## PRECAST CONCRETE PIPE



# PROTECTING THE GROUNDWATER

Concrete pipe is instrumental in conveying sanitary wastewater and stormwater while preserving the surrounding groundwater quality. Concrete pipe is available in a huge variety of shapes and sizes, and its modularity means it can meet the needs of any sanitary wastewater or stormwater project. With its long history of proven performance, precast concrete is the material of choice for piping projects.

## precast makes it possible







### PRECAST CONCRETE PIPE

#### STRENGTH

The strength of concrete increases with time. Other materials can deteriorate, experience creep and stress relaxation, lose strength and/or deflect over time. The load-carrying capacity of concrete is derived from its own structural qualities and does not rely on the strength or quality of the surrounding backfill material.

#### QUALITY

Concrete pipe is produced in a plant-controlled environment using repeatable processes. The design and manufacture of concrete pipe is covered by many ASTM International Standards to help ensure quality.

#### **DURABILITY**

Studies have shown that precast concrete products, such as concrete pipe, can provide a service life in excess of 100 years. For severe service conditions, additional design options are available that can extend the life of the concrete product. This is important when calculating life-cycle costs for a project.

#### WATERTIGHT

Concrete products manufactured in a quality-controlled environment are watertight. Standard watertight gaskets and sealants are formulated to adhere to concrete, making multiple-seam waterproof structures possible.

#### **Ease of Installation**

Because concrete pipe is manufactured well in advance, it is ready for transportation to the job site at a moment's notice. Concrete pipe is quickly installed using an excavator and a small crew.

#### RESISTANT

With a specific gravity of 2.40 and superior frictional resistance, concrete pipe resists the buoyant forces associated with underground construction better than all other pipe materials. Also, concrete is resistant to most substances. Concrete pipe can be designed to withstand anticipated corrosive agents.

#### **N**ONCOMBUSTIBLE

Concrete pipe is noncombustible and maintains its structural integrity in the face of high temperatures.

#### **M**ODULARITY

Because of the modular nature of concrete pipe, piping systems of nearly any size can be accommodated. Concrete pipe is designed and manufactured for simple connection to reduce installation time.

#### READILY AVAILABLE

With hundreds of manufacturers throughout North America, concrete pipe can be ordered from most cities and regions. Concrete pipe is produced in advance and readily available when needed at the job site. This ensures a competitive market and a ready supply.

#### **ENVIRONMENTALLY FRIENDLY**

Besides water, concrete is the most frequently used material on earth. It is nontoxic, environmentally safe and composed of natural materials, so groundwater quality is not affected after installation.

## **precast** makes it possible

