Request for Proposal/Quotation

Title: Construction of Water Intake, Ground Water Tank, Filtration; Transmission and Distribution Pipeline for Level II Water Supply System for the Indigenous Community in Sitio Tagpas, Brgy. Latud, Rizal, Palawan, Philippines

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1. Background

Conservation International Philippines Foundation, Inc. (CIPFI), an affiliate of Conservation International (CI)—a US-based environmental non-profit organization working across 30 countries—is dedicated to protecting, managing, and restoring nature and biodiversity. Guided by science, policy, and field demonstrations, we place people at the heart of our conservation efforts, thus actively engaging with local communities and indigenous peoples in key biodiversity areas. Since 1998, CI has been collaborating with stakeholders in Palawan, both on land and sea, from the magnificent mountain of Mantalingahan to the productive Sulu-Sulawesi Seascape, to ensure the well-being of Filipinos for generations to come.

One of CI's current projects is the Community Conservation and Natural Climate Solutions initiative being implemented within Mount Mantalingahan Protected Landscape (MMPL) and Panalingaan-Latud-Taburi ancestral domain in Southern Palawan, Philippines. As a natural climate solutions initiative, the project puts communities and conservation front and center in responding to climate change. The project is supporting indigenous peoples and local community in the implementation of community and protected area conservation and land use management plans that secure healthy ecosystem services, additional co-benefits, and sustainable financing through piloting innovations to address climate change, working at the interface between conservation and climate, and to ensure that nature-based solutions are maximized.

2. Assignment Overview

The construction of gravity type level II water supply system in barangay Latud was among the identified needs by the Panalingaan-Latud-Taburi ancestral domain holders, during the negotiations as part of the free, prior and informed consent process (FPIC) for the Community Conservation and Natural Climate Solutions project. In Article III (Responsibilities of the Parties), Section B. Item 10 of the memorandum of agreement signed on July 3, 2023, CI committed to provide funds and technical support to the construction of potable water system. Constructing the water system means adhering to the commitments in the agreement with the tenure-holders.

The identified beneficiaries of the water systems are geographically isolated and disadvantaged communities. Provision of a functional water system in these areas helps ensure equitable access to water. This initiative is more than just infrastructure—it is an investment towards better management of common resources including the watershed, community well-being, and long-term resilience. By integrating responsible resource management with inclusive development, we create a future where water security is both a right and a reality for all.

3. Terms of Reference, Deliverables, and Deliverables Schedule

General Requirements

The contractor is responsible for all materials, labor, equipment, and services necessary to complete the work in accordance with the project specifications (Attachment 3) and within the agreed timelines. All work must comply with the local construction standards, environmental regulations, and safety protocols.

As part of compliance, the contractor MUST have professional and general liability insurance relating to the construction works, such as the Commercial General Liability (CGL) Insurance, Professional Indemnity Insurance (PII) and Group Personal Accident (GPA) Insurance.

The Philippines National Standards for Drinking Water of 2017 issued by the Department of Health (Administrative Order No. 2017-0010) MUST be considered and complied with in the implementation of this project to ensure the quality and safety of the drinking water and its facilities.

Work Breakdown

1. Water Intake Construction
   - Site preparation: Clear and prepare the site for the intake structure, ensuring compliance with environmental and legal requirements.
   - Water source diversion: Divert the water source to facilitate proper flow into the intake system.
   - Earthworks: Perform earthworks necessary for the intake construction, including excavation and grading to accommodate the structure.
   - Water intake structure: Construct a permanent or temporary intake structure capable of capturing water at the required flow rate.
   - Screening: Install screens to prevent debris from entering the system.
   - Piping and flow control: Lay pipelines from the intake to the treatment area, installing necessary valves and flow control mechanisms.
   - Concreting works: Complete all required concreting works for the intake structure.

2. Ground Tank Construction
   - Excavation and site preparation: Excavate to the required size and depth for the well.
   - Concrete/masonry work: Construct the ground tank using reinforced concrete or other suitable materials.
   - Water storage and overflow: Install overflow and drainage systems to manage excess water and prevent overflow into surrounding areas.
   - Access points: Install manholes, access points, or ladders for maintenance and inspection.
   - Sealing: Ensure the clear water well is properly sealed to prevent contamination from external sources.

3. Filter Media Structure Construction
   - Site preparation: Clear and level the ground for the filter media structure.
   - Concrete foundation: Construct a reinforced concrete foundation capable of supporting the filter media structure.
   - Steel filter house: Construct the steel filter house frame, ensuring it meets structural integrity and safety standards.
   - Roofing works: Install roofing on the steel filter house to provide protection from environmental elements, using durable materials such as metal sheets or similar.

- Filter media Installation: Install appropriate filter media (e.g., sand, gravel, activated carbon) within the structure to ensure efficient water filtration.
- Piping and connections: Install inlet and outlet pipes, ensuring proper connection to the clear water well and distribution system.
- Testing and commissioning: Perform tests to ensure the filter media operates effectively and the water quality meets required standards.

4. Transmission and Distribution Pipeline
   - Site preparation and trenching: Clear the pipeline route and provide access, shoring or dewatering as needed.
   - Pipe delivery and handling: Deliver, unload and inspect, handle, and properly store pipes and fittings on site to prevent damage prior to installation.
   - Pipe laying and installation: Prepare pipe bedding materials and install transmission and distribution pipelines with proper alignment and leveling including installation of fittings, reducers, couplings, valves, air release valves, and other required pipeline appurtenances in accordance with approved plans.
   - Jointing and connections: Perform pipe jointing using mechanical, fusion, solvent cement, or flanged methods as specified, including installation of transition couplings between different pipe materials and tie-in connections to existing pipelines and structures.
   - Testing and commissioning: Conduct pressure testing, flushing, cleaning, leak inspection, and necessary repairs, followed by final inspection prior to commissioning.
   - Backfilling and reinstatement: Perform backfilling with proper compaction and restore all affected areas.

Key Deliverables and expected timeline:

The project is expected to commence within 7 calendar days upon signing of External Service Agreement and is scheduled for completion within 60 calendar days from the start date.

The key deliverables are:

- Trapezoidal water intake (with width of 18.2 meters and 4.25 meters; height of 4 meters from the bottom of footing) with 4.25 meters x 7.7. meters concrete buttress in Sitio Tagpas, Brgy. Latud, Rizal, Palawan, Philippines
- 100m^3 ground tank and slow sand filter structure in Sitio Tagpas, Brgy. Latud, Rizal, Palawan, Philippines
- Transmission and distribution pipeline from main line to consumers' tap in Sitio Tagpas, Brgy. Latud, Rizal, Palawan, Philippines, in accordance with the technical design and specififcations
- All documentation required for the project including daily reports, safety records, and final inspection records.

4. Submission Details

a. Deadline. Proposals must be received no later than 11:59PM (PHT) on **February 13, 2026**. Late submissions will not be accepted. Proposals must be submitted via email to: cip-procurement@conservation.org. All proposals are to be submitted following the guidelines listed in this RFP. For additional reference, structural and architectural design may be made

available by sending a request through cip-procurement@conservation.org.
Validity of proposal. 30 days from the submission deadline

b. Eligibility
   - The offeror must be a licensed contractor with experience in water system projects.
   - The offeror must provide proof of similar completed projects in the past.
   - The offeror must have the necessary equipment, manpower, and financial capacity to complete the work on time and as per specifications.

5. **Proposal Documents to Include**
   a. Signed cover page on offeror's letterhead with contact information.
   b. Contractor's profile: Please include CV of key personnel, descriptions of similar projects or assignments and at least three client references.
   c. Workers' health and safety plan
   d. Financial proposal and terms of payment. Offerors shall use the cost proposal template (Attachment 1).
   e. Signed representation of transparency, integrity, environmental and social responsibility (Attachment 2)

6. **Evaluation Criteria** In evaluating proposals, CI will seek the best value for money considering the merits of the technical and cost proposals. Proposals will be evaluated using the following criteria:

Evaluation Criteria	**Score (out of 100)**
Proposal, timeline, and cost (50 points)	50 Max points
Experience with similar assignments (25 points)	25 Max points
Worker' health and safety plan (15 points)	15 Max points
Familiarity with the area (Brgy. Latud, Rizal, Palawan) (10 points)	10 Max points

7. **Resulting Award** CI anticipates entering into an agreement with the selected offeror by **March 2, 2026**. Any resulting agreement will be subject to the terms and conditions of CI's Services Agreement. A model form of agreement can be provided upon request.

   This RFP/Q does not obligate CI to execute a contract, nor does it commit CI to pay any costs incurred in the preparation or submission of the proposals. Furthermore, CI reserves the right to reject any and all offers, if such action is considered to be in the best interest of CI. CI will, in its sole discretion, select the winning proposal and is not obligated to share individual evaluation results.

8. **Confidentiality** All proprietary information provided by the offeror shall be treated as confidential and will not be shared with potential or actual applicants during the solicitation process. This includes but is not limited to price quotations and cost proposals. CI may, but is not obliged to, post procurement awards on its public website after the solicitation process has concluded, and

the contract has been awarded. CI's evaluation results are confidential, and applicant scoring will not be shared among bidders.

9. **Code of Ethics** All Offerors are expected to exercise the highest standards of conduct in preparing, submitting and if selected, eventually carrying out the specified work in accordance with CI's Code of Ethics. Conservation International's reputation derives from our commitment to our values: Integrity, Respect, Courage, Optimism, Passion and Teamwork. CI's Code of Ethics (the "Code") provides guidance to CI employees, service providers, experts, interns, and volunteers in living CI's core values, and outlines minimum standards for ethical conduct which all parties must adhere to. Any violation of the Code of Ethics, as well as concerns regarding the integrity of the procurement process and documents should be reported to CI via its Ethics Hotline at www.ci.ethicspoint.com.

10. **Attachments**:

    Attachment 1: Cost Proposal Template
    Attachment 2: Representation of Transparency, Integrity, Environmental and Social Responsibility
    Attachment 3: General Specifications
    Attachment 4: Technical Plans and Design

Attachment 1: Cost Proposal Template

The cost proposal must be all-inclusive of profit, fees or taxes. Additional costs cannot be included after the award, and revisions to proposed costs may not be made after submission unless expressly requested by CI should the offeror's proposal be accepted. Nevertheless, for the purpose of the proposal, Offerors must provide a detailed budget showing major expense line items. Offers must show unit prices, quantities, and total prices. All items, services, etc. must be clearly labeled and included in the total offered price. All cost information must be expressed in PHP.

If selected, the Offeror shall use its best efforts to minimize the financing of any taxes on goods and services, or the importation, manufacture, procurement or supply thereof. If the Offeror is eligible to apply for refunds on taxes paid, the Offeror shall do so. Any tax savings should be reflected in the total cost.

BID QUANTITIES					Unit Cost	Total
Ref #	Bid Item #	Item Description	Qty.	UNIT		
1	1.001	Bonds and Insurances	1	LS		
2	1.002	Testing and Commissioning	1	LS		
3	1.003	Construction Safety and Health, Temporary Bunk House & Storage Area	1	LS		
4	1.004	Clearing, Gravel Excavation, Backfill for Footing and Embankment Water Diversion (Gravel & Sand)	1	LS		
5	1.005	Clearing, Earth Excavation, Backfill for 100cu.m. Ground Tank and Slow Sand Filter Structure Footing	1	LS		
6	1.006	Clearing, Earth Excavation, Backfill for Transmission Pipeline depth 0.5m x wide 0.3 m x length 1700m	1	LS		
7	1.007	Clearing, Earth Excavation, Backfill for Distribution Pipeline depth 0.5m x wide 0.3 m x length 3650m	1	LS		
		INTAKE STRUCTURE				
		Structural Concrete with Reinforcement Grade 40 (Footing) (3.47 cu.m.)				
8	1.008	Portland Cement	32	bags		
9	1.009	Screened Sand	2	cu.m.		
10	1.010	Gravel 3/4	4	cu.m.		
11	1.011	#16 G.I. Tie Wires	1	kgs		
12	1.012	16mm dia. X 6.0 RSB (Grade 40)	16	pcs		
13	1.013	1 bagger mixer		days		
14	1.014	1 concrete vibrator		days		
15	1.015	1 Bar Cutter		days		
16	1.016	1 Bar Bender		days		
17	1.017	Manpower	1	LS		
		Structural Concrete with Reinforcement Grade 40 (Wall) (7.84 cu.m.)				
18	1.018	Portland Cement	71	bags		

BID QUANTITIES					Unit Cost	Total
19	1.019	Screened Sand	4	cu.m.		
20	1.020	Gravel 3/4	8	cu.m.		
21	1.021	#16 G.I. Tie Wires	6	kgs		
22	1.022	12mm dia. X 6.0 RSB	45	pcs		
23	1.023	1 bagger mixer		days		
24	1.024	1 concrete vibrator		days		
25	1.025	1 Bar Cutter		days		
26	1.026	1 Bar Bender		days		
27	1.027	Manpower	1	LS		
		Concrete buttress with Reinforcement Garde 40(1.51 cu.m.)				
28	1.028	Portland Cement	14	bags		
29	1.029	Screened Sand	1	cu.m.		
30	1.030	Gravel 3/4	2	cu.m.		
31	1.031	#16 G.I. Tie Wires	2	kgs		
32	1.032	12mm dia. X 6.0 RSB	44	pcs		
33	1.033	1 bagger mixer		days		
34	1.034	1 concrete vibrator		days		
35	1.035	1 Bar Cutter		days		
36	1.036	1 Bar Bender		days		
37	1.037	Manpower	1	LS		
		Concrete Apron with Reinforcement Grade 40 (13.99 cu.m.)				
38	1.038	Portland Cement	126	bags		
39	1.039	Screened Sand	27	cu.m.		
40	1.040	Gravel 3/4	14	cu.m.		
41	1.041	#16 G.I. Tie Wires	8	kgs		
42	1.042	12mm dia. X 6.0 RSB	195	pcs		
43	1.043	1 bagger mixer		days		
44	1.044	1 concrete vibrator		days		
45	1.045	1 Bar Cutter		days		
46	1.046	1 Bar Bender		days		
47	1.047	Manpower	1	LS		
		100 CUBIC METER GROUND TANK AND SLOW SAND FILTER STRUCTURE				
		Structural Concrete with Reinforcement Grade 40 (Footing) (3 cu.m.)				
48	1.048	Portland Cement	27	bags		
49	1.049	Screened Sand	1.5	cu.m.		
50	1.050	Gravel 3/4	3	cu.m.		
51	1.051	16mm dia. X 6.0 RSB	15	pcs		
52	1.052	#16 G.I. Tie Wires	1	kgs		

BID QUANTITIES					Unit Cost	Total
53	1.053	1 bagger mixer		days		
54	1.054	1 concrete vibrator		days		
55	1.055	1 Bar Cutter		days		
56	1.056	1 Bar Bender		days		
57	1.057	Manpower	1	LS		
		Structural Concrete with Reinforcement Grade 40 (Column) (1.93 cu.m.)				
58	1.058	Portland Cement	18	bags		
59	1.059	Sahara	18	bags		
60	1.060	Screened Sand	1	cu.m.		
61	1.061	Gravel 3/4	2	cu.m.		
62	1.062	#16 G.I. Tie Wires	5	kgs		
63	1.063	12mm dia x 6.0m RSB	38	pcs		
64	1.064	10mm dia x 6.0m RSB	45	pcs		
65	1.065	1 bagger mixer		days		
66	1.066	1 concrete vibrator		days		
67	1.067	1 Bar Cutter		days		
68	1.068	1 Bar Bender		days		
69	1.069	Manpower	1	LS		
		Structural Concrete with Reinforcement Grade 40(Footing Tie Beam) (3.08 cu.m.)				
70	1.070	Portland Cement	27	bags		
71	1.071	Sahara	27	bags		
72	1.072	Screened Sand	1.5	cu.m.		
73	1.073	Gravel 3/4	3	cu.m.		
74	1.074	#16 G.I. Tie Wires	4	kgs		
75	1.075	12mm dia x 6.0m RSB	44	pcs		
76	1.076	10mm dia x 6.0m RSB	35	pcs		
77	1.077	1 bagger mixer		days		
78	1.078	2 concrete vibrator		days		
79	1.079	1 Bar Cutter		days		
80	1.080	1 Bar Bender		days		
81	1.081	Manpower	1	LS		
		Structural Concrete with Reinforcement Grade 40(Flooring) (13.69 cu.m.)				
82	1.082	Portland Cement	124	bags		
83	1.083	Sahara	42	bags		
84	1.084	Screened Sand	7	cu.m.		
85	1.085	Gravel 3/4	14	cu.m.		
86	1.086	#16 G.I. Tie Wires	4	kgs		

BID QUANTITIES					Unit Cost	Total
87	1.087	12mm dia x 6.0m RSB	156	pcs		
88	1.088	1 bagger mixer		days		
89	1.089	2 concrete vibrator		days		
90	1.090	1 Bar Cutter		days		
91	1.091	1 Bar Bender		days		
92	1.092	Manpower	1	LS		
		Structural Concrete with Reinforcement Grade 40 (Wall) (13.89 cu.m.)				
93	1.093	Portland Cement	125	bags		
94	1.094	Sahara	77	bags		
95	1.095	Screened Sand	7	cu.m.		
96	1.096	Gravel 3/4	14	cu.m.		
97	1.097	#16 G.I. Tie Wires	11	kgs		
98	1.098	12mm dia x 6.0m RSB	160	pcs		
99	1.099	1 bagger mixer		days		
100	1.100	2 concrete vibrator		days		
101	1.101	1 Bar Cutter		days		
102	1.102	1 Bar Bender		days		
103	1.103	Manpower	1	LS		
		Structural Concrete with Reinforcement Grade 40 (Beam) (1.85 cu.m.)				
104	1.104	Portland Cement	17	bags		
105	1.105	Sahara	17	bags		
106	1.106	Screened Sand	1	cu.m.		
107	1.107	Gravel 3/4	2	cu.m.		
108	1.108	12mm dia x 6.0m RSB	48	pcs		
109	1.109	10mm dia x 6.0m RSB	38	pcs		
110	1.110	#16 G.I. Tie Wires	4	kgs		
111	1.111	1 bagger mixer		days		
112	1.112	2 concrete vibrator		days		
113	1.113	1 Bar Cutter		days		
114	1.114	1 Bar Bender		days		
115	1.115	Manpower	1	LS		
		Structural Concrete with Reinforcement Grade 40 (Suspended Slab) (10.27 cu.m.)				
116	1.116	Portland Cement	93	bags		
117	1.117	Sahara	93	bags		
118	1.118	Screened Sand	5	cu.m.		
119	1.119	Gravel 3/4	11	cu.m.		
120	1.120	#16 G.I. Tie Wires	4	kgs		

BID QUANTITIES					Unit Cost	Total
121	1.121	12mm dia x 6.0m RSB	156	pcs		
122	1.122	1 bagger mixer		days		
123	1.123	2 concrete vibrator		days		
124	1.124	1 Bar Cutter		days		
125	1.125	1 Bar Bender		days		
126	1.126	Manpower	1	LS		
		Structural Concrete with Reinforcement Grade 40 (Catch Basin) (2.43 cu.m.)				
127	1.127	Portland Cement	22	bags		
128	1.128	Sahara	22	bags		
129	1.129	Screened Sand	1.5	cu.m.		
130	1.130	Gravel 3/4	3	cu.m.		
131	1.131	#16 G.I. Tie Wires	1	kgs		
132	1.132	12mm dia x 6.0m RSB	18	pcs		
133	1.133	1 bagger mixer		days		
134	1.134	2 concrete vibrator		days		
135	1.135	1 Bar Cutter		days		
136	1.136	1 Bar Bender		days		
137	1.137	Manpower	1	LS		
		FORMWORKS				
		INTAKE STRUCTURE				
		Footing				
138	1.138	3/8" x 4' 8' Ord. Plywood	2	pcs		
139	1.139	2" x 2" x 8' Cocolumber	34	bd. Ft.		
140	1.140	2" x 3" x 12' Cocolumber	36	bd. Ft.		
141	1.141	Asst. CWN	4	kgs		
142	1.142	Wood Planks 0.4m x 1.0m x 6cm thk	1	pcs		
143	1.143	Manpower	1	LS		
		Wall				
144	1.144	3/8" x 4' 8' Ord. Plywood	7	pcs		
145	1.145	2" x 2" x 8' Cocolumber	56	bd. Ft.		
146	1.146	2" x 3" x 12' Cocolumber	133	bd. Ft.		
147	1.147	Asst. CWN	10	kgs		
148	1.148	Manpower	1	LS		
		Buttress				
149	1.149	3/8" x 4' 8' Ord. Plywood	2	pcs		
150	1.150	2" x 2" x 8' Cocolumber	16	bd. Ft.		
151	1.151	2" x 3" x 12' Cocolumber	38	bd. Ft.		

