

WHO WE ARE

Supported by more than 3,000 employees in nearly 100 locations across the United States, we provide a full continuum of engineering and consulting services, including design, planning, architectural, environmental, construction and program management. Our clients include U.S. federal, state and municipal governments, foreign allied governments, and a wide range of commercial clients. Michael Baker is committed to delivering a standard of excellence that fosters a culture of innovation, collaboration and technological advancement to help solve our clients' complex challenges.

TRANSPORTATION PRACTICE

Consistently ranked by Engineering News-Record as a Top 20 transportation firm, Michael Baker International offers clients an integrated team of professionals versed in all aspects of transportation planning, design, permitting, and construction management and inspection. In addition, Michael Baker International is a recognized leader in the practical aspects of operating and maintaining a safe and efficient transportation infrastructure.

DESCRIPTION

The Electrical Engineer / Senior Electrical Engineer is responsible for performing OR developing, managing, and reviewing electrical engineering aspects of infrastructure improvement projects involving intelligent transportation systems (ITS), traffic signals, and a variety of lighting applications. You will leverage your engineering knowledge and skills to lead the preparation of engineering plans, power distribution calculations, lighting design (illuminance) calculations, technical specifications, and construction estimates and schedules. You will be supported by a successful management team and team of designers to advance your technical and management skills. The best part being an Electrical Engineer/Senior Electrical Engineer at Michael Baker is that no two days will be the same. You will face different challenges every day, some of which will be extraordinarily complex.

Engineer

- You will be responsible for providing redline markups from younger engineers to assist in laying out electrical distribution equipment, and interaction with engineers from other engineering disciplines.
- You will utilize AutoCAD and Microstation to prepare engineering layout plans, block diagrams, elevation details from rough sketches and/or from client design guidelines.
- Other days you will help to prepare technical proposals or meet with client representatives on projects.

Senior Engineer

- Most days will be spent in the office managing the preparation of engineering designs for highway and other outdoor lighting systems, security systems, and

intelligent transportation systems; voltage drop and illuminance calculations; power distribution diagrams; utility service coordination; and protective relaying, key interlocking, and grounding calculations.

- You will be responsible for all aspects of electrical system designs, task budget expenditures, task schedules. You will work directly with project leadership staff to scope projects and to identify and mitigate potential constructability or other design issues.
- On some days, you will make field visits to project sites to investigate and photograph existing site conditions.
- You will feel a sense of pride in knowing that you are helping Michael Baker International provide innovative solutions to transportation challenges, big and small, and Making a Difference for the clients and communities we serve!

PROFESSIONAL REQUIREMENTS

- You will need a Bachelor's Degree in Electrical Engineering, 4-8 yrs (Engineer) and 8+ yrs (Senior Engineer) of progressive electrical design and lighting design experience. Additional non-lighting electrical engineering experience a plus.
- Experience working with NJDOT, NJTA, Port Authority of New York and New Jersey preferred.
- You will need a Professional Engineer's license.
- You will need a working knowledge of codes and standards such as NEC, IEEE, electrical safety code, IES, and AASHTO lighting standards.
- To be successful, you will need to be bright, organized, and determined; you will also need to be able to build relationships with a wide variety of people and to perform in a leadership role. You will need the ability to multitask, prioritize competing project obligations, and to interface with multiple technical disciplines.
- Working knowledge of CAD software and lighting design software. Excellent English language skills, written and verbal.
- You will need to be able to quickly get up to speed on our policy, procedures and relevant software while acquiring an understanding of the company's service offerings, and the client's standards and procedures relevant to your projects.