

Republic of the Philippines
Department of Public Works and Highways

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

PROGRAM OF WORK

(For all types of Project)

Date :

NAME OF PROJECT : Construction of By-Pass and Diversion Roads - Zamboanga City Diversion Road, Cabaluyan - Zambowood - Mampang Section, Including RROW, Package 3, Zamboanga City	Appropriation	:	P	187,500,000.00
	Source of Funds	:		CY-2018 GAA
LOCATION: Zamboanga City	Issued Obligated Authority	:		
	Released	:		
PROJECT CATEGORY : NATIONAL ROAD	Cal. Days to Complete	:	244	Calendar Days
	Desirable Starting Date	:		upon approval
	Mode of Implementation	:		by contract
PROJECT DESCRIPTION :				
Scope of Work	:	Road Opening		
Road Width	:	6.70 m.		
Roadbed Width	:	12.00 m.		
Subbase Course	:	0.30 m. thk.		
Surface Course	:	0.15 m. thk.		
Station Limits:			Length	
7+820.00	-	9+125.75	1,305.75	
9+743.18	-	10+096.00	352.82	
10+382.34	-	11+380.00	997.66	
0+108.47	-	0+103.40	205.07	Brgy. Road
Net Length:			2,656.23	in.m. / 2.66 km.
Lane Kilometer:			5.31	km.

MINIMUM EQUIPMENT REQUIREMENT :

TECHNICAL PERSONNEL REQUIRED :

Description	No.	Description	No.	Description	No.
Dump Truck	12	Water Pump	1	Project Engineer	1
Transit Mixer	4	Concrete Screeder	1	Materials Engineer	1
Bulldozer	2	Concrete Vibrator	2	Geometric Surveyor	1
Backhoe	3	Concrete Cutter	2	Foreman	1
Road Grader	2	Bar Cutter	1	Materials Lab. Tech.	1
Road Roller	2	Bar Bender	1	Mason	12
Payloader	4	One Bagger Mixer	2	Carpenter	8
Water Truck	2	Batching Plant	1	Laborers (Skilled)	20
Water Tank	2	Plate Compactor	1	Laborers (Unskilled)	30
Kneading Machine	1	Cargo Truck	1	Safety Practitioner	1
Applicator Machine	1				

ESTIMATED COST OF PROPOSED WORK

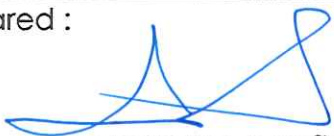
ITEM NO.	DESCRIPTION	% OF TOTAL	UNIT	QUANTITY	DIRECT COST	
					TOTAL	UNIT COST
PART A - FACILITIES FOR THE ENGINEER						
A.1.1(3)	Construction of Field Office for the Engineer	0.34	L.S.	1.00	382,242.09	382,242.09
A.1.1(11)	Provision of Furnitures/Fixtures, Equipment and Appliances for the Field Office for the Field Engineer	0.26	L.S.	1.00	296,073.33	296,073.33
A.1.2(5)	Operation and Maintenance of 4x4 Pick Up Type Service Vehicle for the Engineer	0.23	month	8.13	260,032.08	31,971.16
PART B - OTHER GENERAL REQUIREMENTS						
B.4(1)	Construction Survey & Staking	0.12	km.	2.86	139,144.31	48,629.75
B.5	Project Billboard/Signboard	0.01	each	2.00	10,809.20	5,404.60
B.7	Occupation Safety and Health Program	0.24	month	8.13	269,555.04	33,142.01
B.9	Mobilization & Demobilization	0.87	L.S.	1.00	983,615.00	983,615.00
PART C - EARTHWORKS						
101(3)b2	Removal of Actual Structures/Obstruction	0.42	cu.m.	3,655.00	482,392.64	131.98
102(1)	Unsuitable Excavation	2.64	cu.m.	12,494.00	2,996,503.07	239.84
102(2)	Surplus Common Excavation	1.27	cu.m.	10,088.00	1,437,086.04	142.46
103(3)	Foundation Fill	0.02	cu.m.	12.00	18,796.49	1,566.37
103(6)a	Pipe Culverts and Drain Excavation	0.01	cu.m.	65.00	14,957.52	230.12
104(1)a	Embankment from Roadway Excavation	0.14	cu.m.	677.00	156,091.98	230.56
104(5)	Boulder Fill	50.28	cu.m.	34,122.00	57,113,387.22	1,673.80
105(1)a	Subgrade Preparation	0.22	sq.m.	15,741.00	251,517.57	15.98

ITEM NO.	DESCRIPTION	% OF TOTAL	UNIT	QUANTITY	DIRECT COST	
					TOTAL	UNIT COST
PART D - SUBBASE AND BASE COURSE						
200(1)	Aggregate Subbase Course	10.71	cu.m.	11,343.00	12,161,941.91	1,072.20
PART E - SURFACE COURSES						
300(1)	Gravel Surface Course	1.43	cu.m.	1,431.00	1,624,826.09	1,135.45
311(1)d1	Portland Cement Concrete Pavement	1.42	sq.m.	1,292.00	1,613,664.77	1,248.97
311(1)e1	Portland Cement Concrete Pavement	25.35	sq.m.	18,993.00	28,794,983.63	1,516.08
PART G - DRAINAGE AND SLOPE PROTECTION STRUCTURES						
500(1)b3	Pipe Culverts	0.20	ln.m.	79.00	227,440.15	2,878.99
505(2)a	Grouted Riprap, Class "A"	0.06	cu.m.	22.00	70,132.81	3,187.86
506(1)	Stone Masonry	0.20	cu.m.	60.00	232,239.23	3,870.65
PART H - MISCELLANEOUS STRUCTURES						
612(1)	Reflectorized Thermoplastic Pavement Markings (White)	0.43	sq.m.	664.00	490,778.82	739.12
612(2)	Reflectorized Thermoplastic Pavement Markings (Yellow)	0.00	sq.m.	6.00	4,886.30	814.38
715(1)	Separation Geotextile	3.13	sq.m.	19,136.00	3,554,216.35	185.73
TOTAL		100.00			P 113,587,313.65	

NAME OF PROJECT : Construction of By-Pass and Diversion Roads - Zamboanga City Diversion Road, Cabaluyan - Zambowood - Mampang Section, Package 3, Zamboanga City

Zamboanga City

BREAKDOWN OF ESTIMATED EXPENDITURES	% OF TOTAL	AMOUNT
I. ESTIMATED COST		
A. DIRECT COST		
A.1. Labor	2.16	4,056,174.17
A.2. Equipment Expenses	11.00	20,624,524.03
A.3. Materials	47.42	88,906,615.45
SUB-TOTAL (DIRECT COST)	60.58	P 113,587,313.65
B. INDIRECT COST (Per D.O. # 197, s. 2016)		
B.1. Overhead, Contingency & Misc. (10 % Max. of D.C.)	5.96	11,177,803.82
B.2. Profit (8 % Max. of D.C.)	4.79	8,987,493.33
C. VAT (5% of D.C. and I.C. Per D.O. # 197, s. 2016)	3.57	6,687,630.54
SUBTOTAL (CONTRACT COST)	74.90	P 140,440,241.33
II. ESTIMATED GOVERNMENT EXPENDITURES		
1. Engineering and Administrative Overhead (3.5%)	3.50	6,562,500.00
2. Detailed Engineering (1%)		
3. Reserved for the Payment of RROW	21.60	40,497,258.67
4. Physical Reserved		
TOTAL ESTIMATED PROJECT COST	100.00	P 187,500,000.00

Prepared :  ELWICK P. ACUÑA Engineer II	Checked :  JERALD R. BARRERA Engineer II
Submitted :  LEONCIO B. SOLAMILLO Chief, Construction Division	Recommending Approval :  CAYAMOMBAO D. DIA Assistant Regional Director
Approved :  JORGE U. SEBASTIAN JR. CESO III Regional Director	

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PROGRAM OF WORK

(For all types of Project)

Date : _____

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PROJECT CATEGORY : NATIONAL ROAD													
PROJECT DESCRIPTION : Scope of Work : Road Opening Road Width : 6.70 m. Roadbed Width : 12.00 m. Subbase Course : 0.30 m. thk. Surface Course : 0.15 m. thk.	Station Limits: Length <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 33%;">7+820.00</td> <td style="width: 33%;">- 9+125.75</td> <td style="width: 33%;">1,305.75</td> </tr> <tr> <td>9+743.18</td> <td>- 10+096.00</td> <td>352.82</td> </tr> <tr> <td>10+382.34</td> <td>- 11+380.00</td> <td>997.66</td> </tr> <tr> <td colspan="2">0+-108.47 - 0+103.40</td> <td>205.07 Brgy. Road</td> </tr> </table> Net Length: 2,656.23 In.m. / 2.66 km. Lane Kilometer: 5.31 km.	7+820.00	- 9+125.75	1,305.75	9+743.18	- 10+096.00	352.82	10+382.34	- 11+380.00	997.66	0+-108.47 - 0+103.40		205.07 Brgy. Road
7+820.00	- 9+125.75	1,305.75											
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ESTIMATED COST OF PROPOSED WORK

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Zamboanga City

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2. Detailed Engineering (1%)		
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4. Physical Reserved		
TOTAL ESTIMATED PROJECT COST	100.00	P 187,500,000.00

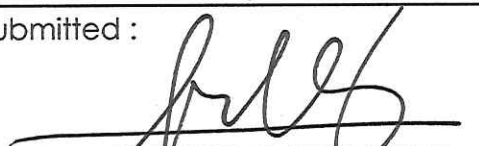
Prepared :


ELWICK P. ACUÑA
Engineer II

Checked :


JERALD R. BARRERA
Engineer II

Submitted :


LEONCIO B. SOLAMILLO
Chief, Construction Division

Recommending Approval :


CAYAMOMBAO D. DIA
Assistant Regional Director

Approved :


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

APPROVED BUDGET FOR THE CONTRACT

Construction of By-Pass and Diversion Roads - Zamboanga City Diversion Road, Cabuluyan - Zambowood - Mampung Section, Package 3, Zamboanga City

Stations : 7,820.00 to 9,125.75
 Length : 9,743.18 to 10,096.00
 2,656.23 km.

