



1. NAME:

Ray R. McKenzie, MITE, FAAPM, CIPM, MCI Arb, CPM, CL, IRPE, P.E.

2. PROFESSION:

Civil/Transportation Engineer

3. YEARS OF EXPERIENCE:

25+ Years

4. NATIONALITY:

Bahamian

5. TEAM LEADER EXPERIENCE:

CCG Team Leader with over 18 years of leading engineering teams.

6. OTHER TRAINING

- Northwestern University, 1994, USA – Transportation Engineering Institute (Semester)
- Certified International Project Manager, CIPM
- SIDRA 6.0 Traffic Software
- SIDRA Trip 1.1 Software
- Synchro 7 Traffic Software
- Highway Capacity Software
- IMSA Traffic Signal III Certification
- FDOT Work Zone Advanced Traffic Maintenance Certification
- FIDIC Contract Training
- Design Build Institute of America Conference
- Certified as a Preparer of Storm Water Pollution Prevention Plan
- Environmental Certification in Commercial/Residential Building

7. SAMPLE KEY QUALIFICATIONS

- **FROM:** 2014 **TO:** Present
Employer: Caribbean Civil Group Ltd.
Name of Assignment of Project: **North Abaco Port Project (US\$39 Million)**
Location: Coopers Town, Abaco Bahamas
Position: CCG Team Leader

The North Abaco Port is located slightly more than 1.6 miles north of Coopers Town. The port area is approximately 45 acres for container stockyard, bulk cargo stockyard and yacht quay service area, and approximately 98,000 square feet area dredge for harbor basin. The port quays include: oil product berth; bulk cargo berth; general cargo berth; and container berth totals approximately 1,732 feet. The quay structures will be supported on steel sheet piles and wood piles. The design plan of dredge slope at bottom and retaining wall on the top is applied for the connecting part between berths; the retaining wall is approximately 1,672 feet long. The area of road and stockyard is approximately 300,000 square feet. Building structures include: warehouses; and an administrative building totaling 8,530 square feet in area. The break water is of crushed stone sloped structure totaling 341 feet long. The approach channel is in width of 200 feet and 980 feet long. The dredge works in approximate quantity 950,000 cubic feet, includes 49,212 cubic feet of channel dredging and a large quantity of harbor basin dredging

Principal Engineer and team leader with oversight of the design review and coordination phase and project management/contract administration services for the works.

- **FROM:** 2010 **TO:** 2013
Employer: Caribbean Civil Group Ltd.
Name of Assignment of Project: **Airport Gateway Project (US\$60 Million)**
Location: New Providence, Bahamas
Position: CCG EOR Team Leader





Reconstruction of approximately 6 miles of major highway consisting of engineering design, design review, earthworks, drainage system, street lighting, electrical low/high voltage and telecommunications utilities, sidewalks, 24 inch water main, landscaping roadway geometrics, signage and markings, detailed engineering calculations reports and specifications. Design entailed nine roundabout intersections.

Principal Engineer and team leader in responsible charge of design and design review, sign and seal drawings coordination and execution of road safety audits. Responsible for management of CCG's Project Engineer during construction providing on site QA-QC of all water main documentation for monthly reporting to Water & Sewerage Corporation.

• **FROM:** 2011 **TO:** 2012

Employer: Caribbean Civil Group Ltd.

Name of Assignment of Project: **Baha Mar Development Mega Resort (US\$3 Billion)**

Location: New Providence, Bahamas

Position: CCG EOR Team Leader

Reconstruction of approximately 6 miles of major highway consisting of engineering design, design review, earthworks, drainage system, street lighting, electrical low/high voltage and telecommunications utilities, sidewalks, 24 inch water and reuse water mains, sanitary sewer design, liftstations, landscaping roadway geometrics, signage and markings, detailed engineering calculations reports and specifications. Design entailed seven roundabout intersections.

Principal Engineer and team leader in responsible charge of design and design review, sign and seal drawings. Responsible for management of CCG's construction Site Engineering team providing QA-QC for all civil infrastructural works and the water main documentation for monthly reporting to Water & Sewerage Corporation.

• **FROM:** 2008 **TO:** 2009

Employer: Caribbean Civil Group Ltd.

Name of Assignment of Project: **New Providence Intersection Improvement (US\$5 Million)**

Location: New Providence, Bahamas

Position: CCG Design Team Leader

Improve and upgrade major intersections along arterial corridors extending from east to west across the island of New Providence including but not limited to traffic data collection and analysis, traffic signal analysis, topographical survey data collection, design development, detailed geometric design, creating tender documents and specifications.

Principal Engineer and design team leader in responsible charge of design and design review, construction documents, sign and seal drawings to upgrade and improve intersections. Responsible for management of CCG's design engineering team.

• **FROM:** 2004 **TO:** 2005

Employer: Caribbean Civil Group Ltd.

Name of Assignment of Project: **Harrold Road Dualling and Rehabilitation Project (US\$8 Million)**

Location: New Providence, Bahamas

Position: CCG Site Engineering Team Leader & Contractor Board Member

Reconstruction of 2 miles of four-lanes urban highway consisting of roundabouts, drainage, oil/water separators, headwalls and culverts, concrete and earthwork testing, lighting, landscaping, curb and gutter, pedestrian crossing and railing.

