

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

PROGRAM OF WORKS

(For all types of Project)

Date : Nov. 13, 2017

NAME/LOCATION OF PROJECT : Water Supply & Sanitation for Poverty Areas & Tourism Priority Sites Construction of Various Water Supply Projects in Zamboanga City	Appropriation : P 120,170,000.00 Source of Funds : SR2017-03-007553 Issued Obligated Authority : Released : Cal. Days to Complete : 396 Calendar Days Desirable Starting Date : Upon Approval Mode of Implementation : By Contract
PROJECT CATEGORY : Water Supply	NET LENGTH: (PIPELINES) RANCHO FRIO, VITALI ■ G.I. Pipes : 4,051.73 LN.M. ■ PVC Pipes : 4,948.50 LN.M. SUMIDERO, BUNGUIAO ■ PVC Pipe : 3,806.62 LN.M. ■ G.I. Pipes : 8,293.89 LN.M.
PROJECT DESCRIPTION : Scope of Work : Pipe Laying & Water Supply (New Construction)	

MINIMUM EQUIPMENT REQUIREMENT :			TECHNICAL PERSONNEL REQUIRED :		
Description	No.	Description	No.	Description	No.
Dumptruck (10 cu.m.)	4	Bar Cutter, Single Phase	4	Project Engineer	1
Cargo Truck (10T, 270 Hp)	4	Bar Bender	4	Materials Engineer	1
Water Truck	2	Transit Mixer	2	Safety Practitioner	1
Payloader	2	Bagger Mixer	4	Foreman	2
Backhoe	4	Concrete Vibrator	4	Electrician	2
Bulldozer	2	Welding Machine	2	Plumber	2
Service Crane	2	Concrete Saw	2	Carpenter	8
		Jackhammer	2	Mason	8
				Laborer	15

ESTIMATED COST OF PROPOSED WORK

ITEM NO.	DESCRIPTION	% OF TOTAL	UNIT	QUANTITY	DIRECT COST	
					TOTAL	UNIT COST
RANCHO FRIO - VITALI WATER SYSTEM						
A.	PIPELAYING	29.412	l.s.	1.00	27,920,143.14	27,920,143.14
B.	CULVERTS CROSSINGS (6 units)	0.129	l.s.	1.00	122,771.13	122,771.13
C.	CONCRETE GROUND TANK (180 cu.m.)	6.807	l.s.	1.00	6,461,372.35	6,461,372.35
D.	INTAKE STRUCTURES	1.900	l.s.	1.00	1,803,424.61	1,803,424.61
E.	CHLORINE ROOM	0.222	l.s.	1.00	210,857.18	210,857.18
F.	OPERATOR'S ROOM	0.693	l.s.	1.00	658,158.98	658,158.98
G.	SEPTIC VAULT (OPERATOR'S ROOM)	0.063	l.s.	1.00	59,772.45	59,772.45
H.	GUARD HOUSE (2.89 sq.m.)	0.301	l.s.	1.00	285,966.46	285,966.46
I.	CONCRETE PERIMETER FENCE	0.846	l.s.	1.00	803,510.43	803,510.43
J.	CONCRETE PIPE SUPPORTS (1,240 units)	3.002	l.s.	1.00	2,849,540.84	2,849,540.84
K.	CREEK CROSSING (1.00 unit)	0.194	l.s.	1.00	184,274.20	184,274.20
L.	RCCP DRAINAGE SYSTEM	0.195	l.s.	1.00	184,866.98	184,866.98
M.	CONCRETE CATWALK/DRIVEWAY	0.285	l.s.	1.00	270,785.61	270,785.61
SUMIDERO - BUNGUIAO WATER SYSTEM						
A.	PIPELAYING	37.257	l.s.	1.00	35,366,229.22	35,366,229.22
B.	CULVERTS CROSSINGS (19 units) & BRIDGE CROSSING (1 unit)	0.126	l.s.	1.00	119,138.19	119,138.19
C.	CONCRETE GROUND TANK (300 cu.m.)	6.951	l.s.	1.00	6,597,927.74	6,597,927.74
D.	INTAKE STRUCTURES	1.889	l.s.	1.00	1,793,629.33	1,793,629.33
E.	CHLORINE ROOM	0.225	l.s.	1.00	213,592.85	213,592.85
F.	OPERATOR'S ROOM	0.741	l.s.	1.00	703,318.42	703,318.42
G.	SEPTIC VAULT (OPERATOR'S ROOM)	0.059	l.s.	1.00	56,321.95	56,321.95
H.	GUARD HOUSE (2.89 sq.m.)	0.302	l.s.	1.00	286,221.33	286,221.33
I.	CONCRETE PERIMETER FENCE	0.829	l.s.	1.00	786,779.32	786,779.32
J.	CONCRETE PIPE SUPPORTS (1,240 units)	3.761	l.s.	1.00	3,569,916.13	3,569,916.13
K.	CREEK CROSSING (9.00 units)	1.126	l.s.	1.00	1,069,330.40	1,069,330.40

