

Project Name: MARC Train

Owner/Client: MDOT - MTA

Type of Project: Martins State Airport Compressed Air System Installation

Location: Baltimore, Maryland

Project Description

MARC Martins State Airport Facility Mechanical Staff had been conducting rolling stock maintenance & repairs utilizing an unreliable and outdated compressed air system. I lead and oversaw the design, procurement, and installation of a new compressed air system to support rolling stock at the facility. The new compressed air system includes 2,200 feet of air pipe, 3 new air compressors and subsequent components, and 7 new connection locations for rolling stock. The new compressed air system also expanded the footprint and the air capabilities at the facility through an exterior implementation of the system. Lastly, a BGE 2000 AMP Service Upgrade was required to support the new compressed air system as well as future expansion at Martins State Airport Facility.

New Compressed Air Plant – Exterior



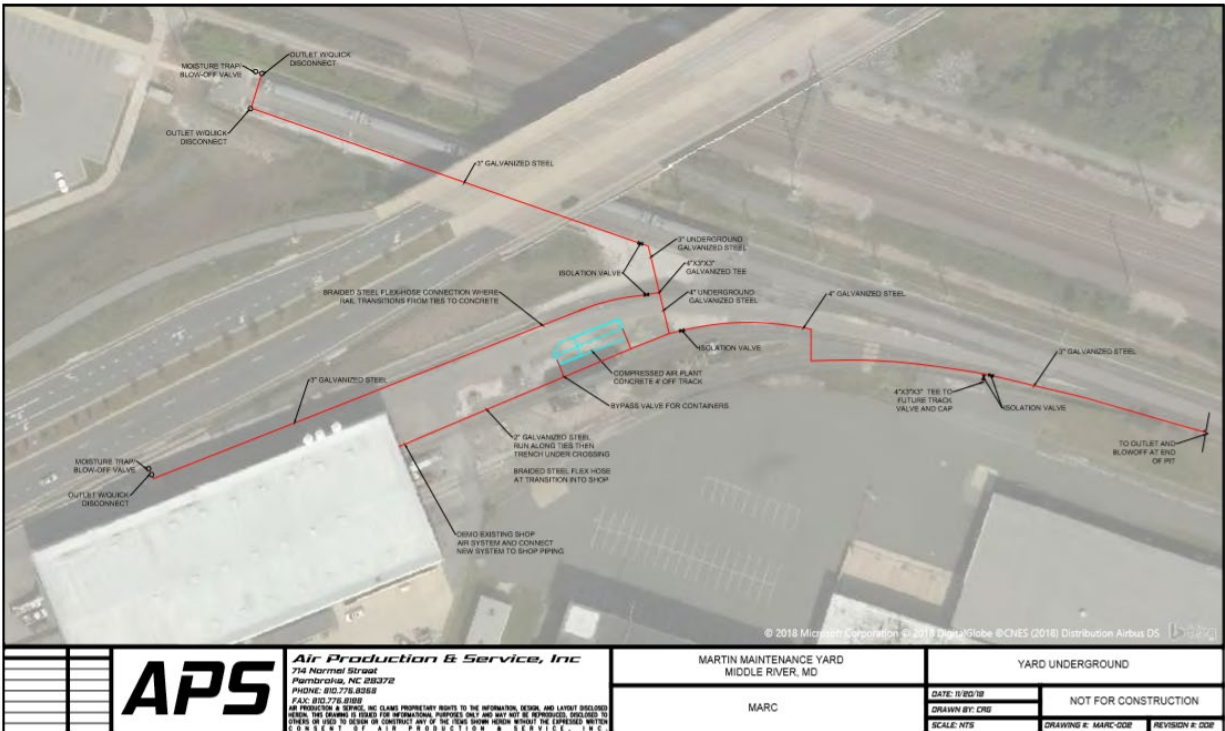
New Compressed Air Plant – Interior



New Compressed Air Connection



As-Built Compressed Air System Diagram



Benefits

The new compressed air system allows MARC to service rolling stock more efficiently at Martins State Airport Facility as well as offers the capability of yard expansion to support a higher volume of rolling stock in the yard. This project greatly reduced preventive maintenance cost and schedules for the mechanical staff and increased the flexibility of the facility overall.

Schedule

Design Phase: 8 Months (Oct. 2018 – May 2019)
 Procurement Phase: 2 Months (June 2019 – July 2019)
 Construction Phase: 7 Months (Aug 2019 – Feb. 2020)
 17 Months Total

Cost

\$686,180.00