Scott M. Younghouse

Career Summary:

Scott currently works out of GDOT Headquarters as a consultant within the Office of Design Policy and Support in the Lighting Group. Responsibilities include reviewing photometric submittals, lighting plans, design layouts and policy updates. Along with design support, maintains GDOT lighting specifications including Chapter 14 of the Design Policy Manual and any of the lighting specifications related to Electrical/Lighting. His roadway lighting skills include using MicroStation and AGi32 to develop photometric submittals, lighting plans and details, developing and checking voltage drop and quantity calculations, putting together pole and photometric data tables. He has also performed several site visits to identify potential light pole conflicts and service point connection points. Scott has taken to everything in the lighting industry quickly and has a keen attention to detail.

Scott previously developed and managed new products at Panduit for over eleven years. He was responsible for project management within their Cable Accessories and Identification product lines, along with supporting product life cycle management. This included overseeing these products from inception, producing cost reduction analysis for these new products versus current products, work with product specifications and product testing. He was also responsible for tracking sales and working with customers and sales groups to better improve the product line.

Contact Information:

- Email: scott@wi-skies.com
- Cell: (678) 689-8084

Education:

- B.S. Electrical & Computer Engineering - Valparaiso University, 2001

Software Proficiencies:

- MicroStation
- AGi32
- Microsoft Office
- SAP
- Oracle

Project Summary:

Project Manager for Roundabout Lighting Projects for Georgia DOT:

PI 0016122 – Burnt Hickory Rd at Stout Pkwy– Operated as the project manager for this project, overseeing design for the lighting layout for this roundabout. He created the pole data and photometric tables, verified that the photometric design met the requirements for the classification. Scott coordinated the service point location with the local power company and performed the cable layouts, voltage drops, and quantities calculations for the project.

PI 0013682 SR 9 at Dawson Forest Rd – Project Manager for this project, designed the lighting layout for the dual roundabout. Created the pole data and photometric tables. Verified that the photometric design met the requirements for the project. Made multiple site visits to understand the site and coordinate the Service Point locations. Performed the cable layouts, voltage drops, and quantities calculations for the project.

PI 0016348 SR 9 at AC Smith – A three-legged roundabout is being constructed at an existing intersection to reduce crash rates and severity at a rural roundabout. Proper lighting was designed for the roundabout to include the roundabout, crosswalk facilities, and the approaches within the roundabout area. However, recommendations were provided and ultimately accepted to remove transition lighting along the two approach legs on SR 9, as visibility of the roundabout was adequate at an AASTHO safe stopping distance. This transition lighting was not removed along the AC Smith approach leg due to roadway curvatures. Spill lighting was analyzed along all residential property lines to minimize undesirable impacts. Scott worked on the Photometrics and the Lighting Plans for this project. He coordinated with the local utility on service point locations and completed voltage drops and quantities. He also visited the location to confirm some design requirements.

Buford Springs Connector at Peachtree St Roundabout - The existing exit and entrance ramps from Buford Springs Connector to Peachtree St will be reconstructed to terminate into a roundabout before reaching Peachtree St. It will also tie into Inwood Drive and an adjacent parking lot. This project responsibility is to provide the complete lighting plans, specifications, voltage drop and photometric calculations. Served as the Project Manager for this project. Made multiple site visits including coordinating the Service Point locations. The lighting will optimize the roundabout, along with the approaches from four different access points and will connect back to existing lighting on both the exit ramp and the entrance ramp to Buford Springs Connector. Existing Service Points will be updated for the new lighting and for the remaining lighting on the ramps. Designed the Photometrics and Lighting Plans which include the voltage drop calculations, single line diagrams, quantities list.

PI 332180 – SR 16 at SR 54– An existing four way stop sign intersection in Coweta County was reconstructed to be a roundabout, which re-aligned both roads several hundred feet in each direction and include a bridge reconstruction north of the roundabout along SR 54. Many of the movements within the roundabout have dual lanes, creating the challenge of achieving recommended vertical illuminance values at all of the crosswalks. Approach legs from SR 54 both also have dedicated right turn lanes, further complicating the roundabout's design. To complicate the design further, the

maximum mounting height the locals can maintain is 30', meaning the light from the luminaires will not travel as far. To combat the design issues, while maximizing the vertical illuminance in these crosswalks, Type IV LED luminaires were used on poles placed optimally before the crosswalk. Designed the lighting layout for this roundabout. Created the pole data and photometric tables. Verified that the photometric design met the requirements for the project. He coordinated the Service Point locations with the local utility. Performed the cable layouts, voltage drops, and quantities calculations for this project.

