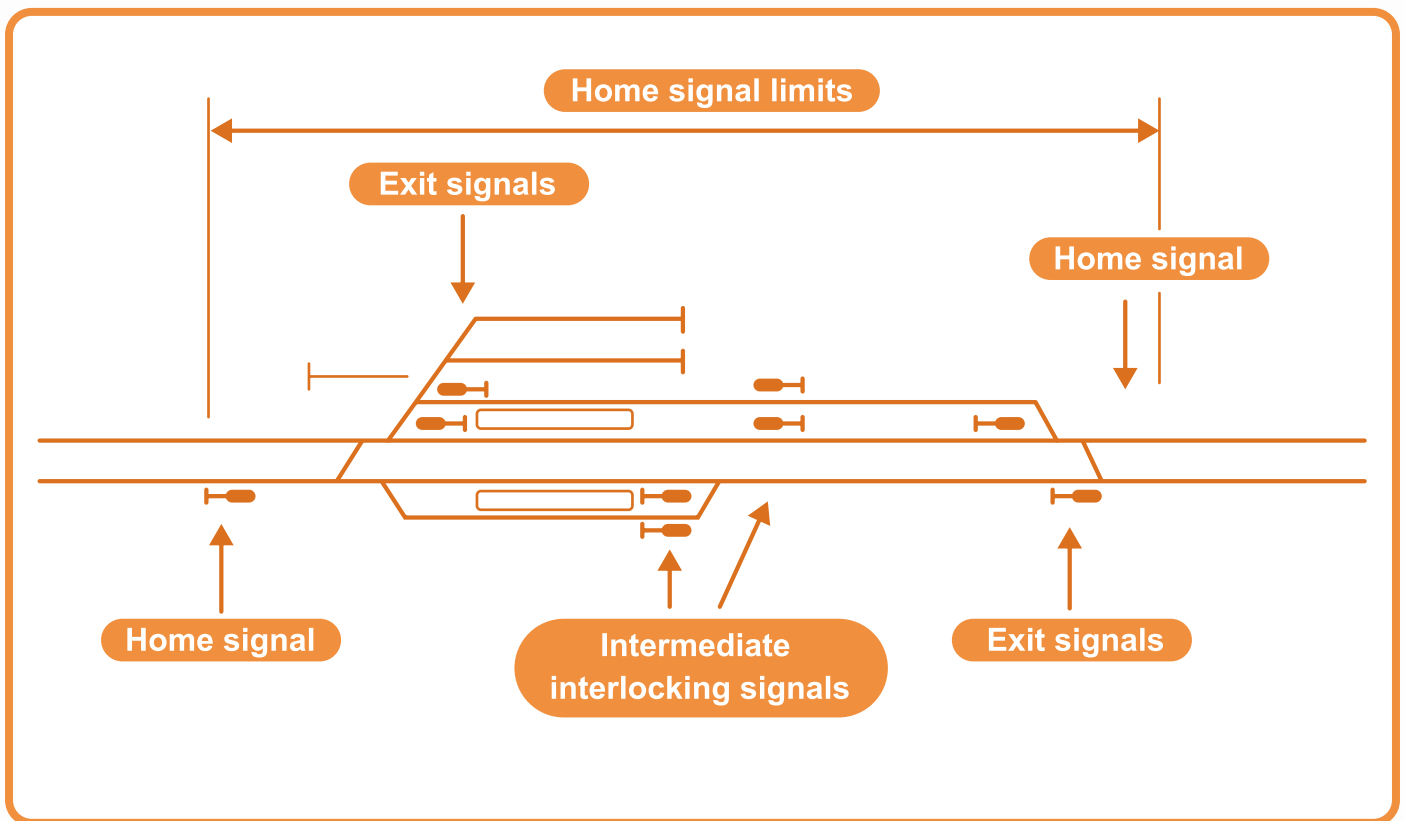


MODERNIZATION OF SUBURBAN RAIL

Datasheet

Project objective

Transfer morally and physically obsolete relay-based signaling system with running out lifecycle to the microprocessor-based element base across the suburban rail line connecting two cities. The goal includes modernization of the interlocking equipment and power supply, cab coding updating, and connection with several bridges in adherence with PTC requirements.



Result

The signaling system is modernized for 15 miles (9 stations) of suburban rail line in compliance with PTC requirements. The modernization resulted in reducing signaling failures of the system, and increasing the level of its safety.

Scope of work

- ❖ Circuit, wiring, and layout diagrams in view of track development changing
- ❖ Applications development to execute interlocking logic on every rail location and provide management by zones
- ❖ Te-ins with 2 bridges and a relay-based interlocking system
- ❖ Modernization of power supply for fully upgraded stations. Making power calculations
- ❖ Cab coding implementation in accordance with initial data
- ❖ Seamless communication of interlocking controllers between rail stations and within stations
- ❖ Station-by-station commissioning in night testing mode

Activities


- ❖ Hardware Design
- ❖ Software Design
- ❖ CAD Drawings Reviews
- ❖ HW/SW Change Orders Implementation
- ❖ Documentation Creation
- ❖ Power Calculations
- ❖ FAT & SAT Assistance Onsite

About the project

Technologies

 Microlok II

Project size

-  1 Technical Coordinator
-  1 Project Manager
-  4 Signaling Engineers
-  1 Technical Writer
-  1 Technical Assistant

Duration



69 months
from July 2017 – March
2023