	3,180.92	
L019	Skilled Labor	md	10.89	100.0%	0.0%	0.0%	0.0%	100.0%	403.00	4,388.67	0.00	0.00	0.00	4,388.67	4,388.67	
L020	Unskilled Labor	md	9.84	100.0%	0.0%	0.0%	0.0%	100.0%	314.00	3,089.76	0.00	0.00	0.00	3,089.76	3,089.76	
W0205	Concrete (Class AAI, 28MPa, max agg. 25mm)	m3	122.15	2.3%	82.2%	15.5%	57.7%	42.3%	1,760.00	4,922.98	176,765.55	33,295.47	124,052.38	90,931.62	214,984.00	Loss 8.0%
W0202	Concrete Pouring by Pump Vehicle (reinforced concrete)	m3	113.10	15.5%	0.2%	84.3%	45.2%	54.8%	257.00	4,515.59	56.99	24,494.12	13,126.42	15,940.28	29,086.70	
W0251	Reinforcement Grade 40, cutting, bending & assembly	kg	226.00	15.2%	77.0%	7.8%	54.0%	46.0%	23.30	799.71	4,054.95	411.14	2,843.27	2,422.53	5,265.80	
W0252	Reinforcement Grade 60, cutting, bending & assembly	kg	30,311.00	14.5%	77.9%	7.7%	54.5%	45.5%	24.50	107,403.92	578,243.81	56,971.76	404,580.68	338,038.82	742,619.50	
Q0513-120	All Casing Excavator, $\phi$ 1200max	hr	35.12	1.0%	4.4%	94.6%	55.4%	44.6%	6,200.00	2,216.33	9,612.50	206,015.17	120,642.64	97,181.36	217,744.00	
R0401-035	Crawler Crane, 31-35t	hr	31.61	4.3%	9.8%	85.9%	52.9%	47.1%	1,680.00	2,283.51	5,204.27	45,617.02	28,098.64	25,006.16	53,104.80	
Q0514-120	Hammer Grab, $\phi$ 1200	day	5.40	0.0%	0.0%	100.0%	67.0%	33.0%	5,910.00	0.00	0.00	31,914.00	21,369.83	10,544.17	31,914.00	
Q0515-001	Hammer Crown, $\phi$ 1200	day	5.40	0.0%	0.0%	100.0%	70.7%	29.3%	1,430.00	0.00	0.00	7,722.00	5,459.86	2,262.14	7,722.00	
Q0516-125	Casing Tube, $\phi$ 1200, L=5m	day	128.82	0.0%	0.0%	100.0%	68.5%	31.5%	2,080.00	0.00	0.00	267,945.60	183,604.87	84,340.73	267,945.60	
W0111	Disposal of Surplus Soil (backhoe loading)	m3	111.01	8.1%	14.8%	77.1%	51.5%	48.5%	93.00	840.87	1,523.08	7,959.99	5,314.13	5,009.80	10,323.93	
	Miscellaneous	LS	1.00	5.0%	30.0%	65.0%	65.0%	45.0%		2,387.02	14,322.15	31,031.32	26,257.27	21,483.22	47,740.49	3.0%
Total										136,029.28	789,683.29	713,377.59	835,350.00	703,740.17	1,639,090.17	
Components (%)										8.3%	48.2%	43.5%	57.1%	42.9%	100.0%	
Unit Rate			m							1,361.05	7,901.22	7,137.74	9,358.69	7,041.31	16,400.00	

Miscellaneous covers the cost for stand pipe, tremmy pipe, welder, vessel, slash tank, suction hose, water pump, etc.

$T_c = T_{so} + T_e$

$T_c$ : Cycle time per pile = 416.78 min/pile

$T_{so}$ : Preparation Time = 46.8+11.3xL2 = 257.55 min/pile

$T_e$ : Excavation Time =  $\sum a_i x L_i$  = 159.24 min/pile

Excavator Operation Time  $T_{D1} = T_c - 16.4$

Crawler Crane Operation Time  $T_{D2} = 0.9xT_{D1}$

D : Pile diameter

L : Pile Length

L2: Excavation depth

Steel Casing Length

T : Daily Operation hour

400.38 min/pile

360.34 min/pile

1.200 m

19.000 m

18.650 m

22.650 m

6.50 hr

	a1	L1	a1xL1
N < 20	8.30	15.050	124.92
N < 40	9.20	2.400	22.08
N > 40	10.20	1.200	12.24
Total		18.650	159.24

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mtl.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
L002	Foreman	md	5.61	100.0%	0.0%	0.0%	0.0%	100.0%	566.00	3,175.26	0.00	0.00	0.00	3,175.26	3,175.26	
L019	Skilled Labor	md	10.61	100.0%	0.0%	0.0%	0.0%	100.0%	403.00	4,275.83	0.00	0.00	0.00	4,275.83	4,275.83	
L020	Unskilled Labor	md	9.61	100.0%	0.0%	0.0%	0.0%	100.0%	314.00	3,017.54	0.00	0.00	0.00	3,017.54	3,017.54	
W0205	Concrete (Class AAI, 28MPa, max agg. 25mm)	m3	190.85	2.3%	82.2%	15.5%	57.7%	42.3%	1,760.00	7,691.78	276,182.60	52,021.82	193,822.32	142,073.68	335,896.00	Loss 8.0%
W0232	Concrete Pouring by Dump Vehicle (reinforced concrete)	m3	176.71	15.5%	0.2%	84.3%	45.2%	54.8%	257.00	7,055.26	89.85	38,270.16	20,509.02	24,905.45	45,414.47	
W0251	Reinforcement Grade 40, cutting, bending & assembly	kg	353.00	15.2%	77.0%	7.8%	54.0%	46.0%	23.30	1,249.10	6,333.62	642.18	4,441.03	3,783.87	8,224.90	
W0252	Reinforcement Grade 60, cutting, bending & assembly	kg	47,358.00	14.5%	77.9%	7.7%	54.5%	45.5%	24.50	167,808.22	903,449.92	89,012.86	632,118.11	528,152.89	1,160,271.00	
Q0513-150	All Casing Excavator, φ1500max	hr	35.09	0.7%	2.1%	97.2%	55.3%	44.7%	8,630.00	2,215.05	6,323.86	294,287.79	167,613.21	135,213.49	302,826.70	
R0401-035	Crawler Crane, 31-35t	hr	31.58	4.3%	9.8%	85.9%	52.9%	47.1%	1,680.00	2,281.34	5,199.33	45,573.73	28,071.98	24,982.42	53,054.40	
Q0514-150	Hammer Grab, φ1500	day	5.40	0.0%	0.0%	100.0%	67.0%	33.0%	10,100.00	0.00	0.00	54,540.00	36,520.36	18,019.64	54,540.00	
Q0515-002	Hammer Crown, > φ1200	day	5.40	0.0%	0.0%	100.0%	70.7%	29.3%	1,920.00	0.00	0.00	10,368.00	7,330.72	3,037.28	10,368.00	
Q0516-155	Casing Tube, φ1500, L=5m	day	133.07	0.0%	0.0%	100.0%	68.5%	31.5%	2,690.00	0.00	0.00	357,958.30	245,284.45	112,673.85	357,958.30	
W0111	Disposal of Surplus Soil (backhoe loading)	m3	173.62	8.1%	14.8%	77.1%	51.5%	48.5%	93.00	1,315.12	2,382.09	12,449.45	8,311.32	7,835.34	16,146.66	
	Miscellaneous	LS	1.00	5.0%	30.0%	65.0%	55.0%	45.0%		3,532.75	21,196.52	45,325.80	38,860.29	31,794.78	70,655.07	3.0%
Total										203,617.26	1,221,156.99	1,001,049.88	1,382,882.81	1,042,941.33	2,425,824.13	
Components (%)										8.3%	50.3%	41.3%	57.0%	43.0%	100.0%	
Unit Rate										2,039.68	12,232.59	10,027.73	13,852.63	10,447.37	24,300.00	

Miscellaneous covers the cost for stand pipe, tremy pipe, welder, vessel, slash tank, suction hose, water pump, etc.

Tc = Tso + Te

Tc: Cycle time per pile = 437.49 min/pile

Tso: Preparation Time = 46.8\*11.3xL2 = 298.85 min/pile

Te: Excavation Time = 2aixLi = 168.65 min/pile

Excavator Operation Time TD1 = Tc - 16.4

Crawler Crane Operation Time TD2 = 0.9xTD1

D : Pile diameter

L : Pile Length

L2: Excavation depth

Steel Casing Length

T : Daily Operation hour

421.09 min/pile

378.98 min/pile

1.500 m

20.000 m

19.650 m

24.650 m

6.50 hr

	ai	Lj	aixLj
N < 20	8.30	15.150	125.75
N < 40	9.20	3.000	27.60
N > 40	10.20	1.500	15.30
Total		19.650	168.65



400(16)d Cast-in-place Concrete Bored Piles  $\phi$ 800mm

Unit: 100.00 m

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
L002	Foreman	md	5.94	100.0%	0.0%	0.0%	0.0%	100.0%	566.00	3,362.04	0.00	0.00	0.00	3,362.04		
L019	Skilled Labor	md	14.28	100.0%	0.0%	0.0%	0.0%	100.0%	403.00	5,754.84	0.00	0.00	0.00	5,754.84		
L020	Unskilled Labor	md	12.61	100.0%	0.0%	0.0%	0.0%	100.0%	314.00	3,959.54	0.00	0.00	0.00	3,959.54		
W0205	Concrete (Class AAI, 28MPa, max agg. 25mm)	m3	54.29	2.3%	82.2%	15.5%	57.7%	42.3%	1,760.00	2,188.04	78,564.07	14,798.29	55,135.52	40,414.88	95,550.40	Loss 8.0%
W0232	Concrete Pouring by Pump Vehicle (reinforced concrete)	m3	50.27	15.5%	0.2%	84.3%	45.2%	54.8%	257.00	2,007.06	25.33	10,887.00	5,834.35	7,085.04	12,919.39	
W0251	Reinforcement Grade 40, cutting, bending & assembly	kg	3,137.00	15.2%	77.0%	7.8%	54.0%	46.0%	23.30	11,100.38	56,284.85	5,706.86	39,466.03	33,626.07	73,092.10	
W0252	Reinforcement Grade 60, cutting, bending & assembly	kg	13,975.80	14.5%	77.9%	7.7%	54.5%	45.5%	24.50	49,518.98	266,601.47	26,267.44	186,533.44	155,854.06	342,387.50	
Q0513-120	All Casing Excavator, $\phi$ 1200max	hr	36.35	1.0%	4.4%	94.6%	55.4%	44.6%	6,200.00	2,293.95	9,845.65	213,230.40	124,867.88	100,502.12	225,370.00	
R0401-035	Crawler Crane, 31-35t	hr	32.71	4.3%	9.8%	85.9%	52.9%	47.1%	1,680.00	2,362.97	5,385.37	47,204.46	29,876.45	25,876.95	54,952.80	
Q0514-080	Hammer Grab, $\phi$ 800	day	5.59	0.0%	0.0%	100.0%	67.0%	33.0%	5,170.00	0.00	0.00	28,900.30	19,351.84	9,548.46	28,900.30	
Q0515-002	Hammer Crown, $>$ $\phi$ 1200	day	5.59	0.0%	0.0%	100.0%	70.7%	29.3%	1,920.00	0.00	0.00	10,732.80	7,588.66	3,144.14	10,732.80	
Q0516-085	Casing Tube, $\phi$ 800, 1-5m	day	117.90	0.0%	0.0%	100.0%	68.5%	31.5%	1,710.00	0.00	0.00	201,609.00	138,148.92	63,460.08	201,609.00	
W0111	Disposal of Surplus Soil (backhoe loading)	m3	48.80	8.1%	14.8%	77.1%	51.5%	48.5%	93.00	369.65	669.54	3,499.21	2,336.09	2,202.31	4,538.40	
	Miscellaneous	LS	1.00	5.0%	30.0%	65.0%	55.0%	45.0%		1,594.69	3,568.16	20,731.02	17,501.63	14,352.24	31,893.87	3.0%
	<b>Total</b>									84,512.15	426,944.46	583,586.37	625,880.81	469,142.18	1,095,022.98	
	<b>Components (%)</b>									7.7%	39.0%	53.3%	57.2%	42.8%	100.0%	
	<b>Unit Rate</b>	m								848.96	4,288.86	5,862.19	6,287.26	4,712.74	11,000.00	

Miscellaneous covers the cost for stand pipe, trolley pipe, welder, vessel, slash tank, suction hose, water pump, etc.

