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 : April 11, 2018

NAME OF PROJECT :

Construction/Repair/Rehabilitation/Improvement of Various Infrastructure Including Local Projects - National Roads and Bridges - National Roads - Road Widening Along Basilan Circumferential Road (BCR) Isabela - Maluso Road, Isabela City, Basilan Including Road Right of Way (ROW)

Appropriation	:	P 120,000,000.00
Source of Funds	:	CY-2018 GAA
Issued Obligated Authority	:	
Released	:	
Cal. Days to Complete	:	204 Calendar Days
Desirable Starting Date	:	upon approval
Mode of Implementation	:	by contract

LOCATION:

Isabela City, Basilan

PROJECT CATEGORY :

NATIONAL ROAD

PROJECT DESCRIPTION :

Scope of Work	:	Road Widening
Road Width	:	6.70 m.
Roadbed Width	:	12.00 m.
Subbase Course	:	0.30 m. thk.
Surface Course	:	0.15 m. thk.

Station Limits:

				Length
I	2+000.00	-	5+000.00	3,000.00

Net Length: **3,000.00 ln.m. / 3.00 km.**
Lane Kilometer: **6.00 lane km.**

MINIMUM EQUIPMENT REQUIREMENT : TECHNICAL PERSONNEL REQUIRED :

Description	No.	Description	No.	Description	No.
Dump Truck	12	Water Pump	1	Project Engineer	1
Transti 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	0.55	L.S.	1.00	460,867.21	460,867.21
A.1.1(11)	Provision of Furnitures/Fixtures, Equipment and Appliances for the Field Office for the Field Engineer	0.35	L.S.	1.00	288,740.00	288,740.00
A.1.2(5)	Operation and Maintenance of 4x4 Pick Up Type Service Vehicle for the Engineer	0.27	month	6.80	228,879.28	33,658.72
PART B - OTHER GENERAL REQUIREMENTS						
B.4(1)	Construction Survey & Staking	0.14	km.	3.00	118,534.09	39,511.36
B.5	Project Billboard/Signboard	0.02	each	2.00	13,249.20	6,624.60
B.7	Occupation Safety and Health Program	0.29	month	6.80	239,588.64	35,233.62
B.9	Mobilization & Demobilization	0.84	L.S.	1.00	696,735.00	696,735.00
PART C - EARTHWORKS						
100(3)a2	Individual Removal of Trees	0.46	each	232.00	385,743.21	1,662.69
100(4)	Individual Removal of Trees	0.04	each	2.00	36,984.92	18,492.46
101(1)	Removal of Structures & Obstructions	1.51	l. s.	1.00	1,255,179.40	1,255,179.40
101(2)	Removal of Actual Structures/Obstruction	0.00	each	8.00	2,894.05	361.76
101(3)b2	Removal of Actual Structures/Obstruction	0.01	sqm	50.50	6,665.07	131.98
101(4)a1	Removal of Actual Structures/Obstruction	0.02	ln.m.	40.00	17,793.64	444.84
102(2)	Surplus Common Excavation	4.18	cu.m.	24,450.50	3,483,095.98	142.46
103(1)a	Structure Excavation	0.16	cu.m.	581.50	133,216.71	229.09
103(3)	Foundation Fill	0.04	cu.m.	10.00	31,851.48	3,185.15
103(6)a	Pipe Culverts and Drain Excavation	0.03	cu.m.	110.50	25,427.78	230.12
104(1)a	Embankment from Roadway Excavation	0.86	cu.m.	3,093.00	713,135.16	230.56
105(1)a	Subgrade Preparation	0.59	sq.m.	30,749.00	491,322.90	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	29.50	cu.m.	11,489.50	24,588,937.46	2,140.12
PART E - SURFACE COURSES						
300(1)	Gravel Surface Course	3.01	cu.m.	1,240.00	2,511,151.90	2,025.12
311(1)a	Portland Cement Concrete Pavement	1.89	sq.m.	1,485.00	1,576,498.72	1,061.62
311(1)e1	Portland Cement Concrete Pavement	46.82	sq.m.	20,150.00	39,016,755.94	1,936.32
PART F - BRIDGE CONSTRUCTION						
404(1)a	Reinforcing Steel	0.67	kg.	11,864.00	561,506.97	47.33
405(1)a3	Structural Concrete, Class "A"	3.07	cu.m.	293.00	2,558,791.92	8,733.08
PART G - DRAINAGE AND SLOPE PROTECTION STRUCTURES						
500(1)b3	Pipe Culverts	0.38	ln.m.	68.00	313,493.01	4,610.19
500(1)b4	Pipe Culverts	0.03	ln.m.	7.00	23,614.60	3,373.51
505(2)a	Grouted Riprap, Class "A"	0.08	cu.m.	16.50	64,253.84	3,894.17
506(1)	Stone Masonry	0.33	cu.m.	59.00	274,744.09	4,656.68
PART H - MISCELLANEOUS STRUCTURES						
611(1)	Trees, Furnishing & Transplanting	3.10	each	301.00	2,586,702.20	8,593.70
612(1)	Reflectorized Thermoplastic Pavement Markings (White)	0.76	sq.m.	832.00	633,030.05	760.85
T O T A L		**100.00**			**P 83,339,384.42**	

NAME OF PROJECT : **Construction/Repair/Rehabilitation/Improvement of Various Infrastructure Including Local Projects - National Roads and Bridges - National Roads - Road Widening Along Basilan Circumferential Road (BCR) Isabela - Maluso Road, Isabela City, Basilan Including Road Right of Way (ROW)**

Zamboanga City

BREAKDOWN OF ESTIMATED EXPENDITURES	% OF TOTAL		AMOUNT
I. ESTIMATED COST			
A. DIRECT COST			
A.1. Labor	1.09		1,310,023.74
A.2. Equipment Expenses	11.85		14,223,652.25
A.3. Materials	56.50		67,805,708.44
SUB-TOTAL (DIRECT COST)	**69.45**	**P**	**83,339,384.42**
B. INDIRECT COST (Per D.O. # 197, s. 2016)			
B.1. Overhead, Contingency & Misc. (10 % Max. of D.C.)	6.82		8,188,544.15
B.2. Profit (8 % Max. of D.C.)	5.49		6,593,101.61
C. VAT (5% of D.C. and I.C. Per D.O. # 197, s. 2016)	4.09		4,906,051.51
SUBTOTAL (CONTRACT COST)	**85.86**	**P**	**103,027,081.70**
II. ESTIMATED GOVERNMENT EXPENDITURES			
1. Engineering and Administrative Overhead (3.5%)	3.50		4,200,000.00
2. Detailed Engineering (1%)			
3. Reserved for the Payment of RROW	10.64		12,772,918.30
4. Physical Reserved			
TOTAL ESTIMATED PROJECT COST	**100.00**	**P**	**120,000,000.00**

Prepared : **ANTONIELLE T. DURAN** 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/Repair/Rehabilitation/Improvement of Various Infrastructure Including Local Projects - National Roads and Bridges - National Roads - Road Widening Along Basilan Circumferential Road (BCR) Isabela - Maluso

Stations: 2+000.00 to 5+000.00

Length: 3,000.00 ln.m.