Team leader in responsible charge of CCG Site Engineering Team for the works and during construction served as a Board Member for the JVP Contractor.





- **FROM:** 2004 **TO:** 2005
Employer: Caribbean Civil Group Ltd.
Name of Assignment of Project: **Leeward Highway & Airport Road Reconstruction (US\$20 Million)**
Location: Providenciales, Turks & Caicos Islands
Position: Contract Administration & Construction Resident Engineering

Reconstruction of capital works consisting of 11 miles via a design-build reconstruction project delivery methodology. Leeward Highway is a major eastbound and westbound principal arterial moving traffic across the Island of Providenciales. Airport Road is a minor arterial moving traffic from the International Airport in Providenciales onto the Leeward Highway. This project encompassed drainage, paving works, earthworks, roadway geometrics, critical path scheduling, and quality control certification.

Team leader responsible for construction supervision, contract administration and resident engineering for oversight and communication with Client Ministry of Public Works providing project management, design review and approval, administration, contract administration, and site engineering inspection, shop drawings review and approval, claims evaluation and recommendations, payment application review and approval, QA-QC oversight for this major capital works.

8. EDUCATION

- BSCE, North Dakota State University, USA, 1991
- Masters Studies Civil Engineering (Transportation Emphasis), University of Memphis, USA, 1996 – 1997
- LL.M Construction Law, Arbitration & Adjudication, Robert Gordon University, UK, 2014 - 2016
- Certified Professional Management, COB/James Madison University, USA, 2002 – 2003
- Certificate in Law, Institute of Legal Executives, UK/COB, 2004 – 2005

9. MEMBER OF PROFESSIONAL ASSOCIATIONS

- Registered Professional Engineer, Bahamas
- Bahamas Institute of Professional Engineers (BIPE)
- Bahamas Society of Engineers (BSE)
- Registered Professional Engineer, South Dakota, USA
- Registered Professional Engineer, Tennessee, USA
- International Registry of Professional Engineers
- Fellow of American Academy of Project Management (FAAPM)
- Certified International Project Manager (CIPM)
- Member of Chartered Institute of Arbitrators
- Member of Construction Institute
- American Society of Highway Engineer (ASHE)
- American Society of Civil Engineers (ASCE)
- Institute of Transportation Engineers (ITE)
- Transportation & Development Institute - American Society of Civil Engineers (ASHE)
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10. COUNTRIES OF WORK EXPERIENCE

- Bahamas
- Turks & Caicos Islands
- Grenada
- United States of America

11. PUBLICATIONS





- Kenya A. Rolle, MSc., PhD (Candidate), Ray R. McKenzie, P.E., Francis S. Clarke, C. Eng., P.E., Ricardo L. Bonaby, BSc. (2013): "Evaluation of Climate Change Using Statistical Methods & The Potential Impacts on Asphalt Roads in New Providence" Jamaican Institute of Engineering
- Philip E. Salt, P. Eng., Prashant Malla, Ray R. McKenzie, P.E., Joy John, P. Eng. (2012): "A Road Maintenance Management System for New Providence Island" Jamaican Institute of Engineering
- Ray R. McKenzie, P.E. (2009): "Foreign Direct Investment (FDI) - The Good, Bad, and Ugly" The College of The Bahamas/Construction Seminar Group
- Ray R. McKenzie, P.E. (2003): "Smart Growth and Planning to Combat Urban Sprawl and Traffic Congestion" The College of The Bahamas Research Forum

12. EXPERIENCE RECORD

FROM: 2001 **TO:** Present
Employer: Caribbean Civil Group Ltd.
Position: Principal

- **Principal Engineer and team leader** in responsible charge of Administration, Technical Design & Engineering, contract administration and site monitoring and observations.

FROM: 1999 **TO:** 2001
Employer: Ministry of Public Works
Position: Senior Engineer

- Senior Civil Engineer with Ministry of Public Works, New Providence, Bahamas. Responsible for oversight of junior engineers, lead numerous Town Hall Meetings for various public works and served on various committees related to engineering works. Assisted with management of 220 employees.

FROM: 1997 **TO:** 1999
Employer: Transportation and Parking Services – City of St. Petersburg, Florida USA
Position: Manager

- Senior Manager of Transportation and Parking Services, St. Petersburg, Florida, managed a staff of 33 employees. Organized and lead public meetings with neighborhood committees on a weekly basis regarding transportation and traffic issues city wide in the various neighborhoods.

FROM: 1996 **TO:** 1997
Employer: Transportation Research Institute – University of Memphis, USA
Position: Research Assistant

- Research Assistant at the Transportation Research Institute, University of Memphis.

FROM: 1991 **TO:** 1996
Employer: NDDOT, USA
Position: Graduate/Project Engineer

- Project Engineer for the NDDOT in responsible charge of the Pavement Management System. Lead engineering teams for planning and eventual design and construction of major highway reconstruction works.

13. LANGUAGES





English

Spoken Language

14. CERTIFICATION

Authorized Signature

7 September 2015

Date (dd/mm/yy)

