



International Boundary & Water Commission United States Section

IOI Rehabilitation Update
August 24, 2022

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IOI Rehabilitation Phasing

Phases 1-3

- Rehab of 5.3 Miles of pipe and 56 manholes
 - Construction Award: 7/13/21
 - Construction Completion Required: 10/29/23
 - Contractor: SAK Construction
 - Cost: \$14.5 Million
 - Mobilization and Construction Start: 4/25/22
 - Phase 1 Rehab Completed: 8/19/22
 - Approximately 33% complete

Phases 4-5

- Rehab of 3.4 Miles of pipe and 38 manholes
 - Expected Construction Award Date: 9/30/22
 - Construction Duration: 660 calendar days or 22 months
 - Anticipated Construction Completion: Summer 2024

Phase 1 Progress

- Built and installed 10,400' overall bypass piping for Phase 1
 - 27,500' of total fused HDPE pipe
 - 5 Primary 12" pumps and 3 Standby 12" pumps
 - 1 pipe crossing under UPRR tracks
- Phase 1 bypass operation started 6/6/22
- Temporary bypass shutdown 8/13/22-8/16/22 due to increased flows from storms
- Shutdown 8/19/22
- Tear down and removal of bypass started 8/22/22
- IOI cleaning completed 7/15/22



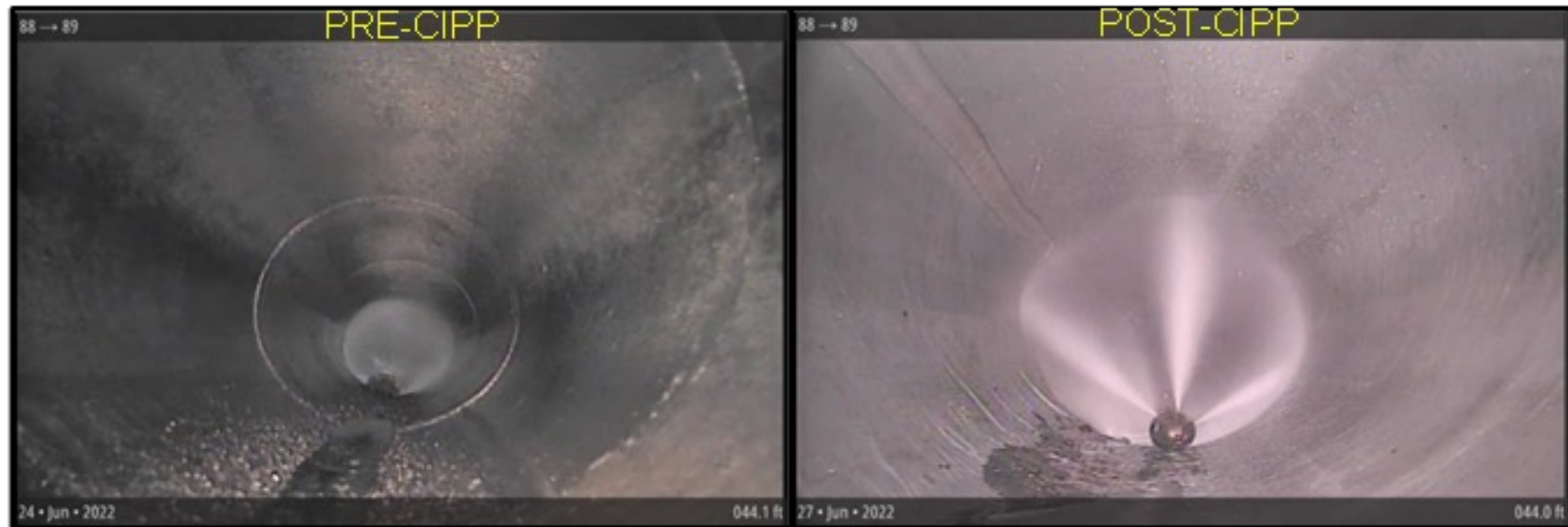
Sewer bypass HDPE pipe and pumps



Debris removed from IOI

Phase 1 IOI Rehabilitation

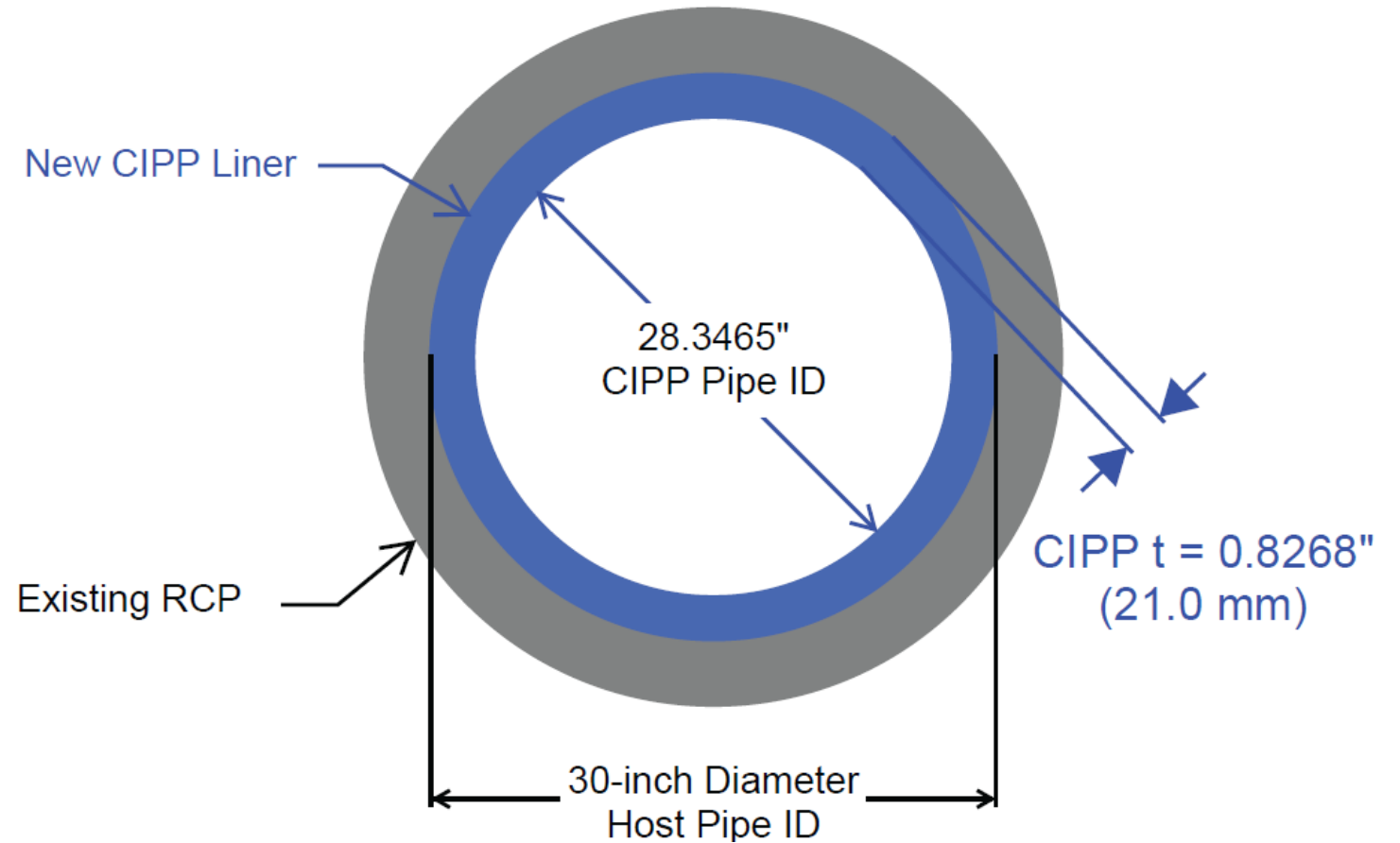
- CIPP completed 7/27/22
 - Total 8,556 LF pipe - 30", 36" & 42" diameter
 - 7 shots/installations
 - Longest installation – 1,910LF over 3 sections
 - Final internal diameters range from 28.3" to 40.3"
- Manhole rehabilitation completed 8/19/22
 - 16 Manholes - 4', 5' & 6' diameter



Pre-CIPP and Post-CIPP Photo between MH88 and MH89 at approx. 44 ft

CIPP Lining

Pipe Segment: **MH 92 to MH 93**
Installed and Finished CIPP Liner
Cross Sectional Profile
(Not to Scale)



