Stirling Trunk Main Duplication

Segment of Stirling Trunk Main Duplicated to Meet Increased Capacity Demand

Project Need

In August 2011, Water Corporation of Western Auastralia announced the expansion of the Southern Seawater Desalination Plant capacity from 50GL per annum to 100GL per annum, which would drought-proof Perth and other communities reliant on the Integrated Water Supply Scheme (IWSS) that feeds all of Perth. Due to the increase in capacity, a section of Stirling Trunk Main (pipeline connecting the Harvey Dam to the Ravenswood pumping station) needed to be duplicated to meet the upgraded desalination plant's demands. The Principal made Steel Mains an unequivocal request for the urgent manufacture of pipes for the Stirling Trunk Main Duplication Project (Phase-2) to meet the urgent increase in capacity of the desalination plant.

Project: Stirling Trunk Main Duplication

Principal: Water Corporation

Location: 145km South of Perth

Completion: 2012

Supplied: 27km of MSCL SINTAKOTE® DN1400 x 11mm WT; RRJ & SSJ

Solution

Steel Mains worked in collaboration with Water Corporation and DM Civil to deliver the "Stirling Trunk Main Duplication Project" on time and on budget. Careful planning and consultation work were carried out with all key stockholders involved to ensure pipes were available and delivered to site as required for project completion and commissioned on time prior to the desalination plant upgrade. This was imperative to facilitate the commencement of the desalination plant's operation without any interruptions.

Based on the project's requirements, Steel Mains efficiently ramped up its Kwinana manufacturing facility's production capability, in response to the urgent delivery timeframe, without compromising safety or quality, thereby making this project a great success.

Achievements

Steel Mains manufactured approximately 2,200 lengths of DN 1400 pipes for the project. Through utilisation of both our SINTAJOINT® elastomeric rubber ring joints (RRJ) and Welded Spherical Slip In Joint (SSJ) innovative pipe jointing technologies, the project contractor was able to reap the benefits of a reduced construction duration. SINTAJOINT removes the need for on-site welding and any internal and external corrosion protection reinstatement of the joint after assembly, thereby improving safety during installation. Steel Mains provided further cost savings to the Principal in terms of logistics by supplying all pipes from its Kwinana Western Australia manufacturing facility. Successful completion of the Stirling Trunk Mains Duplication project is one of the many projects that continues to bolster Steel Mains' rich longstanding experience thereby helping to achieve a drought-proof Perth.