

## **Typical Bypass Setups**

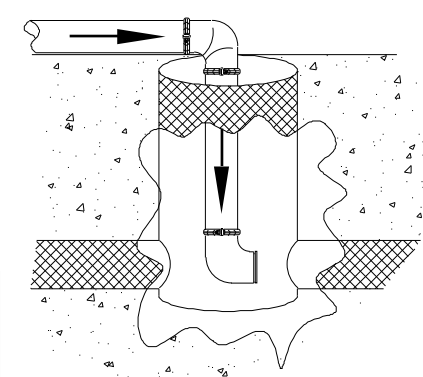
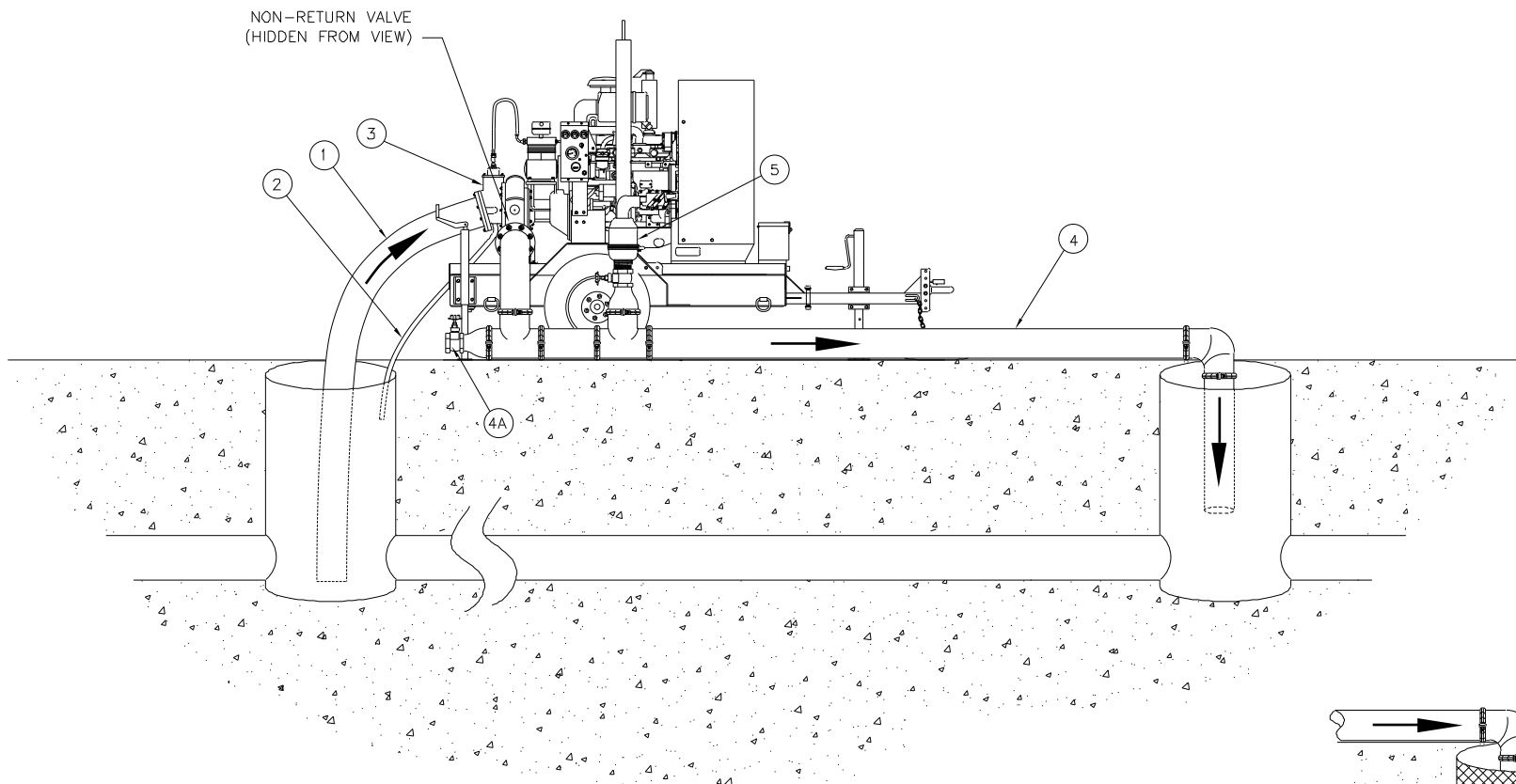
### **Single Pump Setup, no backup, non-critical job**

#### ***Materials List Single Pump Setup*** - no backup, non-critical job

1. Suction hose or pipe sized to match flow requirements of the pump, with some method of protecting the pump from oversized objects in the fluid (hose location or suction screen).
2. Extend the Priming Venturi Discharge Hose into the manhole or other suitable collection point, ensuring no kinks or plugs in the hose.
3. Solids Handling Pump sized for the required flow rate and head.
4. Discharge piping sized for the required flow rate, velocity, and acceptable head loss.
  - A. Flush Fitting located as close to the pump as possible (a "T" with a reducer gate valve so that clean water can be used to flush the line of solids).
5. Air Vent Valve(s) as required, determined by the length of the discharge pipe and the elevation changes. The air vent riser(s) should be mounted on a "T" in the main pipe, with the riser being 4 to 5 feet in length (this reduces the chance of solids getting into the air vent). A gate valve is located on the top of the riser, before the air vent valve. The gate valve (normally open) is used to isolate the air vent for cleaning in case it becomes fouled and starts to leak.
6. Collection Tank (if needed) is connected to the air vent valve to collect any fluids that escape due to the pressure changes at start-up as well as shut down.

REV. NO.	DESCRIPTION	PREVIOUS DWG	BY	DATE

ITEM	QTY.	DESCRIPTION
1	1	SUCTION HOSE OR PIPE
2	1	PRIMING VENTURI DISCHARGE HOSE
3	1	SOLIDS HANDLING PUMP
4	1	DISCHARGE PIPING
4A	1	FLUSH FITTING
5	VARIES	AIR VENT ASSEMBLY (OPTIONAL)



Note - If directional flow is needed, extend the **discharge pipe to the floor, with a 90° elbow pointed to the direction of flow.**

Rev: 04-10-00  
 Scale: NOT TO SCALE  
 Designer:  
 Checker: R. MUSTICK

TYPICAL BYPASS

SINGLE PUMP UNIT  
 NO BACKUP - NON-CRITICAL JOB

POWER PRIME PUMPS  
 2404 State Road PG Box 8248 Bakersfield, Ca. 93303

1 Sheet of 1

Drawing Number: 100015  
 Job Number: 991222