

# VILLAGE OF SOUTH HOLLAND

## Job Description

**TITLE:** GIS / Work and Asset Management Administrator

**REPORTS TO:** Director of Public Works

**POSITIONS SUPERVISED:** None

**POSITION SUMMARY:** Under the general direction of the Director of Public Works, an employee in this class perform a variety of skilled technical work related to the development, maintenance and administration of the GIS / Work and Asset Management System for Village Assets. An employee in this class is responsible for the use of data to make informed decisions related to maintenance and replacement of critical and expensive infrastructure to optimize performance, minimize costs, and make appropriate investments to meet all current and future needs. The employee will lead a team tasked to plan, develop, implement and maintain the Village's Asset Management Program. Implementation will be strategic and focused the Public Works Department including utilities Independent judgment and initiative are exercised within established system structure and standards. Work involves public contact and requires tact and courtesy, and teamwork to accomplish the duties. Accuracy and attention to detail in entering data are critical in performing the work.

### **ESSENTIAL FUNCTIONS:**

#### **Organizational Health Leadership Requirements:**

1. Assist in moving the Village forward through modeling behavior that is consistent with our Good to Great leadership philosophy, our "Three Pillars to Greatness" institutional values (which include our Five Key Traits), and the overall mission and vision as public servants.
2. Carry out the "Organizational Health Plan," which emphasizes the four disciplines of leadership both within and outside of your respective departments, through the building a cohesive leadership team, creating clarity, over-communicating clarity, and reinforcing clarity on a consistent basis.
3. Demonstrate behavior that is consistent with the characteristics of a Level 5 Servant Leader by being authentic, vulnerable, accepting, present, useful, and ambitious first and foremost for the institution, not yourself.
4. Maintain a positive public and professional image of the Village at all times, including professional attire in the performance of responsibilities.
5. Perform all job duties in compliance with the established Code of Conduct and rules and regulations of the Village with the utmost of ethical standards and behaviors.
6. Preserve the integrity and core values of our organization through the consistent use of our three strategic anchors in order to make intentional decisions that are in the best interests of the organization.

**JOB RESPONSIBILITIES:** employee in this class perform a variety of skilled technical work related to the development, maintenance and administration of the GIS / Work and Asset Management System for Village Assets. Work may include, but is not limited to the following:

- Leads the development and implementation of the Asset Management Program for the Public Works Department. Responsible for maintaining the Public Works Asset Management Program that outlines and establishes a set of planned actions, based on best practice, which will enable assets to provide a desired and sustainable level of service, while managing risk at the lowest life cycle cost. This position will lead the development with participation of team members including Public Works Engineering, Operations managers / supervisors and the Fiscal Services Department. Responsible for designing a program framework, including program goals, strategies and performance measures, and developing needed asset management policies. This position will manage and coordinate physical inspection, evaluation and rating of Public Works infrastructure as a prequel to developing maintenance and capital replacement programs;
- Provides expertise and leadership delivering a risk-based infrastructure asset management program consistent with goals and objectives of the department;
- Serves as primary administrator of the Public Works Operations work order management system of the Village to build and guide the asset management program;
- Ranks the conditions of the targeted facilities based upon developed criteria to determine life remaining, life extension through maintenance activities, risk analysis of failure probability and associated consequences;
- Coordinates the production of maps in the GIS environment for water, wastewater, streets, storm drain, traffic and other facilities reflecting existing conditions, projected decline of facilities, remaining life, and potential life extension utilizing established condition assessment software;
- Coordinates with GIS for updates of maps annually from ongoing inspections and ranking modifications;
- May lead projects and/or teams;
- Defines and implements approved asset management policy, processes and procedures for Public Works infrastructure aligned with Departmental goals and objectives;
- Builds and oversees an effective condition-based assessment program for facilities including building infrastructure, streets, drainage, traffic signals, water and wastewater systems including water and wastewater plants, water distribution and wastewater collection systems including lift stations;
- Develops, reviews, analyzes, evaluates and prioritizes data to make recommendations to assist in the development of annual maintenance and capital improvement programs for Public Works infrastructure;
- Ensures Asset Management Plan is developed and maintained consistent with Village goals and objectives and industry best practices;
- Ensures that the asset management policy recommendations are properly approved and communicated before implemented;
- Ensures asset data and assessments are accurate, timely and updated appropriately to enable decision making and planning for maintenance and capital programs;
- Gathers, digitizes, codes, and enters data into the GIS System, Work Management System, Asset Management System and other databases;
- Develops procedures, processes, and applications to access, operate, and control the GIS System, Work Management System, Asset Management System and other databases;

