



(IMPLEMENTING OFFICE)

## PROGRAM OF WORK/BUDGET COST

FORM POW-2015-01-00

Project : Construction/Maintenance of Flood Mitigation Facilities within major River Basins and Principal Rivers  
Construction of Flood Control Structure, Salug Daku Flood Control, Mahayag, Zamboanga del Sur

Net Length : (a) Others 608.00 in.m 0.61 km  
(b) Road  
(c) Brgd  
Target Start Date :  
Total Project Duration : 252 Calendar Days  
No. of Pre-determined : 56 Calendar Days  
Unworkable Days : 28 Calendar Days

Project ID :  
Location : Zamboanga del Sur  
Station Limits : 1+540.00 - 2+092.24; 2+092.24-2+148.00  
Source of Funds : CY-2019

DESCRIPTION OF WORKS TO BE DONE	QUANTITY	UNIT	AS SUBMITTED		AS EVALUATED	
			% TOTAL	TOTAL DIRECT COST	% TOTAL	TOTAL DIRECT COST
PART A: Facilities for the Engineers			1.68%	1,341,668.48		
B: Other General Requirements			1.00%	793,714.95		
C: Earthworks			2.39%	1,904,183.21		
D: Subbase and Base Course			1.38%	1,099,761.43		
E: Surface Courses			0.00%	-		
F: Bridge Construction			41.60%	33,146,106.30		
G: Drainage and Slope Protection Structures			51.94%	41,383,283.22		
H: Miscellaneous Structure			0.00%	-		
I: Provisional Sum			0.00%	-		
J: Daywork			0.00%	-		

## EQUIPMENT:

DESCRIPTION	REQUIRED
(PLS. SEE FORM POW-2015-01B-00)	

## BREAKDOWN OF EXPENDITURES:

	AS SUBMITTED	AS EVALUATED
1. Labor	5,562,370.29	
2. Materials	62,558,926.34	
3. Rental of Equipment	11,547,420.96	
4. Provisional Sum/Daywork	-	
5. OCM and Profit	14,074,139.55	
6. Value Added Tax	4,687,142.86	
7. EAO, 3.5%	3,570,000.00	
8. RROW Acquisition	0.00	
9. Physical Reseved (Contingency)	-	
10. TOTAL ESTIMATED COST	102,000,000.00	

	AS SUBMITTED	AS EVALUATED
A. Total Direct Cost	79,668,717.60	
B. OCM and Profit	14,074,139.55	
C. Value Added Tax	4,687,142.86	
D. Total Construction Cost	-	
E. Eng'g. & Administrative Overhead	3,570,000.00	
F. RROW Acquisition	0.00	
G. Physical Reserved (Contingency)	-	
H. TOTAL ESTIMATED COST	102,000,000.00	

## Preparation and Submission:

Prepared by:

JERALD R. BARRERA

Engineer II

DPWH RO9

Checked/Submited by:

ISIDRA A. ESTANISLAO

Engineer IV

DPWH RO9

## Evaluation:

Reviewed by:

SATURNINO C. TORREFRANCA

District Engineer

DPWH RO9

## Approval:

Recommending Approval

KHADAFFY D. TANGGOL

OIC-Assistant Regional Director

DPWH RO9

Approved:

CAYAMONBAO D. DIA

Regional Director

DPWH RO9



Construction/Maintenance of Flood Mitigation Facilities within major River Basins and Principal Ditch Systems  
Construction of Flood Control Structure, Salug Daku Flood Control, Mahayag, Zamboanga del Sur  
Zamboanga del Sur

FORM POW-2015-01A-00

ITEMIZED BREAKDOWN

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		603,412.37		0.61%
A.1.1 (11)	Prov. Of Furniture, Equipment, & Appliance for Field Engineer	1.00		ls	353,882.69		353,882.69		371,576.82		0.44%
A.1.2 (5)	Operation & Maintenance of Gov't. Service Vehicles	1.00		ls	500,770.16		500,770.16		525,808.67		0.63%
	TOTAL OF PART A				1,341,668.48						1.68%
PART B	Other General Requirements										
B.4(1)	Construction Survey and Staking	0.61		km	41,324.15		67,967.35		84,211.55		0.05%
B.5	Project Billboard	4.00		unit	9,751.33		2,437.83		3,020.47		0.01%
B.7	Occupational Safety & Health Program	1.00		ls	266,037.48		266,037.48		301,686.50		0.33%
B.9	Mobilization & Demobilization	1.00		ls	476,602.00		476,602.00		500,432.10		0.60%
	TOTAL OF PART B				793,714.95						1.00%
PART C	Earthworks										
1702(1)	Structure Excavation	5,087.00		cu.m	812,664.02		159.75		197.93		1.02%
104(Za)	Embankment from Borrow	1,885.00		cu.m	1,091,519.19		579.06		717.45		1.37%
	TOTAL OF PART C				1,904,183.21						2.39%
PART D	Subbase and Base Course										
200(1)	Aggregate Subbase Course	839.00		cu.m	1,099,761.43		1,310.80		1,624.08		1.38%
	TOTAL OF PART D				1,099,761.43						1.38%
PART F	Bridge Construction										
1716(6)	Structural Steel Sheet Piles, Furnished	9,120.00		m	22,762,067.05		2,495.84		3,092.35		28.57%
1716(16)	Steel Sheet Tests Piles, Furnished and Driven	12.00		m	21,905.85		1,825.49		2,261.78		0.03%
1716(12)	Structural Steel Sheet Piles, Driven	9,120.00		m	10,362,133.40		1,136.20		1,407.75		13.01%
	TOTAL OF PART F				33,146,106.30						41.60%
PART G	Drainage and Slope Protection Structures										
404(1)a	Reinforcing Steel (Grade 40)	38,541.00		kg	1,903,308.48		49.38		61.19		2.39%
404(1)b	Reinforcing Steel (Grade 60)	8,635.00		kg	444,564.28		51.48		63.79		0.56%
405(1)a3	Structural Concrete, fc'=27.58 Mpa	1,569.00		cu.m	10,829,681.20		6,902.28		8,551.93		13.59%
1710(5)	Grouted Riprap, Class "A"	1,609.00		cu.m	5,139,520.77		3,194.23		3,957.65		6.45%
508 (1)	Handlaid Rock Embankment	13,929.00		cu.m	23,066,208.49		1,655.98		2,051.76		28.95%
	TOTAL OF PART G				41,383,283.22						51.94%
	GRAND TOTAL				79,668,717.60						100.00%



