# CITY OF MADISON POSITION DESCRIPTION

1. Name of Employee (or "vacant"):

Shayne Santi

Work Phone: 608-261-9128

2. Class Title (i.e. payroll title):

Civil Tech II

3. Working Title (if any):

**GIS** Analyst

4. Name & Class of First-Line Supervisor:

Peter Braselton, Computer Mapping/GIS Coordinator

Work Phone: 608-261-9834

5. Department, Division & Section:

Water Utility, Engineering, Mapping

Work Address:

119 E Olin Ave, Madison, WI 53713

7. Hours/Week: 37.5

Start time: 0700 End time: 1530

- 8. Date of hire in this position:
  - ~ 04/01/2006
- 9. From approximately what date has employee performed the work currently assigned:

06/01/2009

#### 10. Position Summary:

This is skilled technical support work in the Madison Water Utility. The work involves independently performing a variety of tasks such as: technical drafting of plans, maps, drawings and layouts; developing and/or using computer applications; making routine engineering computations, and performing other related field and office work. The work at this level differs from that at the Engineering Aide I and Civil Tech I level in terms of technical difficulty/complexity of assignments and independence of action. The work is performed under the general direction of the Mapping/GIS Coordinator.

- 11. Functions and Worker Activities: (Do NOT include duties done on an "Out-of-Class" basis.)
  - 67% A. Unidirectional Flushing
    - 1. Plan yearly flushing and assign crews to work areas
    - 2. Draw/maintain Maps
    - 3. Provide maps and data sheets for crews

- 4. Data entry and analysis
- 5. Public information: Phone calls to customers and media advertising
- 15% B. Hydraulic Model
  - 1. Update model network based on new construction
  - 2. Run simulations to support future system design decisions
  - 3. Use model for flow tests and data for hydrant painting
- 8% C. GIS Work
  - 1. Ad hoc map creation
  - 2. QC of record drawings
  - 3. Review/Compare GIS data to historical record drawings
- 5% D. Flow Tests
  - 1. Process flow requests in CityWorks
  - 2. Coordinate flow tests with hydrant inspectors and contractors
- 3% E. Water Main Assessment
  - 1. Research whether properties connecting to water main are assessable
  - 2. Calculate assessments
- 2% F. Lead Service Replacement
  - 1. Send letters to notify POs
  - 2. Coordinate replacements with contractors, plumbers, and WU staff
  - 3. Update Lead Database with info from meter slips, inspections, and PO calls
- 12. Primary knowledge, skills and abilities required:

Considerable technical knowledge of drafting techniques, materials and tools. Knowledge of standard engineering nomenclature and mathematics including geometry and trigonometry. Working knowledge of surveying techniques and equipment. Working knowledge of computer usage, terminology, and spreadsheet and database applications. Ability to make neat and legible technical drawings. Ability to perform mathematical computations quickly and accurately. Ability to read detailed maps, plans and specifications. Ability to develop computerized systems and programs. Ability to follow instructions and established procedures. Ability to establish and maintain effective working relationships with internal staff and with persons in other agencies, contractors and the public. Ability to manage data using both manual and computerized systems. Ability to contribute to the preparation of technical reports. Ability to perform field work including observations, measurements, and data collection.

# 13. Special tools and equipment required:

CADD/GIS workstation, software and plotters. GPS data collection hardware and software.

### 14. Required licenses and/or registration:

Valid Wisconsin driver's license.

# 15. Physical requirements:

Ability to work at computer work station and desk for long hours, to operate a motor vehicle, to get to and walk around construction sites and be on site in all weather conditions. Moderate physical labor when in the field.

16.	Supervision	Supervision received (level and type):				
17.	Leadership Responsibilities:					
	This position	n: 🛚	has no leadership responsib	y activities (Supervisory Analysis l ility. (please provide detail under Func	,	
18.	Employee Acknowledgment:					
	<ul> <li>☐ I prepared this form and believe that it accurately describes my position.</li> <li>☐ I have been provided with this description of my assignment by my supervisor.</li> <li>☐ Other comments (see attached).</li> </ul>					
	EMPLOYEE			DATE		
19.	Supervisor Statement:					
	<ul> <li>I have prepared this form and believe that it accurately describes this position.</li> <li>I have reviewed this form, as prepared by the employee, and believe that it accurately describes this position.</li> <li>I have reviewed this form, as prepared by the employee, and find that it differs from my assessment of the position. I have discussed these concerns with the employee and provided them with my written comments (which are attached).</li> <li>I do not believe that the document should be used as the official description of this position (i.e., for purposes of official decisions).</li> <li>Other comments (see attached).</li> </ul>					
	SUPERVISOR			DATE		

Note: Instructions and additional forms are available from the Human Resources Dept., Room 501, City-County Bldg. or by calling 266-4615.