

# PUMP **ONE** LIFT STATION



# PUMP OUT THE STATION



# Created from more than 25 years of experience.



The OneLift™ by Oldcastle Precast, provides a standard turnkey submersible pump station product with the distinction of having a sole-source point of responsibility. The OneLift Pump Station is designed with an integral valve vault built into the unused top portion of the wet

well, which yields a single-structure product, that solves the problems of differential settlement found with the conventional 2-structure systems. In addition; the single-structure design significantly reduces the product footprint for sites with tight area restrictions, and reduces complexity, size and cost of the excavation. The OneLift has proven to significantly reduce the time required for site installation.

OneLift's standard innovative design allows for quicker project documentation, faster product delivery and repetitive high quality manufacturing. Oldcastle Precast's turnkey obligation means that the OneLift Pump Station will be factory preassembled with all mechanical and electrical components prior to delivery, and that Oldcastle Precast, or our licensed distributors, are responsible for product commissioning, training and complete package warranty.

*You can depend on the name and quality of Oldcastle Precast*



TURNKEY PACKAGE  
station from a  
single supplier  
and installed in  
less than a day.



## INNOVATION

### *Single Structure design*

The factory built OneLift pump station offers a monolithically cast valve vault, in what is typically an unused portion of the pump station. This results in a significantly smaller footprint – up to 50% smaller than conventional 2 structure pump stations – allowing it to fit tight sites. The innovative shape and structural design provides ample space for the interior valve vault, while increasing workable system volumes and decreasing the depth of the excavation. The single structure of the OneLift pump station eliminates any potential differential settlement issues, allows for a quick and easy installation by eliminating the typical two-tier excavation of conventional stations, and is proven to be a cost-effective method of providing a high quality pump station solution with rapid and reliable delivery. With the OneLift pump station you get fast turnaround time on submittals; which include standard structural and mechanical components.

### **Design Features:**

- Rounded-corner design – allows for thinner/ lighter walls and prevents solids accumulation
- Near rectangular shape – provides more storage volume in the bottom and more space in the top to integrate the valve chamber
- Single structure design – provides a smaller footprint, simpler excavation, rapid installation, and eliminates potential for differential settlement
- Standard design – allows for stockable components for quicker turnaround and a rapid submittal package

STOCKED  
COMPONENTS  
of various  
heights to  
fit specific  
jobsite needs.



## QUALITY CONSTRUCTION

### *Factory built to rigid Oldcastle Precast quality standards*

With the OneLift pump station you get quick submittal turn-around and high quality repetitive factory outfitting. Assembly of mechanical and electrical components in controlled factory conditions means a consistently higher quality product than site assembled stations. The OneLift pump station is factory preassembled and then partially disassembled for shipping. This prepackaged solution allows for field erection and reassembly in less than four hours. You get standard structural and mechanical components that allow for factory stocking, resulting in quicker station deliveries.

### **Construction Features:**

- Standardized/stockable components that allow for fast production
- Packaging in controlled factory vs. variable field conditions
- Oldcastle quality and local availability
- Quick project turnaround



# PREASSEMBLED equipment package providing rapid installation and factory built quality.

## Technical info:

- Station height 10'-10" to 24'-10"
- Top slab with hatches: 300# pedestrian, or H2O design loading
- Valve vault extension risers (2' & 4')
- Integral valve vault section (4'-8' high)
- Wet well riser sections (2', 3', & 4' high)
- Base section 4'-8' w/ mono fillet & collar
- Factory preassembly of equipment provides: factory assembled quality which further accelerates installation to ½ day



Valve Assembly in Valve Vault, pre-assembled in factory.



Pump Station during factory assembly.