Project Engineer for Langford Parkway (SR 166) Lighting Replacement. Langford Parkway is a major thoroughfare which connects I-285 to I-85 north of the Atlanta airport in the southwest side of the city. The corridor was originally built as an urban collector, but over time has become an access control freeway with entrance and exit ramps. However, urban curb still exists in portions of the roadway and the lighting was installed based on the original urban collector setting and subsequent setbacks. Because of this, most of the lighting installed on the outside of the roadway is within unprotected clear zone and subject to frequent knock-downs. As the entire 6.5 mile corridor is continuously lit, this results in a lot of maintenance. To properly address this situation, coupled with inadequate lighting, the recommendation was made to provide a new lighting system through the corridor which will increase pole setbacks coupled with barrier protection as warranted. This new lighting system will also replace and upgrade the existing lighting along the median wall, where applicable. Scott is the helping with the lighting design of this project which includes photometric calculations, voltage drop calculations, plan preparation and quantity calculations. He also went in the field to identify existing Service Points and review the proposed pole locations to determine if the locations were feasible. Working with both local power companies to update existing Service Points and to create any new ones that are needed for the project.

Project Engineer - I-285 at SR 400 Interchange Lighting and ITS Power (GDOT) As part of the largest design-build effort the state has ever taken on, Scott has visited the site multiple times to review potential locations of proposed pole/cabinet locations and assisted in finding locations for Service Points that will power the equipment. Reviewed equipment and drawing details and created Single Line Diagrams. Worked with quantities and voltage drops for the design. This interchange is the busiest and fastest-growing interchange in the Atlanta area, subject to traffic volumes of over 250,000 vehicles daily. The overall design intent is to provide collector-distributor (CD) lanes throughout the project limits for a total of 8.3 miles along both SR 400 and I-285, which will eliminate much of the congestion in the area due to a poor existing interchange layout. Throughout the design process, several lighting and ITS design alternatives were designed and considered. The lighting design also included daytime lighting installations under three tunnels. Worked on Lighting Plans for both ITS and Lighting. Reviewed voltage drop calcs and quantities throughout the project. Has made multiple trips into the field to work with contractors and to make sure of service point locations. Also worked with the contractor on various updates throughout the design build.

Project Engineer for Tucker Summit CID Lighting Evaluation – City of Tucker, GA. The Tucker Summit CID has been trying to retrofit their existing lighting system to LED for years, but have been having trouble moving forward with the power company making it happen. As they have also heard about LED retrofit design issues, they engaged Wi-Skies to assist them in assuring a proper lighting design is ultimately delivered on the streets within the CID. Our task is to work with the power company to either review their supplier's lighting design or provide a design in typical sections for the power company to install in specific corridors. In total, there are over 18 miles of roadways, both commercial and industrial, to be retrofitted. Scott initially visited the TSCID project areas. He worked on the design for the initial quote for this project. He has continued to work with the photometric design and dealing with the local power company, Georgia Power.

Project Engineer for Carolina Crossroads Phase 1 Design-Build for South Carolina DOT SCDOT is designing improvements along the interstate corridor of I-20/26/126 which includes system interchanges at I-20/I-26 and I-26-I/126 in Lexington and Richland Counties in five phases, of which this is the first. These improvements are proposed to increase mobility and enhance traffic operations by reducing existing traffic congestion within the I-20/26/126 corridor, while accommodating future traffic needs. The corridor's approximately 14 miles of mainline interstate include I-26 from Exit 101 - Broad River Road (US 176) to east of the Saluda River, I-20 from the west of the Saluda River to west of the Broad River, and I-126 from I-26 to east of the interchange with Colonial Life Blvd. Wi-Skies is overseeing the full continuous lighting design along the interstates, the interchanges and includes lighting for Colonial Life Blvd and Greystone Blvd. both north and south of the interchanges. The design includes both high mast towers along the interstate and interchanges as well as conventional roadway lighting along the ramps and side streets. Every effort has been made to minimize spill lighting to the residential areas on the side streets. Scott helped with the Lighting Plans and QAQC. He also reviewed the voltage drops and quantities.

