## **Assistant Engineer**

<u>Background:</u> The Northwest California Resource Conservation & Development Council staff works with a wide variety of people and agencies throughout northwestern California to improve and restore salmonid habitat and improve water quality/quantity and undertake community development projects. The Assistant Engineer conceptualizes projects and develops designs, in close coordination with the Engineer, for restoration and development projects on public and private lands with willing partners.

<u>Brief Position Description</u>: The Assistant Engineer works with the Engineer and project lead staff to develop designs to correct infrastructure and other physical problems to address restoration objectives and create community development opportunities and works with the larger project team and partners to help implement designs. The Assistant Engineer leads field crews in the collection of data that the Engineer needs to understand the site and characterize the problem; assists Engineer in developing design solutions, bid preparation, and other tasks necessary to prepare projects for implementation; takes an active role in the process of implementing designs; in coordination with Engineer, addresses address any emerging problems, deficiencies, or changing conditions; and assists in the reporting and monitoring of projects. All of this must be done in coordination with Engineer, project lead staff, landowners, and funders in order to create and maintain small-scale to large-scale construction projects in a safe, timely, cost effective, and sustainable manner. Assistant Engineer works under the direction of the Executive Director and Program Manager in close coordination with Engineer and may assist with supervising field crews and interns.

## Responsibilities:

- Assist with the development of design concepts in coordination with Engineer, project lead staff, and landowner(s) for use in grant funding request proposals as requested. This includes assisting with the preparation of concept level drawings that satisfy various technical specifications and development of cost estimates.
- Participate in project field visits to meet with Engineer, project lead staff, landowners, and/or funders and ensure smooth project planning efforts.
- Assist Engineer in identifying data needed to create design solutions.
- Take the lead in in performing field work needed to gather data (e.g., measure infrastructure
  and physical features) to inform project designs in coordination with Engineer project lead staff.
  This may involve assisting Engineer with the supervision of interns and other crew members.
  Assist Engineer with analyzing data gathered and other sources of information necessary to
  complete work to ensure accuracy and completeness.
- Assist Engineer with developing existing concept designs to varying stages of completion in coordination with project lead staff and landowner(s) as needed to meet project and grant agreement deliverables. Includes assisting with the preparation of appropriate level drawings, development of materials lists and cost estimates, and assessment of potential risks.
- Draft construction detailed cost estimates and bids in compliance with applicable regulations such as prevailing wage labor laws for the Engineer's review.
- Assist as requested in the procurement of materials, equipment, and services.
- Assist Engineer with inspection of field work and construction activities throughout all phases of a project as needed to ensure compliance with prepared designs and technical specifications.

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This includes communicating needs and bringing to the Engineer's attention possible corrective action(s) for contractors and consultants.

- Assist project lead staff in the preparation of design and technical aspects of project progress reports and deliverables as well as pertinent discussions for Council Board of Directors meetings.
- Draft as-built designs for completed projects for the Engineer's review as needed.
- As requested and/or needed, respond to emergencies and perform tasks in the interest of protecting public safety and/or property during emergencies.
- Assist in the preparation of presentations or education materials as requested.
- Attend meetings related to assigned projects or relevant topics as requested.
- Other duties as assigned.

## Minimum Requirements:

- Interest in conservation, restoration, and/or environmental stewardship.
- Bachelor's degree in engineering or graduating within a year .
- Valid Engineer in Training license or ability to obtain an EIT license within 3 months of hire.
- Ability to understand and perform complex mathematical analysis, calculus, and other mathematics for design and troubleshooting.
- Ability to understand mechanical concepts and processes easily, as well as to use equipment and tools.
- Proficiency in Microsoft Office Excel and Word and experienced in AutoCAD.
- Excellent organizational skills and ability to meet work deadlines both for projects and Council internal requirements.
- Strong writing skills sufficient to prepare clear and succinct technical and non-technical reports.
- Ability to communicate clearly and concisely in a timely manner with co-workers, landowners, regulatory agencies, funders, and project stakeholders.
- Ability to understand and be responsive to input from project lead staff, landowners, regulatory agencies, funders, and project stakeholders in order to ensure project designs meet multiple objectives.
- Experience with doing field surveys and the use and care of equipment used to conduct relevant fieldwork (e.g., Total Station and similar surveying equipment, clinometers, GPS unit, compass).
- Ability to perform basic fieldwork in variable climates and sometimes rugged and uneven terrain: safely conduct surveys of outdoor project sites, stream and road conditions, collect data, and be present during construction activities.
- Valid driver's license, good driving record, and minimum level of vehicle insurance coverage as required by the Council Personnel Policy & Employee Handbook.
- Willingness to travel long distances to perform project site visits and participate in meetings, which sometimes requires overnight stays.

## **Desired Qualifications:**

Bachelor's degree in civil engineering.

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- Familiarity with HEC-RAS, ArcGIS, Microsoft Access or other database programs, and other Microsoft Office Professional programs.
- Familiarity with design principles used in restoration projects such as fish passage, instream habitat features, and road drainage upgrades.
- Knowledge of or ability to rapidly learn and understand relevant regulations and requirements that affect the design, construction, and performance of restoration and community development projects.
- Self-motivated and able to work independently and responsibly in the absence of direct supervision.
- Experience working cooperatively with a broad array of stakeholders, regulatory agencies, contractors, and consultants.
- Knowledge of fish, wildlife, plants, hydrology, forestry, and/or other fields relevant to the duties described above.
- Experience in preparing presentations.

<u>Nature of Position</u>: Full Time/Regular employment. Selected candidate may start part-time and move into full time in accordance with the Council Personnel Policy & Employee Handbook.

<u>Salary Range</u>: Based on relevant experience and education. The Council offers a generous benefits package.

<u>Work Station</u>: Northwest CA Resource Conservation & Resource Development Council Office in Weaverville, CA. Some projects may require extended travel to nearby counties.

Further Information about the Northwest California Resource Conservation & Resource Development Council can be accessed at <a href="http://northwestcarcdc.org">http://northwestcarcdc.org</a>. Information on the 5C Program can be accessed at <a href="http://www.5counties.org">www.5counties.org</a>.

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