

# City and Borough Sitka, Alaska

## Class Specification

<b>Class Title</b>	<b>Engineering Computer-Aided Design Technician</b>
<b>Class Code Number</b>	<b>5095</b>
<b>FLSA Designation</b>	<b>Non-Exempt</b>
<b>Pay Grade and Range</b>	<b>ASEA Bargaining Unit</b>
<b>Effective Date</b>	<b>09/01/2012</b>

### General Statement of Duties

Performs engineering duties in support of public works and civics projects; performs related work as required.

### Distinguishing Features of the Class

The principal function of an employee in this class is to maintain up-to-date maps, prepare cost estimates, drawing and specifications and other related engineering and/or draftsman duties. The incumbent will also be responsible for performing construction management inspection of capital projects. The work is performed under the direct supervision of the Municipal Engineer but considerable leeway is granted for the exercise of independent judgment and initiative. An employee in this class performs the duties of other employees in the Public Works Department as required or as assigned by supervisory personnel. The principal duties of this class are performed in both a general office environment and in various work sites throughout the City and Borough. An employee in this class may perform any one or more or any additional duties as assigned and necessary.

### Examples of Essential Work (Illustrative Only)

- Utilizes AUTOCAD systems in the drafting and design of Public Works projects;
- Utilizes ArcGIS systems in creation or updating of Public Works GIS databases;
- Serves as construction inspector on capital projects;
- Performs engineering duties applied to the location, design, research, maintenance and construction of roads, bridges, buildings, utilities, airports, harbor facilities and related civic projects;
- Performs drafting duties to maintain a current and accurate mapping system of the City and Borough areas, including maps involving the areas of assessing, zoning, water and sewer;
- Prepares draft maps for water, sewer, road and related project plans for construction and special projects as assigned;
- Provides graphics projects on a City-wide basis as requested;
- Provides as-built documentation for the location, type and size of water and sewer services to existing structures;
- Responds to requests for information from the public regarding property boundaries and related areas;
- Performs engineering and architectural drafting in support of public works construction projects;

- Prepares water and sewer utility permits;
- Prepares culvert and encroachment permits;
- Inspects buildings for ADA compliance;
- Coordinates with ADA committee;
- Coordinates safety issue for the Public Works department;
- Locates building systems as-built drawings and manuals for Public Works maintenance personnel;
- Provides needed information and demonstrations concerning how to perform certain work tasks to new employees in the same or similar class of positions;
- Keeps immediate supervisor and designated others fully and accurately informed concerning work progress, including present and potential work problems and suggestions for new or improved ways of addressing such problems;
- Attends meetings, conferences, workshops and training sessions and reviews publications and audio-visual materials to become and remain current on the principles, practices and new developments in assigned work areas;
- The nature of the work performed requires that an employee in this class establish and maintain effective working relationships with other Department and City employees, outside contractors and the public.
- Responds to citizens' questions and comments in a courteous and timely manner;
- Communicates and coordinates regularly with appropriate others to maximize the effectiveness and efficiency of interdepartmental operations and activities;
- Performs other related duties as assigned.

#### Required Knowledge, Skills and Abilities

- Thorough knowledge of standard engineering principles as applied to Public Works projects;
- Thorough knowledge of cartography and related mapping procedures;
- Thorough knowledge of AUTOCAD systems;
- Thorough knowledge of ArcGIS systems;
- Good knowledge of industrial design and architectural practices;
- Ability to use Computer Automated Drafting systems;
- Knowledge and ability to use GIS systems;
- Ability to perform all algebraic and trigonometric computations as applied to engineering practices;
- Ability to use engineering, drafting, survey and testing tools;
- Ability to read, design and compose maps;
- Ability to communicate well with others, both orally and in writing, using both technical and non-technical language;
- Ability to understand and follow oral and/or written policies, procedures and instructions;
- Ability to prepare and present accurate and reliable reports containing findings and recommendations;
- Ability to operate or quickly learn to operate a personal computer using standard or customized software applications appropriate to assigned tasks;
- Ability to use logical and creative thought processes to develop solutions according to written specifications and/or oral instructions;
- Ability to perform a wide variety of duties and responsibilities with accuracy and speed under the pressure of time-sensitive deadlines;
- Ability and willingness to quickly learn and put to use new skills and knowledge brought about by rapidly changing information and/or technology;
- Integrity, ingenuity and inventiveness in the performance of assigned tasks.

#### Acceptable Experience and Training

- Preferred, graduation from an accredited college or university with a Bachelor's Degree or equivalent in Engineering; and
- Considerable experience in civil engineering; or

- Any equivalent combination of experience and training which provides the knowledge, skills and abilities necessary to perform the work.

**Required Special Qualifications**

- Possession of a driver's license issued by the State of Alaska.

**Essential Physical Abilities**

- Sufficient clarity of speech and hearing or other communication capabilities, with or without reasonable accommodation, which permits the employee to communicate effectively;
  - Sufficient vision or other powers of observation, with or without reasonable accommodation, which permits the employee to survey public works structures and review work in progress;
  - Sufficient manual dexterity with or without reasonable accommodation, which permits the employee to operate engineering tools, survey equipment and computer equipment;
  - Sufficient personal mobility and physical reflexes, with or without reasonable accommodation, which permits the employee to visit various work sites within the City and Borough. Locations may include construction sites and locations accessible only by ladders or steep stairs.
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