Project Engineer for Carolina Crossroads Phase 2 Design-Build for South Carolina DOT SCDOT is designing improvements along the interstate corridor of I-20/26/126 which includes system interchanges at I-20/I-26 and I-26-I/126 in Lexington and Richland Counties in five phases. These improvements are proposed to increase mobility and enhance traffic operations by reducing existing traffic congestion within the I-20/26/126 corridor, while accommodating future traffic needs. The corridor's approximately 14 miles of mainline interstate include I-26 from Exit 101 - Broad River Road (US 176) to east of the Saluda River, I-20 from the west of the Saluda River to west of the Broad River, and I-126 from I-26 to east of the interchange with Colonial Life Boulevard. Phase 2 of the design includes the design of I-20 as well as a new Diverging Diamond Interchange at Broad River Road (US 176). The lighting design includes both high mast towers along the interstate and interchange as well as conventional roadway lighting along the side streets, with an effort to minimize spill lighting to the residential areas on the side streets. Scott helped with the Lighting Plans and QAQC. He also reviewed the voltage drops and quantities.

SCOTT M. YOUNGHOUSE

Project Engineer for Woodruff Road Bypass – Greenville, South Carolina (SCDOT) Wi-Skies is providing a complete lighting design for the Woodruff Road Bypass project, which spans a total of six miles of roadway. Woodruff Road is a highly traveled roadway and experiences extreme congestion during peak travel times. SCDOT is proposing a parallel route to bypass the overly crowded Woodruff Road. The roadway contains ten total roundabouts with four travel lanes with a decorative median for most of the route, along with both a sidewalk and multiuse path. As an additional challenge, this roadway intersects a railroad and crosses under transmission lines. Wi-Skies will be responsible for the lighting the entire parkway limits including photometric calculations, service point coordination, voltage drop calculations, conduit routing, and lighting plan development. Scott worked with the photometric design for this project.

Project Engineer for Experimental Daytime Lighting at both I-85 at SR 237 and I-285 at SR 13 for GDOT. As part of ongoing high-level research work with IES, GDOT and other agencies, Wi-Skies is leading the effort to overhaul the international standard for daytime lighting within short tunnels, which are considered to be under 400'. Measuring of over a dozen tunnels has led to the belief that the amount of daytime lighting recommended within short tunnels is excessive and Wi-Skies is leading the charge to provide only lighting which would be minimally necessary to ensure good visibility throughout the tunnel and nothing more. As part of this effort, GDOT has chosen two tunnels which certainly need some sort of daytime lighting and tasked him to provide what he believes will be the minimum amount of lighting necessary within them. Scott is involved with the lighting design on this project which includes various daytime models to determine the best way to only light these areas. He has visited these locations and taken initial lighting values in the current state of these bridges. He has reviewed full plan preparation; voltage drops and quantity calculations. When the project has been installed, he will be taking field measurements again to compare to the original lighting numbers and compare to the AGI designs and how they compare to the installation in the field.

Project Engineer – City of Jesup Streetscape GA (GDOT) The City of Jesup is rehabilitating three street sections off of State Route 38 to match the existing areas that have already been updated previously. The scope is to provide lighting along the sidewalk areas only without negatively impacting the drivers along these roads, as is a Georgia DOT requirement. This is typically a challenge, as pedestrian scale light fixtures are designed to throw light in all directions with little or no cut-off features, especially with acorn style fixtures. To combat this, nominally lower lumen output fixtures are utilized and if possible, mounting height increased to get out of the driver's field of view when measuring the glare metric, the maximum veiling luminance ratio (MaxLv). Calculation of this ratio is necessary to ensure drivers are not blinded by the pedestrian scale light as they drive through this area. All of the lighting work is being done in accordance with Georgia DOT and IES design standards. Scott is designing the lighting layout, creating photometric plans along with quantities and voltage drop calculations.

