Front View

Section C-C

Remarks
1. Reference design consists of 4 different drawings, “legend”, list of “valves and accessories” and “remarks” apply to the entire set of drawings.
2. Building type, materials and final dimensions of the entire building or parts of it, depend on the specific application and its static requirements.
3. Structural analysis has to be carried out in each specific case.
4. Backfill and layer of top soil must be compacted in layers of 30 - 50 cm depending on local soil conditions.
5. Drain pipe must be directed into a stream or discharge channel. The pipe end must be protected from small animals with grating.
6. Pipe installations inside the building must be carried out in stainless steel or polyethylene.
7. All pipe penetrations in floors and walls must be watertight.
8. Gate valves which are closed during normal operation must be opened in reasonable intervals to avoid stagnating water.
9. All pipes need to be fixed by metal pipe supports to the building structure like floors, walls and ceiling.
10. Vestibule with a second door can be added to minimize humidity problems inside the building.
11. Slope stabilization (type, materials and final dimension) depend on local soil conditions.
12. Plexiglas tubes are only applicable for non-pressurized systems.
13. The building should be connected to power supply if possible.
14. Geometry of the retaining wall depends on the soil type and building dimension.

ApaSan - Swiss Water and Sanitation
Project Moldova
Reference Designs for Rural Water Supply Systems
Project Plan
Drinking Water Reservoir, V = 50 m³
Front View + Section C-C

Legend

- Water pipe (blue)
- Water pipe (outflow)
- Drain pipe
- Power supply and lighting
- Air conditioning / ventilation
- Waterprofing coating
- Construction joint
- Reinforced concrete
-_hoverconcrete
- Lean concrete
- Top soil
- Sand
- Crushed stone or coarse gravel
- Drain pipe, PVC DN 110
- Emptying pipe, PVC DN 110
- Inflow, PE DN 90
- To reservoir, PE DN 110
- Watertight pipe penetration
- Coated stone or coarse gravel
- Watertight water pipe, PVC DN 110
- Lean concrete
- Watertight pipe penetration

Valves and Accessories
<table>
<thead>
<tr>
<th>Site / PIC / Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Gate valve with EPDM closing, epoxy painted</td>
</tr>
<tr>
<td>2. Gate valve with EPDM closing, epoxy painted</td>
</tr>
<tr>
<td>3. Gate valve with EPDM closing, epoxy painted</td>
</tr>
<tr>
<td>4. Dewatering piece</td>
</tr>
<tr>
<td>5. Dewatering piece</td>
</tr>
<tr>
<td>6. Dewatering piece</td>
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<tr>
<td>7. Check valve with flue, flanged</td>
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<tr>
<td>8. PVC / DN 110 Passivflow flange pipe for mechanical water meter</td>
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<tr>
<td>9. T-type separator, stainless steel, epoxy painted, flanged</td>
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<tr>
<td>10. Check valve with flange for water sampling and flow connection</td>
</tr>
<tr>
<td>11. Multipoint, stainless steel to PE / PVC</td>
</tr>
<tr>
<td>12. Multipoint, stainless steel to PE / PVC</td>
</tr>
</tbody>
</table>

Scale: 1:50

DRAFT