



FLUID GROUP LLC







Technology

No-Vault Package Pump Stations

#### **Product Overview**

EXCEL FLUID GROUP is a premier manufacturer of complete vault-less pump station enclosures that give you full access and control of your lift station equipment without the hazards of confined space entry and arc-flash electrical concerns.

Built with a rugged aluminum housing and features designed for operational ease, the No-Vault Pump Station is by design, one of the most service friendly pump stations on the market today.

The No-Vault Pump Station provides an industry leading approach to Water and Wastewater Management. Our engineering team can modify standard construction features to fit almost any application.

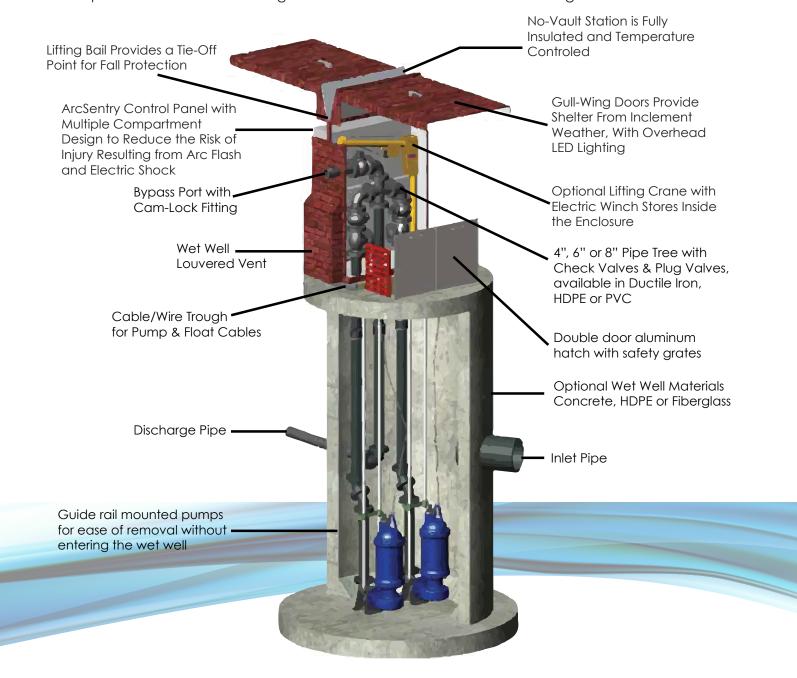
EXCEL FLUID GROUP provides the advantage of a single-source supplier accommodating all brands of pumps and the No-Vault Pump Station can be mounted on concrete, HDPE or fiberglass wet wells, with your choice of controls.



## Package Pump Systems

A sewage wet well is a very dangerous confined space that has claimed many lives in years past. According to OSHA, about 90 deaths involving confined spaces occur every year. This places a special obligation and responsibility on all those involved in the selection and design of pump stations, as well as servicing and installing pump stations. In addition, Safety and Service Directors are responsible for the safety of their Maintenance Personnel which obligates them to eliminate as many hazards as possible from their collection systems.

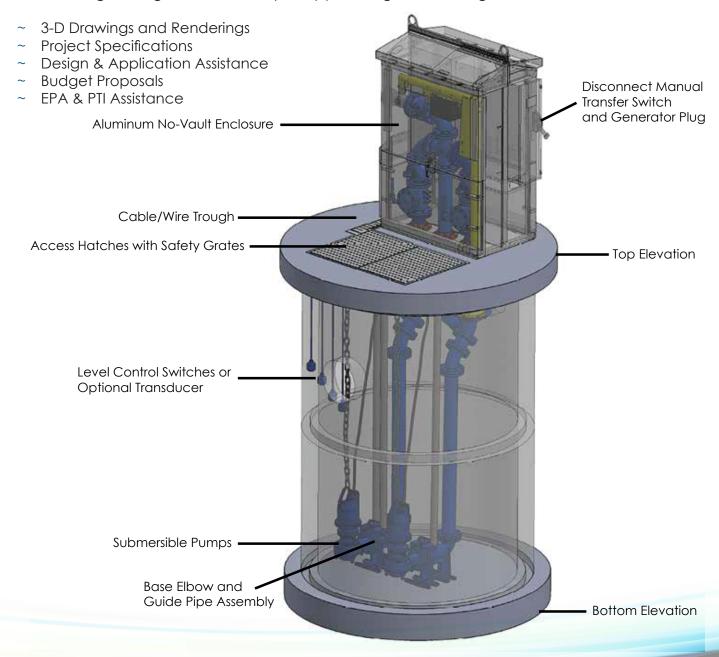
EXCEL FLUID GROUP has worked with clients to develop the Excel No-Vault Pump Station to minimize risk by providing a well designed, safe pump station where maintenance can be performed without entering the wet well and eliminates the below grade valve vault.



