Department of Public Works and Highways

Bureau : DPWH
Region : IX
District/City : Zamboanga City

PROGRAM OF WORK

(For all types of Project)

NAME/LOCATION OF PROJECT :	
Road Widening Sindangan - Liloy Road, Zamboanga del Norte 2nd DEO	Approriation : P 105,000,000.00 Source of Funds : CY-2018 Issued Obligated Authority : Released : Cal. Days to Complete : 180.00 Cal. Days Desirable Starting Date : Upon Approval Mode of Implementation :
PROJECT CATEGORY : NATIONAL ROAD	
PROJECT DESCRIPTION : Scope of Work : Road Widening Road Width : 6.70 m. Roadbed Width : 12.00 m. Subbase Course : 0.30 mtrs thick Surface Course : 0.15 mtrs thick	NET LENGTH : K1958+474.00 - K1960+994.00 K1961+132.00 - K1962+180.00 Net Length : **7.14** lane km Net Length : **3,568.00** ln.m. / **3.568** km

MINIMUM EQUIPMENT REQUIREMENT : TECHNICAL PERSONNEL REQUIRED :

DESCRIPTION	NO.	DESCRIPTION	NO.	DESCRIPTION	NO.
Dumptruck (10 Wheeler)	10	Water Pump	1	Project Engineer	1
Bulldozer	2	Portable Screed	1	Materials Engineer	1
Backhoe	3	Concrete Vibrator	2	Geometric Control	1
Road Grader	2	Concrete Cutter	2	Foreman	1
Road Roller	2	Bar Cutter	1	Materials Lab. Tech	1
Pay Loader	4	Bar Bender	1	Mason	10
Water Truck	2	Conc. Mixer (1-Bagger)	2	Carpenter	6
Water Tank	2	Plate Compactor	1	Laborers (Skilled)	10
Transit Mixer	4			Laborers (Unskilled)	20

ESTIMATED COST OF PROPOSED WORK

ITEM NO.	DESCRIPTION	% OF TOTAL	UNIT	QUANTITY	DIRECT COST	
					TOTAL	UNIT COST
100(3)a1	Individual Removal of Trees	0.085	each	72.00	68,951.25	957.66
100(3)a3	Individual Removal of Trees	0.002	each	2.00	1,915.31	957.66
100(3)a4	Individual Removal of Trees	0.004	each	2.00	3,162.33	1,581.16
101(1)	Removal of Structures and Obstructions	0.618	ls	1.00	500,000.00	500,000.00
101(6)	Removal of Existing RCBC Wingwall	0.032	cu.m.	20.00	26,107.50	1,305.38
101(4)a1	Removal of Existing RCPC	0.005	each	12.00	4,416.00	368.00
101(3b2)	Removal of Existing PCCP	0.002	sq.m	16.50	2,001.47	121.30
101(2)	Removal of Existing Headwall	0.001	each	2.00	723.51	361.76
101(8)	Removal of Existing Guardrails	0.034	ln.m	1,019.00	27,850.85	27.33
101(9)	Removal of Existing Guardrails Post	0.009	each	266.00	7,270.19	27.33
101(10)	Removal of Existing Road Signs	0.013	each	29.00	10,672.00	368.00
102(2)	Surplus Common Excavation	0.700	cu.m.	3,122.00	565,944.71	181.28
103 (1)a	Structure Excavation	0.089	cu.m.	312.00	71,796.08	230.12
103(3)	Foundation Fill	0.010	cu.m.	9.50	7,934.38	835.20
103(6)a	Pipe Culvert and Drain Excavation	0.016	cu.m.	57.50	13,231.65	230.12
104(1)a1	Embankment from Roadway Excavation	3.246	cu.m.	11,331.00	2,624,080.91	231.58
105 (1)a	Subgrade Preparation	0.521	sq.m.	27,466.50	421,111.80	15.33
200 (1)	Aggregate Subbase Course	26.971	cu.m.	14,205.00	21,804,547.16	1,534.99
300 (1)	Aggregate Surface Course	3.178	cu.m.	1,665.00	2,569,579.52	1,543.29
311(1)e1a	Portland Cement Concrete Pavement-using Conventional Method, 0.28m thick	51.307	sq.m.	24,984.00	41,477,862.77	1,660.18
311(1)a	Portland Cement Concrete Pavement, 0.15m. Thick	0.687	sq.m	609.00	555,270.06	911.77
404 (1)a	Reinforcing Steel Bar, Grade 40	0.292	kg.	4,855.50	236,225.60	48.65

404(1)b	Reinforcing Steel Bar, Grade 60	0.467	kg.	7,435.00	377,334.72	50.75
405 (1) a3	Structural Concrete, Class A	1.898	cu.m	208.50	1,534,856.12	7,361.42
407(8)	Concrete Structure (Lean Concrete)	0.069	cu.m	6.50	56,105.88	8,631.67
500(1)b3	Pipe Culvert & Storm Drain	0.337	ln.m	75.00	272,210.65	3,629.48
505(5)	Grouted Riprap, Class A	4.023	cu.m	746.50	3,252,350.91	4,356.80
506(1)	Stone Masonry	0.411	cu.m	74.50	332,191.92	4,458.95
611(1)	Trees (Furnishing and Transplanting)	1.513	each	301.00	1,223,172.20	4,063.70
612(1)	Reflectorized Thermoplastic Pavement Markings (White)	0.965	sq.m	1,071.00	780,560.12	728.81
A.1.1(3)	Const. of Field Office for the Engineer	0.505	LS	1.00	408,182.52	408,182.52
A.1.1(11)	Prov. Of Furniture, Equipment and Appliances for Field Engineer	0.300	LS	1.00	242,943.32	242,943.32
A.1.2(5)	Operation & Maintenance of Gov't. Service Vehicle	0.372	L.S	1.00	300,720.00	300,720.00
B.5	Project Billboard	0.006	Unit	2.00	4,530.90	2,265.45
B.7	Occupational Safety & Health Program	0.182	L.S	1.00	147,208.80	147,208.80
B.9	Mobilization and Demobilization	0.961	L.S	1.00	776,792.00	776,792.00
B.4(1)	Construction Survey and Staking	0.174	Km.	3.79	140,760.04	37,159.46
TOTAL		**100.000**			**P 80,850,575.16**	

Name of Project : **Road Widening Sindangan - Liloy Road, Zamboanga del Norte 2nd DEO**

Station Limits : K1958+474.00 - K1960+994.00
K1876+377.00 - K1877+534.00

BREAKDOWN OF ESTIMATED EXPENDITURES	% OF TOTAL	AMOUNT
I. ESTIMATED COST		
A. DIRECT COST		
A.1 Materials	62.33	65,449,247.38
A.2 Labor	1.50	1,572,776.00
A.3 Equipment Expenses	13.17	13,828,551.77
SUB-TOTAL (DIRECT COST)	77.00	P 80,850,575.16
B. INDIRECT COST (Per DO # 197 s. 2016)		
B.1 Overhead, Contingency & Misc. 10% ~~(8%~~ Max. of D.C.)	7.56	7,938,291.10
B.2 Profit (8% Max. D.C.)	6.06	6,362,409.59
C. VAT (5% of D.C. and I.C. per D.O. # 197)	4.53	4,757,563.79
SUB-TOTAL (CONTRACT COST)	95.15	P 99,908,839.64
II. ESTIMATED GOVERNMENT EXPENDITURES		
1 Engineering and Administrative Overhead (3.5%)	3.50	3,675,000.00
2 Detailed Engineering (1%)		
3 Reserved for the Payment of RROW)	1.35	1,416,160.36
4 Physical Reserved	0.00	
TOTAL ESTIMATED PROJECT COST	100.00	P 105,000,000.00

Prepared by:

JERALD R. BARRERA
Engineer II

Submitted by:

LEONCIO B. SOLAMILLO
Chief, Construction Division

Recommending Approval:

CAYAMOMBAO D. DIA
OIC-Assistant Regional Director

APPROVED:

~~JORGE U. SEBASTIAN, JR., CESO III~~
~~Regional Director~~

APPROVED BUDGET FOR THE CONTRACT

Road Widening Sindangan - [illegible] Road, Zamboanga del Norte 2nd DEO
Project Name and Location

Station Limits : K1958+474.00 - K1960+994.00 K1961+132.00 - K1962+180.00
Length : 3788.00 ln.m.

Contract Duration : 180.00 Calendar Days

Item No.	Description	Quantity	Unit	Estimated Direct Cost	MARK-UP IN PERCENT		TOTAL MARK-UPS		VAT	TOTAL INDIRECT COST	TOTAL COST	TOTAL COST
					OCM	PROFIT	%	VALUE				
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9) = (5)X(8)	(10) = [(5)+(9)]*5%	(11) = (9) + (10)	(12) = (5) + (11)	(13) = (12) / (3)
PART A	**FACILITIES FOR THE ENGINEER**				10.00	8.00	18.00					
A.1.1(3)	Const. of Field Office for the Engineer	1.00	LS	408,182.52	10.00	8.00	18.00	73,472.85	24,082.77	97,555.62	505,738.14	505,738.14
A.1.1(11)	Prov. Of Furniture, Equipment and Appliances for Field Engineer	1.00	LS	242,943.32	0.00	0.00	0.00	-	12,147.17	12,147.17	255,090.49	255,090.49
A.1.2(5)	Operation & Maintenance of Gov't. Service Vehicle	1.00	L.S	300,720.00	0.00	0.00	0.00	-	15,036.00	15,036.00	315,756.00	315,756.00
	TOTAL OF PART A			951,845.84				73,472.85	51,265.93	124,738.79	1,076,584.63	
PART B	**OTHER GENERAL REQUIREMENTS**											
B.5	Project Billboard	2.00	Unit	4,530.90	10.00	8.00	18.00	815.56	267.32	1,082.89	5,613.79	2,806.89
B.7	Occupational Safety & Health Program	1.00	L.S	147,208.80	0.00	8.00	8.00	11,776.70	7,949.28	19,725.98	166,934.78	166,934.78
B.9	Mobilization and Demobilization	1.00	L.S	776,792.00	0.00	0.00	0.00	-	38,839.60	38,839.60	815,631.60	815,631.60
B.4(1)	Construction Survey and Staking	3.79	Km.	140,760.04	10.00	8.00	18.00	25,336.81	8,304.84	33,641.65	174,401.69	46,040.57
	TOTAL OF PART B			1,069,291.74				37,929.07	55,361.04	93,290.11	1,162,581.86	
PART C	**EARTHWORKS**											
100(3)a1	Individual Removal of Trees	72.00	each	68,951.25	10.00	8.00	18.00	12,411.22	4,068.12	16,479.35	85,430.59	1,186.54
100(3)a3	Individual Removal of Trees	2.00	each	1,915.31	10.00	8.00	18.00	344.76	113.00	457.76	2,373.07	1,186.54
100(3)a4	Individual Removal of Trees	2.00	each	3,162.33	10.00	8.00	18.00	569.22	186.58	755.80	3,918.12	1,959.06
101(1)	Removal of Structures and Obstructions	1.00	ls	500,000.00	10.00	8.00	18.00	90,000.00	29,500.00	119,500.00	619,500.00	619,500.00
101(6)	Removal of Existing RCBC Wingwall	20.00	cu.m.	26,107.50	10.00	8.00	18.00	4,699.35	1,540.34	6,239.69	32,347.19	1,617.36
101(4)a1	Removal of Existing RCPC	12.00	each	4,416.00	10.00	8.00	18.00	794.88	260.54	1,055.42	5,471.42	455.95
101(3b2)	Removal of Existing PCCP	16.50	sq.m	2,001.47	10.00	8.00	18.00	360.26	118.09	478.35	2,479.82	150.29
101(2)	Removal of Existing Headwall	2.00	each	723.51	10.00	8.00	18.00	130.23	42.69	172.92	896.43	448.22
101(8)	Removal of Existing Guardrails	1,019.00	ln.m	27,850.85	10.00	8.00	18.00	5,013.15	1,643.20	6,656.35	34,507.20	33.86
101(9)	Removal of Existing Guardrails Post	266.00	each	7,270.19	10.00	8.00	18.00	1,308.63	428.94	1,737.58	9,007.77	33.86
101(10)	Removal of Existing Road Signs	29.00	each	10,672.00	10.00	8.00	18.00	1,920.96	629.65	2,550.61	13,222.61	455.95
102(2)	Surplus Common Excavation	3,122.00	cu.m.	565,944.71	10.00	8.00	18.00	101,870.05	33,390.74	135,260.79	701,205.50	224.60
103 (1)a	Structure Excavation	312.00	cu.m.	71,796.08	10.00	8.00	18.00	12,923.29	4,235.97	17,159.26	88,955.35	285.11
103(3)	Foundation Fill	9.50	cu.m.	7,934.38	10.00	8.00	18.00	1,428.19	468.13	1,896.32	9,830.70	1,034.81
103(6)a	Pipe Culvert and Drain Excavation	57.50	cu.m.	13,231.65	10.00	8.00	18.00	2,381.70	780.67	3,162.36	16,394.01	285.11
104(1)a1	Embankment from Roadway Excavation	11,331.00	cu.m.	2,624,080.91	10.00	8.00	18.00	472,334.56	154,820.77	627,155.34	3,251,236.25	286.93
105 (1)a	Subgrade Preparation	27,466.50	sq.m.	421,111.80	10.00	8.00	18.00	75,800.12	24,845.60	100,645.72	521,757.52	19.00
	TOTAL OF PART C			4,357,169.95				784,290.59	257,073.03	1,041,363.62	5,398,533.57	
PART D	**SUBBASE AND BASE COURSE**											
200 (1)	Aggregate Subbase Course	14,205.00	cu.m.	21,804,547.16	10.00	8.00	18.00	3,924,818.49	1,286,468.28	5,211,286.77	27,015,833.93	1,901.85
	TOTAL OF PART D			21,804,547.16				3,924,818.49	1,286,468.28	5,211,286.77	27,015,833.93	
PART E	**SURFACE COURSES**											
300 (1)	Aggregate Surface Course	1,665.00	cu.m.	2,569,579.52	10.00	8.00	18.00	462,524.31	151,605.19	614,129.50	3,183,709.02	1,912.14
311(1)e1a	Portland Cement Concrete Pavement-using Conventional Method, 0.28m thick	24,984.00	sq.m.	41,477,862.77	10.00	8.00	18.00	7,466,015.30	2,447,193.90	9,913,209.20	51,391,071.98	2,056.96
311(1)a	Portland Cement Concrete Pavement, 0.15m. Thick	609.00	sq.m	555,270.06	10.00	8.00	18.00	99,948.61	32,760.93	132,709.55	687,979.61	1,129.69
	TOTAL OF PART E			44,602,712.35				8,028,488.22	2,631,560.03	10,660,048.25	55,262,760.60	
PART F	**BRIDGE CONSTRUCTION**											
404 (1)a	Reinforcing Steel Bar, Grade 40	4,855.50	kg.	236,225.60	10.00	8.00	18.00	42,520.61	13,937.31	56,457.92	292,683.52	60.28
404(1)b	Reinforcing Steel Bar, Grade 60	7,435.00	kg.	377,334.72	10.00	8.00	18.00	67,920.25	22,262.75	90,183.00	467,517.72	62.88
405 (1) a3	Structural Concrete, Class A	208.50	cu.m	1,534,856.12	10.00	8.00	18.00	276,274.10	90,556.51	366,830.61	1,901,686.74	9,120.80
407(8)	Concrete Structure (Lean Concrete)	6.50	cu.m	56,105.88	10.00	8.00	18.00	10,099.06	3,310.25	13,409.31	69,515.19	10,694.64
	TOTAL OF PART F			2,204,522.33				396,814.02	130,066.82	526,880.84	2,731,403.16	
PART G	**DRAINAGE AND SLOPE PROTECTION STRUCTURES**											
500(1)b3	Pipe Culvert & Storm Drain	75.00	ln.m	272,210.65	10.00	8.00	18.00	48,997.92	16,060.43	65,058.35	337,269.00	4,496.92
505(5)	Grouted Riprap, Class A	746.50	cu.m	3,252,350.91	10.00	8.00	18.00	585,423.16	191,888.70	777,311.87	4,029,662.78	5,398.07
506(1)	Stone Masonry	74.50	cu.m	332,191.92	10.00	8.00	18.00	59,794.55	19,599.32	79,393.87	411,585.79	5,524.64
	TOTAL OF PART G			3,856,753.48				694,215.63	227,548.46	921,764.08	4,778,517.56	
PART H	**MISCELLANEOUS STRUCTURES**											
611(1)	Trees (Furnishing and Transplanting)	301.00	each	1,223,172.20	10.00	8.00	18.00	220,171.00	72,167.16	292,338.15	1,515,510.35	5,034.92
612(1)	Reflectorized Thermoplastic Pavement Markings (White)	1,071.00	sq.m	780,560.12	10.00	8.00	18.00	140,500.82	46,053.05	186,553.87	967,113.98	903.00
	TOTAL OF PART H			2,003,732.31				360,671.82	118,220.21	478,892.02	2,482,624.33	
	TOTAL			80,850,575.16				14,300,700.67	3,471,095.51	19,058,264.48	99,908,839.64	

