



VILLAGE OF HOFFMAN ESTATES

JOB DESCRIPTION

SENIOR TRANSPORTATION ENGINEER

EFFECTIVE DATE: 6/10/2024

DEPARTMENT: Development Services - Engineering Division	WORK LOCATION: Village Hall		FLSA STATUS: Exempt
CLASS CODE: 7825	RANGE: 21	PENSION: IMRF	UNION: NU
REPORTS TO: Director of Engineering	LEVEL OF SUPERVISION RECEIVED: General Direction		LICENSE/CERTIFICATES: Class D Illinois Drivers License Illinois P.E. Registration or ability to obtain within 1 year

SUMMARY:

Activities involve the planning, operation and design of Village Transportation system. Performs technical analyses, some involving complex studies and conditions. Reviews private development site plans and proposals regarding transportation impacts. Coordinates and reviews with other State and local agencies for transportation improvements. Participates as part of team with other Village departments to provide comprehensive assessment and problem solving related to projects both in the office and in the field. Serve as Village project manager for in-house projects including Village, State, and Federally funded work such as STP and CMAQ. Makes presentations to Village Board, external agency groups

Responds to and interacts with residents, employees, and/or others within and outside the organization in a courteous, professional, and effective manner.

JOB NO.	ESSENTIAL JOB FUNCTIONS AND RESPONSIBILITIES	FREQUENCY
1.	Analyzes transportation engineering aspects of the Village and supporting transportation system to identify problems and develop solutions. Applies principles of traffic and transportation engineering, using appropriate reference documents, to a range of projects.	Daily 20%

2.	Research issues relating to traffic studies and recommendations for development proposals via plan review. This includes gathering, interpreting, and preparing data for written and/or oral reports or recommendations to the Village Board, Commissions/Committees, Village management, civic groups, public agencies and the general public.	Daily 25%
3.	Prepare Phase I and II engineering plans / documents for Village, State, and Federal projects such as STP and CMAQ programs. Review similar studies prepared by consultants for grant funded projects and others.	Daily 10%
4.	Makes oral presentations to Village Board, committees or other groups on transportation issues.	Monthly 5%
5.	Prepares technical reports for Village Board, committees and other agencies for public and private development proposals.	Weekly 10%
6.	Represents Village at various Regional Agency meetings and/or technical working groups for transportation projects.	Weekly 5%
7.	Uses computer software applications to perform technical traffic analyses and prepare reports.	Daily 25%
8.	Review of site development plans and supporting traffic / parking studies for adherence with Village Code, industry practices, and traffic / transportation engineering fundamentals.	Daily 10%
9.	Responds to inquiries from the public, consulting engineers, construction project engineers, City, County, State and Federal agencies, professional and technical groups, and Village employees concerning engineering procedures on specific transportation projects or other transportation requests either in person or over the telephone. Coordinates response with Police Department and Public Works staff as appropriate.	Daily 10%
10.	Collects and analyzes traffic data to determine transportation system needs. Assists in development of project scoping, budgeting, and funding applications.	Monthly 10%
11.	Operates and properly maintains all tools and equipment needed to perform the essential job functions and responsibilities listed above while adhering to all safety rules and practices	Daily 5%
12.	Conduct and/or assist with a variety of traffic studies, analyze results, and prepare reports on findings.	Daily 10%
13.	Participates in meetings with developers to discuss aspects of projects.	Weekly 10%
14.	Coordinate projects with State, regional, and local agencies to provide input and ensure that Village projects are properly considered and incorporated into larger projects.	Weekly 10%

JOB NO.	OTHER RELATED DUTIES
1.	Drive Village vehicle to review traffic conditions and investigate field conditions.
2.	Field work to install traffic counters, surveying, construction inspection, and measurements.
3.	Serves as a member of various employee committees.
4.	Follows Village-wide and departmental safety rules and practices.
5.	Performs other duties, tasks, and responsibilities as assigned.

SUPERVISORY RESPONSIBILITIES: (*Select one – required*)

☒ **X** None required

☐ Supervisory responsibilities are required to be carried out in accordance with the organization's policies and applicable laws. (***List specific responsibilities below***)

EDUCATION, EXPERIENCE AND COMPUTER SKILLS:

The designated education and experience levels best describe the minimum requirement needed to fulfill the essential job functions. However, any combination of equivalent education or experience may be considered.