- develops written instructions for its internal use;
- Maintains and reproduces maps from various system;
  - Makes notations, changes, diagrams, and sketches to update and maintain public works databases and maps;
  - Operates GPS system, survey systems or data collection modules to input data on Public Works Assets;
  - Verifies and edits the information entered into the system;
  - Designs and creates maps; creates layers of information; searches information as requested by Village departments, economic developers, and property owners; enters coding required to create maps and administer databases;
  - Digitizes information; enters numbers and codes and defines cross hairs and coordinates; registers map in GIS and to the digital table; follows menu to enter codes; verifies maps once completed on the table; tags the map; creates files for each update; etc;

**Additional Job Duties:**

- Performs all other duties as assigned by supervisor.

**POSITION QUALIFICATIONS:**

**a. Education**

- Bachelor's degree from accredited college or university in Civil Engineering, Engineering Technology, Construction Technology, GIS, Planning or similar field is required;

**b. Experience**

- Must have at least five years of professional experience in infrastructure management performing planning, design, and construction;
- Must have experience in Computerized Maintenance Management Systems (CMMS), database management, and software tools including GIS, SCADA and GPS systems;
- Experience with asset management, utilities, and facilities maintenance;
- Experience managing project teams in a consulting, municipal or public works environment;
- Experience with Esri's ArcGIS software platforms, Enterprise Server, Portal for ArcGIS, GeoEvent server, application service provider (ASP) licensing, and geodatabase administration;
- Implementation experience with on-premise and cloud-based servers, multi-user databases and database design techniques and best practices;
- Experience with Enterprise Asset Management Systems such as Cityworks, Maximo, Cartegraph, etc.;
- Technological creativity with the ability to identify a municipality needs and adapt or develop solutions;
- Ability to understand a municipalities core business and identify how data management and analysis tools can be leveraged to enhance their decision-making processes;
- Knowledge of web application design and development and application integration with various software platforms;
- Experience software development, data storage, and maintenance services.

c. **Licensing/Registration/Certification**

- Possession of a valid driver's license;
- Institute of Asset Management (IAM) Certification and Project Management Professional (PMP) Certification is preferred;
- Desirable qualifications include: GISP, ESRI Technical Certification, various forms of scripting language experience.

d. **Knowledge, Skills & Abilities**

- Knowledge of building infrastructure, streets, drainage, traffic signals, water and wastewater systems including water and wastewater plants, water distribution and wastewater collection systems including lift stations and associated terminology, principles and practices of infrastructure management including operations and maintenance and lifecycle management;
- Must have familiarity with municipal procurement process and procedures;
- Must possess the initiative to manage multiple tasks independently with little direct supervision;
- Must be team oriented and have the ability to transparently discuss issues with immediate supervisor as well as customer divisions and subsequently, prioritize various tasks and develop an action plan to achieve the desired goals;
- Must possess skills in managing time, setting priorities, planning and organizing work and where appropriate work of other employees to achieve specific objectives in the most efficient way possible within the resources available;
- Must be able to work efficiently with little supervision, a high degree of independent judgment and reasoning, and have an aptitude for problem assessment and problem solving;
- Must be a self-starter with a capacity and ability for collaborative thinking and strong task prioritization;
- Must have strong oral and written communication skills, strong interpersonal skills and demonstrated ability to effectively communicate at all levels within and across the organization;
- Knowledge and experience with management and development of infrastructure asset management programs and working with ISO 52000;
- Must have experience implementing IT solutions for infrastructure management;
- Considerable knowledge of associated software and hardware which feed into or tap onto the databases, including digitizing, editing, plotting, script writing, and mapping;
- Considerable knowledge of personal computers, computer work stations, GPS equipment, and applications relating to GIS;
- Ability to deal tactfully and courteously with the public while handling requests for maps and other information;
- Ability to develop and maintain effective working relationships with peers, supervisors, employees in other departments, and the general public;
- Ability to communicate effectively in oral and written forms.