BID QUANTITIES					Unit Cost	Total
152	1.152	Asst. CWN	4	kgs		
153	1.153	Manpower	1	LS		
		Apron				
154	1.154	Asst. CWN	4	kgs		
155	1.155	Manpower (40 % of the total cost of materials)	1	LS		
		100 CUBIC METER GROUND TANK & SLOW SAND FILTER STRUCTURE				
		Footing				
156	1.156	3/8" x 4' 8' Ord. Plywood	2	pcs		
157	1.157	2" x 2" x 8' Cocolumber	32	bd. Ft.		
158	1.158	2" x 3" x 8' Cocolumber	24	bd. Ft.		
159	1.159	Asst. CWN	3	kgs		
160	1.160	Manpower	1	LS		
		Column				
161	1.161	3/8" x 4' 8' Ord. Plywood	8	pcs		
162	1.162	2" x 2" x 8' Cocolumber	107	bd. Ft.		
163	1.163	2" x 3" x 8' Cocolumber	256	bd. Ft.		
164	1.164	Asst. CWN	15	kgs		
165	1.165	Manpower	1	LS		
		Footing Tie Beam				
166	1.166	3/8" x 4' 8' Ord. Plywood	4	pcs		
167	1.167	2" x 2" x 8' Cocolumber	54	bd. Ft.		
168	1.168	2" x 3" x 8' Cocolumber	48	bd. Ft.		
169	1.169	Asst. CWN	10	kgs		
170	1.170	Manpower	1	LS		
		Wall and Catch Basin				
171	1.171	3/8" x 4' 8' Ord. Plywood	14	pcs		
172	1.172	2" x 2" x 8' Cocolumber	112	bd. Ft.		
173	1.173	2" x 3" x 8' Cocolumber	266	bd. Ft.		
174	1.174	Asst. CWN	20	kgs		
175	1.175	Manpower	1	LS		
		Beam				
176	1.176	3/8" x 4' 8' Ord. Plywood	4	pcs		
177	1.177	2" x 2" x 8' Cocolumber	108	bd. Ft.		
178	1.178	2" x 3" x 8' Cocolumber	360	bd. Ft.		
179	1.179	Asst. CWN	10	kgs		
180	1.180	Manpower	1	LS		
		Suspended Slab				
181	1.181	3/8" x 4' 8' Ord. Plywood	8	pcs		

BID QUANTITIES					Unit Cost	Total
182	1.182	2" x 2" x 8' Cocolumber	214	bd. Ft.		
183	1.183	2" x 3" x 8' Cocolumber	384	bd. Ft.		
184	1.184	Asst. CWN	20	kgs		
185	1.185	Manpower	1	LS		
		PLUMBING WORKS (MAINLINE TO CONSUMERS TAP)				
186	1.186	uPVC Pressurized Blue Pipes - Rubber Ring Type, Class 100, 110mm(4") x 6m, 5.3 mm thk. (Ground Tank)	12	pcs		
187	1.187	uPVC Pressurized Blue Fitting - Rubber Ring Type, Class 100, 110mm(4") Coupling, 5.3 mm thk. (Ground Tank)	5	pcs		
188	1.188	uPVC Pressurized Blue Fitting - Rubber Ring Type, Class 100, 110mm(4") Elbow, 5.3 mm thk. (Ground Tank)	16	pcs		
189	1.189	uPVC Pressurized Blue Fitting - Rubber Ring Type, Class 100, 110mm(4") Tee, 5.3 mm thk. (Ground Tank)	20	pcs		
190	1.190	uPVC Pressurized Blue Pipes - Rubber Ring Type, Class 150, 63mm(2")x 6m, 3.6 mm thk. (Transmission Line-284, Distribution Line-609)	865	pcs		
191	1.191	uPVC Pressurized Blue Fitting - Rubber Ring Type, Class 150, 63mm(2") Coupling, 3.6 mm thk.	7	pcs		
192	1.192	4" Gear Type Butterfly Valve w/ uPVC flange adapter, bolts, nuts and washer (5- Ground Tank)	5	pcs		
193	1.193	2" Gear Type Butterfly Valve w/ uPVC flange adapter, bolts, nuts and washer (2- Transmission line, 6-Distribution Line)	8	pcs		
194	1.194	Industrial Type flow meter 2" with uPVC Flange Adapter, bolts and Nuts	1	pcs		
195	1.195	Class 100: Upvc Tee (2") (Distribution Line-1)	1	pcs		
196	1.196	Class 100: Upvc Elbow (2") x 90 degree (Intake Structure)	9	pcs		
197	1.197	Class 100: Upvc Elbow (2") x 22.5 degree (Transmission and Distribution)	8	pcs		
198	1.198	63mm(2") x 32mm(1") Saddle Clamp	15	pcs		
199	1.199	G.I. End Cap/ Male Plug 2"	2	pcs		
200	1.200	HDPE Pipe 1" dia. SDR 11 100m/rol DN32, SDR11/PN16, ISO Type	10	pcs		
201	1.201	HDPE Pipe 1/2" dia. SDR 11 300m/rol DN20, PN12.5, ISO Type	5	pcs		
202	1.202	HDPE Compression Coupling 32mm(1")	10	pcs		
203	1.203	Brass Gate Valve 1"	45	pcs		
204	1.204	Brass Gate Valve 1/2"	30	pcs		
205	1.205	HDPE Male Adaptor 1", ISO Type	60	pcs		
206	1.206	G.I. End Cap/ Male Plug 1"	45	pcs		
207	1.207	G.I. Tee 1" x 1" x1" - Sched. 40	15	pcs		
208	1.208	G.I. Tee 1" x 1" x1/2" - Sched. 40	30	pcs		
209	1.209	HDPE Male Adaptor 1/2", ISO Type	30	pcs		
210	1.210	G.I. Nipple 1" x 4' dia x - Sched. 40	15	pcs		
211	1.211	G.I. Nipple 1/2" x 4' dia x - Sched. 40	30	pcs		
212	1.212	G.I. Elbow 1" dia. - Sched. 40	30	pcs		
213	1.213	G.I. Elbow 1/2" dia. - Sched. 40	30	pcs		
214	1.214	G.I. Nipple 1" x 2' dia x - Sched. 40	30	pcs		

BID QUANTITIES					Unit Cost	Total
215	1.215	G.I. Straight Couping 1" dia - Sched. 40	15	pcs		
216	1.216	G.I. Male Reducer 1" x 1/2" dia - Sched. 40	15	pcs		
217	1.217	Teflon 1"	50	pcs		
218	1.218	Plastic Faucet 1/2"	15	pcs		
219	1.219	Portland Cement	20	pcs		
220	1.220	Pipe Lubricant (Margarine)	1	Pail		
		Pressure Gauge (1)				
221	1.221	Saddle Clamp 4" x 1"	4	pcs		
222	1.222	Saddle Clamp 2" x 1"	8	pcs		
223	1.223	Nipple 1" x 5'	12	pcs		
224	1.224	Male Reducer 1" x 1/4"	12	pcs		
225	1.225	Pressure Gage	12	pcs		
226	1.226	Air release Valve	12	pcs		
227	1.227	Brass Gate Valve 1	12	pcs		
228	1.228	Brass Gate Valve 1	12	pcs		
		Valve Box Width 1.2m Length 1.2m Depth 0.5m x 0.10m thk - 58 sets				
229	1.229	Portland Cement	207	bags		
230	1.230	Sahara	207	bags		
231	1.231	Screened Sand	11	cu.m.		
232	1.232	Gravel ¾	22	cu.m.		
233	1.233	10mm RSB	270	pcs		
234	1.234	Angle Bar (38mmx38mmx4mm)	54	pcs		
235	1.235	G.I. Plain Sheet 0.6mm x 4' x 8'	54	pcs		
236	1.236	Weatherproof fully long shackle solid bras podlaock	54	pcs		
237	1.237	#16 G.I. Tie Wires	5	kgs		
		Disinfecting Materials				
238	1.238	Chlorine 45kgs, 70% Calcium Hypoclorite, Inert Ingredient 30%	1	Pail		
239	1.239	Chlorine Test Kit	1	Pail		
240	1.240	Chlorine Test Kit Refill OTO	15	Set		
		Filtering Materials				
241	1.241	Filter cloth 250 gsm, 4m x 100m	1	Roll		
242	1.242	Charcoal	20	Sacks		
243	1.243	Washed Sand	4	cu.m.		
244	1.244	Boulders	6	cu.m.		

BID QUANTITIES					Unit Cost	Total
245	1.245	Washed 3/4 Gravel	3	cu.m.		
246	1.246	Manpower for Plumbing Works	1	LS		
		Masonry Works (CHB Laying & Plastering)				
247	1.247	Concrete Holow Blocks	368	pcs		
248	1.248	Portland Cement	50	bags		
249	1.249	Sahara	26	bags		
250	1.250	Screened Sand	2	cu.m.		
251	1.251	Fine Sand	2	cu.m.		
252	1.252	10mm RSB	6	pcs		
253	1.253	#16 G.I. Tie Wires	1	kgs		
254	1.254	Manpower	1	LS		
		Steel and Roofing Works				
255	1.255	G.I. Pipe 2" S40, Post	3	pcs		
256	1.256	Angle Bar (25mmx25mmx3mm) Beam member	4	pcs		
257	1.257	12mm RSB	4	pcs		
258	1.258	G.I. Pipe 1" S40, Truss member & Wall Frame	12	pcs		
259	1.259	Metal Primer Grey	3	gal		
260	1.260	Welding Rod	20	kgs		
261	1.261	C Purlins (1.2mm x 2" x 3") spaced @ 0.70mm	16	pcs		
262	1.262	Metal Sheet, GA 26 x 12"	18	pcs		
263	1.263	Ridge Roll 2.44m, Gage 24	4	pcs		
264	1.264	Drill Bit 1/8"	2	box		
265	1.265	Tekscrew 3" x 1/8"	2	box		
266	1.266	Roof Sealant, Vulcaseal	1	pint		
267	1.267	Manpower	1	LS		
		Water Intake Structure Stone Masonry				
268	1.268	Boulders	9	cu.m		
269	1.269	Portland Cement	78	bags		
270	1.270	Screened Sand	5	cu.m		
271	1.271	G.I. Pipe 1"	6	pcs		
272	1.272	Manpower	1	LS		
		TOTAL BASE BID			PHP 0.00	
		TAX				
		TOTAL BID AMOUNT			PHP 0.00	

Attachment 2: Representation of Transparency, Integrity, Environmental and Social Responsibility

All Offerors are expected to exercise the highest standards of conduct in preparing, submitting and if selected, eventually carrying out the specified work in accordance with CI's Code of Ethics. CI's Code of Ethics provides guidance to CI employees, service providers, experts, interns, and volunteers in living CI's core values, and outlines minimum standards for ethical conduct which all parties must adhere to. Any violations of the Code of Ethics should be reported to CI via its Ethics Hotline at www.ci.ethicspoint.com.

CI relies on the personal integrity, good judgment and common sense of all third parties acting on behalf, or providing services to the organization, to deal with issues not expressly addressed by the Code or as noted below.

I. With respect to CI's Code of Ethics, we certify:

a. We understand and accept that CI, its contractual partners, grantees and other parties with whom we work are expected to commit to the highest standards of Transparency, Fairness, and Integrity in procurement.

II. With respect to social and environmental standards, we certify:

a. We are committed to high standards of ethics and integrity and compliance with all applicable laws across our operations, including prohibition of actions that facilitate trafficking in persons, child labor, forced labor, sexual abuse, exploitation or harassment. We respect internationally proclaimed human rights and take no action that contributes to the infringement of human rights. We protect those who are most vulnerable to infringements of their rights and the ecosystems that sustain them.

b. We fully respect and enforce the environmental and social standards recognized by the international community, including the fundamental conventions of International Labour Organization (ILO) and international conventions for the protection of the environment, in line with the laws and regulations applicable to the country where the contract is to be performed.

III. With respect to our eligibility and professional conduct, we certify:

a. We are not and none of our affiliates [members, employees, contractors, subcontractors, and consultants] are in a state of bankruptcy, liquidation, legal settlement, termination of activity, or guilty of grave professional misconduct as determined by a regulatory body responsible for licensing and/or regulating the offeror's business

b. We have not and will not engage in criminal or fraudulent acts. By a final judgment, we were not convicted in the last five years for offenses such as fraud or corruption, money laundering or professional misconduct.

c. We are/were not involved in writing or recommending the terms of reference for this solicitation document.

d. We have not engaged in any collusion or price fixing with other offerors.

e. We have not made promises, offers, or grants, directly or indirectly to any CI employees involved in this procurement, or to any government official in relation to the contract to be performed, with the intention of unduly influencing a decision or receiving an improper advantage.

f. We have taken no action, nor will we take any action to limit or restrict access of other companies, organizations or individuals to participate in the competitive bidding process launched by CI.

g. We have fulfilled our obligations relating to the payment of social security contributions or taxes in accordance with the legal provisions of the country where the contract is to be performed.

h. We have not provided, and will take all reasonable steps to ensure that we do not and will not knowingly provide, material support or resources to any individual or entity that commits, attempts to commit, advocates, facilitates, or participates in terrorist acts, or has committed, attempted to commit, facilitate, or participated in terrorist acts, and we are compliant with all applicable Counter-Terrorist Financing and Anti-Money Laundering laws (including USA Patriot Act and U.S. Executive Order 13224).

i. We certify that neither we nor our directors, officers, key employees or beneficial owners are included in any list of financial or economic sanctions, debarment or suspension adopted by the United States, United Nations, the European Union, the World Bank, or General Services Administration's List of Parties Excluded from Federal Procurement or Non-procurement programs in accordance with E.O.s 12549 and 12689, "Debarment and Suspension".

Name: _____

Signature: _____

Title: _____

Date: _____

Attachment 3. General Specifications

a. Plans and Specifications

i. The plans and specifications shall be considered as binding in all items of work mentioned in one but mentioned or indicated in the other or vice-versa, shall be considered as there are duly mentioned in both.
ii. Where no numerical indications appear on the plans, all drawings shall be carefully followed according to the plans and specifications indicated, but where numerical notations are indicated, such numerical notations shall be followed.
iii. The contractor or workmen without prior approval of the engineer concerned and owner or his representative shall make no change in the drawings or specifications.

b. Concrete and Masonry

i. Concrete Works

- All concrete works shall be done in accordance with Government Specifications for Concrete and or the latest edition of the ACI requirements for Reinforced Concrete.

- The following proportions shall be used unless otherwise noted in the plan:
  Class "A" (1:2:4) for suspended slab, column, beams
  Class "B" (1:2:5) for footings and foundations.
- All slab shall not be less than 0.10 m in thickness. All slab reinforcement shall be 0.10 m in thickness. All slab reinforcement shall be 0.02 m. clear from the bottom and 0.015 m. clear from the top of the slab.

ii. Masonry works

- For all exterior walls use 6" concrete hollow blocks locally manufactured All 6" hollow blocks shall be reinforced with 10 mm diameter vertical bars at every 0.60 mm and 10mm diameter horizontal bars 0.60 m and 10mm diameter horizontal bars at every 0.60m. All 4" hollow blocks shall be reinforced with 10 mm diameter vertical bars at every 0.60 m and 10 mm. diameter horizontal bars at every 0.60 m.
- All cells and joints for reinforcements shall be filled with mortar. All cells and joints under the ground shall be filled
- Tie beam shall be provided all around exterior walls.
- For mortar and plastering, the proportion 1:3 shall be used for cement and sand mixture.

iii. Materials

- Cement shall conform to ASTM standards. Use only one brand for the whole structural and masonry works.
- Fine aggregates for concrete, mortar, grout, or plaster: stone screenings or other materials with similar characteristics: clean, hard, strong, durable, free from dusts, lumps soft or flaky particles, shale, alkali, loam or clay.
- Coarse Aggregates: Gravel; Well- drained, clean, hard particles of gravel or crushed rocks, 25mm (1") dia. Maximum for slab. Clean, washed sand from Porac Plaridel or approved equal.
- Steel reinforcements: As manufactured by National Steel Corporation or approved equal. Structural Grade Steel: with minimum Fy= 227.37 MPa. (3300 Psi), Intermediate Grade Steel: with minimum Fy= 275.8 MPa (4000 psi)
- Tie wires: Ga. 16 galvanized iron (G.I.) at joints or laps of placed reinforcements as indicated in the plans. Refer to structural plans and general construction notes to conform the above values. Use steel conforming to ASTM standards, deformed, for concrete and masonry requirements.

- Water: Fit for drinking, free from injurious amount of oil, acids, alkali, organic materials and other deleterious substances.

iv. Formworks

Construct all formwork complete with centering coarse molds conform to shape, form line grade, maintain rigid to prevent deformation under l load. Provide necessary camber.

Remove forms according to the following schedule:

Foundation - 24 Hrs
Walls – 12 days
Column - 4 days
Beams & Girders --allow one day per ft. with minimum of 7 days.

v. Proportion, Mixing and Curving

The design was based on a 3,000 lbs. concrete. Design mix proportion to produce 3,000 lbs. strength after 28 days. Proportion volume of 2 cu. Ft. boxes.

Immediately after placing, protect concrete surface not covered by form from lots of surface moisture for at least 5 clays. Protect from loss of water by covering with paper.

vi. Concrete Walls

- All walls to be reinforced according to the schedule of wall reinforcement unless otherwise indicated.
- Reinforced bars to be 0.03 meters clear from the face of the wall except in 0.10 meters wall where it will be at the center.
- Carry the vertical bars 0.60 meters above the floor level to provide the splicing within the necessary; elsewhere stop at 0.05 mete below the top of the slab or solid band.
- Horizontal and vertical bars, if necessary, shall be applied by lapping a distance equal to 40 diameters. Wire securely with #16 F.1 wire provided the splicing in the adjacent bars are staggered at least 1.50 meters on center.
- All walls spanning, openings and wall acting as beams to have vertical reinforcement bent U-form like stirrings and spaced according to the schedule of wall reinforcement, unless otherwise stated.
- In wall reinforcement, alternate intersection of vertical and horizontal bare shall be connected with #16 C.l. wire to the opposite intersection to give the required distance in accordance with the notes on concrete walls.

vii. Slabs

- All slabs reinforcement to be 0.02 meters clear from the bottom and 0.15 meters clear from the top of the slab.
- Bend bars at 30 degrees angle.
- Use #3 dia. temperature bar.
- Spaced 12" o.c. both ways.

viii. Cement Finishes

All concrete surfaces including those indicated as cement finish, other than floors and steps and surfaces where other applied finish is required shall be given a finish done and applied in the following manner:

- Immediately after removal of forms, all projecting wire and bolts and other devices used for tying forms shall be cut-off at least one-half cm. beneath the finish surface. All holes, voids,

depressions, and other defects shall be thoroughly wetted and then painted up solid with cement mortar putty of the same proportion as the mortar in the bodywork.

ix. Concrete Hollow Blocks

- Concrete hollow blocks are indicated in the drawings shall be jackbilt or equivalent. The normal thickness of the blocks shall 4" required.
- Concrete blocks shall be wetted thoroughly with water prior to laying. Blocks shall be laid in running hand with vertical faces truly vertical with clean out joints.

Clearing, Grading and Filling

The contractor shall make all necessary excavation for the foundation to grade indicated in the drawings without extra compensation. Excavation for footings shall be done strictly in accordance with the given sizes and depths as shown in the drawings.

