



## CLARIFICATION NO. 5

4<sup>th</sup> June 2024

<b>Project Name:</b> Water Optimization Project	<b>Tender No:</b> RDA/RFP/2024/004/ICB
<b>Tender Name:</b> Supply and Installation of Water Meters for the Reservoirs across the British Virgin Islands	
<b>Bidders Conference / Site Visit Date:</b> N/A	<b>Time:</b> N/A
<b>Location:</b> British Virgin Islands	

#	Question	Answer
1.	Please supply P & ID for tank reservoirs.	None available
2.	For Hannah Hill, Carrot Bay, Forte Hill and Sabbath Hill, please confirm how many meters are required as on the site visit there were multiple inlets and outlets (also state the meter sizes).	Please see attachment, kindly note changes to Minton & Perrot Hill reservoir inlet and outlet sizes. Please refer to RFP, <b>Scope Outline</b> requirements in detail.

**Deadline to submit tenders is 10:00AM Friday 21-Jun-2024,**  
For queries contact the procurement unit at: [procurement@bvirecovery.vg](mailto:procurement@bvirecovery.vg)



Supply & installation of Water Meters Project across the BVI  
**Reservoir Details**

<b>Tank Location</b>	Long Bush
<b>Coordinates</b>	18°25'28.8"N 64°37'47.7"W
<b>Tank size</b>	817,000 gallons (single tank)
<b>Inlet Description</b>	<ul style="list-style-type: none"> <li>• Gate valve situated directly after the 6" inlet as shown in <i>photo 1</i> below.</li> <li>• 5' x 5' inlet meter chamber located next to the gate valve. Existing meter installed and operational.</li> </ul> <p>Number of meters required: 1  Suitable positioning for meter: existing meter chamber (replacement of existing meter, as needed)</p>
<b>Outlet Description</b>	<ul style="list-style-type: none"> <li>• Gate valve located just outside of reservoir.</li> <li>• Gate valve located directly after 6" outlet as depicted in <i>photo 1</i> below.</li> <li>• 5' x 5' outlet meter chamber located next to gate valve. Existing meter installed and operational meter.</li> </ul> <p>Number of meters required: 1  Suitable positioning for meter: existing meter chamber (replacement of existing meter as needed)</p>
<b>Additional Info</b>	<ul style="list-style-type: none"> <li>• Gate valves installed facilitate a water bypass system.</li> <li>• Tank is supplied by Sabbath Hill Tanks via pump located at Elmore Stouff High School. Supply can be shut off at this location.</li> <li>• An air valve is situated, just after the outlet meter chamber.</li> <li>• Recommended installation time: night (liaise with tank operator &amp; WSD)</li> </ul>



