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 - Primary Roads Lanao - Pagadian - Zamboanga City Road, Zamboanga del Sur 1st DEO**	Approriation : P 200,000,000.00 Source of Funds : CY-2018 Issued Obligated Authority : Released : Cal. Days to Complete : 225.00 Cal. Days Desirable Starting Date : Upon Approval Mode of Implementation :
PROJECT CATEGORY : NATIONAL ROAD	
PROJECT DESCRIPTION : Scope of Work : Road Concreting Road Width : 6.70 m. Roadbed Width : 12.00 m. Subbase Course : 0.30 mtrs thick Surface Course : 0.15 mtrs thick	NET LENGTH : K1648+-273.00 - K1651+150.00 K1652+000.00 - K1652+1039.00 K1653+143.00 -K1655+359.00 Net Length : **13.34** lane km. Net Length : **6,670.00** ln.m. / **6.670** 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
101(2)	Removal of Existing Headwall	0.020	each	76.00	27,493.11	361.75
101(6)	Removal of Actual Structures and Obstruction	0.290	cu.m	145.00	388,547.80	2,679.64
101(8)	Removal of Existing Guardrails	0.024	ln.m	1,182.81	32,328.03	27.33
101(9)	Removal of Existing Guardrails Post	0.006	each	310.00	8,472.78	27.33
102(2)	Surplus Common Excavation	1.086	cu.m.	8,740.00	1,458,134.99	166.83
103(1)a	Structure Excavation	0.108	cu.m.	630.00	144,972.86	230.12
103(3)	Foundation Fill	0.030	cu.m.	51.00	40,835.60	800.70
103(6)a	Pipe Culvert and Drain Excavation	0.087	cu.m.	505.00	116,208.40	230.12
104(1)a1	Embankment (from excavation)	6.746	cu.m.	39,942.00	9,054,221.51	226.68
105 (1)a	Subgrade Preparation	0.766	sq.m.	67,073.00	1,028,352.06	15.33
200 (1)	Aggregate Subbase Course	23.869	cu.m.	25,659.94	32,034,664.55	1,248.43
300 (1)	Aggregate Surface Course	3.343	cu.m.	3,291.00	4,487,051.42	1,363.43
311(1)e1a	Portland Cement Concrete Pavement-using Conventional Method, 0.28m thick	49.753	sq.m.	44,548.00	66,772,574.09	1,498.89
404(1)a	Reinforcing Steel Bar, Grade 40	0.227	kg.	6,264.78	304,788.68	48.65
404 (1)b	Reinforcing Steel Bar, Grade 60	0.847	kg.	14,738.11	1,136,659.13	77.12
405 (1) a3	Structural Concrete, Class A	3.041	cu.m	615.00	4,081,229.50	6,636.15
407(8)	Lean Concrete	0.062	cu.m	10.76	83,033.19	7,716.84
500(1)b3	RC Culvert Pipe, 910 mm (36" dia.)	0.705	ln.m	312.00	945,672.26	3,031.00
505(5)	Grouted Riprap, Class A	1.386	cu.m	569.00	1,860,191.95	3,269.23
506	Stone Masonry	0.685	cu.m	231.00	919,894.18	3,982.23
603(3)	Metal Guardrail (Metal Beam) Including Post	3.627	m	1,183.00	4,868,054.82	4,115.01
603(4)b	Metal Beam End Piece	0.021	each	18.00	28,620.97	1,590.05

607(1)b	Reflectorized Thermoplastic Pavement Markings	0.598	each	1,108.00	802,918.48	724.66
612(1)	Reflectorized Thermoplastic Pavement Markings (White)	0.903	sq.m	1,662.00	1,211,289.37	728.81
A.1.1(3)	Construction of Field Office for the Engineer	0.294	LS	1.00	395,037.53	395,037.53
A.1.1(11)	Prov. Of Furniture, Equipment and Appliances for Field Engineer	0.183	LS	1.00	246,143.32	246,143.32
A.1.2(5)	Operation & Maintenance of Gov't. Service Vehicle	0.251	L.S	1.00	336,900.00	336,900.00
B.5	Project Billboard	0.004	each	2.00	5,100.90	2,550.45
B.7	Construction Safety and Health Program	0.135	L.S	1.00	180,921.00	180,921.00
B.9	Mobilization and Demobilization	0.724	L.S	1.00	972,312.00	972,312.00
B.4(1)	Construction Survey and Staking	0.176	Km.	6.67	236,669.51	35,482.68
TOTAL		**100.000**			**P 134,209,293.99**	

Name of Project : **Road Widening - Primary Roads Lanao - Pagadian - Zamboanga City Road, Zamboanga del Sur 1st DEO**

Station Limits : K1648+-273.00 - K1651+150.00 K1653+143.00 -K1655+359.00
K1652+000.00 - K1652+1039.00

BREAKDOWN OF ESTIMATED EXPENDITURES	**% OF TOTAL**	**AMOUNT**
I. ESTIMATED COST		
A. DIRECT COST		
A.1 Materials	52.84	105,681,870.43
A.2 Labor	1.35	2,705,755.60
A.3 Equipment Expenses	12.91	25,821,667.96
SUB-TOTAL (DIRECT COST)	67.10	P 134,209,293.99
B. INDIRECT COST (Per DO # 197 s. 2016)		
B.1 Overhead, Contingency & Misc. (10% Max. of D.C.)	6.62	13,247,301.77
B.2 Profit (8% Max. D.C.)	5.31	10,612,315.09
C. VAT (5% of D.C. and I.C. per D.O. # 197)	3.95	7,903,445.54
SUB-TOTAL (CONTRACT COST)	82.99	P 165,972,356.39
II. ESTIMATED GOVERNMENT EXPENDITURES		
1 Engineering and Administrative Overhead (3.5%)	3.50	7,000,000.00
2 Detailed Engineering (1%)		
3 Reserved for the Payment of RROW)	13.51	27,027,643.61
4 Physical Reserved		
TOTAL ESTIMATED PROJECT COST	100.00	P 200,000,000.00

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

APPROVE[illegible]GET FOR THE CONTRACT

Road Widening - Primary Roads Lanao - Pagadian - Zamboanga City Road, Zamboanga del Sur 1st DEO

Project Name and Location

Station Limits : K1648+273.00 - K1651+150.00 K1652+000.00 - K1652+1039.00 K1653+143.00 -K1655+359.00

Length : 6,670.00 ln.m.