Contract Duration : 244 CD

ITEM NO.	DESCRIPTION	QUANTITY	UNIT	ESTIMATED DIRECT COST	MARK-UPS IN % OCM	PROFIT	TOTAL MARK-UPS %	VALUE	VAT	TOTAL INDIRECT COST	TOTAL COST	UNIT COST
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
PART A - FACILITIES FOR THE ENGINEER												
A.1(1)(3)	Construction of Field Office for the Engineer	1.00	L.S.	382,242.09	10.00	8.00	18.00	68,803.58	22,552.28	91,355.86	473,597.95	473,597.95
A.1.1(11)	Provision of Furnitures/Fixtures, Equipment and Appliances for the Field Office for the Field Engineer	1.00	L.S.	296,073.33	-	8.00	8.00	23,685.87	15,987.96	39,673.83	335,747.16	335,747.16
A.1.2(5)	Operation and Maintenance of 4x4 Pick Up Type Service Vehicle for the Engineer	8.13	month	260,032.08	-	-	-	-	13,001.60	13,001.60	273,033.68	33,569.72
TOTAL OF PART A				938,347.50				92,489.44	51,541.85	144,031.29	1,082,378.79	
PART B - OTHER GENERAL REQUIREMENTS												
B.4(1)	Construction Survey and Staking	2.86	km.	139,144.31	10.00	8.00	18.00	25,045.97	8,209.51	33,255.49	172,399.79	60,252.26
B.5	Project Billboard/Signboard	2.00	each	10,809.20	10.00	8.00	18.00	1,945.66	637.74	2,583.40	13,392.60	6,696.30
B.7	Occupation Safety and Health Program	8.13	month	269,555.04	-	8.00	8.00	21,564.40	14,555.97	36,120.38	305,675.42	37,583.04
B.9	Mobilization & Demobilization	1.00	L.S.	983,615.00	-	-	-	-	49,180.75	49,180.75	1,032,795.75	1,032,795.75
TOTAL OF PART B				1,403,123.55				48,556.03	72,583.98	121,140.01	1,524,263.56	
PART C - EARTHWORKS												
101(3)b2	Removal of Actual Structures/Obstruction	3,655.00	cum.	482,392.44	10.00	8.00	18.00	86,830.68	28,461.17	115,291.84	597,684.49	163.53
102(1)	Unsuitable Excavation	12,494.00	cum.	2,996,503.07	10.00	8.00	18.00	539,370.55	176,793.68	716,164.23	3,712,667.31	297.16
102(2)	Surplus Common Excavation	10,088.00	cum.	1,437,086.04	10.00	8.00	18.00	238,675.49	84,788.08	343,463.56	1,780,549.60	176.50
103(3)	Foundation Fill	12.00	cum.	18,796.49	10.00	8.00	18.00	3,383.37	1,108.99	4,492.36	23,288.85	1,940.74
103(6)a	Pipe Culverts and Drain Excavation	65.00	cum.	14,957.52	10.00	8.00	18.00	2,692.35	882.49	3,574.85	18,532.36	285.11
104(1)a	Embankment from Roadway Excavation	677.00	cum.	156,091.98	10.00	8.00	18.00	28,096.56	9,209.43	37,305.98	193,397.97	285.67
104(5)	Boulder Fill	34,122.00	cum.	57,113,387.22	10.00	8.00	18.00	10,280,409.70	3,369,689.85	13,650,099.55	70,763,486.77	2,073.84
105(1)a	Subgrade Preparation	15,741.00	sq.m.	251,517.57	10.00	8.00	18.00	45,273.16	14,839.54	60,112.70	311,630.27	19.80
TOTAL OF PART C				62,470,732.53				11,244,731.86	3,685,773.22	14,930,505.07	77,401,237.61	
PART D - SUBBASE AND BASE COURSE												
200(1)	Aggregate Subbase Course	11,343.00	cum.	12,161,941.91	10.00	8.00	18.00	2,189,149.54	717,554.57	2,906,704.12	15,068,646.03	1,328.45
TOTAL OF PART D				12,161,941.91				2,189,149.54	717,554.57	2,906,704.12	15,068,646.03	
PART E - SURFACE COURSES												
300(1)	Gravel Surface Course	1,431.00	cum.	1,524,926.09	10.00	8.00	18.00	292,468.70	95,864.74	388,333.44	2,013,159.52	1,406.82
311(1)d	Portland Cement Concrete Pavement	1,292.00	sq.m.	1,613,664.77	10.00	8.00	18.00	290,459.66	95,206.22	385,665.88	1,999,330.65	1,547.47
311(1)e	Portland Cement Concrete Pavement	18,993.00	sq.m.	28,794,983.63	10.00	8.00	18.00	5,183,097.05	1,698,904.03	6,882,001.09	35,676,984.71	1,878.43
TOTAL OF PART E				32,033,474.49				5,766,025.41	1,889,974.99	7,556,000.40	39,689,474.89	
PART G - DRAINAGE AND SLOPE PROTECTION STRUCTURES												
500(1)b3	Pipe Culverts	79.00	ln.m.	227,440.15	10.00	8.00	18.00	40,939.23	13,418.97	54,358.20	281,798.35	3,567.07
505(2)a	Grouted Riprap, Class "A"	22.00	cum.	70,132.81	10.00	8.00	18.00	12,623.91	4,137.84	16,761.74	86,894.56	3,949.75
506(1)	Stone Masonry	60.00	cum.	232,239.23	10.00	8.00	18.00	41,803.06	13,702.11	55,505.18	287,744.41	4,795.74
TOTAL OF PART G				529,812.20				95,366.20	31,258.92	126,625.12	656,437.32	

APPROVED BUDGET FOR THE CONTRACT

Construction of By-Pass and Diversion Roads - Zamboanga City Diversion Road, Cabuluy - Zambowood - Mampang Section, Package 3, Zamboanga City

Stations : 7,820.00 to 9,125.75

9,743.18 to 10,096.00

Length : 2,656.23 km.

Contract Duration : 244 CD

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(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(5) x (8)	5%(5) + (9)	(9) + (10)	(5) + (11)	(12) / (3)
PART A - FACILITIES FOR THE ENGINEER												
A.1.1(3)	Construction of Field Office for the Engineer	1.00	L.S.	382,242.09	10.00	8.00	18.00	68,803.58	22,552.28	91,355.86	473,597.95	473,597.95
A.1.1(11)	Provision of Furnitures/Fixtures, Equipment and Appliances for the Field Office for the Field Engineer	1.00	L.S.	296,073.33	-	8.00	8.00	23,685.87	13,987.96	39,673.83	335,747.16	335,747.16
A.1.2(5)	Operation and Maintenance of 4x4 Pick Up Type Service Vehicle for the Engineer	8.13	month	260,032.08	-	-	-	-	13,001.60	13,001.60	273,033.68	33,569.72
TOTAL OF PART A				938,347.50				92,489.44	51,541.85	144,031.29	1,082,378.79	
PART B - OTHER GENERAL REQUIREMENTS												
B.4(1)	Construction Survey & Staking	2.86	km.	139,144.31	10.00	8.00	18.00	25,045.97	8,209.51	33,255.49	172,399.79	60,252.26
B.5	Project Billboard/Signboard	2.00	each	10,809.20	10.00	8.00	18.00	1,945.66	637.74	2,583.40	13,392.60	6,696.30
B.7	Occupation Safety and Health Program	8.13	month	269,555.04	-	8.00	8.00	21,564.40	14,555.97	36,120.38	305,675.42	37,583.04
B.9	Mobilization & Demobilization	1.00	L.S.	983,615.00	-	-	-	-	49,180.75	49,180.75	1,032,795.75	1,032,795.75
TOTAL OF PART B				1,403,123.55				48,536.03	72,583.98	121,140.01	1,524,263.56	
PART C - EARTHWORKS												
101(3)b2	Removal of Actual Structures/Obstruction	3,655.00	cu.m.	482,392.64	10.00	8.00	18.00	86,630.68	28,461.17	115,291.84	597,684.49	163.53
102(1)	Unsuitable Excavation	12,494.00	cu.m.	2,996,503.07	10.00	8.00	18.00	539,370.55	176,793.68	716,164.23	3,712,667.31	297.16
102(2)	Surplus Common Excavation	10,088.00	cu.m.	1,437,086.04	10.00	8.00	18.00	258,675.49	84,788.08	343,463.56	1,780,549.60	176.50
103(3)	Foundation Fill	12.00	cu.m.	18,796.49	10.00	8.00	18.00	3,383.37	1,108.99	4,492.36	23,288.85	1,940.74
103(6)a	Pipe Culverts and Drain Excavation	65.00	cu.m.	14,957.52	10.00	8.00	18.00	2,692.35	882.49	3,574.85	18,532.36	285.11
104(1)a	Embankment from Roadway Excavation	677.00	cu.m.	156,091.98	10.00	8.00	18.00	28,096.56	9,209.43	37,305.98	193,397.97	285.67
104(5)	Boulder Fill	34,122.00	cu.m.	57,113,387.22	10.00	8.00	18.00	10,280,409.70	3,369,689.85	13,650,099.55	70,763,486.77	2,073.84
105(1)a	Subgrade Preparation	15,741.00	sq.m.	251,517.57	10.00	8.00	18.00	45,273.16	14,839.54	60,112.70	311,630.27	19.80
TOTAL OF PART C				62,470,732.53				11,244,731.86	3,685,773.22	14,930,505.07	77,401,237.61	
PART D - SUBBASE AND BASE COURSE												
200(1)	Aggregate Subbase Course	11,343.00	cu.m.	12,161,941.91	10.00	8.00	18.00	2,189,149.54	717,554.57	2,906,704.12	15,068,646.03	1,328.45
TOTAL OF PART D				12,161,941.91				2,189,149.54	717,554.57	2,906,704.12	15,068,646.03	
PART E - SURFACE COURSES												
300(1)	Gravel Surface Course	1,431.00	cu.m.	1,624,826.09	10.00	8.00	18.00	292,468.70	95,864.74	388,333.44	2,013,159.52	1,406.82
311(1)d1	Portland Cement Concrete Pavement	1,292.00	sq.m.	1,613,664.77	10.00	8.00	18.00	290,459.66	95,206.22	385,665.88	1,999,330.65	1,547.47
311(1)e1	Portland Cement Concrete Pavement	18,993.00	sq.m.	28,794,983.63	10.00	8.00	18.00	5,183,097.05	1,698,904.03	6,882,001.09	35,676,984.71	1,878.43
TOTAL OF PART E				32,033,474.49				5,766,025.41	1,889,974.99	7,656,000.40	39,689,474.89	
PART G - DRAINAGE AND SLOPE PROTECTION STRUCTURES												
500(1)b3	Pipe Culverts	79.00	ln.m.	227,440.15	10.00	8.00	18.00	40,939.23	13,418.97	54,358.20	281,798.35	3,567.07
505(2)a	Grouted Riprap, Class "A"	22.00	cu.m.	70,132.81	10.00	8.00	18.00	12,623.91	4,137.84	16,761.74	86,894.56	3,949.75
506(1)	Stone Masonry	60.00	cu.m.	232,239.23	10.00	8.00	18.00	41,803.06	13,702.11	55,505.18	287,744.41	4,795.74
TOTAL OF PART G				529,812.20				95,366.20	31,258.92	126,625.12	656,437.32	