***Photo 1: Long Bush Reservoir***

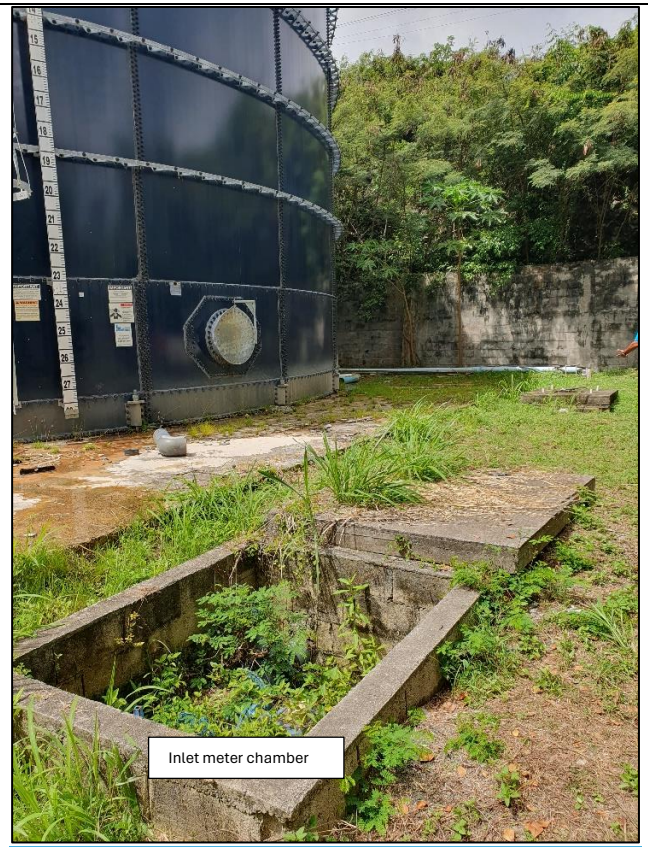


<b>Tank Location</b>	Hannah Hill
<b>Coordinates</b>	18°24'19.1"N 64°38'16.9"W
<b>Tank size</b>	350,000 gallons (single tank)
<b>Inlet Description</b>	<ul style="list-style-type: none"> <li>• 6" inlet meter situated at the entrance of site, meter not functioning.</li> <li>• 4'-6" x 5'-7" meter chamber, which also houses two gate valves.</li> </ul> <p>Number of meters required: 1 Suitable positioning for meter: existing meter chamber (replacement of existing meter as needed)</p>
<b>Outlet Description</b>	<ul style="list-style-type: none"> <li>• 4" outlet feeding nearby housing apartments. Non-functioning meter positioned on pipeline (no chamber).</li> <li>• 6" outlet feeding Seacow's Bay communities. A functioning water meter housed in 3' x 3' chamber 7' away from outlet.</li> </ul> <p>Number of meters required: 2 Suitable positioning for meter: location of existing 4" meter &amp; existing meter chamber for 6"</p>
<b>Additional Info</b>	<ul style="list-style-type: none"> <li>• No lighting installed on site</li> <li>• Tank does not supply water on Fridays for Seacows Bay &amp; it's environs (fed from 6" outlet)</li> <li>• Consideration should be made for possible extension of the existing chamber for the 6" outlet meter as working room is limited.</li> <li>• Recommended installation time: Daytime is possible with necessary communication with tank operator and WSD</li> </ul>