Contract Duration : 225.00 Calendar Days

Item No.	Description	Quantity	Unit	Estimated Direct Cost	MARK-UP IN PERCENT OCM	MARK-UP IN PERCENT PROFIT	TOTAL MARK-UPS %	TOTAL MARK-UPS VALUE	VAT	TOTAL INDIRECT COST	TOTAL COST	TOTAL COST
(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)	Construction of Field Office for the Engineer	1.00	LS	395,037.53	10.00	8.00	18.00	71,106.76	23,307.21	94,413.97	489,451.51	489,451.51
A.1.1(11)	Prov. Of Furniture, Equipment and Appliances for Field Engineer	1.00	LS	246,143.32	0.00	0.00	0.00	-	12,307.17	12,307.17	258,450.49	258,450.49
A.1.2(5)	Operation & Maintenance of Gov't. Service Vehicle	1.00	L.S	336,900.00	0.00	0.00	0.00	-	16,845.00	16,845.00	353,745.00	353,745.00
	TOTAL OF PART A			978,080.85				71,106.76	52,459.38	123,566.14	1,101,646.99	
PART B	**OTHER GENERAL REQUIREMENTS**											
B.5	Project Billboard	2.00	each	5,100.90	10.00	8.00	18.00	918.16	300.95	1,219.12	6,320.02	3,160.01
B.7	Construction Safety and Health Program	1.00	L.S	180,921.00	0.00	8.00	8.00	14,473.68	9,769.73	24,243.41	205,164.41	205,164.41
B.9	Mobilization and Demobilization	1.00	L.S	972,312.00	0.00	0.00	0.00	-	48,615.60	48,615.60	1,020,927.60	1,020,927.60
B.4(1)	Construction Survey and Staking	6.67	Km.	236,669.51	10.00	8.00	18.00	42,600.51	13,963.50	56,564.01	293,233.52	43,963.05
	TOTAL OF PART B			1,395,003.41				57,992.35	72,649.79	130,642.14	1,525,645.55	
PART C	**EARTHWORKS**											
101(2)	Removal of Existing Headwall	76.00	each	27,493.11	10.00	8.00	18.00	4,948.76	1,622.09	6,570.85	34,063.96	448.21
101(8)	Removal of Existing Guardrails	1,182.81	ln.m	32,328.03	10.00	8.00	18.00	5,819.05	1,907.35	7,726.40	40,054.43	33.86
101(9)	Removal of Existing Guardrails Post	310.00	each	8,472.78	10.00	8.00	18.00	1,525.10	499.89	2,024.99	10,497.78	33.86
101(6)	Removal of Actual Structures and Obstruction	145.00	cu.m	388,547.80	10.00	8.00	18.00	69,938.60	22,924.32	92,862.92	481,410.72	3,320.07
102(2)	Surplus Common Excavation	8,740.00	cu.m.	1,458,134.99	10.00	8.00	18.00	262,464.30	86,029.96	348,494.26	1,806,629.25	206.71
103(1)a	Structure Excavation	630.00	cu.m.	144,972.86	10.00	8.00	18.00	26,095.11	8,553.40	34,648.51	179,621.37	285.11
103(3)	Foundation Fill	51.00	cu.m.	40,835.60	10.00	8.00	18.00	7,350.41	2,409.30	9,759.71	50,595.31	992.06
103(6)a	Pipe Culvert and Drain Excavation	505.00	cu.m.	116,208.40	10.00	8.00	18.00	20,917.51	6,856.30	27,773.81	143,982.21	285.11
104(1)a1	Embankment (from excavation)	39,942.00	cu.m.	9,054,221.51	10.00	8.00	18.00	1,629,759.87	534,199.07	2,163,958.94	11,218,180.46	280.86
105 (1)a	Subgrade Preparation	67,073.00	sq.m.	1,028,352.06	10.00	8.00	18.00	185,103.37	60,672.77	245,776.14	1,274,128.20	19.00
	TOTAL OF PART C			12,299,567.14				2,213,922.08	725,674.46	2,939,596.55	15,239,163.68	
PART D	**SUBBASE AND BASE COURSE**											
200 (1)	Aggregate Subbase Course	25,659.94	cu.m.	32,034,664.55	10.00	8.00	18.00	5,766,239.62	1,890,045.21	7,656,284.83	39,690,949.38	1,546.81
	TOTAL OF PART D			32,034,664.55				5,766,239.62	1,890,045.21	7,656,284.83	39,690,949.38	
PART E	**SURFACE COURSES**											
300 (1)	Aggregate Surface Course	3,291.00	cu.m.	4,487,051.42	10.00	8.00	18.00	807,669.26	264,736.03	1,072,405.29	5,559,456.71	1,689.29
311(1)e1a	Portland Cement Concrete Pavement-using Conventional Method, 0.28m thick	44,548.00	sq.m.	66,772,574.09	10.00	8.00	18.00	12,019,063.34	3,939,581.87	15,958,645.21	82,731,219.30	1,857.13
	TOTAL OF PART E			71,259,625.51				12,826,732.59	4,204,317.91	17,031,050.50	88,290,676.01	
PART F	**BRIDGE STRUCTURE**											
404(1)a	Reinforcing Steel Bar, Grade 40	6,264.78	kg.	304,788.68	10.00	8.00	18.00	54,861.96	17,982.53	72,844.49	377,633.18	60.28
404 (1)b	Reinforcing Steel Bar, Grade 60	14,738.11	kg.	1,136,659.13	10.00	8.00	18.00	204,598.64	67,062.89	271,661.53	1,408,320.66	95.56
405 (1) a3	Structural Concrete, Class A	615.00	cu.m	4,081,229.50	10.00	8.00	18.00	734,621.31	240,792.54	975,413.85	5,056,643.35	8,222.18
407(8)	Lean Concrete	10.76	cu.m	83,033.19	10.00	8.00	18.00	14,945.97	4,898.96	19,844.93	102,878.13	9,561.16
	TOTAL OF PART F			5,605,710.51				1,009,027.89	330,736.92	1,339,764.81	6,945,475.32	
PART G	**DRAINAGE AND SLOPE PROTECTION STRUCTURES**											
500(1)b3	RC Culvert Pipe, 910 mm (36" dia.)	312.00	ln.m	945,672.26	10.00	8.00	18.00	170,221.01	55,794.66	226,015.67	1,171,687.93	3,755.41
505(5)	Grouted Riprap, Class A	569.00	cu.m	1,860,191.95	10.00	8.00	18.00	334,834.55	109,751.32	444,585.88	2,304,777.82	4,050.58
506	Stone Masonry	231.00	cu.m	919,894.18	10.00	8.00	18.00	165,580.95	54,273.76	219,854.71	1,139,748.89	4,933.98
	TOTAL OF PART G			3,725,758.39				670,636.51	219,819.74	890,456.25	4,616,214.64	
PART H	**MISCELLANEOUS STRUCTURES**											
603(3)	Metal Guardrail (Metal Beam) Including Post	1,183.00	m	4,868,054.82	10.00	8.00	18.00	876,249.87	287,215.23	1,163,465.10	6,031,519.92	5,098.50
603(4)b	Metal Beam End Piece	18.00	each	28,620.97	10.00	8.00	18.00	5,151.77	1,688.64	6,840.41	35,461.38	1,970.08
607(1)b	Reflectorized Thermoplastic Pavement Markings	1,108.00	each	802,918.48	10.00	8.00	18.00	144,525.33	47,372.19	191,897.52	994,816.00	897.85
612(1)	Reflectorized Thermoplastic Pavement Markings (White)	1,662.00	sq.m	1,211,289.37	10.00	8.00	18.00	218,032.09	71,466.07	289,498.16	1,500,787.53	903.00
	TOTAL OF PART H			6,910,883.64				1,243,959.05	407,742.13	1,651,701.19	8,562,584.82	
	TOTAL			134,209,293.99				23,859,616.86	6,013,400.33	31,763,062.40	165,972,356.39	

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 - Primary Roads Lanao - Pagadian - Zamboanga City Road, Zamboanga del Sur 1st DEO**
Station Limits : K1648+-273.00 - K1651+150.00 K1652+000.00 - K1652+1039.00 K1653+143.00 -K1655+359.00

Item No.	Description	Quantity	Unit	Labor	Equipment	Materials	OCM	Profit	VAT	TOTAL
101(2)	Removal of Existing Headwall	76.00	each	1,330.11	26,163.00	-	2,749.31	2,199.45	1,622.09	34,063.96
101(6)	Removal of Actual Structures and Obstruction	145.00	cu.m	18,797.80	369,750.00	-	38,854.78	31,083.82	22,924.32	481,410.72
101(8)	Removal of Existing Guardrails	1,182.81	ln.m	1,916.74	30,411.29	-	3,232.80	2,586.24	1,907.35	40,054.43
101(9)	Removal of Existing Guardrails Post	310.00	each	502.36	7,970.43	-	847.28	677.82	499.89	10,497.78
102(2)	Surplus Common Excavation	8,740.00	cu.m.	29,836.90	1,428,298.08	-	145,813.50	116,650.80	86,029.96	1,806,629.25
103(1)a	Structure Excavation	630.00	cu.m.	6,452.15	138,520.71	-	14,497.29	11,597.83	8,553.40	179,621.37
103(3)	Foundation Fill	51.00	cu.m.	10,102.49	6,018.00	24,715.11	4,083.56	3,266.85	2,409.30	50,595.31
103(6)a	Pipe Culvert and Drain Excavation	505.00	cu.m.	5,171.96	111,036.45	-	11,620.84	9,296.67	6,856.30	143,982.21
104(1)a1	Embankment (from excavation)	39,942.00	cu.m.	236,897.20	8,817,324.31	-	905,422.15	724,337.72	534,199.07	11,218,180.46
105 (1)a	Subgrade Preparation	67,073.00	sq.m.	36,230.60	992,121.46	-	102,835.21	82,268.16	60,672.77	1,274,128.20
200 (1)	Aggregate Subbase Course	25,659.94	cu.m.	83,163.87	2,277,319.68	29,674,181.01	3,203,466.46	2,562,773.16	1,890,045.21	39,690,949.38
300 (1)	Aggregate Surface Course	3,291.00	cu.m.	10,666.13	292,076.25	4,184,309.04	448,705.14	358,964.11	264,736.03	5,559,456.71
311(1)e1a	Portland Cement Concrete Pavement-using Conventional Method, 0.28m thick	44,548.00	sq.m.	626,490.03	9,293,452.05	56,852,632.01	6,677,257.41	5,341,805.93	3,939,581.87	82,731,219.30
404(1)a	Reinforcing Steel Bar, Grade 40	6,264.78	kg.	18,429.94	14,028.76	272,329.99	30,478.87	24,383.09	17,982.53	377,633.18
404 (1)b	Reinforcing Steel Bar, Grade 60	14,738.11	kg.	41,247.06	36,921.01	1,058,491.06	113,665.91	90,932.73	67,062.89	1,408,320.66
405 (1) a3	Structural Concrete, Class A	615.00	cu.m	528,974.68	263,004.09	3,289,250.73	408,122.95	326,498.36	240,792.54	5,056,643.35
407(8)	Lean Concrete	10.76	cu.m	4,921.39	20,853.26	57,258.53	8,303.32	6,642.66	4,898.96	102,878.13
500(1)b3	RC Culvert Pipe, 910 mm (36" dia.)	312.00	ln.m	63,899.38	154,367.08	727,405.80	94,567.23	75,653.78	55,794.66	1,171,687.93
505(5)	Grouted Riprap, Class A	569.00	cu.m	241,042.06	146,108.50	1,473,041.39	186,019.19	148,815.36	109,751.32	2,304,777.82
506	Stone Masonry	231.00	cu.m	78,285.72	74,090.46	767,518.00	91,989.42	73,591.53	54,273.76	1,139,748.89
603(3)	Metal Guardrail (Metal Beam) Including Post	1,183.00	m	100,952.15	161,971.15	4,605,131.52	486,805.48	389,444.39	287,215.23	6,031,519.92
603(4)b	Metal Beam End Piece	18.00	each	652.35	3,668.62	24,300.00	2,862.10	2,289.68	1,688.64	35,461.38
607(1)b	Reflectorized Thermoplastic Pavement Markings	1,108.00	each	22,695.16	16,456.76	763,766.56	80,291.85	64,233.48	47,372.19	994,816.00
612(1)	Reflectorized Thermoplastic Pavement Markings (White)	1,662.00	sq.m	29,515.13	99,271.26	1,082,502.98	121,128.94	96,903.15	71,466.07	1,500,787.53
A.1.1(3)	Construction of Field Office for the Engineer	1.00	LS	53,245.60	31,804.56	309,987.37	39,503.75	31,603.00	23,307.21	489,451.51
A.1.1(11)	Prov. Of Furniture, Equipment and Appliances for Field Engineer	1.00	LS	-	-	246,143.32	-	-	12,307.17	258,450.49
A.1.2(5)	Operation & Maintenance of Gov't. Service Vehicle	1.00	L.S	99,720.00	-	237,180.00	-	-	16,845.00	353,745.00
B.5	Project Billboard	2.00	each	434.90	-	4,666.00	510.09	408.07	300.95	6,320.02
B.7	Construction Safety and Health Program	1.00	L.S	168,561.00	-	12,360.00	-	14,473.68	9,769.73	205,164.41
B.9	Mobilization and Demobilization	1.00	L.S	-	972,312.00	-	-	-	48,615.60	1,020,927.60
B.4(1)	Construction Survey and Staking	6.67	Km.	185,620.76	36,348.74	14,700.00	23,666.95	18,933.56	13,963.50	293,233.52
	TOTAL			***2,705,755.60***	***25,821,667.96***	***105,681,870.43***	***13,247,301.77***	***10,612,315.09***	***7,903,445.54***	***165,972,356.39***

