

# FORCON INTERNATIONAL

**WILLIAM TERRY GORTNEY, PE**

## **SUMMARY**

Mr. Gortney is an established engineer who specializes in the inspection of residential and commercial properties. Mr. Gortney's areas of specialties structural integrity, electrical systems, plumbing, HVAC, and other essential components. In addition, over the years Mr. Gortney has developed expertise in the area of traffic management systems and the implementation of such systems on both large and small scale projects.

## **EDUCATION**

Bachelor of Science in Civil Engineering – The University of North Carolina at Charlotte; 2012

## **REGISTRATIONS & CERTIFICATIONS**

Registered Professional Engineer

- North Carolina #045413
- South Carolina #36122

Licensed Home Inspector

- North Carolina #4051
- South Carolina #49551

## **PROFESSIONAL ASSOCIATIONS**

Certified Commercial Property Inspectors Association - CCPIA  
Institute of Transportation Engineers - ITE

## **CAREER HISTORY**

### **FORCON International – Inspection Engineer Consultant**

Conducting forensic investigations and expert witness services as it relates to his fields of expertise.

### **Gortney Home Inspections – Founder**

Managing a reputable inspection company, for both residential and commercial properties. Perform comprehensive inspections of properties, evaluating structural integrity, electrical systems, plumbing, HVAC, and other essential components. Prepare detailed inspection reports, documenting findings, identifying potential issues, and offering clear recommendations for improvement or repair.

### **CTRL Pest Solutions – Founder**

Founded and sold a successful pest control company, overseeing all aspects of operations, including customer service, scheduling, and pest control treatment. Developed and implemented effective pest control strategies, ensuring the elimination of pests and the prevention of future infestations. Maintained regulatory compliance and conducted regular inspections to assess treatment efficacy and customer satisfaction.

### **City of Charlotte Department of Transportation – CDOT Senior Signal Systems Engineer**

Managed multiple intelligent transportation systems upgrade studies and implementations of new technologies. Served as the City's Autonomous Vehicle Expert. Designed, tested, and evaluated coordinated traffic signal timing plans. Prepared and modified traffic signal controller databases. Reviewed traffic signal plans to ensure the safe and efficient movement of all modes of travel, including the creation of complex, implementable traffic signal phasing plans and detection schemes.

### **City of Charlotte Department of Transportation – CDOT Land Development Engineering Project Coordinator**

Reviewed Land Development commercial projects and subdivisions. Helped developers understand the requirements each site will have before submittal of plans and rezonings. Assisted in the review of rezoning site

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plans and trip generation. Review Traffic Impact Studies and Synchro modeling required by certain development thresholds. Create maps for the Land Development section through ArcGIS. Represent CDOT Land Development on several committees that involve both internal and external customer service and engineering.

## **City of Hickory – Traffic Signal Systems Operations Engineer**

Oversaw and maintained a traffic signal system consisting of 196 signalized intersections, pavement markings, signs, streetlights, and the city-wide radio system used by Public Services. Managed the operation and maintenance of the computerized traffic signal system, including design, construction, installation, and testing. Inspected signals to ensure compliance with design and contract specifications. Developed and reviewed traffic signal plans. Prepared, evaluated, and modified signal timings and progression schemes. Oversaw all traffic calming requests and resolutions. Reviewed and conducted engineering studies relating to safety and traffic operations. Provided engineering designs and cost estimates for other departments. Responsible for the management of eight full-time and at least one seasonal coworker.

## **Southeastern Freight Lines – Linehaul Dispatcher**

Oversaw the movement of LTL freight out of the greater Hickory area to other terminals around the United States. Assisted the coordination and dispatch of local city drivers to effectively pick up daily LTL freight from within the greater Hickory area.

## **HIGHLIGHT PROJECTS**

### **Structural Evaluation of Large Multi-Family Building (Fire Damage) (Greensboro, NC)**

Performed a comprehensive structural assessment of a 12-unit condominium building that was heavily damaged by fire and ongoing exposure to the elements. Conducted a thorough inspection of each unit within the fire-damaged condominium building, meticulously documenting the extent of damage and identifying compromised structural elements. Provided an unbiased evaluation of whether the building was repairable or should be classified as a total loss, taking into account safety concerns, required upgrades to meet current building codes due to the extent of the damage, structural integrity, demolition methods required, and cost-effectiveness.

### **Emergency and Transit Vehicle Route Priority (City of Charlotte)**

Led the development of the City's Emergency and Transit Vehicle Route Priority integration project which was the first of its kind in the world. This was a multi-year project that provides dynamic signal control to emergency and transit vehicles by leveraging real-time CAD AVL Systems and server to server communication to calculate vehicle ETA to signalized intersections along the route a vehicle is dispatched on. This project improved efficiency, reduced emergency response times by greater than 20 seconds, and focuses on improving transit on-time performance.

### **Citywide ATSPM Integration (City of Charlotte)**

Led the development and integration of the City's ATSPM Initiative. This project is a data-driven Cloud Based ATSPM system focused on improving traffic safety and operations that reduces travel times, delays, congestion, and air pollution while providing a safe environment for multimodal users. This project utilized high resolution signal data from existing traffic signals that enables users to view and optimize traffic signal timing parameters.

### **C2V Integration (City of Charlotte)**

Led the development and integration of the City's C2V project. This project's objective was real-time broadcasting of traffic signal state information and signal timing plan information to vehicle manufacturers from the Traffic Signal Controllers and the Advanced Traffic Management System (ATMS). Vehicle manufacturers collect and analyze this data in real-time to make predictions about the signals and projects this information to their vehicles such as red-light countdowns and Green Light optimal speed advisories.

## **ACHIEVEMENTS**

Employee of the Year – City of Charlotte - 2019