

Republic of the Philippines
Department of Public Works and Highways
Bureau : DPWH
Region : IX
District/City : Zamboanga City

PROGRAM OF WORK
(For all types of Project)

Date :

NAME/LOCATION OF PROJECT : CONSTRUCTION OF CONC. RD., TAWI-TAWI MAINLAND CIRCUMFERENTIAL RD., BUAN PARANGAN SECT. PANGLIMA SUGALA, TAWI-TAWI	Appropriation : P 75,000,000.00 Source of Funds : CY 2017 Regular Infra Project Issued Obligated Authority : Released : Cal. Days to Complete : 136 Calendar Days Desirable Starting Date : Upon Approval Mode of Implementation : By Contract
PROJECT CATEGORY : NATIONAL ROAD	NET LENGTH : Sta.03+810.00 to Sta.05+690.00 N.L. = 1,880.00 In.m. 1.880 km. 3.76 lane km.
PROJECT DESCRIPTION : Scope of Work : Unpaved to paved Road Width : 6.70 meters, (PCCP 0.23 m. thk.) Roadbed Width : 12.00 meters Subbase Course : 0.30 meters Surface Course : 0.15 meters	

MINIMUM EQUIPMENT REQUIREMENT :

TECHNICAL PERSONNEL REQUIRED :

Description	No.	Description	No.	Description	No.
Bulldozer (155 HP), D6H	1	Cargo Truck (10T, 270 Hp)	1	Project Engineer	1
Payloader (1.50 cu.m.), LX80-2C	2	Batching Plant (30 cu.m.)	1	Materials Engineer	1
Motorized Road Grader, G710A	1	Concrete Saw, Blade Ø 14" (7.5 Hp)	1	Materials Lab. Tech.	1
Vibratory Roller (10 m.t.), SD 100 DC	1	Bar Cutter, Single Phase	1	Surveyor	1
Dumptruck (10 cu.m.)	4	Bar Bender	1	Carpenter	10
Backhoe (0.80 cu.m.), SE 130 LC-2	1	Plate Compactor (5Hp)	1	Mason	10
Water Truck/Pump(16000 lit.)	1	One Bagger Mixer	2	Laborer	25
Transit Mixer (5 cu.m.)	4	Concrete Vibrator	2		

ESTIMATED COST OF PROPOSED WORK

ITEM NO.	DESCRIPTION	% OF TOTAL	UNIT	QUANTITY	DIRECT COST	
					TOTAL	UNIT COST
101(2)	Removal of Existing Headwall	0.004	each	6.00	2,152.74	358.79
101(4)a	Removal of Existing RCPC	0.022	In.m.	33.50	12,247.25	365.59
102(2)	Surplus Common Excavation	0.390	cu.m.	1,516.50	219,200.22	144.54
103(1)a	Structure Excavation	0.039	cu.m.	96.00	21,907.94	228.21
103(3)	Foundation Fill	0.065	cu.m.	10.50	36,517.93	3,477.90
103(6)a	Pipe Culvert and Drain Excavation	0.031	cu.m.	75.50	17,229.68	228.21
104(1)a1	Embankment (from Roadway Excavation)	3.690	cu.m.	9,126.00	2,075,948.97	227.48
105(1)a	Subgrade Preparation	0.3050	sq.m.	10,798.00	171,547.11	15.89
200(1)	Aggregate Subbase Course, 0.30m. Thick	38.521	cu.m.	6,973.50	21,669,827.12	3,107.45
300(1)	Gravel Surface Course, 0.15m thk.	4.826	cu.m.	842.50	2,714,917.09	
311(1)c1	Portland Cement Concrete Pavement, 0.23m. Thick	44.224	sq.m.	13,010.00	24,877,820.01	1,912.21
311(1)a	Portland Cement Concrete Pavement, 0.15m. Thick	1.247	sq.m.	556.50	701,231.98	1,260.08
404(1)a	Reinforcing Steel Bar, (Grade 40)	0.191	Kg.	1,943.00	107,354.26	55.25
405(1)a3	Structural Concrete, Class "A"	0.817	cu.m.	48.00	459,535.60	9,573.66
500(1)b3	Reinf. Conc. Culvert Pipe, (910mm dia.)	0.653	In.m.	79.00	367,609.73	4,653.29
505(2)a	Grouted Riprap, Class "A"	0.206	cu.m.	20.00	115,846.27	5,792.31
506(1)	Stone Masonry	0.545	cu.m.	46.00	306,705.73	6,667.52
611(1)	Trees (Furnishing and Transplanting)	1.042	each	131.00	586,274.39	4,475.38
612(1)	ReflectORIZED Thermoplastic Pavement Markings (White)	0.576	sq.m.	442.50	323,935.31	732.06
612(2)	ReflectORIZED Thermoplastic Pavement Markings (Yellow)	0.118	sq.m.	82.00	66,168.91	806.94
A.1.1(3)	Construction of Field Office for the Engineer	0.703	l.s.	1.00	395,654.74	395,654.74
A.1.1(11)	Prov. of Furniture/Fixture, Equipment and Appliances for the Field Office for the Engineer	0.243	l.s.	1.00	136,518.33	136,518.33
A.1.2(5)	Operation and Maintenance of Govt. Service Vehicle	0.436	l.s.	1.00	245,237.12	245,237.12
B.4(1)	Construction Survey and Staking	0.128	km.	1.88	72,231.85	38,421.20
B.5	Project Billboard	0.015	each	2.00	8,483.12	4,241.56
B.7	Occupational Safety and Health Program	0.177	l.s.	1.00	99,389.28	99,389.28
B.9	Mobilization/Demobilization	0.787	l.s.	1.00	442,569.00	442,569.00
TOTAL		99.97			P 56,254,061.67	