Project Engineer - SR 120 from SR 141 to Peachtree-Industrial (GDOT) The reconstruction and widening of over 2.5 miles of this major thoroughfare is substantial and comprises of several large intersections and a roundabout. As part of the project, a multi-use path is being installed along one side of the roadway and a sidewalk will be installed on another, both of which will be properly lit, along with the roadway. Due to narrow ROW and presence of many utilities, this presents many interesting underground and overhead challenges throughout the project. The project spans two cities and ranges from commercial to residential, making the lighting objectives quite different. Scott has reviewed the photometric plans and verified the characteristics of the projects along with the pole layouts.

Project Engineer - Multiple Intersections in Jones Co GA. (GDOT) Various intersections along Grey Bypass had safety concerns that required additional lighting to be added. Scott has designed lighting for these intersections, performed the lighting layout design, photometric calculations that met the desired requirements, created lighting plans, Voltage Drop calcs, and quantities for the project. He also made a site visit to coordinate the Service Point location with GA Power.

Project Engineer - Lighting at I-75 and I-16 Interchange – GDOT. This existing interchange is being overhauled as part of a multi-phase construction project totaling six miles of interstate, all of which will be continuously lit. There are three smaller interchanges, all of which require complete lighting or modifications to complete lighting. Additionally, five total tunnels will require supplemental daytime lighting. There is a lot of pedestrian lighting going in this area as well as the City continues its beautification approach, especially near the River. However, there are also several locations which are sensitive to light pollution, such as residences or other environmental concerns, all of which are being analyzed to verify there is minimal concern. Scott reviewed lighting plans and voltage drops. He also verified the layout design and quantities throughout the project

Project Engineer for I-75 at Highway 151 Interchange Lighting – City of Ringgold, GA. This project required a permit application and approval for the installation of four high mast towers at the Highway 151 interchange at I-75 for the City of Ringgold, GA. There were originally four towers installed at the interchange before a tornado destroyed them a number of years ago. The interchange had been overhauled and expanded since that time and the lighting was missed. Scott was the designer for the lighting, which was submitted through GDOT's permit process (GUPS) and ultimately approved for installation. He also visited the site to make sure of the changes in the field so that the design was accurate.

Project Engineer - Lighting at I-77 and SC Hwy 9 Interchange. This existing interchange is adding lighting at the I-77 and Hwy 9 interchange along with tying into another project that is adding lighting along Hwy 9. This project is a combination of high mass towers and traditional roadway lighting. The use of high mass towers will cover the bridge over I-77 while the traditional roadway poles will be used along the ramps. We are working with Duke Energy to make sure that this project ties directly to the other lighting project along Hwy 9 to ensure full coverage throughout the corridor. Scott worked on the design, reviewed lighting plans and voltage drops along with providing quantities for this project. He also coordinated with Duke Energy for service points and to meet the other project limits.

Scott M. Younghouse

Project Engineer - Iowa DOT – LED Retrofit projects. Assisted on multiple projects where we are updating existing lighting with LED replacements. This includes projects along I-35, I-235, and Burlington Bridge off SR-34.

Project Engineer - Diverging Diamond Intersection at I-285 and GA 6 - GDOT The Department is reconstructing an existing slip diamond interchange to a diverging diamond interchange (DDI) in an effort to greatly reduce traffic concerns at the interchange. Due to the proximity to the Atlanta airport, the use of high mast towers is not possible. Further, the City's desire to use decorative fixtures not intended for roadway use put on us to work with multiple lighting manufacturers to develop fixtures and poles which will meet photometric requirements for the busy roadway as well as meet the City's decorative desires. The existing bridge over I-285 will not be reconstructed as part of the project, which makes lighting the 260' bridge area span challenging. This is especially critical in the area where drivers are on the opposite side of the roadway between crossovers. Additionally, there is a concurrent project consisting of many decorative lighting features the design team is responsible for providing power to. Scott created the voltage drops and quantity calculations along with reviewing cable layouts within the project. He also made site visits to the location.