Name of Project : Road Widening - Primary [illegible]s Lanao - Pagadian - Zamboanga City Road, Zamboang[illegible] Sur 1st DEO

Station Limits : K1648+-273.00 - K1651+150.00 K1652+000.00 - K1652+1039.00 K1653+143.00 -K1655+359.00

Net Length : 6,670.00 ln.m.

Item No.	Description	Quantity	Unit	DURATION # OF DAYS
101(2)	Removal of Existing Headwall	76.00	each	1.03
101(6)	Removal of Actual Structures and Obstruction	145.00	cu.m	14.50
101(8)	Removal of Existing Guardrails	1,182.81	ln.m	1.48
101(9)	Removal of Existing Guardrails Post	310.00	each	0.39
102(2)	Surplus Common Excavation	8,740.00	cu.m.	18.21
103(1)a	Structure Excavation	630.00	cu.m.	3.94
103(3)	Foundation Fill	51.00	cu.m.	5.10
103(6)a	Pipe Culvert and Drain Excavation	505.00	cu.m.	3.16
104(1)a1	Embankment (from excavation)	39,942.00	cu.m.	82.88
105 (1)a	Subgrade Preparation	67,073.00	sq.m.	27.95
200 (1)	Aggregate Subbase Course	25,659.94	cu.m.	64.15
300 (1)	Aggregate Surface Course	3,291.00	cu.m.	8.23
311(1)e1a	Portland Cement Concrete Pavement-using Conventional Method, 0.28m thick	44,548.00	sq.m.	96.51
404(1)a	Reinforcing Steel Bar, Grade 40	6,264.78	kg.	4.35
404 (1)b	Reinforcing Steel Bar, Grade 60	14,738.11	kg.	10.23
405 (1) a3	Structural Concrete, Class A	615.00	cu.m	54.91
407(8)	Lean Concrete	10.76	cu.m	0.96
500(1)b3	RC Culvert Pipe, 910 mm (36" dia.)	312.00	ln.m	22.29
505(5)	Grouted Riprap, Class A	569.00	cu.m	56.90
506	Stone Masonry	231.00	cu.m	18.48
603(3)	Metal Guardrail (Metal Beam) Including Post	1,183.00	m	35.21
603(4)b	Metal Beam End Piece	18.00	each	0.38
607(1)b	Reflectorized Thermoplastic Pavement Markings	1,108.00	each	13.85
612(1)	Reflectorized Thermoplastic Pavement Markings (White	1,662.00	sq.m	8.31
A.1.1(3)	Construction 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	225.00
B.5	Project Billboard	2.00	each	0.25
B.7	Construction Safety and Health Program	1.00	LS	150.00
B.9	Mobilization and Demobilization	1.00	LS	4.00
B.4(1)	Construction Survey and Staking	6.67	Km.	88.93

WEEKS (6 WORKING DAYS)

TOTAL NO. OF WORKING DAYS	:	150
INCLEMENT WEATHER & CURING TIME	:	50
NUMBER OF SUNDAYS	:	25
TOTAL NO. CALENDAR DAYS	:	**225**

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 - Primary Roads Lanao - Pagadian - Zamboanga City Road, Zamboanga del Sur 1st DEO

Item No./Description : 101(2) Removal of Existing Headwall
Unit of Measurement : cu.m
Output per hour : 10.00
Quantity : 76.00 each
82.08 cu.m

	Designation	No. of Person	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Construction Foreman	1	1.03	611.92	627.83
	b. Laborer	2	1.03	342.24	702.28
	Sub-total for A			P	1,330.11
	Name and Capacity	No. of Equip.	No. of Days	Daily Rate	Amount
B	Equipment, (2014 ACEL Rates)				
	a. Backhoe w/ breaker	1	0.51	15,984.00	8,199.79
	b. Backhoe	1	0.51	12,296.00	6,307.85
	c. Dumptruck	1	1.03	11,360.00	11,655.36
	Sub-total for B			P	26,163.00
C.	Total (A+B)			P	27,493.11
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)				27,493.11
G.	Overhead, Contingencies and Miscellaneous		10%	per D.O 197 s 2016	2,749.31
H.	Contractor's Profit (CP)		8%	per D.O 197 s 2016	2,199.45
I.	Value Added Tax (VAT)		5%	per D.O 197 s 2016	1,622.09
J.	Total Unit Cost				448.21

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DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Road Widening (2-4 Lanes) Including Drainage and RROW Acquisition - Lanao - Pagadian - Zamboanga City Road, Zamboanga del Sur 1st DEO

Item No./Description : 101(6) Removal of Actual Structures and Obstruction
Unit of Measurement : cu.m
Output per hour : 10.00
Quantity : 145.00

	Designation	No. of Person	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Construction Foreman	1	14.50	611.92	8,872.84
	b. Laborer	2	14.50	342.24	9,924.96
	Sub-total for A			P	18,797.80
	Name and Capacity	No. of Equip.	No. of Days	Daily Rate	Amount
B	Equipment, (2014 ACEL Rates)				
	a. Backhoe w/ breaker	1	7.25	15,984.00	115,884.00
	b. Backhoe	1	7.25	12,296.00	89,146.00
	c. Dumptruck	1	14.50	11,360.00	164,720.00
	Sub-total for B			P	369,750.00
C.	Total (A+B)			P	388,547.80
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)				388,547.80
G.	Overhead, Contingencies and Miscellaneous		10%	per D.O 197 s 2016	38,854.78
H.	Contractor's Profit (CP)		8%	per D.O 197 s 2016	31,083.82
I.	Value Added Tax (VAT)		5%	per D.O 197 s 2016	22,924.32
J.	Total Unit Cost				3,320.07

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DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Road Widening - Primary Roads Lanao - Pagadian - Zamboanga City Road, Zamboanga del Sur 1st DEO

Item No./Description : 101(8) Removal of Existing Guardrails
Unit of Measurement : ln.m
Output per hour : 100.00
Quantity : 1,182.81

	Designation	No. of Person	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Construction Foreman	1	1.48	611.92	904.73
	b. Laborer	2	1.48	342.24	1,012.01
	Sub-total for A			P	1,916.74
	Name and Capacity	No. of Equip.	No. of Days	Daily Rate	Amount
B	Equipment, (2014 ACEL Rates)				
	a. Backhoe	1	1.48	12,296.00	18,179.79
	b. Boom Truck	1	1.48	8,143.20	12,039.82
	Minor Tools (10% of Labor Cost)				191.67
	Sub-total for B			P	30,411.29
C.	Total (A+B)			P	32,328.03
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)				32,328.03
G.	Overhead, Contingencies and Miscellaneous		10% per D.O 197 s 2016		3,232.80
H.	Contractor's Profit (CP)		8% per D.O 197 s 2016		2,586.24
I.	Value Added Tax (VAT)		5% per D.O 197 s 2016		1,907.35
J.	Total Unit Cost				33.86

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DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Road Widening - Primary Roads Lanao - Pagadian - Zamboanga City Road, Zamboanga del Sur 1st DEO

Item No./Description : 101(9) Removal of Existing Guardrails Post
Unit of Measurement : each
Output per hour : 100.00
Quantity : 310.00

