

CASE STUDY REHABILITATION | SLIPLINING



-  **Project Name:**
3rd Street Sewer Interceptor
Rehabilitation Project Phase 2
-  **Subcontractor:**
Mladen Buntich Construction Company
-  **Location:**
Oakland, CA
-  **Owner:**
East Bay Municipal Utility District

-  **Akkerman Equipment:**
SLS 100 Modular Jacking Frame and
Diesel Power Pack
-  **Pipe:**
96-in. Hobas®
-  **Total Length/Longest:**
4,400-lf./2,520-lf.

PROJECT OVERVIEW

The South Interceptor Sewer was a 105-in. arch shaped reinforced concrete pipe sewer, originally constructed in the 1950s. It services a 10-mile stretch in the East San Francisco Bay area in Oakland, CA and connects to the Wood Street Wastewater Treatment Plant.

By the early 2000s, signs of deterioration and population growth caused flows at up to 50% full on a consistent basis and 100% full during high flows causing backups. In 2003, EBMUD’s attempts to reline portions of the sewer using PVC sheets were time consuming, and required service interruptions for manned entry.

THE CHALLENGES

- Capacity preservation was critical
- Construction to take place in live sewer flows
- Heavy weight large diameter pipeline
- Weight on longest 2,520-ft. single push of 96-in. GRP pipe
- CIPP and manned entry methods deemed risky, time consuming, impractical, and cost prohibitive
- Active railroad crossed over pipeline

THE SOLUTION

Based on the pipeline’s weight, location of the access shafts, and flows, the engineer and owner required the contractor to use Akkerman’s specialized sliplining system with synchronized hydraulic chain driven motors. The all-in-one sliplining system with modular frame and power container allowed for rehabilitation of the pipeline without the need for bypass pumping and a reduction in the number of access shafts.

OUTCOME

- Successful revitalization of a heavily corroded 60-year old sewer
- No service interruptions
- Expedient installation, completed 3 months ahead of schedule
- One 2,520-lf. was noted as a 96-in. centrifugally cast GRP pipe record