Construction/Maintenance of Flood Mitigation Facilities within major River Basins and Principal Rivers Construction of Flood Control Structure, Salug Daku Flood Control, Mahayag, Zamboanga del Sur  
Zamboanga del Sur

FORM POW-2015-01B-00

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/Maintenance of Flood Mitigation Facilities within major River Basins and Pricpal Rivers Construction of Flood Control Structure, Salug Daku Flood Control, Mahayag, Zamboanga del Sur**  
**Zamboanga del Sur**

FORM POW-2015-01C-00

**ITEMIZED BREAKDOWN****DETAILED BREAKDOWN OF COMPONENT COST FOR EACH ITEM**

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	18.00%	87,662.81	28,733.92	603,412.37
A.1.1 (11)	Prov. Of Furniture, Equipment, & Appliance for Field Engineer	AS EVALUATED											
		AS SUBMITTED	0.44%	1.00	ls	353,882.69	-	-	353,882.69	0.00%	-	17,694.13	371,576.82
A.1.2 (5)	Operation & Maintenance of Gov't. Service Vehicles	AS EVALUATED											
		AS SUBMITTED	0.63%	1.00	ls	422,000.00	78,770.16	-	500,770.16	0.00%	-	25,038.51	525,808.67
	TOTAL OF PART A	AS EVALUATED											
		AS SUBMITTED	1.68%			1,175,882.69	135,053.46	30,732.33	1,341,668.48		87,662.81	71,466.56	1,500,797.86
PART B	Other General Requirements												
B.4(1)	Construction Survey and Staking	AS EVALUATED											
		AS SUBMITTED	0.05%	0.61	km	12,180.00	26,444.15	2,700.00	41,324.15	18.00%	7,438.35	2,438.12	51,200.62
B.5	Project Billboard	AS EVALUATED											
		AS SUBMITTED	0.01%	4.00	unit	8,597.40	1,153.93	-	9,751.33	18.00%	1,755.24	575.33	12,081.89
B.7	Occupational Safety & Health Program	AS EVALUATED											
		AS SUBMITTED	0.33%	1.00	ls	12,360.00	253,677.48	-	266,037.48	8.00%	21,283.00	14,366.02	301,686.50
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	1.00%			33,137.40	281,275.55	479,302.00	793,714.95		30,476.58	41,209.58	865,401.11
PART C	Earthworks												
1702(1)	Structure Excavation	AS EVALUATED											
		AS SUBMITTED	1.02%	5,087.00	cu.m	-	55,046.43	757,617.59	812,664.02	18.00%	146,279.52	47,947.18	1,006,890.72
104(2a)	Embankment from Borrow	AS EVALUATED											
		AS SUBMITTED	1.37%	1,885.00	cu.m	910,455.00	6,456.64	174,607.55	1,091,519.19	18.00%	196,473.45	64,399.63	1,352,392.28
	TOTAL OF PART C	AS EVALUATED											
		AS SUBMITTED	2.39%			910,455.00	61,503.07	932,225.14	1,904,183.21		342,752.98	112,346.81	2,359,283.00
PART D	Subbase and Base Course												
200(1)	Aggregate Subbase Course	AS EVALUATED											
		AS SUBMITTED	1.38%	839.00	cu.m	1,019,171.06	2,873.81	77,716.57	1,099,761.43	18.00%	197,957.06	64,885.92	1,362,604.41
	TOTAL OF PART D	AS EVALUATED											
		AS SUBMITTED	1.38%			1,019,171.06	2,873.81	77,716.57	1,099,761.43		197,957.06	64,885.92	1,362,604.41
PART F	Bridge Construction												
1716(6)	Structural Steel Sheet Piles, Furnished	AS EVALUATED											
		AS SUBMITTED	28.57%	9,120.00	m	22,325,760.00	36,540.96	399,766.10	22,762,067.05	18.00%	4,097,172.07	1,342,961.96	28,202,201.08
1716(16)	Steel Sheet Tests Piles, Furnished and Driven	AS EVALUATED											
		AS SUBMITTED	0.03%	12.00	m	3,876.21	3,517.71	14,511.93	21,905.85	18.00%	3,943.05	1,292.45	27,141.35

1716(12)	Structural Steel Sheet Piles, Driven	AS EVALUATED											
		AS SUBMITTED	13.01%	9,120.00	m	1,802.98	641,629.62	8,185,700.80	10,362,133.40	18.00%	1,865,184.01	611,365.87	12,838,683.28
	<b>TOTAL OF PART F</b>	AS EVALUATED											
		AS SUBMITTED	41.60%			23,864,439.19	681,688.28	8,599,978.83	33,146,106.30		5,966,299.13	1,955,620.27	41,068,025.71
<b>PART G</b>	<b>Drainage and Slope Protection Structures</b>												
404(1)a	Reinforcing Steel (Grade 40)	AS EVALUATED											
		AS SUBMITTED	2.39%	38,541.00	kg	1,683,470.88	119,780.88	100,056.72	1,903,308.48	18.00%	342,595.53	112,295.20	2,358,199.20
404(1)b	Reinforcing Steel (Grade 60)	AS EVALUATED											
		AS SUBMITTED	0.56%	8,635.00	kg	395,310.30	26,836.56	22,417.42	444,564.28	18.00%	80,021.57	26,229.29	550,815.14
405(1)a3	Structural Concrete, $f_c=27.58$ Mpa	AS EVALUATED											
		AS SUBMITTED	13.59%	1,569.00	cu.m	8,810,503.82	1,380,546.99	638,630.39	10,829,681.20	18.00%	1,949,342.62	638,951.19	13,417,975.00
1710(5)	Grouted Riprap, Class "A"	AS EVALUATED											
		AS SUBMITTED	6.45%	1,609.00	cu.m	4,025,658.42	667,983.59	445,878.76	5,139,520.77	18.00%	925,113.74	303,231.73	6,367,866.24
508 (1)	Handlaid Rock Embankment	AS EVALUATED											
		AS SUBMITTED	28.95%	13,929.00	cu.m	20,640,897.59	2,204,828.10	220,482.81	23,066,208.49	18.00%	4,151,917.53	1,360,906.30	28,579,032.32
	<b>TOTAL OF PART G</b>	AS EVALUATED											
		AS SUBMITTED	51.94%			35,555,841.01	4,399,976.11	1,427,466.09	41,383,283.22		7,448,990.98	2,441,613.71	51,273,887.91
	<b>GRAND TOTAL</b>	AS EVALUATED											
		AS SUBMITTED	100.00%			62,558,926.34	5,562,370.29	11,547,420.96	79,668,717.60		14,074,139.55	4,687,142.86	98,430,000.00





