

Project Scope:

Great Northern Engineering provided design engineering services to Swissport Fueling Services for their jet fuel hydrant aviation refueling and storage system, airfield hydrant supply loop isolation, Inter-tank transfer and aviation fuel quality system, refueling truck meter prover station, jet fuel water draw off system as well as many other improvements to the overall jet fuel facility operation.

Project Detail:

- Designed a load bank for the 2000 kW generator to accommodate load testing requirements.
- Modified the facility transfer pumps for to enhance capability
- Installed AFFF system on receipt tanks.
- Redesigned all of the external trim on the Carter diaphragm control valve on the HPP and inbound filtration piping.
- Upgraded the Hydrant Cart Test Stand.
- Designed and managed installation of motor operators on all of the plug valves in the valve boxes at eight locations in the control valve pits.
- Upgraded Concourse "A" cathodic protection system for the underground fuel piping.
- Performed pipe stress analysis and designed pipe modifications to the two 20-inch supply headers and the 30-inch hydrant pump suction header to alleviate damage from induced stress in the pipelines due to thermal expansion.
- Design complete replacement of eleven main airfield supply hydrant pumps and their associated malfunctioning pipe components.
- Investigate coating failures and corrosion on issue and receipt tanks. Specify remediation of coatings and manage the construction.