NAME OF PROJECT : CONSTRUCTION OF CONCRETE ROAD, TAWI TAWI MAINLAND
CIRCUMFERENTIAL ROAD, BUAN-PARANGAN SECTION, PANGLIMA
SUGALA, TAWI TAWI

STATION LIMIT : Sta.03+810.00 to Sta.05+690.00

BREAKDOWN OF ESTIMATED EXPENDITURES	% OF TOTAL	AMOUNT
I. ESTIMATED COST		
A. DIRECT COST		
A.1. Materials	65.51	49,135,240.21
A.2. Labor	0.70	526,226.65
A.3. Equipment Expenses	8.79	6,592,594.81
SUB-TOTAL (DIRECT COST)	75.01	P 56,254,061.67
B. INDIRECT COST (Per D.O. No.197, S,2016)		
B.1. Overhead, Contingency & Misc. (10% Max. of D.C.)	7.37	5,525,811.61
B.2. Profit (8 % Max. of D.C.)	5.93	4,445,300.44
C. VAT (5% of D.C. and I.C. Per D.O. No.197, S,2016)	7.27	5,451,074.13
SUBTOTAL (CONTRACT COST)	95.57	P 71,676,247.86
II. ESTIMATED GOVERNMENT EXPENDITURES		
1. Engineering and Administrative Overhead (3.50%)	3.50	2,625,000.00
2. Detailed Engineering (1%)		
3. Reserved for the Payment of RROW	0.93	698,752.14
4. Physical Reserved		
TOTAL ESTIMATED PROJECT COST	100.00	P 75,000,000.00

Prepared by :

Checked :

Submitted :

ROBERTO L. STA. TERESA

Engineer II

JERALD R. BARRERA

Engineer II

LEONCIO B. SOLAMILLO

Chief, Construction Division

Recommending Approval :

CAYAMOMBAO D. DIA

OIC-Assistant Regional Director

Approved :

JORGE U. SEBASTIAN, JR., CESO III

Regional Director

APPROVED BUDGET FOR THE CONTRACT
CONSTRUCTION OF CONC. RD., TAWI-TAWI MAINLAND CIRCUMFERENTIAL RD., BUAN PARANGAN SECT. PANGLIMA SUGALA, TAWI-TAWI
Sta.03+810.00 to Sta.05+690.00

