



City of Santa Rosa

Civil Engineering Technician I, II, III

SALARY	\$29.53 - \$49.42 Hourly \$2,362.15 - \$3,953.54 Biweekly \$61,416.00 - \$102,792.00 Annually	LOCATION	MSCS-69 Stony Circle Santa Rosa, CA
JOB TYPE	Full-Time	JOB NUMBER	23/24-22ALS-O
DEPARTMENT	Transportation and Public Works	OPENING DATE	08/22/2023
CLOSING DATE	9/19/2023 11:59 PM Pacific	FLSA	Non-Exempt
BARGAINING UNIT	7		

The Position

THE CITY OF SANTA ROSA IS NOW HIRING CIVIL ENGINEERING TECHNICIANS TO JOIN OUR TEAM IN PROVIDING CRITICAL SERVICES TO THE LOCAL COMMUNITY!

JOIN A KNOWLEDGEABLE AND MOTIVATED TEAM WHO TAKE PRIDE IN DOING QUALITY WORK!



This recruitment is being conducted to fill vacancies in Transportation and Public Works - Capital Projects Engineering_(CPE) Division, as well as any future regular or limited-term vacancies Citywide during the life of the eligible candidate list. **If you are interested in this position or a possible future Civil Engineering Technician position at the City, should one become available, including transfer opportunities, you are strongly encouraged to apply now.**

The City of Santa Rosa is committed to building a workforce reflective of our community and establishing a lasting culture of equity and belonging within our organization. Our collective talents and expertise contribute to high-quality public services that support a vibrant, resilient, and inclusive City for our community and visitors. We celebrate a diverse workforce and welcome all qualified candidates to apply.

The Benefits of City Employment

In addition to offering a challenging, rewarding work environment and excellent salary, the City of Santa Rosa provides a

generous suite of benefits, including retirement through CalPERS, a competitive leave accrual package, your choice of health plan, and top of the line employer-paid vision and dental coverage. More information regarding benefits associated with this position can be found on our [Miscellaneous Employee Benefits Page](#).

Additional benefits include:

- Flexible schedule (9/80 and 4/10) available with management approval
- 11 paid holidays annually, plus 1 to 3 "floating holidays" per year depending on hire date and years of service
- \$500 Annual wellness bonus

About the Positions

Civil Engineering Technicians perform a variety of routine, intermediate, or advanced level paraprofessional engineering office and field work. Successful candidates will be appointed at the Civil Engineering Technician I, II or III level depending on level of skills and experience.

The Successful Candidate

In addition to the required qualifications below, the successful candidate will:

- Have experience in civil engineering design and construction practices
- Possess knowledge of, and experience in, mathematics, computer-aided design, surveying, materials testing, etc.
- Possess strong technical analysis skills
- Be self-motivated and highly detail oriented
- Have the ability to perform established duties independently, as well as work collaboratively within the team
- Demonstrate effective and efficient communication skills

CIVIL ENGINEERING TECHNICIAN I (\$29.53 - \$35.92 hourly; \$61,416.00 - \$74,704.00 annually)

This is the entry level class in the Civil Engineering Technician series and does not require previous specialized experience. Incumbents will be provided appropriate training in the functions of their area of assignment to enable them to gather, analyze and monitor routine data and formulate recommendations based on established criteria. This classification is distinguished from the class of Civil Engineering Technician II in that the technical work assignments of the latter are performed more independently and incorporate previously learned practices and principles.

To view the complete detailed job description, please click [HERE](#).

CIVIL ENGINEERING TECHNICIAN II (\$34.17 - \$41.57 hourly; \$71,066.00 - \$86,465.00 annually)

This is the intermediate level class in the Civil Engineering Technician series. Positions in this class are normally filled by advancement from the class of Civil Engineering Technician I, or, when filled with a candidate from the outside of the City, requires prior related work experience. A Civil Engineering Technician II works under general supervision and utilizes the principles and practices of engineering to gather, analyze and monitor simple to moderately complex engineering related data. Recommendations are formulated using established criteria or from previous on-the-job experiences. This class is distinguished from Civil Engineering Technician I in that the routine technical work assignments of this classification are performed more independently. This classification is distinguished from the Civil Engineering Technician III classification in that new or more complex technical work assignments of the Civil Engineering Technician II classification are observed and reviewed upon completion.

To view the complete detailed job description, please click [HERE](#).

