



DONNA GAFFORD, LC, MIES, CM-BIM

Career Summary:

In the lighting industry since 2006, Donna has brought a wealth of knowledge primarily gained from her time in the manufacturing sector. With nearly 14 years of experience working with a well-known luminaire manufacturer, she held roles in lighting application engineering, design resources, and specification marketing/education. In addition, Donna is an authorized instructor for Lighting Analysts AGI32, a lighting certified professional (LC) and holds a certificate of management in building information modeling (CM-BIM). Her latest exposure, prior to joining Wi-Skies, was as an independent consultant focusing on her roots in lighting applications by providing lighting calculation and AGI32 coaching services.

Contact Information:

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Education:

- ◆ B.S. Organizational Leadership (Concentration: Project Management) – Union University, 2009

Certifications:

- ◆ LC, Lighting Certified by NCQLP
- ◆ CM-BIM, Certificate of Management - Building Information Modeling, by Associated General Contractors of America

Software Proficiencies:

- ◆ AGI32
- ◆ AutoCAD

Project Summary:

Lighting Designer for SR85 at County Line Rd Interchange – Phase 1. This project analyzed adding roundabouts and traffic flow devices to both exits of County Line Road exiting US 27 ALT. The design team had developed 4 alternatives to discern the most efficient and cost-effective method to safely move traffic onto County Line Road. An adjacent roadway running parallel to US 27 added a level of complexity to the design as it needed to be incorporated into the roundabouts and traffic flow. Donna assisted in performing the photometric calculations for the 4 roundabout alternates which were used to support the design team in the decision-making process.

Lighting Designer for I-75 at Chula-Brookfield Rd (GDOT). At the Chula-Brookfield exit along I-75, GDOT is upgrading the existing on/off ramp intersections with new roundabouts as well as realigning the ramps to accommodate the new intersection locations. Partial interchange lighting is being provided as part of this project utilizing high mast towers at both roundabouts and ramp terminals. As a lighting designer on this project, Donna was responsible for running the lighting calculations, evaluating proposed luminaire and service point locations, and ensuring that voltage drop was within acceptable limits.

Lighting Designer for SR 92/Campbellton Fairburn Rd Continuous Flow Intersection at SR 14 (GDOT). The existing intersection in a growing commercial area is being completely overhauled due to heavy traffic. The proposed solution involves a continuous flow intersection (CFI), which offsets left hand movements further up- and down-stream from the main intersection. This significantly widens the roadway at the intersection and approaches, creating significant challenges to provide sufficient lighting throughout the defined intersection and approach limits. These challenges were met by using Type IV luminaires with a 45' mounting height at a reduced spacing. Overall SR 92 is being widened to include additional turning lanes, a raised median shoulders for many business entrances and exits, resulting in an overall project length of over two miles. Additionally, a new roundabout is designed for the intersection at SR 92 and Hall Rd, which also require full lighting. Once the conceptual design was provided, Donna completed the process of evaluating luminaire locations and conducting photometric calculations to ensure that the design met the IES recommendations.

Lighting Designer for Florida DOT D1 On-Call Lighting and Traffic Signal Design Services. Wi-Skies is a sub on a Districtwide master contract with Florida DOT District 1, where we provide a variety of high-level activities including providing estimates and design reviews as necessary. We are charged with developing program level scopes of work and quantities for various lighting and traffic signal improvements throughout the District, including re-surfacing projects which will address various safety issues related to lighting and traffic operations. To date, Wi-Skies has reviewed and estimated over 55 intersections and 30 miles of roadway improvements across the district. Donna has assisted in this effort by reviewing and providing lighting design reviews for several sections including: SR92 from SR846 – New Market, SR549 from SR542 to SR544, and SR60 City Line to 12th.

