



Construction/Rehabilitation of Flood Protection Facilities within Major River Basins and Principal River Construction of Flood Control Structure along Left Bank of Disacan River (Upstream and Downstream) Package 2
Zamboanga del Norte

FORM POW-2015-01A-00

ITEMIZED BREAKDOWN

ITEM NO.	DESCRIPTION	QUANTITY		UNIT	DIRECT COST				TOTAL UNIT COST		% DIRECT COST
		AS SUBMITTED	AS EVALUATED		TOTAL		UNIT COST		TOTAL		AS EVALUATED
					AS SUBMITTED	AS EVALUATED	AS SUBMITTED	AS EVALUATED	AS SUBMITTED	AS EVALUATED	
PART A	Facilities for the Engineers										
A.1.1 (3)	Const. of Field Office for the Enigneer	1.00		ls	487,015.63		487,015.63		613,639.69		0.61%
A.1.1 (11)	Prov. Of Furniture, Equipment, & Appliance for Field Engineer	1.00		ls	350,000.00		350,000.00		367,500.00		0.44%
A.1.2 (5)	Operation & Maintenance of Gov't. Service Vehicles	1.00		ls	477,143.72		477,143.72		501,000.91		0.60%
	TOTAL OF PART A				1,314,159.35						1.66%
PART B	Other General Requirements										
B.4(1)	Construction Survey and Staking	0.92		km	41,324.15		45,119.61		56,850.71		0.05%
B.5	Project Billboard	4.00		unit	8,083.93		2,020.98		2,546.44		0.01%
B.7	Occupational Safety & Health Program	1.00		ls	247,917.66		247,917.66		281,138.63		0.31%
B.9	Mobilization & Demobilization	1.00		ls	476,602.00		476,602.00		500,432.10		0.60%
	TOTAL OF PART B				773,927.73						0.98%
PART C	Earthworks										
1702(1)	Structure Excavation	4,400.00		cu.m	702,913.64		159.75		201.29		0.89%
104(1a)	Embankment from Roadway Excavation	1,503.00		cu.m	347,044.88		230.90		290.94		0.44%
104(2a)	Embankment from Borrow	1,909.00		cu.m	1,236,660.27		647.81		816.23		1.56%
	TOTAL OF PART C				2,286,618.79						2.88%
PART D	Subbase and Base Course										
200(1)	Aggregate Subbase Course	850.00		cu.m	1,172,967.08		1,379.96		1,738.75		1.48%
	TOTAL OF PART D				1,172,967.08						1.48%
PART F	Bridge Construction										
1716(6)	Structural Steel Sheet Piles, Furnished	9,240.00		m	27,053,247.94		2,927.84		3,689.08		34.09%
1716(12)	Structural Steel Sheet Piles, Driven	9,240.00		m	13,370,683.95		1,447.04		1,823.28		16.85%
1716 (16)	Steel Sheets Test Piles, Furnished and Driven	12.00		ln.m	82,252.95		6,854.41		8,636.56		0.10%
	TOTAL OF PART F				40,506,184.84						51.04%
PART G	Drainage and Slope Protection Structures										
404(1)a	Reinforcing Steel (Grade 40)	34,986.00		kg	1,900,404.29		54.32		68.44		2.39%
404(1)b	Reinforcing Steel (Grade 60)	16,790.00		kg	947,274.89		56.42		71.09		1.19%
405(1)a3	Structural Concrete, Class A	1,478.00		cu.m	10,086,192.23		6,824.22		8,598.51		12.71%
500(1)b3	Pipe Culvert & Storm Drain	13.00		ln.m	41,249.85		3,173.07		3,998.06		0.05%
505(2)a	Grouted Riprap, Class "A"	1,446.00		cu.m	5,048,278.55		3,491.20		4,398.91		6.36%
715(2)	Separation Geotextile	1,578.00		sq.m	279,080.49		176.86		222.84		0.35%
508	Handlaid Rock Embankment	7,684.00		cu.m	15,001,716.78		1,952.33		2,459.94		18.90%
	TOTAL OF PART G				33,304,197.08						41.97%



MINIMUM EQUIPMENT REQUIREMENT

No.	Equipment Description	Capacity	Number of Equipment	No.	Equipment Description	Capacity	Number of Equipment
1	Dumptruck (10 Wheeler)	12 cu. Yd	6	26			
2	Bulldozer		2	27			
3	Backhoe	0.83 cu.m/1.04 cu. Yd	2	28			
4	Road Grader		2	29			
5	Road Roller	10 mt	2	30			
6	Payloader	1.50 cu.m/1.95 cu.yd	2	31			
7	Water Truck/Pump	16000L	2	32			
8	Water Tank		2	33			
9	Transit Mixer	5-6 cu. Yd	2	34			
10	Portable Screed		1	35			
11	Concrete Vibrator		2	36			
12	Concrete Cutter		2	37			
13	Bar Cutter		1	38			
14	Bar Bender		1	39			
15	Cobcrete Mixer	4-6 cu.ft/min	2	40			
16	Plate Compactor		1	41			
17	Truck Mounted Crane		1	42			
18	Vibro Hammer		1	43			
19	Generator Set		1	44			
20				45			
21				46			
22				47			
23				48			
24				49			
25				50			
	SUB-TOTAL				SUB-TOTAL		
TOTAL							



Construction/Rehabilitation of Flood Mitigation Facilities within Major River Basins and Principal Rivers, Construction of Flood Control Structure along Left Bank of Disacan River (Upstream and Downstream) Package 2
Zamboanga del Norte

FORM POW-2015-01C-00

ITEMIZED BREAKDOWN

ITEMIZED BREAKDOWN													
ITEM NO.	DESCRIPTION		DETAILED BREAKDOWN OF COMPONENT COST FOR EACH ITEM										
			%	QTY	UNIT	DIRECT COST				TOTAL MARK-UP		5% VAT	TOTAL COST
						MATERIAL	LABOR	EQUIPMENT	TOTAL	%	VALUE		
PART A	Facilities for the Engineers												
A.1.1 (3)	Const. of Field Office for the Enigneer	AS EVALUATED											
		AS SUBMITTED	0.61%	1.00	ls	400,000.00	56,283.30	30,732.33	487,015.63	20.00%	97,403.13	29,220.94	613,639.69
A.1.1 (11)	Prov. Of Furniture, Equipment, & Appliance for Field Engineer	AS EVALUATED											
		AS SUBMITTED	0.44%	1.00	ls	350,000.00	-	-	350,000.00	0.00%	-	17,500.00	367,500.00
A.1.2 (5)	Operation & Maintenance of Gov't. Service Vehicles	AS EVALUATED											
		AS SUBMITTED	0.60%	1.00	ls	404,000.00	73,143.72	-	477,143.72	0.00%	-	23,857.19	501,000.91
	TOTAL OF PART A	AS EVALUATED											
		AS SUBMITTED	1.66%			1,154,000.00	129,427.02	30,732.33	1,314,159.35		97,403.13	70,578.12	1,482,140.60
PART B	Other General Requirements												
B.4(1)	Construction Survey and Staking	AS EVALUATED											
		AS SUBMITTED	0.05%	0.92	km	12,180.00	26,444.15	2,700.00	41,324.15	20.00%	8,264.83	2,479.45	52,068.43
B.5	Project Billboard	AS EVALUATED											
		AS SUBMITTED	0.01%	4.00	unit	6,930.00	1,153.93	-	8,083.93	20.00%	1,616.79	485.04	10,185.75
B.7	Occupational Safety & Health Program	AS EVALUATED											
		AS SUBMITTED	0.31%	1.00	ls	12,360.00	235,557.66	-	247,917.66	8.00%	19,833.41	13,387.55	281,138.63
B.9	Mobilization & Demobilization	AS EVALUATED											
		AS SUBMITTED	0.60%	1.00	ls	-	-	476,602.00	476,602.00	0.00%	-	23,830.10	500,432.10
	TOTAL OF PART B	AS EVALUATED											
		AS SUBMITTED	0.98%			31,470.00	263,155.73	479,302.00	773,927.73		29,715.03	40,182.14	843,824.90
PART C	Earthworks												
1702(1)	Structure Excavation	AS EVALUATED											
		AS SUBMITTED	0.89%	4,400.00	cu.m	-	47,612.40	655,301.24	702,913.64	20.00%	140,582.73	42,174.82	885,671.19
104(1a)	Embankment from Roadway Excavation	AS EVALUATED											
		AS SUBMITTED	0.44%	1,503.00	cu.m	-	9,421.18	337,623.70	347,044.88	20.00%	69,408.98	20,822.69	437,276.55
104(2a)	Embankment from Borrow	AS EVALUATED											
		AS SUBMITTED	1.56%	1,909.00	cu.m	1,053,290.75	6,538.85	176,830.67	1,236,660.27	20.00%	247,332.05	74,199.62	1,558,191.94
	TOTAL OF PART C	AS EVALUATED											
		AS SUBMITTED	2.88%			1,053,290.75	63,572.43	1,169,755.61	2,286,618.79		457,323.76	137,197.13	2,881,139.68
PART D	Subbase and Base Course												
200(1)	Aggregate Subbase Course	AS EVALUATED											
		AS SUBMITTED	1.48%	850.00	cu.m	1,091,320.10	2,911.48	78,735.50	1,172,967.08	20.00%	234,593.42	70,378.03	1,477,938.53
	TOTAL OF PART D	AS EVALUATED											
		AS SUBMITTED	1.48%			1,091,320.10	2,911.48	78,735.50	1,172,967.08		234,593.42	70,378.03	1,477,938.53
PART F	Bridge Construction												
1716(6)	Structural Steel Sheet Piles, Furnished	AS EVALUATED											
		AS SUBMITTED	34.09%	9,240.00	m	26,611,200.00	37,021.76	405,026.18	27,053,247.94	20.00%	5,410,649.59	1,623,194.88	34,087,092.40

