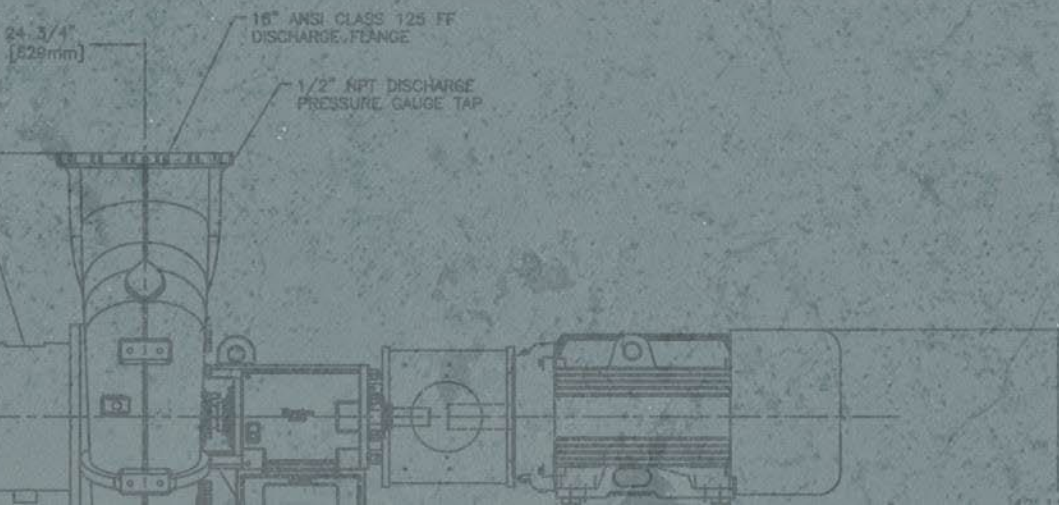




ALTERNATIVE MIXING TECHNOLOGIES



Quality Chopper Pumps Built in America Since 1960

Vaughan
Unmatched Reliability



Chopper Pump Configurations

Vaughan
Unmatched Reliability

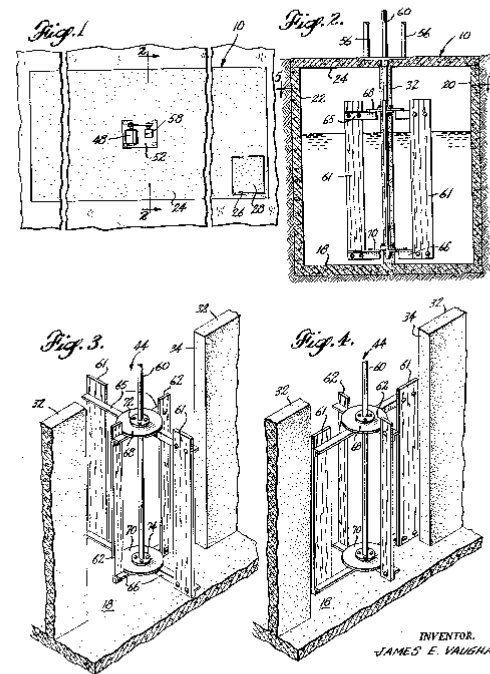


Processing of Mixing and Storing Liquid Manure US 3233875 A, 1966

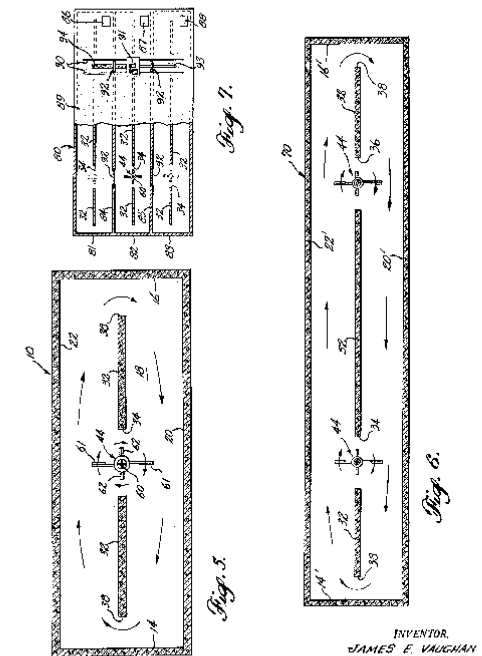


Jim Vaughan, Founder

Feb. 8, 1966 J. E. VAUGHAN 3,233,875
PROCESSING OF MIXING AND STORING LIQUID MANURE
Original Filed April 23, 1962 5 Sheets-Sheet 1