ON IX

Construction/Maintenance of Flood Mitigation Facilities within major River Basins and Principal Rivers Construction of Flood Control Structure, Salug Daku Flood Control, Mahayag, Zamboanga del Sur

Zamboanga del Sur


## SUMMARY OF APPROVED BUDGET FOR THE CONTRACT

FORM POW-2015-02-00

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	1,341,668.48		87,662.81	71,466.56	159,129.38	1,500,797.86
PART B	Other General Requirements	AS EVALUATED						
		AS SUBMITTED	793,714.95		30,476.58	41,209.58	71,686.16	865,401.11
PART C	Earthworks	AS EVALUATED						
		AS SUBMITTED	1,904,183.21		342,752.98	112,346.81	455,099.79	2,359,283.00
PART D	Subbase and Base Course	AS EVALUATED						
		AS SUBMITTED	1,099,761.43		197,957.06	64,885.92	262,842.98	1,362,604.41
PART F	Bridge Construction	AS EVALUATED						
		AS SUBMITTED	33,146,106.30		5,966,299.13	1,955,620.27	7,921,919.41	41,068,025.71
PART G	Drainage and Slope Protection Structures	AS EVALUATED						
		AS SUBMITTED	41,383,283.22		7,448,990.98	2,441,613.71	9,890,604.69	51,273,887.91
TOTAL		AS EVALUATED						
		AS SUBMITTED	79,668,717.60		14,074,139.55	4,687,142.86	18,761,282.40	98,430,000.00

## Preparation and Submission:

Prepared by:

  
JERALD R. BARRERA  
Engineer II  
DPWH RO9

Checked/Submited by:

  
ISIDRA A. ESTANISLAO  
Engineer IV  
DPWH RO9

## Evaluation:

Reviewed by:

  
SATURNINO C. TORREFRANCA  
District Engineer  
DPWH RO9

## Approval:

Recommending Approval

  
KHADAFFY D. TANGGOL  
OIC-Assistant Regional Director  
DPWH RO9

Approved:

  
CAYAMONBAO D. DIA  
Regional Director  
DPWH RO9



Construction/Maintenance of Flood Mitigation Facilities within major River Basins and Principal Rivers Construction of Flood Control Structure, Salug Daku Flood Control, Mahayag, Zamboanga del Sur  
Zamboanga del Sur

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				
<b>PART A</b>	<b>Facilities for the Engineers</b>										
A.1.1 (3)	Const. of Field Office for the Enigneer	AS EVALUATED									
		AS SUBMITTED	1.00	ls	487,015.63	18.00%	87,662.81	28,733.92	116,396.74	603,412.37	603,412.37
A.1.1 (11)	Prov. Of Furniture, Equipment, & Appliance for Field Engineer	AS EVALUATED									
		AS SUBMITTED	1.00	ls	353,882.69	0.00%	-	17,694.13	17,694.13	371,576.82	371,576.82
A.1.2 (5)	Operation & Maintenance of Gov't. Service Vehicles	AS EVALUATED									
		AS SUBMITTED	1.00	ls	500,770.16	0.00%	-	25,038.51	25,038.51	525,808.67	525,808.67
	<b>TOTAL OF PART A</b>	AS EVALUATED									
		AS SUBMITTED			1,341,668.48		87,662.81	71,466.56	159,129.38	1,500,797.86	
<b>PART B</b>	<b>Other General Requirements</b>										
B.4(1)	Construction Survey and Staking	AS EVALUATED									
		AS SUBMITTED	0.61	km	41,324.15	18.00%	7,438.35	2,438.12	9,876.47	51,200.62	84,211.55
B.5	Project Billboard	AS EVALUATED									
		AS SUBMITTED	4.00	unit	9,751.33	18.00%	1,755.24	575.33	2,330.57	12,081.89	3,020.47
B.7	Occupational Safety & Health Program	AS EVALUATED									
		AS SUBMITTED	1.00	ls	266,037.48	8.00%	21,283.00	14,366.02	35,649.02	301,686.50	301,686.50
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
	<b>TOTAL OF PART B</b>	AS EVALUATED			-						
		AS SUBMITTED			793,714.95		30,476.58	41,209.58	71,686.16	865,401.11	
<b>PART C</b>	<b>Earthworks</b>										
1702(1)	Structure Excavation	AS EVALUATED									
		AS SUBMITTED	5,087.00	cu.m	812,664.02	18.00%	146,279.52	47,947.18	194,226.70	1,006,890.72	197.93
104(2a)	Embankment from Borrow	AS EVALUATED									
		AS SUBMITTED	1,885.00	cu.m	1,091,519.19	18.00%	196,473.45	64,399.63	260,873.09	1,352,392.28	717.45
	<b>TOTAL OF PART C</b>	AS EVALUATED			-						
		AS SUBMITTED			1,904,183.21		342,752.98	112,346.81	455,099.79	2,359,283.00	
<b>PART D</b>	<b>Subbase and Base Course</b>										
200(1)	Aggregate Subbase Course	AS EVALUATED									
		AS SUBMITTED	839.00	cu.m	1,099,761.43	18.00%	197,957.06	64,885.92	262,842.98	1,362,604.41	1,624.08
	<b>TOTAL OF PART D</b>	AS EVALUATED			-						
		AS SUBMITTED			1,099,761.43		197,957.06	64,885.92	262,842.98	1,362,604.41	
<b>PART F</b>	<b>Bridge Construction</b>										
1716(6)	Structural Steel Sheet Piles, Furnished	AS EVALUATED									
		AS SUBMITTED	9,120.00	m	22,762,067.05	18.00%	4,097,172.07	1,342,961.96	5,440,134.03	28,202,201.08	3,092.35
1716(16)	Steel Sheet Tests Piles, Furnished and Driven	AS EVALUATED									
		AS SUBMITTED	12.00	m	21,905.85	18.00%	3,943.05	1,292.45	5,235.50	27,141.35	2,261.78

