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)

NAME/LOCATION OF PROJECT : Construction of Bypass and Diversion Roads - Jct. Nat'l. Highway R.T. Lim - Jct. Nat'l. Highway Siocon Road, (Surabay-San Fernandino), Zamboanga Sibugay	Appropriation	:	P	300,000,000.00
	Source of Funds	:	CY 2018 Regular Infra Project	
	Issued Obligated Authority	:		
	Released	:		
PROJECT CATEGORY : NATIONAL ROAD	Cal. Days to Complete	:	432 Calendar Days	
	Desirable Starting Date	:	Upon Approval	
	Mode of Implementation	:	By Contract	

PROJECT DESCRIPTION :

Scope of Work	:	Unpaved to Paved
Road Width	:	6.70 meters, (PCCP 0.28 m. thk.)
Roadbed Width	:	12.00 meters
Subbase Course	:	0.30 meters
Surface Course	:	0.15 meters

STATION LIMITS:

Beg. Of Section 1:	Sta.	1835+800.00
End Of Section 1:	Sta.	1842+148.76
(Exception:	*Steel Bridge)*	
Beg. Of Section 2:	Sta.	1842+173.49
End Of Section 2:	Sta.	1844+400.00

Net Length: **8.575** KM; 17.15 LANE KM.

MINIMUM EQUIPMENT REQUIREMENT : TECHNICAL PERSONNEL REQUIRED :

Description	No.	Description	No.	Description	No.
Bulldozer (155 HP), D65A-8	2	One Bagger Mixer	2	Project Engineer	1
Payloader (1.50 cu.m.)	2	Concrete Screeder (5.5 Hp)	1	Materials Engineer	1
Motorized Road Grader, G710A	1	Transit Mixer (5 cu.m.)	2	Materials Lab. Tech.	1
Vibratory Roller (10 m.t.), SP56	2	Concrete Saw, Blade Ø 14" (7.5 Hp)	2	Surveyor	1
Batching Plant (30 cu.m.)	1	Bar Cutter, Single Phase	2	Safety Practitioner	1
Dumptruck (10 cu.m.)	4	Bar Bender	2	Foreman	2
Backhoe (0.80 cu.m.)	2	Concrete Vibrator	2	Carpenter	8
Water Truck	2	Truck Mounted Crane	2	Mason	10
Cargo Truck (10T, 270 Hp)	2	Plate Compactor	2	Laborer	20

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, (7.00m x 9.00m)	0.203	l.s.	1.00	474,826.29	474,826.29
A.1.1(11)	Provision of Furnitures/Fixtures. Equipment and Appliances for the	0.053	l.s.	1.00	123,345.00	123,345.00
A.1.2(5)	Operation and Maintenance of 4x4 Pick Up Type Service Vehicle	0.234	l.s.	1.00	546,099.20	546,099.20
PART B - OTHER GENERAL REQUIREMENTS						
B.4(1)	Construction Survey and Staking	0.070	km	8.58	163,516.33	19,068.36
B.5	Project Billboard/Signboard	0.006	unit	2.00	12,899.20	6,449.60
B.7	Occupational Safety and Health Program	0.105	l.s.	1.00	245,931.08	245,931.08
B.9	Mobilization & Demobilization	0.513	l.s.	1.00	1,196,832.00	1,196,832.00
PART C - EARTHWORKS						
101(6)	Removal of Structures and Obstructions (Existing Conc. Structures)	0.028	cu.m.	131.00	65,940.19	503.36
101(4)a1	Removal of Actual Structures & Obstructions (610Φ mm RCPC)	0.007	ln.m.	33.00	16,655.77	504.72
102(2)	Surplus Common Excavation	14.036	cu.m.	227,122.50	32,773,920.83	144.30
102(3)b	Surplus Rock Excavation (Hard Rock)	8.417	cu.m.	24,955.00	19,652,877.40	787.53
103(1)a	Structure Excavation	0.049	cu.m.	496.50	114,252.42	230.12
103(3)	Foundation Fill	0.022	cu.m.	21.50	51,632.83	2,401.53

ESTIMATED COST OF PROPOSED WORK						
ITEM NO.	DESCRIPTION	% OF TOTAL	UNIT	QUANTITY	DIRECT COST	
					TOTAL	UNIT COST
103(6)a	Pipe Culvert and Drain Excavation	0.021	cu.m.	215.50	49,589.92	230.12
104(1)a	Embankment (from Excavation)	2.257	cu.m.	45,706.50	5,269,141.99	115.28
105(1)a	Subgrade Preparation	0.617	sq.m.	90,220.00	1,441,580.27	15.98
PART D - SUBBASE AND BASE COURSE						
200(1)	Aggregate Subbase Course, 0.30m. Thick	17.373	cu.m.	35,137.00	40,565,708.66	1,154.50
300(1)	Gravel Surface Course, 0.15m thk.	1.925	cu.m.	3,518.00	4,494,425.12	1,277.55
PART E - SURFACE COURSE						
311(1)e1	PCC Pavement Conventional Method, 280 mm thk.	43.318	sq.m.	61,428.00	101,145,426.21	1,646.57
311(1)a	Portland Cement Concrete Pavement, 0.15m. Thick	1.959	sq.m.	5,086.50	4,573,201.85	899.09
404(1)a	Reinforcing Steel Bar, (Grade 40)	0.076	Kg.	3,641.00	176,490.70	48.47
404(1)b	Reinforcing Steel Bar, (Grade 60)	0.259	Kg.	11,621.00	605,786.07	52.13
405(1)a3	Structural Concrete, Class "A" (20.68 Mpa)	0.306	cu.m.	90.00	714,389.00	7,937.66
405(1)b3	Structural Concrete, Class "A" (27.58 Mpa)	0.455	cu.m.	129.50	1,063,561.66	8,212.83
407(8)	Lean Concrete	0.022	cu.m.	8.50	51,230.11	6,027.07
500(1)b3	Reinf. Conc. Culvert Pipe, (910mm dia.)	0.229	ln.m.	145.00	533,822.57	3,681.53
500(1)b4	Reinf. Conc. Culvert Pipe, (1070mm dia.)	0.032	ln.m.	16.00	75,254.39	4,703.40
505(5)	Grouted Riprap,Class "A"	0.332	cu.m.	172.00	774,955.92	4,505.56
506(1)	Stone Masonry	0.245	cu.m.	117.50	571,636.50	4,864.99
PART H - MISCELLANEOUS STRUCTURES						
603(3)a1	Metal Guardrails (Metal Beam) including Conc. Post	2.006	ln.m.	1,968.00	4,684,997.37	2,380.59
603(4)a	Metal Beam End Piece (Fish Tail)	0.034	each	50.00	79,483.38	1,589.67
612(1)	Reflectorized Thermoplastic Pavement Markings (White)	0.604	sq.m.	2,029.50	1,409,974.18	694.74
612(2)	Reflectorized Thermoplastic Pavement Markings (Yellow)	0.158	sq.m.	480.50	369,463.50	768.91
620(1)a1	Chevron Signs (450mm x 600mm)	0.495	each	98.00	1,156,181.51	11,797.77
622(1)a	Bio-Engineering Solutions (Coco-Net), CGN 400	0.954	sq.m.	19,380.00	2,226,995.72	114.91
622(1)b	Bio-Engineering Solutions (Coco-Net), CGN 700	0.359	sq.m.	6,124.00	838,755.66	136.96
622(2)b	Bio-Engineering Coco Fascine Erosion Control System	0.481	ln.m.	2,253.50	1,122,145.80	497.96
622(3)a	Bio-Engineered Erosion Control System (vegetation)	1.740	sq.m.	25,504.00	4,063,115.69	159.31
TOTAL		100.000			P **233,496,042.30**	

NAME OF PROJECT : Construction of Bypass and Diversion Roads - Jct. Nat'l. Highway R.T. Lim - Jct. Nat'l. Highway Siocon Road, (Surabay-San Fernandino), Zamboanga Sibugay

STATION LIMITS:

Beg. Of Section 1:	1835+800.00	Beg. Of Section 2:	1842+173.49
End Of Section 1:	1842+148.76	End Of Section 2:	1844+400.00
Net Length:	8.575 KM;	LANE KM.	17.15

BREAKDOWN OF ESTIMATED EXPENDITURES	% OF TOTAL		AMOUNT
I. ESTIMATED COST			
A. DIRECT COST			
A.1. Materials	53.20		159,610,324.75
A.2. Labor	1.39		4,175,568.53
A.3. Equipment Expenses	23.24		69,710,149.01
SUB-TOTAL (DIRECT COST)	77.83	P	233,496,042.30
B. INDIRECT COST (Per D.O. # 197 s.2016)			
B.1. Overhead, Contingency & Misc. (8% Max. of D.C.)	6.17		18,510,706.80
B.2. Profit (8 % Max. of D.C.)	6.18		18,540,248.89
C. VAT (5% of D.C. and I.C.)	4.51		13,527,349.90
SUBTOTAL (CONTRACT COST)	94.69	P	284,074,347.88
II. ESTIMATED GOVERNMENT EXPENDITURES			
1. Engineering and Administrative Overhead (3.50%)	3.50		10,500,000.00
2. Detailed Engineering (1%)			
3. Reserved for the Payment of RROW	1.67		5,000,000.00
4. Physical Reserved	0.14		425,652.12
TOTAL ESTIMATED PROJECT COST	100.00	P	300,000,000.00

Prepared:

MICHAEL D. TORINO
Engineer II

Checked:

JOSEPHINE B. RENGQUIJO
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

PROJECT : Construction of Bypass and Diversion Roads - Jct. Nat'l. Highway R.T. Lim - Jct. Nat'l. Highway Siocon Road, (Surabay-San Fernandino), Zamboanga Sibugay

NET LENGTH :	Beg. Of Section 1:	1835+800.00
	End Of Section 1:	1842+148.76
	Beg. Of Section 2:	1842+173.49
	End Of Section 2:	1844+400.00
	NET LENGTH =	**8.88** KM

6 WORKING DAYS

ITEM NO.	DESCRIPTION	QUANTITY	DURATION NO. OF DAYS
A.1.1(3)	Construction of Field Office for the Engineer, (7.00m x 9.00m)	1.00	24.00
A.1.1(11)	Provision of Furnitures/Fixtures, Equipment and Appliances for the	1.00	306.00
A.1.2(5)	Operation and Maintenance of 4x4 Pick Up Type Service Vehicle	1.00	306.00
B.4(1)	Construction Survey and Staking	8.58	42.88
B.5	Project Billboard/Signboard	2.00	2.00
B.7	Occupational Safety and Health Program	1.00	306.00
B.9	Mobilization & Demobilization	1.00	6.00
101(4)	Removal of Structures and Obstructions (Existing Conc. Structures)	131.00	3.28
101(4)a1	Removal of Actual Structures & Obstructions (6100 mm RCPC)	33.00	0.69
102(2)	Surplus Common Excavation	277,172.50	88.72
102(3)b	Surplus Rock Excavation (Hard Rock)	24,955.00	74.27
103(1)a	Structure Excavation	496.50	3.10
103(3)	Foundation Fill	21.50	2.15
103(4)a	Pipe Culvert and Drain Excavation	215.50	1.35
104(1)a	Embankment (from Excavation)	45,706.50	57.13
105(1)a	Subgrade Preparation	90,220.00	37.59
200(1)	Aggregate Subbase Course, 0.30m. thick	35,137.00	87.84
300(1)	Gravel Surface Course 0.15m thk.	3,518.00	8.80
311(1)a	Portland Cement Concrete Pavement, 0.15m. thick	5,006.50	5.92
311(1)a1	PCC Pavement Conventional Method, 280 mm thk.	61,428.00	68.77
404(1)a	Reinforcing Steel Bar, (Grade 40)	3,441.00	2.53
404(1)b	Reinforcing Steel Bar, (Grade 60)	11,421.00	8.07
405(1)a3	Structural Concrete, Class "A" (20.68 Mpa)	90.00	22.50
405(1)b3	Structural Concrete, Class "A" (27.58 Mpa)	129.30	32.38
407(8)	Lean Concrete	8.50	0.74
500(1)b3	Rcbd. Conc. Culvert Pipe, (910mm dia.)	145.00	9.06
500(1)b4	Rcbd. Conc. Culvert Pipe, (1070mm dia.)	16.00	2.00
505(5)	Grouted Riprap Class "A"	172.00	8.60
506(1)	Stone Masonry	117.50	9.18
603(3)a1	Metal Guardrails (Metal Beam) Including Conc. Post	1,958.00	19.52
603(4)a	Metal Beam End Piece (Fish Tail)	50.00	1.04
612(1)	Reflectorized Thermoplastic Pavement Markings (White)	2,029.50	10.15
612(2)	Reflectorized Thermoplastic Pavement Markings (Yellow)	480.50	2.40
620(1)a1	Chevron Signs (450mm x 600mm)	98.00	12.25
622(1)a	Bio-Engineering Solutions (Coco-Net), CCN 400	19,380.00	48.45
622(1)b	Bio-Engineering Solutions (Coco Net), CCN 700	6,124.00	15.31
622(2)b	Bio-Engineering Coco Fascine Erosion Control System	2,353.50	18.78
622(3)a	Bio-Engineered Erosion Control System (vegetation)	25,504.00	25.50

W1 W2 W3 W4 W5 W6 W7 W8 W9 W10 W11 W12 W13 W14 W15 W16 W17 W18 W19 W20 W21 W22 W23 W24 W25 W26 W27 W28 W29 W30 W31 W32 W33 W34 W35 W36 W37 W38 W39 W40 W41 W42 W43 W44 W45 W46 W47 W48 W49 W50 W51 W52 W53 W54 W55

TOTAL WORKING DAYS	306
SUNDAYS & HOLIDAYS	64
INCLEMENT WEATHER & CURING	62
TOTAL NO. OF CAL. DAYS	432

Prepared by:

MICHAEL D. TORINO
Engineer II

[illegible]
Engineer II

Submitted by:

LEONCIO B. SOLAMILLO
Chief, Construction Division

Recommending Approval:

CAYAMOMBAO D. DIA
Assistant Regional Director

Approved:

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

ITEM NO.	DESCRIPTION	QUANTITY	UNIT	ESTIMATED DIRECT COST	MARK-UPS IN PERCENT		TOTAL MARK-UPS		VAT	TOTAL INDIRECT COST	TOTAL COST	UNIT COST
					OCM	PROFIT	%	VALUE				
								(9)	(10)	(11)	(12)	(13)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(5) x (8)	5%[(5) + (9)]	(9) + (10)	(5) + (11)	(12) / (3)
PART E - SURFACE COURSE												
311(1)e1	PCC Pavement Conventional Method, 280 mm thk.	61,428.00	sq.m.	101,145,426.21	8.00	8.00	16.00	16,183,268.19	5,866,434.72	22,049,702.91	123,195,129.12	2,005.52
311(1)a	Portland Cement Concrete Pavement, 0.15m. Thick	5,086.50	sq.m.	4,573,201.85	8.00	8.00	16.00	731,712.30	265,245.71	996,958.00	5,570,159.85	1,095.09
404(1)a	Reinforcing Steel Bar, (Grade 40)	3,641.00	Kg.	176,490.70	8.00	8.00	16.00	28,238.51	10,236.46	38,474.97	214,965.67	59.04
404(1)b	Reinforcing Steel Bar, (Grade 60)	11,621.00	Kg.	605,786.07	8.00	8.00	16.00	96,925.77	35,135.59	132,061.36	737,847.43	63.49
405(1)a3	Structural Concrete, Class "A" (20.68 Mpa)	90.00	cu.m.	714,389.00	8.00	8.00	16.00	114,302.24	41,434.56	155,736.80	870,125.80	9,668.06
405(1)b3	Structural Concrete, Class "A" (27.58 Mpa)	129.50	cu.m.	1,063,561.66	8.00	8.00	16.00	170,169.87	61,686.58	231,856.44	1,295,418.10	10,003.23
407(8)	Lean Concrete	8.50	cu.m.	51,230.11	8.00	8.00	16.00	8,196.82	2,971.35	11,168.16	62,398.28	7,340.97
500(1)b3	Reinf. Conc. Culvert Pipe, (910mm dia.)	145.00	ln.m.	533,822.57	8.00	8.00	16.00	85,411.61	30,961.71	116,373.32	650,195.89	4,484.11
500(1)b4	Reinf. Conc. Culvert Pipe, (1070mm dia.)	16.00	ln.m.	75,254.39	8.00	8.00	16.00	12,040.70	4,364.75	16,405.46	91,659.85	5,728.74
505(5)	Grouted Riprap,Class "A"	172.00	cu.m.	774,955.92	8.00	8.00	16.00	123,992.95	44,947.44	168,940.39	943,896.31	5,487.77
506(1)	Stone Masonry	117.50	cu.m.	571,636.50	8.00	8.00	16.00	91,461.84	33,154.92	124,616.76	696,253.26	5,925.56
PART H - MISCELLANEOUS STRUCTURES												
603(3)a1	Metal Guardrails (Metal Beam) including Conc. Post	1,968.00	ln.m.	4,684,997.37	8.00	8.00	16.00	749,599.58	271,729.85	1,021,329.43	5,706,326.80	2,899.56
603(4)a	Metal Beam End Piece (Fish Tail)	50.00	each	79,483.38	8.00	8.00	16.00	12,717.34	4,610.04	17,327.38	96,810.76	1,936.22
612(1)	Reflectorized Thermoplastic Pavement Markings (White)	2,029.50	sq.m.	1,409,974.18	8.00	8.00	16.00	225,595.87	81,778.50	307,374.37	1,717,348.55	846.19
612(2)	Reflectorized Thermoplastic Pavement Markings (Yellow)	480.50	sq.m.	369,463.50	8.00	8.00	16.00	59,114.16	21,428.88	80,543.04	450,006.55	936.54
620(1)a1	Chevron Signs (450mm x 600mm)	98.00	each	1,156,181.51	8.00	8.00	16.00	184,989.04	67,058.53	252,047.57	1,408,229.08	14,369.68
622(1)a	Bio-Engineering Solutions (Coco-Net), CGN 400	19,380.00	sq.m.	2,226,995.72	8.00	8.00	16.00	356,319.32	129,165.75	485,485.07	2,712,480.79	139.96
622(1)b	Bio-Engineering Solutions (Coco-Net), CGN 700	6,124.00	sq.m.	838,755.66	8.00	8.00	16.00	134,200.90	48,647.83	182,848.73	1,021,604.39	166.82
622(2)b	Bio-Engineering Coco Fascine Erosion Control System	2,253.50	ln.m.	1,122,145.80	8.00	8.00	16.00	179,543.33	65,084.46	244,627.78	1,366,773.58	606.51
622(3)a	Bio-Engineered Erosion Control System (vegetation)	25,504.00	sq.m.	4,063,115.69	8.00	8.00	16.00	650,098.51	235,660.71	885,759.22	4,948,874.91	194.04
	T O T A L			**233,496,042.30**					**13,527,349.90**		**284,074,347.88**	

Submitted :

BELEN A. SAPALLEDA
Head, BAC-TWG

Recommending Approval :

CAYAMOMBAO D. DIA
Assistant Regional Director

~~Approved~~ :

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

APPROVED BUDGET FOR THE CONTRACT

Construction of Bypass and Diversion Roads - Jct. Nat'l. Highway R.T. Lim - Jct. Nat'l. Highway Siocon Road, (Surabay-San Fernandino), Zamboanga Sibugay

Contract Duration : 432.00 C.D.

ITEM NO.	DESCRIPTION	QUANTITY	UNIT	ESTIMATED DIRECT COST	MARK-UPS IN PERCENT		TOTAL MARK-UPS		VAT	TOTAL INDIRECT COST	TOTAL COST	UNIT COST
					OCM	PROFIT	%	VALUE				
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9) (5) x (8)	(10) 5%[(5) + (9)]	(11) (9) + (10)	(12) (5) + (11)	(13) (12) / (3)
PART A - FACILITIES FOR THE ENGINEER												
A.1.1(3)	Construction of Field Office for the Engineer, (7.00m x 9.00m)	1.00	l.s.	474,826.29	8.00	8.00	16.00	75,972.21	27,539.92	103,512.13	578,338.42	578,338.42
A.1.1(11)	Provision of Furnitures/Fixtures. Equipment and Appliances for the	1.00	l.s.	123,345.00	0.00	8.00	8.00	9,867.60	6,660.63	16,528.23	139,873.23	139,873.23
A.1.2(5)	Operation and Maintenance of 4x4 Pick Up Type Service Vehicle	1.00	l.s.	546,099.20	0.00	0.00	0.00	-	27,304.96	27,304.96	573,404.16	573,404.16
PART B - OTHER GENERAL REQUIREMENTS												
B.4(1)	Construction Survey and Staking	8.58	km	163,516.33	8.00	8.00	16.00	26,162.61	9,483.95	35,646.56	199,162.88	23,225.26
B.5	Project Billboard/Signboard	2.00	unit	12,899.20	8.00	8.00	16.00	2,063.87	748.15	2,812.03	15,711.23	7,855.61
B.7	Occupational Safety and Health Program	1.00	l.s.	245,931.08	0.00	8.00	8.00	19,674.49	13,280.28	32,954.76	278,885.84	278,885.84
B.9	Mobilization & Demobilization	1.00	l.s.	1,196,832.00	0.00	0.00	0.00	-	59,841.60	59,841.60	1,256,673.60	1,256,673.60
PART C - EARTHWORKS												
101(6)	Removal of Structures and Obstructions (Existing Conc. Structures)	131.00	cu.m.	65,940.19	8.00	8.00	16.00	10,550.43	3,824.53	14,374.96	80,315.15	613.09
101(4)a1	Removal of Actual Structures & Obstructions (610Φ mm RCPC)	33.00	ln.m.	16,655.77	8.00	8.00	16.00	2,664.92	966.03	3,630.96	20,286.72	614.75
102(2)	Surplus Common Excavation	227,122.50	cu.m.	32,773,920.83	8.00	8.00	16.00	5,243,827.33	1,900,887.41	7,144,714.74	39,918,635.57	175.76
102(3)b	Surplus Rock Excavation (Hard Rock)	24,955.00	cu.m.	19,652,877.40	8.00	8.00	16.00	3,144,460.38	1,139,866.89	4,284,327.27	23,937,204.67	959.21
103(1)a	Structure Excavation	496.50	cu.m.	114,252.42	8.00	8.00	16.00	18,280.39	6,626.64	24,907.03	139,159.45	280.28
103(3)	Foundation Fill	21.50	cu.m.	51,632.83	8.00	8.00	16.00	8,261.25	2,994.70	11,255.96	62,888.79	2,925.06
103(6)a	Pipe Culvert and Drain Excavation	215.50	cu.m.	49,589.92	8.00	8.00	16.00	7,934.39	2,876.22	10,810.60	60,400.53	280.28
104(1)a	Embankment (from Excavation)	45,706.50	cu.m.	5,269,141.99	8.00	8.00	16.00	843,062.72	305,610.24	1,148,672.95	6,417,814.94	140.41
105(1)a	Subgrade Preparation	90,220.00	cu.m.	1,441,580.27	8.00	8.00	16.00	230,652.84	83,611.66	314,264.50	1,755,844.77	19.46
PART D - SUBBASE AND BASE COURSE												
200(1)	Aggregate Subbase Course, 0.30m. Thick	35,137.00	cu.m.	40,565,708.66	8.00	8.00	16.00	6,490,513.39	2,352,811.10	8,843,324.49	49,409,033.15	1,406.18
300(1)	Gravel Surface Course, 0.15m thk.	3,518.00	cu.m.	4,494,425.12	8.00	8.00	16.00	719,108.02	260,676.66	979,784.68	5,474,209.80	1,556.06

Construction of Bypass and Diversion Roads - Jct. Nat'l. Highway R.T. Lim - Jct. Nat'l. Highway Siocon Road, (Surabay-San Fernandino), Zamboanga Sibugay

SUMMARY OF DETAILED ESTIMATES

ITEM NO.	DESCRIPTION	EQUIPMENT	LABOR	MATERIALS	TOTAL
A.1.1(3)	Construction of Field Office for the Engineer, (7.00m x 9.00m)	37,926.53	87,665.28	349,234.48	474,826.29
A.1.1(11)	Provision of Furnitures/Fixtures. Equipment and Appliances for the	-	-	123,345.00	123,345.00
A.1.2(5)	Operation and Maintenance of 4x4 Pick Up Type Service Vehicle	-	135,619.20	410,480.00	546,099.20
B.4(1)	Construction Survey and Staking	25,519.32	112,272.01	25,725.00	163,516.33
B.5	Project Billboard/Signboard	-	3,479.20	9,420.00	12,899.20
B.7	Occupational Safety and Health Program	-	182,431.08	63,500.00	245,931.08
B.9	Mobilization & Demobilization	1,196,832.00	-	-	1,196,832.00
101(6)	Removal of Structures and Obstructions (Existing Conc. Structures)	56,549.84	9,390.34	-	65,940.19
101(4)a1	Removal of Actual Structures & Obstructions (610Φ mm RCPC)	15,293.91	1,361.86	-	16,655.77
102(2)	Surplus Common Excavation	32,476,723.94	297,196.89	-	32,773,920.83
102(3)b	Surplus Rock Excavation (Hard Rock)	9,377,320.45	1,154,504.45	9,121,052.50	19,652,877.40
103(1)a	Structure Excavation	109,167.52	5,084.90	-	114,252.42
103(3)	Foundation Fill	9,283.89	4,258.89	38,090.05	51,632.83
103(6)a	Pipe Culvert and Drain Excavation	47,382.88	2,207.04	-	49,589.92
104(1)a	Embankment (from Excavation)	5,133,598.68	135,543.31	-	5,269,141.99
105(1)a	Subgrade Preparation	1,392,846.43	48,733.84	-	1,441,580.27
200(1)	Aggregate Subbase Course, 0.30m. Thick	3,254,740.31	113,879.02	37,197,089.34	40,565,708.66
300(1)	Gravel Surface Course, 0.15m thk.	325,872.34	11,401.84	4,157,150.94	4,494,425.12
311(1)e1	PCC Pavement Conventional Method, 280 mm thk.	12,857,430.85	826,024.99	87,461,970.38	101,145,426.21
311(1)a	Portland Cement Concrete Pavement, 0.15m. Thick	570,432.87	38,455.61	3,964,313.37	4,573,201.85
404(1)a	Reinforcing Steel Bar, (Grade 40)	9,454.97	10,711.22	156,324.51	176,490.70
404(1)b	Reinforcing Steel Bar, (Grade 60)	48,199.71	34,187.05	523,399.31	605,786.07
405(1)a3	Structural Concrete, Class "A" (20.68 Mpa)	55,154.25	107,254.17	551,980.58	714,389.00
405(1)b3	Structural Concrete, Class "A" (27.58 Mpa)	79,360.84	154,326.83	829,873.99	1,063,561.66
407(8)	Lean Concrete	3,194.61	2,176.06	45,859.44	51,230.11
500(1)b3	Reinf. Conc. Culvert Pipe, (910mm dia.)	124,992.39	46,423.93	362,406.25	533,822.57
500(1)b4	Reinf. Conc. Culvert Pipe, (1070mm dia.)	13,853.46	5,734.56	55,666.37	75,254.39
505(5)	Grouted Riprap,Class "A"	232,013.21	67,600.82	475,341.90	774,955.92
506(1)	Stone Masonry	116,446.39	38,887.36	416,302.75	571,636.50
603(3)a1	Metal Guardrails (Metal Beam) including Conc. Post	268,255.19	144,046.67	4,272,695.52	4,684,997.37
603(4)a	Metal Beam End Piece (Fish Tail)	10,171.30	1,812.08	67,500.00	79,483.38
612(1)	Reflectorized Thermoplastic Pavement Markings (White)	89,999.96	36,041.48	1,283,932.73	1,409,974.18
612(2)	Reflectorized Thermoplastic Pavement Markings (Yellow)	22,509.45	8,533.10	338,420.96	369,463.50
620(1)a1	Chevron Signs (450mm x 600mm)	21,314.51	21,310.10	1,113,556.90	1,156,181.51
622(1)a	Bio-Engineering Solutions (Coco-Net), CGN 400	253,634.97	162,299.75	1,811,061.00	2,226,995.72
622(1)b	Bio-Engineering Solutions (Coco-Net), CGN 700	80,147.61	51,286.05	707,322.00	838,755.66
622(2)b	Bio-Engineering Coco Fascine Erosion Control System	6,290.72	62,907.20	1,052,947.88	1,122,145.80
622(3)a	Bio-Engineered Erosion Control System (vegetation)	1,388,233.73	50,520.36	2,624,361.60	4,063,115.69
	TOTAL	**69,710,149.01**	**4,175,568.53**	**159,610,324.75**	**233,496,042.30**