Education Level (Select one - required)

- ☐ High school education with vocational training
- ☐ High school diploma or general education degree (GED)
- ☐ Two or more years of college coursework in related field
- ☐ Associate's degree (A.A.) from two-year college or technical school
- ☒ Bachelor's degree (B.S.) from four-year college or university
- ☐ Master's degree (M.S.)
- ☐ Doctoral degree (Ph.D.)

Degree or coursework should be in...

BS: Civil Engineering, Transportation, Planning, or related field desired; P.E. registration or ability to obtain

Experience Level (Select one - required)

- ☐ No prior experience or training required
- ☐ Six months to one year related experience
- ☐ One to two years related experience
- ☐ Two to four years related experience
- ☒ Four to ten years related experience

Additional Experience (Select as appropriate)

- ☐ Experience in supervisory capacity...
- ☐ Experience in management capacity...
- ☐ Must meet the requirements as set by the Fire & Police Commission

Computer Skills (Select as appropriate)

- ☒ Entry and processing of data
- ☒ Word Processing data
- ☒ Spreadsheet software
- ☒ Database software

- ☒ Specialized applications:

Technical software specific to transportation planning, safety, operations, analysis, AutoCAD, engineering design software, GIS, Highway Capacity Software

COMMUNICATION SKILLS:**English Language/Communication Skills (Select one)**

- ☐ Basic skills Ability to read, comprehend, listen to and follow basic verbal or written instructions and provide appropriate feedback. Ability to read, comprehend and/or create routine correspondence and memos using proper spelling, grammar, punctuation and sentence structure. Ability to effectively convey information one-on-one or to small groups of employees or customers.
- ☐ Intermediate skills Ability to read, comprehend, listen to and follow complex verbal or written instructions from multiple sources. Ability to provide appropriate feedback by asking probing questions and/or suggesting alternative approaches. Ability to read, comprehend, create and explain to others complex correspondence, reports and/or manuals. Ability to convey procedures and policies one-on-one or in groups to employees or customers.
- ☐ Advanced skills Ability to read or interpret all types of documents including safety rules and regulations, and procedure manuals. Ability to create and edit reports and correspondence from varied source material using appropriate style and format. Clearly convey instructions to employees or team. Ability to speak clearly and effectively before groups of customers answering questions appropriately.
- ☐ Business skills Ability to read, research, and analyze general business periodicals, professional journals, technical reports, finance documents or government laws and regulations. Ability to write reports, business correspondence, manuals and draft policies and procedures. Ability to effectively make presentations and respond to questions from groups of managers, customers, citizens, or other agencies.
- ☒ Specialized skills Ability to read, analyze and interpret professional, scientific, or technical manuals, procedures, plans, schematics, maps, blueprints, licenses, and/or legal documents. Ability to respond to inquiries from managers, customers, business community or regulatory agencies. Ability to draft responses to complex or technical issues and/or effectively present technical concepts or information to managers, customers, or other agencies in concise understandable terms.

Foreign Language Skills (Complete if applicable)

- Fluency in foreign language skills is:
- ☒ A Plus
- ☐ Preferred
- ☐ Required
- Ability to speak and/or read, write and comprehend.

Required Language:

REQUIRED COMPETENCIES:

To perform this job successfully, an individual must be able to perform each essential job function satisfactorily. The required competencies listed below are representative of the knowledge, skills, and/or abilities required for successful job performance.

PROFICIENCY IN:

- Working efficiently under pressure and/or with frequent interruptions.
- Using quantitative skill; performing qualitative analysis.
- Quickly switching from one task to another.
- Database management and applications as well as Microsoft Word and Excel.
- Computer applications for traffic studies (Highway Capacity Software, Synchro, etc.) and design (AutoCAD)
- Research, development and composition of comprehensive engineering reports.
- Operation of listed tools and equipment including the use of civil engineering instruments and equipment.
- Operating a personal computer in a network and cloud-based environment.

WORKING KNOWLEDGE OF:

- Strong knowledge of traffic and transportation engineering principles for all modes of users.
- Civil engineering principles, practices and methods as applicable to a transportation setting.
- Transportation studies including traffic and transit analyses.
- Applicable Village policies, laws, and regulations affecting transportation activities.
- Cost estimating for complex projects.
- IDOT and Cook County project procedures and processing including permits, requests, and STP, CMAQ, and other similar Federal / State funded programs.