Earthworks

Clearing: Removal of vegetation, debris, and any other obstacles in the designated work area for the intake structure, tank foundation, and pipeline trench.
Gravel Excavation: Excavation of gravel as required for trenching for the transmission pipeline, embankment diversion, and backfilling.
Excavation for Footing: Excavation of trenches for the foundations of the intake structure and 100 m^3 ground tank footing.
Backfill for Footing: Backfilling of excavated areas for footings with suitable material.
Water Diversion: Installation of gravel and sand embankments for water diversion around the construction areas.

Reinforced Concrete Work

Intake Structure Concrete Works:
Structural Concrete (Wall): Pouring and finishing of concrete walls for the intake structure.
Concrete Buttress: Formwork, reinforcement, and pouring of concrete buttresses.
Concrete Apron: Installation of the concrete apron around the intake structure to manage water flow.

Ground Tank and Slow Sand Filter Structure:
Structural Concrete (Footing): Preparation and pouring of concrete footings for the 100m^3 ground tank and slow sand filter structure.
Structural Concrete (Column): Reinforced concrete columns as per design for the ground tank and sand filter structure.
Structural Concrete (Tie Beam): Concrete for tie beams between the columns of the structures.
Structural Concrete (Flooring): Installation of concrete flooring within the structures.
Structural Concrete (Wall): Pouring of reinforced concrete walls for the ground tank and sand filter structure.
Structural Concrete (Beam): Reinforced concrete beams as required by the structure.
Structural Concrete (Suspended Slab): Pouring of suspended slabs within the structures for flooring.
Reinforced Steel (Deformed, Grade 40): Supply and installation of deformed steel bars for all concrete works (footings, walls, columns, beams, etc.), including all necessary bending, cutting, and fixing.

Formworks
Intake Structure:

Formwork for the foundation footing, walls, buttresses, and apron.

Ground Tank & Slow Sand Filter Structure:
Formwork for the footing, columns, tie beams, walls, beams, and suspended slabs.
All formwork shall be properly installed, braced, and removed after the curing period, ensuring the structural integrity of the concrete elements.

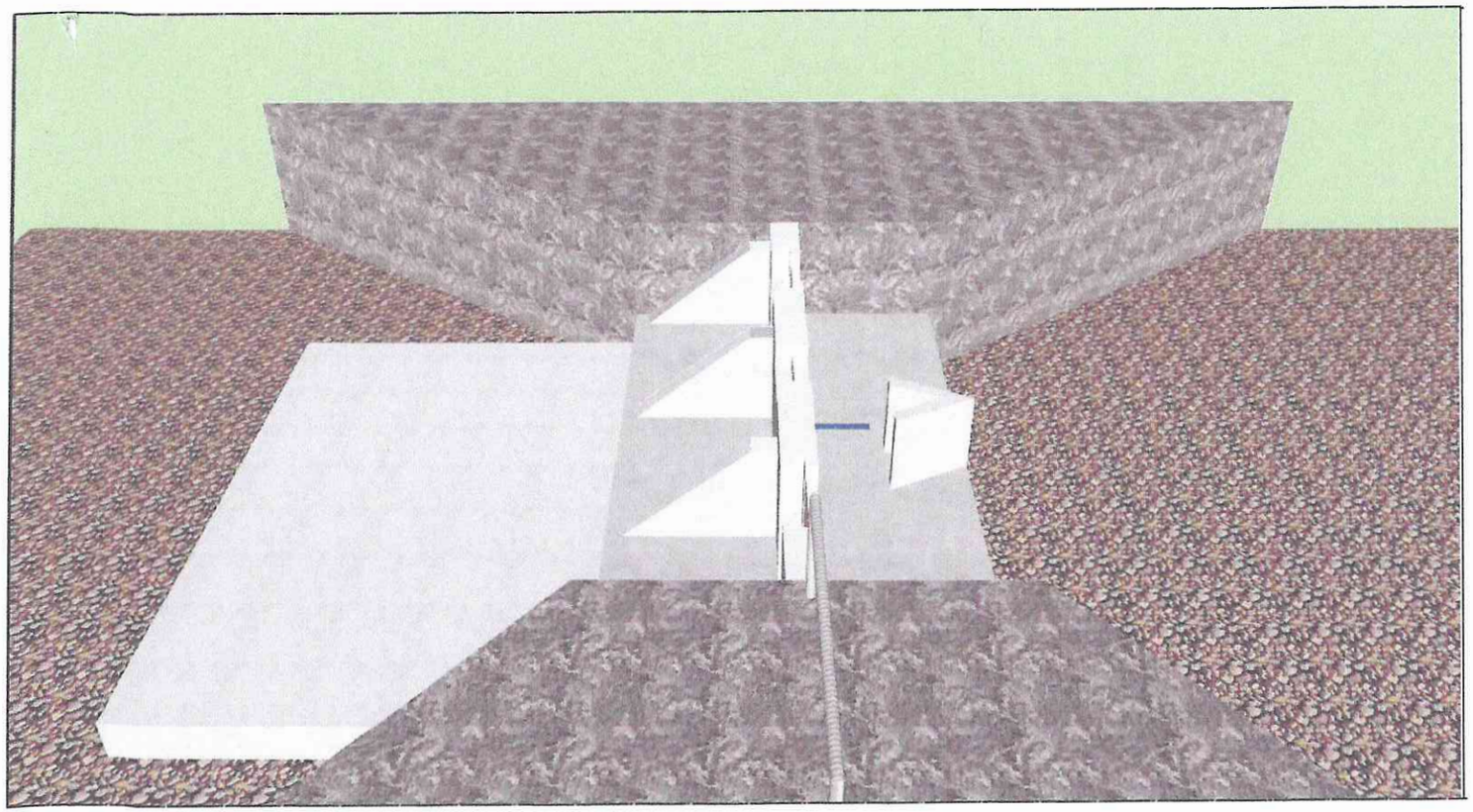
Masonry Works
CHB Laying & Plastering: Construction of masonry walls using concrete hollow blocks (CHB) and plastering as required for the intake structure, ground tank, and sand filter structure.

Steel and Roofing Works
Supply, fabrication, and installation of steel components as required for structural support.
Roofing works including installation of appropriate roofing material for the intake structure, sand filter, and other relevant areas.

Water Intake Structure
Stone masonry works required for the intake structure, including careful selection, placement, and bonding of stone materials.

Plumbing Works
All Plumbing Works shall be executed in accordance with the approved plans and design with approved material specifications, applicable for LGU standards, and relevant local codes.

Attachment 4. Technical Design (prepared and approved by the Municipal Government of Rizal)



INTAKE STRUCTURE PERSPECTIVE

SCALE NTS

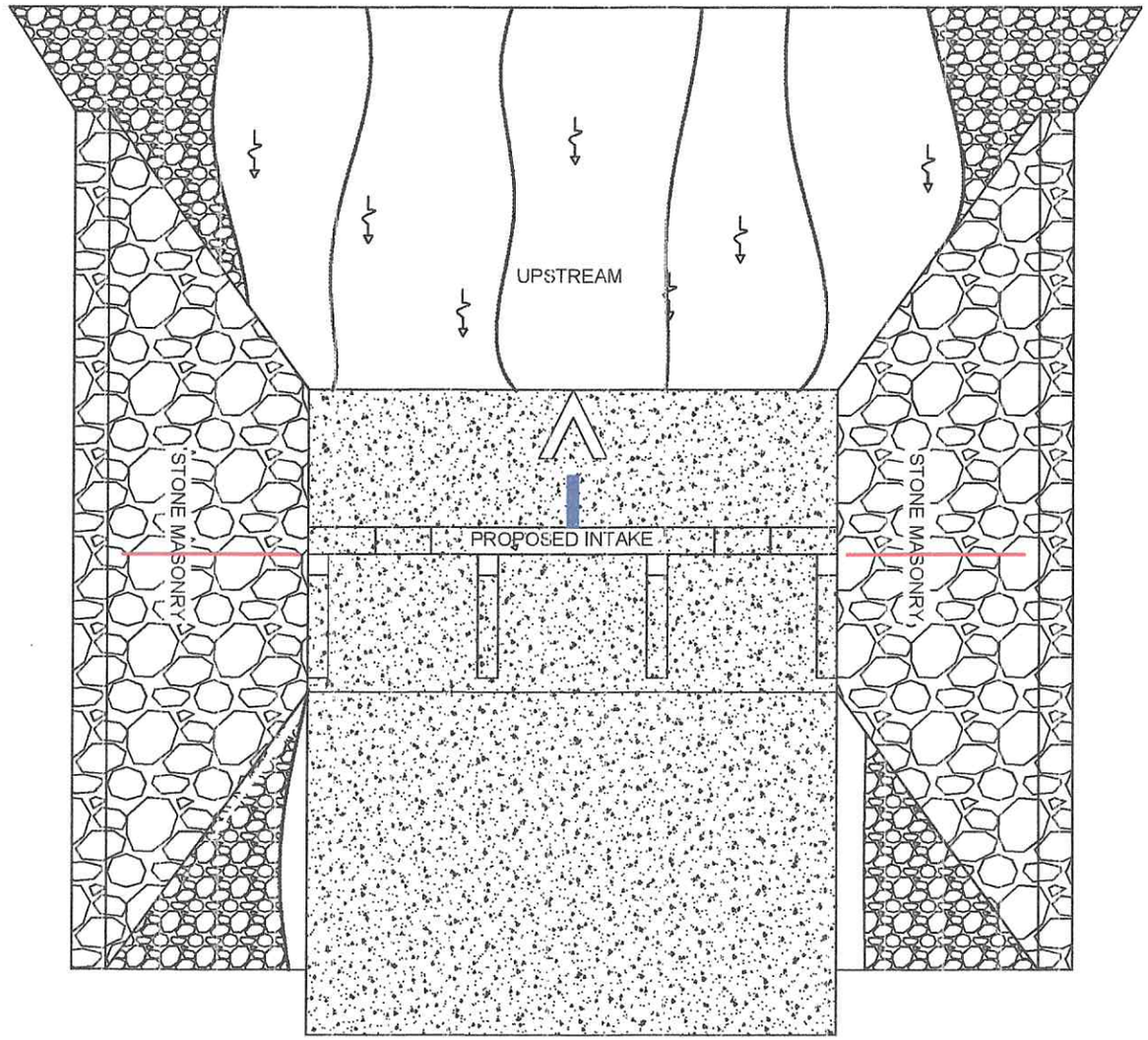
TABLE OF CONTENTS

Republic of the Philippines Province of Palawan Municipality of Rizal OFFICE OF THE MUNICIPAL ENGINEER PLANNING AND DESIGN SECTION	PROJECT TITLE AND LOCATION : Establishment of Level II Water Supply System for Indigenous Community Sitio Tagpas, bgy. Iatud, Rizal, Palawan	DRAFTED & PREPARED BY: ENGR. KENNETH P. APGAO WATERWORKS SUPERVISOR	SUBMITTED BY: ENGR. NELSON R. AVANCEÑA MEEDO	RECOMMENDING APPROVAL: ENGR. RODEL B. LOBATON MUNICIPAL ENGINEER	APPROVED BY: HON. NORMAN S. ONG MUNICIPAL MAYOR	SHEET NO. AR 1 13

LOCATION MAP

SCALE NTS

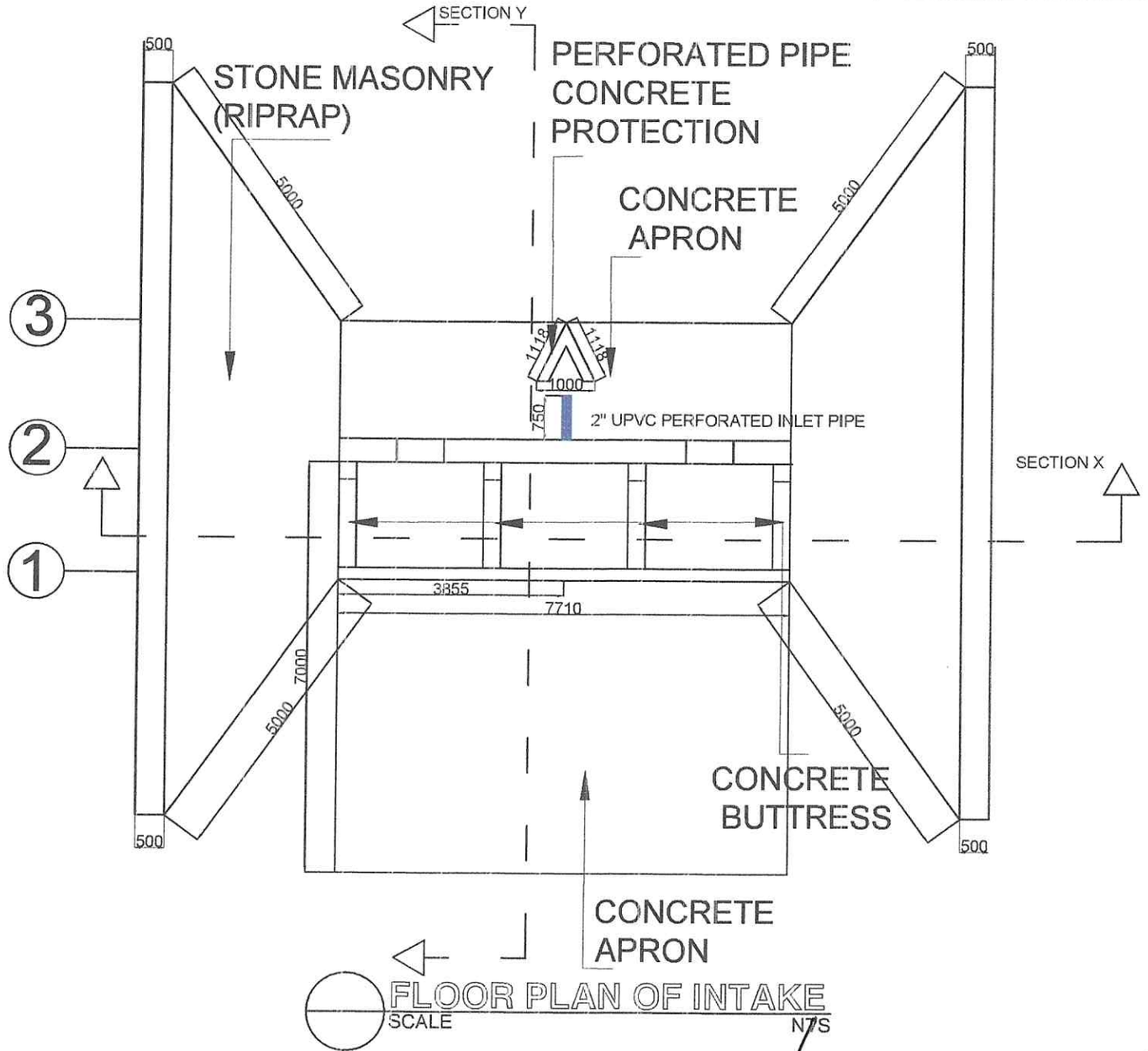
Republic of the Philippines **Province of Palawan** **Municipality of Rizal** **OFFICE OF THE MUNICIPAL ENGINEER** **PLANNING AND DESIGN SECTION**	PROJECT TITLE AND LOCATION : Establishment of Level II Water Supply System for Indigenous Community Sitio Tagpas, bgy. Iatud, Rizal, Palawan	DRAFTED & PREPARED BY: **ENGR. KENNETH P. ARGAO** WATERWORKS SUPERVISOR	SUBMITTED BY: **ENGR. NELSON R. AVANCEÑA** MEEDO	RECOMMENDING APPROVAL: **ENGR. RODEL B. LOBATON** MUNICIPAL ENGINEER	APPROVED BY: **HON. NORMAN S. ONG** MUNICIPAL MAYOR	SHEET NO. AR 2|3



INTAKE SITE DEVELOPMENT PLAN

SCALE NTS

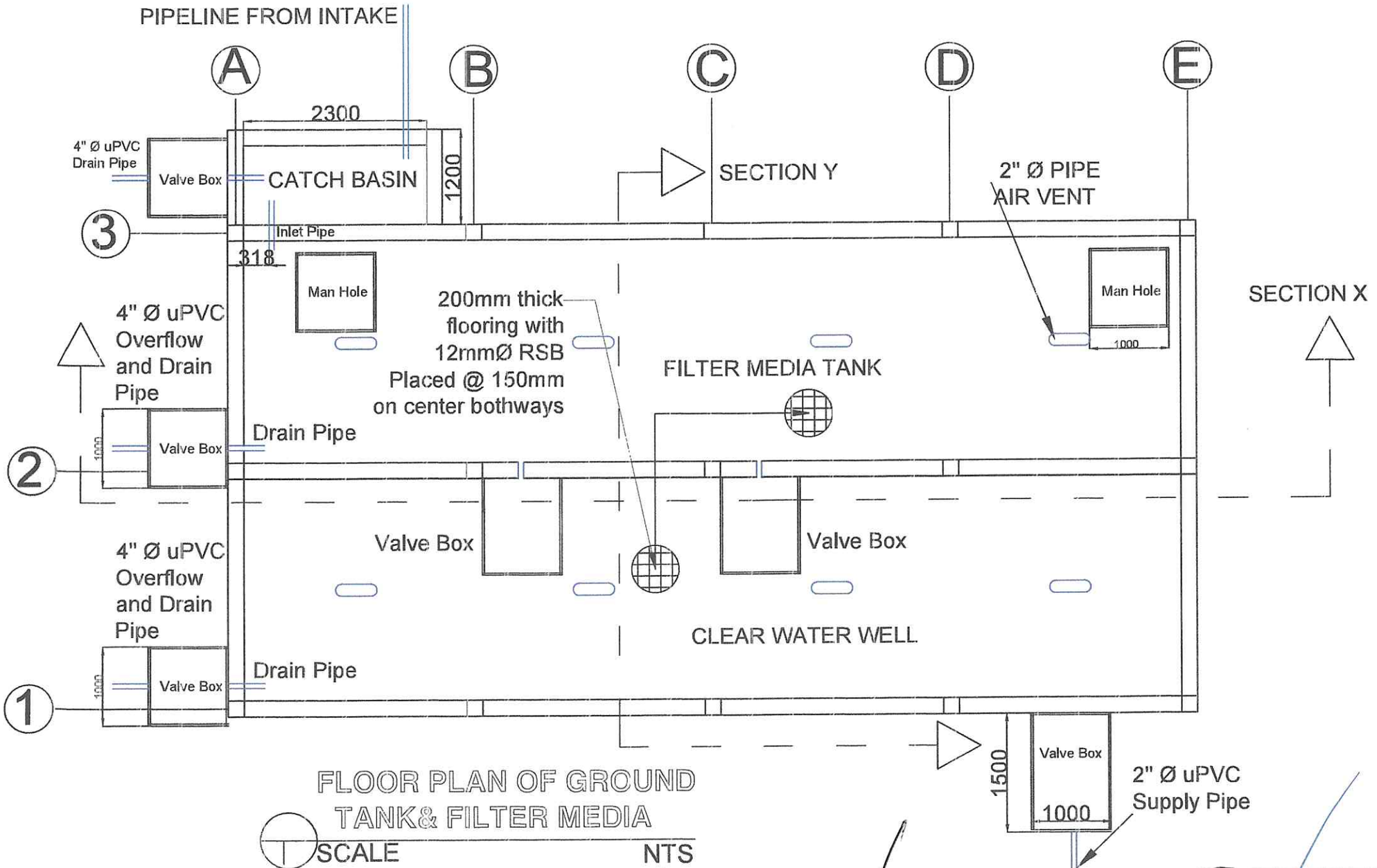
Republic of the Philippines Province of Palawan Municipality of Rizal OFFICE OF THE MUNICIPAL ENGINEER PLANNING AND DESIGN SECTION	PROJECT TITLE AND LOCATION : Establishment of Level II Water Supply System for Indigenous Community Sitio Tagpas, bgy. Iatud, Rizal, Palawan	DRAFTED & PREPARED BY: ENGR. KENNETH P. APOAO WATERWORKS SUPERVISOR	SUBMITTED BY: ENGR. NELSON R. AVANCEÑA MEEDO	RECOMMENDING APPROVAL: ENGR. RODEL B. LOBATON MUNICIPAL ENGINEER	APPROVED BY: HON. NORMAN S. ONG MUNICIPAL MAYOR	SHEET NO. AR 3|13



