

SMARTPOND VAULT VALVE INSTALLATION GUIDE

The smartPOND vault valve may be installed in a near-completely assembled configuration. There are four primary assemblies to the system:

1. Vault assembly with valve and sensor bay
2. Control cabinet
3. Inlet riser screen assembly
4. Electronics kit with solar panel and battery

TOOLS, EQUIPMENT, AND MATERIALS REQUIRED

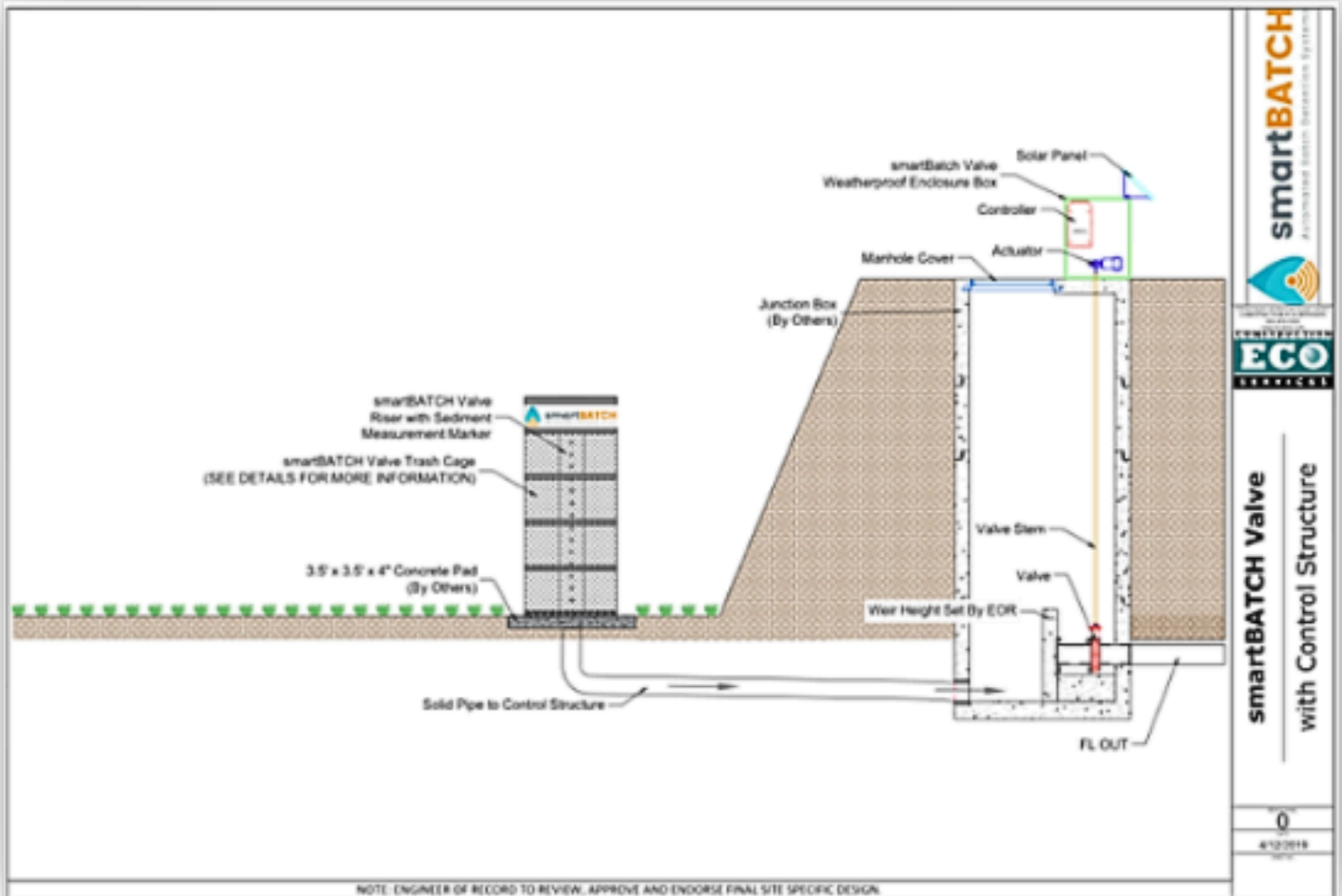
- Excavator or front-end loader equipment to carry the vault assembly and inlet screen to the installation location
- Bubble level to set the vault in a vertical position
- Concrete hammer drill to set anchors for the inlet screen
- PVC plumbing adhesive to make the pipe connections
- Socket set to connect cabinet to vault lid
- Silt fence to wrap inlet screen in case of loose soils in the area
- Geotextile to stabilize disturbed soil areas
- Base and backfill material for setting the vault

Note: this list does not include required tools and equipment to pour the required concrete pad and backfill the berm after assembly of the vault.



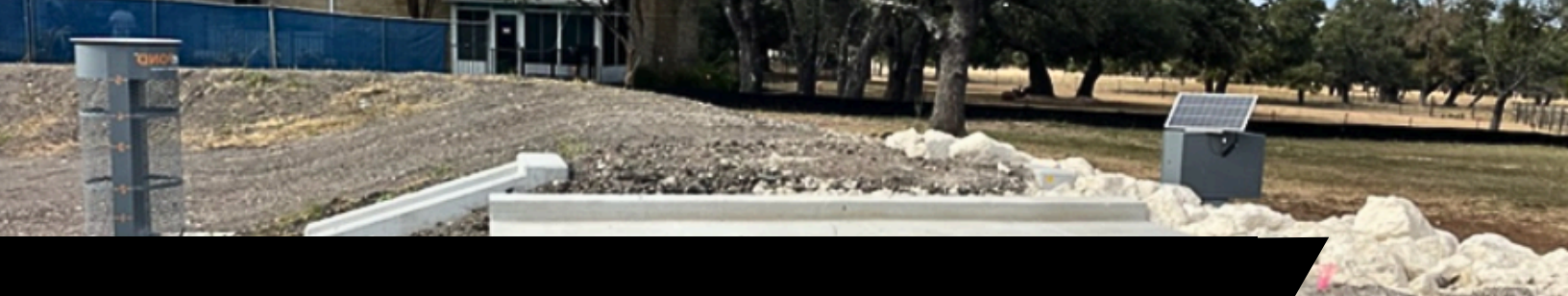


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INSTALLATION

1. Ensure that proper excavation and earth work is complete prior to installing the SmartPOND valve in the vault configuration.
2. Surrounding soils should be stabilized or covered