Contract Duration: 204 CD

ITEM NO.	DESCRIPTION	QUANTITY	UNIT	ESTIMATED DIRECT COST	MARK-UPS IN % OCM	MARK-UPS IN % PROFIT	TOTAL MARK-UPS %	TOTAL MARK-UPS VALUE	VAT	TOTAL INDIRECT COST	TOTAL COST	UNIT COST
(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	1.00	L.S.	460,867.21	10.00	8.00	18.00	82,956.10	27,191.17	110,147.26	571,014.48	571,014.48
A.1.1(11)	Provision of Furnitures/Fixtures, Equipment and Appliances for the Field Office for the Field Engineer	1.00	L.S.	288,740.00	-	8.00	8.00	23,099.20	15,591.96	38,691.16	327,431.16	327,431.16
A.1.2(5)	Operation and Maintenance of 4x4 Pick Up Type Service Vehicle for the Engineer	6.80	month	228,879.28	-	-	-	-	11,443.96	11,443.96	240,323.24	35,341.65
	TOTAL OF PART A			*978,486.49*				*106,055.30*	*54,227.09*	*160,282.39*	***1,138,768.88***	
PART B - OTHER GENERAL REQUIREMENTS												
B.4(1)	Construction Survey & Staking	3.00	km.	118,534.09	10.00	8.00	18.00	21,336.14	6,993.51	28,329.65	146,863.73	48,954.58
B.5	Project Billboard/Signboard	2.00	each	13,249.20	10.00	8.00	18.00	2,384.86	781.70	3,166.56	16,415.76	8,207.88
B.7	Occupation Safety and Health Program	6.80	month	239,588.64	-	8.00	8.00	19,167.09	12,937.79	32,104.88	271,693.52	39,954.93
B.9	Mobilization & Demobilization	1.00	L.S.	696,735.00	-	-	-	-	34,836.75	34,836.75	731,571.75	731,571.75
	TOTAL OF PART B			*1,068,106.93*				*42,888.08*	*55,549.75*	*98,437.83*	***1,166,544.76***	
PART C - EARTHWORKS												
100(3)a2	Individual Removal of Trees	232.00	each	385,743.21	10.00	8.00	18.00	69,433.78	22,758.85	92,192.63	477,935.84	2,060.07
100(4)	Individual Removal of Trees	2.00	each	36,984.92	10.00	8.00	18.00	6,657.29	2,182.11	8,839.40	45,824.32	22,912.16
101(1)	Removal of Structures & Obstructions	1.00	l. s.	1,255,179.40	10.00	8.00	18.00	225,932.29	74,055.58	299,987.88	1,555,167.28	1,555,167.28
101(2)	Removal of Actual Structures/Obstruction	8.00	each	2,894.05	10.00	8.00	18.00	520.93	170.75	691.68	3,585.73	448.22
101(3)b2	Removal of Actual Structures/Obstruction	50.50	sqm	6,665.07	10.00	8.00	18.00	1,199.71	393.24	1,592.95	8,258.02	163.53
101(4)a1	Removal of Actual Structures/Obstruction	40.00	ln.m.	17,793.64	10.00	8.00	18.00	3,202.86	1,049.82	4,252.68	22,046.32	551.16
102(2)	Surplus Common Excavation	24,450.50	cu.m.	3,483,095.98	10.00	8.00	18.00	626,957.28	205,502.66	832,459.94	4,315,555.92	176.50
103(1)a	Structure Excavation	581.50	cu.m.	133,216.71	10.00	8.00	18.00	23,979.01	7,859.79	31,838.79	165,055.50	283.84
103(3)	Foundation Fill	10.00	cu.m.	31,851.48	10.00	8.00	18.00	5,733.27	1,879.24	7,612.50	39,463.99	3,946.40
103(6)a	Pipe Culverts and Drain Excavation	110.50	cu.m.	25,427.78	10.00	8.00	18.00	4,577.00	1,500.24	6,077.24	31,505.02	285.11
104(1)a	Embankment from Roadway Excavation	3,093.00	cu.m.	713,135.16	10.00	8.00	18.00	128,364.33	42,074.97	170,439.30	883,574.47	285.67
105(1)a	Subgrade Preparation	30,749.00	sq.m.	491,322.90	10.00	8.00	18.00	88,438.12	28,988.05	117,426.17	608,749.07	19.80
	TOTAL OF PART C			*6,583,310.30*				*1,184,995.85*	*388,415.31*	*1,573,411.16*	***8,156,721.46***	
PART D - SUBBASE AND BASE COURSE												
200(1)	Aggregate Subbase Course	11,489.50	cu.m.	24,588,937.46	10.00	8.00	18.00	4,426,008.74	1,450,747.31	5,876,756.05	30,465,693.52	2,651.61
	TOTAL OF PART D			*24,588,937.46*				*4,426,008.74*	*1,450,747.31*	*5,876,756.05*	***30,465,693.52***	
PART E - SURFACE COURSES												
300(1)	Gravel Surface Course	1,240.00	cu.m.	2,511,151.90	10.00	8.00	18.00	452,007.34	148,157.96	600,165.30	3,111,317.20	2,509.13
311(1)a	Portland Cement Concrete Pavement	1,485.00	sq.m.	1,576,498.72	10.00	8.00	18.00	283,769.77	93,013.42	376,783.20	1,953,281.92	1,315.34
311(1)e1	Portland Cement Concrete Pavement	20,150.00	sq.m.	39,016,755.94	10.00	8.00	18.00	7,023,016.07	2,301,988.60	9,325,004.67	48,341,760.61	2,399.09
	TOTAL OF PART E			*43,104,406.56*				*7,758,793.18*	*2,543,159.99*	*10,301,953.17*	***53,406,359.73***	
PART F - BRIDGE CONSTRUCTION												
404(1)a	Reinforcing Steel	11,864.00	kg.	561,506.97	10.00	8.00	18.00	101,071.25	33,128.91	134,200.17	695,707.14	58.64
405(1)a3	Structural Concrete, Class "A"	293.00	cu.m.	2,558,791.92	10.00	8.00	18.00	460,582.55	150,968.72	611,551.27	3,170,343.18	10,820.28

ITEM NO.	DESCRIPTION	QUANTITY	UNIT	ESTIMATED DIRECT COST	MARK-UPS IN %		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)
	TOTAL OF PART F			***3,120,298.89***				*561,653.80*	*184,097.63*	*745,751.43*	**3,866,050.32**	
PART G - DRAINAGE AND SLOPE PROTECTION STRUCTURES												
500(1)b3	Pipe Culverts	68.00	ln.m.	313,493.01	10.00	8.00	18.00	56,428.74	18,496.09	74,924.83	388,417.84	5,712.03
500(1)b4	Pipe Culverts	7.00	ln.m.	23,614.60	10.00	8.00	18.00	4,250.63	1,393.26	5,643.89	29,258.49	4,179.78
505(2)a	Grouted Riprap, Class "A"	16.50	cu.m.	64,253.84	10.00	8.00	18.00	11,565.69	3,790.98	15,356.67	79,610.50	4,824.88
506(1)	Stone Masonry	59.00	cu.m.	274,744.09	10.00	8.00	18.00	49,453.94	16,209.90	65,663.84	340,407.92	5,769.63
	TOTAL OF PART G			***676,105.54***				*121,699.00*	*39,890.23*	*161,589.22*	**837,694.76**	
PART H - MISCELLANEOUS STRUCTURES												
611(1)	Trees, Furnishing & Transplanting	301.00	each	2,586,702.20	10.00	8.00	18.00	465,606.40	152,615.43	618,221.82	3,204,924.02	10,647.59
612(1)	Reflectorized Thermoplastic Pavement Markings (White)	832.00	sq.m.	633,030.05	10.00	8.00	18.00	113,945.41	37,348.77	151,294.18	784,324.24	942.70
	TOTAL OF PART H			***3,219,732.25***				*579,551.80*	*189,964.20*	*769,516.01*	**3,989,248.26**	
	TOTAL			**83,339,384.42**				14,781,645.76	4,906,051.51	19,687,697.27	**103,027,081.70**	

Prepared by :

BELEN A. SAPALLEDA
Head, BAC Technical Working Group

Submitted by :

LEONCIO B. SOLAMILLO
Chief, Construction Division

Recommending Approval:

CAYAMOMBAO D. DIA
Assistant, Regional Director

Approved by :

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

DETAILED UNIT PRICE ANALYSIS

PROJECT NAME: Construction/Repair/Rehabilitation/Improvement of Various Infrastructure Including Local Projects - National Roads and Bridges - National Roads - Road Widening Along Basilan Circumferential Road (BCR) Isabela - Maluso Road, Isabela City, Basilan Including Road Right of a

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 - Classoom, 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.	1,777.61	6,221.64
	b. Selected Fill	10.00	cu.m.	396.35	3,963.50
	c. Soil Poisoning	2.50	L	2,100.00	5,250.00
	II. Concrete Works (Footing, Columns, Beams & Slab on Grade)				
	a. Portland Cement	90.00	bag	285.00	25,650.00
	b. Crushed Gravel	21.00	cu.m.	1,777.61	37,329.81
	c. Washed Sand	18.00	cu.m.	2,477.61	44,596.98
	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.	90.00	1,800.00
	IV. Formworks (Columns & Beams)				
	a. Coco Lumber	400.00	bd.ft.	13.00	5,200.00
	b. Ordinary Plywood, 1/4"x4'x8'	18.00	pc.	525.00	9,450.00
	c. CWN, Assorted	5.00	kg.	90.00	450.00
	V. Masonry Works (masonry walls & plastering)				
	a. CHB 6" thk	650.00	pc.	18.00	11,700.00
	b. Portland Cement	45.00	bag	285.00	12,825.00
	c. Washed Sand	8.00	cu.m.	2,477.61	19,820.88
	d. 10mm dia. X 6m RSB	65.00	kg.	38.00	2,470.00
	e. No. 16 GI Tie Wire	2.50	kg.	90.00	225.00
	VI. Doors and Windows				
	a. D-1, Hollow Core Flush Type swing door, complete w/ accessories, 0.90mx2.1m	2.00	set	1,153.44	2,306.88
	b. W-1, Jalousie window, 1.4m x 1.2m	2.00	set	1,310.40	2,620.80
	c. W-2, Jalousie window, 2.8m x 1.2m	2.00	set	2,620.80	5,241.60
	Sub-total for E			P	213,652.09
	Sub-total for E (I + II + III)			P	386,155.09
F.	Direct Cost (C + E)				460,867.21
G.	Overhead, Contingencies and Miscellaneous		10% per D.O. 197, s. 2016		46,086.72
H.	Contractor's Profit(CP)		8% per D.O. 197, s. 2016		36,869.38
I.	Value Added Tax (VAT)		5% per D.O. 197, s. 2016		27,191.17
J.	Total Unit Cost				571,014.48

DETAILED UNIT PRICE ANALYSIS

PROJECT NAME: Construction/Repair/Rehabilitation/Improvement of Various Infrastructure Including Local Projects - National Roads and Bridges - National Roads - Road Widening Along Basilan Circumferential Road (BCR) Isabela - Maluso Road, Isabela City, Basilan Including Road Right of