1716(12)	Structural Steel Sheet Piles, Driven	AS EVALUATED											
		AS SUBMITTED	16.85%	9,240.00	m	2,984,683.36	650,072.12	9,735,928.47	13,370,683.95	20.00%	2,674,136.79	802,241.04	16,847,061.78
1716 (16)	Steel Sheets Test Piles, Furnished and Driven	AS EVALUATED											
		AS SUBMITTED	0.10%	12.00	ln.m	64,399.20	3,517.71	14,336.05	82,252.95	20.00%	16,450.59	4,935.18	103,638.72
	TOTAL OF PART F	AS EVALUATED											
		AS SUBMITTED	51.04%			29,660,282.56	690,611.58	10,155,290.69	40,506,184.84		8,101,236.97	2,430,371.09	51,037,792.90
PART G	Drainage and Slope Protection Structures												
404(1)a	Reinforcing Steel (Grade 40)	AS EVALUATED											
		AS SUBMITTED	2.39%	34,986.00	kg	1,700,844.39	108,732.36	90,827.54	1,900,404.29	20.00%	380,080.86	114,024.26	2,394,509.41
404(1)b	Reinforcing Steel (Grade 60)	AS EVALUATED											
		AS SUBMITTED	1.19%	16,790.00	kg	851,504.85	52,181.34	43,588.71	947,274.89	20.00%	189,454.98	56,836.49	1,193,566.37
405(1)a3	Structural Concrete, Class A	AS EVALUATED											
		AS SUBMITTED	12.71%	1,478.00	cu.m	8,139,257.33	1,343,207.72	603,727.17	10,086,192.23	20.00%	2,017,238.45	605,171.53	12,708,602.20
500(1)b3	Pipe Culvert & Storm Drain	AS EVALUATED											
		AS SUBMITTED	0.05%	13.00	ln.m	29,574.90	4,924.32	6,750.63	41,249.85	20.00%	8,249.97	2,474.99	51,974.81
505(2)a	Grouted Riprap, Class "A"	AS EVALUATED											
		AS SUBMITTED	6.36%	1,446.00	cu.m	4,073,008.41	576,902.31	398,367.83	5,048,278.55	20.00%	1,009,655.71	302,896.71	6,360,830.97
715(2)	Separation Geotextile	AS EVALUATED											
		AS SUBMITTED	0.35%	1,578.00	sq.m	265,104.00	4,413.81	9,562.68	279,080.49	20.00%	55,816.10	16,744.83	351,641.42
508	Handlaid Rock Embankment	AS EVALUATED											
		AS SUBMITTED	18.90%	7,684.00	cu.m	13,671,080.81	1,209,669.07	120,966.91	15,001,716.78	20.00%	3,000,343.36	900,103.01	18,902,163.15
	TOTAL OF PART G	AS EVALUATED											
		AS SUBMITTED	41.97%			28,730,374.69	3,300,030.92	1,273,791.47	33,304,197.08		6,660,839.42	1,998,251.82	41,963,288.32
	GRAND TOTAL	AS EVALUATED											
		AS SUBMITTED	100.00%			61,720,738.10	4,449,709.18	13,187,607.60	79,358,054.88		15,581,111.71	4,746,958.33	99,686,124.92



REGION IX

Construction/Rehabilitation of Flood Mitigation Facilities within Major River Basins and Principal Rivers, Construction of Flood Control Structure along Left Bank of Disacan River (Upstream and Downstream) Package 2

Zamboanga del Norte

SUMMARY OF APPROVED BUDGET FOR THE CONTRACT

FORM POW-2015-02-00

FORM POW-2019-02-00

DESCRIPTION OF WORKS TO BE DONE			ESTIMATED DIRECT COST	TOTAL MARK-UP		VAT	TOTAL INDIRECT COST	TOTAL COST
				%	TOTAL DIRECT COST			
PART A	Facilities for the Engineers	AS EVALUATED						
		AS SUBMITTED	1,314,159.35		97,403.13	70,578.12	167,981.25	1,482,140.60
PART B	Other General Requirements	AS EVALUATED						
		AS SUBMITTED	773,927.73		29,715.03	40,182.14	69,897.17	843,824.90
PART C	Earthworks	AS EVALUATED						
		AS SUBMITTED	2,286,618.79		457,323.76	137,197.13	594,520.89	2,881,139.68
PART D	Subbase and Base Course	AS EVALUATED						
		AS SUBMITTED	1,172,967.08		234,593.42	70,378.03	304,971.44	1,477,938.53
PART F	Bridge Construction	AS EVALUATED						
		AS SUBMITTED	40,506,184.84		8,101,236.97	2,430,371.09	10,531,608.06	51,037,792.90
PART G	Drainage and Slope Protection Structures	AS EVALUATED						
		AS SUBMITTED	33,304,197.08		6,660,839.42	1,998,251.82	8,659,091.24	41,963,288.32
TOTAL		AS EVALUATED						
		AS SUBMITTED	79,358,054.88		15,581,111.71	4,746,958.33	20,328,070.04	99,686,124.92

Preparation and Submission:

Prepared by:

JERALD R. BARRERA

Engineer II
DPWH RO9

Checked/Submitted by:

ISIDRA A. ESTANISLAO

Engineer IV
DPWH RO9

Evaluation:

Reviewed by:

SATURNINO C. TORREFRANCA

District Engineer
DPWH RO9

Approval:

Recommending Approval

KHADAFY D. TANGGOL

OIC-Assistant Regional Director
DPWH RO9

Approved:

CAYAMOMBAO D. DIA

Regional Director
DPWH RO9



SECTION IX

Construction/Rehabilitation of Flood Mitigation Facilities within Major River Basins and Principal Rivers, Construction of Flood Control Structure along Left Bank of Disacan River (Upstream and Downstream) Package 2
Zamboanga del Norte

FORM POW-2015-02A-00

ITEM NO.	DESCRIPTION		QTY	UNIT	ESTIMATED DIRECT COST	TOTAL MARK-UP		VAT	TOTAL INDIRECT COST	TOTAL COST	UNIT COST
						%	VALUE				
PART A	Facilities for the Engineers										
A.1.1 (3)	Const. of Field Office for the Engineer	AS EVALUATED									
		AS SUBMITTED	1.00	ls	487,015.63	20.00%	97,403.13	29,220.94	126,624.06	613,639.69	613,639.69
A.1.1 (11)	Prov. Of Furniture, Equipment, & Appliance for Field Engineer	AS EVALUATED									
		AS SUBMITTED	1.00	ls	350,000.00	0.00%	-	17,500.00	17,500.00	367,500.00	367,500.00
A.1.2 (5)	Operation & Maintenance of Gov't. Service Vehicles	AS EVALUATED									
		AS SUBMITTED	1.00	ls	477,143.72	0.00%	-	23,857.19	23,857.19	501,000.91	501,000.91
	TOTAL OF PART A	AS EVALUATED									
		AS SUBMITTED			1,314,159.35		97,403.13	70,578.12	167,981.25	1,482,140.60	
PART B	Other General Requirements										
B.4(1)	Construction Survey and Staking	AS EVALUATED									
		AS SUBMITTED	0.92	km	41,324.15	20.00%	8,264.83	2,479.45	10,744.28	52,068.43	56,850.71
B.5	Project Billboard	AS EVALUATED									
		AS SUBMITTED	4.00	unit	8,083.93	20.00%	1,616.79	485.04	2,101.82	10,185.75	2,546.44
B.7	Occupational Safety & Health Program	AS EVALUATED									
		AS SUBMITTED	1.00	ls	247,917.66	8.00%	19,833.41	13,387.55	33,220.97	281,138.63	281,138.63
B.9	Mobilization & Demobilization	AS EVALUATED									
		AS SUBMITTED	1.00	ls	476,602.00	0.00%	-	23,830.10	23,830.10	500,432.10	500,432.10
	TOTAL OF PART B	AS EVALUATED			-						
		AS SUBMITTED			773,927.73		29,715.03	40,182.14	69,897.17	843,824.90	
PART C	Earthworks										
1702(1)	Structure Excavation	AS EVALUATED									
		AS SUBMITTED	4,400.00	cu.m	702,913.64	20.00%	140,582.73	42,174.82	182,757.55	885,671.19	201.29
104(1a)	Embankment from Roadway Excavation	AS EVALUATED									
		AS SUBMITTED	1,503.00	cu.m	347,044.88	20.00%	69,408.98	20,822.69	90,231.67	437,276.55	290.94
104(2a)	Embankment from Borrow	AS EVALUATED									
		AS SUBMITTED	1,909.00	cu.m	1,236,660.27	20.00%	247,332.05	74,199.62	321,531.67	1,558,191.94	816.23
	TOTAL OF PART C	AS EVALUATED			-						
		AS SUBMITTED			2,286,618.79		457,323.76	137,197.13	594,520.89	2,881,139.68	
PART D	Subbase and Base Course										
200(1)	Aggregate Subbase Course	AS EVALUATED									
		AS SUBMITTED	850.00	cu.m	1,172,967.08	20.00%	234,593.42	70,378.03	304,971.44	1,477,938.53	1,738.75
	TOTAL OF PART D	AS EVALUATED			-						
		AS SUBMITTED			1,172,967.08		234,593.42	70,378.03	304,971.44	1,477,938.53	
PART F	Bridge Construction										
1716(5)	Structural Steel Sheet Piles, Furnished	AS EVALUATED									
		AS SUBMITTED	9,240.00	m	27,053,247.94	20.00%	5,410,649.59	1,623,194.88	7,033,844.46	34,087,092.40	3,689.08

