



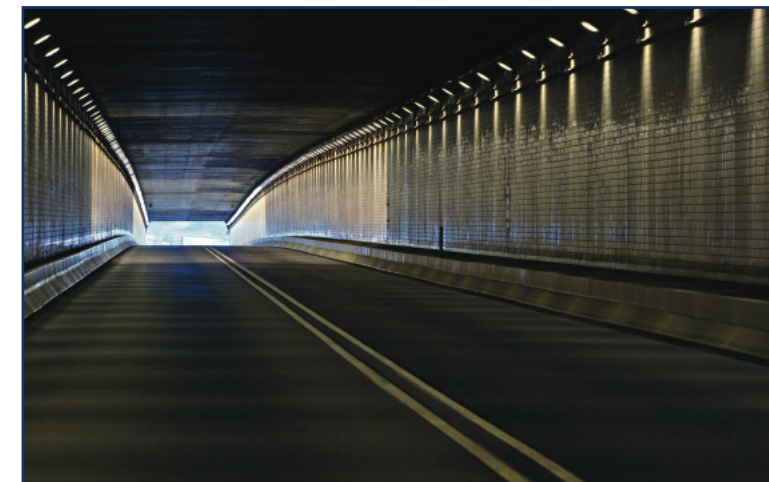
North Star Completes Multimillion Dollar Project



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Design/Build Allegheny Tunnel Lighting Project



Met the Challenge

- On the face of it, it may seem like a small business as usual and interesting feat. The team professionals met the challenge by thoroughly and realistically understanding the process and avoiding the pitfalls of a fast track design/build project

Design / Build Project

- This project was awarded in the summer of 2005 by PTC to the design/build team of Lighthouse Electric and PSE after a comprehensive selection process

◆ This \$7.6 million design/build project was fully designed, constructed and completed in a record timeframe of 9 months
◆ Design was completed in 4 months
◆ Construction was completed in 5 months

Real-life, Everyday Advantages for the Commuter

- The Allegheny Tunnel experienced total operability during all the winter and spring months of construction
- Protection and safety of commuters, construction workers, and all workers on site was fully maintained
- No closings of the tunnel occurred during regular driving hours – no routing volumes of traffic and inconveniencing the driving public

High Standard of Teamwork Ethic Among

- PA Turnpike Commission (PTC)
- Lighthouse Electric
- Professional Systems Engineering, LLC (PSE)

Quality Control Plan

- Staffing and organizational charts
- Procedures to control the final design included approach for design criteria and submission reviews, check lists, QC forms, and maintaining the design schedule
- Development of construction documentation, site surveying, and permit application and approval

Comprehensive Quality Control Construction Plan

- Outlined procedures for managing submittals reviews, tracking deficiencies (Non Conformance Reporting) and corrective action for revision control
- Contractor safety plan and maintenance and protection of traffic plan
- QC inspections of all construction
- Chaired monthly status meetings with all parties
- Conducted final acceptance testing to ensure all designs were implemented correctly and met contract requirements



Significant Advantages to the Client/Owner

- Expedited major design decisions earlier than a traditionally sequenced project
- Completed preliminary designs in a high-quality, cost-effective team approach—eliminating costly re-design issues
- Maintained high level of consistency in design and detail through attentive coordination
- Enhanced communication provided an excellent cooperative team relationship
- Attended closeout tasks and construction services with relentless diligence
- Evaluated the project successes and challenges and recognizing the team participation in a formal closure

Major Firms and Team Members

PA Turnpike Commission

John Ozimok, PE
John Cottle, PE
Chuck Holupka, PE
John Pavlovich

Buchart-Horn/BASCO Associates

James Badaczewski, PE
Sheri Bickhart
Frank Donaldson

North Star

Mike Patel
Jeffrey Sanders

Lighthouse Electric Contractors

Tony Mikec
Todd Mikec
Anton Mikec
Mark Mikec
Josh Eckenrode
Jay Reed

SQUARE D

Pete Webster

MGE UPS

Richard Woods
Phil Hollern

Michael Baker Corporation

Paul Carver

Professional Systems Engineering, LLC

Jerry Schorn, PE, CSI
Jerry Forstater, PE, CSI
Keith McCall
Charles Oerkvitz, FIES

"I never worked with a better contractor (Lighthouse Electrical) in my 30+ career years as an engineer. It was a pleasure to work with such a comprehensive group. PTC was the consummate professional."

*- Jerry Schorn, PE, CSI
PSE, LLC*

"It was good that the project team was able to work together to improve the tunnel lighting to meet the contract requirements and schedule."

*John Cottle, PE
PTC*

