CUSTOMER SITUATION:
Baltimore, Maryland, was facing a serious problem when sinkholes began developing above the city’s primary wastewater collection line. When a municipal vehicle fell victim to one of these cave-ins, the city moved to assess the condition of their aging 102-inch ID, pre-stressed concrete pipe. An ultrasound scan of the pipe’s interior revealed that, as a result of years of gas accumulation, the top lining of the concrete pipe had decomposed, causing debris to collect at the bottom of the line. This deterioration would only worsen, resulting in a loss of sewage service for a major portion of the city. Something had to be done to gain access to the damaged sections for refurbishment, without shutting down the wastewater line during repairs.

TDW SOLUTION:
To stem the tide of decomposition, city engineers planned to insert liners into two of the most deteriorated sections of pipe. Doing so would require diverting the wastewater through bypasses so as not to compromise service to the city. TDW technicians performed 60-inch hot taps, providing access to the line so divers could remove the collected debris. This was critical to help ensure that subsequent 102-inch folding head plugging operations would successfully seal the line. Once the plugging heads were in place and the wastewater was diverted through bypasses, the liners were inserted as planned. With removal of the plugging heads and reactivation of the repaired sections, TDW officially entered the record books for completing the world’s largest plugging operations.

CUSTOMER BENEFIT:
Despite the logistical complexities of tapping and plugging such a large diameter pipe, Baltimore experienced no interruption in wastewater collection. That’s no small feat, considering the demands placed on both TDW personnel and equipment by the scale of the project. TDW engineers and technicians rose to the challenge, combining their skills and experience into a successful and record-breaking effort. Along the way, they proved that — regardless of size — TDW is the worldwide leader in hot tapping, plugging and bypass operations.