Feb. 8, 1966 J. E. VAUGHAN 3,233,875
PROCESSING OF MIXING AND STORING LIQUID MANURE
Original Filed April 23, 1962 5 Sheets-Sheet 2





Mixing Solutions

Vaughan
Unmatched Reliability



Vertical Recirculators and Submersible Recirculators



- Vaughan “Pit cleaning” devices
- Resuspend
- Homogenize
- One piece of engineered equipment with multiple functions – pump out AND mixing



Vertical Recirculators and Submersible Recirculators

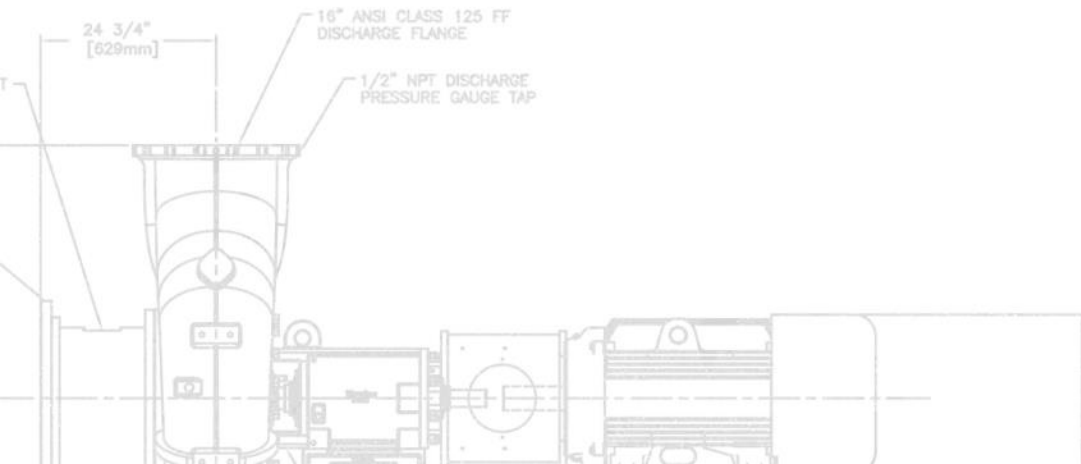
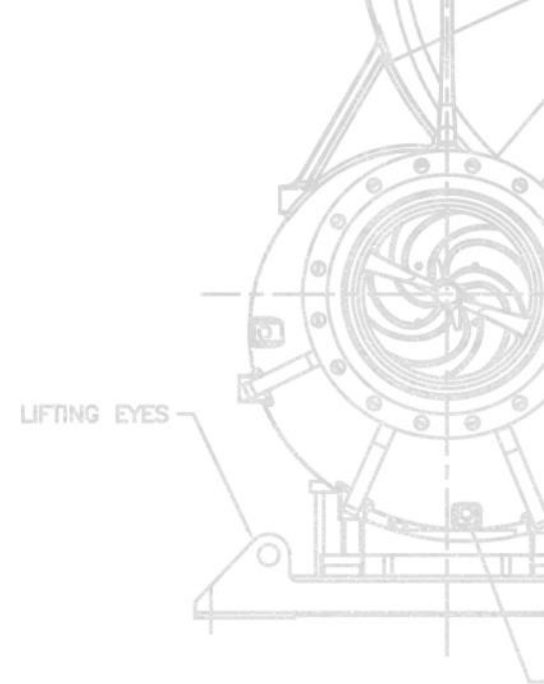


