**City of Pendleton**

**Job Description**

**Geographical Information System Technician**

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| --- | --- |
| **Department**: Public Works | **FLSA**: Non-exempt |
| **Reports to**: Public Works Director | **Representation**: SEIU |
| **Pay Range**: Range 24 | **Date**: April 2020 |

**GENERAL POSITION SUMMARY:** *(Briefly describe why this position exists.)*

Performs skilled work in the development, operation, and maintenance of a geographical information system (GIS) for the Public Works Department; does related work as required.

**DUTIES AND RESPONSIBILITIES:**

Tasks listed are intended to be descriptive and not restrictive. An employee in this classification may perform any of the tasks listed; however, these examples do not include all the tasks which an employee may be expected to perform.

**ESSENTIAL FUNCTIONS/MAJOR RESPONSIBILITIES:** *(List those tasks that must be done to accomplish the job purpose. In order of importance or time spent on the task, please describe the various duties of the job which are critical to the successful performance of the job* ***or*** *occupy more than 5% of the time. Start each sentence with an action verb. Group tasks which require similar skills/knowledge together. Think in terms of WHAT needs done, not HOW it is done. Avoid describing procedures. Describe in such a way as to be clear to someone outside the profession.)*

1. ArcGIS Management: Performing day-to-day development, operation, and maintenance related to the ArcGIS database. This may include, but not be limited to, field data collection for accuracy of information, reviewing and inputting as-built information, coordinating updates with AutoCAD for engineering design work by others, fulfilling data and map requests, publishing updated map information for field staff, maintaining data library, and representing data as layer files.
2. Achieving desired goals with available resources for department; planning and organizing individual workload; reporting on progress; making recommendations; taking direction; and implementing changes as needed.
3. Coordinating with departmental staff and Community Development Department Engineering Division staff to secure attribute data and develop GIS library at the highest level of accuracy possible.  This includes frequent field trips to collect and download GPS information using RTK unit.
4. Producing sophisticated maps, reports, imagery, and related GIS products and services as needed.
5. Designing and developing project specific GIS data.
6. Designing, implementing, and documenting quality control measures for special projects, products, and services.
7. Providing technical assistance on demand to department staff and other department’s GIS users.
8. Writing and updating standard operating procedures and work plans.
9. Other duties as assigned by the Public Works Director.

**IMPORTANT FUNCTIONS:** *(List those tasks or duties that may be assigned, but are not essential to fulfill the job purpose; any ancillary job tasks, or those that take less than 5% of the time. All jobs have non-essential functions.)*

Attend project demonstrations, seminar, workshops, and other professional opportunities to maintain the necessary level of GIS expertise.

1. Attending in-house training, staff meetings, safety meetings, etc., as needed.
2. Other duties as assigned.

**DISTINGUISHING CHARACTERISTICS:** *(If the position is in a series, describe what separates this job from the others in the series.*

Position not in a series.

**JOB SPECIFICATIONS:**

1**. Education & Experience:** *(Education and experience requirements are minimum standards.)*

1. Bachelor’s Degree or Master of Science (MS)is required. Degree must be in Geography, Natural Resource Management, Landscape Architecture, Engineering, Urban Planning or a closely related field; or
2. Two-years of training or technical experience in GIS, or completion of GIS coursework at an accredited university or college is required;
3. Work Experience: Indicate the minimum level of work-related experience required to effectively perform the position’s responsibilities. *(Check only one box.)*

[ ]  Less than 12 months

[x]  1 – 3 years

[ ]  3 – 5 years

[ ]  5 – 8 years

[ ]  Other

 Describe experience: Technical experience in data management software and Esri/ArcGIS mapping and analytics platform.

d) Any satisfactory equivalent combination of education and experience.

