

GUAM CONSOLIDATED COMMISSION ON UTILITIES RESOLUTION NO. 53-FY2016

RELATIVE TO APPROVING THE CONSTRUCTION CONTRACT FOR THE YIGO AND ASTUMBO TANKS

WHEREAS, under 12 G.C.A. § 14105, the Consolidated Commission on Utilities ("CCU") has plenary authority over financial, contractual and policy matters relative to the Guam Waterworks Authority ("GWA"); and

WHEREAS, the Guam Waterworks Authority ("GWA") is a Guam Public Corporation established and existing under the laws of Guam; and

WHEREAS, GWA currently has a number of critical Court Order ("CO") Projects, including the construction (i.e. repair, rehabilitate, replace or relocate) of the Yigo and Astumbo tanks, as stated in Paragraph 29 (b) (4), (5), and (6) of the Court Order; and

WHEREAS, in compliance with the Court Order, GWA intends to execute a construction project to address the following:

- the construction of the new Yigo tanks will replace the existing Yigo No. 1 steel
 tank and increase the overall water storage capacity from 3.0 million gallons to
 6.5 million gallons; and
- 2. the construction of the new Yigo booster pump station will replace the Yigo Elevated tank; and
- the construction of the new Astumbo No. 1 tank will replace the existing Astumbo
 No. 1 steel tank and increase the overall water storage capacity from 3.0 million
 gallons to 4.0 million gallons; and
- 4. the construction of a new water transmission line connecting the new Astumbo tank to a new water well, to be developed; and

WHEREAS, GWA has advertised an Invitation For Bid (IFB) soliciting bid proposal from experienced, responsible, and responsive bidders to construct three 2.0 million gallon concrete tanks, a booster pump station, and new line installation; and

WHEREAS, the work consists of the Contractor furnishing all labor, tools, equipment and materials necessary to complete the construction of the Yigo booster pump station, 3,500 LF of new water transmission line, and three pre-stressed concrete tanks (2 tanks at Yigo site and 1 tank at Astumbo site) to include, but not limited to: foundation, earthwork, pipework, retaining wall, storm water detention basin, fences and gates, protective coatings, SCADA, disinfection, testing and start-up under the provisions of the bid documents and in accordance with applicable GWA standards; and

WHEREAS, IFB packages were picked up by fifteen (15) interested parties, from which GWA received bid proposals from two (2) of the fifteen (15) parties before the bid proposal deadline (See Exhibit A – Bid Tabulation); and

WHEREAS, GWA Engineering and the Construction Management team analyzed all bid proposals received on August 5th, 2016 and determined that Pernix Guam, LLC, who submitted the lowest total bid as being the responsive and responsible bidder and met all the bid requirements set forth by GWA (See Exhibit B – Recommendation Memorandum); and

WHEREAS, GWA Management finds the Pernix Guam, LLC bid proposal of Eighteen Million Two Hundred Twenty One Thousand Three Hundred Twenty Eight Dollars (\$18,221,328.00) to be acceptable (See Exhibit C – Bid Proposal); and

WHEREAS, GWA Management is seeking approval to enter into a contract with Pernix Guam, LLC for IFB-07-ENG-2016 in the amount of Eighteen Million Two Hundred Twenty One Thousand Three Hundred Twenty Eight Dollars (\$18,221,328.00), along with a ten percent (10%) contingency of One Million Eight Hundred Twenty Two Thousand One Hundred Thirty Two Dollars (\$1,822,132.00) bringing the total requested funding amount to Twenty Million Forty Three Thousand Four Hundred Sixty Dollars (\$20,043,460.00); and

WHEREAS, the funding source for the construction project will be from the CIP PW 12-05 Tank Major Repair Yigo No. 1, Mangilao No. 2, and Astumbo No. 1 and PW 09-11 Water System Reservoirs 2005 Improvements; and