### **Application and Design**

The Excel No-Vault design incorporates the valves and lift station controls within the footprint of the main wet well. For installation in areas with limited space the Excel No-Vault provides all of the features commonly found in conventional lift stations.

EXCEL FLUID GROUP invites you to discuss specific projects that are in initial planning or design stage, and our engineering team will assist you by providing the following services:



# Advantages



Above Ground Enclosure: Eliminates Confined Space Safety Hazards and reduces Real Estate Requirements



Arc-Sentry Control Panel: Design Reduces Arc Flash Hazards and Includes User Friendly Controls



Cable/Wire Trough:
Simplifies Pump Installation and Maintenance
and Eliminates the Need for Underground
Electronic Conduit or Junction Box in
Wet Well



Electrical Plugs and Receptacles:
Ensures Correct Pump Rotation and Reduces
Installation, Maintenance and Service Time

### **Exterior No-Vault Covering Options**

The No-Vault Pump Station is offered with custom aesthetics to blend into its surrounding environment. This makes it a first choice for many developers, engineers and communities.







## No-Vault Pump Station Installation References

# The Plains WWTP Lift Station: Athens County, OH Triplex No-Vault Pump Station

- ~ 10.0' Dia. x 26.5' Deep Concrete Wet Well
- ~ Aluminum No-Vault NV3 6x6 Enclosure
- ~ Arc-Sentry Control Panel with Variable Frequency Drives
- Submersible 20 HP Explosion Proof Vortex Pumps



# Meadow Wood Lift Station: Ashtabula County, OH Duplex No-Vault Pump Station

- ~ 5.0' Dia. x 20.0' Deep Concrete Wet Well
- ~ Aluminum No-Vault NV2 4x4 Enclosure
- ~ Arc-Sentry Control Panel
- ~ Submersible 7.5 HP Vortex Pumps



# Air Force One Hanger Lift Station: Joint Base Andrews, MD Duplex No-Vault Pump Station

- ~ 8.0' Dia. x 15.0' Deep Concrete Wet Well
- ~ Aluminum No-Vault NV2 4x4 Enclosure
- ~ Duplex Control Panel
- ~ Submersible 7.5 HP Non-Clog Pumps





#### No-Vault Pump Station Installation References

#### Bell Acres Municipal Authority: Allegheny County, PA

Duplex No-Vault Pump Station

- 8.0' Dia. x 17.0' Deep Fiberglass Wet Well
- ~ Aluminum No-Vault NV3 6x6 Enclosure
- ~ Arc-Sentry Control Panel with Variable Frequency Drives
- ~ Submersible 40 HP Explosion Proof Non-Clog Pumps

Duplex No-Vault Pump Station

- ~ 6.0' Dia. x 11.0' Deep Fiberglass Wet Well
- ~ Aluminum No-Vault NV2 4x4 Enclosure
- ~ Arc-Sentry Control Panel with Variable Frequency Drives
- Submersible 7.5 HP Explosion Proof Non-Clog Pumps



### NEORSD Stone Levee Lift Station: Cleveland, OH

Duplex No-Vault Pump Station

- ~ 10.0' Dia. x 23.0' Deep Concrete Wet Well
- ~ Aluminum No-Vault NV3 6x6 Enclosure
- ~ Arc-Sentry Control Panel with Variable Frequency Drives
- ~ Submersible 14 HP Explosion Proof Non-Clog Pumps



# Common Wastewater Industry Challenges

- ~ Increasing Asset Ownership Cost from Maintenance of Ageing Infrastructure
- ~ Inflated Installation Costs of Traditional Concrete Pump Stations
- Traditional Concrete Stations are Compromised by Hydrogen Sulfide (H2S) Corrosion, unless protected by an interior coating that is costly to install and maintain.
- ~ Groundwater Infiltration (I&I) Into Sanitary Sewer System
- ~ Service Hazards of Confined Space Entry and Injury From Electrical Shock

# Contact Us For A No-Vault Package Pump Station Solution

## Design Criteria for No-Vault Package Pump Stations

- ~ What is the average daily flow rate in gallons per minute (GPM) into the pump station?
- What is the proposed forcemain size, length to discharge point and construction?
- ~ What is the grade elevation at the proposed pump station location?
- ~ What is the grade elevation at the proposed discharge point of the forcemain?
- ~ What is the gravity sewer invert pipe elevation?
- ~ Confirm the jobsite electrical service details.
- ~ Advise if emergency power connection or standby power service is required.
- ~ Advise if remote telemetry system is required.



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