2**. Necessary Knowledge, Skills and Abilities:**

1. Knowledge of the principles and practices of GIS, spatial analysis, remote sensing and cartography.
2. Knowledge of GPS data collection and associated principles and practices.
3. Knowledge of the principles and common standards for geospatial metadata.
4. Knowledge of AutoCAD software and file structures, as it relates to GIS applications.
5. Knowledge of quality control and quality assurance techniques related to GIS.
6. Knowledge of City policies, procedures, regulations, and codes related to area of responsibility.
7. Knowledge of safety standards, practices and procedures applicable to area of assignment.
8. Ability to manage GIS project data in an ArcGIS geodatabase format.
9. Ability to document methods of analysis and to provide tools to GIS users.
10. Ability to develop sophisticated maps and graphs, forms and reports.
11. Ability to summarize and communicate steps used to derive GIS products.
12. Ability to effectively research published journals, trade magazines, tests, web pages, and other sources to keep current with development in the field of GIS.
13. Ability to read and follow directions.
14. Ability to diagnose and analyze problems and recommend and/or institute a corrective action.
15. Ability to use information technology software and hardware for work orders, time reporting, data collecting, inventory, and other applications related to operation and maintenance activities for the department.
16. Ability to perform data entry and use word processing and spreadsheet programs.
17. Ability to communicate effectively, verbally and in writing, in English.
18. Ability to work independently in the absence of direct supervision.
19. Ability to maintain regular and predictable attendance to serve customers/interact with (specify: co-workers/supervisor/patrons/clients, etc.), attend meetings, training, etc., or other face-to-face job requirements.
20. Ability to establish and maintain effective working relationships.
21. Ability to work as a team member.
22. Ability to perform work in a manner consistent with the City’s Core Values of: Respect, Integrity, Caring, Responsibility, Citizenship, Cooperation and Industriousness.
23. Ability to work efficiently and perform the essential functions of the job.

3. **Special Requirements:**

1. [x]  Must possess, or be able to obtain by time of hire, a valid driver’s license.
2. [ ]  Must be able to pass the department’s security clearance standards including review of criminal history and driving record.

4. **Tools and Equipment Used:**

1. Standard office equipment including telephones, computer, printer, fax machine and copy machines; Computer software: *(Choose all that apply.)*

[x]  MS based word-processing, spreadsheet, and/or data base programs

[x]  Outlook or other email communication.

[x]  Internet and/or social media

[x]  Presentation or desktop publishing software

[x]  Specialized or custom software

1. Vehicle - Car/pickup/van/SUV

5. **Supervision:**

1. This position does not supervise other staff.
2. This position does provide lead worker direction for Public Works Engineering Intern position.
3. This position reports to the Public Works Director. Supervision received is: *(Choose one)*

[ ]  Direct. Supervisor provides assignments, directs work on a regular basis, and tasks or procedures are usually well defined.

[x]  General. Work is assigned more generally with the employee having some autonomy to determine the order or manner in which the work is completed. Policies and procedures exist.

[ ]  Limited. Work is performed highly independently with little direction. Position has significant decision-making discretion. Work is evaluated for overall effectiveness.

6. **Communications**:

1. Communications are: *(Choose one)*

[x]  Primarily with other City staff, vendors and/or customers.

[ ]  Regularly includes others outside the organization (not customers), such as contractors, attorneys, agents, or business partners.

[ ]  Routinely with leaders inside and outside the organization such as department heads, City Councilors, public officials from other agencies, and/or community leaders.

1. The communications may be: *(Check any that apply.)*

[x]  Complex

[ ]  Controversial

[ ]  Confidential

[ ]  Have significant impact (affect City services or reputation, or have legal or financial consequences)

**7.** **Cognitive Functions**: *Check the one that most closely aligns to position:*

[ ]  Tasks require the employee to remember complex processes and/or be able to perform multi-step jobs without step-by-step instructions. Requires a moderate level of independent thinking and reasoning.

[ ]  Tasks are highly creative or complex and requires significant mental exertion that would typically require specialized schooling, training, certification or a license to be able to accomplish. Employee has some control over the planning and performance of the work, and may determine their own practices and procedures.

[x]  Responsibilities include significant accountability (i.e. could expose the City to risk or liability, generate public censure, or impact the work or reputation of the City.) Work is performed highly independently. Employee has significant control over the planning and performance of the work, and may develop or recommend new practices and procedures.

[ ]  Responsible for developing or approving programs/services; determining quantity and/or quality standards; and monitoring, evaluating, and analyzing program effectiveness to determine success or failure. Routinely engages in autonomous problem-solving. May include developing and implementing policies, procedures or regulations.

8. **Problem Solving:** *(Indicate the nature of problems regularly encountered by this position. Check only one box.)*

[ ]  Most situations are resolved using standard procedures and established guidelines.