Contract Duration : **136 Calendar Days**

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)	(10)	(11)	(12)	(13)
								(5) x (8)	5%(5) + (9)	(9) + (10)	(5) + (11)	(12) / (3)
PART-A, FACILITIES FOR THE ENGINEER												
A.1.1(3)	Construction of Field Office for the Engineer	1.00	l.s.	395,654.74	10.00	8.00	18.00	71,217.85	23,343.63	94,561.48	490,216.22	490,216.22
A.1.1(11)	Prov. of Furniture/Fixture, Equipment and Appliances for	1.00	l.s.	136,518.33	-	8.00	8.00	10,921.47	7,371.99	18,293.46	154,811.79	154,811.79
A.1.2(5)	Operation and Maintenance of Govt. Service Vehicle	1.00	l.s.	245,237.12	-	-	-	-	12,261.86	12,261.86	257,498.98	257,498.98
SUB TOTAL PART A				777,410.19					42,977.48		902,526.99	
PART-B, OTHER GENERAL REQUIREMENT												
B.4(1)	Construction Survey and Staking	1.88	km.	72,231.85	-	8.00	8.00	5,778.55	3,900.52	9,679.07	81,910.92	43,569.64
B.5	Project Billboard	2.00	each	8,483.12	10.00	8.00	18.00	1,526.96	500.50	2,027.47	10,510.59	5,255.29
B.7	Occupational Safety and Health Program	1.00	l.s.	99,389.28	-	8.00	8.00	7,951.14	5,367.02	13,318.16	112,707.44	112,707.44
B.9	Mobilization/Demobilization	1.00	l.s.	442,569.00	-	-	-	-	2,161,943.90	2,161,943.90	2,604,512.90	2,604,512.90
SUB TOTAL PART B				622,673.25					2,171,711.94		2,809,641.85	
PART-C, EARTHWORKS												
101(2)	Removal of Existing Headwall	6.00	each	2,152.74	10.00	8.00	18.00	387.49	127.01	514.50	2,667.25	444.54
101(4)a	Removal of Existing RCPC	33.50	ln.m.	12,247.25	10.00	8.00	18.00	2,204.51	722.59	2,927.09	15,174.35	452.97
102(2)	Surplus Common Excavation	1,516.50	cu.m.	219,200.22	10.00	8.00	18.00	39,456.04	12,932.81	52,388.85	271,589.07	179.09
103(1)a	Structure Excavation	96.00	cu.m.	21,907.94	10.00	8.00	18.00	3,943.43	1,292.57	5,236.00	27,143.94	282.75
103(3)	Foundation Fill	10.50	cu.m.	36,517.93	10.00	8.00	18.00	6,573.23	2,154.56	8,727.78	45,245.71	4,309.12
103(6)a	Pipe Culvert and Drain Excavation	75.50	cu.m.	17,229.68	10.00	8.00	18.00	3,101.34	1,016.55	4,117.89	21,347.58	282.75
104(1)a1	Embankment (from Roadway Excavation)	9,126.00	cu.m.	2,075,948.97	10.00	8.00	18.00	373,670.81	122,480.99	496,151.80	2,572,100.77	281.84
105(1)a	Subgrade Preparation	10,798.00	sq.m.	171,547.11	10.00	8.00	18.00	30,878.48	10,121.28	40,999.76	212,546.86	19.68
SUB TOTAL PART C				2,556,751.84					150,848.36		3,167,815.52	
PART-D, SUBBASE AND BASE COURSE												
200(1)	Aggregate Subbase Course, 0.30m. Thick	6,973.50	cu.m.	21,669,827.12	10.00	8.00	18.00	3,900,568.88	1,278,519.80	5,179,088.68	26,848,915.80	3,850.13
300(1)	Gravel Surface Course, 0.15m thk.	842.50	cu.m.	2,714,917.09	10.00	8.00	18.00	488,685.08	160,180.11	648,865.18	3,363,782.27	3,992.62
SUB TOTAL PART D				24,384,744.21					1,438,699.91		30,212,698.07	
PART-E, SURFACE COURSE												
311(1)c1	Portland Cement Concrete Pavement, 0.23m. Thick	13,010.00	sq.m.	24,877,820.01	10.00	8.00	18.00	4,478,007.60	1,467,791.38	5,945,798.98	30,823,618.99	2,369.23
311(1)a	Portland Cement Concrete Pavement, 0.15m. Thick	556.50	sq.m.	701,231.98	10.00	8.00	18.00	126,221.76	41,372.69	167,594.44	868,826.42	1,561.23
SUB TOTAL PART E				25,579,051.98					1,509,164.07		31,692,445.41	
PART-G, DRAINAGE AND SLOPE PROTECTION STRUCTURE												
404(1)a	Reinforcing Steel Bar, (Grade 40)	1,943.00	Kg.	107,354.26	10.00	8.00	18.00	19,323.77	6,333.90	25,657.67	133,011.93	68.46
405(1)a3	Structural Concrete, Class "A"	48.00	cu.m.	459,535.60	10.00	8.00	18.00	82,716.41	27,112.60	109,829.01	569,364.61	11,861.76
500(1)b3	Reinf. Conc. Culvert Pipe, (910mm dia.)	79.00	ln.m.	367,609.73	10.00	8.00	18.00	66,169.75	21,688.97	87,858.72	455,468.45	5,765.42
505(2)a	Grouted Riprap, Class "A"	20.00	cu.m.	115,846.27	10.00	8.00	18.00	20,852.33	6,834.93	27,687.26	143,533.53	7,176.68
506(1)	Stone Masonry	46.00	cu.m.	306,705.73	10.00	8.00	18.00	55,207.03	18,095.64	73,302.67	380,008.40	8,261.05
SUB TOTAL PART G				1,357,051.59					80,066.04		1,681,386.92	
PART-H, MISCELLANEOUS STRUCTURE												
611(1)	Trees (Furnishing and Transplanting)	131.00	each	586,274.39	10.00	8.00	18.00	105,529.39	34,590.19	140,119.58	726,393.97	5,544.99
612(1)	Reflectorized Thermoplastic Pavement Markings (White)	442.50	sq.m.	323,935.31	10.00	8.00	18.00	58,308.36	19,112.18	77,420.54	401,355.85	907.02
612(2)	Reflectorized Thermoplastic Pavement Markings (Yellow)	82.00	sq.m.	66,168.91	10.00	8.00	18.00	11,910.40	3,903.97	15,814.37	81,983.28	999.80
SUB TOTAL PART H				976,378.61					57,606.34		1,209,733.10	
T O T A L				56,254,061.67					5,451,074.13		71,676,247.86	

Prepared by :

Submitted :

Approved :

BELEN A. SAPALLEDA
Head, BAC-TWG

CAYAMOMBAO D. DIA
OIC-Assistant Regional Director

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