Tc = Tso + Te

Tc: Cycle time per pile = 278.10 min/pile

Tso: Preparation Time = 46.8+11.3xL2 = 178.45 min/pile

Ta: Excavation Time =  $\sum a_i x l_i$  = 99.66 min/pile

Excavator Operation Time TBI = Tc - 16.4

Crawler Crane Operation Time TD2 = 0.9xTD1

D : Pile diameter

L : Pile Length

1.2: Excavation depth

Steel Casing Length

T : Daily Operation hour

261.70 min/pile

235.53 min/pile

0.800 m

12.000 m

11.650 m

12.650 m

6.50 hr

	ai	li	ai x li
N < 20	8.30	9.250	76.78
N < 40	9.20	1.600	14.72
N > 40	10.20	0.800	8.16
<b>Total</b>		11.650	99.66

400(19)a Pile shoes for 400mm x 400mm Piles

Unit: 1.00 each

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
L009	Welder	md	0.05	100.0%	0.0%	0.0%	0.0%	100.0%	500.00	25.00	0.00	0.00	0.00	25.00	25.00	
L019	Skilled Labor	md	0.05	100.0%	0.0%	0.0%	0.0%	100.0%	403.00	20.15	0.00	0.00	0.00	20.15	20.15	
W02015	Structural Steel (Plates, SS400)	kg	11.99	0.0%	100.0%	0.0%	70.0%	30.0%	20.20	0.00	242.20	0.00	169.54	72.66	242.20	
W02002	Reinforcing Bars, Grade 60	kg	22.70	0.0%	100.0%	0.0%	65.0%	35.0%	17.00	0.00	385.90	0.00	250.84	135.07	385.90	
R0901-025	Welding Machine 250A	day	0.05	0.0%	39.8%	60.2%	58.6%	41.4%	588.00	0.00	11.70	17.70	17.22	12.18	29.40	
	Miscellaneous	LS	1.00	10.0%	30.0%	60.0%	50.0%	50.0%		1.41	4.22	8.43	7.03	7.03	14.05	2.0%
	<b>Total</b>									46.56	644.02	26.13	444.63	272.08	716.70	
	<b>Components (%)</b>									6.5%	89.9%	3.6%	62.0%	38.0%	100.0%	
	<b>Unit Rate</b>	each								46.57	644.28	26.14	444.81	272.19	717.00	

Miscellaneous covers the cost for steel cutters, acetylene gas, welding rods, wires, etc.

400(19)b Pile shoes for 450mm x 450mm Piles

Unit: 1.00 each

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
L009	Welder	md	0.05	100.0%	0.0%	0.0%	0.0%	100.0%	500.00	25.00	0.00	0.00	0.00	25.00	25.00	
L019	Skilled Labor	md	0.05	100.0%	0.0%	0.0%	0.0%	100.0%	403.00	20.15	0.00	0.00	0.00	20.15	20.15	
W02015	Structural Steel (Plates, SS400)	kg	11.99	0.0%	100.0%	0.0%	70.0%	30.0%	20.20	0.00	242.20	0.00	169.54	72.66	242.20	
W02002	Reinforcing Bars, Grade 60	kg	22.70	0.0%	100.0%	0.0%	65.0%	35.0%	17.00	0.00	385.90	0.00	250.84	135.07	385.90	
R0901-025	Welding Machine 250A	day	0.05	0.0%	39.8%	60.2%	58.6%	41.4%	588.00	0.00	11.70	17.70	17.22	12.18	29.40	
	Miscellaneous	LS	1.00	10.0%	30.0%	60.0%	50.0%	50.0%		1.41	4.22	8.43	7.03	7.03	14.05	2.0%
	<b>Total</b>									46.56	644.02	26.13	444.63	272.08	716.70	
	<b>Components (%)</b>									6.5%	89.9%	3.6%	62.0%	38.0%	100.0%	
	<b>Unit Rate</b>	each								46.57	644.28	26.14	444.81	272.19	717.00	

Miscellaneous covers the cost for steel cutters, acetylene gas, welding rods, wires, etc.

400(20)a Splices for 400mm x 400mm Piles Unit: 100.00 each

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks	
				Component (%)						Component (PP)							
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local			
L019	Skilled Labor	md	1.00	100.0%	0.0%	0.0%	0.0%	100.0%	403.00	403.00	0.00	0.00	0.00	0.00	403.00	403.00	
W02011	Structural Steel (Round Bar, SS400)	kg	5,752.40	0.0%	100.0%	0.0%	70.0%	30.0%	21.80	0.00	125,402.32	0.00	87,781.62	37,620.70	125,402.32		
W0225	Grout (non-shrink)	m3	0.78	1.0%	96.3%	2.8%	61.2%	38.8%	3,060.00	23.38	2,297.71	65.71	1,461.76	925.04	2,386.80		
	Miscellaneous	LS	1.00	10.0%	30.0%	60.0%	50.0%	50.0%		256.38	789.15	1,538.31	1,281.92	2,563.84		2.0%	
	<b>Total</b>									682.76	128,469.18	1,604.02	90,525.31	40,230.66	130,755.96		
	Components (%)									0.5%	98.3%	1.2%	69.2%	30.8%	100.0%		
	Unit Rate	each								6.84	1,287.09	16.07	906.94	403.06	1,310.00		

Miscellaneous covers the cost for steel cutters, acetylene gas, welding rods, wires, etc.

400(20)b Splices for 450mm x 450mm Piles Unit: 100.00 each

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks	
				Component (%)						Component (PP)							
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local			
L019	Skilled Labor	md	1.00	100.0%	0.0%	0.0%	0.0%	100.0%	403.00	403.00	0.00	0.00	0.00	403.00	403.00		
W02011	Structural Steel (Round Bar, SS400)	kg	5,762.10	0.0%	100.0%	0.0%	70.0%	30.0%	21.80	0.00	125,613.78	0.00	87,929.65	37,684.13	125,613.78		
W0225	Grout (non-shrink)	m3	0.82	1.0%	96.3%	2.8%	61.2%	38.8%	3,060.00	24.58	2,415.54	69.08	1,536.72	972.48	2,509.20		
	Miscellaneous	LS	1.00	10.0%	30.0%	60.0%	50.0%	50.0%		257.05	771.16	1,542.31	1,285.26	2,570.52		2.0%	
	<b>Total</b>									684.63	128,800.48	1,611.39	90,751.63	40,344.87	131,096.50		
	Components (%)									0.5%	98.2%	1.2%	69.2%	30.8%	100.0%		
	Unit Rate	each								6.84	1,287.06	16.10	906.95	403.15	1,310.00		

Miscellaneous covers the cost for steel cutters, acetylene gas, welding rods, wires, etc.

400(21) Static Pile Load Test for φ1500mm Bored Piles Unit: 1.00 each

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks	
				Component (%)						Component (PP)							
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local			
L002	Foreman	md	0.50	100.0%	0.0%	0.0%	0.0%	100.0%	566.00	283.00	0.00	0.00	0.00	283.00	283.00		
L019	Skilled Labor	md	1.00	100.0%	0.0%	0.0%	0.0%	100.0%	403.00	403.00	0.00	0.00	0.00	403.00	403.00		
	Static Pile Load Test for φ1500mm Bored Piles	each	1.00	30.0%	15.0%	55.0%	45.0%	55.0%	92,700.00	27,810.00	13,905.00	50,985.00	41,715.00	50,985.00	92,700.00		
	Miscellaneous	LS	1.00	30.0%	10.0%	60.0%	40.0%	60.0%		8,404.74	2,801.58	16,809.48	11,206.32	16,809.48	28,015.80		30.0%
	<b>Total</b>									36,800.74	16,706.58	67,794.48	52,921.32	68,480.48	121,401.80		
	Components (%)									30.4%	13.8%	55.8%	43.6%	56.4%	100.0%		
	Unit Rate	each								36,778.61	16,651.29	67,570.10	52,746.17	68,253.83	121,000.00		

Miscellaneous covers the cost for overhead, mobilization, etc. of subcontractor, etc.

SPL 400(23)a High Strain Dynamic Pile Test for φ1000mm Bored Piles Unit: 1.00 each

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks	
				Component (%)						Component (PP)							
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local			
L002	Foreman	md	0.50	100.0%	0.0%	0.0%	0.0%	100.0%	566.00	283.00	0.00	0.00	0.00	283.00	283.00		
L019	Skilled Labor	md	1.00	100.0%	0.0%	0.0%	0.0%	100.0%	403.00	403.00	0.00	0.00	0.00	403.00	403.00		
	Dynamic Pile Load Test for φ1000mm Bored Piles	each	1.00	30.0%	15.0%	55.0%	45.0%	55.0%	94,000.00	28,200.00	14,100.00	51,700.00	42,300.00	51,700.00	94,000.00		
	Miscellaneous	LS	1.00	30.0%	10.0%	60.0%	40.0%	60.0%		8,521.74	2,840.58	17,043.48	11,362.32	17,043.48	28,405.80		30.0%
	<b>Total</b>									37,407.74	16,940.58	68,743.48	53,662.32	69,429.48	123,091.80		
	Components (%)									30.4%	13.8%	55.8%	43.6%	56.4%	100.0%		
	Unit Rate	each								37,379.84	16,927.95	68,692.21	53,622.30	69,377.70	123,000.00		

Miscellaneous covers the cost for overhead, mobilization, etc. of subcontractor, etc.

SPL 400(23)b High Strain Dynamic Pile Test for φ1200mm Bored Piles Unit: 1.00 each

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks	
				Component (%)						Component (PP)							
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local			
L002	Foreman	md	0.50	100.0%	0.0%	0.0%	0.0%	100.0%	566.00	283.00	0.00	0.00	0.00	283.00	283.00		
L019	Skilled Labor	md	1.00	100.0%	0.0%	0.0%	0.0%	100.0%	403.00	403.00	0.00	0.00	0.00	403.00	403.00		
	Dynamic Pile Load Test for φ1500mm Bored Piles	each	1.00	30.0%	15.0%	55.0%	45.0%	55.0%	96,000.00	28,800.00	14,400.00	52,800.00	43,200.00	52,800.00	96,000.00		
	Miscellaneous	LS	1.00	30.0%	10.0%	60.0%	40.0%	60.0%		8,791.74	2,900.58	17,403.48	11,602.32	17,403.48	29,005.80		30.0%
	<b>Total</b>									38,187.74	17,300.58	70,203.48	54,802.32	70,889.48	125,691.80		
	Components (%)									30.4%	13.8%	55.9%	43.6%	56.4%	100.0%		
	Unit Rate	each								38,281.38	17,343.00	70,375.62	54,936.70	71,063.30	126,000.00		

Miscellaneous covers the cost for overhead, mobilization, etc. of subcontractor, etc.

SPL 400(23)c High Strain Dynamic Pile Test for φ800mm Bored Piles

Unit: 1.00 each

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
L002	Foreman	md	0.50	100.0%	0.0%	0.0%	0.0%	100.0%	566.00	283.00	0.00	0.00	0.00	283.00	283.00	
L019	Skilled Labor	md	1.00	100.0%	0.0%	0.0%	0.0%	100.0%	403.00	403.00	0.00	0.00	0.00	403.00	403.00	
	Dynamic Pile Load Test for φ800mm Bored Piles	each	1.00	30.0%	15.0%	55.0%	45.0%	55.0%	92,000.00	27,600.00	13,800.00	50,600.00	41,400.00	50,600.00	92,000.00	
	Miscellaneous	LS	1.00	30.0%	10.0%	60.0%	40.0%	60.0%		8,341.74	2,780.58	18,683.48	11,122.32	18,683.48	27,805.80	30.0%
	Total								36,627.74	16,580.58	67,283.48	52,622.32	67,969.48	129,491.80		
	Components (%)								30.4%	13.8%	65.8%	43.6%	56.4%	100.0%		
	Unit Rate	each							36,478.24	16,512.90	67,008.86	52,307.94	67,692.06	129,000.00		

Miscellaneous covers the cost for overhead, mobilization, etc. of subcontractor, etc.

SPL 400(24) Pile Integrity Test for Bored Piles of various diameter

Unit: 1.00 each

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
L002	Foreman	md	0.50	100.0%	0.0%	0.0%	0.0%	100.0%	566.00	283.00	0.00	0.00	0.00	283.00	283.00	
L019	Skilled Labor	md	1.00	100.0%	0.0%	0.0%	0.0%	100.0%	403.00	403.00	0.00	0.00	0.00	403.00	403.00	
	Dynamic Pile Load Test for φ1500mm Bored Piles	each	1.00	30.0%	15.0%	55.0%	45.0%	55.0%	125,000.00	37,500.00	18,750.00	68,750.00	56,250.00	68,750.00	125,000.00	
	Miscellaneous	LS	1.00	30.0%	10.0%	60.0%	40.0%	60.0%		11,311.74	3,770.58	22,623.48	15,082.32	22,623.48	37,705.80	30.0%
	Total								49,497.74	22,520.58	91,373.48	71,332.32	92,059.48	163,391.80		
	Components (%)								30.3%	13.8%	65.9%	43.7%	56.3%	100.0%		
	Unit Rate	each							49,379.05	22,466.58	91,154.37	71,161.27	91,838.73	163,000.00		

Miscellaneous covers the cost for overhead, mobilization, etc. of subcontractor, etc.

