



Title: Engineering Analyst II

FLSA Status: Non-Exempt

BRIEF DESCRIPTION:

The purpose of this position is to provide journey level analytical and data reporting support for the District’s capital and maintenance programs, including complex projects, through scope, cost and schedule management. This is accomplished by developing project schedules and cash flow, reviewing project cost estimates, developing and updating project status reports, developing project work breakdown structure and allocating funding based upon direction from project manager, coordinating project funding updates and budget transfers with Finance staff, performing project data analysis, assisting project and contract managers in tracking expenditures against approved budget, preparing issue papers and data reporting. Other duties include participating in project construction meetings, observing project field construction progress, providing informal direction to administrative staff, tracking contract payments, change orders, requests for information and submittal status.

ESSENTIAL FUNCTIONS:

Note: This information is intended to be descriptive of the key responsibilities of the position. The list of essential functions below does not identify all duties performed by any single incumbent in this position. Additionally, please be aware of the legend below when referring to the physical demands of each essential function.

(S) Sedentary Exerting up to 10 lbs. occasionally or negligible weights frequently; sitting most of the time.	(L) Light Exerting up to 20 lbs. occasionally; 10 lbs. frequently; or negligible amounts constantly; OR requires walking or standing to a significant degree.	(M) Medium Exerting 20-50 lbs. occasionally; 10-25 lbs. frequently; or up to 10 lbs. constantly.	(H) Heavy Exerting 50-100 lbs. occasionally; 10-25 lbs. frequently; or up to 10-20 lbs. constantly.	(V) Very Heavy Exerting over 100 lbs. occasionally; 50-100 lbs. frequently; or up to 20-50 lbs. constantly.
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#	Code	Essential Functions	% of Time
1	S	Develop and review project schedules; develop project work breakdown structures; develop project cash flow and management plans; review project cost estimates; manage project budget information; coordinate project funding updates and budget transfers; develop project and document control procedures; develop project management reports for capital projects; and assist with updating the Capital Improvement Plan. Perform other related scope, cost and schedule management duties as assigned.	50%
2	S	Collect project schedule and cost estimate data; develop and update project report status, cost and schedule; provide project managers with project cost, schedule and forecast information and analysis; monitor and coordinate project funding cash flow; prepare project closeout reports detailing scope, cost and schedule deviations; and track and monitor contract amendments and invoices. Prepare correspondence, issue papers and technical reports. Perform other related administrative and reporting duties as assigned.	20%



3	S	Provide project managers with project cost and schedule analysis; assist with analyzing departmental budgets; review and analyze contractor/consultant submittals; and develop spreadsheets and databases to track project information. Perform other related project data analysis duties as assigned.	15%
4	S	Attend construction meetings; make field observations to track construction progress, as necessary; support construction management staff in processing and tracking contractor payment requests; support division staff in tracking and monitoring change orders; document complex construction schedule and cost deviations from baseline; and provide recordkeeping for potential contractor claims. Perform other related construction support duties as assigned.	15%



JOB REQUIREMENTS:

-Description of Minimum Job Requirements-	
Formal Education	<p>Work requires broad knowledge in a general professional or technical field. Knowledge is normally acquired through four (4) years of an accredited college or university resulting in a Bachelor's degree or equivalent in Engineering, Business, Construction Management, Business Administration, Public Administration or a closely related field.</p> <p>Additional directly related experience beyond the minimum requirement may substitute for the required education based on the ratio of one and a half (1.5) years of experience for each (1) year of education.</p>
Experience	A minimum of three (3) years of experience performing cost and schedule support and associated data analysis for design and construction projects. Experience in transportation or transit projects is preferred.
Supervision	Work requires functioning as a lead worker performing essentially the same work as those directed, and includes overseeing work quality, training, instructing, and scheduling work.
Human Collaboration Skills	Work may require providing advice to others outside direct reporting relationships on specific problems or general policies. Contacts may require the consideration of different points of view to reach agreement. Elements of persuasion may be necessary to gain cooperation and acceptance of ideas.
Freedom to Act	The employee normally performs the job by following established standard operating procedures and/or policies. There is a choice of the appropriate procedure or policy to apply to duties. Performance is reviewed periodically.
Technical Skills	Skilled: Work requires a comprehensive, practical knowledge of a technical field with use of analytical judgment and decision-making abilities appropriate to the work environment of the organization.
Budget Responsibility	Position has limited fiscal responsibility. May assist in the collection of data in support of recommendations for departmental budget allocations. May monitor division or program/project level budget and expenditures.
Reading	Intermediate - Ability to read papers, periodicals, journals, manuals, dictionaries, thesauruses, and encyclopedias. Ordinarily, such education is obtained in high school up to college. However, it may be obtained from experience and self-study.
Math	Intermediate - Ability to deal with a system of real numbers; and practical application of fractions, percentages, ratios/proportions and measurement. Ordinarily, such education is obtained in high school up to college. However, it may be obtained from experience and self-study.
Writing	Intermediate - Ability to write reports, prepare business letters, expositions, and summaries with proper format, punctuation, spelling, and grammar, using all parts of speech. Ordinarily, such education is obtained in high school up to college. However, it may be obtained from



experience and self-study.
Certification & Other Requirements

KNOWLEDGE
<ul style="list-style-type: none"> • Intermediate statistical analysis. • Methods and techniques of tracking, recording and presenting statistical data. • English grammar, punctuation, spelling and usage. • Practical application of computers and peripheral equipment. • Problem solving and communication skills. • Principles and practices of contract administration. • Project cost and schedule development best practices. • Funding allocation processes. • Current/local costs for estimating labor, materials and equipment. • Production of database reports. • Processes involved in the completion of environmental studies, design, right of way acquisition, construction and construction management. • Federal contracting requirements and cost accounting standards. • Project management and control principles and systems. • Project metrics to develop cost and resource loaded baseline schedules. • Project scheduling practices and principles. • Standard project reports to monitor schedule progress, expenditures, variances and exceptions. • Project life cycle of conceptualization, planning, execution and termination. • Report and business correspondence writing.