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

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.	165.00	3,300.00
	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.	42.00	420.00
	k. Welding Rod	15.00	kg.	169.00	2,535.00
	l. Primer, Zinc Cromate	5.00	gal.	531.00	2,655.00
	VIII Roofing Works				
	a. Pre-painted GI Roofing Sheet long span	55.00	sq.m.	562.00	30,910.00
	b. Pre-painted ridge roll ga 24, 0.60m width	10.00	ln.m.	780.00	7,800.00
	c. Pre-painted flashing, ga. 24	2.00	ln.m.	850.00	1,700.00
	d. Teckscrew 11/2"	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.	525.00	15,750.00
	c. Finishing Nails	5.00	kg.	100.00	500.00
	d. Common Wire Nails	10.00	kg.	90.00	900.00
	e. Wood Preservative Brown	5.00	L	400.00	2,000.00
	Sub-total for E			P	126,774.00
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/Repair/Rehabilitation/Improvement of Various Infrastructure Including Local Projects - National Roads and Bridges - National Roads - Road Widening Along Basilan Circumferential Road (BCR) Isabela - Maluso Road, Isabela City, Basilan Including Road Right of c

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 Convinience outlet	3.00	pc	170.00	510.00
	d. two gang switch	3.00	pc	132.00	396.00
	e. 3.5mm2 thw	3.00	roll	3,600.00	10,800.00
	f. 8.00mm2 thw	25.00	m	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	21.00	525.00
	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	58.00	116.00
	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	8,280.00	8,280.00
	b. Lavatory (include fitting & Accessories)	1.00	set	7,200.00	7,200.00
	c. 1/2" GI Pipe S-40	2.00	pc	500.00	1,000.00
	d. 1/2" Water Faucet	2.00	pc	210.00	420.00
	e. 1/2" Assorted Connector	8.00	pc	20.00	160.00
	f. 4" PVC series 1000	1.00	pc	733.00	733.00
	g. 2" PVC series 1000	1.00	pc	330.00	330.00
	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	45,729.00
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/Repair/Rehabilitation/Improvement of Various Infrastructure Including Local Projects - National Roads and Bridges - National Roads - Road Widening Along Basilan Circumferential Road (BCR) Isabela - Maluso Road, Isabela City, Basilan Including Road Right of

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 *(Folders, Bond Paper, Yellow Pads, Ball Pens, Pencil, Envelopes, etc.)*	1.00	L.S.	45,000.00	45,000.00
	Kitchenware *(Plates, Spoons & Forks, Glasses, etc.)*	1.00	L.S.	30,000.00	30,000.00
	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	6.80	mos.	3,000.00	20,400.00
	b. Water Bill	6.80	mos.	1,500.00	10,200.00
	c. LPG (11 kg)	6.80	mos.	1,000.00	6,800.00
	Sub-total for E			P	288,740.00
F.	Direct Cost (C + E)				288,740.00
G.	Overhead, Contingencies and Miscellaneous		per D.O. 197, s. 2016		-
H.	Contractor's Profit(CP)		8% per D.O. 197, s. 2016		23,099.20
I.	Value Added Tax (VAT)		5% per D.O. 197, s. 2016		15,591.96
J.	Total Unit Cost				327,431.16

DETAILED UNIT PRICE ANALYSIS

PROJECT NAME: Construction/Repair/Rehabilitation/Improvement of Various Infrastructure Including Local Projects - National Roads and Bridges - National Roads - Road Widening Along Basilan Circumferential Road (BCR) Isabela - Maluso Road, Isabela City, Basilan Including Road Right of

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: 6.80

	Designation	No. of Persons	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Driver	1	204	422.32	86,153.28
	Sub-total for A			P	86,153.28
	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)				86,153.28
D.	Output/day -	L.S./day			
	Name and Specifications	Quantity	Unit	Unit Cost	Amount
E.	Materials				
	a. Diesel	2,040.00	L	31.00	63,240.00
	b. Spare Parts	1.00	L.S.	40,000.00	40,000.00
	c. Engine Oil & Lubricants	1.00	L.S.	9,486.00	9,486.00
	d. Miscellaneous	1.00	L.S.	30,000.00	30,000.00
	Sub-total for E			P	142,726.00
F.	Direct Cost (C + E)				228,879.28
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		11,443.96
J.	Total Unit Cost				35,341.65

DETAILED UNIT PRICE ANALYSIS

PROJECT NAME:	Construction/Repair/Rehabilitation/Improvement of Various Infrastructure Including Local Projects - National Roads and Bridges - National Roads - Road Widening Along Basilan Circumferential Road (BCR) Isabela - Maluso Road, Isabela City, Basilan Including Road Right of
Item No./Description:	B.4(1) Construction Survey & Staking
Unit of Measurement:	km.
Output per hour:	0.04
Quantity:	3.000

	Designation	No. of Persons	No. of Days	Daily Rate	Amount
A.	Labor				
	For Field Works				
	a. Geodetic Engineer	1	9.38	833.31	7,812.28
	b. Skilled Laborer	3	9.38	443.20	12,465.00
	c. Laborer	3	9.38	342.24	9,625.50
	For Office Works				
	a. Geodetic Engineer	1	28.13	833.31	23,436.84
	b. Skilled Laborer	2	28.13	443.20	24,930.00
	Sub-total for A			P	78,269.63
	Name and Capacity	No. of Equipment	No. of Days	Unit Cost	Amount
B.	Equipment, (2014 ACEL Rates)				
	a. Total Station w/ complete accessories	1	9.38	800.00	7,500.00
	Minor Tools 10% of Labor				7,826.96
	Sub-total for B			P	15,326.96
C.	Total (A+B)				93,596.59
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)	50.00	pc	400.00	20,000.00
	b. Blue Printing	250.00	pc	15.00	3,750.00
	Miscellaneous 5% of Materials Cost				1,187.50
	Sub-total for E			P	24,937.50
F.	Direct Cost (C + E)				118,534.09
G.	Overhead, Contingencies and Miscellaneous		10% per D.O. 197, s. 2016		11,853.41
H.	Contractor's Profit(CP)		8% per D.O. 197, s. 2016		9,482.73
I.	Value Added Tax (VAT)		5% per D.O. 197, s. 2016		6,993.51
J.	Total Unit Cost				48,954.58

DETAILED UNIT PRICE ANALYSIS

PROJECT NAME: Construction/Repair/Rehabilitation/Improvement of Various Infrastructure Including Local Projects - National Roads and Bridges - National Roads - Road Widening Along Basilan Circumferential Road (BCR) Isabela - Maluso Road, Isabela City, Basilan Including Road Right of

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.	995.00	1,990.00
	b. Tarpaulin (4' x 8')	2.00	pc.	1,000.00	2,000.00
	c. Assorted Lumber	100.00	bd.ft.	56.00	5,600.00
	d. Assorted CW Nails	2.00	kg.	90.00	180.00
	Sub-total for E			P	9,770.00
F.	Direct Cost (C + E)				13,249.20
G.	Overhead, Contingencies and Miscellaneous		10% per D.O. 197, s. 2016		1,324.92
H.	Contractor's Profit(CP)		8% per D.O. 197, s. 2016		1,059.94
I.	Value Added Tax (VAT)		5% per D.O. 197, s. 2016		781.70
J.	Total Unit Cost				8,207.88

DETAILED UNIT PRICE ANALYSIS

PROJECT NAME: Construction/Repair/Rehabilitation/Improvement of Various Infrastructure Including Local Projects - National Roads and Bridges - National Roads - Road Widening Along Basilan Circumferential Road (BCR) Isabela - Maluso Road, Isabela City, Basilan Including Road Right of

Item No./Description: B.7 Occupation Safety and Health Program

Unit of Measurement: month

Output per hour:

Quantity: 6.80

	Designation	No. of Persons	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Safety Practioner	1	102.00	611.92	62,415.84
	b. First Aider	1	204.00	443.20	90,412.80
	Sub-total for A			P	152,828.64
	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)				212,828.64
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)				239,588.64
G.	Overhead, Contingencies and Miscellaneous		per D.O. 197, s. 2016		-
H.	Contractor's Profit(CP)		8% per D.O. 197, s. 2016		19,167.09
I.	Value Added Tax (VAT)		5% per D.O. 197, s. 2016		12,937.79
J.	Total Unit Cost				39,954.93

DETAILED UNIT PRICE ANALYSIS

PROJECT NAME: Construction/Repair/Rehabilitation/Improvement of Various Infrastructure Including Local Projects - National Roads and Bridges - National Roads - Road Widening Along Basilan Circumferential Road (BCR) Isabela - Maluso Road, Isabela City, Basilan Including Road Right of

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	3	5.00	11,360.00	170,400.00
	Sub-total for B			P	696,735.00
C.	Total (A+B)				696,735.00
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)				696,735.00
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	34,836.75
J.	Total Unit Cost				731,571.75

DETAILED UNIT PRICE ANALYSIS

PROJECT NAME: Construction/Repair/Rehabilitation/Improvement of Various Infrastructure Including Local Projects - National Roads and Bridges - National Roads - Road Widening Along Basilan Circumferential Road (BCR) Isabela - Maluso Road, Isabela City, Basilan Including Road Right of

Item No./Description: 100(3)a2 Individual Removal of Trees
Unit of Measurement: each
Output per hour: 1.00
Quantity: 232.00

Existing Trees within Road Improvement (Mahogany Tree, 500mm dia)