DETAILED UNIT PRICE ANALYSIS

PROJECT NAME	: Construction of Bypass and Diversion Roads - Jct. Nat'l. Highway R.T. Lim - Jct. Nat'l. Highway Siocon Road, (Surabay-San Fernandino), Zamboanga Sibugay
Item No./Description	: 101(6) Removal of Structures and Obstructions (Existing Conc. Structures)
Unit of Measurement	: cu.m.
Output per hour	: 5.00 cu.m./hr.
Quantity	: 131.00

	Designation	No. of Person	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Construction Foreman	1	3.28	611.92	2,004.04
	b. Skilled Laborer	2	3.28	443.20	2,902.96
	c. Laborer	4	3.28	342.24	4,483.34
	Sub-total for A				**9,390.34**
	Name and Capacity	**No. of Equipment**	**No. of Days**	**Daily Rate**	**Amount**
B.	Equipment Cost (2014 ACEL Rates)				
	a. Backhoe (0.80 cu.m.)	1	1.64	12,296.00	20,134.70
	a. Backhoe w/ Breaker (0.80 cu.m.)	1	1.64	15,984.80	26,175.11
	d. Dumptruck (10 cu.m.)	1	0.82	11,360.00	9,301.00
	Minor Tools (10% of Labor)				939.03
	Sub-total for B				**56,549.84**
C.	Total (A + B)				**65,940.19**
D.	Output / day 40.00	cu.m./day			
	Name and Specification	**Quantity**	**Unit**	**Unit Cost**	**Total**
E.	Materials				
					-
					-
					-
	Sub-total for E				-
F.	Direct Unit Cost (C + E)				**65,940.19**
G.	Overhead Contingencies & Miscellaneous (OCM)		8%		**5,275.21**
H.	Contractors Profit (CP)		8%		**5,275.21**
I.	Value Added Tax (VAT)		5%		**3,824.53**
J.	Total Unit Cost				**613.09**

DETAILED UNIT PRICE ANALYSIS

PROJECT NAME	: Construction of Bypass and Diversion Roads - Jct. Nat'l. Highway R.T. Lim - Jct. Nat'l. Highway Siocon Road, (Surabay-San Fernandino), Zamboanga Sibugay
Item No./Description	: 101(4)a1 Removal of Actual Structures & Obstructions (610Φ mm RCPC)
Unit of Measurement	: ln.m.
Output per hour	: 6.00 ln.m./hr.
Quantity	: 33.00

	Designation	No. of Person	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Construction Foreman	1	0.69	611.92	420.70
	b. Laborer	4	0.69	342.24	941.16
	Sub-total for A				**1,361.86**
	Name and Capacity	**No. of Equipment**	**No. of Days**	**Daily Rate**	**Amount**
B.	Equipment Cost (2014 ACEL Rates)				
	a. Backhoe (0.80 cu.m.)	1	0.69	12,296.00	8,453.50
	b. Boom Truck	1	0.34	8,143.20	2,799.23
	c. Dump Truck	1	0.34	11,360.00	3,905.00
	Minor Tools (10% of Labor)				136.19
	Sub-total for B				**15,293.91**
C.	Total (A + B)				**16,655.77**
D.	Output / day 48.00	l.m./day			
	Name and Specification	**Quantity**	**Unit**	**Unit Cost**	**Total**
E.	Materials				
	Sub-total for E				-
F.	Direct Unit Cost (C + E)				**16,655.77**
G.	Overhead Contingencies & Miscellaneous (OCM)		8%		**1,332.46**
H.	Contractors Profit (CP)		8%		**1,332.46**
I.	Value Added Tax (VAT)		5%		**966.03**
J.	Total Unit Cost				**614.75**

DETAILED UNIT PRICE ANALYSIS

PROJECT NAME	:	Construction of Bypass and Diversion Roads - Jct. Nat'l. Highway R.T. Lim - Jct. Nat'l. Highway Siocon Road, (Surabay-San Fernandino), Zamboanga Sibugay
Item No./Description	:	102(2) Surplus Common Excavation
Unit of Measurement	:	cu.m.
Output per hour	:	320.00 cu.m./hr.
Quantity	:	227,122.50

Note: Use four (4) gang of labor and equipment

	Designation	No. of Person	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Construction Foreman	1	88.72	611.92	54,289.38
	b. Laborer	8	88.72	342.24	242,907.51
	Sub-total for A				**297,196.89**
	Name and Capacity	No. of Equipment	No. of Days	Daily Rate	Amount
B.	Equipment Cost (2014 ACEL Rates)				
	a. Payloader (1.50 cu.m.)	4	88.72	13,864.00	4,920,041.16
	b. Payloader (1.50 cu.m.) - at disposal area	4	26.62	13,864.00	1,476,012.35
	c. Dumptruck (10 cu.m.)	12	88.72	11,360.00	12,094,273.13
	d. Backhoe (0.80 cu.m.)	4	88.72	12,296.00	4,363,591.03
	e. Bulldozer (165 Hp)	4	88.72	27,032.00	9,593,086.59
	Minor Tools (10% of Labor)				29,719.69
	Sub-total for B				**32,476,723.94**
C.	Total (A + B)				**32,773,920.83**
D.	Output / day	2,560.00	cu.m./day		
	Name and Specification	Quantity	Unit	Unit Cost	Total
E.	Materials				
	Sub-total for E				-
F.	Direct Unit Cost (C + E)				**32,773,920.83**
G.	Overhead Contingencies & Miscellaneous (OCM)		8%		**2,621,913.67**
H.	Contractors Profit (CP)		8%		**2,621,913.67**
I.	Value Added Tax (VAT)		5%		**1,900,887.41**
J.	Total Unit Cost				**175.76**

DETAILED UNIT PRICE ANALYSIS

PROJECT NAME	:	Construction of Bypass and Diversion Roads - Jct. Nat'l. Highway R.T. Lim - Jct. Nat'l. Highway Siocon Road, (Surabay-San Fernandino), Zamboanga Sibugay
Item No./Description	:	102(3)b Surplus Rock Excavation (Hard Rock)
Unit of Measurement	:	cu.m.
Output per hour	:	16.80 cu.m./hr.
Quantity	:	24,955.00

Note: Use four (4) gang of labor and equipment

	Designation	No. of Person	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Construction Foreman (Drilling)	1	74.27	611.92	45,447.81
	b. Skilled Laborer	8	74.27	443.20	263,334.67
	c. Laborer	16	74.27	342.24	406,695.20
	a. Construction Foreman (Blasting)	1	37.14	611.92	22,723.90
	b. Skilled Laborer	4	37.14	443.20	65,833.67
	c. Laborer	8	37.14	342.24	101,673.80
	a. Construction Foreman (Disposal)	1	74.27	611.92	45,447.81
	b. Laborer	8	74.27	342.24	203,347.60
	Sub-total for A				**1,154,504.45**
	Name and Capacity	No. of Equipment	No. of Days	Daily Rate	Amount
B.	Equipment Cost (2014 ACEL Rates)				
	a. Payloader (1.50 cu.m.)	4	27.85	13,864.00	1,544,536.25
	b. Payloader (1.50 cu.m.) - at disposal area	4	9.28	13,864.00	514,845.42
	c. Dumptruck (10 cu.m.)	4	74.27	11,360.00	3,374,866.67
	d. Backhoe (0.80 cu.m.)	4	37.14	12,296.00	1,826,468.33
	e. Pneumatic Drilling Machine	8	74.27	1,360.00	808,066.67
	f. Air Compressor (161-185 cfm)	4	74.27	4,016.00	1,193,086.67
	Minor Tools (10% of Labor)				115,450.45
	Sub-total for B				**9,377,320.45**
C.	Total (A + B)				**10,531,824.90**
D.	Output / day	134.40	cu.m./day		
	Name and Specification	Quantity	Unit	Unit Cost	Total
E.	Materials				
	a. Dynamite	9,982.00	kgs.	290.00	2,894,780.00
	b. Detonation Cord	49,910.00	m.	85.00	4,242,350.00
	c. Detonator	3,743.25	pc.	260.00	973,245.00
	d. Ammonium Sulfate	4,991.00	kgs.	80.00	399,280.00
	e. Blasting Cap	9,982.00	pc.	50.00	499,100.00
	f. Safety Fuse	2,495.50	m.	45.00	112,297.50
	Sub-total for E				**9,121,052.50**
F.	Direct Unit Cost (C + E)				**19,652,877.40**
G.	Overhead Contingencies & Miscellaneous (OCM)		8%		**1,572,230.19**
H.	Contractors Profit (CP)		8%		**1,572,230.19**
I.	Value Added Tax (VAT)		5%		**1,139,866.89**
J.	Total Unit Cost				**959.21**

DETAILED UNIT PRICE ANALYSIS

PROJECT NAME	:	Construction of Bypass and Diversion Roads - Jct. Nat'l. Highway R.T. Lim - Jct. Nat'l. Highway Siocon Road, (Surabay-San Fernandino), Zamboanga Sibugay
Item No./Description	:	103(1)a Structure Excavation
Unit of Measurement	:	cu.m.
Output per hour	:	20.00 cu.m./hr.
Quantity	:	496.50

	Designation	No. of Person	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Construction Foreman	1	3.10	611.92	1,898.86
	b. Laborer	3	3.10	342.24	3,186.04
	Sub-total for A				**5,084.90**
	Name and Capacity	**No. of Equipment**	**No. of Days**	**Daily Rate**	**Amount**
B.	Equipment Cost (2014 ACEL Rates)				
	a. Dumptruck (10 cu.m.)	2	3.10	11,360.00	70,503.00
	b. Backhoe (0.80 cu.m.)	1	3.10	12,296.00	38,156.03
	Minor Tools (10% of Labor)				508.49
	Sub-total for B				**109,167.52**
C.	Total (A + B)				**114,252.42**
D.	Output / day 160.00	cu.m./day			
	Name and Specification	**Quantity**	**Unit**	**Unit Cost**	**Total**
E.	Materials				
					-
					-
					-
					-
					-
	Sub-total for E				-
F.	Direct Unit Cost (C + E)				**114,252.42**
G.	Overhead Contingencies & Miscellaneous (OCM)		8%		**9,140.19**
H.	Contractors Profit (CP)		8%		**9,140.19**
I.	Value Added Tax (VAT)		5%		**6,626.64**
J.	Total Unit Cost				**280.28**

DETAILED UNIT PRICE ANALYSIS

PROJECT NAME	:	Construction of Bypass and Diversion Roads - Jct. Nat'l. Highway R.T. Lim - Jct. Nat'l. Highway Siocon Road, (Surabay-San Fernandino), Zamboanga Sibugay
Item No./Description	:	103(3) Foundation Fill
Unit of Measurement	:	cu.m.
Output per hour	:	1.25 cu.m./hr.
Quantity	:	21.50

	Designation	No. of Person	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Construction Foreman	1	2.15	611.92	1,315.63
	b. Laborer	4	2.15	342.24	2,943.26
	Sub-total for A				**4,258.89**
	Name and Capacity	No. of Equipment	No. of Days	Daily Rate	Amount
B.	Equipment Cost (2014 ACEL Rates)				
	a. Plate Compactor (5Hp)	1	2.15	984.00	2,115.60
	b. Water Truck (16000 gal.)	1	0.34	19,600.00	6,742.40
	Minor Tools (10% of Labor)				425.89
	Sub-total for B				**9,283.89**
C.	Total (A + B)				**13,542.78**
D.	Output / day 10.00	cu.m./day			
	Name and Specification	Quantity	Unit	Unit Cost	Total
E.	Materials				
	a. Filling Materials	24.73	cu.m.	1,540.55	38,090.05
	Sub-total for E				**38,090.05**
F.	Direct Unit Cost (C + E)				**51,632.83**
G.	Overhead Contingencies & Miscellaneous (OCM)		8%		**4,130.63**
H.	Contractors Profit (CP)		8%		**4,130.63**
I.	Value Added Tax (VAT)		5%		**2,994.70**
J.	Total Unit Cost				**2,925.06**

DETAILED UNIT PRICE ANALYSIS

PROJECT NAME	:	Construction of Bypass and Diversion Roads - Jct. Nat'l. Highway R.T. Lim - Jct. Nat'l. Highway Siocon Road, (Surabay-San Fernandino), Zamboanga Sibugay
Item No./Description	:	103(6)a Pipe Culvert and Drain Excavation
Unit of Measurement	:	cu.m.
Output per hour	:	20.00 cu.m./hr.
Quantity	:	215.50

	Designation	No. of Person	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Construction Foreman	1	1.35	611.92	824.18
	b. Laborer	3	1.35	342.24	1,382.86
	Sub-total for A				**2,207.04**
	Name and Capacity	No. of Equipment	No. of Days	Daily Rate	Amount
B.	Equipment Cost (2014 ACEL Rates)				
	a. Backhoe (0.80 cu.m.)	1	1.35	12,296.00	16,561.18
	b. Dump Truck (10 cu.m.)	2	1.35	11,360.00	30,601.00
	Minor Tools (10% of Labor)				220.70
	Sub-total for B				**47,382.88**
C.	Total (A + B)				**49,589.92**
D.	Output / day 160.00	cu.m./day			
	Name and Specification	Quantity	Unit	Unit Cost	Total
E.	Materials				
	Sub-total for E				-
F.	Direct Unit Cost (C + E)				**49,589.92**
G.	Overhead Contingencies & Miscellaneous (OCM)		8%		**3,967.19**
H.	Contractors Profit (CP)		8%		**3,967.19**
I.	Value Added Tax (VAT)		5%		**2,876.22**
J.	Total Unit Cost				**280.28**

DETAILED UNIT PRICE ANALYSIS

PROJECT NAME	: Construction of Bypass and Diversion Roads - Jct. Nat'l. Highway R.T. Lim - Jct. Nat'l. Highway Siocon Road, (Surabay-San Fernandino), Zamboanga Sibugay
Item No./Description	: 104(1)a Embankment (from Excavation)
Unit of Measurement	: cu.m.
Output per hour	: 100.00 cu.m./hr.
Quantity	: 45,706.50