FLOOR PLAN OF INTAKE

SCALE N.T.S

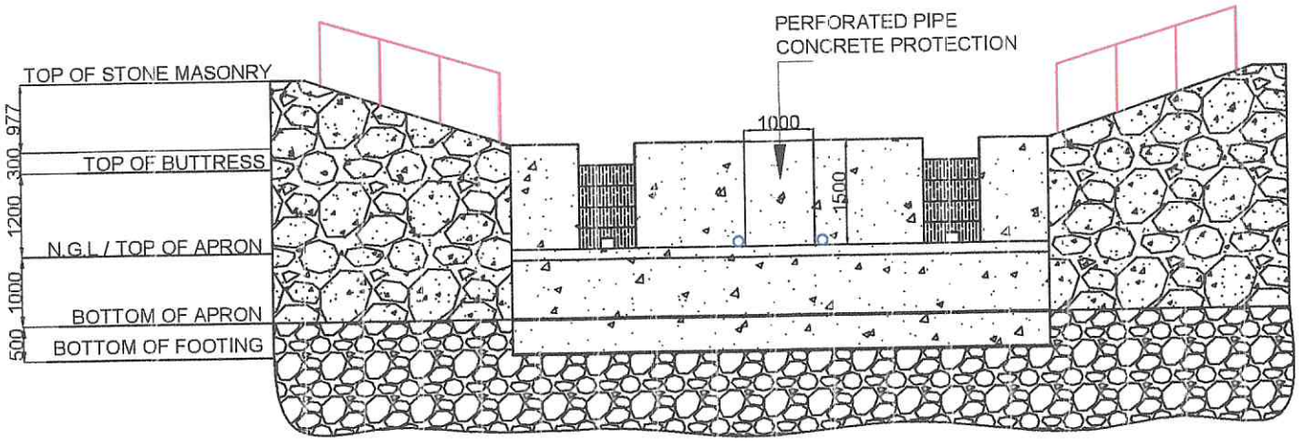
Republic of the Philippines Province of Palawan Municipality of Rizal OFFICE OF THE MUNICIPAL ENGINEER PLANNING AND DESIGN SECTION	PROJECT TITLE AND LOCATION : Establishment of Level II Water Supply System for Indigenous Community Sitio Tagpas, bgy. Iatud, Rizal, Palawan	DRAFTED & PREPARED BY: ENGR. KENNETH P. APGAO WATERWORKS SUPERVISOR	SUBMITTED BY: ENGR. NELSON R. AVANCEÑA MEEDO	RECOMMENDING APPROVAL: ENGR. RODEL B. LOBATON MUNICIPAL ENGINEER	APPROVED BY: HON. NORMAN S. ONG MUNICIPAL MAYOR	SHEET NO. AR 413



FLOOR PLAN OF GROUND TANK& FILTER MEDIA

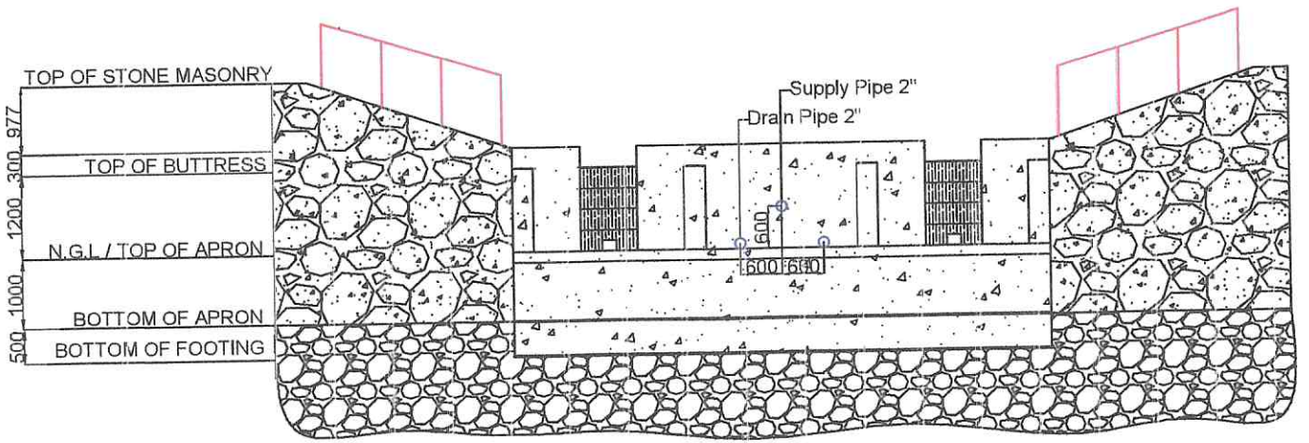
SCALE NTS

Republic of the Philippines Province of Palawan Municipality of Rizal OFFICE OF THE MUNICIPAL ENGINEER PLANNING AND DESIGN SECTION	PROJECT TITLE AND LOCATION : Establishment of Level II Water Supply System for Indigenous Community Sitio Tagpas, bgy. Iatud, Rizal, Palawan	DRAFTED & PREPARED BY: ENGR. KENNETH P. APGAO WATERWORKS SUPERVISOR	SUBMITTED BY: ENGR. NELSON R. AVANCEÑA MEEDO	RECOMMENDING APPROVAL: ENGR. NOEL B. LOBATON MUNICIPAL ENGINEER	APPROVED BY: HON. NORMAN S. ONG MUNICIPAL MAYOR	SHEET NO. AR 5|13



FRONT ELEVATION PLAN OF INTAKE STRUCTURE

SCALE NTS



REAR ELEVATION PLAN OF INTAKE STRUCTURE

SCALE NTS

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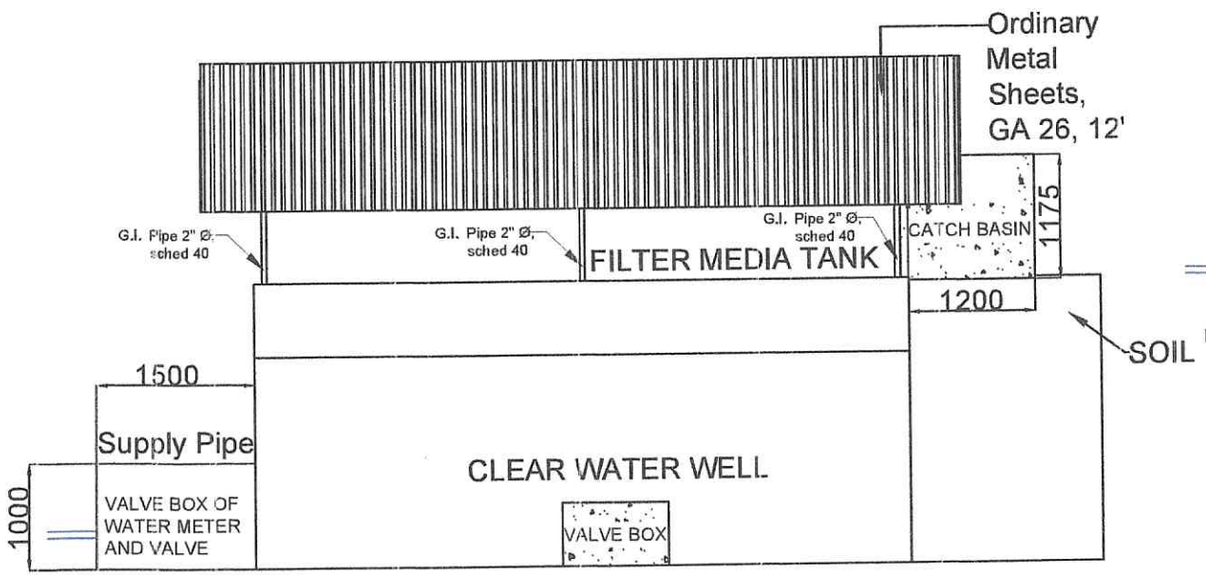

RIGHT SIDE ELEVATION PLAN OF GROUND TANK
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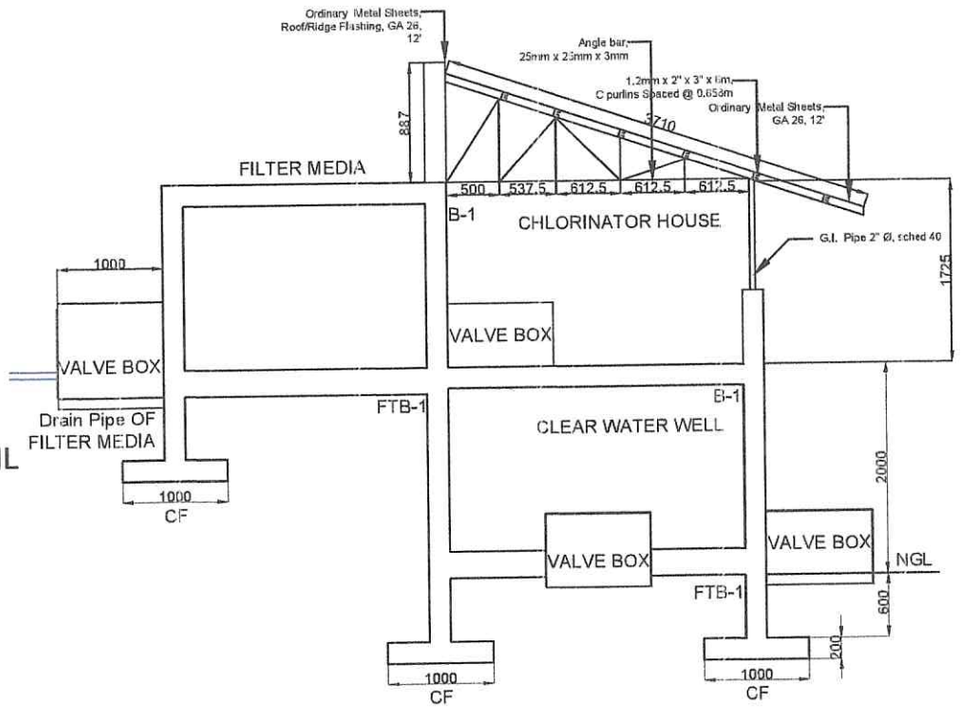

FRONT SIDE ELEVATION PLAN OF GROUND TANK
SCALE NTS

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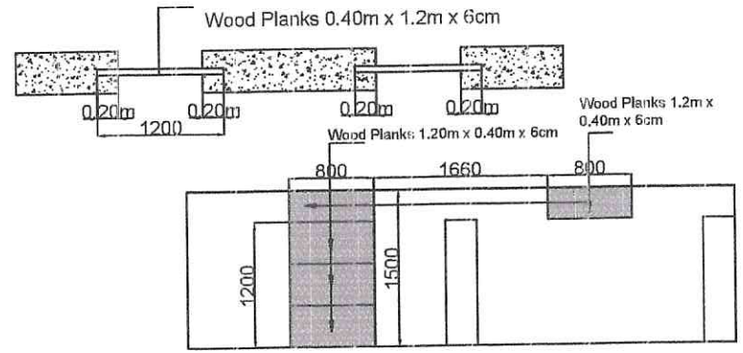

WOOD PLANK DETAILS
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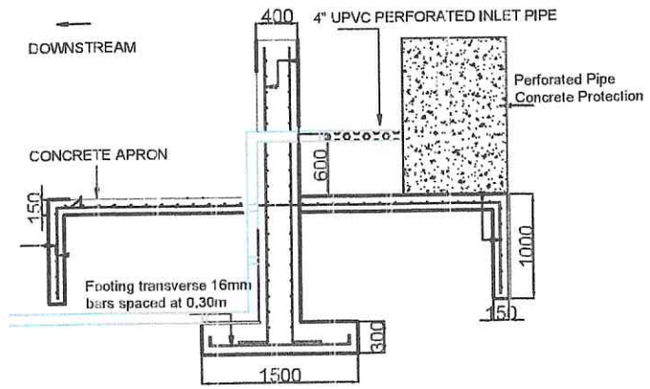

UPSTREAM

UPVC Perforated Pipe Plan
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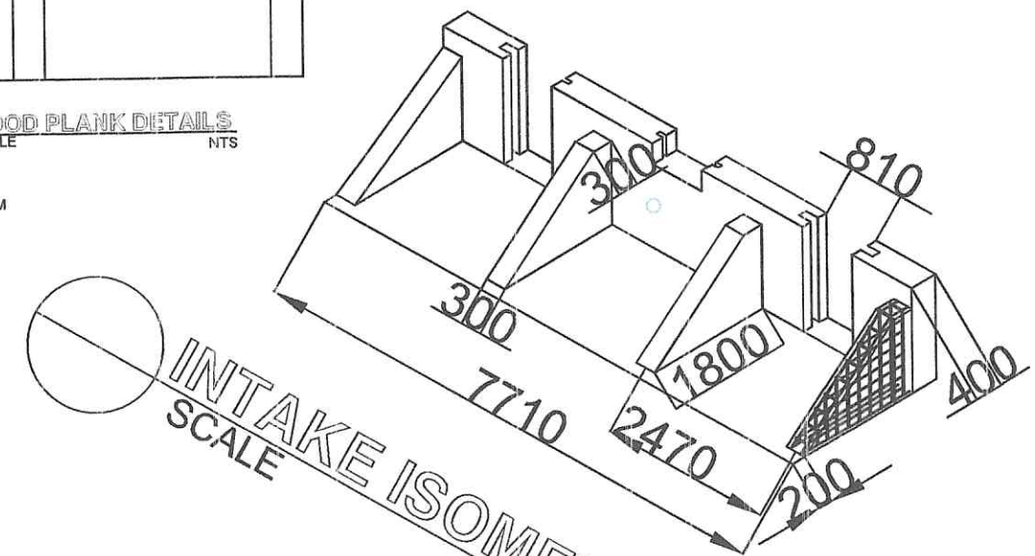

INTAKE ISOMETRIC VIEW
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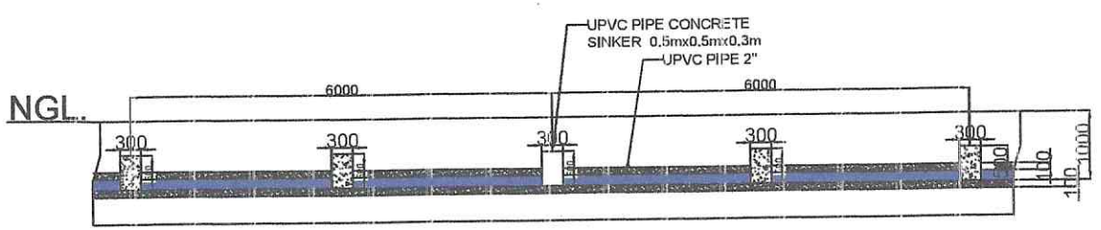
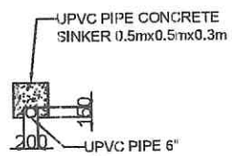
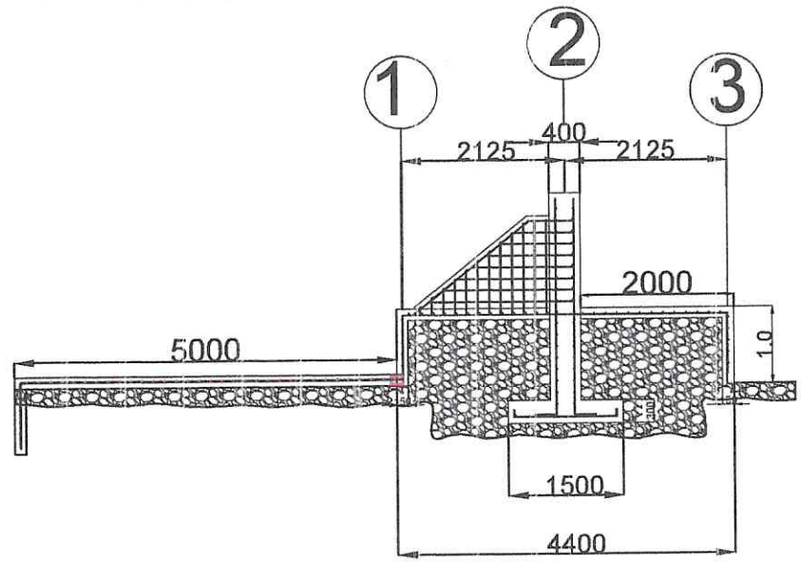




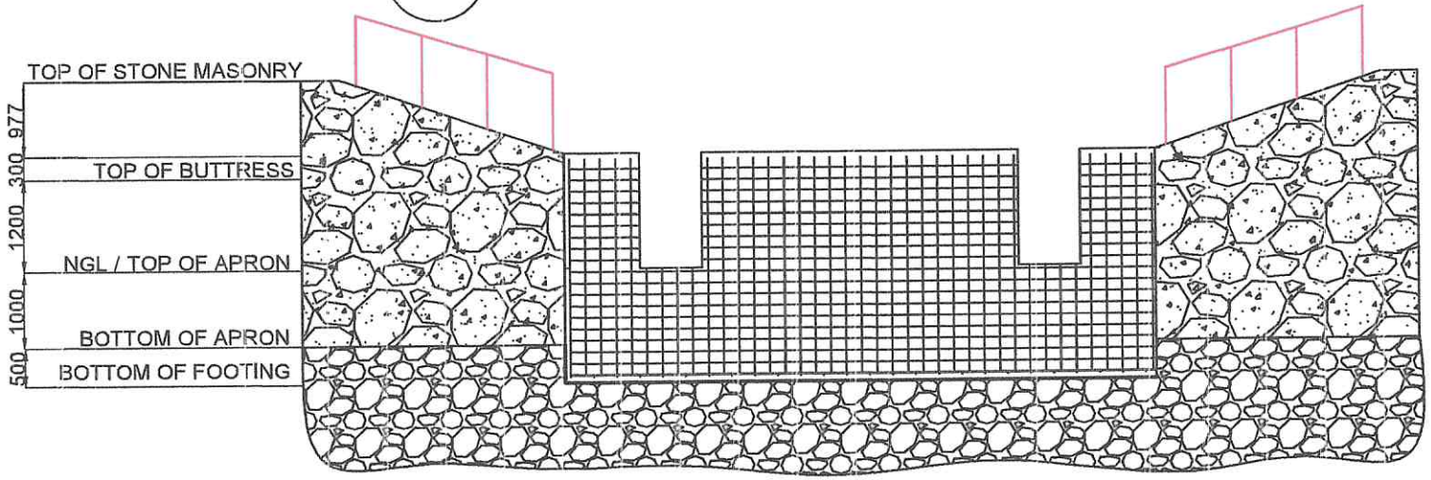
PIPE SINKER DETAIL
SCALE NTS

Republic of the Philippines Province of Palawan Municipality of Rizal OFFICE OF THE MUNICIPAL ENGINEER PLANNING AND DESIGN SECTION	PROJECT TITLE AND LOCATION : Establishment of Level II Water Supply System for Indigenous Community Sitio Tagpas, bgy. Iatud, Rizal, Palawan	DRAFTED & PREPARED BY: ENGR. KENNETH P. APGAO WATERWORKS SUPERVISOR	SUBMITTED BY: ENGR. NELSON R. AVANCEÑA MEEDO	RECOMMENDING APPROVAL: ENGR. ROLLIL B. LOBATON MUNICIPAL ENGINEER	APPROVED BY: HON. NORMAN S. ONG MUNICIPAL MAYOR	SHEET NO. AR 8|13



