REQUEST FOR QUALIFICATIONS

Lutak Dock Replacement Design and Construction

Issue Date: March 07, 2022

Submittal Deadline: 3:00 pm, Monday, April 4, 2022

Lutak Dock Replacement Design and Construction
Issue Date: March 7, 2022

The Haines Borough is soliciting qualifications from qualified and licensed firms to perform the work for the **Design, Permitting & Construction of the Lutak Dock.**

DESCRIPTION OF THE PROJECT: The Lutak Dock is a deepwater port located in Haines, Alaska. The dock is 1,100 feet long and includes 15 cellular structures, closure arcs, and a concrete cap. The United States Army Corps of Engineers (USACE) designed Lutak Dock and completed its construction in 1953. The Lutak Dock accommodates regularly scheduled shipments of fuel and freight, both of which support consumer and industrial activities in the region. The dock utilizes a closed-cell bulkhead configuration, with closure arcs to prevent loss of fill. The entire Lutak Dock Replacement contains three distinct construction phases; however, this project will provide engineering, design, and permitting for all three phases of the project; and construction for phases I and II. Permitting for the project will require U. S. Army Corps of Engineers (USACE) Section 10/404 Permitting, National Marine Fisheries (NMFS) Incidental Harassment Authorization (IHA) Permitting, and NEPA Compliance.

The Haines Borough recently received a Rebuilding American Infrastructure with Sustainability and Equity (RAISE) grant of $20,000,000.00 from the Department of Transportation. The Borough seeks a project with a budget not to exceed $25,611,284.00. All interested firms are required to be registered in Alaska and have an Alaska Business License. A Haines Business License is required prior to contract award.

RECEIPT OF QUALIFICATIONS DEADLINE: Qualifications will be accepted until 3:00 p.m., Local Time, **Monday, April 4, 2022.** Qualifications shall be submitted through Bid Express Online Bidding Platform.

SCOPE OF WORK: The selected project team will take the Haines Borough's conceptual designs from its current condition through the final design. The design includes Planning Commission reviews at 35/65/95%. Permitting work, and final construction of the Lutak Dock Replacement. The team must demonstrate familiarity with federal procurement rules 2 CFR 200.319 – 2 CFR 200.320. Potential teams will be required to make recommendations to the Haines Borough of the best, most cost-effective contracting method to design and construct the Lutak Dock. The chosen project team must have the ability to work with the Borough staff, stakeholders, and community members to design a new facility. The timeline for completion of Lutak Dock Replacement is December 2024.

Minimum Qualification Statement Contents

1. Project Team name or names if joint effort.
2. The number of years in business and a brief history of the team members.
3. Experience in working on federally funded projects.
4. Experience in U. S. Army Corps of Engineers (USACE) Section 10/404 Permitting, National Marine Fisheries (NMFS) Incidental Harassment Authorization (IHA) Permitting, and NEPA Compliance.
5. Current rate of professional fees with a breakdown of personnel costs, reimbursable expenses, and other potential costs. The project team should assume at least one public meeting to be held in Haines.
6. Description of the team's experience in working in communities similar in size and character to the Haines Borough.
7. Bar chart schedule to meet the December 2024 completion timeline.

Qualification statements must contain responses corresponding to each numbered item in the above list as a minimum.

EVALUATION CRITERIA: After reviewing the RFQs, the Borough will select qualified proposers for further consideration. Selected teams will prepare presentations via Zoom to the Haines Borough. The Borough will enter into negotiations with one team deemed to be the best fit for the project. Interested parties shall submit the following items:

1. **Project team member qualifications**. (15 pts)
2. **Relevant past and present performance criteria** (15 pts)

   Assessment of the project team's past and present performance will be evaluated relative to their capability to meet the requirements contained herein. Additionally, safety, quality of service, customer satisfaction, cost control and timeliness will be evaluated.

3. **Capacity to perform work** (15pts)

   The team's ability to perform the work in the prescribed timeline considering the team members' current and planned workload. Description of the project team's ability to provide the technical disciplines and services required to cover the work required by the project.

4. **Project team experience with similar projects. Especially with federally funded projects.** (25 pts)
5. **Approach to the project**. Innovative ideas on how to enhance this project. Such as suggestions for increased usability, decreased costs, safety, or reliability (30 pts)

   Evaluations will be performed to determine the project team understands the work to be performed, understands and is committed to the timeline, overall approach to the project, potential for completing the work as specified. Award will be made to the team whose conformance to the RFQ is considered most advantageous to the Haines Borough.

Turnagain
Marine Construction

LUTAK DOCK REPLACEMENT

PROGRESSIVE **DESIGN-BUILD** PROPOSAL

ADDRESS

8241
Dimond Hook Dr.,
Anchorage, AK
99507

PHONE

907-261-8960

CONTACT

Jason Davis
jdavis@turnagain.build

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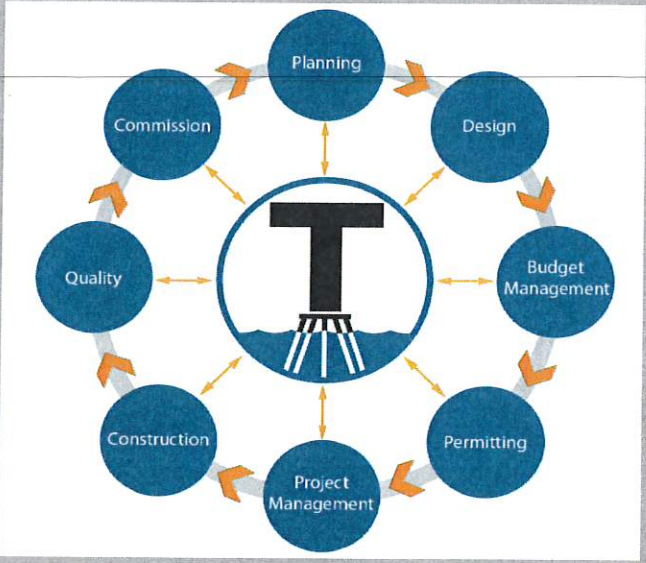
TURNAGAIN MARINE DESIGN-BUILD QUALIFICATION STATEMENT

TURNAGAIN MARINE CONSTRUCTION DISTINCTIVELY QUALIFIED TO BE THE DESIGN-BUILDER FOR THE HAINES BOROUGH LUTAK DOCK REPLACEMENT AND WILL PROVIDE BEST VALUE DOCK DESIGN THAT MAXIMIZES QUALITY AND USABILITY FOR THE ACHIEVES THE BEST VALUE AND IS COMMISSIONED IN THE SHORTEST POSSIBLE TIME FRAME.



Project Team

Integrated Design-Builder responsible for design and Construction including engineer of record service.

Turnagain Marine Construction Corporation
8241 Dimond Hood Dr, Unit A
Anchorage, AK 99507
907-261-8960

Team Introduction

Turnagain Marine Construction was established 8 years ago to provide exceptional marine construction and design-build services. Turnagain has a broad depth of experience managing, designing, and constructing cruise ship berths, freight docks, and other marine facility projects throughout Alaska. The design-build process exercised by TMC excels in streamlined project delivery, cost savings, and promotes alternative delivery projects. Our portfolio includes a proven track record of routinely designing lower-cost solutions than other firms can provide. This can be attributed to our skilled team's attention to every detail, the design-build model that Turnagain excels at, and our exceptional in-house design team.

President JASON DAVIS

Overall responsibility for the project from the proposal phase through pre-construction, construction, commissioning, and warranty lies with Jason Davis, the firm's president. Mr. Davis will be actively engaged in the overall execution of Turnagain's contractual duties, relationship management, risk mitigation, and construction cost estimating. Mr. Davis is a design-build professional accredited by the Design-Build Institute of America. Over the last twenty years, Mr. Davis has led the construction or renovation of over fifty industrial marine facilities throughout Alaska.

Engineering Lead JOSH ZELLMER, PE, SE

Josh Zellmer will have responsible charge for all engineering performed on the project. Mr. Zellmer will utilize properly credentialed and proven design sub-consultants to support the mechanical and electrical system design. Mr. Zellmer has been a lead designer on several recent large-scale cruise ship facilities undertaken by Turnagain Marine including the cruise facilities at Hoonah and Ward Cove, constructed in 2019 and 2020 respectively.

Construction Manager CHRIS NIELSEN

Chris Nielsen has planned and executed several of the most exciting marine infrastructure projects built in Alaska. Chris is an expert in marine foundation selection and construction methodology. He has delivered thousands of hours of construction safely, timely, and to the highest quality standards. Chris is an expert in design-build delivery and design-build project management.

Federal Project Liaison CHRIS HLADICK

Chris Hladick has over twenty years of experience as a City Manager in Alaska. After his position as the City Manager of Unalaska, Chris served as the Commissioner of Economic Development under Governor Walker, then as the EPA Region 10 Director. In his years of service, Chris has administered numerous large-scale public works projects and insured compliance with the federal procurement rules.

Experience in Working on
Federally Funded Projects

Turnagain has performed design-build and design-bid-build for a variety of federal owners and federally funded projects led by non-federal owners.

- NAVAL FACILITIES NW
- NAVAL FACILITIES SW
- NAVAL FACILITIES HAWAII
- FEDERAL HIGHWAY ADMINISTRATION
- UNITED STATES COAST GUARD
- US ARMY CORPS OF ENGINEERS
- ALASKA DOT - FEDERALLY FUNDED
- FEDERAL AVIATION ADMINISTRATION
- DEPARTMENT OF DEFENSE/ARMY
- MUNICIPALITIES - FEDERALLY FUNDED

Through our federal experience Turnagain is experienced with the federal construction and bidding processes, application and interpretation of the Federal Acquisition Regulation System (FARS), and EM-385-1-1 federal construction safety standards.

Experience in
U. S. Army Corps of Engineers (USACE) Section 10/404 Permitting, National Marine Fisheries (NMFS) Incidental Harassment Authorization (IHA) Permitting, and NEPA Compliance

Turnagain Marine Construction has extensive experience securing, implementing, complying with, and satisfying the recording requirements of marine infrastructure construction permits throughout Alaska.

- Turnagain has been responsible for securing over a dozen USACE Section 10/404 permits for large marine construction projects in Alaska.
- Turnagain has been responsible for securing National Marine Fisheries (NMFS) and Fish and Wildlife Incidental Harassment Authorizations (IHAs) on numerous large-scale marine construction projects in Alaska.
- Turnagain has completed over 40 projects under USACE, NMFS, NEPA, and other environmental permits and regulations without a single recordable incidence, violation, spill, or known harm to marine mammals.
- Turnagain has a proven track record of acquiring USACE and NMFS IHA permits in a shorter time frame and for a lower cost than any other firm in Alaska. Additionally, all permit conditions are developed in concert with the construction team to mitigate schedule impacts and unnecessary cost impacts.
- Turnagain engages Solstice Environmental Consulting to assist with all permitting and compliance management.
- Turnagain and Solstice Environmental Consulting have trained and experienced Protected Species Observers (PSOs) on staff and available for this project.

Current Rate of Professional Fees

WITH A BREAKDOWN OF PERSONNEL COSTS, REIMBURSABLE EXPENSES AND OTHER POTENTIAL COSTS

Turnagain hourly fees are $125/ hour for all members of our team when performing cost-reimbursable work. Rather than using a cost reimbursable hourly rate, Turnagain proposes the following fixed fee structure for this project:

01 Provide one owner furnished and three Turnagain furnished project concepts developed to 35% design. Provide 35% plan set(s) and construction cost estimate for each concept. **Projects will be designed and scoped to be constructible within available project funds.** The four concepts will provide equivalent or better usability than the Owner furnished concept. Pricing includes all required Owner coordination, planning, travel, associated fees and effort to generate deliverables to the satisfaction of the Borough

1 LUMP SUM $40,000

02 From the four concepts provided under Item one, progress up to two concepts to a 65% level of development. Provide project plan sets with the basis of design documents and firm fixed price cost proposals compliant with federal procurement rules. Pricing is inclusive of all fees, engineering, estimating, coordination, revision, and other efforts needed to provide the Borough with a high value preferred solution, a firm fixed price, and all support needed to move into the construction phase.

1 LUMP SUM $45,000

03 Provide 95% and IFC project documents, including plans, basis of design, specifications/sheet notes for the selected concept concurrent with the procurement and construction phase.

04 Public Meetings inclusive of travel and all fees

TWO AT NO COST, THEN $5,000 EACH

05 Borough Planning and Coordination Meetings during - pre-construction

a. 3 trips for 2-5 people included at no cost
b. Additional trips to Haines/ Juneau as needed to be negotiated, not to exceed $3,000 per trip.

06 Turnagain will secure all required project permits including but not limited to the USACE Section 10/404 and NMFS IHA in concurrence with a design-build construction contract.

1 LUMP SUM $125,000

Experience in Working in
Communities Similar in Size and Character to the Haines Borough

Turnagain Marine Construction has performed over forty design-build and marine construction projects ranging from $750,000 to over $40,000,000 across Alaska.

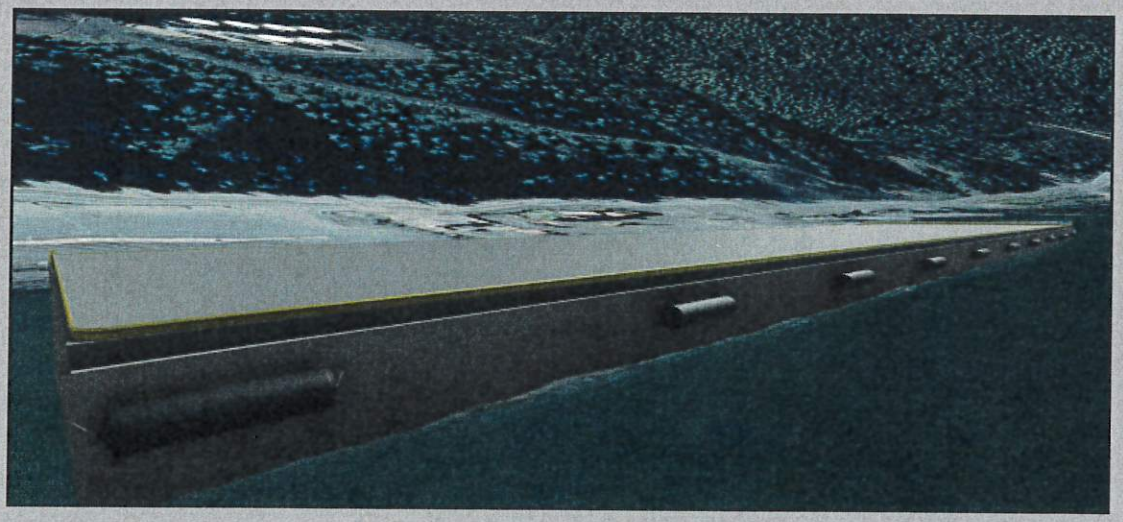
• KETCHIKAN	• SITKA	• COLD BAY	• WARD COVE
• JUNEAU	• HAINES	• AKUTAN	• SKAGWAY
• KODIAK	• WHITTIER	• DUTCH HARBOR	• VALDEZ
• OUZINKIE	• HOMER	• SITKA	• HOONAH
• KENAI (COOK INLET)	• MULTIPLE REMOTE SITES		

Bar Chart Schedule
To Meet the December 2024 Completion Time line

Turnagain has developed a highly efficient and collaborative design-build method that allows projects similar to the Haines Lutak Dock Replacement to progress far more rapidly than other methods and design-build teams can achieve. **Exhibit A** is a bar chart schedule that shows one possible time line that would deliver the project roughly 550 days before the December 2024 deadline. While Turnagain has delivered major infrastructure projects like the cruise ship terminals in Icy Strait Point and Ward Cove on a similar time lines, we will spend any additional time needed in the pre-construction and design development stage to ensure the Borough and other stake holders are pleased and comfortable before progressing to the next steps.

DETAILED RESPONSE FOR EVALUATION

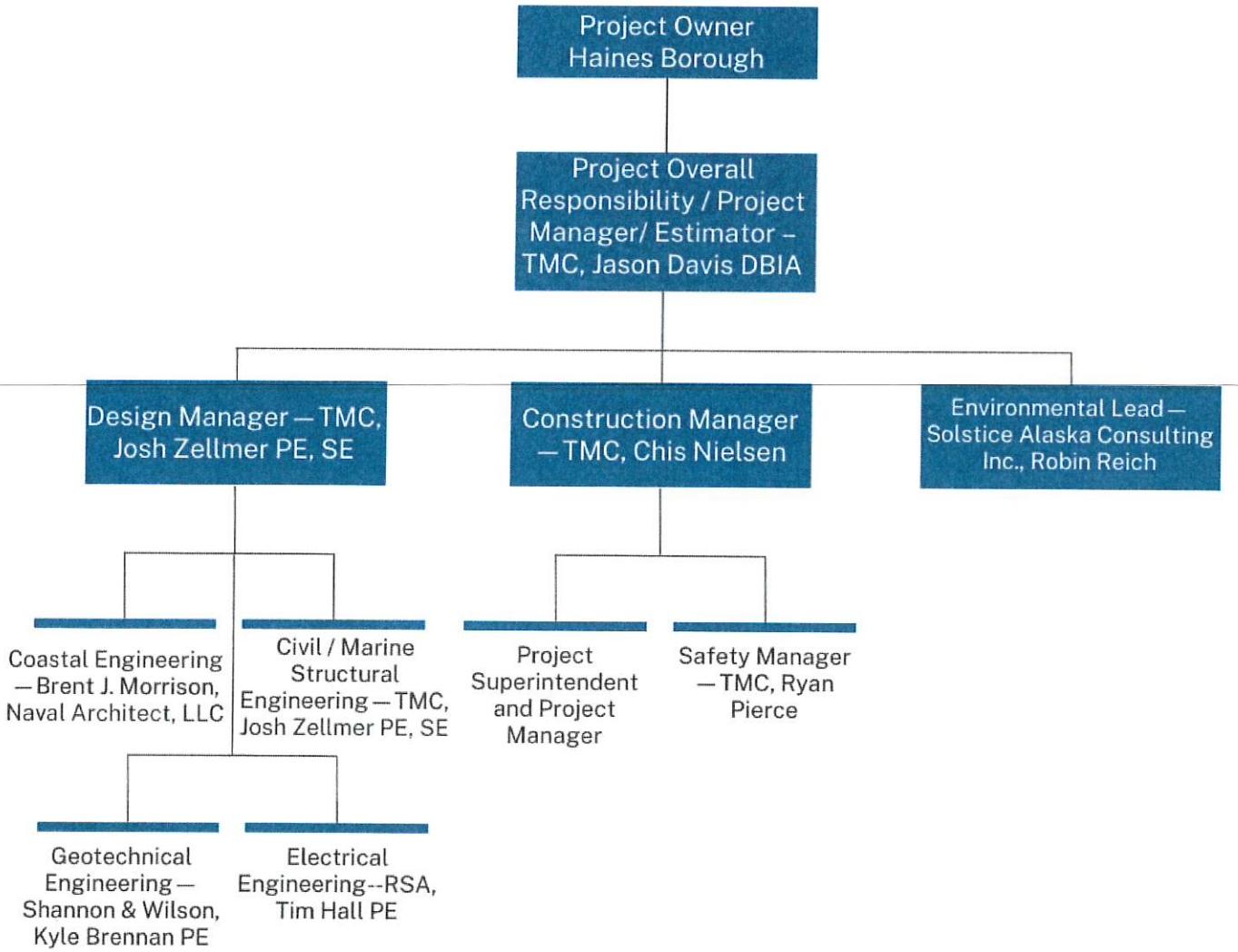
TURNAGAIN'S DESIGN-BUILD TEAM WILL COMMITMENT TO PROVIDING A FULLY FUNCTIONAL, MUNICIPAL QUALITY LUTAK DOCK REPLACEMENT PRIOR TO DECEMBER 2024 WITHIN THE ESTABLISHED PROJECT BUDGET.



Team Qualifications

Team Organization

The chart below represents Turnagain's anticipated reporting flow for this project.

