

## City of Danville, Illinois Position Description

Position Title:	ENGINEER II							
Classification No. 221								
Department:	Engineering & Urban Services	Division:	Engineering					
Type of Positio  X Full Time Part-Time	n: Regular Temporary _ e Seasonal	ExemptX_Non-ExemptX	Union Non-Union					
Position Reports To/Supervised By: Director, Engineering & Urban Services, Assistant City Engineer								
<b>Position Oversees/Supervises:</b> Contract construction, Utility locates, Material testing, Project Designs, Consultant management, Engineer I, Engineering technicians, and interns.								

**Position Summary:** The general purpose of this position and/or contribution to the department is:

The Engineer II participates and leads efforts in survey, concept design, construction observation, engineering design, inventory management, utility coordination, construction documentation, consultant oversight, project management, cost estimating, report generation, engineering studies, permitting, funding acquisition, and agency coordination. The Engineer II works under general supervision and is familiar with the standards required to perform the various functions of the department.

**Qualifications:** The following are considered as minimum qualifications. Extensive related experience will be considered in lieu of these position requirements if they represent similar skills, knowledge, and levels of responsibility. In addition to demonstrated competency in the experience items listed below; an Engineer II produces constructible contract documents prepared to departmental standards, maintains construction records according to IDOT standards, and is gaining technical expertise in one or more areas of municipal engineering.

**Education:** The minimum educational requirements for this position are:

Employee must hold a Bachelors Degree in Civil Engineering or similar field with related work experience. Employee should have or be able to attain certifications in relative IDOT training courses. Is involved in professional organizations of mutual benefit to the City.

**Experience:** Candidates for this position must possess the following experience, or experience deemed to be equivalent to the following:

Minimum of 2 years working experience

- General knowledge of municipal engineering concepts
- Relevant college coursework and continuing education certifications
- Project design support
- Construction inspection / documentation
- Survey
- Quantity computations
- Cost Estimating
- Material testing
- Man hour projections
- Project engineering, lead design engineer on design elements
- Project management
- Resident construction engineer
- Survey chief
- Design computations
- Public involvement
- Dispute resolutions
- QA/QC review of contract documents and reports

**Required Skills:** The following skills are basic to the functions of this position: Candidates should possess these skills or be able to show their ability to develop these skills within 30 days of their start date.

- Employee must have advanced computer skills including word processing, spreadsheets.
- Employee must have advanced math skills including addition, subtraction, multiplication, division, percentages, interest, geometry, calculus, trigonometry, algebra, and similar concepts.
- Employee must have good verbal and written communication skills.
- Employee must have a working knowledge of surveying equipment, material testing equipment.
- Advanced CADD skills.
- Basic GIS knowledge
- Software customization.
- Survey data manipulation and management
- Construction documentation systems.

**Required Licenses:** The person holding this position must have the following licenses or be able to

obtain the same within 30 days of their start date:

- Illinois Class D Vehicle Operators License
- Engineering in Training

**Essential Duties and Responsibilities:** The following examples are illustrative of the work duties and

responsibilities of this position: In addition to this list, the employee is expected to carry out any work assignment made by his/her supervisor.

- Construction engineering and inspection
- Material testing
- Surveying

- Design engineering
- Develop maintenance programs
- Utility coordination
- JULIE locates
- Traffic counts
- Permits and inspections
- Sewer capacity analysis
- NPDES (National Pollution Discharge Elimination System) compliance
- Ordinance enforcement
- Engineering studies
- Interdepartmental interaction
- Funding applications
- Public communications

**Physical Demands:** The physical demands shown on the accompanying Chart 3 are representative of those that must be met by the employee to successfully perform the essential functions of this position. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

**Environmental Demands:** The work environment characteristics shown on Chart 3 are representative of those an employee encounters while performing the essential functions of this position. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

**Other Information:** Employees of the City of Danville are expected to be honest, courteous and helpful to the public and handle matters in confidence. The City Council has adopted a "Code of Ethics" that is applicable to all employees and officers of the City.

**Residency Requirements:** Employees and Officers of the City of Danville must establish their principal residence in Illinois, within the City of Danville corporate limits within six months following successful completion of their probationary period.

**Probationary Period:** New employees must serve a 90-day probationary period. Successful completion of the probationary period is based on the employee's ability to carry out the essential duties and responsibilities of the position as determined by the individual's supervisor and/or department head.

## **ESSENTIAL PHYSICAL DEMANDS**

ACTIVITY	From Table	Job Requires	ACTIVITY	From Table	Job Requires
Walk	3	F	Lower	3	М
Sit	3	0	1. Weight	1	LM
Stand	3	F	2. Height	1	А
Climb	3	0	Crawl	3	М
1. Stairs	3	М	Turn	3	F
2. Ladders	3	0	1. Standing	3	F
3. Scaffold	3	М	2. Sitting	3	М
4. Other	3	С	Carry	3	М
Kneel	3	М	1. Weight	1	LM
Bend	3	0	2. Distance	1	Α
Reach	3	М	Handle/Feel	5	N
Push	3	М	Finger Dexterity	5	N
1. Weight	1	LM	Color Distinction	5	N
2. Height	1	Α	Visual Acuity	5	N
Pull	3	М	1. Close/Reading	3	С
1. Weight	1	LM	2. Normal	3	С
2. Height	1	S	3. Distance	3	М
Lift	3	М	4. Peripheral	3	F
1. Weight	1	LM	Driving Vehicle	3	F
2. Height	1	Α	Operate Lt/Hvy Equipment	3	BN/NA

	WORKING CONDITIONS / ENVIRONMENTAL DEMANDS				
Primary Work Locations	2	OD	Noise Level	5	N
Other Work Locations	2	ID	1. Vocal	4	MD
Climatic Conditions	5	V	2. Mechanical	4	MH
1. Normal	4	LM	3. Vehicular	4	MD
2. Hot	4	MD	Vibrations	4	NA
3. Cold	4	MD	Atmospheric Conditions	5	N
4. Variable	4	MD	1. Humid	4	MD
Exposure to Hazards	5	BN	2. Wet	4	MD
1. Height	4	LM	3. Dry	4	MD
2. Cramped Quarters	4	L	4. Odors	4	LM
Exposure to Burns	4	L	5. Dust	4	MH
4. Electrical	4	LM	Work Relations	NA	NA
5. Mechanical	4	LM	1. Work Alone	3	F
6. Radiant Energy	4	L	2. Work With Others	3	0
7. Toxic	4	М	3. Work Around Others	3	С

## **KEY TO ABBREVIATIONS AND DEFINITIONS**

Table 1 - Weights and Distances	Table 2 - Location	Table 3 - Percent of Time	Table 4 – Exposure Ta	ble 5 - Other	
L – Light (0-10#)	ID – Indoors	M - Minimal (Less than 10%)	L – Light		BN – Below Normal
LM - Light to Moderate (10-25#)	OD – Outdoor	O – Occasional (10-25%)	LM – Light to Moderate	N - Normal/Avera	ge
M – Moderate (25-45#)	G – Garage	F – Frequent (25-50%)	MD – Moderate		AN – Above Normal
MH - Moderate to Heavy (45-75#)	DV – Driving	C – Constant (over 50%)	MH – Moderate to Heavy	V - Variable	
H – Heavy (over 75#)			H - Heavy	,	SE – Seasonal
S - Small/Short (0' - 3')					
A – Average (3' – 6')					
T – Tall/Long (over 6')	NA – Not A	pplicable			