	Designation	No. of Person	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Construction Foreman	1	0.39	611.92	237.12
	b. Laborer	2	0.39	342.24	265.24
	Sub-total for A			P	502.36
	Name and Capacity	No. of Equip.	No. of Days	Daily Rate	Amount
B	Equipment, (2014 ACEL Rates)				
	a. Backhoe	1	0.39	12,296.00	4,764.70
	b. Boom Truck	1	0.39	8,143.20	3,155.49
	Minor Tools (10% of Labor Cost)				50.24
	Sub-total for B			P	7,970.43
C.	Total (A+B)			P	8,472.78
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)				8,472.78
G.	Overhead, Contingencies and Miscellaneous		10% per D.O 197 s 2016		847.28
H.	Contractor's Profit (CP)		8% per D.O 197 s 2016		677.82
I.	Value Added Tax (VAT)		5% per D.O 197 s 2016		499.89
J.	Total Unit Cost				33.86

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DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Road Widening - Primary Roads Lanao - Pagadian - Zamboanga City Road, Zamboanga del Sur 1st DEO

Item No./Description : 102(2) Surplus Common Excavation
Unit of Measurement : cu.m.
Output per hour : 60.00
Quantity : 8,740.00

	Designation	No. of Person	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Construction Foreman	1	18.21	611.92	11,142.04
	b. Laborer	3	18.21	342.24	18,694.86
	Sub-total for A			P	29,836.90
	Name and Capacity	No. of Equip.	No. of Days	Daily Rate	Amount
B	Equipment, (2014 ACEL Rates)				
	a. Bulldozer	1	18.21	27,032.00	492,207.67
	b. Payloader	1	18.21	13,864.00	252,440.33
	c. Payloader	1	4.55	13,864.00	63,110.08
	d. Dumptruck	3	18.21	11,360.00	620,540.00
	Sub-total for B			P	1,428,298.08
C.	Total (A+B)			P	1,458,134.99
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)				1,458,134.99
G.	Overhead, Contingencies and Miscellaneous		10% per D.O 197 s 2016		145,813.50
H.	Contractor's Profit (CP)		8% per D.O 197 s 2016		116,650.80
I.	Value Added Tax (VAT)		5% per D.O 197 s 2016		86,029.96
J.	Total Unit Cost				206.71

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DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Road Widening - Primary Roads Lanao - Pagadian - Zamboanga City Road, Zamboanga del Sur 1st DEO

Item No./Description : 103(1)a Structure Excavation

Unit of Measurement : cu.m.

Output per hour : 20.00

Quantity : 630.00

	Designation	No. of Person	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Construction Foreman	1	3.94	611.92	2,409.44
	b. Laborers	3	3.94	342.24	4,042.71
	Sub-total for A			P	6,452.15
	Name and Capacity	No. of Equip.	No. of Days	Daily Rate	Amount
B	Equipment, (2014 ACEL Rates)				
	a. Dumptruck	2	3.94	11,360.00	89,460.00
	b. Backhoe	1	3.94	12,296.00	48,415.50
	Minor Tools (10% of Labor)				645.21
	Sub-total for B			P	138,520.71
C.	Total (A+B)			P	144,972.86
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)				144,972.86
G.	Overhead, Contingencies and Miscellaneous		10%	per D.O 197 s 2016	14,497.29
H.	Contractor's Profit (CP)		8%	per D.O 197 s 2016	11,597.83
I.	Value Added Tax (VAT)		5%	per D.O 197 s 2016	8,553.40
J.	Total Unit Cost				285.11

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DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Road Widening - Primary Roads Lanao - Pagadian - Zamboanga City Road, Zamboanga del Sur 1st DEO

Item No./Description : 103(3) Foundation Fill
Unit of Measurement : cu.m.
Output per hour : 1.25
Quantity : 51.00

	Designation	No. of Person	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Construction Foreman	1	5.10	611.92	3,120.79
	b. Laborer	4	5.10	342.24	6,981.70
	Sub-total for A			P	10,102.49
	Name and Capacity	No. of Equip.	No. of Days	Daily Rate	Amount
B	Equipment, (2014 ACEL Rates)				
	a. Plate Compactor	1	5.10	984.00	5,018.40
	b. Water Truck	1	0.05	19,600.00	999.60
	c. Minor Tools (10% of Labor)				
	Sub-total for B			P	6,018.00
C.	Total (A+B)			P	16,120.49
D.	Output/day 10.00 cu.m. /day				
	Name and Specifications	Quantity	Unit	Unit Cost	Amount
E.	Materials				
	a. Filling Materials	58.65	cu.m.	421.40	24,715.11
	Sub-total for E			P	24,715.11
F.	Direct Cost (C+E)				40,835.60
G.	Overhead, Contingencies and Miscellaneous		10%	per D.O 197 s 2016	4,083.56
H.	Contractor's Profit (CP)		8%	per D.O 197 s 2016	3,266.85
I.	Value Added Tax (VAT)		5%	per D.O 197 s 2016	2,409.30
J.	Total Unit Cost				992.06

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DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Road Widening - Primary Roads Lanao - Pagadian - Zamboanga City Road, Zamboanga del Sur 1st DEO

Item No./Description : 103(6)a Pipe Culvert and Drain Excavation

Unit of Measurement : cu.m.

Output per hour : 20.00

Quantity : 505.00

	Designation	No. of Person	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Construction Foreman	1	3.16	611.92	1,931.37
	b. Laborer	3	3.16	342.24	3,240.59
	Sub-total for A			P	5,171.96
	Name and Capacity	No. of Equip.	No. of Days	Daily Rate	Amount
B	Equipment, (2014 ACEL Rates)				
	a. Dumptruck	2	3.16	11,360.00	71,710.00
	b. Backhoe	1	3.16	12,296.00	38,809.25
	Minor Tools (10% of Labor)				517.20
	Sub-total for B			P	111,036.45
C.	Total (A+B)			P	116,208.40
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)				116,208.40
G.	Overhead, Contingencies and Miscellaneous		10%	per D.O 197 s 2016	11,620.84
H.	Contractor's Profit (CP)		8%	per D.O 197 s 2016	9,296.67
I.	Value Added Tax (VAT)		5%	per D.O 197 s 2016	6,856.30
J.	Total Unit Cost				285.11

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DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Road Widening - Primary Roads Lanao - Pagadian - Zamboanga City Road, Zamboanga del Sur 1st DEO

Item No./Description : 104(1)a1 Embankment (from excavation)
Unit of Measurement : cu.m.
Output per hour : 50.00
Quantity : 39,942.00

	Designation	No. of Person	No. of Days	Daily Rate	Amount
A.	Labor				
	For Excavation Work				
	a. Construction Foreman	1	82.88	611.92	50,715.72
	b. Laborer	2	82.88	342.24	56,729.46
	Spreading & Compaction				
	a. Construction Foreman	1	99.86	611.92	61,103.27
	b. Laborer	2	99.86	342.24	68,348.75
	Sub-total for A			P	236,897.20
	Name and Capacity	No. of Equip.	No. of Days	Daily Rate	Amount
B	Equipment, (2014 ACEL Rates)				
	For Excavation Work				
	a. Bullduzer	1	82.88	27,032.00	2,240,402.70
	b. Payloader	1	82.88	13,864.00	1,149,043.47
	c. Dumptruck	2	82.88	11,360.00	1,883,025.65
	Spreading and Compaction				
	a. Road Grader	1	99.86	17,384.00	1,735,879.32
	b. Road Roller	1	99.86	13,216.00	1,319,683.68
	c. Water Truck	1	24.96	19,600.00	489,289.50
	Sub-total for B			P	8,817,324.31
C.	Total (A+B)			P	9,054,221.51
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)				9,054,221.51
G.	Overhead, Contingencies and Miscellaneous		10% per D.O 197 s 2016		905,422.15
H.	Contractor's Profit (CP)		8% per D.O 197 s 2016		724,337.72
I.	Value Added Tax (VAT)		5% per D.O 197 s 2016		534,199.07
J.	Total Unit Cost				280.86

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DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Road Widening - Primary Roads Lanao - Pagadian - Zamboanga City Road, Zamboanga del Sur 1st DEO

Item No./Description : 105 (1)a Subgrade Preparation

Unit of Measurement : sq.m.

Output per hour : 300.00

Quantity : 67,073.00

	Designation	No. of Person	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Construction Foreman	1	27.95	611.92	17,101.38
	b. Laborer	2	27.95	342.24	19,129.22
	Sub-total for A			P	36,230.60
	Name and Capacity	No. of Equip.	No. of Days	Daily Rate	Amount
B	Equipment, (2014 ACEL Rates)				
	a. Road Grader	1	27.95	17,384.00	485,832.10
	b. Road Roller	1	27.95	13,216.00	369,348.65
	c. Water Truck	1	6.99	19,600.00	136,940.71
	Sub-total for B			P	992,121.46
C.	Total (A+B)			P	1,028,352.06
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)				1,028,352.06
G.	Overhead, Contingencies and Miscellaneous		10% per D.O 197 s 2016		102,835.21
H.	Contractor's Profit (CP)		8% per D.O 197 s 2016		82,268.16
I.	Value Added Tax (VAT)		5% per D.O 197 s 2016		60,672.77
J.	Total Unit Cost				19.00

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DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Road Widening - Primary Roads Lanao - Pagadian - Zamboanga City Road, Zamboanga del Sur 1st DEO

Item No./Description : 200 (1) Aggregate Subbase Course
Unit of Measurement : cu.m.
Output per hour : 50.00
Quantity : 25,659.94