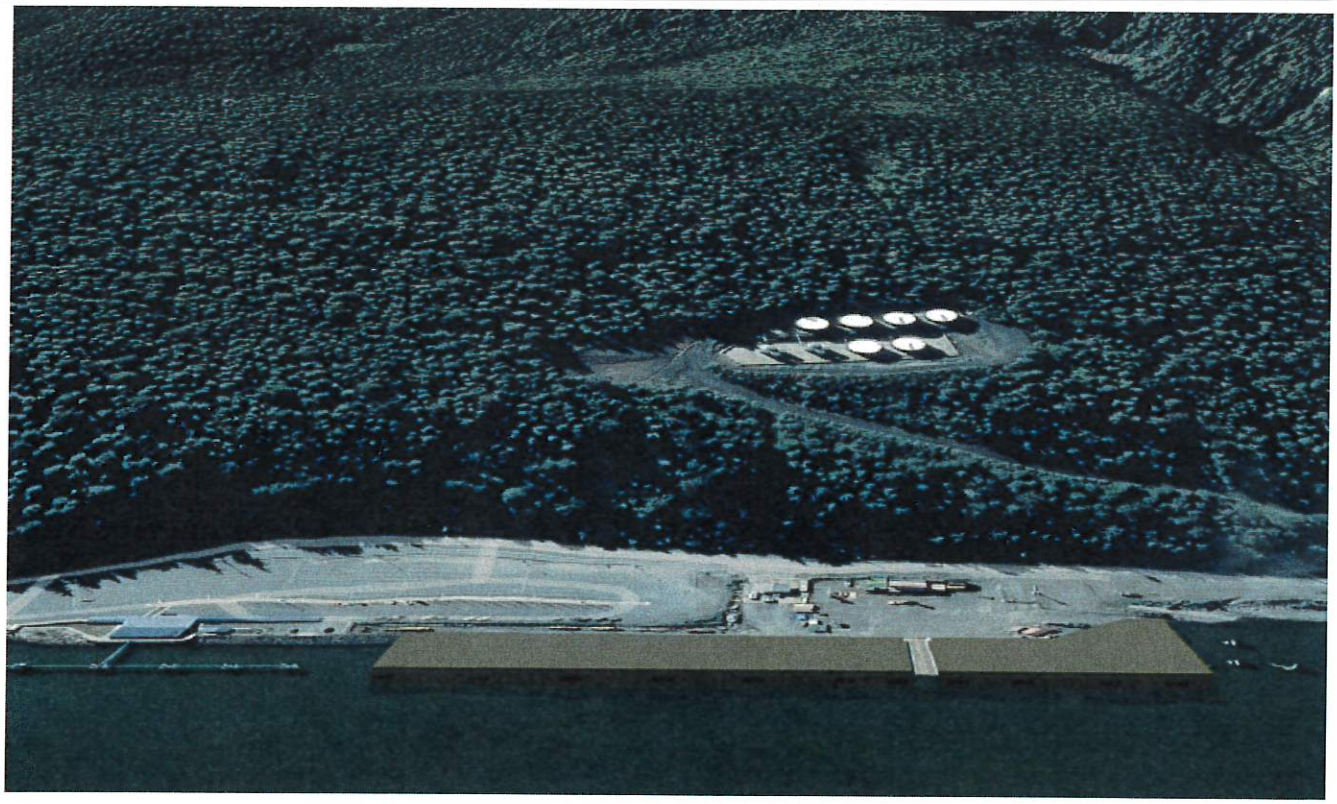


Turnagain Marine Construction is a fully integrated design-build firm with industry-leading engineering and construction expertise. Unlike the multi-party arrangement formed when a construction company subcontracts out the design work to a consulting engineering firm, Turnagain is a cross-functional multi-disciplinary team accustomed to working together to deliver outstanding design-build results.

The estimating, construction, and structural-civil design professionals who will be working on this project are co-located in Anchorage Alaska, specifically for the purpose of effectively planning and executing Alaskan design-build projects. Sub-consultants for mechanical and electrical have been vetted by Turnagain on previous successful projects. The project team will be available to meet with the Haines Borough and other stakeholders virtually or in person at their Haines facility headquarters throughout all stages of the contract. While the RFP describes a virtual interview, Turnagain will send a team to Haines to present in person at no cost to the Borough.

Turnagain will utilize processes developed on earlier design-build and progressive design-build projects to ensure that a detailed, accurate, and up-to-date record of this project is maintained at all times. File sharing platforms will be used to provide all stakeholders access to project documents allowing the Haines Borough and other stakeholders to audit progress easily and efficiently.

The key personnel identified in this section, including the Project Manager and Design Manager, will be assigned to the project immediately upon award and will actively participate in the project through commissioning. Haines Borough will have continual communication and involvement throughout all phases of the project. Formal reporting will be provided based on the schedule established in the project initiation meeting, and will be the primary means of status updates. Time-critical or other necessary communications will be disseminated through the TMC project manager, Jason Davis.



Design-Build Project Manager
JASON DAVIS

Jason Davis has estimated, managed, and constructed Alaskan marine infrastructure projects for over 20 years. Davis has served as the President of Turnagain Marine Construction since helping found the company in 2014. Prior to his role in starting Turnagain, Davis was a Partner in, and served as the Vice President of Alaska Operations for, Pacific Pile & Marine (PP&M). While at PP&M, Davis was responsible for the management and execution of the company's Alaskan pursuits including the design-build Carl E. Moses Commercial Harbor in Unalaska, AK and the White Pass Cruise Ship Floating Berth Design-Build project in Skagway, AK. Davis has successfully delivered over $250 million of marine infrastructure projects on time, on budget, and without claims or arbitration. In addition to years of working in Alaska, Davis has experience on a wide variety of projects across the Pacific Northwest including deep coffer dams, navy piers, deepwater outfalls, container ports, harbors, ferry terminals, environmental remediation, and energy projects. Davis's exposure to a breadth of public, private, and military owners and a variety of industry best practices provides a well-rounded industry perspective.

Davis injects relentless drive to surpass both owner's expectations and internal benchmarks into every element of Turnagain's operations. Davis implements the company direction and assures baseline performance through:

- Establishing and maintaining accountability at all levels of the organization
- Ensuring that project execution and company operations are continuously improved
- Establishing and maintaining solid project management and cost control procedures
- Identifying and resolving operational deficiencies within the organization or project teams
- Creating a culture of pride and stewardship throughout the company
- Developing and preserving industry relationships that increase Turnagain's effectiveness

Beyond his role of providing company leadership and ensuring performance objectives are met, Davis is the company advocate for alternative delivery projects. Davis has led several exciting alternative delivery projects to unequivocally exceptional outcomes. Completing over 25 of these projects with 16 different engineering companies provides Davis with the perspective and experience to make sound judgements and deliver successful alternative delivery projects every time.
Since serving as the Project Manager/General Superintendent on the $37 million Ketchikan Berth III Cruise Dock Reconfiguration project in 2006, Davis has become an industry expert in the design and construction of Alaska industrial marine infrastructure.

Why Jason Was Selected

Davis was selected for the Project Manager position for this project because he has an extensive proven track record of successfully delivering large design-build marine infrastructure projects, similar to the Lutak Dock Replacement, very rapidly and professionally. As demonstrated by being awarded numerous best-value competitively bid projects and several sole source design-build contracts, Davis is an industry recognized leader known to deliver outstanding facilities to Public and Private marine infrastructure owners state wide.

Similar Project Management Experience

Davis has experience developing and managing similar large scale marine infrastructure projects including the construction of eight cruise ship terminals, container handling terminals, deep-water large commercial vessel harbors, and dozens of other relevant projects. Davis's experience constructing industrial Alaskan freight facilities is highly applicable to the Lutak Dock Replacement Project. Davis has an extensive understanding of alternative delivery and the overall Lutak project requirements.

Innovative Approaches Suggested By Jason

Davis recently led a value engineering process on the $34 million UMC Position III & IV Replacement project that produced $1.5 million in savings to the Owner. The project originally included 48 each socketed and post-tensioned anchor piles. Davis's knowledge of deep pile foundations allowed him to lead a re-design effort that eliminated 36 of the 48 piles and simplified the drilling requirements. In addition to the $1.5 million cost savings, the value engineering effort reduced the construction duration by 66 days.

On the $9.6 million Hebgen Dam Cellular Coffer Dam Design-Build project, Davis attended an engineering round table discussion to provide constructability review of five different engineers' proposed methods of stabilizing the collapsed intake structure at Hebgen Dam and re-gaining control of the Madison River flow through the dam. All five of the proposed methods were either unconstructable or economically infeasible. At the round table, Davis proposed an independent and unique cofferdam solution that satisfied all the Owner's needs and was economically viable. Thirty days later, his firm was under contract and executing the design-build solution he proposed.

Design-Build Experience

Davis is a credentialed design-build professional by the Design-Build Institute of America. From deep water outfalls constructed miles off shore in 600 feet of water to freight terminals, harbors, cruise facilities, and industrial docks, Davis has led dozens of design-build pursuits. Davis has successfully completed design-build projects with small municipalities using design-build for the first time and for large sophisticated owners with well developed and stringent design-build program requirements.

REFERENCES

Russell Dick

President / CEO
Huna Totem Corporation
(907)-723-9891
russell.dick@HunaTotem.com
Owner of Icy Strait Point Berths I and II
Owner of Whittier Cruise Ship Terminal
Total past work value: $110MM

Ethan Berto

Survey Point Holdings
(907)-225-0999
eberto@surveypt.com
Client in Skagway and other Terminals
Total past work value: $20MM

Alicia Cuervo

Vice president-- On-shore Design, Development and Construction
Norwegian Cruise Line Holdings Ltd.
(786)-295-8922
acuervo@nlcorp.com
Client at Ward Cove and ISP Berth II, and Whittier
Total past work value: $125MM

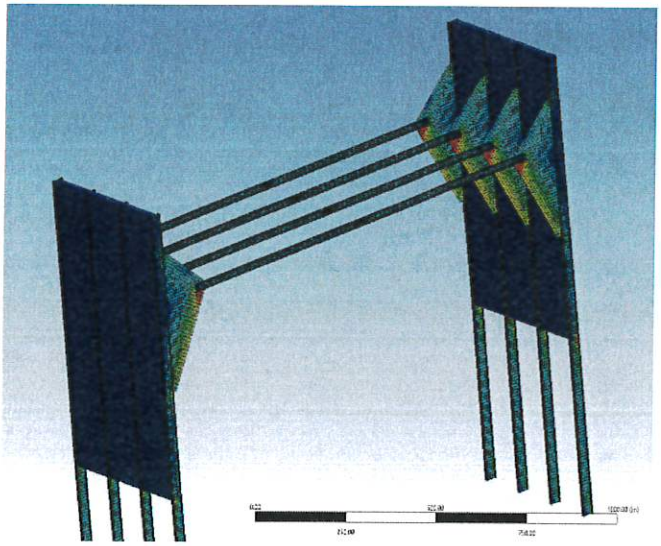
Design Manager & Lead Structural Engineer

JOSH ZELLMER PE, SE

Josh Zellmer is a licensed Civil and Structural Engineer in the state of Alaska. Since 2016 Mr. Zellmer has been working with Turnagain Marine to deliver outstanding marine infrastructure. Starting in 2020, Josh became Turnagain's lead designer with designated responsible charge for all Turnagain engineering services. As a lifelong Alaskan, Josh has spent his career designing Alaskan facilities. Before joining Turnagain Marine, Josh spent five years as a Project Engineer in the Structural and Waterfront Groups at R&M Consultants. Josh has also worked as an engineer at the AKDOT (five years), and in the Structural Department at USKH.

Josh has been the architect of Turnagain Marine's engineering department, building a group that is integrated with Turnagain's construction staff and dedicated to optimizing the design-build delivery method. From developing the company's engineering capacity to advancing Turnagain's design-build process, Josh is at the heart of Turnagain's design team and a leader in the design-build industry. Josh is instrumental in the following:

- Establishing and maintaining engineering processes and quality control measures
- Establishing and maintaining design phase constructability coordination and cost review
- Supporting Turnagain's culture of pride and stewardship within the company
- Identifying and resolving operational inefficiencies in the design and design QC operations
- Developing first-class design capability and capacity in Alaska



Why Josh Was Selected

Josh has embraced the concept of integrated design-build and actively solicits multidisciplinary and cross functional participation throughout all stages of design and execution. Josh has fundamentally embraced and advanced the concept that plan sets can be tailored to the improved benefit of the Owner and a design-builder when (designer) risk avoidance, and bid-proofing give way to communicating mutually beneficial and important information.

Similar Design and Design Management Experience

Zellmer has experience designing and managing design staff and sub-consultants on similar large scale marine infrastructure projects, including:

- Seward Passenger Terminal Development Project – Josh managed the design effort in pursuit of this 2020 RFP, including the development of an innovative bulkhead dock, management of sub-consultant designers, and management of the drawing and graphics package submittal.
- AJ Dock Retrofit – Josh managed the design of the cruise ship mooring dolphin upgrades at the dock, including overseeing all structural engineering completed in-house and managing wind, wave and mooring analysis completed by sub-consultants.
- Ward Cove Double Cruise Ship Berths – Josh assisted with the management of structural engineering efforts for the design of mooring dolphins, float restraint dolphins and the transfer span for this project.
- Hoonah Berth II, Floating Cruise Ship Dock – Josh was a key structural engineer in the design and development of this cruise ship mooring and berthing facility.

Innovative Approaches Suggested By Josh

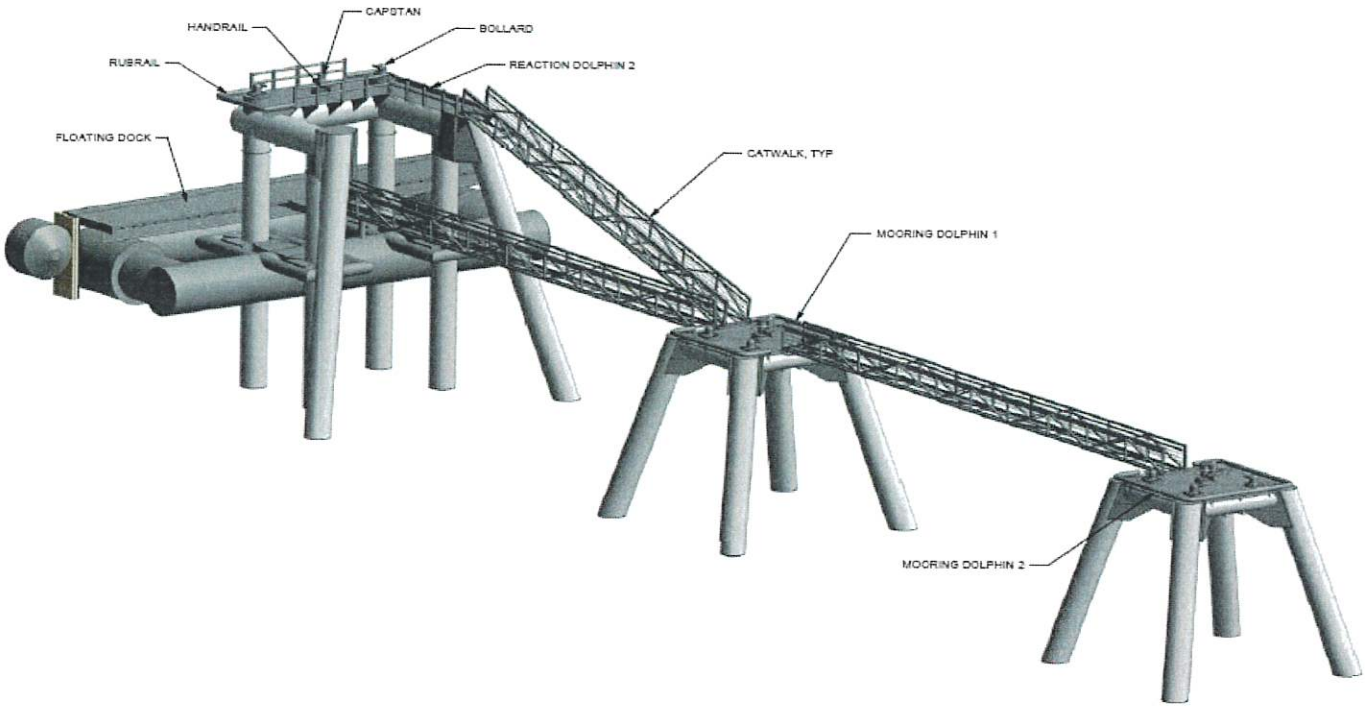
One key area of innovation that Josh champions is tailoring design drawings and graphics to best communicate information to the target audience. Previously, Josh developed detailed 3-D construction phasing plans to clearly communicate to Owners facility construction progression. He has created technical structural drawings for fabricators to construct complicated assemblies, and has created construction specific drawings for field crews to build structures from prefabricated elements. This eye for conveying ideas to a specific audience has allowed Josh to change the idea of a "plan set" from flat, black and white drawings to information dense drawing packages that communicate how a project will be constructed from start to finish.

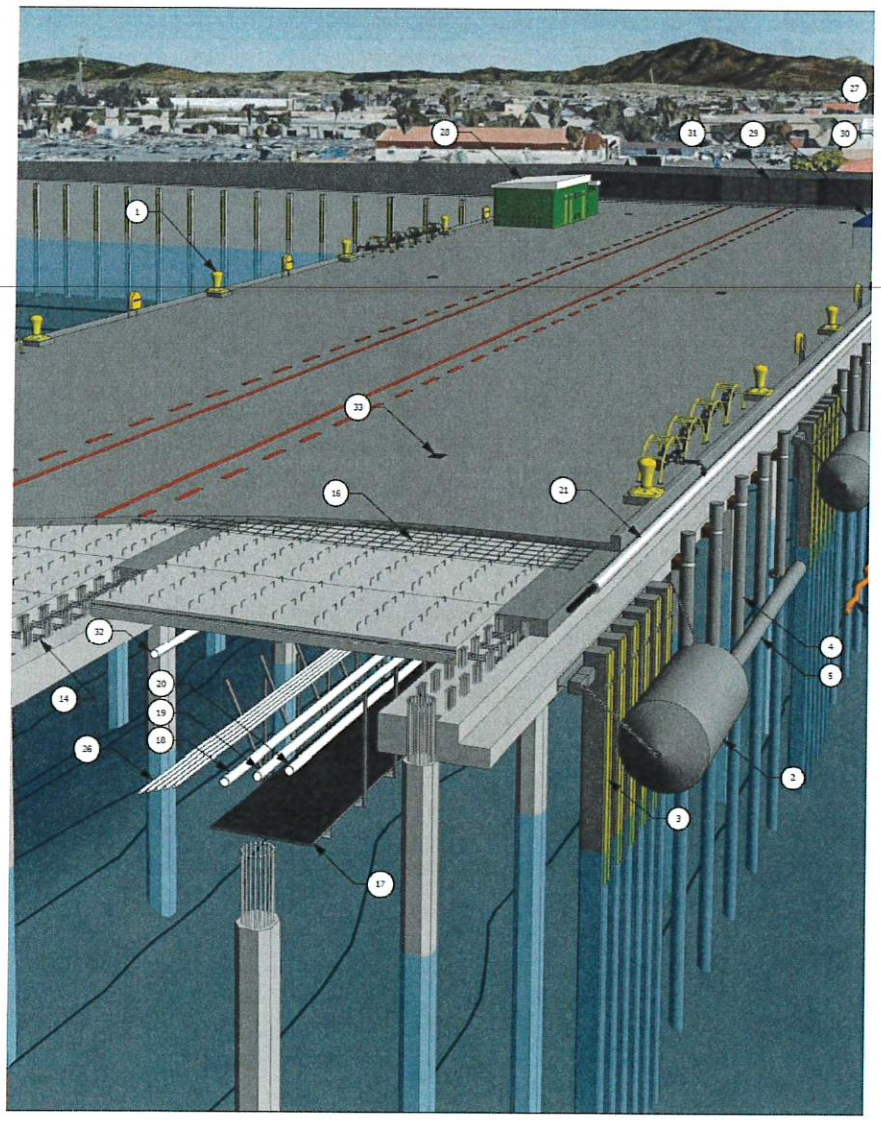
Interaction with Sub-Design Firms

Josh Zellmer has had years of experience with Turnagain and other consultants managing and interacting with design sub-consultants. Over the course of his career, Josh has become skilled at working with upland designers, architects, surveyors and other engineers in reviewing and coordinating work and building a positive collaborative environment.

Alternative Contracting Experience

Josh Zellmer has led or held a significant role on eleven alternative delivery projects including Progressive Design-Build, Design-Build, and CMGC. Alternative delivery has allowed Josh to expand the focus on value and constructability during design. Josh has also changed how QC and QA milestones are integrated into the design and procurement phase resulting in earlier detection of potential non-conformances and proactive response.