	Designation	No. of Persons	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Const. Foreman	1	19.43	611.92	11,889.61
	b. Skilled Labor	1	19.43	443.20	8,611.38
	c. Unskilled Labor	2	19.43	342.24	13,299.45
	Sub-total for A			P	33,800.43
	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	14.50	15,984.00	231,768.00
	b. Dump Truck (12 cu.yd.)	1	9.57	11,360.00	108,715.20
	c. Chain Saw	1	9.57	602.88	5,769.56
	Minor Tools 5% of Labor Cost				1,690.02
	Sub-total for B			P	347,942.78
C.	Total (A+B)				381,743.21
D.	Output/day 8.00	each/day			
	Name and Specifications	Quantity	Unit	Unit Cost	Amount
E.	Materials				
	a. Rope, 1" dia - 5 uses	20	m	200.00	4,000.00
	Sub-total for E			P	4,000.00
F.	Direct Cost (C + E)				385,743.21
G.	Overhead, Contingencies and Miscellaneous		10% per D.O. 197, s. 2016		38,574.32
H.	Contractor's Profit(CP)		8% per D.O. 197, s. 2016		30,859.46
I.	Value Added Tax (VAT)		5% per D.O. 197, s. 2016		22,758.85
J.	Total Unit Cost				2,060.07

DETAILED UNIT PRICE ANALYSIS

PROJECT NAME: Construction/Repair/Rehabilitation/Improvement of Various Infrastructure Including Local Projects - National Roads and Bridges - National Roads - Road Widening Along Basilan Circumferential Road (BCR) Isabela - Maluso Road, Isabela City, Basilan Including Road Right of

Item No./Description: 100(4) Individual Removal of Trees

Unit of Measurement: each

Output per hour: 1.00

Quantity: 2.00

Existing Trees within Road Improvement (Acacia Tree, 1.00m & 1.50m)

	Designation	No. of Persons	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Const. Foreman	1	1.67	611.92	1,020.38
	b. Skilled Labor	1	1.67	443.20	739.04
	c. Unskilled Labor	2	1.67	342.24	1,141.37
	Sub-total for A			P	2,900.78
	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	1.25	15,984.00	19,980.00
	b. Dump Truck (12 cu.yd.)	1	0.83	11,360.00	9,457.20
	c. Chain Saw	1	0.83	602.88	501.90
	Minor Tools 5% of Labor Cost				145.04
	Sub-total for B			P	30,084.14
C.	Total (A+B)				32,984.92
D.	Output/day 8.00	each/day			
	Name and Specifications	**Quantity**	**Unit**	**Unit Cost**	**Amount**
E.	Materials				
	a. Rope, 1" dia - 5 uses	20	m	200.00	4,000.00
	Sub-total for E			P	4,000.00
F.	Direct Cost (C + E)				36,984.92
G.	Overhead, Contingencies and Miscellaneous		10% per D.O. 197, s. 2016		3,698.49
H.	Contractor's Profit(CP)		8% per D.O. 197, s. 2016		2,958.79
I.	Value Added Tax (VAT)		5% per D.O. 197, s. 2016		2,182.11
J.	Total Unit Cost				22,912.16

DETAILED UNIT PRICE ANALYSIS

PROJECT NAME: Construction/Repair/Rehabilitation/Improvement of Various Infrastructure Including Local Projects - National Roads and Bridges - National Roads - Road Widening Along Basilan Circumferential Road (BCR) Isabela - Maluso Road, Isabela City, Basilan Including Road Right of

Item No./Description: 101(1) Removal of Structures & Obstructions

Unit of Measurement: l. s.

Output per hour:

Quantity: 1.00

Removal of Concrete & Wooden House, Stores, Fence, & other like structures

	Designation	No. of Persons	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Const. Foreman	1	30.00	611.92	18,357.60
	b. Skilled Labor	1	30.00	443.20	13,296.00
	c. Unskilled Labor	2	30.00	342.24	20,534.40
	Sub-total for A			P	52,188.00
	Name and Capacity	**No. of Equipment**	**No. of Days**	**Daily Rate**	**Amount**
B.	Equipment, (2014 ACEL Rates)				
	a. Backhoe w/ Breaker (0.80 cu.m.)	1	30.00	15,984.80	479,544.00
	b. Backhoe (0.80 cu.m.) - for loading	1	30.00	12,296.00	368,880.00
	c. Dump Truck (12 cu. yd)	1	30.00	11,360.00	340,800.00
	d. Cutting Outfit	1	30.00	363.60	10,908.00
	Minor Tools 5% of Labor Cost				2,609.40
	Sub-total for B			P	1,202,741.40
C.	Total (A+B)				1,254,929.40
D.	Output/day -	each/day			
	Name and Specifications	**Quantity**	**Unit**	**Unit Cost**	**Amount**
E.	Materials				
	a. Oxy/Acetylene	0.1	set	2,500.00	250.00
	Sub-total for E			P	250.00
F.	Direct Cost (C + E)				1,255,179.40
G.	Overhead, Contingencies and Miscellaneous		10% per D.O. 197, s. 2016		125,517.94
H.	Contractor's Profit(CP)		8% per D.O. 197, s. 2016		100,414.35
I.	Value Added Tax (VAT)		5% per D.O. 197, s. 2016		74,055.58
J.	Total Unit Cost				1,555,167.28

DETAILED UNIT PRICE ANALYSIS

PROJECT NAME: Construction/Repair/Rehabilitation/Improvement of Various Infrastructure Including Local Projects - National Roads and Bridges - National Roads - Road Widening Along Basilan Circumferential Road (BCR) Isabela - Maluso Road, Isabela City, Basilan Including Road Right of

Item No./Description: 101(2) Removal of Actual Structures/Obstruction

Unit of Measurement: each

Output per hour: 10.00 cu.m./hr.

Quantity: 8.00 each

8.64 cu.m.

Removal of Existing Headwall (0.30m x 1.80m x 2.00 m.)

	Designation	No. of Persons	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Const. Foreman	1	0.11	611.92	66.09
	b. Unskilled Labor	2	0.11	342.24	73.92
	Sub-total for A			P	140.01
	Name and Capacity	No. of Equipment	No. of Days	Daily Rate	Amount
B.	Equipment, (2014 ACEL Rates)				
	a. Backhoe w/ Breaker (0.80 cu.m.)	1	0.05	15,984.80	863.18
	b. Backhoe (0.80 cu.m.) - for loading	1	0.05	12,296.00	663.98
	c. Dump Truck (12 cu.yd.)	1	0.11	11,360.00	1,226.88
	Sub-total for B			P	2,754.04
C.	Total (A+B)				2,894.05
D.	Output/day 80.00	cu.m./day			
	Name and Specifications	Quantity	Unit	Unit Cost	Amount
E.	Materials				
	Sub-total for E			P	-
F.	Direct Cost (C + E)				2,894.05
G.	Overhead, Contingencies and Miscellaneous		10% per D.O. 197, s. 2016		289.41
H.	Contractor's Profit(CP)		8% per D.O. 197, s. 2016		231.52
I.	Value Added Tax (VAT)		5% per D.O. 197, s. 2016		170.75
J.	Total Unit Cost				448.22

DETAILED UNIT PRICE ANALYSIS

PROJECT NAME: Construction/Repair/Rehabilitation/Improvement of Various Infrastructure Including Local Projects - National Roads and Bridges - National Roads - Road Widening Along Basilan Circumferential Road (BCR) Isabela - Maluso Road, Isabela City, Basilan Including Road Right of

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

Unit of Measurement: sqm

Output per hour: 35.00

Quantity: 50.50

Existing PCCP (Width = 6.70m)

	Designation	No. of Persons	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Const. Foreman	1	0.18	611.92	110.36
	b. Unskilled Labor	2	0.18	342.24	123.45
	Sub-total for A			P	233.82
	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	0.18	15,984.80	2,882.97
	b. Payloader (1.50 cu.m.), LX80-2C	1	0.18	13,864.00	2,500.47
	c. Dump Truck (12 cu.yd.)	1	0.09	11,360.00	1,024.43
	Minor Tools 10% of Labor Cost				23.38
	Sub-total for B			P	6,431.25
C.	Total (A+B)				6,665.07
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)				6,665.07
G.	Overhead, Contingencies and Miscellaneous		10% per D.O. 197, s. 2016		666.51
H.	Contractor's Profit(CP)		8% per D.O. 197, s. 2016		533.21
I.	Value Added Tax (VAT)		5% per D.O. 197, s. 2016		393.24
J.	Total Unit Cost				163.53

DETAILED UNIT PRICE ANALYSIS

PROJECT NAME: Construction/Repair/Rehabilitation/Improvement of Various Infrastructure Including Local Projects - National Roads and Bridges - National Roads - Road Widening Along Basilan Circumferential Road (BCR) Isabela - Maluso Road, Isabela City, Basilan Including Road Right of

Item No./Description: 101(4)a1 Removal of Actual Structures/Obstruction

Unit of Measurement: ln.m.

Output per hour: 5.00

Quantity: 40.00

Existing RCPC (610 mm.)

