

# IPR Industrial Services: A Tale of Two Transitions

## CIPP Introduction

CIPP is the pinnacle of trenchless repairs and is considered the most cost-effective rehabilitation process. CIPP stands for "Cure-In-Place Pipe" and is a resin-saturated felt tube that is inverted into a damaged pipe. IPR creates its CIPP liners within the designated four wetout facilities throughout the nation. Once the pipe is inserted within the old pipe, it is cured through steam or hot water. After the curing process, technicians cut laterals and open up the ends of the new pipe to reinstate flow. Compared to older methods of pipe rehabilitation, CIPP reduces construction footprint, is cost-effective and guarantees a 50-year pipe lifespan.

Recently, IPR Industrial Services ran across two situations where they were faced with this challenge.

## Two Projects, One Solution

IPR Industrial Services was assigned two completely different cases of the pipe diameter fluctuations but only used one CIPP solution.

### Amtrak Maintenance Facility - Beech Grove, Indiana

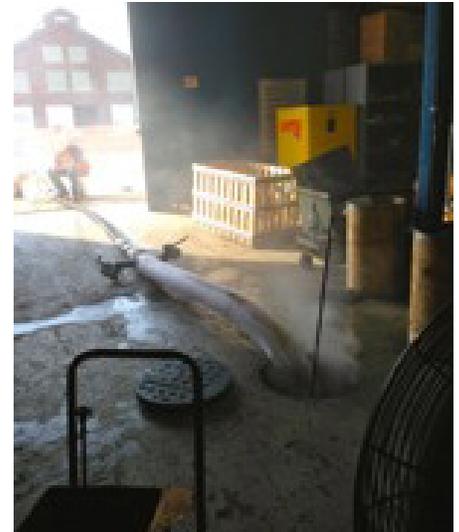
IPR Industrial Services became part of a significant industrial sewer CIPP relining project at Indiana's historical locomotive and rail car facility. A CCTV camera inspection revealed pipe sections with major deterioration. The pipeline ran beneath the railway and needed to transition from an 8-inch to a 6-inch diameter size. After making the proper measurements for length and diameter, IPR manufactured a special liner for installation. As a result, the total length of the pipe section was 88 linear foot. The rehabilitated pipe sections totaled to 59 linear foot of the new 8-inch diameter liner and transitioned down to 6-inch diameter for the last 29 linear foot of pipeline.

IPR Industrial Services successfully rehabilitated the pipeline throughout the Amtrak's daily process with no disruption in scheduling. A post-installation inspection revealed a smooth transition from one diameter size to another.

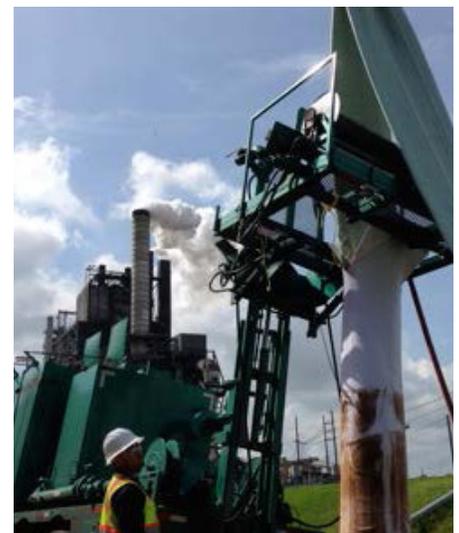
### Department of Public Works - Los Angeles County, California

A 90 linear foot storm drain, located beneath an easement, had been installed using both Corrugated Metal Pipe (CMP) and HDPE Pipe. The CMP had corroded at the invert and outside infiltration was speeding the deterioration. The pipeline would eventually lead to a collapse and the City of Los Angeles' Department of Public Works searched for a more sustainable solution. IPR Industrial recommended a custom manufactured CIPP liner that could be inserted and expanded against the inner wall of the storm drain. Careful installation and curing were required to ensure the liner diameters properly transitioned at the pipe's invert.

As a result, the IPR crew was able to install the liner in a day, compared to the other solutions' 3-5 day installation time, and save the City of Los Angeles an immense amount of replacement cost.



It is not uncommon to discover different diameters of pipe on sewer lines that run beneath old industrial buildings, roads, and railroad tracks.



CIPP inversion set up