REFERENCES

Mickey Richardson

Director
Huna Totem Corporation
(907)-723-9891
mickey@icystraitpoint.com
Owner of Icy Strait Point Berths I &II and Whittier Cruise Terminal

John Binkley

Chairman
Godspeed Inc
(907)-479-6673
john@riverboatdiscovery.com
Owner of Ward Cove Dock Group

John Daley, PE

Senior Engineer
R&M Consultants, Inc.
(907)-646-9679
JDaley@rmconsult.com

Design-Build Construction Manager

CHRIS NIELSEN

Chris Nielsen has estimated, managed, and constructed Alaskan marine infrastructure projects for over seven years. Since 2015, Mr. Nielsen has worked for Turnagain Marine, constructing and managing projects from Ketchikan to Unalaska. During his time at Turnagain, Mr. Nielsen has played a significant role in all Turnagain cruise ship berth and container port projects. As Project Manager on Unalaska Marine Center, Hoonah Cruise Ship Facility Berth II and Ward Cove Cruise Ship Facility, Chris has worked through nearly every challenge that marine construction in Alaska has to offer. Nielsen successfully manages projects by utilizing his experience along Alaska's coastlines through:

- Establishing, maintaining, and meeting project cost control
- Providing insight and reviewing constructability of Turnagain designed structures
- Supporting project engineers, field engineers and project superintendents with project planning and coordination
- Becoming well versed in Alaska maritime logistics
- Developing lasting positive relationships with project teams and project owners

Beyond his role of planning and supervising construction and procurement, Chris is continuously engaged during the design phase, providing constructability review and aiding the design team to integrate value into the final product. Working together, Chris and the design team optimize project elements to increase project efficiency, safety exposure, and quality.

Why Chris Was Selected

Chris was selected as the Construction Manager for this project due to his vast experience and knowledge constructing large scale marine facilities along the coastline of Alaska. Chris and his project teams have successfully constructed alternative delivery marine facilities and structures throughout the state.

Similar Project Management Experience

In Chris's career at Turnagain, he has worked on four cruise ship berths, one container terminal and a number of small boat harbors, freight docks, ferry terminals and other marine based Alaska projects. Nielsen's experience with multiple bulkhead marine freight and container support facilities makes him the perfect fit as the Construction Manager on the Seward Passenger Terminal project.

Innovative Approaches Suggested By Chris

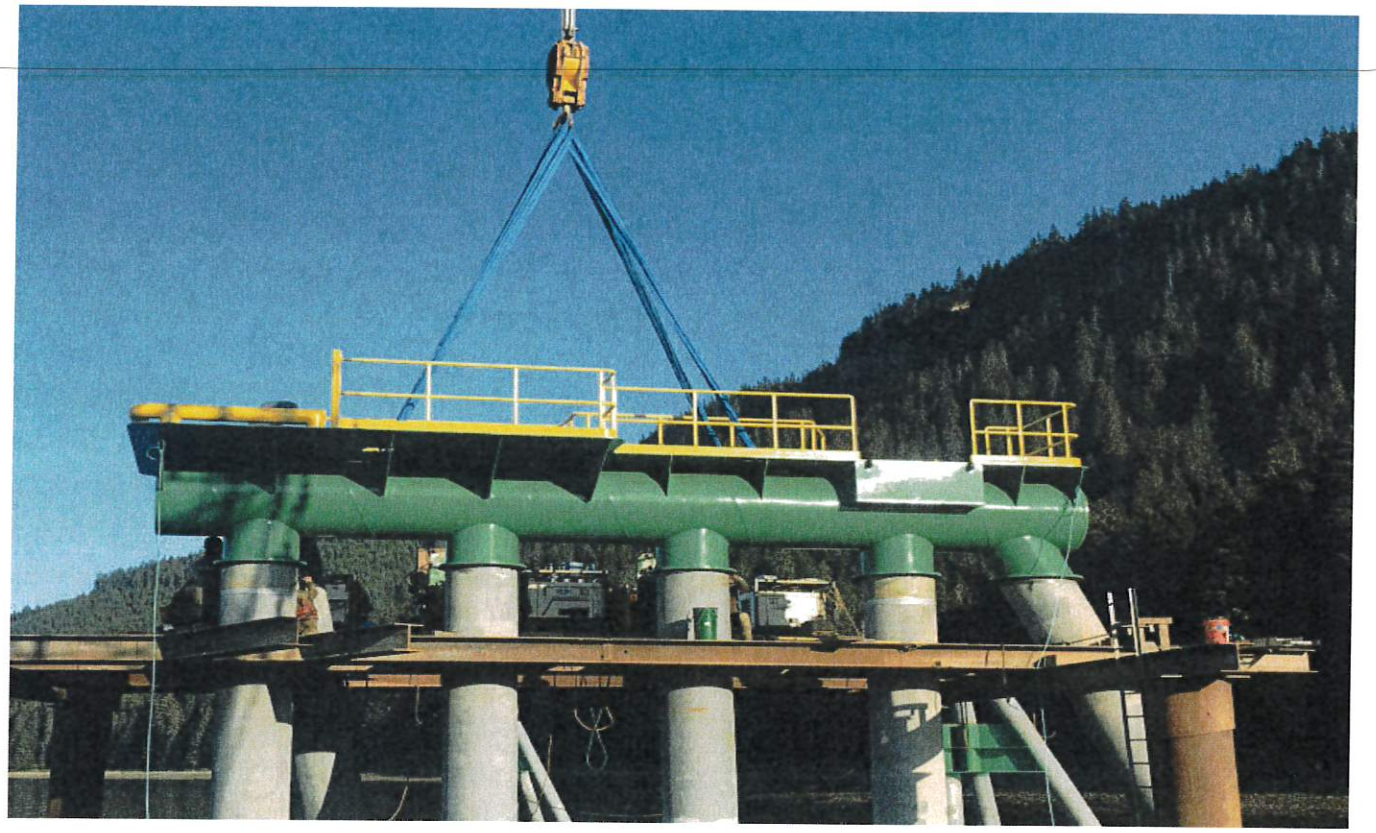
As a construction manager for Turnagain, most of Chris's influence on innovative approaches are developed during the early design and construction planning phases of the project life cycle. Chris has successfully optimized pile spacing in order to utilize one template set to install multiple pile bents, and added sacrificial features to dolphin caps in order to simplify staging design on previous projects. Every step of the installation process is thoroughly reviewed by Chris and his team and any opportunity to improve safety, quality and efficiency during construction receives scrutiny.

Interaction with Design Firms

In Chris's career at Turnagain, he has performed alternative delivery projects with 5 different engineering firms, most Alaskan based. Nielsen has provided extensive feedback and analysis in regard to constructability and installation efficiency. His input on design development and concepts directly correlates to project safety, quality and efficiency.

Alternative Contracting Experience

Chris Nielsen has performed construction/ project management on 7 Progressive Design-Build and Design-Build projects spanning from Ketchikan to Unalaska. All projects finished ahead of schedule and on or under budget with no contractor initiated change orders. In addition to performing alternative delivery projects, Chris is recognized by the Design-Build Institute of America as a Young Professional Practitioner.



Design Leads Responsible Charge

Coastal Engineering & Mooring Analysis

Naval Architect LLC, Brent J Morrison PE

Brent has worked closely with Turnagain on past projects to successful completion and delivery. He is a self-proclaimed "Right-brained Engineer" and his creativity plays into alternative delivery project success. Brent routinely analyzes mooring loads and supports projects from a coastal and marine engineering role.

Civil & Structural

Turnagain Marine Construction, Josh Zellmer PE

Additional details for Josh are listed above, but as the project Design Manager, Josh will be positioned to integrate all the individual design disciplines into one cohesive package. His previous experience in design of marine structures with Turnagain, and throughout the state make him the ideal candidate for this position.

Geotechnical Engineering

Shannon & Wilson, Kyle Brennan PE

Kyle has 19 years of experience in the field of geotechnical engineering. His prior experience includes work on seaports, and he has experience providing solutions for bulkhead structures similar to Turnagain's proposed design. Kyle knows what it takes to design to the varied and challenging conditions encountered in Alaska.

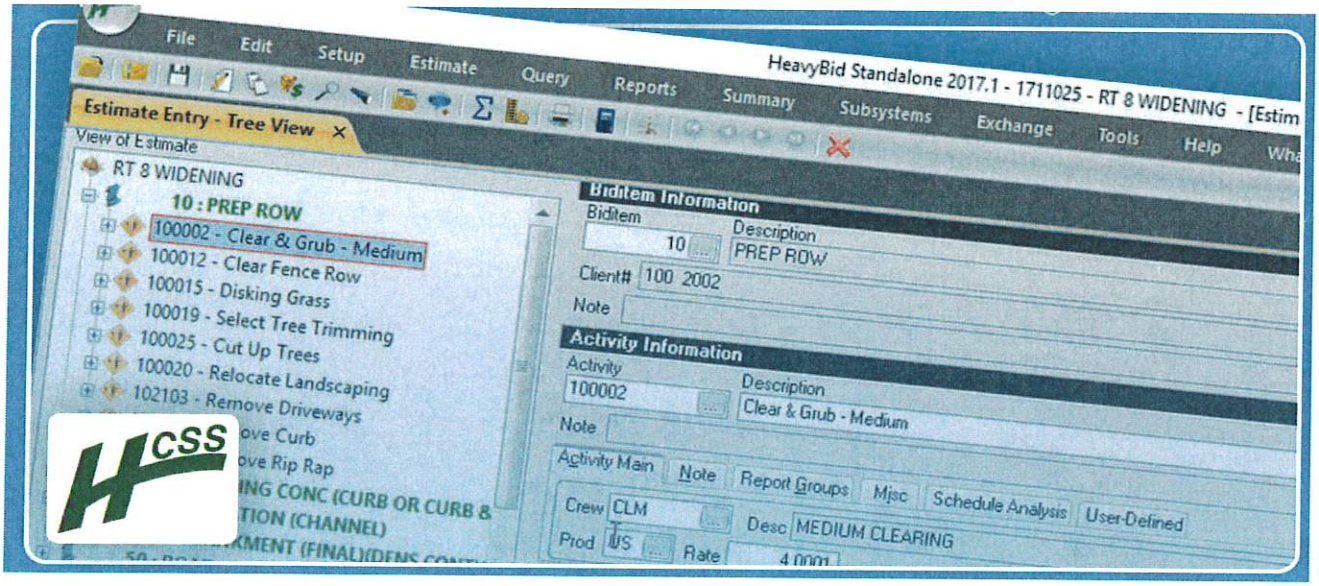
Electrical Engineering

RSA Engineers, Tim Hall PE

Tim has over 36 years of experience in the electrical construction field and was an electrician journeyman prior to pursuing his engineering degree. His field experience makes Tim the ideal candidate to ensure constructability and optimal design for electrical scope. His experience includes work on commercial, and industrial design including in marinas, and boat yards. Tim has worked closely to successful project completion with Turnagain in the past.

Cost Estimator
JASON DAVIS

As noted above, Jason has more than 20 years of experience in Alaska estimating marine construction projects. Under Jason's leadership, and adhering to core values, TMC continually strives to provide the highest quality end products delivered at the best value. In support of this goal, the years of networking in Alaska have allowed Jason to foster relationships with key local vendors ensuring that TMC receives and is able to pass on the best value to the client.



Environmental Lead
ROBIN REICH

Ms. Reich is President and founder of Solstice Alaska Consulting Inc., a certified woman-owned small business. She has more than 20 years of experience in environmental studies, documentation and permitting. Reich has extensive experience facilitating conversations between agencies, engineers and clients to ensure project delivery while mitigating environmental impact. Her emphasis on communications between involved parties ensures that projects meet public and agency approvals. As an Alaskan, and having spent her career helping clients obtain regulatory approvals, Robin is experienced in anticipating and proactively addressing common pitfalls surrounding challenging Alaskan projects. Her experience includes similar work with marine assessments, construction and environmental impact evaluations. Reich has worked closely with Turnagain Marine in the past to successful project completion with minimal environmental impact. The Ward Cove Cruise Ship Dock is one example of a project that Robin worked closely with Turnagain on—taking lead to navigate challenging environmental scrutiny from USACE, EPA, DEC, and the local community, and maintain minimal environmental impact. The list of clients that Reich has worked within Alaska, both state-run and private, is extensive.

Relevant Past and Present Performance

2017, 2019, 2020, completed accident-free – zero recordable injuries.

THE GRAPHIC BELOW SUMMARIZES TURNAGAIN'S RELEVANT SUCCESS ON EXCEEDING OWNER'S EXPECTATIONS.

Project Performance Criteria	Design-Build	Federally Funded	Completed without Claim	Completed without Safety Incident	Delivered On Time	Delivered Within Owner's stated Budget	TMC Top Technical Proposal	TMC Lowest Bid	Direct Award	Total Value ($MM)
Hoonah Cruise Ship Facility Berth I	X		X		X	X	X	X		25
Hoonah Cruise Ship Facility Berth II	X		X	X	X	X			X	30
White Pass and Yukon Route Railroad Mooring Dolphins 4 & 5			X	X	X	X	X	X		5
Unalaska Marine Center Dock Replacement			X	X	X	X	X	X		35
Ward Cove Cruise Ship Facility	X		X	X	X	X			X	40
Seward Harbor Floats Replacement	X	X	X	X	X	X	X	X		5
US Navy – Submarine Cable		X	X	X	X	X	NA	X		30
Klosterboer Dutch Harbor Pier	X		X	X	X	X			X	6
Iliamna River Bridge		X	X	X	X	X	NA	X		6.6
Gary Paxton Industrial Park Multi-Purpose Dock	X		X	X	X	X	X	X		7
Kodiak Transient Float Dock	X		X	X	X	X	X	X		2
Skagway Ore Dock Dredging	X		X	X	X	X			X	4
AML Lutak Dock Freight Facility	X		X	X	X	X	X	X		2
Pearl Harbor Naval Shipyard		X	X	X	X	X	X	X		58
King County Marine Outfall	X	X	X	X	X	X	X	X		27
Crescent Harbor Replacement	X		X	X	X	X	X	X		13
AMHS Ferry Docks (6 each)		X	X	X	X	X	NA	X		18
Jewell Beach Outfall	X	X	X	X	X	X	X	X		3.9

Senior leadership are certified as Design-Build Professionals by the Design-Build Institute of America. Turnagain staff are trained in design-build done right, the industry standard best practices for design-build and integrated project delivery. This formal training provides specific competencies, skills, and practices that are directly beneficial to the Haines Borough.

USACE Past Performance Questionnaire Scoring		
Project	**Client**	**Overall Score**
Akutan Ferry Terminal	City of Akutan	Excellent
Baranof Warm Springs Float Replacement	Alaska Dept of Transportation	Excellent
Cold Bay Dock Refurbishment	Alaska Dept of Transportation	Excellent
Homer Ferry Terminal Refurbishment	Alaska Dept of Transportation	Very Good
Hoonah Cruise Ship Berth	Huna Totem	Excellent
Ketchikan Berth III Emergency Repairs	City of Ketchikan	Excellent
Ketchikan Ferry Terminal	Alaska Dept of Transportation	Excellent
Light Cargo Dock Expansion	City of Unalaska	Excellent
Robert Storrs Harbor C Float Replacement	City of Unalaska	Very Good
Seward BCS Float Replacement	City of Seward	Very Good
ISP Berth II	Huna Totem	Excellent
Ward Cove Cruise Facility	Ward Cove Dock Group	Excellent

THE STATE of ALASKA
GOVERNOR MIKE DUNLEAVY

Department of Environmental Conservation

Jason W. Brune
Commissioner

Post Office Box 111800
Juneau, Alaska 99811-1800
Main: 907.465.5066
Fax: 907.465.5070

Proclamation Commending Ward Cove Dock Group LLC, Norwegian Cruise Lines, Turnagain Marine Construction, Transpac Marinas, John Binkley, and Dave Spokely

WHEREAS, Ward Cove is home to Ketchikan's former pulp mill which began operations in 1954 and was one of the largest employers in the region for decades;

WHEREAS, after closure of the pulp mill, Ward Cove was found to be contaminated with fuels, paints, and heavy metals as well as large quantities of sunken logs which affected local organisms;

WHEREAS, Ward Cove was declared a Superfund site under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) and was remediated with institutional controls under the oversight of the Environmental Protection Agency and the Alaska Department of Environmental Conservation;

WHEREAS, under the leadership of John Binkley and Dave Spokely, a partnership formed between Ward Cove Dock Group LLC and Norwegian Cruise Lines that saw past the stigma of a CERCLA designation and developed a plan to responsibly repurpose this previously remediated Superfund site;

WHEREAS, after the project developers invested over $50 million, Turnagain Marine Constructors and Transpac Marinas built a world class cruise ship dock and the former pulp mill site was repurposed, bringing economic activity back to the area;

WHEREAS, the innovative design and construction of the Ward Cove project resulted in receipt of the prestigious Associated General Contractors National Build America Award recognizing state-of-the-art projects that emphasize environmental sensitivity;

WHEREAS, AS 46.03.045 and AS 46.03.485 encourage the Department of Environmental Conservation to recognize superior environmental protection efforts.

NOW THEREFORE, I, Jason Brune, COMMISSIONER OF THE ALASKA DEPARTMENT OF ENVIRONMENTAL CONSERVATION, recognize and congratulate:

Ward Cove Dock Group LLC, Norwegian Cruise Lines, Turnagain Marine Construction, Transpac Marinas, John Binkley, and Dave Spokely for their efforts to repurpose and revitalize Ward Cove

Dated: August 12, 2021

ALASKA DEPARTMENT OF ENVIRONMENTAL CONSERVATION
FIFTIETH ANNIVERSARY
1971–2021

Jason W. Brune, Commissioner
Department of Environmental Conservation

City and Borough of Sitka

PUBLIC WORKS

100 LINCOLN STREET • SITKA, ALASKA 99835

PHONE (907) 747-1804 • FAX (907) 747-3158

April 17, 2018

Subject: Testimonial Letter for Turnagain Marine Construction Corporation

To Whom It May Concern:

It has been my distinct pleasure to work with Turnagain Marine Construction on the Gary Paxton Industrial Park (GPIP) Multi-Purpose Dock project in Sitka, Alaska. As the Municipal Engineer for the City and Borough of Sitka (CBS), I served as Project Manager and was thus intimately involved with the project from the development of the RFP through construction.

Turnagain was awarded the contract following a Design-Build, Best Value procurement process that included City Staff, the GPIP Director, and GPIP Board of Directors serving as the selection committee. Turnagain was unanimously selected as they offered an innovative, high quality solution that not only met the project goals, but also resulted in the lowest cost proposal to the CBS.

I genuinely appreciated and enjoyed the collaborative approach toward completing the project. Turnagain's experience and expertise combined with a willingness to listen to our concerns and ideas resulted in the best possible product for the community within our budgetary constraints. Turnagain's commitment to partnering is evidenced by the fact that there were zero Contractor-initiated change orders on the near $7-million contract.

I would not hesitate to work with them again or to recommend them for similar work. If you have any questions regarding this letter or any aspect of Turnagain's performance, please do not hesitate to contact me.

Sincerely,

Dan Tadic

Dan Tadic, P.E.
Municipal Engineer
City and Borough of Sitka
(907) 747-1807
dan.tadic@cityofsitka.org

CRUISE LINES INTERNATIONAL ASSOCIATION
ALASKA

September 24, 2019

Jason Davis, President
Turnagain Marine Construction
8241 Dimond Hook Drive Unit A
Anchorage, Alaska 99507

Mr. Davis,

I would like to thank you for the work that your company has done for our cruise industry in Alaska.

Over the last several years, Turnagain Marine has invested in specialized equipment and obtained the necessary and unique expertise to effectively construct cruise ship facilities in Alaska.

The emergency repair to berth three in Ketchikan is an example of how you saved millions of dollars in passenger spending by mobilizing and repairing that facility in record time.

Your innovative design and construction techniques resulted in an efficient floating dock at ISP and now facilitates a significant increase in shore side spending for visitors to Hoonah. In addition, the design, permitting, and construction in record time of berth two at ISP will result in that community hosting over 400,000 cruise guests next year, an increase of 114% since 2018.

In Skagway, you increased the docking capacity for the new class of neo-Panamax ships. In challenging conditions of very deep and exposed waters, you were able to construct additional mooring dolphins. That allowed larger capacity ships to dock, which in turn, increased that community's economic benefits.

With your first of a kind design for a single float, two berth dock in Ward Cove, the community of Ketchikan will have a total of six cruise ship berths. That will signal a new era of the need for additional dock construction to meet future cruise ship infrastructure needs throughout Alaska.

We appreciate Turnagain Marine's commitment to innovate and increase economic benefits for Alaskans.

Sincerely,

John Binkley
President

cliaalaska.org
360 K Street, Suite 300 | Anchorage, AK 99501 | United States

To whom it may concern:

Letter of recommendation forTurnagain Marine Construction

Dated July 19, 2016

I am Mark Keller. I was the Project Manager for the HunaTotem Corporation for the construction of the Hoonah Cruise Ship Dock Project.

