1. Inspected and evaluated existing buildings for structural deficiencies and code violations.
2. Published technical reports on structural conditions, including repair cost estimates and necessary corrections required to meet local building codes.
3. Verified construction documentation conformed to quality assurance standards and client requirements.
4. Traveled to build sites to collaborate with construction personnel and to confirm compliance with design parameters and regulations.
5. Drafted structural plans using various computer aided design solutions, including [Software] and [Software].
6. Completed accurate engineering calculations for weights, loads and other metrics using both manual and digital methods.
7. Created cost-effective, sustainable and safe plans for large and small bridge projects.
8. Designed structures for construction in various building mediums, including [Type] and [Type].
9. Created designs for temporary structures such as shores, vertical transportation solutions, employee access solutions and more.
10. Performed quality inspections of all plans, documents, and calculations as well as in-progress and final bridge construction.
11. Prepared presentations outlining proposed designs to customers and incorporated feedback into final plans.
12. Assisted drafters in developing structural design of products using drafting tools or computer-assisted design (CAD) or drafting equipment and software.
13. Wrote project proposal summaries, outlining factors such as cost, timelines, scheduling and required permits.
14. Attended professional training courses to maintain current knowledge and licensure.
15. Helped prepare project budgets, maintain schedules and put together final documentation.
16. Authored technical specifications for structural designs in [Industry].
17. Supervised application of quality assurance and quality control of construction of [Type] structures in [Type] area.
18. Administered contracts and managed projects.
19. Participated in design reviews within team-based structural planning committees.
20. Improved traffic flow and reduced congestion through innovative and solution-oriented bridge system design.