INTAKE STRUCTURE SECTION THRU Y

SCALE NTS



INTAKE STRUCTURE SECTION THRU X

SCALE NTS

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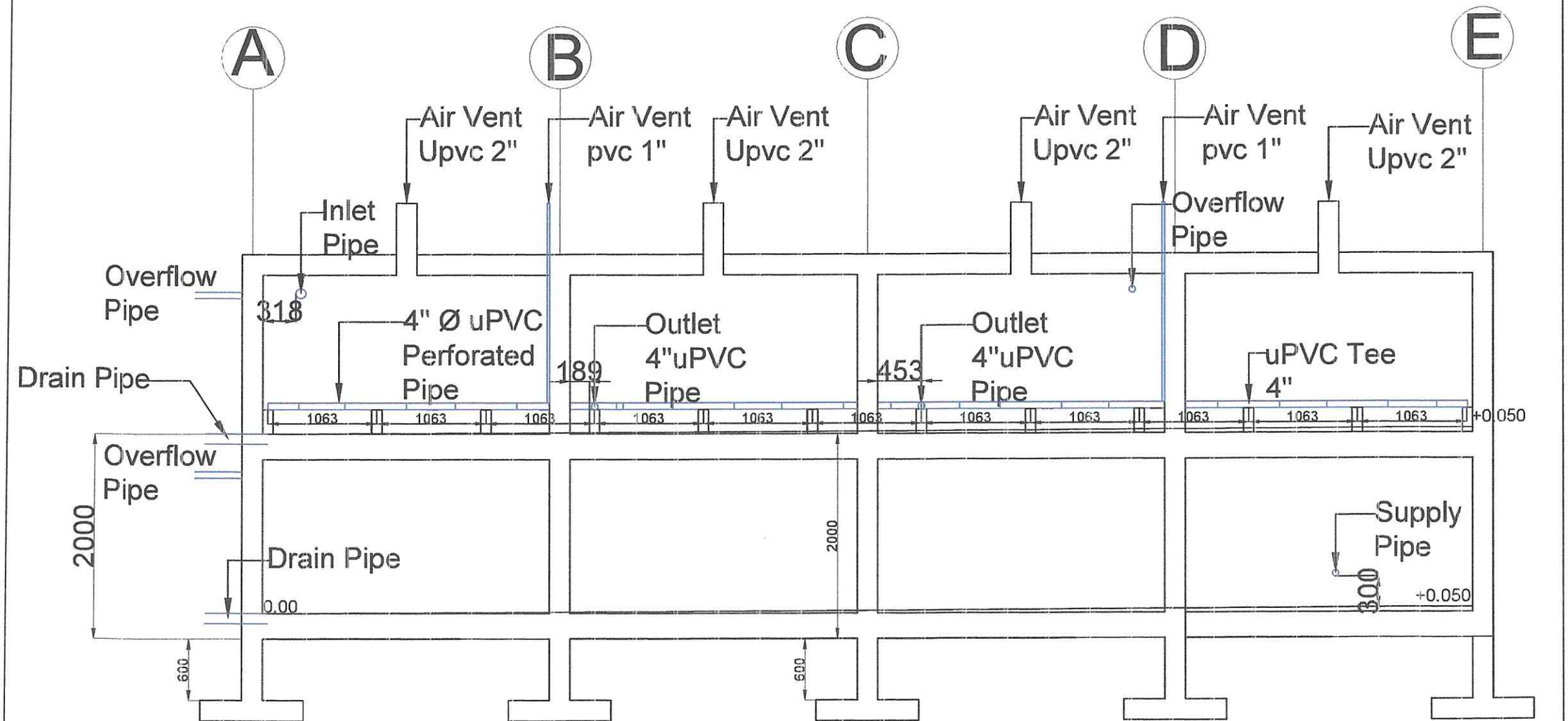
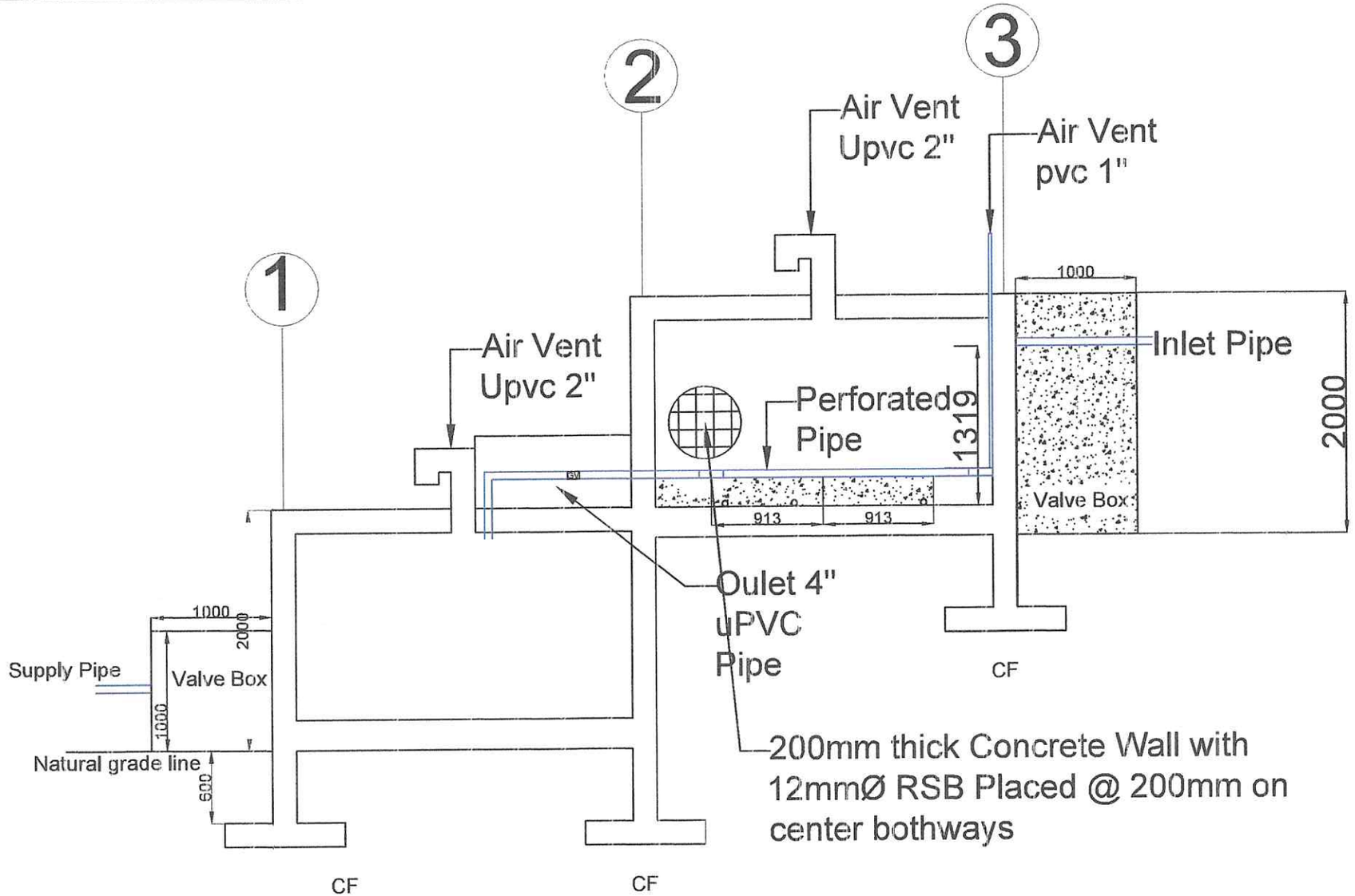


CE 1 1 SECTION THRU X PLAN OF GROUND TANK

SCALE NTS

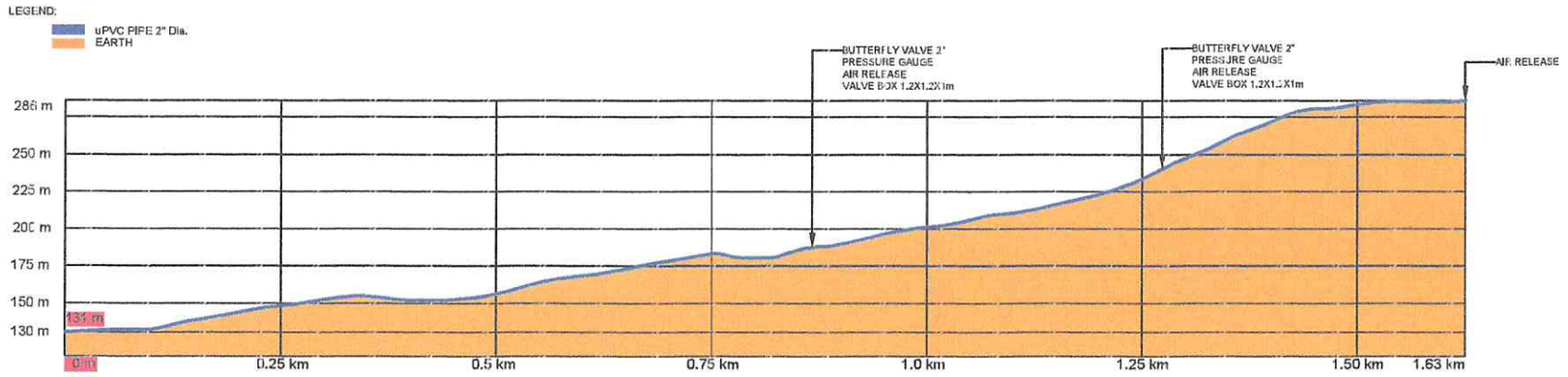
Republic of the Philippines Province of Palawan Municipality of Rizal OFFICE OF THE MUNICIPAL ENGINEER PLANNING AND DESIGN SECTION	PROJECT TITLE AND LOCATION : Establishment of Level II Water Supply System for Indigenous Community Sitio Tagpas, bgy. Iatud, Rizal, Palawan	DRAFTED & PREPARED BY: ENGR. KENNETH P. APGAO WATERWORKS SUPERVISOR	SUBMITTED BY: ENGR. NELSON R. AVANCEÑA MEEDO	RECOMMENDING APPROVAL: ENGR. RUEL B. LOBATON MUNICIPAL ENGINEER	APPROVED BY: HON. NORMAN S. ONG MUNICIPAL MAYOR	SHEET NO. AR 1013



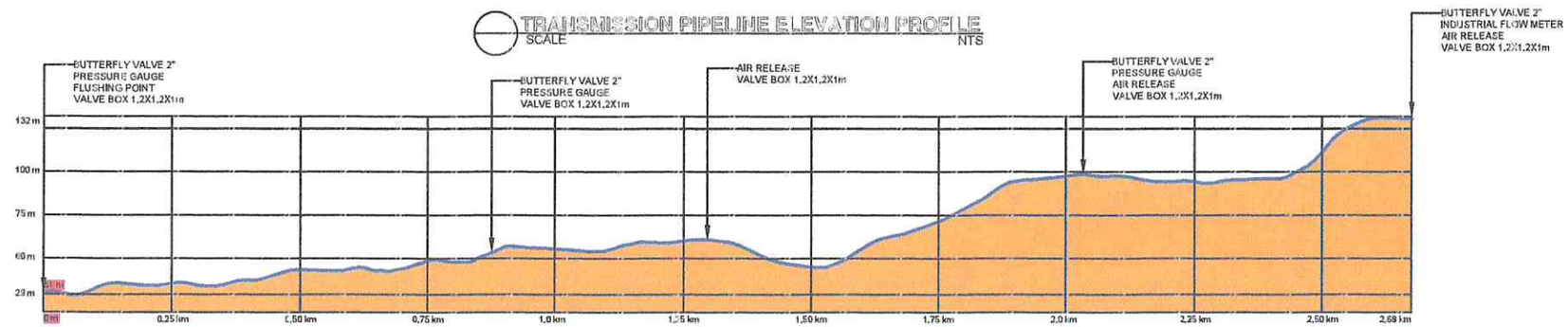
CE 1|1 SECTION THRU Y PLAN OF GROUND TANK

SCALE NTS

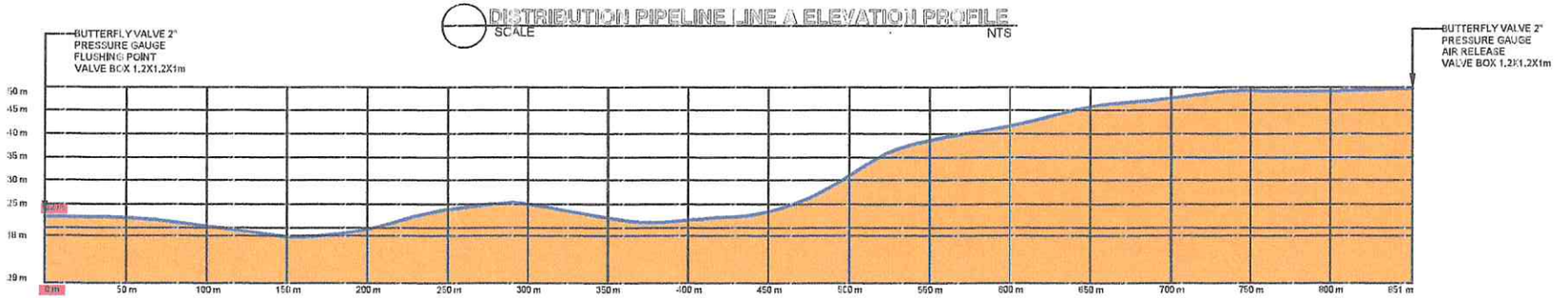
Republic of the Philippines Province of Palawan Municipality of Rizal OFFICE OF THE MUNICIPAL ENGINEER PLANNING AND DESIGN SECTION	PROJECT TITLE AND LOCATION : Establishment of Level II Water Supply System for Indigenous Community Sitio Tagpas, bgy. Iatud, Rizal, Palawan	DRAFTED & PREPARED BY: ENGR. KENNETH P. APGAO WATERWORKS SUPERVISOR	SUBMITTED BY: ENGR. NELSON R. AVANCENA MEEDO	RECOMMENDING APPROVAL: ENGR. RODEL B. LOBATON MUNICIPAL ENGINEER	APPROVED BY: HON. NORMAN S. ONG MUNICIPAL MAYOR	SHEET NO. AR 11|13



TRANSMISSION PIPELINE ELEVATION PROFILE
SCALE NTS



DISTRIBUTION PIPELINE LINE A ELEVATION PROFILE
SCALE NTS



DISTRIBUTION PIPELINE LINE B ELEVATION PROFILE
SCALE NTS

Republic of the Philippines **Province of Palawan** **Municipality of Rizal** **OFFICE OF THE MUNICIPAL ENGINEER** **PLANNING AND DESIGN SECTION**	PROJECT TITLE AND LOCATION : Establishment of Level II Water Supply System for Indigenous Community Sitio Tagpas, bgy. Iatud, Rizal, Palawan	DRAFTED & PREPARED BY: **ENGR. KENNETH P. APGAD** WATERWORKS SUPERVISOR	SUBMITTED BY: **ENGR. NELSON R. AVANCEÑA** MEEDO	RECOMMENDING APPROVAL: **ENGR. RODEL B. LOBATON** MUNICIPAL ENGINEER	APPROVED BY: **HON. NORMAN S. ONG** MUNICIPAL MAYOR	SHEET NO. AR 12|13

SCHEDULE OF PIPELINE			
DESCRIPTION	LENGTH OF PIPELINE	ELEVATION	STATION
DISTRIBUTION PIPELINE uPVC 2" LINE A	2+680		
BUTTERFLY VALVE 2" , INDUSTRIAL FLOW METER , AIR RELEASE, FILTER MEDIA, CLEAR WATER WELL , VALVE BOX 1.2X1.2X1m	N/A	131m to 127m	2+680-2+668
BUTTERFLY VALVE 2" PRESSURE GAUGE AIR RELEASE VALVE BOX 1.2X1.2X1m	N/A	99m	2+030
AIR RELEASE, VALVE BOX	N/A	67m	1+300
BUTTERFLY VALVE 2" PRESSURE GAUGE VALVE BOX 1.2X1.2X1m	N/A	62m	0+870
BUTTERFLY VALVE 2" PRESSURE GAUGE FLUSHING POINT VALVE BOX 1.2X1.2X1m	N/A	31m	0+000

SCHEDULE OF PIPELINE
SCALE NTS

SCHEDULE OF PIPELINE			
DESCRIPTION	LENGTH OF PIPELINE	ELEVATION	STATION
DISTRIBUTION PIPELINE uPVC 2" LINE B	0+851		
BUTTERFLY VALVE 2" PRESSURE GAUGE AIR RELEASE VALVE BOX 1.2X1.2X1m	N/A	50m	0+851
BUTTERFLY VALVE 2" PRESSURE GAUGE FLUSHING POINT VALVE BOX 1.2X1.2X1m	N/A	22m	0+000