I was privileged to work withTMC for the period November 14, 2014 through April 2016 during the design and construction of the above project. This work included contract negotiation, design development, construction and project close out. During the 18 months we worked together a strong project oriented relationship developed that was focused on completion of a cruise ship dock at Icy Strait Point. We worked together very well, while maintaining a strong focus on cost and schedule control. While focusing on these two key components of project delivery we also established a heavy concentration on quality and conformance with the Basis of Design and related specifications.

The key to the success of the Hoonah Cruise Ship Dock project was the quality of our working relationships. Our communications were always prompt, through and professional. We engaged in regular weekly progress meetings as well as spontaneous issue focused discussions about specific aspects of the project as they emerged. TMC was always highly responsive to any issue that arose. They worked well as a team between the designers, the project managers, and the superintendents, as well as field craft and trade personnel. TMC knows how to get marine projects built.

I would highly recommendTMC for any marine related project they would propose to undertake. TMC is a contractor who understands how projects can best be built. They have the industry knowledge required to execute the work they undertake. While any design build project requires a concentrated effort on behalf of the owner and the design builderTMC brings a strong work ethic to the projects they undertake. Indeed they brought cost savings to the project that allowed the Hoonah Cruise Ship Dock to be built in the time framed needed to serve the needs of the HunaTotem Corporation.

SelectingTMC as your contractor will make your project a success. If you desire please feel free to contact me at your convenience to answer any question you might have about to quality ofTMC's performance on the Hoonah Cruise Ship Dock project.

Regards

Mark Keller

Mark Keller
Project Manager
Duck Point Development (an LLC of the HunaTotem Corporation)
206 419 4080
Mkeller@Duckpointdev.com

Huna Totem Corporation

WOOSH-JEE-EEN • PULLING TOGETHER

January 6, 2020

Jason Davis, President
Turnagain Marine Construction
8241 Dimond Hook Drive, Unit A
Anchorage, Alaska 99507

This letter is to thank you and your entire team for your extraordinary efforts in developing and constructing our new cruise ship pier at Icy Strait Point. Huna Totem Corporation has now completed two highly successful dock projects with the professionals from Turnagain Marine Construction (TMC). Simply stated, we could not be more pleased with the results, and express our confidence in TMC for any future development.

One element worth noting is that TMC rolled up its sleeves and dug into our project before the contract was finalized and executed, which is indicative of a true partner in every sense. TMC contributed significantly to the preliminary design, budgeting, and concept development that was necessary to aid in developing our program; and all of that was done economically and collaboratively.

TMC's attention to detail, focus on timely communication, commitment to working cooperatively, and key personnel were all outstanding. TMC excelled at every aspect of our dock projects – safety, cost control, meeting schedules and perhaps most importantly, keeping working relationships on an even keel. TMC is deeply knowledgeable of marine construction and came into our waters with the skill and experience to tackle the task. We have benefitted enormously from our decision to contract with TMC, with both projects completed on time and under budget. The result is a tremendous surge in our ability to serve our guests and cruise line partners.

In closing, let me note that we just finished the final project walkthrough of our second dock. The remaining details to closure were minimal with nothing material to rework before handover of the project to us, which testifies to the high-quality workmanship of your crew, and leadership of the job superintendent and supervisors. Please contact me if I can provide additional insight into TMC's performance on our projects. Suffice to say, I am happy to provide a strong reference in support of your capabilities.

Sincerely,
HUNA TOTEM CORPORATION

Russell Dick
President & CEO

9301 Glacier Hwy Suite 200 Juneau, AK 99801 Phone (907) 789-8500 Fax (907) 789-1896

CITY OF KODIAK
HARBOR DEPARTMENT
403 MARINE WAY, KODIAK, ALASKA 99615
TELEPHONE (907) 486-8080
FAX (907) 486-8090

To Whom It May Concern,

August 29th, 2017

RE: Turnagain Marine Construction

As Port Director for the City of Kodiak Alaska, I had the distinct pleasure of working with Turnagain Marine for the last eighteen months. Turnagain Marine was the prime contractor for the Channel Transient Float (CTF) replacement project that was solicited as a design- build project.

The CTF project was the first time the Port of Kodiak used the design- build concept. It proved to be the most successful project we have done in years. All work was completed ahead of schedule, under budget and without any contractor driven change orders. I attribute the success of the project to the outstanding Turnagain team and their subcontractors.

Interaction and communications with Turnagain were seamless throughout the project. Administration and recordkeeping were exceptional. The professionalism and efficiency of the entire staff, from management to pile bucks was impressive. The equipment used on the job was state of the art and safety standards were impeccable.

I have been in the port management business for thirty six years and can say without hesitation that Turnagain Marine Construction is the best marine construction contractor I have ever worked with. I look forward to working with them again in the very near future and highly recommend them.

Please feel free to contact me anytime if you have additional questions.

Sincerely,

Lon A. White
Port Director
Kodiak, Alaska

NCLH
NORWEGIAN CRUISE LINE
HOLDINGS LTD.

October 17, 2020

RE: Double Pier - Ward Cove in Ketchikan Alaska

Dear Turnagain Marine Construction Team,

This letter is to commend you and your entire team for your extraordinary efforts in developing and constructing our new cruise ship pier at Ward Cove in Ketchikan Alaska. This highly successful dock project was spearheaded by professionals from Turnagain Marine Construction (TMC). The project was built during the constraints of a pandemic, continuing on-schedule and within budget. The foresight to pre-fabricate off-site was a significant time-savings to the project. The project's success is timely for a 2021 sailing in Alaska. NCLH's satisfaction with this team's results has continued to foster a relationship for future NCLH developments.

Our experience on this project and other projects together is a testament to our partnership. TMC completed most of the preconstruction, permit submittals and design before the contract was executed and before the project's notice of commencement.

TMC's attention to detail, focus on timely communication, commitment to working cooperatively, and key project team personnel was outstanding. TMC excelled at every aspect of our dock project. TMC worked with NCLH construction and Operations Divisions on design elements, safety, and cost controls. We have benefitted greatly from our decision to contract with TMC on this project. Specifically, a project whose oversight was limited and often virtual due to travel restrictions. This project was a testament to our confidence in TMC.

The project is currently 98% complete with final project walkthroughs and close-out paperwork pending. The remaining details to closure are minimal with nothing material to rework before handover of the project, which testifies to the high-quality workmanship of TMC's crew, and leadership of the job superintendent and supervisors. Please contact me if I can ever provide additional insight into TMC's performance on this project or any of the projects we have worked together. I am happy to provide a strong reference in support of TMC's capabilities.

My Best,

Alicia Cuervo | Vice President - On-Shore Design, Development and Construction
P: +1 786.295.8922
acuervo@nclcorp.com | www.nclhltd.com
Norwegian Cruise Line Holdings Ltd.

NORWEGIAN CRUISE LINE · OCEANIA CRUISES · Regent SEVEN SEAS CRUISES

Capacity to Perform Work

Turnagain Marine employs a steady workforce in Alaska with typically three to five active marine construction projects in process. Turnagain's owns an extensive construction fleet, including the two largest ABS crane barges home ported in Alaska.

Financially Turnagain is capable of bonding and completing multiple large projects concurrently. Turnagain has the resources to complete this project on time.

Whit Campbell
Pacific Northwest Regional Manager
Phone: (206) 346-0130

The Hartford Fire Insurance Company
520 Pike Tower, Suite 900
Seattle, WA 98101

THE HARTFORD

January 5, 2021

Re: Bonding capacity for Turnagain Marine Construction

To whom it may concern:

Turnagain Marine Construction has asked us to submit this letter to you outlining their surety relationship with The Hartford. The Hartford has been the bonding company for Turnagain Marine Construction since 2014. During this time we have provided final performance and payment bonds totaling in excess of $175,000,000 for a wide range of projects all over Alaska. Turnagain Marine Construction enjoys a substantial suety program totaling upwards of $100,000,0000 single project and $250,000,000 aggregate capacity.

While we envision full support of Turnagain Marine Construction, project pre-qualification and approval of bonds for specific projects would be conditioned upon our review and approval of the individual project characteristics, acceptable contract terms, and other pertinent underwriting information at the time of request. You understand that any arrangement for final bonds on this project is a matter between Turnagain Marine Construction and The Hartford and we assume no liability to third parties or you if, for any reason, we do not execute a bid or final bond for any project.

Sincerely,
Hartford Fire Insurance Company

Whit Campbell
Pacific Northwest Regional Manager

Cc: Jim Binder / Propel Insurance

Project Team Experience with Similar Projects

ESPECIALLY FEDERALLY FUNDED

Similarity – Design-Build

Design-build construction projects are Turnagain's passion. This company thrives on the challenge and satisfaction of creating the best value solutions to an Owner's unique needs and desires. Turnagain has a proven record of being able to combine sound engineering solutions to cost-effective high-quality construction methodology and deliver superior value. Turnagain has never had a claim against a design firm or on a design-build project. Using alternate delivery and its ability to provide absolute cost certainty, Turnagain has helped Owners achieve successful projects that would not have been undertaken using traditional delivery methods.

DESIGN-BUILD METHOD

Turnagain has led many exciting alternate delivery projects to unequivocally exceptional outcomes. Turnagain's past successful design-build projects all shared one key element: open, direct, and timely communication amongst all parties. As the design-builder, Turnagain ensures that all parties are included in relevant decision-making processes, that deadlines and deliverables are understood and achieved, and that difficult issues and challenges are addressed in a timely and productive manner. While Turnagain is the facilitator of all formal communications, each of the parties is encouraged to collaborate openly.

During the design and construction phases of the project, Turnagain integrates well communicated and pre-determined stop points where the owner will be given an opportunity to provide formal review comments. In addition to the formal review stop points, the Owner will be included in appropriate decisions in real-time. In order to maintain schedule, the Owner will not be included in all correspondence and choices, but the Owner will always have a voice and channels to guarantee that they are receiving Turnagain's utmost attention and have the appropriate level of input. Turnagain recognizes that the project is only successful if the Haines Borough is pleased with the final product.

DESIGN-BUILD HIGHLIGHTS

· Completing over 20 alternate delivery projects with 15 different engineering companies demonstrates our team has the perspective and experience to make sound judgments to lead diverse teams to successful outcomes, and deliver successful projects every time

· Managed every phase of alternate delivery, from initial project concept development through completion and warranty closeout.

· Completed successful projects using Design-Build, CM-at-Risk (CMAR), and Progressive Design-Build ranging in value from under $1 million to over $40 million.

· Completed alternate delivery projects for public and private owners.

· Identified, developed, and executed value engineering proposals on Design-Bid-Build projects that saved the client thousands to millions of dollars.

· Successfully completed alternate delivery projects for public and private owners using alternate delivery methods for the first time, as well as owners with established, sophisticated, and well-defined alternate delivery programs. Turnagain's alternate delivery competency gives us the ability to meet each specific Owner's needs and program requirements, leading when necessary and following when appropriate.

General Info

Total:

Number

RFQ HB 22- 01

Deadline

04/04/2022 11:00 PM UTC

Vendor

Western Marine Construction

Submitted

04/04/2022 04:06 PM UTC

Signed by

Julian Koerner

Account Holder

Julian Koerner

Opened

04/04/2022 11:06 PM UTC **By**

cwooton@haines.ak.us

Description

The Haines Borough is soliciting qualifications from qualified and licensed firms to perform the work for the Design, Permitting & Construction of the Lutak Dock.

DESCRIPTION OF THE PROJECT: The Lutak Dock is a deep-water port located in Haines, Alaska. The dock is 1,100 feet long and includes 15 cellular structures, closure arcs, and a concrete cap. The United States Army Corps of Engineers (USACE) designed Lutak Dock and completed its construction in 1953. The Lutak Dock regularly accommodates regularly scheduled shipments of fuel and freight, both of which support consumer and industrial activities in the region. The dock utilizes a closed-cell bulkhead configuration, with closure arcs to prevent loss of fill. The entire Lutak Dock Replacement contains three distinct construction phases; however, this project will provide Engineering, design, and permitting for all three phases of the project; and construction for phases I and II. Permitting for the project will require U. S. Army Corps of Engineers (USACE) Section 10/404 Permitting, National Marine Fisheries (NMFS) Incidental Harassment Authorization (IHA) Permitting, and NEPA Compliance.

The Haines Borough recently received a Rebuilding American Infrastructure with Sustainability and Equity (RAISE) grant of $20,000,000.00 from the Department of Transportation and seeks a project with a budget not to exceed $25,611,284.00. All interested firms are required to be registered in Alaska and have an Alaska Business License. A Haines Business License is required prior to contract award.

Allows zero unit prices and labor

No

Allows negative unit prices and labor

No

Addenda List and Acknowledgement

Addendum #1 Add 35% Conceptual Drawings to the Attachment list

Addendum #2 Extend time for Questions until 3/31/22, Zoom link and add Addendum list and acknowledgment.

Respondent acknowledges receipt of the following addenda (click + to add addenda or type N/A if no addenda have been issued.)

Addendum No: *

1

Initial: *

JLK

Respondent acknowledges receipt of the following addenda (click + to add addenda or type N/A if no addenda have been issued.) 1

Addendum No: *

2

Initial: *

JLK

Scope of Work

Interested project teams will take the Haines Borough's 35% conceptual designs through design (35/65/95%), permitting work, and final construction of the Lutak Dock Replacement. The team must demonstrate familiarity with federal procurement rules 2 CFR 200.319 – 2 CFR 200.320. Potential teams will be required to make recommendations to the Haines Borough of the best, most cost-effective manner to design and construct the Lutak Dock. The chosen project team must have the ability to work with the Borough Assembly, staff, stakeholders, and community members to design a new facility. The timeline for completion of Lutak Dock Replacement is December 2024.

RFQ Opening will take place on Zoom on Monday, April 4, 2022 at 3 pm. If you would like to attend please use the following link:

Join Zoom Meeting

https://us06web.zoom.us/j/86969633250?pwd=NzRKbFJzVWpsRmpNcWt0UDVOVXVDdz09

Meeting ID: 869 6963 3250

Passcode: 061264

One tap mobile

+12532158782,,86969633250#,,,,*061264# US (Tacoma)

+13462487799,,86969633250#,,,,*061264# US (Houston)

Dial by your location

+1 253 215 8782 US (Tacoma)

+1 346 248 7799 US (Houston)

+1 669 900 6833 US (San Jose)

+1 301 715 8592 US (Washington DC)

+1 312 626 6799 US (Chicago)

+1 929 205 6099 US (New York)

Meeting ID: 869 6963 3250

Passcode: 061264

Find your local number: https://us06web.zoom.us/u/kdkMZrJXin

Attachment List

Federal Procurement.pdf (253 KB)
2 CFR 200 Federal Procurement Guidance

NEPA Permitting Requirements.pdf (251 KB)
MARAD NEPA and Permitting Guidelines

RFQ Lutak Dock Replacement (246 KB)

Phase 1 & 2 Site Plans (6.4 MB)

Addendum #1 Attach 35% Conceptual Drawings.pdf (330 KB)

Addendum #2 Extend Q & A Deadline, add to SOW.pdf (339 KB)

Minimum Qualification Statement Contents

1. Project Team name or names if joint effort. *

Western Marine Construction, Inc.

2. The number of years in business and a brief history of the team members. *

Founded in 1961, prime contractor Western Marine Construction offers a wide variety of design-build experience, especially in the construction of marine facilities with adjoining uplands. With offices based in Seattle and Juneau, they have designed and constructed docks, ferry terminals, and other marine structures throughout Alaska for more than 60 years.

Established in Haines in 2015, proHNS is a consulting firm dedicated to helping clients reach their project goals through cost-effective design practices and detailed-oriented project management. From their offices in Haines and Juneau, their team provides civil engineering, design, construction inspection, permitting, and contract administration services to private developers, municipalities, and agencies across Alaska, including the Federal Government.

With 18 years of firm history, NGE was established in 2000 to provide geotechnical engineering specifically in cold regions and has since expanded their reach to all of Alaska. Their professional engineers and geologists are experienced in a wide range of subsurface exploration techniques, marine design, and Alaskan construction practices.

Environmental services firm RCE was launched this year by a Juneau-based environmental specialist with nearly a decade of experience working on federally funded Alaska projects. The RCE team is led by a senior-level Environmental Reviewer and Regulatory Specialist for the federal government and includes subject matter experts who will ensure a smooth and complete permitting process.

See Pages 3-5 of the attached Statement of Qualifications package for additional Team Member information and Appendix A for Team Member resumes.

3. Experience in working on federally funded projects *

The WMC Team has worked extensively on federally funded projects and understands how critical it is to review provisions establishing monetary obligations and reporting requirements whenever federal funding is involved. Our collective team has been involved in more than $200 million in federally funded construction projects in Alaska and the Lower 48 since 2015, which have included funding from the Federal Highway Administration (FHWA), Federal Aviation Administration (FAA), Federal Emergency Management Agency (FEMA), and Environmental Protection Agency (via the Alaska Department of Environmental Conservation). Our team is compliant and familiar with federal procurement rules 2 CFR 200.319 – 2 CFR 200.320.

See Pages 9-10 of the attached Statement of Qualifications package for more information on federally funded projects we have worked on.

4. Experience in U. S. Army Corps of Engineers (USACE) Section 10/404 Permitting, National Marine Fisheries (NMFS) Incidental Harassment Authorization (IHA) Permitting, and NEPA Compliance.

The WMC Team has been responsible for acquiring environmental permits for in-water work and implementing required mitigation measures for projects all over Alaska, including the Haines Ferry Terminal Improvements. RCE team members have participated in every side of the NEPA process and other federal permitting actions: they've
been the applicant, the specialist consultant supporting federal grant-funded applicants, and the reviewer who recommends approval of applications. RCE's holistic experience regarding federal permitting means our team knows the quickest, easiest path for navigating USACE Section 404 permitting, NMFS IHA permitting, and NEPA compliance.

See Page 5 of the attached Statement of Qualifications package for more information on our team's experience with federal permitting processes.

required

5. Current rate of professional fees with a breakdown of personnel costs, reimbursable expenses, and other potential costs. The project team should assume at least one public meeting to be held in Haines

See Appendix B of the attached Statement of Qualifications package for key team member professional hourly rates with a breakdown of anticipated reimbursable expenses, and other potential direct costs, including public meetings in Haines.

required

6. Description of the team's experience in working in communities similar in size and character to the Haines Borough. *

From Haines to Sand Point, the WMC Team has worked in many small Alaskan communities and understands how to work with local entities to complete projects while also being sensitive to local concerns and objectives. In Haines alone, our collective team members have been a part of more than three dozen private, local, state, and federally funded projects in the last decade. In fact, proHNS was founded in Haines and continues to staff an office there in support of its ongoing and future projects with the Haines Borough.

See Pages 6-7 and 9-10 of the attached Statement of Qualifications package for more information on our work in Haines and other small Alaskan communities.

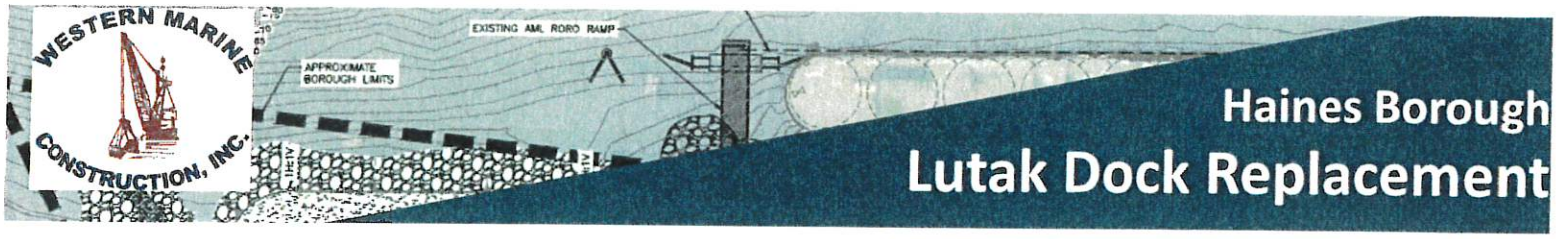
7. Bar chart schedule to meet the December 2024 completion timeline. *

See Appendix C of the attached Statement of Qualifications package for our team's bar chart project schedule demonstrating our ability to meet the December 2024 completion timeline.