Prepared by:

BELEN A. SAPALLEDA
Head TWG, BAC

Recommending Approval:

CAYAMOMBAO D. DIA
OIC-Assistant Regional Director

APPROVED:

JORGE U. SEBASTIAN, JR., CESO III
Regional Director

SUMMARY

Name of Project : **Road Widening Sindangan - Liloy Road, Zamboanga del Norte 2nd DEO**

Item No.	Description	Quantity	Unit	Labor	Equipment	Materials	OCM	Profit	VAT	TOTAL
100(3)a1	Individual Removal of Trees	72.00	each	15,656.40	47,534.85	5,760.00	6,895.12	5,516.10	4,068.12	87,803.67
100(3)a3	Individual Removal of Trees	2.00	each	434.90	1,320.41	160.00	191.53	153.22	113.00	2,373.07
100(3)a4	Individual Removal of Trees	2.00	each	434.90	2,567.43	160.00	316.23	252.99	186.58	3,918.12
101(1)	Removal of Structures and Obstructions	1.00	ls	-	-	500,000.00	50,000.00	40,000.00	29,500.00	619,500.00
101(6)	Removal of Existing RCBC Wingwall	20.00	cu.m.	2,174.50	23,933.00	-	2,610.75	2,088.60	1,540.34	32,347.19
101(4)a1	Removal of Existing RCPC	12.00	each	324.10	4,091.90	-	441.60	353.28	260.54	5,471.42
101(3b2)	Removal of Existing PCCP	16.50	sq.m	66.85	1,934.63	-	200.15	160.12	118.09	2,479.82
101(2)	Removal of Existing Headwall	2.00	each	35.00	688.51	-	72.35	57.88	42.69	896.43
101(8)	Removal of Existing Guardrails	1,019.00	ln.m	1,651.29	26,199.56	-	2,785.08	2,228.07	1,643.20	34,507.20
101(9)	Removal of Existing Guardrails Post	266.00	each	431.05	6,839.14	-	727.02	581.62	428.94	9,007.77
101(10)	Removal of Existing Road Signs	29.00	each	783.24	9,888.76	-	1,067.20	853.76	629.65	13,222.61
102(2)	Surplus Common Excavation	3,122.00	cu.m.	10,657.99	555,286.73	-	56,594.47	45,275.58	33,390.74	701,205.50
103 (1)a	Structure Excavation	312.00	cu.m.	3,195.35	68,600.73	-	7,179.61	5,743.69	4,235.97	88,955.35
103(3)	Foundation Fill	9.50	cu.m.	1,881.84	1,121.00	4,931.55	793.44	634.75	468.13	9,830.70
103(6)a	Pipe Culvert and Drain Excavation	57.50	cu.m.	588.89	12,642.76	-	1,323.16	1,058.53	780.67	16,394.01
104(1)a1	Embankment from Roadway Excavation	11,331.00	cu.m.	67,204.50	2,556,876.41	-	262,408.09	209,926.47	154,820.77	3,251,236.25
105 (1)a	Subgrade Preparation	27,466.50	sq.m.	14,836.49	406,275.31	-	42,111.18	33,688.94	24,845.60	521,757.52
200 (1)	Aggregate Subbase Course	14,205.00	cu.m.	46,038.41	1,782,727.50	19,975,781.25	2,180,454.72	1,744,363.77	1,286,468.28	27,015,833.93
300 (1)	Aggregate Surface Course	1,665.00	cu.m.	5,396.27	147,768.75	2,416,414.50	256,957.95	205,566.36	151,605.19	3,183,709.02
311(1)e1a	Portland Cement Concrete Pavement-using Conventional Method, 0.28m thick	24,984.00	sq.m.	351,356.44	5,212,077.00	35,914,429.33	4,147,786.28	3,318,229.02	2,447,193.90	51,391,071.98
311(1)a	Portland Cement Concrete Pavement, 0.15m. Thick	609.00	sq.m	4,604.24	71,473.30	479,192.53	55,527.01	44,421.61	32,760.93	687,979.61
404 (1)a	Reinforcing Steel Bar, Grade 40	4,855.50	kg.	14,284.07	10,872.95	211,068.59	23,622.56	18,898.05	13,937.31	292,683.52
404(1)b	Reinforcing Steel Bar, Grade 60	7,435.00	kg.	21,872.53	16,649.24	338,812.95	37,733.47	30,186.78	22,262.75	467,517.72
405 (1) a3	Structural Concrete, Class A	208.50	cu.m	179,335.32	89,164.80	1,266,356.00	153,485.61	122,788.49	90,556.51	1,901,686.74
407(8)	Concrete Structure (Lean Concrete)	6.50	cu.m	2,972.96	12,597.23	40,535.69	5,610.59	4,488.47	3,310.25	69,515.19
500(1)b3	Pipe Culvert & Storm Drain	75.00	ln.m	26,880.75	64,938.08	180,391.83	27,221.07	21,776.85	16,060.43	337,269.00
505(5)	Grouted Riprap, Class A	746.50	cu.m	316,235.32	703,786.17	2,232,329.43	325,235.09	260,188.07	191,888.70	4,029,662.78
506(1)	Stone Masonry	74.50	cu.m	25,247.99	23,894.98	283,048.95	33,219.19	26,575.35	19,599.32	411,585.79
611(1)	Trees (Furnishing and Transplanting)	301.00	each	65,452.45	1,073,590.25	84,129.50	122,317.22	97,853.78	72,167.16	1,515,510.35
612(1)	Reflectorized Thermoplastic Pavement Markings (White)	1,071.00	sq.m	19,019.67	63,970.83	697,569.61	78,056.01	62,444.81	46,053.05	967,113.98
A.1.1(3)	Const. of Field Office for the Engineer	1.00	LS	53,245.60	31,804.56	323,132.36	40,818.25	32,654.60	24,082.77	505,738.14
A.1.1(11)	Prov. Of Furniture, Equipment and Appliances for Field Engineer	1.00	LS	-	-	242,943.32	-	-	12,147.17	255,090.49
A.1.2(5)	Operation & Maintenance of Gov't. Service Vehicle	1.00	L.S	79,776.00	-	220,944.00	-	-	15,036.00	315,756.00
B.5	Project Billboard	2.00	Unit	434.90	-	4,096.00	453.09	362.47	267.32	5,613.79
B.7	Occupational Safety & Health Program	1.00	L.S	134,848.80	-	12,360.00	-	11,776.70	7,949.28	166,934.78
B.9	Mobilization and Demobilization	1.00	L.S	-	776,792.00	-	-	-	38,839.60	815,631.60
B.4(1)	Construction Survey and Staking	3.79	Km.	105,417.01	20,643.03	14,700.00	14,076.00	11,260.80	8,304.84	174,401.69
	TOTAL			***1,572,776.00***	***13,828,551.77***	***65,449,247.38***	***7,938,291.10***	***6,362,409.59***	***4,757,563.79***	***99,911,212.72***

Name of Project : **Road Widening Sindangan - Liloy Road, Zamboanga del Norte 2nd DEO**

Net Length : 3,788.00 ln.m.

Item No.	Description	Quantity	Unit	DURATION # OF DAYS
100(3)a1	Individual Removal of Trees	72.00	each	9.00
100(3)a3	Individual Removal of Trees	2.00	each	0.25
100(3)a4	Individual Removal of Trees	2.00	each	0.25
101(1)	Removal of Structures and Obstructions	1.00	ls	0.00
101(6)	Removal of Existing RCBC Wingwall	20.00	cu.m.	1.25
101(4)a1	Removal of Existing RCPC	12.00	each	0.25
101(3b2)	Removal of Existing PCCP	16.50	each	0.05
101(2)	Removal of Existing Headwall	2.00	each	0.03
101(8)	Removal of Existing Guardrails	1,019.00	ln.m	1.27
101(9)	Removal of Existing Guardrails Post	266.00	each	0.33
101(10)	Removal of Existing Road Signs	29.00	each	0.60
102(2)	Surplus Common Excavation	3,122.00	cu.m.	6.50
103 (1)a	Structure Excavation	312.00	cu.m.	1.95
103(3)	Foundation Fill	9.50	cu.m.	0.95
103(6)a	Pipe Culvert and Drain Excavation	57.50	cu.m.	0.36
104(1)a1	Embankment from Roadway Excavation	11,331.00	cu.m.	23.51
105 (1)a	Subgrade Preparation	27,466.50	sq.m.	11.44
200 (1)	Aggregate Subbase Course	14,205.00	cu.m.	35.51
300 (1)	Aggregate Surface Course	1,665.00	cu.m.	4.16
311(1)e1a	Portland Cement Concrete Pavement-using Conventional Method, 0.28m thick	24,984.00	sq.m.	54.12
311(1)a	Portland Cement Concrete Pavement, 0.15m. Thick	609.00	sq.m	0.71
404 (1)a	Reinforcing Steel Bar, Grade 40	4,855.50	kg.	3.37
404(1)b	Reinforcing Steel Bar, Grade 60	7,435.00	kg.	5.16
405 (1) a3	Structural Concrete, Class A	208.50	cu.m	18.62
407(8)	Concrete Structure (Lean Concrete)	6.50	cu.m	0.58
500(1)b3	Pipe Culvert & Storm Drain	75.00	ln.m	9.38
505(5)	Grouted Riprap, Class A	746.50	cu.m	74.65
506(1)	Stone Masonry	74.50	cu.m	5.96
611(1)	Trees (Furnishing and Transplanting)	301.00	each	37.63
612(1)	Reflectorized Thermoplastic Pavement Markings (White)	1,071.00	sq.m	5.36
A.1.1(3)	Const. of Field Office for the Engineer	1.00	LS	10.00
A.1.1(11)	Prov. Of Furniture, Equipment and Appliances for Field Engineer	1.00	LS	
A.1.2(5)	Operation & Maintenance of Gov't. Service Vehicle	1.00	LS	180.00
B.5	Project Billboard	2.00	Unit	0.25
B.7	Occupational Safety & Health Program	1.00	LS	120.00
B.9	Mobilization and Demobilization	1.00	LS	4.00
B.4(1)	Construction Survey and Staking	3.79	Km.	50.51