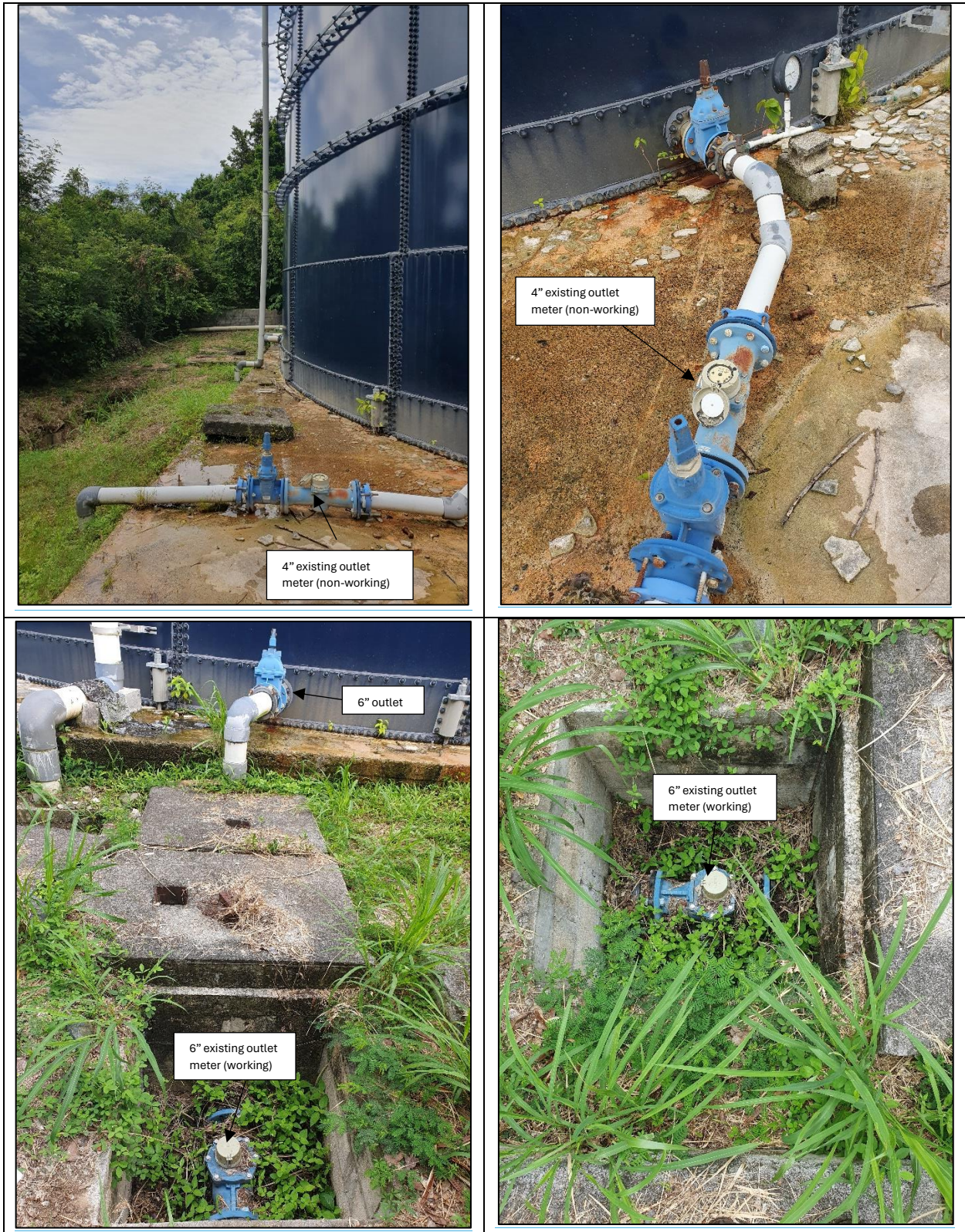
**Photo 2: Hannah Hill Reservoir**





**Photo 2a: Hannah Hill Reservoir (inlet)**





***Photo 2b: Hannah Hill Reservoir (outlet)***



<b>Tank Location</b>	Carrot Bay
<b>Coordinates</b>	18°24'36.3"N 64°40'07.2"W
<b>Tank size</b>	645,000 gallons (two tanks)
<b>Inlet Description</b>	<ul style="list-style-type: none"> <li>• 6" working inlet meter (Siemens- SITRANS FM MAG 8000)</li> <li>• 5' x 5' inlet meter chamber</li> </ul> <p>Number of meters required: 1 Suitable positioning for meter: existing meter chamber (replacement of existing meter as needed)</p>
<b>Outlet Description</b>	<ul style="list-style-type: none"> <li>• 6" working outlet meter (Siemens- SITRANS FM MAG 8000)</li> <li>• 5' x 5' outlet meter chamber</li> </ul> <p>Number of meters required: 1 Suitable positioning for meter: existing meter chamber (replacement of existing meter as needed)</p>
<b>Additional Info</b>	<ul style="list-style-type: none"> <li>• Solar lights on property, not all working.</li> <li>• Recommended installation time: Daytime is possible with necessary communication with tank operator and WSD</li> </ul>



**Photo 3: Carrot Bay Reservoir**





**Photo 3a: Carrot Bay Reservoir**



<b>Tank Location</b>	Zion Hill
<b>Coordinates</b>	18°23'44.9"N 64°40'53.7"W
<b>Tank size</b>	100,000 gallons (single tank)
<b>Inlet Description</b>	<ul style="list-style-type: none"> <li>• 6" working inlet meter (Siemens- SITRANS FM MAG 8000)</li> <li>• 5' x 5' inlet meter chamber</li> </ul> <p>Number of meters required: 1 Suitable positioning for meter: existing meter chamber (replacement of existing meter as needed)</p>
<b>Outlet Description</b>	<ul style="list-style-type: none"> <li>• 6" working outlet meter (Siemens- SITRANS FM MAG 8000)</li> <li>• 5' x 5' outlet meter chamber</li> </ul> <p>Number of meters required: 1 Suitable positioning for meter: existing meter chamber (replacement of existing meter as needed)</p>
<b>Additional Info</b>	<ul style="list-style-type: none"> <li>• Solar lights on property.</li> <li>• Both 6" inlet and outlet lines are reduced to 4" lines from the meter point. See <i>photo 4a below</i>.</li> <li>• Recommended installation time: Daytime is possible with necessary communication with tank operator and WSD</li> </ul>