NOW BE IT THEREFORE RESOLVED, the Consolidated Commission on Utilities does hereby approve and authorize the following:

- 1. The recitals set forth above hereby constitute the findings of the CCU.
- 2. The CCU finds that the terms of the bid proposal submitted by Pernix Guam, LLC are fair and reasonable.
- 3. The CCU finds that the terms of the conditions set by GWA relative to commencement of subsequent work activities are fair and reasonable and serve as a measure of Quality Assurance/Quality Control (QA/QC).
- 4. The CCU hereby authorizes the management of GWA to accept the bid from Pernix Guam, LLC attached hereto as Exhibit C, and which is also incorporated into this Resolution in its entirety.
- 5. The CCU hereby further authorizes the management to enter into a contract with Pernix Guam, LLC, in the amount of Eighteen Million Two Hundred Twenty One Thousand Three Hundred Twenty Eight Dollars (\$18,221,328.00).
- 6. The CCU hereby approves the funding total of Eighteen Million Two Hundred Twenty One Thousand Three Hundred Twenty Eight Dollars (\$18,221,328.00) plus a ten percent (10%) contingency of One Million Eight Hundred Twenty Two Thousand One Hundred Thirty Two Dollars (\$1,822,132.00) to bring the total authorized funding amount to a maximum of Twenty Million Forty Three Thousand Four Hundred Sixty Dollars (\$20,043,460.00).
- The CCU hereby approves the use of funding from CIP PW 12-05 Tank Major Repair Yigo No. 1, Mangilao No. 2, and Astumbo No. 1 and PW 09-11 Water System Reservoirs 2005 Improvements.

RESOLVED, that the Chairman certified and the Board Secretary attests to the adoption of this Resolution.

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DULY AND REGULARLY ADOPTED, this 23th day of August 2016. Certified by: Attested by: JOSEPH T. DUENAS **GEORGE BAMBA** Chairperson Secretary I, J. George Bamba, Board Secretary of the Consolidated Commission on Utilities as evidenced by my signature above do hereby certify as follows: The foregoing is a full, true and accurate copy of the resolution duly adopted at a regular meeting by the members of the Guam Consolidated Commission on Utilities, duly and legally held at a place properly noticed and advertised at which meeting a quorum was present and the members who were present voted as follows: AYES: NAYS: **ABSTENTIONS:** ABSENT: /// /// ///

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ORIGINAL

August 5, 2016 3:00 PM

Bid Opening Date: Time:

GUAM WATERWORKS AUTHORITY ABSTRACT OF BIDS

Tris W

YIGO AND ASTUMBO RESERVOIR Project Number: Project Name:

W13-001-BND; IFB-07-ENG-2016

Exhibit A (1 of \$19,221, 328.00 **TOTAL BID** AMOUNT \$11,725,085.00 \$6,496,243.00 TABLE B (ASTUMBO) TABLE A (YIGO) 7 1 Instructions to Bidders Special / Major Shareholders Affidavit 10 Wage & Benefit Determination 7 CERTIFICATIONS Non-Segrageted Facilities EEO / Non-Collusion Affidavit Bidder Qualification Form 7 15% of Total Bid Amount Fidelity and Depart Consony Merykin Section A-5 Bid Bond ORION CONSTRUCTION CORP. GUAM SUMITOMO MITSUI CONST. CO., LTD **Bidders Name** PROTECTIVE COATING SUPPLY PACIFIC RIM CONSTRUCTOR PROPACIFIC BUILDER CORP REX INTERNATIONAL INC. POLYPHASE SYSTEM INC. AMERICAN INTL SUPPLY BLACK CONSTRUCTION SMITHBRIDGE GUAM JRN A/C & REF INC. BME & SONS INC. DN TANKS PERNIX 10 11. 12. 13.