WEEKS (6 WORKING DAYS): 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60

TOTAL NO. OF WORKING DAYS	:	120
INCLEMENT WEATHER & CURING TIME	:	40
NUMBER OF SUNDAYS	:	20
TOTAL NO. CALENDAR DAYS	:	**180**

Prepared by:

JERALD R. BARRERA
Engineer II

Submitted by:

LEONCIO B. SOLAMILLO
Chief, Construction Division

APPROVED:

JORGE U. SEBASTIAN, JR., CESO III
Regional Director

DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Road Widening Sindangan - Liloy Road, Zamboanga del Norte 2nd DEO

Item No./Description : 100(3)a1 Individual Removal of Trees
Unit of Measurement : each
Output per hour : 1.00
Quantity : 72.00

	Designation	No. of Person	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Construction Foreman	1	9.00	611.92	5,507.28
	b. Skilled Laborer	1	9.00	443.20	3,988.80
	c. Laborer	2	9.00	342.24	6,160.32
	Sub-total for A			P	15,656.40
	Name and Capacity	No. of Equip.	No. of Days	Daily Rate	Amount
B	Equipment, (2014 ACEL Rates)				
	a. Backhoe	1	2.25	12,296.00	27,666.00
	b. Dumptruck	1	1.53	11,360.00	17,380.80
	c. Chain Saw	1	1.53	602.88	922.41
	Minor Tools (5% of Labor Cost)				1,565.64
	Sub-total for B			P	47,534.85
C.	Total (A+B)			P	63,191.25
D.	Output/day 8.00 each /day				
	Name and Specifications	Quantity	Unit	Unit Cost	Amount
E.	Materials				
	a. Rope, 1" dia.	288.00	m	20.00	5,760.00
	Sub-total for E			P	5,760.00
F.	Direct Cost (C+E)				68,951.25
G.	Overhead, Contingencies and Miscellaneous		10% per D.O 197 s 2016		6,895.12
H.	Contractor's Profit (CP)		8% per D.O 197 s 2016		5,516.10
I.	Value Added Tax (VAT)		5% per D.O 197 s 2016		4,068.12
J.	Total Unit Cost				1,186.54

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DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Road Widening Sindangan - Liloy Road, Zamboanga del Norte 2nd DEO

Item No./Description : 100(3)a3 Individual Removal of Trees
Unit of Measurement : each
Output per hour : 1.00
Quantity : 2.00

	Designation	No. of Person	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Construction Foreman	1	0.25	611.92	152.98
	b. Skilled Laborer	1	0.25	443.20	110.80
	c. Laborer	2	0.25	342.24	171.12
	Sub-total for A			P	434.90
	Name and Capacity	No. of Equip.	No. of Days	Daily Rate	Amount
B	Equipment, (2014 ACEL Rates)				
	a. Backhoe	1	0.06	12,296.00	768.50
	b. Dumptruck	1	0.04	11,360.00	482.80
	c. Chain Saw	1	0.04	602.88	25.62
	Minor Tools (5% of Labor Cost)				43.49
	Sub-total for B			P	1,320.41
C.	Total (A+B)			P	1,755.31
D.	Output/day 8.00 each /day				
	Name and Specifications	Quantity	Unit	Unit Cost	Amount
E.	Materials				
	a. Rope, 1" dia.	8.00	m	20.00	160.00
	Sub-total for E			P	160.00
F.	Direct Cost (C+E)				1,915.31
G.	Overhead, Contingencies and Miscellaneous		10% per D.O 197 s 2016		191.53
H.	Contractor's Profit (CP)		8% per D.O 197 s 2016		153.22
I.	Value Added Tax (VAT)		5% per D.O 197 s 2016		113.00
J.	Total Unit Cost				1,186.54

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DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Road Widening Sindangan - Liloy Road, Zamboanga del Norte 2nd DEO

Item No./Description : 100(3)a4 Individual Removal of Trees
Unit of Measurement : each
Output per hour : 1.00
Quantity : 2.00

	Designation	No. of Person	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Construction Foreman	1	0.25	611.92	152.98
	b. Skilled Laborer	1	0.25	443.20	110.80
	c. Laborer	2	0.25	342.24	171.12
	Sub-total for A			P	434.90
	Name and Capacity	No. of Equip.	No. of Days	Daily Rate	Amount
B	Equipment, (2014 ACEL Rates)				
	a. Backhoe	1	0.13	12,296.00	1,537.00
	b. Dumptruck	1	0.08	11,360.00	937.20
	c. Chain Saw	1	0.08	602.88	49.74
	Minor Tools (5% of Labor Cost)				43.49
	Sub-total for B			P	2,567.43
C.	Total (A+B)			P	3,002.33
D.	Output/day 8.00 each /day				
	Name and Specifications	Quantity	Unit	Unit Cost	Amount
E.	Materials				
	a. Rope, 1" dia.	8.00	m	20.00	160.00
	Sub-total for E			P	160.00
F.	Direct Cost (C+E)				3,162.33
G.	Overhead, Contingencies and Miscellaneous		10% per D.O 197 s 2016		316.23
H.	Contractor's Profit (CP)		8% per D.O 197 s 2016		252.99
I.	Value Added Tax (VAT)		5% per D.O 197 s 2016		186.58
J.	Total Unit Cost				1,959.06

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DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Road Widening Sindangan - Liloy Road, Zamboanga del Norte 2nd DEO

Item No./Description : 101(6) Removal of Existing RCBC Wingwall
Unit of Measurement : cu.m.
Output per hour : 2.00
Quantity : 20.00

	Designation	No. of Person	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Construction Foreman	1	1.25	611.92	764.90
	b. Skilled Laborer	1	1.25	443.20	554.00
	c. Laborer	2	1.25	342.24	855.60
	Sub-total for A			P	2,174.50
	Name and Capacity	No. of Equip.	No. of Days	Daily Rate	Amount
B	Equipment, (2014 ACEL Rates)				
	a. Backhoe w/ breaker	1	0.63	15,984.80	9,990.50
	b. Backhoe	1	0.31	12,296.00	3,842.50
	c. Dumptruck	1	0.63	11,360.00	7,100.00
	d. Cutting Outfit	1	1.25	2,400.00	3,000.00
	Sub-total for B			P	23,933.00
C.	Total (A+B)			P	26,107.50
D.	Output/day 16.00 cu.m /day				
	Name and Specifications	Quantity	Unit	Unit Cost	Amount
E.	Materials				
	Sub-total for E			P	0.00
F.	Direct Cost (C+E)				26,107.50
G.	Overhead, Contingencies and Miscellaneous		10% per D.O 197 s 2016		2,610.75
H.	Contractor's Profit (CP)		8% per D.O 197 s 2016		2,088.60
I.	Value Added Tax (VAT)		5% per D.O 197 s 2016		1,540.34
J.	Total Unit Cost				1,617.36

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DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Road Widening Sindangan - Liloy Road, Zamboanga del Norte 2nd DEO

Item No./Description : 101(1) Removal of Structures and Obstructions
Unit of Measurement : ls
Output per hour :
Quantity : 1.00

	Designation	No. of Person	No. of Days	Daily Rate	Amount
A.	Labor				
	Sub-total for A			P	0.00
	Name and Capacity	No. of Equip.	No. of Days	Daily Rate	Amount
B	Equipment, (2014 ACEL Rates)				
	Sub-total for B			P	0.00
C.	Total (A+B)			P	0.00
D.	Output/day 0.00 ls /day				
	Name and Specifications	Quantity	Unit	Unit Cost	Amount
E.	Materials				500,000.00
	Sub-total for E			P	500,000.00
F.	Direct Cost (C+E)				500,000.00
G.	Overhead, Contingencies and Miscellaneous		10% per D.O 197 s 2016		50,000.00
H.	Contractor's Profit (CP)		8% per D.O 197 s 2016		40,000.00
I.	Value Added Tax (VAT)		5% per D.O 197 s 2016		29,500.00
J.	Total Unit Cost				619,500.00

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DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Road Widening Sindangan - Liloy Road, Zamboanga del Norte 2nd DEO

Item No./Description : 101(4)a1 Removal of Existing RCPC
Unit of Measurement : each
Output per hour : 6.00
Quantity : 12.00

	Designation	No. of Person	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Construction Foreman	1	0.25	611.92	152.98
	b. Laborer	2	0.25	342.24	171.12
	Sub-total for A			P	324.10
	Name and Capacity	No. of Equip.	No. of Days	Daily Rate	Amount
B	Equipment, (2014 ACEL Rates)				
	a. Backhoe	1	0.25	12,296.00	3,074.00
	b. Boom Truck	1	0.13	8,143.20	1,017.90
	Sub-total for B			P	4,091.90
C.	Total (A+B)			P	4,416.00
D.	Output/day 48.00 each /day				
	Name and Specifications	Quantity	Unit	Unit Cost	Amount
E.	Materials				
	Sub-total for E			P	0.00
F.	Direct Cost (C+E)				4,416.00
G.	Overhead, Contingencies and Miscellaneous		10% per D.O 197 s 2016		441.60
H.	Contractor's Profit (CP)		8% per D.O 197 s 2016		353.28
I.	Value Added Tax (VAT)		5% per D.O 197 s 2016		260.54
J.	Total Unit Cost				455.95

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DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Road Widening including Drainage and RROW Acquisition - Dipolog - Oroquieta National Road, Zamboanga del Norte 3rd DEO

Item No./Description : 101(3b2) Removal of Existing PCCP
Unit of Measurement : sq.m
Output per hour : 40.00
Quantity : 16.50

	Designation	No. of Person	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Construction Foreman	1	0.05	611.92	31.55
	b. Laborer	2	0.05	342.24	35.29
	Sub-total for A			P	66.85
	Name and Capacity	No. of Equip.	No. of Days	Daily Rate	Amount
B	Equipment, (2014 ACEL Rates)				
	a. Backhoe	1	0.05	12,296.00	634.01
	b. Payloader	1	0.05	13,864.00	714.86
	c. Dumptruck	1	0.05	11,360.00	585.75
	Sub-total for B			P	1,934.63
C.	Total (A+B)			P	2,001.47
D.	Output/day 320.00 sq.m /day				
	Name and Specifications	Quantity	Unit	Unit Cost	Amount
E.	Materials				
	Sub-total for E			P	0.00
F.	Direct Cost (C+E)				2,001.47
G.	Overhead, Contingencies and Miscellaneous		10% per D.O 197 s 2016		200.15
H.	Contractor's Profit (CP)		8% per D.O 197 s 2016		160.12
I.	Value Added Tax (VAT)		5% per D.O 197 s 2016		118.09
J.	Total Unit Cost				150.29

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DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Road Widening Sindangan - Liloy Road, Zamboanga del Norte 2nd DEO

Item No./Description : 101(2) Removal of Existing Headwall
Unit of Measurement : cu.m
Output per hour : 10.00
Quantity : 2.00 each
2.16

	Designation	No. of Person	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Construction Foreman	1	0.03	611.92	16.52
	b. Laborer	2	0.03	342.24	18.48
	Sub-total for A			P	35.00
	Name and Capacity	No. of Equip.	No. of Days	Daily Rate	Amount
B	Equipment, (2014 ACEL Rates)				
	a. Backhoe w/ breaker	1	0.01	15,984.80	215.79
	b. Backhoe	1	0.01	12,296.00	166.00
	c. Dumptruck	1	0.03	11,360.00	306.72
	Sub-total for B			P	688.51
C.	Total (A+B)			P	723.51
D.	Output/day 80.00 cu.m /day				
	Name and Specifications	Quantity	Unit	Unit Cost	Amount
E.	Materials				
	Sub-total for E			P	0.00
F.	Direct Cost (C+E)				723.51
G.	Overhead, Contingencies and Miscellaneous		10% per D.O 197 s 2016		72.35
H.	Contractor's Profit (CP)		8% per D.O 197 s 2016		57.88
I.	Value Added Tax (VAT)		5% per D.O 197 s 2016		42.69
J.	Total Unit Cost				448.22

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DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Road Widening Sindangan - Liloy Road, Zamboanga del Norte 2nd DEO