	Designation	No. of Persons	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Const. Foreman	1	1.00	611.92	611.92
	b. Unskilled Labor	2	1.00	342.24	684.48
	Sub-total for A			P	1,296.40
	Name and Capacity	No. of Equipment	No. of Days	Daily Rate	Amount
B.	Equipment, (2014 ACEL Rates)				
	a. Backhoe (0.80 cu.m.)	1	1.00	12,296.00	12,296.00
	b. Boom Truck (2 - 5 mt.)	1	0.50	8,143.20	4,071.60
	Minor Tools 10% of Labor Cost				129.64
	Sub-total for B			P	16,497.24
C.	Total (A+B)				17,793.64
D.	Output/day 40.00	cu.m./day			
	Name and Specifications	Quantity	Unit	Unit Cost	Amount
E.	Materials				
	Sub-total for E			P	-
F.	Direct Cost (C + E)				17,793.64
G.	Overhead, Contingencies and Miscellaneous		10% per D.O. 197, s. 2016		1,779.36
H.	Contractor's Profit(CP)		8% per D.O. 197, s. 2016		1,423.49
I.	Value Added Tax (VAT)		5% per D.O. 197, s. 2016		1,049.82
J.	Total Unit Cost				551.16

DETAILED UNIT PRICE ANALYSIS

PROJECT NAME: Construction/Repair/Rehabilitation/Improvement of Various Infrastructure Including Local Projects - National Roads and Bridges - National Roads - Road Widening Along Basilan Circumferential Road (BCR) Isabela - Maluso Road, Isabela City, Basilan Including Road Right of

Item No./Description: 102(2) Surplus Common Excavation
Unit of Measurement: cu.m.
Output per hour: 60.00
Quantity: 24,450.50

For Disposal

	Designation		No. of Persons	No. of Days	Daily Rate	Amount
A.	Labor					
	a. Const. Foreman		1	50.94	611.92	31,170.31
	b. Unskilled Labor		2	50.94	342.24	34,866.41
	Sub-total for A				P	66,036.73
	Name and Capacity		No. of Equipment	No. of Days	Daily Rate	Amount
B.	Equipment, (2014 ACEL Rates)					
	a. Bulldozer, D6H SERIES II PSDS/DD		1	50.94	27,032.00	1,376,970.66
	b. Payloader (1.50 cu.m.)		1	50.94	13,864.00	706,211.94
	c. Payloader (1.50 cu.m.) - at disposal area		1	12.73	13,864.00	176,552.99
	d. Dump Truck (12 cu.yd.)		2	50.94	11,360.00	1,157,323.67
	Sub-total for B				P	3,417,059.25
C.	Total (A+B)					3,483,095.98
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)					3,483,095.98
G.	Overhead, Contingencies and Miscellaneous			10% per D.O. 197, s. 2016		348,309.60
H.	Contractor's Profit(CP)			8% per D.O. 197, s. 2016		278,647.68
I.	Value Added Tax (VAT)			5% per D.O. 197, s. 2016		205,502.66
J.	Total Unit Cost					176.50

DETAILED UNIT PRICE ANALYSIS

PROJECT NAME: Construction/Repair/Rehabilitation/Improvement of Various Infrastructure Including Local Projects - National Roads and Bridges - National Roads - Road Widening Along Basilan Circumferential Road (BCR) Isabela - Maluso Road, Isabela City, Basilan Including Road Right of

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

Unit of Measurement: cu.m.

Output per hour: 20.00

Quantity: 581.50

For Lined Canal

	Designation	No. of Persons	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Const. Foreman	1	3.63	611.92	2,223.95
	b. Unskilled Labor	3	3.63	342.24	3,731.49
	Sub-total for A			P	5,955.43
	Name and Capacity	No. of Equipment	No. of Days	Daily Rate	Amount
B.	Equipment, (2014 ACEL Rates)				
	a. Dump Truck (12 cu.yd.)	2	3.63	11,360.00	82,573.00
	b. Backhoe (0.80 cu.m.)	1	3.63	12,296.00	44,688.28
	Sub-total for B			P	127,261.28
C.	Total (A+B)				133,216.71
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)				133,216.71
G.	Overhead, Contingencies and Miscellaneous		10% per D.O. 197, s. 2016		13,321.67
H.	Contractor's Profit(CP)		8% per D.O. 197, s. 2016		10,657.34
I.	Value Added Tax (VAT)		5% per D.O. 197, s. 2016		7,859.79
J.	Total Unit Cost				283.84

DETAILED UNIT PRICE ANALYSIS

PROJECT NAME: Construction/Repair/Rehabilitation/Improvement of Various Infrastructure Including Local Projects - National Roads and Bridges - National Roads - Road Widening Along Basilan Circumferential Road (BCR) Isabela - Maluso Road, Isabela City, Basilan Including Road Right of

Item No./Description: 103(3) Foundation Fill
Unit of Measurement: cu.m.
Output per hour: 1.25
Quantity: 10.00

For RCPC Beddings

	Designation	No. of Persons	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Const. Foreman	1	1.00	611.92	611.92
	b. Unskilled Labor	4	1.00	342.24	1,368.96
	Sub-total for A			P	1,980.88
	Name and Capacity	No. of Equipment	No. of Days	Daily Rate	Amount
B.	Equipment, (2014 ACEL Rates)				
	a. Plate Compactor (5 hp)	1	1.00	984.00	984.00
	b. Water Truck/Pump (16000 L)	1	0.01	19,600.00	196.00
	Minor Tools 10% of Labor Cost				198.09
	Sub-total for B			P	1,378.09
C.	Total (A+B)				3,358.97
D.	Output/day 10.00	cu.m./day			
	Name and Specifications	Quantity	Unit	Unit Cost	Amount
E.	Materials				
	a. Filling Materials (well-graded sand)	11.50	cu.m.	2,477.61	28,492.52
	Sub-total for E			P	28,492.52
F.	Direct Cost (C + E)				31,851.48
G.	Overhead, Contingencies and Miscellaneous		10% per D.O. 197, s. 2016		3,185.15
H.	Contractor's Profit(CP)		8% per D.O. 197, s. 2016		2,548.12
I.	Value Added Tax (VAT)		5% per D.O. 197, s. 2016		1,879.24
J.	Total Unit Cost				3,946.40

DETAILED UNIT PRICE ANALYSIS

PROJECT NAME: Construction/Repair/Rehabilitation/Improvement of Various Infrastructure Including Local Projects - National Roads and Bridges - National Roads - Road Widening Along Basilan Circumferential Road (BCR) Isabela - Maluso Road, Isabela City, Basilan Including Road Right of

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

Unit of Measurement: cu.m.

Output per hour: 20.00

Quantity: 110.50

For RCPC Excavation

	Designation	No. of Persons	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Const. Foreman	1	0.69	611.92	422.61
	b. Unskilled Labor	3	0.69	342.24	709.08
	Sub-total for A			P	1,131.69
	Name and Capacity	No. of Equipment	No. of Days	Daily Rate	Amount
B.	Equipment, (2014 ACEL Rates)				
	a. Dump Truck (12 cu.yd.)	2	0.69	11,360.00	15,691.00
	b. Backhoe (0.80 cu.m.)	1	0.69	12,296.00	8,491.93
	Minor Tools 10% of Labor Cost				113.17
	Sub-total for B			P	24,296.09
C.	Total (A+B)				25,427.78
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)				25,427.78
G.	Overhead, Contingencies and Miscellaneous		10% per D.O. 197, s. 2016		2,542.78
H.	Contractor's Profit(CP)		8% per D.O. 197, s. 2016		2,034.22
I.	Value Added Tax (VAT)		5% per D.O. 197, s. 2016		1,500.24
J.	Total Unit Cost				285.11

DETAILED UNIT PRICE ANALYSIS

PROJECT NAME: Construction/Repair/Rehabilitation/Improvement of Various Infrastructure Including Local Projects - National Roads and Bridges - National Roads - Road Widening Along Basilan Circumferential Road (BCR) Isabela - Maluso Road, Isabela City, Basilan Including Road Right of

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

Unit of Measurement: cu.m.

Output per hour: 50.00

Quantity: 3,093.00

Compacted Volume

	Designation	No. of Persons	No. of Days	Daily Rate	Amount
A.	Labor				
	For Excavation Work				
	a. Const. Foreman	1	6.42	611.92	3,927.29
	c. Unskilled Laborer	2	6.42	342.24	4,392.98
	Spreading and Compaction				
	a. Const. Foreman	1	7.73	611.92	4,731.67
	c. Unskilled Laborer	2	7.73	342.24	5,292.74
	Sub-total for A			P	18,344.68
	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	6.42	27,032.00	173,490.70
	b. Payloader (1.50 cu.m.)	1	6.42	13,864.00	88,978.81
	c. Dump Truck (12 cu.yd.)	2	6.42	11,360.00	145,816.39
	Spreading and Compaction				
	a. Motorized Road Grader (140 hp), G170A	1	7.73	17,384.00	134,421.78
	b. Vibratory Roller (10 mt), SD100C	1	7.73	14,768.00	114,193.56
	c. Water Truck/Pump (16000 L)	1	1.93	19,600.00	37,889.25
	Sub-total for B			P	694,790.49
C.	Total (A+B)				713,135.16
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)				713,135.16
G.	Overhead, Contingencies and Miscellaneous		10% per D.O. 197, s. 2016		71,313.52
H.	Contractor's Profit(CP)		8% per D.O. 197, s. 2016		57,050.81
I.	Value Added Tax (VAT)		5% per D.O. 197, s. 2016		42,074.97
J.	Total Unit Cost				285.67

DETAILED UNIT PRICE ANALYSIS

PROJECT NAME: Construction/Repair/Rehabilitation/Improvement of Various Infrastructure Including Local Projects - National Roads and Bridges - National Roads - Road Widening Along Basilan Circumferential Road (BCR) Isabela - Maluso Road, Isabela City, Basilan Including Road Right of

Item No./Description: 105(1)a Subgrade Preparation
Unit of Measurement: sq.m.
Output per hour: 300.00
Quantity: 30,749.00