Submersible Recirculators

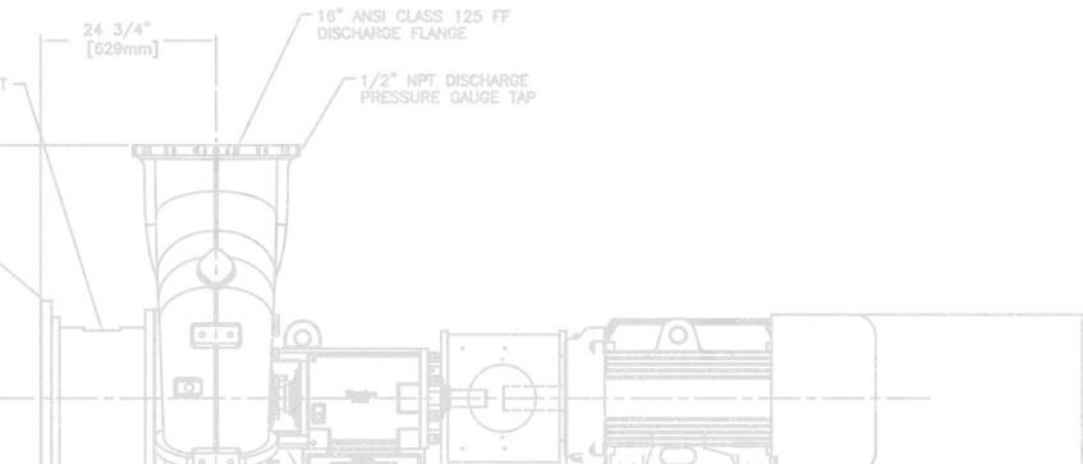
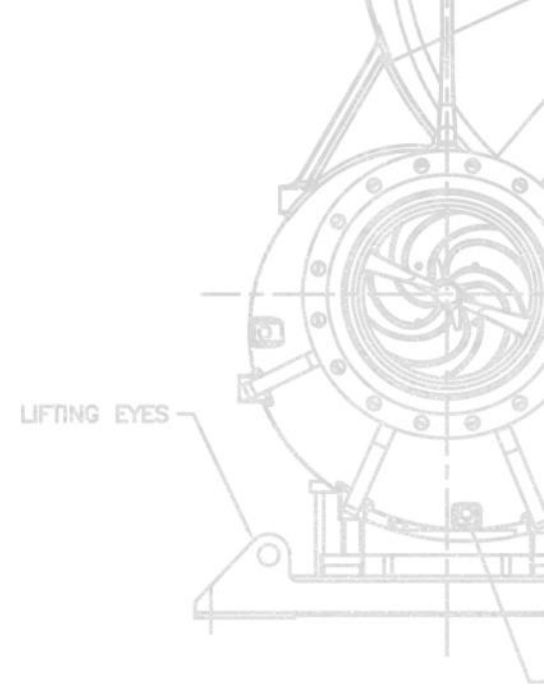
- Nozzle is adjustable a minimum of 180 degrees horizontally and 45 degrees vertically
- Auto Valve-actuator feature
- Duplex systems with one Recirculating device



VWW Recirc How it Works - Animation



VWW Recirc in Lift Station - Video



CONDITIONING PUMPS



- **ELIMINATES FLOATING MATS**
- **MOVES GRIT**
- **ELIMINATES COSTLY VAC TRUCK VISITS**
- **PORTABILITY**
- **COST EFFECTIVE**
- **3"-8" MODELS CURRENTLY INSTALLED ACROSS THE GLOBE**

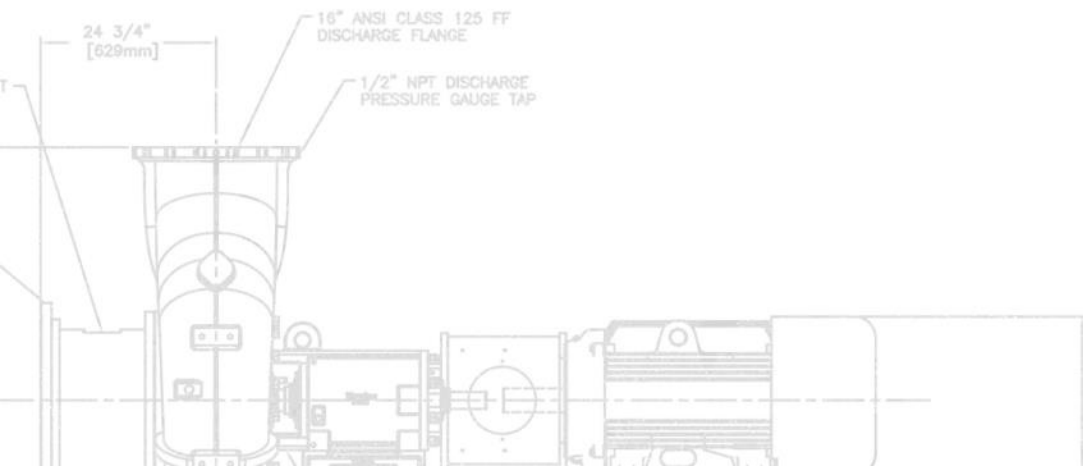
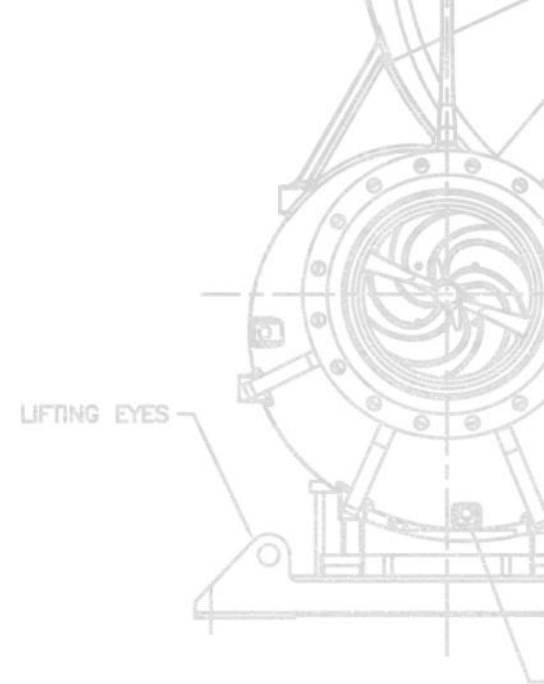