Item No./Description : 101(8) Removal of Existing Guardrails
Unit of Measurement : ln.m
Output per hour : 100.00
Quantity : 1,019.00

	Designation	No. of Person	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Construction Foreman	1	1.27	611.92	779.43
	b. Laborer	2	1.27	342.24	871.86
	Sub-total for A			P	1,651.29
	Name and Capacity	No. of Equip.	No. of Days	Daily Rate	Amount
B	Equipment, (2014 ACEL Rates)				
	a. Backhoe	1	1.27	12,296.00	15,662.03
	b. Boom Truck	1	1.27	8,143.20	10,372.40
	Minor Tools (10% of Labor Cost)				165.13
	Sub-total for B			P	26,199.56
C.	Total (A+B)			P	27,850.85
D.	Output/day 800.00 ln.m /day				
	Name and Specifications	Quantity	Unit	Unit Cost	Amount
E.	Materials				
	Sub-total for E			P	0.00
F.	Direct Cost (C+E)				27,850.85
G.	Overhead, Contingencies and Miscellaneous		10% per D.O 197 s 2016		2,785.08
H.	Contractor's Profit (CP)		8% per D.O 197 s 2016		2,228.07
I.	Value Added Tax (VAT)		5% per D.O 197 s 2016		1,643.20
J.	Total Unit Cost				33.86

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DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Road Widening Sindangan - Liloy Road, Zamboanga del Norte 2nd DEO

Item No./Description : 101(9) Removal of Existing Guardrails Post
Unit of Measurement : each
Output per hour : 100.00
Quantity : 266.00

	Designation	No. of Person	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Construction Foreman	1	0.33	611.92	203.46
	b. Laborer	2	0.33	342.24	227.59
	Sub-total for A			P	431.05
	Name and Capacity	No. of Equip.	No. of Days	Daily Rate	Amount
B	Equipment, (2014 ACEL Rates)				
	a. Backhoe	1	0.33	12,296.00	4,088.42
	b. Boom Truck	1	0.33	8,143.20	2,707.61
	Minor Tools (10% of Labor Cost)				43.11
	Sub-total for B			P	6,839.14
C.	Total (A+B)			P	7,270.19
D.	Output/day 800.00 each /day				
	Name and Specifications	Quantity	Unit	Unit Cost	Amount
E.	Materials				
	Sub-total for E			P	0.00
F.	Direct Cost (C+E)				7,270.19
G.	Overhead, Contingencies and Miscellaneous		10% per D.O 197 s 2016		727.02
H.	Contractor's Profit (CP)		8% per D.O 197 s 2016		581.62
I.	Value Added Tax (VAT)		5% per D.O 197 s 2016		428.94
J.	Total Unit Cost				33.86

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DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Road Widening Sindangan - Liloy Road, Zamboanga del Norte 2nd DEO

Item No./Description : 101(10) Removal of Existing Road Signs
Unit of Measurement : each
Output per hour : 6.00
Quantity : 29.00

	Designation	No. of Person	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Construction Foreman	1	0.60	611.92	369.70
	b. Laborer	2	0.60	342.24	413.54
	Sub-total for A			P	783.24
	Name and Capacity	No. of Equip.	No. of Days	Daily Rate	Amount
B	Equipment, (2014 ACEL Rates)				
	a. Backhoe	1	0.60	12,296.00	7,428.83
	b. Boom Truck	1	0.30	8,143.20	2,459.93
	Sub-total for B			P	9,888.76
C.	Total (A+B)			P	10,672.00
D.	Output/day 48.00 each/day				
	Name and Specifications	Quantity	Unit	Unit Cost	Amount
E.	Materials				
	Sub-total for E			P	0.00
F.	Direct Cost (C+E)				10,672.00
G.	Overhead, Contingencies and Miscellaneous		10% per D.O 197 s 2016		1,067.20
H.	Contractor's Profit (CP)		8% per D.O 197 s 2016		853.76
I.	Value Added Tax (VAT)		5% per D.O 197 s 2016		629.65
J.	Total Unit Cost				455.95

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DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Road Widening Sindangan - Liloy Road, Zamboanga del Norte 2nd DEO

Item No./Description : 102(2) Surplus Common Excavation
Unit of Measurement : cu.m.
Output per hour : 60.00
Quantity : 3,122.0

	Designation	No. of Person	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Construction Foreman	1	6.50	611.92	3,980.03
	b. Laborer	3	6.50	342.24	6,677.96
	Sub-total for A			P	10,657.99
	Name and Capacity	**No. of Equip.**	**No. of Days**	**Daily Rate**	**Amount**
B	Equipment, (2014 ACEL Rates)				
	a. Bullduzer	1	6.50	27,032.00	175,820.63
	b. Payloader	1	6.50	13,864.00	90,173.77
	c. Payloader	1	4.88	13,864.00	67,630.33
	d. Dumptruck	3	6.50	11,360.00	221,662.00
	Sub-total for B			P	555,286.73
C.	Total (A+B)			P	565,944.71
D.	Output/day 480.00 cu.m /day				
	Name and Specifications	**Quantity**	**Unit**	**Unit Cost**	**Amount**
E.	Materials				
	Sub-total for E			P	0.00
F.	Direct Cost (C+E)				565,944.71
G.	Overhead, Contingencies and Miscellaneous		10% per D.O 197 s 2016		56,594.47
H.	Contractor's Profit (CP)		8% per D.O 197 s 2016		45,275.58
I.	Value Added Tax (VAT)		5% per D.O 197 s 2016		33,390.74
J.	Total Unit Cost				224.60

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DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Road Widening Sindangan - Liloy Road, Zamboanga del Norte 2nd DEO

Item No./Description : 103 (1)a Structure Excavation
Unit of Measurement : cu.m.
Output per hour : 20.00
Quantity : 312.00

	Designation	No. of Person	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Construction Foreman	1	1.95	611.92	1,193.24
	b. Laborers	3	1.95	342.24	2,002.10
	Sub-total for A			P	3,195.35
	Name and Capacity	No. of Equip.	No. of Days	Daily Rate	Amount
B	Equipment, (2014 ACEL Rates)				
	a. Dumptruck	2	1.95	11,360.00	44,304.00
	b. Backhoe	1	1.95	12,296.00	23,977.20
	Minor Tools (10% of Labor)				319.53
	Sub-total for B			P	68,600.73
C.	Total (A+B)			P	71,796.08
D.	Output/day 160.00 cu.m /day				
	Name and Specifications	Quantity	Unit	Unit Cost	Amount
E.	Materials				
	Sub-total for E			P	0.00
F.	Direct Cost (C+E)				71,796.08
G.	Overhead, Contingencies and Miscellaneous		10% per D.O 197 s 2016		7,179.61
H.	Contractor's Profit (CP)		8% per D.O 197 s 2016		5,743.69
I.	Value Added Tax (VAT)		5% per D.O 197 s 2016		4,235.97
J.	Total Unit Cost				285.11

gerald_0101

DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Road Widening Sindangan - Liloy Road, Zamboanga del Norte 2nd DEO

Item No./Description : 103(3) Foundation Fill
Unit of Measurement : cu.m.
Output per hour : 1.25
Quantity : 9.50

	Designation	No. of Person	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Construction Foreman	1	0.95	611.92	581.32
	b. Laborer	4	0.95	342.24	1,300.51
	Sub-total for A			P	1,881.84
	Name and Capacity	No. of Equip.	No. of Days	Daily Rate	Amount
B	Equipment, (2014 ACEL Rates)				
	a. Plate Compactor	1	0.95	984.00	934.80
	b. Water Truck	1	0.01	19,600.00	186.20
	c. Minor Tools (10% of Labor)				
	Sub-total for B			P	1,121.00
C.	Total (A+B)			P	3,002.84
D.	Output/day 10.00 cu.m. /day				
	Name and Specifications	Quantity	Unit	Unit Cost	Amount
E.	Materials				
	a. Filling Materials	10.93	cu.m.	451.40	4,931.55
	Sub-total for E			P	4,931.55
F.	Direct Cost (C+E)				7,934.38
G.	Overhead, Contingencies and Miscellaneous		10% per D.O 197 s 2016		793.44
H.	Contractor's Profit (CP)		8% per D.O 197 s 2016		634.75
I.	Value Added Tax (VAT)		5% per D.O 197 s 2016		468.13
J.	Total Unit Cost				1,034.81

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DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Road Widening Sindangan - Liloy Road, Zamboanga del Norte 2nd DEO

Item No./Description : 103(6)a Pipe Culvert and Drain Excavation
Unit of Measurement : cu.m.
Output per hour : 20.00
Quantity : 57.50

	Designation	No. of Person	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Construction Foreman	1	0.36	611.92	219.91
	b. Laborer	3	0.36	342.24	368.98
	Sub-total for A			P	588.89
	Name and Capacity	No. of Equip.	No. of Days	Daily Rate	Amount
B	Equipment, (2014 ACEL Rates)				
	a. Dumptruck	2	0.36	11,360.00	8,165.00
	b. Backhoe	1	0.36	12,296.00	4,418.88
	Minor Tools (10% of Labor)				58.89
	Sub-total for B			P	12,642.76
C.	Total (A+B)			P	13,231.65
D.	Output/day 160.00 cu.m /day				
	Name and Specifications	Quantity	Unit	Unit Cost	Amount
E.	Materials				
	a.				
	Sub-total for E			P	0.00
F.	Direct Cost (C+E)				13,231.65
G.	Overhead, Contingencies and Miscellaneous		10% per D.O 197 s 2016		1,323.16
H.	Contractor's Profit (CP)		8% per D.O 197 s 2016		1,058.53
I.	Value Added Tax (VAT)		5% per D.O 197 s 2016		780.67
J.	Total Unit Cost				285.11

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DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Road Widening Sindangan - Liloy Road, Zamboanga del Norte 2nd DEO

Item No./Description : 104(1)a1 Embankment from Roadway Excavation
Unit of Measurement : cu.m.
Output per hour : 50.00
Quantity : 11,331.00

	Designation	No. of Person	No. of Days	Daily Rate	Amount
A.	Labor				
	For Excavation Work				
	a. Construction Foreman	1	23.51	611.92	14,387.36
	b. Laborer	2	23.51	342.24	16,093.37
	Spreading & Compaction				
	a. Construction Foreman	1	28.33	611.92	17,334.16
	b. Laborer	2	28.33	342.24	19,389.61
	Sub-total for A			P	67,204.50
	Name and Capacity	No. of Equip.	No. of Days	Daily Rate	Amount
B	Equipment, (2014 ACEL Rates)				
	For Excavation Work				
	a. Bulldozer	1	23.51	27,032.00	635,571.65
	b. Payloader	1	23.51	13,864.00	325,967.94
	c. Dumptruck	2	23.51	11,360.00	534,188.66
	Spreading and Compaction				
	a. Road Grader	1	28.33	17,384.00	492,445.26
	b. Road Roller	1	28.33	13,216.00	374,376.24
	c. Water Truck	1	9.91	19,600.00	194,326.65
	Sub-total for B			P	2,556,876.41
C.	Total (A+B)			P	2,624,080.91
D.	Output/day 400.00 cu.m. /day				
	Name and Specifications	Quantity	Unit	Unit Cost	Amount
E.	Materials				
	Sub-total for E			P	0.00
F.	Direct Cost (C+E)				2,624,080.91
G.	Overhead, Contingencies and Miscellaneous		10% per D.O 197 s 2016		262,408.09
H.	Contractor's Profit (CP)		8% per D.O 197 s 2016		209,926.47
I.	Value Added Tax (VAT)		5% per D.O 197 s 2016		154,820.77
J.	Total Unit Cost				286.93

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DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Road Widening Sindangan - Liloy Road, Zamboanga del Norte 2nd DEO

Item No./Description : 105 (1)a Subgrade Preparation
Unit of Measurement : sq.m.
Output per hour : 300.00
Quantity : 27,466.50

	Designation	No. of Person	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Construction Foreman	1	11.44	611.92	7,003.04
	b. Laborer	2	11.44	342.24	7,833.45
	Sub-total for A			P	14,836.49
	Name and Capacity	No. of Equip.	No. of Days	Daily Rate	Amount
B	Equipment, (2014 ACEL Rates)				
	a. Road Grader	1	11.44	17,384.00	198,949.02
	b. Road Roller	1	11.44	13,216.00	151,248.86
	c. Water Truck	1	2.86	19,600.00	56,077.44
	Sub-total for B			P	406,275.31
C.	Total (A+B)			P	421,111.80
D.	Output/day 2,400.00 sq.m. /day				
	Name and Specifications	Quantity	Unit	Unit Cost	Amount
E.	Materials				
	a.				
	Sub-total for E			P	0.00
F.	Direct Cost (C+E)				421,111.80
G.	Overhead, Contingencies and Miscellaneous		10% per D.O 197 s 2016		42,111.18
H.	Contractor's Profit (CP)		8% per D.O 197 s 2016		33,688.94
I.	Value Added Tax (VAT)		5% per D.O 197 s 2016		24,845.60
J.	Total Unit Cost				19.00