1716(12)	Structural Steel Sheet Piles, Driven	AS EVALUATED									
		AS SUBMITTED	9,240.00	m	13,370,683.95	20.00%	2,674,136.79	802,241.04	3,476,377.83	16,847,061.78	1,823.28
1716 (16)	Steel Sheets Test Piles, Furnished and Driven	AS EVALUATED									
		AS SUBMITTED	12.00	ln.m	82,252.95	20.00%	16,450.59	4,935.18	21,385.77	103,638.72	8,636.56
	TOTAL OF PART F	AS EVALUATED			-						
		AS SUBMITTED			40,506,184.84		8,101,236.97	2,430,371.09	10,531,608.06	51,037,792.90	
PART G	Drainage and Slope Protection Structures										
404(1)a	Reinforcing Steel (Grade 40)	AS EVALUATED									
		AS SUBMITTED	34,986.00	kg	1,900,404.29	20.00%	380,080.86	114,024.26	494,105.12	2,394,509.41	68.44
404(1)b	Reinforcing Steel (Grade 60)	AS EVALUATED									
		AS SUBMITTED	16,790.00	kg	947,274.89	20.00%	189,454.98	56,836.49	246,291.47	1,193,566.37	71.09
405(1)a3	Structural Concrete, Class A	AS EVALUATED									
		AS SUBMITTED	1,478.00	cu.m	10,086,192.23	20.00%	2,017,238.45	605,171.53	2,622,409.98	12,708,602.20	8,598.51
500(1)b3	Pipe Culvert & Storm Drain	AS EVALUATED									
		AS SUBMITTED	13.00	ln.m	41,249.85	20.00%	8,249.97	2,474.99	10,724.96	51,974.81	3,998.06
505(2)a	Grouted Riprap, Class "A"	AS EVALUATED									
		AS SUBMITTED	1,446.00	cu.m	5,048,278.55	20.00%	1,009,655.71	302,896.71	1,312,552.42	6,360,830.97	4,398.91
715(2)	Separation Geotextile	AS EVALUATED									
		AS SUBMITTED	1,578.00	sq.m	279,080.49	20.00%	55,816.10	16,744.83	72,560.93	351,641.42	222.84
508	Handlaid Rock Embankment	AS EVALUATED									
		AS SUBMITTED	7,684.00	cu.m	15,001,716.78	20.00%	3,000,343.36	900,103.01	3,900,446.36	18,902,163.15	2,459.94
	TOTAL OF PART G	AS EVALUATED			-						
		AS SUBMITTED			33,304,197.08		6,660,839.42	1,998,251.82	8,659,091.24	41,963,288.32	
	GRAND TOTAL	AS EVALUATED			-						
		AS SUBMITTED			79,358,054.88		15,581,111.71	4,746,958.33	20,328,070.04	99,686,124.92	

99,686,124.92

Preparation and Submission:

Prepared by:


JERALD R. BARRERA

Engineer II
DPWH RO9

Checked/Submitted by:


ISIDRA A. ESTANISLAO

Engineer IV
DPWH RO9

Evaluation:

Reviewed by:


SATURNINO C. TORRE-FRANCA

District Engineer
DPWH RO9

Zamboanga del Norte

FORM-POW-2015-01D-00

Item No./Description : Const. of Field Office for the Engineer

Unit of Measurement : 1.00 ls
 Output per hour-As Submitted : 1.00
 Output per hour-As Evaluated :

Designation	No. of Person/s	No. of Hour/s	Hourly Rate	Amount (Php.)
Labor				
A.1				
a. Construction Foreman	1	80	80.95	6,476.10
b. Masons	3	80	58.61	14,066.10
c. Carpenters	3	80	58.61	14,066.10
d. Laborers	6	80	45.16	21,675.00
Sub-Total for A-1 As Submitted				56,283.30
Labor				
A.2				
Sub-Total for A-2 As Evaluated				
Name and Capacity	No. of Units	No. of Hour/s	Hourly Rate	Amount (Php.)
B.1				
Equipment				
a. One Bagger Mixer	1	32	172.00	5,504.00
b. Water Truck	1	8	2,450.00	19,600.00
Minor Tools (10% of Labor Cost)				5,628.33
Sub-Total for B-1 As Submitted				30,732.33
Equipment				
B.2				
Sub-Total for B-2 As Evaluated				
C.1				
Total (A.1+B.1) - As Submitted				56,283.30
C.2				
Total (A.2+B.2) - As Evaluated				-
D.1				
Output per Hour - As Submitted				1.00
D.2				
Output per Hour - As Evaluated				-
E.1				
Direct Unit Cost (C.1 +D.1) - As Submitted				56,283.30
E.2				
Direct Unit Cost (C.2 +D.2) - As Evaluated				-
Name and Specification	Unit	Quantity	Unit Cost	Amount (Php.)
F.1				
Materials				
a. Materials	lumpsum	1	400,000.00	400,000.00
Sub-Total for F-1 As Submitted				400,000.00
Equipment				
F.2				
Sub-Total for F-2 As Evaluated				
G.1				
Direct Unit Cost (E.1+F.1) - As Submitted				456,283.30
G.2				
Direct Unit Cost (E.2+F.2) - As Evaluated				-
H.1				
Overhead, Contingencies & Miscellaneous (OCM) - As Submitted			12%/9%/7%/6% of G.1	54,754.00
H.2				
Overhead, Contingencies & Miscellaneous (OCM) - As Evaluated			12%/9%/7%/6% of G.1	-
I.1				
Contractor's Profit - As Submitted			10%/8% of G.1	36,502.66
I.2				
Contractor's Profit - As Evaluated			10%/8% of G.1	-
J.1				
Value Added Tax - As Submitted			5% of (G.1+H1+I1)	27,377.00
J.2				
Value Added Tax - As Evaluated			5% of (G.2+H2+I2)	-
K.1				
Total Unit Cost - As Submitted			(G.1+H1+I1+J1)	574,916.96
K.2				
Total Unit Cost - As Evaluated			(G.2+H2+I2+J1)	-

Prepared by:

Checked/Reviewed


 JERALD R. BARRERA

Engineer II


 ISIDRA A. ESTANISLAO

Engineer IV

Zamboanga del Norte

FORM-POW-2015-01D-00

Item No./Description : Operation & Maintenance of Gov't. Service Vehicles

Unit of Measurement : 1.00 ls

Output per hour-As Submitted : 1.00

Output per hour-As Evaluated :

Designation	No. of Person/s	No. of Hour/s	Hourly Rate	Amount (Php.)
A.1				
Labor				
a. Service Driver	1	1248	58.61	73,143.72
Sub-Total for A-1 As Submitted				73,143.72
Labor				
A.2				
Sub-Total for A-2 As Evaluated				-
B.1				
Equipment	No. of Units	No. of Hour/s	Hourly Rate	Amount (Php.)
Sub-Total for B-1 As Submitted				-
B.2				
Equipment				
Sub-Total for B-2 As Evaluated				-
C.1				
Total (A.1+B.1) - As Submitted				73,143.72
C.2				
Total (A.2+B.2) - As Evaluated				-
D.1				
Output per Hour - As Submitted				1.00
D.2				
Output per Hour - As Evaluated				-
E.1				
Direct Unit Cost (C.1 + D.1) - As Submitted				73,143.72
E.2				
Direct Unit Cost (C.2 + D.2) - As Evaluated				-
F.1				
Materials	Unit	Quantity	Unit Cost	Amount (Php.)
a. Diesel Fuel	ltrs	4,680.00	50.00	234,000.00
b. Engine Oil & Lubricants	ls	1.00	30,000.00	30,000.00
c. Tires	pcs	4.00	10,000.00	40,000.00
d. Spareparts etc.	ls	1.00	100,000.00	100,000.00
Sub-Total for F-1 As Submitted				404,000.00
Equipment				
Sub-Total for F-1 As Submitted				404,000.00
F.2				
Sub-Total for F-2 As Evaluated				-
G.1				
Direct Unit Cost (E.1+F.1) - As Submitted				477,143.72
G.2				
Direct Unit Cost (E.2+F.2) - As Evaluated				-
H.1				
Overhead, Contingencies & Miscellaneous (OCM) - As Submitted			12%/9%/7%/6% of G.1	-
H.2				
Overhead, Contingencies & Miscellaneous (OCM) - As Evaluated			12%/9%/7%/6% of G.1	-
I.1				
Contractor's Profit - As Submitted			10%/8% of G.1	-
I.2				
Contractor's Profit - As Evaluated			10%/8% of G.1	-
J.1				
Value Added Tax - As Submitted			5% of (G.1+H1+I1)	23,857.19
J.2				
Value Added Tax - As Evaluated			5% of (G.2+H2+I2)	-
K.1				
Total Unit Cost - As Submitted			(G.1+H1+I1+J1)	501,000.91
K.2				
Total Unit Cost - As Evaluated			(G.2+H2+I2+J2)	-

Prepared by:

Checked/Reviewed


JERALD R. BARNERA

Engineer II


ISIDRA A. ESTANISLAO

Engineer IV

Zamboanga del Norte

DETAILED UNIT PRICE ANALYSIS

FORM-POW-2015-01D-00

Item No./Description : Construction Survey and Staking

Unit of Measurement : 0.92 km

Output per hour-As Submitted : 1.00

Output per hour-As Evaluated :

Designation	No. of Person/s	No. of Hour/s	Hourly Rate	Amount (Php.)
Labor				
<i>(For Field Works)</i>				
a. Geodetic Engineer	1	27	80.95	2,185.68
b. Skilled Laborer	3	27	58.61	4,747.31
c. Laborer	3	27	45.16	3,657.66
<i>(For Office Works)</i>				
a. Geodetic Engineer	1	80	80.95	6,476.10
b. Skilled Laborer	2	80	58.61	9,377.40
Sub-Total for A-1 As Submitted				26,444.15
Labor				
A.2				
Sub-Total for A-2 As Evaluated				
Name and Capacity	No. of Units	No. of Hour/s	Hourly Rate	Amount (Php.)
Equipment				
a. Total Station with complete accessories	1	27	100.00	2,700.00
Sub-Total for B-1 As Submitted				2,700.00
Equipment				
B.2				
Sub-Total for B-2 As Evaluated				
C.1				
Total (A.1+B.1) - As Submitted				29,144.15
C.2				
Total (A.2+B.2) - As Evaluated				-
D.1				
Output per Hour - As Submitted				1.00
D.2				
Output per Hour - As Evaluated				-
E.1				
Direct Unit Cost (C.1 + D.1) - As Submitted				29,144.15
E.2				
Direct Unit Cost (C.2 + D.2) - As Evaluated				-
Name and Specification	Unit	Quantity	Unit Cost	Amount (Php.)
Materials				
a. Standard Stake Plan	pcs	35	200.00	7,000.00
b. Blue Printing	pcs	115	40.00	4,600.00
Miscellaneous (5% of Materials)				580.00
Sub-Total for F-1 As Submitted				12,180.00
Materials				
F.2				
Sub-Total for F-2 As Evaluated				-
G.1				
Direct Unit Cost (E.1+F.1) - As Submitted				41,324.15
G.2				
Direct Unit Cost (E.2+F.2) - As Evaluated				-
H.1				
Overhead, Contingencies & Miscellaneous (OCM) - As Submitted			12%/9%/7%/6% of G.1	4,958.90
H.2				
Overhead, Contingencies & Miscellaneous (OCM) - As Evaluated			12%/9%/7%/6% of G.1	-
I.1				
Contractor's Profit - As Submitted			10%/8% of G.1	3,305.93
I.2				
Contractor's Profit - As Evaluated			10%/8% of G.1	-
J.1				
Value Added Tax - As Submitted			5% of (G.1+H1+I1)	2,479.45
J.2				
Value Added Tax - As Evaluated			5% of (G.2+H2+I2)	-
K.1				
Total Unit Cost - As Submitted			(G.1+H1+I1+J1)	52,068.43
K.2				
Total Unit Cost - As Evaluated			(G.2+H2+I2+J1)	-

