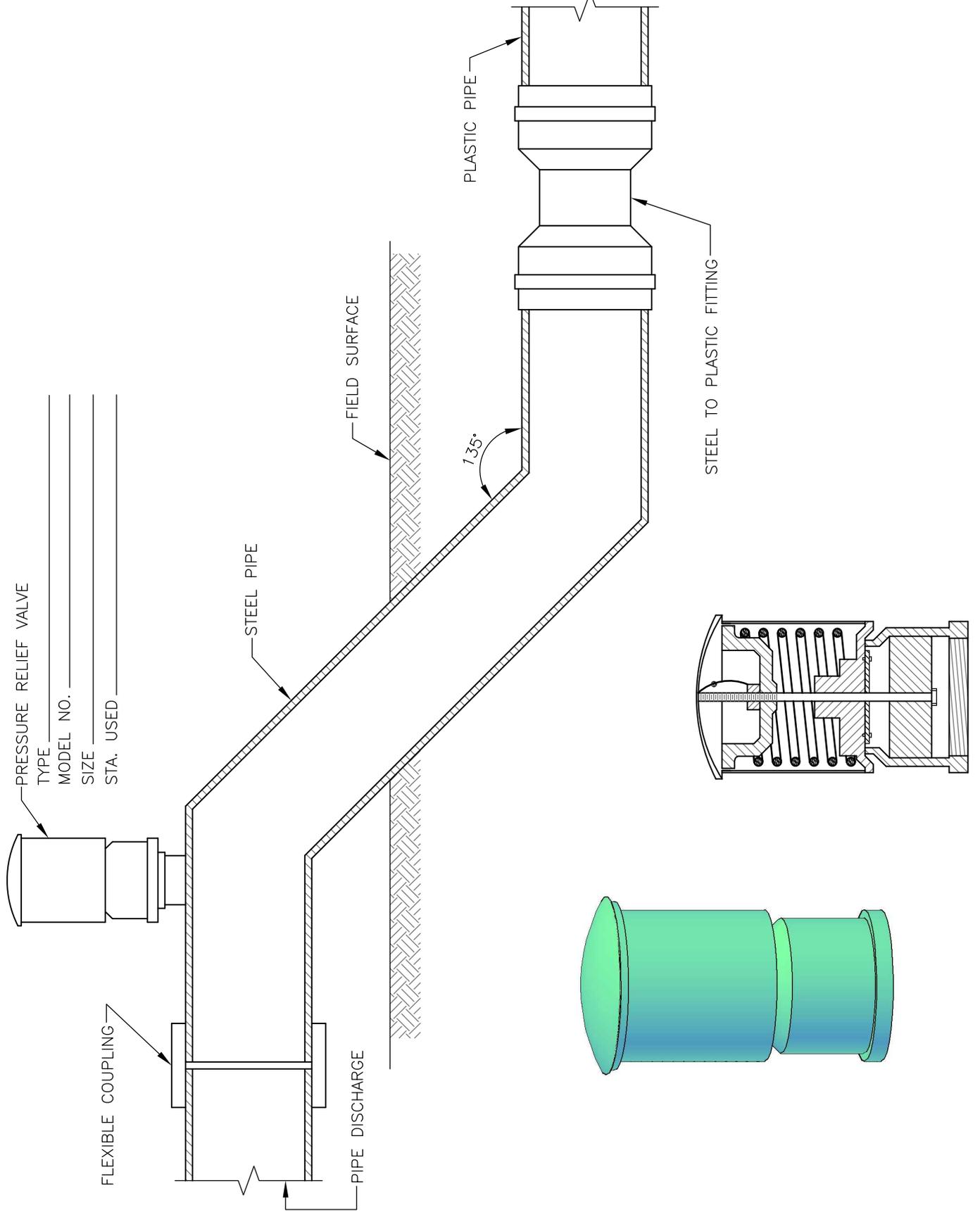


PRESSURE RELIEF VALVE
 TYPE _____
 MODEL NO. _____
 SIZE _____
 STA. USED _____



NRCS

Natural Resources Conservation Service
United States Department of Agriculture

**PRESSURE RELIEF VALVES
FOR PLASTIC PIPES**

(REVISED LAST ON 10-09)

Designed	BEB, AJS	Date	8-80
Drawn	DDD		9-09
Checked	BEB		9-80
Approved	J.E. ANDREWS S.C.E.		10-09