CFD- Proven Mixing Options



CFD - Animation

Conditioning Pump - Video



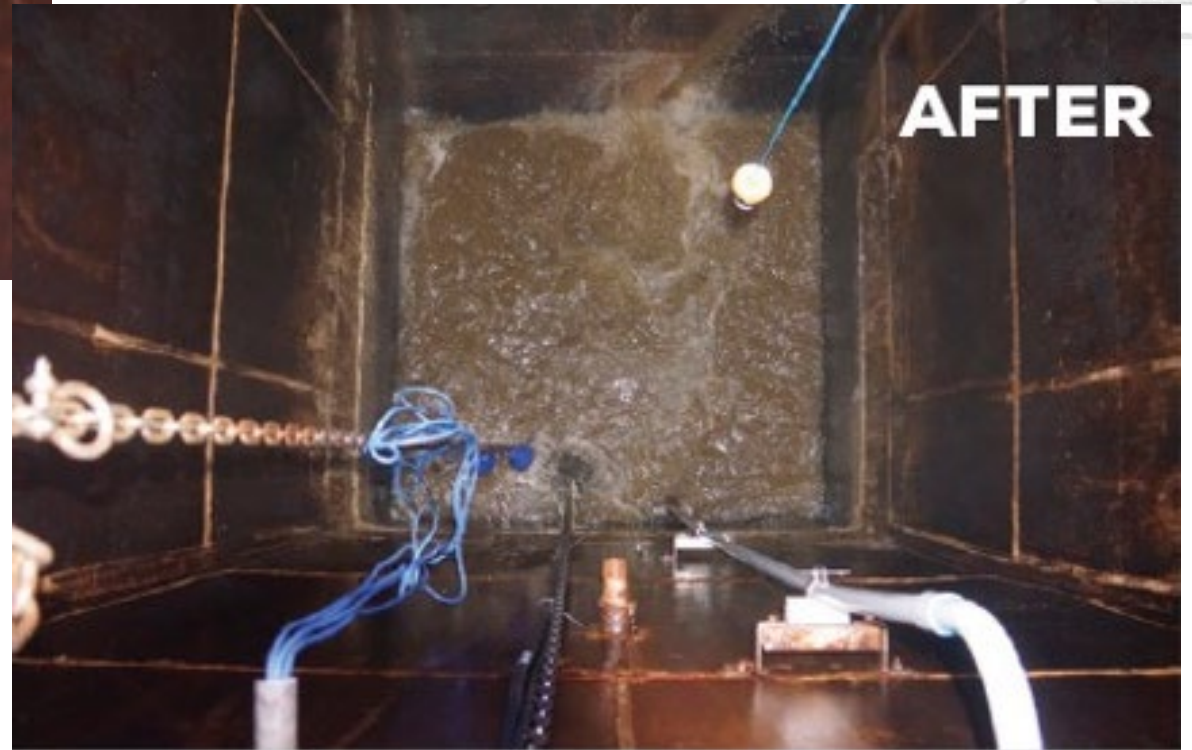
BEFORE



LIFTING EYES



AFTER



24 3/4"
[629mm]

16" ANSI CLASS 125 FF
DISCHARGE FLANGE

1/2" NPT DISCHARGE
PRESSURE GAUGE TAP



Pump and Nozzles



- Lift Station conditioning (non-duty pump)
- CSO
- Scum Wells
- Food Waste / FOG reception
- Septage
- Dedicated Tank Scum management
- Dedicated Tank Foam Suppression



