Case Study - Grouting Abandoned Utilities

Anderson Road and Macleod Trail SW Calgary, Alberta, Canada

Problem: A one-meter diameter water main was abandoned beneath a new overpass. In order to prevent future subsidence and limit contaminant migration in the event of a spill, the designers required intermittent sections of the abandoned pipe to be filled with grout. Some sections were inaccessible from above and could only be accessed by traveling through hundreds of meters of the pipe leading to the sections to be grouted. Ordinary grout would require numerous heavy duty bulkheads to resist the high pressure. These bulkheads would be expensive to fabricate and install.

Solution: CEMATRIX CMG-500 grout was used to easily and reliably fill the abandoned water main. Easy to install, light gauge steel bulkheads were placed at either end of the pipe sections to contain the cellular material.

Advantages: The main advantage of using CMG-500 grout in this situation is the ease of placement. CEMATRIX CMG-500 contains fine air bubbles which act like ball bearings during placing. This results in extreme flowability; therefore, CMG-500 can be pumped several hundred meters along a pipe under very low pressure. In this way, complete filling of the void can be assured.