CIVIL ENGINEERING TECHNICIAN III (\$40.70 - \$49.42 hourly; \$84,647.00 - \$102,792.00 annually)

This is the full journey level class in the Civil Engineering Technician series. Positions in this class are normally filled by advancement from the class of Civil Engineering Technician II or, when filled from the outside, require significant prior related work experience. Working under direction, a Civil Engineering Technician III utilizes the principles and practices of engineering to independently gather, analyze and monitor a full range of engineering related data. Recommendations are formulated using independent judgment and from previous on-the-job experience. This class is distinguished from Civil Engineering Technician II in that the technical work is more complex and performed independently or with minimal supervision.

To view the complete detailed job description, please click [HERE](#).

There are multiple vacant positions that may be filled at the I, II, or III level depending on the skills and experience of the candidates selected for appointment.

The Selection Process

Please complete a thoughtful, thorough Supplemental Questionnaire submission. As part of the selection process, your responses will be reviewed for required qualifications and may be scored using criteria specific to this position. Incomplete responses, minimal or generic responses, or responses such as "See Resume" can result in disqualification from the selection process.

The selection process will include a minimum qualifications assessment, an application and supplemental questionnaire review, followed by department selection interviews. An eligibility list will be established as a result of this selection process and may be used to fill the current vacancy as well as any future vacancies.

Additional requirements, such as successful completion of a physical exam, drug screen, etc., may apply, depending on the duties and responsibilities of the position. If you receive a conditional job offer for the position, the requirements upon which the offer is contingent will be outlined in the conditional job letter.

Santa Rosa - A Wonderful City to Call Home

The City of Santa Rosa is located just 55 miles north of San Francisco and 30 miles east of the Pacific Ocean with a population of approximately 180,000. Santa Rosa is the seat of Sonoma County and the center of trade, government, commerce, and medical facilities for the North Bay. The surrounding area is home to over a hundred wineries and vineyards and many beautiful parks and recreational facilities, including golf courses. Santa Rosa is in the center of a nationally recognized cycling area. We boast many attractions associated with large cities, including a symphony, performing arts center, theater productions and internationally recognized restaurants, yet still retain the warmth and small town feel of decades past. Santa Rosa has been named one of the 50 greenest cities in the United States with one of the top five mid-sized downtowns in California.



Examples of Duties and Responsibilities

PLEASE NOTE: The duties and responsibilities listed below are specific to Civil Engineering Technician III and these duties may/or may not be performed by Civil Engineering Technicians I & II. **For specific duties related to Civil Engineering Technician I & II, please visit the links referenced above to review the detailed job descriptions for each level.**

Examples of Essential Duties (all positions):

The following duties are considered essential for this job classification:

- Research, file, retrieve, review and/or prepare a variety of engineering maps, documents, records, reports, and correspondence;
- operate computer-aided design, modeling and/or other application programs;
- respond to complaints and inquiries from other departments, outside agencies, and the public concerning engineering activities;

- locate utilities, easements, property lines, and/or other information on plans;
- perform and check mathematical, computer, and/or statistical calculations used in engineering tasks;
- perform field investigations and/or inspections of existing conditions and new construction;
- collect, compile, and/or analyze data and/or field samples;
- notify contractors of discrepancies between work performed and the approved plans, specifications, and standards;
- review drawings and improvement plans for conformance with established engineering standards;
- provide technical direction to less experienced staff;
- prepare program and project schedules.

In addition to the duties listed above, the following duties are considered essential for the following divisions:

Engineering Development /Water Engineering Services:

Plan Check:

- Process legal documents, permit applications and issue permits;
- coordinate public works and utility activities with other City departments, divisions and sections and with outside agencies;
- research publications and industry information sources;
- develop and revise design standards, Standard Plans, specifications, and Engineers Approved lists;
- attend public hearings;
- review various development submittals proposing modifications;
- place conditions on projects to ensure all engineering design criteria, City Standards and Policies are met.

Inspection:

- Perform inspection for current development infrastructure, water, sewer, storm water, grading and erosion, and sediment control;
- ensure quality control of projects as well as public safety aspects while the projects are under construction;
- complete daily inspection and field activity reports;
- coordinate engineering field activities with other City Departments and Development Services, contractors and consultants on project scheduling and technical requirements;
- process permit applications and issue permits.

