



CUSTOMER INFORMATION  
FOR  
LOW PRESSURE SEWER SYSTEMS

PREPARED BY PANAMA CITY BEACH  
UTILITIES DEPARTMENT

## **What is a Low-Pressure Sewer System?**

Low Pressure Sewer Systems consist of small diameter force mains which individual, private grinder or effluent type pump stations pump into. Connecting to a pressure sewer requires a wet well (or holding tank) and a pump, collectively known as a “pump station”. Certain commercial applications will require two pumps in the wet well, so a pump is always available as a back-up in the event one pump fails. Grinder pump stations consist of a prefabricated wet well, which is buried in the ground and collects the sewage and houses the pump(s), electrical service and a control panel. Each residence would need a small grinder pump station to collect wastewater from the home, grind it up, and then pump it into the pressure sewer line.

Most pump stations require a dedicated 20-amp electrical service. In certain cases, the service may need to be a higher amperage due to the pump motor horsepower requirements. An alarm light is usually mounted on the wall of the house; the light flashes if the pump(s) fail to operate. A small pressure pipe would be needed to connect the grinder pump station to the pressure sewer main.

If the property line is 100 feet or greater from the tap location, the individual service line must have a gate valve at the property line in addition to any valves required at the pump and connection to the main.

## **Why Low Pressure instead of a Gravity System?**

Certain areas exhibit conditions that are not favorable for the installation and operation of conventional onsite sewage disposal systems or conventional gravity sewage collection systems. In order to provide these areas with sewer service, an alternative wastewater collection technology is necessary. A low-pressure sewer system is an acceptable alternative technology. In general, gravity sewers are preferable to pressure sewers. However, costs and conditions can make gravity sewers not feasible.

## **How do I size my Private Pump station?**

Operating pressure information is available for the municipal force main that Panama City Beach operates and maintains. The services of a professional (engineer or qualified plumber) should be obtained to appropriately size the on-site pump station and

service line. In many cases, the pump supplier will assist in suggesting an appropriate pump size.

### What is the Customer's Ownership Responsibility?

Panama City Beach operates and maintains most common force mains within public rights of ways and wastewater utility easements dedicated to the City into which an individual residence service line discharge. An exception would be if the common line is located on private property serving several residential units that are part of an overall development (i.e., Private Subdivision). That line would be maintained by some sort of community association. Each pump station owner is responsible for permitting, constructing, operating and maintaining their pump facility and the service line connecting it to the Low-Pressure Sewer System. The valve box at the property line is usually the limit of the customer's responsibility (see Figure 1). If the common force main is not located in a public street right of way or a dedicated utility easement, the common force main is considered private and maintenance is the responsibility of users of the force main.

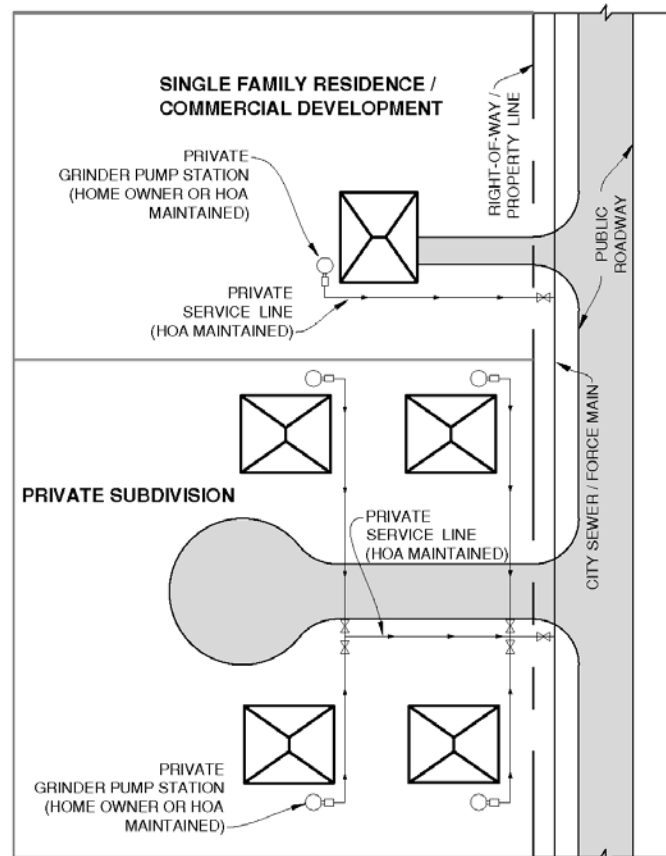


FIGURE 1  
COMPONENTS OF LOW  
PRESSURE SEWER SYSTEM

TAP MADE BY OWNER'S CONTRACTOR WITH CITY REPRESENTATIVE  
PRESENT, APPROVAL AND CITY UTILITY PERMIT REQUIRED

Construction and installation of all components of the individual pump station and connecting force main up the connection to the common force main shall be the responsibility of the customer. All on-site improvements, including the associated

pumping station and service line, shall be constructed in accordance with local building codes. Individual connections to the common force main shall be made with Panama City Beach personnel present.