**Photo 4: Zion Hill Reservoir**



**Photo 4a: Zion Hill Reservoir**



<b>Tank Location</b>	Sabbath Hill
<b>Coordinates</b>	18°26'03.3"N 64°35'50.9"W
<b>Tank size</b>	1,000,000 gallons (two tanks)
<b>Inlet Description</b>	<ul style="list-style-type: none"> <li>12" Cast iron pipeline feeds from the Intermediary Pump Station (Hedrington Estate)</li> </ul> <p>Number of meters required: 1 Suitable positioning for meter: Next to existing inlet meter chamber, see photo 5</p>
<b>Outlet Description</b>	<ul style="list-style-type: none"> <li>Both tanks are connected and share a 12" cast iron outlet which is then converted to a 12" PVC pipeline</li> <li>A meter chamber is positioned just after the pipe conversion, with a functional meter operated by Seven Seas Water Group.</li> <li>Just outside of the meter chamber the 12" PVC line is separated and reduced to an 8" and a 6" PVC line.</li> <li>The 8" PVC outlet which is then reduced to a 6" then back to 8" feeds the Forte Hill &amp; Balsum Ghut Reservoirs and nearby communities.</li> <li>A valve is located at the point the 6" converts back to 8"</li> <li>The 6" PVC outlet feeds the Hannah Hill Reservoir and nearby communities.</li> </ul> <p>Number of meters required: 2 (both 6" lines) Suitable positioning for meter: few feet away from gate valves which are indicated on photo</p>
<b>Additional Info</b>	<ul style="list-style-type: none"> <li>Recommended installation time: Daytime is possible with necessary communication with tank operator and WSD</li> </ul>



**Photo 5: Sabbath Hill Reservoir**





***Photo 5a: Sabbath Hill Reservoir***





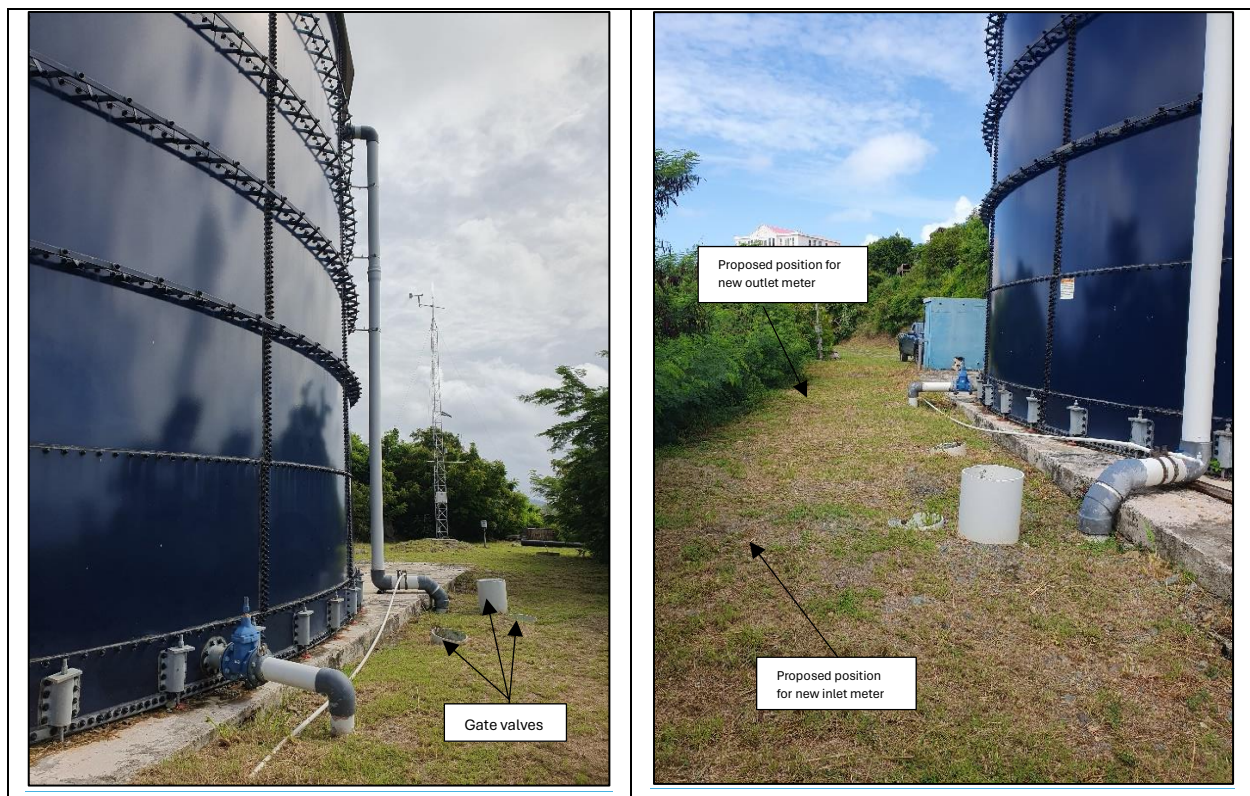
<b>Tank Location</b>	Balsam Ghut
<b>Coordinates</b>	18°27'08.3"N 64°33'58.9"W
<b>Tank size</b>	350,000 gallons (single tank)
<b>Inlet Description</b>	<ul style="list-style-type: none"> <li>• 6" PVC line which feeds from the Sabbath Hill Reservoir</li> <li>• Gate valve situated directly in front of inlet pipeline.</li> </ul> <p>Number of meters required: 1  Suitable positioning for meter: see photo 6</p>
<b>Outlet Description</b>	<ul style="list-style-type: none"> <li>• 4" PVC outlet with a gate valve situated directly in front of tank</li> <li>• Non-functioning meter located few feet away from gate valve in a dugout area shown in <i>photo 6</i></li> </ul> <p>Number of meters required: 1  Suitable positioning for meter: existing outlet meter dugout, see photo 6</p>
<b>Additional Info</b>	<ul style="list-style-type: none"> <li>• Recommended installation time: daytime with the necessary communications with the tank operator and WSD</li> <li>• Gate valve situated between inlet and outlet gate valves.</li> </ul>