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DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Road Widening Sindangan - Liloy Road, Zamboanga del Norte 2nd DEO

Item No./Description : 200 (1) Aggregate Subbase Course
Unit of Measurement : cu.m.
Output per hour : 50.00
Quantity : 14,205.00

	Designation	No. of Person	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Construction Foreman	1	35.51	611.92	21,730.81
	b. Laborer	2	35.51	342.24	24,307.60
	Sub-total for A			P	46,038.41
	Name and Capacity	**No. of Equip.**	**No. of Days**	**Daily Rate**	**Amount**
B	Equipment, (2014 ACEL Rates)				
	a. Road Grader	1	35.51	17,384.00	617,349.30
	b. Road Roller	1	35.51	13,216.00	469,333.20
	c. Water Truck	1	35.51	19,600.00	696,045.00
	Sub-total for B			P	1,782,727.50
C.	Total (A+B)			P	1,828,765.91
D.	Output/day 400.00 cu.m. /day				
	Name and Specifications	**Quantity**	**Unit**	**Unit Cost**	**Amount**
E.	Materials				
	a. Aggregate Subbase Course (w/ Shrinkage of 15%)	17,756.25	cu.m.	1,125.00	19,975,781.25
	Sub-total for E			P	19,975,781.25
F.	Direct Cost (C+E)				21,804,547.16
G.	Overhead, Contingencies and Miscellaneous		10% per D.O 197 s 2016		2,180,454.72
H.	Contractor's Profit (CP)		8% per D.O 197 s 2016		1,744,363.77
I.	Value Added Tax (VAT)		5% per D.O 197 s 2016		1,286,468.28
J.	Total Unit Cost				1,901.85

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DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Road Widening Sindangan - Liloy Road, Zamboanga del Norte 2nd DEO

Item No./Description : 300 (1) Aggregate Surface Course
Unit of Measurement : cu.m.
Output per hour : 50.00
Quantity : 1,665.00

Designation		No. of Person	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Construction Foreman	1	4.16	611.92	2,547.12
	b. Laborer	2	4.16	342.24	2,849.15
	Sub-total for A			P	5,396.27
	Name and Capacity	No. of Equip.	No. of Days	Daily Rate	Amount
B	Equipment, (2014 ACEL Rates)				
	a. Road Grader	1	4.16	17,384.00	72,360.90
	b. Road Roller	1	4.16	13,216.00	55,011.60
	c. Water Truck	1	1.04	19,600.00	20,396.25
	Sub-total for B			P	147,768.75
C.	Total (A+B)			P	153,165.02
D.	Output/day 400.00 cu.m. /day				
	Name and Specifications	Quantity	Unit	Unit Cost	Amount
E.	Materials				
	a. Aggregate Surface Course (w/ shrinkage of 15%)	1,914.75	cu.m.	1,262.00	2,416,414.50
	Sub-total for E			P	2,416,414.50
F.	Direct Cost (C+E)				2,569,579.52
G.	Overhead, Contingencies and Miscellaneous		10% per D.O 197 s 2016		256,957.95
H.	Contractor's Profit (CP)		8% per D.O 197 s 2016		205,566.36
I.	Value Added Tax (VAT)		5% per D.O 197 s 2016		151,605.19
J.	Total Unit Cost				1,912.14

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DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Road Widening Sindangan - Liloy Road, Zamboanga del Norte 2nd DEO

Item No./Description : 311(1)e1a Portland Cement Concrete Pavement-using Conventional Method, 0.28m thick
Unit of Measurement : sq.m.
Output per hour : 57.70
Quantity : 24,984.00

	Designation	No. of Person	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Construction Foreman	1	54.12	611.92	33,120.04
	b. Skilled	4	54.12	443.20	95,952.42
	c. Laborer	12	54.12	342.24	222,283.99
	Sub-total for A			P	351,356.44
	Name and Capacity	No. of Equip.	No. of Days	Daily Rate	Amount
B	Equipment, (2014 ACEL Rates)				
	a. Transit Mixer	4	54.12	10,544.00	2,282,766.86
	b. Concrete Vibrator	2	54.12	730.00	79,022.18
	c. Batching Plant	1	54.12	14,076.00	761,860.45
	d. Pay Loader	1	54.12	13,864.00	750,386.00
	e. Concrete Screeder	1	54.12	4,360.00	235,984.06
	f. Water Truck	1	54.12	19,600.00	1,060,845.75
	g. Concrete Saw	1	54.12	261.04	14,128.73
	h. Bar Cutter	1	5.41	1,758.00	9,515.14
	Minor Tools (5% of labor)				17,567.82
	Sub-total for B			P	5,212,077.00
C.	Total (A+B)			P	5,563,433.44
D.	Output/day 461.60 sq.m. /day				
	Name and Specifications	Quantity	Unit	Unit Cost	Amount
E.	Materials				
	a. Reinforcing Steel Bar	12,492.00	kg	40.00	499,680.00
	b. Curing Compound	7,245.36	lit	45.00	326,041.20
	c. Asphalt Sealant	4,247.28	lit	75.00	318,546.00
	d. Sand	3,847.54	cu.m	1,357.00	5,221,106.35
	e. Gravel	6,995.52	cu.m	1,357.00	9,492,920.64
	f. Cement	66,457.44	bag	290.51	19,306,585.16
	g. Concrete Saw	3.75	pc	8,000.00	29,980.80
	h. Pipe Sleeve, 2" dia.	194.88	l.m	133.00	25,918.40
	i. Grease/Tar	194.88	lit	21.00	4,092.38
	j. Steel Forms	11,492.64	lit	60.00	689,558.40
	Sub-total for E			P	35,914,429.33
F.	Direct Cost (C+E)				41,477,862.77
G.	Overhead, Contingencies and Miscellaneous		10% per D.O 197 s 2016		4,147,786.28
H.	Contractor's Profit (CP)		8% per D.O 197 s 2016		3,318,229.02
I.	Value Added Tax (VAT)		5% per D.O 197 s 2016		2,447,193.90
J.	Total Unit Cost				2,056.96

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DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Road Widening Sindangan - Liloy Road, Zamboanga del Norte 2nd DEO

Item No./Description : 311(1)a Portland Cement Concrete Pavement, 0.15m. Thick
Unit of Measurement : sq.m
Output per hour : 107.33
Quantity : 609.00

	Designation	No. of Person	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Construction Foreman	1	0.71	611.92	434.01
	b. Skilled	4	0.71	443.20	1,257.38
	c. Laborer	12	0.71	342.24	2,912.85
	Sub-total for A			P	4,604.24
	Name and Capacity	**No. of Equip.**	**No. of Days**	**Daily Rate**	**Amount**
B	Equipment, (2014 ACEL Rates)				
	a. Transit Mixer	4	0.71	10,544.00	29,913.80
	b. Concrete Vibrator	2	0.71	730.00	1,035.52
	c. Batching Plant	1	0.71	14,076.00	9,983.56
	d. Pay Loader	1	0.71	13,864.00	9,833.20
	e. Concrete Screeder	1	0.71	4,360.00	3,092.38
	f. Water Truck	1	0.71	19,600.00	13,901.52
	g. Concrete Saw	1	0.71	261.04	185.15
	h. Bar Cutter	1	0.07	1,758.00	124.69
	Minor Tools (5% of Labor)				3,403.49
	Sub-total for B			P	71,473.30
C.	Total (A+B)			P	76,077.54
D.	Output/day 858.64 sq.m /day				
	Name and Specifications	**Quantity**	**Unit**	**Unit Cost**	**Amount**
E.	Materials				
	a. Reinforcing Steel Bar	200.97	kg	40.00	8,038.80
	b. Curing Compound	176.61	lit	45.00	7,947.45
	c. Asphalt Sealant	73.08	lit	75.00	5,481.00
	d. Steel Form	280.14	l.m	40.00	11,205.60
	e. Sand	50.24	cu.m	1,357.00	68,179.07
	f. Gravel	91.35	cu.m	1,357.00	123,961.95
	g. Cement	870.87	bag	290.51	252,996.89
	h. Concrete Saw	0.09	pc	8,000.00	730.80
	i. Pipe Sleeve, 1" dia.	4.75	l.m	133.00	631.78
	j. Grease/Tar	0.91	lit	21.00	19.18
	Sub-total for E			P	479,192.53
F.	Direct Cost (C+E)				555,270.06
G.	Overhead, Contingencies and Miscellaneous		10% per D.O 197 s 2016		55,527.01
H.	Contractor's Profit (CP)		8% per D.O 197 s 2016		44,421.61
I.	Value Added Tax (VAT)		5% per D.O 197 s 2016		32,760.93
J.	Total Unit Cost				1,129.69

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DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Road Widening Sindangan - Liloy Road, Zamboanga del Norte 2nd DEO

Item No./Description : 404 (1)a Reinforcing Steel Bar, Grade 40
Unit of Measurement : kg.
Output per hour : 180.00
Quantity : 4,855.50

	Designation	No. of Person	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Construction Foreman	1	3.37	611.92	2,063.32
	b. Skilled Laborer	2	3.37	443.20	2,988.83
	c. Laborer	8	3.37	342.24	9,231.92
	Sub-total for A			P	14,284.07
	Name and Capacity	No. of Equip.	No. of Days	Daily Rate	Amount
B	Equipment, (2009 ACEL Rates)				
	a. Bar Cutter	1	1.69	1,758.00	2,963.88
	b. Bar Bender	1	1.69	2,812.00	4,740.86
	c. Cargo Truck	1	0.51	6,264.00	3,168.21
	Sub-total for B			P	10,872.95
C.	Total (A+B)			P	25,157.02
D.	Output/day 1,440.00 kg. /day				
	Name and Specifications	Quantity	Unit	Unit Cost	Amount
E.	Materials				
	a. Tie Wire	101.97	kg	70.00	7,137.59
	b. Reinforcing Steel Bar, Grade 40	5,098.28	kg	40.00	203,931.00
	Sub-total for E			P	211,068.59
F.	Direct Cost (C+E)				236,225.60
G.	Overhead, Contingencies and Miscellaneous		10% per D.O 197 s 2016		23,622.56
H.	Contractor's Profit (CP)		8% per D.O 197 s 2016		18,898.05
I.	Value Added Tax (VAT)		5% per D.O 197 s 2016		13,937.31
J.	Total Unit Cost				60.28

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DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Road Widening Sindangan - Liloy Road, Zamboanga del Norte 2nd DEO

Item No./Description : 404(1)b Reinforcing Steel Bar, Grade 60
Unit of Measurement : kg.
Output per hour : 180.00
Quantity : 7,435.00

	Designation	No. of Person	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Construction Foreman	1	5.16	611.92	3,159.46
	b. Skilled	2	5.16	443.20	4,576.66
	c. Laborer	8	5.16	342.24	14,136.41
	Sub-total for A			P	21,872.53
	Name and Capacity	No. of Equip.	No. of Days	Daily Rate	Amount
B	Equipment, (2014 ACEL Rates)				
	a. Bar Cutter	1	2.58	1,758.00	4,538.45
	b. Bar Bender	1	2.58	2,812.00	7,259.45
	c. Cargo Truck	1	0.77	6,264.00	4,851.34
	Sub-total for B			P	16,649.24
C.	Total (A+B)			P	38,521.77
D.	Output/day 1,440.00 kg. /day				
	Name and Specifications	Quantity	Unit	Unit Cost	Amount
E.	Materials				
	a. Tie Wire	156.14	kgs	70.00	10,929.45
	b. Reinforcing Steel Bar, Grade 60	7,806.75	kgs	42.00	327,883.50
	Sub-total for E			P	338,812.95
F.	Direct Cost (C+E)				377,334.72
G.	Overhead, Contingencies and Miscellaneous		10% per D.O 197 s 2016		37,733.47
H.	Contractor's Profit (CP)		8% per D.O 197 s 2016		30,186.78
I.	Value Added Tax (VAT)		5% per D.O 197 s 2016		22,262.75
J.	Total Unit Cost				62.88

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DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Road Widening Sindangan - Liloy Road, Zamboanga del Norte 2nd DEO

Item No./Description : 405 (1) a3 Structural Concrete, Class A
Unit of Measurement : cu.m
Output per hour : 1.40
Quantity : 208.50