Capital Projects Engineering

Project Development:

- Assist in the relative tasks from project planning through construction during implementation of engineering contracts;
- assist in preparing project initiation documents, including but not limited to the schedule, cost estimate, project maps, PowerPoint presentations, and other supporting documents;
- assist in drafting and releasing Requests for Proposals, reviewing consultant proposals, and giving feedback for contract negotiations;
- review improvement plans and project specifications for conformance with established engineering standards and city codes;
- review engineering estimate for conformance with project specifications, including quantity checking;
- research necessary environmental permits, and process permit applications and other associated documents;
- locate utilities, easements, property lines, and/or other information within archived records;
- coordinate public works and utility activities with other City departments, divisions, and outside agencies;
- submit permit applications and supporting documentation to various inside and outside organizations;
- perform soil contamination research for given project areas and draft supporting documentation;
- support public participation efforts by drafting and sending letter to community members;
- provide updates to the public facing CIP project website;
- coordinate plan review distribution to appropriate staff and departments and compile comments into one document, and document comments received in the CIP project directory;
- develop and maintain a thorough knowledge of City's Design & Construction Standards, including sections association with roadway, traffic, sewer, water & storm drain projects;
- develop and maintain a thorough knowledge of the principles, procedures and standards for Water Distribution and Water Collection Systems and related resource material.

Construction & Inspection:

- Perform site constructability review;
- perform inspection for roadway, water, sewer, storm water, grading and erosion control, and other public infrastructure projects;
- ensure quality control of projects as well as public safety aspects while under construction;
- complete daily inspection and field activity reports;
- document photos of daily construction activities;
- perform stormwater management inspections, as needed, and inform engineer of any issues;
- act as liaison between City staff and professional consultant construction manager and inspector; provide coordination support and overall assistance as needed;
- understand and maintain appropriate communication channels established by the project engineer;
- participate in construction meetings and provide input/recommendations as necessary to assist with or resolve construction related matters or conflicts;
- perform meter and tie-in inspections according to established procedures by insuring installations meet City Design & Construction Standards or approved plans, and assuring adequate notification of service interruptions or items needing correction are given to customers;
- function as a backup resource for construction inspection duties when all other field inspection staff are unavailable, including staff from Engineering Development Services.

Project Closeout:

- Complete and archive all applicable design and construction documents, and final record drawings consistent with Department archiving procedures.

Survey Section:

- Act as the Survey Party Chief and/or a chain, rod, or instrument-person;
- provide field and record information to be used in production of engineering drawings;
- perform topographic, boundary, control and construction surveys;
- perform construction staking;
- perform duties typically associated with land surveying activities.

Asset Management:

Planning & Assets:

- Perform analysis of infrastructure asset data using CMMS software, ARCGIS and MS Access;
- review data sources for asset condition assessment including collection system CCTVs, base maps, construction drawings, and collection system flow meter graphs;
- map city assets using AutoCAD, and coordinate mapping with asset management software;
- Coordinate with Capital Projects Engineering, Water Engineering Services, and Local Operations on the creation of assets and management of the City's engineering document database;
- assist in Capital Projects Planning, project scoping, and project prioritization;
- in addition to the duties listed above, Capital Project Engineering duties may also be required on small projects.

Storm Water & Creeks:

- Perform field investigations/tests on storm water;
- assist in the preparation and administration of engineering contracts and professional service agreements;
- work with Environmental Specialist staff to prepare information and exhibits as needed for storm water and creek restoration projects.

Materials Engineering:

- Demonstrate and perform all testing procedures;
- perform testing and lab analysis of R-value, TSR, unconfined compressive strength of treated soils, S-value and others as required;
- review and evaluate HMA, PCC and aggregate quarry operations including their QC procedures;
- perform plant and jobsite HMA and PCC inspections;
- respond to contractor/customer inquiries with regards to materials and placement thereof;
- utilize PMP software and train technicians in PMP inspections.

Traffic Engineering:

- Develop and maintain traffic signal timing for isolated intersections and coordinated systems independently;
- train others to process permit applications and issue transportation permits;
- determine and collect fees;

- process and issue transportation permits for oversize & overweight vehicles;
- assist in drafting of striping plans for construction and material quantities for a cost estimate and the preparation of engineering contracts;
- perform engineering and traffic surveys for establishing speed limits;
- assist in the preparation of engineering contracts, process customer service requests and provide appropriate solutions on an independent basis;
- apply principles of the California Manual of Uniform Traffic Control Devices to daily work.

Additional Duties:

In addition to the duties listed in the Essential Duties Section, each employee in this classification may perform the following duties in the department and section assignments specified. Any single position may not be assigned all duties listed below, nor do the examples cover all duties which may be assigned.

