# Alaska Capital Engineers

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### **UPCOMING EVENTS**

Virtual Presentation with ASCE EOTY & POTY Recipients

Date: 2/24/2020

Time: 12:00pm

Place: WebEx

### Message From Branch Treasure Micki Minsch

Alaska Capital Engineers,

I hope you are all well and are enjoying the snow and sunshine! I'd like to thank those who submitted EOTY and POTY nominations for 2020. We had several great nominations and we look forward to recognizing the recipients of the awards and hearing about their accomplishments.. If you are not already aware, our annual banquet has been cancelled. In place of the banquet, we will be hosting a presentation on Wednesday February 24th where we will be recognizing the Engineer of the Year and Project of the Year. The link to the meeting will be sent out with this newsletter.

We have another important event coming up this month held by the MATHCOUNTS Foundation. The MATHCOUNTS Foundation is a non-profit organization that has programs for middle schoolers across the United States. Alaska has chapters in Anchorage, Fairbanks, Juneau, and Remote. Students compete in local competitions and have the chance to advance to the state competition. This year the local event will be held virtually. Please see page 4, of this newsletter for more information.

Although officer elections are not for several months, we are looking for individuals who are interested in joining our board for the 2021-2022 year. Being a part of the Juneau ASCE board is a great opportunity to get to know and collaborate with fellow engineers in town. If you are interested, please reach out to us via this email address.

We look forward to seeing you at this month's luncheon!

Sincerely,

Micki Minsch, EIT

Juneau Branch Treasurer





# ASCE ALASKA SECTION, ENGINEER OF THE YEAR JOHN BOHAN, P.E., CHIEF ENGINEER FOR CBJ

Mr. Bohan is a dedicated professional who plans, manages and executes millions of dollars of projects annually that make our community a better place to live.

In addition to managing and executing the Capital Improvement Plan (CIP), in 2000 John excelled in applying his management skills and technical knowledge as the supervisor of the CBJ Water Division. This required a working knowledge of water treatment and requirements, as well as working with a diverse group of employees. In 3 short years, he transformed the Division and was able to successfully hand off management back to the Utility. Through this process a list of engineering projects was developed to modernize the utility.

In 2020 John developed an internship program to help Juneau grow our own future engineers and get them excited about the important work of constructing and maintaining municipal infrastructure. CBJ is currently advertising for two positions for the summer of 2021.



In December of 2020 Juneau was hit with an unprecedented winter storm that resulted in multiple landslides and destruction of personal and municipal infrastructure. John put his civil engineering and contract management skills to

work and within 24 hours had multiple teams on site cleaning up debris and restoring access to homes and critical infrastructure such as pump stations and water reservoirs. His knowledge and ability to act decisively saved the CBJ in continuing damage from diverted drainages but also brought much needed return to some semblance of normalcy for our community.

John Bohan develops, manages and executes the Capital Improvement Program (CIP) for the entire City and Borough of Juneau. The CIP includes an annual project list of approximately \$54 million and a plan of capital improvements, including cost estimates and financing sources, for a six year period. Developing the CIP involves crafting individual construction projects. This requires intimate knowledge of all components of municipal infrastructure – water treatment and distribution, wastewater collection and treatment, drainage and stormwater collection, traffic engineering, earthworks, foundations, structures, etc. It also requires working knowledge of specialty disciplines such as electrical and mechanical engineering.

In addition to actively managing projects, John is a mentor and supervisor for 5 project managers. He is a respected mentor to each engineer/project manager working under him, as well as others within the organization (CBJ) and beyond and is known as a repository of knowledge on past City projects, procedures, relationships, contracts, successes, and failures. He is a resource for insight into all aspects of construction projects – planning, design, construction, and operations and maintenance. One of the engineering accomplishments John is most proud of is constructing the Treadwell Arena in 2002, primarily as a volunteer effort.

When not on a job site solving knotty engineering problems or in his office planning how to stretch every penny of municipal taxpayer dollars, John Bohan is a dedicated Hockey coach for Juneau Douglas Ice Association. He spends early mornings, late nights and long weekends teaching and mentoring kids not just ice skills, but life skills.



## ASCE ALASKA SECTION, PROJECT OF THE YEAR EGAN DRIVE IMPROVEMENTS, MAIN TO 10TH STREET

This \$14.3 million project was awarded to Secon on March 27, 2019 and required completion of challenging urban street reconstruction along a highly trafficked section of Egan Drive in downtown Juneau, from the 10th Street intersection at the base of the Juneau-Douglas Bridge to the Main Street intersection, as well as adjacent to the historic Merchant's Wharf. Improvements included safer pedestrian facilities, improved traffic signal & highway lighting systems, wider

sidewalks, the addition of bicycle lanes, a new storm drainage system, retaining wall construction & repairs, bridge repairs, landscaping, and much more.

