

## Robert W. Pearson, P.E. | Southeast Principal Engineer

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### Professional Summary:

Mr. Pearson has over 3 decades of civil engineering design, project management, program management and construction management experience for public sector and private sector clients. In the last 5-years, he has completed over 900 civil and structural forensic investigations. Areas of engineering expertise include:

- Water intrusion
- Wind and flood assessments resulting from natural disasters
- Residential/commercial/industrial construction claims
- Residential and commercial roof analyses
- Building Code compliance (IRC and IBC)
- Structural assessments (subsequent to fire and other losses)
- Structural assessments (subsequent to ground settlement and movement)
- Underground utility systems

Mr. Pearson has completed forensic analyses related to residential, commercial and industrial claims to determine cause of loss in steel, wood, concrete, and masonry structures; construction defects; water intrusion; building code compliance geotechnical and foundation failures; HVAC system failures and wet fire suppression system failures.

### Licenses and Certifications:

Professional Engineer, NCBELS, North Carolina, License # 027593

Professional Engineer, SC LLR, South Carolina, License # 31700

Professional Engineer, APELSCIDLA, Virginia, License # 0402054589

Professional Engineer, State Board of Registration, Georgia, License # PE 040516

Professional Engineer, Department of Education, New York, (Inactive) License # 071711

NCEES Record Holder

Certified Residential Roof Inspector, Haag Engineering, 2015

Certified Commercial Roof Inspector, Haag Engineering, 2015

Certified Project Management Professional (CPMP), Central Piedmont Community College, 2013

Certified Business Analyst Professional (CBAP), Central Piedmont Community College, 2013

Lean Enterprise Specialist, Central Piedmont Community College, 2012

OSHA/AHERA Asbestos O+M Certificate, Current

## Project Experience:

### **Ground Storage Tank Collapse, Charlotte, NC**

Engineer-of-Record for in-service collapse of 1MM gallon non-potable water storage tank. Scope of work was to determine cause of loss. Process of elimination investigation indicated unauthorized breach of minimally secured operating system controls.

### **Class A Warehouse Construction Claim, Durham, NC**

In-progress construction claim in 2-15,000 sf Class A warehouses related to heaving of concrete floor slabs. Scope of work was to determine cause of loss and recommend repair protocol. Geotech analysis determined presence of expansive soils and water intrusion due to improperly sloped rough grading. Recommendations included removal of recently placed concrete, removal of expansive soils, backfill with acceptable soil base and replacement of concrete floor slabs. Project completed on-budget, on schedule.

### **Off-campus Student Housing Floor Subsidence, Charlotte, NC**

First Engineer on scene to investigate floor subsidence in newly constructed high-end leased student apartment building. Investigation quickly expanded to other units with similar symptoms in all buildings resulting in displacement of all tenants. Detailed investigation determined cause of loss was excessive point-loads of building materials.

### **Automotive Dealership Expansion Roof Collapse, Augusta, GA**

Engineer-of-Record for in-progress construction claim for automotive dealership expansion which resulted in roof collapse during microburst rainstorm. Scope of work was to determine cause of loss and recommend solutions. Investigation determined improper construction involving plugged primary roof drain outlets and blocked secondary roof drain outlets.

### **Subsidized Housing Complex Condition Assessments, Nationwide**

Project Manager for Condition Assessments for national subsidized housing complex property owner. Developed scope of work, field-work equipment, digital reporting platforms, reporting protocol and schedule for evaluation of 200 properties. Managed nationwide network of in-house Engineers to complete scope on-budget, on-schedule.

### **32-Building Apartment Complex Roof Evaluation, Greensboro, NC**

Wind and hail damage claimed on roofs of 32, 3-story residential apartment buildings. Scope was to determine cause, extent of damage and repairability given varying roof covering ages and varying direction of roof slope exposure. Project completed on-budget, on-schedule.

### **27-Building Condominium Complex Roof Evaluation, Myrtle Beach, SC**

Wind damage claimed on roofs of 27, 3-story multi-unit residential condominium buildings. Scope was to determine cause, extent of damage and repairability of Hurricane Dorian related damages given varying roof covering ages and varying direction of roof slope exposure. Project completed on-budget, on schedule.