	Designation	No. of Person	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Construction Foreman	1	64.15	611.92	39,254.58
	b. Laborer	2	64.15	342.24	43,909.29
	Sub-total for A			P	83,163.87
	Name and Capacity	No. of Equip.	No. of Days	Daily Rate	Amount
B	Equipment, (2014 ACEL Rates)				
	a. Road Grader	1	64.15	17,384.00	1,115,180.99
	b. Road Roller	1	64.15	13,216.00	847,804.42
	c. Water Truck	1	16.04	19,600.00	314,334.27
	Sub-total for B			P	2,277,319.68
C.	Total (A+B)			P	2,360,483.54
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%)	29,508.93	cu.m.	1,005.60	29,674,181.01
	Sub-total for E			P	29,674,181.01
F.	Direct Cost (C+E)				32,034,664.55
G.	Overhead, Contingencies and Miscellaneous		10% per D.O 197 s 2016		3,203,466.46
H.	Contractor's Profit (CP)		8% per D.O 197 s 2016		2,562,773.16
I.	Value Added Tax (VAT)		5% per D.O 197 s 2016		1,890,045.21
J.	Total Unit Cost				1,546.81

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DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Road Widening - Primary Roads Lanao - Pagadian - Zamboanga City Road, Zamboanga del Sur 1st DEO

Item No./Description : 300 (1) Aggregate Surface Course
Unit of Measurement : cu.m.
Output per hour : 50.00
Quantity : 3,291.00

	Designation	No. of Person	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Construction Foreman	1	8.23	611.92	5,034.57
	b. Laborer	2	8.23	342.24	5,631.56
	Sub-total for A			P	10,666.13
	Name and Capacity	No. of Equip.	No. of Days	Daily Rate	Amount
B	Equipment, (2014 ACEL Rates)				
	a. Road Grader	1	8.23	17,384.00	143,026.86
	b. Road Roller	1	8.23	13,216.00	108,734.64
	c. Water Truck	1	2.06	19,600.00	40,314.75
	Sub-total for B			P	292,076.25
C.	Total (A+B)			P	302,742.38
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%)	3,784.65	cu.m.	1,105.60	4,184,309.04
	Sub-total for E			P	4,184,309.04
F.	Direct Cost (C+E)				4,487,051.42
G.	Overhead, Contingencies and Miscellaneous		10% per D.O 197 s 2016		448,705.14
H.	Contractor's Profit (CP)		8% per D.O 197 s 2016		358,964.11
I.	Value Added Tax (VAT)		5% per D.O 197 s 2016		264,736.03
J.	Total Unit Cost				1,689.29

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DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Road Widening - Primary Roads Lanao - Pagadian - Zamboanga City Road, Zamboanga del Sur 1st 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 : 44,548.00

	Designation	No. of Person	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Construction Foreman	1	96.51	611.92	59,055.05
	b. Skilled	4	96.51	443.20	171,089.03
	c. Laborer	12	96.51	342.24	396,345.95
	Sub-total for A			P	626,490.03
	Name and Capacity	**No. of Equip.**	**No. of Days**	**Daily Rate**	**Amount**
B	Equipment, (2014 ACEL Rates)				
	a. Transit Mixer	4	96.51	10,544.00	4,070,312.93
	b. Concrete Vibrator	2	96.51	730.00	140,901.39
	c. Batching Plant	1	96.51	14,076.00	1,358,443.78
	d. Pay Loader	1	96.51	13,864.00	1,337,984.12
	e. Concrete Screeder	1	96.51	4,360.00	420,774.00
	f. Water Truck	1	96.51	19,600.00	1,891,552.86
	g. Concrete Saw	1	96.51	261.04	25,192.40
	h. Bar Cutter	1	9.65	1,758.00	16,966.07
	Minor Tools (5% of labor)				31,324.50
	Sub-total for B			P	9,293,452.05
C.	Total (A+B)			P	9,919,942.08
D.	Output/day 461.60 sq.m. /day				
	Name and Specifications	**Quantity**	**Unit**	**Unit Cost**	**Amount**
E.	Materials				
	a. Reinforcing Steel Bar	22,274.00	kg	40.00	890,960.00
	b. Curing Compound	12,918.92	lit	40.00	516,756.80
	c. Asphalt Sealant	7,573.16	lit	75.00	567,987.00
	d. Sand	6,860.39	cu.m	1,105.60	7,584,849.40
	e. Gravel	12,473.44	cu.m	1,155.60	14,414,307.26
	f. Cement	118,497.68	bag	266.18	31,541,278.09
	g. Concrete Saw	6.68	pc	8,000.00	53,457.60
	h. Pipe Sleeve, 2" dia.	347.47	l.m	133.00	46,214.10
	i. Grease/Tar	347.47	lit	21.00	7,296.96
	j. Steel Forms	20,492.08	lit	60.00	1,229,524.80
	Sub-total for E			P	56,852,632.01
F.	Direct Cost (C+E)				66,772,574.09
G.	Overhead, Contingencies and Miscellaneous		10% per D.O 197 s 2016		6,677,257.41
H.	Contractor's Profit (CP)		8% per D.O 197 s 2016		5,341,805.93
I.	Value Added Tax (VAT)		5% per D.O 197 s 2016		3,939,581.87
J.	Total Unit Cost				1,857.13

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DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Road Widening - Primary Roads Lanao - Pagadian - Zamboanga City Road, Zamboanga del Sur 1st DEO

Item No./Description : 404(1)a Reinforcing Steel Bar, Grade 40
Unit of Measurement : kg.
Output per hour : 180.00
Quantity : 6,264.78

	Designation	No. of Person	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Construction Foreman	1	4.35	611.92	2,662.18
	b. Skilled	2	4.35	443.20	3,856.32
	c. Laborer	8	4.35	342.24	11,911.44
	Sub-total for A			P	18,429.94
	Name and Capacity	**No. of Equip.**	**No. of Days**	**Daily Rate**	**Amount**
B	Equipment, (2014 ACEL Rates)				
	a. Bar Cutter	1	2.18	1,758.00	3,824.13
	b. Bar Bender	1	2.18	2,812.00	6,116.86
	c. Cargo Truck	1	0.65	6,264.00	4,087.77
	Sub-total for B			P	14,028.76
C.	Total (A+B)			P	32,458.70
D.	Output/day 1,440.00 kg. /day				
	Name and Specifications	**Quantity**	**Unit**	**Unit Cost**	**Amount**
E.	Materials				
	a. Tie Wire	131.56	kgs	70.00	9,209.23
	b. Reinforcing Steel Bar, Grade 40	6,578.02	kgs	40.00	263,120.76
	Sub-total for E			P	272,329.99
F.	Direct Cost (C+E)				304,788.68
G.	Overhead, Contingencies and Miscellaneous		10% per D.O 197 s 2016		30,478.87
H.	Contractor's Profit (CP)		8% per D.O 197 s 2016		24,383.09
I.	Value Added Tax (VAT)		5% per D.O 197 s 2016		17,982.53
J.	Total Unit Cost				60.28

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DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Road Widening - Primary Roads Lanao - Pagadian - Zamboanga City Road, Zamboanga del Sur 1st DEO

Item No./Description : 404 (1)b Reinforcing Steel Bar, Grade 60
Unit of Measurement : kg.
Output per hour : 180.00
Quantity : 14,738.11

	Designation	No. of Person	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Construction Foreman	1	10.23	584.16	5,978.76
	b. Skilled Laborer	2	10.23	422.32	8,644.72
	c. Laborer	8	10.23	325.16	26,623.58
	Sub-total for A			P	41,247.06
	Name and Capacity	No. of Equip.	No. of Days	Daily Rate	Amount
B	Equipment, (2009 ACEL Rates)				
	a. Bar Cutter	1	5.12	1,758.00	8,996.39
	b. Bar Bender	1	5.12	2,812.00	14,390.13
	c. Cargo Truck	1	1.54	8,816.00	13,534.50
	Sub-total for B			P	36,921.01
C.	Total (A+B)			P	78,168.07
D.	Output/day 1,440.00 kg. /day				
	Name and Specifications	Quantity	Unit	Unit Cost	Amount
E.	Materials				
	a. Tie Wire	309.50	kg	70.00	21,665.02
	b. Reinforcing Steel Bar, Grade 60	15,475.02	kg	67.00	1,036,826.04
	Sub-total for E			P	1,058,491.06
F.	Direct Cost (C+E)				1,136,659.13
G.	Overhead, Contingencies and Miscellaneous		10% per D.O 197 s 2016		113,665.91
H.	Contractor's Profit (CP)		8% per D.O 197 s 2016		90,932.73
I.	Value Added Tax (VAT)		5% per D.O 197 s 2016		67,062.89
J.	Total Unit Cost				95.56

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DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Road Widening - Primary Roads Lanao - Pagadian - Zamboanga City Road, Zamboanga del Sur 1st DEO