	Designation	No. of Person	No. of Days	Daily Rate	Amount
A.	Labor				
	For Excavation Work:				
	a. Construction Foreman	1	47.42	611.92	29,017.55
	b. Laborer	2	47.42	342.24	32,458.38
	For Spreading and Compaction:				
	a. Construction Foreman	1	57.13	611.92	34,960.90
	b. Laborer	2	57.13	342.24	39,106.48
	Sub-total for A				**135,543.31**
	Name and Capacity	**No. of Equipment**	**No. of Days**	**Daily Rate**	**Amount**
B.	Equipment Cost (2014 ACEL Rates)				
	For Excavation Work:				
	a. Bulldozer (165Hp)	1	47.42	27,032.00	1,281,870.79
	b. Payloader (1.50 cu.m.)	1	47.42	13,864.00	657,437.73
	c. Dump Truck (10 cu.m.)	2	47.42	11,360.00	1,077,393.62
	For Spreading and Compaction:				
	a. Motorized Road Grader, G710A	1	57.13	17,384.00	993,202.25
	b. Vibratory Roller (10 m.t.), SP56	1	57.13	14,768.00	843,741.99
	c. Water Truck	1	14.28	19,600.00	279,952.31
	Sub-total for B				**5,133,598.68**
C.	Total (A + B)				**5,269,141.99**
D.	Output / day 800.00	cu.m./day			
	Name and Specification	**Quantity**	**Unit**	**Unit Cost**	**Total**
E.	Materials				
	Sub-total for E				-
F.	Direct Unit Cost (C + E)				**5,269,141.99**
G.	Overhead Contingencies & Miscellaneous (OCM)		8%		**421,531.36**
H.	Contractors Profit (CP)		8%		**421,531.36**
I.	Value Added Tax (VAT)		5%		**305,610.24**
J.	Total Unit Cost				**140.41**

DETAILED UNIT PRICE ANALYSIS

PROJECT NAME	:	Construction of Bypass and Diversion Roads - Jct. Nat'l. Highway R.T. Lim - Jct. Nat'l. Highway Siocon Road, (Surabay-San Fernandino), Zamboanga Sibugay
Item No./Description	:	105(1)a Subgrade Preparation
Unit of Measurement	:	sq.m.
Output per hour	:	300.00 sq.m./hr.
Quantity	:	90,220.00

	Designation	No. of Person	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Construction Foreman	1	37.59	611.92	23,003.09
	b. Laborer	2	37.59	342.24	25,730.74
	Sub-total for A				**48,733.84**
	Name and Capacity	No. of Equipment	No. of Days	Daily Rate	Amount
B.	Equipment Cost (2014 ACEL Rates)				
	a. Motorized Road Grader, G710A	1	37.59	17,384.00	653,493.53
	b. Vibratory Roller (10 m.t.), SP56	1	37.59	14,768.00	555,153.73
	c. Water Truck	1	9.40	19,600.00	184,199.17
	Sub-total for B				**1,392,846.43**
C.	Total (A + B)				**1,441,580.27**
D.	Output / day 2,400.00	sq.m./day			
	Name and Specification	Quantity	Unit	Unit Cost	Total
E.	Materials				
	Sub-total for E				-
F.	Direct Unit Cost (C + E)				**1,441,580.27**
G.	Overhead Contingencies & Miscellaneous (OCM)		8%		**115,326.42**
H.	Contractors Profit (CP)		8%		**115,326.42**
I.	Value Added Tax (VAT)		5%		**83,611.66**
J.	Total Unit Cost				**19.46**

DETAILED UNIT PRICE ANALYSIS

PROJECT NAME	:	Construction of Bypass and Diversion Roads - Jct. Nat'l. Highway R.T. Lim - Jct. Nat'l. Highway Siocon Road, (Surabay-San Fernandino), Zamboanga Sibugay
Item No./Description	:	200(1) Aggregate Subbase Course, 0.30m. Thick
Unit of Measurement	:	cu.m.
Output per hour	:	50.00 cu.m./hr.
Quantity	:	35,137.00

	Designation	No. of Person	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Construction Foreman	1	87.84	611.92	53,752.58
	b. Laborer	2	87.84	342.24	60,126.43
	Sub-total for A				**113,879.02**
	Name and Capacity	**No. of Equipment**	**No. of Days**	**Daily Rate**	**Amount**
B.	Equipment Cost (2014 ACEL Rates)				
	a. Motorized Road Grader, G710A	1	87.84	17,384.00	1,527,054.02
	b. Vibratory Roller (10 m.t.), SP56	1	87.84	14,768.00	1,297,258.04
	c. Water Truck	1	21.96	19,600.00	430,428.25
	Sub-total for B				**3,254,740.31**
C.	Total (A + B)				**3,368,619.33**
D.	Output / day 400.00	cu.m./day			
	Name and Specification	**Quantity**	**Unit**	**Unit Cost**	**Total**
E.	Materials				
	a. Aggregate Subbase Course (with shrinkage of 15%)	40,407.55	cu.m.	920.55	37,197,089.34
	Sub-total for E				**37,197,089.34**
F.	Direct Unit Cost (C + E)				**40,565,708.66**
G.	Overhead Contingencies & Miscellaneous (OCM)		8%		**3,245,256.69**
H.	Contractors Profit (CP)		8%		**3,245,256.69**
I.	Value Added Tax (VAT)		5%		**2,352,811.10**
J.	Total Unit Cost				**1,406.18**

DETAILED UNIT PRICE ANALYSIS

PROJECT NAME	:	Construction of Bypass and Diversion Roads - Jct. Nat'l. Highway R.T. Lim - Jct. Nat'l. Highway Siocon Road, (Surabay-San Fernandino), Zamboanga Sibugay
Item No./Description	:	300(1) Gravel Surface Course, 0.15m thk.
Unit of Measurement	:	cu.m.
Output per hour	:	50.00 cu.m./hr.
Quantity	:	3,518.00

	Designation	No. of Person	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Construction Foreman	1	8.80	611.92	5,381.84
	b. Laborer	2	8.80	342.24	6,020.00
	Sub-total for A				**11,401.84**
	Name and Capacity	No. of Equipment	No. of Days	Daily Rate	Amount
B.	Equipment Cost (2014 ACEL Rates)				
	a. Motorized Road Grader, G710A	1	8.80	17,384.00	152,892.28
	b. Vibratory Roller (10 m.t.), SP56	1	8.80	14,768.00	129,884.56
	c. Water Truck	1	2.20	19,600.00	43,095.50
	Sub-total for B				**325,872.34**
C.	Total (A + B)				**337,274.18**
D.	Output / day 400.00	cu.m./day			
	Name and Specification	Quantity	Unit	Unit Cost	Total
E.	Materials				
	a. Aggregate Surface Course (Uncrushed Grade A) (with shrinkage of 15%)	4,045.70	cu.m.	1,027.55	4,157,150.94
	Sub-total for E				**4,157,150.94**
F.	Direct Unit Cost (C + E)				**4,494,425.12**
G.	Overhead Contingencies & Miscellaneous (OCM)		8%		**359,554.01**
H.	Contractors Profit (CP)		8%		**359,554.01**
I.	Value Added Tax (VAT)		5%		**260,676.66**
J.	Total Unit Cost				**1,556.06**

DETAILED UNIT PRICE ANALYSIS

PROJECT NAME	:	Construction of Bypass and Diversion Roads - Jct. Nat'l. Highway R.T. Lim - Jct. Nat'l. Highway Siocon Road, (Surabay-San Fernandino), Zamboanga Sibugay
Item No./Description	:	311(1)a Portland Cement Concrete Pavement, 0.15m. Thick
Unit of Measurement	:	sq.m.
Output per hour	:	107.33 sq.m./hr.
Quantity	:	5,086.50

	Designation	No. of Person	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Construction Foreman	1	5.92	611.92	3,624.95
	b. Skilled Laborer	4	5.92	443.20	10,501.90
	c. Laborer	12	5.92	342.24	24,328.76
	Sub-total for A				38,455.61
	Name and Capacity	No. of Equipment	No. of Days	Daily Rate	Amount
B.	Equipment Cost (2014 ACEL Rates)				
	a. Batching Plant (30 cu.m.)	1	5.92	14,072.00	83,361.16
	b. Concrete Screeder (5.5 Hp)	1	5.92	4,360.00	25,828.22
	c. Transit Mixer (5 cu.m.)	4	5.92	10,544.00	249,846.53
	d. Payloader (1.50 cu.m.), LX80-2C	1	5.92	13,864.00	82,128.99
	e. Water Truck	1	5.92	19,600.00	116,108.50
	f. Concrete Saw, Blade Ø 14" (7.5 Hp)	1	5.92	261.04	1,546.38
	g. Concrete Vibrator	2	5.92	730.00	8,648.90
	h. Bar Cutter, Single Phase	1	0.59	1,758.00	1,041.42
	Minor Tools (5% of Labor)				1,922.78
	Sub-total for B				570,432.87
C.	Total (A + B)				608,888.48
D.	Output / day 858.64	sq.m./day			
	Name and Specification	Quantity	Unit	Unit Cost	Total
E.	Materials				
	a. Reinforcing Steel Bars (Grade 60)	1,678.55	kg.	41.29	69,314.47
	b. Curing Compound	1,475.09	lit.	45.00	66,378.83
	c. Asphalt Sealant	610.38	lit.	71.00	43,336.98
	d. Steel Forms (Rental)	2,339.79	l.m.	40.00	93,591.60
	e. Sand	419.64	cu.m.	1,540.55	646,469.79
	f. Gravel	762.98	cu.m.	1,340.55	1,022,804.61
	g. Cement	7,273.70	bags	275.18	2,001,545.15
	h. Concrete Saw (diamond blade 14")	0.76	pcs.	8,000.00	6,103.80
	i. Pipe Sleeve, 2" Ø	39.67	ln.m.	318.00	12,616.55
	j. Grease/Tar	7.63	lit.	282.00	2,151.59
	Sub-total for E				3,964,313.37
F.	Direct Unit Cost (C + E)				4,573,201.85
G.	Overhead Contingencies & Miscellaneous (OCM)		8%		365,856.15
H.	Contractors Profit (CP)		8%		365,856.15
I.	Value Added Tax (VAT)		5%		265,245.71
J.	Total Unit Cost				1,095.09

DETAILED UNIT PRICE ANALYSIS

Name of Project : Construction of Bypass and Diversion Roads - Jct. Nat'l. Highway R.T. Lim - Jct. Nat'l. Highway Siocon Road, (Surabay-San Fernandino), Zamboanga Sibugay

Item No. & Description : 311(1)e1 PCC Pavement Conventional Method, 280 mm thk.

Unit of Measurement : sq.m.

Output per Hour : 115.00 sq.m./hr.

Quantity : 61,428.00 *Note: Use two (2) gang of labor and equipment*

	Designation	No. of Persons	No. of Days	Rate/Day	Amount
A.	Labor				
	a. Construction Foreman	1	66.77	611.92	40,857.63
	b. Skilled Laborer	8	66.77	443.20	236,738.17
	c. Laborer	24	66.77	342.24	548,429.18
	Sub-total for A				**826,024.99**
	Name and Capacity	No. of Units	No. of Days	Rate/Day	Amount
B.	Equipment Cost (2014 ACEL Rates)				
	a. Transit Mixer (5 cu.m.)	8	66.77	10,544.00	5,632,146.37
	b. Concrete Vibrator	4	66.77	730.00	194,967.13
	c. Batching Plant (30cu.m.)	2	66.77	14,076.00	1,879,696.80
	d. Payloader (1.5 cu.m.), LX80-2C	2	66.77	13,864.00	1,851,386.50
	e. Concrete Screeder (5.5 HP)	2	66.77	4,360.00	582,230.61
	f. Water Truck	2	66.77	19,600.00	2,617,366.96
	g. Concrete Saw, Blade Dia. 14" (7.5 HP)	2	66.77	261.04	34,859.05
	h. Bar Cutter, Single Phase	2	6.68	1,758.00	23,476.18
	Minor Tools (5% of Labor)				41,301.25
	Sub-Total				**12,857,430.85**
C.	Total (A + B)				**13,683,455.84**
D.	Output per Day	920 sq.m./day			
	Name and Specification	No. of Units	Unit	Unit Cost	Amount
E.	Materials				
	a. Reinforcing Steel Bars	30,714.00	kg.	41.29	1,268,315.45
	b. Curing Compound	17,814.12	lit.	45.00	801,635.40
	c. Asphalt Sealant	10,442.76	lit.	71.00	741,435.96
	d. Steel Forms (Rental)	28,256.88	l.m.	60.00	1,695,412.80
	e. Sand	9,459.91	cu.m.	1,540.55	14,573,448.51
	f. Gravel	17,199.84	cu.m.	1,340.55	23,057,211.11
	g. Cement	163,398.48	bag	275.18	44,963,314.50
	h. Concrete Saw (diamond blade 14"Ø)	9.21	pc.	8,000.00	73,713.60
	i. Pipe Sleeves, 2" dia.	479.14	ln.m.	318.00	152,366.01
	j. Grease/Tar	479.14	lit.	282.00	135,117.03
	Sub-Total				**87,461,970.38**
F.	Direct Cost (C + E)				**101,145,426.21**
G.	Overhead Contigencies and Miscellaneous (OCM)		8%		**8,091,634.10**
H.	Contractor's profit (CP)		8%		**8,091,634.10**
I.	Value Added Tax (VAT)		5%		**5,866,434.72**
J.	Total Unit Cost				**2,005.52**

DETAILED UNIT PRICE ANALYSIS

PROJECT NAME	:	Construction of Bypass and Diversion Roads - Jct. Nat'l. Highway R.T. Lim - Jct. Nat'l. Highway Siocon Road, (Surabay-San Fernandino), Zamboanga Sibugay
Item No./Description	:	404(1)a Reinforcing Steel Bar, (Grade 40)
Unit of Measurement	:	Kg.
Output per hour	:	180.00 Kg./hr.
Quantity	:	3,641.00

Designation	No. of Person	No. of Days	Daily Rate	Amount
A. Labor				
a. Construction Foreman	1	2.53	611.92	1,547.22
b. Skilled Laborer	2	2.53	443.20	2,241.24
c. Laborer	8	2.53	342.24	6,922.75
Sub-total for A				**10,711.22**
Name and Capacity	**No. of Equipment**	**No. of Days**	**Daily Rate**	**Amount**
B. Equipment Cost (2014 ACEL Rates)				
a. Cargo Truck (10T, 270 Hp)	1	0.38	9,696.00	3,677.41
b. Bar Cutter	1	1.26	1,758.00	2,222.53
c. Bar Bender	1	1.26	2,812.00	3,555.03
Sub-total for B				**9,454.97**
C. Total (A + B)				**20,166.18**
D. Output / day 1,440.00	Kg./day			
Name and Specification	**Quantity**	**Unit**	**Unit Cost**	**Total**
E. Materials				
a. Reinforcing Steel Bars, Grade 40 (w/ 5% wastage)	3,823.05	kg.	39.29	150,207.63
b. Tie Wire (2% of RSB)	76.46	kg.	80.00	6,116.88
Sub-total for E				**156,324.51**
F. Direct Unit Cost (C + E)				**176,490.70**
G. Overhead Contingencies & Miscellaneous (OCM)		10%		**17,649.07**
H. Contractors Profit (CP)		8%		**14,119.26**
I. Value Added Tax (VAT)		5%		**10,412.95**
J. Total Unit Cost				**60.06**

DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Construction of Bypass and Diversion Roads - Jct. Nat'l. Highway R.T. Lim - Jct. Nat'l. Highway Siocon Road, (Surabay-San Fernandino), Zamboanga Sibugay

Item No./Description : 404(1)b Reinforcing Steel Bar, (Grade 60)

Unit of Measurement : Kg.