Required Document List

Name	Omission Terms	Submitted File
Optional: Vendor is not required to complete.		
Additional Document Upload ie: resumes, references, etc.		Western Marine Construction Statement of Qualifications for Haines Borough Lutak Dock Replacement Design and Construction.pdf

1 Required Document



April 4, 2022

Haines Borough
PO Box 1209
Haines, AK 99827

Re: Lutak Dock Replacement Design and Construction Request for Qualifications

Dear Selection Committee Members,

Thank you for considering our qualifications to support the Haines Borough in designing and constructing replacement of the Lutak Dock, a critical piece of Upper Lynn Canal infrastructure. Between our site-specific knowledge gained from constructing the Haines Ferry Terminal Improvements in 2016, our ability to efficiently mobilize from Juneau, our strategic partnership with specialty subcontractors, and our experience ensuring full funding participation from federal entities, we believe the Western Marine Construction Team can permit, design, and construct a high-quality, cost-effective facility that serves local and regional interests for decades to come.

Western Marine Construction (WMC) is adopting a partnership-based approach to this project, teaming with key technical service firms **proHNS LLC**, **Northern Geotechnical Engineering** (NGE), and **Rugged Coast Environmental** (RCE). Each brings unique benefits to the table: proHNS has experience working with the Haines Borough, a local office, and Haines-based staff to support the public process; NGE is our long-time associate, and already has access to geotechnical research garnered from their work on the Haines Ferry Terminal Improvements; and Juneau-based RCE not only prepares environmental documentation and permit applications, but their team has served as federal reviewers for permit applications, Section 7 ESA consultation requests for NMFS, and IHA applications at NMFS PR1. This experience translates to less back and forth between the applicant and the respective agencies, resulting in shorter consultations, stream-lined permitting processes, and decreased project cost.

If selected for this project, our team will work cooperatively with the Haines Borough to achieve the following goals:

Goal 1: Design, permit, and construct all three phases of the Lutak Dock Replacement project. (We understand the RFQ specifies the third phase of the project need not be constructed as part of this effort, but we believe our cost-saving strategies will allow us to permit, design, and construct all three phases within the $25,611,284 budget.)

Goal 2: Develop and construct a project with the complete support and backing of the Haines community, stakeholders, and facility users.

Goal 3: Complete the project by December 2024 and ensure full funding participation.

The following items address the Minimum Qualification Statement Contents requested in the RFQ. We have elaborated on many of them in the body of our attached Statement of Qualifications, as noted below.

Item 1. Western Marine Construction (AK Business License #14457).

Item 2. Founded in 1961, prime contractor Western Marine Construction offers a wide variety of design-build experience, especially in the construction of marine facilities with adjoining uplands. With offices based in Seattle and Juneau, they have designed and constructed docks, ferry terminals, and other marine structures throughout Alaska for more than 60 years.

Established in Haines in 2015, proHNS is a consulting firm dedicated to helping clients reach their project goals through cost-effective design practices and detailed-oriented project management. From their offices in Haines and Juneau, their team provides civil engineering, design, construction inspection, permitting, and contract administration services to private developers, municipalities, and agencies across Alaska, including the Federal Government.

With 18 years of firm history, NGE was established in 2000 to provide geotechnical engineering specifically in cold regions and has since expanded their reach to all of Alaska. Their professional engineers and geologists are experienced in a wide range of subsurface exploration techniques, marine design, and Alaskan construction practices.

Environmental services firm RCE was launched this year by a Juneau-based environmental specialist with nearly a decade of experience working on federally funded Alaska projects. The RCE team is led by a senior-level Environmental Reviewer and Regulatory Specialist for the federal government and includes subject matter experts who will ensure a smooth and complete permitting process.

See Pages 3-5 for additional Team Member information and Appendix A for Team Member resumes.

Item 3. The WMC Team has worked extensively on federally funded projects and understands how critical it is to review provisions establishing monetary obligations and reporting requirements whenever federal funding is involved. Our collective team has been involved in more than $200 million in federally funded construction projects in Alaska and the Lower 48 since 2015, which have included funding from the Federal Highway Administration (FHWA), Federal Aviation Administration (FAA), Federal Emergency Management Agency (FEMA), and Environmental Protection Agency (via the Alaska Department of Environmental Conservation). Our team is compliant and familiar with federal procurement rules 2 CFR 200.319 – 2 CFR 200.320.

See Pages 9-10 for more information on federally funded projects we have worked on.

Item 4. The WMC Team has been responsible for acquiring environmental permits for in-water work and implementing required mitigation measures for projects all over Alaska, including the Haines Ferry Terminal Improvements. RCE team members have participated in every side of the NEPA process and other federal permitting actions: they've been the applicant, the specialist consultant supporting federal grant-funded applicants, and the reviewer who recommends approval of applications. RCE's holistic experience regarding federal permitting means our team knows the quickest, easiest path for navigating USACE Section 404 permitting, NMFS IHA permitting, and NEPA compliance.

~~***See Page 5*** for more information on our team's experience with federal permitting processes.~~

Item 5. See Appendix B for key team member professional hourly rates with a breakdown of anticipated reimbursable expenses, and other potential direct costs, including public meetings in Haines.

Item 6. From Haines to Sand Point, the WMC Team has worked in many small Alaskan communities and understands how to work with local entities to complete projects while also being sensitive to local concerns and objectives. In Haines alone, our collective team members have been a part of more than three dozen private, local, state, and federally funded projects in the last decade. In fact, proHNS was founded in Haines and continues to staff an office there in support of its ongoing and future projects with the Haines Borough.

See Pages 6-7 and 9-10 for more information on our work in Haines and other small Alaskan communities.

Item 7. See Appendix C for our team's bar chart project schedule demonstrating our ability to meet the December 2024 completion timeline.

Again, we appreciate you taking the time to review our statement of qualifications. We are confident our team is the most qualified for the Lutak Dock Replacement project and can successfully bring a new facility into unimpeded operation by December 2024 within the budget limits described in the RFQ.

Sincerely,

[redacted]

Kriss Hart, President
Western Marine Construction

1. Project Team Member Qualifications

Kriss E. Hart — Western Marine Construction — President/Contract Manager

Licenses/Certifications: USACE Construction Quality Management for Contractors, Licensed Tug Operator, Certified Diver, First Aid/CPR

Responsibilities on this Project: Contract Manager on behalf of the WMC Team, fee negotiation, and ensuring our team meets all Contractor-Owner contract terms.

Professional Qualifications

As President of WMC and a 42-year veteran of the firm, Kriss' knowledge of marine construction in Alaska and the Pacific Northwest is nearly unparalleled. He specializes in collaborating with Owners to develop cost-effective designs to meet their needs and budgets, simplifying approaches to reduce cost and improve service. His commitment to WMC is integral to the firm earning many recognitions over the years, including the U.S. Army Corps of Engineers Contractor of the Year Award.

Raised in Juneau and having worked in Lynn Canal for years, Kriss knows Haines and the community's needs for marine infrastructure. The Lutak Dock Replacement project is a perfect fit for Kriss' experience and strengths.

Relevant Project Experience

Since Kriss first began working for WMC as a land and hydrographic surveyor on the Whittier Harbor Expansion project in 1980, he has overseen construction of Alaska and Pacific Northwest marine projects involving pile driving, underwater drilling, dredging, blasting, excavation, mooring systems, breakwaters, revetments, docks, ferry terminals, and more.

On the recent AK DOT&PF **Tenakee Ferry Terminal Improvements (2020),** Kriss led a value-engineering change proposal (VECP) effort to redesign the terminal's staging dock, utility building, fueling system, and electrical systems to provide cost savings, schedule savings, and a more functional facility.

Julian Koerner, PE — Western Marine Construction — Project Manager

Licenses/Certifications: USACE Construction Quality Management for Contractors, Registered Professional Engineer in AK (#110734), WA (#58148), and OR (#88246PE), First Aid/CPR, OSHA 30-Hour

Responsibilities on this Project: Project delivery management, Borough's point of contact during construction, and coordinating the work of the design team with our construction group.

Professional Qualifications

With more the 15 years' experience, Julian brings a reservoir of knowledge and experience in the execution of heavy-civil, marine, pile driving, drilling, deep foundations, and structures projects utilizing both conventional design-bid-build and alternative delivery methods.

Having fulfilled progressively vital company and project roles, Julian is skilled in managing complex projects and their progression from inception to completion including estimating, coordination, budget, quality, scheduling, safety, and project issue resolution. His proven track-record of working with clients in Alaska and the Pacific Northwest to develop projects and navigate the process through construction makes him the ideal candidate to lead the partnership between WMC and the Haines Borough for development and execution of the Lutak Dock Replacement project.

Relevant Project Experience

As a professional engineer, Julian has worked in the construction industry honing one of his specialties: alternative delivery projects including design-build, progressive design-build, and Construction Manager-General Contractor (CM-GC). Using his engineering background and construction experience, he has led contractor efforts from proposal through design, permitting, and construction with a vast variety of public and private clients.

A few of his alternative delivery projects include **NAVFAC Ediz Hook Shoreline Restoration (ongoing)**, **USCG Ketchikan FRC Phase II (ongoing)**, **Gary Paxton Industrial Park Multi-Purpose Dock (2018)**, and **Icy Strait Point Hoonah Berthing Facility (2016)**. Though not an alternative delivery project, he was also heavily involved on the **Tenakee Ferry Terminal Improvements (2020)**.

Patrick McHugh — Western Marine Construction — Project Superintendent

Licenses/Certifications: USACE Construction Quality Management for Contractors, PADI Certified Dry Suit Diver, First Aid/CPR

Responsibilities on this Project: Overseeing physical construction in the field on behalf of WMC while coordinating with facility users, subcontractors, and Borough representatives.

Professional Qualifications

After graduating with a degree in Construction Management in 1996, Patrick worked as a Project Engineer and Quality Control Manager on many fast-track large projects. These early projects set the foundation for his complete understanding of the systems needed to ensure quality construction.

Over the next 12 years, Patrick was promoted to Project Manager and Senior Project Manager. In 2009, WMC recruited Patrick to aid with management, scheduling, estimating and quality control. In his 13 years with WMC, Patrick has been involved in the completion of all varieties of marine construction including breakwaters, docks, floats, bridges, and ferry terminals. Patrick's extensive construction experience and familiarity with Lutak Dock will be utilized to provide quality control of design ideas, plans, and specifications.

Relevant Project Experience

As Superintendent and Project Manager on the **Haines Ferry Terminal Improvements (2016)**, Patrick is familiar with the site conditions and best strategies for tackling much of the Lutak Rock Replacement work, including safe removal of the sheet pile cells and effective driving of new sheet pile. Having conquered much of the steep learning curve associated with the site, Patrick is uniquely equipped to guide a construction process as free from schedule delays or cost overruns as possible.

As Superintendent on the **Sand Point City Dock Replacement (2019)**, Patrick worked with the City and AK DOT&PF to redesign an extravagant electrical plan and instead construct a less expensive, more appropriate system. The alteration saved enough funds to allow for construction of a 2000-square foot warehouse facility.

Garret Gladsjo, PE – proHNS LLC – Design Manager

Licenses/Certifications: Alaska Professional Civil Engineer AELC #14469, AK-CESCL Master Instructor, AK-CESCL #PHS-22-0001

Responsibilities on this Project: Managing all stages of design delivery, coordinating work of technical subcontractors, civil engineering, and serving as the Borough's point of contact during design.

Professional Qualifications

Garret is a licensed professional civil engineer, manager, and half-owner of proHNS. His prior employment over the last decade includes positions with AK DOT&PF Southcoast Region, where he held both Regional Quality Assurance Engineer and Project Engineer positions. Garret has administered and led the delivery of contracts for federal, state, and municipal projects, managed and trained project staff, performed design engineering, prepared contract documents, and navigated the complex relationships between members of the public, government agencies, and private industry.

Garret is especially adept at managing large, multi-disciplinary teams on public agency projects. His expertise has proven critical to the success of projects with public perception, community buy-in, and environmental challenges. His knowledge of and experience working with the Haines Borough makes him the ideal candidate to lead the design of the Lutak Dock Replacement project.

Relevant Project Experience

Garret has managed many of proHNS's Haines Borough projects, including the **2020 Flood Damage Repairs (ongoing)**, **Small Tracts/Mud Bay/Third Avenue AC Pipe Replacement (2021)**, and **Tlingit Park Trails and ADA Upgrades (2021)**. He has established relationships with Borough staff and understands both the local policies and technical decisions behind the success of many Haines projects.

He also serves as a Project/Contract Manager and QC Manager on all of proHNS' AK DOT&PF projects, including the **Egan Drive 10th to Main Street Improvements (2021)**. On this multi-year project, Garret managed proHNS staff and specialty subcontractors, coordinated with dozens of stakeholder groups, and worked with the Owner and Contractor to ensure the uninterrupted use of the corridor. In a similar role on the **Tenakee Ferry Terminal Improvements (2020)**, he managed proHNS staff while working cooperatively with WMC to deliver a superior final product for AK DOT&PF.

Ryan Bare – Rugged Coast Environmental – Environmental Manager

Licenses/Certifications: DHS Level II NEPA Warrant, EPA NPDES Permit Writer

Responsibilities on this Project: Leading a team of environmental specialists responsible for obtaining all necessary state and federal permits, completing all required agency consultations, and navigating the NEPA process in a fashion that expedites the project's advance to construction.

Professional Qualifications

Though Ryan only recently established Rugged Coast Environmental, he has nearly a decade of experience working on environmental and permitting processes on federally-funded Alaska projects. He knows the key to successfully navigating the permitting process is early and regular consultation with the agencies, many of whom he already has contacts with.

As a Senior Environmental Impact Analyst for AK DOT&PF, he ran the environmental process for Southeast transportation projects to ensure NEPA/ESA/MMPA/Section 106/4f/CWA and all applicable environmental laws were complied with and appropriate permits were obtained. In his current position as a senior environmental reviewer for the USCG, he reviews environmental compliance documentation and federal permit applications. With regard to the NEPA process and federal permits, he has been the applicant, the specialist consultant supporting a federal grant-funded applicant, and the reviewer who recommends approval of applications.

Relevant Project Experience

As a NEPA/ESA Specialist hired by the Seldovia Village Tribe for the **Seldovia Bay Ferry Dock Refurbishment Project (est. 2023)**, Ryan drafted environmental documents and consulted with agencies to meet Federal Transit Administration grant requirements, evaluated potential environmental impacts from the proposed project, and prepared the following documentation: Section 106 consultation, Essential Fish Habitat Assessment, Endangered Species Act, Draft EA, and Biological Assessment for Sec 7 ESA consultation.

Ryan's recent experience also includes ensuring NEPA compliance, ESA compliance, and MMPA compliance on AK DOT&PF's **Metlakatla Seaplane Facility Refurbishment (2022)**. He was also involved in development of an Incidental Harassment Authorization application on that project. On **Katlian Bay Road (ongoing)**, also a State project, Ryan efficiently handled USACE 404/10 permitting, eagle permitting, ADF&G Fish Habitat permitting, and NEPA compliance.

Keith Mobley, PE, GE – Northern Geotechnical Engineering – Geotechnical Manager

Licenses/Certifications: Professional Civil Engineer Alaska CE #5066 / California CE #30683, California Professional Geotechnical Engineer GE #2389

Responsibilities on this Project: Overseeing geotech investigation and site characterization, and leading NGE's design of fill placement, the new bulkhead wall, and riprap for shoreline protection.

Professional Qualifications

Keith has over 40 years of experience as a geotechnical consultant specializing in cold region geotechnical engineering and waterfront design. Keith founded NGE in 2000 and the company has expanded its services to include geotechnical engineering, laboratory and field material testing, special inspection, instrumentation, and construction management for waterfront and earthworks projects.

Many of Keith's projects involve unconventional techniques for obtaining the subsurface information needed to properly design the project. He specifically tailors his methods to match the available equipment and purpose of the design, and specializes in modifying conventional designs to match the project's specific purpose, environment, and equipment most easily available to complete construction.

Relevant Project Experience

On the **Haines Ferry Terminal Improvements (2016)**, Keith provided geotechnical engineering guidance when WMC encountered challenging pile driving conditions at the project site. With his guidance, WMC was able to successfully install the piling without damaging it or incurring significant cost overruns due to the unexpected driving conditions.

On the **Ruby Marine River Barge Dock and Barge Launch (2020)** in Nenana, Keith designed a 600-ft long sheet pile bulkhead river barge dock as well as a 60-ft wide concrete-lined earthen tug/barge launch ramp. His efforts also included a geotechnical assessment of the riverbed conditions, selection and design of materials, and on-site engineering support and inspection during construction, USACE permitting support, and completion of as-built drawings.

2. Past and Present Performance

The following projects highlight instances where our team has 1) delivered exceptional quality of service, 2) generated high customer satisfaction, 3) saved the client money, and 4) completed the project on or before schedule. Some projects listed here may overlap with those listed in Section 4; however, we intend for this section to focus more on performance regarding client satisfaction, while Section 4 focuses on performance related to the technical scope of work.

It is worth noting Western Marine Construction boasts a track record free of claims or litigation. Additionally, our team's belief that contract performance and employee safety are enhanced through stringent maintenance and procedures programs has resulted in an outstanding safety record, virtually free of accidents and injuries.

Project: Haines Ferry Terminal Improvements **Client:** Alaska Department of Transportation
Location: Haines, AK **Cost:** $15 million **Completed:** 2016
Reference: Keri Williamson, PE, Project Manager, AK DOT&PF, 907-790-2361

As the Prime Contractor on the Haines Ferry Terminal Improvements, Western Marine Construction worked to save both AK DOT&PF and the Haines Borough (consequential savings to this project) from incurring the cost of an unnecessary bid item.

AK DOT&PF initially intended to salvage and transform one of the cells on the Borough's side of the structure; however, WMC pointed out that due to the Lutak Dock's condition, the facility would likely be replaced in the near future, at which point the cell would need to be removed anyway. Instead of salvaging the cell that would soon need to be demolished, WMC worked with AK DOT&PF to modify the design, armor the slope area, and ***save the State nearly $1 million in construction costs.***

Project: Tenakee Ferry Terminal Improvements **Client:** Alaska Department of Transportation
Location: Tenakee Springs, AK **Cost:** $11 million **Completed:** 2020
Reference: David Lowell, PE, Project Manager, AK DOT&PF, 907-465-4812

On this project that replaced the existing Tenakee fuel dock and ferry terminal facility, community members expressed concern that planned drilled rock anchors would compromise the town's famous hot springs. As the Prime Contractor, Western Marine Construction worked with community representatives and AK DOT&PF to devise an alternative design that replaced the concrete pier structure with a permanent fill dock that did not require anchor drilling. ***The benefits to this solution were two-fold:*** 1) the hot springs were undamaged, much to the community's relief, and 2) the new structure not only remained within budget, it was large enough to accommodate a storage building and laydown area twice the size of the original plans.

Also heavily involved in this project, proHNS performed construction contract administration and inspection on behalf of our client, AK DOT&PF. Our team not only ***closed the project out in record time to the satisfaction of the client***, but we also provided incredibly cost-effective services for the client by minimizing field staff and utilizing the 60-foot M/V Heron as a project office and place of lodging. Our extensive pre-mobilization and logistical planning regarding testing and quarantining ensured the proHNS field team arrived in Tenakee free of COVID-19, a significant concern in the Tenakee community.

Project: Small Tracts/Mud Bay/Third Avenue Water Line Replacement **Client:** Haines Borough
Location: Haines, AK **Cost:** $2.1 million **Completed:** 2021

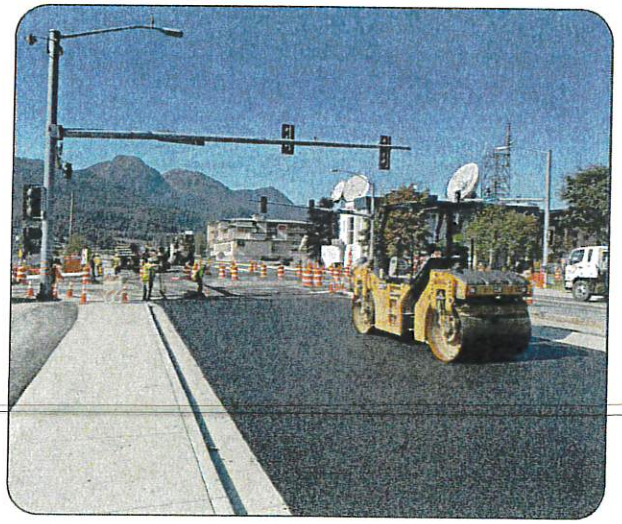
Reference: Edward Coffland, PE, Public Facilities Director, Haines Borough, 907-766-6414

Since the project was funded through an Alaska Drinking Water Loan Fund (via the Environmental Protection Agency), proHNS was charged with conducting wage rate interviews, confirming certified payroll, ensuring all project materials conformed with American Iron and Steel requirements, and a slew of other requirements connected to the federal funding. During wage rate interviews, ***proHNS successfully protected the Borough's funding*** when they discovered the Contractor was not paying employees a high enough prevailing wage on the project. proHNS worked with the Contractor to back-pay employees the difference in wages and pay the appropriate rate going forward, ensuring funding would not be jeopardized.