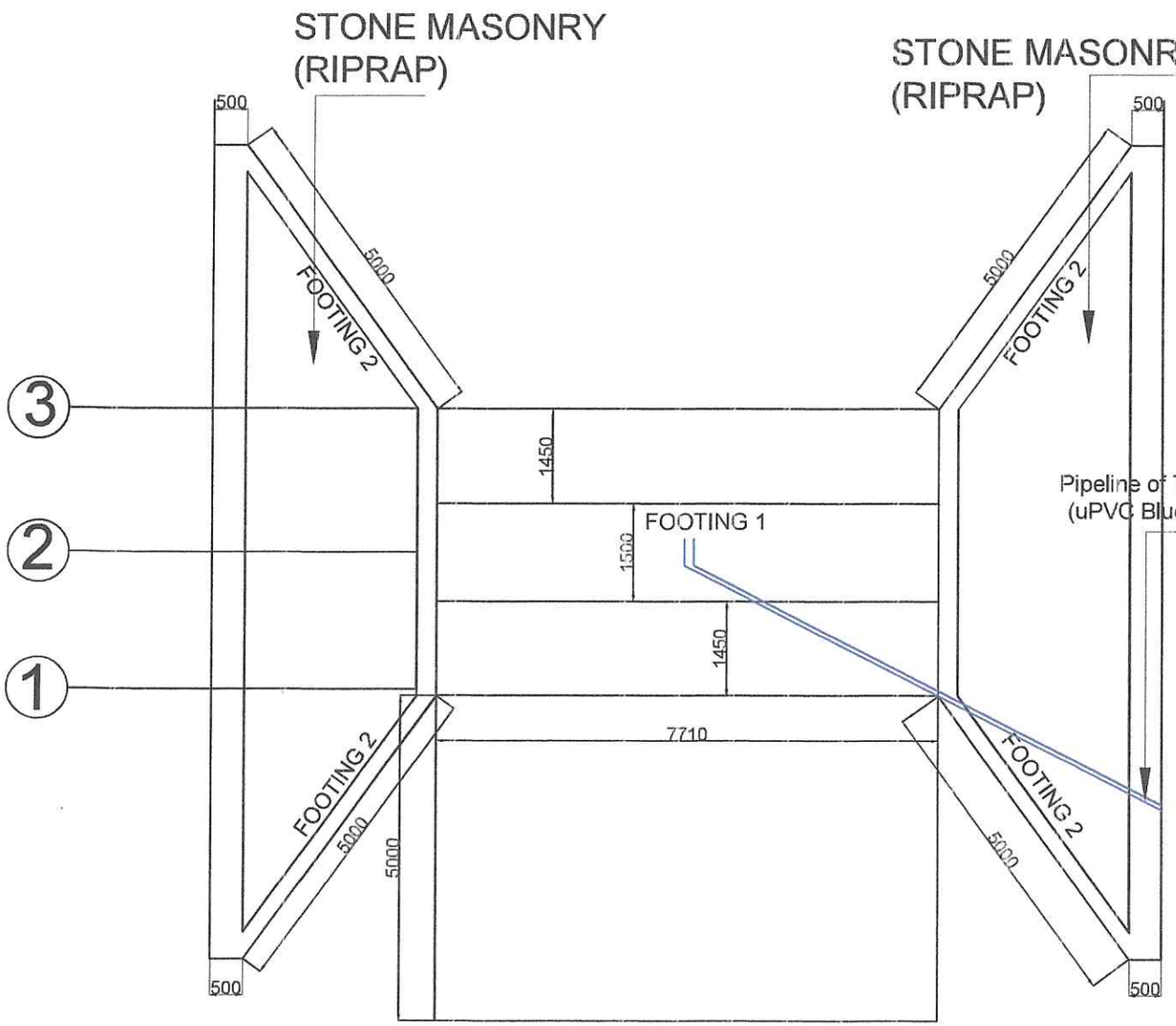
SCHEDULE OF PIPELINE
SCALE NTS

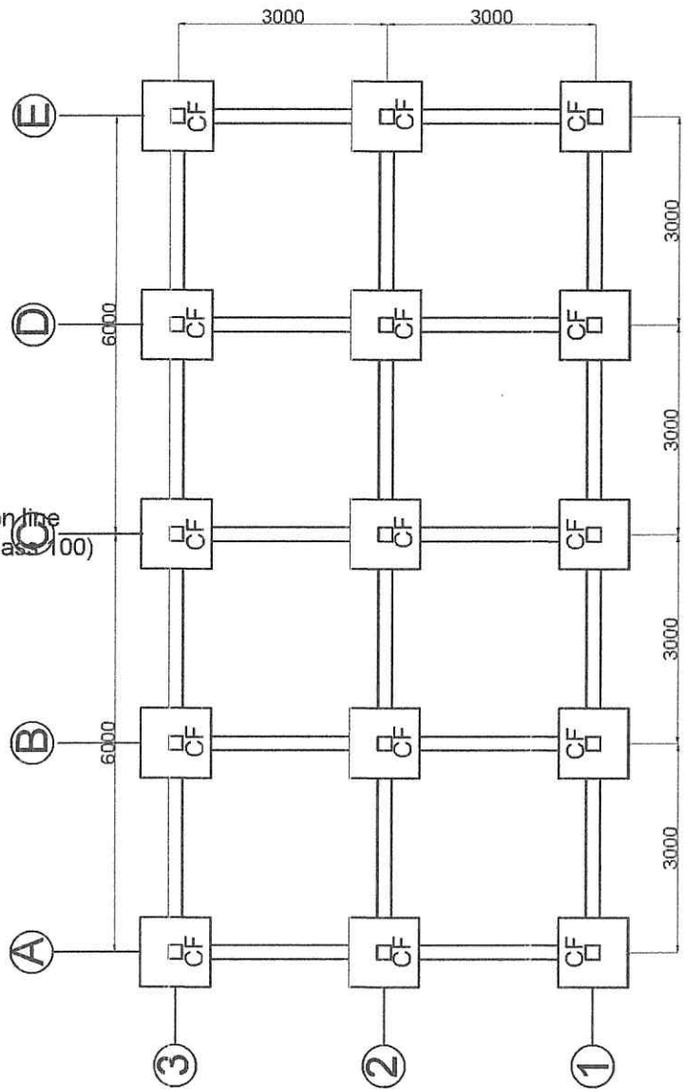
SCHEDULE OF PIPELINE			
DESCRIPTION	LENGTH OF PIPELINE	ELEVATION	STATION
INTAKE STRUCTURES	N/A	286m	1+630
TRANSMISSION PIPELINE uPVC 2"	1+630		
AIR RELEASE	N/A	286m	1+630
AIR RELEASE, PRESSURE GAUGE, BUTTERFLY VALVE 2", VALVE BOX 1.2X1.2X1m	N/A	237m	1+270
AIR RELEASE, PRESSURE GAUGE, BUTTERFLY VALVE 2" , VALVE BOX 1.2X1.2X1m	N/A	187m	0+850

SCHEDULE OF PIPELINE
SCALE NTS

SCHEDULE OF PIPELINE
SCALE NTS

Republic of the Philippines Province of Palawan Municipality of Rizal OFFICE OF THE MUNICIPAL ENGINEER PLANNING AND DESIGN SECTION	PROJECT TITLE AND LOCATION : Establishment of Level II Water Supply System for Indigenous Community Sitio Tagpas, bgy. Iatud, Rizal, Palawan	DRAFTED & PREPARED BY: ENGR. KENNETH P. APGAO WATERWORKS SUPERVISOR	SUBMITTED BY: ENGR. NELSON R. AVANCEÑA MEEDO	RECOMMENDING APPROVAL: ENGR. RODEL B. LOBATON MUNICIPAL ENGINEER	APPROVED BY: HON. NORMAN S. ONG MUNICIPAL MAYOR	SHEET NO. AR 13|13

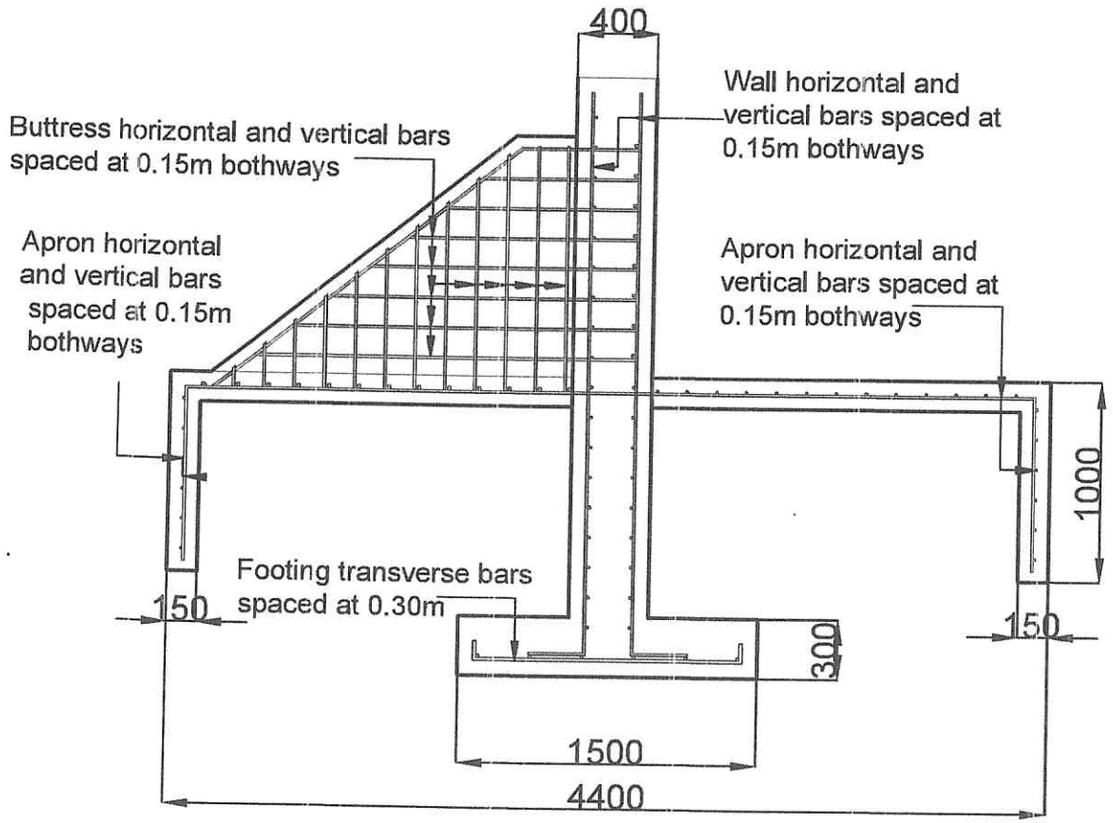




INTAKE FOUNDATION PLAN
SCALE NTS

GROUND TANK FOUNDATION PLAN
SCALE NTS

Republic of the Philippines Province of Palawan Municipality of Rizal OFFICE OF THE MUNICIPAL ENGINEER PLANNING AND DESIGN SECTION	PROJECT TITLE AND LOCATION : Establishment of Level II Water Supply System for Indigenous Community Sitio Tagpas, bgy. Iatud, Rizal, Palawan	DRAFTED & PREPARED BY: ENGR. KENNETH P. APOLAD WATERWORKS SUPERVISOR	SUBMITTED BY: ENGR. NELSON R. AVANCEÑA MEEDO	RECOMMENDING APPROVAL: ENGR. RODEL B. LOBATON MUNICIPAL ENGINEER	APPROVED BY: HON. NORMAN S. ONG MUNICIPAL MAYOR	SHEET NO. S 1 5



INTAKE FOOTING

BAR CUTTING SCHEDULE

DESIGNATION	NO. OF BAR	SHAPE	LENGTH OF EACH BAR
FOOTING	84		1.50m
	30	600 LAPPING 5300 100	6.0m
WALL	168	2745	3.0m
	180	LAPPING 600 5400	6.0m
APRON	125		6.0m
	150	600 5400	6.0m

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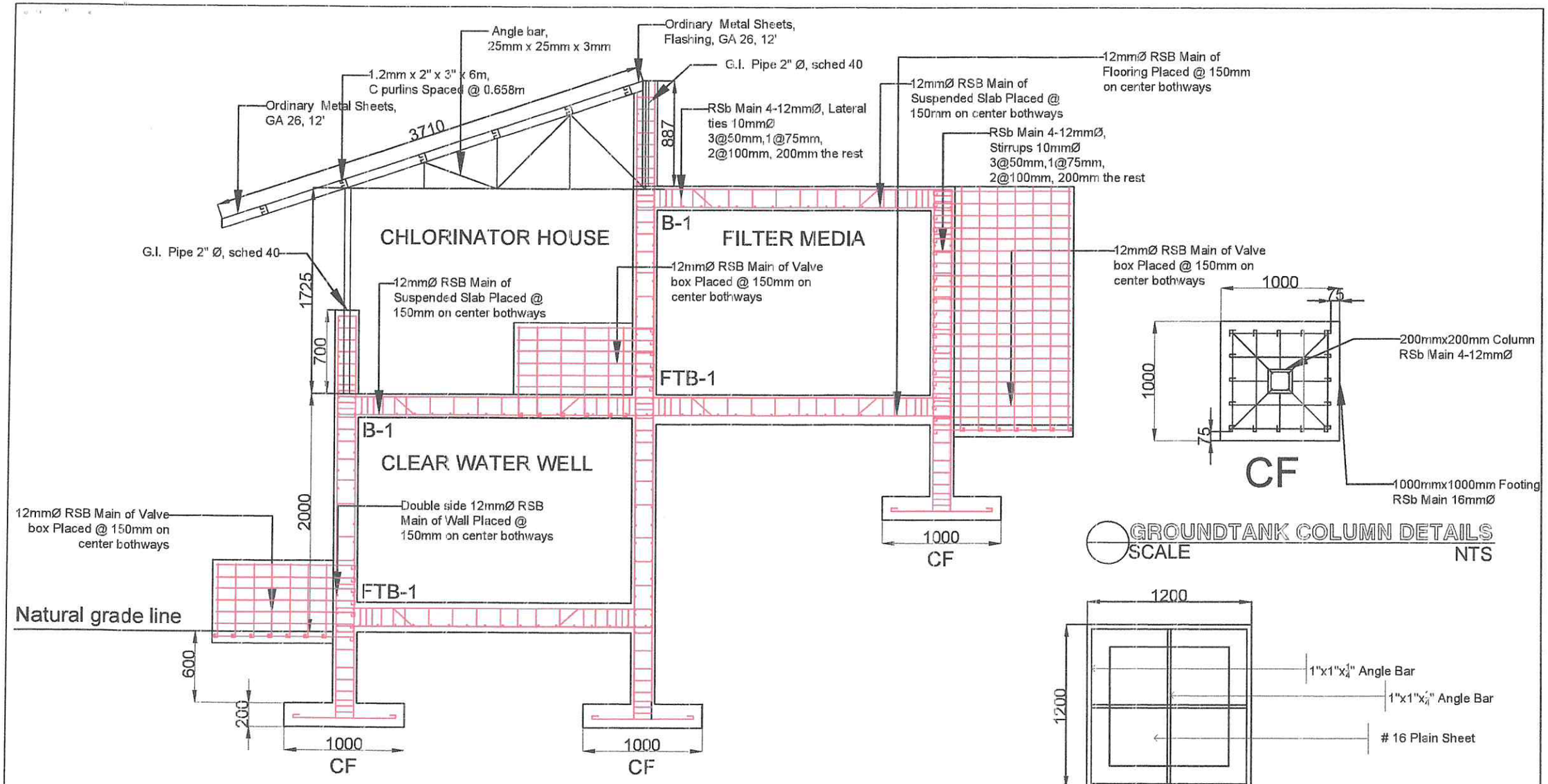

GROUNDTANK COLUMN DETAILS
SCALE NTS

REINFORCEMENT OF FOOTING, FTB, COLUMN, WALL, BEAM, Suspended Slab and Flooring DETAILS
SCALE NTS

VALVE BOX COVER DETAIL
SCALE NTS

Republic of the Philippines Province of Palawan Municipality of Rizal OFFICE OF THE MUNICIPAL ENGINEER PLANNING AND DESIGN SECTION	PROJECT TITLE AND LOCATION : Establishment of Level II Water Supply System for Indigenous Community Sitio Tagpas, bgy. Iatud, Rizal, Palawan	DRAFTED & PREPARED BY: ENGR. KENNETH F. APGAO WATERWORKS SUPERVISOR	SUBMITTED BY: ENGR. NELSON R. AVANCEÑA MEEDO	RECOMMENDING APPROVAL: ENGR. RODEL B. LOBATON MUNICIPAL ENGINEER	APPROVED BY: HON. NORMAN S. ONG MUNICIPAL MAYOR	SHEET NO. S 3 | 5

CONSTRUCTION NOTES

A. GENERAL NOTES

1. ALL STRUCTURAL WORKS SHALL BE EXECUTED IN ACCORDANCE WITH THE LOCAL STRUCTURAL CODE.

2. CONCRETE STRENGTH:
UNLESS OTHERWISE INDICATED IN PLANS OR NOTED IN SPECIFICATIONS, THE MINIMUM 28-DAY CYLINDER
COMPRESSIVE STRENGTH OF CONCRETE ARE AS FOLLOWS:

FOUNDATION,FOOTING BEAMS, WALL FOOTINGS _____21 MPA

ALL CONCRETE MIXES FOR MAIN STRUCTURAL MEMBERS SHALL BE READY-MIXED
FROM PRE-APPROVED SUPPLIER, TEST SPECIMEN MUST BE PROVIDED ON ALL BATCHES OF READY-
MIXED CONCRETE FOR LABORATORY TESTING.

IF JOB-MIXED CONCRETE SHALL BE USED, MIXTURE MUST BE 1:2:3 (CEMENT:SAND:GRAVEL) FOR 21 MPA.

3. IN THE INTERPRETATION OF THIS DRAWINGS, INDICATED DIMENSION SHALL GOVERN AND THE DISTANCES OR SIZES ARE NOT TO BE SCALED FOR CONSTRUCTION PURPOSES.

B. NOTES ON REINFORCING BARS

1. UNLESS OTHERWISE SPECIFIED IN THE PLANS. THE MINIMUM YIELD STRENGTH OF REINFORCEMENT TO BE USED CORRESPONDING TO THE STRUCTURAL MEMBERS ARE AS FOLLOWS:
16mmØ, 12mmØ & 10mmØ _____275 MPA - (GRADE 40)

2. THE FOLLOWING MINIMUM CLEAR CONCRETE COVER SHALL BE PROVIDED:
FOOTING, WALL FOOTING_____75mm

3. CONTINUOUS BARS SHALL BE SPLICED AS SHOWN IN TABLE 1.0

F. NOTES ON STRUCTURAL STEEL

1. UNLESS OTHERWISE INDICATED IN THE PLANS, STRUCTURAL STEEL AND PLATES SHALL CONFORM TO ASTM-A36. CERTIFIED MILL TEST SHALL BE SUBMITTED BY THE FABRICATOR.

2. WELDING SHALL CONFORM TO AWS STANDARD, E60 OR E70 ELECTRODES SHALL BE USEDUNLESS OTHERWISE SPECIFIED BY THE STRUCTURAL ENGINEER.

3. THE FABRICATOR SHALL HAVE THE WELDS TESTED BY ANY INDEPENDENT COMPANY ENGAGED IN NON
-DESTRUCTIVE TESTING. THE WELDS CAN BE ACCEPTED AND ARE CONSIDERED SATISFACTORY IF 9 OOUT OF 10 SAMPLES PASSED THE REQUIREMENTS. OTHERWISE, THE WELDS SHALL NOT BE CONSIDERED.

4. STEEL FABRICATOR SHALL SUBMIT SHOP DRAWINGS SHOWING COMPLETE DETAILED CONNECTIONS.

5. ALL DIMENSION IN THE PLANS SHALL BE VERIFIED BY THE STEEL FABRICATOR IN THE FIELD IN COORDINATION WITH THE GENERAL CONTRACTOR.

6. ALL SPLICES SHALL BE STAGGERED. NO SPLICE SHALL BE PERMITTED AT POINTS WHERE CRITICAL STRESSES OCCUR.

STANDARD DETAILS

1. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE ADEQUATE SHORING AND BRACING OF THE STRUCTURE FOR ALL LOADS THAT MAY BE IMPOSED DURING CONSTRUCTION INCLUDING THE DANGER THAT MAY BE CAUSED TO THE EXISTING ADJACENT STRUCTURES ALONG THE PERIMETER DURING THE EXCAVATION OF FOUNDATION. IT MUST BE UNDERSTOOD THAT THE CONSULTANTS, SPECIFICALLY THE SIGNING STRUCTURAL ENGINEER IS LIABILITY-FREE FROM ANY DAMAGE THAT MAY BE CAUSED IN ANY ADJACENT EXISTING STRUCTURES.

Republic of the Philippines Province of Palawan Municipality of Rizal OFFICE OF THE MUNICIPAL ENGINEER PLANNING AND DESIGN SECTION	PROJECT TITLE AND LOCATION : Establishment of Level II Water Supply System for Indigenous Community Sitio Tagbas, Barangay Rizal, Palawan	DRAFTED & PREPARED BY: ENGR. KENNETH P. APGAO WATER WORKS SUPERVISOR	SUBMITTED BY: ENGR. NELSON R. AVANCEÑA MEEDO	RECOMMENDING APPROVAL: ENGR. ROMEL B. LOBATON MUNICIPAL ENGINEER	APPROVED BY: HON. NORMAN S. ONG MUNICIPAL MAYOR	SHEET NO. S 4/5

2. ALL MATERIALS AND WORKMANSHIP SHALL CONFORM TO THE LATEST APPLICABLE STANDARDS OR SPECIFICATIONS. ALL WORKS SHALL CONFORM WITH THE BEST PRACTICE PREVAILING IN THE VARIOUS TRADES.

3. INSPECTION-ALL CONSTRUCTION AND WORKMANSHIP SHALL BE SUBJECT TO INSPECTION, EXAMINATION AND TESTING BY THE ENGINEER/ARCHITECT. THE ENGINEER/ARCHITECTSHALL HAVE THE RIGHT TO REJECT DEFECTIVE MATERIALS AND WORKMANSHIP OR REQUIRE ITS CORRECTION.

4. UNLESS SPECIFICALLY DETAILED ELSEWHERE CONTRACTOR SHALL FOLLOW TYPICAL DETAILS AS SHOWN IN THESE DRAWINGS.

5. THE CONTRACTOR WILL BE RESPONSIBLE FOR THE COORDINATION OF WORK AMONG THE VARIOUS TRADE AS NECESSARY TO AVOID CONFLICTS AND TO INSURE THE INSTALLATION OF ALL WORKS WITHIN THE AVAILABLE SPACE.

6. DO NOT SCALE DRAWINGS, CALLED OUT DIMENSIONS AND STANDARD CODE REQUIREMENTS SHALL GOVERN OVER UNSCALLED DRAWINGS.

7. HONEYCOMB ON NEWLY POURED CONCRETE. THE CONTRACTOR MUST REFRAIN FROM ORDINARY CONCRETE MORTAR PATCHING OF ALL HONEYCOMB FOUND OUT AFTER STRIPPING OF FORMWORKS. EPOXY PATCHING OR PRESSURIZED EPOXY INJECTION IS THE ONLY METHOD ALLOWED TO RECTIFY MAIN R.C.STRUCTURAL MEMBERS WITH HONEYCOMB.

C. NOTES ON FOOTINGS

1. FOOTING WERE DESIGNED FOR ALLOWABLE SOIL PRESSURE OF 96 KPA. CONTRACTORS SHALL REPORT TO THE STRUCTURAL ENGINEER ANY INDICATION OF SOFT SOIL CONDITION.