1716(12)	Structural Steel Sheet Piles, Driven	AS EVALUATED									
		AS SUBMITTED	9,120.00	m	10,362,133.40	18.00%	1,865,184.01	611,365.87	2,476,549.88	12,838,683.28	1,407.75
	TOTAL OF PART F	AS EVALUATED			-						
		AS SUBMITTED			33,146,106.30		5,966,299.13	1,955,620.27	7,921,919.41	41,068,025.71	
PART G	Drainage and Slope Protection Structures										
404(1)a	Reinforcing Steel (Grade 40)	AS EVALUATED									
		AS SUBMITTED	38,541.00	kg	1,903,308.48	18.00%	342,595.53	112,295.20	454,890.73	2,358,199.20	61.19
404(1)b	Reinforcing Steel (Grade 60)	AS EVALUATED									
		AS SUBMITTED	8,635.00	kg	444,564.28	18.00%	80,021.57	26,229.29	106,250.86	550,815.14	63.79
405(1)a3	Structural Concrete, f'c=27.58 Mpa	AS EVALUATED									
		AS SUBMITTED	1,569.00	cu.m	10,829,681.20	18.00%	1,949,342.62	638,951.19	2,588,293.81	13,417,975.00	8,551.93
1710(5)	Grouted Riprap, Class "A"	AS EVALUATED									
		AS SUBMITTED	1,609.00	cu.m	5,139,520.77	18.00%	925,113.74	303,231.73	1,228,345.46	6,367,866.24	3,957.65
508 (1)	Handlaid Rock Embankment	AS EVALUATED									
		AS SUBMITTED	13,929.00	cu.m	23,066,208.49	18.00%	4,151,917.53	1,360,906.30	5,512,823.83	28,579,032.32	2,051.76
	TOTAL OF PART G	AS EVALUATED			-						
		AS SUBMITTED			41,383,283.22		7,448,990.98	2,441,613.71	9,890,604.69	51,273,887.91	
	GRAND TOTAL	AS EVALUATED			-						
		AS SUBMITTED			79,668,717.60		14,074,139.55	4,687,142.86	18,761,282.40	98,430,000.00	

98,430,000.00

Preparation and Submission:

Prepared by:

  
**JERALD R. BARRERA**  
 Engineer II  
 DPWH RO9

Checked/Submited by:

  
**ISIDRA A. ESTANISLAO**  
 Engineer IV  
 DPWH RO9

Evaluation:

Reviewed by:

  
**SATURNINO C. TORREFRANCA**  
 District Engineer  
 DPWH RO9



## Zamboanga del Sur

FORM-POW-2015-01D-00


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

Unit of Measurement : 1.00 Is  
 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. 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
A.2	Labor				
	Sub-Total for A-2 As Evaluated				
B.1	Name and Capacity	No. of Units	No. of Hour/s	Hourly Rate	Amount (Php.)
	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
B.2	Equipment				
	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				-
F.1	Name and Specification	Unit	Quantity	Unit Cost	Amount (Php.)
	Materials				
	a. Materials	lumpsum	1	400,000.00	400,000.00
	Sub-Total for F-1 As Submitted				400,000.00
F.2	Equipment				
	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	45,628.33
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)	26,920.71
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)	565,335.01
K.2	Total Unit Cost - As Evaluated			(G.2+H2+I2+J1)	-

Prepared by:

Checked/Reviewed

  
 JERARD R. BARRERA

Engineer II

  
 ISIDRA A. ESTANISLAO

Engineer IV

## Zamboanga del Sur

FORM-POW-2015-01D-00

Item No./Description : Prov. Of Furniture, Equipment, &amp; Appliance for Field Engineer

Unit of Measurement : 1.00 Is  
 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				
	Sub-Total for A-1 As Submitted				-
A.2	Labor				
	Sub-Total for A-2 As Evaluated				
B.1	Name and Capacity	No. of Units	No. of Hour/s	Hourly Rate	Amount (Php.)
	Equipment				
	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				-
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				-
E.2	Direct Unit Cost (C.2 + D.2) - As Evaluated				
F.1	Name and Specification	Unit	Quantity	Unit Cost	Amount (Php.)
	Materials				
	a. Office Equipment/Facilities & Supplies	lumpsum	1	353,882.69	353,882.69
	Sub-Total for F-1 As Submitted				353,882.69
F.2	Equipment				
	Sub-Total for F-2 As Evaluated				
G.1	Direct Unit Cost (E.1 + F.1) - As Submitted				353,882.69
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)	17,694.13
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)	371,576.82
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



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.)
<b>Labor</b>				
A.1 a. Service Driver	1	1344	58.61	78,770.16
Sub-Total for A-1 As Submitted				78,770.16
<b>Labor</b>				
A.2				
Sub-Total for A-2 As Evaluated				-
<b>Name and Capacity</b>	<b>No. of Units</b>	<b>No. of Hour/s</b>	<b>Hourly Rate</b>	<b>Amount (Php.)</b>
<b>B.1</b>				
Equipment				
Sub-Total for B-1 As Submitted				-
<b>Equipment</b>				
B.2				
Sub-Total for B-2 As Evaluated				-
C.1 Total (A.1+B.1) - As Submitted				78,770.16
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				78,770.16
E.2 Direct Unit Cost (C.2 +D.2) - As Evaluated				-
<b>Name and Specification</b>	<b>Unit</b>	<b>Quantity</b>	<b>Unit Cost</b>	<b>Amount (Php.)</b>
<b>Materials</b>				
a. Diesel Fuel	ltres	5,040.00	50.00	252,000.00
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				422,000.00
<b>Equipment</b>				
F.2				
Sub-Total for F-2 As Evaluated				-
G.1 Direct Unit Cost (E.1+F.1) - As Submitted				500,770.16
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)	25,038.51
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)	525,808.67
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 Sur  
DETAILED UNIT PRICE ANALYSIS