Bids Opened and Read by:

Garrett Yech (Name and Signature)

CHEUK NAM YAM ((Name and Signature) Tabulated By:

Name and Signature)

GMA Procurement Representati

Witnesses:

\$10,648,818.00 \$ 6,214,436.00 \$ 16,863,249.00 V \$14,061,815.00 \$10,222,220.00 \$24,284,035.00

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Federal Insurance Company -

15% of Bid Amount

GRANITE CONSTRUCTION COMPANY GUAM

GWA Estimate

Exhibit B (1 of 1)



Memorandum

August 9, 2016

То:	Mr. Tom Cruz, P.E. Chief Engineer, GWA			
Cc:	File; Garrett Yeoh; Brett Railey, P.E.			
From:	Aaron Sutton, P.E., Construction Manager	Tel:	671-472-6792	
Subject:	GWA Construction of Yigo and Astumbo Reservoirs	GHD Job No.:	8411481	.81
premis particular of the entire and	Project No. W13-001-BND			
	IFB No. IFB-07-ENG-2016			
	Bid Recommendation Memorandum			

COMMENTS:

Table 1 provides a summary of the Bids from lowest apparent to the highest apparent Bidder. Exhibit D provides a more detailed table with the bid schedule comparison between the two bidders and variance above or below the Engineers Estimate in dollars for the apparent low bid. The apparent low bidder is Pernix Guam, LLC (Pernix) with a base bid amount of \$18,221,328 which was 8.05% above the Engineer's Estimate of \$16,863,249.

TABLE1. SUMMARY OF BASE BIDS

BIDDER	BASIC BID AMOUNT
Pernix Guam, LLC	\$18,221,328
Granite, LLC	\$24,284,035

RECOMMENDATION:

Based on GHD's review of the Bid Documents, it is our professional opinion that Pernix has submitted a bid which conforms in all material respects to the Invitation to Bid and has the capability to satisfy the contract requirements. Based on this, we recommend award of the contract to Pernix as the lowest responsive and responsible Bidder. See Exhibits A, B, and C for copies of low bid information and Exhibit D for a detailed spreadsheet summary of the Bidders' Schedule of Values.

Attachments: Exhibit A, Pernix Bid Proposal

Exhibit B, Pernix Bid Bond Exhibit C, GWA Abstract of Bids Exhibit D, Detailed Spread Sheet

Exhibit C (1 of 12)

Yigo & Astumbo Reservoir

APPENDIX A

BID PROPOSAL FORM

DATE:

TO: General Manager
Guam Waterworks Authority
Gloria B. Nelson Public Service Building
688 Route 15
Mangilao, GU 96913

Dear Sir/Madam:

The undersigned ("Bidder"), a Limited Liability Company (Corporation or partnership or individual), organized and/or licensed to do business under the laws of Guam, hereby proposes and agrees to furnish all necessary labor, materials, equipment, tools and services necessary for the construction of the IFB-07-ENG-2016 YIGO AND ASTUMBO RESERVOIR; GWA Project No. W13-001-BND in accordance with the Specifications and other Contract Documents herein for the sum of

(Bid Amount)
Eighteen Million, Two Hundred Twenty One Thousand, Three Hundred Twenty Eight Dollars (\$18,221,328.00)

plus any and all sums to be added and/or deducted resulted from all extra and/or omitted work under a change order or Contract amendment under the unit and/or lump sum prices stated in the itemized proposal form attached hereto.

The undersigned has examined the location of the proposed work, the drawings, specifications and other Contract Documents and is familiar with the local conditions at the place where the work is to be performed, agrees to perform all work within the time set forth; herein and the price stated in their bid.

