

CITY OF SIMI VALLEY

PRINCIPAL ENGINEER

Class specifications are intended to present a descriptive list of the range of duties performed by employees in the class. Specifications are not intended to reflect all duties performed within the job.

SUMMARY DESCRIPTION

Under general direction, supervises and coordinates assigned engineering section activities and operations within assigned engineering section; coordinates assigned activities with other divisions, outside agencies and the general public; and provides highly responsible and complex staff assistance to assigned Deputy Director.

This is a broad classification with individual positions assigned to specific functional areas; duties and assignments may overlap depending on the operational needs of the department and staffing levels.

REPRESENTATIVE DUTIES

The following duties are typical for this classification. Incumbents may not perform all of the listed duties and/or may be required to perform additional or different duties from those set forth below to address business needs and changing business practices.

1. Coordinate the organization, staffing and operational activities of assigned engineering section including management of all major engineering projects.
2. Participate in the development and implementation of goals, objectives, policies and priorities; recommend and implement resulting policies and procedures.
3. Identify opportunities for improving service delivery methods and procedures; identify resource needs; review with appropriate management staff to implement improvements.
4. Prepare plans and studies to forecast section and division needs; implement recommendations.
5. Plan and review work activities and projects; monitor work flow; review and evaluate work products, methods and procedures; meet with staff to identify and resolve problems.
6. Assist City Manager's Office in technical presentations before elected officials as necessary.
7. Oversee Requests for Qualifications (RFQ) and Requests for Proposals (RFP) for the solicitation, evaluation and selection of engineering consultants; negotiate fees and determine the scope of work for complex engineering services contracts; prepare, review and analyze bid documents; award construction contracts; schedule and attend pre construction meetings; oversee and supervise staff in the administration and management of professional engineering contracts.
8. Select, train, motivate and evaluate assigned personnel; provide or coordinate staff training; work with employees to correct deficiencies; implement discipline and termination procedures.
9. Participate in the development and administration of program budget; forecast funds needed for staffing, equipment, materials and supplies; monitor and approve expenditures; recommend adjustments as necessary.
10. Provide staff assistance to assigned Deputy Director; serve as staff on a variety of boards, commissions, and committees; prepare and present staff reports and other correspondence as appropriate and necessary.

11. Coordinate engineering activities with those of other divisions and outside agencies and organizations; provide customer service to developers and residents; answer questions and provide information.
12. Attend and participate in professional group meetings; stay abreast of new trends and innovations in the field of municipal civil engineering.
13. Respond to and resolve difficult and sensitive citizen inquiries and complaints.
14. Perform related duties as required.

When assigned to Capital Projects:

15. Monitor and supervise the work of staff responsible for project final design, right-of-way acquisitions and easements, legal descriptions, agreements, studies, plans, cost estimates and specifications for capital projects; ensure compliance with applicable standards, rules and regulations.
16. Oversee construction administration for capital projects; prepare, review and analyze bid documents; award construction contracts; schedule and attend pre-construction meetings; prepare maps, drawings, exhibits and documentation for meetings.
17. Supervise construction inspection activities for capital projects; document construction activities; confer with contractors on construction progress; ensure compliance with applicable standards and regulations; provide resolutions to construction problems.
18. Oversee and participate in field reviews, preliminary designs, design alternatives and studies for capital projects; prepare and present reports.

When assigned to Land Development:

19. Plan for and review construction inspection activities for commercial and residential development and public facilities.
20. Oversee the development, processing and review of final maps and pertinent infrastructure improvement plans; recommend plans for approval signatures to the City Council; review construction cost estimates for the development of fees and bond amounts.
21. Review and approve all construction permit applications submitted by developers or contractors; review and approve major design and/or construction changes.
22. Inspect the more complex development projects; ensure quality control and compliance with applicable codes and regulations; prepare detailed reports on inspection and construction activities.
23. Attend and participate in construction and design meetings; confer with developers, contractors, surveyors and other engineers; provide information regarding City development standards and ordinances.

When assigned to Utilities:

24. Review all sewer and water improvement plans for residential and commercial development; review construction cost estimates; establish development fees.
25. Review easements and acquisitions, conditions documents, legal descriptions, agreements and cost estimates for sewer and water capital improvement projects.