Item No./Description : 405 (1) a3 Structural Concrete, Class A

Unit of Measurement : cu.m

Output per hour : 1.40

Quantity : 615.00

	Designation	No. of Person	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Construction Foreman	1	54.91	611.92	33,600.96
	b. Skilled Laborer	4	54.91	443.20	97,345.71
	c. Laborer	8	54.91	342.24	150,341.14
	Installation/Removal of Form Works				
	a. Skilled Laborer	4	54.91	443.20	97,345.71
	b. Laborer	8	54.91	342.24	150,341.14
	Sub-total for A			P	528,974.68
	Name and Capacity	No. of Equip.	No. of Days	Daily Rate	Amount
B	Equipment, (2014 ACEL Rates)				
	a. One Bagger Mixer	1	54.91	1,376.00	75,557.14
	b. Concrete Vibrator	1	54.91	972.00	53,373.21
	c. Water Truck	1	5.49	19,600.00	107,625.00
	Minor Tools (5% of Labor)				26,448.73
	Sub-total for B			P	263,004.09
C.	Total (A+B)			P	791,978.77
D.	Output/day 11.20 cu.m /day				
	Name and Specifications	Quantity	Unit	Unit Cost	Amount
E.	Materials				
	a. Form Lumber	10,762.50	bd.ft	37.00	398,212.50
	b. Plywood	246.00	pc	1,058.00	260,268.00
	c. Assorted CW Nails	430.50	kg.	58.00	24,969.00
	d. Portland Cement	5,842.50	bag	266.18	1,555,135.23
	e. Sand	307.50	cu.m	1,105.60	339,972.00
	f. Gravel	615.00	cu.m	1,155.60	710,694.00
	Sub-total for E			P	3,289,250.73
F.	Direct Cost (C+E)				4,081,229.50
G.	Overhead, Contingencies and Miscellaneous		10% per D.O 197 s 2016		408,122.95
H.	Contractor's Profit (CP)		8% per D.O 197 s 2016		326,498.36
I.	Value Added Tax (VAT)		5% per D.O 197 s 2016		240,792.54
J.	Total Unit Cost				8,222.18

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DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Road Widening - Primary Roads Lanao - Pagadian - Zamboanga City Road, Zamboanga del Sur 1st DEO

Item No./Description : 407(8) Lean Concrete
Unit of Measurement : cu.m
Output per hour : 1.40
Quantity : 10.76

	Designation	No. of Person	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Construction Foreman	1	0.96	611.92	587.88
	b. Skilled Laborer	4	0.96	443.20	1,703.15
	c. Laborer	8	0.96	342.24	2,630.36
	Sub-total for A			P	4,921.39
	Name and Capacity	No. of Equip.	No. of Days	Daily Rate	Amount
B	Equipment, (2014 ACEL Rates)				
	a. One Bagger Mixer	1	0.96	1,376.00	1,321.94
	b. Concrete Vibrator	1	0.96	730.00	701.32
	c. Water Truck	1	0.96	19,600.00	18,830.00
	Sub-total for B			P	20,853.26
C.	Total (A+B)			P	25,774.66
D.	Output/day 11.20 cu.m /day				
	Name and Specifications	Quantity	Unit	Unit Cost	Amount
E.	Materials				
	a. Form Lumber	3.55	bd.ft	37.00	131.38
	b. Plywood	17.22	pc	640.00	11,018.24
	c. Assorted CW Nails	8.93	kg.	58.00	517.99
	d. Portland Cement	102.22	bag	266.18	27,208.54
	e. Sand	5.38	cu.m	1,105.60	5,948.13
	f. Gravel	10.76	cu.m	1,155.60	12,434.26
	Sub-total for E			P	57,258.53
F.	Direct Cost (C+E)				83,033.19
G.	Overhead, Contingencies and Miscellaneous		10% per D.O 197 s 2016		8,303.32
H.	Contractor's Profit (CP)		8% per D.O 197 s 2016		6,642.66
I.	Value Added Tax (VAT)		5% per D.O 197 s 2016		4,898.96
J.	Total Unit Cost				9,561.16

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DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Road Widening - Primary Roads Lanao - Pagadian - Zamboanga City Road, Zamboanga del Sur 1st DEO

Item No./Description : 500(1)b3 RC Culvert Pipe, 910 mm (36" dia.)

Unit of Measurement : ln.m

Output per hour : 1.75

Quantity : 312.00

	Designation	No. of Person	No. of Days	Daily Rate		Amount
A.	Labor					
	a. Construction Foreman	1	22.29	611.92		13,637.07
	b. Skilled Laborer	2	22.29	443.20		19,754.06
	c. Laborer	4	22.29	342.24		30,508.25
	Sub-total for A				P	63,899.38
	Name and Capacity	**No. of Equip.**	**No. of Days**	**Daily Rate**		**Amount**
B	Equipment, (2014 ACEL Rates)					
	a. Backhoe	1	11.14	12,296.00		137,012.57
	b. Plate Compactor	1	11.14	984.00		10,964.57
	Minor Tools (10% of Labor)					6,389.94
	Sub-total for B				P	154,367.08
C.	Total (A+B)				P	218,266.46
D.	Output/day 14.00 ln.m /day					
	Name and Specifications	**Quantity**	**Unit**	**Unit Cost**		**Amount**
E.	Materials					
	a. Portland Cement	336.96	bag	266.18		89,690.78
	b. Sand	19.03	cu.m	1,105.60		21,041.78
	c. RC Pipes (910 mm dia.)	312.00	pc	1,835.00		572,520.00
	d. Sand Bedding	39.94	cu.m	1,105.60		44,153.24
	Sub-total for E				P	727,405.80
F.	Direct Cost (C+E)					945,672.26
G.	Overhead, Contingencies and Miscellaneous		10%	per D.O 197 s 2016		94,567.23
H.	Contractor's Profit (CP)		8%	per D.O 197 s 2016		75,653.78
I.	Value Added Tax (VAT)		5%	per D.O 197 s 2016		55,794.66
J.	Total Unit Cost					3,755.41

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DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Road Widening - Primary Roads Lanao - Pagadian - Zamboanga City Road, Zamboanga del Sur 1st DEO

Item No./Description : 505(5) Grouted Riprap, Class A

Unit of Measurement : cu.m

Output per hour : 1.25

Quantity : 569.00

	Designation	No. of Person	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Construction Foreman	1	56.90	611.92	34,818.25
	b. Skilled Laborer	2	56.90	443.20	50,436.16
	c. Laborer	8	56.90	342.24	155,787.65
	Sub-total for A			P	241,042.06
	Name and Capacity	No. of Equip.	No. of Days	Daily Rate	Amount
B	Equipment, (2014 ACEL Rates)				
	a. One Bagger Mixer	1	56.90	1,376.00	78,294.40
	b. Water Truck	1	2.85	19,600.00	55,762.00
	Minor Tools (5% of Labor)				12,052.10
	Sub-total for B			P	146,108.50
C.	Total (A+B)			P	387,150.56
D.	Output/day 10.00 cu.m /day				
	Name and Specifications	Quantity	Unit	Unit Cost	Amount
E.	Materials				
	a. Cement	1,707.00	bag	266.18	454,363.00
	b. Sand	142.25	cu.m	1,105.60	157,271.60
	c. Gravel Fill	8.54	cu.m	1,155.60	9,863.05
	d. Weep Holes (PVC), 2" dia.	170.70	ln.m	133.00	22,703.10
	e. Filter Cloth	8.54	sq.m	160.00	1,365.60
	f. Boulders	597.45	cu.m	1,360.60	812,890.47
	Miscellaneous (1% of Materials)				14,584.57
	Sub-total for E			P	1,473,041.39
F.	Direct Cost (C+E)				1,860,191.95
G.	Overhead, Contingencies and Miscellaneous		10%	per D.O 197 s 2016	186,019.19
H.	Contractor's Profit (CP)		8%	per D.O 197 s 2016	148,815.36
I.	Value Added Tax (VAT)		5%	per D.O 197 s 2016	109,751.32
J.	Total Unit Cost				4,050.58

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DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Road Widening - Primary Roads Lanao - Pagadian - Zamboanga City Road, Zamboanga del Sur 1st DEO

Item No./Description : 506 Stone Masonry

Unit of Measurement : cu.m

Output per hour : 1.56

Quantity : 231.00

	Designation	No. of Person	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Construction Foreman	1	18.48	611.92	11,308.28
	b. Skilled Laborer	2	18.48	443.20	16,380.67
	c. Laborer	8	18.48	342.24	50,596.76
	Sub-total for A			P	78,285.72
	Name and Capacity	No. of Equip.	No. of Days	Daily Rate	Amount
B	Equipment, (2014 ACEL Rates)				
	a. One Bagger Mixer	1	18.48	1,376.00	25,428.48
	b. Water Truck	1	0.92	19,600.00	18,110.40
	c. Backhoe	1	1.85	12,296.00	22,723.01
	Minor Tools (10% of Labor)				7,828.57
	Sub-total for B			P	74,090.46
C.	Total (A+B)			P	152,376.17
D.	Output/day 12.50 cu.m /day				
	Name and Specifications	Quantity	Unit	Unit Cost	Amount
E.	Materials				
	a. Cement	1,270.50	bag	266.18	338,177.03
	b. Sand	69.30	cu.m	1,105.60	76,618.08
	c. Gravel Fill	4.62	cu.m	1,155.60	5,338.87
	d. Weep Holes (PVC)	69.30	ln.m	133.00	9,216.90
	e. Filter Cloth	3.47	sq.m	160.00	554.40
	f. Boulders	242.55	cu.m	1,360.60	330,013.53
	Miscellaneous (1% of Materials)				7,599.19
	Sub-total for E			P	767,518.00
F.	Direct Cost (C+E)				919,894.18
G.	Overhead, Contingencies and Miscellaneous		10% per D.O 197 s 2016		91,989.42
H.	Contractor's Profit (CP)		8% per D.O 197 s 2016		73,591.53
I.	Value Added Tax (VAT)		5% per D.O 197 s 2016		54,273.76
J.	Total Unit Cost				4,933.98