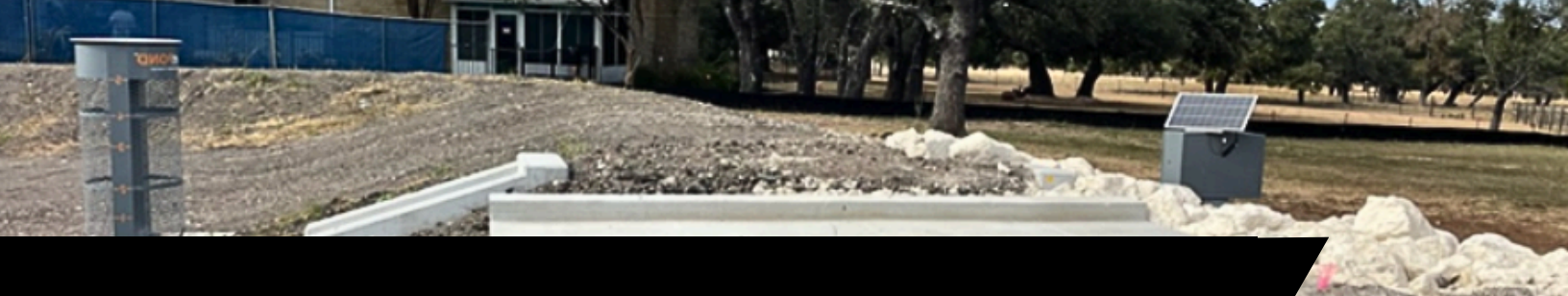


3. At the sump or desired drainage point, pour a 4' x 4' x 4" concrete pad at grade or 1" below grade
4. Install the inner perforated square pipe of the riser assembly to the concrete pad using 3/8" concrete anchors

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5. Slide the outer screen around the perforated square tubing and secure to the pad using 3/8" concrete anchors.

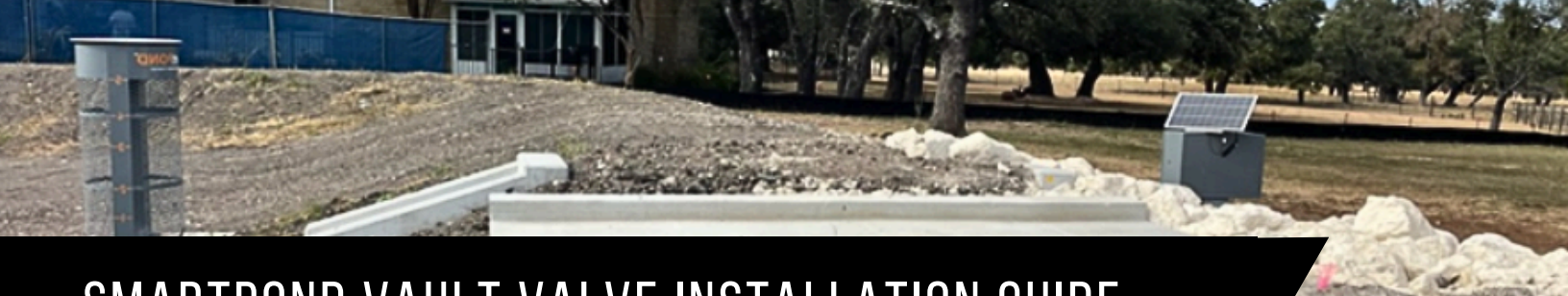


6. Attach the discharge pipe to the inlet screen riser and route to location of the valve assembly

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7. Connect the pipe from the inlet riser screen to the INLET side of the vault. The vault should be labeled for inlet and outlet side, but for reference, look through the trap door in the vault lid to confirm the location of the inner valve assembly. The valve assembly will be bolted through the vault wall on the inlet side of the vault. The valve discharges into the vault chamber when opened.



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8. Attach the outlet pipe to the other side of the vault and route as needed.
9. Install the control cabinet on the vault lid, aligning the driveshaft coupling with the actuator inside the cabinet. Four threaded studs will align with holes in the vault lid. Ensure the water level sensor wire from inside the vault is undamaged and secured at the surface for future connection.

TIP: Look for the square pattern of bolts going through the vault wall. This indicates the location of the inner valve assembly and is a quick way to identify the INLET side of the vault.

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10. Once the vault and inlet screen are installed and all plumbing is complete, final earth work and backfilling may take place.

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11. With final earth work completed, activation of the vault valve may be requested. A manufacturer-certified technician will arrive with the solar kit, battery, and control electronics to activate the system and certify for warranty.

IMPORTANT: Ensure the water level sensor wire is pulled to the surface and secured in a safe position until activation is complete.

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12. Ensure that the cabinet door is closed and locked upon completion of installation.



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13. Wrap the inlet riser screen assembly with silt fence if loose and disturbed soils still exist in the pond site. Leave wrapped until well vegetated, then remove.