Project: Egan Drive 10th to Main Street Improvements **Client:** Alaska Department of Transportation
Location: Juneau, AK **Cost:** $14.3 million **Completed:** 2021

Reference: Catherine Wilkins, AIA, Project Manager, AK DOT&PF (retired), 907-586-2457

proHNS provided a full team of experienced Project Engineers, Office Engineers, and Engineering Technicians to provide contract administration and inspection services for this high-profile, logistically challenging road improvement project in downtown Juneau. The three-season project repaved the roadway, improved pedestrian and bicycle facilities, and repaired the Merchant's Wharf retaining wall, all while maintaining access throughout the busy downtown corridor.



It earned the **2020 Outstanding Project of the Year Award** from the American Society of Civil Engineers Juneau Branch, and received accolades from Juneau's Tourism Best Management Practices group, which printed a thank-you ad in the local newspaper: ***"Your hard-working employees, community outreach, and regular communications throughout the summer truly helped minimize the impacts of this project on the day-to-day traffic into and out of downtown Juneau."***

Project: Kenai Liquified Natural Gas (KLNG) Refinery Shore Stabilization **Client:** Precision Maint. & Fabrication
Location: Nikiski, AK **Cost:** $1.4 million **Completed:** 2021

Reference: Corey Karcz, President, Precision Maintenance & Fabrication, 907-748-7770

Northern Geotechnical Engineering was tasked with evaluating and identifying changes to an original repair design that could result in increased functional value while reducing construction, operation, and maintenance costs. NGE was able to work directly with the client during the design and construction of the project to ***reduce the total cost of the project from initial estimates by approximately $600,000.*** After review of the initial plans, NGE designed and provided construction administration for the 280-foot-long and 20-foot-tall Z-sheet pile retaining wall with associated anchor systems and cathodic protection.

Project: Akutan East Dock Extension **Client:** Trident Seafoods
Location: Akutan, AK **Cost:** $9.5 million **Completed:** 2013

Reference: Jarred Brand, Director, Operational Strategy & Initiatives at Trident Seafoods, 206-369-8513

Designed by Northern Geotechnical Engineering and constructed by Western Marine Construction, this project expanded Trident's Akutan dock area by constructing a 1,000' combination steel pile/sheetpile wall, complete with 150 each 2 ¼"diameter number 18 threadbar tieback anchor rods attached to concrete anchor deadmen ranging in size of up to 22,000 pounds each. Additionally, approximately 25,000 cubic yards of rock pit material was processed, including crushing, and screening, for utilization as rip rap, backfill material, and for other Trident projects. This project was completed ***on time, under budget, and the client was so pleased, they recently hired WMC to construct a similar $20 million structure in Dutch Harbor.***

3. Capacity to Perform the Work

Western Marine Construction owns, operates, and maintains our own equipment, including barges, cranes, excavators, specialty marine equipment and support vessels. Owning our equipment (and staging much of it in Juneau) allows us to precisely schedule the tools necessary for the project. Our experienced and certified operators are knowledgeable and familiar with each piece of our equipment ensuring lower costs and on-time completion.

Western Marine Construction maintains a fully equipped construction staging yard in Juneau for quick, efficient equipment mobilization to the Lutak Dock project site.

proHNS' Haines Office and staff will be essential to bringing the community along on this project's journey. proHNS will use local staff to facilitate public meetings as directed by the Borough, as well as attend Haines Borough Assembly, Lutak Dock Design Working Group, Ports and Harbors Advisory Committee, and Planning Commission meetings related to this project. proHNS Creative Director Karen Garcia has lived in Haines for nearly a decade and is not only familiar with the community conversation surrounding this project but is on a first-name basis with many of the stakeholder representatives. Karen will support the Haines Borough throughout the public process, helping lead public outreach and coordinating public meetings as requested by the Borough.

proHNS staff based in Haines can provide local support for public meetings, outreach, and other stakeholder involvement efforts.

Key management staff outlined in this proposal are available to facilitate design and permitting in 2022, with equipment and personnel available for the 2023 and 2024 construction seasons. We have minimal commitments beyond 2022 (see chart below), ensuring full availability to efficiently execute the work.

In addition to our key personnel detailed in this proposal, WMC and our partners have a deep reserve of additional staff available to support this project, including engineers, technicians, and environmental analysts. Our extensive equipment inventory also ensures our proposed staff will have access to the tools they need when they need them. In short, we are fully equipped, qualified professionals who are eager to tackle this project as soon as Notice of Intent to Award is issued.

FIRM	OWNER – PROJECT NAME	2022	2023	2024
Western Marine Construction	NOAA – Ediz Hook Shoreline Restoration	5%	0%	0%
Western Marine Construction	USCG – Ketchikan Fast Response Cutter Phase II	5%	10%	0%
Western Marine Construction	NOAA – Fairweather Recapitalization	15%	0%	0%
Western Marine Construction	WSDOT – SR536 Drawrest Emergency Repairs	5%	0%	0%
Western Marine Construction	Trident Seafoods – LFS Dutch Harbor	45%	0%	0%
	Current and Projected Workload Commitment	***75%***	***10%***	***0%***
proHNS LLC	Haines Borough – Design & Engineering for 2020 Flood Damage	25%	25%	0%
proHNS LLC	FHWA - Construction Management & Inspection Services for Western Federal Lands Highway Division	5%	5%	5%
proHNS LLC	City & Borough of Juneau – Calhoun Avenue Reconstruction	5%	5%	0%
proHNS LLC	City & Borough of Juneau – Misty Lane Reconstruction	5%	0%	0%
proHNS LLC	Other Public and Private Projects	10%	5%	5%
	Current and Projected Workload Commitment	***50%***	***40%***	***10%***
Northern Geotech. Engineering	Alaska Railroad Corporation – Bridge 354.0	10%	5%	0%
Northern Geotech. Engineering	Alaska Railroad Corporation – Bridge 355.2	10%	5%	0%
Northern Geotech. Engineering	Trident Seafoods – LFS Dutch Harbor	5%	5%	0%
	Current and Projected Workload Commitment	***25%***	***15%***	***0%***
Rugged Coast Environmental	Other Public and Private Projects	10%	10%	0%
	Current and Projected Workload Commitment	***10%***	***10%***	***0%***

4. Team Experience with Similar Projects

Our experience with dock demolition and construction projects in Alaska is extensive. Most of these projects received the majority of their funding from federal sources, which established special conditions and reporting requirements. Our proactive review and understanding of all special requirements associated with any given funding entity alleviates compliance issues, ensuring participation in funding is not jeopardized.

Since 2015, ***proHNS*** has been involved in more than $100 million in federally funded construction projects in Alaska and the Lower 48. ***WMC*** has also handled federally funded projects totaling more than $110 million in the past seven years.

The RAISE grant helping fund most of the Lutak Dock Replacement project will be administered by FHWA on behalf of USDOT, an agency we are very familiar with. WMC has constructed and proHNS has administered many FHWA-funded projects, so we understand the requirements surrounding certified payroll, EEO, DBE, Buy America/Buy American, and prevailing wages. For example, WMC and its subcontractors on this project will need to pay workers the higher of the Davis Bacon and State of Alaska rates, as the project includes State funding as well.

Project: Haines Ferry Terminal Improvements — **Client:** Alaska Department of Transportation
Federal Funding Source: Federal Highway Administration — **Cost:** $15 million — **Completed:** 2016

Located adjacent to the Lutak Dock, the Haines Ferry Terminal Improvements included many elements that are identical to this project's scope. As the Prime Contractor on the Haines Ferry Terminal Improvements, Western Marine Construction successfully removed existing cellular sheet pile structures and constructed a riprap slope, sheet pile retaining walls, a pile-supported mooring dolphin and fender system, and associated access structures.

Work included offshore dredging to provide sufficient water depths along the face of the berth for safe vessel use. Additional upland areas were also developed to offset land area losses as a result of the removed sheet pile structures and to allow reconfiguration and expansion of the uplands for two separate vehicle staging areas.

Northern Geotechnical Engineering provided guidance when challenging pile driving conditions were encountered at the project site. With NGE's expertise, WMC was able to successfully install the piling without incurring significant damage to the piling or compiling significant cost overruns due to the unexpected driving conditions.

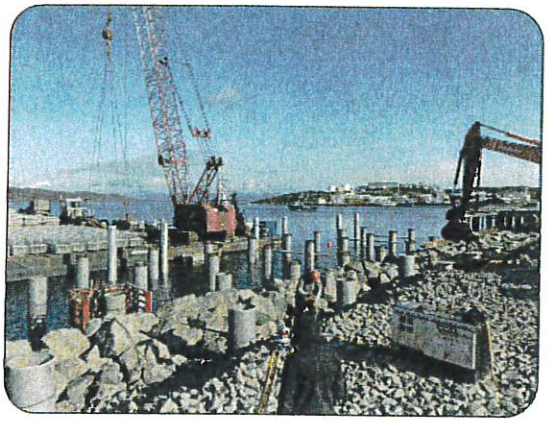
Funded through the USDOT via AK DOT&PF, WMC secured full federal funding participation by ensuring compliance with various programs including Buy America provisions, Davis Bacon wages and certified payrolls, and DBE commitments.

Project: Tenakee Ferry Terminal Improvements — **Client:** Alaska Department of Transportation
Federal Funding Source: Federal Highway Administration — **Cost:** $11 million — **Completed:** 2020

Western Marine Construction and proHNS worked together on this project that replaced the existing Tenakee fuel dock and ferry terminal facility, an experience that led directly to our partnership on this proposal. WMC led a value-engineering change proposal (VECP) effort to redesign the staging dock, utility building, fueling system, and electrical systems providing cost savings, schedule savings, and a more functional facility. WMC also led the design and environmental permitting effort to proceed with the VECP concurrent with ongoing procurement and construction eliminating possible project delays. Our team's efforts ultimately earned an AGC Excellence in Construction award for this project.

The final scope of work included 7 EA 12" pipe pile, 34 EA 18" pipe pile (14 EA rock-socketed), 11 EA 24" pipe pile (4 EA rock-socketed), 12 EA 30" pipe pile, 34 post-tensioned rock anchors, 2300 CY of core rock fill, 3000 CY of armor rock, superstructure steel framing, precast concrete deck panels, floating docks, 3 EA mooring dolphins, fender system, transfer bridge, Flexifloat-supported vehicle transfer system, utility building, fuel distribution system, and electrical.

Project: Sand Point City Dock Replacement
Owner: Alaska Department of Transportation
Federal Funding Source: Federal Highway Administration
Cost: $11.4 million **Completed:** 2019



As the Prime Contractor on this project located in the Aleutians East Borough, Western Marine Construction constructed a new concrete freight and ferry dock supported by concrete-filled steel pile into the face of an existing rubble-mound breakwater and new mooring dolphin.

Western Marine utilized its decades of Alaska and Aleutian experience to complete this project in a single season. With the late project award, WMC proactively committed resources to the project commencing aggregate and armor rock production while final funding was obtained to complete the project. However, to maintain a reasonable project budget, Western Marine understood the limited work window available and proactively ordered materials and expended resources to eliminate any impacts from the delayed award period. In approaching the schedule with demobilization as a high priority, WMC committed additional resources to the project to ensure maintenance of the schedule.

The dock and mooring dolphin construction included installation of 13 EA 24" pipe pile (up to 120' length), 52 EA 30" pipe pile (up to 130' length), 525 CY of tremie-placed drilled shaft concrete, precast pile caps and deck panels, 400 CY of CIP structural concrete, steel fender system, electrical, storage building, upland grading, and miscellaneous dock appurtenances. Breakwater modifications included salvaging and replacing 5,000 CY of armor rock, production and placement of 16,000 CY of new core rock, and production and placement of 3,500 CY of new armor rock in compliance with USACE standards and permits.

Project: Seldovia Bay Ferry Dock Refurbishment
Owner: City of Seldovia
Federal Funding Source: Federal Transit Administration
Cost: $960,000 **Completed:** Est. 2023

Ryan Bare of Rugged Coast Environmental was hired as a NEPA/ESA Specialist for this project that refurbished, reinstalled, and reoriented the Seldovia Bay Ferry Dock. The project involved the removal and installation of up to 24" diameter steel piles by down-the-hole drilling (DTH), and vibratory and impact pile driving in marine waters, and therefore required much of the same environmental permitting and consultation the Lutak Dock Replacement project will need. (EPA documentation, MMPA/ESA/EFH/106/etc.)

The project was funded by the Federal Transit Authority in several phases. Ryan expedited the NEPA process and fast-tracked informal consultation with NMFS Protected Resources Division in order to complete the FTA environmental document by the September 2021 deadline to move into Phase II grant disbursement. By completing the environmental process by the Sept 2021 deadline, SVT was able to receive the next Phase of grant money from the FTA and keep the project on track.

Project: Ruby Marine River Barge Dock and Launch
Owner: Ruby Marine, Inc.
Federal Funding Source: N/A
Cost: $2.2 million **Completed:** 2020

Though this project did not involve federal funding, we have elected to highlight this Northern Geotechnical Engineering project because of its similarity with several components of the Lutak Dock. The goal of the project was to provide deeper river barge moorage draft and improve barge loading/offloading capabilities, as well as improve bank stability, reduce riverbank erosion and launch ramp sedimentation, and provide for a more reliable tug/barge launch.

NGE's role included design of a 600-ft long sheetpile bulkhead river barge dock along the north bank of the Tanana River near the town of Nenana, AK, as well as design of a 60-ft wide concrete-lined earthen tug/barge launch ramp for a river tug/barge operator servicing lower Tanana and Yukon River communities. NGE efforts included a geotechnical assessment of the riverbed conditions, design of the bulkhead wall and tie-back anchors, selection and design of materials, and on-site engineering support and inspection during construction, as well as AK DNR lease application/support, USACE construction permitting, and as-built drawings of the completed dock improvements.

5. Approach to the Project

Our team strongly believes the best, most cost-effective contracting method for the Lutak Dock Replacement project is a ***progressive design-build project delivery***. The graphic below depicts our team's abbreviated approach to reaching contracting, design, permitting, and construction milestones. A detailed bar chart project schedule is included in Appendix C.

April 2022

Once notified we are the winning proposer, we will immediately begin developing a 35% design and full permitting services fee proposal for Borough consideration. Part of this effort will include discovery of any and all resources that may be of use during the project, such as all preliminary engineering and prior permitting efforts for nearby facilities.

June 2022

Following approval of our 35% design and permitting contract, we will proceed expeditiously to obtain additional field data through site surveying and geotechnical investigations while simultaneously beginning civil design and permitting efforts. Permitting will continue to run concurrently with design tasks for the project duration.

Fall 2022

After reaching 35% design completion, we will submit plans to the Haines Borough for review and approval, and following any revisions, submit 35% plans to the Planning Commission. We will then begin negotiating an amendment to our existing contract for 65%, 95%, and final design services, as well as physical construction of the facility.

April 2023

Winter of 2022-23 will see the submission of 65% and 95% plans to the Haines Borough.The environmental permitting process, which will have been moving forward since approval of our 35% contract, will be completed at this time. Final design plans and technical specifications will be submitted to the Haines Borough for review and approval.

May 2023

With the National Environmental Policy Act (NEPA) process completed and environmental permits obtained for the project, we will begin with Phase 1 and 2 construction following receipt of Notice to Proceed with construction from the Haines Borough. Phases 1 and 2 will include demolition, dredging, pile driving, marine structure erection, and bulkhead wall construction.

Oct. 2023

We have accounted for a winter shutdown period of Oct. 2023 to March 2024. While our team will seek opportunities to continue productive and efficient construction at the site from mobilization to project completion, our approach to the project and proposed schedule will allow for a winter shutdown period to mitigate the risk of weather impacts on production.

March 2024

Following winter shutdown, we will return to the site to continue work on Phases 1 and 2, with the goal of reaching substantial completion by Oct. 2024. The scope of Phases 2 and 3 overlaps considerably, and if we can proceed with Phase 3 concurrently with Phases 1-2, we believe we will only need an additional month to reach substantial completion of Phase 3 by Nov. 2024.

Nov. 2024

We anticipate construction will reach substantial completion by Nov. 2024, and final punch list, as-built documentation, and other project closeout activities will be completed prior to the Dec. 2024 deadline. Our team's schedule includes a substantial amount of float that maximizes our ability to meet both Haines Borough and funding partner required deadlines.

To accomplish the three primary goals we identified at the beginning of this Statement of Qualifications, our team offers the following approach-driven advantages and innovations to maximize facility usability, reduce costs, expedite the schedule, increase community buy-in, and generally make the project as successful as possible.

1 **Goal:** Design, permit, and construct all three phases of the Lutak Dock Replacement project

Our team's advantages and innovative ideas associated with this goal are those that reduce costs or constitute unique approaches to construction of the project in the interest of maximizing savings and reducing risk.

☑ **Constructing All Three Phases with Existing Funds.** We believe we can construct all three phases of the Lutak Dock Replacement within the stated funding constraints by providing cost-effective design, permitting, and construction services. By contracting with the Borough at both the 35% design phase and final design/construction phase, we can

focus our early efforts on developing a project scope that meets the facility requirements and jump-starts the permitting process, while also minimizing the risk of proposing an over-inflated construction fee as part of the first contracting phase. Once we have 35% plan approval by the Haines Borough and Planning Commission, our team will negotiate a contract with the Borough for remaining design phases and construction of the facility. This two-phase contract approach ensures our team has a well-defined scope of work and clear goals for the project, which in turn will allow the parties to negotiate the most accurate and fair contract terms possible.

☑ **Aggregating Existing Data.** Part of our 35% design development will include discovery of any and all information relevant to the project. This includes obtaining copies of the preliminary engineering performed by R&M Consultants of Anchorage, prior engineering and permitting for the Alaska Marine Lines roll-on/roll-off facility, and a complete copy of AK DOT&PF's project file for the Haines Ferry Terminal project. This information, coupled with our team's unique historical knowledge of similar work at the facility, will ensure we do not duplicate prior efforts and maximizes the use of available data to deliver a cost effective 35% design.

☑ **Utilizing Site-Specific Knowledge, Experience, and Records.** From our experience overcoming the various demolition and pile-driving challenges on the Haines Ferry Terminal Improvements project, we are uniquely positioned to address and mitigate potential issues through design processes and contingencies to reduce the risk of unknowns when developing the project budget. Our existing geotechnical research and reports generated during the Haines Ferry Terminal project will save grant funds and give us a head-start on design.

☑ **Capitalizing on Established Relationships with Suppliers and Subcontractors.** We have established relationships with subcontractors and material suppliers who will provide the resources to construct the project in the most cost-effective manner. By waiting to negotiate agreements for subcontracted work and imported materials until after the 35% design is completed, we can ensure the most accurate and fair cost estimates possible are developed for this specific project. Additionally, we have spent decades working with and managing industry partners in Southeast Alaska, partners who will help ensure the project is completed on or ahead of schedule.

☑ **Exploring Potential Design and Construction Innovations with the Owner.** Our team has brainstormed a multitude of technical design and construction innovations for discussion with the Haines Borough prior to reaching 35% design completion. Though these ideas may not pan out once fully explored, and others may have already been eliminated during conceptual development and preliminary engineering, all ideas will be considered worthy of discussion and those with merit presented to the Haines Borough for consideration.

2 Goal: Develop and construct a project with the backing of the community, stakeholders, and users

Our team's advantages and innovative ideas associated with this goal focus on preserving Owner vision, increasing facility usability, and maximizing public participation.

☑ **Prioritizing Ports and Harbors Advisory Committee Involvement.** The Haines Borough's Ports and Harbors Advisory Committee has been instrumental in developing the vision for the Lutak Dock Replacement Project and will continue to play a major role in its design and completion. Approximately two to three weeks prior to submitting 35%, 65%, and 95% plans to the Planning Commission as required by Borough Code, we can present these plan document milestones to the Ports and Harbors Advisory Committee for review and input. Our goal is to ensure the project meets the intent of the Ports and Harbors Advisory Committee's vision before submitting plans to Planning Commission for formal approval.