Output per hour : 180.00 Kg./hr.

Quantity : 11,621.00

Designation	No. of Person	No. of Days	Daily Rate	Amount
A. Labor				
a. Construction Foreman	1	8.07	611.92	4,938.28
b. Skilled Laborer	2	8.07	443.20	7,153.37
c. Laborer	8	8.07	342.24	22,095.39
Sub-total for A				**34,187.05**
Name and Capacity	**No. of Equipment**	**No. of Days**	**Daily Rate**	**Amount**
B. Equipment Cost (2014 ACEL Rates)				
a. Truck Mounted Crane (21-25 MT)	1	1.21	14,888.00	18,022.23
b. Cargo Truck (10T, 270 Hp)	1	1.21	9,696.00	11,737.21
c. Bar Cutter	1	4.04	1,758.00	7,093.65
d. Bar Bender	1	4.04	2,812.00	11,346.62
Sub-total for B				**48,199.71**
C. Total (A + B)				**82,386.76**
D. Output / day 1,440.00	Kg./day			
Name and Specification	**Quantity**	**Unit**	**Unit Cost**	**Total**
E. Materials				
a. Reinforcing Steel Bars, Grade 60 (w/ 5% wastage)	12,202.05	kg.	41.29	503,876.03
b. Tie Wire (2% of RSB)	244.04	kg.	80.00	19,523.28
Sub-total for E				**523,399.31**
F. Direct Unit Cost (C + E)				**605,786.07**
G. Overhead Contingencies & Miscellaneous (OCM)		8%		**48,462.89**
H. Contractors Profit (CP)		8%		**48,462.89**
I. Value Added Tax (VAT)		5%		**35,135.59**
J. Total Unit Cost				**63.49**

DETAILED UNIT PRICE ANALYSIS

PROJECT NAME	:	Construction of Bypass and Diversion Roads - Jct. Nat'l. Highway R.T. Lim - Jct. Nat'l. Highway Siocon Road, (Surabay-San Fernandino), Zamboanga Sibugay
Item No./Description	:	405(1)a3 Structural Concrete, Class "A" (20.68 Mpa)
Unit of Measurement	:	cu.m.
Output per hour	:	10.00 cu.m./hr.
Quantity	:	90.00

Designation	No. of Person	No. of Days	Daily Rate	Amount
A. Labor				
a. Construction Foreman	1	1.13	611.92	688.41
b. Skilled Laborer	4	1.13	443.20	1,994.40
c. Laborer	8	1.13	342.24	3,080.16
Installation & Removal of Formworks/Falseworks:				
a. Skilled Laborer	4	22.50	443.20	39,888.00
b. Laborer	8	22.50	342.24	61,603.20
Sub-total for A				**107,254.17**
Name and Capacity	**No. of Equipment**	**No. of Days**	**Daily Rate**	**Amount**
B. Equipment Cost (2014 ACEL Rates)				
a. Transit Mixer (5 m^3)	2	1.13	10,544.00	23,724.00
b. Concrete Vibrator	2	1.13	730.00	1,642.50
c. Batching Plant (30 m^3)	1	0.56	14,076.00	7,917.75
d. Payloader (1.50 m^3), LX80-2C	1	0.56	13,864.00	7,798.50
e. Water Truck (16000L)	1	0.28	19,600.00	5,512.50
f. Crawler Crane w/ Bucket (36-40 MT)	1	0.56	15,216.00	8,559.00
Sub-total for B				**55,154.25**
C. Total (A + B)				**162,408.42**
D. Output / day 80.00	cu.m./day			
Name and Specification	**Quantity**	**Unit**	**Unit Cost**	**Total**
E. Materials				
a. Good Lumber - 4 uses	2,250.00	bd.ft.	40.00	90,000.00
b. Marine Plywood (1/2" x 4' x 8') - 4 uses	33.75	pcs.	795.00	26,831.25
c. Assorted CW Nails	90.00	kg.	65.00	5,850.00
d. Portland Cement	855.00	bag	275.18	235,275.35
e. Sand	45.00	cu.m.	1,540.55	69,324.66
f. Gravel	90.00	cu.m.	1,340.55	120,649.32
g. Curing Compound	90.00	lit.	45.00	4,050.00
Sub-total for E				**551,980.58**
F. Direct Unit Cost (C + E)				**714,389.00**
G. Overhead Contingencies & Miscellaneous (OCM)		8%		**57,151.12**
H. Contractors Profit (CP)		8%		**57,151.12**
I. Value Added Tax (VAT)		5%		**41,434.56**
J. Total Unit Cost				**9,668.06**

DETAILED UNIT PRICE ANALYSIS

PROJECT NAME	: Construction of Bypass and Diversion Roads - Jct. Nat'l. Highway R.T. Lim - Jct. Nat'l. Highway Siocon Road, (Surabay-San Fernandino), Zamboanga Sibugay
Item No./Description	: 405(1)b3 Structural Concrete, Class "A" (27.58 Mpa)
Unit of Measurement	: cu.m.
Output per hour	: 10.00 cu.m./hr.
Quantity	: 129.50

Designation	No. of Person	No. of Days	Daily Rate	Amount
A. Labor				
a. Construction Foreman	1	1.62	611.92	990.55
b. Skilled Laborer	4	1.62	443.20	2,869.72
c. Laborer	8	1.62	342.24	4,432.01
Installation & Removal of Formworks/Falseworks:				
a. Skilled Laborer	4	32.38	443.20	57,394.40
b. Laborer	8	32.38	342.24	88,640.16
Sub-total for A				**154,326.83**
Name and Capacity	**No. of Equipment**	**No. of Days**	**Daily Rate**	**Amount**
B. Equipment Cost (2014 ACEL Rates)				
a. Transit Mixer (5 m^3)	2	1.62	10,544.00	34,136.20
b. Concrete Vibrator	2	1.62	730.00	2,363.38
c. Batching Plant (30 m^3)	1	0.81	14,076.00	11,392.76
d. Payloader (1.50 m^3), LX80-2C	1	0.81	13,864.00	11,221.18
e. Water Truck (16000L)	1	0.40	19,600.00	7,931.88
f. Crawler Crane w/ Bucket (36-40 MT)	1	0.81	15,216.00	12,315.45
Sub-total for B				**79,360.84**
C. Total (A + B)				**233,687.67**
D. Output / day 80.00	cu.m./day			
Name and Specification	**Quantity**	**Unit**	**Unit Cost**	**Total**
E. Materials				
a. Good Lumber - 4 uses	3,237.50	bd.ft.	40.00	129,500.00
b. Marine Plywood (1/2" x 4' x 8') - 4 uses	48.56	pcs.	795.00	38,607.19
c. Assorted CW Nails	129.50	kg.	65.00	8,417.50
d. Portland Cement	1,359.75	bag	275.18	374,170.35
e. Sand	64.75	cu.m.	1,540.55	99,750.48
f. Gravel	129.50	cu.m.	1,340.55	173,600.97
g. Curing Compound	129.50	lit.	45.00	5,827.50
Sub-total for E				**829,873.99**
F. Direct Unit Cost (C + E)				**1,063,561.66**
G. Overhead Contingencies & Miscellaneous (OCM)		8%		**85,084.93**
H. Contractors Profit (CP)		8%		**85,084.93**
I. Value Added Tax (VAT)		5%		**61,686.58**
J. Total Unit Cost				**10,003.23**

DETAILED UNIT PRICE ANALYSIS

PROJECT NAME	:	Construction of Bypass and Diversion Roads - Jct. Nat'l. Highway R.T. Lim - Jct. Nat'l. Highway Siocon Road, (Surabay-San Fernandino), Zamboanga Sibugay
Item No./Description	:	407(8) Lean Concrete
Unit of Measurement	:	cu.m.
Output per hour	:	1.40 cu.m./hr.
Quantity	:	8.50

Designation	No. of Person	No. of Days	Daily Rate	Amount
A. Labor				
a. Construction Foreman	1	0.76	611.92	464.40
b. Skilled Laborer	2	0.76	443.20	672.71
c. Laborer	4	0.76	342.24	1,038.94
Sub-total for A				**2,176.06**
Name and Capacity	**No. of Equipment**	**No. of Days**	**Daily Rate**	**Amount**
B. Equipment Cost (2014 ACEL Rates)				
a. One Bagger Mixer	1	0.76	1,376.00	1,044.29
b. Concrete Vibrator	1	0.76	730.00	554.02
c. Water Truck	1	0.08	19,600.00	1,487.50
Minor Tools (5% of Labor)				108.80
Sub-total for B				**3,194.61**
C. Total (A + B)				**5,370.67**
D. Output / day 11.20	cu.m./day			
Name and Specification	**Quantity**	**Unit**	**Unit Cost**	**Total**
E. Materials				
a. Form Lumber	148.75	bd.ft.	40.00	5,950.00
b. Marine Plywood (1/2" x 4' x 8')	3.40	pcs.	795.00	2,703.00
c. Assorted CW Nails	8.50	kg.	65.00	552.50
d. Portland Cement	68.00	bag	275.18	18,711.96
e. Sand	4.25	cu.m.	1,540.55	6,547.33
f. Gravel	8.50	cu.m.	1,340.55	11,394.66
Sub-total for E				**45,859.44**
F. Direct Unit Cost (C + E)				**51,230.11**
G. Overhead Contingencies & Miscellaneous (OCM)		8%		**4,098.41**
H. Contractors Profit (CP)		8%		**4,098.41**
I. Value Added Tax (VAT)		5%		**2,971.35**
J. Total Unit Cost				**7,340.97**

DETAILED UNIT PRICE ANALYSIS

PROJECT NAME	:	Construction of Bypass and Diversion Roads - Jct. Nat'l. Highway R.T. Lim - Jct. Nat'l. Highway Siocon Road, (Surabay-San Fernandino), Zamboanga Sibugay	
Item No./Description	:	500(1)b3 Reinf. Conc. Culvert Pipe, (910mm dia.)	
Unit of Measurement	:	ln.m.	
Output per hour	:	2.00 ln.m./hr.	
Quantity	:	145.00	*Note: Use two (2) gangs of equipment and labor*

Designation	No. of Person	No. of Days	Daily Rate	Amount
A. Labor				
a. Construction Foreman	1	9.06	611.92	5,545.53
b. Skilled Laborer	4	9.06	443.20	16,066.00
c. Laborer	8	9.06	342.24	24,812.40
Sub-total for A				**46,423.93**
Name and Capacity	**No. of Equipment**	**No. of Days**	**Daily Rate**	**Amount**
B. Equipment Cost (2014 ACEL Rates)				
a. Backhoe (0.80 cu.m)	2	4.53	12,296.00	111,432.50
b. Plate Compactor (5 Hp)	2	4.53	984.00	8,917.50
Minor Tools (10% of Labor)				4,642.39
Sub-total for B				**124,992.39**
C. Total (A + B)				**171,416.32**
D. Output / day 16.00 ln.m./day				
Name and Specification	**Quantity**	**Unit**	**Unit Cost**	**Total**
E. Materials				
a. Portland Cement	156.60	bag	275.18	43,092.54
b. Sand	8.85	cu.m	1,540.55	13,626.15
c. R.C. Pipes (910mm dia.)	145.00	pc.	1,911.00	277,095.00
d. Sand Bedding/Selected Sandy Soil	18.56	cu.m	1,540.55	28,592.57
Sub-total for E				**362,406.25**
F. Direct Unit Cost (C + E)				**533,822.57**
G. Overhead Contingencies & Miscellaneous (OCM)		8%		**42,705.81**
H. Contractors Profit (CP)		8%		**42,705.81**
I. Value Added Tax (VAT)		5%		**30,961.71**
J. Total Unit Cost				**4,484.11**

DETAILED UNIT PRICE ANALYSIS

PROJECT NAME	:	Construction of Bypass and Diversion Roads - Jct. Nat'l. Highway R.T. Lim - Jct. Nat'l. Highway Siocon Road, (Surabay-San Fernandino), Zamboanga Sibugay
Item No./Description	:	500(1)b4 Reinf. Conc. Culvert Pipe, (1070mm dia.)
Unit of Measurement	:	ln.m.
Output per hour	:	1.00 ln.m./hr.
Quantity	:	16.00

	Designation	No. of Person	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Construction Foreman	1	2.00	611.92	1,223.84
	b. Skilled Laborer	2	2.00	443.20	1,772.80
	c. Laborer	4	2.00	342.24	2,737.92
	Sub-total for A				**5,734.56**
	Name and Capacity	No. of Equipment	No. of Days	Daily Rate	Amount
B.	Equipment Cost (2014 ACEL Rates)				
	a. Backhoe (0.80 cu.m)	1	1.00	12,296.00	12,296.00
	b. Plate Compactor (5 Hp)	1	1.00	984.00	984.00
	Minor Tools (10% of Labor)				573.46
	Sub-total for B				**13,853.46**
C.	Total (A + B)				**19,588.02**
D.	Output / day	8.00	ln.m./day		
	Name and Specification	Quantity	Unit	Unit Cost	Total
E.	Materials				
	a. Portland Cement	19.87	bag	275.18	5,468.29
	b. Sand	1.12	cu.m	1,540.55	1,725.41
	c. R.C. Pipes - Class IV (1070mm dia.)	16.00	pc.	2,800.00	44,800.00
	d. Sand Bedding/Selected Sandy Soil	2.38	cu.m	1,540.55	3,672.67
	Sub-total for E				**55,666.37**
F.	Direct Unit Cost (C + E)				**75,254.39**
G.	Overhead Contingencies & Miscellaneous (OCM)		8%		**6,020.35**
H.	Contractors Profit (CP)		8%		**6,020.35**
I.	Value Added Tax (VAT)		5%		**4,364.75**
J.	Total Unit Cost				**5,728.74**

DETAILED UNIT PRICE ANALYSIS

PROJECT NAME	:	Construction of Bypass and Diversion Roads - Jct. Nat'l. Highway R.T. Lim - Jct. Nat'l. Highway Siocon
Item No./Description	:	505(5) Grouted Riprap,Class "A"
Unit of Measurement	:	cu.m.
Output per hour	:	2.50 cu.m./hr.
Quantity	:	172.00

