

Title: Principal Civil Engineer

FLSA Status: Exempt

BRIEF DESCRIPTION:

The purpose of this position is to plan, design, and direct civil engineering projects such as railway track and substructure, stations, roads, drainage, structures, and other transit facilities which include the most complex projects requiring project management of consultants as well as District staff from various departments throughout the organization. This is accomplished by planning and supervising all phases of engineering and design programs, developing technical documents, reviewing technical reports, coordinating with various governmental agencies, administering consultant contracts, and establishing and controlling project budgets and schedules.

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

#	Code	Essential Functions	% of Time
1	S	Prepares projects, specifications and plans by developing workplans, budgets and schedules, obtaining consultant services, managing and reviewing performance of engineering staff and consultants, providing technical support and guidance, providing direct coordination and interface of utilities, city, county, state and private parties, reviewing documents and provide technical feedback, preparing and supervising required applications for encroachment, storm water and development reviews, administering contract documents, supervising right of way engineering documents, plats and legal descriptions, making presentations to the Board of Directors or other public meetings, and coordinating with Legal Division and Procurement Department to update contract language for design services and constconstruction contracts.	50%
2	S	Develops designs by developing and supervising conceptual plans and costs for proposed light rail extensions and facility improvements, evaluating impacts and feasibility, providing coordination and interface of utilities, city, county, state and private parties, providing recommendations to executive management and department managers, making presentations as needed to the Board or other public meetings, and participating on technical committees	25%

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Date Established: 03/2009 Date Revised: N/A



		and panels.	
3	S	Supports operations, planning, real estate and facilities by examining and identifying deficiencies within RT's existing track system, structures and other RT facilities, preparing recommendations for proposed improvements, providing technical support to various departments, preparing documents, plats and legal descriptions, reviewing development projects, coordinating proposed improvements, and participating in audits.	15%
4	S	Supervises staff by planning and directing the work of professional engineers, assigning and monitoring technician workloads, preparing performance evaluations, reviewing timesheets, providing project management by developing the proposals, managing contracts, and assisting with the management of subordinate engineers.	10%

JOB REQUIREMENTS:

	
	-Description of Minimum Job Requirements-
Formal Education	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.
	Substitution of experience for the required education is not accepted.
Experience	A minimum of five (5) years of experience in engineering design, construction, or project management. Two (2) years of supervisory experience is preferred. Experience in transportation or transit facilities is preferred.
Supervision	Work requires supervising and monitoring performance for a regular group of employees or department including providing input on hiring/disciplinary actions and work objectives/ effectiveness, performance evaluations, and realigning work as needed.
Human Collaboration Skills	Recommendations regarding policy development and implementation are made and/or recommended. Evaluates customer satisfaction, develops cooperative associations, and utilizes resources to continuously improve customer satisfaction.
Freedom to Act	The employee normally performs the duty assignment according to his or her own judgment, requesting supervisory assistance only when necessary. Special projects are managed with little oversight and assignments may be reviewed upon completion. Performance reviewed periodically.
Technical Skills	Advanced: Work requires advanced skills and knowledge in approaches and systems, which affect the design and implementation of major programs and/or processes organization-wide. Independent judgment and decision-making abilities are necessary to apply technical skills



	effectively.
Budget	Position has moderate fiscal responsibility. May be responsible for the
Responsibility	billing, collection and/or accounting of funds. May be responsible for the
	handling and balancing of cash.
Reading	Advanced - Ability to read literature, books, reviews, scientific or
	technical journals, abstracts, financial reports, and/or legal documents.
	Ordinarily, such education is obtained in at the college level or above.
	However, it may be obtained from experience and self-study.
Math	Advanced - Ability to apply fundamental concepts of theories; work with
	advanced mathematical operations methods and functions of real and
	complex variables. Ordinarily, such education is obtained in at the
	college level or above. However, it may be obtained from experience
	and self-study.
Writing	Advanced - Ability to write editorials, journals, speeches, manuals, or
	critiques. Ordinarily, such education is obtained in at the college level or
	above. However, it may be obtained from experience and self-study.
Certification & Professional Engineer license in the State of California is required.	
Other Requirements	

KNOWLEDGE

- Civil engineering related to utilities, storm drainage facilities, and structures.
- Construction materials, methods, and processes.
- Design submittals and proof of design and acceptance testing to validate safety certification.
- Engineering principles, theory, and practices relating to design, specification writing, and estimating.
- Project planning and management principles, theory, and practices.
- Sources of federal, state, and local funding.
- Principles and practices of environmental planning and development.
- Principles and techniques of personnel management and supervision.
- Applicable Federal, State and pertinent local laws and ordinances, including the California Environmental Quality Act and its guidelines and the National Environmental Policy Act.
- Project management, analysis, and evaluation.
- Statistical concepts and methods.