Prepared by:

Checked/Reviewed

JEBALD R. BARRERA

Engineer II

ISIDRA A. ESTANISLAO

Engineer IV

FORM-POW-2015-01D-00

Unit of Measurement	:	4.00	unit
Output per hour-As Submitted	:	1.00	
Output per hour-As Evaluated	:	-	

	Designation	No. of Person/s	No. of Hour/s	Hourly Rate	Amount (Php.)
	Labor				
	a. Construction Foreman	1	1	80.95	80.95
A.1	b. Skilled Laborer	2	1	58.61	117.22
	c. Laborer	2	1	45.16	90.31
	Sub-Total for A-1 As Submitted				288.48
	Labor				
A.2					
	Sub-Total for A-2 As Evaluated				
	Name and Capacity	No. of Units	No. of Hour/s	Hourly Rate	Amount (Php.)
B.1	Equipment				
	Sub-Total for B-1 As Submitted				-
	Equipment				
B.2					
	Sub-Total for B-2 As Evaluated				
C.1	Total (A.1+B.1) - As Submitted				288.48
C.2	Total (A.2+B.2) - As Evaluated				-
D.1	Output per Hour - As Submitted				1.00
D.2	Output per Hour - As Evaluated				-
E.1	Direct Unit Cost (C.1 +D.1) - As Submitted				288.48
E.2	Direct Unit Cost (C.2 +D.2) - As Evaluated				-
	Name and Specification	Unit	Quantity	Unit Cost	Amount (Php.)
	Materials				
F.1	a. Marine Plywood, 3/6" thk x 4' x 8'	pcs	1.00	850.00	850.00
	b. Tarpauling (4" x 8")	pcs	1.00	800.00	800.00
	c. Assorted Lumber Sizes	bd.ft	50.00	18.00	900.00
	d. Assorted Sizes CMW Nails	kg	1.00	55.00	55.00
	Sub-Total for F-1 As Submitted				2,550.00
	Materials				
F.2					
	Sub-Total for F-2 As Evaluated				-
G.1	Direct Unit Cost (E.1+F.1) - As Submitted				2,838.48
G.2	Direct Unit Cost (E.2+F.2) - As Evaluated				-
H.1	Overhead, Contingencies & Miscellaneous (OCM) - As Submitted			12%/9%/7%/6% of G.1	340.62
H.2	Overhead, Contingencies & Miscellaneous (OCM) - As Evaluated			12%/9%/7%/6% of G.1	-
I.1	Contractor's Profit - As Submitted			10%/8% of G.1	227.08
I.2	Contractor's Profit - As Evaluated			10%/8% of G.1	-
J.1	Value Added Tax - As Submitted			5% of (G.1+H1+I1)	170.31
J.2	Value Added Tax - As Evaluated			5% of (G.2+H2+I2)	-
K.1	Total Unit Cost - As Submitted			(G.1+H1+I1+J1)	3,576.49
K.2	Total Unit Cost - As Evaluated			(G.2+H2+I2+J1)	-

ISIDRA A. ESTANISLAO
Engineer IV

DETAILED UNIT PRICE ANALYSIS

FORM-POW-2015-01D-00

Item No./Description : Mobilization & Demobilization

Unit of Measurement : 1.00 ls
 Output per hour-As Submitted : 1.00
 Output per hour-As Evaluated : -

Designation	No. of Person/s	No. of Hour/s	Hourly Rate	Amount (P/tp.)
A.1				
Labor				
				-
				-
				-
				-
				-
Sub-Total for A-1 As Submitted				-
Labor				
A.2				
Sub-Total for A-2 As Evaluated				
B.1				
Equipment				
a. Low Bed Trailer	2	56	4,255.38	476,602.00
Sub-Total for B-1 As Submitted				476,602.00
Equipment				
B.2				
Sub-Total for B-2 As Evaluated				
C.1				
Total (A.1+B.1) - As Submitted				476,602.00
C.2				
Total (A.2+B.2) - As Evaluated				-
D.1				
Output per Hour - As Submitted				1.00
D.2				
Output per Hour - As Evaluated				-
E.1				
Direct Unit Cost (C.1 +D.1) - As Submitted				476,602.00
E.2				
Direct Unit Cost (C.2 +D.2) - As Evaluated				-
F.1				
Materials				
				-
				-
				-
				-
Sub-Total for F-1 As Submitted				-
Materials				
F.2				
Sub-Total for F-2 As Evaluated				-
G.1				
Direct Unit Cost (E.1+F.1) - As Submitted				476,602.00
G.2				
Direct Unit Cost (E.2+F.2) - As Evaluated				-
H.1				
Overhead, Contingencies & Miscellaneous (OCM) - As Submitted			12%/9%/7%/6% of G.1	-
H.2				
Overhead, Contingencies & Miscellaneous (OCM) - As Evaluated			12%/9%/7%/6% of G.1	-
I.1				
Contractor's Profit - As Submitted			10%/8% of G.1	-
I.2				
Contractor's Profit - As Evaluated			10%/8% of G.1	-
J.1				
Value Added Tax - As Submitted			5% of (G.1+H1+I1)	23,830.10
J.2				
Value Added Tax - As Evaluated			5% of (G.2+H2+I2)	-
K.1				
Total Unit Cost - As Submitted			(G.1+H1+I1+J1)	500,432.10
K.2				
Total Unit Cost - As Evaluated			(G.2+H2+I2+J1)	-

Prepared by:

Checked/Reviewed


JERALD R. BARRERA
 Engineer II


ISIDRA A. ESTANISLAO
 Engineer IV

Zamboanga del Norte
DETAILED UNIT PRICE ANALYSIS

FORM-POW-2015-01D-00

Item No./Description : Structure Excavation

Unit of Measurement : 4,400.00 cu.m
 Output per hour-As Submitted : 20.00
 Output per hour-As Evaluated : -

Designation	No. of Person/s	No. of Hour/s	Hourly Rate	Amount (P/p.p.)
Labor				
a. Construction Foreman	1	1.00	80.95	80.95
A.1 b. Laborer	3	1.00	45.16	135.47
Sub-Total for A-1 As Submitted				216.42
Labor				
A.2				
Sub-Total for A-2 As Evaluated				-
Name and Capacity	No. of Units	No. of Hour/s	Hourly Rate	Amount (P/p.p.)
Equipment				
B.1 a. Dumptruck	1	1.00	1,420.00	1,420.00
b. Backhoe	1	1.00	1,537.00	1,537.00
c. Minor Tools (10% of Labor)				21.64
Sub-Total for B-1 As Submitted				2,978.64
Equipment				
B.2				
Sub-Total for B-2 As Evaluated				
C.1 Total (A.1+B.1) - As Submitted				3,195.06
C.2 Total (A.2+B.2) - As Evaluated				-
D.1 Output per Hour - As Submitted				20.00
D.2 Output per Hour - As Evaluated				-
E.1 Direct Unit Cost (C.1 + D.1) - As Submitted				159.75
E.2 Direct Unit Cost (C.2 + D.2) - As Evaluated				-
Name and Specification	Unit	Quantity	Unit Cost	Amount (P/p.p.)
Materials				
F.1				
				-
				-
				-
Sub-Total for F-1 As Submitted				-
Materials				
F.2				
Sub-Total for F-2 As Evaluated				-
G.1 Direct Unit Cost (E.1+F.1) - As Submitted				159.75
G.2 Direct Unit Cost (E.2+F.2) - As Evaluated				-
H.1 Overhead, Contingencies & Miscellaneous (OCM) - As Submitted			12%/9%/7%/6% of G.1	19.17
H.2 Overhead, Contingencies & Miscellaneous (OCM) - As Evaluated			12%/9%/7%/6% of G.1	-
I.1 Contractor's Profit - As Submitted			10%/8% of G.1	12.78
I.2 Contractor's Profit - As Evaluated			10%/8% of G.1	-
J.1 Value Added Tax - As Submitted			5% of (G.1+H1+I1)	9.59
J.2 Value Added Tax - As Evaluated			5% of (G.2+H2+I2)	-
K.1 Total Unit Cost - As Submitted			(G.1+H1+I1+J1)	201.29
K.2 Total Unit Cost - As Evaluated			(G.2+H2+I2+J1)	-

Prepared by:

JERARD R. BARRERA

Engineer II

Checked/Reviewed

ISIDRA A. ESTANISLAO

Engineer IV

Zamboanga del Norte
DETAILED UNIT PRICE ANALYSIS

FORM-POW-2015-01D-00

Item No./Description : Embankment from Roadway Excavation

Unit of Measurement : 1,503.00 cu.m

Output per hour-As Submitted : 50.00

Output per hour-As Evaluated : -

Designation	No. of Person/s	No. of Hour/s	Hourly Rate	Amount (Php.)
Labor				
<i>For Excavation Work</i>				
a. Construction Foreman	1	0.83	80.95	67.19
b. Laborer	2	0.83	45.16	74.96
A.1				
<i>Spreading and Compaction</i>				
a. Construction Foreman	1	1.00	80.95	80.95
b. Laborer	2	1.00	45.16	90.31
Sub-Total for A-1 As Submitted				313.41
Labor				
				-
A.2				
Sub-Total for A-2 As Evaluated				-
Equipment				
<i>For Excavation Work</i>				
a. Bulldozer	1	0.83	3,379.00	2,804.57
b. Payloader	1	0.83	1,733.00	1,438.39
c. Dumptruck	2	0.83	1,420.00	2,357.20
<i>Spreading and Compaction</i>				
a. Motorized Road Grader	1	1.00	2,173.00	2,173.00
b. Vibratory Roller	1	1.00	1,846.00	1,846.00
c. Water Truck/Pump	1	0.25	2,450.00	612.50
Sub-Total for B-1 As Submitted				11,231.66
Equipment				
B.2				
Sub-Total for B-2 As Evaluated				
C.1				
Total (A.1+B.1) - As Submitted				11,545.07
C.2				
Total (A.2+B.2) - As Evaluated				-
D.1				
Output per Hour - As Submitted				50.00
D.2				
Output per Hour - As Evaluated				-
E.1				
Direct Unit Cost (C.1 ÷ D.1) - As Submitted				230.90
E.2				
Direct Unit Cost (C.2 ÷ D.2) - As Evaluated				-
Name and Specification	Unit	Quantity	Unit Cost	Amount (Php.)
F.1				
Materials				
				-
Sub-Total for F-1 As Submitted				-
Materials				
F.2				
Sub-Total for F-2 As Evaluated				-
G.1				
Direct Unit Cost (E.1+F.1) - As Submitted				230.90
G.2				
Direct Unit Cost (E.2+F.2) - As Evaluated				-
H.1				
Overhead, Contingencies & Miscellaneous (OCM) - As Submitted			12%/9%/7%/6% of G.1	27.71
H.2				
Overhead, Contingencies & Miscellaneous (OCM) - As Evaluated			12%/9%/7%/6% of G.1	-
I.1				
Contractor's Profit - As Submitted			10%/8% of G.1	18.47
I.2				
Contractor's Profit - As Evaluated			10%/8% of G.1	-
J.1				
Value Added Tax - As Submitted			5% of (G.1+H1+I1)	13.85
J.2				
Value Added Tax - As Evaluated			5% of (G.2+H2+I2)	-
K.1				
Total Unit Cost - As Submitted			(G.1+H1+I1+J1)	290.94
K.2				
Total Unit Cost - As Evaluated			(G.2+H2+I2+J1)	-

Prepared by:

JERALD R. BARRERA

Engineer II

Checked/Reviewed

ISIDRA A. ESTANISLAO

Engineer IV

Zamboanga del Norte
DETAILED UNIT PRICE ANALYSIS

FORM-POW-2015-01D-00

Item No./Description : Embankment from Borrow

Unit of Measurement : 1,909.00 cu.m
 Output per hour-As Submitted : 50.00
 Output per hour-As Evaluated :

Designation	No. of Person/s	No. of Hour/s	Hourly Rate	Amount (Php.)
Labor				
a. Construction Foreman	1	1.00	80.95	80.95
b. Laborer	2	1.00	45.16	90.31
A.1				
				-
				-
				-
Sub-Total for A-1 As Submitted				171.26
Labor				
				-
A.2				
Sub-Total for A-2 As Evaluated				-
Equipment				
a. Motorized Road Grader	1	1.00	2,173.00	2,173.00
b. Vibratory Roller	1	1.00	1,846.00	1,846.00
c. Water Truck/Pump	1	0.25	2,450.00	612.50
B.1				
				-
				-
Sub-Total for B-1 As Submitted				4,631.50
Equipment				
B.2				
Sub-Total for B-2 As Evaluated				
C.1				
Total (A.1+B.1) - As Submitted				4,802.76
C.2				
Total (A.2+B.2) - As Evaluated				-
D.1				
Output per Hour - As Submitted				50.00
D.2				
Output per Hour - As Evaluated				-
E.1				
Direct Unit Cost (C.1 +D.1) - As Submitted				96.06
E.2				
Direct Unit Cost (C.2 +D.2) - As Evaluated				-
Name and Specification	Unit	Quantity	Unit Cost	Amount (Php.)
F.1				
Materials				
a. Common Borrow	cu.m	1.25	441.40	551.75
Sub-Total for F-1 As Submitted				551.75
Materials				
F.2				
Sub-Total for F-2 As Evaluated				-
G.1				
Direct Unit Cost (E.1+F.1) - As Submitted				647.81
G.2				
Direct Unit Cost (E.2+F.2) - As Evaluated				-
H.1				
Overhead, Contingencies & Miscellaneous (OCM) - As Submitted			12%/9%/7%/6% of G.1	77.74
H.2				
Overhead, Contingencies & Miscellaneous (OCM) - As Evaluated			12%/9%/7%/6% of G.1	-
I.1				
Contractor's Profit - As Submitted			10%/8% of G.1	51.82
I.2				
Contractor's Profit - As Evaluated			10%/8% of G.1	-
J.1				
Value Added Tax - As Submitted			5% of (G.1+H1+I1)	38.87
J.2				
Value Added Tax - As Evaluated			5% of (G.2+H2+I2)	-
K.1				
Total Unit Cost - As Submitted			(G.1+H1+I1+J1)	816.23
K.2				
Total Unit Cost - As Evaluated			(G.2+H2+I2+J1)	-

Prepared by:

JERALD R. BARRERA

Engineer II

Checked/Reviewed

ISIDRA A. ESTANISLAO

Engineer IV

Zamboanga del Norte

DETAILED UNIT PRICE ANALYSIS

FORM-POW-2015-01D-00

Item No./Description : Aggregate Subbase Course

Unit of Measurement : 850.00 cu.m
 Output per hour-As Submitted : 50.00
 Output per hour-As Evaluated : -

Designation	No. of Person/s	No. of Hour/s	Hourly Rate	Amount (Php.)
Labor				
a. Construction Foreman	1	1.00	80.95	80.95
A.1 b. Laborer	2	1.00	45.16	90.31
				-
				-
Sub-Total for A-1 As Submitted				171.26
Labor				
				-
A.2				
Sub-Total for A-2 As Evaluated				-
Equipment	No. of Units	No. of Hour/s	Hourly Rate	Amount (Php.)
a. Motorized Road Grader	1	1.00	2,173.00	2,173.00
b. Vibratory Roller	1	1.00	1,846.00	1,846.00
B.1 c. Water Truck/Pump	1	0.25	2,450.00	612.50
Sub-Total for B-1 As Submitted				4,631.50
Equipment				
B.2				
Sub-Total for B-2 As Evaluated				
C.1 Total (A.1+B.1) - As Submitted				4,802.76
C.2 Total (A.2+B.2) - As Evaluated				-
D.1 Output per Hour - As Submitted				50.00
D.2 Output per Hour - As Evaluated				-
E.1 Direct Unit Cost (C.1 ÷ D.1) - As Submitted				96.06
E.2 Direct Unit Cost (C.2 ÷ D.2) - As Evaluated				-
Name and Specification	Unit	Quantity	Unit Cost	Amount (Php.)
F.1 Materials				
a. Aggregate Subbase Course	cu.m	1.15	1,116.44	1,283.91
Sub-Total for F-1 As Submitted				1,283.91
Materials				
F.2				
Sub-Total for F-2 As Evaluated				-
G.1 Direct Unit Cost (E.1+F.1) - As Submitted				1,379.96
G.2 Direct Unit Cost (E.2+F.2) - As Evaluated				-
H.1 Overhead, Contingencies & Miscellaneous (OCM) - As Submitted			12%/9%/7%/6% of G.1	165.60
H.2 Overhead, Contingencies & Miscellaneous (OCM) - As Evaluated			12%/9%/7%/6% of G.1	-
I.1 Contractor's Profit - As Submitted			10%/8% of G.1	110.40
I.2 Contractor's Profit - As Evaluated			10%/8% of G.1	-
J.1 Value Added Tax - As Submitted			5% of (G.1+H.1+I.1)	82.80
J.2 Value Added Tax - As Evaluated			5% of (G.2+H.2+I.2)	-
K.1 Total Unit Cost - As Submitted			(G.1+H.1+I.1+J.1)	1,736.75
K.2 Total Unit Cost - As Evaluated			(G.2+H.2+I.2+J.2)	-

Prepared by:

Checked/Reviewed

JERALD R. BARBERA

Engineer II

ISIDRA A. ESTANISLAO

Engineer IV

FORM-POW-2015-01D-00

Item No./Description : Structural Steel Sheet Piles, Driven
 Unit of Measurement : 9,240.00 m
 Output per hour-As Submitted : 10.00
 Output per hour-As Evaluated : -

Designation	No. of Person/s	No. of Hour/s	Hourly Rate	Amount (Php.)
Labor				
A.1				
a. Construction Foreman	1	1.00	80.95	80.95
b. Skilled Laborer	6	1.00	58.61	351.65
c. Laborer	6	1.00	45.16	270.94
Sub-Total for A-1 As Submitted				703.54
Labor				
A.2				
Sub-Total for A-2 As Evaluated				-
Name and Capacity	No. of Units	No. of Hour/s	Hourly Rate	Amount (Php.)
Equipment				
a. Truck Mounted Crane	1	1.00	3,127.20	3,127.20
b. Vibro Hammer	1	1.00	4,118.00	4,118.00
c. Generator Set	1	1.00	2,659.44	2,659.44
d. Welding Machine	1	1.00	539.00	539.00
e. Cutting Outfit	1	0.50	45.45	22.73
Minor Tools (10% of Labor Cost)				70.35
Sub-Total for B-1 As Submitted				10,536.72
Equipment				
B.2				
Sub-Total for B-2 As Evaluated				
C.1				
Total (A.1+B.1) - As Submitted				11,240.26
C.2				
Total (A.2+B.2) - As Evaluated				-
D.1				
Output per Hour - As Submitted				10.00
D.2				
Output per Hour - As Evaluated				-
E.1				
Direct Unit Cost (C.1 +D.1) - As Submitted				1,124.03
E.2				
Direct Unit Cost (C.2 +D.2) - As Evaluated				-
Name and Specification	Unit	Quantity	Unit Cost	Amount (Php.)
Materials				
a. Welding Rod	m	1.00	138.00	138.00
b. Oxy/Acetylene	kg	0.05	2,500.00	120.00
c. Coco Logs	set	0.02	436.00	8.28
d. Good Lumber	m	1.00	40.00	40.00
e. Nail/Spike	kg	0.16	65.00	10.40
Miscellaneous (2% of Materials)	kg	0.16	65.00	10.40
Sub-Total for F-1 As Submitted				327.08
Materials				
F.2				
Sub-Total for F-2 As Evaluated				-
G.1				
Direct Unit Cost (E.1+F.1) - As Submitted				1,451.11
G.2				
Direct Unit Cost (E.2+F.2) - As Evaluated				-
H.1				
Overhead, Contingencies & Miscellaneous (OCM) - As Submitted			12%/9%/7%/6% of G.1	174.13
H.2				
Overhead, Contingencies & Miscellaneous (OCM) - As Evaluated			12%/9%/7%/6% of G.1	-
I.1				
Contractor's Profit - As Submitted			10%/8% of G.1	116.09
I.2				
Contractor's Profit - As Evaluated			10%/8% of G.1	-
J.1				
Value Added Tax - As Submitted			5% of (G.1+H1+I1)	87.07
J.2				
Value Added Tax - As Evaluated			5% of (G.2+H2+I2)	-
K.1				
Total Unit Cost - As Submitted			(G.1+H1+I1+J1)	1,828.40
K.2				
Total Unit Cost - As Evaluated			(G.2+H2+I2+J1)	-