401(1)a Concrete Railing Type A (Concrete Posts and Precast Beams)

Unit: 10.00 m

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
W0203	Concrete (Class A, 21MPa, max agg. 38mm)	m3	1.13	2.5%	80.6%	16.9%	56.7%	43.3%	1,610.00	45.69	1,465.89	307.71	1,032.43	786.87	1,819.30	Loss 2.0%
W0232	Concrete Pouring by Pump Vehicle (reinforced concrete)	m3	1.11	15.5%	0.2%	84.3%	45.2%	54.8%	257.00	44.32	0.56	240.39	128.83	156.44	285.27	
W0237	Concrete Curing (reinforced concrete)	m3	1.11	74.6%	7.6%	17.8%	14.0%	86.0%	4.21	3.49	0.36	0.83	0.65	4.02	4.67	
W0241	Formwork (reinforced concrete H<4m)	m2	17.00	59.3%	39.9%	0.8%	2.9%	97.1%	224.00	2,257.61	1,520.52	29.87	111.12	3,696.88	3,808.00	
W0251	Reinforcement Grade 40, cutting, bending & assembly	kg	189.90	15.2%	77.0%	7.8%	54.0%	46.0%	23.30	671.97	3,407.23	345.47	2,389.10	2,035.57	4,424.67	
W0252	Reinforcement Grade 60, cutting, bending & assembly	kg	81.80	14.5%	77.9%	7.7%	54.5%	45.5%	24.50	290.20	1,562.41	153.94	1,093.17	913.38	2,006.55	
	Miscellaneous	LS	1.00							0.00	0.00	0.00	0.00	0.00	0.00	0.0%
	Total								3,313.28	7,956.97	1,078.21	4,755.30	7,693.16	12,348.16		
	Components (%)								26.8%	64.4%	8.7%	38.5%	61.5%	100.0%		
	Unit Rate	m							330.03	792.57	107.40	473.66	756.34	1,230.00		

401(1)b Concrete Railing Type B (Concrete Wall Type)

Unit: 180.00 m

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
W0203	Concrete (Class A, 21MPa, max agg. 38mm)	m3	44.27	2.5%	80.6%	16.9%	56.7%	43.3%	1,610.00	1,790.03	57,429.33	12,055.34	40,447.46	30,827.24	71,274.70	Loss 2.0%
W0232	Concrete Pouring by Pump Vehicle (reinforced concrete)	m3	43.40	15.5%	0.2%	84.3%	45.2%	54.8%	257.00	1,732.77	21.87	9,399.16	5,037.02	6,116.78	11,153.80	
W0237	Concrete Curing (reinforced concrete)	m3	43.40	74.6%	7.6%	17.8%	14.0%	86.0%	4.21	136.35	13.91	32.45	25.50	157.21	182.71	
W0241	Formwork (reinforced concrete H<4m)	m2	340.90	59.3%	39.9%	0.8%	2.9%	97.1%	224.00	45,271.77	30,490.92	598.91	2,228.27	74,133.33	76,361.60	
W0251	Reinforcement Grade 40, cutting, bending & assembly	kg	3,786.50	15.2%	77.0%	7.8%	54.0%	46.0%	23.30	13,398.66	67,938.35	6,888.44	47,437.27	40,588.18	88,225.45	
	Miscellaneous	LS	1.00							0.00	0.00	0.00	0.00	0.00	0.00	0.0%
	Total								62,329.58	155,894.38	28,974.30	95,375.52	151,822.74	247,198.26		
	Components (%)								25.2%	63.1%	11.7%	38.6%	61.4%	100.0%		
	Unit Rate	m							345.44	863.98	160.58	528.58	841.42	1,370.00		



SPL 401(3)b Bridge Name Plate, 1000 x 600 mm for Pampanga Bridge

Unit: 10.00 each

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
L002	Foreman	md	0.43	100.0%	0.0%	0.0%	0.0%	100.0%	566.00	243.38	0.00	0.00	0.00	243.38	243.38	
L019	Skilled Labor	md	1.60	100.0%	0.0%	0.0%	0.0%	100.0%	403.00	644.80	0.00	0.00	0.00	644.80	644.80	
L020	Unskilled Labor	md	1.60	100.0%	0.0%	0.0%	0.0%	100.0%	314.00	502.40	0.00	0.00	0.00	502.40	502.40	
W02501	Brass Plate	kg	1,068.00	0.0%	100.0%	0.0%	70.0%	30.0%	228.00	0.00	243,504.00	0.00	170,452.80	73,051.20	243,504.00	
W0225	Grout (non-shrink)	m3	0.09	1.0%	96.3%	2.8%	61.2%	38.8%	3,060.00	2.70	265.12	7.58	168.66	106.74	275.40	
R0602-002	Cargo truck 2.0-5.0t	hr	3.21	14.4%	13.7%	71.9%	48.0%	52.0%	570.00	263.48	250.67	1,315.55	877.70	952.00	1,829.70	
	Miscellaneous	LS	1.00	20.0%	40.0%	40.0%	50.0%	50.0%		14,819.98	29,639.96	29,639.96	37,049.95	37,049.95	74,099.90	30.0%
Total										16,476.73	273,659.75	30,963.10	208,549.12	112,550.46	321,099.58	
Components (%)										5.1%	85.2%	9.6%	64.9%	35.1%	100.0%	
Unit Rate		each								1,647.16	27,357.49	3,095.35	20,848.44	11,251.56	32,100.00	

Miscellaneous covers the cost for overhead of fabricators, anchors, fixtures, carving, chipping, cleaning, minor tools, etc.  
 Plate Size = 1,000 x 600 x 20 mm  
 Unit Weight = 8,900 kg/m3

SPL 401(3)c Bridge Name Plate, 1000 x 600 mm for Talavera Bridge

Unit: 10.00 each

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
L002	Foreman	md	0.43	100.0%	0.0%	0.0%	0.0%	100.0%	566.00	243.38	0.00	0.00	0.00	243.38	243.38	
L019	Skilled Labor	md	1.60	100.0%	0.0%	0.0%	0.0%	100.0%	403.00	644.80	0.00	0.00	0.00	644.80	644.80	
L020	Unskilled Labor	md	1.60	100.0%	0.0%	0.0%	0.0%	100.0%	314.00	502.40	0.00	0.00	0.00	502.40	502.40	
W02501	Brass Plate	kg	1,068.00	0.0%	100.0%	0.0%	70.0%	30.0%	228.00	0.00	243,504.00	0.00	170,452.80	73,051.20	243,504.00	
W0225	Grout (non-shrink)	m3	0.09	1.0%	96.3%	2.8%	61.2%	38.8%	3,060.00	2.70	265.12	7.58	168.66	106.74	275.40	
R0602-002	Cargo truck 2.0-5.0t	hr	3.21	14.4%	13.7%	71.9%	48.0%	52.0%	570.00	263.48	250.67	1,315.55	877.70	952.00	1,829.70	
	Miscellaneous	LS	1.00	20.0%	40.0%	40.0%	50.0%	50.0%		14,819.98	29,639.96	29,639.96	37,049.95	37,049.95	74,099.90	30.0%
Total										16,476.73	273,659.75	30,963.10	208,549.12	112,550.46	321,099.58	
Components (%)										5.1%	85.2%	9.6%	64.9%	35.1%	100.0%	
Unit Rate		each								1,647.16	27,357.49	3,095.35	20,848.44	11,251.56	32,100.00	

Miscellaneous covers the cost for overhead of fabricators, anchors, fixtures, carving, chipping, cleaning, minor tools, etc.  
 Plate Size = 1,000 x 600 x 20 mm  
 Unit Weight = 8,900 kg/m3

SPL 401(3)d Bridge Name Plate, 1000 x 600 mm for Interchange Ramp

Unit: 10.00 each

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
L002	Foreman	md	0.43	100.0%	0.0%	0.0%	0.0%	100.0%	566.00	243.38	0.00	0.00	0.00	243.38	243.38	
L019	Skilled Labor	md	1.60	100.0%	0.0%	0.0%	0.0%	100.0%	403.00	644.80	0.00	0.00	0.00	644.80	644.80	
L020	Unskilled Labor	md	1.60	100.0%	0.0%	0.0%	0.0%	100.0%	314.00	502.40	0.00	0.00	0.00	502.40	502.40	
W02501	Brass Plate	kg	1,068.00	0.0%	100.0%	0.0%	70.0%	30.0%	228.00	0.00	243,504.00	0.00	170,452.80	73,051.20	243,504.00	
W0225	Grout (non-shrink)	m3	0.09	1.0%	96.3%	2.8%	61.2%	38.8%	3,060.00	2.70	265.12	7.58	168.66	106.74	275.40	
R0602-002	Cargo truck 2.0-5.0t	hr	3.21	14.4%	13.7%	71.9%	48.0%	52.0%	570.00	263.48	250.67	1,315.55	877.70	952.00	1,829.70	
	Miscellaneous	LS	1.00	20.0%	40.0%	40.0%	50.0%	50.0%		14,819.98	29,639.96	29,639.96	37,049.95	37,049.95	74,099.90	30.0%
Total										16,476.73	273,659.75	30,963.10	208,549.12	112,550.46	321,099.58	
Components (%)										5.1%	85.2%	9.6%	64.9%	35.1%	100.0%	
Unit Rate		each								1,647.16	27,357.49	3,095.35	20,848.44	11,251.56	32,100.00	

Miscellaneous covers the cost for overhead of fabricators, anchors, fixtures, carving, chipping, cleaning, minor tools, etc.  
 Plate Size = 1,000 x 600 x 20 mm  
 Unit Weight = 8,900 kg/m3



403(8)b Bearing Shoe for Steel Plate Girder Type 2 (Max. R=650t) in Pampang Bridge Unit: 1.00 each

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
L002	Foreman	md	0.41	100.0%	0.0%	0.0%	0.0%	100.0%	566.00	232.06	0.00	0.00	0.00	232.06	232.06	
L019	Skilled Labor	md	1.64	100.0%	0.0%	0.0%	0.0%	100.0%	403.00	660.92	0.00	0.00	0.00	660.92	660.92	
L020	Unskilled Labor	md	0.41	100.0%	0.0%	0.0%	0.0%	100.0%	314.00	128.74	0.00	0.00	0.00	128.74	128.74	
M09106	Bearing Shoe (rubber enclosed type), 650t	each	1.00	0.0%	100.0%	0.0%	70.0%	30.0%	764,000.00	0.00	764,000.00	0.00	534,800.00	229,200.00	764,000.00	
R0402-025	Truck Crane, Hydraulic 21-25t	hr	1.17	5.5%	6.8%	87.7%	52.0%	48.0%	1,330.00	85.59	105.81	1,364.70	808.57	747.53	1,556.10	
W0225	Grout (non-shrink)	m3	0.07	1.0%	96.3%	2.8%	61.2%	38.8%	3,060.00	2.10	206.20	5.90	131.18	83.02	214.20	Loss 3.0%
	Miscellaneous	LS	1.00	0.0%	50.0%	50.0%	55.0%	45.0%		0.00	7,667.92	7,667.92	8,434.71	6,901.13	15,335.84	2.0%
Total										1,109.40	771,979.94	9,038.52	544,174.47	237,953.39	782,127.86	
Components (%)										0.1%	98.7%	1.2%	69.6%	30.4%	100.0%	
Unit Rate			each							1,109.22	771,853.74	9,037.04	544,085.51	237,914.49	782,000.00	

Miscellaneous covers the costs for depreciation of temporary supports, minor tools, generator, etc.  
 $y = N/[0.2 \cdot a \cdot (N+8)]$  N: Total number of shoes 22  
 $y$ : Work capacity = 2.44 each/day a: Coefficient 1.50

403(8)c Bearing Shoe for Steel Plate Girder Type 3 (Max. R=650t) in Pampang Bridge Unit: 1.00 each

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
L002	Foreman	md	0.41	100.0%	0.0%	0.0%	0.0%	100.0%	566.00	232.06	0.00	0.00	0.00	232.06	232.06	
L019	Skilled Labor	md	1.64	100.0%	0.0%	0.0%	0.0%	100.0%	403.00	660.92	0.00	0.00	0.00	660.92	660.92	
L020	Unskilled Labor	md	0.41	100.0%	0.0%	0.0%	0.0%	100.0%	314.00	128.74	0.00	0.00	0.00	128.74	128.74	
M09108	Bearing Shoe (rubber enclosed type), 650t	each	1.00	0.0%	100.0%	0.0%	70.0%	30.0%	764,000.00	0.00	764,000.00	0.00	534,800.00	229,200.00	764,000.00	
R0402-025	Truck Crane, Hydraulic 21-25t	hr	1.17	5.5%	6.8%	87.7%	52.0%	48.0%	1,330.00	85.59	105.81	1,364.70	808.57	747.53	1,556.10	
W0225	Grout (non-shrink)	m3	0.07	1.0%	96.3%	2.8%	61.2%	38.8%	3,060.00	2.10	206.20	5.90	131.18	83.02	214.20	Loss 3.0%
	Miscellaneous	LS	1.00	0.0%	50.0%	50.0%	55.0%	45.0%		0.00	7,667.92	7,667.92	8,434.71	6,901.13	15,335.84	2.0%
Total										1,109.40	771,979.94	9,038.52	544,174.47	237,953.39	782,127.86	
Components (%)										0.1%	98.7%	1.2%	69.6%	30.4%	100.0%	
Unit Rate			each							1,109.22	771,853.74	9,037.04	544,085.51	237,914.49	782,000.00	

Miscellaneous covers the costs for depreciation of temporary supports, minor tools, generator, etc.  
 $y = N/[0.2 \cdot a \cdot (N+8)]$  N: Total number of shoes 22  
 $y$ : Work capacity = 2.44 each/day a: Coefficient 1.50

SPL 403(9) Steel Grating for Sunlight Opening in Underpasses Unit: 10.00 m2

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
L002	Foreman	md	0.57	100.0%	0.0%	0.0%	0.0%	100.0%	566.00	322.62	0.00	0.00	0.00	322.62	322.62	
L009	Welder	md	1.91	100.0%	0.0%	0.0%	0.0%	100.0%	500.00	955.00	0.00	0.00	0.00	955.00	955.00	
L019	Skilled Labor	md	1.91	100.0%	0.0%	0.0%	0.0%	100.0%	403.00	769.73	0.00	0.00	0.00	769.73	769.73	
L020	Unskilled Labor	md	0.95	100.0%	0.0%	0.0%	0.0%	100.0%	314.00	298.30	0.00	0.00	0.00	298.30	298.30	
M02012	Structural Steel (Flat Bar, SS400)	kg	1,284.43	0.0%	100.0%	0.0%	70.0%	30.0%	22.70	0.00	29,156.56	0.00	20,409.59	8,746.97	29,156.56	Loss 7.0%
M02014	Structural Steel (Shapes, SS400)	kg	623.06	0.0%	100.0%	0.0%	70.0%	30.0%	17.60	0.00	10,965.86	0.00	7,676.10	3,289.76	10,965.86	Loss 7.0%
R0901-025	Welding Machine 250A	day	1.91	0.0%	39.8%	60.2%	58.6%	41.4%	588.00	0.00	446.99	676.09	657.96	465.12	1,123.08	
R0402-025	Truck Crane, Hydraulic 21-25t	hr	0.10	5.5%	6.8%	87.7%	52.0%	48.0%	1,330.00	6.98	8.63	111.25	65.81	60.94	126.85	
R0601-0H6	Dump Truck, 6.0-9.0 cu-yds (4.6-6.9m3)	hr	2.44	10.0%	17.9%	72.7%	50.8%	49.2%	603.00	147.13	263.37	1,060.82	747.11	724.21	1,471.32	
	Miscellaneous	LS	1.00	10.0%	35.0%	55.0%	50.0%	50.0%		3,355.68	4,744.88	7,456.24	6,178.40	6,778.40	13,556.80	30.0%
Total										3,855.14	45,586.28	9,304.40	36,335.08	22,411.04	68,746.12	
Components (%)										6.6%	77.6%	15.8%	61.9%	38.1%	100.0%	
Unit Rate			m2							385.24	4,558.05	929.71	3,630.86	2,239.34	5,870.00	

Miscellaneous covers the cost for fabricator's overhead & facilities, painting or galvanizing, etc.

