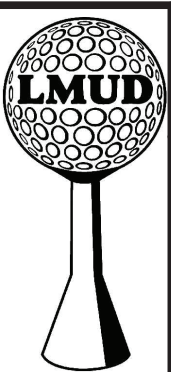


REQUIRED GRINDER PUMP INSTALLATION

1. 2 HP. BARNES CENTRIFUGAL PUMP, MODEL NO. ZOGP, SIMPLEX GRINDER PUMP. THE DISTRICT WILL AID IN DETERMINING PUMP HEAD REQUIREMENTS.
 2. ACCESSWAY, COVER, AND PUMP TANK TO BE FIBERGLASS REINFORCED POLYESTER (F.R.P.).
 3. 304 SS UNION (SEE DISCHARGE PIPING DETAIL NEXT SHEET WW-11A).
 4. ELECTRICAL ENTRY BUSHINGS FOR LEADS FROM GRINDER PUMP AND FLOATS TO THE CONTROL PANEL (ITEM 6) ARE REQUIRED. SEAL BOTH ENDS OF 2-INCH CONDUIT WITH DUCK SEAL FLEXIBLE CLAY. GROMMET REQUIRED FOR TANK PENETRATION.
 5. GRINDER PUMP AND ALARM LEADS – CIRCUIT TO BE RUN IN ACCORDANCE WITH APPLICABLE ELECTRICAL CODES. (ALL POWER AND FLOAT LEADS MUST BE 2-INCH MINIMUM CONDUIT).
 6. RAINPROOF (NEMA 3R OR 4X) CONTROL PANEL – WITH CIRCUIT BREAKERS OR DISCONNECT SWITCH AND HIGH WATER ALARM, FLASHING BEACON MOUNTED ON EXTERIOR OF PANEL. NOTE: PUMP POWER AND CONTROL POWER ARE ON SEPARATE SUPPLY BREAKERS.
 7. TANK INLET – 4” PIPE GROMMET 420P-4 (5” HOLE), TANK OUTLET 1-1/4” PIPE GROMMET 420P-1.25 (2” HOLE).
 8. TANK VENTS THROUGH THE HOUSE SERVICE LINE.
 9. GRAVITY SERVICE LINE – 4” DRAIN WASTE VENT W/ COMBINATION POP-UP RELIEF VALVE ON DUAL SWEEP CLEAN OUT. IF GREATER THAN 12” BELOW GRADE, THEN 2 CLEAN-OUT SWEEPS ARE REQUIRED.
- ADDITIONAL REQUIREMENTS, SEE STANDARD DETAIL WW-11A.