ITEM NO.	DESCRIPTION	QUANTITY	UNIT	ESTIMATED DIRECT COST	MARK-UPS IN %		TOTAL MARK-UPS VALUE	VAT	TOTAL INDIRECT COST	TOTAL COST	UNIT COST	
					OCM	PROFIT						%
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
								(5) x (8)	5%[(5) + (9)]	(9) + (10)	(5) + (11)	(12) / (3)
PART H - MISCELLANEOUS STRUCTURES:												
612(1)	Reflectolized Thermoplastic Pavement Markings (White)	664.00	sq.m.	490,778.82	10.00	8.00	18.00	88,340.19	28,955.95	117,296.14	608,074.96	915.78
612(2)	Reflectolized Thermoplastic Pavement Markings (Yellow)	6.00	sq.m.	4,886.30	10.00	8.00	18.00	879.53	288.29	1,167.83	6,054.13	1,009.02
715(1)	Separation Geotextile	19,136.00	sq.m.	3,554,216.35	10.00	8.00	18.00	639,758.94	209,698.76	849,457.71	4,403,674.06	230.13
	TOTAL OF PART H			4,049,881.47				728,978.66	238,943.01	967,921.67	5,017,803.14	
	TOTAL			113,687,313.65				20,165,297.15	6,687,630.54	26,852,927.68	140,440,241.33	

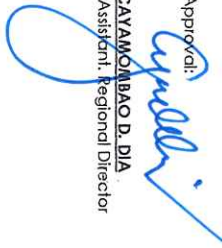
Prepared by :


BELENA SAPALEDA
Head, BAC Technical Working Group

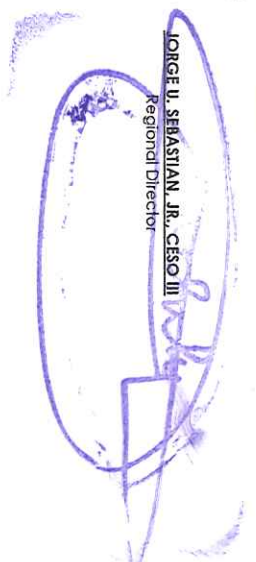
Submitted by :


FRANCISCO B. SOLAMILLO
Chief, Construction Division

Recommending Approval:


CAYAMONBAO D. DIA
Assistant Regional Director

Approved by :


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

ITEM NO.	DESCRIPTION	QUANTITY	UNIT	ESTIMATED DIREC. COST	MARK-UPS IN %		TOTAL MARK-UPS		VAT	TOTAL INDIRECT COST	TOTAL COST	UNIT COST
(1)	(2)	(3)	(4)	(5)	OCM	PROFIT	%	VALUE	(10)	(11)	(12)	(13)
					(6)	(7)	(8)	(9) x (8)	5%[(5) + (9)]	(9) + (10)	(9) + (11)	(12) / (3)
PART H - MISCELLANEOUS STRUCTURES:												
612(1)	Reflectioized Thermoplastic Pavement Markings (White)	664.00	sq.m.	490,778.82	10.00	8.00	18.00	88,340.19	23,955.95	117,296.14	608,074.96	915.78
612(2)	Reflectioized Thermoplastic Pavement Markings (Yellow)	6.00	sq.m.	4,886.30	10.00	8.00	18.00	879.53	288.29	1,167.83	6,054.13	1,009.02
715(1)	Separation Geotextile	19,136.00	sq.m.	3,554,216.35	10.00	8.00	18.00	639,758.94	209,698.76	849,457.71	4,403,674.06	230.13
	TOTAL OF PART H			4,049,881.47				728,978.66	238,943.01	967,921.67	5,017,803.14	
	TOTAL			113,587,313.65				20,765,297.15	6,637,630.54	26,852,927.68	140,440,241.33	

Prepared by :

BELEN A. SAPALLIDA
Head, BAC Technical Working Group

Submitted by :

LEONICIO B. SOLAMILLO
Chief, Construction Division

Recommending Approval:

CAYMOMBAO D. DIA
Asst. Regional Director

Approved by :

JORGE U. SEBASTIAN, JR.
Regional Director

DETAILED UNIT PRICE ANALYSIS

PROJECT NAME: Construction of By-Pass and Diversion Roads - Zamboanga City Diversion Road, Cabaluyay - Zambood - Mampang Section, Package 3, Zamboanga City

Item No./Description: A.1.1(3) Construction of Field Office for the Engineer

Unit of Measurement: L.S.

Output per hour:

Quantity: 1.00

*7.00 m. x 9.00 m., 1 - Classroom, for
Government Field Office, fully furnished as
shown on plans*

Designation		No. of Persons	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Const. Foreman	1	8.00	611.92	4,895.36
	b. Mason	3	8.00	443.20	10,636.80
	c. Carpenter	3	8.00	443.20	10,636.80
	d. Laborer	6	8.00	342.24	16,427.52
Sub-total for A				P	42,596.48
Name and Capacity		No. of Equipment	No. of Days	Daily Rate	Amount
B.	Equipment, (2014 ACEL Rates)				
	a. One Bagger Mixer	1	6.00	1,376.00	8,256.00
	b. Water Truck	1	1.00	19,600.00	19,600.00
	Minor Tools 10% of Labor				4,259.65
Sub-total for B				P	32,115.65
C.	Total (A+B)				74,712.13
D.	Output/day	- L.S./day			
Name and Specifications		Quantity	Unit	Unit Cost	Amount
E.	Materials				
	I. Earthworks (Excavation, Embankment, Bedding)				
	a. Gravel Bedding	3.50	cu.m.	1,069.98	3,744.93
	b. Selected Fill	10.00	cu.m.	388.35	3,883.50
	c. Soil Poisoning	2.50	L	1,900.00	4,750.00
	II. Concrete Works (Footing, Columns, Beams & Slab on Grade)				
	a. Portland Cement	90.00	bag	283.00	25,470.00
	b. Crushed Gravel	21.00	cu.m.	1,069.98	22,469.58
	c. Washed Sand	18.00	cu.m.	1,069.98	19,259.64
	III. Reinforcing Bars(Footing Columns, Beams, & Slabs on Grade)				
	a. Deformed Round Bar, Grade 40	435.00	kg.	38.00	16,530.00
	b. No. 16 GI Tie Wire	20.00	kg.	80.00	1,600.00
	IV. Formworks (Columns & Beams)				
	a. Coko Lumber	400.00	bd.ft.	24.50	9,800.00
	b. Ordinary Plywood, 1/4"x4'x8'	18.00	pc.	385.00	6,930.00
	c. CWN, Assorted	5.00	kg.	65.00	325.00
	V. Masonry Works (masonry walls & plastering)				
	a. CHB 6" thk	650.00	pc.	16.00	10,400.00
	b. Portland Cement	45.00	bag	283.00	12,735.00
	c. Washed Sand	8.00	cu.m.	1,069.98	8,559.84
	d. 10mm dia. X 6m RSB	65.00	kg.	38.00	2,470.00
	e. No. 16 GI Tie Wire	2.50	kg.	80.00	200.00
	VI. Doors and Windows				
	a. D-1, Hollow Core Flush Type swing door, complete w/ accessories, 0.90mx2.1m	2.00	set	1,765.26	3,530.52
	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				P	158,202.01
Sub-total for E (I + II + III)				P	307,529.96
F.	Direct Cost (C + E)				382,242.09
G.	Overhead, Contingencies and Miscellaneous	10% per D.O. 197, s. 2016			38,224.21
H.	Contractor's Profit(CP)	8% per D.O. 197, s. 2016			30,579.37
I.	Value Added Tax (VAT)	5% per D.O. 197, s. 2016			22,552.28
J.	Total Unit Cost				473,597.95

DETAILED UNIT PRICE ANALYSIS

PROJECT NAME: Construction of By-Pass and Diversion Roads - Zamboanga City Diversion Road, Cabaluyay - Zambowood - Mampang Section, Package 3, Zamboanga City

Item No./Description: A.1.1(3) Bunkhouse, 7.00 m. x 9.00 m.

Unit of Measurement: L.S.

