ALASKA CAPITAL ENGINEERS

DECEMBER 2019



Upcoming Events

December Luncheon

(12/11/2019)

Speaker: Doug Murray and

Aaron Morrison, PDC

Engineers

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December Menu

Catered by Breeze In

\$20 per person

\$10 under 35 years old

Location: AEL&P

Conference Room

Contact Ethan Roemeling to submit ideas for luncheon speakers: EthanRoemeling@pdceng.com



ASCE Juneau Secretary Message

Dear Alaska Capital Engineers,

I hope you all had a great thanksgiving! I am excited to finally introduce myself. I graduated from Thunder Mountain High School in 2015 and just graduated from California Polytechnic State University this past June. I've always felt very fortunate to call Juneau home, so I was set on starting my career in Juneau after getting my degree. I am now happily working with DOWL as a Transportation Designer.

Getting involved with the Juneau community and creating relationships with other engineers in town is something that I think is very important. I am excited to be working on Juneau projects and I really look forward to serving our chapter over the next few years.

We have some exciting things to look forward to in the next few months. This month we have mechanical engineers Doug Murray and Aaron Morrison from PDC speaking about water source heat pump projects in Southeast Alaska. We've got our January luncheon, the APDC Fly-in, and we also have our banquet coming up on February 29th, 2020.

I look forward to meeting more of you in the upcoming months!

Thank you,

Micki Minsch ASCE Juneau Branch Secretary



December Luncheon:

Wednesday December 11th, Noon to One at the AEL&P Conference Room





Speaker Biography

Doug Murray is a Licensed Mechanical Engineer and Principal at PDC Engineers. Doug is a graduate of UAF and has provided mechanical design expertise to southeast Alaska and across the State. Aaron Morrison is also a licensed Mechanical Engineer and joined PDC Engineers in 2017. This month at the Juneau Branch of ASCE Luncheon, Doug and Aaron will be presenting on Water Source Heat Pump Projects in Southeast Alaska.

2019-2020 Call For Nominations

DUE JANUARY 31ST, 2020

It's time to think about our hard-working friends and coworkers and their projects! These awards recognize a Juneau Engineer that has demonstrated excellence in engineering within the state of Alaska and the local community, as well as a project in Alaska that has demonstrated excellence in engineering skill through the design, coordination, and execution of the construction. Please consider nominating an engineer and/or project for this year's awards. Nomination forms are posted on the ASCE Juneau Branch website.

ASCE Alaska Section, Juneau Branch Outstanding Engineer of the Year

Requirements:

- The nominee shall be a Juneau resident, having practiced as a licensed engineer within the state of Alaska for the majority of 2019
- The nominee shall have practiced within the state of Alaska for 3 years

ASCE Alaska Section, Juneau Branch Outstanding Project of the Year

Requirements:

- The project must have been constructed in Alaska, with the majority of the design work having been performed by Juneau engineers
- The project must have been completed and put into service during 2019-2020. Individual phases/segments of multiple-phase projects maybe submitted upon completion of the phase being nominated. Only the phase being nominated must meet these guidelines
- No project or project phase/segment may be re-nominated after receiving an award

Support the Endowment of the Dale Nelson Memorial Civil Engineering Scholarship Fund

Dale Albin Nelson, PE, F.ASCE 14 December 1944 – 01 January 2019

Growing up in Washington, Dale worked at his parents' logging and sawmill business as well as at his grandparents' cattle ranch. Completing his degree in Civil Engineering, Dale realigned his dream and moved to Alaska, where he worked for the U.S. Army Corps of Engineers at Fort Richardson. Soon after, Dale married Elaine, and they were blessed with two children: Garth Nelson, a registered civil engineer, and Lesa Zimnawoda, an environmental scientist.

Committed to strong family values, Dale was a strong role model for Anchorage youth, teaching positive work ethic, compassion, and community involvement, and a stalwart proponent of young engineering professionals, providing powerful mentorship and advocacy. He distinguished himself as an active and influential member of ASCE, assuming leadership responsibility within ASCE beginning in 1971, serving all positions within the Board of Directors of the Anchorage Branch and the Alaska Section, and as a Regional Governor and Director. In October 1999, Dale was elevated to the ASCE Fellow status and he became a life member in 2009.