The Bid Guaranty attached hereto without endorsement, in the sum of not less than fifteen percent (15%) of the highest amount the total aggregate bid, is furnished to the Guam Waterworks Authority as a guarantee that the Agreement will be executed and a Performance and Payment Bond and proof of insurance and other requirements set forth in the bid, in forms acceptable to GWA, shall be furnished within twenty (20) days after notification that the undersigned is the lowest responsible and responsive bidder. In the event that this Bid is accepted, and the undersigned bidder shall fail to: (1) provide any and all documents requested by GWA; (2) execute the Contract on terms and conditions acceptable to GWA; and (3) furnish a satisfactory performance and Payment Bond under the conditions and within the time specified in this Proposal, the equivalent amount of the Proposed Guaranty shall be forfeited, as liquidated damages for the delay and additional work and costs caused thereby in obtaining another bidder, said amount being beforehand determined as being

Exhibit C (2 of 12)

Yigo & Astumbo Reservoir

reasonable and containing no penalties. If written notice that the bidder is the lowest responsible and responsive bidder, and such notice is mailed, telegraphed or delivered to the undersigned within one hundred and twenty (120) days after the opening thereof, the undersigned agrees to execute the a Contract on terms and conditions acceptable to GWA, and to furnish a Performance and Payment Bond in an amount equal to one hundred percent (100%) of the Contract Amount, within twenty (20) days after receipt of such notice. The undersigned hereby acknowledges receipt of the following Addenda: Addendum No. 7-18-2016 7-28-2016 If awarded the Contract, the undersigned agrees to complete the work within 300 calendar days for each tank following the execution of the Contract by all parties thereto and the issuance of the Notice to Proceed from GWA. Attached hereto are the following: (1) an affidavit in proof that the undersigned has not entered into any collusion with any person in respect to this proposal or any other proposal or the submitting of proposals for the Contract for which this bid is submitted; (2) proof of licensure on Guam to conduct the services specified in the bid; (3) proof of insurance in the types and amounts specified in the bid, including certificates and a copy of the complete policies which indicates coverages and exclusions; (4) Certification of Non-Employment of Convicted Sex Offenders; and (5) any other document requested under per the Bid Specifications. The undersigned understands that the Guam Waterworks Authority reserves the right to reject any or all Proposals or to waive any informality or technicality in any Proposal in the interest of GWA. RESPECTFULLY SUBMITTED BY: Pernix Guam, LLC (SONTRACTOR) Louis C. DeMaria (BY) Vice President/General Manager (TITLE)

(BUSINESS ADDRESS)

P.O. Box 23068, Barrigada, Guam 96921

Exhibit C (3 of 12)

BID SCHEDULE

Interested Bidders must complete Table A and Table B. All blanks in the tables must be filled out.

Definitions:

LS = lump sum

TABLE A YIGO BID SCHEDULE

Item No.	Description	Quantity	Unit	Extended Amount
1	Mobilization, as specified in the Contract Documents.	1	LS	\$320,867.91
2	Demolition of existing facilities, including the elevated steel tank and foundation, the existing pump building and foundation, paving, chain link fences and gates, piping, concrete vaults, headwall, and appurtenances, as shown and specified in the Contract Documents.			
		1	LS	\$105,138.8

Construction of Tank No. 1, including a 2.0 million gallon (MG) nominal capacity prestressed concrete tank, earthwork, yard piping, fences and gates, protective coatings, electrical, instrumentation and controls, disinfection, testing, startup, and all appurtenant work, complete and operable, as shown and specified in the Contract Documents.

Exhibit C (4 of 12)

