### **ENGINEER: CIVIL/STRUCTURAL**

#### SERGIO G. ARRATIA, M.S.C.E., P.E.

Engineering Design & Testing Corp. Post Office Box 940520 Maitland, FL 32794 Telephone: (407) 865-9900 sarratia@edtengineers.com

### **EDUCATION**:

2008	M.S., Civil Engineering University of Arkansas, Fayetteville, Arkansas
2005	B.S., Civil Engineering University of Arkansas, Fayetteville, Arkansas

#### **EXPERIENCE**:

# February 2018Engineering Design & Testing Corp.to PresentOrlando, Florida

Consulting Engineer. Assessment of residential and commercial structural systems, foundation settlement, walls, structural supports, roofs, property loss, construction defects, building code compliance, water intrusion, interior and exterior finishes, and storm damage. Evaluation of structural building components including concrete, masonry, steel, light-gauge, timber, and composite structural members. Root cause investigation and damage assessment of incidents affecting residential and commercial property, including scope of damage, remediation analysis, and cost estimation.

## January 2015Bryntesen Structural Engineersto January 2018Fort Lauderdale, Florida

Project Manager. Designed and managed luxury residential, commercial, retail and office structural projects with conventional systems, pre-engineered systems, and deep and shallow foundations. Provided analysis and design for lateral and gravity structural systems for new and retrofitted structures with various structural building components including concrete, masonry, timber, light-gauge, and composite structural members. Supplied feasibility studies for proposed renovations and remediation reports for existing structures. Performed special and threshold inspector requirements per Florida Statute.

## August 2011Tatum-Smith Engineers, Inc.to May 2014Rogers, Arkansas

Project Manager. Developed project scope and coordinated requirements and specifications with local and national clients. Coordinated project scheduling with Tatum-Smith management team. Supervised and monitored the work and schedule of sub-professional level Project Engineers. Coordinated structural design with architectural design and other engineering disciplines, performed quality assurance and control on construction documents and structural calculations, and executed field observations during and after construction to evaluate and ensure conformance with the project specifications.

## June 2008CMC Joist and Deckto July 2010Rogers, Arkansas

Design Engineer. Assisted draftsmen and sales people in interpreting contract documents to prepare bid proposals for steel joists and steel deck. Detailed and reviewed structural drawings from construction documents provided by clients. Evaluated, designed, analyzed, and reinforced structural members for commercial and residential projects. Prepared bills of materials for implementation in the production lines and visited job sites to monitor erection procedures and construction methodologies.

# June 2006University of Arkansasto May 2008Fayetteville, Arkansas

Graduate Research Assistant. Evaluated concrete construction and curing procedures in bridges constructed by the Arkansas Highway and Transportation Department (AHTD). Project funded by AHTD for a master's degree thesis titled "Evaluation of Bridge Deck Curing Procedures".

# August 2003Center for Training Transportation Professionalsto May 2008Fayetteville, Arkansas

Certified Proctor. Capacitated and tested personnel and companies performing work in the transportation industry with the aggregates, asphalt, concrete, and soils modules.

#### **CONTINUING EDUCATION:**

"Post-earthquake Safety Evaluation of Buildings," sponsored by ATC, Fayetteville, AR, October 2013

"Framing Solutions for Steel-Framed Office Buildings," sponsored by AISC, Rogers, AR, October 2013

"Framing Solutions for Steel-Framed Office Buildings," sponsored by AISC, Rogers, AR, October 2013

### **PUBLICATIONS**:

Arratia, S. G. Evaluation of Bridge Deck Curing Procedures. University of Arkansas, Fayetteville, 2009.

### PROFESSIONAL ORGANIZATIONS:

American Society of Civil Engineers (ASCE) American Concrete Institute (ACI) Tau Beta Pi National Engineering Honor Society Chi Epsilon National Civil Engineering Honor Society

### **REGISTRATIONS and CERTIFICATIONS:**

Registered Professional Engineer in Alabama (#37444-E) Registered Professional Engineer in Arkansas (#15388) Registered Professional Engineer in Florida (#82552) National Council of Examiners for Engineering and Surveying Record (#13-923-04) HAAG Certified Inspector – Residential Roofs (#201804300) HAAG Certified Inspector – Commercial Roofs (#201804300) National Association of Realtors® (#278050977) Florida Association of Realtors (#SL3359394)