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DETAILED UNIT PRICE ANALYSIS

PROJECT NAME	:	Road Widening - Primary Roads Lanao - Pagadian - Zamboanga City Road, Zamboanga del Sur 1st DEO
Item No./Description	:	603(3) Metal Guardrail (Metal Beam) Including Post
Unit of Measurement	:	m
Output per hour	:	4.20
Quantity	:	1,183.00

	Designation	No. of Person	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Construction Foreman	1	35.21	611.92	21,544.68
	b. Skilled Laborer	2	35.21	443.20	31,208.67
	c. Laborer	4	35.21	342.24	48,198.80
	Sub-total for A			P	100,952.15
	Name and Capacity	No. of Equip.	No. of Days	Daily Rate	Amount
B	Equipment, (2014 ACEL Rates)				
	a. One Bagger Mixer	1	17.60	1,376.00	24,223.33
	b. Concrete Vibrator	1	17.60	730.00	12,851.04
	c. Water Truck	1	1.76	19,600.00	34,504.17
	d. Cargo Truck	1	8.80	9,696.00	85,345.00
	Minor Tools (5%of Labor Cost)				5047.6075
	Sub-total for B			P	161,971.15
C.	Total (A+B)			P	262,923.30
D.	Output/day 33.60 m /day				
	Name and Specifications	Quantity	Unit	Unit Cost	Amount
E.	Materials				
	a. Cement	390.39	bag	266.18	103,912.58
	b. Sand	21.29	cu.m	1,105.60	23,542.65
	c. Gravel	42.59	cu.m	1,155.60	49,214.69
	d. Metal Beam Guardrail	1,183.00	m	1,650.00	1,951,950.00
	e. Plywood Marine	295.75	pc	1,247.00	368,800.25
	f. Lumber	9,464.00	bd-ft	20.00	189,280.00
	g. Reinforcing Steel Bars	4,732.00	kg	42.00	198,744.00
	h. Tie Wire	94.64	kg	80.00	7,571.20
	i. Assorted CWN	94.64	kg	65.83	6,230.15
	j. Bolt, Nut & Washer 5/8" dia. X 9"	59,150.00	pc	28.00	1,656,200.00
	k. Bolt, Nut & Washer 5/8" dia. X 1"	2,366.00	pc	21.00	49,686.00
	Sub-total for E			P	4,605,131.52
F.	Direct Cost (C+E)				4,868,054.82
G.	Overhead, Contingencies and Miscellaneous		10% per D.O 197 s 2016		486,805.48
H.	Contractor's Profit (CP)		8% per D.O 197 s 2016		389,444.39
I.	Value Added Tax (VAT)		5% per D.O 197 s 2016		287,215.23
J.	Total Unit Cost				5,098.50

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DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Road Widening - Primary Roads Lanao - Pagadian - Zamboanga City Road, Zamboanga del Sur 1st DEO

Item No./Description : 603(4)b Metal Beam End Piece
Unit of Measurement : each
Output per hour : 6.00
Quantity : 18.00

	Designation	No. of Person	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Construction Foreman	1	0.38	611.92	229.47
	b. Skilled Laborer	1	0.38	443.20	166.20
	c. Laborer	2	0.38	342.24	256.68
	Sub-total for A			P	652.35
	Name and Capacity	No. of Equip.	No. of Days	Daily Rate	Amount
B	Equipment, (2014 ACEL Rates)				
	a. Cargo Truck	1	0.38	9,696.00	3,636.00
	Minor Tools (5%of Labor Cost)				32.62
	Sub-total for B			P	3,668.62
C.	Total (A+B)			P	4,320.97
D.	Output/day 48.00 each /day				
	Name and Specifications	Quantity	Unit	Unit Cost	Amount
E.	Materials				
	a. Metal Guardrail End Piece	18.00	each	1,350.00	24,300.00
	Sub-total for E			P	24,300.00
F.	Direct Cost (C+E)				28,620.97
G.	Overhead, Contingencies and Miscellaneous		10% per D.O 197 s 2016		2,862.10
H.	Contractor's Profit (CP)		8% per D.O 197 s 2016		2,289.68
I.	Value Added Tax (VAT)		5% per D.O 197 s 2016		1,688.64
J.	Total Unit Cost				1,970.08

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DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Road Widening - Primary Roads Lanao - Pagadian - Zamboanga City Road, Zamboanga del Sur 1st DEO

Item No./Description : 607(1)b Reflectorized Thermoplastic Pavement Markings
Unit of Measurement : each
Output per hour : 10.00
Quantity : 1,108.00

	Designation	No. of Person	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Construction Foreman	1	13.85	611.92	8,475.09
	b. Laborer	3	13.85	342.24	14,220.07
	Sub-total for A			P	22,695.16
	Name and Capacity	No. of Equip.	No. of Days	Daily Rate	Amount
B	Equipment, (2014 ACEL Rates)				
	a. Diamond Drill	1	13.85	1,376.00	1,610.00
	b. Cargo Truck	1	3.46	730.00	9,696.00
	c. Air Compressor	1	13.85	19,600.00	4,016.00
	Minor Tools (5%of Labor Cost)				1,134.76
	Sub-total for B			P	16,456.76
C.	Total (A+B)			P	39,151.92
D.	Output/day 80.00 each /day				
	Name and Specifications	Quantity	Unit	Unit Cost	Amount
E.	Materials				
	a. Reflective Stud Catcheye Flush Surface	1,108.00	pc	667.00	739,036.00
	b. Concrete Epoxy A & B	13.30	l	1,860.00	24,730.56
	Sub-total for E			P	763,766.56
F.	Direct Cost (C+E)				802,918.48
G.	Overhead, Contingencies and Miscellaneous		10% per D.O 197 s 2016		80,291.85
H.	Contractor's Profit (CP)		8% per D.O 197 s 2016		64,233.48
I.	Value Added Tax (VAT)		5% per D.O 197 s 2016		47,372.19
J.	Total Unit Cost				897.85

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DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Road Widening - Primary Roads Lanao - Pagadian - Zamboanga City Road, Zamboanga del Sur 1st DEO

Item No./Description : 612(1) Reflectorized Thermoplastic Pavement Markings (White)

Unit of Measurement : sq.m

Output per hour : 25.00

Quantity : 1,662.00

Designation		No. of Person	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Construction Foreman	1	8.31	611.92	5,085.06
	b. Skilled Laborer	2	8.31	443.20	7,365.98
	c. Laborer	6	8.31	342.24	17,064.09
	Sub-total for A			P	29,515.13
Name and Capacity		No. of Equip.	No. of Days	Daily Rate	Amount
B	Equipment, (2014 ACEL Rates)				
	a. Cargo Truck/Delivery Truck	1	8.31	9,696.00	80,573.76
	b. Applicator Machine	1	8.31	750.00	6,232.50
	c. Kneading Machine	1	8.31	1,500.00	12,465.00
	Minor Tools (10% of labor)				
	Sub-total for B			P	99,271.26
C.	Total (A+B)			P	128,786.39
D.	Output/day 200.00 sq.m	/day			
Name and Specifications		Quantity	Unit	Unit Cost	Amount
E.	Materials				
	a. Thermoplastic Paint (white)	540.15	bag	1,585.00	856,137.75
	b. Glass Beads	54.85	bag	2,500.00	137,115.00
	c. Primer	199.44	liter	180.00	35,899.20
	d. LPG (50 kg.)	6.65	cyl	90.00	598.32
	e. LPG (12 kg.)	3.32	cyl	50.00	166.20
	f. Calsumine	207.75	kg	5.00	1,038.75
	Miscellaneous (5% of Materials)				51,547.76
	Sub-total for E			P	1,082,502.98
F.	Direct Cost (C+E)				1,211,289.37
G.	Overhead, Contingencies and Miscellaneous		10% per D.O 197 s 2016		121,128.94
H.	Contractor's Profit (CP)		8% per D.O 197 s 2016		96,903.15
I.	Value Added Tax (VAT)		5% per D.O 197 s 2016		71,466.07
J.	Total Unit Cost				903.00

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DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Road Widening - Primary Roads Lanao - Pagadian - Zamboanga City Road, Zamboanga del Sur 1st DEO

Item No./Description : A.1.1(3) Construction 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	1,155.60	4,044.60
	b. Selected Fill	10.00	cu.m	421.40	4,214.00
	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	266.18	23,955.87
	b. Crushed Gravel	20.00	cu.m	1,155.60	23,112.00
	c. Washed Sand	17.00	cu.m	1,105.60	18,795.20
	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	70.00	1,400.00
	IV. Formworks (Columns & Beams)				
	a. Coco Lumber	400.00	bd.ft	20.00	8,000.00
	b. Ordinary Plywood, 1/4"x4'x8'	18.00	pc	520.00	9,360.00
	c. CWN, Assorted	5.00	kg	58.00	290.00
	V. Masonry Works (masonry walls & plastering)				
	a. CHB 6" thk	650.00	pc	18.00	11,700.00
	b. Portland Cement	50.00	bag	266.18	13,308.82
	c. Washed Sand	10.00	cu.m	1,105.60	11,056.00
	d. 10mm dia. X 6m RSB	75.00	kg	43.00	3,225.00
	e. No. 16 GI Tie Wire	2.50	kg	70.00	175.00
	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				166,461.02
	Sub-total for E			P	309,987.37
F.	Direct Cost (C+E)				395,037.53
G.	Overhead, Contingencies and Miscellaneous		10%	per D.O 197 s 2016	39,503.75
H.	Contractor's Profit (CP)		8%	per D.O 197 s 2016	31,603.00
I.	Value Added Tax (VAT)		5%	per D.O 197 s 2016	23,307.21
J.	Total Unit Cost				489,451.51

DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Road Widening - Primary Roads Lanao - Pagadian - Zamboanga City Road, Zamboanga del Sur 1st DEO

Item No./Description : A.1.1(3) Construction 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 - Primary Roads Lanao - Pagadian - Zamboanga City Road, Zamboanga del Sur 1st DEO

Item No./Description : A.1.1(3) Construction 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 - Primary Roads Lanao - Pagadian - Zamboanga City Road, Zamboanga del Sur 1st 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	5.00	mons	1,200.00	6,000.00
	b. Water Bill	5.00	mons	1,000.00	5,000.00
	c. LPG Gasul (11 kg)	5.00	mons	1,000.00	5,000.00
	Sub-Total for E				246,143.32
	Sub-total for E			P	246,143.32
F.	Direct Cost (C+E)				246,143.32
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	12,307.17
J.	Total Unit Cost				258,450.49

DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Road Widening - Primary Roads Lanao - Pagadian - Zamboanga City Road, Zamboanga del Sur 1st 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	225.00	443.20	99,720.00
	Sub-total for A			P	99,720.00
	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	99,720.00
D.	Output/day 0.00 L.S /day				
	Name and Specifications	Quantity	Unit	Unit Cost	Amount
E.	Materials				
	a. Liters, Diesel Fuel	2,250.00	liters	33.00	74,250.00
	b. Engine Oil & Lubricants	1.00	ls	24,930.00	24,930.00
	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	237,180.00
F.	Direct Cost (C+E)				336,900.00
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	16,845.00
J.	Total Unit Cost				353,745.00

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DETAILED UNIT PRICE ANALYSIS

PROJECT NAME	:	Road Widening - Primary Roads Lanao - Pagadian - Zamboanga City Road, Zamboanga del Sur 1st DEO
Item No./Description	:	B.5 Project Billboard
Unit of Measurement	:	each
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 each /day				
	Name and Specifications	**Quantity**	**Unit**	**Unit Cost**	**Amount**
E.	Materials				
	a. Marine Plywood 3/16" thk. X 4' x 8'	2.00	pc	475.00	950.00
	b. Tarpaulin (4' x 8')	2.00	pc	800.00	1,600.00
	c. Assorted Sizes Lumber	100.00	bd. Ft	20.00	2,000.00
	d. Assorted Sizes CW Nails	2.00	kg	58.00	116.00
	Sub-total for E			P	4,666.00
F.	Direct Cost (C+E)				5,100.90
G.	Overhead, Contingencies and Miscellaneous		10%	per D.O 197 s 2016	510.09
H.	Contractor's Profit (CP)		8%	per D.O 197 s 2016	408.07
I.	Value Added Tax (VAT)		5%	per D.O 197 s 2016	300.95
J.	Total Unit Cost				3,160.01

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DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Road Widening - Primary Roads Lanao - Pagadian - Zamboanga City Road, Zamboanga del Sur 1st DEO

Item No./Description : B.7 Construction Safety and 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	112.50	611.92	68,841.00
	b. First Aider	1	225.00	443.20	99,720.00
	Sub-total for A			P	168,561.00
	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	168,561.00
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)				180,921.00
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	14,473.68
I.	Value Added Tax (VAT)		5%	per D.O 197 s 2016	9,769.73
J.	Total Unit Cost				205,164.41

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DETAILED UNIT PRICE ANALYSIS

PROJECT NAME	: Road Widening - Primary Roads Lanao - Pagadian - Zamboanga City Road, Zamboanga del Sur 1st 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	2	4.00	12,296.00	98,368.00
	d. Payloader	2	4.00	13,864.00	110,912.00
	e. Dumptruck	4	4.00	11,360.00	181,760.00
	f. Bulldozer	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	972,312.00
C.	Total (A+B)			P	972,312.00
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)				972,312.00
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	48,615.60
J.	Total Unit Cost				1,020,927.60

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DETAILED UNIT PRICE ANALYSIS

PROJECT NAME	:	Road Widening - Primary Roads Lanao - Pagadian - Zamboanga City Road, Zamboanga del Sur 1st DEO
Item No./Description	:	B.4(1) Construction Survey and Staking
Unit of Measurement	:	Km.
Output per hour	:	0.04
Quantity	:	6.67

	Designation	No. of Person	No. of Days	Daily Rate	Amount
A.	Labor				
	(For Field Works)				
	a. Geodetic Engineer	1	22.23	833.31	18,527.26
	b. Skilled Laborer	3	22.23	443.20	29,561.44
	c. Laborer	3	22.23	342.24	22,827.41
	(For Office Works)				
	a. Geodetic Engineer	1	66.70	833.31	55,581.78
	b. Skilled Laborer	2	66.70	443.20	59,122.88
	Sub-total for A			P	185,620.76
	Name and Capacity	**No. of Equip.**	**No. of Days**	**Daily Rate**	**Amount**
B	Equipment, (2014 ACEL Rates)				
	a. Total Station w/ complete accessories	1	22.23	800.00	17,786.67
	Minor Tools (10% of labor)				18,562.08
	Sub-total for B			P	36,348.74
C.	Total (A+B)			P	221,969.51
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)				236,669.51
G.	Overhead, Contingencies and Miscellaneous		10% per D.O 197 s 2016		23,666.95
H.	Contractor's Profit (CP)		8% per D.O 197 s 2016		18,933.56
I.	Value Added Tax (VAT)		5% per D.O 197 s 2016		13,963.50
J.	Total Unit Cost				43,963.05

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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 SUR 1ST 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	40.00	X	10.14	=	405.60	+	700.00	=	1,105.60
Cost of Coarse Aggregates	40.00	X	10.14	=	405.60	+	750.00	=	1,155.60
Cost of Item 200 Materails	40.00	X	10.14	=	405.60	+	600.00	=	1,005.60
Cost of Item 201 Materails	40.00	X	10.14	=	405.60	+	630.00	=	1,035.60
Cost of Item 300 Materails	40.00	X	10.14	=	405.60	+	700.00	=	1,105.60
Cost of Boulders	40.00	X	10.14	=	405.60	+	955.00	=	1,360.60
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-using Conventional Method, 0.28m thick	118,497.68
Portland Cement Concrete Pavement, 0.15m. Thick	-
Structural Concrete, Class A	5,842.50
Grouted Riprap, Class A	1,707.00
Stone Masonry	1,270.50
Construction of Field Office for the Engineer	90.00
	50.00
Lean Concrete	102.22
TOTAL	***127,559.90***

Quantity = 127,559.90 Bags

Delivery Charge = P 0.12 /bag/km

SITE	*HAULING DISTANCE*
Zamboanga del Sur 1st DEO PROJECT SITE	45.00

* Average Hauling Distance from source to assumed stockpilling area:
say 45.00 km.

Delivery Charge = P 0.12 X 45.00
Delivery Charge = P 5.40 /bag

* Delivery Truck : 127,559.90 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 $= \dfrac{45.00 \times 60.00}{30.00} =$ 90 mins.

Unloading Running $= \dfrac{45.00 \times 60.00}{40.00} =$ 67.5 mins.

Loading & Unloading = *45.00 mins.*
Capacity of Dumptruck = *8.00 cu.m.*
500.00 bags
Total Cycle Time = *202.50 mins.*

No. of trips for Dumptruck per day	=	$\dfrac{8.00 \times 60.00}{202.50}$	=	2.37	trips
Dumptruck Daily Outpout	=	*500.00 X 2.37*	=	*1,185.19*	cu.m.
Using 4 Dumptruck	=	*1,185.19 X 4.00*	=	*4,740.74*	cu.m.
No. of Days for Dumptruck	=	$\dfrac{127{,}559.90}{4{,}740.74}$	=	26.91	days
No. of Days for Labor for unloading	=	complimentary to D.Truck days	=	26.91	days

DELIVERY COST:

127,559.90	Bags, Portland Cement	@	P	5.40	/bag	=	P	688,823.46
					Sub-total			**688,823.46**

LABOR:

1	Foreman	@	P	558.00	/day	X	26.91	days	=	P	15,014.20
10	Laborers	@	P	312.24	/day	X	26.91	days	=		84,014.94
								Sub-total			**99,029.14**

MATERIALS:

127,559.90	Bags, Portland Cement	@	P	260.00	/bag	=	P	33,165,574.00
					Sub-total			**33,165,574.00**

Estimated Quantity : 127,559.90 Bags

Unit Cost	P	266.18
Grand Total	P	33,953,426.60
Delivery Cost	P	688,823.46
Labor	P	99,029.14
Materials	P	33,165,574.00