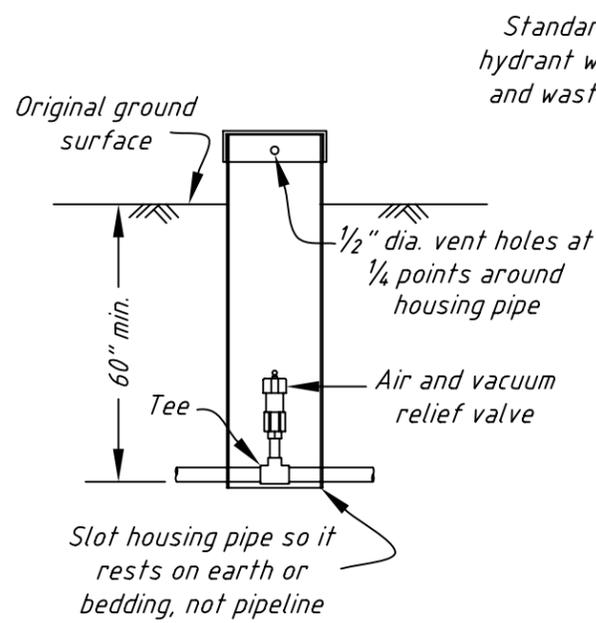


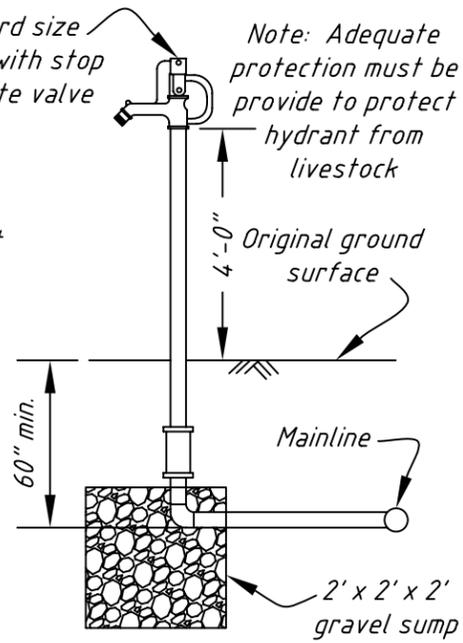
**Plan View**

**Elevation**

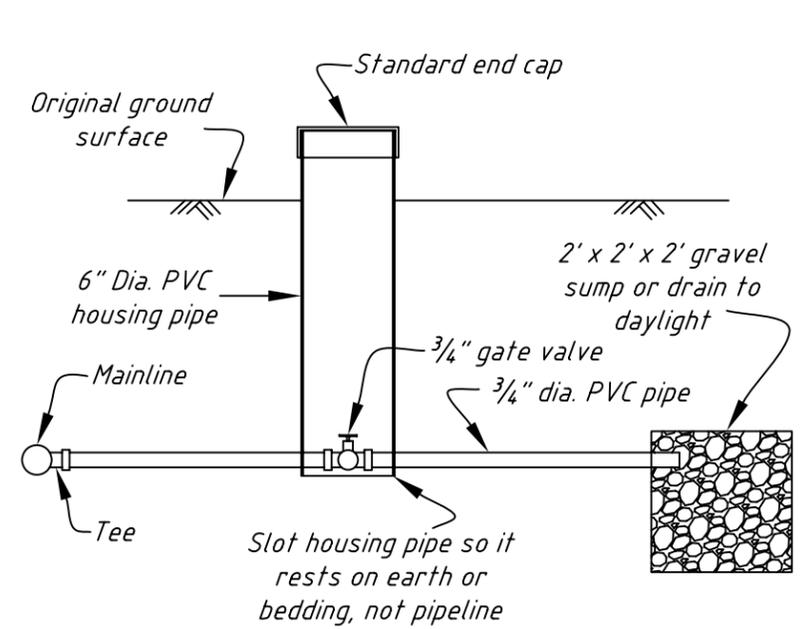
**GUARD POST ASSEMBLY**



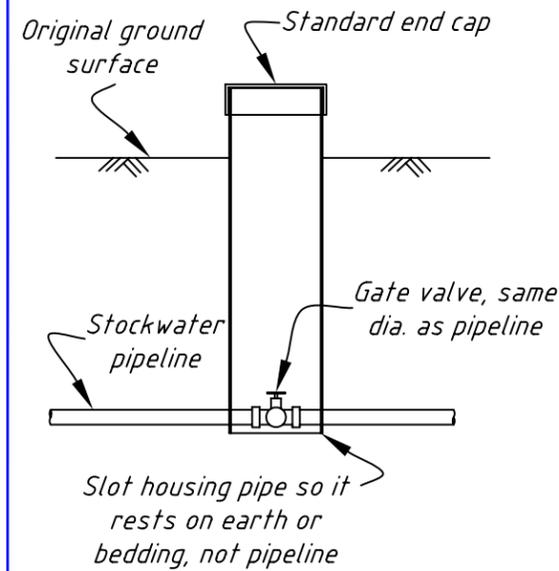
**AIR AND VACUUM RELIEF VALVE DETAIL**



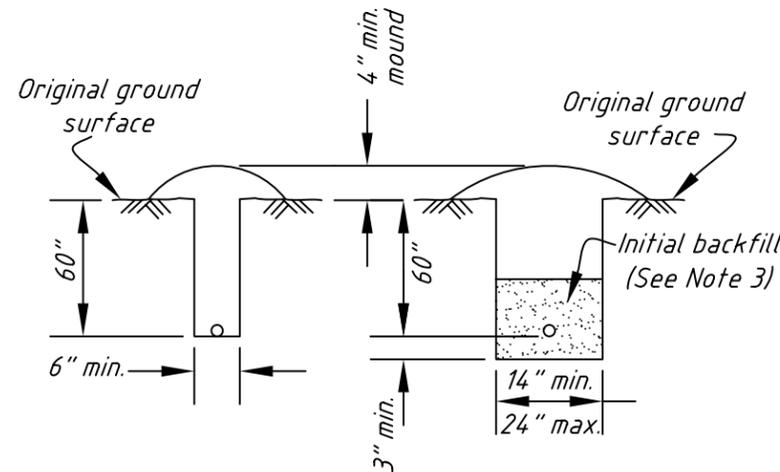
**HYDRANT DETAIL**



**PIPELINE DRAIN DETAIL**



**GATE VALVE DETAIL**



**Fine Grained Soils**

**Coarse Grained Soils**

**TRENCH DETAILS**

**NOTES:**

1. Where special bedding is required, the minimum trench width shall be fourteen (14) inches. The maximum trench width shall be twenty-four (24) inches.
2. Where the bottom of the trench is not free from rock, hard un-weathered shale or boulders, bedding shall be provided. The trench shall be over excavated a minimum of three (3) inches below grade. The bedding material used to establish the final grade shall be sand or fine graded stable soil finer than a number four (4) screen.
3. Backfill materials placed within the first six (6) inches over the pipeline shall be finer than a number four (4) screen. The backfill shall be mounded for four (4) inches above the natural ground line.
4. Earthen water bars shall be provided where necessary to divert excess water runoff away from the trench.
5. Areas disturbed by construction activity shall be revegetated.
6. Shallow pipelines for summer use installed to a minimum depth of twelve (12) inches will require drain provisions at all low points. Positive grade will be provided from all drain locations.
7. Vents for removing air should be located at all summits. An air release valve shall be located at the first summit from the water source. Special care shall be taken during the layout of the pipeline to eliminate grade changes that cause minor high points between the air vents. In no case shall the air vents be more than one (1) mile apart.
8. Automatic vacuum relief valves shall be designed for pipelines subject to extreme surge flow conditions such as pumping, fluctuating flow, or high velocity flow.
9. Guard posts shall be installed at all appurtenances which have above ground housing pipes.

Date	
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Approved	

Cooperator:	County, Wyoming
	County Conservation District
	County Conservation District



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