## BENEFITS TO ...

### the Design Engineer

- Smaller footprint on site
- Accommodates multiple pump manufacturers
- Turn-key package from one supplier
- AutoCAD drawings and specs readily available
- Timely and accurate budget estimates
- Can be considered a "standard off-the-shelf product"

### the Owner

- Rapid project cycle (design & construct)
- Smaller footprint on site
- Standardized and repeatable
- Overall cost savings
- Reliability and quality of Oldcastle Precast

### the Site Contractor

- Quick delivery timeline and rapid installation process
- Single smaller excavation (possibly shallower)
- Rapid installation limits the dewatering process
- Preassembled-requires only minor reassembly on site
- Safer below grade construction process
- Competitive installed cost
- Greater value and known quantity



# TYPICAL 1/2-DAY INSTALLATION

As a prepackaged solution, the OneLift pump station arrives at your job site preassembled and ready for installation. The preassembly of the OneLift pump station allows for a simplified construction process reducing installation time to 3-4 hours or just half a day. The single structure of the OneLift pump station is significantly easier to install.



**9:30 am**

*Flat bed trucks arrive with pump station components. Contractor has excavation ready for pump station installation.*



**10:15 am**

*Crane off-loads base section into excavation, additional sections are set at a rate of approximately one every thirty minutes.*



A single tier excavation is all that is required which improves job site safety as assembly time in the excavation is reduced. Dewatering time and costs are reduced as well. *Case study: RC509 delivered and installed in North Truro, MA.*



**11:15 am**

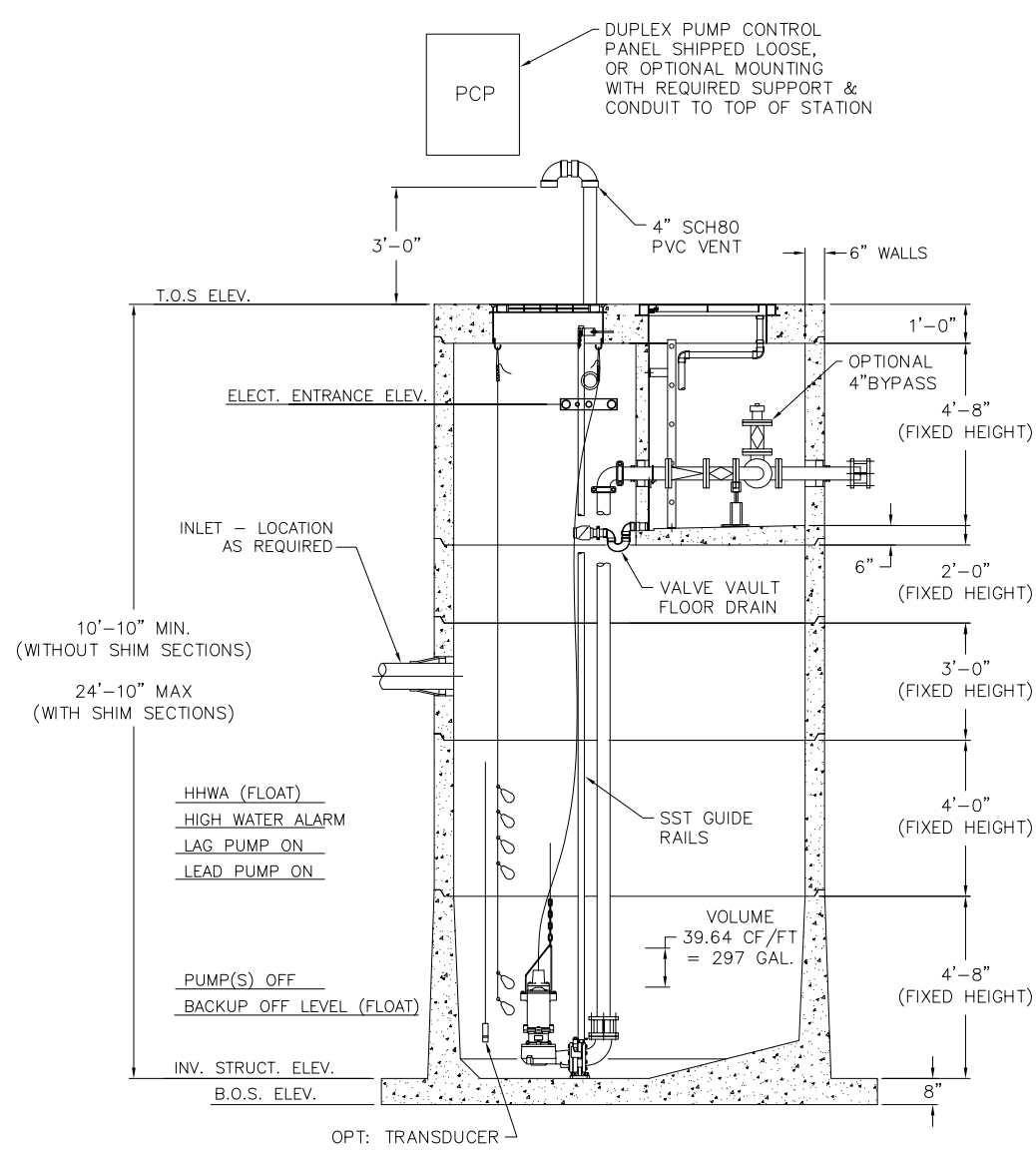
*Crane sets long discharge pipes and pump guide rails (shipped loose) into station. Pump station top section with integral vault is set.*



