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CITY OF CALGARY – DECISION TO APPLY PIPE BURSTING FOR CHALLENGING SEWER AND STORM DRAIN REPLACEMENT

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ABSTRACT: Calgary, Alberta, Canada's Oil Capitol becomes a city in 1894 and has since grown into one of the most important business center in Canada. As city prospers, it attracts workforce from neighboring provinces and also from other countries. This influx of people has contributed to the continued growth of the local economy to what it is today, considered as the richest province in Canada. As city grows, more homes, industries and commercial buildings were built to cater to the ever increasing population and business demands which in turn require the installation of water distribution mains, sanitary sewers, gas pipeline as well as other necessary underground infrastructure. Many of these buried utilities are now aging and are in need of rehabilitation, repair and or replacement.

Traditional open cut replacement methods for underground pipeline rehabilitation and replacement is no longer the only choice for this city of a million people these days. If employed, these conventional open trenching methods will certainly lead to road closures, long traffic delays, frustrating detours, loss of access to homes and businesses, unsightliness, noise, and disruption to the general public. Such constraints have encouraged the City of Calgary to consider the applications of trenchless technologies to address its underground infrastructure improvement needs. This paper shall discuss the current state of the City's sewers, the improvement program in place to meet the continuous demand of a very rapidly growing population and economy; the application of pipe bursting techniques that successfully replaced sewers in challenging residential and in public places. This paper shall further highlight the efficiency, cost effectiveness, social impact (or lack of) of using the pipe bursting process, its limitations, lessons learnt and steps taken to ensure future applications of this trenchless pipe line replacement process will serve the public even better.