Note: Use two (2) gang of labor and equipment

	Designation	No. of Person	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Construction Foreman	1	8.60	611.92	5,262.51
	b. Skilled Laborer	4	8.60	443.20	15,246.08
	c. Laborer	16	8.60	342.24	47,092.22
	Sub-total for A				**67,600.82**
	Name and Capacity	**No. of Equipment**	**No. of Days**	**Daily Rate**	**Amount**
B.	Equipment Cost (2014 ACEL Rates)				
	a. One Bagger Mixer	2	8.60	10,544.00	181,356.80
	b. Water Truck	2	0.43	19,600.00	16,856.00
	Minor Tools (5% of Labor)				33,800.41
	Sub-total for B				**232,013.21**
C.	Total (A + B)				**299,614.02**
D.	Output / day 20.00	cu.m./day			
	Name and Specification	**Quantity**	**Unit**	**Unit Cost**	**Total**
E.	Materials				
	a. Cement	516.00	bag	275.18	141,990.74
	b. Sand	43.00	cu.m.	1,540.55	66,243.56
	c. Gravel Fill	2.58	cu.m.	1,340.55	3,458.61
	d. Weep Holes 50 mm.(2") Ø PVC Pipe	51.60	ln.m.	318.00	16,408.80
	e. Filter Cloth	2.58	sq.m.	167.00	430.86
	f. Boulders	180.60	cu.m.	1,340.55	242,102.97
	Miscellaneous (1% of Materials)				4,706.36
	Sub-total for E				**475,341.90**
F.	Direct Unit Cost (C + E)				**774,955.92**
G.	Overhead Contingencies & Miscellaneous (OCM)		8%		**61,996.47**
H.	Contractors Profit (CP)		8%		**61,996.47**
I.	Value Added Tax (VAT)		5%		**44,947.44**
J.	Total Unit Cost				**5,487.77**

DETAILED UNIT PRICE ANALYSIS

PROJECT NAME	:	Construction of Bypass and Diversion Roads - Jct. Nat'l. Highway R.T. Lim - Jct. Nat'l. Highway Siocon Road, (Surabay-San Fernandino), Zamboanga Sibugay
Item No./Description	:	506(1) Stone Masonry
Unit of Measurement	:	cu.m.
Output per hour	:	1.6000 cu.m./hr.
Quantity	:	117.50

	Designation	No. of Person	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Construction Foreman	1	9.18	611.92	5,617.23
	b. Skilled Laborer	2	9.18	443.20	8,136.88
	c. Laborer	8	9.18	342.24	25,133.25
	Sub-total for A				**38,887.36**
	Name and Capacity	No. of Equipment	No. of Days	Daily Rate	Amount
B.	Equipment Cost (2014 ACEL Rates)				
	a. One Bagger Mixer	1	9.18	10,544.00	96,790.63
	b. Water Truck	1	0.46	19,600.00	8,996.09
	c. Backhoe (wheel type 0.28 cu.m.)	1	0.92	7,376.00	6,770.94
	Minor Tools (10% of Labor)				3,888.74
	Sub-total for B				**116,446.39**
C.	Total (A + B)				**155,333.75**
D.	Output / day 12.80	cu.m./day			
	Name and Specification	Quantity	Unit	Unit Cost	Total
E.	Materials				
	a. Cement	646.25	bag	275.18	177,832.39
	b. Sand	35.25	cu.m.	1,540.55	54,304.32
	c. Gravel Fill	2.35	cu.m.	1,340.55	3,150.29
	d. Weep Holes 50 mm.(2") Ø PVC Pipe	35.25	ln.m.	318.00	11,209.50
	e. Filter Cloth	1.76	sq.m.	167.00	294.34
	f. Boulders	123.38	cu.m.	1,340.55	165,390.11
	Miscellaneous (1% of Materials)				4,121.81
	Sub-total for E				**416,302.75**
F.	Direct Unit Cost (C + E)				**571,636.50**
G.	Overhead Contingencies & Miscellaneous (OCM)		8%		**45,730.92**
H.	Contractors Profit (CP)		8%		**45,730.92**
I.	Value Added Tax (VAT)		5%		**33,154.92**
J.	Total Unit Cost				**5,925.56**

DETAILED UNIT PRICE ANALYSIS

PROJECT NAME	:	Construction of Bypass and Diversion Roads - Jct. Nat'l. Highway R.T. Lim - Jct. Nat'l. Highway Siocon Road, (Surabay-San Fernandino), Zamboanga Sibugay
Item No./Description	:	603(3)a1 Metal Guardrails (Metal Beam) including Conc. Post
Unit of Measurement	:	ln.m.
Output per hour	:	12.60 ln.m./hr.
Quantity	:	1,968.00

Note: Use three (3) gang of labor and equipment

	Designation	No. of Person	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Construction Foreman	1	19.52	611.92	11,947.01
	b. Skilled Laborer	6	19.52	443.20	51,917.71
	c. Laborer	12	19.52	342.24	80,181.94
	Sub-total for A				**144,046.67**
	Name and Capacity	No. of Equipment	No. of Days	Daily Rate	Amount
B.	Equipment Cost (2014 ACEL Rates)				
	a. One Bagger Mixer	3	9.76	1,376.00	40,297.14
	b. Concrete Vibrator	3	9.76	730.00	21,378.57
	c. Water Truck	3	0.98	19,600.00	57,400.00
	d. Cargo Truck (10 T)	3	4.88	9,696.00	141,977.14
	Minor Tools (5% of Labor)				7,202.33
	Sub-total for B				**268,255.19**
C.	Total (A + B)				**412,301.86**
D.	Output / day 100.80	each/day			
	Name and Specification	Quantity	Unit	Unit Cost	Total
E.	Materials				
	a. Portland Cement	649.44	bags	275.18	178,710.20
	b. Sand	35.42	cu.m.	1,540.55	54,572.37
	c. Gravel	70.85	cu.m.	1,340.55	94,975.14
	d. Metal Beam Guardrail (305mm width)	1,968.00	ln.m.	1,650.00	3,247,200.00
	e. Marine Plywood (½" x 4' x 8') - 4 uses	123.00	pcs.	795.00	97,785.00
	f. Form Lumber, Good - 4 uses	3,936.00	bd.ft.	40.00	157,440.00
	g. Reinforcing Steel Bar, Gr.40	7,872.00	kgs.	39.00	307,008.00
	h. Tie Wires (2% of RSB)	157.44	kgs.	80.00	12,595.20
	i. Assorted CWN	157.44	kgs.	65.00	10,233.60
	j. Bolts, Nuts and Washers 5/8"Ø x 9"	984.00	pcs.	30.00	29,520.00
	k. Bolts, Nuts and Washers 5/8"Ø x 1"	3,936.00	pcs.	21.00	82,656.00
	Sub-total for E				**4,272,695.52**
F.	Direct Unit Cost (C + E)				**4,684,997.37**
G.	Overhead Contingencies & Miscellaneous (OCM)		8%		**374,799.79**
H.	Contractors Profit (CP)		8%		**374,799.79**
I.	Value Added Tax (VAT)		5%		**271,729.85**
J.	Total Unit Cost				**2,899.56**

DETAILED UNIT PRICE ANALYSIS

PROJECT NAME	:	Construction of Bypass and Diversion Roads - Jct. Nat'l. Highway R.T. Lim - Jct. Nat'l. Highway Siocon Road, (Surabay-San Fernandino), Zamboanga Sibugay
Item No./Description	:	603(4)a Metal Beam End Piece (Fish Tail)
Unit of Measurement	:	each
Output per hour	:	6.00 ea./hr.
Quantity	:	50.00

	Designation	No. of Person	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Construction Foreman	1	1.04	611.92	637.42
	b. Skilled Laborer	1	1.04	443.20	461.67
	c. Laborer	2	1.04	342.24	713.00
	Sub-total for A				1,812.08
	Name and Capacity	No. of Equipment	No. of Days	Daily Rate	Amount
B.	Equipment Cost (2014 ACEL Rates)				
	a. Cargo Truck (10 T)	1	1.04	9,696.00	10,100.00
	Minor Tools (10% of Labor)				71.30
	Sub-total for B				10,171.30
C.	Total (A + B)				11,983.38
D.	Output / day 48.00	each/day			
	Name and Specification	Quantity	Unit	Unit Cost	Total
E.	Materials				
	a. Metal Guardrail End Piece (Fish Tail)	50.00	each	1,350.00	67,500.00
	Sub-total for E				67,500.00
F.	Direct Unit Cost (C + E)				79,483.38
G.	Overhead Contingencies & Miscellaneous (OCM)		8%		6,358.67
H.	Contractors Profit (CP)		8%		6,358.67
I.	Value Added Tax (VAT)		5%		4,610.04
J.	Total Unit Cost				1,936.22

DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Construction of Bypass and Diversion Roads - Jct. Nat'l. Highway R.T. Lim - Jct. Nat'l. Highway Siocon
Item No./Description : 620(1)a1 Chevron Signs (450mm x 600mm)
Unit of Measurement : each
Output per hour : 1.00 each/hr.
Quantity : 98.00

	Designation	No. of Person	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Construction Foreman	1	12.25	611.92	7,496.02
	b. Skilled Laborer	1	12.25	443.20	5,429.20
	c. Laborer	2	12.25	342.24	8,384.88
	Sub-total for A				**21,310.10**
	Name and Capacity	No. of Equipment	No. of Days	Daily Rate	Amount
B.	Equipment Cost (2014 ACEL Rates)				
	a. Cargo Truck (5 T)	1	3.06	6,264.00	19,183.50
	Minor Tools (10% of Labor)				2,131.01
	Sub-total for B				**21,314.51**
C.	Total (A + B)				**42,624.61**
D.	Output / day	8.00	each/day		
	Name and Specification	Quantity	Unit	Unit Cost	Total
E.	Materials				
	a. Portland Cement	47.04	bags	275.18	12,944.27
	b. Sand	2.45	cu.m.	1,540.55	3,774.34
	c. Gravel	4.90	cu.m.	1,340.55	6,568.69
	d. Form Lumber, Good - 4 uses	196.00	bd.ft.	40.00	7,840.00
	e. 3" Ø G.I. Pipe	318.50	ln.m.	500.00	159,250.00
	f. G.I. Flat Bar, 1½" x ⅛"	490.00	kgs.	50.00	24,500.00
	g. G.I. Bolts w/ Nuts & Washers, 5mmØ	294.00	pcs.	15.00	4,410.00
	h. G.I. Bolts w/ Nuts & Washers, 2mmØ	1,176.00	pcs.	10.00	11,760.00
	i. Sign Face, 3mm thk. Aluminum Sheet	196.00	pcs.	4,500.00	882,000.00
	j. Assorted CWN	7.84	Kg.	65.00	509.60
	Sub-total for E				**1,113,556.90**
F.	Direct Unit Cost (C + E)				**1,156,181.51**
G.	Overhead Contingencies & Miscellaneous (OCM)		8%		**92,494.52**
H.	Contractors Profit (CP)		8%		**92,494.52**
I.	Value Added Tax (VAT)		5%		**67,058.53**
J.	Total Unit Cost				**14,369.68**

DETAILED UNIT PRICE ANALYSIS

PROJECT NAME	: Construction of Bypass and Diversion Roads - Jct. Nat'l. Highway R.T. Lim - Jct. Nat'l. Highway Siocon Road, (Surabay-San Fernandino), Zamboanga Sibugay
Item No./Description	: 612(1) Reflectorized Thermoplastic Pavement Markings (White)
Unit of Measurement	: sq.m.
Output per hour	: 25.00 sq.m./hr.
Quantity	: 2,029.50

	Designation	No. of Person	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Construction Foreman	1	10.15	611.92	6,209.46
	b. Skilled Laborer	2	10.15	443.20	8,994.74
	c. Laborer	6	10.15	342.24	20,837.28
	Sub-total for A				36,041.48
	Name and Capacity	No. of Equipment	No. of Days	Daily Rate	Amount
B.	Equipment Cost (2014 ACEL Rates)				
	a. Cargo Truck /Delivery Truck (5T)	1	10.15	6,264.00	63,563.94
	b. Applicator Machine	1	10.15	750.00	7,610.63
	c. Kneading Machine	1	10.15	1,500.00	15,221.25
	Minor Tools (10% of Labor)				3,604.15
	Sub-total for B				89,999.96
C.	Total (A + B)				126,041.45
D.	Output / day 200.00	sq.m./day			
	Name and Specification	Quantity	Unit	Unit Cost	Total
E.	Materials				
	a. Thermoplastic Paint (White)	659.59	bag	1,585.00	1,045,446.19
	b. Glass Beads (Pre-Mix)	66.97	bag	2,500.00	167,433.75
	c. Primer	243.54	liter	160.00	38,966.40
	d. LPG (50kg.)	8.12	cyl.	3,250.00	26,383.50
	e. LPG (12kg.)	4.06	cyl.	780.00	3,166.02
	f. Calsumine	253.69	kg.	10.00	2,536.88
	Sub-total for E				1,283,932.73
F.	Direct Unit Cost (C + E)				1,409,974.18
G.	Overhead Contingencies & Miscellaneous (OCM)		8%		112,797.93
H.	Contractors Profit (CP)		8%		112,797.93
I.	Value Added Tax (VAT)		5%		81,778.50
J.	Total Unit Cost				846.19

DETAILED UNIT PRICE ANALYSIS

PROJECT NAME	:	Construction of Bypass and Diversion Roads - Jct. Nat'l. Highway R.T. Lim - Jct. Nat'l. Highway Siocon Road, (Surabay-San Fernandino), Zamboanga Sibugay
Item No./Description	:	612(2) Reflectorized Thermoplastic Pavement Markings (Yellow)
Unit of Measurement	:	sq.m.
Output per hour	:	25.00 sq.m./hr.
Quantity	:	480.50

