# CITY OF MADISON POSITION DESCRIPTION

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

Kay Schindel, P.E.

Work Phone: 608-266-4668

CITY OF MADISON HUMAN RESOURCES

2013 JAN -9 AM 8: 15

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

Engineer 4

3. Working Title (if any):

Engineer 4

4. Name & Class of First-Line Supervisor:

Jeanne Hoffman, Facilities & Sustainability Manager

Work Phone: 608-266-4091

5. Department, Division & Section:

Department of Public Works, Engineering Division

6. Work Address:

Room 115, CCB

7. Hours/Week: 38.75

Start time: 7:30 AM

End time: 4:00 PM

8. Date of hire in this position:

Hired as hourly engineer: April 2006 Hired permanently as Engineer I: 6/18/2007

Engineer II: June 2008

Engineer III: October 2010

9. From approximately what date has employee performed the work currently assigned:

January 2012

10. Position Summary:

This is advanced-level professional engineering and project supervision work performed in the office and/or field in connection with the planning, design, management and construction of a wide variety of mechanical, electrical, plumbing projects. Work involves the application of independent professional judgment to define the project; determine the best methods of addressing the situation(s), including the

assignment of project components to lower-level staff, and professional certification of the results. Coordinate projects with consulting engineers; private/public utilities; state, county and other governmental units; and other individuals and entities. Perform related work as required.

# 11. Functions and Worker Activities: (Do NOT include duties done on an "Out-of-Class" basis.)

Design: 30%

- 1. Prepare engineering plans, designs, and specifications for projects
- 2. Coordinate design activities with other Engineering Units, City agencies, and other entities as necessary
- 3. Prepare project and construction cost estimates
- 4. Assist in the review of outside plans and specifications for compliance with City Ordinances and state and federal regulations

### Project Management: 25%

- 1. Oversee drafting of plans and specifications
- 2. Answer technical questions from the public, contractors, property owners, and elected officials about engineering considerations and plans.
- 3. Management of major projects with broader professional expertise and independent responsibility.

#### Construction Inspection: 15%

 Conduct field inspections of construction sites and prepare reports and other materials as necessary. Oversee remedies to construction deficiencies as needed..

#### Commissioning/Retro-commissioning: 20%

- 2. Prepare commissioning narrative and statistical reports and other materials as necessary. Implement recommendations as needed.
- 3. Conduct basic engineering research.

General Facilities Management work (assisting maintenance, energy management, special projects): 10%

- 1. Attend public hearings and informational meetings alone or with higher level engineers and provide project-related reports and information. Answer questions from the public, contractors, developers, inspectors, etc.
- 2. Work with maintenance to fix field issues including existing buildings and buildings under construction, review plans and specs with maintenance staff, and work with maintenance staff on installation projects.
- 3. Manage energy management software for the City and work with utilities, software companies and city agencies to provide accurate energy data and reports.

## 12. Primary knowledge, skills and abilities required:

Thorough knowledge of mechanical engineering design and construction principles, practices, materials, and inspection techniques. Thorough knowledge of the procedural aspects of the City's contracting and capital budgeting processes. Ability to supervise lower level staff in the design and coordination of public works construction projects. Skill in making and documenting engineering computations and cost estimates, and document them and to review the work of others. Ability to perform computer-aided design and spreadsheet analysis. Ability to exercise significant professional engineering expertise and judgment in the resolution of engineering problems. Ability to collect, analyze and compile data and prepare technical reports. Ability to communicate effectively both orally and in writing. Ability to speak before large groups, answer technical questions, and assist subordinates. Ability to develop and maintain effective relationships with supervisors, subordinates, co-workers, contractors, the general public and

other parties. Ability to maintain accurate records. Ability to inspect or assign others to inspect public works construction projects. Ability to maintain adequate attendance.

# 13. Special tools and equipment required:

Advanced knowledge in the use of a personal computer and workstation to run design software, and a variety of other office software such as access, excel, word, Microsoft projects, outlook and other database software.

#### Tools:

- PC (capable of CAD work) with 2 monitors
- HVAC measurement tools and data loggers
- architectural measurement tools

#### Software:

- AutoCAD MEP
- Building Information Modeling software
- energy simulation software
- Engineering Equation Solver

# 14. Required licenses and/or registration:

Possession of a valid certificate of registration as a Professional Engineer in the State of Wisconsin or ability to obtain such registration within the probation or trial period. Possession of a valid Wisconsin driver's license or the ability to meet the transportation requirements.

# 15. Physical requirements:

Ability to make field or on-site evaluations to determine existing conditions for design, maintenance, problem solving and construction.

#### 16. Supervision received (level and type):

Assignments are received from the City Engineer, Facilities and Sustainability Manager and the work involves the application of independent professional judgment to define the project; determine the best methods of addressing the situation(s), including the assignment of project components to lower level staff; and the professional certification of the results.

The work is performed under the general direction and coordination of the City Engineer, Facilities and Sustainability Manager and regularly involves the supervision of lower level staff.

	Sustainability I	Sustainability Manager and regularly involves the supervision of lower level staff.				
17.	Leadership Responsibilities:					
	This position:		is responsible for supervisory activities (Supervisors no leadership responsibility. provides general leadership (please provide details)	,		
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>					
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	EMPLOYEE			DATE		

19.	Supervisor Statement:					
		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).				
		Dem Alden 1/8/12				

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