Output per hour:

Quantity: 1.00

*For Government Field Office, fully
furnished as shown on plans*

Designation		No. of Persons	No. of Days	Daily Rate	Amount
A.	Labor				
Sub-total for A				P	-
Name and Capacity		No. of Equipment	No. of Days	Daily Rate	Amount
B.	Equipment, (2014 ACEL Rates)				-
Sub-total for B				P	-
C.	Total (A+B)				-
D.	Output/day	-	L.S./day		
Name and Specifications		Quantity	Unit	Unit Cost	Amount
E.	Materials				
	VII. Steel Works				
	a. 65 x 65 x 6mm. L	350.00	kg.	48.00	16,800.00
	b. 50 x 50 x 6mm. L	250.00	kg.	48.00	12,000.00
	c. 50 x 50 x 4mm. L	100.00	kg.	48.00	4,800.00
	d. Purlins C- 150 x 50 x 3mm.	18.00	kg.	48.00	864.00
	e. 16mm dia. Cross bracing	35.00	kg.	38.00	1,330.00
	f. 16mm dia. Turn buckle	20.00	pc.	118.00	2,360.00
	g. 12mm thk base plate	25.00	kg.	47.00	1,175.00
	h. 10mm thk batten plate	15.00	kg.	47.00	705.00
	i. 10mm dia. Sag rod	10.00	kg.	38.00	380.00
	j. 20mm dia. X 350 mm anchor bolts	10.00	pc.	36.00	360.00
	k. Welding Rod	15.00	kg.	166.33	2,494.95
	l. Primer, Zinc Chromate	5.00	gal.	531.00	2,655.00
	VIII 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.	113.00	1,130.00
	c. Pre-painted flashing, ga. 24	2.00	ln.m.	113.00	226.00
	d. Teckscrew 1 1/2"	1,000.00	pc.	1.25	1,250.00
	e. Roof Sealant	2.00	L	250.00	500.00
	IX. Carpentry Works				
	a. Rough Lumber, sun dried tanguile	500.00	bd.ft.	37.00	18,500.00
	b. Plywood, ordinary 1/4" x 4' x 8'	30.00	pc.	385.00	11,550.00
	c. Finishing Nails	5.00	kg.	100.00	500.00
	d. Common Wire Nails	10.00	kg.	65.00	650.00
	e. Wood Preservative Brown	5.00	L	400.00	2,000.00
Sub-total for E				P	105,329.95
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: Construction of By-Pass and Diversion Roads - Zamboanga City Diversion Road, Cabaluyay -
Zambowood - Mampang Section, Package 3, Zamboanga City

Item No./Description: A.1.1(3) Bunkhouse, 7.00 m. x 9.00 m.

Unit of Measurement: L.S.

Output per hour:

Quantity: 1.00

*For Government Field Office, fully
furnished as shown on plans*

Designation		No. of Persons	No. of Days	Daily Rate	Amount
A.	Labor				
Sub-total for A				P	-
Name and Capacity		No. of Equipment	No. of Days	Daily Rate	Amount
B.	Equipment, (2014 ACEL Rates)				
Sub-total for B				P	-
C.	Total (A+B)				-
D.	Output/day	-	L.S./day		
Name and Specifications		Quantity	Unit	Unit Cost	Amount
E.	Materials				
	X. Electrical Works				
a.	2 x 40w Flourescent lighting fixtures	5.00	set	1,030.00	5,150.00
b.	Porcelain Ceiling Outlet w/ female socket	2.00	pc	50.00	100.00
c.	Duplex Convenience outlet	3.00	pc	170.00	510.00
d.	two gang switch	3.00	pc	170.00	510.00
e.	3.5mm2 fhw	3.00	roll	3,600.00	10,800.00
f.	8.00mm2 thw	25.00	m	70.00	1,750.00
g.	15mm dia. PVC pipe	20.00	pc	73.00	1,460.00
h.	15mm dia. PVC Coupling	25.00	pc	5.00	125.00
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	9.00	27.00
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	100.00	200.00
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	31.00	217.00
t.	panel board (side main w/ braches)	2.00	set	1,627.00	3,254.00
	XI. Plumbing Works				
a.	Water Closet (include. Fitting & Accessories)	1.00	set	7,375.00	7,375.00
b.	Lavatory (include fitting & Accessories)	1.00	set	6,615.00	6,615.00
c.	1/2" GI Pipe S-40	2.00	pc	166.00	332.00
d.	1/2" Water Faucet	2.00	pc	321.00	642.00
e.	1/2" Assorted Connector	8.00	pc	20.00	160.00
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				P	43,998.00
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: Construction of By-Pass and Diversion Roads - Zamboanga City Diversion Road, Cabaluyay -
Zambowood - Mampang Section, Package 3, Zamboanga City

Item No./Description: A.1.1(11) Provision of Furnitures/Fixtures, Equipment and Appliances for the Field Office for the
Field Engineer

Unit of Measurement: L.S.

Output per hour:

Quantity: 1.00

Designation		No. of Persons	No. of Days	Daily Rate	Amount
A.	Labor				
Sub-total for A					P -
Name and Capacity		No. of Equipment	No. of Days	Daily Rate	Amount
B.	Equipment, (2014 ACEL Rates)				
Sub-total for B					P -
C.	Total (A+B)				-
D.	Output/day	- L.S./day			
Name and Specifications		Quantity	Unit	Unit Cost	Amount
E.	Materials				
	Office Equipment/Facilities & Supplies				
	Electric Desk Fan	2.00	unit	1,370.00	2,740.00
	Folding Beds, Good Quality	2.00	each	2,700.00	5,400.00
	pillows w/ pillow cases, fitted sheets and blanket	2.00	each	5,000.00	10,000.00
	Double burner gas stove (Gasul)	1.00	unit	3,700.00	3,700.00
	10 cups Rice Cooker	1.00	unit	2,500.00	2,500.00
	Various Office Supply	1.00	L.S.	45,000.00	45,000.00
	(Folders, Bond Paper, Yellow Pads, Ball Pens, Pencil, Envelopes, etc.)				
	Kitchenware	1.00	L.S.	30,000.00	30,000.00
	(Plates, Spoons & Forks, Glasses, etc.)				
	Dining Table	1.00	set	8,000.00	8,000.00
	Digital Camera	2.00	set	12,000.00	24,000.00
	Cellphone	4.00	set	15,000.00	60,000.00
	Desktop Computer	1.00	set	60,000.00	60,000.00
	Lighting/Water Fixtures				
	a. Electrical Bill	8.13	mos.	3,000.00	24,400.00
	b. Water Bill	8.13	mos.	1,500.00	12,200.00
	c. LPG (11 kg)	8.13	mos.	1,000.00	8,133.33
Sub-total for E					P 296,073.33
F.	Direct Cost (C + E)				296,073.33
G.	Overhead, Contingencies and Miscellaneous	per D.O. 197, s. 2016			-
H.	Contractor's Profit (CP)	8% per D.O. 197, s. 2016			23,685.87
I.	Value Added Tax (VAT)	5% per D.O. 197, s. 2016			15,987.96
J.	Total Unit Cost				335,747.16

DETAILED UNIT PRICE ANALYSIS

PROJECT NAME: Construction of By-Pass and Diversion Roads - Zamboanga City Diversion Road, Cabaluyay - Zambowood - Mampang Section, Package 3, Zamboanga City

Item No./Description: A.1.2(5) Operation and Maintenance of 4x4 Pick Up Type Service Vehicle for the Engineer
Unit of Measurement: month

Output per hour:

Quantity: 8.13

Designation		No. of Persons	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Driver	1	244	422.32	103,046.08
Sub-total for A				P	103,046.08
Name and Capacity		No. of Equipment	No. of Months	Monthly Rate	Amount
B.	Equipment, (2014 ACEL Rates)				
Sub-total for B				P	-
C.	Total (A+B)				103,046.08
D.	Output/day	-	L.S./day		
Name and Specifications		Quantity	Unit	Unit Cost	Amount
E.	Materials				
	a. Diesel	2,440.00	L	31.00	75,640.00
	b. Spare Parts	1.00	L.S.	40,000.00	40,000.00
	c. Engine Oil & Lubricants	1.00	L.S.	11,346.00	11,346.00
	d. Miscellaneous	1.00	L.S.	30,000.00	30,000.00
Sub-total for E				P	156,986.00
F.	Direct Cost (C + E)				260,032.08
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		13,001.60
J.	Total Unit Cost				33,569.72

DETAILED UNIT PRICE ANALYSIS

PROJECT NAME: Construction of By-Pass and Diversion Roads - Zamboanga City Diversion Road, Cabaluyay -
Zambowood - Mampang Section, Package 3, Zamboanga City

Item No./Description: B.4(1) Construction Survey & Staking
Unit of Measurement: km.
Output per hour: 0.04
Quantity: 2.861

Designation		No. of Persons	No. of Days	Daily Rate	Amount
A.	Labor				
	For Field Works				
	a. Geodetic Engineer	1	8.94	833.31	7,451.09
	b. Skilled Laborer	3	8.94	443.20	11,888.70
	c. Laborer	3	8.94	342.24	9,180.48
	For Office Works				
	a. Geodetic Engineer	1	26.82	833.31	22,353.28
	b. Skilled Laborer	2	26.82	443.20	23,777.40
Sub-total for A				P	74,650.96
Name and Capacity		No. of Equipment	No. of Days	Daily Rate	Amount
B.	Equipment, (2014 ACEL Rates)				
	a. Total Station w/ complete accessories	1	8.94	800.00	7,153.25
	Minor Tools 10% of Labor				7,465.10
Sub-total for B				P	14,618.35
C.	Total (A+B)				89,269.31
D.	Output/day	0.32	km./day		
Name and Specifications		Quantity	Unit	Unit Cost	Amount
E.	Materials				
	a. Standard Stake Plan (800 mm x 910 mm)	100.00	pc	400.00	40,000.00
	b. Blue Printing	500.00	pc	15.00	7,500.00
	Miscellaneous 5% of Materials Cost				2,375.00
Sub-total for E				P	49,875.00
F.	Direct Cost (C + E)				139,144.31
G.	Overhead, Contingencies and Miscellaneous		10% per D.O. 197, s. 2016		13,914.43
H.	Contractor's Profit (CP)		8% per D.O. 197, s. 2016		11,131.54
I.	Value Added Tax (VAT)		5% per D.O. 197, s. 2016		8,209.51
J.	Total Unit Cost				60,252.26

DETAILED UNIT PRICE ANALYSIS

PROJECT NAME: Construction of By-Pass and Diversion Roads - Zamboanga City Diversion Road, Cabaluyan -
Zamboang - Mampang Section, Package 3, Zamboanga City

Item No./Description: B.5 Project Billboard/Signboard

Unit of Measurement: each

Output per hour:

