

Preface

Sewer Main Pipe Collection System Pipe Joint Infiltration Research Conducted by the University of Houston Department of Civil and Environmental Engineering

The sewer-main pipe industry and University of Houston completed the pipe joint infiltration research project in 2003 to measure the water infiltration rate of 30-inch pipe joints at a minimum hydrostatic head of 15 feet (i.e., 7 psi) under axial, shear loaded and angularly deflected conditions. The project was funded by participating industry members and the Environmental Protection Agency Office of Wastewater through a grant to, and administered by, the Fiberglass Tank & Pipe Institute. Invitations to participate in the project were extended to all large diameter (i. e., 30-inch and larger) sewer-main pipe manufacturers. Below is a list of the pipe manufacturing trade organizations that participated in the research project. The research project determined that the pipe joints submitted for leak testing under a 15 foot hydrostatic head did not leak under axial, shear load and deflection conditions:

- American Concrete Pipe Association
- Fiberglass Tank & Pipe Institute
- National Clay Pipe Institute
- Uni-Bell PVC Pipe Association

A research project Steering Committee was formed to:

- a. Meet semi-annually at the Houston, Texas University of Houston (UH) testing laboratory for on-site updates on research project status.
- b. Provide overall UH research project guidance.
- c. Review and develop consensus approval of:
 - the infiltration test protocols developed by UH for pipe joint testing.
 - UH project reports before releasing the final reports.

The following list of Steering Committee members provided a balance of manufacturers and non-manufacturers (users, installers, governmental & technical representatives):

Organizations

Pate Engineers (Design Engineers)
City of Conroe, Texas
City of Houston, Texas
City of Victoria, Texas
City of Montgomery, Alabama
Parsons Brinckerhoff (Design Engineers)
Black & Veatch (ASCE Representative)
Laughlin-Thyssen, Inc. (Contractor)
University of Houston
US EPA Office of Wastewater
American Concrete Pipe Association
Hobas Pipe USA
National Clay Pipe Institute
Uni-Bell PVC Pipe Association
Fiberglass Tank & Pipe Institute

Representatives

J. E. Pate (Chair)
Brent Sherrod (Vice Chair)
Henry N. Gregory
Ken E. Gill
Danny Holmberg
Richard Thomasson
Rick Nelson
Clifford L. Tubbs
Dr. C. Vipulanandan
Charles P. Vanderlyn
Matthew S. Childs
Richard C. Turkopp
Ed Sikora
Shah Rahman
Sullivan D. Curran (staff)
Thomas M. Spencer (staff)