404(1) Reinforcement Steel Grade 40 Unit: 1,000.00 kg

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
L002	Foreman	md	0.70	100.0%	0.0%	0.0%	0.0%	100.0%	566.00	396.20	0.00	0.00	0.00	396.20	396.20	
L006	Re-Bar Worker	md	4.60	100.0%	0.0%	0.0%	0.0%	100.0%	403.00	1,853.80	0.00	0.00	0.00	1,853.80	1,853.80	
L019	Skilled Labor	md	0.60	100.0%	0.0%	0.0%	0.0%	100.0%	403.00	241.80	0.00	0.00	0.00	241.80	241.80	
L020	Unskilled Labor	md	3.20	100.0%	0.0%	0.0%	0.0%	100.0%	314.00	1,004.80	0.00	0.00	0.00	1,004.80	1,004.80	
W02001	Reinforcing Bars, Grade 40	kg	1,070.00	0.0%	100.0%	0.0%	65.0%	35.0%	16.00	0.00	17,120.00	0.00	11,128.00	5,992.00	17,120.00	Loss 7.0%
RO402-025	Truck Crane, Hydraulic 21-25t	hr	0.57	5.5%	6.8%	87.7%	52.0%	48.0%	1,330.00	41.70	51.55	664.85	393.92	364.18	758.10	
	Miscellaneous	LS	1.00	0.0%	40.0%	60.0%	55.0%	45.0%		0.00	769.49	1,154.23	1,058.07	865.68	1,923.72	9.0%
Total										3,538.30	17,941.04	1,819.09	12,579.97	10,718.45	23,298.42	
Components (%)										15.2%	77.9%	7.8%	54.0%	46.0%	100.0%	
Unit Rate			kg							3.54	17.94	1.82	12.58	10.72	23.30	

Miscellaneous covers the cost for bar cutter, bar bender, binding wire, spacer, etc.

404(2) Reinforcement Steel Grade 60 Unit: 1,000.00 kg

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
L002	Foreman	md	0.70	100.0%	0.0%	0.0%	0.0%	100.0%	566.00	396.20	0.00	0.00	0.00	396.20	396.20	
L006	Re-Bar Worker	md	4.60	100.0%	0.0%	0.0%	0.0%	100.0%	403.00	1,853.80	0.00	0.00	0.00	1,853.80	1,853.80	
L019	Skilled Labor	md	0.60	100.0%	0.0%	0.0%	0.0%	100.0%	403.00	241.80	0.00	0.00	0.00	241.80	241.80	
L020	Unskilled Labor	md	3.20	100.0%	0.0%	0.0%	0.0%	100.0%	314.00	1,004.80	0.00	0.00	0.00	1,004.80	1,004.80	
W02002	Reinforcing Bars, Grade 60	kg	1,070.00	0.0%	100.0%	0.0%	65.0%	35.0%	17.00	0.00	18,190.00	0.00	11,823.50	6,366.50	18,190.00	Loss 7.0%
RO402-025	Truck Crane, Hydraulic 21-25t	hr	0.57	5.5%	6.8%	87.7%	52.0%	48.0%	1,330.00	41.70	51.55	664.85	393.92	364.18	758.10	
	Miscellaneous	LS	1.00	0.0%	40.0%	60.0%	55.0%	45.0%		0.00	808.01	1,212.01	1,111.01	909.01	2,020.02	9.0%
Total										3,538.30	19,049.56	1,876.87	13,328.43	11,136.29	24,464.72	
Components (%)										14.5%	77.9%	7.7%	54.5%	45.5%	100.0%	
Unit Rate			kg							3.54	19.08	1.88	13.35	11.15	24.50	

Miscellaneous covers the cost for bar cutter, bar bender, binding wire, spacer, etc.

405(1)a Structural Concrete Class A (fc' = 21MPa, max. aggregate 38mm) for heavily reinforced structures Unit: 10.00 m3

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
W0203	Concrete (Class A, 21MPa, max agg. 38mm)	m3	10.20	2.5%	80.6%	16.9%	56.7%	43.3%	1,610.00	412.43	13,231.97	2,777.60	9,319.27	7,102.73	16,422.00	Loss 2.0%
W0232	Concrete Pouring by Pump Vehicle (reinforced concrete)	m3	10.00	15.5%	0.2%	84.3%	45.2%	54.8%	257.00	399.26	5.04	2,165.70	1,160.60	1,409.40	2,570.00	
W0237	Concrete Curing (reinforced concrete)	m3	10.00	74.6%	7.6%	17.8%	14.0%	86.0%	4.21	31.42	3.20	7.48	5.88	36.22	42.10	
W0241	Formwork (reinforced concrete 114m)	m2	49.20	59.3%	39.9%	0.8%	2.9%	97.1%	224.00	6,533.80	4,400.57	86.44	321.59	10,694.21	11,020.80	
W0441	Temporary Frame Support Installation & Removal	m3	20.00	58.9%	3.9%	37.1%	22.5%	77.5%	52.50	618.97	41.16	389.87	236.32	813.68	1,050.00	
W0442	Temporary Frame Support Depreciation	m3-d	560.00	0.0%	96.3%	3.7%	50.0%	50.0%	0.76	0.00	410.92	15.80	213.36	213.36	426.72	
	Miscellaneous	LS	1.00							0.00	0.00	0.00	0.00	0.00	0.00	0.0%
Total										7,995.87	18,092.85	5,442.90	11,257.02	20,274.60	31,531.62	
Components (%)										25.4%	57.4%	17.3%	35.7%	64.3%	100.0%	
Unit Rate			m3							798.79	1,807.47	543.74	1,124.57	2,025.43	3,150.00	

Depreciation period for temporary support = 28 days

405(1)b Structural Concrete Class A (fc' = 21MPa, max. aggregate 38mm) for small & medium bridges substructures Unit: 10.00 m3

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
W0203	Concrete (Class A, 21MPa, max agg. 38mm)	m3	10.20	2.5%	80.6%	16.9%	56.7%	43.3%	1,610.00	412.43	13,231.97	2,777.60	9,319.27	7,102.73	16,422.00	Loss 2.0%
W0232	Concrete Pouring by Pump Vehicle (reinforced concrete)	m3	10.00	15.5%	0.2%	84.3%	45.2%	54.8%	257.00	399.26	5.04	2,165.70	1,160.60	1,409.40	2,570.00	
W0237	Concrete Curing (reinforced concrete)	m3	10.00	74.6%	7.6%	17.8%	14.0%	86.0%	4.21	31.42	3.20	7.48	5.88	36.22	42.10	
W0241	Formwork (reinforced concrete 114m)	m2	49.20	59.3%	39.9%	0.8%	2.9%	97.1%	224.00	1,978.73	1,332.69	26.18	97.39	3,240.21	3,337.60	
	Miscellaneous	LS	1.00							0.00	0.00	0.00	0.00	0.00	0.00	0.0%
Total										2,821.84	14,572.90	4,976.96	10,683.14	11,786.56	22,371.70	
Components (%)										12.6%	65.1%	22.2%	47.3%	52.7%	100.0%	
Unit Rate			m3							282.54	1,459.13	498.33	1,059.65	1,180.35	2,240.00	









406(1)c Precast Prestressed Structural Concrete Members (AASHTO Girder Type IV L=24m), fabricated & erected										Unit: 1.00 each						
Item No.	Description	Unit	Quantity	Unit Rate						Amount					Remarks	
				Component (%)					Total (PP)	Component (PP)						Total (PP)
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
W0521	Precast PC Girder Fabrication Base Construction & Removal	girder	1.00	76.3%	11.8%	11.8%	13.0%	87.0%	1,380.00	1,053.44	163.28	163.28	179.61	1,200.39	1,380.00	
W0522	Precast PC Girder Fabrication Base Maintenance	girder	1.00	100.0%	0.0%	0.0%	0.0%	100.0%	493.00	493.00	0.00	0.00	0.00	493.00	493.00	
W0208	Concrete (Class PP, 41MPa, max agg. 20mm)	m3	13.67	1.9%	85.7%	12.4%	58.3%	41.7%	2,130.00	543.66	24,965.46	3,607.98	16,975.49	12,141.61	29,117.10	Loss 2.0%
W0231	Concrete Pouring by Pump Vehicle (plain concrete)	m3	13.40	18.8%	0.2%	81.0%	43.4%	56.6%	213.00	536.50	5.60	2,312.11	1,239.21	1,614.99	2,854.20	
W0237	Concrete Curing (reinforced concrete)	m3	13.40	74.6%	7.6%	17.8%	14.0%	86.0%	4.21	42.10	4.29	10.02	7.87	48.54	56.41	
W0241	Formwork (reinforced concrete IIC4m)	m2	74.65	59.3%	39.9%	0.8%	2.9%	97.1%	224.00	9,913.57	6,676.88	131.15	487.94	16,233.66	16,721.60	
W0251	Reinforcement Grade 40, cutting, bending & assembly	kg	879.00	15.2%	77.0%	7.8%	54.0%	46.0%	23.30	3,110.37	15,771.24	1,599.09	11,058.54	9,422.16	20,480.70	
W0252	Reinforcement Grade 60, cutting, bending & assembly	kg	1,154.00	14.5%	77.9%	7.7%	54.5%	45.5%	24.50	4,089.08	22,014.89	2,169.03	15,403.19	12,869.81	28,273.00	
W0537	PC Strand (12-T12.7, 225t) Installation for Precast PC Girder	m	48.96	4.8%	95.0%	0.2%	65.9%	34.1%	1,340.00	3,146.58	62,317.12	142.70	43,242.57	22,363.83	65,606.40	
W0547	PC Strand (12-T12.7, 225t) Tensioning for Precast PC Girder	cable	2.00	2.5%	96.6%	1.0%	72.6%	27.4%	19,600.00	969.30	37,854.18	376.52	28,473.15	10,726.85	39,200.00	
W0536	PC Strand (10-T12.7, 190t) Installation for Precast PC Girder	m	24.48	5.3%	94.5%	0.2%	65.5%	34.5%	1,140.00	1,467.65	26,378.70	60.85	18,291.13	9,616.07	27,907.20	
W0546	PC Strand (10-T12.7, 190t) Tensioning for Precast PC Girder	cable	1.00	2.4%	96.7%	0.9%	72.7%	27.3%	19,600.00	467.05	18,951.11	181.84	14,251.10	5,348.90	19,600.00	
W0555	Precast PC Girder Erection (20.0 ≤ W < 35.0 t)	t	33.50	15.3%	3.6%	81.0%	46.4%	53.6%	213.00	1,092.18	260.06	5,783.26	3,312.89	3,822.61	7,135.50	
Miscellaneous		LS	1.00							0.00	0.00	0.00	0.00	0.00	0.00	0.0%
Total										26,924.47	215,362.80	16,537.83	152,922.68	105,902.43	258,825.11	
Components (%)										10.4%	83.2%	6.4%	59.1%	40.9%	100.0%	
Unit Rate				each						26,942.87	215,508.33	16,549.01	153,028.01	105,973.98	259,000.00	