Quantity: 2.00

Per D.O. 141, s. 2016

Designation		No. of Persons	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Const. Foreman	1	2.00	611.92	1,223.84
	b. Skilled Labor	1	2.00	443.20	886.40
	c. Unskilled Labor	2	2.00	342.24	1,368.96
Sub-total for A					P 3,479.20
Name and Capacity		No. of Equipment	No. of Days	Daily Rate	Amount
B.	Equipment, (2014 ACEL Rates)				
Sub-total for B					P -
C.	Total (A+B)				3,479.20
D.	Output/day	-	each/day		
Name and Specifications		Quantity	Unit	Unit Cost	Amount
E.	Materials				
	a. Ordinary Plywood 1/2" thk. x 4' x 8'	2.00	pc.	750.00	1,500.00
	b. Tarpaulin (4' x 8')	2.00	pc.	1,000.00	2,000.00
	c. Assorted Lumber	100.00	bd.ft.	37.00	3,700.00
	d. Assorted CW Nails	2.00	kg.	65.00	130.00
Sub-total for E					P 7,330.00
F.	Direct Cost (C + E)				10,809.20
G.	Overhead, Contingencies and Miscellaneous		10% per D.O. 197, s. 2016		1,080.92
H.	Contractor's Profit (CP)		8% per D.O. 197, s. 2016		864.74
I.	Value Added Tax (VAT)		5% per D.O. 197, s. 2016		637.74
J.	Total Unit Cost				6,696.30

DETAILED UNIT PRICE ANALYSIS

PROJECT NAME: Construction of By-Pass and Diversion Roads - Zamboanga City Diversion Road, Cabaluyay - Zambowood - Mampang Section, Package 3, Zamboanga City

Item No./Description: B.7 Occupation Safety and Health Program
 Unit of Measurement: month
 Output per hour:
 Quantity: 8.13

Designation		No. of Persons	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Safety Practioner	1	122.00	611.92	74,654.24
	b. First Aider	1	244.00	443.20	108,140.80
Sub-total for A					P 182,795.04
Name and Capacity		No. of Equipment	No. of Days	Daily Rate	Amount
B.	Equipment, (2014 ACEL Rates)				
	a. Warning Signs and Barricades				60,000.00
Sub-total for B					P 60,000.00
C.	Total (A+B)				242,795.04
D.	Output/day	-	L.S./day		
Name and Specifications		Quantity	Unit	Unit Cost	Amount
E.	Materials				
	a. Rubber Boots (Long w/ steel toe, Black)	24.00	pair	400.00	9,600.00
	b. Working Gloves (Maong Material)	24.00	pair	15.00	360.00
	c. Rain Coats (Reinforced, Hip Length)	24.00	pc.	100.00	2,400.00
	d. Safety Hats	24.00	pc,	600.00	14,400.00
Sub-total for E					P 26,760.00
F.	Direct Cost (C + E)				269,555.04
G.	Overhead, Contingencies and Miscellaneous			per D.O. 197, s. 2016	=
H.	Contractor's Profit (CP)			8% per D.O. 197, s. 2016	21,564.40
I.	Value Added Tax (VAT)			5% per D.O. 197, s. 2016	14,555.97
J.	Total Unit Cost				37,583.04

DETAILED UNIT PRICE ANALYSIS

PROJECT NAME: Construction of By-Pass and Diversion Roads - Zamboanga City Diversion Road, Cabaluyay -
Zambowood - Mampang Section, Package 3, Zamboanga City

Item No./Description: B.9 Mobilization & Demobilization

Unit of Measurement: L.S.

Output per hour:

Quantity: 1.00

Designation		No. of Persons	No. of Days	Daily Rate	Amount
A.	Labor				
Sub-total for A				P	-
Name and Capacity		No. of Equipment	No. of Days	Daily Rate	Amount
B.	Equipment, (2014 ACEL Rates)				
	a. Low Bed Trailer	1	5.00	34,043.00	170,215.00
	b. Water Truck	1	5.00	19,600.00	98,000.00
	c. Backhoe	2	5.00	12,296.00	122,960.00
	d. Bulldozer	1	5.00	27,032.00	135,160.00
	e. Dumptruck	4	5.00	11,360.00	227,200.00
	f. Payloader	1	5.00	13,864.00	69,320.00
	g. Grader	1	5.00	17,384.00	86,920.00
	h. Vibratory Roller	1	5.00	14,768.00	73,840.00
Sub-total for B				P	983,615.00
C.	Total (A+B)				983,615.00
D.	Output/day	-	L.S./day		
Name and Specifications		Quantity	Unit	Unit Cost	Amount
E.	Materials				
Sub-total for E				P	-
F.	Direct Cost (C + E)				983,615.00
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				49,180.75
J.	Total Unit Cost				1,032,795.75

DETAILED UNIT PRICE ANALYSIS

PROJECT NAME: Construction of By-Pass and Diversion Roads - Zamboanga City Diversion Road, Cabaluyan -
Zambowood - Mampang Section, Package 3, Zamboanga City

Item No./Description: 101(3)b2 Removal of Actual Structures/Obstruction

Unit of Measurement: cu.m.

Output per hour: 35.00

Quantity: 3,655.00

0.20 m. thick, PCCP (Unreinforced)

Designation		No. of Persons	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Const. Foreman	1	13.05	611.92	7,987.74
	b. Unskilled Labor	2	13.05	342.24	8,934.91
Sub-total for A					P 16,922.65
Name and Capacity		No. of Equipment	No. of Days	Daily Rate	Amount
B.	Equipment, (2014 ACEL Rates)				
	a. Backhoe w/ Pavement Breaker (0.80 cu.m.)	1	13.05	15,984.80	208,658.73
	b. Payloader (1.50 cu.m.), LX80-2C	1	13.05	13,864.00	180,974.71
	c. Dump Truck (12 cu.yd.)	1	6.53	11,360.00	74,144.29
	Minor Tools 10% of Labor Cost				1,692.27
Sub-total for B					P 465,469.99
C.	Total (A+B)				482,392.64
D.	Output/day	280.00	cu.m./day		
Name and Specifications		Quantity	Unit	Unit Cost	Amount
E.	Materials				
Sub-total for E					P -
F.	Direct Cost (C + E)				482,392.64
G.	Overhead, Contingencies and Miscellaneous		10% per D.O. 197, s. 2016		48,239.26
H.	Contractor's Profit (CP)		8% per D.O. 197, s. 2016		38,591.41
I.	Value Added Tax (VAT)		5% per D.O. 197, s. 2016		28,461.17
J.	Total Unit Cost				163.53

DETAILED UNIT PRICE ANALYSIS

PROJECT NAME: Construction of By-Pass and Diversion Roads - Zamboanga City Diversion Road, Cabaluyay - Zamboowood - Mampang Section, Package 3, Zamboanga City

Item No./Description: 102{1} Unsuitable Excavation
Unit of Measurement: cu.m.

Output per hour: 60.00

Quantity: 12,494.00

For Disposal

Designation		No. of Persons	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Const. Foreman	1	26.03	611.92	15,927.77
	b. Leadman	3	26.03	561.36	43,835.20
	c. Unskilled Labor	9	26.03	342.24	80,174.00
	used triple gang of labor and equipment				
Sub-total for A				P	139,936.96
Name and Capacity		No. of Equipment	No. of Days	Daily Rate	Amount
B.	Equipment, (2014 ACEL Rates)				
	a. Dump Truck (12 cu.yd.)	6	26.03	11,360.00	1,774,148.00
	b. Backhoe (0.80 cu.m.)	3	26.03	12,296.00	960,163.90
	c. Payloader (1.50 cu.m.) - disposal site	3	2.60	13,864.00	108,260.51
	Minor Tools 10% of Labor Cost				13,993.70
Sub-total for B				P	2,856,566.11
C.	Total (A+B)				2,996,503.07
D.	Output/day 480.00 cu.m./day				
Name and Specifications		Quantity	Unit	Unit Cost	Amount
E.	Materials				
Sub-total for E				P	-
F.	Direct Cost (C + E)				2,996,503.07
G.	Overhead, Contingencies and Miscellaneous		10% per D.O. 197, s. 2016		299,650.31
H.	Contractor's Profit (CP)		8% per D.O. 197, s. 2016		239,720.25
I.	Value Added Tax (VAT)		5% per D.O. 197, s. 2016		176,793.68
J.	Total Unit Cost				297.16

DETAILED UNIT PRICE ANALYSIS

PROJECT NAME: Construction of By-Pass and Diversion Roads - Zamboanga City Diversion Road, Cabaluyay - Zambowood - Mampang Section, Package 3, Zamboanga City

Item No./Description: 103(3) Foundation Fill
 Unit of Measurement: cu.m.
 Output per hour: 1.25
 Quantity: 12.00

Designation		No. of Persons	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Const. Foreman	1	1.20	611.92	734.30
	b. Unskilled Labor	4	1.20	342.24	1,642.75
Sub-total for A				P	2,377.06
Name and Capacity		No. of Equipment	No. of Days	Daily Rate	Amount
B.	Equipment, (2014 ACEL Rates)				
	a. Plate Compactor (5 hp)	1	1.20	984.00	1,180.80
	b. Water Truck/Pump (16000 L)	1	0.01	19,600.00	235.20
	Minor Tools 10% of Labor Cost				237.71
Sub-total for B				P	1,653.71
C.	Total (A+B)				4,030.76
D.	Output/day	10.00	cu.m./day		
Name and Specifications		Quantity	Unit	Unit Cost	Amount
E.	Materials				
	a. Filling Materials (well-graded sand)	13.80	cu.m.	1,069.98	14,765.72
Sub-total for E				P	14,765.72
F.	Direct Cost (C + E)				18,796.49
G.	Overhead, Contingencies and Miscellaneous			10% per D.O. 197, s. 2016	1,879.65
H.	Contractor's Profit (CP)			8% per D.O. 197, s. 2016	1,503.72
I.	Value Added Tax (VAT)			5% per D.O. 197, s. 2016	1,108.99
J.	Total Unit Cost				1,940.74

DETAILED UNIT PRICE ANALYSIS

PROJECT NAME: Construction of By-Pass and Diversion Roads - Zamboanga City Diversion Road, Cabaluay -
Zambowood - Mampang Section, Package 3, Zamboanga City

Item No./Description: 103(6)a Pipe Culverts and Drain Excavation
Unit of Measurement: cu.m.
Output per hour: 20.00
Quantity: 65.00

Designation		No. of Persons	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Const. Foreman	1	0.41	611.92	248.59
	b. Unskilled Labor	3	0.41	342.24	417.11
Sub-total for A				P	665.70
Name and Capacity		No. of Equipment	No. of Days	Daily Rate	Amount
B.	Equipment, (2014 ACEL Rates)				
	a. Dump Truck (12 cu.yd.)	2	0.41	11,360.00	9,230.00
	b. Backhoe (0.80 cu.m.)	1	0.41	12,296.00	4,995.25
	Minor Tools 10% of Labor Cost				66.57
Sub-total for B				P	14,291.82
C.	Total (A+B)				14,957.52
D.	Output/day	160.00	cu.m./day		
Name and Specifications		Quantity	Unit	Unit Cost	Amount
E.	Materials				
Sub-total for E				P	-
F.	Direct Cost (C + E)				14,957.52
G.	Overhead, Contingencies and Miscellaneous		10% per D.O. 197, s. 2016		1,495.75
H.	Contractor's Profit (CP)		8% per D.O. 197, s. 2016		1,196.60
I.	Value Added Tax (VAT)		5% per D.O. 197, s. 2016		882.49
J.	Total Unit Cost				285.11

DETAILED UNIT PRICE ANALYSIS

PROJECT NAME: Construction of By-Pass and Diversion Roads - Zamboanga City Diversion Road, Cabaluyay - Zambowood - Mampang Section, Package 3, Zamboanga City

Item No./Description: 104(1)a Embankment from Roadway Excavation

Unit of Measurement: cu.m.