Prepared by:


 JERALD R. BARBERA
 Engineer II

Checked/Reviewed


 ISIDRA A. ESTANISLAO
 Engineer IV

DETAILED UNIT PRICE ANALYSIS

FORM-POW-2015-01D-00

Item No./Description : Steel Sheets Test Piles, Furnished and Driven

Unit of Measurement : 12.00 ln.m
Output per hour-As Submitted : 2.40
Output per hour-As Evaluated : -

Designation	No. of Person/s	No. of Hour/s	Hourly Rate	Amount (Php.)
Labor				
A.1				
a. Construction Foreman	1	1.00	80.95	80.95
b. Skilled Laborer	6	1.00	58.61	351.65
c. Laborer	6	1.00	45.16	270.94
Sub-Total for A-1 As Submitted				703.54
Labor				
A.2				
Sub-Total for A-2 As Evaluated				-
Name and Capacity	No. of Units	No. of Hour/s	Hourly Rate	Amount (Php.)
Equipment				
a. Truck Mounted Crane	1	0.58	3,127.20	1,813.78
b. Diesel Hammer	1	0.25	1,286.00	321.50
c. Drop Hammer	1	0.13	5,000.00	650.00
d. Welding Machine	1	0.08	539.00	43.12
e. Cutting Outfit	1	0.08	45.45	3.64
Minor Tools (5% of Labor Cost)				35.18
Sub-Total for B-1 As Submitted				2,867.21
Equipment				
B.2				
Sub-Total for B-2 As Evaluated				
C.1				
Total (A.1+B.1) - As Submitted				3,570.75
C.2				
Total (A.2+B.2) - As Evaluated				-
D.1				
Output per Hour - As Submitted				2.40
D.2				
Output per Hour - As Evaluated				-
E.1				
Direct Unit Cost (C.1 + D.1) - As Submitted				1,487.81
E.2				
Direct Unit Cost (C.2 + D.2) - As Evaluated				-
Name and Specification	Unit	Quantity	Unit Cost	Amount (Php.)
Materials				
a. Steel Sheet Pile	m	1.00	3,850.00	3,850.00
b. Oxy/Acetylene	kg	0.05	2,500.00	125.00
c. Coco Logs	set	1.70	436.00	741.20
d. Good Lumber	m	16.00	40.00	640.00
e. Nail/Spike	kg	0.16	65.00	10.40
Sub-Total for F-1 As Submitted				5,366.60
Materials				
F.2				
Sub-Total for F-2 As Evaluated				-
G.1				
Direct Unit Cost (E.1+F.1) - As Submitted				6,854.41
G.2				
Direct Unit Cost (E.2+F.2) - As Evaluated				-
H.1				
Overhead, Contingencies & Miscellaneous (OCM) - As Submitted			12%/9%/7%/6% of G.1	822.53
H.2				
Overhead, Contingencies & Miscellaneous (OCM) - As Evaluated			12%/9%/7%/6% of G.1	-
I.1				
Contractor's Profit - As Submitted			10%/8% of G.1	548.35
I.2				
Contractor's Profit - As Evaluated			10%/8% of G.1	-
J.1				
Value Added Tax - As Submitted			5% of (G.1+H.1+I.1)	411.26
J.2				
Value Added Tax - As Evaluated			5% of (G.2+H.2+I.2)	-
K.1				
Total Unit Cost - As Submitted			(G.1+H.1+I.1+J.1)	8,636.56
K.2				
Total Unit Cost - As Evaluated			(G.2+H.2+I.2+J.2)	-

Prepared by:

JERALD R. BARRERA

Engineer II

Checked/Reviewed

ISIDRA A. ESTANISLAO

Engineer IV

Reinforcing Steel (Grade 40)	34,986.00	kg
	180.00	

	Designation	No. of Person/s	No. of Hour/s	Hourly Rate	Amount (Php.)
	Labor				
A.1	a. Construction Foreman	1	1.00	80.95	80.95
	b. Skilled Laborer	2	1.00	58.61	117.22
	c. Laborer	8	1.00	45.16	361.25
					-
					-
					-
	Sub-Total for A-1 As Submitted				559.42
	Labor				
A.2					-
					-
	Sub-Total for A-2 As Evaluated				-
	Name and Capacity	No. of Units	No. of Hour/s	Hourly Rate	Amount (Php.)
	Equipment				
B.1	a. Bar Cutter	1	0.50	219.50	109.75
	b. Bar Bender	1	0.50	351.50	175.75
	c. Cargo Truck	1	0.15	1,212.00	181.80
	Sub-Total for B-1 As Submitted				467.30
	Equipment				
B.2					
	Sub-Total for B-2 As Evaluated				
C.1	Total (A.1+B.1) - As Submitted				1,026.72
C.2	Total (A.2+B.2) - As Evaluated				-
D.1	Output per Hour - As Submitted				180.00
D.2	Output per Hour - As Evaluated				-
E.1	Direct Unit Cost (C.1 ÷ D.1) - As Submitted				5.70
E.2	Direct Unit Cost (C.2 ÷ D.2) - As Evaluated				-
	Name and Specification	Unit	Quantity	Unit Cost	Amount (Php.)
	Materials				
	a. Tie Wire	kg	0.02	65.00	1.37
	b. Reinforcing Steel Bar, Grade 40	kg	1.05	45.00	47.25
F.1					
	Sub-Total for F-1 As Submitted				48.62
	Materials				
F.2					
	Sub-Total for F-2 As Evaluated				-
G.1	Direct Unit Cost (E.1+F.1) - As Submitted				54.32
G.2	Direct Unit Cost (E.2+F.2) - As Evaluated				-
H.1	Overhead, Contingencies & Miscellaneous (OCM) - As Submitted			12%/9%/7%/6% of G.1	6.52
H.2	Overhead, Contingencies & Miscellaneous (OCM) - As Evaluated			12%/9%/7%/6% of G.1	-
I.1	Contractor's Profit - As Submitted			10%/8% of G.1	4.35
I.2	Contractor's Profit - As Evaluated			10%/8% of G.1	-
J.1	Value Added Tax - As Submitted			5% of (G.1+H1+I1)	3.26
J.2	Value Added Tax - As Evaluated			5% of (G.2+H2+I2)	-
K.1	Total Unit Cost - As Submitted			(G.1+H1+I1+J1)	68.44
K.2	Total Unit Cost - As Evaluated			(G.2+H2+I2+J1)	-

Checked/Reviewed

ISIDRA A. ESTANISLAO

Engineer IV

Zamboanga del Norte
DETAILED UNIT PRICE ANALYSIS

FORM-POW-2015-01D-00

Item No./Description : Reinforcing Steel (Grade 60)

Unit of Measurement : 16,790.00 kg

Output per hour-As Submitted : 180.00

Output per hour-As Evaluated :

Designation	No. of Person/s	No. of Hour/s	Hourly Rate	Amount (Php.)
Labor				
a. Construction Foreman	1	1.00	80.95	80.95
b. Skilled Laborer	2	1.00	58.61	117.22
c. Laborer	8	1.00	45.16	361.25
				-
				-
Sub-Total for A-1 As Submitted				559.42
Labor				
				-
				-
Sub-Total for A-2 As Evaluated				-
A.2				
Equipment				
a. Bar Cutter	1	0.50	219.50	109.75
b. Bar Bender	1	0.50	351.50	175.75
c. Cargo Truck	1	0.15	1,212.00	181.80
Sub-Total for B-1 As Submitted				467.30
Equipment				
Sub-Total for B-2 As Evaluated				
C.1				
Total (A.1+B.1) - As Submitted				1,026.72
C.2				
Total (A.2+B.2) - As Evaluated				-
D.1				
Output per Hour - As Submitted				180.00
D.2				
Output per Hour - As Evaluated				-
E.1				
Direct Unit Cost (C.1 +D.1) - As Submitted				5.70
E.2				
Direct Unit Cost (C.2 +D.2) - As Evaluated				-
F.1				
Materials				
a. Tie Wire	kg	0.02	65.00	1.37
b. Reinforcing Steel Bar, Grade 40	kg	1.05	47.00	49.35
Sub-Total for F-1 As Submitted				50.72
Materials				
Sub-Total for F-2 As Evaluated				-
G.1				
Direct Unit Cost (E.1+F.1) - As Submitted				56.42
G.2				
Direct Unit Cost (E.2+F.2) - As Evaluated				-
H.1				
Overhead, Contingencies & Miscellaneous (OCM) - As Submitted			12%/9%/7%/6% of G.1	6.77
H.2				
Overhead, Contingencies & Miscellaneous (OCM) - As Evaluated			12%/9%/7%/6% of G.1	-
I.1				
Contractor's Profit - As Submitted			10%/8% of G.1	4.51
I.2				
Contractor's Profit - As Evaluated			10%/8% of G.1	-
J.1				
Value Added Tax - As Submitted			5% of (G.1+H1+I1)	3.39
J.2				
Value Added Tax - As Evaluated			5% of (G.2+H2+I2)	-
K.1				
Total Unit Cost - As Submitted			(G.1+H1+I1+J1)	71.09
K.2				
Total Unit Cost - As Evaluated			(G.2+H2+I2+J1)	-