Designation	No. of Person	No. of Days	Daily Rate	Amount
A. Labor				
a. Construction Foreman	1	2.40	611.92	1,470.14
b. Skilled Laborer	2	2.40	443.20	2,129.58
c. Laborer	6	2.40	342.24	4,933.39
Sub-total for A				**8,533.10**
Name and Capacity	**No. of Equipment**	**No. of Days**	**Daily Rate**	**Amount**
B. Equipment Cost (2014 ACEL Rates)				
a. Cargo Truck	1	2.4	6,264.00	15,049.26
b. Applicator Machine	1	2.4	750.00	1,801.88
c. Kneading Machine	1	2.4	1,500.00	3,603.75
d. Traffic Safety Devices	1	2.4	500.00	1,201.25
Minor Tools (10% of Labor)				853.31
Sub-total for B				**22,509.45**
C. Total (A + B)				**31,042.55**
D. Output / day 200.00	sq.m./day			
Name and Specification	**Quantity**	**Unit**	**Unit Cost**	**Total**
E. Materials				
a. Thermoplastic Paint (Yellow)	156.16	bag	1,800.00	281,092.50
b. Glass Beads	15.86	bag	2,500.00	39,641.25
c. Primer	57.66	lit.	175.00	10,090.50
d. LPG (50kg.)	1.92	cyl.	3,250.00	6,246.50
e. LPG (12kg.)	0.96	cyl.	780.00	749.58
f. Calsumine	60.06	Kg.	10.00	600.63
Miscellaneous (5% of Materials)				
Sub-total for E				**338,420.96**
F. Direct Unit Cost (C + E)				**369,463.50**
G. Overhead Contingencies & Miscellaneous (OCM)		8%		**29,557.08**
H. Contractors Profit (CP)		8%		**29,557.08**
I. Value Added Tax (VAT)		5%		**21,428.88**
J. Total Unit Cost				**936.54**

DETAILED UNIT PRICE ANALYSIS

PROJECT NAME	: Construction of Bypass and Diversion Roads - Jct. Nat'l. Highway R.T. Lim - Jct. Nat'l. Highway Siocon Road, (Surabay-San Fernandino), Zamboanga Sibugay
Item No./Description	: 622(1)a Bio-Engineering Solutions (Coco-Net), CGN 400
Unit of Measurement	: sq.m.
Output per hour	: 50.00 sq.m./hr.
Quantity	: 19,380.00

	Designation	No. of Person	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Construction Foreman	1	48.45	611.92	29,647.52
	b. Laborer	8	48.45	342.24	132,652.22
	Sub-total for A				**162,299.75**
	Name and Capacity	No. of Equipment	No. of Days	Daily Rate	Amount
B.	Equipment Cost (2014 ACEL Rates)				
	a. Water Truck (16000 L)	1	12.11	19,600.00	237,405.00
	Minor Tools (10% of Labor)				16,229.97
	Sub-total for B				**253,634.97**
C.	Total (A + B)				**415,934.72**
D.	Output / day 400.00	Sq.m./day			
	Name and Specification	Quantity	Unit	Unit Cost	Total
E.	Materials				
	a. Erosion Control Net CGN 400 w/5% wastage (includes bamboo pegs)	20,349.00	sq.m.	89.00	1,811,061.00
	Sub-total for E				**1,811,061.00**
F.	Direct Unit Cost (C + E)				**2,226,995.72**
G.	Overhead Contingencies & Miscellaneous (OCM)		8%		**178,159.66**
H.	Contractors Profit (CP)		8%		**178,159.66**
I.	Value Added Tax (VAT)		5%		**129,165.75**
J.	Total Unit Cost				**139.96**

DETAILED UNIT PRICE ANALYSIS

PROJECT NAME	:	Construction of Bypass and Diversion Roads - Jct. Nat'l. Highway R.T. Lim - Jct. Nat'l. Highway Siocon Road, (Surabay-San Fernandino), Zamboanga Sibugay
Item No./Description	:	622(1)b Bio-Engineering Solutions (Coco-Net), CGN 700
Unit of Measurement	:	sq.m.
Output per hour	:	50.00 sq.m./hr.
Quantity	:	6,124.00

	Designation	No. of Person	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Construction Foreman	1	15.31	611.92	9,368.50
	b. Laborer	8	15.31	342.24	41,917.56
	Sub-total for A				**51,286.05**
	Name and Capacity	No. of Equipment	No. of Days	Daily Rate	Amount
B.	Equipment Cost (2014 ACEL Rates)				
	a. Water Truck (16000 L)	1	3.83	19,600.00	75,019.00
	Minor Tools (10% of Labor)				5,128.61
	Sub-total for B				**80,147.61**
C.	Total (A + B)				**131,433.66**
D.	Output / day 400.00	Sq.m./day			
	Name and Specification	Quantity	Unit	Unit Cost	Total
E.	Materials				
	a. Erosion Control Net CGN 700 w/5% wastage (includes bamboo pegs)	6,430.20	sq.m.	110.00	707,322.00
	Sub-total for E				**707,322.00**
F.	Direct Unit Cost (C + E)				**838,755.66**
G.	Overhead Contingencies & Miscellaneous (OCM)		8%		**67,100.45**
H.	Contractors Profit (CP)		8%		**67,100.45**
I.	Value Added Tax (VAT)		5%		**48,647.83**
J.	Total Unit Cost				**166.82**

DETAILED UNIT PRICE ANALYSIS

PROJECT NAME	:	Construction of Bypass and Diversion Roads - Jct. Nat'l. Highway R.T. Lim - Jct. Nat'l. Highway Siocon Road, (Surabay-San Fernandino), Zamboanga Sibugay
Item No./Description	:	622(2)b Bio-Engineering Coco Fascine Erosion Control System
Unit of Measurement	:	ln.m.
Output per hour	:	15.00 ln.m./hr.
Quantity	:	2,253.50

Designation	No. of Person	No. of Days	Daily Rate	Amount
A. Labor				
a. Construction Foreman	1	18.78	611.92	11,491.35
b. Laborer	8	18.78	342.24	51,415.86
Sub-total for A				**62,907.20**
Name and Capacity	No. of Equipment	No. of Days	Daily Rate	Amount
B. Equipment Cost (2014 ACEL Rates)				
Minor Tools (10% of Labor)				6,290.72
Sub-total for B				**6,290.72**
C. Total (A + B)				**69,197.92**
D. Output / day 120.00	ln.m./day			
Name and Specification	Quantity	Unit	Unit Cost	Total
E. Materials				
a. Coco Fiber Roll (CGR200) (price includes nylon ropes & live stakes)	2,366.18	ln.m.	445.00	1,052,947.88
Sub-total for E				**1,052,947.88**
F. Direct Unit Cost (C + E)				**1,122,145.80**
G. Overhead Contingencies & Miscellaneous (OCM)		8%		**89,771.66**
H. Contractors Profit (CP)		8%		**89,771.66**
I. Value Added Tax (VAT)		5%		**65,084.46**
J. Total Unit Cost				**606.51**

DETAILED UNIT PRICE ANALYSIS

PROJECT NAME	:	Construction of Bypass and Diversion Roads - Jct. Nat'l. Highway R.T. Lim - Jct. Nat'l. Highway Siocon Road, (Surabay-San Fernandino), Zamboanga Sibugay
Item No./Description	:	622(3)a Bio-Engineered Erosion Control System (vegetation)
Unit of Measurement	:	sq.m.
Output per hour	:	125.00 sq.m./hr.
Quantity	:	25,504.00

Note: Use two (2) gang of labor and equipment

Designation	No. of Person	No. of Days	Daily Rate	Amount
A. Labor				
a. Construction Foreman	1	25.50	611.92	15,606.41
b. Laborer	4	25.50	342.24	34,913.96
Sub-total for A				**50,520.36**
Name and Capacity	**No. of Equipment**	**No. of Days**	**Daily Rate**	**Amount**
B. Equipment Cost (2014 ACEL Rates)				
a. Hydroseeding machine	2	25.50	7,616.00	388,476.93
b. Water Truck (16000 gal.)	2	25.50	19,600.00	999,756.80
Sub-total for B				**1,388,233.73**
C. Total (A + B)				**1,438,754.09**
D. Output / day	1,000.00	sq.m./day		
Name and Specification	**Quantity**	**Unit**	**Unit Cost**	**Total**
E. Materials				
a. Grass Cover (includes grass seeds, mulch, cocpeat & binding agent for hydroseeding)	26,779.20	sq.m.	98.00	2,624,361.60
Sub-total for E				**2,624,361.60**
F. Direct Unit Cost (C + E)				**4,063,115.69**
G. Overhead Contingencies & Miscellaneous (OCM)		8%		**325,049.26**
H. Contractors Profit (CP)		8%		**325,049.26**
I. Value Added Tax (VAT)		5%		**235,660.71**
J. Total Unit Cost				**194.04**

DETAILED UNIT PRICE ANALYSIS

Name of Project	:	Construction of Bypass and Diversion Roads - Jct. Nat'l. Highway R.T. Lim - Jct. Nat'l. Highway Siocon Road, (Surabay-San Fernandino), Zamboanga Sibugay
Item No./Description	:	A.1.1(3) Construction of Field Office for the Engineer, (7.00m x 9.00m)
Unit of Measurement	:	l.s.
Output per Hour	:	1.00
Quantity	:	1.00

	Description	No. of Persons	No. of Days	Rate/Day	Amount
A.	Labor				
	a. Construction Foreman	1	24.00	611.92	14,686.08
	c. Skilled	3	24.00	443.20	31,910.40
	d. Laborer	5	24.00	342.24	41,068.80
	Sub-total for A				**87,665.28**
	Name and Capacity	No. of Units	No. of Days	Rate/Day	Amount
B.	Equipment, (2014 Acel Rates)				
	a. Bagger Mixer	1	15.00	1,376.00	20,640.00
	b. Water Truck (16000L)	1	1.00	8,520.00	8,520.00
	Minor Tools (10% of Labor)				8,766.53
	Sub-total for B				**37,926.53**
C.	Total (A + B)				**125,591.81**
D.	Output / day -	Sq.m./day			
	Name and Specification of Materials	No. of Units	Unit	Unit Cost	Amount
E.	Materials				
	I. Earthworks (Excavation,Embankment,Bedding)				
	a. Gravel Bedding G-1	5.00	cu.m.	850.00	4,250.00
	b. Selected Fill	6.00	cu.m.	600.00	3,600.00
	c. Soil Poisoning	1.00	lit.	1,183.00	1,183.00
	II. Concrete Works (Footing,Column,Beams) Slab on Grade)				
	a. Portland Cement	74.00	bag	275.18	20,363.01
	b. Crushed Gravel G-1"	10.00	cu.m.	850.00	8,500.00
	c. Washed Sand	4.00	cu.m.	850.00	3,400.00
	III. Reinforcing Bars (Footing Columns,Beams) Slab on Grade)				
	a. Deformed Round Bar,Grade 40	550.00	kg.	39.00	21,450.00
	b. No. 16 G.I. Tie Wire	12.00	kg.	80.00	960.00
	IV. Formworks (Columns & Beams)				
	a. Coco Lumber	240.00	bd.ft.	18.00	4,320.00
	b. Ordinary Plywood, 1/4"x4'x8'	10.00	pc.	395.00	3,950.00
	c. CWN,Assorted	5.00	kg.	65.00	325.00
	V. Masonry Works (Masonry Wall & Plastering)				
	a. CHB 6" Thk.	840.00	pc.	25.00	21,000.00
	b. Portland Cement	70.00	bag	275.18	19,262.31
	c. Washed Sand	5.00	cu.m.	1,300.00	6,500.00
	d. 10mm dia. x6m RSB	150.00	kg.	39.00	5,850.00
	e. No. 16 G.I. Tie Wire	1.53	kg.	80.00	122.40
	VI. Doors And Window				
	a. D-1,Hollow Core Flush Type Swing Door w/ Marine Plywood Facing and Fixed Glass Transom complete with accessories, 0.90m.x2.10m.	2.00	set	1,814.40	3,628.80
	b. W-1,Jalousie Window with Clear Glass Blades on Standard Aluminum Casing and Fixed Clear Glass Transom on Wooden Jamb complete with accessories,1.40mx1.20m	2.00	set	1,273.44	2,546.88
	c. W-2,Jalousie Window with Clear Glass Blades onStandard Aluminum Casing and Fixed Clear Glass Transom on Wooden Jamb complete with accessories,2.80mx1.20m	2.00	set	2,546.88	5,093.76

Name and Specification of Materials		No. of Units	Unit	Unit Cost	Amount
VII.	***Steel Works***				
a.	65 x 65 x 6mm. L	820.00	kg.	48.00	39,360.00
b.	50 x 50 x 6mm. L	400.00	kg.	48.00	19,200.00
c.	50 x 50 x 4mm. L	240.00	kg.	48.00	11,520.00
d.	Purlins C- 150 x 50 x 3mm.	31.79	kg.	48.00	1,525.92
e.	16mm. Dia. Cross Bracing	58.34	kg.	48.00	2,800.32
f.	16mm. Dia. Turn Buckle	24.00	pc.	136.00	3,264.00
g.	12mm. Thk. Base Plate	42.38	kg.	42.00	1,779.96
h.	10mm. Thk. Batten Plate	29.08	kg.	42.00	1,221.36
i.	12mm. Dia. Sag Rod	13.12	kg.	48.00	629.76
j.	20mm. Dia x 350mm. Anchor Bolts	12.00	pc.	100.00	1,200.00
k.	Welding Rod	20.00	kg.	138.00	2,760.00
l.	Primer , Zinc Cromate	2.00	gal.	791.00	1,582.00
VIII	***Roofing Works***				
a.	Pre-Painted G.I. Roofing Sheet Long Span, Ga.26	80.00	sq.m.	420.00	33,600.00
b.	Pre-Painted Ridge Roll Ga.24, 0.60m. Width	8.00	ln.m.	190.00	1,520.00
c.	Pre-Painted Flashing, Ga.24	9.00	ln.m.	190.00	1,710.00
d.	Teckscrew 1-1/2"	920.00	pc.	1.00	920.00
e.	Roof Sealant	1.00	lit.	435.00	435.00
IX	***Carpentry Works***				
a.	Rough Lumber, Sun Dried Tanguile	650.00	bd.ft.	40.00	26,000.00
b.	Plywood, Ordinary 1/4" x 4"x 8"	30.00	pc.	395.00	11,850.00
c.	Finishing Nails	3.00	kg.	80.00	240.00
d.	Common Wire Nails	6.00	kg.	65.00	390.00
X	***Electrical Works***				
a.	2 x 40w Flourescent Lighting Fixture	5.00	set	1,260.00	6,300.00
b.	Porcelain Ceiling Outlet w/ Female Socket	1.00	pc.	60.00	60.00
c.	Duplex Convenience Outlet	4.00	pc.	170.00	680.00
d.	Two Gang Switch	2.00	pc.	132.00	264.00
e.	3.5mm2 THW	2.00	roll	1,200.00	2,400.00
f.	8.0mm2 THW	20.00	m.	38.00	760.00
g.	19mm. dia. PVC Pipe	24.00	pc.	96.00	2,304.00
h.	19mm. dia. PVC Coupling	15.00	pc.	9.00	135.00
i.	19mm. dia. PVC Elbow	20.00	pc.	9.00	180.00
j.	19mm. dia. PVC Clamp	40.00	pc.	15.00	600.00
k.	25mm. dia. RSC Pipe	3.00	pc.	766.00	2,298.00
l.	25mm. dia. RSC Coupling	2.00	pc.	23.00	46.00
m.	25mm. dia. RSC Elbow	2.00	pc.	21.00	42.00
n.	25mm. dia. RSC Clamp	9.00	pc.	25.00	225.00
o.	25mm. dia. Service Entrance Cap	1.00	pc.	201.00	201.00
p.	Wire Holder	1.00	pc.	90.00	90.00
q.	Utility Box	6.00	pc.	32.00	192.00
r.	Octagonal Box	7.00	pc.	34.00	238.00
s.	Electrical Tape (Big)	6.00	pc.	31.00	186.00
t.	Panel Board (Side Main w/ Branches)	1.00	set	1,627.00	1,627.00
XI	***Painting Works***				
a.	Latex, Flat	4.00	gal.	605.00	2,420.00
b.	Latex, Semi Gloss	4.00	gal.	605.00	2,420.00
c.	Neutralizer	10.00	ltr.	120.00	1,200.00
d.	Acri Color	2.00	qrt.	180.00	360.00
e.	Masonry Putty	1.00	kg.	148.00	148.00
f.	Enamel, Flat Wall	3.00	gal.	870.00	2,610.00
g.	Enamel, Semi Gloss	3.00	gal.	870.00	2,610.00
h.	Paint Thinner	3.00	gal.	322.00	966.00
i.	Glazing Putty	1.00	gal.	150.00	150.00
j.	Paint Brush	4.00	pc.	85.00	340.00
k.	Paint Roller and Tray	2.00	pc.	75.00	150.00
l.	Laquer Thinner	1.00	gal.	450.00	450.00