CITY OF SIMI VALLEY
Principal Engineer (Continued)

26. Prepare engineering documents for the evaluation of reclaimed water systems planning, implementation, analysis, design and construction.
27. Oversee the preparation and maintenance of water and sewer system maps and water system hydraulic models.
28. Oversee the management of the City's groundwater dewatering program including the tracking of reports of high groundwater, the analysis of probable causes, and evaluation and recommendation of possible remedies.
29. Oversee the development of local water resources.
30. Ensure compliance with applicable local, state and federal waterworks standards, rules and regulations as well as health and safety requirements.

When assigned to Traffic:

31. Review project development applications including specific plans for residential and commercial development regarding the impact of the project on City streets, right-of-way, street design and the environment.
32. Review traffic impact studies and environmental impact reports; analyze and recommend traffic related conditions for improvement.
33. Maintain, update and operate the City's traffic model for long range planning; coordinate traffic modeling activities with outside agencies.
34. Direct the development of a City-wide traffic/transportation improvement plan.
35. Oversee the collection of traffic data including volume counts, street layout, and intersection geometries.
36. Prepare City-wide studies and reports for speed limits, high accident location review/correction, and traffic signal priority lists.
37. Oversee the review of pertinent traffic related development infrastructure improvement plans for developers and City projects.

When assigned to Building & Safety:

38. Oversee the front counter and permitting sections within the Building & Safety Division including coordinating the organization, staffing, and operational activities for all plan check, plan reviews, and permit issuance processes.
39. Perform the more difficult and complex engineering tasks related to building plan checking; review complex and difficult construction plans.
40. Explain, interpret and provide guidance to the general public, design professionals, contractors, developers, and owners regarding building codes and regulations.
41. Serve as Building Official in his/her absence.

QUALIFICATIONS

The following generally describes the knowledge and ability required to enter the job and/or be learned within a short period of time in order to successfully perform the assigned duties.

Knowledge of:

Operational characteristics, services and activities of a comprehensive engineering program.
Modern and complex principles and practices of civil engineering.
Methods and techniques of project scheduling.
Principles of municipal budget preparation and control.
Principles of supervision, training and performance evaluation.
Principles and practices of construction management.
Sanitary engineering, waste engineering and wastewater reclamation regulations.
Wastewater treatment, collection and disposal.
Traffic engineering, the California vehicle code and traffic control devices.
State traffic, state highway capacity, and state highway design manuals.
Subdivision Map Act and the California Environmental Quality Act (CEQA).
Transportation planning and traffic forecasting models.
Civil engineering hydraulics for water, wastewater and reclaimed water systems including pumps, pipes, valves, storage and controls.
Environmental engineering.
Water resources engineering.
Design, construction management, and operation of wastewater treatment processes.
Procurement of engineering and construction services.
Project financing.
Construction safety practices.
Land development practices.
Design and construction of roadway asphalt construction
Pertinent federal, state and local laws, codes and regulations.

Ability to:

Oversee the activities, operations and projects of an engineering section.
Supervise, direct and coordinate the work of lower level staff.
Select, supervise, train and evaluate staff.
Interpret and explain City development policies and procedures.
Negotiate and manage engineering services and construction contract modification.
Work with professional consultants, contractors, citizens, council and board members.
Prepare clear and concise reports.
Use personal computer to perform engineering tasks.
Communicate clearly and concisely, both orally and in writing.
Establish and maintain effective working relationships with those contacted in the course of work.

Education and Experience Guidelines - *Any combination of education and experience that would likely provide the required knowledge and abilities is qualifying. A typical way to obtain the knowledge and abilities would be:*

Education/Training:

Equivalent to a Bachelor's degree from an accredited college or university with major course work in civil engineering or a related field.

Experience:

Five years of responsible engineering experience including two years of administrative and/or supervisory experience.

License or Certificate:

Possession of registration as a Professional Engineer in the State of California.

Possession of, or ability to obtain, an appropriate, valid driver's license.

PHYSICAL DEMANDS AND WORKING ENVIRONMENT

The conditions herein are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential job functions.

Environment: Office and field environment; travel from site to site; works with computers; exposure to noise and poisonous gases and liquids.

Physical: Sufficient physical ability to work in an office setting and operate office equipment; sit, stand, and walk for prolonged periods of time; climb ladders and slopes; operate motorized vehicles.

Vision: See in the normal visual range with or without correction; vision sufficient to read computer screens and printed documents and to operate vehicles.

Hearing: Hear in the normal audio range with or without correction.

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Johnson & Associates

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