CITY OF MADISON POSITION DESCRIPTION

	POSITION DE	<u> </u>	METION		
1.	Name of Employee (or "vacant"):	5.	Department, Division & Section:		
	Alysen Kohlnhofer		Madison Water Utility		
			Engineering Section		
	Work Phone:				
2.	Class Title (i.e. payroll title):	6.	Work Address:		
۷.	Civil Tech 2 (Currently Underfilled @ Civil Tech 1)	0.	119 East Olin Avenue		
	oviii roon 2 (ourrona) ondoriiiod @ oivii roon i)		Madison, WI 53713		
3.	Working Title (if any):		Wadison, VVI COT 10		
J.	Working Title (II arry).				
4.	Name & Class of First-Line Supervisor:	7.	Regular daily hours of work:		
	Dennis Cawley; Engineer 4		Hours/Week: 38.75		
	, , 0			,	
	Work Phone: 261-9243		From 7:00 AM To 2:4	45 PM	
8.	Date of hire in this position:		November 2008		
9.	From approximately what date has employee performed the work currently assigned:				
10.	This is skilled technical support and paraprofessional we	ork ir	n a professional engineering and pu	ıblic works	
	construction environment performed in the office and in the field. The work involves independently performing				
	a variety of tasks such as: assisting in the development of water main designs and specifications for replacement and new construction, technical drafting, developing and updating the utility GIS maps, drawing and layouts; developing and/or using a wide variety of computer applications and databases; making routing engineering computations, construction inspection and administration, field survey and project layout and				
	record measurement including the use of specialized GPS equipment, and performing other public works related field and office work as assigned. The work is performed under the general direction of higher-level				
	technical or professional staff and is reviewed upon completion.				
11.					
Time % Functions and Worker Activities: (Do <u>not</u> include duties done on an "Out-of-Class" basis			e done on an "Out of Class" basis \		
1 11 1	io w It attorious and worker vorkines. (Do liot illoinde d	นแฮอ	, done on an Out-of-Class pasis.)		

11.

- Time % | Functions and Worker Activities: (Do <u>not</u> include duties done on an "Out-of-Class" basis.)
 - Conduct field surveys, including operating survey instruments and specialized GPS equipment, and evaluations of Water Utility systems for proposed reconstruction or new construction. Reduce field notes to plan drawings for base map drawings. Obtain utility information and evaluate for conflicts with proposed water main. Use information from surveyor notes, field observations, previous maps and plans, and other source to prepare materials. Create and convert scaled drawings as requested.
 - Use computer techniques and software, including computer assisted drafting and databases, to perform a wide range of technical support functions and analysis as requested by other Water Utility sections and supervisors. This includes planning and implementing unidirectional flushing operations. Research and provide information to the public, contractors and other City employees in a variety of areas relating to the work of the Water Utility
 - Under the direction of a Water Utility Engineer, prepare construction drawings, specifications, quantity take-offs, and cost estimates for water main projects. Layout construction drawings and special details from engineering layouts, sketches and special instructions. Draft final drawings and prepare or assist in the preparation of specifications. Review projects for completeness, list quantities and labor, and compute total cost of projects. Calculate and estimate quantities for construction bids.
 - 5 Assist with the updating of GIS records as required and assigned.
 - Respond to inquiries from City officials, the business community, property owners, tenants, private utilities, contractors and the general public regarding design, bidding, inspection and construction considerations related to assigned projects, and work with these individuals and groups to resolve the problems which the construction may cause them.
 - Inspect construction projects to ensure compliance with contract specifications and other requirements. Exercise considerable judgment in identifying potential problems, and taking necessary corrective action while serving as the water utility representative in the field. Inspect, photograph, catalogue, GPS, and measure existing field conditions for inclusion in Utility records and maps and other drawings. Take measurements, monitor and record material quantities and other required information for monthly construction pay requests. Prepare as-constructed drawings and records for water utility projects using field and survey notes, etc. Assist with the flushing and testing of new mains and conduct pressure tests and certifying of acceptable construction.
 - Perform any other related work as required and assigned.

12. Primary knowledge, skills and abilities required:

Knowledge of standard engineering nomenclature; mathematics; and fundamental principles, practices and techniques. Knowledge of drafting, surveying and engineering design practices and techniques, including basic familiarity with computer assisted drafting (CAD). Working knowledge of computer terminology, usage, and engineering applications. Ability to interpret and explain engineering plans, specifications, and other technical documents and projects to other agencies, and the public. Ability to perform engineering design work.

Working knowledge of surveying techniques and equipment. Ability to perform mathematical computations quickly and accurately. Ability to read detailed maps, plans and specifications. Ability to perform fieldwork including observations, measurements, data collection, and surveying activities.

Knowledge of practices, policies and procedures related to the inspection of the construction of a wide variety of public works projects. Ability to keep construction records and prepare reports; ability to work from oral and written instructions and from engineering plans and sketches. Ability to mediate problems with engineers, surveyors, contractors, and construction workers to complete construction projects. Ability to oversee numerous projects running simultaneously. Ability to work independently without close supervision finishing

5

tasks efficiently and timely.

Ability to maintain good working relationships and communication with management, supervisors, staff. members of other agencies, and the general public. Ability to dispense technical information quickly, accurately and in a tactful and courteous manner over the telephone, in writing, and in person to contractors, other City agencies, and members of the general public.

Training and Experience:

Three years of experience performing technical office and/or field work in support of engineering activities in the area of Public Works design and construction. Such experience would normally be gained after completion of high school or equivalent (including two years of math and/or mechanical drawing). Vocational school or university training in the area of civil engineering technology or a closely related area may be substituted up to two years of experience. Other combinations of training and/or experience which can be demonstrated to result in the possession of the knowledges, skills and abilities necessary to perform the duties of positions in this class will also be considered.

13. Special tools and equipment required:

CADD/GIS workstation, software and plotters.

Ability to effectively use:

radio equipment

computer

calculator

gauges

copier survey level

metal detector

water main and service keys hydrant tools and wrenches

pumps (for pressure testing)

tape measures engineers scale

measuring wheel

flushing devices

GPS equipment

14. Required licenses and/or registration:

Valid Drivers License

15. Physical requirements:

Able to work at a computer workstation all day. Repetitive movement when using a mouse,

The ability to stand for long periods of time, access and walk around an active construction site, withstand adverse weather extremes (cold, hot, rain, or sun), tolerate loud noises, dust, and pollen.

Ability to meet the transportation and mobility requirements of the position.

Supervision received (level and type):

Water Utility Engineer 4

17.	Lea	Leadership Responsibilities:			
	This position:				
		is responsible for supervisory activities (Supervisory Analysis Form attached). has no leadership responsibility. provides general leadership (please provide detail under Function Statement).			
18.	Employee Acknowledgment:				
		I prepared this form and believe that it accurately describes my position. I have been provided with this description of my assignment by my supervisor. Other comments (see attached).			
Employee's Signature Date					
19.	9. Supervisor Statement:				
	\boxtimes	I have prepared this form and believe that it accurately describes this position.			
		I have reviewed this form, as prepared by the employee, and believe that it accurately describes this position.			
		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).			
		I do <u>not</u> believe that the document should be used as the official description of this position (i.e., for purposes of official decisions).			
		Other comments (see attached).			
Sup	Supervisor's Signature: Alan L. Larson P.E. Date: June 21, 2010				
1		structions and additional forms are available from the Human Resources Dept., Room 501, City-County by calling 266-4615			