406(1)d Precast Prestressed Structural Concrete Members (AASHTO Girder Type IV L=25m), fabricated & erected										Unit: 1.00 each						
Item No.	Description	Unit	Quantity	Unit Rate						Amount					Remarks	
				Component (%)					Total (PP)	Component (PP)						Total (PP)
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
W0521	Precast PC Girder Fabrication Base Construction & Removal	girder	1.00	76.3%	11.8%	11.8%	13.0%	87.0%	1,380.00	1,053.44	163.28	163.28	179.61	1,200.39	1,380.00	
W0522	Precast PC Girder Fabrication Base Maintenance	girder	1.00	100.0%	0.0%	0.0%	0.0%	100.0%	493.00	493.00	0.00	0.00	0.00	493.00	493.00	
W0208	Concrete (Class PP, 41MPa, max agg. 20mm)	m3	14.19	1.9%	85.7%	12.4%	58.3%	41.7%	2,130.00	564.34	25,915.13	3,745.22	17,621.23	12,603.47	30,224.70	Loss 2.0%
W0231	Concrete Pouring by Pump Vehicle (plain concrete)	m3	13.91	18.8%	0.2%	81.0%	43.4%	56.6%	213.00	566.92	5.81	2,400.10	1,286.37	1,676.46	2,962.83	
W0237	Concrete Curing (reinforced concrete)	m3	13.91	74.6%	7.6%	17.8%	14.0%	86.0%	4.21	43.70	4.46	10.40	8.17	50.39	58.56	
W0241	Formwork (reinforced concrete IIC4m)	m2	77.71	59.3%	39.9%	0.8%	2.9%	97.1%	224.00	10,319.94	6,950.57	136.53	607.95	16,899.09	17,407.04	
W0251	Reinforcement Grade 40, cutting, bending & assembly	kg	918.00	15.2%	77.0%	7.8%	54.0%	46.0%	23.30	3,248.38	16,470.99	1,670.04	11,549.19	9,840.23	21,389.40	
W0252	Reinforcement Grade 60, cutting, bending & assembly	kg	1,177.00	14.5%	77.9%	7.7%	54.5%	45.5%	24.50	4,170.58	22,453.66	2,212.26	15,710.19	13,126.31	28,836.50	
W0537	PC Strand (12-T12.7, 225t) Installation for Precast PC Girder	m	51.00	4.8%	95.0%	0.2%	65.9%	34.1%	1,340.00	3,277.69	64,913.67	148.64	45,044.34	23,295.66	68,340.00	
W0547	PC Strand (12-T12.7, 225t) Tensioning for Precast PC Girder	cable	2.00	2.5%	96.6%	1.0%	72.6%	27.4%	19,600.00	969.30	37,854.18	376.52	28,473.15	10,726.85	39,200.00	
W0536	PC Strand (10-T12.7, 190t) Installation for Precast PC Girder	m	25.50	5.3%	94.5%	0.2%	65.5%	34.5%	1,140.00	1,528.80	27,477.81	63.39	19,053.26	10,016.74	29,070.00	
W0546	PC Strand (10-T12.7, 190t) Tensioning for Precast PC Girder	cable	1.00	2.4%	96.7%	0.9%	72.7%	27.3%	19,600.00	467.05	18,951.11	181.84	14,251.10	5,348.90	19,600.00	
W0555	Precast PC Girder Erection (20.0 ≤ W < 35.0 t)	t	34.78	15.3%	3.6%	81.0%	46.4%	53.6%	213.00	1,133.91	270.00	6,004.24	3,439.47	3,968.67	7,408.14	
Miscellaneous		LS	1.00							0.00	0.00	0.00	0.00	0.00	0.00	0.0%
Total										27,827.04	221,430.66	17,112.47	157,124.02	109,246.15	266,370.17	
Components (%)										10.4%	83.1%	6.4%	59.0%	41.0%	100.0%	
Unit Rate				each						27,788.37	221,122.95	17,088.68	156,905.67	109,094.33	266,000.00	



406(1)g Precast Prestressed Structural Concrete Members (AASHTO Girder Type V L=29.4m), fabricated & erected															Unit: 1.00 each	
Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
W0521	Precast PC Girder Fabrication Base Construction & Removal	girder	1.00	76.3%	11.8%	11.8%	13.0%	87.0%	1,380.00	1,053.44	163.28	163.28	179.61	1,200.39	1,380.00	
W0522	Precast PC Girder Fabrication Base Maintenance	girder	1.00	100.0%	0.0%	0.0%	0.0%	100.0%	493.00	493.00	0.00	0.00	0.00	493.00	493.00	
W0208	Concrete (Class PP, 41MPa, max agg. 20mm)	m3	21.52	1.9%	85.7%	12.4%	58.3%	41.7%	2,130.00	855.86	39,301.88	5,679.86	26,723.66	19,113.94	45,837.60	Loss 2.0%
W0231	Concrete Pouring by Pump Vehicle (plain concrete)	m3	21.10	18.8%	0.2%	81.0%	43.4%	56.6%	213.00	844.78	8.81	3,640.70	1,951.29	2,543.01	4,494.30	
W0237	Concrete Curing (reinforced concrete)	m3	21.10	74.6%	7.6%	17.8%	14.0%	86.0%	4.21	66.29	6.78	15.78	12.40	76.43	88.83	
W0241	Formwork (reinforced concrete H<4m)	m2	116.11	59.3%	39.9%	0.8%	2.9%	97.1%	224.00	15,446.05	10,403.05	204.34	760.25	25,293.19	26,053.44	
W0251	Reinforcement Grade 40, cutting, bending & assembly	kg	0.00	15.2%	77.0%	7.8%	54.0%	46.0%	23.30	0.00	0.00	0.00	0.00	0.00	0.00	
W0252	Reinforcement Grade 60, cutting, bending & assembly	kg	4,387.67	14.5%	77.9%	7.7%	54.5%	45.5%	24.50	15,547.26	83,703.71	8,246.95	58,565.10	48,932.82	107,497.92	
W0537	PC Strand (12-T12.7, 225t) Installation for Precast PC Girder	m	59.98	4.8%	95.0%	0.2%	65.9%	34.1%	1,340.00	3,854.82	76,343.56	174.82	52,975.68	27,397.52	80,373.20	
W0547	PC Strand (12-T12.7, 225t) Tensioning for Precast PC Girder	cable	2.00	2.5%	96.6%	1.0%	72.6%	27.4%	19,600.00	969.30	37,854.18	376.52	28,473.15	10,726.85	39,200.00	
W0536	PC Strand (10-T12.7, 190t) Installation for Precast PC Girder	m	59.98	5.3%	94.5%	0.2%	65.5%	34.5%	1,140.00	3,595.98	64,632.13	149.10	44,816.25	23,560.95	68,377.20	
W0546	PC Strand (10-T12.7, 190t) Tensioning for Precast PC Girder	cable	2.00	2.4%	96.7%	0.9%	72.7%	27.3%	19,600.00	934.10	37,902.21	363.69	28,502.20	10,697.80	39,200.00	
W0556	Precast PC Girder Erection (35.0 ≤ W < 60.0 t)	t	52.75	7.3%	1.8%	90.9%	50.5%	49.5%	377.00	1,461.29	353.98	18,071.49	10,044.67	9,842.08	19,886.75	
	Miscellaneous	LS	1.00							0.00	0.00	0.00	0.00	0.00	0.00	0.0%
Total										45,122.17	350,873.55	37,086.53	253,004.26	179,877.98	432,882.24	
Components (%)										10.4%	81.0%	8.6%	58.4%	41.6%	100.0%	
Unit Rate			each							45,134.44	350,768.94	37,096.62	253,073.08	179,926.92	433,000.00	

406(1)h Precast Prestressed Structural Concrete Member (AASHTO Girder Type V L=29.55m), fabricated & erected															Unit: 1.00 each	
Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
W0521	Precast PC Girder Fabrication Base Construction & Removal	girder	1.00	76.3%	11.8%	11.8%	13.0%	87.0%	1,380.00	1,053.44	163.28	163.28	179.61	1,200.39	1,380.00	
W0522	Precast PC Girder Fabrication Base Maintenance	girder	1.00	100.0%	0.0%	0.0%	0.0%	100.0%	493.00	493.00	0.00	0.00	0.00	493.00	493.00	
W0208	Concrete (Class PP, 41MPa, max agg. 20mm)	m3	21.62	1.9%	85.7%	12.4%	58.3%	41.7%	2,130.00	859.84	39,484.51	5,706.28	26,847.84	19,202.76	46,050.60	Loss 2.0%
W0231	Concrete Pouring by Pump Vehicle (plain concrete)	m3	21.20	18.8%	0.2%	81.0%	43.4%	56.6%	213.00	848.79	8.85	3,657.96	1,960.54	2,555.06	4,515.60	
W0237	Concrete Curing (reinforced concrete)	m3	21.20	74.6%	7.6%	17.8%	14.0%	86.0%	4.21	66.60	6.79	15.85	12.46	76.79	89.25	
W0241	Formwork (reinforced concrete H<4m)	m2	116.92	59.3%	39.9%	0.8%	2.9%	97.1%	224.00	15,527.06	10,457.61	205.41	764.24	25,425.84	26,190.08	
W0251	Reinforcement Grade 40, cutting, bending & assembly	kg	0.00	15.2%	77.0%	7.8%	54.0%	46.0%	23.30	0.00	0.00	0.00	0.00	0.00	0.00	
W0252	Reinforcement Grade 60, cutting, bending & assembly	kg	4,396.75	14.5%	77.9%	7.7%	54.5%	45.5%	24.50	15,579.42	83,876.83	8,264.01	58,686.22	49,034.03	107,720.25	
W0537	PC Strand (12-T12.7, 225t) Installation for Precast PC Girder	m	60.28	4.8%	95.0%	0.2%	65.9%	34.1%	1,340.00	3,874.10	76,725.41	175.69	53,240.64	27,534.56	80,775.20	
W0547	PC Strand (12-T12.7, 225t) Tensioning for Precast PC Girder	cable	2.00	2.5%	96.6%	1.0%	72.6%	27.4%	19,600.00	969.30	37,854.18	376.52	28,473.15	10,726.85	39,200.00	
W0536	PC Strand (10-T12.7, 190t) Installation for Precast PC Girder	m	60.28	5.3%	94.5%	0.2%	65.5%	34.5%	1,140.00	3,613.96	64,955.39	149.85	45,040.41	23,678.79	68,719.20	
W0546	PC Strand (10-T12.7, 190t) Tensioning for Precast PC Girder	cable	2.00	2.4%	96.7%	0.9%	72.7%	27.3%	19,600.00	934.10	37,902.21	363.69	28,502.20	10,697.80	39,200.00	
W0556	Precast PC Girder Erection (35.0 ≤ W < 60.0 t)	t	53.00	7.3%	1.8%	90.9%	50.5%	49.5%	377.00	1,468.21	355.66	18,157.13	10,092.27	9,888.73	19,981.00	
	Miscellaneous	LS	1.00							0.00	0.00	0.00	0.00	0.00	0.00	0
Total										45,287.82	351,790.72	37,235.65	253,799.58	180,514.60	434,314.18	
Components (%)										10.4%	81.0%	8.6%	58.4%	41.6%	100.0%	
Unit Rate			each							45,255.06	351,636.23	37,208.71	253,615.99	180,384.01	434,000.00	



406(1)k Precast Prestressed Structural Concrete Members (AASHTO Girder Type VI L=36m), fabricated & erected Unit: 1.00 each

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
W0521	Precast PC Girder Fabrication Base Construction & Removal	girder	1.00	76.3%	11.8%	11.8%	13.0%	87.0%	1,380.00	1,053.44	163.28	163.28	179.61	1,200.39	1,380.00	
W0522	Precast PC Girder Fabrication Base Maintenance	girder	1.00	100.0%	0.0%	0.0%	0.0%	100.0%	493.00	493.00	0.00	0.00	0.00	493.00	493.00	
W0208	Concrete (Class PP, 41MPa, max agg. 20mm)	m3	28.04	1.9%	85.7%	12.4%	58.3%	41.7%	2,130.00	1,115.17	51,209.32	7,400.71	34,820.24	24,904.96	59,725.20	Less 2.0%
W0231	Concrete Pouring by Pump Vehicle (plain concrete)	m3	27.49	18.8%	0.2%	81.0%	43.4%	56.6%	213.00	1,100.62	11.48	4,743.27	2,542.23	3,313.14	5,855.37	
W0237	Concrete Curing (reinforced concrete)	m3	27.49	74.6%	7.6%	17.8%	14.0%	86.0%	4.21	86.37	8.81	20.56	16.15	99.58	115.73	
W0241	Formwork (reinforced concrete 11<4m)	m2	159.31	59.3%	39.9%	0.8%	2.9%	97.1%	224.00	21,156.48	14,249.07	279.89	1,041.32	34,644.12	35,685.44	
W0251	Reinforcement Grade 40, cutting, bending & assembly	kg	2,017.00	15.2%	77.0%	7.8%	54.0%	46.0%	23.30	7,137.23	36,189.53	3,669.35	25,375.51	21,620.59	46,996.10	
W0252	Reinforcement Grade 60, cutting, bending & assembly	kg	1,721.00	14.5%	77.9%	7.7%	54.5%	45.5%	24.50	6,098.19	32,831.57	3,234.75	22,971.31	19,193.19	42,164.50	
W0537	PC Strand (12-T12.7, 225t) Installation for Precast PC Girder	m	110.16	4.8%	95.0%	0.2%	65.9%	34.1%	1,340.00	7,079.81	140,213.52	321.07	97,295.77	50,318.63	147,614.40	
W0547	PC Strand (12-T12.7, 225t) Tensioning for Precast PC Girder	cable	3.00	2.5%	96.6%	1.0%	72.6%	27.4%	19,600.00	1,453.95	56,781.27	564.78	42,709.72	16,190.28	58,800.00	
W0536	PC Strand (10-T12.7, 190t) Installation for Precast PC Girder	m	73.44	5.3%	94.5%	0.2%	65.5%	34.5%	1,140.00	4,402.94	79,136.10	182.56	54,873.38	28,848.22	83,721.60	
W0546	PC Strand (10-T12.7, 190t) Tensioning for Precast PC Girder	cable	2.00	2.4%	96.7%	0.9%	72.7%	27.3%	19,600.00	934.10	37,902.21	363.69	28,502.20	10,697.80	39,200.00	
W0557	Precast PC Girder Erection (60.0 ≤ W < 75.0 t)	t	68.73	6.2%	1.8%	92.0%	51.1%	48.9%	423.00	1,814.30	522.61	26,735.87	14,861.53	14,211.26	29,072.79	
	Miscellaneous	LS	1.00							0.00	0.00	0.00	0.00	0.00	0.00	0.0%
	<b>Total</b>									53,925.59	449,218.77	47,679.77	325,188.98	225,635.15	550,824.13	
	<b>Components (%)</b>									9.8%	81.6%	8.7%	59.0%	41.0%	100.0%	
	<b>Unit Rate</b>	each								53,942.80	449,342.20	47,694.99	325,292.81	225,707.19	551,000.00	