Construction on this project began in June 2019 and continued in spring/summer 2020 following a brief winter shutdown period. Of note, this was one of Alaska DOT&PF's first major construction projects to start work in 2020 while implementing COVID-19 safety protocols to protect both workers and the public. The project is currently 95% complete with only minor,



weather-dependent work and punch lists to be completed in the spring of 2021.

Most of the design work was completed by Juneau engineers under the direction of engineer of record and Alaska DOT&PF Southcoast Region Preconstruction Project Manager, Charles Tripp, PE. Other contributing Alaskan engineering firms and Juneau engineers included Alaska DOT&PF Bridge Section (Gold Creek Bridge rehabilitation), PDC Engineers Inc. (Merchant's Wharf timber wall replacement), and Stantec Consulting Services Inc. (highway lighting and traffic signal systems). In addition to these designers and firms, other services and companies employed during construction who were key to the success of this project included:

Construction Contractor & Subcontractors

- Secon (General Contractor)
- Island Electric (Lighting & Signals)
- DOWL (Surveying)
- Southeast Concrete (Concrete)
- Carver Construction (Steel Erection)
- Arete Construction (Utilities)
- Trucano (Pile Driving)
- Alaska Juneau Construction (Trucking)
- Channel Construction (Trucking)
- Roadrunner Fence Co. (Bridge Rail)
- Specialized Pavement Marking (Striping)
- KC Corporation (Bridge Membrane)

Owner Contract Administration & Inspection

- proHNS LLC (Prime Consultant)
- Haight & Associates (Electrical Inspection)
- Kinney Engineering (Traffic Engineering)
- McDowell Group (Public Outreach)
- SGS Associates (Schedule Analysis)
- Alaska Testlab (GPR Services)

## HONORABLE MENTIONS - CLICK HERE >> AWARDS | JUNEAU BRANCH (ASCE.ORG)



JUNEAU CHAPTER ALASKA SOCIETY OF PROFESSIONAL ENGINEERS

#### February 2021 DREAM BIG, ENGINEERING OUR WORLD

All around the world, engineers are pushing the limits of ingenuity and innovation in unexpected, imaginative, and amazing ways. Dream Big: Engineering Our World, a giant-screen film about engineering, takes viewers on a journey of discovery from the world's tallest building to a bridge higher than the clouds. Along the way, the audiences witness how today's engineers are shaping the world of tomorrow.



#### MATH COUNTS



Members of last year's Southeast regional MATHCOUNTS winning leam from Dzantik'i Heeni Middle School. From left: coach Mary Borthwick, Marina Lloyd, Krishna Bathija, Addy Mallott and Edward Hu. (Kevin Gullufsen | Juneau Empire)

MATHCOUNTS virtual competition results will be available February 12<sup>th</sup>, 2021.

The MATHCOUNTS Foundation is a 501(c)3 non-profit organization that reaches students in grades 6-8 in all US states and territories with extracurricular math programs. More than a quarter million students participate each year. <u>https://www.mathcounts.org/</u>

For information on MATHCOUNTS in Juneau, or to volunteer, contact Doug Murray (dougmurray@pdceng.com)

#### SMART WINDOWS UTILIZE LIQUID SOLUTION TO IMPROVE BUILDINGS' ENERGY EFFICIENCY

# By Poornima Apte December 8, 2020

Windows are key to improving the energy efficiency of buildings. Given that carbon emissions from buildings <u>reached a record high in 2019</u> according to the International Energy Agency, the pressure is on to develop energy efficiency solutions that can keep up with building growth. Scientists at the Nanyang Technological University in Singapore are addressing this challenge through a smart window, which seals a hydrogel-based liquid between its panels.



Read More Here >>>



### **PROFESSIONAL DEVELOPMENT HOURS**

The ASCE Juneau Branch will provide electronic continuing education development hour certificates for those who are interested in tracking development hours received by attending the Alaska Capital Engineers presentations to hear speakers present on engineering topics. Certificates can be found on the branch webpage: <a href="http://branches.asce.org/juneau/">http://branches.asce.org/juneau/</a>

### **ASCE JUNEAU BRANCH WEBSITE**

Bookmark this website for easy access to the events calendar, PDH certificates, new and archived newsletters, contact information and much more: <u>http://branches.asce.org/Juneau/</u>

For questions or concerns regarding the Juneau Branch ASCE website, please contact Janice Wells.