**Photo 6: Balsam Ghut Reservoir**



<b>Tank Location</b>	Maya Cove
<b>Coordinates</b>	18°25'32.7"N 64°34'16.1"W
<b>Tank size</b>	150,000 gallons (single tank)
<b>Inlet Description</b>	<ul style="list-style-type: none"> <li>8" inlet, which feeds from the plant operated by Ocean Conversion</li> </ul> <p>Number of meters required: 1 Suitable positioning for meter: see photo 7</p>
<b>Outlet Description</b>	<ul style="list-style-type: none"> <li>6" outlet, which supplies the airport and neighboring communities</li> </ul> <p>Number of meters required: 1 Suitable positioning for meter: see photo 7</p>
<b>Additional Info</b>	<ul style="list-style-type: none"> <li>Recommended installation time: <ul style="list-style-type: none"> <li>inlet meter- anytime with the necessary communication with the tank operator and WSD</li> <li>outlet meter- between the hours of 8:30am -4:30 pm, with the necessary communication with the tank operator and WSD</li> </ul> </li> </ul>



**Photo 7: Maya Cove Reservoir**

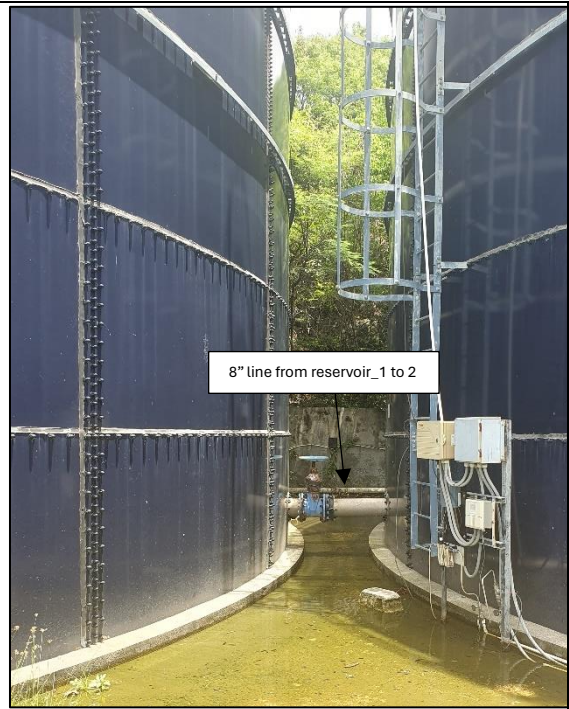
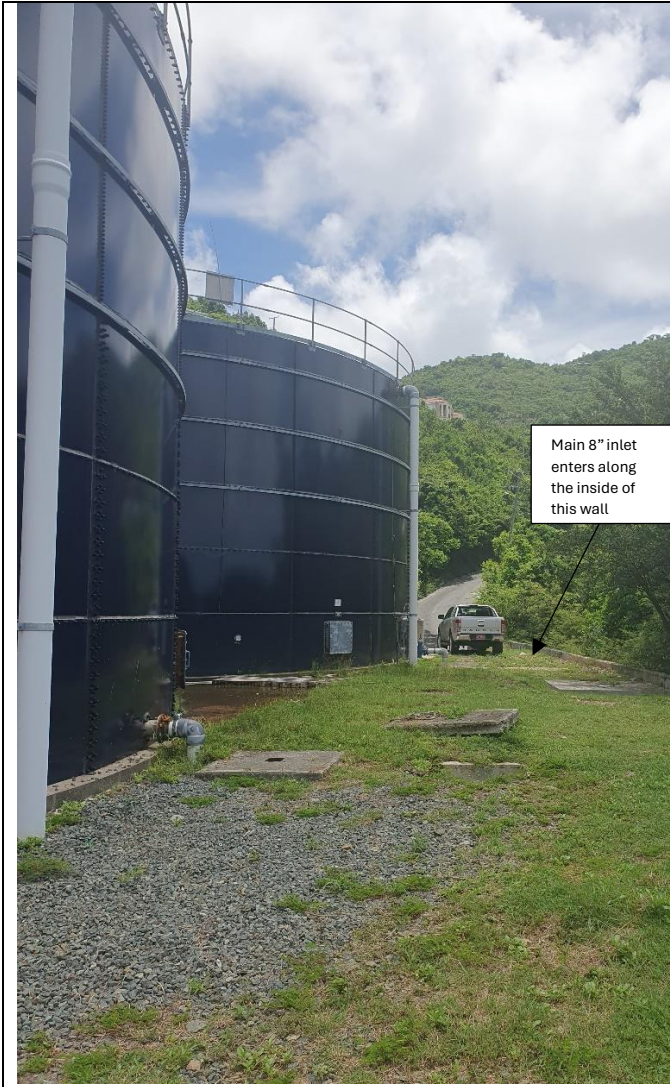


<b>Tank Location</b>	Forte Hill
<b>Coordinates</b>	18°25'46.3"N 64°36'12.1"W
<b>Tank size</b>	750,000 gallons (two tanks)
<b>Inlet Description</b>	<ul style="list-style-type: none"> <li>• Functional 8" inlet_1 (<i>reservoir at entrance</i>)</li> <li>• Water enters thru 8" line from the Sabbath Hill Reservoir then is T'd off to supply both reservoirs, however inlet_2 is abandoned, hence reservoir_2 fills directly from reservoir_1 thru an 8" PVC connection.