TABLE A YIGO BID SCHEDULE

Item No	. Description	Quantity	Unit	Extended Amount
	Item 3 Breakdown			
	3.1 Earthwork			\$03 A77 10
	3.2 Tank Foundation			\$83,477.19 \$356,098.80
	3.3 Tank Piping & Valving			\$104,466.41
	3.4 Pre-stressed Concrete Tank			\$3,147,868.54
	3.5 Tank Appurtenances			\$189,559.53
	3.6 Tank Coating			\$54,453.80
	3.7 Tank & Piping Disinfection			\$18,510.25
	3.8 Testing & Startup			\$8,469.39
	3.9 Electrical System for Phase 1			ΨΒ,407.57
	and Phase 2			\$254,578.36
	3.10 Instrumentation and Control			\$95,503.55
	3.11 Yard Piping & Valving			\$353,463.10
	3.12 Drain Vault No. 1, Piping and			4050,100.10
	Manholes No. 1 and 2			\$57,419.88
	3.13 Fencing and Gates			\$179,438.20
	3.14 All other appurtenant work			\$1,204.01
	Subtotal	1	LS	\$4,904,511.01
4.	Site Grading and pavement including curbs, concrete gutters, headwalls, sidewalks, stormwater swales, riprap, and stormwater detention basin.			2252 211 41
		1	LS	\$352,214.61
5.	Construction of Inlet Valve Vault No. 1 on the 16-inch inlet pipeline of Proposed Water Tank No. 1,including construction of a concrete vault, hatches, safety nets, piping, valves, protective coating, earthwork, testing and disinfection, and all appurtenant work, complete and operable, as shown and specified in accordance with the Contract Documents.			
		i	LS	\$150,926.28

Exhibit C (5 of 12)

TABLE A YIGO BID SCHEDULE

Item No.	Description	Quantity	Unit	Extended Amount
6	Construction of Outlet Valve Vault No.1 on the 16-inch outlet pipeline of Proposed Water Tank No. 1, including construction concrete vault, hatches, safety nets, piping, valves, protective coating, connection to existing pipes, earthwork, testing disinfection, and all appurtenant work, complete and operable, as shown and specified in accordance with the Contract Documents.			
		1	LS	\$111,669.31
7	Construction of Inlet/Outlet Meter Vault on the 16-inch outlet pipeline and the 16-inch inlet pipeline of Proposed Water Tank No. 1, including construction concrete vault, hatches, safety nets, piping, valves, meters, protective coating, connection to existing pipes, earthwork, testing and disinfection, and all appurtenant work, complete and operable, as shown and specified in accordance with the Contract Documents.			
		1	LS	\$105,011.76
8	Construction of Yigo Booster Pump station, including triplex booster pumps, electrical and controls, generator, fuel tank, hoist, piping, valves, meters, connection to existing pipes, earthwork, disinfection, testing and startup, and all appurtenant work, complete and operable as shown and specified in accordance with the Contract Documents.			

Exhibit C (6 of 12)

TABLE A YIGO BID SCHEDULE

Item No.	Description	Quantity	Unit	Extended Amount	
<u>Item</u>	No. 8 Breakdown				
	8.1 Proposed Booster Pump House			\$211,710.41	
	8.2 Triplex Pump System			\$119,045.87	
	8.3 Piping and Valving			\$24,667.97	
	8.4 Flow Meters			\$19,916.52	
	8.5 Hoist System			\$14,973.39	
	8.6 Generator			\$88,516.67	
	8.7 Diesel Fuel Tank			\$91,534.65	
	8.8 Electrical System			\$146,131.40	
	8.9 All other appurtenant work			\$31,754.39	
	Subtotal	1	LS	\$748,251.28 748,	251, 27
9	Phase 2: Preparation of inspection of existing Yigo Tank #2 including interior floor, wall, and roof cleaning, scaffolding, supply of man-lift for 3 days, and safe access for GWA staff and inspectors.				
		I	LS	\$27,235.34	
10	Phase 2: Demolition of existing Yigo No. I steel tank, including foundation, oiled-sand, piping, concrete vaults, valves, pavement, and appurtenances, as shown and specified in the Contract Documents.				
		1	LS	\$50,289.90	
11	Phase 2: Connection and construction of new appurtenances for existing Yigo Tank #2 as Shown and Specified in the Contract Documents.				
	Item 11. Breakdown				
	10.1 New 16-inch Outlet Pipeline			የ 10 ላድግ ላላ	
	10.2 Connection to Yigo No. 2 Tank			\$10,457.44 \$2,181.28	
	10.3 Inlet Valve Vault No. 2			\$2,181.28 \$70.542.30	
	10.4 Outlet Valve Vault No. 2			\$70,542.30 \$53.144.87	
	10.5 Tank & Piping Disinfection			\$52,144.87	
	10.6 Testing & Startup			\$20,138.52	
	10.7 Instrumentation and Control			\$11,572.17	
	10.8 Yard Piping & Valving			\$41,301.97	
	10.8 Yard Piping & Valving			\$12,325.55	