Project Engineer - Continuous Flow Intersection - GA 400 at GA 53 - GDOT An existing intersection which is being changed to a Continuous Flow Intersection (CFI). The basis of a CFI is to eliminate the need for a dedicated left turn arrow at a normal signalized intersection. In order to accomplish this, the left turn movement must be done several hundred feet prior to the main intersection by creating a small crossover intersection. For lighting purposes, these smaller adjacent intersections must be well lit, as well as the main intersection. This creates a very large area which must be continuously well lit with good uniformity. Since these intersections are generally very busy, the main challenge is providing enough light across the entire intersection when the width of the intersection is so large. Additionally, this intersection had several crosswalks which had to be analyzed to alleviate any pedestrian conflicts. Scott reviewed photometric drawings and confirmed pole data table. Assisted in the CADD work throughout this project. Reviewed lighting plans and quantities for the project.

Project Engineer - Intersection Lighting at GA 12 and Cove Lake Rd. An existing four-way intersection is being expanded due to increased capacity demands. Full intersection lighting is being provided as well to combat an ongoing trend of increased pedestrian and vehicular strikes near the intersection due to a bus stop at the intersection. Scott reviewed cable layouts and created the voltage drops and quantity calculations along Single Line Diagrams in MicroStation.

Project Engineer - Pedestrian Bridge over Northside Dr at Mercedes-Benz Stadium. As part of a design-build project, Wi-Skies designed the lighting for a pedestrian bridge being constructed safely allow pedestrians to cross the busy six-lane roadway immediately adjacent to the new Atlanta Falcons stadium. The bridge spans a total of almost 1000' of walkable path, including a 140' long covered portion as it crosses Northside Drive. All of the pathway is being lit to high pedestrian traffic lighting design criteria, including vertical illuminance design criteria, which is being accomplished with a combination of pedestrian scale LED fixtures for outside of the covered portion and architectural ceiling mounted fixtures inside the covered portion. The sidewalk areas along the perimeter of the west loop are also being lit to ensure good visibility of fellow pedestrians while not providing a glare concern to the drivers along Northside Dr. In addition to the pedestrian lighting, Wi-Skies is also responsible for designing the impressive architectural lighting features on, in and around the bridge. Both sides of the bridge will have continuous multi-color rope lights which span a total of over 2000'. Additionally, accent lights are being provided at crucial areas, such as the bridge decorative columns and outer aluminum skin of the bridge as it crosses Northside Dr. All of the decorative features will be centrally controlled for the client to have the ability to change the colors freely, depending on the venue. The architectural features of this bridge will mesh well with the new stadium's architectural features, as it is immediately adjacent to the new stadium, which will be aerially viewed often to show off its architectural features, yet the lighting on the bridge will set it apart. Scott assisted in the development of several details for a design-build project for a pedestrian bridge.

Project Engineer - Pedestrian Bridge over Castleberry Rd in Cumming, GA. The City of Cumming is constructing an elevated pedestrian bridge to the City Fairgrounds from the parking lot across Castleberry Rd. Ramps will tie into the existing sidewalk and lead up to a covered portion of the bridge over Castleberry and tie into an existing elevation difference on the other side. All of the ramps, adjacent sidewalks and covered portion of the bridge all require pedestrian lighting, accomplished by several light fixture types. Additionally, there are variable message signs on both sides of the pedestrian bridge to alert drivers along Castleberry of pertinent information. Scott has created the lighting layout for the ramp and the raised bridge, performed the photometric drawings and confirmed pole data table, verified the layout designs requirements throughout the project. He also made site visits to review existing power in the area and coordinated with GA Power potential Service Point options.

Project Engineer - City of East Point Streetscape. The City of East Point is rehabilitating a mile segment of sidewalk along the west side of Main St (State Route 14 & 139, US 29) and Wi-Skies is designing the lighting to be included. The scope is to provide lighting along the sidewalk areas only without negatively impacting the drivers along the State Route, as is a Georgia DOT requirement. This is typically a challenge, as pedestrian scale light fixtures are designed to throw light in all directions with little or no cut-off features, especially with acorn style fixtures. To combat this, we use lower lumen output fixtures nominally. We also try to increase mounting height to get out of the driver's field of view when measuring the glare metric, the maximum veiling luminance ratio (MaxLv). Calculation of this ratio is necessary to ensure drivers are not blinded by the pedestrian scale light as they drive through the corridor. All of the lighting work is being done in accordance with Georgia DOT standards. Scott made a site visit to review layouts and look for any potential conflicts. He reviewed cable layouts along with assisting with the quantity calculations.

