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PRIVATE SEWER LATERAL REHABILITATION: THE NEXT FRONTIER

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ABSTRACT: In 2005, ASCE published their fifth report on the state of America's public works infrastructure. As part of this report, the wastewater infrastructure was assigned a grade of D-, the lowest grade assigned to any other public works component. Since the early 1970s, more and more money and resources are being spent each year on renewing and upgrading sanitary sewers. The results, for the most part, have been disappointing. Expectations and program goals such as reduced occurrences of wet-weather overflows and sewer backups have not been achieved. Beginning in the late 1980s, cities and municipalities started to attack the private-sector portion of the wastewater system, including illicit I/I connections such as downspouts, sump pumps, and other direct inflow sources. It appears, now, that the next frontier to conquer is the elusive, underground world of private service laterals.

This paper will discuss chronic problems typically encountered with service lateral inspection and renewal including: (a) excessive I/I, (b) structural deterioration, (c) chronic maintenance problems, and (d) inaccessibility. These challenges are, perhaps even greater to overcome than the publicly owned sewer system because of its accessibility. Accessibility is generally limited to an occasional cleanout in the basement or along the alignment of the service to the main. Because of these limitations, cities have not taken as aggressive a role in evaluating the condition of the service lateral and, consequently, the lateral has become "orphaned". Data presented will put perspective on the issue of lateral sewer trenchless renewal strategies by addressing the issues of: inspection challenges, responsibilities and legal issues, and long-term O&M. The paper will also answer several pressing questions and provide additional resources in an effort to make intelligent and sensible decisions for those who have responsible stewardship of the municipal sewer system enterprise.