ESTIMATED COST OF PROPOSED WORK						
ITEM NO.	DESCRIPTION	% OF TOTAL	UNIT	QUANTITY	DIRECT COST	
					TOTAL	UNIT COST
L.	RCCP DRAINAGE SYSTEM	0.202	l.s.	1.00	192,005.85	192,005.85
M.	CONCRETE CATWALK/DRIVEWAY	0.282	l.s.	1.00	267,854.86	267,854.86
GENERAL REQUIREMENTS						
A.1.1(3)	Construction of Field Office for the Engineer	0.500	l.s.	1.00	474,914.27	474,914.27
B.5	Project Billboard/Signboard	0.019	unit	4.00	17,676.40	4,419.10
B.7	Occupational Safety and Health Program	0.563	l.s.	1.00	534,811.76	534,811.76
B.9	Mobilization/Demobilization	0.517	l.s.	1.00	490,451.04	490,451.04
A.1.2(5)	Operation and Maintenance of Gov't. Service Vehicle (4x4 Pick-Up Type)	0.601	l.s.	1.00	570,741.60	570,741.60
TOTAL		100.000			P 94,926,305.02	

NAME OF PROJECT : Water Supply & Sanitation for Poverty Areas & Tourism Priority Sites
Construction of Various Water Supply Projects in Zamboanga City

BREAKDOWN OF ESTIMATED EXPENDITURES	% OF TOTAL	AMOUNT
I. ESTIMATED COST		
A. DIRECT COST		
A.1. Materials	57.71	69,346,094.19
A.2. Labor	8.36	10,046,569.12
A.3. Equipment Expenses	12.93	15,533,641.70
SUB-TOTAL (DIRECT COST)	78.99	P 94,926,305.02
B. INDIRECT COST (Per D.O. # 197 Series of 2016)		
B.1. Overhead, Contingency & Misc. (10% Max. of D.C.)	7.77	9,333,030.06
B.2. Profit (8 % Max. of D.C.)	6.25	7,509,208.99
C. VAT (5% of D.C. and I.C.)	4.65	5,588,427.20
SUBTOTAL (CONTRACT COST)	97.66	P 117,356,971.27
II. ESTIMATED GOVERNMENT EXPENDITURES		
1. Engineering and Administrative Overhead (2.53%)	2.03	2,440,000.00
2. Detailed Engineering (1%)		
3. Reserved for the Payment of RROW	0.00	-
4. Physical Reserved	0.31	373,028.73
TOTAL ESTIMATED PROJECT COST	100.00	P 120,170,000.00

Prepared:

Checked:

MICHAEL D. TORINO

Engineer II

JERALD R. BARRERA

Engineer II

Submitted:

LEONCIO B. SOLAMILLO

Chief, Construction Division

Recommending Approval:

CAYAMOMBAO D. DIA

OIC - Assistant Regional Director

Approved:

JORGE U. SEBASTIAN, JR., CESO III

Regional Director

Concurred:

LEONARDO REY D. VASQUEZ

General Manager
Zamboanga City Water District (ZCWD)

APPROVED BUDGET FOR THE CONTRACT

Water Supply & Sanitation for Poverty Areas & Tourism Priority Sites
Construction of Various Water Supply Projects in Zamboanga City

Contract Duration : (C.D.)

