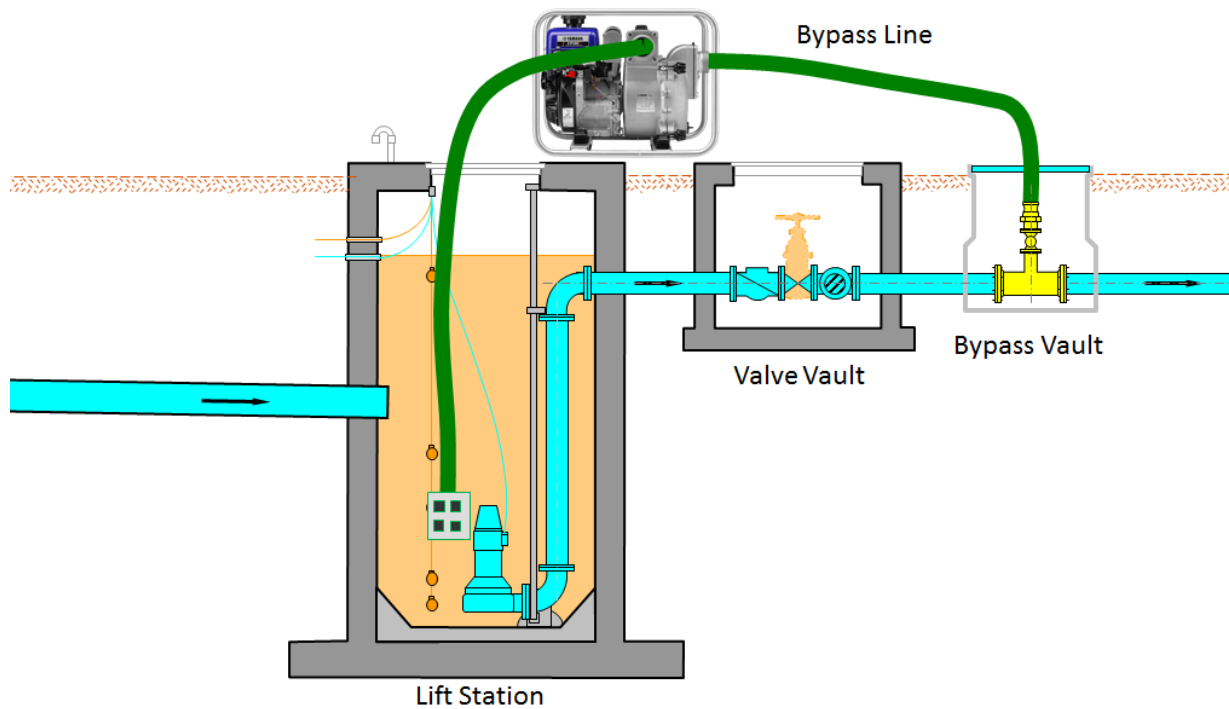


Lift Station Overflow Protection using Bypass Pumps

Operational Resilience and Hardening of Water and Wastewater Facilities
Practical Mitigation Options to Protect Critical Assets



Possible Configuration of Lift Station Bypass Pump Connection

Summary of Components Needed	Description
Self-Priming Semi-Trash Water Pump	2, 3 or 4-inch diameter, 160 to 380 gpm flow
Pump Suction / Discharge Hoses	(2) at 20-ft. each
Strainer	To protect pump from debris
Cam-Lock Fittings	For hoses and vault
Ball Valve	FNPT x FNPT, Full Port Classification, Brass, Lever
Cut in MJ Reducing Tee	Sized to match existing pipe and pump discharge hose
Bypass Vault	
Miscellaneous fittings	