2005 Excellence in Construction Award

Public Construction

Frank Imhof

Marysville WWTP Upgrade & Expansion – Phase II

Owner: City of Marysville
Architect/Engineer: Tetra Tech/KCM
ABC Member Firms:
Andgar Corporation
General Storefronts Inc.
Wilder Construction Company

By continually striving to find a better way to build, crews from IMCO General Construction made construction of Phase II of the Marysville Wastewater Treatment Upgrade and Expansion more efficient and cost-effective.

The upgrade—the goal of which was to bring the treatment plant effluent quality up to Department of Ecology requirements—included installation of 153 concrete piles, placement of eight additional sand filters, construction of an ultraviolet disinfection system, the retrofit of an existing concrete tank and a number of additional jobs.

The treatment plant site, located adjacent to the Ebey Slough and surrounded by 20 acres of treatment lagoons, offered very little room for material lay down and equipment storage. The 140-foot lengths of concrete pile specified by the engineer would be difficult to store as well as transport to the site. To solve the problem, IMCO worked with Tetra Tech—the engineer—to split the pile into two sections. A $500 steel splice changed everything; the shorter units were easier to transport to the jobsite, could more easily stored onsite, allowed crews to use a smaller crane to lift them, and created safer working conditions.

IMCO further simplified construction and saved considerable time and money as crews were preparing to build the shoring for excavation for the sand

filters. Geotechnical reports indicated that the ground was extremely saturated and unstable, requiring stout and complicated shoring to support construction of a sheet pile cell. IMCO crews found a photograph taken in 1994 of the excavation for the existing sand filters, showing an open cut excavation with soils that appeared stable. With the blessing of the geotechnical engineer, IMCO performed a successful open cut excavation, resulting in significant timesavings and safer work access.