	Designation	No. of Person	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Construction Foreman	1	18.62	611.92	11,391.55
	b. Skilled Laborer	4	18.62	443.20	33,002.57
	c. Laborer	8	18.62	342.24	50,969.31
	Installation/Removal of Form Works				
	a. Skilled Laborer	4	18.62	443.20	33,002.57
	b. Laborer	8	18.62	342.24	50,969.31
	Sub-total for A			P	179,335.32
	Name and Capacity	**No. of Equip.**	**No. of Days**	**Daily Rate**	**Amount**
B	Equipment, (2014 ACEL Rates)				
	a. One Bagger Mixer	1	18.62	1,376.00	25,615.71
	b. Concrete Vibrator	1	18.62	972.00	18,094.82
	c. Water Truck	1	1.86	19,600.00	36,487.50
	Minor Tools (5% of Labor)				8,966.77
	Sub-total for B			P	89,164.80
C.	Total (A+B)			P	268,500.12
D.	Output/day 11.20 cu.m /day				
	Name and Specifications	**Quantity**	**Unit**	**Unit Cost**	**Amount**
E.	Materials				
	a. Form Lumber	3,648.75	bd.ft	42.00	153,247.50
	b. Plywood	83.40	pc	1,227.00	102,331.80
	c. Assorted CW Nails	145.95	kg.	75.00	10,946.25
	d. Portland Cement	1,980.75	bag	290.51	575,428.70
	e. Sand	104.25	cu.m	1,357.00	141,467.25
	f. Gravel	208.50	cu.m	1,357.00	282,934.50
	Sub-total for E			P	1,266,356.00
F.	Direct Cost (C+E)				1,534,856.12
G.	Overhead, Contingencies and Miscellaneous		10% per D.O 197 s 2016		153,485.61
H.	Contractor's Profit (CP)		8% per D.O 197 s 2016		122,788.49
I.	Value Added Tax (VAT)		5% per D.O 197 s 2016		90,556.51
J.	Total Unit Cost				9,120.80

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DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Road Widening Sindangan - Liloy Road, Zamboanga del Norte 2nd DEO

Item No./Description : 407(8) Concrete Structure (Lean Concrete)
Unit of Measurement : cu.m
Output per hour : 1.40
Quantity : 6.50

	Designation	No. of Person	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Construction Foreman	1	0.58	611.92	355.13
	b. Skilled Laborer	4	0.58	443.20	1,028.86
	c. Laborer	8	0.58	342.24	1,588.97
	Sub-total for A			P	2,972.96
	Name and Capacity	No. of Equip.	No. of Days	Daily Rate	Amount
B	Equipment, (2014 ACEL Rates)				
	a. One Bagger Mixer	1	0.58	1,376.00	798.57
	b. Concrete Vibrator	1	0.58	730.00	423.66
	c. Water Truck	1	0.58	19,600.00	11,375.00
	Sub-total for B			P	12,597.23
C.	Total (A+B)			P	15,570.19
D.	Output/day 11.20 cu.m /day				
	Name and Specifications	Quantity	Unit	Unit Cost	Amount
E.	Materials				
	a. Form Lumber	2.15	bd.ft	42.00	90.09
	b. Plywood	10.40	pc	853.00	8,871.20
	c. Assorted CW Nails	5.40	kg.	75.00	404.63
	d. Portland Cement	61.75	bag	290.51	17,939.02
	e. Sand	3.25	cu.m	1,357.00	4,410.25
	f. Gravel	6.50	cu.m	1,357.00	8,820.50
	Sub-total for E			P	40,535.69
F.	Direct Cost (C+E)				56,105.88
G.	Overhead, Contingencies and Miscellaneous		10% per D.O 197 s 2016		5,610.59
H.	Contractor's Profit (CP)		8% per D.O 197 s 2016		4,488.47
I.	Value Added Tax (VAT)		5% per D.O 197 s 2016		3,310.25
J.	Total Unit Cost				10,694.64

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DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Road Widening Sindangan - Liloy Road, Zamboanga del Norte 2nd DEO

Item No./Description : 500(1)b3 Pipe Culvert & Storm Drain
Unit of Measurement : ln.m
Output per hour : 1.00
Quantity : 75.00

	Designation	No. of Person	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Construction Foreman	1	9.38	611.92	5,736.75
	b. Skilled Laborer	2	9.38	443.20	8,310.00
	c. Laborer	4	9.38	342.24	12,834.00
	Sub-total for A			P	26,880.75
	Name and Capacity	No. of Equip.	No. of Days	Daily Rate	Amount
B	Equipment, (2014 ACEL Rates)				
	a. Backhoe	1	4.69	12,296.00	57,637.50
	b. Plate Compactor	1	4.69	984.00	4,612.50
	Minor Tools (10% of Labor)				2,688.08
	Sub-total for B			P	64,938.08
C.	Total (A+B)			P	91,818.83
D.	Output/day 8.00 ln.m /day				
	Name and Specifications	Quantity	Unit	Unit Cost	Amount
E.	Materials				
	a. Portland Cement	81.00	bag	290.51	23,531.35
	b. Sand	4.58	cu.m	1,357.00	6,208.28
	c. RC Pipes (910 mm dia.)	75.00	pc	1,835.00	137,625.00
	d. Sand Bedding	9.60	cu.m	1,357.00	13,027.20
	Sub-total for E			P	180,391.83
F.	Direct Cost (C+E)				272,210.65
G.	Overhead, Contingencies and Miscellaneous		10% per D.O 197 s 2016		27,221.07
H.	Contractor's Profit (CP)		8% per D.O 197 s 2016		21,776.85
I.	Value Added Tax (VAT)		5% per D.O 197 s 2016		16,060.43
J.	Total Unit Cost				4,496.92

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DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Road Widening Sindangan - Liloy Road, Zamboanga del Norte 2nd DEO

Item No./Description : 505(5) Grouted Riprap, Class A
Unit of Measurement : cu.m
Output per hour : 1.25
Quantity : 746.50

	Designation	No. of Person	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Construction Foreman	1	74.65	611.92	45,679.83
	b. Skilled Laborer	2	74.65	443.20	66,169.76
	c. Laborer	8	74.65	342.24	204,385.73
	Sub-total for A			P	316,235.32
	Name and Capacity	No. of Equip.	No. of Days	Daily Rate	Amount
B	Equipment, (2014 ACEL Rates)				
	a. One Bagger Mixer	1	74.65	1,376.00	102,718.40
	b. Water Truck	1	29.86	19,600.00	585,256.00
	Minor Tools (5% of Labor)				15,811.77
	Sub-total for B			P	703,786.17
C.	Total (A+B)			P	1,020,021.48
D.	Output/day 10.00 cu.m /day				
	Name and Specifications	Quantity	Unit	Unit Cost	Amount
E.	Materials				
	a. Cement	2,239.50	bag	290.51	650,598.30
	b. Sand	186.63	cu.m	1,357.00	253,250.13
	c. Gravel Fill	11.20	cu.m	1,357.00	15,195.01
	d. Weep Holes (PVC), 2" dia.	223.95	ln.m	133.00	29,785.35
	e. Filter Cloth	11.20	sq.m	160.00	1,791.60
	f. Boulders	783.83	cu.m	1,607.00	1,259,606.78
	Miscellaneous (1% of Materials)				22,102.27
	Sub-total for E			P	2,232,329.43
F.	Direct Cost (C+E)				3,252,350.91
G.	Overhead, Contingencies and Miscellaneous		10% per D.O 197 s 2016		325,235.09
H.	Contractor's Profit (CP)		8% per D.O 197 s 2016		260,188.07
I.	Value Added Tax (VAT)		5% per D.O 197 s 2016		191,888.70
J.	Total Unit Cost				5,398.07

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DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Road Widening Sindangan - Liloy Road, Zamboanga del Norte 2nd DEO

Item No./Description : 506(1) Stone Masonry
Unit of Measurement : cu.m
Output per hour : 1.56
Quantity : 74.50

	Designation	No. of Person	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Construction Foreman	1	5.96	611.92	3,647.04
	b. Skilled Laborer	2	5.96	443.20	5,282.94
	c. Laborer	8	5.96	342.24	16,318.00
	Sub-total for A			P	25,247.99
	Name and Capacity	No. of Equip.	No. of Days	Daily Rate	Amount
B	Equipment, (2014 ACEL Rates)				
	a. One Bagger Mixer	1	5.96	1,376.00	8,200.96
	b. Water Truck	1	0.30	19,600.00	5,840.80
	c. Backhoe	1	0.60	12,296.00	7,328.42
	Minor Tools (10% of Labor)				2,524.80
	Sub-total for B			P	23,894.98
C.	Total (A+B)			P	49,142.97
D.	Output/day 12.50 cu.m /day				
	Name and Specifications	Quantity	Unit	Unit Cost	Amount
E.	Materials				
	a. Cement	409.75	bag	290.51	119,036.68
	b. Sand	22.35	cu.m	1,357.00	30,328.95
	c. Gravel Fill	1.49	cu.m	1,357.00	2,021.93
	d. Weep Holes (PVC)	22.35	ln.m	133.00	2,972.55
	e. Filter Cloth	1.12	sq.m	160.00	178.80
	f. Boulders	78.23	cu.m	1,607.00	125,707.58
	Miscellaneous (1% of Materials)				2,802.46
	Sub-total for E			P	283,048.95
F.	Direct Cost (C+E)				332,191.92
G.	Overhead, Contingencies and Miscellaneous		10% per D.O 197 s 2016		33,219.19
H.	Contractor's Profit (CP)		8% per D.O 197 s 2016		26,575.35
I.	Value Added Tax (VAT)		5% per D.O 197 s 2016		19,599.32
J.	Total Unit Cost				5,524.64

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DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Road Widening Sindangan - Liloy Road, Zamboanga del Norte 2nd DEO

Item No./Description : 611(1) Trees (Furnishing and Transplanting)
Unit of Measurement : each
Output per hour : 1.00
Quantity : 301.00

	Designation	No. of Person	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Construction Foreman	1	37.63	611.92	23,023.49
	b. Skilled Laborer	1	37.63	443.20	16,675.40
	c. Laborer	2	37.63	342.24	25,753.56
	Sub-total for A			P	65,452.45
	Name and Capacity	**No. of Equip.**	**No. of Days**	**Daily Rate**	**Amount**
B	Equipment, (2014 ACEL Rates)				
	a. Cargo Truck	1	37.63	6,264.00	235,683.00
	b. Backhoe	1	37.63	12,296.00	462,637.00
	c. Water Truck	1	18.81	19,600.00	368,725.00
	Minor Tools (10% of Labor)				6,545.25
	Sub-total for B			P	1,073,590.25
C.	Total (A+B)			P	1,139,042.70
D.	Output/day 8.00 each /day				
	Name and Specifications	**Quantity**	**Unit**	**Unit Cost**	**Amount**
E.	Materials				
	a. Fertilizers	903.00	kg	27.00	24,381.00
	b. Bamboo Pole	903.00	pc	10.00	9,030.00
	c. Polyethylene	903.00	sq.m	40.00	36,120.00
	d. Tie Wire	75.25	kg	70.00	5,267.50
	e. Trees (Delivered at site)	301.00	each	31.00	9,331.00
	Sub-total for E			P	84,129.50
F.	Direct Cost (C+E)				1,223,172.20
G.	Overhead, Contingencies and Miscellaneous		10% per D.O 197 s 2016		122,317.22
H.	Contractor's Profit (CP)		8% per D.O 197 s 2016		97,853.78
I.	Value Added Tax (VAT)		5% per D.O 197 s 2016		72,167.16
J.	Total Unit Cost				5,034.92

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DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Road Widening Sindangan - Liloy Road, Zamboanga del Norte 2nd DEO

Item No./Description : 612(1) Reflectorized Thermoplastic Pavement Markings (White)
Unit of Measurement : sq.m
Output per hour : 25.00
Quantity : 1,071.00

	Designation	No. of Person	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Construction Foreman	1	5.36	611.92	3,276.83
	b. Skilled Laborer	2	5.36	443.20	4,746.67
	c. Laborer	6	5.36	342.24	10,996.17
	Sub-total for A			P	19,019.67
	Name and Capacity	No. of Equip.	No. of Days	Daily Rate	Amount
B	Equipment, (2014 ACEL Rates)				
	a. Cargo Truck/Delivery Truck	1	5.36	9,696.00	51,922.08
	b. Applicator Machine	1	5.36	750.00	4,016.25
	c. Kneading Machine	1	5.36	1,500.00	8,032.50
	Minor Tools (10% of labor)				
	Sub-total for B			P	63,970.83
C.	Total (A+B)			P	82,990.50
D.	Output/day 200.00 sq.m	/day			
	Name and Specifications	Quantity	Unit	Unit Cost	Amount
E.	Materials				
	a. Thermoplastic Paint (white)	348.08	bag	1,585.00	551,698.88
	b. Glass Beads	35.34	bag	2,500.00	88,357.50
	c. Primer	128.52	liter	180.00	23,133.60
	d. LPG (50 kg.)	4.28	cyl	90.00	385.56
	e. LPG (12 kg.)	2.14	cyl	50.00	107.10
	f. Calsumine	133.88	kg	5.00	669.38
	Miscellaneous (5% of Materials)				33,217.60
	Sub-total for E			P	697,569.61
F.	Direct Cost (C+E)				780,560.12
G.	Overhead, Contingencies and Miscellaneous		10% per D.O 197 s 2016		78,056.01
H.	Contractor's Profit (CP)		8% per D.O 197 s 2016		62,444.81
I.	Value Added Tax (VAT)		5% per D.O 197 s 2016		46,053.05
J.	Total Unit Cost				903.00

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DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Road Widening Sindangan - Liloy Road, Zamboanga del Norte 2nd DEO

Item No./Description : A.1.1(3) Const. of Field Office for the Engineer
Unit of Measurement : LS
Output per hour :
Quantity : 1.00