</li> </ul> <p>Number of meters required: <b>1</b>  Suitable positioning for meter: <i>Between T'd off Chamber (Main inlet chamber) &amp; Meter Chamber for Outlet_1 (see photo 8)</i></p>
<b>Outlet Description</b>	<ul style="list-style-type: none"> <li>• Outlet_1 (6") transfers water to Road Town</li> <li>• Meter chamber located directly in front of inlet_1, with a non-functioning meter in place. Chamber external dimensions: 6'-8" x 4'-2" x 2'-8" (approximated due to sediment build-up)</li> <li>• Outlet_2 (6") supplies Paraquita Bay</li> <li>• Two Chambers located after outlet</li> <li>• Chamber 1 houses a gate valve</li> <li>• Meter chamber with a non-functioning meter in place and gate valve. Chamber internal dimensions: 3' x 3'-5" x 4' (approximated due to sediment build-up)</li> </ul> <p>Number of meters required: <b>2</b>  Suitable positioning for meter: <i>existing meter chambers for both outlets</i></p>
<b>Additional Info</b>	<ul style="list-style-type: none"> <li>• A gate valve is in the vicinity of Qwomar Trading Limited &amp; Pharmacy, which has the ability to divert the water to Road Town or Paraquita Bay to enable installation of outlet meters one at a time.</li> <li>• Recommended installation time: Daytime is possible with necessary communication with tank operator and WSD</li> </ul>