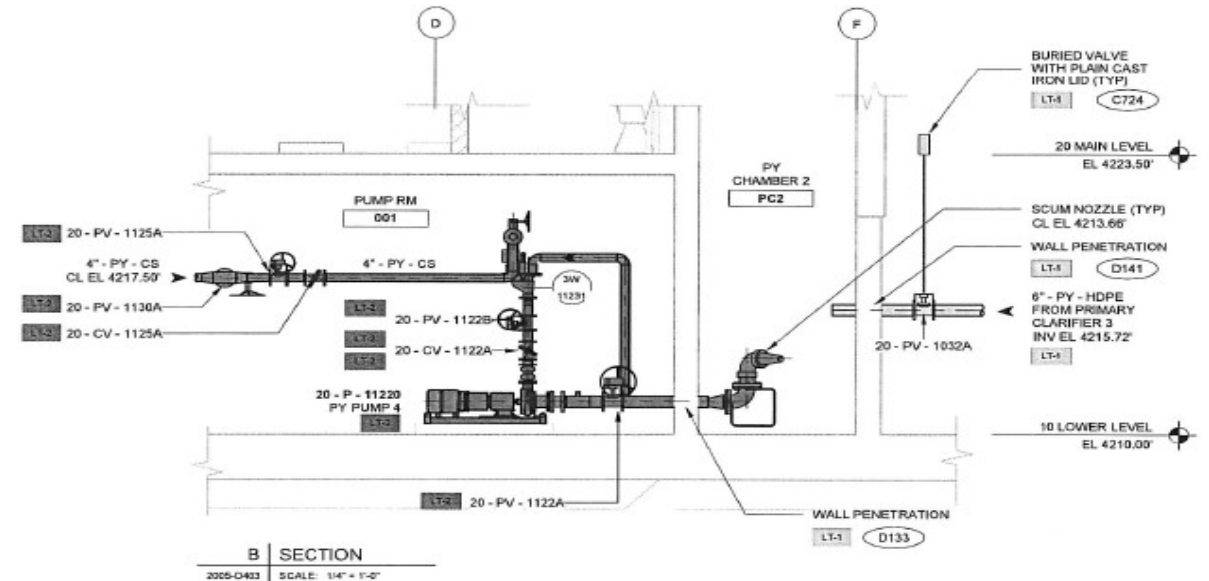
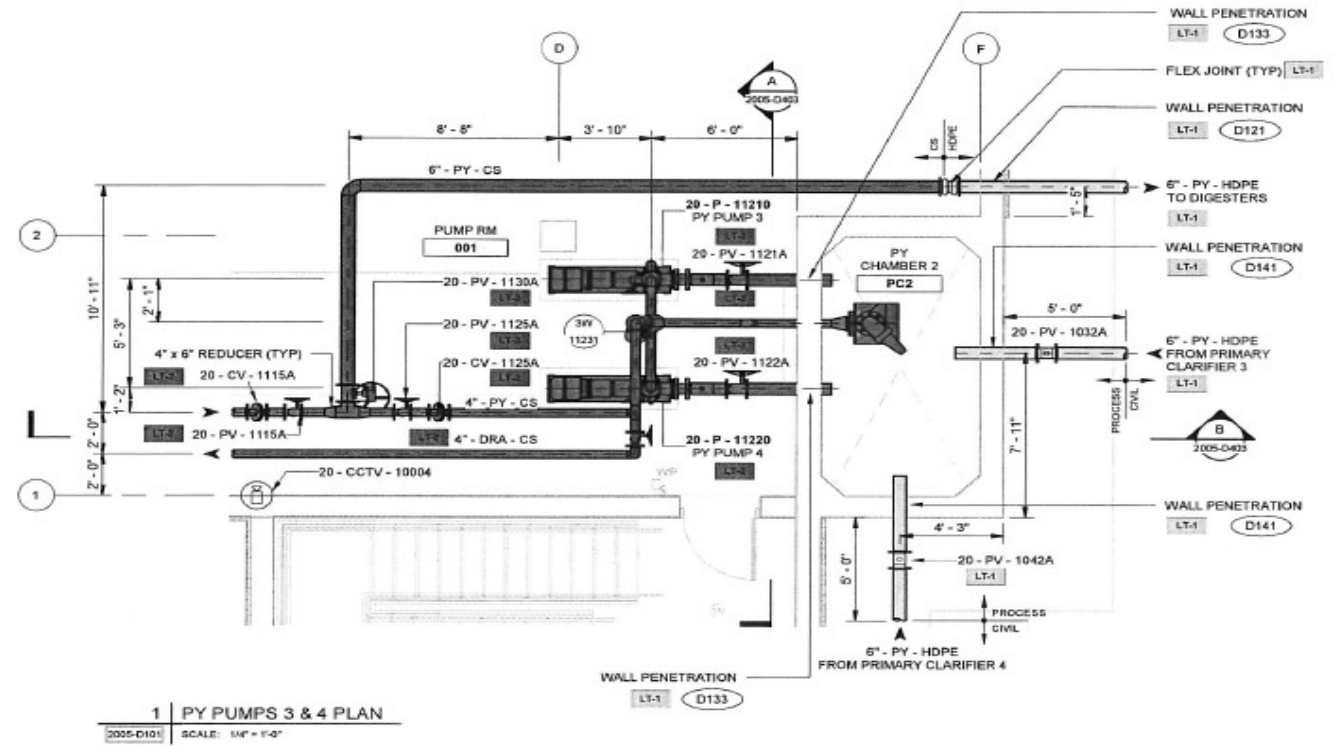