	Designation	No. of Person	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Construction Foreman	1	10.00	611.92	6,119.20
	b. Masons	3	10.00	443.20	13,296.00
	c. Carpenters	3	10.00	443.20	13,296.00
	d. Laborers	6	10.00	342.24	20,534.40
	Sub-total for A			P	53,245.60
	Name and Capacity	**No. of Equip.**	**No. of Days**	**Daily Rate**	**Amount**
B	Equipment, (2014 ACEL Rates)				
	a. Bagger Mixer	1	5.00	1,376.00	6,880.00
	b. Water Truck	1	1.00	19,600.00	19,600.00
	Minor Tools (10% of Labor)				5,324.56
	Sub-total for B			P	31,804.56
C.	Total (A+B)			P	85,050.16
D.	Output/day 0.00 LS	/day			
	Name and Specifications	**Quantity**	**Unit**	**Unit Cost**	**Amount**
E.	Materials				
	I. Earthworks (Excavation, Embankment, Bedding)				
	a. Gravel Bedding	3.50	cu.m	1,357.00	4,749.50
	b. Selected Fill	10.00	cu.m	451.40	4,514.00
	c. Soil Poisoning	2.50	lit	1,900.00	4,750.00
	II. Concrete Works (Footing, Columns, Beams & Slab on Grade)				
	a. Portland Cement	90.00	bag	290.51	26,145.95
	b. Crushed Gravel	20.00	cu.m	1,357.00	27,140.00
	c. Washed Sand	17.00	cu.m	1,357.00	23,069.00
	III. Reinforcing Bars(Footing Columns, Beams, & Slabs on Grade)				
	a. Deformed Round Bar, Grade 40	500.00	kg	40.00	20,000.00
	b. No. 16 GI Tie Wire	20.00	kg	68.00	1,360.00
	IV. Formworks (Columns & Beams)				
	a. Coco Lumber	400.00	bd.ft	15.00	6,000.00
	b. Ordinary Plywood, 1/4"x4'x8'	18.00	pc	520.00	9,360.00
	c. CWN, Assorted	5.00	kg	44.00	220.00
	V. Masonry Works (masonry walls & plastering)				
	a. CHB 6" thk	650.00	pc	18.00	11,700.00
	b. Portland Cement	50.00	bag	290.51	14,525.53
	c. Washed Sand	10.00	cu.m	1,357.00	13,570.00
	d. 10mm dia. X 6m RSB	75.00	kg	43.00	3,225.00
	e. No. 16 GI Tie Wire	2.50	kg	81.00	202.50
	VI. Doors and Windows				
	a. D-1, Hollow Core Flush Type swing door, complete w/ accessories, 0.90mx2.1m	2.00	set	1,765.27	3,530.54
	b. W-1, Jalousie window, 1.4m x 1.2m	2.00	set	924.00	1,848.00
	c. W-2, Jalousie window, 2.8m x 1.2m	2.00	set	1,848.00	3,696.00
	Sub-Total for E				179,606.01
	Sub-total for E			P	323,132.36
F.	Direct Cost (C+E)				408,182.52
G.	Overhead, Contingencies and Miscellaneous		10%	per D.O 197 s 2016	40,818.25
H.	Contractor's Profit (CP)		8%	per D.O 197 s 2016	32,654.60
I.	Value Added Tax (VAT)		5%	per D.O 197 s 2016	24,082.77
J.	Total Unit Cost				505,738.14

DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Road Widening Sindangan - Liloy Road, Zamboanga del Norte 2nd DEO

Item No./Description : A.1.1(3) Const. of Field Office for the Engineer
Unit of Measurement : LS
Output per hour :
Quantity : 1.00

	Designation	No. of Person	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Construction Foreman	1	16.00	611.92	
	b. Masons	3	16.00	443.20	
	c. Carpenters	3	16.00	443.20	
	d. Laborers	6	16.00	342.24	
	Sub-total for A			P	0.00
	Name and Capacity	No. of Equip.	No. of Days	Daily Rate	Amount
B	Equipment, (2014 ACEL Rates)				
	a. Bagger Mixer	1	5.00	1,376.00	
	b. Water Truck	1	1.00	19,600.00	
	Minor Tools (10% of Labor)				
	Sub-total for B			P	0.00
C.	Total (A+B)			P	0.00
D.	Output/day 0.00 LS	/day			
	Name and Specifications	Quantity	Unit	Unit Cost	Amount
E.	Materials				
	VII Steel Works				
	a. 65 x 65 x 6mm. L	300.00	kg	48.00	14,400.00
	b. 50 x 50 x 6mm. L	200.00	kg	48.00	9,600.00
	c. 50 x 50 x 4mm. L	100.00	kg	48.00	4,800.00
	d. Purlins C- 150 x 50 x 3mm.	19.00	kg	45.00	855.00
	e. 16mm dia. Cross bracing	32.00	kg	50.00	1,600.00
	f. 16mm dia. Turn buckle	15.00	pc	123.00	1,845.00
	g. 12mm thk base plate	22.00	kg	45.00	990.00
	h. 10mm thk batten plate	15.00	kg	45.00	675.00
	i. 10mm dia. Sag rod	7.50	kg	50.00	375.00
	j. 20mm dia. X 350 mm anchor bolts	7.00	pc	60.00	420.00
	k. Welding Rod	12.50	kg	125.00	1,562.50
	l. Primer, Zinc Cromate	5.00	gal	531.00	2,655.00
	VII Roofing Works				
	a. Pre-painted GI Roofing Sheet long span	55.00	sq.m	420.00	23,100.00
	b. Pre-painted ridge roll ga 24, 0.60m width	10.00	ln.m	189.00	1,890.00
	c. Pre-painted flashing, ga. 24	2.00	ln.m	189.00	378.00
	d. Teckscrew 11/2"	500.00	pc	1.25	625.00
	e. Roof Sealant	2.00	lit	242.84	485.68
	IX. Carpentry Works				
	a. Rough Lumber, sun dried tanguile	350.00	bd.ft	37.00	12,950.00
	b. Plywood, ordinary 1/4" x 4' x 8'	30.00	pc	350.00	10,500.00
	c. Finishing Nails	5.00	kg	74.00	370.00
	d. Common Wire Nails	10.00	kg	74.00	740.00
	e. Wood Preservative Brown	5.00	lit	900.00	4,500.00
	Sub-Total for E				95,316.18
	Sub-total for E			P	95,316.18
F.	Direct Cost (C+E)				
G.	Overhead, Contingencies and Miscellaneous		10% per D.O 197 s 2016		
H.	Contractor's Profit (CP)		8% per D.O 197 s 2016		
I.	Value Added Tax (VAT)		5% per D.O 197 s 2016		
J.	Total Unit Cost				

DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Road Widening Sindangan - Liloy Road, Zamboanga del Norte 2nd DEO

Item No./Description : A.1.1(3) Const. of Field Office for the Engineer
Unit of Measurement : LS
Output per hour :
Quantity : 1.00

Name and Specifications	Quantity	Unit	Unit Cost	Amount
E. Materials				
X. Electrical Works				
a. 2 x 40w Flourescent lighting fixtures	5.00	set	1,500.00	7,500.00
b. Porcelain Ceiling Outlet w/ femal	2.00	pc	50.00	100.00
c. douplex Convinience outlet	3.00	pc	170.00	510.00
d. two gang switch	3.00	pc	132.00	396.00
e. 3.5mm2 thw	3.00	roll	3,600.00	10,800.00
f. 8.00mm2 thw	25.00	m	69.33	1,733.25
g. 15mm dia. PVC pipe	20.00	pc	76.00	1,520.00
h. 15mm dia. PVC Coupling	25.00	pc	27.00	675.00
i. 15mm dia. PVC Elbow	25.00	pc	26.00	650.00
j. 15mm dia. PVC Clamp	55.00	pc	8.00	440.00
k. 20mm dia. RSC Pipe	4.00	pc	240.00	960.00
l. 20mm dia. RSC Coupling	3.00	pc	36.00	108.00
m. 20mm dia. RSC elbow	3.00	pc	30.00	90.00
n. 20mm dia. RSC Clamp	10.00	pc	18.00	180.00
o. 20mm dia. Service entrance cap	2.00	pc	101.49	202.98
p. wire holder	2.00	pc	50.00	100.00
q. utility box	7.00	pc	32.00	224.00
r. octagonal box	8.00	pc	34.00	272.00
s. electrical tape (big)	7.00	pc	28.00	196.00
t. panel board (side main w/ braches)	2.00	set	3,000.00	6,000.00
XI. Plumbing Works				
a. Water Closet (include. Fitting & Accessories	1.00	set	7,631.94	7,631.94
b. Lavatory (include fitting & Accessories)	1.00	set	5,000.00	5,000.00
c. 1/2" GI Pipe S-40	2.00	pc	292.00	584.00
d. 1/2" Water Faucet	2.00	pc	165.00	330.00
e. 1/2" Assorted Connector	8.00	pc	19.00	152.00
f. 4" PVC series 1000	1.00	pc	640.00	640.00
g. 2" PVC series 1000	1.00	pc	305.00	305.00
h. 4" PVC assorted Connector	6.00	pc	77.00	462.00
i. 2" PVC assorted Connector	8.00	pc	56.00	448.00
Sub-Total for E				48,210.17
Sub-total for E			P	48,210.17
F. Direct Cost (C+E)				
G. Overhead, Contingencies and Miscellaneous		10% per D.O 197 s 2016		
H. Contractor's Profit (CP)		8% per D.O 197 s 2016		
I. Value Added Tax (VAT)		5% per D.O 197 s 2016		
J. Total Unit Cost				

DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Road Widening Sindangan - Liloy Road, Zamboanga del Norte 2nd DEO

Item No./Description : A.1.1(11) Prov. Of Furniture, Equipment and Appliances for Field Engineer
Unit of Measurement : LS
Output per hour :
Quantity : 1.00

	Designation	No. of Person	No. of Days	Daily Rate	Amount
A.					
	Sub-total for A			P	0.00
	Name and Capacity	No. of Equip.	No. of Days	Daily Rate	Amount
B					
	Sub-total for B			P	0.00
C.	Total (A+B)			P	0.00
D.	Output/day 0.00 LS	/day			
	Name and Specifications	Quantity	Unit	Unit Cost	Amount
E.	Materials				
	Office Equipment/Facilities & Supplies				
	a. Office Table, Executive type w/ chair	2.00	unit	7,000.00	14,000.00
	b. 1/2" wooden office table	2.00	each	2,830.00	5,660.00
	c. Drawing Table	2.00	unit	5,000.00	10,000.00
	d. Electric Desk Fan	3.00	unit	1,370.00	4,110.00
	e. Folding Beds, Good Quality	3.00	each	2,700.00	8,100.00
	f. 6" sleeping beds w/ pillows and blanket	3.00	each	5,000.00	15,000.00
	g. Double burner gas stove (Gasul)	1.00	unit	3,700.00	3,700.00
	h. 10 cups Rice Cooker	1.00	unit	2,500.00	2,500.00
	i. Aluminum Cookware	1.00	set	3,500.00	3,500.00
	j. Plate, Glass, Spoon and fork	1.00	dozen	2,000.00	2,000.00
	k. 6 seater dinning table	1.00	each	2,800.00	2,800.00
	l. Monoblock Backrest chair	2.00	dozen	2,500.00	5,000.00
	m. Plastic Pail & Basin	2.00	pc	500.00	1,000.00
	n. White Board	3.00	Unit	7,000.00	21,000.00
	o. Bond Paper (Long)	20.00	ream	300.00	6,000.00
	p. Bond Paper (Short)	20.00	ream	270.00	5,400.00
	q. Yellow Pad	6.00	pad	35.00	210.00
	r. White Board Marker	10.00	pc	75.00	750.00
	s. Sign Pen (assorted color)	2.00	dozen	650.00	1,300.00
	t. Ballpen (assorted color)	4.00	box	180.00	720.00
	u. Mechanical Pencil	6.00	unit	350.00	2,100.00
	v. Pencil Lead, No. 5	4.00	box	145.00	580.00
	w. Puncher	1.00	Unit	253.32	253.32
	x. Staple Pad w/ wire	2.00	Unit	275.00	550.00
	y. Cutter Blade	2.00	box	240.00	480.00
	z. Scotch Tape	10.00	roll	45.00	450.00
	aa Brown Envelop	7.00	dozen	125.00	875.00
	bb Folder, Long	7.00	dozen	85.00	595.00
	cc Folder, Short	7.00	dozen	70.00	490.00
	dd Data File Folder	12.00	pc	85.00	1,020.00
	ee Desktop w/ complete accessories	1.00	unit	60,000.00	60,000.00
	ff Printer (3in1)	1.00	unit	20,000.00	20,000.00
	gg Camera	2.00	unit	15,000.00	30,000.00
	Lighting/Water Fixtures				
	a. Electric Bill	4.00	mons	1,200.00	4,800.00
	b. Water Bill	4.00	mons	1,000.00	4,000.00
	c. LPG Gasul (11 kg)	4.00	mons	1,000.00	4,000.00
	Sub-Total for E				242,943.32
	Sub-total for E			P	242,943.32
F.	Direct Cost (C+E)				242,943.32
G.	Overhead, Contingencies and Miscellaneous			per D.O 197 s 2016	
H.	Contractor's Profit (CP)			per D.O 197 s 2016	
I.	Value Added Tax (VAT)		5%	per D.O 197 s 2016	12,147.17
J.	Total Unit Cost				255,090.49

DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Road Widening Sindangan - Liloy Road, Zamboanga del Norte 2nd DEO

Item No./Description : A.1.2(5) Operation & Maintenance of Gov't. Service Vehicle
Unit of Measurement : L.S
Output per hour :
Quantity : 1.00

	Designation	No. of Person	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Service Driver	1	180.00	443.20	79,776.00
	Sub-total for A			P	79,776.00
	Name and Capacity	No. of Equip.	No. of Days	Daily Rate	Amount
B	Equipment, (2014 ACEL Rates)				
	Sub-total for B			P	0.00
C.	Total (A+B)			P	79,776.00
D.	Output/day 0.00 L.S /day				
	Name and Specifications	Quantity	Unit	Unit Cost	Amount
E.	Materials				
	a. Liters, Diesel Fuel	1,800.00	liters	35.00	63,000.00
	b. Engine Oil & Lubricants	1.00	ls	19,944.00	19,944.00
	c. Tires	4.00	pcs	9,500.00	38,000.00
	d. Spare parts etc.	1.00	ls	100,000.00	100,000.00
	Sub-total for E			P	220,944.00
F.	Direct Cost (C+E)				300,720.00
G.	Overhead, Contingencies and Miscellaneous		0%	per D.O 197 s 2016	0.00
H.	Contractor's Profit (CP)		0%	per D.O 197 s 2016	0.00
I.	Value Added Tax (VAT)		5%	per D.O 197 s 2016	15,036.00
J.	Total Unit Cost				315,756.00

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DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Road Widening Sindangan - Liloy Road, Zamboanga del Norte 2nd DEO

Item No./Description : B.5 Project Billboard
Unit of Measurement : Unit
Output per hour :
Quantity : 2.00

	Designation	No. of Person	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Construction Foreman	1	0.25	611.92	152.98
	b. Carpenters	1	0.25	443.20	110.80
	c. Laborer	2	0.25	342.24	171.12
	Sub-total for A			P	434.90
	Name and Capacity	No. of Equip.	No. of Days	Daily Rate	Amount
B	Equipment, (2014 ACEL Rates)				
	Sub-total for B			P	0.00
C.	Total (A+B)			P	434.90
D.	Output/day 0.00 Unit /day				
	Name and Specifications	Quantity	Unit	Unit Cost	Amount
E.	Materials				
	a. Marine Plywood 3/16" thk. X 4' x 8'	2.00	pc	423.00	846.00
	b. Tarpaulin (4' x 8')	2.00	pc	800.00	1,600.00
	c. Assorted Sizes Lumber	100.00	bd. Ft	15.00	1,500.00
	d. Assorted Sizes CW Nails	2.00	kg	75.00	150.00
	Sub-total for E			P	4,096.00
F.	Direct Cost (C+E)				4,530.90
G.	Overhead, Contingencies and Miscellaneous		10% per D.O 197 s 2016		453.09
H.	Contractor's Profit (CP)		8% per D.O 197 s 2016		362.47
I.	Value Added Tax (VAT)		5% per D.O 197 s 2016		267.32
J.	Total Unit Cost				2,806.89

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DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Road Widening Sindangan - Liloy Road, Zamboanga del Norte 2nd DEO

Item No./Description : B.7 Occupational Safety & Health Program
Unit of Measurement : L.S
Output per hour :
Quantity : 1.00

	Designation	No. of Person	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Safety Practitioner	1	90.00	611.92	55,072.80
	b. First Aider	1	180.00	443.20	79,776.00
	Sub-total for A			P	134,848.80
	Name and Capacity	**No. of Equip.**	**No. of Days**	**Daily Rate**	**Amount**
B	Equipment, (2014 ACEL Rates)				
	Sub-total for B			P	0.00
C.	Total (A+B)			P	134,848.80
D.	Output/day 0.00 L.S /day				
	Name and Specifications	**Quantity**	**Unit**	**Unit Cost**	**Amount**
E.	Materials				
	a. Pairs, Rubber Boots Men, Long with Steel Toe, Black	24.00	pair	400.00	9,600.00
	b. Pairs, Working Gloves (Maong Materials)	24.00	pair	15.00	360.00
	c. Pcs. Rain Coats (Rain Forced, Hip Length Small, Medium & Large)	24.00	pcs	100.00	2,400.00
	Sub-total for E			P	12,360.00
F.	Direct Cost (C+E)				147,208.80
G.	Overhead, Contingencies and Miscellaneous			per D.O 197 s 2016	0.00
H.	Contractor's Profit (CP)		8%	per D.O 197 s 2016	11,776.70
I.	Value Added Tax (VAT)		5%	per D.O 197 s 2016	7,949.28
J.	Total Unit Cost				166,934.78

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DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Road Widening Sindangan - Liloy Road, Zamboanga del Norte 2nd DEO

Item No./Description : B.9 Mobilization and Demobilization
Unit of Measurement : L.S
Output per hour :
Quantity : 1.00

	Designation	No. of Person	No. of Days	Daily Rate	Amount
A.	Labor				
	Sub-total for A			P	0.00
	Name and Capacity	No. of Equip.	No. of Days	Daily Rate	Amount
B	Equipment, (2014 ACEL Rates)				
	a. Low Bed Trailer	2	4.00	34,043.00	272,344.00
	b. Water Truck	1	4.00	19,600.00	78,400.00
	c. Backhoe	1	4.00	12,296.00	49,184.00
	d. Payloader	1	4.00	13,864.00	55,456.00
	e. Dumptruck	2	4.00	11,360.00	90,880.00
	f. Bullduzer	1	4.00	27,032.00	108,128.00
	g. Road Roller	1	4.00	13,216.00	52,864.00
	h. Road Grader	1	4.00	17,384.00	69,536.00
	Sub-total for B			P	776,792.00
C.	Total (A+B)			P	776,792.00
D.	Output/day 0.00 L.S /day				
	Name and Specifications	Quantity	Unit	Unit Cost	Amount
E.	Materials				
	Sub-total for E			P	0.00
F.	Direct Cost (C+E)				776,792.00
G.	Overhead, Contingencies and Miscellaneous			per D.O 197 s 2016	0.00
H.	Contractor's Profit (CP)			per D.O 197 s 2016	0.00
I.	Value Added Tax (VAT)			5% per D.O 197 s 2016	38,839.60
J.	Total Unit Cost				815,631.60

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DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Road Widening Sindangan - Liloy Road, Zamboanga del Norte 2nd DEO

Item No./Description : B.4(1) Construction Survey and Staking
Unit of Measurement : Km.
Output per hour : 0.04
Quantity : 3.57

	Designation	No. of Person	No. of Days	Daily Rate	Amount
A.	Labor				
	(For Field Works)				
	a. Geodetic Engineer	1	11.89	833.31	9,910.83
	b. Skilled Laborer	3	11.89	443.20	15,813.38
	c. Laborer	3	11.89	342.24	12,211.12
	(For Office Works)				
	a. Geodetic Engineer	1	35.68	833.31	29,732.50
	b. Skilled Laborer	2	35.68	443.20	31,626.75
	Sub-total for A			P	99,294.59
	Name and Capacity	**No. of Equip.**	**No. of Days**	**Daily Rate**	**Amount**
B	Equipment, (2014 ACEL Rates)				
	a. Total Station w/ complete accessories	1	11.89	800.00	9,514.67
	Minor Tools (10% of labor)				9,929.46
	Sub-total for B			P	19,444.13
C.	Total (A+B)			P	118,738.71
D.	Output/day 0.30 Km.	/day			
	Name and Specifications	**Quantity**	**Unit**	**Unit Cost**	**Amount**
E.	Materials				
	a. Standard Stake Plan (800 mm x 910 mm)	35.00	pcs	200.00	7,000.00
	b. Blue Printing	175.00	pcs	40.00	7,000.00
	Miscellaneous (5% of Materials)				700.00
	Sub-total for E			P	14,700.00
F.	Direct Cost (C+E)				133,438.71
G.	Overhead, Contingencies and Miscellaneous		10% per D.O 197 s 2016		13,343.87
H.	Contractor's Profit (CP)		8% per D.O 197 s 2016		10,675.10
I.	Value Added Tax (VAT)		5% per D.O 197 s 2016		7,872.88
J.	Total Unit Cost				46,337.04

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UNIT COST ANALYSIS FOR HAULING COST FOR ALL AGGREGATES

Hauling Cost from the District Office to Site

Item No	: *ALL AGGREGATES*	*Terrain*	: *Flat to Rolling*
Quantity	: *1,000.00*	*Unit*	: *cu.m.*
		Hauling Distance	: *5.00 km.*
		Effective Working Hours	: *8.00 hrs.*

Hauling : *Using 10.00 cu.m. capacity Dumptruck*

Weight of Dumptruck (cap. 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 $= \dfrac{5.00 \times 60.00}{30.00} = 10$ mins.

Unloaded Running $= \dfrac{5.00 \times 60.00}{40.00} = 7.5$ 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 $= \dfrac{8.00 \times 60.00}{22.50} = 21.33$ trips

Dumptruck Daily Outpout = *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 $= \dfrac{1{,}000.00}{853.33} = 1.17$ days

EQUIPMENT USED: (2009 ACEL RATES)

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

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 NORTE 2nd DEO *(using 2nd Quarter 2017)*

	Hauling Distance		Unit Cost per cu.m/km		Hauling Cost per km.		Unit Price		Unit cost per cu.m.
Cost of Fine Aggregates	50.00	X	10.14	=	507.00	+	850.00	=	1,357.00
Cost of Coarse Aggregates	50.00	X	10.14	=	507.00	+	850.00	=	1,357.00
Cost of Item 200 Materails	50.00	X	10.14	=	507.00	+	618.00	=	1,125.00
Cost of Item 201 Materails	50.00	X	10.14	=	507.00	+	630.00	=	1,137.00
Cost of Item 300 Materails	50.00	X	10.14	=	507.00	+	755.00	=	1,262.00
Cost of Boulders	50.00	X	10.14	=	507.00	+	1,100.00	=	1,607.00
Cost of Embankment, Common Borrow	10.00	X	10.14	=	101.40	+	270.00	=	371.40
Cost of Embankment, Selected Borrow	10.00	X	10.14	=	101.40	+	350.00	=	451.40

UNIT COST DERIVATION FOR PORTLAND CEMENT

TOTAL QUANTITY REQUIREMENTS FOR PORTLAND CEMENT

Description	Quantity (Bags)
Portland Cement Concrete Pavement-using Conventional Method, 0.28m thick	66,457.44
Portland Cement Concrete Pavement, 0.15m. Thick	870.87
Structural Concrete, Class A	1,980.75
Grouted Riprap, Class A	2,239.50
Stone Masonry	409.75
Const. of Field Office for the Engineer	90.00
	50.00
Concrete Structure (Lean Concrete)	61.75
TOTAL	***72,160.06***

Quantity = 72,160.06 Bags

Delivery Charge = P 0.12 /bag/km

SITE	*HAULING DISTANCE*
Zamboanga del Norte 2nd DEO PROJECT SITE	55.00

* Average Hauling Distance from source to assumed stockpilling area:
say 55.00 km.

Delivery Charge = P 0.12 X 55.00
Delivery Charge = P 6.60 /bag

* Delivery Truck : 72,160.06 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

$$\text{Loaded Running} = \frac{55.00 \times 60.00}{30.00} = 110 \text{ mins.}$$

$$\text{Unloading Running} = \frac{55.00 \times 60.00}{40.00} = 82.5 \text{ mins.}$$

Loading & Unloading = *45.00 mins.*
Capacity of Dumptruck = *8.00 cu.m.*
500.00 bags
Total Cycle Time = *237.50 mins.*

No. of trips for Dumptruck per day	=	$\frac{8.00 \times 60.00}{237.50}$	=	2.02	trips
Dumptruck Daily Outpout	=	*500.00 X 2.02*	=	*1,010.53*	cu.m.
Using 4 Dumptruck	=	*1,010.53 X 4.00*	=	*4,042.11*	cu.m.
No. of Days for Dumptruck	=	$\frac{72,160.06}{4,042.11}$	=	17.85	days
No. of Days for Labor for unloading	=	complimentary to D.Truck days	=	17.85	days

DELIVERY COST:

72,160.06	Bags, Portland Cement	@ P	6.60	/bag	= P	476,256.40
				Sub-total		**476,256.40**

LABOR:

1	Foreman	@ P	558.00	/day	X	17.85	days	= P	9,961.47
10	Laborers	@ P	312.24	/day	X	17.85	days	=	55,741.39
							Sub-total		**65,702.86**

MATERIALS:

72,160.06	Bags, Portland Cement	@ P	283.00	/bag	= P	20,421,296.98
				Sub-total		**20,421,296.98**

Estimated Quantity : 72,160.06 Bags

Unit Cost	P	290.51
Grand Total	P	20,963,256.24
Delivery Cost	P	476,256.40
Labor	P	65,702.86
Materials	P	20,421,296.98