396 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				
					(6)	(7)	(8)	(9) (5) x (8)				
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10) 5%[(5) + (9)]	(11) (9) + (10)	(12) (5) + (11)	(13) (12) / (3)
RANCHO FRIO - VITALI WATER SYSTEM												
A.	PIPELAYING	1.00	l.s.	27,920,143.14	10.00	8.00	18.00	5,025,625.77	1,647,288.45	6,672,914.21	34,593,057.35	34,593,057.35
B.	CULVERTS CROSSINGS (6 units)	1.00	l.s.	122,771.13	10.00	8.00	18.00	22,098.80	7,243.50	29,342.30	152,113.43	152,113.43
C.	CONCRETE GROUND TANK (180 cu.m.)	1.00	l.s.	6,461,372.35	10.00	8.00	18.00	1,163,047.02	381,220.97	1,544,267.99	8,005,640.34	8,005,640.34
D.	INTAKE STRUCTURES	1.00	l.s.	1,803,424.61	10.00	8.00	18.00	324,616.43	106,402.05	431,018.48	2,234,443.10	2,234,443.10
E.	CHLORINE ROOM	1.00	l.s.	210,857.18	10.00	8.00	18.00	37,954.29	12,440.57	50,394.87	261,252.05	261,252.05
F.	OPERATOR'S ROOM	1.00	l.s.	658,158.98	10.00	8.00	18.00	118,468.62	38,831.38	157,300.00	815,458.98	815,458.98
G.	SEPTIC VAULT (OPERATOR'S ROOM)	1.00	l.s.	59,772.45	10.00	8.00	18.00	10,759.04	3,526.57	14,285.61	74,058.06	74,058.06
H.	GUARD HOUSE (2.89 sq.m.)	1.00	l.s.	285,966.46	10.00	8.00	18.00	51,473.96	16,872.02	68,345.98	354,312.44	354,312.44
I.	CONCRETE PERIMETER FENCE	1.00	l.s.	803,510.43	10.00	8.00	18.00	144,631.88	47,407.12	192,038.99	995,549.43	995,549.43
J.	CONCRETE PIPE SUPPORTS (1,240 units)	1.00	l.s.	2,849,540.84	10.00	8.00	18.00	512,917.35	168,122.91	681,040.26	3,530,581.10	3,530,581.10
K.	CREEK CROSSING (1.00 unit)	1.00	l.s.	184,274.20	10.00	8.00	18.00	33,169.36	10,872.18	44,041.53	228,315.74	228,315.74
L.	RCCP DRAINAGE SYSTEM	1.00	l.s.	184,866.98	10.00	8.00	18.00	33,276.06	10,907.15	44,183.21	229,050.19	229,050.19
M.	CONCRETE CATWALK/DRIVEWAY	1.00	l.s.	270,785.61	10.00	8.00	18.00	48,741.41	15,976.35	64,717.76	335,503.37	335,503.37
SUMIDERO - BUNGUIAO WATER SYSTEM												
A.	PIPELAYING	1.00	l.s.	35,366,229.22	10.00	8.00	18.00	6,365,921.26	2,086,607.52	8,452,528.78	43,818,758.00	43,818,758.00
B.	CULVERTS CROSSINGS (19 units) & BRIDGE CROSSING (1 unit)	1.00	l.s.	119,138.19	10.00	8.00	18.00	21,444.87	7,029.15	28,474.03	147,612.21	147,612.21
C.	CONCRETE GROUND TANK (300 cu.m.)	1.00	l.s.	6,597,927.74	10.00	8.00	18.00	1,187,626.99	389,277.74	1,576,904.73	8,174,832.47	8,174,832.47
D.	INTAKE STRUCTURES	1.00	l.s.	1,793,629.33	10.00	8.00	18.00	322,853.28	105,824.13	428,677.41	2,222,306.74	2,222,306.74
E.	CHLORINE ROOM	1.00	l.s.	213,592.85	10.00	8.00	18.00	38,446.71	12,601.98	51,048.69	264,641.55	264,641.55
F.	OPERATOR'S ROOM	1.00	l.s.	703,318.42	10.00	8.00	18.00	126,597.32	41,495.79	168,093.10	871,411.53	871,411.53
G.	SEPTIC VAULT (OPERATOR'S ROOM)	1.00	l.s.	56,321.95	10.00	8.00	18.00	10,137.95	3,323.00	13,460.95	69,782.90	69,782.90
H.	GUARD HOUSE (2.89 sq.m.)	1.00	l.s.	286,221.33	10.00	8.00	18.00	51,519.84	16,887.06	68,406.90	354,628.23	354,628.23
I.	CONCRETE PERIMETER FENCE	1.00	l.s.	786,779.32	10.00	8.00	18.00	141,620.28	46,419.98	188,040.26	974,819.58	974,819.58
J.	CONCRETE PIPE SUPPORTS (1,240 units)	1.00	l.s.	3,569,916.13	10.00	8.00	18.00	642,584.90	210,625.05	853,209.96	4,423,126.09	4,423,126.09
K.	CREEK CROSSING (9.00 units)	1.00	l.s.	1,069,330.40	10.00	8.00	18.00	192,479.47	63,090.49	255,569.97	1,324,900.36	1,324,900.36
L.	RCCP DRAINAGE SYSTEM	1.00	l.s.	192,005.85	10.00	8.00	18.00	34,561.05	11,328.35	45,889.40	237,895.25	237,895.25
M.	CONCRETE CATWALK/DRIVEWAY	1.00	l.s.	267,854.86	10.00	8.00	18.00	48,213.87	15,803.44	64,017.31	331,872.17	331,872.17

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)
GENERAL REQUIREMENTS												
A.1.1(3)	Construction of Field Office for the Engineer	1.00	l.s.	474,914.27	10.00	8.00	18.00	85,484.57	28,019.94	113,504.51	588,418.78	588,418.78
B.5	Project Billboard/Signboard	4.00	unit	17,676.40	10.00	8.00	18.00	3,181.75	1,042.91	4,224.66	21,901.06	5,475.26
B.7	Occupational Safety and Health Program	1.00	l.s.	534,811.76	0.00	8.00	8.00	42,784.94	28,879.84	71,664.78	606,476.54	606,476.54
B.9	Mobilization/Demobilization	1.00	l.s.	490,451.04	0.00	0.00	0.00	-	24,522.55	24,522.55	514,973.59	514,973.59
A.1.2(5)	Operation and Maintenance of Gov't. Service Vehicle (4x4 Pick-Up Type)	1.00	l.s.	570,741.60	0.00	0.00	0.00	-	28,537.08	28,537.08	599,278.68	599,278.68
T O T A L				94,926,305.02					5,588,427.20		117,356,971.27	

Submitted :

Recommending Approval :

Approved :

BELEN A. SAPALLED A
Head, BAC-TWG

CAYAMOMBAO D. DIA
OIC - Assistant Regional Director

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