Output per hour: 50.00

Quantity: 677.00

Compacted Volume

Designation		No. of Persons	No. of Days	Daily Rate	Amount
A.	Labor				
	For Excavation Work				
	a. Const. Foreman	1	1.40	611.92	859.61
	c. Unskilled Laborer	2	1.40	342.24	961.54
	Spreading and Compaction				
	a. Const. Foreman	1	1.69	611.92	1,035.67
	c. Unskilled Laborer	2	1.69	342.24	1,158.48
Sub-total for A					P 4,015.31
Name and Capacity		No. of Equipment	No. of Days	Daily Rate	Amount
B.	Equipment, (2014 ACEL Rates)				
	For Excavation Work				
	a. Bulldozer, D6H Series II PSDS/DD	1	1.40	27,032.00	37,973.88
	b. Payloader (1.50 cu.m.)	1	1.40	13,864.00	19,475.80
	c. Dump Truck (12 cu.yd.)	2	1.40	11,360.00	31,916.49
	Spreading and Compaction				
	a. Motorized Road Grader (140 hp), G170A	1	1.69	17,384.00	29,422.42
	b. Vibratory Roller (10 mt), SD100C	1	1.69	14,768.00	24,994.84
	c. Water Truck/Pump (16000 L)	1	0.42	19,600.00	8,293.25
Sub-total for B					P 152,076.68
C.	Total (A+B)				156,091.98
D.	Output/day	400.00	cu.m./day		
Name and Specifications		Quantity	Unit	Unit Cost	Amount
E.	Materials				
Sub-total for E					P -
F.	Direct Cost (C + E)				156,091.98
G.	Overhead, Contingencies and Miscellaneous		10% per D.O. 197, s. 2016		15,609.20
H.	Contractor's Profit (CP)		8% per D.O. 197, s. 2016		12,487.36
I.	Value Added Tax (VAT)		5% per D.O. 197, s. 2016		9,209.43
J.	Total Unit Cost				285.67

DETAILED UNIT PRICE ANALYSIS

PROJECT NAME: Construction of By-Pass and Diversion Roads - Zamboanga City Diversion Road, Cabaluay - Zambowood - Mampang Section, Package 3, Zamboanga City

Item No./Description: 104(2)a Embankment from Borrow

Unit of Measurement: cu.m.

Output per hour: 200.00

Quantity: - Compacted Volume

Designation		No. of Persons	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Const. Foreman	1	0.00	611.92	-
	b. Leadman	4	0.00	561.36	-
	c. Unskilled Laborer	8	0.00	342.24	-
	used quadruple gang of labor and equipment				
Sub-total for A					P -
Name and Capacity		No. of Equipment	No. of Days	Daily Rate	Amount
B.	Equipment, (2014 ACEL Rates)				
	a. Motorized Road Grader (140 hp), G170A	4	0.00	17,384.00	-
	b. Vibratory Roller (10 mt), SD100C	4	0.00	14,768.00	-
	c. Water Truck/Pump (16000 L)	4	0.00	19,600.00	-
Sub-total for B					P -
C.	Total (A+B)				-
D.	Output/day	1,600.00	cu.m./day		
Name and Specifications		Quantity	Unit	Unit Cost	Amount
E.	Materials				
	a. Common Borrow (with 25% Shrinkage Factor)	-	cu.m.	388.35	-
Sub-total for E					P -
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				#DIV/0!

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DETAILED UNIT PRICE ANALYSIS

PROJECT NAME: Construction of By-Pass and Diversion Roads - Zamboanga City Diversion Road, Cabaluyay -
Zambowood - Mampang Section, Package 3, Zamboanga City

Item No./Description: 104(5) Boulder Fill
Unit of Measurement: cu.m.
Output per hour: 25.00
Quantity: 34,122.00

Designation		No. of Persons	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Const. Foreman	1	170.61	611.92	104,399.67
	b. Leadman	4	170.61	561.36	383,094.52
	b. Skilled Laborer	8	170.61	443.20	604,914.82
	c. Unskilled Laborer	32	170.61	342.24	1,868,466.12
	use quadruple gang of labor and equipment				
Sub-total for A				P	2,960,875.13
Name and Capacity		No. of Equipment	No. of Days	Daily Rate	Amount
B.	Equipment, (2014 ACEL Rates)				
	a. Backhoe (0.80 cu.m.)	4	170.61	12,296.00	8,391,282.24
	Minor Tools 10% of Labor				296,087.51
Sub-total for B				P	8,687,369.75
C.	Total (A+B)				11,648,244.88
D.	Output/day	200.00	cu.m./day		
Name and Specifications		Quantity	Unit	Unit Cost	Amount
E.	Materials				
	a. Boulders (with 5% wastage factor)	35,828.10	cu.m.	1,268.98	45,465,142.34
Sub-total for E				P	45,465,142.34
F.	Direct Cost (C + E)				57,113,387.22
G.	Overhead, Contingencies and Miscellaneous		10% per D.O. 197, s. 2016		5,711,338.72
H.	Contractor's Profit (CP)		8% per D.O. 197, s. 2016		4,569,070.98
I.	Value Added Tax (VAT)		5% per D.O. 197, s. 2016		3,369,689.85
J.	Total Unit Cost				2,073.84

DETAILED UNIT PRICE ANALYSIS

PROJECT NAME: Construction of By-Pass and Diversion Roads - Zamboanga City Diversion Road, Cabaluyan -
Zambowood - Mampang Section, Package 3, Zamboanga City

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

Unit of Measurement: sq.m.

Output per hour: 300.00

Quantity: 15,741.00

Variable Width

Designation		No. of Persons	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Const. Foreman	1	6.56	611.92	4,013.43
	b. Unskilled Laborer	2	6.56	342.24	4,489.33
Sub-total for A					P 8,502.76
Name and Capacity		No. of Equipment	No. of Days	Daily Rate	Amount
B.	Equipment, (2014 ACEL Rates)				
	a. Motorized Road Grader (140 hp), G710A	1	6.56	17,384.00	114,017.31
	b. Vibratory Roller (10 mt), SD100DC	1	6.56	14,768.00	96,859.62
	c. Water Truck/Pump (16000 L)	1	1.64	19,600.00	32,137.88
Sub-total for B					P 243,014.81
C.	Total (A+B)				251,517.57
D.	Output/day	2,400.00	sq.m./day		
Name and Specifications		Quantity	Unit	Unit Cost	Amount
E.	Materials				
Sub-total for E					P -
F.	Direct Cost (C + E)				251,517.57
G.	Overhead, Contingencies and Miscellaneous		10% per D.O. 197, s. 2016		25,151.76
H.	Contractor's Profit (CP)		8% per D.O. 197, s. 2016		20,121.41
I.	Value Added Tax (VAT)		5% per D.O. 197, s. 2016		14,839.54
J.	Total Unit Cost				19.80

W

DETAILED UNIT PRICE ANALYSIS

PROJECT NAME: Construction of By-Pass and Diversion Roads - Zamboanga City Diversion Road, Cabaluyan -
Zamboanga - Mampang Section, Package 3, Zamboanga City

Item No./Description: 200(1) Aggregate Subbase Course

Unit of Measurement: cu.m.

Output per hour: 50.00

Quantity: 11,343.00

0.30 m. thk. (min.), Compacted Volume

Designation		No. of Persons	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Const. Foreman	1	28.36	611.92	17,352.52
	b. Unskilled Labor	2	28.36	342.24	19,410.14
Sub-total for A					P 36,762.66
Name and Capacity		No. of Equipment	No. of Days	Daily Rate	Amount
B.	Equipment, (2014 ACEL Rates)				
	a. Motorized Road Grader (140 hp), G710A	1	28.36	17,384.00	492,966.78
	b. Vibratory Roller (10 mt), SD100DC	1	28.36	14,768.00	418,783.56
	c. Water Truck/Pump (16000 L)	1	7.09	19,600.00	138,951.75
Sub-total for B					P 1,050,702.09
C.	Total (A+B)				1,087,464.75
D.	Output/day	400.00	cu.m./day		
Name and Specifications		Quantity	Unit	Unit Cost	Amount
E.	Materials				
	a. Aggregate Subbase Course (w/ 15% Shrinkage Factor)	13,044.45	cu.m.	848.98	11,074,477.16
Sub-total for E					P 11,074,477.16
F.	Direct Cost (C + E)				12,161,941.91
G.	Overhead, Contingencies and Miscellaneous			10% per D.O. 197, s. 2016	1,216,194.19
H.	Contractor's Profit (CP)			8% per D.O. 197, s. 2016	972,955.35
I.	Value Added Tax (VAT)			5% per D.O. 197, s. 2016	717,554.57
J.	Total Unit Cost				1,328.45

DETAILED UNIT PRICE ANALYSIS

PROJECT NAME: Construction of By-Pass and Diversion Roads - Zamboanga City Diversion Road, Cabaluyan -
Zambowood - Mampang Section, Package 3, Zamboanga City

Item No./Description: 300(1) Gravel Surface Course
Unit of Measurement: cu.m.