☑ **Providing Support for Public Meetings.** Our team will utilize our experience with the Haines community to provide the Borough with public outreach, coordination, and meeting support. While the Borough will still lead the public process, our team will distribute information, provide presentation content, and supply keynote speakers necessary to ensure success. The timing of meetings and our level of participation in the public process will be determined during contract negotiations, but our schedule proposes presentation of the project at two public open house meetings in

Haines prior to submitting 95% Plans for Planning Commission review. We propose holding identical open houses on both a weekday and weekend to ensure ample opportunity for public input. Feedback received at the open houses can be documented and submitted to the Haines Borough for consideration.

☑ **Supporting Owner Relationships with Facility Users and Stakeholders.** During project development we will monitor the actions and meeting minutes of the Lutak Dock Design Working Group to stay abreast of discussion topics and decisions. The group consists of existing facility users (AML, Delta Western), representatives from relevant Borough committees and commissions, and the Mayor. We also recommend the Borough continue to engage representatives from other community groups (such as the Haines Chamber of Commerce, Alaska Miners Association - Haines Chapter, Lynn Canal Conservation, Takshanuk Watershed Council, etc.), and we can provide periodic project updates to these groups as directed or requested by the Borough.

☑ **Further Evaluating Short-Term Facility Needs and Long-Term Potential Uses.** Prior to reaching 35% design completion, we will work with and pose questions to the Haines Borough to further evaluate and design for short-term and long-term facility needs. Questions might include: Do you anticipate new facility users in the future? What type of other freight or export activities could the facility support? Are there industries not currently served by the facility that should be? How could this facility continue supporting Alaska Marine Lines if their current ramp is ever damaged?

While many of these questions may have already been asked, with the input we receive from the Borough, our team can suggest alternatives that fit within the current budget and provide recommendations on how to plan for additional development that meets future needs. Our combined operations, construction, and design knowledge will help ensure reasonable and cost-effective solutions are developed for current and future facility needs.

3 Goal: Complete the project by December 2024 and ensure full funding participation

Our team's advantages and innovative ideas associated with this goal focus on environmental permitting lead times, expediting strategies, quality control actions, and other processes to reduce the project schedule while ensuring full funding participation.

☑ **Expediting the Environmental Process.** Using recent IHAs, environmental documents, USACE permits, and biological assessments from similar projects in northern Lynn Canal as reference points, our team can reduce research time of environmental staff, resultant project costs, and speed up the permitting and environmental processes. Our environmental team has a curated EndNote library of over 30,000 peer-reviewed scientific articles to draw from for the drafting of IHA application and biological assessment which will also save significant time and money.

☑ **Ensuring On-Time Submission of Documents and Deliverables.** Haines Borough Assembly and Planning Commission meetings occur on a set calendar schedule, with the former meeting twice a month and the latter only once. To ensure Borough Code-required review and approval processes for contracts and plans take place at these meetings are not missed or are unnecessarily delayed, our team will submit documents slated for review and approval a minimum of one week in advance of meetings.

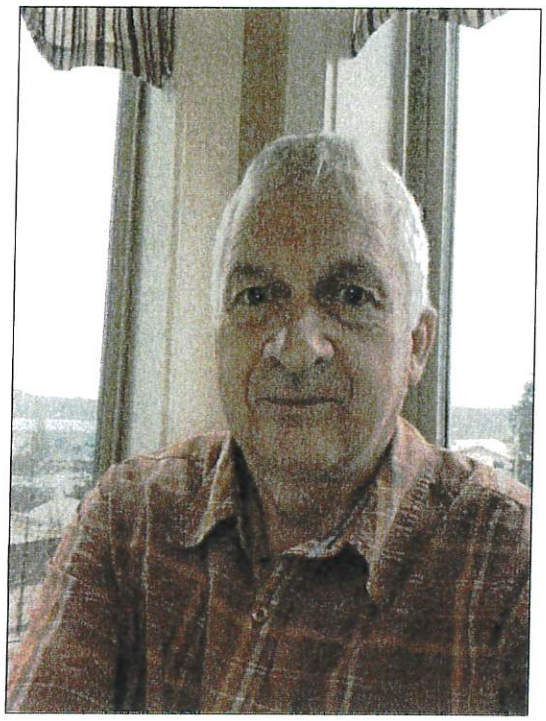
☑ **Developing a Contractor Quality Control Plan.** To ensure full funding participation, our team will develop a Contractor Quality Control Plan (CQCP) for Borough review and approval. The CQCP will outline how materials on the project are deemed acceptable, what submittals are prepared and provided to the Owner, materials sampling & QC testing, best practices that will be employed, and daily reports that will be provided to the Borough. This process will ensure no funding source requirements are overlooked during construction, such as Buy American procurement standards and Davis-Bacon Act prevailing wages.

☑ **Preparing Early for Funding Agency Project Closeout Processes.** Working through the Haines Borough and prior to finalizing the 35% design, our team will engage with funding agency partners to fully understand what deliverables and contracting processes must be documented to ensure full funding participation. By identifying these deliverables well before reaching closeout, we can minimize the risk of non-participation by funding partners and ensure the project closeout process is completed in advance of any deadlines associated with funding obligations and expenditures.

Lutak Dock Replacement Design and Construction

Appendix A: Key Team Member Resumes

WESTERN MARINE CONSTRUCTION, INC.



Kriss E. Hart
Contract Manager/President

Mr. Hart has 34 years of experience in marine construction including; pile driving, underwater drilling, dredging, blasting, excavation, outfall, mooring systems, rock production, breakwaters, floating breakwaters and facilities, revetments, docks, ferry terminals, dolphins. Kriss first began working for Western Marine as a land and hydrographic surveyor on the Whittier Harbor Expansion project in 1980. Since that time, Kriss has had extensive experience in both new and reconstruction of marine facilities in most Alaskan Harbors from Ketchikan in the southeast and throughout Atka on the Aleutian Islands. Mr. Hart also has training and experience in surveying, QC Control/Management, HAZWOPER, first aid/CPR, and project management. He has been directly involved in most Western Marine's projects since 1981.

Years with WMC: 34 years

Education

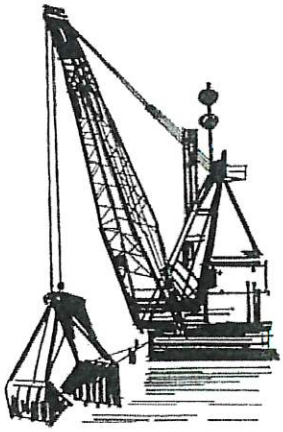
- Juneau/Douglas High School
- Western Washington University
- Oregon State University, Construction Engineering

Active Registrations and Certifications

- USACE: Construction Quality Management for Contractors
- Licensed Tug Operator
- Certified Diver
- First Aid/CPR Certified

Project Assignments

- Superintendent
- Quality Control Manager



WESTERN MARINE CONSTRUCTION INC.

Julian Koerner, P.E.
Project Manager

With over 15 years' construction industry experience, Mr. Koerner brings extensive construction experience. Julian provides leadership and knowledge in the execution of heavy-civil, marine, pile driving, deep foundations, and structures projects utilizing both conventional design-bid-build and alternative project delivery methods. Having fulfilled progressively vital company and project roles, Mr. Koerner is skilled in managing complex projects and their progression from inception to completion including estimating, coordination, budget control, quality control, scheduling, safety, and project issue resolution.

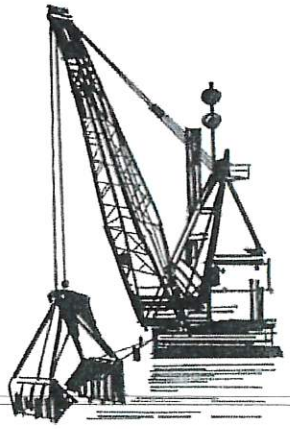
Joined WMC: July 2019

Education

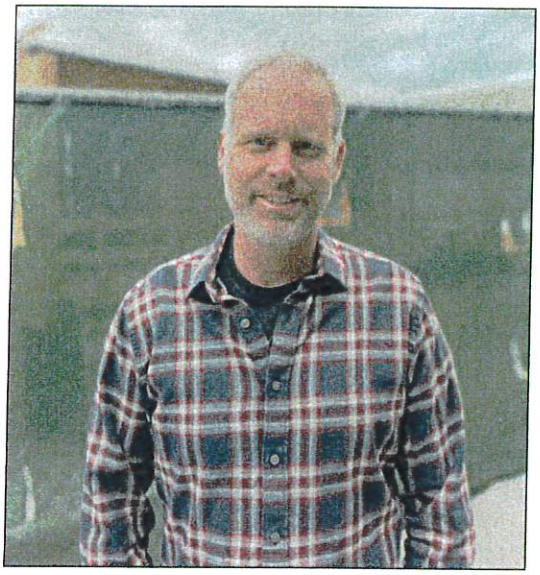
- Sturgis High School (Sturgis, SD)
- South Dakota School of Mines & Technology, BS Civil Engineering
- South Dakota School of Mines & Technology, MS Construction Management

Active Registrations and Certifications

- USACE: Construction Quality Management for Contractors
- Professional Engineer, State of Alaska #110734
- Professional Engineer, State of Washington #58148
- Professional Engineer, State of Oregon #88246PE
- First Aid/CPR Certified
- 30-Hour OSHA #35-602001196



WESTERN MARINE CONSTRUCTION INC.



Patrick McHugh
Project Superintendent

Mr. McHugh graduated from the Washington State University School of Architecture with a degree in Construction Management in 1996. After graduation, Patrick's roles as Project Engineer consisted of quality control manager on several fast track large projects. These early projects set the foundation for a career in construction with a complete understanding of the necessary systems needed to ensure quality construction. Over the next 12 years, Patrick was promoted to Project Manager and Senior Project Manager. In 2009, Western Marine recruited Patrick to join the team to aid with management, scheduling, estimating and project quality control. Since joining Western Marine, Patrick has been involved in the completion of all types of marine construction including, dredging, piling, breakwaters, floats, bridges and ferry terminals

Joined WMC: December 2009

Education

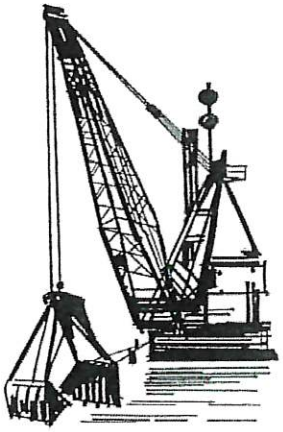
- Sammamish High School (Bellevue, WA)
- Washington State University, Bachelors of Science in Construction Management

Training and Certifications

- USACE: Construction Quality Management for Contractors
- Certified Erosion and Sediment Control Lead
- PADI Certified Dry Suit Diver
- First Aid/CPR Certified

Project Assignments

- Superintendent
- Alternate Safety Manager



WESTERN MARINE
CONSTRUCTION INC.

Garret K. Gladsjo, PE

Design Manager
Juneau, AK

Education

Bachelor of Science
Civil Engineering
Washington State University

Registration

AK Professional Civil Engineer
AELC #14469

Certifications

Alaska Certified Erosion and Sediment Control Lead
#PHS-22-0001

AK-CESCL Master Instructor

WAQTC Technician #943

American Traffic Safety Services Association Certified Traffic Control Supervisor

References

Christopher Goins, PE
AK DOT&PF Southcoast Region
907-465-8884

Garrett Paul, PE
AK DOT Southcoast Region
907-465-1897

Edward Coffland, PE
Haines Borough
907-766-6414

proHNS LLC

Professional Experience

Garret is a licensed professional civil engineer and the manager of proHNS's Juneau branch. His experience over the last decade includes employment with Snohomish County Public Works, Reichhardt & Ebe Engineering, and the Alaska Department of Transportation and Public Facilities (AK DOT&PF). Garret has administered construction contracts for federal, state, and municipal projects, managed and trained project staff, performed design engineering, prepared contract documents, and navigated the complex relationships between members of the public, government agencies, and private industry. In 2021, he was named one of the Alaska Journal of Commerce's Top 40 Under 40, a recognition of outstanding young professionals in the State.

Skills and Expertise

Contract Administration: As contract administration team leader, Garret has been responsible for the preparation of bid documents, project scheduling, agency coordination with public and private entities, review/approval of project submittals, issuance of progress estimates, field engineering, construction inspection, materials sampling/testing, change orders, and contract dispute resolution.

Project Management: Garret is experienced managing teams of up to 10 engineers, technical specialists, and support staff with varying backgrounds on projects ranging in cost from $5,000 to $5 million. Superior cost and schedule control is where Garret sets himself apart from other project managers, largely due to his ability to recognize the potential pitfalls of any given project and head them off at the pass.

Relevant Project Experience

Gustavus Airport Apron, Runway, and Taxiway Pavement Rehabilitation

AK DOT&PF • Gustavus, AK • 2021

This FAA-funded project addressed multiple safety concerns by resurfacing and rehabilitating the existing taxiways, aprons, and runways. Garret deftly managed this project from afar, particularly impressive given the controversy surrounding the site's PFAS contamination. His partnering-based approach and coordination with State agencies such as DEC, DNR, and other stakeholders allowed construction to move forward and successfully complete in Fall 2021, despite significant doubts that the project would be able to move forward.

Egan Drive 10th to Main Street Improvements

AK DOT&PF • Juneau, AK • 2019-2021

Garret was the Project/Contract Manager for this complex, high-profile improvement project in downtown Juneau. He was responsible for the overall quality of construction administration services rendered, and oversaw, reviewed, and reported all schedules, billings, progress, and budgets to DOT&PF. He directly oversaw a staff of seven CA/I proHNS personnel, three subcontractors, and an independent cost estimator. The project was very successful, and earned the 2020 Outstanding Project of the Year Award from the American Society of Civil Engineers (ASCE) Alaska Section – Juneau Branch.

Tenakee Ferry Terminal Improvements

AK DOT&PF • Tenakee Springs, AK • 2020

proHNS provided a full team to perform contract administration and inspection services for all work on this $11.2 million project that reconstructed the existing Tenakee city dock and DOT&PF ferry terminal facility. Working remotely from the Juneau office, Garret served as the Project/Contract Manager and was responsible for construction engineering cost control, direct oversight to ensure conformance with contract documents, and all proHNS staff and subcontractors.

Ryan Bare

Principal Environmental Manager at Rugged Coast Environmental

CONTACT [redacted]

[redacted]

[redacted]

[redacted]

SUMMARY

Senior level environmental reviewer and regulatory specialist for the federal government with 9 years of experience working on federally-funded projects in Alaska.

EDUCATION

Graduate Studies
Biology
Valdosta State University | Valdosta, GA
2010-2012

Bachelor's of Science
Biology
Georgia Southwestern State University | Americus, GA
2006 - 2010

Areas of Expertise

- NEPA Documentation
- ESA Documentation
- MMPA Documentation
- Federal Permit Review
- Permit Preparation
- Project Management
- Agency Consultation
- Biological Sampling
- Environmental Sampling

WORK EXPERIENCE

Bridge Management Specialist
USCG | Juneau, AK | 2020 – Present

-Reviewing permit applications and required environmental documentation for organizations seeking bridge permits from the US Coast Guard.

-Recent projects have included:

- Nanushuk Project, Oil Search LLC.
- Seward Hwy MP 75-90, AKDOT&PF
- Ambler Road Project, AIDEA

-Preparing environmental documentation as required, including Categorical Exclusions (CEs), Environmental Assessments (EAs), Findings of No Significant Impact (FONSIs), and Records of Decision (RODs).

NEPA/ESA Specialist@, *AK | 2020-Present*

-Drafting environmental documents and consulting with agencies on behalf of the Seldovia Village Tribe to meet Federal Transit Administration grant requirements.
-Evaluating potential environmental impacts from the proposed Seldovia Bay Ferry Dock Refurbishment Project.
-Preparing the following documentation and correspondence for consultation with regulatory agencies:

- Section 106 consultation(Historic Preservation)
- Essential Fish Habitat Assessment
- Endangered Species Act (Informal consultation)
- Draft EA
- Biological Assessment for Sec 7 ESA consultation

Senior Environmental Impact Analyst
Alaska DOT&PF | Juneau, AK | 2018-2020

-Running the environmental process for transportation projects to ensure NEPA/ESA/MMPA/Section 106/4f/CWA and all applicable environmental laws are complied with and appropriate permits are obtained.

-Projects relevant to Lutak Ferry Terminal included

- Herring Cove Bridge
- Metlakatla Seaplane Facility Refurbishment
- Katlian Bay Road
- Klawock Airport Runway Expansion
- Hyder Levee Rehabilitation
- Kodiak Airport Perimeter Fencing Upgrades

Keith F. Mobley, P.E., G.E.

President | Principal Geotechnical Engineer

EDUCATION

B.S., Civil Engineering, Montana State University, Bozeman, MT - 1976
M.E., Geochemical Engineering, Dartmouth College, Hanover, NH – 1988

PROFESSTIONAL REGISTRATION

P.E., Civil Engineering: Alaska (CE 5066)
P.E., Civil Engineering: California (CE 30683)
G.E., Geotechnical Engineering: California (GE 2389)

GENERAL EXPERIENCE

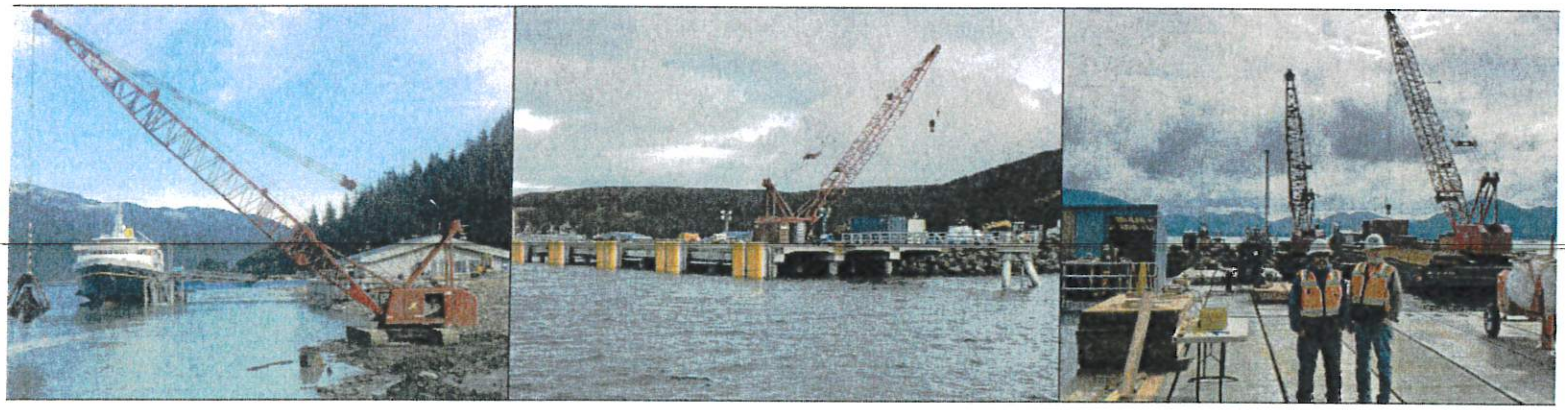
Keith has over 40 years of experience as a geotechnical engineering consultant in Alaska. Keith specializes in cold regions geotechnical engineering and waterfront design. In 2000, Keith founded Northern Geotechnical Engineering which has expanded its service to include geotechnical engineering, laboratory and field material testing, special inspection, instrumentation, and construction management for waterfront and earthworks projects. Many of the projects that Keith has completed have involved unconventional techniques for obtaining the subsurface information needed to properly design the project. Keith specifically tailors the methods used to match the available equipment and the purpose of the design. Keith's designs are also modified from the conventional to match the specific purpose of the project, the environment in which the project is located, and the equipment most easily available to complete the construction. Keith's experience completing construction projects in remote locations in Alaska provides a solid background for the design process and a unique ability to adapt the constraints imposed on engineering operations in arctic, subarctic, and maritime environments.

RELEVANT PROJECT EXPERIENCE

- LFS Captains Bay Facility Assessment & Design – Unalaska, AK - 2022
- KLNG Shore Stabilization Wall – Nikiski, AK – 2021
- Trident Seafoods Dock Repair Assessment – Sand Point, AK - 2021
- Ruby Marine Barge Dock and Tug/Barge Launch – Nenana, AK – 2020
- Chulitna Bluffs Shore Stabilization Wall – Kenai, AK - 2018
- PetroStar Dolphin Mooring Piles – Valdez, AK – 2017
- Trident Seafoods Cordova Boat Harbor Fish Offload Dock – Cordova, AK - 2017
- Alaska Marine Highway Ferry Terminal Improvements – Haines, AK – 2014-15
- Statter Harbor Fill Consolidation Monitoring – Auke Bay - Juneau, AK – 2014
- Trident Seafoods Akutan Processing Facility East Dock Expansion – Akutan, AK – 2012
- Trident Seafoods Akutan Processing Facility West Dock Repairs – Akutan, AK – 2004

Lutak Dock Replacement Design and Construction

Appendix B: Professional Service Rates



WESTERN MARINE CONSTRUCTION, INC.