### Professional Experience:

EFI Global /Unified Forensics, PLLC, District Engineering Principal, 2018-Present  
Unified Forensics, PLLC, Senior Forensic Consulting Engineer, 2017 – 2018  
Unified Forensics, PLLC, Forensic Consulting Engineer, 2013 – 2017  
Vector Consulting, PLLC, Civil Consulting Project Manager, 2011- 2013  
US Infrastructure of Carolina, Inc., Engineering Project Manager, 2008-2011  
Clark Patterson Lee, Engineering Principal, 2007  
Charlotte Water, Engineering Program Manager/ GIS Project Manager, 1999-2007  
Stantec, Engineering Project Manager, 1997-1999  
Pearson Consulting, Engineering Project Manager, 1995-1997  
LJR Engineering, Project Engineer, 1989-1995  
Way International, Engineering Coordinator, 1983-1989

### Specialized Education:

Mass Timber Construction, Design and Connections, Wood Products Council, 2020  
Electric Transmission Future Trends, National Society of Professional Engineers (NSPE), 2020  
Consequences of Industrial Exemptions to Engineered Facilities, NSPE, 2020  
Application of Artificial Intelligence in Engineering, NSPE, 2020  
Automated Vehicles and application of Engineering, NSPE, 2020  
Use of Un-manned Aerial Vehicles in Engineering, NSPE, 2020  
Green Design and Construction, Titan Continuing Education, 2019  
Mold Remediation in Schools & Commercial Buildings, Titan Continuing Education, 2019  
2010 ADA Part 1-Title II, Titan Continuing Education, 2018  
Investigation and Repair of Fire-Damaged Framing, ASCE, 2018  
Retaining Wall Design and Slope Stabilization, Half Moon Education, 2017  
Nuclear Energy in the Future, NSPE, 2017  
Public Investments and Regional Economic Health, NSPE, 2017  
Introduction to Wood, Wood Products Council, Charlotte, NC 2016  
Residential Roof Inspector Certification Course, Haag Education, Columbus, OH 2016  
Commercial Roof Inspector Certification Course, Haag Education, Columbus, OH 2016  
Evolving Professional Risks, NSPE, 2015  
Single-ply Roof Damage Assessments, Haag Education, 2015  
Low-slope Roof Basics, Haag Education, 2015  
Moisture Penetration in Building Envelopes, Case Institute, 2014  
Composition Roof Damage Assessment, Haag Education, 2014

Contractual Indemnities, AIA, 2014  
Project cost Control, NSPE, 2014  
Building Information Management, NSPE, 2014  
Effective Investigation and Testimony, IAAI, 2013  
Residential Building Construction, IAAI, 2013  
Vacant and Abandoned Building Hazards and Solutions, IAAI 2013  
NFPA 921 and 1033 2014 Updates, IAAI 2014  
Regulatory Reform in NC Affecting Engineering, Professional Engineers of NC (PENC), 2013  
Hydraulic Fracturing in North Carolina, PENC, 2013  
Project Planning and Control, PMI, 2013  
Determining Business Requirements, PMI, 2013  
Creating Functional Specifications, PMI, 2013  
Structured Systems Testing, PMI, 2013  
Microsoft Project, PMI, 2013  
Cloud Technology- Transforming Municipalities, American Public Works Association (APWA), 2011  
Energy Audit Preparation, APWA, 2011  
Watershed Master Planning, APWA, 2011  
Engineering Contracts, APWA, 2011  
Stormwater and Ice Removal, APWA, 2011  
Surge Model Calibration, AWWA, 2011  
Capital Program and Operating Budgets, AWWA, 2011  
Process and Economic Benefits, AWWA, 2011  
Addressing Sanitary Sewer Overflows, AWWA, 2011  
Drought in Catawba River Basin, AWWA, 2011  
Asset Management Plans, AWWA, 2011  
North Carolina Dept. Transportation (NCDOT) Bridge Program, NSPE, 2011

#### Education:

BS, Civil Engineering Technology, Virginia Tech, Blacksburg, VA, 1979

#### Affiliations:

National Society of Professional Engineers (NSPE)  
American Water Works Association, (AWWA)  
Professional Engineers of North Carolina (PENC)

#### Publications and Presentations:

"Construction Defects", Saenger Consulting Group, Inc. Charlotte, NC 2019

"Wind, Water and More", Natural Disaster Damage Assessment, Saenger Consulting Group, Inc. Charlotte, 2019, 2018 and 2017.

"Making Sense of Cracking Up", Types and Causes of Cracks in Structures, Saenger Consulting Group, Inc., July 2017.

"Lean Business Processes Score in Lean Times", American Water Works Association Annual Conference, Concord, NC, 2013.

"Lean Business Processes Score in Lean Times", American Public Works Association Annual Conference, Asheville, NC, 2012.

"Working Smarter by Mapping Your Business Processes", AWWA Finance and Management Workshop, Asheville, NC, 2008.

"GIS Implementation: Which Comes First, Data Conversion of Business Processes?" ESRI International Users Conventions, San Diego, CA, 2006.