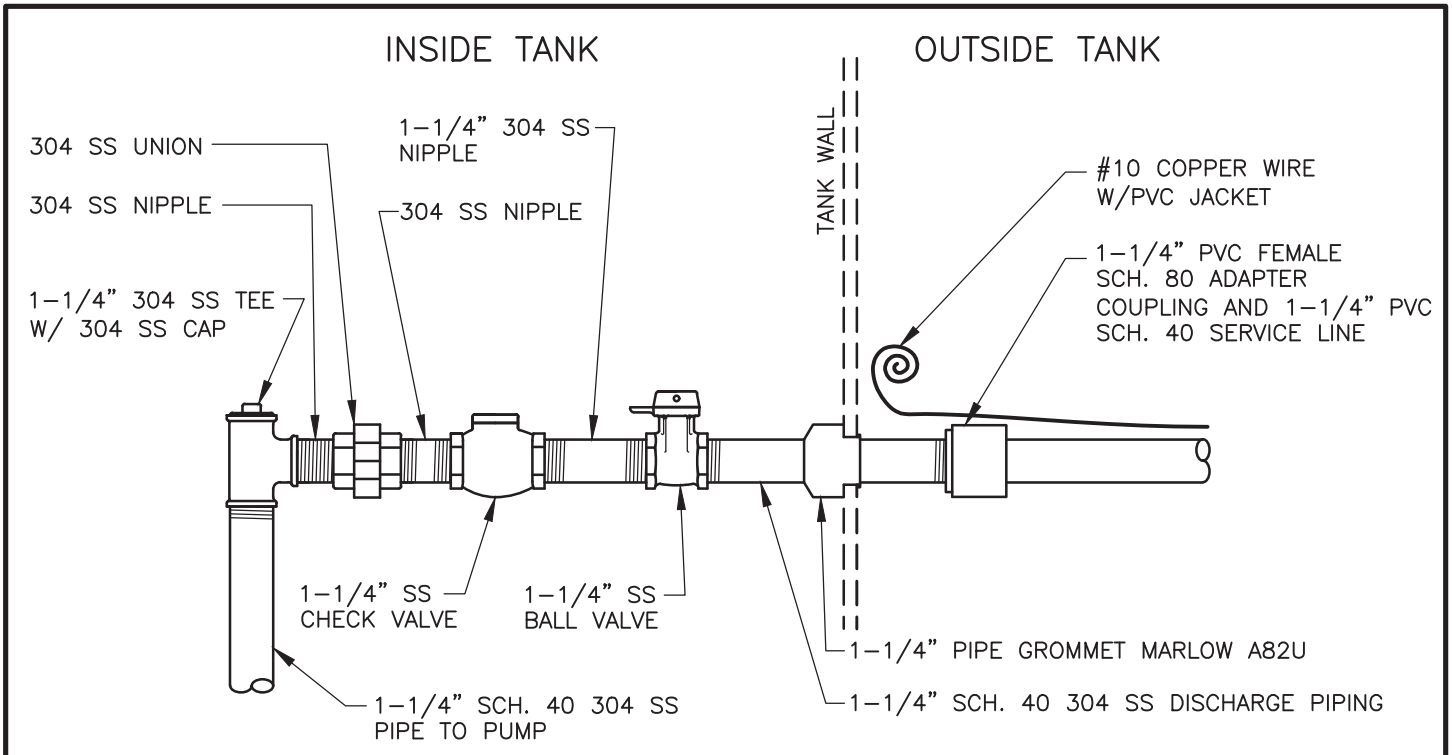


**LAKWAY MUNICIPAL UTILITY DISTRICT
LAKWAY, TEXAS**

Scale: NTS			
Date Issued:		March 18, 2021	
Rev.#	Date	By	Remarks

**TYPICAL GRINDER PUMP
INSTALLATION (SHEET 1 OF 2)**

**STANDARD
DETAIL
WW-11**



DISCHARGE PIPING - AT GRINDER PUMP

CONTINUED NOTES:

- 10. DISCHARGE OUTLET – 1 1/4" MALE PIPE THREADED NIPPLE W/ 1 1/4" FEMALE PVC ADAPTER BUSHING.
- 11. GRINDER PUMP DISCHARGE LINE WITH GROMMET – 1 1/4" SCH 40 304 SS NOMINAL PIPE SIZE.
- 12. CONCRETE ANCHOR: 900 LBS. (6 CU.FT.) PLUS 600 BLS. (4 CU.FT.) PER FOOT OF ACCESSWAY. EXAMPLE: W/2' ACCESSWAY – 900+1200=2100 lbs. (14 CU.FT.). SLEEVE OVER INLET LINE IS REQUIRED IF ANCHOR IS POURED TO A LEVEL ABOVE THE INLET. (REQUIRED IN FLOOD PLAIN AS DESIGNATED BY BUILDING INSPECTOR)
- 13. BEDDING MATERIAL – 6" MINIMUM, ROUNDED AGGREGATE (PEA GRAVEL).
- 14. FINISHED GRADE – GRADE LINE TO BE 8" BELOW TOP OF ACCESSWAY AND SLOPE AWAY FROM ACCESSWAY OPENING.
- 15. 4" COMBINATION POP-UP RELIEF VALVE / CLEAN-OUT SET IN 4" PVC ADAPTER. POP-UP RELIEF VALVE SHALL BE 4" ABOVE GROUND AND 4" BELOW TOP OF TANK.
- 16. ALL DISCHARGE PIPING, FITTINGS AND HARDWARE TO BE SCH. 40 304 STAINLESS STEEL WITHIN TANK.
- 17. SERVICE PIPING DOWNSTREAM OF ADAPTER COUPLING TO BE SCH. 40 PVC.
- 18. WHERE REQUIRED DUE TO PUMP BEING LOCATED ABOVE MAIN LINE GRADE AT STREET, INSTALL 1-1/4" TEE AND BALL VALVE TO PIPE RETURN TO TANK THROUGH GROMMET.



LAKEWAY MUNICIPAL UTILITY DISTRICT LAKEWAY, TEXAS

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TYPICAL GRINDER PUMP
INSTALLATION (SHEET 2 OF 2)

STANDARD
DETAIL
WW-11A