Case Study Category: CADW

Case Study Title: Inspection of a Large Diameter Welded Steel and Prestressed Concrete Pipe with Visual Inspection, Probing, and Sounding by Aurora Water, Colorado

Utility Name: Aurora Water

Case Study Abstract: This case study is about the process and findings of inspections of a 66-inch diameter pipeline located in Aurora, Colorado, constructed in the 1960’s. This pipeline consists of both lined welded steel pipe and prestressed concrete pipe with an external coating. The inspections were conducted in 2006 and 2007. The 2006 inspection consisted of visual inspection of the pipe lining, joint rings, and concrete core; probing of the lining and joint rings with tools; and sounding of the prestressed concrete pipe with a ball-peen hammer. The 2007 inspection focused on the welded steel pipe and consisted of visual inspection, probing, lining thickness measurements, and ultrasonic wall thickness measurements. Recommendations for rehabilitation and Aurora Water’s resulting decisions are discussed.

Case Study Link: http://waterid.org/content/inspection-large-diameter-welded-steel-and-prestressed-concrete-pipe-visual-inspection-probi