SKILLS
<ul style="list-style-type: none"> • Intermediate word processing, spreadsheet, presentation and database software. • Specialized software related to functional area.

ABILITIES
<ul style="list-style-type: none"> • Prioritize and deal with conflicting workload requirements. • Learn Enterprise Resource Planning software, DataWarehouse, SAP project system and related modules. • Effectively present information and respond to questions from others. • Learn Federal, State and local agency funding application requirements. • Resolve budget differences between Finance and program control data. • Understand project budget allocation and budget release processes. • Develop project status reports including cost and schedule analysis. • Ensure timely funding and budget transfers. • Work with Division staff to review and update project schedules. • Ensure timely creation of purchase requisitions and purchase orders.



- Work with Division staff to review and update project cost estimates.
- Develop scope of services for procurement of professional consultant services.
- Manage consultant contracts.
- Ensure that proper codes are used consistently
- Learn District construction practices and reporting requirements.
- Learn District policies, procedures and practices.
- Deal with difficult people and situations.
- Organize information clearly and precisely.
- Communicate clearly and effectively, both orally and in writing, with internal and external contacts.
- Interact professionally with District employees and outside agency representatives.



OVERALL PHYSICAL STRENGTH DEMANDS:

-Physical strength for this position is indicated below with “X”-

Sedentary	Light	Medium	Heavy	Very Heavy
X				
Exerting up to 10 lbs. occasionally or negligible weights frequently; sitting most of the time.	Exerting up to 20 lbs. occasionally, 10 lbs. frequently, or negligible amounts constantly OR requires walking or standing to a significant degree.	Exerting 20-50 lbs. occasionally, 10-25 lbs. frequently, or up to 10 lbs. constantly.	Exerting 50-100 lbs. occasionally, 10-25 lbs. frequently, or up to 10-20 lbs. constantly.	Exerting over 100 lbs. occasionally, 50-100 lbs. frequently, or up to 20-50 lbs. constantly.

PHYSICAL DEMANDS:

C	F	O	R	N
Continuously 2/3 or more of the time.	Frequently From 1/3 to 2/3 of the time.	Occasionally Up to 1/3 of the time.	Rarely Less than 1 hour per week.	Never Never occurs.

Note: This is intended as a description of the way the job is currently performed. It does not address the potential for accommodation.

-Physical Demand-	-Frequency-	-Brief Description-
Standing	O	Making presentations; observing work site; observing work duties; communicating with co-workers
Sitting	C	Desk work; meetings; driving
Walking	O	To other departments/offices; around work site
Lifting	R	Supplies; files
Carrying	R	Supplies; files
Pushing/Pulling	R	File drawers; tables and chairs
Reaching	R	For supplies; for files
Handling	O	Paperwork
Fine Dexterity	C	Computer keyboard; telephone keypad; calculator
Kneeling	R	Filing in lower drawers; retrieving items from lower shelves/ground
Crouching	R	Filing in lower drawers; retrieving items from lower shelves/ground
Crawling	R	Under equipment
Bending	R	Filing in lower drawers; retrieving items from lower shelves/ground
Twisting	R	From computer to telephone; getting inside vehicle
Climbing	R	Stairs
Balancing	N	
Vision	C	Reading; computer screen; driving; observing work site
Hearing	F	Communicating via telephone/radio; to co-workers/public
Talking	O	Communicating via telephone/radio; to co-workers/public
Foot Controls	R	Driving
Other (specified if applicable)		None

MACHINES, TOOLS, EQUIPMENT, SOFTWARE, AND HARDWARE:

Telephone, copier, fax machine, calculator, vehicle, computer and associated hardware and software.



ENVIRONMENTAL FACTORS:

C Continuously	F Frequently	O Occasionally	R Rarely	N Never
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D Daily	W Several Times Per Week	M Several Times Per Month	S Seasonally	N Never
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-Health and Safety Factors-	
Mechanical Hazards	N
Chemical Hazards	N
Electrical Hazards	N
Fire Hazards	N
Explosives	N
Communicable Diseases	N
Physical Danger or Abuse	N
Other (see 1 below)	N

-Environmental Factors-	
Respiratory Hazards	N
Extreme Temperatures	N
Noise and Vibration	N
Wetness/Humidity	N
Physical Hazards	N

(1) N/A

PROTECTIVE EQUIPMENT REQUIRED:

Safety shoes, protective eyewear, safety vest, hard hat only if performing occasional field observations.

NON-PHYSICAL DEMANDS:

F Frequently From 1/3 to 2/3 of the time	O Occasionally Up to 1/3 of the time	R Rarely Less than 1 hour per week	N Never Never occurs
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-Description of Non-Physical Demands-	-Frequency-
Time Pressure	O
Emergency Situation	R
Frequent Change of Tasks	F
Irregular Work Schedule/Overtime	R
Performing Multiple Tasks Simultaneously	F
Working Closely with Others as Part of a Team	F
Tedious or Exacting Work	O
Noisy/Distracting Environment	R
Other (see 2 below)	

(2) N/A

PRIMARY WORK LOCATION:

Office Environment	X	Vehicle	
Warehouse		Outdoors	
Shop		Other (see 3 below)	
Recreation/Neighborhood Center			

(3)N/A

The above statements are intended to describe the general nature and level of work being performed by individuals assigned to this position. They are not intended to be an exhaustive list of all responsibilities, duties, and skills required. This description is subject to modification as the needs and requirements of the position change.