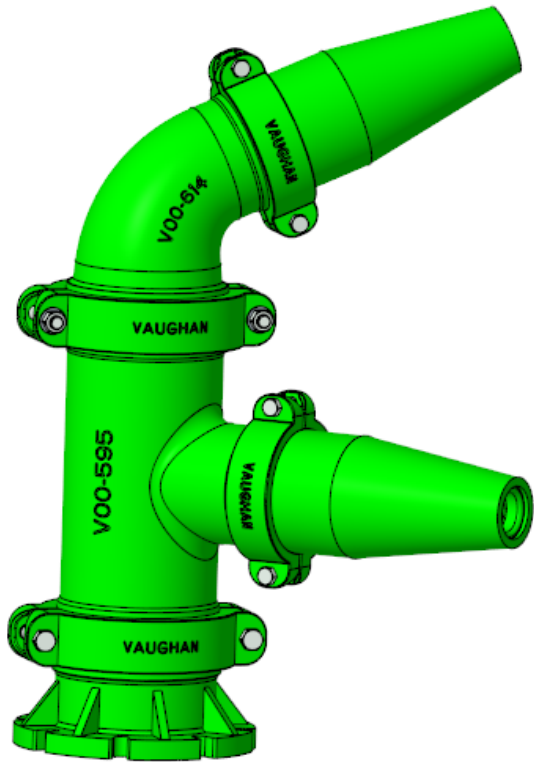
Pump and Nozzles - Continued