File Name	
Drawing Name	CO-SSP-71B
Sheet	1 of 2

DESIGN AND CONSTRUCTION NOTES

1. THE DISCHARGE PIPE MAY BE "DOG-LEGGED" (SEE DRAWING ON SHEET 1 OF 3) BELOW GROUND WHERE THE INLET VELOCITY IS LESS THAN 3 TIMES THAT OF THE OUTLETTING PIPELINE.
2. THE "DOG-LEG" SECTION OF THE PUMP DISCHARGE PIPE SHALL BE CONSTRUCTED WITH THE SAME NOMINAL DIAMETER AS THE PIPELINE.
3. THE PRESSURE RELIEF VALVE SHALL BE INSTALLED ON TOP OF THE UPPER HORIZONTAL SECTION OF THE "DOG-LEG".
4. PRESSURE RELIEF VALVES SHALL BE INSTALLED WITH NOMINAL SIZE PIPE TO FIT THE VALVES THREADED INLETS.
5. VIBRATION CONTROL MEASURES SUCH AS SPECIAL COUPLERS OR FLEXIBLE PIPE SHALL BE PROVIDED AS NEEDED TO INSURE THAT VIBRATION FROM THE PUMP DISCHARGE PIPE(S) IS NOT TRANSMITTED TO THE STAND.
6. SAND TRAPS, WHEN COMBINED WITH A STAND, SHALL HAVE A MINIMUM INSIDE DIA. OF 30 INCHES AND SHALL BE CONSTRUCTED SO THAT THE BOTTOM IS AT LEAST 24 INCHES BELOW THE INVERT OF THE OUTLET TO THE PIPELINE. THE DOWNWARD VELOCITY OF FLOW OF THE WATER IN A SAND TRAP SHALL NOT EXCEED 0.25 FEET PER SECOND. SUITABLE PROVISIONS FOR CLEANING SAND TRAPS SHALL BE PROVIDED.
7. PRESSURE RELIEF VALVES DO NOT FUNCTION AS AIR RELEASE VALVES AND SHALL NOT BE USED AS SUBSTITUTES FOR SUCH VALVES WHERE RELEASE OF ENTRAPPED AIR IS REQUIRED.
8. PRESSURE RELIEF VALVES SHALL BE USED IN CONJUNCTION WITH AIR AND VACUUM VALVES AT ALL PUMP STANDS.
9. A PRESSURE RELIEF VALVE SHALL BE USED AT THE END OF PIPELINES WHEN NEEDED TO RELIEVE SURGE AT THE END OF THE LINES.
10. FOR LOW PRESSURE UNDERGROUND PLASTIC PIPELINES, THE FLOW CAPACITY OF PRESSURE RELEASE VALVES SHALL BE THE PIPELINE DESIGN FLOW RATE WITH A PIPELINE PRESSURE NO GREATER THAN 50 PERCENT ABOVE THE PERMISSIBLE WORKING PRESSURE FOR THE PIPE.
11. FOR HIGH PRESSURE UNDERGROUND PLASTIC PIPELINES PRESSURE RELIEF VALVES SHALL BE NO SMALLER THAN 1/4 INCH NOMINAL SIZE FOR EACH DIAMETER INCH OF THE PIPELINE, AND SHALL BE SET TO OPEN AT A PRESSURE NO GREATER THAN 5 PSI ABOVE THE DESIGN WORKING PRESSURE OF THE PIPE.
12. PRESSURE RELIEF VALVES SHALL BE MARKED WITH THE PRESSURE AT WHICH THE VALVE STARTS TO OPEN. ADJUSTABLE PRESSURE RELIEF VALVES SHALL BE SEALED OR OTHERWISE ALTERED TO PREVENT CHANGING OF THE ADJUSTMENT FROM THAT MARKED ON THE VALVE.
13. MANUFACTURERS OF PRESSURE RELIEF VALVES SHALL PROVIDE CAPACITY TABLES, BASED ON PERFORMANCE TESTS, WHICH GIVE THE DISCHARGE CAPACITIES OF THE VALVES AT THE MAXIMUM PERMISSIBLE PRESSURE AND DIFFERENTIAL PRESSURE SETTING. SUCH MANUFACTURERS TABLES SHALL BE THE BASIS FOR THE DESIGN OF THE PRESSURE SETTING AND OF ACCEPTANCE OF THESE VALVES.
14. PRESSURE RELIEF VALVES SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURERS DIRECTIONS.
15. A PRESSURE RELIEF VALVE SHALL BE INSTALLED BETWEEN THE PUMP DISCHARGE AND THE PIPELINE WHEN EXCESSIVE PRESSURES CAN BE DEVELOPED BY OPERATING WITH ALL VALVES CLOSED.
16. A PRESSURE RELIEF VALVE SHALL BE INSTALLED ON THE DISCHARGE SIDE OF THE CHECK VALVE WHERE A REVERSAL OF FLOW MAY OCCUR. A REVERSAL OF FLOW WOULD OCCUR WHEN PUMPING UPHILL.
17. A PRESSURE RELIEF VALVE SHALL BE USED UPSTREAM OF ANY POINT IN THE PIPELINE WHERE THE PIPELINE HAS A METHOD OF COMPLETE SHUTOFF SUCH AS A GATE VALVE.
18. STANDARDIZED DESIGNS – MUST BE ADAPTED TO THE SPECIFIC SITE.



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