Residential – Connection of individual residential systems may be allowed upon payment of appropriate fees and charges and plans review by the Panama City Beach Utilities Engineering Department. If a proposed connecting forcemain serves multiple residences or requires an extension of the City common force main, the Florida Department of Environmental Protection requires that plans and specifications be prepared by a licensed professional engineer and the required permit application be submitted for their review.

Commercial – Connection of systems serving commercial facilities or multiple residential units shall require approval of the Panama City Beach Utilities Engineering Department in accordance with Panama City Beach's requirements for approval of extensions to the Panama City Beach system.

If the proposed work requires crossing of a street or extension alongside a street within public rights of way, the appropriate right of way use permit must be secured by the Owner.

### **What is required to connect my house to the new sewer system?**

Typically, a customer will contact one or more plumbers to get proposals for the work to connect the house and the new system. The plumber should include the cost to install the grinder station, run the pressure service line from the station to the connection point at the property line, and to abandon (obtain permit, pump out and fill with dirt) the existing septic tank (if necessary). Permits are required from the Health Department prior to abandoning a septic tank.

### **How is my sewer charge determined? How much will my bill be?**

Sewer service charges are based on water usage. Panama City Beach typically bills customers based on the amount of water used during a bi-monthly billing period (2 months). A few areas are billed monthly and you can contact the Utilities customer service office for confirmation of monthly, or bi-monthly billing, at your address.

### **What is the cost for a homeowner to connect to a pressure system?**

Out of pocket costs for customers connecting to the sewer system will vary depending on circumstances. The grinder pump stations are available for purchase in a package, which may range from \$2,500 to over \$3,000 depending upon the specific circumstances and size of pumps. Total installation costs, including the grinder station, plumbing work, electrical work, and septic tank abandonment could vary from \$2,500 to \$7,000. If a common City operated and maintained force main is not located in front of the property, an extension will be required at the property owner's cost. If the cost of the extension in the right-of-way exceeds \$7,000, the City has a program that could help the

homeowners recover some of the cost over time. You may contact the City Utilities Engineering department for program details.

In addition, grinder pump stations have operation and maintenance costs. While the pumps require electricity to run, usage is typically in the range of 30 to 60 minutes per month. Typical yearly electrical costs may range from \$20.00 to \$30.00. Pumps wear out over time and will require repair or replacement. These costs will vary depending on the pump selected. Some people may choose to purchase an annual maintenance contract from a plumber or other authorized grinder pump system repair agency.

### **What will happen to my pump during power outages?**

One basic concern with pressure sewers in our area are the fact that pumps will not work in power outages such as may be experienced during and after a hurricane. Use of bath and kitchen facilities in these periods could result in sewage backups. As with any electrically powered device, the pump could be powered by an emergency generator if necessary.

The proposed grinder pump stations will have limited excess holding capacity to provide wastewater storage during most electrical power outages. Please keep in mind that when power outages are experienced, the average consumption of water significantly decreases.

### **How much power will the pump use?**

Monthly power consumption of a grinder pump station is substantially less than that of most other major appliances. This is comparable to the cost associated with the operation of a 100-watt light bulb or small refrigerator.

### **Are there things that I should avoid flushing in using my grinder pump system?**

There are certain items that should not be flushed through the grinder pump just like any other sewer system. They include grease, cooking oil of any kind, glass, metal including razor blades and needles, plastics such as toys and utensils, sanitary napkins and tampons, seafood shells, fish scales, diapers, rags, hair or cloths. Although some are advertised as "Flushable", cleaning cloths, wipes and heads from toilet cleaning wands should not be flushed. Do not flush beauty/hygiene cloths such as wipes and towelettes, medicated cloths and swabs. Any of these materials may cause the pump to stop working properly and repairs may not be covered under the manufacturer's warranty. Chemicals including explosives/flammable material, oil, strong chemicals including household chemicals and gasoline should never be flushed. Liquid clog removal chemicals may also damage your grinder pump and should be used carefully.

### **How will I know if there is a problem with my pump and who should I call?**

All pumps will be equipped with an audio and visual alarm. The alarm is part of a small panel, which is typically located on the side of the home in a place visible from the street.

A professional plumber should be contacted immediately if the alarm is activated. A list of known area plumbers is attached. This list should not be considered as a recommendation for any listed plumber by the City nor a complete listing of all plumbers suited for performing the work.