FORM-POW-2015-01D-00

Item No./Description : Construction Survey and Staking

Unit of Measurement : 0.61 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.)
<b>Labor</b>				
<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
<b>A.1</b>				
<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				
<b>A.2</b>				
Sub-Total for A-2 As Evaluated				
<b>Name and Capacity</b>	<b>No. of Units</b>	<b>No. of Hour/s</b>	<b>Hourly Rate</b>	<b>Amount (Php.)</b>
<b>Equipment</b>				
a. Total Station with complete accessories	1	27	100.00	2,700.00
<b>B.1</b>				
Sub-Total for B-1 As Submitted				2,700.00
<b>Equipment</b>				
<b>B.2</b>				
Sub-Total for B-2 As Evaluated				
<b>C.1</b>				
Total (A.1+B.1) - As Submitted				29,144.15
<b>C.2</b>				
Total (A.2+B.2) - As Evaluated				-
<b>D.1</b>				
Output per Hour - As Submitted				1.00
<b>D.2</b>				
Output per Hour - As Evaluated				-
<b>E.1</b>				
Direct Unit Cost (C.1 ÷ D.1) - As Submitted				29,144.15
<b>E.2</b>				
Direct Unit Cost (C.2 ÷ D.2) - As Evaluated				-
<b>Name and Specification</b>	<b>Unit</b>	<b>Quantity</b>	<b>Unit Cost</b>	<b>Amount (Php.)</b>
<b>Materials</b>				
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				
<b>F.2</b>				
Sub-Total for F-2 As Evaluated				-
<b>G.1</b>				
Direct Unit Cost (E.1 + F.1) - As Submitted				41,324.15
<b>G.2</b>				
Direct Unit Cost (E.2 + F.2) - As Evaluated				-
<b>H.1</b>				
Overhead, Contingencies & Miscellaneous (OCM) - As Submitted			12%/9%/7%/6% of G.1	4,132.41
<b>H.2</b>				
Overhead, Contingencies & Miscellaneous (OCM) - As Evaluated			12%/9%/7%/6% of G.1	-
<b>I.1</b>				
Contractor's Profit - As Submitted			10%/8% of G.1	3,305.93
<b>I.2</b>				
Contractor's Profit - As Evaluated			10%/8% of G.1	-
<b>J.1</b>				
Value Added Tax - As Submitted			5% of (G.1+H1+I1)	2,438.12
<b>J.2</b>				
Value Added Tax - As Evaluated			5% of (G.2+H2+I2)	-
<b>K.1</b>				
Total Unit Cost - As Submitted			(G.1+H1+I1+J1)	51,200.62
<b>K.2</b>				
Total Unit Cost - As Evaluated			(G.2+H2+I2+J1)	-

Prepared by:

JERALD R. BARREKA

Engineer II

Checked/Reviewed

ISIDRA A. ESTANISLAO

Engineer IV







## Zamboanga del Sur

## DETAILED UNIT PRICE ANALYSIS

FORM-POW-2015-01D-00

Item No./Description : Occupational Safety &amp; Health Program

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. Safety Practitioner	1	672	80.95	54,399.24
A.1	b. First Alder	2	1344	74.14	199,278.24
	Sub-Total for A-1 As Submitted				253,677.48
	Labor				
A.2					
	Sub-Total for A-2 As Evaluated				
B.1	Name and Capacity	No. of Units	No. of Hour/s	Hourly Rate	Amount (Php.)
	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				253,677.48
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				253,677.48
E.2	Direct Unit Cost (C.2 ÷ D.2) - As Evaluated				-
	Name and Specification	Unit	Quantity	Unit Cost	Amount (Php.)
	Materials				
F.1	a. Pairs, Rubber Boots Men, Long with Steel Toe, Black	pair	24.00	400.00	9,600.00
	b. Pairs, Working Gloves (Maong Materials)	pair	24.00	15.00	360.00
	c. Rain Coats (Rain Forced, Hip Length Small, Medium & Large)	pcs	24.00	100.00	2,400.00
	Sub-Total for F-1 As Submitted				12,360.00
	Materials				
F.2					
	Sub-Total for F-2 As Evaluated				-
G.1	Direct Unit Cost (E.1+F.1) - As Submitted				266,037.48
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	-
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	21,283.00
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)	14,366.02
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)	301,686.50
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 Sur

## DETAILED UNIT PRICE ANALYSIS

FORM-POW-2015-01D-00

Item No./Description : Structure Excavation

Unit of Measurement : 5,087.00 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 (Php.)
A.1	Labor				
	a. Construction Foreman	1	1.00	80.95	80.95
	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 (Php.)
B.1	Equipment				
	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 (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				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	15.98
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)	9.43
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)	197.93
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

# **DETAILED UNIT PRICE ANALYSIS**

FORM-POW-2015-01D-00

Item No./Description : Embankment from Borrow


Unit of Measurement : 1,885.00 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
				-
				-
Sub-Total for A-1 As Submitted				171.26
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. 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				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	386.40	483.00
				-
Sub-Total for F-1 As Submitted				483.00
Materials				
F.2				
Sub-Total for F-2 As Evaluated				-
G.1				
Direct Unit Cost (E.1+F.1) - As Submitted				579.06
G.2				
Direct Unit Cost (E.2+F.2) - As Evaluated				-
H.1				
Overhead, Contingencies & Miscellaneous (OCM) - As Submitted			2%/9%/7%/6% of G.1	57.91
H.2				
Overhead, Contingencies & Miscellaneous (OCM) - As Evaluated			2%/9%/7%/6% of G.1	-
I.1				
Contractor's Profit - As Submitted			10%/8% of G.1	46.32
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)	34.16
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)	717.45
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 Sur

## DETAILED UNIT PRICE ANALYSIS

FORM-POW-2015-01D-00

Item No./Description : Aggregate Subbase Course

Unit of Measurement : 839.00 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				-
Name and Capacity	No. of Units	No. of Hour/s	Hourly Rate	Amount (Php.)
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. Aggregate Subbase Course	cu.m	1.15	1,056.30	1,214.75
Sub-Total for F-1 As Submitted				1,214.75
Materials				
F.2				
Sub-Total for F-2 As Evaluated				-
G.1 Direct Unit Cost (E.1+F.1) - As Submitted				1,310.80
G.2 Direct Unit Cost (E.2+F.2) - As Evaluated				-
H.1 Overhead, Contingencies & Miscellaneous (OCM) - As Submitted			2%/9%/7%/6% of G.1	131.08
H.2 Overhead, Contingencies & Miscellaneous (OCM) - As Evaluated			2%/9%/7%/6% of G.1	-
I.1 Contractor's Profit - As Submitted			10%/8% of G.1	104.86
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)	77.34
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)	1,624.08
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 Sur  
DETAILED UNIT PRICE ANALYSIS