- Lift Station /CSO,
- “ Large Shafts”
- Storm water management
- Grit management
- Solids handling
- Specialized Mixing Applications

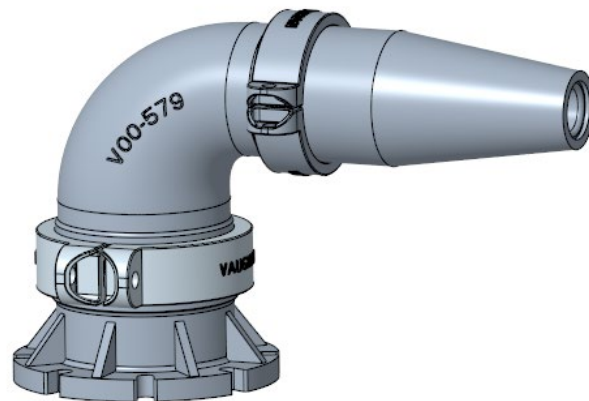
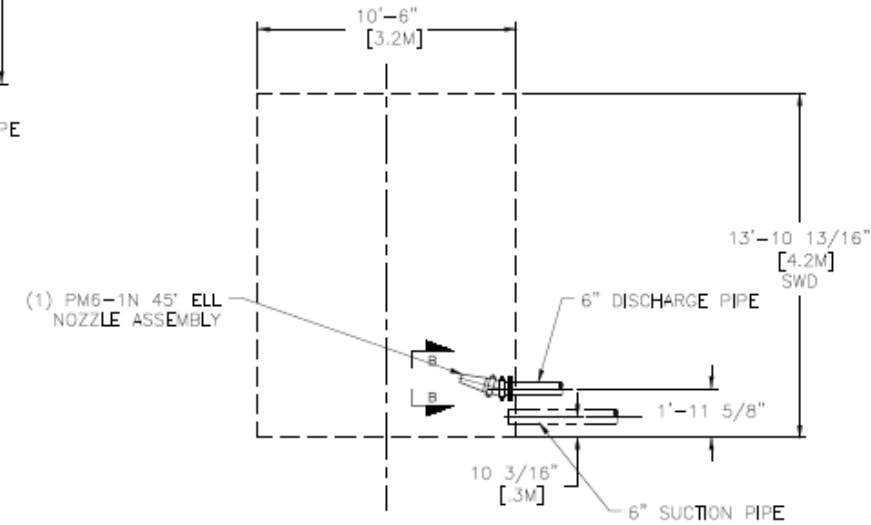
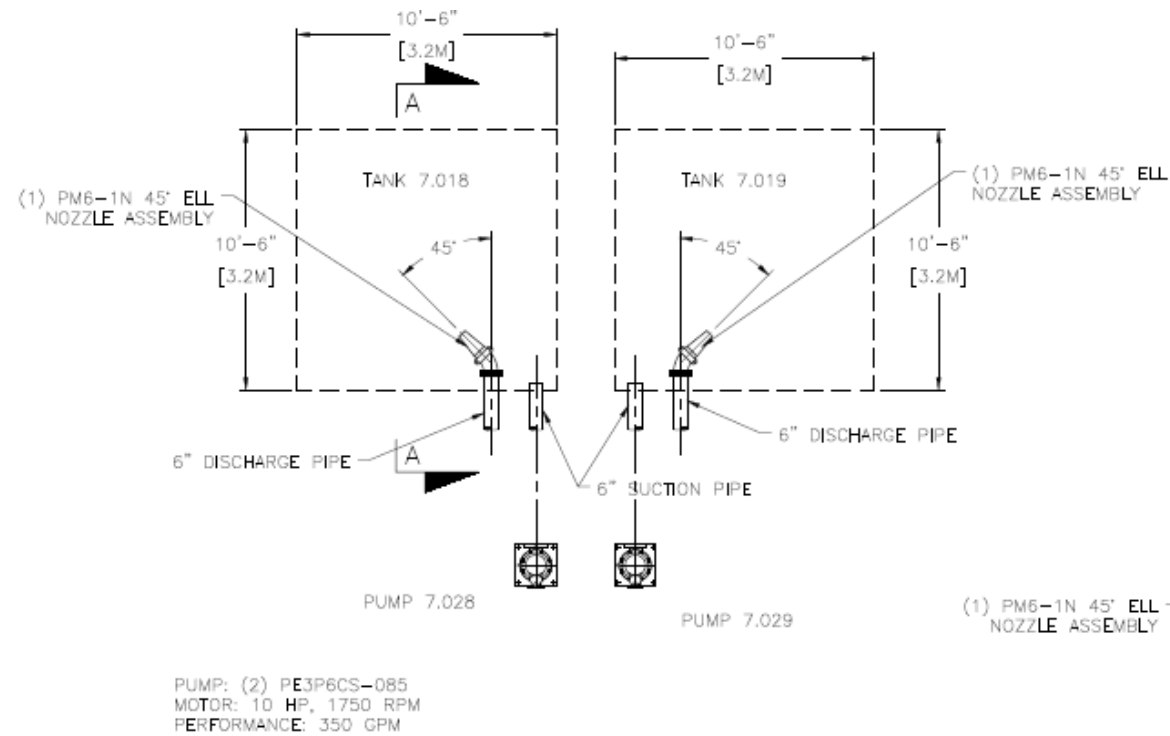