[x]  Situations are somewhat varied; requires application of specific technical skills and expertise.

[ ]  Varied situations that require significant analysis or interpretation; general precedents and practices used, but may be modified.

[ ]  Highly varied and unpredictable situations, complex and often non-recurring; new and creative approaches required.

9. **Work Environment*:*** *(The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.)*

1. Work is performed primarily indoors. Work is most often in a temperature controlled office.
2. Strength Rating (see attached definitions) is: Medium .
3. Hazards include: *(Check all that apply and include the percentage of time exposed to the listed hazard.)*

[x]  Office environment/no specific or unusual physical or environmental demands.

[x]  Work on and around heavy construction equipment **0-1%**

[x]  Exposure to toxic elements/hazardous chemicals **0-1%**

[ ]  Work at heights in excess of 20 feet \_\_\_%

[x]  More than occasional exposure to poor air quality (excessive dust, smoke, fumes, gases, etc.) **0-5%**

[x]  Exposure to weather or temperature extremes **0-20%**

[x]  Isolation **0-80%**

[x]  Exposure to light or noise extremes **0-5%**

[ ]  Regular travel outside the City \_\_\_\_%

[x]  Risk of injury **carpal tunnel syndrome; tripping** **0-5%**

[x]  Significant physical exertion required to **lift/handle equipment**  **0-5%**

[ ]  Other (describe) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

d) General hours of work are 8:00 a.m. – 5:00 p.m. Monday – Friday. Variations include: *(Check all that apply.)*

[ ]  Frequent or regular overtime

[x]  Subject to emergency call out

[ ]  Night shift

10. **Resource Accountability:**

1. Check item(s) that describe involvement in the budgetary process:

[ ]  Not applicable [x]  Input [ ]  Prepare [ ]  Forecast [ ]  Monitor [ ]  Approve

1. This position has resource accountability for the following level of purchasing: (Choose one)

[ ]  Significant – as would be typified by purchasing authorization up to $25,000, or responsibility for operation or use of very high level equipment/assets.

[x]  Moderate – as would be typified by purchasing authority up to $5,000 or responsibility for operation or use of equipment/assets of moderate value.

[ ]  None/Low – employees with no purchasing authority or responsibility for operation or use of equipment/assets of modest value.

1. Persons in this classification are responsible to make purchasing decisions resulting in the most efficient solution for the lowest cost.

*The job classification description does not constitute an employment agreement between the employer and employee and is subject to change by the employer as the needs of the employer and requirements of the job change.*

Drafted: January 2014

Adopted: January 2014

Revised: April 2020

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Employee Acknowledgement/Date Supervisor Approval/Date

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Department Head Approval/Date Administration Approval/Date

Overall Job Strength Rating Definitions

(Oregon Workers’ Compensation Rules, Div. 436-035-0012)

**S - Sedentary** – exerting up to 10 pounds of force occasionally, or a negligible amount of force frequently to lift, carry, push, pull, or otherwise move objects. Job is mostly sitting, but brief walking and/or standing (occasionally) may be required.

**L – Light**  - exerting up to 20 pounds of force occasionally, or up to 10 pounds of force frequently, or a negligible amount of force continually to lift, carry, push, pull or move objects. Job is largely sitting, but more than sedentary walking or standing may be required. Work is light if job tasks are done sitting, but considerable upper body or arm movement or use of leg controls is involved.

**M – Medium** - exerting 20 to 50 pounds of force occasionally, or 10 to 25 pounds of force frequently, or greater than negligible up to 10 pounds of force continually to lift, carry, push, pull or move objects. Standing, walking, and/or other positional physical movements may be occasional to frequent.

**H – Heavy** – exerting 50 to 100 pounds of force occasionally, or 25 to 50 pounds of force frequently, or 10 to 20 pounds of force continually to lift, carry, push, pull, or move objects. Walking, standing, and other positional physical requirements may be frequent to continual.

**V/H – Very Heavy** – exerting in excess of 100 pounds of force occasionally, or in excess of 50 pounds of force frequently, or in excess of 20 pounds of force continually to lift, carry, push, pull, or move objects. Walking, standing, and other positional physical requirements may be frequent to continual.