406(1)l Precast Prestressed Structural Concrete Members (AASHTO Girder Type VI(mod) L=39.4m), fabricated & erected Unit: 1.00 each

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
W0521	Precast PC Girder Fabrication Base Construction & Removal	girder	1.00	76.3%	11.8%	11.8%	13.0%	87.0%	1,380.00	1,053.44	163.28	163.28	179.61	1,200.39	1,380.00	
W0522	Precast PC Girder Fabrication Base Maintenance	girder	1.00	100.0%	0.0%	0.0%	0.0%	100.0%	493.00	493.00	0.00	0.00	0.00	493.00	493.00	
W0208	Concrete (Class PP, 41MPa, max agg. 20mm)	m3	32.18	1.9%	85.7%	12.4%	58.3%	41.7%	2,130.00	1,279.82	58,770.18	8,493.40	39,961.31	28,582.09	68,543.40	Less 2.0%
W0231	Concrete Pouring by Pump Vehicle (plain concrete)	m3	31.55	18.8%	0.2%	81.0%	43.4%	56.6%	213.00	1,263.17	13.18	5,443.80	2,917.69	3,802.46	6,720.15	
W0237	Concrete Curing (reinforced concrete)	m3	31.55	74.6%	7.6%	17.8%	14.0%	86.0%	4.21	99.13	10.11	23.59	18.54	114.29	132.83	
W0241	Formwork (reinforced concrete 11<4m)	m2	188.02	59.3%	39.9%	0.8%	2.9%	97.1%	224.00	24,969.19	16,816.96	330.33	1,228.98	40,887.50	42,116.48	
W0251	Reinforcement Grade 40, cutting, bending & assembly	kg	4,298.00	15.2%	77.0%	7.8%	54.0%	46.0%	23.30	15,208.62	77,115.81	7,818.97	54,072.36	46,071.04	100,143.40	
W0252	Reinforcement Grade 60, cutting, bending & assembly	kg	3,674.00	14.5%	77.9%	7.7%	54.5%	45.5%	24.50	13,018.44	70,089.00	6,905.55	49,039.27	40,973.73	90,013.00	
W0537	PC Strand (12-T12.7, 225t) Installation for Precast PC Girder	m	200.94	4.8%	95.0%	0.2%	65.9%	34.1%	1,340.00	12,914.09	255,759.85	585.66	177,474.70	91,784.90	289,259.60	
W0547	PC Strand (12-T12.7, 225t) Tensioning for Precast PC Girder	cable	5.00	2.5%	96.6%	1.0%	72.6%	27.4%	19,600.00	2,423.25	94,635.45	941.30	71,182.86	26,817.14	98,000.00	
W0558	Precast PC Girder Erection (75.0 ≤ W < 80.0 t)	t	78.88	5.7%	1.8%	92.5%	51.4%	48.6%	430.00	1,947.93	612.34	31,358.13	17,435.22	16,483.18	33,918.40	
	Miscellaneous	LS	1.00							0.00	0.00	0.00	0.00	0.00	0.00	0.0%
	<b>Total</b>									74,670.88	573,986.16	62,064.02	413,510.55	297,209.71	710,720.26	
	<b>Components (%)</b>									10.5%	80.8%	8.7%	58.2%	41.8%	100.0%	
	<b>Unit Rate</b>	each								74,699.47	574,212.08	62,089.45	413,673.30	297,326.70	711,000.00	



406(i)n Precast Prestressed Structural Concrete Members (AASHTO Girder Type VI(mod) L=39.55m), fabricated & erected															Unit: 1.00 each	
Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
W0521	Precast PC Girder Fabrication Base Construction & Removal	girder	1.00	76.3%	11.8%	11.8%	13.0%	87.0%	1,380.00	1,053.44	163.28	163.28	179.61	1,200.39	1,380.00	
W0522	Precast PC Girder Fabrication Base Maintenance	girder	1.00	100.0%	0.0%	0.0%	0.0%	100.0%	493.00	493.00	0.00	0.00	0.00	493.00	493.00	
W0208	Concrete (Class PP, 41MPa, max agg.20mm)	m3	32.29	1.9%	86.7%	12.4%	58.3%	41.7%	2,130.00	1,284.19	58,971.08	8,522.43	40,097.91	28,679.79	68,777.70	Loss 2.0%
W0231	Concrete Pouring by Pump Vehicle (plain concrete)	m3	31.66	18.8%	0.2%	81.0%	43.4%	56.6%	213.00	1,267.57	13.22	5,462.78	2,927.87	3,815.71	6,743.56	
W0237	Concrete Curing (reinforced concrete)	m3	31.66	74.6%	7.6%	17.8%	14.0%	86.0%	4.21	99.47	10.15	23.67	18.60	114.69	133.29	
W0241	Formwork (reinforced concrete H<4m)	m2	188.74	59.3%	39.9%	0.8%	2.9%	97.1%	224.00	25,064.81	16,881.36	331.59	1,233.69	41,044.07	42,277.76	
W0251	Reinforcement Grade 40, cutting, bending & assembly	kg	4,386.00	15.2%	77.0%	7.8%	54.0%	46.0%	23.30	15,520.01	78,694.73	7,979.06	55,179.48	47,914.32	102,193.80	
W0252	Reinforcement Grade 60, cutting, bending & assembly	kg	3,572.00	14.5%	77.9%	7.7%	54.5%	45.5%	24.50	12,657.02	68,143.15	6,713.84	47,677.81	39,836.19	87,514.00	
W0537	PC Strand (12-T12.7, 225t) Installation for Precast PC Girder	m	201.71	4.8%	95.0%	0.2%	65.9%	34.1%	1,340.00	12,963.58	256,739.92	587.90	178,154.78	92,136.62	270,291.40	
W0547	PC Strand (12-T12.7, 225t) Tensioning for Precast PC Girder	cable	5.00	2.5%	96.6%	1.0%	72.6%	27.4%	19,600.00	2,423.25	94,635.45	941.30	71,182.86	26,817.14	98,000.00	
W0558	Precast PC Girder Erection (75.0 ≤ W < 80.0 t)	t	79.15	5.7%	1.8%	92.5%	51.4%	48.6%	430.00	1,954.60	814.43	31,465.47	17,494.90	16,539.60	34,034.50	
	Miscellaneous	LS	1.00							0.00	0.00	0.00	0.00	0.00	0.00	0.0%
	<b>Total</b>									<b>74,780.93</b>	<b>574,866.76</b>	<b>62,191.34</b>	<b>414,147.50</b>	<b>297,691.53</b>	<b>711,839.03</b>	
	<b>Components (%)</b>									<b>10.5%</b>	<b>80.8%</b>	<b>8.7%</b>	<b>58.2%</b>	<b>41.8%</b>	<b>100.0%</b>	
	<b>Unit Rate</b>	<b>each</b>								<b>74,797.84</b>	<b>574,996.76</b>	<b>62,205.40</b>	<b>414,241.15</b>	<b>297,758.85</b>	<b>712,000.00</b>	

406(l)n Precast Prestressed Structural Concrete Members (AASHTO Girder Type VI(mod) L=40m), fabricated & erected															Unit: 1.00 each	
Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
W0521	Precast PC Girder Fabrication Base Construction & Removal	girder	1.00	76.3%	11.8%	11.8%	13.0%	87.0%	1,380.00	1,053.44	163.28	163.28	179.61	1,200.39	1,380.00	
W0522	Precast PC Girder Fabrication Base Maintenance	girder	1.00	100.0%	0.0%	0.0%	0.0%	100.0%	493.00	493.00	0.00	0.00	0.00	493.00	493.00	
W0208	Concrete (Class PP, 41MPa, max agg.20mm)	m3	32.62	1.9%	85.7%	12.4%	58.3%	41.7%	2,130.00	1,297.32	59,573.75	8,609.53	40,507.71	28,972.89	69,480.60	Loss 2.0%
W0231	Concrete Pouring by Pump Vehicle (plain concrete)	m3	31.98	18.8%	0.2%	81.0%	43.4%	56.6%	213.00	1,280.39	13.36	5,518.00	2,957.46	3,854.28	6,811.74	
W0237	Concrete Curing (reinforced concrete)	m3	31.98	74.6%	7.6%	17.8%	14.0%	86.0%	4.21	100.48	10.25	23.91	18.79	115.85	134.61	
W0241	Formwork (reinforced concrete H<4m)	m2	190.92	59.3%	39.9%	0.8%	2.9%	97.1%	224.00	25,354.31	17,076.35	335.42	1,247.94	41,518.14	42,766.08	
W0251	Reinforcement Grade 40, cutting, bending & assembly	kg	3,060.00	15.2%	77.0%	7.8%	54.0%	46.0%	23.30	10,827.92	54,903.30	5,566.78	39,497.31	32,800.69	71,298.00	
W0252	Reinforcement Grade 60, cutting, bending & assembly	kg	1,895.00	14.5%	77.9%	7.7%	54.5%	45.5%	24.50	6,714.74	36,150.97	3,561.79	25,293.80	21,133.70	46,427.50	
W0537	PC Strand (12-T12.7, 225t) Installation for Precast PC Girder	m	204.80	4.8%	95.0%	0.2%	65.9%	34.1%	1,340.00	13,110.75	259,654.67	594.58	180,177.36	93,182.64	273,360.00	
W0547	PC Strand (12-T12.7, 225t) Tensioning for Precast PC Girder	cable	5.00	2.5%	96.6%	1.0%	72.6%	27.4%	19,600.00	2,423.25	94,635.45	941.30	71,182.86	26,817.14	98,000.00	
W0558	Precast PC Girder Erection (75.0 ≤ W < 80.0 t)	t	79.95	5.7%	1.8%	92.5%	51.4%	48.6%	430.00	1,974.35	820.64	31,783.50	17,671.72	16,706.78	34,378.50	
	Miscellaneous	LS	1.00							0.00	0.00	0.00	0.00	0.00	0.00	0.0%
	<b>Total</b>									<b>64,629.94</b>	<b>522,802.02</b>	<b>57,098.11</b>	<b>377,734.56</b>	<b>266,795.51</b>	<b>644,530.06</b>	
	<b>Components (%)</b>									<b>10.0%</b>	<b>81.1%</b>	<b>8.9%</b>	<b>58.6%</b>	<b>41.4%</b>	<b>100.0%</b>	
	<b>Unit Rate</b>	<b>each</b>								<b>64,677.06</b>	<b>523,183.20</b>	<b>57,139.74</b>	<b>378,009.97</b>	<b>266,990.03</b>	<b>645,000.00</b>	



















SPL 420(1) Temporary Access Road Crossing Streams/Rivers

Unit: 1.00 L.S.

