

**M. Gates Browne** was born and raised in San Jose, California. Gates and his wife, Angie, currently reside in Plainfield Indiana with their two children, Walter (6) and Roger (4). Gates is a licensed civil engineering in the state of California and was awarded a Bachelor of Science in Civil Engineering from Arizona State University.

Currently, Gates is employed by Duke Energy as a member of their Indiana Substation Engineering team. He is involved in the design and construction of new electrical substations and expansions to existing facilities. The experience at Duke has given Gates the opportunity to become familiar with high voltage equipment and the physical design of electrical facilities.

Gates spent three years, performing Structural Design for Vertex Consulting Structural Engineers located in Scottsdale Arizona. His employment at Vertex allowed him to become familiar with consulting structural design and construction processes for residential, commercial and industrial projects.

Gates' areas of interest include: Structural Engineering (commercial, industrial, infrastructure), Amusement Park/Ride Design, Construction Technology, and National Defense (blast resistant structures, armor, ordinance).



## **M. Gates Browne, PE**

---

### **Civil Engineer**

(317) 652-7372 - Home

(480) 276-8992 - Cellular

[mgbrowne@enworb.net](mailto:mgbrowne@enworb.net)

<http://www.enworb.net/profile>

## Work Experience

Duke Energy | Oct. 2009 – Present  
Plainfield, Indiana

### Civil Engineer

Civil and Structural Design: Electrical substation physical layout and design. Coordinate substation requirements and equipment selection with electrical engineers. Performed updates to structural standards to conform with contemporary code requirements.

Procurement and Construction: Attend site meetings to discuss construction requirement as well as assess existing site conditions. Create and approve work orders for required project materials.

Vertex Consulting Structural Engineers, LLC | Oct. 2006 – Sept. 2009  
Scottsdale, Arizona

### Structural Designer

Structural Design: Industrial, commercial, and residential projects; analysis of structural members, components, and foundations; also, create structural drawings, notes, and details.

Special Structural Inspections: concrete tilt-up panel pours, reinforcing steel (foundation, tilt panel, masonry), grout pours, structural welds.

Additional Responsibilities: reviewing shop drawings for compliance with structural specifications to aid proper fabrication and construction.

Unisys/International Business Machines | Sept. 2004 – Feb. 2006  
Phoenix, Arizona

### Desktop Support Technician

Onsite Contractor: Honeywell International onsite IT support for engineering and fabrication desktop environments.

## Licensures & Certifications

---

California | **Professional Civil Engineer**  
Six Sigma | **White Belt Lean**  
CompTIA | **A+ Hardware/Operating Systems**

## Education

---

**Arizona State University - Civil Engineering** | Aug. 2004 – May 2009  
Tempe, Arizona

**Bachelor of Science in Civil Engineering** | Emphasis Construction Engineering

## Qualifications

---

**Structural Design:** Able to communicate with architect from initial concept of project and create structural drawings, calculations, and details to meet architectural and functional demands. Proficient in engineering software: Enercalc V6, Risa3D, Staad.Foundation, RAMadvanse, AutoCAD 2011, Inventor 2011, Excel.

**Construction:** Perform special structural inspections, create plans/ calculations and follow through building department review, check shop drawings for conformance with design specifications.

**Substation Design:** Understanding of electrical codes for setbacks, spacing, and clearances for high voltage equipment up to 345kV. Experienced in selecting electrical bus, switches and other associated equipment.

**Company Life:** Have worked in variety of environments: small business, industrial and large corporation; often performing several roles within an organization.

**Technical Literacy:** Extensive computer skills including engineering and business applications, graphic and video editing software, server administration, network configuration, and desktop management.

## Volunteer & Extracurricular Activities

---

**ImagiNations 2009 Design Competition** - Walt Disney Imagineering  
June 2008 – April 2009

Led a four-person team, from ASU, in creating a design submission for the annual Disney ImagiNations contest. This project included floor plans, elevations, architectural design, and 3-D modeling. Project submission qualified for the semi-final judging round.

**Proselyting Service Missionary** - Tempe, Arizona | Feb. 2001 – Dec. 2002

Served as a full-time proselyting missionary for The Church of Jesus Christ of Latter-day Saints. Appointed as a supervisor over several other volunteer missionaries.

**Congregational Service** – Plainfield, Indiana | Sept. 2011 – Present

Currently, serve as clerk responsible for maintaining membership records.

## Professional Associations

---

Associate Member | **ISEA**  
Member | **ASCE**