

# Venice Dual Force Main Sewer

## High-Profile Micro-Tunnel at Venice Beach

To supplement its deteriorating 60-year-old sewer line, the City of Los Angeles Department of Public Works commissioned a 54-inch diameter force main sewer to run in parallel with the older sewer line.

To keep the surface disruption to a minimum in a densely populated, environmentally sensitive beach community, the plan called for more than 90% of the pipeline to be constructed through micro-tunneling.

- The total pipeline spans more than 10,000 linear feet and travels under Marina Del Ray, 15 to 30 feet below the sea floor
- A critical section of the pipeline is comprised of 1,710 linear feet of 72" diameter Class V precast concrete jacking pipe.
- The jacking pipe acts as a casing pipe for the 54" pressurized force main.

The project required close collaboration on joint design between Geneva Pipe and Precast and Hamilton Kent. The gasket played a critical role in meeting the specification for a joint that would pass a 50-psi pressure requirement.

The final joint design consisted of a confined O-Ring gasket combined with a steel bell band, which disperses much of the jacking force around the pipe. The concrete jacking pipe and high-pressure gasket ensured a trouble-free design and contributed to a successful project that will protect the environment for decades to come.