Exhibit C (7 of 12)

TABLE A YIGO BID SCHEDULE

	YIGO BII	SCHEDULE		
Item No.	Description	Quantity	Unit	Extended Amount
	10.9 Connection to 16-inch lines	<u>-</u> -		\$2,182.38
	10.10 All other appurtenant work			\$1,245.04
Subtotal		ı	LS	\$224,091.52
12	Phase 2: Construction of Tank No. 2, including a 2.0 million gallon (MG) nominal capacity pre-stressed concrete tank, earthwork, yard piping, protective coatings, electrical, instrumentation and controls, disinfection, testing, startup, and all appurtenant work, complete and operable, as shown and specified in the Contract Documents.			
	Item 11 Breakdown 3.1 Earthwork 3.2 Tank Foundation 3.3 Tank Piping & Valving 3.4 Pre-stressed Concrete Tank 3.5 Tank Appurtenances			\$114,098.92 \$336,372.71 \$146,767.76 \$3,516,966.39
	3.6 Tank Appartenances 3.7 Tank & Piping Disinfection 3.8 Testing & Startup 3.9 Electrical System on Tank 3.10 Instrumentation and Control			\$213,463.25 \$56,309.23 \$19,140.95 \$8,756.88 \$1,245.04 \$94,263.72
	3.11 Yard Piping & Valving3.12Drain Vault and Piping3.13 All other appurtenant work			\$65,258.83 \$50,988.52 \$1,245.04
	Subtotal	1	LS	\$4,624,877.24

TABLE B ASTUMBO BID SCHEDULE

\$11,725,085.00

Table A Subtotal

Item No.	Description	Quantity	Unit	Extended Amount
				

Exhibit C (8 of 12)