	Name and Specification of Materials	No. of Units	Unit	Unit Cost	Amount
	XII ***Plumbing Works***				
	a. Water Closet (Including Fittings and Accessories)	1.00	set	8,820.00	8,820.00
	b. Lavatory (Including Fittings and Accessories)	1.00	set	4,390.00	4,390.00
	c. 1/2" G.I. Pipe S-40	2.00	pc.	400.00	800.00
	d. 1/2" Water Faucet (Bronze)	2.00	pc.	315.00	630.00
	e. 1/2" Assorted Connector	6.00	pc.	35.00	210.00
	f. 4" PVC series 1000	1.00	pc.	735.00	735.00
	g. 2" PVC series 1000	1.00	pc.	346.00	346.00
	h. 4" PVC Assorted Connector	6.00	pc.	73.00	438.00
	i. 2" PVC Assorted Connector	8.00	pc.	50.00	400.00
	Sub-total for E				**349,234.48**
F.	Direct Cost (C + E)				**474,826.29**
G.	Overhead Contigencies and Miscellaneous (OCM)		8%		**37,986.10**
H.	Contractor's profit (CP)		8%		**37,986.10**
I.	Value Added Tax (VAT)		5%		**27,539.92**
J.	Total Unit Cost				**578,338.42**

DETAILED UNIT PRICE ANALYSIS

PROJECT NAME	:	Construction of Bypass and Diversion Roads - Jct. Nat'l. Highway R.T. Lim - Jct. Nat'l. Highway Siocon Road, (Surabay-San Fernandino), Zamboanga Sibugay
Item No./Description	:	A.1.1(11) Provision of Furnitures/Fixtures. Equipment and Appliances for the Field Office for the Field Engineers
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				
	Name and Capacity	No. of Equipment	No. of Days	Daily Rate	Amount
B.	Equipment Cost				
	Sub-total for B				
C.	Total (A + B)				
D.	Output / day				
	Name and Specification	Quantity	Unit	Unit Cost	Total
E.	Materials				
	Office Equipment/Facilities & Supplies				
	a. Office Table,Excecutive Type w/ chair	1.00	unit	7,000.00	7,000.00
	b. 1/2" Wooden Ofiice Table	1.00	each	2,500.00	2,500.00
	c. Drawing Table	1.00	unit	5,000.00	5,000.00
	d. Electric Desk Fan	2.00	unit	1,800.00	3,600.00
	e. Folding Beds, Good Quality	2.00	each	2,700.00	5,400.00
	f. 6" Sleeping Bed w/pillows and Blanket	2.00	each	5,000.00	10,000.00
	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	doz.	2,000.00	2,000.00
	k. 6 Seater Dining Table	1.00	each	2,800.00	2,800.00
	l. Monoblock Backrest Chair	1.00	doz.	2,500.00	2,500.00
	m. Plastic Pail & Basin	2.00	pc.	500.00	1,000.00
	n. White Board	1.00	unit	7,000.00	7,000.00
	o. Bond Paper (Long)	15.00	ream	300.00	4,500.00
	p. Bond Paper (Short)	15.00	ream	270.00	4,050.00
	q. Yellow Pad	4.00	pad	35.00	140.00
	r. White Board Marker (Assorted colors)	8.00	pc.	75.00	600.00
	s. Sign Pen (Assoreted Colors)	2.00	doz.	800.00	1,600.00
	t. Ball Pen	2.00	box	180.00	360.00
	u. Mechanical Pencil	3.00	unit	350.00	1,050.00
	v. Pencil Lead, No.5	3.00	box	145.00	435.00
	w. Puncher	2.00	unit	250.00	500.00
	x. Staple Padw/wire	2.00	unit	275.00	550.00
	y. Cutter Blade	2.00	box	238.50	477.00
	z. Scotch Tape	6.00	roll	48.00	288.00
	aa. Brown Envelop	6.00	doz.	125.00	750.00
	bb. Folder, long	5.00	doz.	85.00	425.00
	cc. Folder, short	3.00	doz.	70.00	210.00
	dd. Data File Folder	6.00	pc.	85.00	510.00
	Lighting/Water Fixtures:				
	a. Electric Bill	11.00	mo.	2,000.00	22,000.00
	b. Water Bill	11.00	mo.	1,500.00	16,500.00
	c. LPG Gasul (11 Kg.)	11.00	mo.	900.00	9,900.00
	Sub-total for E				**123,345.00**
F.	Direct Unit Cost (C + E)				**123,345.00**
G.	Overhead Contingencies & Miscellaneous (OCM)		8%		-
H.	Contractors Profit (CP)		8%		**9,867.60**
I.	Value Added Tax (VAT)		5%		**6,660.63**
J.	Total Unit Cost				**139,873.23**

DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Construction of Bypass and Diversion Roads - Jct. Nat'l. Highway R.T. Lim - Jct. Nat'l. Highway Siocon Road, (Surabay-San Fernandino), Zamboanga Sibugay

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

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	306.00	443.20	135,619.20
	Sub-total for A				**135,619.20**
	Name and Capacity	No. of Equipment	No. of Mos.	Monthly Rate	Amount
B.	Equipment Cost				-
	Sub-total for B				-
C.	Total (A + B)				**135,619.20**
D.	Output / day				
	Name and Specification	Quantity	Unit	Unit Cost	Total
E.	Materials				
	a. Fuel (20 Liters per Day)	6,120.00	lit.	45.00	275,400.00
	b. Engine Oil Lubr icants, Greasing (20 % of Fuel)	1.00	l.s.	55,080.00	55,080.00
	c. Tires	5.00	each	10,000.00	50,000.00
	d. Spare Parts	1.00	l.s.	30,000.00	30,000.00
	Sub-total for E				**410,480.00**
F.	Direct Unit Cost (C + E)				**546,099.20**
G.	Overhead Contingencies & Miscellaneous (OCM)		8%		-
H.	Contractors Profit (CP)		8%		-
I.	Value Added Tax (VAT)		5%		**27,304.96**
J.	Total Unit Cost				**573,404.16**

DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Construction of Bypass and Diversion Roads - Jct. Nat'l. Highway R.T. Lim - Jct. Nat'l. Highway Siocon Road, (Surabay-San Fernandino), Zamboanga Sibugay

Item No./Description : B.4(1) Construction Survey and Staking

Unit of Measurement : km

Output per hour : 0.04

Quantity : 8.58

Designation	No. of Person	No. of Days	Daily Rate	Amount
A. Labor				
(For Field Works) Output: 0.30 km/day				
a. Geodetic Engineer	1	14.29	906.36	12,953.80
b. Skilled Laborer	2	14.29	443.20	12,668.53
c. Laborer	2	14.29	342.24	9,782.67
(For Office Works) Output: 0.10 km/day				
a. Geodetic Engineer	1	42.88	906.36	38,861.41
b. Skilled Laborer	2	42.88	443.20	38,005.60
Sub-total for A				112,272.01
Name and Capacity	**No. of Equipment**	**No. of Days**	**Daily Rate**	**Amount**
B. Equipment Cost (2014 ACEL Rates)				
a. Total Station w/ complete accessories	1	14.29	1,000.00	14,292.12
Minor Tools (10% of Labor)				11,227.20
Sub-total for B				25,519.32
C. Total (A + B)				137,791.33
D. Output / day	0.32 km/day			
Name and Specification	**Quantity**	**Unit**	**Unit Cost**	**Total**
E. Materials				
a. Standard Stake Plan (800mm x 910mm)	50.00	pcs	250.00	12,500.00
b. Blue Printing	300.00	pcs	40.00	12,000.00
Miscellaneous (5% of Materials)				1,225.00
Sub-total for E				25,725.00
F. Direct Unit Cost (C + E)				163,516.33
G. Overhead Contingencies & Miscellaneous (OCM)			8%	13,081.31
H. Contractors Profit (CP)			8%	13,081.31
I. Value Added Tax (VAT)			5%	9,483.95
J. Total Unit Cost				23,225.26

DETAILED UNIT PRICE ANALYSIS

PROJECT NAME	:	Construction of Bypass and Diversion Roads - Jct. Nat'l. Highway R.T. Lim - Jct. Nat'l. Highway Siocon Road, (Surabay-San Fernandino), Zamboanga Sibugay	
Item No./Description	:	B.5	Project Billboard/Signboard
Unit of Measurement	:	unit	
Output per hour	:		
Quantity	:	2.00	

Designation	No. of Person	No. of Days	Daily Rate	Amount
A. Labor				
a. Construction Foreman	1	2.0	611.92	1,223.84
b. Carpenter	1	2.0	443.20	886.40
c. Laborer	2	2.0	342.24	1,368.96
Sub-total for A				**3,479.20**
Name and Capacity	**No. of Equipment**	**No. of Days**	**Daily Rate**	**Amount**
B. Equipment Cost (2014 ACEL Rates)				
Sub-total for B				-
C. Total (A + B)				**3,479.20**
D. Output / day				
Name and Specification	**Quantity**	**Unit**	**Unit Cost**	**Total**
E. Materials				
a. 1/4" thk. 4' x 8' Marine Plywood	2.00	pc.	445.00	890.00
b. Tarpaulin (4' x 8')	2.00	pc.	1,200.00	2,400.00
c. Assorted Sizes Lumber	150.00	bd.ft.	40.00	6,000.00
d. C.W. Nails, Assorted Sizes	2.00	kg.	65.00	130.00
Sub-total for E				**9,420.00**
F. Direct Unit Cost (C + E)				**12,899.20**
G. Overhead Contingencies & Miscellaneous (OC		8%		**1,031.94**
H. Contractors Profit (CP)		8%		**1,031.94**
I. Value Added Tax (VAT)		5%		**748.15**
J. Total Unit Cost				**7,855.61**

DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Construction of Bypass and Diversion Roads - Jct. Nat'l. Highway R.T. Lim - Jct. Nat'l. Highway Siocon Road, (Surabay-San Fernandino), Zamboanga Sibugay

Item No./Description : B.7 Occupational 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	76.50	611.92	46,811.88
b. First Aider	1	306.00	443.20	135,619.20
Sub-total for A				**182,431.08**
Name and Capacity	**No. of Equipment**	**No. of Days**	**Daily Rate**	**Amount**
B. Equipment Cost (2014 ACEL Rates)				
Sub-total for B				-
C. Total (A + B)				**182,431.08**
D. Output / day				
Name and Specification	**Quantity**	**Unit**	**Unit Cost**	**Total**
E. Materials				
a. Pairs, Rubber Boots Men, Long with Steel Toe, Black	60.00	pair	400.00	24,000.00
b. Pairs, Working Gloves (Leather Materials)	60.00	pair	175.00	10,500.00
c. Pcs., Rain Coats (Rainforced, Hip Length Small, Medium & Large)	60.00	pc.	150.00	9,000.00
d. Hard Hat	60.00	pc.	250.00	15,000.00
e. Medical Supplies	1.00	set	5,000.00	5,000.00
Sub-total for E				**63,500.00**
F. Direct Unit Cost (C + E)				**245,931.08**
G. Overhead Contingencies & Miscellaneous (OCM)		8%		-
H. Contractors Profit (CP)		8%		**19,674.49**
I. Value Added Tax (VAT)		5%		**13,280.28**
J. Total Unit Cost				**278,885.84**

DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Construction of Bypass and Diversion Roads - Jct. Nat'l. Highway R.T. Lim - Jct. Nat'l. Highway Siocon Road, (Surabay-San Fernandino), Zamboanga Sibugay

Item No./Description : B.9 Mobilization & 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				-
Name and Capacity	**No. of Equipment**	**No. of Days**	**Daily Rate**	**Amount**
B. Equipment Cost (2014 ACEL Rates)				
a. Transit Mixer (5 cu.m.)	1	6.00	10,544.00	63,264.00
b. Payloader (1.50 cu.m.), LX80-2C	2	6.00	13,864.00	166,368.00
c. Dump Truck (10 cu.m.)	2	6.00	11,360.00	136,320.00
d. Bulldozer (155 HP), D65A-8	2	6.00	27,032.00	324,384.00
e. Concrete Paver, GP-2000 Slipform			-	-
f. Motorized Road Grader, G710A	2	6.00	17,384.00	208,608.00
g. Vibratory Roller (10 m.t.), SP56	1	6.00	14,768.00	88,608.00
h. Water Truck	1	6.00	19,600.00	117,600.00
i. Cargo Truck (10T)	2	6.00	6,264.00	75,168.00
j. Conc. Mixer (1 bagger)	2	6.00	1,376.00	16,512.00
Sub-total for B				**1,196,832.00**
C. Total (A + B)				**1,196,832.00**
D. Output / day				
Name and Specification	**Quantity**	**Unit**	**Unit Cost**	**Total**
E. Materials				-
Sub-total for E				-
F. Direct Unit Cost (C + E)				**1,196,832.00**
G. Overhead Contingencies & Miscellaneous (OCM)		8%		-
H. Contractors Profit (CP)		8%		-
I. Value Added Tax (VAT)		5%		**59,841.60**
J. Total Unit Cost				**1,256,673.60**