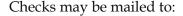
Throughout his career, Dale was admired and well respected by the engineering community he so passionately served.

Dale Nelson Memorial Civil Engineering Scholarship Fund

In his honor and memory, Dale's family established the Dale Nelson Civil Engineering Memorial Scholarship, which is currently gathering funds through the University of Alaska Foundation in a holding account. Current funding has reached \$22,000, and it is hoped that the \$25,000 level needed for an endowed scholarship will be reached soon

Your Financial Support

If you are able to contribute, you may do so online (https://engage.alaska.edu/, select "Other" as designation, and write "Dale Nelson Memorial Scholarship Fund" in the comment section), by check (checks payable to "University of Alaska Foundation" and write "Dale Nelson Memorial Scholarship Fund" in the memo section), or by wire transfer (contact the University of Alaska Foundation at 907-450 -8030 or foundation@alaska.edu for details).



University of Alaska Foundation University of Alaska Foundation

2025 Yukon Drive 1815 Bragaw St., Ste.203

PO Box 755080 or Anchorage, AK 99508

Fairbanks, AK 99775



\$30,000.00

Tax ID # 23-7394620



ASCE Juneau Branch 2020 Scholarship Due April 30th, 2020

The American Society of Civil Engineers scholarship is a \$500 - \$1,000 scholarship awarded to students from Juneau Douglas and Thunder Mountain High Schools intending to pursue a degree in an engineering discipline at an accredited college.

Application Information:

Selection will be based on several factors including past educational performance, engineering goals and demonstrated community service participation. \$500 - \$1,000 scholarships may be awarded to one or two students from JDHS and TMHS pursuing engineering degrees

Applications are on the Juneau Branch website and should be submitted **no later than April 30, 2020**



Public Works & Engineering Director

Partially Exempt Full-Time Position

Position open until filled



The successful candidate will have expert level knowledge in management theories, principles and techniques, and the organization and administration of public works agencies. In addition, the successful candidate will possess strong oral and written communication skills, be skilled in building and maintaining effective working relationships with government officials and special interest groups, be able to resolve conflict and build consensus where there are differing opinions and interests, have a strong history of developing and implementing new programs or services to increase operational efficiencies, and the ability to lead a team of professional staff in delivering excellent services to the community we serve.

The successful candidate will have a Bachelor's Degree from an accredited college or university in Business Administration, Public Administration, Engineering, Environmental Science or a closely related field. In addition, candidates should have a minimum of five years of experience in the planning, construction, maintenance, or operations of public facilities, utilities, or transportations systems. At least three years of this experience must have been at a managerial level and must have included responsibility for supervising professional level staff. Registration as a Professional Engineer is highly desirable but not required. Special Note: The successful candidate must be able to travel to various locations within the City and Borough of Juneau to meet program needs and to fulfill the job responsibilities. When driving on City business, maintenance of a valid Alaska driver's license and satisfactory driving record is required.

For more information and directions on how to apply, visit the City and Borough of Juneau Website.



Deputy Port Engineer

Full-Time Position

Position open until filled



This is the first level registered professional engineer (PE) or architect. Work is performed under general direction. Independently performs most assignments with instruction as to the desired outcome. Receives instructions on specific assignment objectives, complex features and possible solutions. Provides professional management of engineering, architectural and construction projects. May lead the work of lower level engineering/architectural staff.

Typical responsibilities include the following:

Assists in the preparation of and/or prepares drawings, specifications, cost estimates, reports, contracts and requests for proposals (RFPs); utilizes professional seal where appropriate.