TABLE B ASTUMBO BID SCHEDULE

1 Mobilization, as specified in the Contract Documents 1 LS \$237,952.75 2 Demolition of existing facilities, including the Astumbo #1 steel tank, foundation, oiled-sand, paving, chain link fences and gates, piping, concrete vaults, headwall, and appurtenances, as shown and specified in the Contract Documents. 1 Ls \$86,410.35 3 Construction of Astumbo Tank, including a 2.0 million gallon (MG) nominal capacity pre-stressed concrete tank, earthwork, yard piping, fences and gates, protective coatings, electrical, instrumentation and controls, disinfection, testing, startup, and all appurtenant work, complete and operable, as shown and specified in the Contract Documents. Item 3 Breakdown	tem Io.	Description		Quantity	Unit	Extended Amoun
including the Astumbo #I steel tank, foundation, oiled-sand, paving, chain link fences and gates, piping, concrete vaults, headwall, and appurtenances, as shown and specified in the Contract Documents. 3 Construction of Astumbo Tank, including a 2.0 million gallon (MG) nominal capacity pre-stressed concrete tank, earthwork, yard piping, fences and gates, protective coatings, electrical, instrumentation and controls, disinfection, testing, startup, and all appurtenant work, complete and operable, as shown and specified in the Contract Documents. Item 3 Breakdown	1	· •	1		LS	\$237,952.75
Construction of Astumbo Tank, including a 2.0 million gallon (MG) nominal capacity pre-stressed concrete tank, earthwork, yard piping, fences and gates, protective coatings, electrical, instrumentation and controls, disinfection, testing, startup, and all appurtenant work, complete and operable, as shown and specified in the Contract Documents. tem 3 Breakdown	2	including the Astumbo #1 steel tank, foundation, oiled-sand, paving, chain link fences and gates, piping, concrete vaults, headwall, and appurtenances, as shown and specified in the Contract	1		10	\$96.410.35
3.1 Earthwork \$61,908.81 3.2 Tank Foundation \$317,622.91 3.3 Tank Piping & Valving \$130,387.55 3.4 Pre-stressed Concrete Tank \$3,163,293.61 3.5 Tank Appurtenances \$190,488.41 3.6 Tank Coating \$54,338.61 3.7 Tank & Piping Disinfection \$19,205.37 3.8 Testing & Startup \$8,510.89 3.9 Electrical System \$237,992.12 3.10 Instrumentation and Control \$142,600.54 3.11 Yard Piping & Valving \$351,034.39 3.12 Drain Vault, Piping and Overflow Manhole \$41,868.10 3.13 Fencing and Gates \$84,192.71	3	including a 2.0 million gallon (MG) nominal capacity pre-stressed concrete tank, earthwork, yard piping, fences and gates, protective coatings, electrical, instrumentation and controls, disinfection, testing, startup, and all appurtenant work, complete and operable, as shown and				400,410.33
3.4 Pre-stressed Concrete Tank \$3,163,293.61 3.5 Tank Appurtenances \$190,488.41 3.6 Tank Coating \$190,488.41 3.7 Tank & Piping Disinfection \$19,205.37 3.8 Testing & Startup \$237,992.12 3.10 Instrumentation and Control \$142,600.54 3.11 Yard Piping & Valving \$351,034.39 3.12 Drain Vault, Piping and Overflow Manhole \$41,868.10 3.13 Fencing and Gates \$84,192.71		3.1 Earthwork 3.2 Tank Foundation				\$317,622.91
3.7 Tank & Piping Disinfection \$19,205.37 3.8 Testing & Startup \$19,205.37 3.9 Electrical System \$237,992.12 3.10 Instrumentation and Control \$142,600.54 3.11 Yard Piping & Valving \$351,034.39 3.12 Drain Vault, Piping and Overflow Manhole \$41,868.10 3.13 Fencing and Gates \$84,192.71		3.4 Pre-stressed Concrete Tank 3.5 Tank Appurtenances				\$3,163,293.61
3.9 Electrical System \$237,992.12 3.10 Instrumentation and Control \$142,600.54 3.11 Yard Piping & Valving \$351,034.39 3.12 Drain Vault, Piping and Overflow Manhole \$41,868.10 3.13 Fencing and Gates \$84,192.71		3.7 Tank & Piping Disinfection				\$19,205.37
3.12 Drain Vault, Piping and Overflow Manhole \$41,868.10 3.13 Fencing and Gates \$84,192.71		3.10 Instrumentation and Control				\$142,600.54
\$1,209.91		3.12 Drain Vault, Piping and Overflow Manhole 3.13 Fencing and Gates				\$41,868.10 \$84,192.71
btotal 1 IS \$4.904.652.02		5.14 cm outer apparenant work				\$1,209.91

Exhibit C (9 o f12)

TABLE B ASTUMBO BID SCHEDULE

Item No.	Description	Quantity	Unit	Extended Amount
4	Site Grading and pavement including curbs, concrete gutters, sidewalks, stormwater swales, riprap, and stormwater detention basin.	1	LS	\$252,470.64
5	Construction of Inlet Valve Vault and Inlet Meter Vault on the 16-inch inlet pipeline of Proposed Water Tank, including construction of a concrete vault, hatches, safety nets, piping, valves, meter, protective coating, connection to existing pipe, earthwork, testing and disinfection, and all appurtenant work, complete and operable, as shown and specified in accordance with the Contract Documents.			·
6	Construction of Outlet Valve Vault No.1 on the 16-inch outlet pipeline of Proposed Water Tank, including construction concrete vault, hatches, safety nets, piping, valves, protective coating, connection to existing pipes, earthwork, testing disinfection, and all appurtenant work, complete and operable, as accordance shown and specified in with the Contract Documents.	1	LS	\$193,593.53
		1	LS	\$118,825.80
7	Construction of Outlet Vault No. 2 and Outlet Meter Vault on the 16-inch outlet pipeline and the 16-inch outlet pipeline, including construction concrete vault, hatches, safety nets, piping, valves, meter, protective coating, connection to existing pipe, earthwork, testing and disinfection, and all appurtenant work, complete and operable, as shown and specified in accordance with the Contract Documents.			
		1	LS	\$ 179,741.78