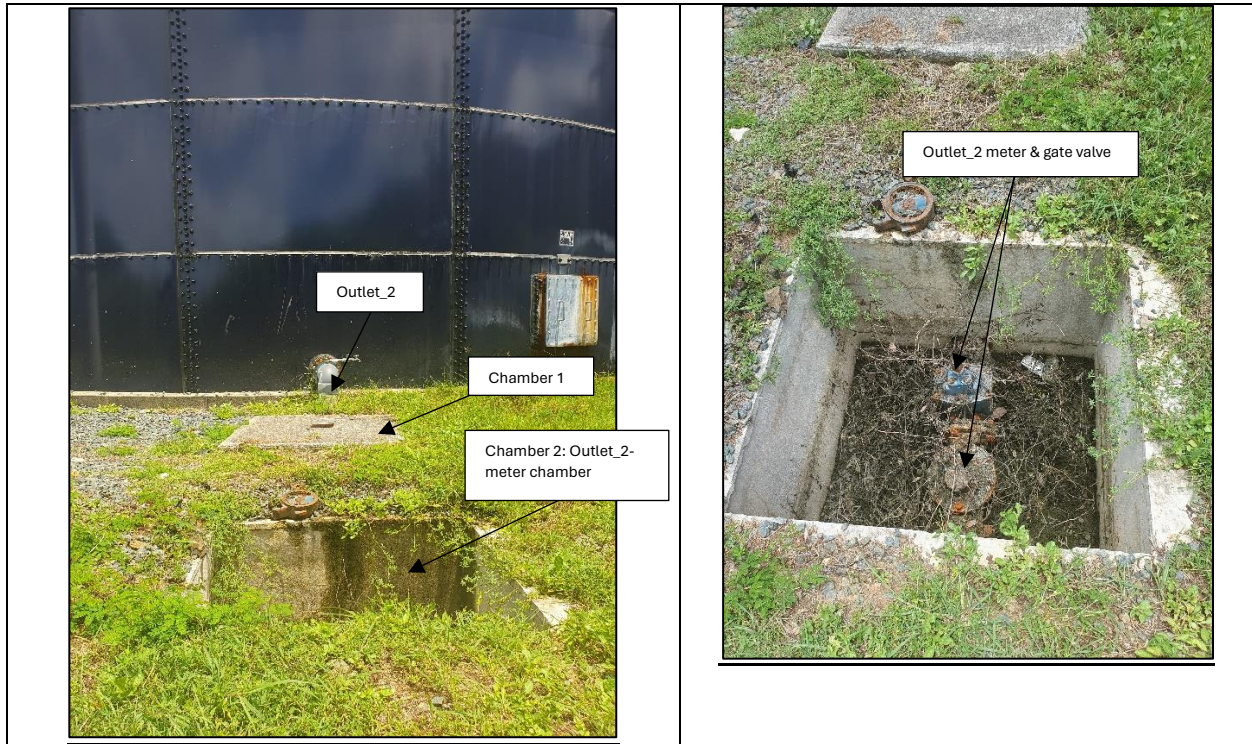




**Photo 8: Forte Hill Reservoir**







**Photo 8a: Forte Hill Reservoir**

<b>Tank Location</b>	Minton Hill
<b>Coordinates</b>	18°27'39.2"N 64°25'36.5"W
<b>Tank size</b>	150,000 gallons (single tank)
<b>Inlet Description</b>	<ul style="list-style-type: none"> <li>8" inlet pipeline, which feeds directly from the Handsome Bay water Plant</li> <li>Meter on inlet line, non-functioning.</li> </ul> <p>Number of meters required: 1 Suitable positioning for meter: existing meter position</p>
<b>Outlet Description</b>	<ul style="list-style-type: none"> <li>6" outlet pipeline</li> <li>Meter on inlet line, non-functioning.</li> </ul> <p>Number of meters required: 1 Suitable positioning for meter: existing meter position</p>
<b>Additional Info</b>	<ul style="list-style-type: none"> <li>Recommended installation time: Daytime is possible with necessary communication with tank operator and WSD</li> </ul>



***Photo 9: Minton Hill Reservoir***



<b>Tank Location</b>	Perrot Hill
<b>Coordinates</b>	18°29'23.6"N 64°23'44.6"W
<b>Tank size</b>	150,000 gallons (single tank)
<b>Inlet Description</b>	<ul style="list-style-type: none"> <li>• 4" pipeline feeds from the Little Hill reservoir, which is increased to 6"</li> <li>• No meter on pipeline</li> </ul> <p>Number of meters required: 1 Suitable positioning for meter: in front bypass chamber on 4" line, see photo10</p>
<b>Outlet Description</b>	<ul style="list-style-type: none"> <li>• 4" outlet pipeline supplying the upper North Sound Communities.</li> <li>• Gate valve and sampling line on 4" outlet line</li> </ul> <p>Number of meters required: 1 Suitable positioning for meter: between elbow and gate valve, see photo 10</p>
<b>Additional Info</b>	<ul style="list-style-type: none"> <li>• Bypass valves located in chamber in front of tank</li> <li>• Consider repositioning sample line to make space for new meter.</li> <li>• Recommended installation time: Daytime is possible with necessary communication with tank operator and WSD</li> </ul>