Output per hour: 50.00
Quantity: 1,431.00

0.15 m. thick. For shouldering, Compacted
Volume

Designation		No. of Persons	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Const. Foreman	1	3.58	611.92	2,189.14
	b. Unskilled Labor	2	3.58	342.24	2,448.73
Sub-total for A					P 4,637.87
Name and Capacity		No. of Equipment	No. of Days	Daily Rate	Amount
B.	Equipment, (2014 ACEL Rates)				
	a. Motorized Road Grader (140 hp), G710A	1	3.58	17,384.00	62,191.26
	b. Vibratory Roller (10 mt), SD100DC	1	3.58	14,768.00	52,832.52
	c. Water Truck/Pump (16000 L)	1	0.89	19,600.00	17,529.75
Sub-total for B					P 132,553.53
C.	Total (A+B)				137,191.40
D.	Output/day	400.00	cu.m./day		
Name and Specifications		Quantity	Unit	Unit Cost	Amount
E.	Materials				
	a. Uncrushed Aggregate Surface Course (w/ 15% Shrinkage Factor)	1,645.65	cu.m.	903.98	1,487,634.69
Sub-total for E					P 1,487,634.69
F.	Direct Cost (C + E)				1,624,826.09
G.	Overhead, Contingencies and Miscellaneous		10% per D.O. 197, s. 2016		162,482.61
H.	Contractor's Profit (CP)		8% per D.O. 197, s. 2016		129,986.09
I.	Value Added Tax (VAT)		5% per D.O. 197, s. 2016		95,864.74
J.	Total Unit Cost				1,406.82

H

DETAILED UNIT PRICE ANALYSIS

PROJECT NAME: Construction of By-Pass and Diversion Roads - Zamboanga City Diversion Road, Cabalua -
Zambo Wood - Mampang Section, Package 3, Zamboanga City

Item No./Description: 311(1)d1 Portland Cement Concrete Pavement

Unit of Measurement: sq.m.

Output per hour: 70.00

Quantity: 1,292.00

0.23 m. thick, includes widening (width =
6.10 m.)

Designation		No. of Persons	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Const. Foreman	1	2.31	611.92	1,411.79
	b. Skilled Labor	4	2.31	443.20	4,090.10
	c. Unskilled Labor	12	2.31	342.24	9,475.16
Sub-total for A					P 14,977.05
Name and Capacity		No. of Equipment	No. of Days	Daily Rate	Amount
B.	Equipment, (2014 ACEL Rates)				
	a. Transit Mixer (5 cu.m.)	4	2.31	10,544.00	97,306.06
	b. Concrete Vibrator	2	2.31	730.00	3,368.43
	c. Concrete Batch Plant (30 cu.m.)	1	2.31	14,076.00	32,475.34
	d. Payloader (1.50 cu.m.), LX80-2C	1	2.31	13,864.00	31,986.23
	e. Concrete Screeder (5.5 hp)	1	2.31	4,360.00	10,059.14
	f. Water truck/Pump (16000 L)	1	2.31	19,600.00	45,220.00
	g. Concrete Saw (7.5 hp), 14" Blade Ø	1	2.31	261.04	602.26
	h. Bar Cutter, Single Phase	1	0.23	1,758.00	405.60
	Minor Tools 5% of Labor				748.85
Sub-total for B					P 222,171.90
C.	Total (A+B)				237,148.95
D.	Output/day	560.00	sq.m./day		
Name and Specifications		Quantity	Unit	Unit Cost	Amount
E.	Materials				
	a. Reinforcing Steel Bar	555.56	kg.	38.00	21,111.28
	b. Curing Compound	374.68	L	35.00	13,113.80
	c. Asphalt Sealant	155.04	L	100.00	15,504.00
	d. Steel Forms (Rental)	594.32	m	52.00	30,904.64
	e. Sand	163.44	cu.m.	1,069.98	174,875.39
	f. Gravel	297.16	cu.m.	1,069.98	317,955.26
	g. Cement	2,829.48	bag	283.00	800,742.84
	h. Concrete Saw (Diamond Blade 14" Ø)	0.19	pc.	2,500.00	484.50
	i. Pipe Sleeve, 2" Ø	9.17	m.	61.00	559.57
	j. Grease/Tar	11.24	L	112.50	1,264.55
Sub-total for E					P 1,376,515.82
F.	Direct Cost (C + E)				1,613,664.77
G.	Overhead, Contingencies and Miscellaneous		10% per D.O. 197, s. 2016		161,366.48
H.	Contractor's Profit (CP)		8% per D.O. 197, s. 2016		129,093.18
I.	Value Added Tax (VAT)		5% per D.O. 197, s. 2016		95,206.22
J.	Total Unit Cost				1,547.47

DETAILED UNIT PRICE ANALYSIS

PROJECT NAME: Construction of By-Pass and Diversion Roads - Zamboanga City Diversion Road, Cabaluyan - Zamboanga - Mampang Section, Package 3, Zamboanga City

Item No./Description: 311(1)e1 Portland Cement Concrete Pavement

Unit of Measurement: sq.m.

Output per hour: 57.50

Quantity: 18,993.00

0.28 m. thick, includes widening (width = 6.70 m.)

Designation		No. of Persons	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Const. Foreman	1	41.29	611.92	25,265.64
	b. Skilled Labor	4	41.29	443.20	73,197.37
	c. Unskilled Labor	12	41.29	342.24	169,569.50
Sub-total for A					P 268,032.52
Name and Capacity		No. of Equipment	No. of Days	Daily Rate	Amount
B.	Equipment, (2014 ACEL Rates)				
	a. Transit Mixer (5 cu.m.)	4	41.29	10,544.00	1,741,410.37
	b. Concrete Vibrator	2	41.29	730.00	60,282.13
	c. Concrete Batch Plant (30 cu.m.)	1	41.29	14,076.00	581,185.80
	d. Payloader (1.50 cu.m.), LX80-2C	1	41.29	13,864.00	572,432.50
	e. Concrete Screeder (5.5 hp)	1	41.29	4,360.00	180,020.61
	f. Water truck/Pump (16000 L)	1	41.29	19,600.00	809,266.96
	g. Concrete Saw (7.5 hp), 14" Blade Ø	1	41.29	261.04	10,778.11
	h. Bar Cutter, Single Phase	1	4.13	1,758.00	7,258.63
	Minor Tools 5% of Labor				13,401.63
Sub-total for B					P 3,976,036.73
C.	Total (A+B)				4,244,069.25
D.	Output/day	460.00	sq.m./day		
Name and Specifications		Quantity	Unit	Unit Cost	Amount
E.	Materials				
	a. Reinforcing Steel Bar	9,496.50	kg.	38.00	360,867.00
	b. Curing Compound	5,507.97	L	35.00	192,778.95
	c. Asphalt Sealant	3,228.81	L	100.00	322,881.00
	d. Steel Forms (Rental)	8,736.78	m	60.00	524,206.80
	e. Sand	2,924.92	cu.m.	1,069.98	3,129,608.04
	f. Gravel	5,318.04	cu.m.	1,069.98	5,690,196.44
	g. Cement	50,521.38	bag	283.00	14,297,550.54
	h. Concrete Saw (Diamond Blade 14" Ø)	2.85	pc.	2,500.00	7,122.38
	i. Pipe Sleeve, 2" Ø	148.15	m.	61.00	9,036.87
	j. Grease/Tar	148.15	L	112.50	16,666.36
Sub-total for E					P 24,550,914.37
F.	Direct Cost (C + E)				28,794,983.63
G.	Overhead, Contingencies and Miscellaneous		10% per D.O. 197, s. 2016		2,879,498.36
H.	Contractor's Profit (CP)		8% per D.O. 197, s. 2016		2,303,598.69
I.	Value Added Tax (VAT)		5% per D.O. 197, s. 2016		1,698,904.03
J.	Total Unit Cost				1,878.43

DETAILED UNIT PRICE ANALYSIS

PROJECT NAME: Construction of By-Pass and Diversion Roads - Zamboanga City Diversion Road, Cabaluyan -
Zamboanga - Mampang Section, Package 3, Zamboanga City

Item No./Description: 500(1) b3 Pipe Culverts

Unit of Measurement: In.m.

Output per hour: 1.00

Quantity: 79.00

910 mm. dia., Class IV

Designation		No. of Persons	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Const. Foreman	1	5.63	611.92	3,444.34
	b. Skilled Labor	2	5.63	443.20	4,989.32
	c. Unskilled Labor	4	5.63	342.24	7,705.53
Sub-total for A					P 16,139.20
Name and Capacity		No. of Equipment	No. of Days	Daily Rate	Amount
B.	Equipment, (2014 ACEL Rates)				
	a. Backhoe (0.80 cu.m.)	1	2.86	12,296.00	35,212.67
	b. Plate Compactor (5 hp)	1	2.86	984.00	2,817.93
	Minor Tools 10% of Labor				1,613.92
Sub-total for B					P 39,644.52
C.	Total (A+B)				55,783.72
D.	Output/day 8.00 In.m./day				
Name and Specifications		Quantity	Unit	Unit Cost	Amount
E.	Materials				
	a. Cement	85.32	bag	283.00	24,145.56
	b. Sand	4.82	cu.m.	1,069.98	5,156.23
	c. RC Pipes (910 mm. dia.)	79.00	cu.m.	1,665.00	131,535.00
	d. Sand Bedding/Selected Sandy Soil	10.11	m.	1,069.98	10,819.64
Sub-total for E					P 171,656.43
F.	Direct Cost (C + E)				227,440.15
G.	Overhead, Contingencies and Miscellaneous		10% per D.O. 197, s. 2016		22,744.02
H.	Contractor's Profit (CP)		8% per D.O. 197, s. 2016		18,195.21
I.	Value Added Tax (VAT)		5% per D.O. 197, s. 2016		13,418.97
J.	Total Unit Cost				3,567.07

DETAILED UNIT PRICE ANALYSIS

PROJECT NAME: Construction of By-Pass and Diversion Roads - Zamboanga City Diversion Road, Cabaluay - Zambowood - Mampang Section, Package 3, Zamboanga City

Item No./Description: 505(2)a Grouted Riprap, Class "A"

Unit of Measurement: cu.m.