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
W0121	Borrow Soil, transported	m3	4,786.80	6.0%	25.8%	68.2%	45.5%	54.5%	116.00	33,053.00	143,417.57	378,798.24	252,510.76	302,758.04	655,268.80	Loss 20.0%
W0149	Filling, Laying & Compaction, bulldozer 21t	m3	3,989.00	1.5%	8.2%	90.3%	54.4%	45.6%	56.00	3,350.76	18,317.49	201,715.75	121,525.98	101,858.02	223,384.00	
W0332	Precast Reinforced Concrete Pipe (Extra Strength 32MPa), fabrication φ610 (24")	m	0.00	10.2%	68.3%	21.5%	53.6%	46.4%	1,120.00	0.00	0.00	0.00	0.00	0.00	0.00	
W0342	Precast Concrete Pipe Laying φ610 (24")	m	0.00	45.6%	8.2%	46.2%	29.7%	70.3%	244.00	0.00	0.00	0.00	0.00	0.00	0.00	
W0352	Precast Concrete Pipe Removal φ610 (24")	m	0.00	44.9%	6.1%	49.1%	38.1%	69.9%	75.30	0.00	0.00	0.00	0.00	0.00	0.00	
W0334	Precast Reinforced Concrete Pipe (Extra Strength), fabrication φ910 (36")	m	50.80	10.8%	68.3%	20.9%	53.5%	46.5%	2,650.00	14,531.94	92,011.87	28,076.19	72,028.69	62,591.31	134,620.00	
W0344	Precast Concrete Pipe Laying φ910 (36")	m	50.80	31.0%	8.6%	60.4%	37.7%	62.3%	513.00	8,067.90	2,250.77	15,741.74	9,821.10	16,239.30	26,060.40	
W0354	Precast Concrete Pipe Removal φ910 (36")	m	50.80	30.7%	6.4%	62.8%	37.9%	62.1%	158.00	2,464.51	517.43	5,044.46	3,040.83	4,985.57	8,026.40	
W0335	Precast Reinforced Concrete Pipe (Extra Strength 32MPa), fabrication φ1070 (42")	m	57.00	11.2%	68.6%	20.2%	53.4%	46.6%	3,970.00	25,300.33	155,324.02	45,665.65	120,940.07	105,349.93	226,290.00	
W0345	Precast Concrete Pipe Laying φ1070 (42")	m	57.00	31.4%	8.6%	60.0%	37.4%	62.6%	590.00	10,567.76	2,890.36	20,171.88	12,587.28	21,042.72	33,630.00	
W0355	Precast Concrete Pipe Removal φ1070 (42")	m	57.00	31.2%	6.4%	62.4%	37.6%	62.4%	182.00	3,233.53	664.41	6,476.07	3,903.59	6,470.41	10,374.00	
W0336	Precast Reinforced Concrete Pipe (Extra Strength 32MPa), fabrication φ1220 (48")	m	79.50	10.8%	68.3%	20.9%	53.5%	46.5%	4,330.00	37,036.22	235,211.25	71,987.54	184,204.56	160,030.44	344,235.00	
W0346	Precast Concrete Pipe Laying φ1220 (48")	m	79.50	31.2%	8.6%	60.2%	37.6%	62.4%	661.00	16,369.32	4,529.42	31,650.76	19,748.03	32,801.47	52,549.50	
W0356	Precast Concrete Pipe Removal φ1220 (48")	m	79.50	30.9%	6.4%	62.7%	37.8%	62.2%	204.00	5,013.45	1,042.46	10,162.09	6,125.62	10,092.38	16,218.00	
W0105	Excavation, Backhoe 0.61m3	m3	3,989.00	4.4%	8.4%	87.2%	52.9%	47.1%	40.90	7,178.60	13,704.61	142,266.89	86,271.58	76,878.52	163,150.10	
W0111	Disposal of Surplus Soil (backhoe loading)	m3	3,989.00	8.1%	14.8%	77.1%	51.5%	48.5%	93.00	30,215.50	54,729.72	286,031.78	190,956.36	180,020.64	370,977.00	
	Miscellaneous	L.S.	1.00	15.0%	40.0%	45.0%	50.0%	50.0%		3,247.17	8,659.13	9,741.52	10,823.92	10,823.92	21,647.83	1.0%
	Total									199,629.99	733,270.50	1,253,530.55	1,094,498.38	1,091,942.65	2,186,431.03	
	Components (%)									9.1%	33.5%	57.3%	50.1%	49.9%	100.0%	
	Unit Rate	L.S.								199,955.85	734,467.43	1,255,576.72	1,096,274.94	1,093,725.08	2,190,000.00	

Miscellaneous covers the cost for temporary paving, maintenance, safety measures, etc.

SPL 420(2) Realignment of River/Stream

Unit: 1.00 L.S.

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
W0105	Excavation, Backhoe 0.61m3	m3	0.00	4.4%	8.4%	87.2%	52.9%	47.1%	40.90	0.00	0.00	0.00	0.00	0.00	0.00	
W0121	Borrow Soil, transported	m3	13,804.80	6.0%	25.8%	68.2%	45.5%	54.5%	116.00	95,322.55	413,606.34	1,092,427.90	728,223.57	873,133.23	1,601,356.80	Loss 20.0%
W0149	Filling, Laying & Compaction, bulldozer 21t	m3	11,504.00	1.5%	8.2%	90.3%	54.4%	45.6%	56.00	9,663.36	52,826.37	581,734.27	350,472.52	293,751.48	644,224.00	
W0202	Concrete (Class B, 17MPa, max agg. 50mm)	m3	332.50	3.0%	76.4%	20.6%	56.1%	43.9%	1,380.00	13,738.04	350,632.38	94,479.57	257,611.73	201,238.27	458,850.00	Loss 2.0%
W0235	Concrete Pouring by Manpower for small structures	m3	326.00	98.0%	0.2%	1.8%	1.1%	98.9%	224.00	71,592.16	143.18	1,288.66	787.51	72,236.49	73,024.00	
W0236	Concrete Curing (plain concrete)	m3	326.00	70.9%	8.7%	20.4%	16.0%	84.0%	8.85	2,046.17	251.68	587.25	461.41	2,423.69	2,885.10	
W0240	Formwork (plain concrete 11<4m)	m2	652.00	58.9%	40.4%	0.8%	2.9%	97.1%	222.00	85,195.71	58,413.04	1,135.25	4,254.57	140,489.43	144,744.00	
W0741	Grouted Riprap Class A	m3	742.00	15.4%	62.8%	21.8%	48.1%	51.9%	751.00	86,036.36	349,960.46	121,245.18	287,886.14	289,355.86	557,242.00	
	Miscellaneous	L.S.	1.00	15.0%	40.0%	45.0%	40.0%	60.0%		15,670.47	41,787.91	47,011.40	41,787.91	62,681.87	104,469.78	3.0%
	Total									379,264.83	1,267,621.37	1,939,909.48	1,651,485.36	1,935,310.71	3,586,795.68	
	Components (%)									10.6%	35.3%	54.1%	46.0%	54.0%	100.0%	
	Unit Rate	L.S.								379,603.65	1,268,753.82	1,941,642.53	1,652,960.75	1,937,039.25	3,590,000.00	

Miscellaneous covers the cost for temporary shoring, revetment, maintenance, safety measures, etc.

SPL 420(3) False Works Required for Cantilever Construction for PC Box Girder (Angat River)

Unit: 1.00 I.S.

Item No.	Description	Unit	Quantity	Unit Rate						Total (PP)	Amount					Total (PP)	Remarks
				Component (%)					Labor		Component (PP)						
				Lab.	Mnt.	Equip.	For.	Local			Material	Equipment	Foreign	Local			
W0651	Temporary Support at Pier Head for Cantilever Construction	v-m3	5.10	34.3%	17.8%	47.9%	35.4%	64.6%	426.00	745.60	385.81	1,041.20	768.18	1,404.42	2,172.60		
W0652	Temporary Bracket Support at Pier Head for Cantilever Construction	t	299.20	24.4%	44.6%	31.0%	39.2%	60.8%	7,840.00	571,320.06	1,046,168.85	728,239.09	919,258.08	1,426,469.92	2,345,728.00		
W0653	Temporary External & Internal Support at Pier Head for Cantilever Construction	v-m3	1,293.20	29.2%	30.0%	40.8%	37.5%	62.5%	172.00	64,889.39	66,813.69	90,727.32	83,394.92	139,035.48	222,430.40		
W0654	Temporary Suspension Support at Center Connection for Cantilever Construction	t	42.20	24.6%	29.2%	46.2%	39.9%	60.1%	8,330.00	86,420.07	102,619.29	162,486.64	140,113.23	211,412.77	351,526.00		
W0655	Temporary External & Internal Support at Center Connection for Cantilever Construction	v-m3	185.10	28.0%	28.7%	43.3%	38.0%	62.0%	179.00	9,286.47	9,506.91	14,339.62	12,585.02	20,547.88	33,132.90		
W0656	Temporary Frame Support at Side Span for Cantilever Construction	v-m3	3,622.50	21.4%	40.6%	38.0%	41.2%	58.8%	93.90	72,641.60	138,142.18	129,368.96	140,247.72	199,905.03	340,152.75		
W0657	Temporary External & Internal Support at Side Span for Cantilever Construction	v-m3	530.60	29.7%	28.8%	41.5%	37.3%	62.7%	169.00	26,651.49	25,835.69	37,184.22	33,409.30	56,262.10	89,671.40		
W0661	Assembly & Disassembly of Form Traveler	set	12.00	23.4%	17.7%	58.9%	41.0%	59.0%	335,000.00	939,626.63	713,336.13	2,367,037.24	1,644,909.10	2,371,090.90	4,020,000.00		
W0662	Form Traveler Shifting	time	96.00	78.7%	12.8%	8.5%	10.6%	89.4%	2,080.00	157,228.35	25,470.99	16,980.66	21,225.83	178,454.17	199,680.00		
W0663	Form Traveler Lifting	time	96.00	100.0%	0.0%	0.0%	0.0%	100.0%	4,980.00	478,080.00	0.00	0.00	0.00	478,080.00	478,080.00		
W0664	Form Traveler Pulling Back	m	376.00	100.0%	0.0%	0.0%	0.0%	100.0%	114.00	42,864.00	0.00	0.00	0.00	42,864.00	42,864.00		
Q1521-014	PC Bridge Cantilever Construction Form Traveler, W≤14m	day	1,393.00	0.0%	0.0%	100.0%	60.9%	39.1%	16,700.00	0.00	0.00	23,263,100.00	14,178,100.34	9,084,999.66	23,263,100.00		
	Miscellaneous	IS	1.00	5.0%	40.0%	55.0%	50.0%	50.0%		31,388.54	251,108.30	345,273.92	313,885.38	313,885.38	627,770.76	2.0%	
Total										2,481,142.20	2,379,387.74	27,155,778.87	17,491,897.11	14,524,411.70	32,016,308.81		
Components (%)										7.4%	7.4%	81.8%	51.6%	45.4%	100.0%		
Unit Rate										2,479,878.33	2,378,175.70	27,141,945.97	17,482,986.90	14,517,013.10	32,000,000.00		

Miscellaneous covers the cost for the depreciation of minor tools and equipment, etc.

SPL 420(4)a Temporary Craneway for Angat Bridge Construction

Unit: 416.00 m

Item No.	Description	Unit	Quantity	Unit Rate						Total (PP)	Amount					Total (PP)	Remarks
				Component (%)					Labor		Component (PP)						
				Lab.	Mnt.	Equip.	For.	Local			Material	Equipment	Foreign	Local			
W0406	H-Pile Driving for Temporary Access Bridge (Vibro Hammer)	m	5,845.50	10.2%	13.5%	76.2%	49.9%	50.1%	117.00	70,033.08	92,533.52	521,356.91	341,371.02	342,552.48	683,923.50		
W0407	H-Pile Removal for Temporary Access Bridge (Vibro Hammer)	m	5,845.50	10.2%	13.5%	76.4%	49.9%	50.1%	102.00	60,641.88	80,248.54	455,350.58	297,778.41	298,462.59	596,241.00		
W0421	Temporary Access Bridge Superstructure Installation	t	568.60	21.6%	8.0%	70.4%	43.3%	56.7%	1,450.00	177,894.68	65,878.30	580,697.02	357,244.16	467,225.84	824,470.00		
W0422	Temporary Access Bridge Superstructure Removal	t	568.60	23.1%	8.2%	68.7%	42.5%	57.5%	1,010.00	132,517.40	47,294.66	394,473.94	244,055.85	330,230.15	574,286.00		
W0415	Temporary Deck Plate Installation	m2	4,784.00	35.3%	5.9%	58.8%	35.8%	64.2%	78.20	132,147.93	21,924.40	220,036.47	133,800.15	240,308.65	374,108.80		
W0416	Temporary Deck Plate Removal	m2	4,784.00	35.3%	5.9%	58.8%	35.8%	64.2%	42.70	72,106.02	11,976.17	120,194.61	73,088.14	131,188.66	204,276.80		
W0423	Temporary Access Bridge Railing Installation	m	1,196.00	36.1%	6.8%	57.1%	35.3%	64.7%	106.00	45,797.19	8,583.31	72,395.50	44,737.98	82,038.02	126,776.00		
W0424	Temporary Access Bridge Railing Removal	m	1,196.00	38.1%	5.4%	56.5%	34.2%	65.8%	56.90	25,914.49	3,679.21	38,458.70	23,289.73	44,762.67	68,052.40		
N05041	Temporary Steel Shapes Depreciation	t-d	624,576.00	0.0%	100.0%	0.0%	50.0%	50.0%	31.30	0.00	19,549,228.80	0.00	9,774,614.40	9,774,614.40	19,549,228.80		
N05051	Temporary Deck Plate Depreciation	m2-d	2,296,320.00	0.0%	100.0%	0.0%	50.0%	50.0%	11.10	0.00	25,489,152.00	0.00	12,744,576.00	12,744,576.00	25,489,152.00		
N05055	Temporary Pipe Railing Depreciation	m-d	674,080.00	0.0%	100.0%	0.0%	50.0%	50.0%	1.33	0.00	763,526.40	0.00	381,763.20	381,763.20	763,526.40		
	Miscellaneous	IS	1.00	15.0%	40.0%	45.0%	55.0%	45.0%		73,881.06	187,016.17	221,643.19	270,897.23	221,643.19	492,540.42	1.0%	
Total										790,933.73	46,331,041.47	2,624,606.92	24,687,216.28	25,059,365.83	49,746,582.12		
Components (%)										1.6%	93.1%	5.3%	49.6%	50.4%	100.0%		
Unit Rate										1,907.91	111,760.94	6,331.15	59,551.15	60,448.85	120,000.00		

Miscellaneous covers the costs for material haulage, maintenance, etc.