Pump & Nozzles - Continued

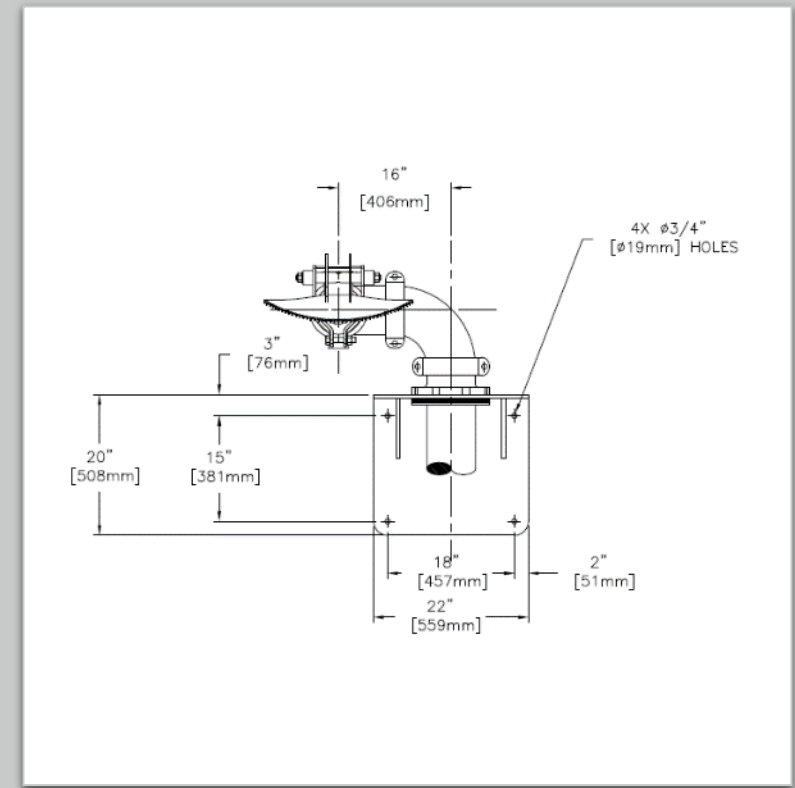
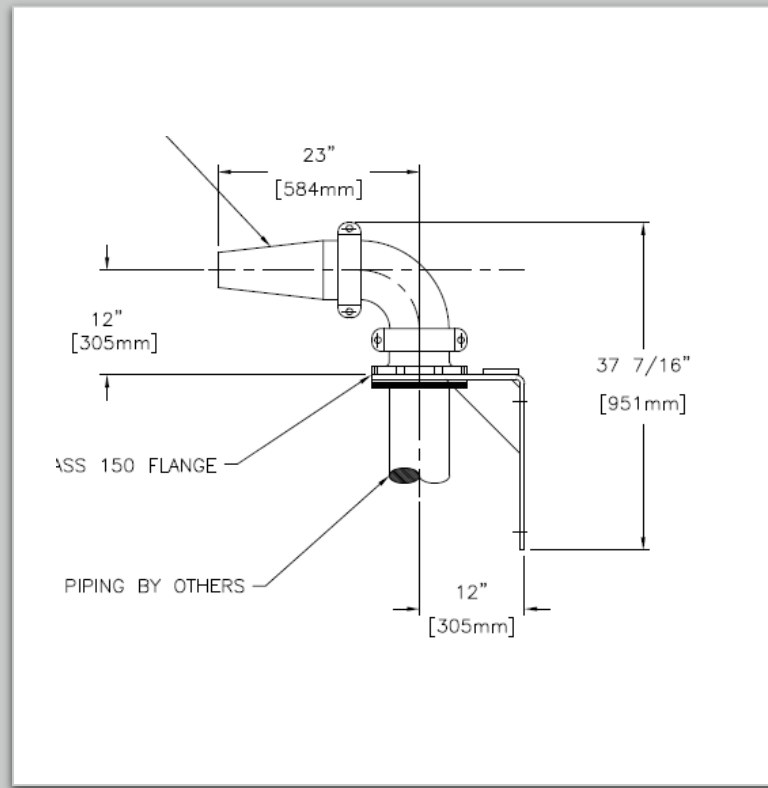
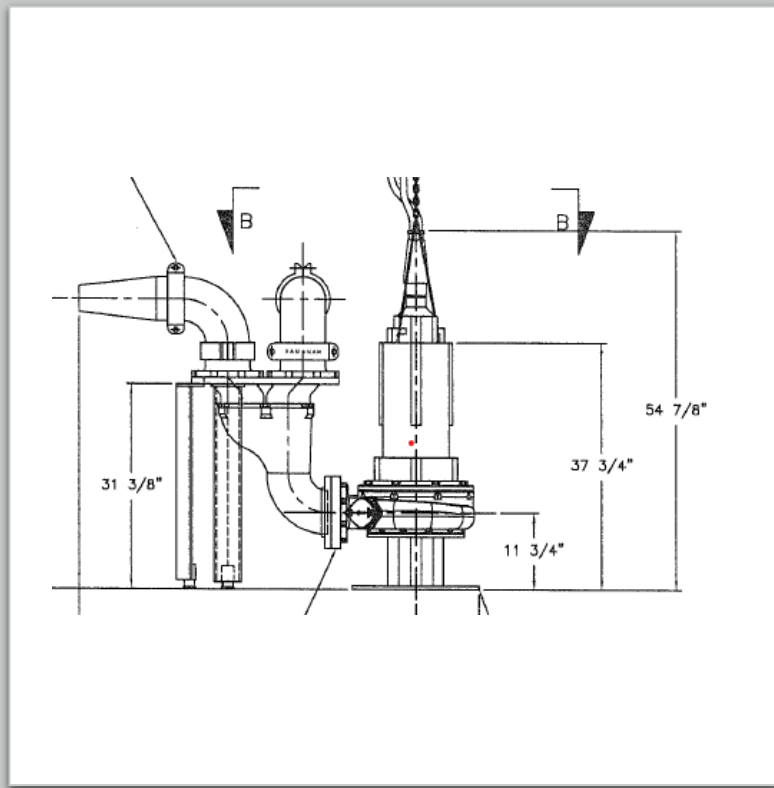
- Ability to mix multiple wet wells and transfer.



Pump & Nozzles - Continued



- **FOG Reception**



Nozzle Options



QUESTIONS