- Develop and revise design standards, Standard Plans, specifications, and Engineers Approved lists;
- process permit applications and issue permits;
- determine and collect fees;
- assist in the preparation and administration of engineering contracts;
- and perform related duties as assigned.

Required Qualifications

Knowledge of: Terminology, methods, practices, and techniques of construction inspection; trigonometry as applied to the computations of angles, areas, distances, and traverses; principles and practices of surveying; materials sampling and testing methods; engineering design and construction practices; computer-aided design and other general engineering computer software application programs, including spreadsheets and word processing; quantity and cost estimating; customer service techniques; principles of statistics and mathematics as applied to engineering tasks.

Ability to: Read figures and make accurate mathematical and basic statistical calculations; understand and follow oral and written instructions and sketches; communicate clearly and effectively, orally and in writing; comprehend and draw inferences from written material; establish and maintain effective working relationships with those contacted in the course of work; understand and use computer-aided design and other application programs; read and understand record drawings, parcel maps, subdivision maps, zoning maps, improvement plans and specifications; operate engineering office equipment, computers and copy machines; maintain engineering records; file information using numerical, alphabetical, chronological and/or reverse chronological filing systems; organize and complete assignments within established time frames; perform research. Positions assigned to the Survey section also require the ability to operate and care for surveying instruments. Positions assigned to the Materials Engineering section also require the ability to operate and care for materials testing instruments.

Experience and Education: Any combination equivalent to experience and education that could likely provide the required knowledge and abilities is qualifying. A typical way to obtain the knowledge and abilities would be: Experience - Sufficient experience in civil engineering design and construction practices to demonstrate possession of the knowledge and abilities listed above; Education - Courses in mathematics, computer-aided design, construction practices, surveying, materials testing, and/or other related courses. A certificate of completion from an accredited Civil Engineering Technology or other related technical program may be substituted for the experience requirement.

License(s)

This classification may require the ability to perform work at various locations. For positions that may require work at various locations, individuals must be physically capable of operating a motor vehicle safely and possess a valid, Class C, California Drivers License, or be able to demonstrate the ability to travel on scheduled or unscheduled visits to various City facilities or work locations which may or may not be reachable by public transportation.

Additional Information

WORKING CONDITIONS:

The work is performed indoors in an engineering office environment and outdoors in field conditions involving heavy traffic, steep terrain, muddy construction sites and exposure to poison oak. Field work frequently is performed outdoors in a

variety of weather conditions and involves walking on rough, uneven or rocky surfaces. Incumbents communicate with others orally, face to face and by telephone and/or two-way radio. Incumbents are given oral direction or graphic information such as blueprints, schematic drawings, layouts or other visual aids when receiving assignments. When operating office equipment such as a computer keyboard, mouse, and/or calculator, incumbents make fine, highly controlled, repetitive arm/hand movements. When operating a computer, incumbents sit for extended time periods with the ability to move at will. Incumbents raise arms overhead and/or bend and stoop to retrieve documents from file drawers. When performing field inspections and office duties, incumbents climb stairs and/or ladders, walk and stand for extended periods of time, and stoop and crouch with the ability to change positions as needed. They file documents in numerical, alphabetical, chronological and/or reverse chronological order. When laying out traffic control patterns, incumbents place and observe the placement of cones to ensure compliance with safety standards. When performing field inspections and/or laboratory tests, incumbents respond to auditory warning devices. Construction inspection duties require incumbents to coordinate movement of more than one limb simultaneously while driving, to get in and out of a vehicle repeatedly, and to make visual inspections of contractors' work. During inspections, incumbents observe people in the field to monitor compliance with safety standards. Incumbents sometimes perform construction inspections at night and/or on weekends and holidays. Incumbents review or check the work products of less experienced staff.

Incumbents sometimes use common hand tools, such as a pick or a meter box lifting device, to remove utility box or manhole covers for design and inspection activities. Functional area assignments within a division are flexible, shifting as division needs change. Incumbents in this department discriminate among or match colors in order to inspect curb painting, pavement marking, and traffic signs and to read documents in color.

Incumbents in the Survey Section, when performing surveys, lift and move survey equipment weighing up to 25 pounds for short and long distances; use common hand tools, such as sledgehammers, spades, picks, and shovels to uncover and/or dig up survey points, move debris, remove catch basin and manhole covers, and pound stakes into the ground. They also use machetes to remove brush. When maintaining, assembling, or operating survey equipment, incumbents make skillful, controlled manipulations of small parts, screws, and tools. Field and/or office work requires incumbents to measure distances using calibrated instruments.