Exhibit C (10 of 12)

TABLE B ASTUMBO BID SCHEDULE

	ASTUMBO B	ID SCHEDULE	<u> </u>	
Item No.	Description	Quantity	Unit	Extended Amount
8	Construction of Control Building, including electrical and controls, earthwork, and all appurtenant work, complete and operable as shown and specified in accordance with the Contract Documents.	l	LS	\$50,071.46
9	Valve replacement on Y-Sengsong Road including pavement restoration.	·	۵	\$50,07 1.40
		i	LS	\$15,295.77
10	Design and installation of approximately 3,500.00 linear feet of 12-inch PVC AWWA C900 waterline on Chalan Nijok (begin at Chalan Nijok-Chalan Koda intersection and end connection to the inlet of the Astumbo Reservoirs on Chalan Palauan). The work will include:			
	a. Installation of new gate valves, valve box, and valve cover (no less than every 500 feet).			
	b. Installation of new fire wet barrel hydrants (no less than every 500 feet), air release valves, blow-off assemblies, combination air release valves, and all other necessary appurtenances.			
	c. Installation of main line fittings and accessories which include mechanical joint restraints, push-on joints, flange-bolts, gaskets, and all other necessary appurtenances.			
	d. Installation of tees and cross tees at intersections.			
	e. Installation of service line materials and fittings.			
	f. Pipeline disinfection and pressure testing.			
	g. Pavement restoration where necessary.			

Exhibit C (11 of 12)

TABLE B ASTUMBO BID SCHEDULE

Item No.	Description	Quantity	Unit	Extended Amount
NU	h. All necessary work for complete and proper construction per AWWA and GWA standards.			
	 Designer shall be approved by GWA Engineering. 	1	LS	\$425,915.98
11	Design and installation of 2 pressure reducing valves (PRV) and 1 vault (see PRV and Vault Example – Table B Bid Item 11 on CD) on Chalan Nijok or Chalan Palauan. The work will include:			
	a. Installation of 10" PRV w/ valve stem indicator.			
	b. Installation of 6" bypass PRV w/valve stem indicator.			
	c. Isolation gates valves before and after each PRV.			
	d. Piping, fittings, reducers, air/vacuum release, block supports and all other necessary appurtenances.			
	e. Pressure gauges upstream and downstream of each PRV in the vault. f. Traffic rated vault access hatch and stainless steel access ladder.			
	g. Concrete Vault. Vault shall be sized to include all necessary piping, fittings, valving, PRVs, drain sump, and adequate space for GWA maintenance.			
	h. All necessary work for complete and proper construction per AWWA and GWA standards.			
	i. Designer shall be approved by GWA Engineering.	i	LS	\$131,311.02
able B S	ubtotal			\$6,496,243.00

Table A and B Total

\$18,221,328.00

Exhibit C (12 of 12)

TOTAL BID PRICE FOR THE BID SCHEDULE (Table A and B)
For the lump sum of \$ 18,221,328.00
(Price in Figures)
Eighteen Million Two Hundred Twenty One Thousand Three Hundred Twenty Eight and 00/100 U.S. Dollar
(Price in Words)

This Contract will be awarded to the lowest responsive and responsible bidder based on the Bid Schedule. Determination of the lowest responsive and responsible bidder will be in accordance with the provisions of the Bid Documents.