2. NO FOOTINGS SHALL REST ON FILL.

3. USE OF VIBRATOR IS STRICTLY REQUIRED DURING CONCRETE POURING.

D. NOTES ON CONCRETE POURING

1. CONCRETE SHALL BE DEPOSITED IN ITS FINAL POSITION WITHOUT SEGREGATION, REHANDLING OR FLOWING. PLACING SHALL BE DONE WITH BUGGIES, BUCKETS OR BY PUMPING. NO CHUTE SHALL BE ALLOWED EXCEPT TO TRANSFER CONCRETE FROM HOPPERS TO BUGGIES. WHEELBORROWS OR BUCKETS IN WHICH CASE THEY SHALL NOT EXCEED 6100mm IN AGGREGATE LENGTH.

2. USE OF VIBRATIONS IS STRICTLY REQUIRED DURING DEPOSITING OR PLACING OF CONCRETE, UNLESS OTHERWISE AUTHORIZED IN WRITING BY THE STRUCTURAL ENGR. AND FOR UNUSUAL CONDITIONS WHERE VIBRATION IS EXTREMELY DIFFICULT TO ACCOMPLISH.

E. NOTES ON FORMWORKS

1. FORMS SHALL BE PROVIDED FOR ALL CONCRETE INDICATED UNLESS SPECIFIED OTHERWISE. FORMS SHALL BE SET TRUE TO LINE AND GRADE AND MAINTAINED SO AS TO ENSURE COMPLETE WORK WITHIN THE ALLOWABLE TOLERANCE SPECIFIED AND SHALL BE MORTAR TIGHT.

2. FORMS AND THEIR SUPPORT SHALL BE DESIGNED SO AS NOT TO DAMAGE PREVIOUSLY PLACED STRUCTURE.

3. NO CONSTRUCTION LOAD SHALL BE SUPPORTED ON, NOR ANY SHORING REMOVED FROM ANY PART OF THE STRUCTURE UNDER CONSTRUCTION EXCEPT WHEN THAT PORTION OF THE STRUCTURE IN COMBINATION WITH THE REMAINING FORMING AND SHORING SYSTEM HAS STRENGTH TO SUPPORT SAFETY ITS WEIGHT AND THE ADDITIONAL IMPOSED LOADS.

4. FORMS SHALL BE REMOVED IN SUCH MANNER AS NOT TO IMPAIR SAFETY AND SERVICE ABILITY OF THE STRUCTURE.

SCHEDULE OF STRIPPING OF FORMS AND SHORES

FOUNDATION _____ 24 HRS
WALLS _____ 12 DAYS

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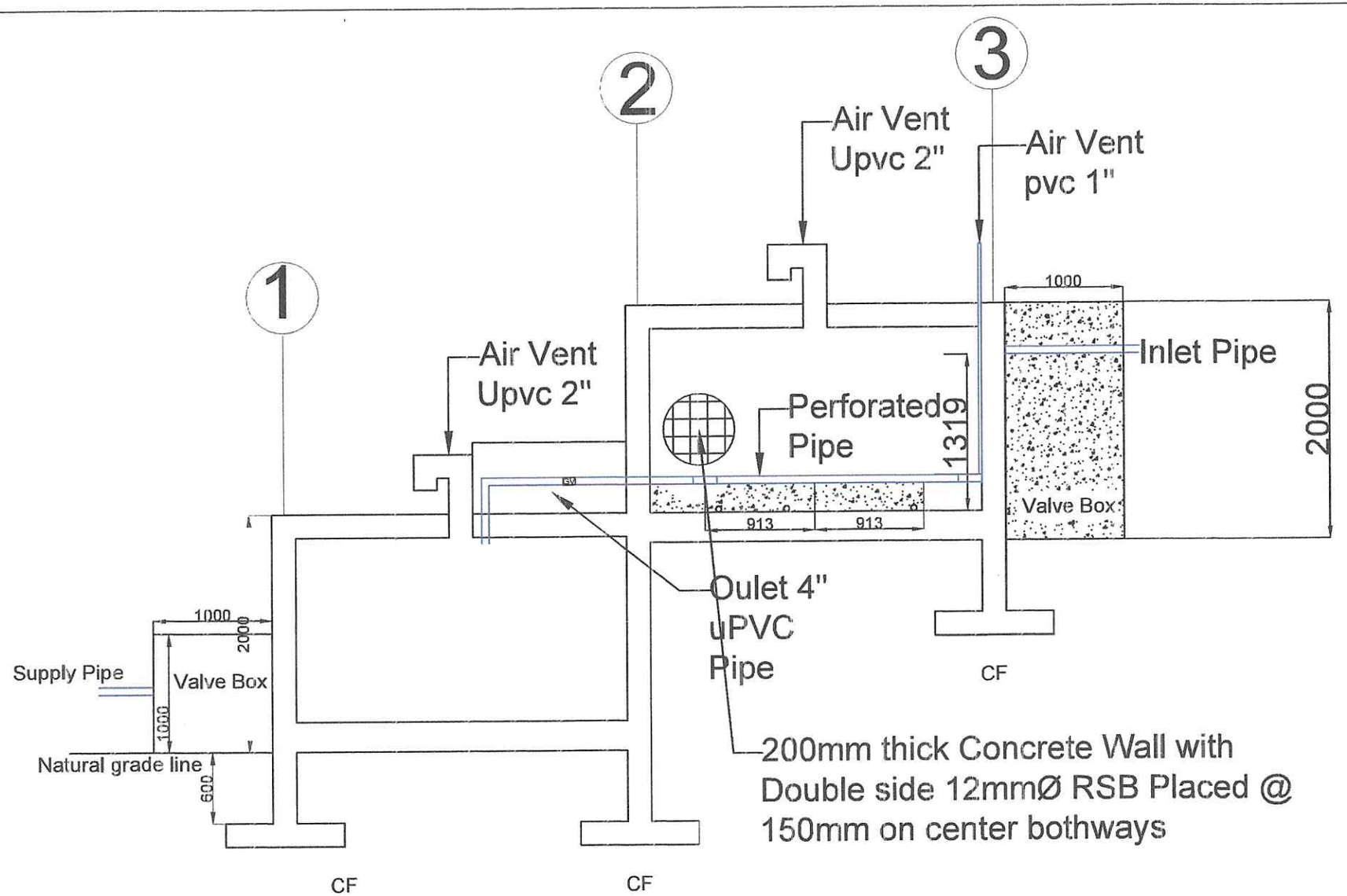

CE 11 SECTION THRU Y PLAN OF GROUND TANK

SCALE NTS

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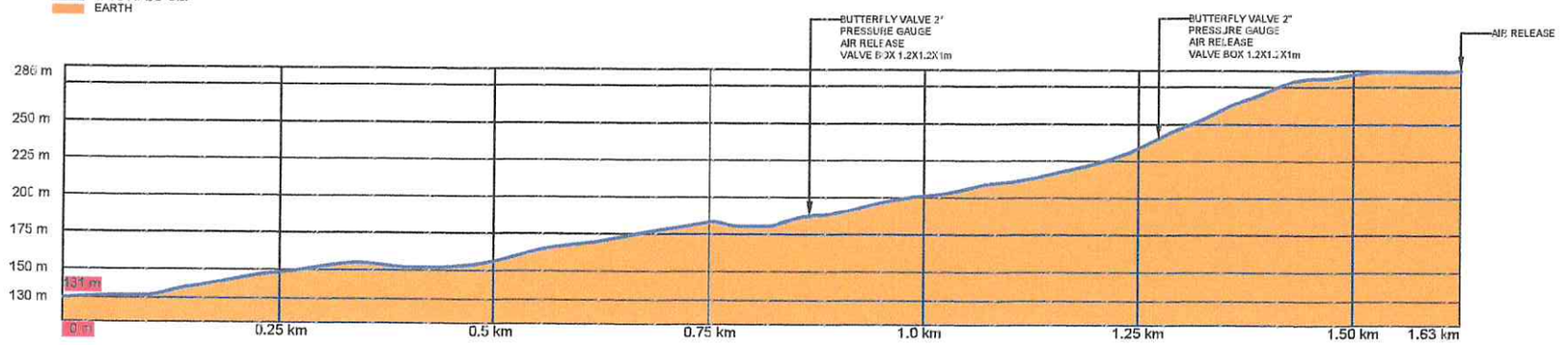
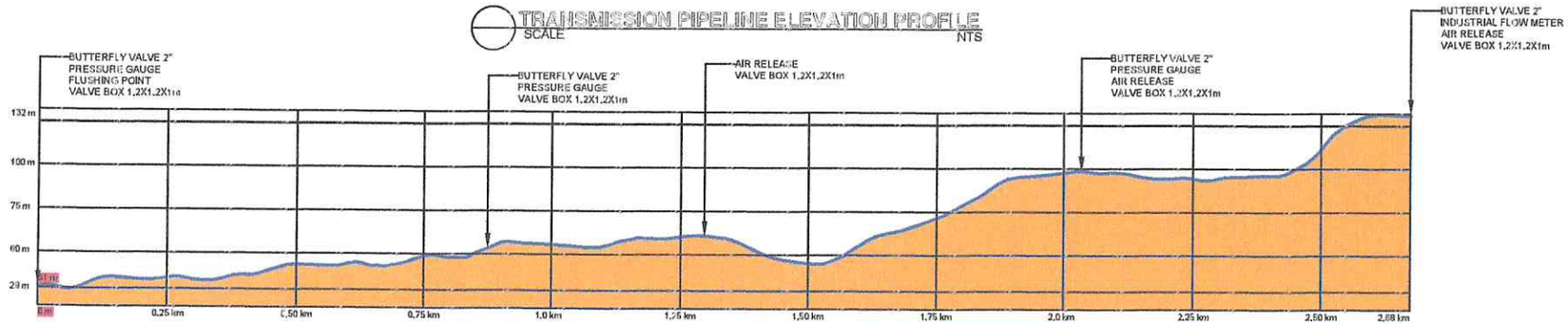
LEGEND:

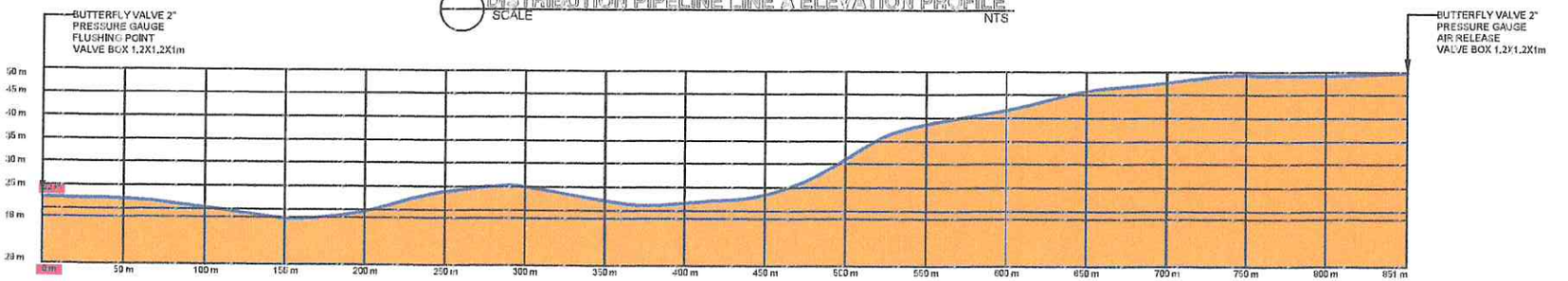
uPVC PIPE 2" Dia.
EARTH



TRANSMISSION PIPELINE ELEVATION PROFILE
SCALE NTS



DISTRIBUTION PIPELINE LINE A ELEVATION PROFILE
SCALE NTS



DISTRIBUTION PIPELINE LINE B ELEVATION PROFILE
SCALE NTS

Republic of the Philippines **Province of Palawan** **Municipality of Rizal** **OFFICE OF THE MUNICIPAL ENGINEER** **PLANNING AND DESIGN SECTION**	PROJECT TITLE AND LOCATION : Establishment of Level II Water Supply System for Indigenous Community Sitio Tagpas, bgy. Iatud, Rizal, Palawan	DRAFTED & PREPARED BY: **ENGR. KENNETH P. APGAO** WATERWORKS SUPERVISOR	SUBMITTED BY: **ENGR. NELSON R. AVANCEÑA** MEEDO	RECOMMENDING APPROVAL: **ENGR. RODEL B. LOBATON** MUNICIPAL ENGINEER	APPROVED BY: **HON. NORMAN S. ONG** MUNICIPAL MAYOR	SHEET NO. AR 12|13

SCHEDULE OF PIPELINE			
DESCRIPTION	LENGTH OF PIPELINE	ELEVATION	STATION
DISTRIBUTION PIPELINE uPVC 2" LINE A	2+680		
BUTTERFLY VALVE 2" , INDUSTRIAL FLOW METER , AIR RELEASE, FILTER MEDIA, CLEAR WATER WELL , VALVE BOX 1.2X1.2X1m	N/A	131m to 127m	2+680-2+668
BUTTERFLY VALVE 2" PRESSURE GAUGE AIR RELEASE VALVE BOX 1.2X1.2X1m	N/A	99m	2+030
AIR RELEASE, VALVE BOX	N/A	67m	1+300
BUTTERFLY VALVE 2" PRESSURE GAUGE VALVE BOX 1.2X1.2X1m	N/A	62m	0+870
BUTTERFLY VALVE 2" PRESSURE GAUGE FLUSHING POINT VALVE BOX 1.2X1.2X1m	N/A	31m	0+000

SCHEDULE OF PIPELINE
SCALE NTS

SCHEDULE OF PIPELINE			
DESCRIPTION	LENGTH OF PIPELINE	ELEVATION	STATION
DISTRIBUTION PIPELINE uPVC 2" LINE B	0+851		
BUTTERFLY VALVE 2" PRESSURE GAUGE AIR RELEASE VALVE BOX 1.2X1.2X1m	N/A	50m	0+851
BUTTERFLY VALVE 2" PRESSURE GAUGE FLUSHING POINT VALVE BOX 1.2X1.2X1m	N/A	22m	0+000

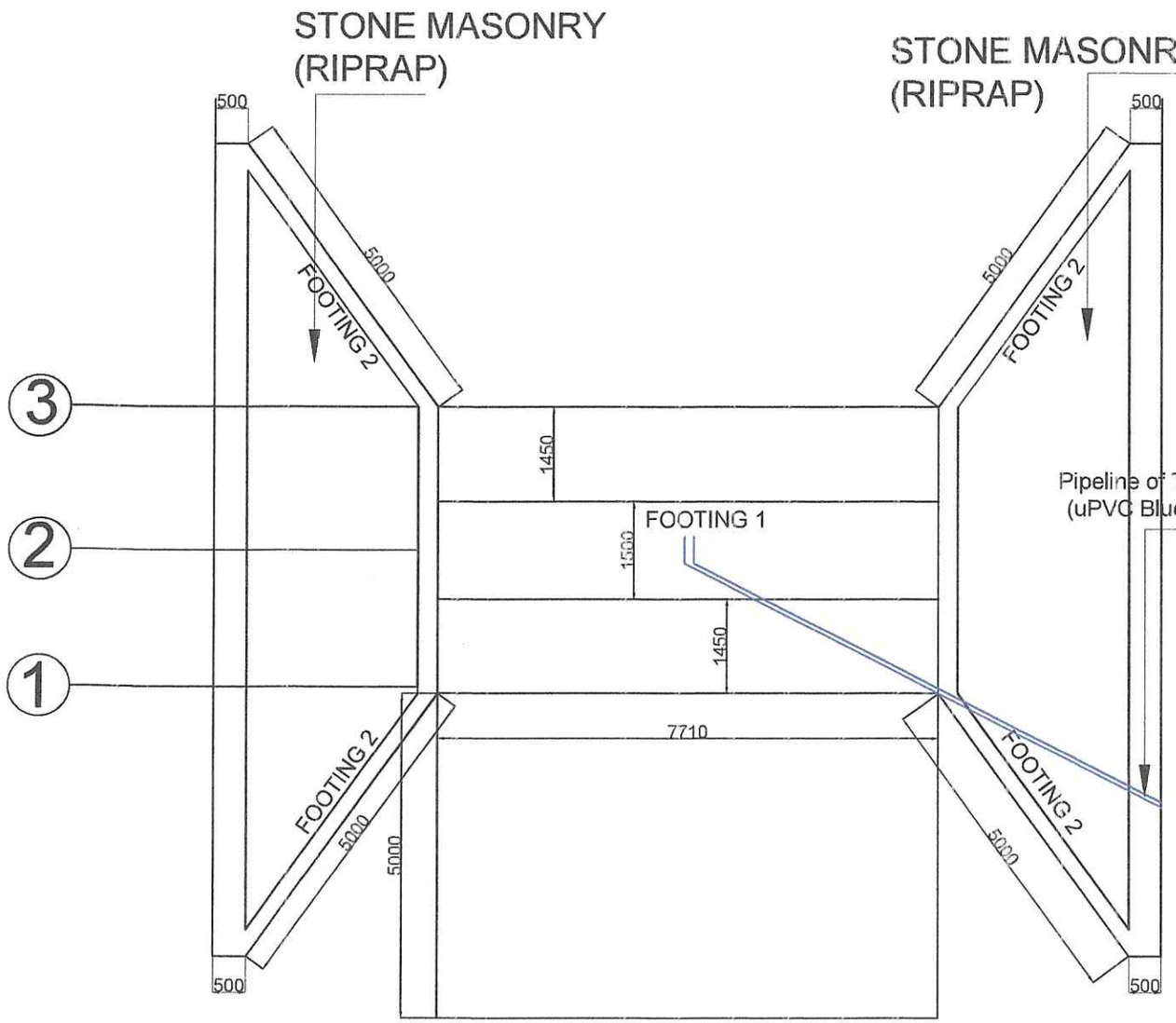
SCHEDULE OF PIPELINE
SCALE NTS

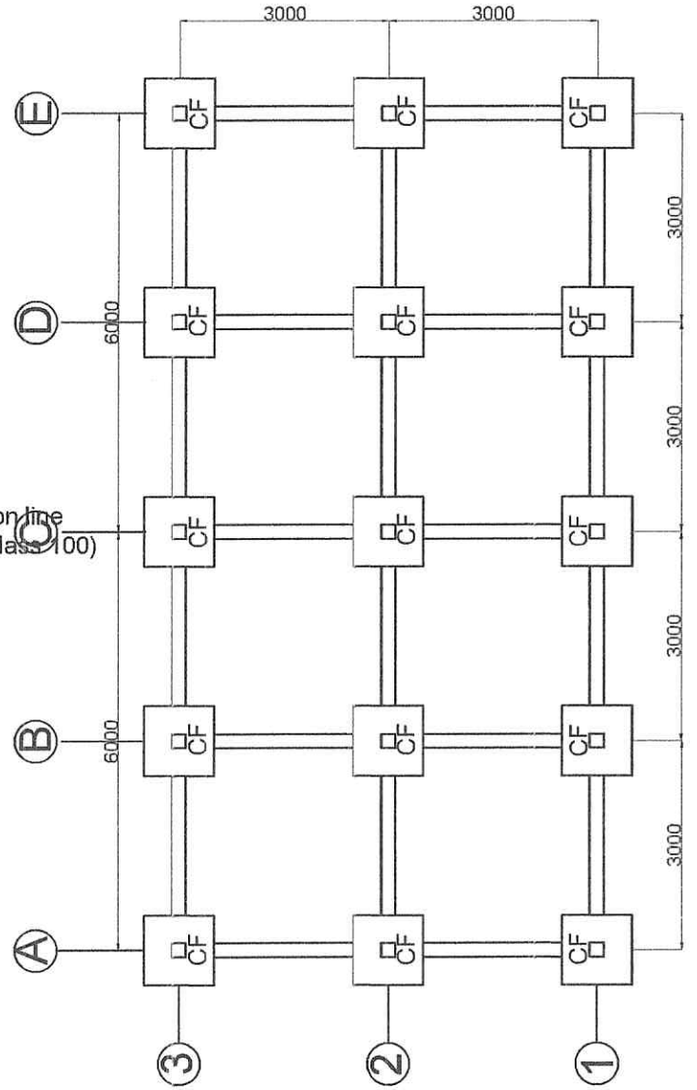
SCHEDULE OF PIPELINE			
DESCRIPTION	LENGTH OF PIPELINE	ELEVATION	STATION
INTAKE STRUCTURES	N/A	286m	1+630
TRANSMISSION PIPELINE uPVC 2"	1+630		
AIR RELEASE	N/A	286m	1+630
AIR RELEASE, PRESSURE GAUGE, BUTTERFLY VALVE 2", VALVE BOX 1.2X1.2X1m	N/A	237m	1+270
AIR RELEASE, PRESSURE GAUGE, BUTTERFLY VALVE 2" , VALVE BOX 1.2X1.2X1m	N/A	187m	0+850