Variable Width

	Designation	No. of Persons	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Const. Foreman	1	12.81	611.92	7,839.97
	b. Unskilled Laborer	2	12.81	342.24	8,769.61
	Sub-total for A			P	16,609.58
	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	12.81	17,384.00	222,725.26
	b. Vibratory Roller (10 mt), SD100DC	1	12.81	14,768.00	189,208.85
	c. Water Truck/Pump (16000 L)	1	3.20	19,600.00	62,779.21
	Sub-total for B			P	474,713.31
C.	Total (A+B)				491,322.90
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)				491,322.90
G.	Overhead, Contingencies and Miscellaneous		10% per D.O. 197, s. 2016		49,132.29
H.	Contractor's Profit(CP)		8% per D.O. 197, s. 2016		39,305.83
I.	Value Added Tax (VAT)		5% per D.O. 197, s. 2016		28,988.05
J.	Total Unit Cost				19.80

DETAILED UNIT PRICE ANALYSIS

PROJECT NAME: Construction/Repair/Rehabilitation/Improvement of Various Infrastructure Including Local Projects - National Roads and Bridges - National Roads - Road Widening Along Basilan Circumferential Road (BCR) Isabela - Maluso Road, Isabela City, Basilan Including Road Right of

Item No./Description: 200(1) Aggregate Subbase Course
Unit of Measurement: cu.m.
Output per hour: 50.00
Quantity: 11,489.50 *0.30 m. thk. (min.), Compacted Volume*

	Designation	No. of Persons	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Const. Foreman	1	28.72	611.92	17,576.64
	b. Unskilled Labor	2	28.72	342.24	19,660.83
	Sub-total for A			P	37,237.47
	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	28.72	17,384.00	499,333.67
	b. Vibratory Roller (10 mt), SD100DC	1	28.72	14,768.00	424,192.34
	c. Water Truck/Pump (16000 L)	1	7.18	19,600.00	140,746.38
	Sub-total for B			P	1,064,272.39
C.	Total (A+B)				1,101,509.85
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)	13,212.93	cu.m.	1,777.61	23,487,427.61
	Sub-total for E			P	23,487,427.61
F.	Direct Cost (C + E)				24,588,937.46
G.	Overhead, Contingencies and Miscellaneous		10% per D.O. 197, s. 2016		2,458,893.75
H.	Contractor's Profit(CP)		8% per D.O. 197, s. 2016		1,967,115.00
I.	Value Added Tax (VAT)		5% per D.O. 197, s. 2016		1,450,747.31
J.	Total Unit Cost				2,651.61

DETAILED UNIT PRICE ANALYSIS

PROJECT NAME: Construction/Repair/Rehabilitation/Improvement of Various Infrastructure Including Local Projects - National Roads and Bridges - National Roads - Road Widening Along Basilan Circumferential Road (BCR) Isabela - Maluso Road, Isabela City, Basilan Including Road Right of

Item No./Description: 300(1) Gravel Surface Course

Unit of Measurement: cu.m.

Output per hour: 50.00

Quantity: 1,240.00

0.15m thk for shouldering Volume *Compacted*

	Designation	No. of Persons	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Const. Foreman	1	3.10	611.92	1,896.95
	b. Unskilled Labor	2	3.10	342.24	2,121.89
	Sub-total for A			P	4,018.84
	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	3.10	17,384.00	53,890.40
	b. Vibratory Roller (10 mt), SD100DC	1	3.10	14,768.00	45,780.80
	c. Water Truck/Pump (16000 L)	1	0.78	19,600.00	15,190.00
	Sub-total for B			P	114,861.20
C.	Total (A+B)				118,880.04
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)	1,426.00	cu.m.	1,677.61	2,392,271.86
	Sub-total for E			P	2,392,271.86
F.	Direct Cost (C + E)				2,511,151.90
G.	Overhead, Contingencies and Miscellaneous		10% per D.O. 197, s. 2016		251,115.19
H.	Contractor's Profit(CP)		8% per D.O. 197, s. 2016		200,892.15
I.	Value Added Tax (VAT)		5% per D.O. 197, s. 2016		148,157.96
J.	Total Unit Cost				2,509.13

DETAILED UNIT PRICE ANALYSIS

PROJECT NAME: Construction/Repair/Rehabilitation/Improvement of Various Infrastructure Including Local Projects - National Roads and Bridges - National Roads - Road Widening Along Basilan Circumferential Road (BCR) Isabela - Maluso Road, Isabela City, Basilan Including Road Right of

Item No./Description: 311(1)a Portland Cement Concrete Pavement
Unit of Measurement: sq.m.
Output per hour: 107.33
Quantity: 1,485.00

0.15 m. thick, for shouldering

	Designation	No. of Persons	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Const. Foreman	1	1.73	611.92	1,058.30
	b. Skilled Labor	4	1.73	443.20	3,066.02
	c. Unskilled Labor	12	1.73	342.24	7,102.76
	Sub-total for A			P	11,227.09
	Name and Capacity	No. of Equipment	No. of Days	Daily Rate	Amount
B.	Equipment, (2014 ACEL Rates)				
	a. Transit Mixer (5 cu.m.)	4	1.73	10,544.00	72,942.51
	b. Concrete Vibrator	2	1.73	730.00	2,525.04
	c. Concrete Batch Plant (30 cu.m.)	1	1.73	14,076.00	24,344.15
	d. Payloader (1.50 cu.m.), LX80-2C	1	1.73	13,864.00	23,977.50
	e. Concrete Screeder (5.5 hp)	1	1.73	4,360.00	7,540.53
	f. Water truck/Pump (16000 L)	1	1.73	19,600.00	33,897.79
	g. Concrete Saw (7.5 hp), 14" Blade Ø	1	1.73	261.04	451.46
	h. Bar Cutter, Single Phase	1	0.17	1,758.00	304.04
	Minor Tools 5% of Labor				561.35
	Sub-total for B			P	166,544.38
C.	Total (A+B)				177,771.47
D.	Output/day 858.64	sq.m./day			
	Name and Specifications	Quantity	Unit	Unit Cost	Amount
E.	Materials				
	a. Reinforcing Steel Bar	490.05	kg.	38.00	18,621.90
	b. Curing Compound	430.65	L	35.00	15,072.75
	c. Asphalt Sealant	178.20	L	100.00	17,820.00
	d. Steel Forms (Rental)	683.10	m	60.00	40,986.00
	e. Sand	122.51	cu.m.	2,477.61	303,538.20
	f. Gravel	222.75	cu.m.	1,777.61	395,962.63
	g. Cement	2,123.55	bag	285.00	605,211.75
	h. Concrete Saw (Diamond Blade 14" Ø)	0.22	pc.	2,500.00	556.88
	i. Pipe Sleeve, 2" Ø	11.58	m.	61.00	706.56
	j. Grease/Tar	2.23	L	112.50	250.59
	Sub-total for E			P	1,398,727.25
F.	Direct Cost (C + E)				1,576,498.72
G.	Overhead, Contingencies and Miscellaneous		10% per D.O. 197, s. 2016		157,649.87
H.	Contractor's Profit(CP)		8% per D.O. 197, s. 2016		126,119.90
I.	Value Added Tax (VAT)		5% per D.O. 197, s. 2016		93,013.42
J.	Total Unit Cost				1,315.34

DETAILED UNIT PRICE ANALYSIS

PROJECT NAME: Construction/Repair/Rehabilitation/Improvement of Various Infrastructure Including Local Projects - National Roads and Bridges - National Roads - Road Widening Along Basilan Circumferential Road (BCR) Isabela - Maluso Road, Isabela City, Basilan Including Road Right of

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

Unit of Measurement: sq.m.

Output per hour: 57.50

Quantity: 20,150.00

0.28 m. thick,
Widening Lane Width = 3.35m (Bothside)

	Designation	No. of Persons	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Const. Foreman	1	43.80	611.92	26,804.76
	b. Skilled Labor	4	43.80	443.20	77,656.35
	c. Unskilled Labor	12	43.80	342.24	179,899.20
	Sub-total for A			P	284,360.30
	Name and Capacity	No. of Equipment	No. of Days	Daily Rate	Amount
B.	Equipment, (2014 ACEL Rates)				
	a. Transit Mixer (5 cu.m.)	4	43.80	10,544.00	1,847,492.17
	b. Concrete Vibrator	2	43.80	730.00	63,954.35
	c. Concrete Batch Plant (30 cu.m.)	1	43.80	14,076.00	616,590.00
	d. Payloader (1.50 cu.m.), LX80-2C	1	43.80	13,864.00	607,303.48
	e. Concrete Screeder (5.5 hp)	1	43.80	4,360.00	190,986.96
	f. Water truck/Pump (16000 L)	1	43.80	19,600.00	858,565.22
	g. Concrete Saw (7.5 hp), 14" Blade Ø	1	43.80	261.04	11,434.69
	h. Bar Cutter, Single Phase	1	4.38	1,758.00	7,700.80
	Minor Tools 5% of Labor				14,218.02
	Sub-total for B			P	4,218,245.68
C.	Total (A+B)				4,502,605.98
D.	Output/day 460.00	sq.m./day			
	Name and Specifications	Quantity	Unit	Unit Cost	Amount
E.	Materials				
	a. Reinforcing Steel Bar	10,075.00	kg.	38.00	382,850.00
	b. Curing Compound	5,843.50	L	35.00	204,522.50
	c. Asphalt Sealant	3,425.50	L	100.00	342,550.00
	d. Steel Forms (Rental)	9,269.00	m	60.00	556,140.00
	e. Sand	3,103.10	cu.m.	2,477.61	7,688,271.59
	f. Gravel	5,642.00	cu.m.	1,777.61	10,029,275.62
	g. Cement	53,599.00	bag	285.00	15,275,715.00
	h. Concrete Saw (Diamond Blade 14" Ø)	3.02	pc.	2,500.00	7,556.25
	i. Pipe Sleeve, 2" Ø	157.17	m.	61.00	9,587.37
	j. Grease/Tar	157.17	L	112.50	17,681.63
	Sub-total for E			P	34,514,149.96
F.	Direct Cost (C + E)				39,016,755.94
G.	Overhead, Contingencies and Miscellaneous		10% per D.O. 197, s. 2016		3,901,675.59
H.	Contractor's Profit(CP)		8% per D.O. 197, s. 2016		3,121,340.48
I.	Value Added Tax (VAT)		5% per D.O. 197, s. 2016		2,301,988.60
J.	Total Unit Cost				2,399.09