### ACCESSENGINEERING

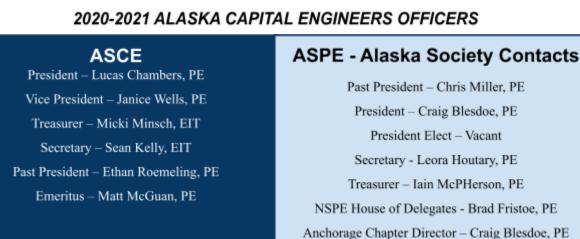
Developed in partnership with McGraw-Hill Education, ASCE members now have FREE and unlimited usage of this award-winning engineering reference tool: <u>www.asce.org/AccessEngineering</u>

### MEMBERSHIP AND RENEWAL

Thank you for your continued membership and support for ASCE and NSPE. Our professional organizations provide a great opportunity to network with other members of the engineering profession. Select the links below for society membership information.

### ASCE Membership Information

### NSPE Membership Information



Fairbanks Chapter Director - Frank Wuttig, PE

Juneau Chapter Director - Darrell Wetherall, PE

### **Special Committees**

School Outreach/STEM Coordinator - Please Volunteer Dream Big Coordinator - Please Volunteer

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PLAN • DESIGN • CONSTRUCT Transforming Challenges into Solutions.

### Submit Resume & Cover Letter to:

Human Resources at jobs@pdceng.com

### PDC is an Equal Opportunity Employer

All qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, or protected veteran status and will not be discriminated against on the basis of disability.

### **Ongoing Recruitment**

We always have room for more talent. If this position isn't the right one for you but you still feel like you'd be a great addition to our team, visit <u>www.pdceng.com/open-</u> <u>positions</u> and let us know what position you're interested in. We'll

make sure your information gets into the right hands.



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# **Civil Engineer**

Position Opening

PDC, a **RESPEC** Company, is seeking a civil design engineer to join our full-service engineering team! We design innovative world-class projects utilizing state-of-the-art technologies. Experience providing technical leadership within civil engineering and diversified knowledge of engineering practices is a must. This is a management position for utility and site design projects; a great career opportunity for a dynamic, energetic individual with proven technical and leadership skills.

Qualifications/Skills:

- B.S. in Civil or Engineering
- Alaska Professional Civil Engineer License, or ability to obtain within one year
- 5+ years' of cold regions experience
- AutoCAD & Civil 3D proficiency
- GIS experience is a plus
- Able to manage team and contracts on multiple projects concurrently
- Detail oriented & well organized with demonstrated ability to meet deadlines
- Strong verbal & written communication skills

**Compensation:** Salary DOE. We offer competitive pay, excellent benefits (healthcare, retirement, disability & life insurance, paid time off, 10-holidays/year) and advancement opportunities, continuing education, and professional societies. PDC, a division of RESPEC, is 100-percent employee-owned.

This position is available in our Fairbanks and Juneau office. Submit your cover letter and resume to PDC Engineers, Attn: Human Resources, PO Box 32723, Juneau, AK 99803 or at jobs@pdceng.com.

Interviews are by appointment only. Open until filled.



PLAN • DESIGN • CONSTRUCT Transforming Challenges into Solutions.

# Submit Resume & Cover Letter to:

Human Resources at jobs@pdceng.com

### PDC is an Equal Opportunity Employer

All qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, or protected veteran status and will not be discriminated against on the basis of disability.

### **Ongoing Recruitment**

We always have room for more talent. If this position isn't the right one for you but you still feel like you'd be a great addition to our team, visit <u>www.pdceng.com/openpositions</u> and let us know what position you're interested in. We'll make sure your information gets into the right hands.



www.PDCENG.com

# **Professional Land Surveyor**

**Position Opening** 

PDC, a **RESPEC** Company, is seeking an experienced Professional Land Surveyor to join our full-service engineering team to lead and grow our Southeast Survey Department in Juneau, AK.

The successful candidate will be licensed as a Professional Land Surveyor (PLS) in the state of Alaska. Duties include establishing legal boundaries of properties, subdivision plats, Dept. Of Natural Resources plats (ASLS, ATS, Accretions). This position facilitates work for small to large projects and entails the ability to work on many type of survey works, collaborating with multi-discipline engineering staff, clients, and other invested individuals to review and coordinate findings; interprets survey data and calculates geodetic measurements to determine shapes, positions, and elevations of geomorphic and topographic features. Schedules, assigns, supervises work of survey parties, engages in collection, processing and mapping of survey data. Provides advanced professional, technical, day-to-day support, guidance, and input to staff and other team members. Prepares project submittals to ensure that project budgets are met and reviews each project upon completion for quality assurance.

