

HONORABLE MENTION

# SOUTH WASTEWATER TREATMENT PLANT

Gulf Coast Underground - Shotcrete Contractor

## SOUTH WASTEWATER TREATMENT PLANT INFLUENT VAULT REHABILITATION - BATON ROUGE, LA

On this project, we rehabilitated two influent vaults at the South Wastewater Treatment Plant in Baton Rouge, LA. The project required a significant bypass effort to keep the 60 MGD flow out of the structures so work could proceed. Needless to say, time was of the essence. Vault #2 and Vault #3 required a 40,000 psi hydroblasting and full removal and replacement of the outer mat of resteel. Following the replacement of the rebar (#6 bar @ 6" O.C.), the reinforcing was properly encased by a certified shotcrete nozzleman (dry mix), and adequate cover and structural integrity were restored. In total, over 2,000 SF of the surface was prepared, restored, and ultimately an inert coating was applied over the finished product to ensure protection from the harsh sewer gases. The bypass costs on this project were a significant driving factor in the decisions being made by the Owner/Engineer. Since the work couldn't be performed under live sewer flow, all flow coming into the plant had to be diverted to the headworks structure. As a result, shotcrete provided an excellent solution for repair as it was determined to reduce construction time by nearly 50% as compared to form and pour for this application. Furthermore, since the wall structures were compromised in these below-ground vaults, shoring braces were required to safely work inside the space. The presence of said shoring would have likely made for constructability concerns for form and pour. Proper replacement and encasement of the steel were vital to the project's success.