DETAILED UNIT PRICE ANALYSIS

PROJECT NAME: Construction/Repair/Rehabilitation/Improvement of Various Infrastructure Including Local Projects - National Roads and Bridges - National Roads - Road Widening Along Basilan Circumferential Road (BCR) Isabela - Maluso Road, Isabela City, Basilan Including Road Right of

Item No./Description: 404(1)a Reinforcing Steel
Unit of Measurement: kg.
Output per hour: 180.00
Quantity: 11,864.00

Grade 40, For Lined Canal

	Designation	No. of Persons	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Const. Foreman	1	8.24	611.92	5,041.54
	b. Skilled Labor	2	8.24	443.20	7,302.95
	c. Unskilled Labor	8	8.24	342.24	22,557.42
	Sub-total for A			P	34,901.91
	Name and Capacity	No. of Equipment	No. of Days	Daily Rate	Amount
B.	Equipment, (2014 ACEL Rates)				
	a. Bar Cutter	1	4.12	1,758.00	7,241.98
	b. Bar Bender	1	4.12	2,812.00	11,583.88
	c. Cargo Truck (9 - 10 mt.)	1	1.24	9,696.00	11,982.64
	Sub-total for B			P	30,808.50
C.	Total (A+B)				65,710.41
D.	Output/day 1,440.00	ln.m./day			
	Name and Specifications	Quantity	Unit	Unit Cost	Amount
E.	Materials				
	a. Tie Wire (2% of RSB)	249.14	kg.	90.00	22,422.96
	b. Reinforcing Steel Bar, Grade 40 (with 5% wastage)	12,457.20	kg.	38.00	473,373.60
	Sub-total for E			P	495,796.56
F.	Direct Cost (C + E)				561,506.97
G.	Overhead, Contingencies and Miscellaneous		10% per D.O. 197, s. 2016		56,150.70
H.	Contractor's Profit(CP)		8% per D.O. 197, s. 2016		44,920.56
I.	Value Added Tax (VAT)		5% per D.O. 197, s. 2016		33,128.91
J.	Total Unit Cost				58.64

DETAILED UNIT PRICE ANALYSIS

PROJECT NAME: Construction/Repair/Rehabilitation/Improvement of Various Infrastructure Including Local Projects - National Roads and Bridges - National Roads - Road Widening Along Basilan Circumferential Road (BCR) Isabela - Maluso Road, Isabela City, Basilan Including Road Right of

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

Unit of Measurement: cu.m.

Output per hour: 1.40

Quantity: 293.00

For Lined Canal

	Designation	No. of Persons	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Const. Foreman	1	26.16	611.92	16,008.26
	b. Skilled Labor	4	26.16	443.20	46,377.71
	c. Unskilled Labor	8	26.16	342.24	71,625.94
	Installation/Removal of Formworks				
	b. Skilled Labor	4	26.16	443.20	46,377.71
	c. Unskilled Labor	8	26.16	342.24	71,625.94
	Sub-total for A			P	252,015.58
	Name and Capacity	No. of Equipment	No. of Days	Daily Rate	Amount
B.	Equipment, (2014 ACEL Rates)				
	a. One Bagger Mixer	1	26.16	1,376.00	35,997.14
	b. Concrete Vibrator	1	26.16	730.00	19,097.32
	c. Water Truck/Pump (16000 L)	1	2.62	19,600.00	51,275.00
	Minor Tools 5% of Labor				12,600.78
	Sub-total for B			P	118,970.24
C.	Total (A+B)				370,985.82
D.	Output/day 11.20	ln.m./day			
	Name and Specifications	Quantity	Unit	Unit Cost	Amount
E.	Materials				
	a. Lumber, Good - 4 uses	20,510.00	bd.ft.	56.00	287,140.00
	b. Marine Plywood (1/2" x 4' x 8') - 4 uses	468.80	pc.	1,750.00	205,100.00
	c. Assorted CWN (1kg./100 bd.ft. of Lumber)	205.10	kg.	90.00	18,459.00
	d. Cement	2,783.50	bag	285.00	793,297.50
	e. Sand	146.50	cu.m.	2,477.61	362,969.87
	f. Gravel	293.00	cu.m.	1,777.61	520,839.73
	Sub-total for E			P	2,187,806.10
F.	Direct Cost (C + E)				2,558,791.92
G.	Overhead, Contingencies and Miscellaneous		10% per D.O. 197, s. 2016		255,879.19
H.	Contractor's Profit(CP)		8% per D.O. 197, s. 2016		204,703.35
I.	Value Added Tax (VAT)		5% per D.O. 197, s. 2016		150,968.72
J.	Total Unit Cost				10,820.28

DETAILED UNIT PRICE ANALYSIS

PROJECT NAME: Construction/Repair/Rehabilitation/Improvement of Various Infrastructure Including Local Projects - National Roads and Bridges - National Roads - Road Widening Along Basilan Circumferential Road (BCR) Isabela - Maluso Road, Isabela City, Basilan Including Road Right of

Item No./Description: 500(1)b3 Pipe Culverts
Unit of Measurement: ln.m.
Output per hour: 1.00
Quantity: 68.00

Class IV, Wall B, AASHTO M - 170 - 85 (910mm dia)

	Designation	No. of Persons	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Const. Foreman	1	4.85	611.92	2,964.75
	b. Skilled Labor	2	4.85	443.20	4,294.61
	c. Unskilled Labor	4	4.85	342.24	6,632.61
	Sub-total for A			P	13,891.97
	Name and Capacity	No. of Equipment	No. of Days	Daily Rate	Amount
B.	Equipment, (2014 ACEL Rates)				
	a. Backhoe (0.80 cu.m.)	1	2.47	12,296.00	30,309.64
	b. Plate Compactor (5 hp)	1	2.47	984.00	2,425.56
	Minor Tools 10% of Labor				1,389.20
	Sub-total for B			P	34,124.40
C.	Total (A+B)				48,016.37
D.	Output/day 8.00	ln.m./day			
	Name and Specifications	Quantity	Unit	Unit Cost	Amount
E.	Materials				
	a. Cement	73.44	bag	285.00	20,930.40
	b. Sand	4.15	cu.m.	2,477.61	10,277.13
	c. RC Pipes (910 mm. dia.)	68.00	cu.m.	3,128.00	212,704.00
	d. Sand Bedding/Selected Sandy Soil	8.70	m.	2,477.61	21,565.12
	Sub-total for E			P	265,476.64
F.	Direct Cost (C + E)				313,493.01
G.	Overhead, Contingencies and Miscellaneous		10% per D.O. 197, s. 2016		31,349.30
H.	Contractor's Profit(CP)		8% per D.O. 197, s. 2016		25,079.44
I.	Value Added Tax (VAT)		5% per D.O. 197, s. 2016		18,496.09
J.	Total Unit Cost				5,712.03

DETAILED UNIT PRICE ANALYSIS

PROJECT NAME: Construction/Repair/Rehabilitation/Improvement of Various Infrastructure Including Local Projects - National Roads and Bridges - National Roads - Road Widening Along Basilan Circumferential Road (BCR) Isabela - Maluso Road, Isabela City, Basilan Including Road Right of

Item No./Description: 500(1)b4 Pipe Culverts

Unit of Measurement: ln.m.

Output per hour: 1.00

Quantity: 7.00

Class IV, Wall B, AASHTO M - 170 - 85 (1070mm)

	Designation	No. of Persons	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Const. Foreman	1	0.59	611.92	358.74
	b. Skilled Labor	2	0.59	443.20	519.65
	c. Unskilled Labor	4	0.59	342.24	802.55
	Sub-total for A			P	1,680.94
	Name and Capacity	**No. of Equipment**	**No. of Days**	**Daily Rate**	**Amount**
B.	Equipment, (2014 ACEL Rates)				
	a. Backhoe (0.80 cu.m.)	1	0.29	12,296.00	3,550.47
	b. Plate Compactor (5 hp)	1	0.29	984.00	284.13
	Minor Tools 10% of Labor				168.09
	Sub-total for B			P	4,002.69
C.	Total (A+B)				5,683.64
D.	Output/day 8.00	ln.m./day			
	Name and Specifications	**Quantity**	**Unit**	**Unit Cost**	**Amount**
E.	Materials				
	a. Cement	8.69	bag	285.00	2,477.79
	b. Sand	0.49	cu.m.	2,477.61	1,214.03
	c. RC Pipes (1070 mm. dia.)	7.00	pc	1,665.00	11,655.00
	d. Sand Bedding/Selected Sandy Soil	1.04	cu.m.	2,477.61	2,584.15
	Sub-total for E			P	17,930.97
F.	Direct Cost (C + E)				23,614.60
G.	Overhead, Contingencies and Miscellaneous		10% per D.O. 197, s. 2016		2,361.46
H.	Contractor's Profit(CP)		8% per D.O. 197, s. 2016		1,889.17
I.	Value Added Tax (VAT)		5% per D.O. 197, s. 2016		1,393.26
J.	Total Unit Cost				4,179.78