FORM-POW-2015-01D-00

Item No./Description : Structural Steel Sheet Piles, Furnished

Unit of Measurement : 9,120.00 m  
 Output per hour-As Submitted : 72.00  
 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	2	1.00	58.61	117.22
	c. Laborer	2	1.00	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				
	a. Truck Mounted Crane	1	1.00	3,127.20	3,127.20
	Minor Tools (10% of Labor Cost)				28.85
	Sub-Total for B-1 As Submitted				3,156.05
	Equipment				
B.2					
	Sub-Total for B-2 As Evaluated				
C.1	Total (A.1+B.1) - As Submitted				3,444.53
C.2	Total (A.2+B.2) - As Evaluated				-
D.1	Output per Hour - As Submitted				72.00
D.2	Output per Hour - As Evaluated				-
E.1	Direct Unit Cost (C.1 ÷ D.1) - As Submitted				47.84
E.2	Direct Unit Cost (C.2 ÷ D.2) - As Evaluated				-
	Name and Specification	Unit	Quantity	Unit Cost	Amount (Php.)
F.1	Materials				
	a. Steel Sheet Pile KSP II (delivered at site)	kg	48.00	50.00	2,400.00
	Miscellaneous (2% of Materials Cost)				48.00
	Sub-Total for F-1 As Submitted				2,448.00
	Materials				
F.2					
	Sub-Total for F-2 As Evaluated				-
G.1	Direct Unit Cost (E.1+F.1) - As Submitted				2,495.84
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	249.58
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	199.67
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)	147.25
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)	3,092.35
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





Zamboanga del Sur  
DETAILED UNIT PRICE ANALYSIS

FORM-POW-2015-01D-00

Item No./Description : Structural Steel Sheet Piles, Driven

Unit of Measurement : 9,120.00 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. 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	3,069.00	3,069.00
c. Generator Set	1	1.00	2,147.27	2,147.27
d. Welding Machine	1	1.00	539.00	539.00
e. Cutting Outfit	1	0.50	45.45	22.73
Minor Tools (5% of Labor Cost)				35.18
Sub-Total for B-1 As Submitted				8,940.37
Equipment				
B.2				
Sub-Total for B-2 As Evaluated				
C.1				
Total (A.1+B.1) - As Submitted				9,643.91
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				964.39
E.2				
Direct Unit Cost (C.2 +D.2) - As Evaluated				-
Name and Specification	Unit	Quantity	Unit Cost	Amount (Php.)
Materials				
a. Welding Rod	kg	0.02	150.00	3.60
b. Oxy/Acetylene	set	0.01	2,500.00	24.00
c. Coco Logs	m	0.18	436.00	78.48
d. Good Lumber	bld.ft	1.55	37.00	57.35
e. Assorted CWN	kg	0.02	78.00	1.56
Miscellaneous (2% of Materials)				3.30
Sub-Total for F-1 As Submitted				168.29
Materials				
F.2				
Sub-Total for F-2 As Evaluated				-
G.1				
Direct Unit Cost (E.1+F.1) - As Submitted				1,132.68
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	113.27
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	90.61
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)	66.83
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)	1,403.39
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 Sur

## DETAILED UNIT PRICE ANALYSIS

FORM-POW-2015-01D-00

Item No./Description : Reinforcing Steel (Grade 40)

Unit of Measurement : 38,541.00 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.)
<b>Labor</b>				
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				-
				-
<b>Name and Capacity</b>	<b>No. of Units</b>	<b>No. of Hour/s</b>	<b>Hourly Rate</b>	<b>Amount (Php.)</b>
<b>Equipment</b>				
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				1,026.72
Total (A.1+B.1) - As Submitted				-
C.2				180.00
Total (A.2+B.2) - As Evaluated				-
D.1				-
Output per Hour - As Submitted				5.70
D.2				-
Output per Hour - As Evaluated				-
E.1				-
Direct Unit Cost (C.1 ÷ D.1) - As Submitted				-
E.2				-
Direct Unit Cost (C.2 ÷ D.2) - As Evaluated				-
<b>Name and Specification</b>	<b>Unit</b>	<b>Quantity</b>	<b>Unit Cost</b>	<b>Amount (Php.)</b>
<b>Materials</b>				
a. Tie Wire	kg	0.02	80.00	1.68
b. Reinforcing Steel Bar, Grade 40	kg	1.05	40.00	42.00
F.1				-
				-
				-
				-
Sub-Total for F-1 As Submitted				43.68
Materials				-
				-
F.2				-
Sub-Total for F-2 As Evaluated				-
G.1				49.38
Direct Unit Cost (E.1+F.1) - As Submitted				-
G.2				-
Direct Unit Cost (E.2+F.2) - As Evaluated				-
H.1				4.94
Overhead, Contingencies & Miscellaneous (OCM) - As Submitted				-
H.2				-
Overhead, Contingencies & Miscellaneous (OCM) - As Evaluated				-
I.1				3.95
Contractor's Profit - As Submitted				-
I.2				-
Contractor's Profit - As Evaluated				-
J.1				2.91
Value Added Tax - As Submitted				-
J.2				-
Value Added Tax - As Evaluated				-
K.1				61.19
Total Unit Cost - As Submitted				-
K.2				-
Total Unit Cost - As Evaluated				-

Prepared by:

  
 JERALD R. BARRERA

Engineer II

Checked/Reviewed

  
 ISIDRA A. ESTANISLAO

Engineer IV



## Zamboanga del Sur

## DETAILED UNIT PRICE ANALYSIS

FORM-POW-2015-01D-00

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

Unit of Measurement : 8,635.00 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.)
<b>Labor</b>				
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				-
<b>Name and Capacity</b>	<b>No. of Units</b>	<b>No. of Hour/s</b>	<b>Hourly Rate</b>	<b>Amount (Php.)</b>
<b>Equipment</b>				
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				-
<b>Name and Specification</b>	<b>Unit</b>	<b>Quantity</b>	<b>Unit Cost</b>	<b>Amount (Php.)</b>
<b>Materials</b>				
a. Tie Wire	kg	0.02	80.00	1.68
b. Reinforcing Steel Bar, Grade 40	kg	1.05	42.00	44.10
F.1				
Sub-Total for F-1 As Submitted				45.78
Materials				
F.2				
Sub-Total for F-2 As Evaluated				-
G.1				
Direct Unit Cost (E.1+F.1) - As Submitted				51.48
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	5.15
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	4.12
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)	3.04
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)	63.79
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 Sur