Lighting Designer for City of Union City, GA Gateway Park Lighting and Cameras. Union City is developing a new Gateway Park adjacent to the intersection of SR 92 at SR 14, which requires new parking lot, decorative sign and pavilion lighting, in addition to security cameras to provide visibility to the Union City police department throughout project site. Wi-Skies was brought in after the plans were awarded to the Contractor to re-design all of the lighting and electrical systems. Careful coordination with ongoing construction activities and concurrent design with an adjacent GDOT project was imperative to the success of delivering of this project. Donna played a role in this project by helping develop a new, revised concept with better suited fixtures that were originally specified.



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Furthermore, she ran the standard calculations needed to prove the concept including photometric and voltage drop.

Interstate Lighting Retrofit using Carbon Reduction Program Funding for Georgia DOT. GDOT Management wanted to retrofit and repair approximately fifty miles of existing lighting along the interstate system within the I-285 Atlanta metro perimeter ahead of the World Cup arrival in the summer of 2026. The Department identified and utilized available funding from the federal carbon reduction program (CRP) initiative to deliver this seemingly impossible task in less than a year and a half. This timeframe included development of full plans, specifications and estimates for fourteen total projects which were competitively bid and awarded to comply with federal funding requirements. Starting in October of 2024, each of the fourteen projects had to be developed in extremely short order to ensure they were competitively bid, awarded, procured, installed and operational before May 2026 to meet the World Cup deadline. This required an incredible amount of effort and coordination with over a dozen GDOT Offices to ensure the delivery schedule was met. All plan development was done in accordance with all GDOT and FHWA requirements, including coordination and approval from all parties, including environmental, right-of-way, structural, railroad, utility, and state construction offices. Despite the consolidated schedule, all construction delivery requirements had to be fulfilled, including final field plan review (FFPR), approval from all offices, including FHWA, and Construction Bidding Administration (CBA) and Let date timelines.

All fourteen projects required a full electrical survey to determine the condition and power source of each luminaire and circuit along each corridor. The survey results were used to establish accurate quantities and to ensure adequate funding within each project's budget, without exceeding the overall CRP allocation. As much of the system was in disrepair, this required a lot of cable replacement as well as replacement of each of the service points to ensure all lights were metered. Each project was designed to meet current IES/ANSI lighting requirements whenever possible without creating environmental, ROW or constructability issues with variances granted when necessary.

Wi-Skies is also responsible for construction oversight of all projects to address the myriad of RFI's and construction issues with all fourteen projects. These projects are concurrent to many other large-scale projects, such as repaving all fifty miles of the same stretches of the same interstate system and a fiber installation project, all with competing lane closures. We are also responsible for providing as-built drawings for all work completed, including final wiring schematics for each service point throughout the interstate system, as this information did not previously exist, but is necessary for any future maintenance or proposed project.

(PI#0021308) I-85 from I-75 Split to Lenox Rd. This 3.5-mile-long segment included all lighting infrastructure along the mainlines, ramps, and under bridge locations along I-85. This segment includes the illumination of the Buford Highway ramps and side streets spanning underneath the I-85 mainline. Field analysis was conducted to ensure all existing, damaged, or removed lighting infrastructure was accounted for. New design layouts were implemented where the team discovered the opportunity to without interfering with existing civil infrastructure. Donna's primary focus on this segment included lighting calculations and determining locations where new installations were critical.

(PI#0021310) I-20 from Capitol Ave to Flat Shoals Road. This five-mile segment includes the mainlines, ramps, and under bridge locations along I-20. A section of I-20 within this segment includes both center median light poles and single conventional light poles on the outer lanes. Special attention was given to which poles required new fixtures with a higher-lumen output or lower-lower lumen output to ensure all lanes could be illuminated while still utilizing the existing lighting infrastructure and enhancing its performance. Field analysis was especially critical to ensure all existing, damaged, or removed lighting infrastructure was accounted for. The overall design was improved to meet current ANSI/IES standards, and new design layouts were implemented where the team discovered the opportunity to without interfering with the existing civil infrastructure. On this particular project, Donna conducted photometric and voltage drop calculations to support the overall project.