**12:00 Noon**

*Minor reassembly of shipped loose items are completed in two hours and backfill begins.*

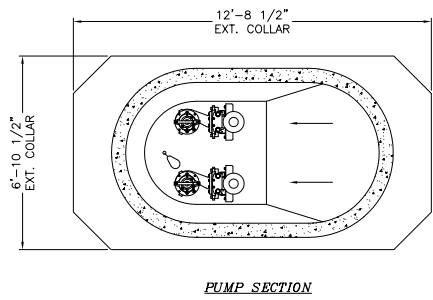
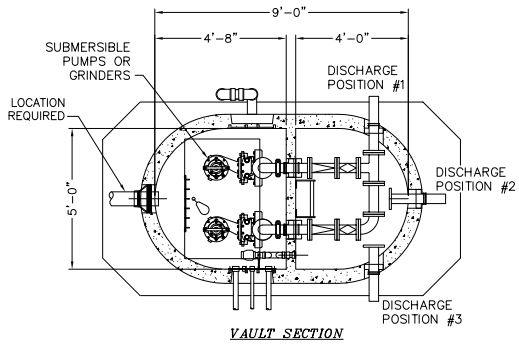
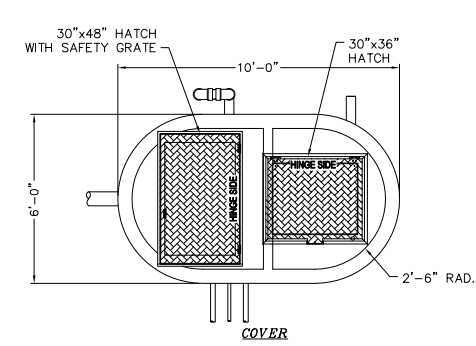
# SPECIFICATIONS



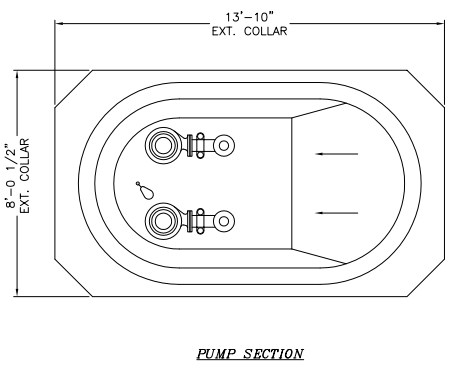
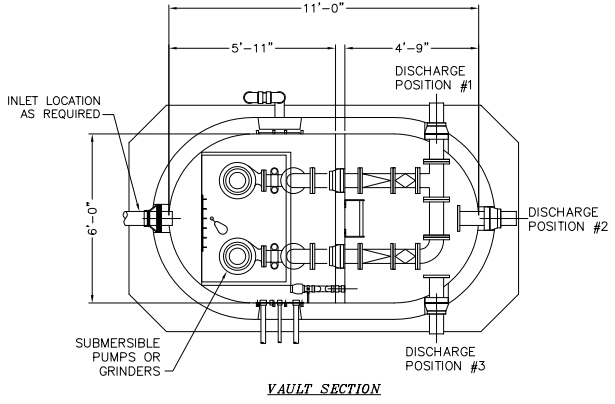
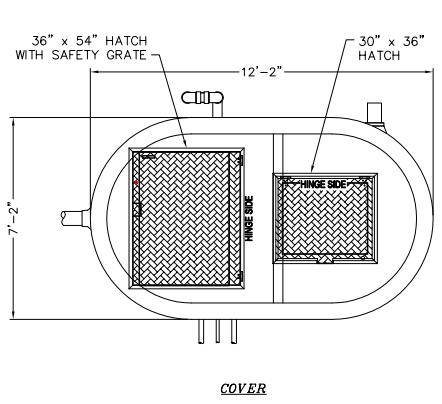
**INTERIOR ELEVATION VIEW**  
**RC509 x 10'-10" to 24'-10"**