- Provides technical architectural, engineering, and landscape architecture services and/or support for projects that construct new, or renovate or modify existing, CBJ owned or operated facilities.
- Assists with and/or conducts negotiations related to professional service contracts.
- Reviews and/or creates permit applications, including plans and drawings and specifications for compliance with regulatory codes and standards.
- Serves as a CBJ representative for management of multiple planning, design and construction projects.
- Manages and conducts project activities to ensure CBJ's interests are protected.
- Continuously monitors and inspects construction work quality, workmanship, and material selection to ensure
 compliance with contract documents; identifies deficiencies; recommends corrective actions; coordinates the
 resolution of issues between parties.
- Issues Stop Work orders, Notices of Defective Work and imposes other contractual mechanisms to contractors not complying with the contract documents.
- Monitors contractor's construction safety program and maintains safe practices for CBJ personnel at the construction site.
- Proposes and implements a dispute resolution program.
- Develops project budgets; provides fiscal control of projects; reviews and approves expenses charged to projects; administers professional design and construction contracts for timely completion; establishes and maintains the financial project records; and assists in financial audits.
- Determines appropriate insurance and bonding limits and amounts for a variety of project types.
- Designs, conducts and manages specialized studies; identifies alternatives and makes recommendations.
- Assesses project needs and hires, or recommends the hire, of qualified staff to provide high quality public service.
- Prepares reports regarding the status of projects.
- Trains other CBJ staff on project management, documentation and CBJ policies and procedures.
- Supervise and direct staff
- Makes oral and written presentations to the Assembly, Docks & Harbor Board, Commissions, Client Department groups and the public.
- Develops and implements departmental policies and procedures.
- Other related duties as assigned.

For more information and directions on how to apply, visit the City and Borough of Juneau Website.





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 www.PDCENG.com/open-positions and let us know what position you're interested in. We'll make sure your information gets into the right hands.



Professional Land Surveyor

Position Opening

Location: Juneau, Alaska

PDC Engineers is seeking an experienced Professional Land Surveyor to join our full-service engineering team and lead and grow our Southeast Survey Department in Juneau, AK. We design innovative world-class projects utilizing state-of-the-art technologies from five offices throughout Alaska. We offer competitive pay and excellent benefits that includes paid time off (PTO), eight (8) paid holidays/year, healthcare, group life/disability, retirement, education reimbursement and advancement opportunities. PDC is a 100-percent employee-owned company.

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

Submit your resume to PDC Engineers, Attn: Human Resources, 6205 Glacier Highway, Juneau, AK 99801 or at jobs@pdceng.com. Open until filled.

Anchorage | Fairbanks | Juneau | Palmer | Soldotna



proHNS is Hiring (Civil Engineer)

Haines, Alaska

This position, based in Haines, AK, will manage a variety of interesting projects and hone your skills in site development, production of construction drawings and specifications, design of utilities, and construction of government-owned facilities. Most of our projects include all aspects of civil engineering design through on-site construction inspection and contract administration. This job requires professionalism, out-of-the-box thinking, open communication, and a willingness to push the limits of one's expertise. For the right candidate, this is a position that allows for putting down lasting roots in Haines while also continuing to grow with proHNS.

Successful candidates will have at least five years of relevant professional experience, a bachelor's degree in civil engineering or related field, and an Alaska Professional Civil Engineer license (or ability to obtain within one year). Preferred skills include proficiency in AutoCAD Civil 3D and other engineering software applications, solid time management skills, and ability to produce accurate, high-quality work under deadline.

We offer competitive pay, paid personal leave, a SIMPLE IRA retirement program, eligibility for annual performance bonuses, a relocation stipend, and more. To learn more about the position, visit www.proHNS.com/careers. Submit your cover letter, resume, and references to solutions@proHNS.com.

MATHCOUNTS®

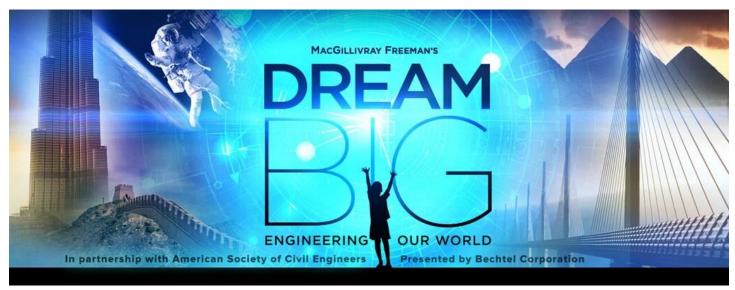


Members of last year's Southeast regional MATHCOUNTS winning team from Dzantik'i Heeni Middle School. From left: coach Mary Borthwick, Marina Lloyd, Krishna Bathija, Addy Mallott and Edward Hu. (Kevin Gullufsen | Juneau Emnire)

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.

https://www.mathcounts.org/

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



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.