SKILLS

- Advanced word processing, spreadsheet, presentation and database software.
- Specialized software related to functional area.



ABILITIES

- Develop and administer a project budget.
- Establish, monitor, and control projects and schedules.
- Functions and responsibilities of a regional transit district and its planning activities.
- Techniques used in the development and amendment of general transportation plans.
- Statistical and research methods as applied to public transportation planning.
- Transit lines and schedules of the District.
- Laws, ordinances, rules, and regulations affecting mass public transit planning.
- Plan, organize, supervise, and review the work of staff and consultants.
- Provide technical advice to professional and technical staff in solving complex environmental issues, regulations and compliance problems.
- Supervise the collection, analysis, and interpretation of environmental data and information.
- Participate in technical research on planning, environmental, economic, and transportation problems.
- Recognize problems, perform research, analyze, and evaluate complex environmental data, prepare reports, and develop recommendations.
- Develop alternatives and resolve conflicts among competing interests.
- Communicate clearly and concisely, orally and in writing; make presentations before large and small groups.
- Conduct meetings and lead discussions.
- Establish and maintain effective, cooperative working relationships with professional and technical staff, consultants, various governmental agencies, and the general public.
- Interpret and apply Federal, State and local policies, procedures, laws, ordinances and regulations.
- Perform professional work with minimal supervision.
- Negotiate and develop contracts and agreements.
- Analyze and solve program and/or technical problems/issues and take appropriate corrective action.
- Learn District policies and procedures.



OVERALL PHYSICAL STRENGTH DEMANDS:

-Physical strength for this position is indicated below with "X"-				
Sedentary Light- X Medium Heavy			Heavy	Very Heavy
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	0	R	N
Continuously	Frequently	Occasionally	Rarely	Never
2/3 or more of the time.	From $1/3$ to $2/3$ of the time.	Up to 1/3 of the time.	Less than 1 hour per week.	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	О	Making presentations, observing work site, observing work	
		duties, communicating with co-workers	
Sitting	С	Desk work, meetings, driving	
Walking	О	To other departments/offices, around work site	
Lifting	R	Supplies, equipment, files	
Carrying	R	Supplies, equipment, files	
Pushing/Pulling	R	File drawers, tables and chairs	
Reaching	R	For supplies, for files	
Handling	О	Paperwork	
Fine Dexterity	F	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	N		
Bending	R	Filing in lower drawers, retrieving items from lower	
		shelves/ground	
Twisting	O	From computer to telephone, getting inside vehicle	
Climbing	R	Stairs, ladders	
Balancing	R	On ladders, on step stools	
Vision	С	Reading, computer screen, driving, observing work site	
Hearing	F	Communicating via telephone/radio, to co-workers/public	
Talking	О	Communicating via telephone/radio, to co-workers/public	
Foot Controls	0	Driving	
Other			
(specified if applicable)			

MACHINES, TOOLS, EQUIPMENT, SOFTWARE, AND HARDWARE:

Telephone, fax machine, copier, calculator, automobile, radio, Personal Computer, Plotter, Printer, digital sender, Microsoft Office, AutoCad, Autoturn, SAP, Application Extender, Adobe, Groupwise

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ENVIRONMENTAL FACTORS:

C	F	0	R	N
Continuously	Frequently	Occasionally	Rarely	Never

-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	

ע	VV	IVI	3	IN
Daily	Several	Several	Seasonally	Never
	Times Per	Times Per		
	Week	Month		
	-Enviro	onmental F	actors-	

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

PROTECTIVE EQUIPMENT REQUIRED: Work boots, Reflective Vest, Hard Hat, hearing protection, gloves and protective eyewear

NON-PHYSICAL DEMANDS:

F	0	R	N
Frequently	Occasionally	Rarely	Never
From 1/3 to 2/3 of the time	Up to 1/3 of the time	Less than 1 hour per week	Never occurs

-Description of Non-Physical Demands-	-Frequency-
Time Pressure	0
Emergency Situation	R
Frequent Change of Tasks	О
Irregular Work Schedule/Overtime	О
Performing Multiple Tasks Simultaneously	F
Working Closely with Others as Part of a Team	F
Tedious or Exacting Work	R
Noisy/Distracting Environment	О
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.

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⁽¹⁾ N/A