Prepared by:

JERALD R. BARBERA
Engineer II

Checked/Reviewed

ISIDRA A. ESTANISLAO
Engineer IV

Zamboanga del Norte

DETAILED UNIT PRICE ANALYSIS

FORM-POW-2015-01D-00

Item No./Description : Structural Concrete, Class A

Unit of Measurement : 1,478.00 cu.m
 Output per hour-As Submitted : 1.40
 Output per hour-As Evaluated : -

Designation	No. of Person/s	No. of Hour/s	Hourly Rate	Amount (Php.)
Labor				
A.1				
a. Construction Foreman	1	1.00	80.95	80.95
b. Skilled Laborer	4	1.00	58.61	234.44
c. Laborer	8	1.00	45.16	361.25
<i>Installation/Removal of Formworks</i>				
a. Skilled Laborer	4	1.00	58.61	234.44
b. Laborer	8	1.00	45.16	361.25
Sub-Total for A-1 As Submitted				1,272.32
Labor				
A.2				
Sub-Total for A-2 As Evaluated				-
Name and Capacity				
No. of Units	No. of Hour/s	Hourly Rate	Amount (Php.)	
<i>Equipment</i>				
B.1				
a. One Bagger Mixer	1	1.00	172.00	172.00
b. Concrete Vibrator	1	1.00	91.25	91.25
c. Water Truck/Pump	1	0.10	2,450.00	245.00
Minor Tools (5% of Labor Cost)				63.62
Sub-Total for B-1 As Submitted				571.87
Equipment				
B.2				
Sub-Total for B-2 As Evaluated				
C.1				
Total (A.1+B.1) - As Submitted				1,844.19
C.2				
Total (A.2+B.2) - As Evaluated				-
D.1				
Output per Hour - As Submitted				1.40
D.2				
Output per Hour - As Evaluated				-
E.1				
Direct Unit Cost (C.1 ÷ D.1) - As Submitted				1,317.28
E.2				
Direct Unit Cost (C.2 ÷ D.2) - As Evaluated				-
Name and Specification				
Unit	Quantity	Unit Cost	Amount (Php.)	
<i>Materials</i>				
F.1				
a. Lumber, Good	bd.ft	17.50	40.00	700.00
b. Marine Plywood	pc	0.40	850.00	340.00
c. Assorted CWN	kg	0.70	55.00	38.50
d. Cement	bag	9.50	281.98	2,678.78
e. Sand	cu.m	0.50	1,166.44	583.22
f. Gravel	cu.m	1.00	1,166.44	1,166.44
Sub-Total for F-1 As Submitted				5,506.94
Materials				
F.2				
Sub-Total for F-2 As Evaluated				-
G.1				
Direct Unit Cost (E.1+F.1) - As Submitted				6,824.22
G.2				
Direct Unit Cost (E.2+F.2) - As Evaluated				-
H.1				
Overhead, Contingencies & Miscellaneous (OCM) - As Submitted		12%/9%/7%/6% of G.1		818.91
H.2				
Overhead, Contingencies & Miscellaneous (OCM) - As Evaluated		12%/9%/7%/6% of G.1		-
I.1				
Contractor's Profit - As Submitted		10%/8% of G.1		545.94
I.2				
Contractor's Profit - As Evaluated		10%/8% of G.1		-
J.1				
Value Added Tax - As Submitted		5% of (G.1+H.1+I.1)		409.45
J.2				
Value Added Tax - As Evaluated		5% of (G.2+H.2+I.2)		-
K.1				
Total Unit Cost - As Submitted		(G.1+H.1+I.1+J.1)		8,598.51
K.2				
Total Unit Cost - As Evaluated		(G.2+H.2+I.2+J.2)		-

Prepared by:

Checked/Reviewed

JERALD R. BARRERA

Engineer II

ISIDRA A. ESTANISLAO

Engineer IV

Zamboanga del Norte

DETAILED UNIT PRICE ANALYSIS

FORM-POW-2015-01D-00

Item No./Description : Pipe Culvert & Storm Drain

Unit of Measurement : 13.00 In.m

Output per hour-As Submitted : 1.00

Output per hour-As Evaluated : -

Designation	No. of Person/s	No. of Hour/s	Hourly Rate	Amount (Php.)
Labor				
a. Construction Foreman	1	1.00	80.95	80.95
b. Skilled Laborer	2	1.00	58.61	117.22
c. Laborer	4	1.00	45.16	180.63
Sub-Total for A-1 As Submitted				378.79
Labor				
A.2				-
Sub-Total for A-2 As Evaluated				-
Name and Capacity	No. of Units	No. of Hour/s	Hourly Rate	Amount (Php.)
Equipment				
a. Backhoe	1	0.29	1,537.00	445.73
b. Plate Compactor	1	0.29	123.00	35.67
Minor Tools (10% of Labor Cost)				37.88
Sub-Total for B-1 As Submitted				519.28
Equipment				
B.2				
Sub-Total for B-2 As Evaluated				
C.1				
Total (A.1+B.1) - As Submitted				898.07
C.2				
Total (A.2+B.2) - As Evaluated				-
D.1				
Output per Hour - As Submitted				1.00
D.2				
Output per Hour - As Evaluated				-
E.1				
Direct Unit Cost (C.1 +D.1) - As Submitted				898.07
E.2				
Direct Unit Cost (C.2 +D.2) - As Evaluated				-
Name and Specification	Unit	Quantity	Unit Cost	Amount (Php.)
Materials				
a. Portland Cement	bag	1.08	281.98	304.53
b. Sand	cu.m	0.06	1,166.44	71.15
c. RC Pipes (910 mm dia.)	pc	1.00	1,750.00	1,750.00
d. Sand Bedding/Selected Sandy Soil	cu.m	0.13	1,166.44	149.30
Sub-Total for F-1 As Submitted				2,274.99
Materials				
F.2				
Sub-Total for F-2 As Evaluated				-
G.1				
Direct Unit Cost (E.1+F.1) - As Submitted				3,173.07
G.2				
Direct Unit Cost (E.2+F.2) - As Evaluated				-
H.1				
Overhead, Contingencies & Miscellaneous (OCM) - As Submitted			12%/9%/7%/6% of G.1	380.77
H.2				
Overhead, Contingencies & Miscellaneous (OCM) - As Evaluated			12%/9%/7%/6% of G.1	-
I.1				
Contractor's Profit - As Submitted			10%/8% of G.1	253.85
I.2				
Contractor's Profit - As Evaluated			10%/8% of G.1	-
J.1				
Value Added Tax - As Submitted			5% of (G.1+H1+I1)	190.38
J.2				
Value Added Tax - As Evaluated			5% of (G.2+H2+I2)	-
K.1				
Total Unit Cost - As Submitted			(G.1+H1+I1+J1)	3,998.06
K.2				
Total Unit Cost - As Evaluated			(G.2+H2+I2+J1)	-

Prepared by:

JERALD R. BARRERA

Engineer II

Checked/Reviewed

ISIDRA A. ESTANISLAO

Engineer IV

Zamboanga del Norte

DETAILED UNIT PRICE ANALYSIS

FORM-POW-2015-01D-00

Item No./Description : Grouted Riprap, Class "A"

Unit of Measurement : 1,446.00 cu.m

Output per hour-As Submitted : 1.25

Output per hour-As Evaluated : -

Note: Use Four (4) gangs

Designation	No. of Person/s	No. of Hour/s	Hourly Rate	Amount (P/tp.)
Labor				
a. Construction Foreman	1	1.00	80.95	80.95
A.1 b. Skilled Laborer	8	1.00	58.61	468.87
c. Laborer	32	1.00	45.16	1,445.00
Sub-Total for A-1 As Submitted				1,994.82
Labor				
				-
A.2				
Sub-Total for A-2 As Evaluated				-
Name and Capacity	No. of Units	No. of Hour/s	Hourly Rate	Amount (P/tp.)
Equipment				
B.1 a. One Bagger Mixer	4	1.00	172.00	688.00
b. Water Truck/Pump	4	0.05	2,450.00	490.00
Minor Tools (10% of Labor Cost)				199.48
Sub-Total for B-1 As Submitted				1,377.48
Equipment				
B.2				
Sub-Total for B-2 As Evaluated				
C.1 Total (A.1+B.1) - As Submitted				3,372.30
C.2 Total (A.2+B.2) - As Evaluated				-
D.1 Output per Hour - As Submitted				1.25
D.2 Output per Hour - As Evaluated				-
E.1 Direct Unit Cost (C.1 ÷ D.1) - As Submitted				2,697.84
E.2 Direct Unit Cost (C.2 ÷ D.2) - As Evaluated				-
Name and Specification	Unit	Quantity	Unit Cost	Amount (P/tp.)
Materials				
a. Portland Cement	bag	2.50	281.98	704.94
b. Sand	cu.m	0.21	1,166.44	244.95
F.1 c. Gravel Fill	cu.m	0.02	1,166.44	17.50
d. Weep Holes	m	0.30	133.00	39.90
e. Filter Cloth	sq.m	0.02	160.00	2.40
f. Boulder	cu.m	1.05	1,694.44	1,779.16
Miscellaneous (1% of Materials Cost)				27.89
Sub-Total for F-1 As Submitted				2,816.74
Materials				
F.2				
Sub-Total for F-2 As Evaluated				-
G.1 Direct Unit Cost (E.1+F.1) - As Submitted				5,514.58
G.2 Direct Unit Cost (E.2+F.2) - As Evaluated				-
H.1 Overhead, Contingencies & Miscellaneous (OCM) - As Submitted			12%/9%/7%/6% of G.1	661.75
H.2 Overhead, Contingencies & Miscellaneous (OCM) - As Evaluated			12%/9%/7%/6% of G.1	-
I.1 Contractor's Profit - As Submitted			10%/8% of G.1	441.17
I.2 Contractor's Profit - As Evaluated			10%/8% of G.1	-
J.1 Value Added Tax - As Submitted			5% of (G.1+H1+I1)	330.88
J.2 Value Added Tax - As Evaluated			5% of (G.2+H2+I2)	-
K.1 Total Unit Cost - As Submitted			(G.1+H1+I1+J1)	6,948.38
K.2 Total Unit Cost - As Evaluated			(G.2+H2+I2+J1)	-