## DETAILED UNIT PRICE ANALYSIS

FORM-POW-2015-01D-00

Item No./Description : Structural Concrete,  $f'_c=27.58$  Mpa

Unit of Measurement : 1,569.00 cu.m

Output per hour-As Submitted : 1.40

Output per hour-As Evaluated : -

Note: Use Two (2) gang

Designation	No. of Person/s	No. of Hour/s	Hourly Rate	Amount (Php.)
<b>Labor</b>				
a. Construction Foreman	1	1.00	80.95	80.95
b. Skilled Laborer	8	1.00	58.61	468.87
c. Laborer	16	1.00	45.16	722.50
<i>Installation/Removal of Formworks</i>				-
a. Skilled Laborer	8	1.00	58.61	468.87
b. Laborer	16	1.00	45.16	722.50
Sub-Total for A-1 As Submitted				2,463.69
<b>Labor</b>				
				-
				-
<b>A.2</b>				
Sub-Total for A-2 As Evaluated				-
<b>Name and Capacity</b>	<b>No. of Units</b>	<b>No. of Hour/s</b>	<b>Hourly Rate</b>	<b>Amount (Php.)</b>
<b>Equipment</b>				
a. One Bagger Mixer	2	1.00	172.00	344.00
b. Concrete Vibrator	2	1.00	91.25	182.50
c. Water Truck/Pump	2	0.10	2,450.00	490.00
Minor Tools (5% of Labor Cost)				123.18
Sub-Total for B-1 As Submitted				1,139.68
<b>Equipment</b>				
<b>B.2</b>				
Sub-Total for B-2 As Evaluated				
<b>C.1</b>				
Total (A.1+B.1) - As Submitted				3,603.38
<b>C.2</b>				
Total (A.2+B.2) - As Evaluated				-
<b>D.1</b>				
Output per Hour - As Submitted				1.40
<b>D.2</b>				
Output per Hour - As Evaluated				-
<b>E.1</b>				
Direct Unit Cost (C.1 ÷ D.1) - As Submitted				2,573.84
<b>E.2</b>				
Direct Unit Cost (C.2 ÷ D.2) - As Evaluated				-
<b>Name and Specification</b>	<b>Unit</b>	<b>Quantity</b>	<b>Unit Cost</b>	<b>Amount (Php.)</b>
<b>Materials</b>				
a. Lumber, Good	bd.ft	17.50	37.00	647.50
b. Marine Plywood	pc	0.40	1,247.00	498.80
c. Assorted GWN	kg	0.70	78.00	54.60
d. Cement	bag	9.50	276.84	2,630.01
e. Sand	cu.m	0.50	1,156.30	578.15
f. Gravel	cu.m	1.00	1,206.30	1,206.30
Sub-Total for F-1 As Submitted				5,615.36
<b>Materials</b>				
<b>F.2</b>				
Sub-Total for F-2 As Evaluated				-
<b>G.1</b>				
Direct Unit Cost (E.1+F.1) - As Submitted				8,189.20
<b>G.2</b>				
Direct Unit Cost (E.2+F.2) - As Evaluated				-
<b>H.1</b>				
Overhead, Contingencies & Miscellaneous (OCM) - As Submitted			12%/9%/7%/6% of G.1	818.92
<b>H.2</b>				
Overhead, Contingencies & Miscellaneous (OCM) - As Evaluated			12%/9%/7%/6% of G.1	-
<b>I.1</b>				
Contractor's Profit - As Submitted			10%/8% of G.1	655.14
<b>I.2</b>				
Contractor's Profit - As Evaluated			10%/8% of G.1	-
<b>J.1</b>				
Value Added Tax - As Submitted			5% of (G.1+H1+I1)	483.16
<b>J.2</b>				
Value Added Tax - As Evaluated			5% of (G.2+H2+I2)	-
<b>K.1</b>				
Total Unit Cost - As Submitted			(G.1+H1+I1+J1)	10,146.42
<b>K.2</b>				
Total Unit Cost - As Evaluated			(G.2+H2+I2+J2)	-

Prepared by:

JERALD R. BARRERA

Engineer II

Checked/Reviewed

ISIDRA A. ESTANISLAO

Engineer IV

Zamboanga del Sur  
DETAILED UNIT PRICE ANALYSIS

FORM-POW-2015-01D-00

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

Unit of Measurement : 1,609.00 cu.m  
 Output per hour-As Submitted : 1.25  
 Output per hour-As Evaluated : -

Note: Use Two (2) gang

Designation	No. of Person/s	No. of Hour/s	Hourly Rate	Amount (Php.)
<b>Labor</b>				
A.1				
a. Construction Foreman	1	1.00	80.95	80.95
b. Skilled Laborer	4	1.00	58.61	234.44
c. Laborer	16	1.00	45.16	722.50
Sub- Total for A-1 As Submitted				1,037.89
Labor				
A.2				
Sub-Total for A-2 As Evaluated				-
<b>Name and Capacity</b>	<b>No. of Units</b>	<b>No. of Hour/s</b>	<b>Hourly Rate</b>	<b>Amount (Php.)</b>
<b>Equipment</b>				
B.1				
a. One Bagger Mixer	2	1.00	172.00	344.00
b. Water Truck/Pump	2	0.05	2,450.00	245.00
Minor Tools (10% of Labor Cost)				103.79
Sub- Total for B-1 As Submitted				692.79
Equipment				
B.2				
Sub-Total for B-2 As Evaluated				
C.1				
Total (A.1+B.1) - As Submitted				1,730.67
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				1,384.54
E.2				
Direct Unit Cost (C.2 +D.2) - As Evaluated				-
<b>Name and Specification</b>	<b>Unit</b>	<b>Quantity</b>	<b>Unit Cost</b>	<b>Amount (Php.)</b>
<b>Materials</b>				
a. Portland Cement	bag	2.50	276.84	692.11
b. Sand	cu.m	0.21	1,156.30	242.82
c. Gravel Fill	cu.m	0.02	1,206.30	18.09
d. Weesp 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	1,411.30	1,481.87
Miscellaneous (1% of Materials Cost)				24.77
Sub-Total for F-1 As Submitted				2,501.96
Materials				
F.2				
Sub-Total for F-2 As Evaluated				-
G.1				
Direct Unit Cost (E.1+F.1) - As Submitted				3,886.50
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	388.65
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	310.92
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)	229.30
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)	4,815.38
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 Sur

