



## The Snap-Tite® Hydro-Bell Culvert Inlet Device

The Hydro-Bell inlet device uses newer materials to capitalize on the effects of culvert fluid dynamics. Through this design, it is now possible to maximize the hydraulic efficiency (and/or reduce head loss) of a relined culvert.

## **Advantages of the Hydro-Bell:**

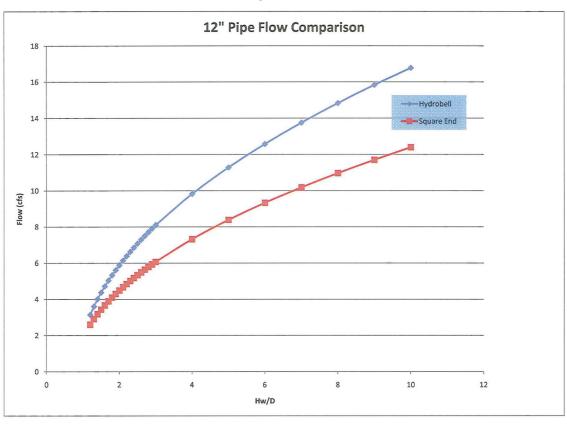
- An average flow increase of 30% compared to plain-end headwalls under inlet control conditions
- As head pressure increases, the Snap-Tite® Hydro-Bell system flow rate increases, refer to Chart 2
  on reverse side
- Available in High-Density Polyethylene (HDPE) and Fiberglass Reinforced Plastic (FRP)
- Third-party tested to prove performance results
- Connects onto the inlet end of the Snap-Tite culvert liner
- No special training or tools required to install
- Available in all Snap-Tite® liner sizes 8" through 63"
- FRP Hydro-Bells are lightweight and UV protected
- FRP Hydro-Bells are constructed using a fire retardant and corrosion resistant vinyl ester resin.
- Hydro-Bell makes Snap-Tite® the ideal hydraulic option to line failing culverts
- Inlet Control Constants and Entrance Loss Coefficients can be found in chapter 3 of the Snap-Tite
   Design Manual along with other useful hydraulic information







**CHART 1** 



Flow projections based on numerical head discharge constants as developed from independent testing conducted by Utah State University.

**CHART 2** 



Flow improvement based on headwater height above Hydro-Bell as compared to plain-end pipe.