

TOWN OF SANDWICH - POSITION DESCRIPTION GIS TECHNICIAN

SUMMARY:

Responsible administrative, technical, and professional work in management of the Town's Geographic Information System (GIS), conducting preliminary studies, designing and inspecting the construction of public works projects, surveying land and performing office engineering; all other related work as required. Reports to the Assistant Town Engineer.

PRIMARY DUTIES AND ESSENTIAL FUNCTIONS:

Work duties include: GIS data collection, processing, maintenance, and coordination between all Town departments; database development, management, and quality control; coordination with the Cape Cod Commission, MassGIS, and other regional entities, consultants, and contractors with regard to data acquisition, management, analysis, and other GIS-related activities; preparation and maintenance of Town of Sandwich Assessors Tax Maps; timely integration of software updates and capitalization of new software features; education of current GIS users in Town Departments to new procedures and datasets; development and distribution of maps; management of public records requests relating to Department records, GIS data, and distribution of GIS data.

Assists with implementation of the Town's Stormwater Management Program and other efforts to comply with federal, state, and local environmental regulations. Primary tasks include planning and implementing public education activities, infrastructure inspection, sample collection, and mapping, inter-department coordination, and report development.

Assists with utilization of the Town's Asset Management software including field inspections, data entry, data maintenance, consultant/contractor coordination, analysis, and reporting.

Reviews and inspects new subdivision plans for compliance with Planning Board's Rules and Regulations and design specifications; reviews applications to Zoning Board of Appeals; attends occasional regulatory board and other relevant meetings as required to advise on various projects.

Conducts research to determine feasibility of municipal construction projects under consideration, determines the ownership of land, and obtains plans of record; collects, compiles and analyzes information, including field data to provide technical assistance to the Assistant Town Engineer on a variety of engineering issues; assists in making required calculations and construction cost estimates.

Prepares and/or assists in preparing engineering designs and bid documents, evaluates bids received, and oversees implementation of various bidding and construction projects; prepares grant proposals and application for relevant programs.

Inspects progress and oversees various town construction projects; coordinates work with consultants and contractors hired by the Town; maintains record of inspections and observations; reports findings to Assistant Town Engineer.

Performs office duties as draftsman using conventional drafting tools and computer software; prepares plots and drafts of plans for municipal construction and surveying projects; drafts new plans and updates existing plans; maintains subdivision plans and as-built construction and drainage drawings, layouts of Town accepted roads and easements; performs technical analysis for correcting drainage problems on Town roads; prepares maps using the Town's Geographic Information System to support Town projects.

Maintains and updates the listing of all Town and private roads; assists in the process of accepting private streets as Town ways; assists with Department efforts associated with the Town's Temporary Repairs to Private Ways program; reviews curb cut applications; maintains Town street numbering system; assists in maintenance of pavement management system; performs engineering survey activities.

Provides information and assistance to Town departments, boards and committees, general public, developers, and others on GIS and Engineering Department related matters.

Assists the Department of Public Works in snow and ice operations such as assisting with planning truck routes, etc., and assists with Town-wide recycling events and other programs as required.

Assists with administrative tasks and clerical work as required. Assists with file maintenance, both paper and electronic, as well as converting/scanning, cataloging, and storing documents.

Performs other related work as may be required or assigned.

TOWN OF SANDWICH - POSITION CLASSIFICATION SHEET GIS TECHNICIAN

EDUCATION/BASIC KNOWLEDGE

Associate's degree in cartography, geography, civil engineering, environmental science, or closely related field or any equivalent combination of education and experience. Specific knowledge of GIS software including ESRI ArcMap, ArcGIS Pro, ArcGIS Online, ArcGIS Collector, ArcGIS Survey123, and similar; engineering and construction practices, drafting, surveying and computers required. Must have working knowledge of the requirements of pertinent state and local statutes as it relates to municipal engineering including public bidding requirements. Knowledge and experience in the use of Geographic Information Systems (GIS) required. Must possess and retain a valid Class D Massachusetts Motor Vehicle License.

EXPERIENCE

Two years' experience with GIS and/or engineering-related work, with construction inspection preferred. Once hired, up to one and one half years on job to become proficient.

JUDGMENT AND INITIATIVE

Performs varied and responsible technical duties requiring judgment and initiative in reviewing and inspecting the development of subdivisions, public works projects, and other engineering-related activities. Decisions and observations are reviewed on a regular basis by the Assistant Town Engineer.

SUPERVISION REQUIRED

Works under the supervision of the Assistant Town Engineer. Normally works independently on assigned tasks, reporting any unusual circumstances or conditions to the Assistant Town Engineer as required. Work subject to regular review.

ACCOUNTABILITY

Errors in judgement could result in time and monetary loss with possible legal repercussions, especially in relation to subdivision and public works reviews and inspections, most actions and decisions are reviewed before serious problems could result.

CONTACT WITH OTHERS

Daily contact with Assistant Town Engineer. Frequent contacts with general public, developers, and other Town departments, boards and committees and other governmental agencies concerning engineering-related matters. Contacts must reflect a positive image for the Town to promote favorable public relations.

CONFIDENTIALITY

Has access to a limited amount of department-related confidential information.

PHYSICAL ENVIRONMENT

Required frequent exposure to hazards related to municipal infrastructure (e.g. roadways and drainage facilities); construction sites; and foul weather conditions; approximately one half of time spent in normal office conditions.

PHYSICAL EFFORT

Duties may require significant use of manual skills requiring motor coordination such as climbing a ladder, conducting field inspections/on-site visits, collecting water samples, and other similar activities. Minimum physical effort associated with office activities.

OCCUPATIONAL RISKS

Some possibility of injury from falls related to site reviews and field inspections. Minimal exposure to hazards in office environment. Minimal exposure to occupational hazards.

CHARACTER OF SUPERVISION EXERCISED

No supervision exercised.

(This position description is subject to change by the employer as the needs of the employer and requirements of the job change.)