Available on Netflix

ASCE News Brief



The Resettlement Community School. Photo: Mike Paddock

Bring Your Own Cardboard

By Michael Paddock December 3, 2019

Paddock draws on his own travels to paint a picture of how climate change is affecting the communitites

"Engineering With Heart" is a series of articles by Michael Paddock for ASCE News.

Paddock, P.E., M.ASCE, a 30-year member of ASCE, is a licensed civil engineer and surveyor. His professional career was spent managing teams of over 100 engineers designing infrastructure projects over \$1 billion, and he was the youngest-ever recipient of Wisconsin's "Engineer of the Year" award. After a near-death cancer experience, he was motivated to begin a pro bono engineering career that has delivered projects with Engineers Without Borders USA, Rotary, Bridges to Prosperity and other nonprofits on five continents over the last 20 years.

As I look at the small blue school, it breaks my heart.

It is a temporary school made from a blue tarp, built as part of the post–Cyclone Idai disaster response in Mozambique. The school has no desks, no chairs, not even a wood plank to sit on. A tarp covers about half of the dirt floor, and the students arrange themselves on it to avoid sitting in the dirt. The students seem unfazed by their setting; they exude boundless energy as they talk with each other and play before class starts.

Clearly, they have recovered faster than the infrastructure around them.

A small girl rushes into the school. She is late and looks around for a place to sit, trying to avoid sitting in the dirt. Then she notices her friend sitting on a small piece of cardboard along the edge of the tent. The two make eye contact and her friend slides over to make some room, patting the empty spot on the cardboard with her hand. The two girls wiggle their tiny behinds to nestle into their spots on the cardboard, giggling – but not loud enough to attract the teacher. Classes are beginning.

Read More >>>

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 Luncheons to hear speakers present on engineering topics. Certificates can be found on the branch webpage: http://branches.asce.org/juneau/

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: http://branches.asce.org/Juneau/

For questions or concerns regarding the Juneau Branch ASCE website, please contact Ethan Roemeling.

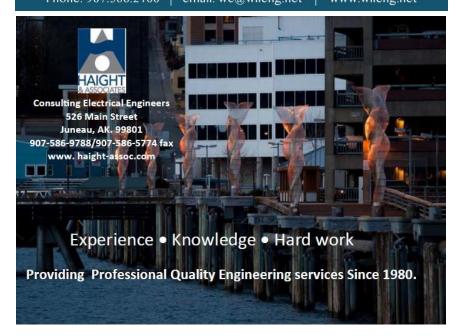
AccessEngineering

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

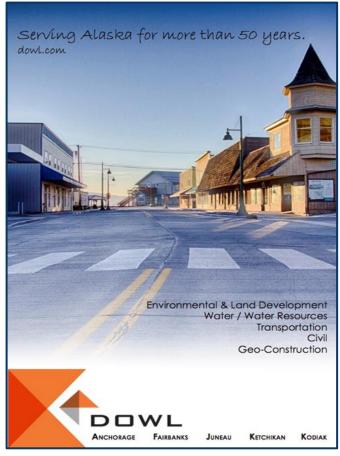
















Shoemaker Harbor, Wrangell



Sysco Building, Juneau







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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

2019-2020 Alaska Capital Engineers Officers

ASCE

President - Ethan Roemeling, EIT

Vice President - Lucas Chambers, PE

Treasurer - Janice Simmons, EIT

Secretary – Micki Minsch, EIT

Past President - Matt McGuan, PE

Emeritus - TBD

Special Committees

School Outreach/STEM Coordinator - Please Volunteer

Dream Big Coordinator - Please Volunteer

ASPE - Alaska Society Contacts

Past President - Jeanne Bowie, PE

President - Chris Miller, PE

President Elect - Craig Bledsoe, PE

Secretary - Leora Houtary, PE

Treasurer - Michael Spano, EIT

NSPE House of Delegates - Brad Fristoe, PE

Anchorage Chapter Director - Brian Lamson, PE

Fairbanks Chapter Director - Frank Wuttig, PE

Juneau Chapter Director - Darrell Wetherall, PE

To support Alaska Capital Engineers, consider sponsoring this newsletter. Contact Ethan Roemeling at EthanRoemeling@pdceng.com