ABILITY TO:

- Manage several large projects simultaneously.
- Analyze complex transportation issues.
- Make public presentations and written reports.
- Learn new technical procedures using computer based applications.
- Explain complex analyses to a variety of audiences.
- Work independently and as part of a team within the Division as well as with other Departments.
- Serve as a Team Leader coordinating work efforts of other staff within areas of expertise.
- High degree of flexibility, creativity and innovation and the ability to interact effectively with people at all levels inside and outside of the organization
- Communicate effectively verbally and in writing.
- Respond to and interact with residents, employees and others within and outside the organization in a professional and effective manner.
- Establish successful working relationships with other employees, supervisors and other departments.
- Read, write, speak and comprehend the English language.
- Assist with miscellaneous office tasks as needed.

TOOLS AND EQUIPMENT USED:

Networked computer system, personal computer, PDA, software including; word processing, spreadsheet, data base, Highway Capacity Software and other analysis tools, GIS, and related transportation analysis software, CAD (Computer Aided Design), 10-key calculator, telephone, copy machine, writing utensils, standard drafting tools; surveying equipment including level, GPS; traffic counter equipment, radar unit, mobile radio, and motor vehicle.

PHYSICAL DEMANDS:

The physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this job with or without reasonable accommodations.

(mark all 17 activities)	----- Amount of Time -----			
<u>Physical Activity</u>	None	Less than 1/3	1/3 to 2/3	More than 2/3
Stands	_____	<u>X</u>	_____	_____
Walks	_____	<u>X</u>	_____	_____
Sits	_____	_____	<u>X</u>	_____
Uses fingers in a repetitive motion	_____	_____	<u>X</u>	_____
Uses hands to grasp, finger, handle, or feel	_____	_____	<u>X</u>	_____
Reaches with hands and arms above shoulder	_____	<u>X</u>	_____	_____
Climbs or balances	_____	<u>X</u>	_____	_____
Twists or turns	_____	<u>X</u>	_____	_____
Stoops, kneels, crouches, bends, or crawls	_____	<u>X</u>	_____	_____
Pulls, pushes, or carries	_____	<u>X</u>	_____	_____
Talks or hears	_____	_____	_____	<u>X</u>
Tastes or smells	<u>X</u>	_____	_____	_____
Operates a motor vehicle or heavy equipment	_____	<u>X</u>	_____	_____
Lifts or move 0 to 10 pounds (sedentary)	_____	<u>X</u>	_____	_____
Lifts or move 10 to 20 pounds (light)	_____	<u>X</u>	_____	_____
Lifts or move 20 to 50 pounds (moderate)	_____	<u>X</u>	_____	_____
Lifts or move 50 to 100 pounds (heavy)	<u>X</u>	_____	_____	_____

VISION DEMANDS:

The vision demands described here including the ability to adjust focus, close vision, sharpness of vision, depth perception, peripheral vision, distance vision, hand-eye coordination or as otherwise specified by the Board of Fire and Police Commissioners, are representative of those that must be met by an employee to successfully operate the tools and equipment needed to perform the essential functions of this job.

Other Vision Demands (select if applicable)

☐ Absence of color blindness

☒ Corrected vision of...

☐ Uncorrected vision of...

20/20; and as required by ILSOS to operate motor vehicle

Enter specific vision requirement here

WORK ENVIRONMENT:

The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this job with or without reasonable accommodations.

(mark all 15 conditions)

<u>Environmental Conditions</u>	----- Amount of Time -----			
	None	Less than 1/3	1/3 to 2/3	More than 2/3
Customary indoor conditions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Customary outdoor weather conditions including extreme cold, extreme heat, and wet or humid conditions	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Non-weather conditions: extreme cold, extreme heat, and wet or humid conditions	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Works near moving mechanical parts	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Works in high precarious places, underground, or confined spaces	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Flying debris or airborne particles	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fire, smoke, fumes, gases, or noxious odors	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Toxic or caustic chemicals, aerosols, liquids, solvents or oils	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Risk of electrical shock	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Works with explosives or risk of radiation	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Vibration	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Extreme illumination	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Low noise level (Normal voice tones)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Moderate noise level (Raised voice levels)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
High noise level (Shouting/ear protection may be needed)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

The information listed above reflects minimum standards and illustrations of the various types of work that may be performed. The omission of specific job functions, requirements or tasks does not exclude them from the job if the work is similar, related or a logical extension of the work assigned.

This job description does not constitute an employment agreement between the employer and employee.

Recommended Approval:



Department Director

Reviewed Approval:

Human Resources Management Director

Approved:

Village Manager

Effective Date: _____

Revision Date: _____