



Alaska BioMap, Inc. is recruiting an independent subcontractor for an **Environmental Engineering Technician** position to assist the Anchorage Conservation Office of the U.S. Fish and Wildlife Service (FWS) with planning, designing, and constructing fish passage improvement and habitat restoration projects in Alaska. The selectee will be a member of a multi-disciplinary team of engineers, biologists, and a hydrologist with the FWS Alaska Habitat Restoration Program. A FWS, licensed professional engineer will provide oversight of the work.

Period of Performance

- 2080 billable hours between June 2019 and June 2020
- mid-June start date

Compensation and Inclusions

- Hourly rate commensurate with qualifications and experience
- Federal holidays paid
- Overtime paid as flex time
- Work-related travel and training costs will be reimbursed

Travel and Training

- Travel to remote sites in Alaska will be required during the field and construction season (May to October), with site visits typically lasting 1 to 3 days.
- Travel for off-site, technical training sessions will be required; trips will last 1 to 2 weeks
- A 5-day, Applied Fluvial Geomorphology course must be taken in either August or November. Course details, including specific dates and locations, are provided at <https://wildlandhydrology.com/courses/?id=73&course=Applied+Fluvial+Geomorphology>.

How to Apply

- Prepare a single PDF document that includes:
 - 1) A 1 page cover letter that should specify the position to which you are applying, your earliest available start date, and your level of knowledge, skills, abilities, and experience as they pertain to the key responsibilities and desired strengths of the position.
 - 2) A 2 to 3 page resume targeted specifically towards the duties and qualifications of the job;
 - 3) Phone and email contact information for at least 2 references who can provide a knowledgeable assessment of your job-specific qualifications.
- Name the PDF in the format of <Lastname-Firstname_Application_EnvEngTech>.
- Send the PDF to jobs@akbiomap.com with <Environmental Engineering Technician> in the subject line.
- Applications must be received by Tuesday, 14 May at 9 pm AKDT for consideration.
- For additional information, email info@akbiomap.com or call (907) 321-2908.

Position duties and qualifications for the Environmental Engineering Technician are described on the following 2 pages.

ENVIRONMENTAL ENGINEERING TECHNICIAN

Major Duties

- Produce construction drawings using AutoCAD Civil 3D software for three-dimensional modeling. Construction drawings will include plan and profile sheets, typical section sheets, quantity tables, detail sheets, revegetation and stream channel construction sheets, phasing plans, environmental permit drawings, and other sheets as necessary.
- Perform quantity calculations using Civil 3D software or hand computations for earthwork volumes and other items of work.
- Utilize construction as-built drawings, surveys, photos, sketches, maps, GIS data, and other information or data in the drafting process.
- Work in a geospatial environment utilizing tools such as ArcGIS to interpret maps, plan sets, construction details, survey information, and GIS data.
- Perform on-site construction inspections of projects during the summer construction season (typically June to August). Verify that the materials and methods used in construction meet the requirements in the drawings and specifications. Resolve construction issues and facilitate communications between the contractor, property owner, and designer(s). Prepare site visit reports that include pertinent photos.
- Provide oral and written progress reports concerning construction inspections to project partners, stakeholders, and the FWS engineer.
- Monitor and document compliance with project permit conditions, environmental issues, and water discharge requirements. Witness and document the contractor's quality control activities including inspections and testing.
- Act as field assistant to professional engineer, hydrologist or biologist using equipment such as flow meters, total station and auto level equipment to collect topographic, hydrologic, geomorphic, and habitat data during the field season (typically May to October).
- Participate in on- and off-site training regarding specific data collection, design, layout, and construction methods used to restore streams and improve fish passage
- Travel to remote sites in Alaska during the field and construction season
- Travel for off-site technical training

Minimum Qualifications

- Degree in computer assisted drafting at the technical/vocational or college level **and** a minimum of 2 years of professional automated drafting experience using AutoCAD Civil 3D,

OR

- A bachelor's degree in engineering **and** a minimum of 1 year of professional automated drafting experience using AutoCAD Civil 3D,

OR

- Degree requirement may be substituted, on a case by case basis, with at least 3 years of professional experience in computer assisted drafting using AutoCAD Civil 3D.

ENVIRONMENTAL ENGINEERING TECHNICIAN

Desired Skills, Strengths, and Qualifications

- Proficient using Computer Aided Drafting (AutoCAD) and Design (Civil 3D) software to generate civil engineering displays and plan sets
- Proficient in ArcGIS, including importing and exporting data between ArcGIS and AutoCAD
- Experience reading, reviewing, and interpreting information from design sketches, existing drawings, maps, and schematics
- Proficient at developing plan layouts, drawing scale and methods of presentation, sectional views, using symbology and notes appropriately, compiling lists of materials, and dimensional computations
- Experience in reviewing plan sets for accuracy which includes comparing recorded information on different sheets to make sure there are no discrepancies
- Experience creating artistic renditions and isometric views from two-dimensional plan and elevation data
- Experience using spreadsheets, word processing, database, file management, and email software in a technical environment
- Proficient at overlaying aerial based photography and GIS data in CADD software
- Commitment to professional development learning focused on keeping up with current CADD practices
- Desire to work in a team atmosphere and routinely confer with the design team to meet project goals for fish passage, habitat restoration, and infrastructure
- Willingness to work overtime when necessary to meet deadlines
- Ability to adhere to and participate in the further development of engineering drafting standards, methods, and procedures
- Ability to comprehend and utilize design features such as Civil 3D label styles
- Ability to perform accurate computations for basic roadway geometry and perform accurate calculations for earthwork quantities and other items of work
- Understanding of construction methods, including standards, equipment, methods, and safety considerations
- Strong written and oral communication skills, including the ability to maintain a positive work atmosphere and get along with partners, regulatory personnel, contractors, co-workers, and FWS management
- Ability to read, understand, and verify implementation of construction drawings and specifications
- A valid driver's license
- Ability to lift 40 pounds and carry equipment over rough terrain
- Ability to walk, stand, and climb stairs and ladders, as well as navigate steep, brushy, and hazardous terrain for up to 10 hours a day