Project Engineer - Jeffersonville Rd and Millerfield Rd Lighting (City of Macon/Bibb County) As part of a large-scale area of urban improvement, these two segments will encompass a total of 1.8 miles of urban collector roadway. The five-lane roadway

cross-section consists of dual lanes in each direction with a middle turn lane throughout. To complicate the design, there are several smaller roadways and driveways littered throughout the project, a continuous multi-use path along one side with a sidewalk on the other of the roadway throughout. This creates a challenge of providing good uniformity throughout a wide area using a large setback. Especially challenging is meeting vertical illuminance requirements along the multi-use path, sidewalk and at the many crosswalks throughout the project while also providing recommended average luminance and uniformity in the center dual turn lane. This is all being accomplished by using LED fixtures mounted at a maximum mounting height of 45', due to Macon-Bibb's maintenance limitations. Scott provided MicroStation support for the photometric and final plan submittals while also reviewing voltage drop calculations and developing photometric and pole data tables.

Project Engineer - Stand-alone Lighting I-75 from Pierce Ave to Arkwright Rd (GDOT) Led a majority of the MicroStation effort on this stand-alone lighting project provided 3.5 miles of mainly high mast lighting along I-75 from Pierce Ave to Arkwright Rd. This included developing the photometric and pole data tables for the photometric submittal, developing many of the plan sheets and unique construction details and verifying the voltage drop calculations.

Project Engineer - Lighting along GA 30/90/US 280/16th St from I-75 to Midway Rd in Cordele, GA for Georgia DOT. Due to the heavy volume of truck and other traffic at the interchange due to the large commercial presence, the Department is widening the roadway from the northbound interchange ramp intersection to the Midway Rd intersection, where a Pilot exists. Due to the high pedestrian traffic in the area, lighting is being extended from the interchange to Midway. As the existing lighting system is HPS, the new portion will be HPS to match. In addition to the roadway being analyzed for proper luminance through this half mile segment, new sidewalk facilities will be analyzed, including both horizontal and vertical illuminance requirements. The intersection at Midway has transmission lines running along the west side of the road, creating a large area where light poles cannot be installed and therefore, creating uniformity issues within the intersection. Scott developed the voltage drop and quantity calculations, and assisted with the CADD effort on the expansion of a half mile segment of heavy commercial roadway.

Project Engineer - Swainsboro Streetscape Lighting – City of Swainsboro, GA Provided photometric plan sheets, voltage drop calculations and cabling plans tying into three existing service cabinets across the City for pedestrian lighting project at six locations in downtown Swainsboro.

Additional Roundabout Lighting Projects for Georgia DOT as Project Engineer:

PI 0016116 - SR 53BU at Dragon Dr. A three-legged roundabout is being constructed at an existing intersection to reduce crash rates and severity at a rural roundabout. This roundabout is at the entrance to a local high school. Proper lighting was designed for the roundabout to include the roundabout, crosswalk facilities, and the approaches within the roundabout area. However, recommendations were provided, and ultimately accepted to remove transition lighting along all three approach legs, as visibility of the roundabout was adequate at an AASTHO safe stopping distance.

PI 0013333 - I-20 EB at Maynard Terrace - The existing exit ramp from I-20 onto Maynard Terrace is being reconstructed to terminate into a roundabout on the Eastbound ramp terminal. As Project Manager for this project, I provided photometric calculations while taking in consideration the multi-purpose walkway in this area along with the historic areas around this roundabout. The lighting will optimize the roundabout, along with the approaches from four different access points and incorporate the multi-purpose walkway and crosswalks in the roundabout.