**What type of power will be required for the installation of the pump?** Most pump stations require a dedicated 20-amp electrical service. In certain cases, the service may need to be a higher amperage due to the pump motor horsepower requirements. The pump installation contractor will determine if your power supply is adequate.

### **Plumbers Licensed in the City**

The following is a list of licensed plumbers that are registered with the City of Panama City Beach as of **May 18, 2022**. This list is in no way comprehensive; rather, it is intended as a starting point for a homeowner to obtain price quotes for the installation of a private lift station. Other qualified and licensed plumbers/contractors are certainly encouraged to be contacted.

850 PLUMBING, INC	850-333-3014
A & L Plumbing Specialists LLC	786-252-6938
ABOVE ALL CONSTRUCTION AND REMODELING LLC	850-640-0404
AIR CONDITIONING AND HEATING 911, LLC	850-347-2087
AMERICANS BUILDING AMERICA LLC	850-640-8130
AND SERVICES	850-805-6455
Apex Air Conditioning & Refrigeration	407-660-9644
BAREFOOT PLUMBING, INC	850-899-4616
BCH Mechanical Inc.	727-541-5503
BEACH PLUMBING SERVICE INC	850-387-1400
BENEFIELD PLUMBING	850-271-3887
BENJAMIN FRANKLIN PLUMBING dba Rooter Man	850-565-5081
BLUE MOON PLUMBING	267-864-7962
BOWDEN PLUMBING & ELECTRICAL, INC	850-265-4945
BRIM CONSTRUCTION GROUP, INC	251-660-8374 x31

BROUSSARD PLUMBING, INC	228-875-5177
BRT HOME REPAIRS	850-250-7124
CASEY HYMAN PLUMBING INC	850-477-0388
Coastal Plumbing of Bay County 2, LLC	850-747-8030
D & S PLUMBING LLC	850-593-6010
D&M CONTRACTING, LLC	915-822-6989
Davis & Sons Plumbing	850-956-4329
Elite Mechanical Systems, LLC.	850-332-5123
EMERALD BAY PLUMBING INC	850-837-1979
Emerald Coast Baths Inc DBA Rebath	850-588-8466
Envision It Remodeling	850-596-2193
FOY'S PLUMBING , LLC	850-265-6100
FRANK WOOD & SON PLUMBING	850-234-2168
FRESH FLOW LLC	850-630-0084
Gibson Plumbing Inc	813-239-7732
Gordon Andrews Construction LLC	850-271-5302
GULF COAST PLUMBING, INC	850-481-8545
Gulfside Plumbing, Inc	850-697-8213
H E S SERVICES, LLC	386-215-4647
HOBBS PLUMBING, INC	850-763-2001
HOLIDAY BEACH MECHANICAL, INC	850-249-1680
Hometown Contractors	850-995-9947
INTEGRITY PLUMBING LLC	850-836-2212
JCV PLUMBING, INC	205-285-4358

JIMMY LUMLEY PLUMBING INC	850-769-2681
JL&G PLUMBING	850-819-7271
J'S PRECISION PLUMBING	850-237-1314
Keith Lawson Services, LLC	850-562-2600
MCCULLOUGH AND SONS INC	850-327-6064
METROPOWER, INC	850-769-8099
MK COASTAL RENOVATIONS, LLC	850-387-6678
MUTH & SONS PLUMBING INC	850-763-2395
PEADEN	850-872-1004
Plumb Better	850-914-3036
PLUMBING SYSTEMS INC	850-625-4247
PLUMBMAZING PLUMBING SERVICES, INC	229-227-5828
PREAUX PLUMBING, INC	255-685-7919
PRECISION PLUMBING OF NW FL, LLC	850-630-1610
R&E Plumbing Services, Corp	786-587-3269
RANDALL D. PADGETT PLUMBING, LLC	850-784-9800
Royal Flush Plumbing of the Florida Panhandle, Inc	850-236-5852
SCOTT'S PLUMBING	850-527-9304
SD CHURCH & SONS	850-269-2002
SHEP'S PLUMBING CO., INC.	863-294-1739
SOLID ROCK PLUMBING, LLC	850-763-7625
SOUTHERN CONSTRUCTION SERVICE, INC.	850-832-5302
Sunrise Contractors of Florida LLC	850-640-7412
System Service & Engineering	850-441-3458



The Green Air Group	850-608-3065
The Sunshine Plumber	850-512-8957
THOMPSON PLUMBING & GAS, LLC	850-951-1055
TRI STATE PLUMBING INC	850-249-8720
Triple J Plumbing LLC	850-303-5483
VAN WORZ PLUMBING, INC	904-687-7702
Vito Works, LLC	850-258-6807
W & W PLUMBING	850-232-6952
WEST END PLUMBING CONTRACTORS INC	850-258-6717
WHITES PLUMBING, LLC	850-576-3510
WORTHMANN	850-919-5124