



# THE FALCON GROUP

## Juan Rivera, P.E. *Director of Tampa Bay*

### EDUCATION:

MSCE, Civil Engineering, Polytechnic University of Puerto Rico (2005)

BS, Civil Engineering, Polytechnic University of Puerto Rico (1997)

### LICENSES/CERTIFICATIONS:

Licensed Professional Engineer–P.E.:  
Florida (PE #79942)

Bullet Proof Manager Program

OSHA Training for the Construction Industry 10-Hours

### AFFILIATES AND ORGANIZATIONS:

American Concrete Institute (ACI)

American Society of Civil Engineers (ASCE)

### COURSES PRESENTED:

Painting and Waterproofing Essentials:

- Tampa Bay Condo & HOA Expo  
Tampa, FL (2019)
- Orlando Condo and HOA Expo  
Orlando, FL (2019 & 2021)

### PUBLICATIONS:

A SECOND-ORDER ANALYSIS BY  
FINITE ELEMENT METHOD FOR  
BEAM- COLUMN DESIGN, A THESIS  
SUBMITTED IN PARTIAL FULFILLMENT  
OF THE REQUIREMENTS FOR THE  
MASTER OF SCIENCE IN CIVIL  
ENGINEERING, 2005

### MILITARY SERVICE:

MACHINIST MATE THIRD CLASS  
1984 – 1988

### PROFILE:

Mr. Juan Rivera is the Director of the Tampa Bay office within The Falcon Group. He brings to the team 26 years of experience providing inspections, design, construction administration, and forensic services to public and private-sector clients on a wide range of projects. Job design portfolio includes project development, from conceptual design and plan preparation through construction and final inspection. As a forensic engineer, he investigated failures, site or building construction defects, and code compliance on behalf of attorneys, owners, developers, and insurance companies. Areas of expertise include building envelope systems, structural systems, and evaluation of civil infrastructure for engineering standard of care.

As the Director of the Tampa Bay office, Mr. Rivera ensures adherence to project, project plans, and timelines to be met by internal and external resources, final review of all reports, letters, bids, specifications, construction drawings, exhibits, etc. written by staff, and prioritizes and manages multiple projects within design specifications and budget restrictions. He also provides leadership direction through the sharing of techniques and problem-solving approaches, coordinates and manages internal kick-off, milestone and closeout meetings for projects, and verifies schedules, ensures adherence to project plans and timelines to be met by internal and external resources.

### PROJECT EXPERIENCE SYNOPSIS:

#### LITIGATION SUPPORT – EXPERT SERVICES:

As a forensic engineer, I investigated failures, site or building construction defects, and code compliance on behalf of attorneys, owners, developers, and insurance companies. Areas of expertise include building envelope systems, structural systems, and evaluation of civil infrastructure for engineering standard of care.

#### INVESTIGATION AND REPORT

Depending on the project's particularity, the investigation and report phase were anticipated for repair, restoration, design, or litigation. The systemic approach to each evaluation included; Review of Project Documents, Evaluation of Design Concept; Determination of Service History; Inspection; Investigate and Testing; Analysis, and Report Preparation.

#### REPAIR - RESTORATIONS – STRUCTURAL RETROFIT AND CIVIL WORK

While performing these services, different skill sets developed in forensic investigation, design, and construction are combined to identify the underlay failures to provide a remedial protocol to mitigate damage and bring the structures or components to governing codes.

#### INSPECTION AND CONSTRUCTION MANAGEMENT.

Oversaw quality control protocols to guarantee compliance with contract documents. Responsible for collecting and analyzing engineering data to solve

problems, developing reports, and providing recommendations. Advised the owner representative regarding construction material costs and quantity calculations. Participated in and documented weekly meetings to discuss the construction and design aspects. Evaluated and made recommendations for project chain orders. Evaluated contractor certifications for payments, oversaw punch list and secured close-out documentation.

### **NEW DESIGN AND CONSTRUCTION**

Consulted in civil and structural engineering disciplines during the planning and design stages. Created detailed CAD drawings for the civil and structural engineering trades. Produced and maintained accurate design documentation. Created estimates for the site and structural works. Researched, interpreted, and carried out engineering assignments for the structural design of new structures and analyzing existing systems and their foundations. Analyzed, interpreted, and carried out engineering assignments to perform civil design, including; grading, best management practices for control of erosion and sedimentation, stormwater sewer systems, and geometric layout of parking and roadways.

### **PROPERTY CONDITION ASSESSMENTS**

Property condition assessment follows the guidelines included in the ASTM E2018. This guide outlines procedures for conducting a walk-through survey to identify the subject property's physical deficiencies and recommends various systems, components, and equipment that should be observed by the field observer and reported in the property condition report (PCR).