## PUMP STATION SIZING CHART

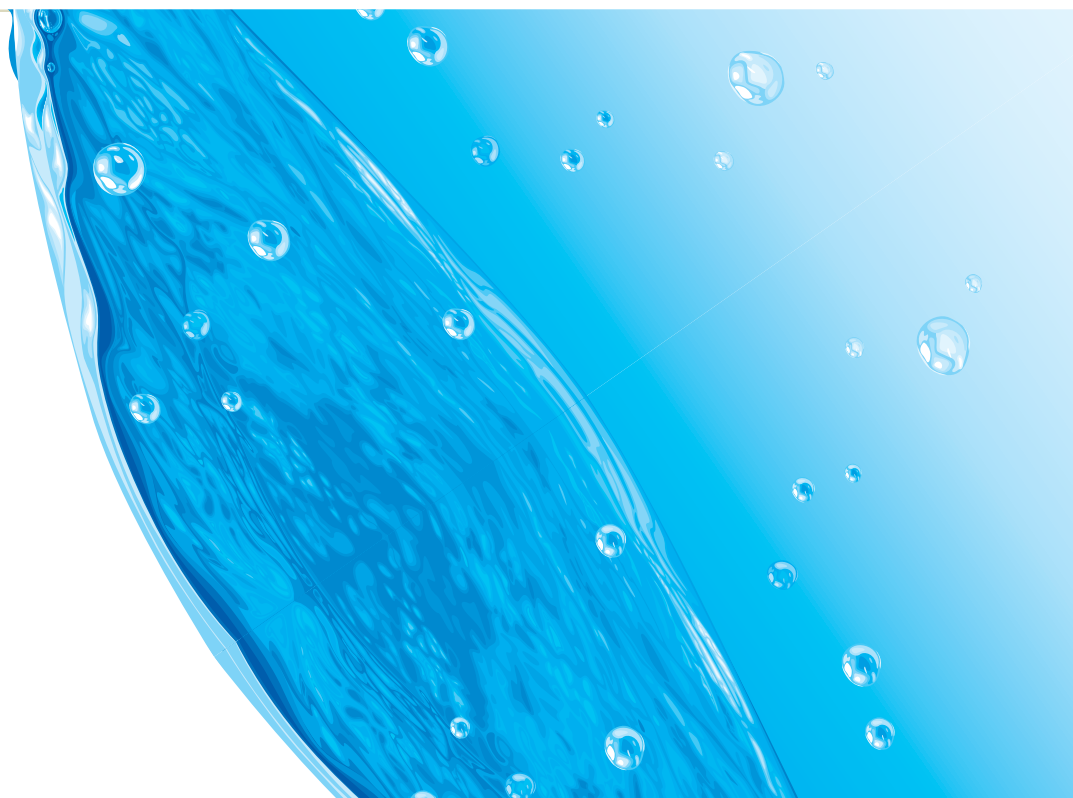
Model Number	RC509	RC611
Interior Width	5'-0"	6'-0"
Interior Length	9'-0"	11'-0"
Min/Max Height (T.O.S. to floor)	10'-10" / 24'-10"	10'-10" / 24'-10"
Volume (gal/vertical foot)	297 gal	436 gal
Standard DI Piping & Discharge Size*	4"	6"
Replaces Conventional Pump Stations	6' diameter & 8' diameter	8' diameter & 10' diameter



**RC509 PLAN VIEWS**



**RC611 PLAN VIEWS**







**PUMP** **ONE**  
**LIFT**  
**STATION**



[www.onelift.com](http://www.onelift.com)  
888-965-3227