**Photo 10: Perrot Hill Reservoir**



<b>Tank Location</b>	Johnny Hill, East
<b>Coordinates</b>	18°26'43.9"N 64°44'04.4"W
<b>Tank size</b>	275,964 gallons (single tank)
<b>Inlet Description</b>	<ul style="list-style-type: none"> <li>• Pipe enters site as a 4" PVC line from the water plant, then is increased to 6"</li> <li>• Gate valve located in chamber just in front of tank, see <i>photo 11</i>.</li> </ul> <p>Number of meters required: 1  Suitable positioning for meter: in front bypass chamber, see photo10</p>
<b>Outlet Description</b>	<ul style="list-style-type: none"> <li>• 6" PVC outlet pipeline</li> <li>• Gate valve located just outside tank.</li> <li>• Meter located inside chamber to the front of outlet, unsure of its condition.</li> </ul> <p>Number of meters required: 1  Suitable positioning for meter: in front bypass chamber, see photo10</p>
<b>Additional Info</b>	<ul style="list-style-type: none"> <li>• Recommended installation time: Daytime is possible with necessary communication with tank operator and WSD</li> <li>• Access to the site is fairly good, approximately 5Km from the Ferry Dock.</li> </ul>





**Photo 11: Johnny Hill Reservoir**



Supply & installation of Water Meters Project across the BVI  
**Reservoir Details**

<b>Tank Location</b>	Little Hill
<b>Coordinates</b>	18°29'16.2"N 64°23'23.3"W
<b>Tank size</b>	single tank
<b>Inlet Description</b>	<ul style="list-style-type: none"> <li>• 4" inlet supplied from the North Sound water plant</li> </ul> Number of meters required: 1 Suitable positioning for meter: to be decided on site
<b>Outlet Description</b>	<ul style="list-style-type: none"> <li>• Two 4" outlet pipeline, one supplying the Perrot Hill Reservoir and the other distributes to the Leverick Bay &amp; Gun Greek Communities</li> </ul> Number of meters required: 2 Suitable positioning for meter: to be decided on site
<b>Additional Info</b>	<ul style="list-style-type: none"> <li>• Bypass valves located in front of inlet &amp; outlet</li> <li>• Recommended installation time: night (liaise with tank operator &amp; WSD)</li> </ul>