H-Pile = 7,704.0 m      732.6 t      Pile Driving Length = 5,845.5 m  
 Superstructure = 568.6 t      Deck Plate = 4,784.0 m<sup>2</sup>  
 Depreciation Period = 480 days      Railing = 1,196.0 m

SPL 420(4)b Temporary Craneway for Pampanga Bridge Construction

Unit: 320.00 m

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
W0406	H-Pile Driving for Temporary Access Bridge (Vibro Hammer)	m	3,290.60	10.2%	13.5%	76.2%	49.9%	50.1%	117.00	39,423.63	52,089.78	293,486.79	192,167.56	192,832.64	385,000.20	
W0407	H-Pile Removal for Temporary Access Bridge (Vibro Hammer)	m	3,290.60	10.2%	13.5%	76.4%	49.9%	50.1%	102.00	34,137.05	45,174.21	256,329.93	167,628.03	168,013.17	335,641.20	
W0421	Temporary Access Bridge Superstructure Installation	t	428.90	21.6%	8.0%	70.4%	43.3%	56.7%	1,450.00	134,187.53	49,692.58	438,024.89	269,472.43	352,432.57	621,905.00	
W0422	Temporary Access Bridge Superstructure Removal	t	428.90	23.1%	8.2%	68.7%	42.5%	57.5%	1,010.00	99,959.04	35,674.78	297,555.18	184,093.49	249,095.51	433,189.00	
W0415	Temporary Deck Plate Installation	m2	3,470.00	35.3%	5.9%	58.8%	35.8%	64.2%	78.20	95,851.45	15,902.62	159,600.03	97,049.86	174,304.14	271,354.00	
W0416	Temporary Deck Plate Removal	m2	3,470.00	35.3%	5.9%	58.8%	35.8%	64.2%	42.70	52,300.98	8,686.73	87,181.29	53,013.35	95,155.65	148,169.00	
W0423	Temporary Access Bridge Railing Installation	m	900.00	36.1%	6.8%	57.1%	35.3%	64.7%	106.00	34,462.77	6,458.01	54,478.22	33,665.71	61,734.29	95,400.00	
W0424	Temporary Access Bridge Railing Removal	m	900.00	38.1%	5.4%	56.5%	34.2%	65.8%	56.90	19,500.87	2,768.64	28,940.49	17,525.72	33,684.28	51,210.00	
W0504	Temporary Steel Shapes Depreciation	t-d	504,780.00	0.0%	100.0%	0.0%	50.0%	50.0%	31.30	0.00	15,799,614.00	0.00	7,899,807.00	7,899,807.00	15,799,614.00	
W0505	Temporary Deck Plate Depreciation	m2-d	2,082,000.00	0.0%	100.0%	0.0%	50.0%	50.0%	11.10	0.00	23,110,200.00	0.00	11,555,100.00	11,555,100.00	23,110,200.00	
W05055	Temporary Pipe Railing Depreciation	m-d	540,000.00	0.0%	100.0%	0.0%	50.0%	50.0%	1.33	8.00	718,200.00	0.00	359,100.00	359,100.00	718,200.00	
	Miscellaneous	LS	1.00	15.0%	40.0%	45.0%	55.0%	45.0%		62,954.82	167,879.53	188,864.47	230,834.35	188,864.47	419,698.82	1.0%
	<b>Total</b>									572,778.15	40,012,341.78	1,804,461.30	21,059,457.48	21,330,123.74	42,389,581.22	
	<b>Components (%)</b>									1.4%	94.4%	4.3%	49.7%	50.3%	100.0%	
	<b>Unit Rate</b>	m								1,783.62	124,597.34	5,619.04	65,578.58	66,421.42	132,000.00	

Miscellaneous covers the cost for material haulage, maintenance, etc.

H-Pile = 4,387.5 m      412.4 t      Pile Driving Length = 3,290.6 m  
 Superstructure = 428.9 t      Deck Plate = 3,470.0 m2  
 Depreciation Period = 600 days      Railing = 900.0 m

SPL 420(4)c Temporary Craneway for Talavera Bridge Construction

Unit: 80.00 m

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
W0406	H-Pile Driving for Temporary Access Bridge (Vibro Hammer)	m	1,042.88	10.2%	13.5%	76.2%	49.9%	50.1%	117.00	12,494.35	16,508.58	93,013.45	60,902.80	61,113.58	122,016.38	
W0407	H-Pile Removal for Temporary Access Bridge (Vibro Hammer)	m	1,042.88	10.2%	13.5%	76.4%	49.9%	50.1%	102.00	10,818.90	14,316.86	81,237.49	53,125.59	53,247.66	106,373.25	
W0421	Temporary Access Bridge Superstructure Installation	t	126.00	21.6%	8.0%	70.4%	43.3%	56.7%	1,450.00	39,422.41	14,598.98	128,685.54	79,167.20	103,539.73	182,706.93	
W0422	Temporary Access Bridge Superstructure Removal	t	126.00	23.1%	8.2%	68.7%	42.5%	57.5%	1,010.00	29,366.56	10,480.75	87,417.52	54,084.07	73,180.76	127,264.63	
W0415	Temporary Deck Plate Installation	m2	1,004.00	35.3%	5.9%	58.8%	35.8%	64.2%	78.20	27,733.39	4,601.19	46,178.22	28,080.13	50,432.67	78,512.80	
W0416	Temporary Deck Plate Removal	m2	1,004.00	35.3%	5.9%	58.8%	35.8%	64.2%	42.70	15,132.62	2,513.39	25,224.79	15,338.73	27,532.07	42,870.80	
W0423	Temporary Access Bridge Railing Installation	m	264.00	36.1%	6.8%	57.1%	35.3%	64.7%	106.00	10,109.08	1,894.64	15,980.28	9,875.27	18,108.73	27,984.00	
W0424	Temporary Access Bridge Railing Removal	m	264.00	38.1%	5.4%	56.5%	34.2%	65.8%	56.90	5,720.28	812.13	8,489.21	5,140.88	9,880.72	15,021.60	
W0504	Temporary Steel Shapes Depreciation	t-d	100,117.59	0.0%	100.0%	0.0%	50.0%	50.0%	31.30	0.00	3,133,680.57	0.00	1,566,840.29	1,566,840.29	3,133,680.57	
W0505	Temporary Deck Plate Depreciation	m2-d	391,560.00	0.0%	100.0%	0.0%	50.0%	50.0%	11.10	0.00	4,346,316.00	0.00	2,173,158.00	2,173,158.00	4,346,316.00	
W05055	Temporary Pipe Railing Depreciation	m-d	102,960.00	0.0%	100.0%	0.0%	50.0%	50.0%	1.33	0.00	136,936.80	0.00	68,468.40	68,468.40	136,936.80	
	Miscellaneous	LS	1.00	15.0%	40.0%	45.0%	55.0%	45.0%		12,479.53	31,278.74	37,438.58	45,758.26	37,438.58	83,196.84	1.0%
	<b>Total</b>									163,277.09	7,715,938.63	523,665.08	4,159,939.63	4,242,941.17	8,402,880.80	
	<b>Components (%)</b>									1.9%	91.8%	6.2%	49.6%	50.5%	100.0%	
	<b>Unit Rate</b>	m								2,040.26	96,416.17	6,543.57	51,981.42	53,018.58	105,000.00	

Miscellaneous covers the cost for material haulage, maintenance, etc.

H-Pile = 1,390.5 m      130.7 t      Pile Driving Length = 1,042.9 m  
 Superstructure = 126.0 t      Deck Plate = 1,004.0 m2  
 Depreciation Period = 390 days      Railing = 264.0 m

SPL 420(5)a Temporary Access Road (Causeway) for Angat Bridge Construction

Unit: 710.00 m

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
W0121	Borrow Soil, transported	m3	14,179.50	6.0%	25.8%	68.2%	45.5%	54.5%	116.00	97,909.87	424,832.75	1,122,079.38	747,989.55	896,832.45	1,644,822.00	Loss 15.0%
W0149	Filling, Laying & Compaction, bulldozer 2lt	m3	12,330.00	1.5%	8.2%	90.3%	54.4%	45.6%	56.00	10,457.20	56,619.36	623,503.44	375,636.84	314,843.16	690,480.00	
W0122	Crushed Aggregate, transported	m3	1,339.75	9.1%	15.7%	75.2%	47.2%	52.8%	274.00	33,559.05	57,533.55	275,998.90	173,393.40	193,698.10	367,091.50	Loss 15.0%
W0149	Filling, Laying & Compaction, bulldozer 2lt	m3	1,165.00	1.5%	8.2%	90.3%	54.4%	45.6%	56.00	978.60	5,349.68	58,911.72	35,492.05	29,747.95	65,240.00	
W0105	Excavation, Backhoe 0.61m3	m3	13,495.00	4.4%	8.4%	87.2%	52.9%	47.1%	40.90	24,285.60	46,363.42	481,296.48	291,861.58	260,084.12	551,945.50	
W0111	Disposal of Surplus Soil (backhoe loading)	m3	13,495.00	8.1%	14.8%	77.1%	51.5%	48.5%	93.00	102,220.65	185,153.57	967,660.78	646,015.58	609,419.42	1,255,935.00	
	Miscellaneous	LS	1.00	15.0%	40.0%	45.0%	45.0%	55.0%		6,861.92	18,298.46	20,585.76	20,585.76	25,160.38	45,746.14	1.0%
	Total									276,172.89	794,150.79	3,556,036.46	2,290,974.55	2,329,385.59	4,620,360.14	
	Components (%)									6.0%	17.2%	78.8%	49.6%	50.4%	100.0%	
	Unit Rate	m								389.12	1,118.94	5,001.93	3,227.94	3,282.06	6,510.00	

Miscellaneous covers the costs for maintenance works, minor works, etc.

SPL 420(5)b Temporary Access Road (Causeway) for Pampanga Bridge Construction

Unit: 880.00 m

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
W0121	Borrow Soil, transported	m3	14,099.00	6.0%	25.8%	68.2%	45.5%	54.5%	116.00	97,354.81	422,420.89	1,115,709.10	743,743.66	891,740.95	1,635,484.00	Loss 15.0%
W0149	Filling, Laying & Compaction, bulldozer 2lt	m3	12,260.00	1.5%	8.2%	90.3%	54.4%	45.6%	56.00	10,298.40	56,297.92	619,963.68	373,504.27	313,055.73	686,560.00	
W0122	Crushed Aggregate, transported	m3	1,650.60	9.1%	15.7%	75.2%	47.2%	52.8%	274.00	41,595.93	71,311.98	342,096.49	214,918.52	240,085.88	455,004.40	Loss 15.0%
W0149	Filling, Laying & Compaction, bulldozer 2lt	m3	1,444.00	1.5%	8.2%	90.3%	54.4%	45.6%	56.00	1,212.96	6,630.85	73,020.19	43,991.86	36,872.14	80,864.00	
W0105	Excavation, Backhoe 0.61m3	m3	13,704.00	4.4%	8.4%	87.2%	52.9%	47.1%	40.90	24,661.72	47,081.46	488,750.42	286,381.50	264,112.10	560,493.60	
W0111	Disposal of Surplus Soil (backhoe loading)	m3	13,704.00	8.1%	14.8%	77.1%	51.5%	48.5%	93.00	103,803.76	188,021.88	982,647.15	656,020.56	618,451.44	1,274,472.00	
	Miscellaneous	LS	1.00	15.0%	40.0%	45.0%	45.0%	55.0%		7,039.32	18,771.51	21,117.95	21,117.95	25,810.83	46,928.78	1.0%
	Total									285,966.10	810,535.69	3,643,304.99	2,349,677.71	2,390,129.07	4,739,806.78	
	Components (%)									6.0%	17.1%	76.9%	49.6%	50.4%	100.0%	
	Unit Rate	m								325.19	921.72	4,143.08	2,672.00	2,718.00	5,390.00	

Miscellaneous covers the costs for maintenance works, minor works, etc.

SPL 420(5)c Temporary Access Road (Causeway) for Talavera Bridge Construction

Unit: 300.00 m

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
W0121	Borrow Soil, transported	m3	7,762.50	6.0%	25.8%	68.2%	45.5%	54.5%	116.00	53,600.29	232,572.67	614,277.03	409,483.33	490,966.67	900,450.00	Loss 15.0%
W0149	Filling, Laying & Compaction, bulldozer 2lt	m3	6,750.00	1.5%	8.2%	90.3%	54.4%	45.6%	56.00	5,870.00	30,996.00	341,334.00	206,540.61	172,359.39	378,000.00	
W0122	Crushed Aggregate, transported	m3	565.80	9.1%	15.7%	75.2%	47.2%	52.8%	274.00	14,172.58	24,297.43	116,559.19	73,227.08	81,802.12	155,029.20	Loss 15.0%
W0149	Filling, Laying & Compaction, bulldozer 2lt	m3	492.00	1.5%	8.2%	90.3%	54.4%	45.6%	56.00	413.28	2,259.26	24,879.46	14,988.92	12,563.08	27,552.00	
W0105	Excavation, Backhoe 0.61m3	m3	7,242.00	4.4%	8.4%	87.2%	52.9%	47.1%	40.90	13,032.70	24,880.62	258,284.48	156,825.42	139,572.38	296,197.80	
W0111	Disposal of Surplus Soil (backhoe loading)	m3	7,242.00	8.1%	14.8%	77.1%	51.5%	48.5%	93.00	54,856.02	99,361.41	519,288.58	346,679.87	326,826.13	673,506.00	
	Miscellaneous	LS	1.00	15.0%	40.0%	45.0%	45.0%	55.0%		3,646.10	9,722.94	10,938.31	10,938.31	13,369.94	24,307.35	1.0%
	Total									145,390.97	424,090.33	1,865,561.05	1,217,583.53	1,237,458.82	2,455,042.35	
	Components (%)									5.9%	17.3%	76.9%	49.6%	50.4%	100.0%	
	Unit Rate	m								484.43	1,413.03	6,282.53	4,056.89	4,123.11	8,180.00	

Miscellaneous covers the costs for maintenance works, minor works, etc.