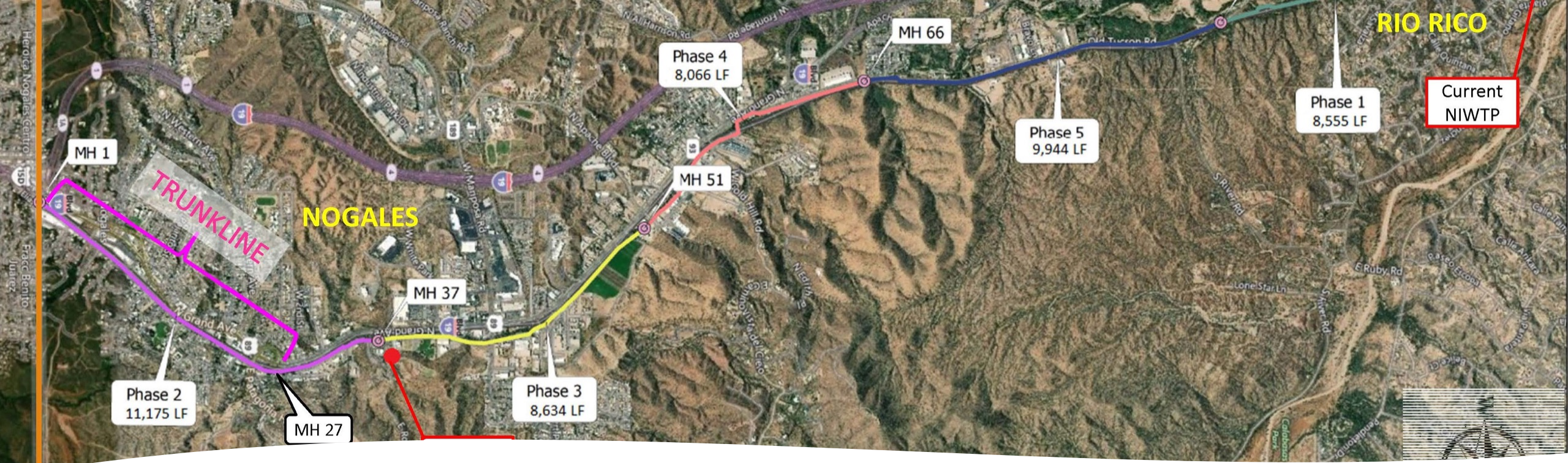
MH Rehabilitation Photos



Spark Testing of MH99



Top Coating of MH87



Rehabilitation Phases 2&3 Progress

- Phase 3 estimated to start mid September 2022
 - Bypass plan completed
 - Bypass setup to begin once Traffic Control Plan is approved
- Phase 2 to start January 2023
 - Bypass plan completed
 - Traffic Control planning

CON Construction Requirements In Progress



Bypass Plan Approval

City of Nogales (CON) approval of bypass piping plan for Phase 2 granted 2/23/22

City of Nogales (CON) approval of bypass piping plan for Phase 3 granted 8/12/22

Pending as-built information for utilities at Public Works Bldg Parking & Park St with Morley/Robins intersection



Traffic Control Approval

Traffic Control Plan for Phase 3 Bypass Setup submitted to CON for review on 8/17/22

SAK to submit Phase 3 Construction and Phase 2 plans to CON for review in September/October



Conditional Use Permit

Required due to fuel tanks within CON Limits

Submitted on 7/28/22, pending approval

Construction Requirements In Progress

UPRR Permit - Contractor Right of Entry (ROE) Status

- Contractor ROE for CIPP Rehab and Manhole Rehab completed
- Permit approved for bypass piping crossing under tracks on 5/4/22 after 7 months
 - ADEQ assisted with expediting reviews from UPRR

Temporary Construction Easements Status

- Phases 1 & 3 have 11 easements within private properties shown
 - 10 easements finalized
 - 1 property has recently been purchased by new owner, working to have easement signed by new owner

Trunkline Flow Metering

- Existing flow meter at Manhole 5 that monitors Mexican flows requires removal during Phase 2 rehabilitation
- Metering to be provided through bypass system to ensure flow metering continues
- Discussion with City of Nogales pending for agreement on temporary method for monitoring Mexican flows during Phase 2 bypass/rehab

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- **Questions?**