

STRUCTURAL ENGINEER (Licensed PE or SE, 5+ Years of Experience)

About Us

10-4 Engineering PLLC is a Chicago-based structural engineering firm founded by three licensed structural engineers: Hemal Patel, Gary Powell, and Vinod Patel. Together, they bring a combined 100 years of experience delivering award-winning bridge designs and structural designs for complex transportation projects throughout Illinois, Wisconsin, and the Midwest.

Our name, 10-4 Engineering, comes from the familiar phrase “10-4,” meaning “message received, taking action.” That same spirit guides how we work every day: clear communication, decisive problem-solving, and a commitment to getting things done right the first time.

About the Job

We are looking for a licensed Structural Engineer (PE or SE) with at least 5-10 years of experience to join our growing team. This is a rare chance to work side-by-side with our founding partners on high-profile transportation projects and to take your skills to the next level.

You will be involved in every part of our work, from project scoping and structural analysis to final design and plan delivery for bridges, retaining walls, culverts, and other structures. You will collaborate with other disciplines like roadway, geotechnical, hydraulics, and construction to deliver projects that make a real difference for communities.

Our founders have mentored many engineers who have gone on to become leaders in the industry. If you want hands-on guidance and opportunities to grow as a well-rounded engineer and project manager, you will find that here. We have many interesting and challenging projects coming up and are looking for someone experienced to help us deliver them. There is a lot of room for you to grow and take your career to the next step.

What You'll Do

- Inspect existing structures, perform condition assessments, and complete load ratings.
- Prepare detailed condition reports, develop repair options, and estimate construction costs.
- Plan and lay out new structures in coordination with roadway and railway improvements.
- Develop bridge type studies and propose cost effective and durable structural solutions.
- Design all types of structures, including complex bridges, using RS & PS concrete, steel, and timber.
- Conduct structural analysis and design calculations using a variety of analysis software.
- Perform design calculations and checks following AASHTO, AREMA, IDOT BM and other codes.
- Guide entry level and junior engineers on analysis, design and plan production at a high standard.
- Develop and QC construction plans, specifications, and cost estimates using Microstation & Bluebeam.

- Experience with Bentley 3D (OpenBridge) modeling is a plus, as we have upcoming projects involving it.
- Provide support during construction, including shop drawing review, RFI responses and site visits.
- Help project managers with scoping, budgeting, scheduling, and quality checks for deliverables.
- Coordinate closely with roadway, hydraulics, and geotechnical teams to ensure seamless designs.

What We're Looking For

- Based in the Chicago area or willing to relocate.
- Bachelor's degree in Civil Engineering with a structural focus. A master's degree is a plus.
- PE and/or SE license in Illinois is highly preferred.
- At least 5-10 years of structural design experience, ideally with IDOT or Illinois Tollway projects.
- Previous experience with AASHTO, AREMA, and other relevant bridge design codes.
- Skilled in structural analysis and design software. Ability to perform hand calcs to check results.
- Proficiency with Microstation CAD. Experience with Bentley 3D modeling is a bonus.
- Strong written and verbal communication skills. Ability to make quick and confident decisions.
- Ability to guide and mentor junior engineers and keep projects organized within scope/schedule.
- Highly organized and has the ability to manage multiple projects and priorities.
- A genuine interest in contributing to a growing, small, close-knit firm.

What We Offer

- Fifteen (15) days of paid time off each year
- Seven (7) paid holidays, including one (1) floating
- Annual continuing education and industry membership allowance
- 401(k) plan with up to 4% company match
- Health, dental, and vision insurance
- Life insurance
- FSA and HSA options

- Short and long term disability coverage
- Hybrid and flexible work schedule

Ready to Take the Next Step?

At 10-4 Engineering, you will find the rare chance to shape your career while working on challenging projects alongside seasoned mentors who truly care about your growth. If you are ready to step up, learn, and help us build the future, we would love to meet you.

For more information or to apply, please reach out to **Siobhan Sullivan** (siobhan.sullivan@10-4eng.com) and **Hemal Patel** (hemal.patel@10-4eng.com).

10-4 Engineering PLLC is proud to be an Equal Opportunity Employer.