[Name of the Writer]

[Name of Instructor]

[Subject]

[Date]

Job Description for Civil Engineer

## **[Job Title]**

Civil Engineer for Silver Sand Town

## **Reports To**

Civil Engineer reports directly to Project Manager of Silver Sand Town.

## **Job Overview**

We are looking for a professional, dedicated and cooperative Civil Engineer who has rich and diverse knowledge of the construction industry. This job requires the division of time between an office setting, visits to site as well as meetings with the local city council. To be successful, the ideal candidate should have versatility and endurance to work long hours in alternate settings. The Civil Engineer will supervise the construction operations for the real estate development company, suggest design improvements and calculate structural components and their various thresholds.

Critical thinking is a necessity for this job as command over mathematics and physics is a basic requirement. The ideal candidate will have grasp over core civil engineering subjects and be able to apply knowledge in a practical setting in order to ensure sufficient cost cutting and quality maximization for the company. The company expects innovative solutions to problems that will be encountered during construction. The selected candidate will be expected to deal efficiently with clients, team members, and company management and be able to communicate effectively with the aforementioned as well. Communication skills of the highest level are expected of the candidate as the margin of error in the industry is very small.

**Responsibilities and Duties**

* Management of all construction activities
* Designing more efficient methods of construction
* Conducting feasibility of projects
* Development and creation of construction projects of the company
* Supervision of all construction activities of the project from its inception to completion
* Studying government rules and legal precedents in the construction industry
* Examining and providing estimates for the individual components of the project
* Command over engineering and design software to run test simulations
* Efficient liaison with peers in industry, colleagues and clients
* Management of budgets and resources by keeping track of deadlines and obtaining quotes from vendors and suppliers
* Assessing the environmental feasibility and sustainability

## **Qualifications**

The ideal candidate must have the following qualifications

* 4 years Bachelor’s degree in Civil Engineering from a recognized university, accredited by the Institution of Civil Engineers
* A minimum of 3 years of industry-specific experience (commercial building construction experience will be preferred)
* Registration as Civil Engineer is mandatory
* Familiarity with software used in design such as AutoCad Civil 3D, CAD, Autodesk and MicroStation
* Command over photo imaging software and map creation software
* Considerable analytical and critical thinking skills, with extreme precision in design calculations
* Impeccable time management skills to effectively divide time between multiple settings such as office, site and meetings
* Solid leadership capability to steer a team of workers towards the objective and motivate them when necessary
* Punctual with deadlines
* Licensed Professional Engineer with American Society of Civil Engineers will be preferred
* Physically apt to perform demanding and physically arduous tasks with considerable ease

**Criteria Determination**

Civil Engineers are responsible for management of huge construction projects that cost millions of dollars in investments. It is pertinent to note here that the margin of error in this field is minimal and therefore, civil engineers must be extremely precise in their calculations as even the slightest error in calculation can result in disasters that will result in property damage, if not a loss of life. Civil Engineers are also responsible for keeping within the assigned budget and any rise in costs are usually attributed to a civil engineer’s lack of vision. The costs associate with a project are rarely final and Civil Engineers are expected to cut some costs through the use of innovative strategies and methods of construction. Moreover, Civil Engineers are also tasked with proposing out-of-the-box solutions to problems that inevitably arise in many construction projects.

 Another important aspect of a Civil Engineer’s job is to keep in view the government regulations and rules. This ensures that the company is not in violation of any laws and in some situations, the law supports a specific business industry and people of the industry are unaware of the advantages and benefits being offered. Therefore, it is crucial for a civil engineer to be abreast of all laws of government, both at federal and state level. Moreover, a civil engineer has to liaison with multiple vendors, suppliers and in some cases with official government representatives as well. So, having the right temperament is crucial and it is absolutely essential to have effective communication skills.

 When we talk about qualifications, the minimum criterion for selection as Civil Engineer is a Bachelor’s degree. In addition to this, a 3 year work experience is necessary for a job of this scale as the margin of error and complexity of design require experienced professionals. Furthermore, registration with American Society of Civil Engineers is essential as the license of Professional Engineer ensures that a candidate has all the requisite knowledge of the industry in question. Professional Engineers are licensed to oversee the work of other engineers as well as the technicians. They are also able to approve design plans. Professional Engineers are also federal and state law compliant so company can apply for licenses for construction projects as well. The “Code of Federal Register” lists all federal laws pertaining to civil engineers and has been consulted while designing this job description.

Works Cited

#### "Govinfo." *Govinfo.gov*. N. p., 2019. Web. 19 Apr. 2019.

#### "What Is A PE?." *Nspe.org*. N. p., 2019. Web. 19 Apr. 2019.