PI 0009855 – Solar Roundabout - CR 238 at Cool Springs Rd – The existing intersection is being converted to a four-legged roundabout, which requires lighting. Due to the limited power options in the rural area, power for this lighting must be accomplished by other means, namely solar as well as potentially wind energy. Finding the square footage of land necessary for the solar panels which will not become shadowed is a challenge within itself due to wetlands, trees and potential businesses in the future. The objective to create the first completely off-grid lighting project within the state which would be self-autonomous for ten days or more. Mr. Marsh is designing the alternative energy solution along with overseeing the lighting design, consisting of photometric calculations, lighting plans and specifications. For this project, provided photometric submittal, voltage drops, quantities, single line diagram

Wiley Bridge Rd at Cox Rd – An existing three-legged intersection in the middle of a residential area is being converted to a roundabout. As the area is also littered with many large trees and distribution lines which have decent clearances, light pole placement is an extreme challenge. Additionally, the tight proximity of residences near the roundabout creates more complication to the design in the form of minimizing spill lighting. These areas of concern are carefully analyzed to ensure there is minimal or no impact to the residences in the area. Approach lighting on some of the legs is being removed where good visibility exists to the drivers approaching in that leg from a safe sight stopping distance (SSSD). Made site visit to verify the sight distance required for this design. Checked/reviewed the lighting plans, voltage drop and quantity calculations.

PI 0000315 – SR 52 at SR 183 – The existing intersection is being revised to a roundabout due several high speed accidents, for which the roundabout will force traffic in all directions to slow down to at least a crawl before proceeding. The addition of lighting in the rural and very dark area will also assist visibility and therefore safety to the roundabout's performance. Developed voltage drop calculations, wiring diagram, pole data table, performed quantity calculations and visited the site to identify potential overhead and underground conflicts and determine service point tie-in with local EMC

Scott M. Younghouse

PI 0009938 – SR 53 at SR 183 – GDOT revise a three-legged intersection to a roundabout due several high-speed accidents. SR 183 terminates into SR 53 at the intersection while SR 53 continues east to west, all of which are rural roads with speed limits of 55 MPH, with only yield signs at each leg, creating a dangerous situation. Add in that drivers along westbound SR 53 experience a blind curve entering the intersection without the need to yield makes it treacherous. The new roundabout will force traffic in all directions to slow down to at least a crawl before proceeding. The addition of lighting in the rural and very dark area will also assist visibility and therefore safety to the roundabout's performance. Both horizontal illuminance requirements for the roundabout and vertical illuminance requirements at each crosswalk can be reached by using an LED fixture with a lower lumen package mounted at 30', which saves energy costs to the locals while also minimizing light pollution to the adjacent residences. Visited the site to coordinate the service point tie-in with the EMC, led the effort to develop the photometric submittal and plan sheets including details in MicroStation including the wiring diagram and verified the quantity calculations

PI 532650 - Solar Roundabout at SR 99 and SR 25 – Phase 2. Project Manager for this project. Designing the lighting plans for this project, including the cable layouts, voltage drops and quantities calculations.

PI 0009874 - Solar Roundabout at SR 99 and SR 25 – Phase 1. Reviewed layout and pole data table. Verified the photometric design of the roundabout.

PI 0015600 – SR 5 at SR 166 - Visited the site to identify potential overhead and underground conflicts, provided initial design for roundabout pending environmental/survey responses.

PI 0009988 – SR 212 at CR 594 - Assisted with developing photometric submittal and pole data table

PI 0015323 – Exchange Blvd Ext from Harry McCarty to SR 11 – Checked/reviewed the lighting plans, voltage drop and quantity calculations.

PI 532370 – SR 144 at Capt. Mathew Freeman – Checked the voltage drop and quantity calculations and performed much of the MicroStation effort to deliver final plans.

Bell Rd at Cauley Creek Park – Checked/reviewed the lighting plans, voltage drop and quantity calculations.

Woodstock Rd at Victory Dr – Made site visit to verify the sight distance required for this design. Checked/reviewed the lighting plans, voltage drop and quantity calculations.

PI 0007319 – SR 347 at New Bethany – Assisted with CADD and details for the lighting plans and performed quantity calculations

PI 0012834 – SR 195 at Smithville & 2nd St – Led the CADD effort to develop the photometric submittal on this challenging project.