



Fig. 3.54

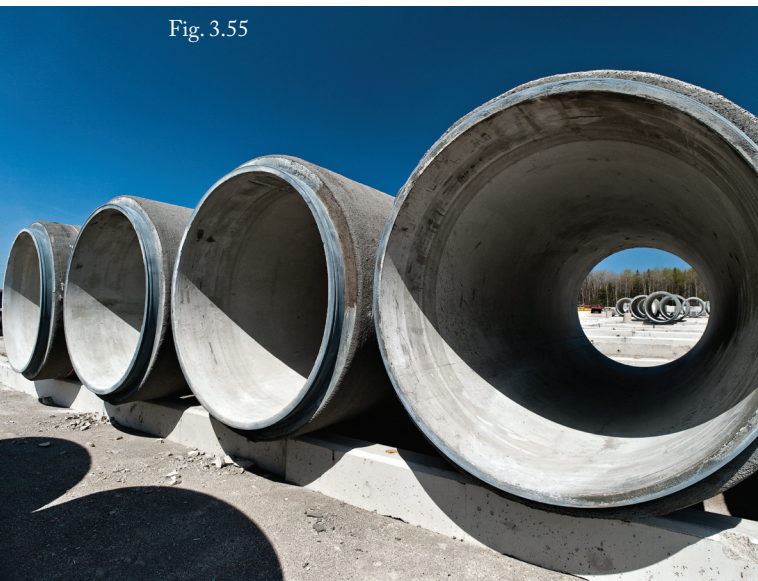


Fig. 3.55



Fig. 3.56



Fig. 3.57



Fig. 3.58

Pipe Top Sustainability Benefits

The American Concrete Pressure Pipe Association and their member company, Hanson Pressure Pipe, contributed content for the top ten via the company's sustainability Web site. All other material in this chapter is contributed by the American Concrete Pipe Association (ACPA).

- Full recycling of all pipe materials (concrete and steel) at the end of the service life (which often exceeds 100 years).
- Inherent strength of the pipe does not require special backfill material (native soil can be used rather than importing material).
- Minimizes surrounding contamination; less likely to leak than other pipe materials.
- Locally manufactured.
- Does not release chemicals into the surroundings.
- Energy conservation through long service life, lower energy footprint.
- Resilient: particularly against terrorist attacks and natural disasters such as fires, hurricanes, tornadoes, and floods.
- Materials efficiency: can use regional and recycled materials.

Resources

ACPA and ACPPA member, Hanson Pressure Pipe, sustainability site:

www.hansonpressurepipe.com

“Evaluation of HDPE Pipelines Structural Performance”
<http://www.uta.edu/ce/aareports2.php>

The Economic Costs of Culvert Failures
 by Joseph Perrin Jr. and Chintan S. Jhaveri
 Prepared for the Transportation Research Board,
 January 2004



Bell (groove)—The portion of the end of a pipe that overlaps a portion of the end of an adjoining pipe to form a connection.

Box culvert—A reinforced concrete pipe with a rectangular cross section. A culvert is a pipeline intended to convey water under a highway, road, slab, railroad, or other similar facility.

Infiltration—The flow that enters a pipeline through its connections, joints, and appurtenances, with the

flow coming from sources outside of the sewer system. One of these outside sources is groundwater (typically in reference to sanitary sewer pipe).

Joint—A connection of two pipeline components, usually pipes, manholes, or box section ends, to continue the flow. Joints can be made by several methods and materials.

Storm sewer—A pipeline that is intended to collect and convey storm water.