Output per hour: 1.25

Quantity: 22.00

For Slope Protection

Designation		No. of Persons	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Const. Foreman	1	2.20	611.92	1,346.22
	b. Skilled Labor	2	2.20	443.20	1,950.08
	c. Unskilled Labor	8	2.20	342.24	6,023.42
Sub-total for A					P 9,319.73
Name and Capacity		No. of Equipment	No. of Days	Daily Rate	Amount
B.	Equipment, (2014 ACEL Rates)				
	a. One Bagger Mixer	1	2.20	1,376.00	3,027.20
	b. Water Truck/Pump (16000 L)	1	0.11	19,600.00	2,156.00
	Minor Tools 5% of Labor				465.99
Sub-total for B					P 5,649.19
C.	Total (A+B)				14,968.91
D.	Output/day	10.00	cu.m./day		
Name and Specifications		Quantity	Unit	Unit Cost	Amount
E.	Materials				
	a. Cement	66.00	bag	283.00	18,678.00
	b. Sand	5.50	cu.m.	1,069.98	5,884.89
	c. Gravel	0.33	cu.m.	1,069.98	353.09
	d. Weep Holes (PVC)	6.60	m.	50.83	335.50
	e. Filter Cloth	0.33	sq.m.	160.00	52.80
	f. Boulders (15 - 25 kg.)	23.10	cu.m.	1,268.98	29,313.44
	Miscellaneous 1% of Materials Cost				546.18
Sub-total for E					P 55,163.90
F.	Direct Cost (C + E)				70,132.81
G.	Overhead, Contingencies and Miscellaneous		10% per D.O. 197, s. 2016		7,013.28
H.	Contractor's Profit (CP)		8% per D.O. 197, s. 2016		5,610.63
I.	Value Added Tax (VAT)		5% per D.O. 197, s. 2016		4,137.84
J.	Total Unit Cost				3,949.75

DETAILED UNIT PRICE ANALYSIS

PROJECT NAME: Construction of By-Pass and Diversion Roads - Zamboanga City Diversion Road, Cabaluyan -
Zambowood - Mampang Section, Package 3, Zamboanga City

Item No./Description: 506(1) Stone Masonry

Unit of Measurement: cu.m.

Output per hour: 1.60

Quantity: 60.00

For Slope Protection

Designation		No. of Persons	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Const. Foreman	1	4.69	611.92	2,868.38
	b. Skilled Labor	2	4.69	443.20	4,155.00
	c. Unskilled Labor	8	4.69	342.24	12,834.00
Sub-total for A				P	19,857.38
Name and Capacity		No. of Equipment	No. of Days	Daily Rate	Amount
B.	Equipment, (2014 ACEL Rates)				
	a. One Bagger Mixer	1	4.69	1,376.00	6,450.00
	b. Water Truck/Pump (16000 L)	1	0.23	19,600.00	4,593.75
	c. Backhoe (Wheel Type 0.28 cu.m.)	1	0.47	7,376.00	3,457.50
	Minor Tools 5% of Labor				992.87
Sub-total for B				P	15,494.12
C.	Total (A+B)				35,351.49
D.	Output/day	12.80	cu.m./day		
Name and Specifications		Quantity	Unit	Unit Cost	Amount
E.	Materials				
	a. Cement	330.00	bag	283.00	93,390.00
	b. Sand	18.00	cu.m.	1,069.98	19,259.64
	c. Gravel	1.20	cu.m.	1,069.98	1,283.98
	d. Weep Holes (PVC)	18.00	m.	50.83	915.00
	e. Filter Cloth	0.90	sq.m.	160.00	144.00
	f. Boulders	63.00	cu.m.	1,268.98	79,945.74
	Miscellaneous 1% of Materials Cost				1,949.38
Sub-total for E				P	196,887.74
F.	Direct Cost (C + E)				232,239.23
G.	Overhead, Contingencies and Miscellaneous		10% per D.O. 197, s. 2016		23,223.92
H.	Contractor's Profit (CP)		8% per D.O. 197, s. 2016		18,579.14
I.	Value Added Tax (VAT)		5% per D.O. 197, s. 2016		13,702.11
J.	Total Unit Cost				4,795.74

DETAILED UNIT PRICE ANALYSIS

PROJECT NAME: Construction of By-Pass and Diversion Roads - Zamboanga City Diversion Road, Cabaluay -
Zambowood - Mampang Section, Package 3, Zamboanga City

Item No./Description: 612(1) Reflectorized Thermoplastic Pavement Markings (White)
Unit of Measurement: sq.m.
Output per hour: 25.00
Quantity: 664.00

Designation		No. of Persons	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Const. Foreman	1	3.32	611.92	2,031.57
	b. Skilled Labor	2	3.32	443.20	2,942.85
	c. Unskilled Labor	6	3.32	342.24	6,817.42
Sub-total for A					P 11,791.84
Name and Capacity		No. of Equipment	No. of Days	Daily Rate	Amount
B.	Equipment, (2014 ACEL Rates)				
	a. Cargo Truck/Delivery Truck (2-5 mt)	1	3.32	6,264.00	20,796.48
	b. Applicator Machine	1	3.32	750.00	2,490.00
	c. Kneading Machine	1	3.32	1,500.00	4,980.00
	Minor Tools 10% of Labor				1,179.18
Sub-total for B					P 29,445.66
C.	Total (A+B)				41,237.51
D.	Output/day	200.00	sq.m./day		
Name and Specifications		Quantity	Unit	Unit Cost	Amount
E.	Materials				
	a. Thermoplastic Paint (White)	215.80	bag	1,585.00	342,043.00
	b. Glass Beads	21.91	bag	2,500.00	54,780.00
	c. Primer	79.68	L	160.00	12,748.80
	d. LPG (50 kg)	2.66	cyl.	3,450.00	9,163.20
	e. LPG (12 kg)	1.33	cyl.	828.00	1,099.58
	f. Calsumine	83.00	kg.	100.00	8,300.00
	Miscellaneous 5% of Materials Cost				21,406.73
Sub-total for E					P 449,541.31
F.	Direct Cost (C + E)				490,778.82
G.	Overhead, Contingencies and Miscellaneous		10% per D.O. 197, s. 2016		49,077.88
H.	Contractor's Profit (CP)		8% per D.O. 197, s. 2016		39,262.31
I.	Value Added Tax (VAT)		5% per D.O. 197, s. 2016		28,955.95
J.	Total Unit Cost				915.78

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DETAILED UNIT PRICE ANALYSIS

PROJECT NAME: Construction of By-Pass and Diversion Roads - Zamboanga City Diversion Road, Cabaluay - Zambowood - Mampang Section, Package 3, Zamboanga City

Item No./Description: 612(2) Reflectorized Thermoplastic Pavement Markings (Yellow)
 Unit of Measurement: sq.m.
 Output per hour: 25.00
 Quantity: 6.00

Designation		No. of Persons	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Const. Foreman	1	0.03	611.92	18.36
	b. Skilled Labor	2	0.03	443.20	26.59
	c. Unskilled Labor	6	0.03	342.24	61.60
Sub-total for A				P	106.55
Name and Capacity		No. of Equipment	No. of Days	Daily Rate	Amount
B.	Equipment, (2014 ACEL Rates)				
	a. Cargo Truck/Delivery Truck (2-5 mt)	1	0.03	6,264.00	187.92
	b. Applicator Machine	1	0.03	750.00	22.50
	c. Kneading Machine	1	0.03	1,500.00	45.00
	Minor Tools 10% of Labor				10.66
Sub-total for B				P	266.08
C.	Total (A+B)				372.63
D.	Output/day	200.00	sq.m./day		
Name and Specifications		Quantity	Unit	Unit Cost	Amount
E.	Materials				
	a. Thermoplastic Paint (Yellow)	1.95	bag	1,800.00	3,510.00
	b. Glass Beads	0.20	bag	2,500.00	495.00
	c. Primer	0.72	L	175.00	126.00
	d. LPG (50 kg)	0.02	cyl.	3,450.00	82.80
	e. LPG (12 kg)	0.01	cyl.	828.00	9.94
	f. Calsumine	0.75	kg.	100.00	75.00
	Miscellaneous 5% of Materials Cost				214.94
Sub-total for E				P	4,513.67
F.	Direct Cost (C + E)				4,886.30
G.	Overhead, Contingencies and Miscellaneous		10% per D.O. 197, s. 2016		488.63
H.	Contractor's Profit (CP)		8% per D.O. 197, s. 2016		390.90
I.	Value Added Tax (VAT)		5% per D.O. 197, s. 2016		288.29
J.	Total Unit Cost				1,009.02

DETAILED UNIT PRICE ANALYSIS

PROJECT NAME: Construction of By-Pass and Diversion Roads - Zamboanga City Diversion Road, Cabaluay - Zambowood - Mampang Section, Package 3, Zamboanga City

Item No./Description: 715(1) Separation Geotextile
 Unit of Measurement: sq.m.
 Output per hour: 200.00
 Quantity: 19,136.00

Designation		No. of Persons	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Const. Foreman	1	11.96	611.92	7,318.56
	b. Leadman	2	11.96	561.36	13,427.73
	c. Skilled Labor	4	11.96	443.20	21,202.69
	d. Unskilled Labor	16	11.96	342.24	65,491.05
Sub-total for A				P	107,440.03
Name and Capacity		No. of Equipment	No. of Days	Daily Rate	Amount
B.	Equipment, (2014 ACEL Rates)				
	a. Cargo Truck/Delivery Truck (9-10 mt)	2	11.96	9,696.00	231,928.32
Sub-total for B				P	231,928.32
C.	Total (A+B)				339,368.35
D.	Output/day	1,600.00	sq.m./day		
Name and Specifications		Quantity	Unit	Unit Cost	Amount
E.	Materials				
	a. Filter Cloth	20,092.80	sq.m.	160.00	3,214,848.00
Sub-total for E				P	3,214,848.00
F.	Direct Cost (C + E)				3,554,216.35
G.	Overhead, Contingencies and Miscellaneous		10% per D.O. 197, s. 2016		355,421.63
H.	Contractor's Profit (CP)		8% per D.O. 197, s. 2016		284,337.31
I.	Value Added Tax (VAT)		5% per D.O. 197, s. 2016		209,698.76
J.	Total Unit Cost				230.13