SCHEDULE OF PIPELINE
SCALE NTS

SCHEDULE OF PIPELINE
SCALE NTS

Republic of the Philippines Province of Palawan Municipality of Rizal OFFICE OF THE MUNICIPAL ENGINEER PLANNING AND DESIGN SECTION	PROJECT TITLE AND LOCATION : Establishment of Level II Water Supply System for Indigenous Community Sitio Tagpas, bgy. Iatud, Rizal, Palawan	DRAFTED & PREPARED BY: ENGR. KENNETH P. APGAO WATERWORKS SUPERVISOR	SUBMITTED BY: ENGR. NELSON R. AVANCEÑA MEEDO	RECOMMENDING APPROVAL: ENGR. RUEL B. LOBATON MUNICIPAL ENGINEER	APPROVED BY: HON. NORMAN S. ONG MUNICIPAL MAYOR	SHEET NO. AR 13|13

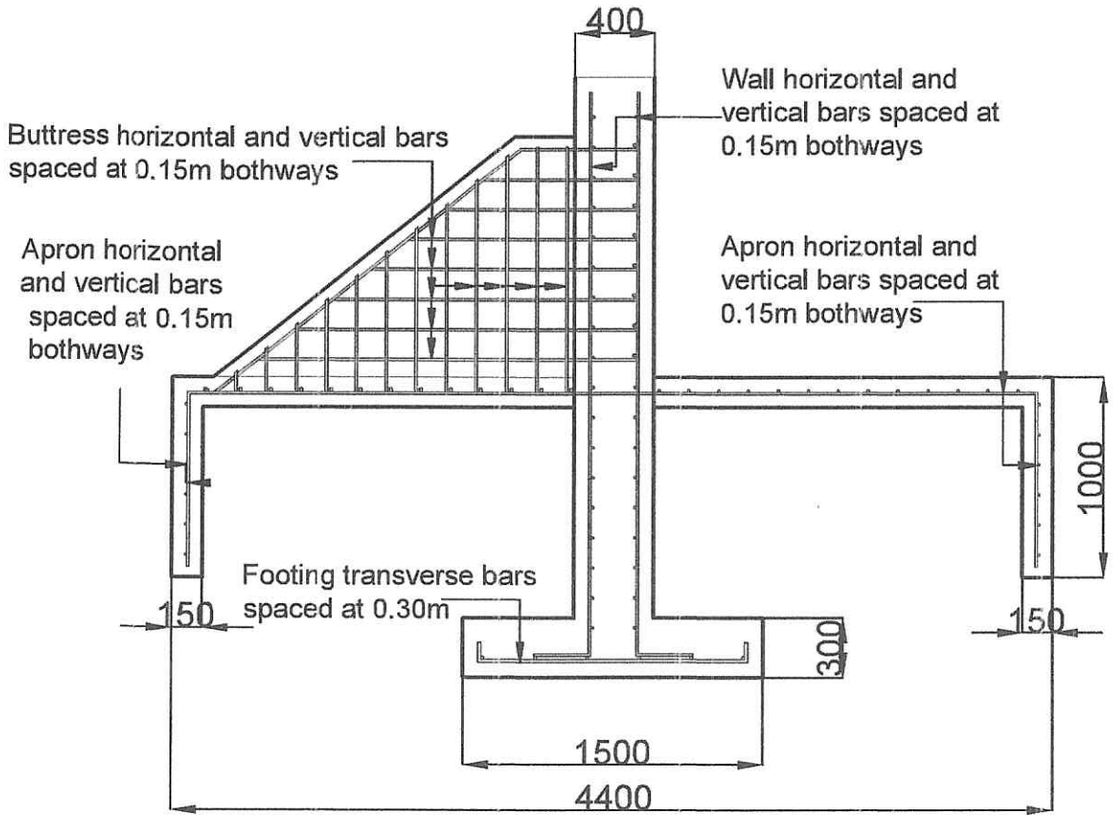




INTAKE FOUNDATION PLAN
SCALE NTS

GROUND TANK FOUNDATION PLAN
SCALE NTS

Republic of the Philippines Province of Palawan Municipality of Rizal OFFICE OF THE MUNICIPAL ENGINEER PLANNING AND DESIGN SECTION	PROJECT TITLE AND LOCATION : Establishment of Level II Water Supply System for Indigenous Community Sitio Tagpas, bgy. Iatud, Rizal, Palawan	DRAFTED & PREPARED BY: ENGR. KENNETH P. APIAG WATERWORKS SUPERVISOR	SUBMITTED BY: ENGR. NELSON R. AVANCENA MEEDO	RECOMMENDING APPROVAL: ENGR. CUEL B. LOBATON MUNICIPAL ENGINEER	APPROVED BY: HON. NORMAN S. ONG MUNICIPAL MAYOR	SHEET NO. S 15



INTAKE FOOTING

BAR CUTTING SCHEDULE

DESIGNATION	NO. OF BAR	SHAPE	LENGTH OF EACH BAR
FOOTING	84		1.50m
	30	600 LAPPING 5300 100	6.0m
WALL	168	2775	3.0m
	180	LAPPING 600 5400	6.0m
APRON	125	150	6.0m
	150	600 5400	6.0m

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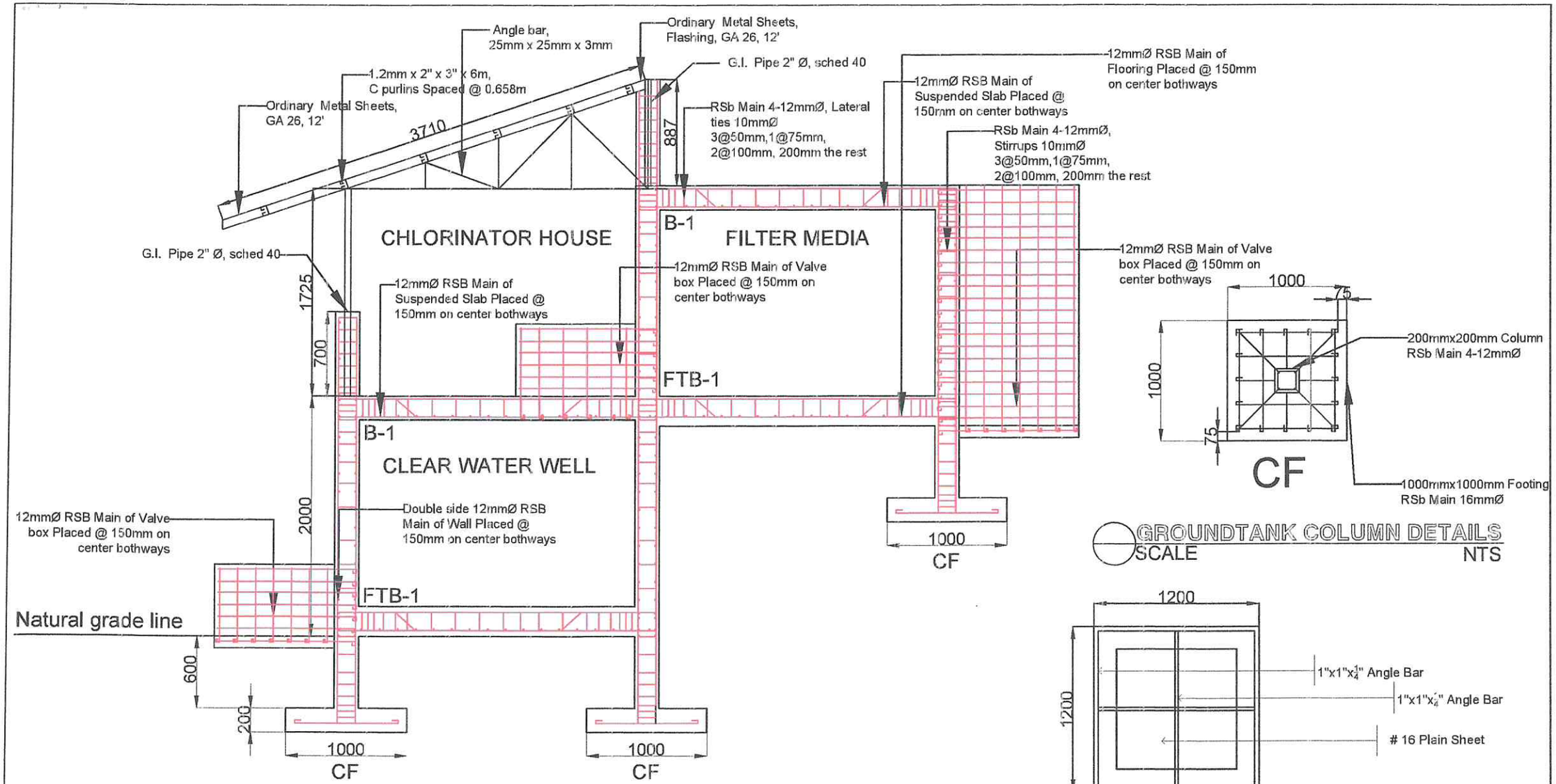

GROUNDTANK COLUMN DETAILS
SCALE NTS

REINFORCEMENT OF FOOTING, FTB, COLUMN, WALL, BEAM, Suspended Slab and Flooring DETAILS
SCALE NTS

VALVE BOX COVER DETAIL
SCALE NTS

Republic of the Philippines Province of Palawan Municipality of Rizal OFFICE OF THE MUNICIPAL ENGINEER PLANNING AND DESIGN SECTION	PROJECT TITLE AND LOCATION : Establishment of Level II Water Supply System for Indigenous Community Sitio Tagpas, bgy. Iatud, Rizal, Palawan	DRAFTED & PREPARED BY: ENGR. KENNETH P. APGAO WATERWORKS SUPERVISOR	SUBMITTED BY: ENGR. NELSON R. AVANCENA MEEDO	RECOMMENDING APPROVAL: ENGR. RUEL B. LOBATON MUNICIPAL ENGINEER	APPROVED BY: HON. NORMAN S. ONG MUNICIPAL MAYOR	SHEET NO. S 3|5

CONSTRUCTION NOTES

A. GENERAL NOTES

1. ALL STRUCTURAL WORKS SHALL BE EXECUTED IN ACCORDANCE WITH THE LOCAL STRUCTURAL CODE.

2. CONCRETE STRENGTH:
UNLESS OTHERWISE INDICATED IN PLANS OR NOTED IN SPECIFICATIONS, THE MINIMUM 28-DAY CYLINDER
COMPRESSIVE STRENGTH OF CONCRETE ARE AS FOLLOWS:

FOUNDATION,FOOTING BEAMS, WALL FOOTINGS _____21 MPA

ALL CONCRETE MIXES FOR MAIN STRUCTURAL MEMBERS SHALL BE READY-MIXED
FROM PRE-APPROVED SUPPLIER, TEST SPECIMEN MUST BE PROVIDED ON ALL BATCHES OF READY-
MIXED CONCRETE FOR LABORATORY TESTING.

IF JOB-MIXED CONCRETE SHALL BE USED, MIXTURE MUST BE 1:2:3 (CEMENT:SAND:GRAVEL) FOR 21 MPA.

3. IN THE INTERPRETATION OF THIS DRAWINGS, INDICATED DIMENSION SHALL GOVERN AND THE DISTANCES OR SIZES ARE NOT TO BE SCALED FOR CONSTRUCTION PURPOSES.

B. NOTES ON REINFORCING BARS

1. UNLESS OTHERWISE SPECIFIED IN THE PLANS. THE MINIMUM YIELD STRENGTH OF REINFORCEMENT TO BE USED CORRESPONDING TO THE STRUCTURAL MEMBERS ARE AS FOLLOWS:
16mmØ, 12mmØ & 10mmØ _____275 MPA - (GRADE 40)

2. THE FOLLOWING MINIMUM CLEAR CONCRETE COVER SHALL BE PROVIDED:
FOOTING, WALL FOOTING_____75mm

3. CONTINUOUS BARS SHALL BE SPLICED AS SHOWN IN TABLE 1.0

F. NOTES ON STRUCTURAL STEEL

1. UNLESS OTHERWISE INDICATED IN THE PLANS, STRUCTURAL STEEL AND PLATES SHALL CONFORM TO ASTM-A36. CERTIFIED MILL TEST SHALL BE SUBMITTED BY THE FABRICATOR.

2. WELDING SHALL CONFORM TO AWS STANDARD, E60 OR E70 ELECTRODES SHALL BE USEDUNLESS OTHERWISE SPECIFIED BY THE STRUCTURAL ENGINEER.

3. THE FABRICATOR SHALL HAVE THE WELDS TESTED BY ANY INDEPENDENT COMPANY ENGAGED IN NON
-DESTRUCTIVE TESTING. THE WELDS CAN BE ACCEPTED AND ARE CONSIDERED SATISFACTORY IF 9 OOUT OF 10 SAMPLES PASSED THE REQUIREMENTS. OTHERWISE, THE WELDS SHALL NOT BE CONSIDERED.

4. STEEL FABRICATOR SHALL SUBMIT SHOP DRAWINGS SHOWING COMPLETE DETAILED CONNECTIONS.

5. ALL DIMENSION IN THE PLANS SHALL BE VERIFIED BY THE STEEL FABRICATOR IN THE FIELD IN COORDINATION WITH THE GENERAL CONTRACTOR.

6. ALL SPLICES SHALL BE STAGGERED. NO SPLICE SHALL BE PERMITTED AT POINTS WHERE CRITICAL STRESSES OCCUR.

STANDARD DETAILS

1. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE ADEQUATE SHORING AND BRACING OF THE STRUCTURE FOR ALL LOADS THAT MAY BE IMPOSED DURING CONSTRUCTION INCLUDING THE DANGER THAT MAY BE CAUSED TO THE EXISTING ADJACENT STRUCTURES ALONG THE PERIMETER DURING THE EXCAVATION OF FOUNDATION. IT MUST BE UNDERSTOOD THAT THE CONSULTANTS, SPECIFICALLY THE SIGNING STRUCTURAL ENGINEER IS LIABILITY-FREE FROM ANY DAMAGE THAT MAY BE CAUSED IN ANY ADJACENT EXISTING STRUCTURES.

Republic of the Philippines Province of Palawan Municipality of Rizal OFFICE OF THE MUNICIPAL ENGINEER PLANNING AND DESIGN SECTION	PROJECT TITLE AND LOCATION : Establishment of Level II Water Supply System for Indigenous Community Sitio Tuapos, Barangay Rizal, Rizal, Palawan	DRAFTED & PREPARED BY: ENGR. KENNETH P. APGAO WATERWORKS SUPERVISOR	SUBMITTED BY: ENGR. NELSON R. AVANCEÑA MEEDO	RECOMMENDING APPROVAL: ENGR. ROMEL B. LOBATON MUNICIPAL ENGINEER	APPROVED BY: HON. NORMAN S. ONG MUNICIPAL MAYOR	SHEET NO. S 4|5

2. ALL MATERIALS AND WORKMANSHIP SHALL CONFORM TO THE LATEST APPLICABLE STANDARDS OR SPECIFICATIONS. ALL WORKS SHALL CONFORM WITH THE BEST PRACTICE PREVAILING IN THE VARIOUS TRADES.

3. INSPECTION-ALL CONSTRUCTION AND WORKMANSHIP SHALL BE SUBJECT TO INSPECTION, EXAMINATION AND TESTING BY THE ENGINEER/ARCHITECT. THE ENGINEER/ARCHITECTSHALL HAVE THE RIGHT TO REJECT DEFECTIVE MATERIALS AND WORKMANSHIP OR REQUIRE ITS CORRECTION.

4. UNLESS SPECIFICALLY DETAILED ELSEWHERE CONTRACTOR SHALL FOLLOW TYPICAL DETAILS AS SHOWN IN THESE DRAWINGS.

5. THE CONTRACTOR WILL BE RESPONSIBLE FOR THE COORDINATION OF WORK AMONG THE VARIOUS TRADE AS NECESSARY TO AVOID CONFLICTS AND TO INSURE THE INSTALLATION OF ALL WORKS WITHIN THE AVAILABLE SPACE.

6. DO NOT SCALE DRAWINGS, CALLED OUT DIMENSIONS AND STANDARD CODE REQUIREMENTS SHALL GOVERN OVER UNSCALLED DRAWINGS.

7. HONEYCOMB ON NEWLY POURED CONCRETE. THE CONTRACTOR MUST REFRAIN FROM ORDINARY CONCRETE MORTAR PATCHING OF ALL HONEYCOMB FOUND OUT AFTER STRIPPING OF FORMWORKS. EPOXY PATCHING OR PRESSURIZED EPOXY INJECTION IS THE ONLY METHOD ALLOWED TO RECTIFY MAIN R.C.STRUCTURAL MEMBERS WITH HONEYCOMB.

C. NOTES ON FOOTINGS

1. FOOTING WERE DESIGNED FOR ALLOWABLE SOIL PRESSURE OF 96 KPA. CONTRACTORS SHALL REPORT TO THE STRUCTURAL ENGINEER ANY INDICATION OF SOFT SOIL CONDITION.

2. NO FOOTINGS SHALL REST ON FILL.

3. USE OF VIBRATOR IS STRICTLY REQUIRED DURING CONCRETE POURING.

D. NOTES ON CONCRETE POURING

1. CONCRETE SHALL BE DEPOSITED IN ITS FINAL POSITION WITHOUT SEGREGATION, REHANDLING OR FLOWING. PLACING SHALL BE DONE WITH BUGGIES, BUCKETS OR BY PUMPING. NO CHUTE SHALL BE ALLOWED EXCEPT TO TRANSFER CONCRETE FROM HOPPERS TO BUGGIES. WHEELBORROWS OR BUCKETS IN WHICH CASE THEY SHALL NOT EXCEED 6100mm IN AGGREGATE LENGTH.

2. USE OF VIBRATIONS IS STRICTLY REQUIRED DURING DEPOSITING OR PLACING OF CONCRETE, UNLESS OTHERWISE AUTHORIZED IN WRITING BY THE STRUCTURAL ENGR. AND FOR UNUSUAL CONDITIONS WHERE VIBRATION IS EXTREMELY DIFFICULT TO ACCOMPLISH.

E. NOTES ON FORMWORKS

1. FORMS SHALL BE PROVIDED FOR ALL CONCRETE INDICATED UNLESS SPECIFIED OTHERWISE. FORMS SHALL BE SET TRUE TO LINE AND GRADE AND MAINTAINED SO AS TO ENSURE COMPLETE WORK WITHIN THE ALLOWABLE TOLERANCE SPECIFIED AND SHALL BE MORTAR TIGHT.

2. FORMS AND THEIR SUPPORT SHALL BE DESIGNED SO AS NOT TO DAMAGE PREVIOUSLY PLACED STRUCTURE.

3. NO CONSTRUCTION LOAD SHALL BE SUPPORTED ON, NOR ANY SHORING REMOVED FROM ANY PART OF THE STRUCTURE UNDER CONSTRUCTION EXCEPT WHEN THAT PORTION OF THE STRUCTURE IN COMBINATION WITH THE REMAINING FORMING AND SHORING SYSTEM HAS STRENGTH TO SUPPORT SAFETY ITS WEIGHT AND THE ADDITIONAL IMPOSED LOADS.

4. FORMS SHALL BE REMOVED IN SUCH MANNER AS NOT TO IMPAIR SAFETY AND SERVICE ABILITY OF THE STRUCTURE.

SCHEDULE OF STRIPPING OF FORMS AND SHORES

FOUNDATION_____ 24 HRS
WALLS_____ 12 DAYS

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