

Kristi K. Bumpas, P.E., LEED AP

PROJECT ENGINEER / PRESIDENT
RED ROCK CONSULTING, LLC

PROFESSIONAL EXPERIENCE

Ms. Bumpas is a project engineer responsible for geotechnical engineering projects and business development. She has extensive experience in soils testing and evaluation, pavement testing and evaluation and project management. Areas of focus include mitigation of expansive soils (including sulfate soils), pavement design and sustainable design through innovative geotechnical applications and foundation recommendations.

REPRESENTATIVE PROJECT EXPERIENCE

- **Vance AFB Control Tower – Enid, OK**
Conducted a geotechnical engineering investigation for an approximate 700 square foot eleven story control tower with an approximate 450 square foot single story safe room and pavement area. Environmental precautions were necessary for this site due to soil contamination as a result of activities at the base.
- **Fort Sill Pavement and Subgrade Evaluation – Lawton, OK**
Conducted a pavement and subgrade evaluation for approximately 126,000 feet (24 miles) of secondary street pavement across the base. Pavement section thicknesses were measured and subgrade soils were tested and classified.
- **Fort Sill Company Operations Facility Buildings – Lawton, OK***
Conducted a geotechnical engineering investigation in expansive soils for the construction of three areas, each with readiness modules, an administration building, covered hardstands and pavement. The project was Design-Build.
- **Vance AFB Force Protection Enhancements – Enid, OK***
Conducted geotechnical engineering investigation in expansive soils for 6 structures and approximately 6,200 feet of concrete road pavement. Environmental precautions were necessary for this site due to soil contamination as a result of activities at the base.
- **Fort Sill Child Development Center – Lawton, OK***
Conducted a geotechnical engineering investigation in expansive soils for the construction of an approximate 25,800 square foot child development center with an approximate 15,000 square foot asphaltic concrete parking area.
- **Fort Sill Physical Fitness Center – Lawton, OK***
Conducted a geotechnical engineering investigation in expansive soils for the construction of an approximate 80,500 square foot fitness facility with an approximate 30,000 square foot asphaltic concrete parking area.
- **McAlester Army Ammunitions Plant Improvements – McAlester, OK***
Conducted a geotechnical engineering investigation for the checkpoint building and pavement reconstruction of the main gate entry and an additional exit lane.
- **Tinker AFB Flammables Storage – Midwest City, OK***
Conducted geotechnical engineering investigation in expansive soils for the construction of an approximate 6,000 square foot warehouse with a single concrete truck loading dock and a gravel parking and drive area.
- **Vance AFB Fuel Maintenance Facility – Enid, OK***
Conducted a geotechnical engineering investigation for the construction of an approximate 16,500 square foot fuel system maintenance facility with an approximate 8,500 square foot concrete apron and an asphalt parking lot.

EDUCATION

Bachelor of Science, Civil Engineering,
Oklahoma State University

Masters Courses, Geotechnical Engineering,
Oklahoma State University

REGISTRATION

Oklahoma PE

Texas PE

AFFILIATIONS

American Society of Civil Engineers,
Past President

ASCE Geo Institute, Oklahoma Chapter
Secretary, Founder

American Council of Engineering Companies

Society for Marketing Professional Services

Edmond Chamber of Commerce

WORK HISTORY

Red Rock Consulting, LLC
Project Engineer, 2009 - Present

Shepherd Geotechnical Engineering, Inc.
Project Engineer, 2007 – 2009

Shepherd Engineering Design Co., Inc.
Project Manager, 2005 – 2007

Professional Services Industries, Inc.
Project Manager, 2003 – 2005

- **Fort Sill Call for Fire Training Facility – Lawton, OK***
Conducted geotechnical engineering investigation in expansive soils for an approximate 6,000 square foot training facility.
- **Fort Sill Clothing Initial Issue Point Warehouse – Lawton, OK***
Conducted geotechnical engineering investigation in expansive soils for the construction of an approximate 6,000 square foot warehouse with a single concrete truck loading dock and a gravel parking and drive area.

* Project was completed under previous employment