### Qualifications/Skills:

- Registered land surveyor in Alaska
- 5+ years of relevant work experience
- Proficient in Trimble Business Center and AutoCAD with Civil 3D desired
- Experience with GPS equipment, total station instruments, data collectors
- Boundary, control, Bathymetric, and topographic survey experience
- Thorough understanding of the principles, practices, and procedures of land surveying
- In depth knowledge of federal and state laws related to land surveying
- Excellent mathematical skills to conduct land survey analysis
- Strong verbal & written communication skills
- Ability to work on multiple projects concurrently and meet deadlines

**Compensation:** Salary depends on experience. We offer competitive pay, excellent benefits (healthcare, retirement, disability & life insurance, paid time off, 8-holidays/year) and advancement opportunities, continuing education, and professional societies. We are 100-percent employee-owned.

Submit your resume to PDC Engineers, Attn: Human Resources, PO Box 32723, Juneau, AK 99803 or at <u>iobs@pdceng.com</u>.

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JUNEAU CHAPTER ALASKA SOCIETY OF PROFESSIONAL ENGINEERS

#### February 2021



The Department of Transportation and Public Facilities (DOT&PF) Southcoast Region Design & Engineering Services is seeking a professional Technical Engineer I/Architect I to join our team in Juneau and help our mission to *Keep Alaska Moving through service and infrastructure*.

This position functions as the Southcoast Region's Reconnaissance Engineer and assists planners with early project scoping and estimates. The Reconnaissance Engineer advances some projects to the point that a reconnaissance report can be finalized with recommended alternatives and then handed off to a design team. The position also supervises one engineering assistant and utilizes in-house staff or consultants to advance some projects through final plans, specs and estimate depending on workload.

### The Working Environment you can Expect

This position reports to the DOT&PF, Southcoast Region, 7-mile office located in Juneau. You will be in in a management role supervising the design of roads and airports in communities stretching from Adak to Kodiak and Yakutat to Ketchikan to meet the needs of our communities.

### **Desired Skills**

- Experience with cost estimating on a large variety of transportation, marine, and airport civil engineering projects;
- Experience applying value engineering principles to recommend the best project alternative to advance;
- Ability to develop final plans, specifications and estimates for transportation related civil design projects;
- Good writing skills and ability to develop technical documents, such as Reconnaissance Reports, Design Study Reports, etc.;
- Familiarity with AK DOT&PF, FHWA, and FAA project development criteria

### **Minimum Qualifications**

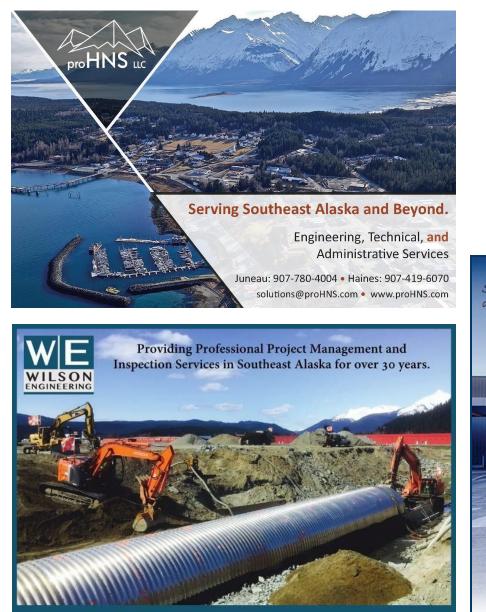
Registration as a professional engineer (PE) or professional architect, and two years of professional engineering or architectural experience as an Engineer I, Architectural Assistant III or higher with the State of Alaska, or the equivalent elsewhere.

### **Competitive Benefits**

State of Alaska provides competitive health and retirement benefits.

<ul> <li>Medical / Vision / Dental Insurance</li> <li>Single or Family Coverage</li> <li>Different Cost and Coverage Options</li> <li>Life Insurance</li> <li>Disability Insurance</li> <li>Accidental Death &amp; Dismemberment</li> <li>Generous leave accrual</li> <li>Holiday pay</li> <li>And More</li> </ul>	<ul> <li>The PERS / TERS retirement benefit is only available to permanent positions.</li> <li>Public Employees Retirement System (PERS)</li> <li>Matching employer contribution</li> <li>Employer contributions 100% vested after 5 years</li> <li>Alaska Supplemental Annuity Plan in lieu of Social Security</li> <li>Retirement health savings account contributions</li> </ul>
<b>Complete Job Listing</b> Workplace Alaska https://www.governmentjobs.com/careers/alaska Job Number 27427 / PCN 25-0118 Closes: 1/26/21	





175 South Franklin St, Suite 300 Juneau, Alaska 99801 Phone: 907.586.2100 | email: we@wileng.net | www.wileng.net