## DETAILED UNIT PRICE ANALYSIS

FORM-POW-2015-01D-00

Item No./Description : Handlaid Rock Embankment

Unit of Measurement : 13,929.00 cu.m

Output per hour-As Submitted : 3.13

Output per hour-As Evaluated : -

Note: Use Five (5) gang

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	10	1.00	58.61	586.09
c. Laborer	40	1.00	45.16	1,806.25
Sub-Total for A-1 As Submitted				2,473.29
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)				247.33
Sub-Total for B-1 As Submitted				247.33
Equipment				
B.2				
Sub-Total for B-2 As Evaluated				
C.1				
Total (A.1+B.1) - As Submitted				2,720.62
C.2				
Total (A.2+B.2) - As Evaluated				-
D.1				
Output per Hour - As Submitted				1.60
D.2				
Output per Hour - As Evaluated				-
E.1				
Direct Unit Cost (C.1 ÷ D.1) - As Submitted				1,700.39
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	1,411.30	1,481.87
				-
				-
				-
F.1				
Sub-Total for F-1 As Submitted				1,481.87
Materials				
F.2				
Sub-Total for F-2 As Evaluated				-
G.1				
Direct Unit Cost (E.1+F.1) - As Submitted				3,182.25
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	318.23
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	254.58
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)	187.75
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)	3,942.81
K.2				
Total Unit Cost - As Evaluated			(G.2+H2+I2+J1)	-

Prepared by:

*Jerald R. Barrera*  
JERALD R. BARRERA

Engineer II

Checked/Reviewed

*Isidra A. Estanislao*  
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 Dumpttruck  
Weight of Dumpttruck (cap. 10.00 cu.m.) : 16,000.00 kgs  
Unit Weight of Fine Aggregates : 1,640.00 kg/cu.m.  
Unit Weight of Course Aggregates : 1,534.00 kg/cu.m.

Maximum Volume to be Carried per DT : 11.57 cu.m.

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

$$\text{Loaded Running} = \frac{5.00 \times 60.00}{30.00} = 10 \text{ mins.}$$

$$\text{Unloaded Running} = \frac{5.00 \times 60.00}{40.00} = 7.5 \text{ mins.}$$

Loading & Unloading = 5.00 mins.  
Capacity of Dumpttruck = 10.00 cu.m.  
Total Cycle Time = 22.50 mins.

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

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

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

#### EQUIPMENT USED: (2009 ACCEL RATES)

4.00 - Unit Dumpttruck @ P 10,816.00 / day X 1.17 days = P 50,700.00  
Sub-Total P 50,700.00

Estimated Quantity = 1,000.00 cu.m.  
**Unit Cost P 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 SUR 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	45.00 X	10.14	= 456.30	+ 700.00	= 1,156.30
Cost of Coarse Aggregates	45.00 X	10.14	= 456.30	+ 750.00	= 1,206.30
Cost of Item 200 Materials	45.00 X	10.14	= 456.30	+ 600.00	= 1,056.30
Cost of Item 201 Materials	45.00 X	10.14	= 456.30	+ 630.00	= 1,086.30
Cost of Item 300 Materials	45.00 X	10.14	= 456.30	+ 700.00	= 1,156.30
Cost of Boulders	45.00 X	10.14	= 456.30	+ 955.00	= 1,411.30
Cost of Embankment, Common Borrow	10.00 X	10.14	= 101.40	+ 285.00	= 386.40
Cost of Embankment, Selected Borrow	10.00 X	10.14	= 101.40	+ 320.00	= 421.40

# 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, $f_c=27.58$ Mpa	14,905.50
Lean Concrete for RCBC	-
Pipe Culvert & Storm Drain	-
Reinforced Concrete Culverts Pipe, 610 mm dia	-
Grouted Riprap, Class "A"	4,022.50
Stone Masonry	-
<b>TOTAL</b>	<b>18,928.00</b>

Quantity = 18,928.00 Bags

Delivery Charge = P 0.12 /bag/km

SITE	HAULING DISTANCE
Zamboanga del Sur 1st DEO	
PROJECT SITE	50.00

\* Average Hauling Distance from source to assumed stockpiling area:  
say 50.00 km.

Delivery Charge = P 0.12 X 50.00  
Delivery Charge = P 6.00 /bag

\* Delivery Truck : 18,928.00 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 =  $\frac{50.00 \times 60.00}{30.00}$  = 100 mins.

Unloading Running =  $\frac{50.00 \times 60.00}{40.00}$  = 75 mins.

Loading & Unloading = 45.00 mins.

Capacity of Dumptruck = 8.00 cu.m.

500.00 bags

Total Cycle Time = 220.00 mins.



$$\text{No. of trips for Dumptruck per day} = \frac{8.00}{220.00} \times 60.00 = 2.18 \text{ trips}$$

$$\begin{aligned} \text{Dumptruck Daily Output} &= 500.00 \times 2.18 = 1,090.91 \text{ cu.m.} \\ \text{Using 4 Dumptruck} &= 1,090.91 \times 4.00 = 4,363.64 \text{ cu.m.} \end{aligned}$$

$$\text{No. of Days for Dumptruck} = \frac{18,928.00}{4,363.64} = 4.34 \text{ days}$$

$$\begin{aligned} \text{No. of Days for Labor for unloading} &= \text{complimentary to D.Truck days} = 4.34 \text{ days} \end{aligned}$$

#### DELIVERY COST:

$$18,928.00 \text{ Bags, Portland Cement} @ \text{ P } 6.00 \text{ /bag} = \text{ P } 113,568.00$$

**Sub-total 113,568.00**

#### LABOR:

1 Foreman	@ P 558.00 /day	X	4.34 days	= P 2,420.42
10 Laboreers	@ P 312.24 /day	X	4.34 days	= 13,543.93
			<b>Sub-total</b>	<b>15,964.35</b>

#### MATERIALS:

$$18,928.00 \text{ Bags, Portland Cement} @ \text{ P } 270.00 \text{ /bag} = \text{ P } 5,110,560.00$$

**Sub-total 5,110,560.00**

Estimated Quantity : 18,928.00 Bags

Unit Cost	P	276.84
Grand Total	P	5,240,092.35
Delivery Cost	P	113,568.00
Labor	P	15,964.35
Materials	P	5,110,560.00