DETAILED UNIT PRICE ANALYSIS

PROJECT NAME: Construction/Repair/Rehabilitation/Improvement of Various Infrastructure Including Local Projects - National Roads and Bridges - National Roads - Road Widening Along Basilan Circumferential Road (BCR) Isabela - Maluso Road, Isabela City, Basilan Including Road Right of

Item No./Description: 505(2)a Grouted Riprap, Class "A"
Unit of Measurement: cu.m.
Output per hour: 1.25
Quantity: 16.50

For Slope Protection & Headwall Apron

	Designation	No. of Persons	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Const. Foreman	1	1.65	611.92	1,009.67
	b. Skilled Labor	2	1.65	443.20	1,462.56
	c. Unskilled Labor	8	1.65	342.24	4,517.57
	Sub-total for A			P	6,989.80
	Name and Capacity	No. of Equipment	No. of Days	Daily Rate	Amount
B.	Equipment, (2014 ACEL Rates)				
	a. One Bagger Mixer	1	1.65	1,376.00	2,270.40
	b. Water Truck/Pump (16000 L)	1	0.08	19,600.00	1,617.00
	Minor Tools 5% of Labor				349.49
	Sub-total for B			P	4,236.89
C.	Total (A+B)				11,226.69
D.	Output/day 10.00	cu.m./day			
	Name and Specifications	Quantity	Unit	Unit Cost	Amount
E.	Materials				
	a. Cement	49.50	bag	285.00	14,107.50
	b. Sand	4.13	cu.m.	2,477.61	10,220.14
	c. Gravel	0.25	cu.m.	1,777.61	439.96
	d. Weep Holes (PVC)	4.95	m.	55.00	272.25
	e. Filter Cloth	0.25	sq.m.	176.00	43.56
	f. Boulders (15 - 25 kg.)	17.33	cu.m.	1,582.61	27,418.72
	Miscellaneous 1% of Materials Cost				525.02
	Sub-total for E			P	53,027.15
F.	Direct Cost (C + E)				64,253.84
G.	Overhead, Contingencies and Miscellaneous		10% per D.O. 197, s. 2016		6,425.38
H.	Contractor's Profit(CP)		8% per D.O. 197, s. 2016		5,140.31
I.	Value Added Tax (VAT)		5% per D.O. 197, s. 2016		3,790.98
J.	Total Unit Cost				4,824.88

DETAILED UNIT PRICE ANALYSIS

PROJECT NAME: Construction/Repair/Rehabilitation/Improvement of Various Infrastructure Including Local Projects - National Roads and Bridges - National Roads - Road Widening Along Basilan Circumferential Road (BCR) Isabela - Maluso Road, Isabela City, Basilan Including Road Right of

Item No./Description: 506(1) Stone Masonry
Unit of Measurement: cu.m.
Output per hour: 1.60
Quantity: 59.00

For Headwall and Wingwall

	Designation	No. of Persons	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Const. Foreman	1	4.61	611.92	2,820.57
	b. Skilled Labor	2	4.61	443.20	4,085.75
	c. Unskilled Labor	8	4.61	342.24	12,620.10
	Sub-total for A			P	19,526.42
	Name and Capacity	No. of Equipment	No. of Days	Daily Rate	Amount
B.	Equipment, (2014 ACEL Rates)				
	a. One Bagger Mixer	1	4.61	1,376.00	6,342.50
	b. Water Truck/Pump (16000 L)	1	0.23	19,600.00	4,517.19
	c. Backhoe (Wheel Type 0.28 cu.m.)	1	0.46	7,376.00	3,399.88
	Minor Tools 5% of Labor				976.32
	Sub-total for B			P	15,235.88
C.	Total (A+B)				34,762.30
D.	Output/day 12.80	cu.m./day			
	Name and Specifications	Quantity	Unit	Unit Cost	Amount
E.	Materials				
	a. Cement	324.50	bag	285.00	92,482.50
	b. Sand	17.70	cu.m.	2,477.61	43,853.70
	c. Gravel	1.18	cu.m.	1,777.61	2,097.58
	d. Weep Holes (PVC)	17.70	m.	55.00	973.50
	e. Filter Cloth	0.89	sq.m.	176.00	155.76
	f. Boulders	61.95	cu.m.	1,582.61	98,042.69
	Miscellaneous 1% of Materials Cost				2,376.06
	Sub-total for E			P	239,981.78
F.	Direct Cost (C + E)				274,744.09
G.	Overhead, Contingencies and Miscellaneous		10% per D.O. 197, s. 2016		27,474.41
H.	Contractor's Profit(CP)		8% per D.O. 197, s. 2016		21,979.53
I.	Value Added Tax (VAT)		5% per D.O. 197, s. 2016		16,209.90
J.	Total Unit Cost				5,769.63

DETAILED UNIT PRICE ANALYSIS

PROJECT NAME: Construction/Repair/Rehabilitation/Improvement of Various Infrastructure Including Local Projects - National Roads and Bridges - National Roads - Road Widening Along Basilan Circumferential Road (BCR) Isabela - Maluso Road, Isabela City, Basilan Including Road Right of

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

Diameter not less than 1.50cm & Height not less than 1.50m

	Designation	No. of Persons	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Const. Foreman	1	37.63	611.92	23,023.49
	b. Skilled Labor	1	37.63	443.20	16,675.40
	c. Unskilled Labor	2	37.63	342.24	25,753.56
	Sub-total for A			P	65,452.45
	Name and Capacity	No. of Equipment	No. of Days	Daily Rate	Amount
B.	Equipment, (2014 ACEL Rates)				
	a. Cargo Truck (9-10mt)	1	37.63	11,360.00	427,420.00
	b. Backhoe (0.80 cu.m.)	1	37.63	12,296.00	462,637.00
	c. Water Truck/Pump (16000 L)	1	18.81	19,600.00	368,725.00
	Minor Tools 10% of Labor				6,545.25
	Sub-total for B			P	1,265,327.25
C.	Total (A+B)				1,330,779.70
D.	Output/day 8.00	ln.m./day			
	Name and Specifications	Quantity	Unit	Unit Cost	Amount
E.	Materials				
	a. Trees (Delivered at Site)	301.00	pc	25.00	7,525.00
	b. Fertilizers	903.00	kg	1,350.00	1,219,050.00
	c. Bamboo Pole	903.00	pc	10.00	9,030.00
	d. Polyethylene Sheets	903.00	sq.m.	15.00	13,545.00
	e. Tie Wire	75.25	kg	90.00	6,772.50
	Sub-total for E			P	1,255,922.50
F.	Direct Cost (C + E)				2,586,702.20
G.	Overhead, Contingencies and Miscellaneous		10% per D.O. 197, s. 2016		258,670.22
H.	Contractor's Profit(CP)		8% per D.O. 197, s. 2016		206,936.18
I.	Value Added Tax (VAT)		5% per D.O. 197, s. 2016		152,615.43
J.	Total Unit Cost				10,647.59

DETAILED UNIT PRICE ANALYSIS

PROJECT NAME: Construction/Repair/Rehabilitation/Improvement of Various Infrastructure Including Local Projects - National Roads and Bridges - National Roads - Road Widening Along Basilan Circumferential Road (BCR) Isabela - Maluso Road, Isabela City, Basilan Including Road Right of

Item No./Description: 612(1) Reflectorized Thermoplastic Pavement Markings (White)
Unit of Measurement: sq.m.
Output per hour: 25.00
Quantity: 832.00

For Center Line and Edge Lines

	Designation	No. of Persons	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Const. Foreman	1	4.16	611.92	2,545.59
	b. Skilled Labor	2	4.16	443.20	3,687.42
	c. Unskilled Labor	6	4.16	342.24	8,542.31
	Sub-total for A			P	14,775.32
	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	4.16	6,264.00	26,058.24
	b. Applicator Machine	1	4.16	750.00	3,120.00
	c. Kneading Machine	1	4.16	1,500.00	6,240.00
	Minor Tools 10% of Labor				1,477.53
	Sub-total for B			P	36,895.77
C.	Total (A+B)				51,671.09
D.	Output/day 200.00	sq.m./day			
	Name and Specifications	Quantity	Unit	Unit Cost	Amount
E.	Materials				
	a. Thermoplastic Paint (White)	270.40	bag	1,585.00	428,584.00
	b. Glass Beads	27.46	bag	2,500.00	68,640.00
	c. Primer	99.84	L	168.00	16,773.12
	d. LPG (50 kg)	3.33	cyl.	5,865.00	19,518.72
	e. LPG (12 kg)	1.66	cyl.	5,865.00	9,759.36
	f. Calsumine	104.00	kg.	100.00	10,400.00
	Miscellaneous 5% of Materials Cost				27,683.76
	Sub-total for E			P	581,358.96
F.	Direct Cost (C + E)				633,030.05
G.	Overhead, Contingencies and Miscellaneous		10% per D.O. 197, s. 2016		63,303.01
H.	Contractor's Profit(CP)		8% per D.O. 197, s. 2016		50,642.40
I.	Value Added Tax (VAT)		5% per D.O. 197, s. 2016		37,348.77
J.	Total Unit Cost				942.70