Prepared by:

Checked/Reviewed

JERALD R. BARRERA

Engineer II

ISIDRA A. ESTANISLAO

Engineer IV

Zamboanga del Norte

DETAILED UNIT PRICE ANALYSIS

FORM-POW-2015-01D-00

Item No./Description : Handlaid Rock Embankment

Unit of Measurement : 7,684.00 cu.m
 Output per hour-As Submitted : 3.13
 Output per hour-As Evaluated : -

Note: Use Six (6) gangs

Designation	No. of Person/s	No. of Hour/s	Hourly Rate	Amount (Php.)
Labor				
a. Construction Foreman	1	1.00	80.95	80.95
A.1 b. Skilled Laborer	12	1.00	58.61	703.31
c. Laborer	48	1.00	45.16	2,167.50
Sub-Total for A-1 As Submitted				2,951.76
Labor				
A.2				
Sub-Total for A-2 As Evaluated				-
Name and Capacity	No. of Units	No. of Hour/s	Hourly Rate	Amount (Php.)
Equipment				
B.1				
Minor Tools (10% of Labor Cost)				295.18
Sub-Total for B-1 As Submitted				295.18
Equipment				
B.2				
Sub-Total for B-2 As Evaluated				
C.1 Total (A.1+B.1) - As Submitted				3,246.93
C.2 Total (A.2+B.2) - As Evaluated				-
D.1 Output per Hour - As Submitted				200.00
D.2 Output per Hour - As Evaluated				-
E.1 Direct Unit Cost (C.1 +D.1) - As Submitted				16.23
E.2 Direct Unit Cost (C.2 +D.2) - As Evaluated				-
Name and Specification	Unit	Quantity	Unit Cost	Amount (Php.)
Materials				
a. Boulders	cu.m	1.05	1,694.44	1,779.16
F.1				
Sub-Total for F-1 As Submitted				1,779.16
Materials				
F.2				
Sub-Total for F-2 As Evaluated				-
G.1 Direct Unit Cost (E.1+F.1) - As Submitted				1,795.40
G.2 Direct Unit Cost (E.2+F.2) - As Evaluated				-
H.1 Overhead, Contingencies & Miscellaneous (OCM) - As Submitted			12%/9%/7%/6% of G.1	215.45
H.2 Overhead, Contingencies & Miscellaneous (OCM) - As Evaluated			12%/9%/7%/6% of G.1	-
I.1 Contractor's Profit - As Submitted			10%/8% of G.1	143.63
I.2 Contractor's Profit - As Evaluated			10%/8% of G.1	-
J.1 Value Added Tax - As Submitted			5% of (G.1+H1+I1)	107.72
J.2 Value Added Tax - As Evaluated			5% of (G.2+H2+I2)	-
K.1 Total Unit Cost - As Submitted			(G.1+H1+I1+J1)	2,262.20
K.2 Total Unit Cost - As Evaluated			(G.2+H2+I2+J1)	-

Prepared by:

Checked/Reviewed


 JERALD R. BARRERA
 Engineer II


 ISIDRA A. ESTANISLAO
 Engineer IV

UNIT COST ANALYSIS FOR HAULING COST FOR ALL AGGREGATES

Hauling Cost from the District Office to Site

Item No : ALL AGGREGATES
Quantity : 1,000.00

Terrain Unit : Flat to Rolling
Hauling Distance : 5.00 km.
Effective Working Hours : 8.00 hrs.

Hauling : Using 10.00 cu.m. capacity Dumptruck
Weight of Dumptruck (ccp, 10.00 cu.m.) : 16,000.00 kgs
Unit Weight of Fine Aggrgates : 1,640.00 kg/cu.m.
Unit Weight of Course Aggrgates : 1,534.00 kg/cu.m.
Maximum Volumeto be Carried per DT : 11.57 cu.m.

* Dumptruck (10 Wheeler) days computation : **TIME-MOTION ANALYSIS**
Speed when loaded : 30.00 kph
Speed when unloaded : 40.00 kph

Loaded Running = $\frac{5.00}{30.00} \times \frac{60.00}{1} = 10$ mins.
Unloaded Running = $\frac{5.00}{40.00} \times \frac{60.00}{1} = 7.5$ mins.
Loading & Unloading = 5.00 mins.
Capacity of Dumptruck = 10.00 cu.m.
Total Cycle Time = 22.50 mins.

No. of trips for Dumptruck per day = $\frac{8.00}{22.50} \times \frac{60.00}{1} = 21.33$ trips

Dumptruck Daily Output = 10.00 X 21.33 = 213.33 cu.m.
Using 4 Dumptruck = 213.33 X 4.00 = 853.33 cu.m.

No. of Days for Dumptruck = $\frac{1,000.00}{853.33} = 1.17$ days

EQUIPMENT USED: (2009 ACEL RATES)

4.00 - Unit Dumptruck	@	P	10,816.00	/	day	X	1.17	days	=	P	50,700.00
Estimated Quantity	=	1,000.00	cu.m.								
Unit Cost	=	10.14	/cu.m/km. (unit cost hauling per cu.m. per km.)								
Grand Total	P	50,700.00									
Equipment	P	50,700.00									
Labor	P										
Equipment	P										

ZAMBOANGA DEL NORTE 1st DEO (using 3rd Quarter 2018)

	Hauling Distance	Unit Cost per cu.m/km	Hauling Cost per km.	Unit Price	Unit cost per cu.m.
Cost of Fine Aggregates	46.00 X	10.14 =	466.44 +	700.00 =	1,166.44
Cost of Coarse Aggregates	46.00 X	10.14 =	466.44 +	700.00 =	1,166.44
Cost of Item 200 Materials	46.00 X	10.14 =	466.44 +	650.00 =	1,116.44
Cost of Item 201 Materials	46.00 X	10.14 =	466.44 +	625.00 =	1,091.44
Cost of Item 300 Materials	46.00 X	10.14 =	466.44 +	700.00 =	1,166.44
Cost of Boulders	46.00 X	10.14 =	466.44 +	1,228.00 =	1,694.44
Cost of Embankment, Common Borrow	10.00 X	10.14 =	101.40 +	340.00 =	441.40
Cost of Embankment, Selected Borrow	10.00 X	10.14 =	101.40 +	500.00 =	601.40

UNIT COST DERIVATION FOR PORTLAND CEMENT

TOTAL QUANTITY REQUIREMENTS FOR PORTLAND CEMENT

Description	Quantity (Bags)
Portland Cement Concrete Pavement	-
Portland Cement Concrete Pavement	-
Structural Concrete, Class A	14,041.00
Lean Concrete for RCBC	-
Pipe Culvert & Storm Drain	14.04
Reinforced Concrete Culverts Pipe, 610 mm dia	-
Grouted Riprap, Class "A"	3,615.00
Separation Geotextile	1,656.90
TOTAL	19,326.94

Quantity = 19,326.94 Bags

Delivery Charge = P 0.12 /bag/km

SITE	HAULING DISTANCE
Zamboanga del Norte1st DEO	
PROJECT SITE	51.00

* Average Hauling Distance from source to assumed stockpiling area:
say 51.00 km.

Delivery Charge = P 0.12 X 51.00
Delivery Charge = P 6.12 /bag

* Delivery Truck : 19,326.94 bags (hauling works)
20,000.00 kgs., (capacity per haul)
500.00 bags, (capacity per haul)

* Capacity of laborers unloading bags of Cement from Delivery Truck:
Assume 10 laborers can unload 500.00 bags of Cement
*Dumptruck (10 Wheeler) days computation : **TIME - MOTION ANALYSIS**
Speed when loaded : 30.00 kph
Speed when unloaded : 40.00 kph

Loaded Running = $\frac{51.00 \times 60.00}{30.00}$ = 102 mins.

Unloading Running = $\frac{51.00 \times 60.00}{40.00}$ = 76.5 mins.

Loading & Unloading = 45.00 mins.

Capacity of Dumptruck = 8.00 cu.m.

500.00 bags

Total Cycle Time = 223.50 mins.

$$\begin{array}{rcl} \text{No. of trips for Dumptruck per} & = & \frac{8.00}{223.50} \times \frac{60.00}{223.50} = 2.15 \text{ trips} \\ \text{day} & & \end{array}$$

$$\begin{array}{rcl} \text{Dumptruck Daily Output} & = & 500.00 \times 2.15 = 1,073.83 \text{ cu.m.} \\ \text{Using 4 Dumptruck} & = & 1,073.83 \times 4.00 = 4,295.30 \text{ cu.m.} \end{array}$$

$$\begin{array}{rcl} \text{No. of Days for Dumptruck} & = & \frac{19,326.94}{4,295.30} = 4.50 \text{ days} \end{array}$$

$$\begin{array}{rcl} \text{No. of Days for Labor for} & = & \text{complimentary to} \\ \text{unloading} & = & \text{D.Truck days} = 4.50 \text{ days} \end{array}$$

DELIVERY COST:

$$\begin{array}{rcl} 19,326.94 \text{ Bags, Portland Cement} & @ & P \quad 6.12 \quad \text{/bag} = P \quad \underline{118,280.87} \\ \text{Sub-total} & & \underline{118,280.87} \end{array}$$

LABOR:

$$\begin{array}{rcl} 1 \text{ Foreman} & @ & P \quad 558.00 \quad \text{/day} \quad \times \quad X \quad 4.50 \quad \text{days} = P \quad 2,510.75 \\ 10 \text{ Laborers} & @ & P \quad 312.24 \quad \text{/day} \quad \times \quad X \quad 4.50 \quad \text{days} = \quad \underline{14,049.40} \\ \text{Sub-total} & & \underline{16,560.16} \end{array}$$

MATERIALS:

$$\begin{array}{rcl} 19,326.94 \text{ Bags, Portland Cement} & @ & P \quad 275.00 \quad \text{/bag} = P \quad \underline{5,314,908.50} \\ \text{Sub-total} & & \underline{5,314,908.50} \end{array}$$

Estimated Quantity : 19,326.94 Bags

Unit Cost	P	281.98
Grand Total	P	5,449,749.53
Delivery Cost	P	118,280.87
Labor	P	16,560.16
Materials	P	5,314,908.50