Incumbents assigned to the Materials Engineering section lift and move laboratory equipment and/or samples of construction materials weighing up to 40 pounds both short and long distances. They discriminate among colors when monitoring quality of materials. They also work with cleaning fluids such as solvents to clean tools and sampling containers using normal protective equipment, such as safety glasses and heavy duty rubber gloves. Incumbents make precise arm/hand positioning movements when operating stabilometer, kneading compactor, or compression testing machine. Incumbents use their arms above shoulder level and coordinate movement of more than one limb simultaneously when operating drill rig and other lab equipment; and use picks, shovels, or other tools to obtain samples of construction materials. When testing construction materials, incumbents remember and follow prescribed testing procedures. When maintaining, assembling, or operating laboratory equipment, incumbents make skillful, controlled manipulations of small parts, screws, and tools. Field and/or office work requires incumbents to observe data collected while using test equipment.

In the Storm Water & Creeks section, incumbents use common hand tools such as a sledge hammer and pick to remove catch basin and manhole covers. When performing water tests, they remember and follow prescribed testing procedures. When collecting water samples, incumbents carry kits and cones weighing up to 20 pounds both short and long distances. In the field an incumbent may be subjected to wet, hot, and cold weather. They walk on level, inclined, uneven, wet and slippery surfaces; reach, kneel, bend, stoop and climb over objects. Bioassay sample collection requires incumbents to bend and stoop to lift 5-gallon water sample containers weighing up to 50 pounds. Incumbents use and calibrate instruments such as turbidity probes, pH probes, dissolved oxygen probes and automatic samplers to monitor water quality.

For more information regarding this exciting opportunity, please contact Human Resources at 707-543-3060.

The City of Santa Rosa is proud to be an equal opportunity workplace

Agency

City of Santa Rosa

Address

100 Santa Rosa Ave, Room 1

Santa Rosa, California, 95404

Phone

707-543-3060

Website<https://www.governmentjobs.com/careers/srcity>**Civil Engineering Technician I, II, III Supplemental Questionnaire*****QUESTION 1**

The answers you provide to the supplemental questions will be used to evaluate your qualifications for this position. Additionally, the answers you provide may be scored, using specific criteria to this position, to determine whether you will continue in the selection process. Incomplete responses, minimal or generic responses, or responses such as "see resume" can result in disqualification from the selection process. Specific work experience you claim in response to these questions must be clearly supported and described in the work history and education portion of your application.

Do you accept these conditions?

- ☐ Yes
- ☐ No

***QUESTION 2**

Please indicate the assignment areas you would be interested in (check all that apply).

- ☐ Capital Projects Engineering (current vacancy)
- ☐ Survey Section
- ☐ Stormwater and Creeks
- ☐ Traffic Engineering (current vacancy)
- ☐ Engineering Development Services
- ☐ Asset Management
- ☐ Water Engineering Services
- ☐ Public Works Administration

***QUESTION 3**

Do you possess a Certification of Completion for any of the following? Please check all that apply.

- ☐ Civil Engineering Technology
- ☐ Radiation Safety/Use of Nuclear Soil Gauges
- ☐ Hazardous Waste Operations and Emergency Response Training
- ☐ Grade 1 Water Distribution Operator (State of California)
- ☐ None of the above

***QUESTION 4**

If you possess any other certifications that you feel are related to this position, please describe below. If not, please enter "N/A."

***QUESTION 5**

Please describe in detail your training and professional experience applicable to the position of Civil Engineering Technician, including the name of your employer or school, specific types of jobs you completed, equipment used, level of independence, etc.

***QUESTION 6**

Please list the courses, training, and/or workshops you have successfully completed that are related to the Civil Engineering Technician field. Please list course title, school attended and units completed for each course. If none, please enter "N/A."

***QUESTION 7**

Please briefly describe your training and professional experience in each of the following areas: a) Interpreting and applying complex or technical rules and specifications. b) Reading and interpreting engineering or other technical drawings and maps.

***QUESTION 8**

Please list the computer programs, especially any technical and/or engineering-related programs, with which you have experience (e.g. AutoCAD, ArcGIS, spreadsheets, word processing, database, etc.). For each software program listed specify the name of the software, where and when you gained your experience, and your level of proficiency.

* Required Question