International Boundary and Water Commission
United States and Mexico
United States Section
4191 N. Mesa, El Paso, TX 79902

Nogales Trunkline & IOI Rehabilitation Phases 4-5

Contract Number:	191BWC22C0006
Contractor:	SAK Construction, LLC
Notice to Proceed (NTP):	October 24, 2022
Required Completion:	February 10, 2025
Contract Price:	$15,305,075.00

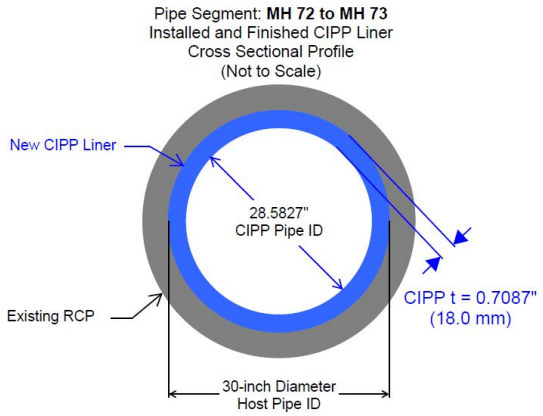
The existing sewer pipeline, consisting of the Trunkline and the IOI, was built in 1971 and is comprised of reinforced and unreinforced concrete pipe that ranges in size between 24 inches and 42 inches in diameter. Since then, the pipe and manholes have deteriorated significantly requiring rehabilitation for continued serviceability.

Due to the estimated cost of the project, the project was broken into 5 phases and prioritized based on the pipeline condition. This contract included rehabilitation of Phases 4 and 5.

Phase 4	*from Manhole 52 to Manhole 66*	8,065 ft
Phase 5	*from Manhole 67* to Manhole 84*	9,944 ft

*note that, Phase 5 begins at Manhole 67, but due to bypass operations will be encompassed during Phase 4 work

Construction of this contract will begin with Phase 5 and finish with Phase 4. In both phases of work the pipe diameter is 30 inches. There are a total of 36 manholes to be rehabilitated under this contract, and all of which will be epoxy coated. MH 60 and MH 79 were initially to be rehabilitated with a carbon fiber structural treatment, however based on existing field conditions they were found to be structurally stronger than originally examined and will be treated with an epoxy coating.



Sample of CIPP Cross Sections planned

CAST-IN-PLACE PIPING (CIPP)

- Rehab of 18,009 LF (3.41 Miles) of piping
- Trenchless technology with little or no disruption to the existing ground conditions
- A resin filled polyester felt tube, or liner, is inserted and inverted into an existing pipe
- The liner is inflated and thermally cured-in-place using hot water

MANHOLE REHABILITATION

- Rehab of 36 manholes
- All manholes planned rehabilitation with a protective epoxy lining system

Contractor began fusing HDPE pipe for the IOI bypass in August 2023. Once the bypass is in place, CIPP construction will begin in late October 2023. Phase 5 bypass begins at MH70 along Old Tucson Rd and terminates at MH87 along Old Tucson Rd just north of South River Road. CIPP lining of Phase 5 is expected to be complete tentatively late December 2023, with bypass teardown immediately after. Bypass construction for Phase 4 will follow soon after in early 2024. Complete rehabilitation of both phases is expected by Summer 2024. The Construction Contractor is providing 24 hour public notices

to any parties that may be impacted by the sewer bypass, however interruptions are expected to be minimal.

The CIPP curing process involves the use of steam and agents such as styrene. The public should be aware of the potential for a strong chemical smell during the steam curing process in nearby areas. To help mitigate the potential styrene smell, homeowners/businesses can run water through all indoor drains, particularly drains that are not used often, to fill P-traps that will create a barrier preventing the odor from entering a home or business. The Construction Contractor actively monitors safety hazards and has procedures in place to monitor the controlled perimeter of work.

See project flyers on the International Trunkline/IOI at www.ibwc.gov/resources-info/IOI.pdf for additional information and background about the whole project and on Phases 1 through 3 at www.ibwc.gov/resources-info/IOI1-3.pdf.