**WORKING CONDITIONS & PHYSICAL REQUIREMENTS:**

- A well-groomed appearance appropriate for the position and situations;
- Subject to inside and outside environmental conditions;

- Must be able to physically perform the basic life operational functions of pushing, pulling, fingering, grasping, talking, hearing, and repetitive motions.
- Must be able to light work and exert up to 20 pounds of force occasionally to move objects.
- Must possess the visual acuity to operate a computer terminal, to use measuring devices to inspect small parts, to prepare and analyze data and figures, and to determine neatness, accuracy and thoroughness of completed work.

## GENERAL STATEMENT

*The above statements are intended to describe the general nature and level of work performed by people assigned to this classification. They are not intended to be construed as an exhaustive list of all responsibilities, duties, and skills required of the personnel so classified. The job description does not constitute an employment agreement between the employer and employee.*

PHYSICAL REQUIREMENTS AND WORK ENVIRONMENT											
1. Check the frequency and number of hours a day the worker is required to do the following specific types of activities: <b>GIS / Work and Asset Management Administrator</b>											
ACTIVITY	FREQUENCY		# OF HOURS A DAY								
	CONTINUOUS	INTERMITTENT	1	2	3	4	5	6	7	8	8+
a. Sitting		X								x	
b. Walking		X		x							
c. Standing		X	x								
d. Bending		X	x								
e. Squatting		X	x								
f. Climbing		X	x								
g. Kneeling		X	x								
h. Twisting		X	x								
i. Lifting		X	x								
LIFTING <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> 0-10 lbs.      10-15 lbs.      15-30 lbs.      Over 30 lbs.											
2a. HAND MANIPULATION REQUIRED?      X Yes (If yes, complete a,b,c,d,e,f)      No											
2b. Repetitive hand movements?      X Yes      No											
2c. Simple Grasping?			Right Hand <u>  X  </u> Yes <u>  X  </u> No <u>      </u>				Left Hand <u>  X  </u> Yes <u>  X  </u> No <u>      </u>				
2d. Power Grasping?			Right Hand <u>  X  </u> Yes <u>  X  </u> No <u>      </u>				Left Hand <u>  X  </u> Yes <u>  x  </u> No <u>      </u>				
2e. Pushing Pulling?			Right Hand <u>  X  </u> Yes <u>  X  </u> No <u>      </u>				Left Hand <u>  X  </u> Yes <u>  X  </u> No <u>      </u>				
2f. Fine manipulation:			Right Hand <u>  X  </u> Yes <u>  X  </u> No <u>      </u>				Left Hand <u>  X  </u> Yes <u>  X  </u> No <u>      </u>				
3. (a) Does the job require worker to reach or work above the shoulder? <u>      </u> Yes <u>  X  </u> No											
(b) Reaching at or below shoulder level? <u>  X  </u> Yes <u>      </u> No <b>Frequency: ONCE IN A WHILE</b>											

4. Does the job require use of his/her feet to operate foot controls or for repetitive movement?

Yes  No

5. Are there special visual or auditory requirements?  Yes  No

**Describe: Basic visual or auditory abilities**

**WORK ENVIRONMENT:**

a. Does the employee work near moving mechanical parts; in high, precarious places; and in outside weather conditions?  Yes  No

b. Is the employee exposed to fumes or airborne particles?  Yes  No

**BLOOD/FLUID EXPOSURE RISK: (check the right category)**

**Category I:** Tasks involve exposure to blood, fluids or tissue

**Category II:** Usual tasks do not involve exposure to blood, body fluid, or tissues but job may require performing unplanned Category I tasks.

**Category III:** Tasks involve no exposure to blood, body fluids, or tissues. Category I tasks are not a condition of employment.

**ACKNOWLEDGMENT FOR RECEIPT OF JOB DESCRIPTION**

**I have received a copy of the Job Description and have read and understand its contents.**

\_\_\_\_\_  
*Employee Name (Please Print)*

\_\_\_\_\_  
*Date*

\_\_\_\_\_  
*Employee Signature*

\_\_\_\_\_  
*Date*

\_\_\_\_\_  
*Supervisor's Signature*

\_\_\_\_\_  
*Date*