Personnel Costs and Estimated Reimbursable Expenses

In response to Minimum Qualification Statement 5, professional rates for WMC's key team members are broken down below:

Firm Name	Key Team Member	Hourly Billing Rate
Western Marine Construction	Kriss Hart	$75.00*
Western Marine Construction	Julian Koerner	$75.00*
Western Marine Construction	Patrick McHugh	$75.00*
proHNS	Garret Gladsjo	$156.00
Northern Geotechnical Engineering	Keith Mobley	$225.00
Rugged Coast Environmental	Ryan Bare	$100.00

**WMC maintains an Owner friendly policy regarding time and effort for initial design and project development cost and does not intend to charge for its' time to progress the design to 35%.*

Estimated reimbursable expenses and potential costs the WMC Team anticipates incurring include, but are not limited to, the following:

Description of Cost	Cost Rate	Quantity	Estimated Cost
Public Open House/Meetings (room rental, refreshments, etc.)	$500.00 / Meet	2	$1,000.00
Personnel Air Travel JNU-HNS-JNU During Design Develop.	$325.00 / Trip	10	$3,250.00
Personnel Lodging in Haines During Design Development	$150.00 / Night	20	$3,000.00
Personnel Per Diem While in Haines During Design Develop.	$60.00 / Day	40	$2,400.00
Personnel Mobilization via HNS HWY During Design Develop.	$0.58 / Mile	1600	$928.00

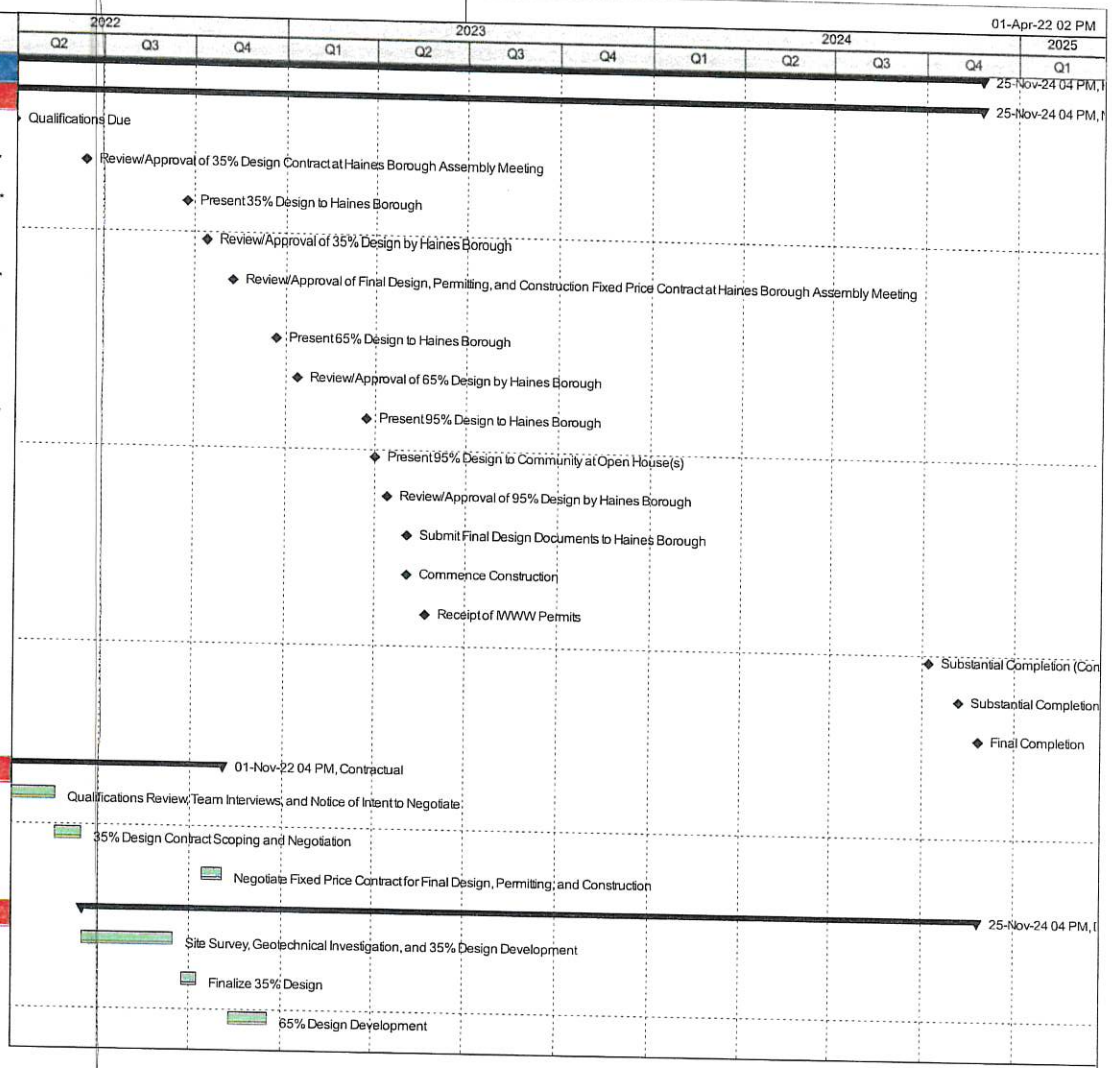
Lutak Dock Replacement Design and Construction

Appendix C: Project Schedule

WESTERN MARINE CONSTRUCTION, INC.

Haines Lutak Dock Replacement

Activity ID	Activity Name	Original Duration	Start	Finish
Haines Lutak Dock Replacement		932d	04-Apr-22 08 AM	25-Nov-24 04 PM
Milestones		932d	04-Apr-22 08 AM	25-Nov-24 04 PM
M1000	Qualifications Due	0d	04-Apr-22 08 AM	
M1010	Review/Approval of 35% Design Contract at Haines Borough Assembly Meeting	0d		14-Jun-22 04 PM*
M1020	Present 35% Design to Haines Borough	0d		22-Sep-22 04 PM*
M1030	Review/Approval of 35% Design by Haines Borough	0d		13-Oct-22 08 AM*
M1040	Review/Approval of Final Design, Permitting, and Construction Fixed Price Contract at Haines Borough Assembly Meeting	0d		08-Nov-22 04 PM*
M1050	Present 65% Design to Haines Borough	0d		22-Dec-22 08 AM*
M1060	Review/Approval of 65% Design by Haines Borough	0d		12-Jan-23 08 AM*
M1070	Present 95% Design to Haines Borough	0d		23-Mar-23 04 PM*
M1080	Present 95% Design to Community at Open House(s)	0d		01-Apr-23 08 AM*
M1090	Review/Approval of 95% Design by Haines Borough	0d		13-Apr-23 08 AM*
M1100	Submit Final Design Documents to Haines Borough	0d		02-May-23 04 PM
M1120	Commence Construction	0d	03-May-23 08 AM	
M1110	Receipt of IWWW Permits	0d		21-May-23 04 PM
M1130	Substantial Completion (Construction Phases 1-2)	0d		06-Oct-24 04 PM
M1135	Substantial Completion (Construction Phases 1-3)	0d		05-Nov-24 04 PM
M1140	Final Completion	0d		25-Nov-24 04 PM
Contractual		209d	04-Apr-22 08 AM	01-Nov-22 04 PM
C1000	Qualifications Review, Team Interviews, and Notice of Intent to Negotiate	45d	04-Apr-22 08 AM	18-May-22 04 PM
C1010	35% Design Contract Scoping and Negotiation	25d	19-May-22 08 AM	13-Jun-22 04 PM
C1020	Negotiate Fixed Price Contract for Final Design, Permitting, and Construction	20d	13-Oct-22 08 AM	01-Nov-22 04 PM
Design		861d	15-Jun-22 08 AM	25-Nov-24 04 PM
D1000	Site Survey, Geotechnical Investigation, and 35% Design Development	90d	15-Jun-22 08 AM	14-Sep-22 04 PM
D1010	Finalize 35% Design	15d	23-Sep-22 08 AM	07-Oct-22 04 PM
D1020	65% Design Development	35d	09-Nov-22 08 AM	17-Dec-22 04 PM



Project Baseline Bar
Actual Work
Remaining Work
Critical Remaining Work
Milestone
Summary

WESTERN MARINE CONSTRUCTION, INC.

General Info

Total:

Number

RFQ HB 22- 01

Deadline

04/04/2022 11:00 PM UTC

Vendor

Pacific Pile & Marine, L.P.

Submitted

04/04/2022 08:37 PM UTC

Signed by

Chris Willis
Account Holder Chris Willis

Opened

04/04/2022 11:08 PM UTC **By** cwooton@haines.ak.us

Description

The Haines Borough is soliciting qualifications from qualified and licensed firms to perform the work for the Design, Permitting & Construction of the Lutak Dock.

DESCRIPTION OF THE PROJECT: The Lutak Dock is a deep-water port located in Haines, Alaska. The dock is 1,100 feet long and includes 15 cellular structures, closure arcs, and a concrete cap. The United States Army Corps of Engineers (USACE) designed Lutak Dock and completed its construction in 1953. The Lutak Dock regularly accommodates regularly scheduled shipments of fuel and freight, both of which support consumer and industrial activities in the region. The dock utilizes a closed-cell bulkhead configuration, with closure arcs to prevent loss of fill. The entire Lutak Dock Replacement contains three distinct construction phases; however, this project will provide Engineering, design, and permitting for all three phases of the project; and construction for phases I and II. Permitting for the project will require U. S. Army Corps of Engineers (USACE) Section 10/404 Permitting, National Marine Fisheries (NMFS) Incidental Harassment Authorization (IHA) Permitting, and NEPA Compliance.

The Haines Borough recently received a Rebuilding American Infrastructure with Sustainability and Equity (RAISE) grant of $20,000,000.00 from the Department of Transportation and seeks a project with a budget not to exceed $25,611,284.00. All interested firms are required to be registered in Alaska and have an Alaska Business License. A Haines Business License is required prior to contract award.

Allows zero unit prices and labor

No

Allows negative unit prices and labor

No

Addenda List and Acknowledgement

Addendum #1 Add 35% Conceptual Drawings to the Attachment list

Addendum #2 Extend time for Questions until 3/31/22, Zoom link and add Addendum list and acknowledgment.

Respondent acknowledges receipt of the following addenda (click + to add addenda or type N/A if no addenda have been issued.)

Addendum No: *

1

Initial: *

CJW

Respondent acknowledges receipt of the following addenda (click + to add addenda or type N/A if no addenda have been issued.) 1

Addendum No: *

2

Initial: *

CJW

Scope of Work

Interested project teams will take the Haines Borough's 35% conceptual designs through design (35/65/95%), permitting work, and final construction of the Lutak Dock Replacement. The team must demonstrate familiarity with federal procurement rules 2 CFR 200.319 – 2 CFR 200.320. Potential teams will be required to make recommendations to the Haines Borough of the best, most cost-effective manner to design and construct the Lutak Dock. The chosen project team must have the ability to work with the Borough Assembly, staff, stakeholders, and community members to design a new facility. The timeline for completion of Lutak Dock Replacement is December 2024.

RFQ Opening will take place on Zoom on Monday, April 4, 2022 at 3 pm. If you would like to attend please use the following link:

Join Zoom Meeting

https://us06web.zoom.us/j/86969633250?pwd=NzRKbFJzVWpsRmpNcWt0UDVOVXVDdz09

Meeting ID: 869 6963 3250

Passcode: 061264

One tap mobile

+12532158782,,86969633250#,,,,*061264# US (Tacoma)

+13462487799,,86969633250#,,,,*061264# US (Houston)

Dial by your location

+1 253 215 8782 US (Tacoma)

+1 346 248 7799 US (Houston)

+1 669 900 6833 US (San Jose)

+1 301 715 8592 US (Washington DC)

+1 312 626 6799 US (Chicago)

+1 929 205 6099 US (New York)

Meeting ID: 869 6963 3250

Passcode: 061264

Find your local number: https://us06web.zoom.us/u/kdkMZrJXin

Attachment List

Federal Procurement.pdf (253 KB)
2 CFR 200 Federal Procurement Guidance

NEPA Permitting Requirements.pdf (251 KB)
MARAD NEPA and Permitting Guidelines

RFQ Lutak Dock Replacement (246 KB)

Phase 1 & 2 Site Plans (6.4 MB)

Addendum #1 Attach 35% Conceptual Drawings.pdf (330 KB)

Addendum #2 Extend Q & A Deadline, add to SOW.pdf (339 KB)

Minimum Qualification Statement Contents

1. Project Team name or names if joint effort. *

Our team is led by Pacific Pile and Marine with design support from PND Engineers. PND is supported by RESPEC Engineering and Great Northern Engineering.
See Attached PDF for more detailed information, we have developed a full proposal to address each of the following sections and the evaluation criteria. We hope that helps make review of our information easier. Please let us know if you have any questions.

2. The number of years in business and a brief history of the team members. *

PPM has been in business since 2008. PND since 1979. Our team's combined history teaming on large-scale projects in Alaska locales places us in a prime position to meet safety, quality, and compliance goals for the Lutak Dock Project. Our tight-knit associations allow designs tailored to meet the capabilities of the construction equipment that will be used on the project, creating a safer working environment for everybody involved in the field.
Providing constructability input early in the design phase about material costs, lead times, and our means and methods allows the design to be customized to our installation procedure, often reducing cost, accelerating the schedule, and protecting marine coatings, ultimately giving you a better final product.

Pacific Pile & Marine (PPM) and PND Engineers (PND) staff have collaborated on nearly 50 projects, dating back to 1996 when PPM was doing business as Hurlen Construction Company. When American Civil Constructors acquired Hurlen, our collaboration remained intact; we've worked together on 20 projects over the last 15 years, including critical design-build projects. One of our first design/build collaborations together was the design/build project at Adak Small Boat Harbor in 2002 in the middle of the Aleutian Chain.
In 2009 (as PPM), our two firms collaborated with the U.S. Army Corps of Engineers (USACE) and the City of Unalaska to design-build the Carl E. Moses Boat Harbor on Amaknak Island in Captains Bay – an award-winning $32M project in the Aleutian Islands.
In 2013, PND provided initial scoping and concept design to PPM for construction of the Offshore Systems, Inc. Dutch Harbor Marine Terminal, a facility in the Aleutians that serves bulk freight carriers and marine oil field service vessels.
In 2015, PPM constructed the Chignik Public Dock, a sheet-pile bulkhead dock in the Aleutians designed by PND for the Alaska Department of Transportation. PND and PPM worked together to effectively construct the facility while cost-efficiently addressing challenging site conditions and adhering to the project schedule.
Currently, PND and PPM are working together on a design-build project for the U.S. Navy at the Manchester Fuel Depot in Puget Sound, the Pentagon's largest single-site fuel terminal in the United States.
See Attached PDF for more detailed information

3. Experience in working on federally funded projects *

Both PPM and PND have extensive experience working on federally funded projects in Alaska with our work with the US Army Corps of Engineers, USAF, DOD, and Alaska DOT.
See Attached PDF for more detailed information

4. Experience in U. S. Army Corps of Engineers (USACE) Section 10/404 Permitting, National Marine Fisheries (NMFS) Incidental Harassment Authorization (IHA) Permitting, and NEPA Compliance.

PPM as a heavy civil marine contractor, and with PND being a marine civil engineering firm have extensive experience with USACE permitting NMFS, IHA, and NEPA Compliance. Additionally, we have extensive experience with sensitive marine environments requiring marine mammal observation and incredibly long permitting times. We know how to separate work activities to apply for permits in a sequenced approach that allows us to develop early work packages.

Our PDF shows highlighted projects that have included these requirements

required

5. Current rate of professional fees with a breakdown of personnel costs, reimbursable expenses, and other potential costs. The project team should assume at least one public meeting to be held in Haines

See attached rate sheet for a breakdown of our professional rates. We understand the budgetary limitations of this project and have proposed a progressive design build approach to meet that budget. The following is a breakdown of our team's professional services rates with more detail supplied in the attached PDF.
Employee Rates
Dick Somerville, Senior Engineer VII - $225
John DeMuth, Senior Engineer VII - $225
Sean Sjostedt, Senior Engineer V - $190
Tyler Bradshaw, Senior Engineer IV - $175
Brenna Hughes, Environmental Scientist III - $140
Iain Brown, Senior Land Surveyor III - $135

required

6. Description of the team's experience in working in communities similar in size and character to the Haines Borough. *

As mentioned in the previous answer, our team has worked on many project together, and many of those are for communities similar to Haines or in Haines itself.
One of our first design/build collaborations together was the design/build project at Adak Small Boat Harbor in 2002 in the middle of the Aleutian Chain.
In 2009 (as PPM), our two firms collaborated with the U.S. Army Corps of Engineers (USACE) and the City of Unalaska to design-build the Carl E. Moses Boat Harbor on Amaknak Island in Captains Bay – an award-winning $32M project.
In 2013, PND provided initial scoping and concept design to PPM for construction of the Offshore Systems, Inc. Dutch Harbor Marine Terminal, a facility in the Aleutians that serves bulk freight carriers and marine oil field service vessels.
In 2015, PPM constructed the Chignik Public Dock, a sheet-pile bulkhead dock in the Aleutians designed by PND for the Alaska Department of Transportation. PND and PPM worked together to effectively construct the facility while cost-efficiently addressing challenging site conditions and adhering to the project schedule.
Additionally, the following are some of the projects we've worked on in Haines Borough
Lutak Dock Condition Assessment & Structural Analysis
Lutak Dock Bathymetry
Port Chilkoot Dock
Letnikof Cove Boarding Float
Letnikof Cove Harbor Refurbishment
Portage Cove Harbor Moorage Reconstruction
Portage Cove Harbor Expansion
Haines Street Improvements
Portage Cove Harbor Dredging and Wave Barrier
Portage Cove Harbor Boat Launch Ramp and Uplands Parking
See Attached PDF for more detailed information

7. Bar chart schedule to meet the December 2024 completion timeline. *

We can't provide a bar chart in this field but we have included a Gannt chart in the attached PDF with our full proposal submission. This schedule shows how we will meet the December 2024 completion.

Required Document List

Name	Omission Terms	Submitted File
Optional: Vendor is not required to complete.		
Additional Document Upload ie: resumes, references, etc.		Lutak Dock Design and Construction RFQ - PPM.pdf

1 Required Document

Pacific
Pile&Marine

Pacific Pile & Marine, LP
4753 West 80th Ave
Anchorage, AK 99502

Chris Willis
206.331.3873
chrisw@pacificpile.com

HAINES BOROUGH ALASKA

Lutak Dock Replacement Design and Construction

April 4, 2022

COVER LETTER

Carolann Wooton
Contracts & Grants Administrator
Public Facilities Office
PO Box 1209

Subject: Lutak Dock Replacement Design and Construction RFQ

Dear Carolann Wooton and the Haines Borough review team,

On behalf of Pacific Pile & Marine (PPM), I am very pleased to submit this response for the Haines Borough's Lutak Dock Replacement Design and Construction Request for Qualifications. PPM recognizes the importance of this project for the success of Borough operations accommodating shipments that support both consumer and industrial activities throughout the region. We are honored to be able to provide our qualifications for a chance to be involved in this critical project.

To make our proposal response as easy to review as possible we have provided a response that follows the outline of the evaluation criteria while also meeting the minimum qualification statement contents. We hope this approach resonates with you as we will be bringing this "Keep it Simple" methodology into our design and construction efforts. Our design-build team is led by PPM and supported primarily by PND Engineers and their key design subconsultants; RESPEC Engineering and Great Northern Engineering. The following are some of the key considerations that we believe makes our team the most advantageous choice for Haines Borough:

- **EXTREME FAMILIARITY WITH HAINES BOROUGH:** Our team has delivered many projects for the Haines Borough and the surrounding area. PND specifically has been inspecting the Lutak Dock for the last 30 years. We know the key players in the region, and we understand how to work in Lynn Canal. Even though Lutak Dock is a bit more protected than some, if the wind comes in wrong it can be a challenging place to perform this type of work and our team is prepared to design for that, develop the right construction phasing, and knows how to adapt to these challenges during the performance of the work.
- Additionally, PND has been involved in the Lutak Dock conversation since the beginning and knows the history of the dock, and the several iterations of repair concepts, that have brought us to the design we have today. This experience streamlines our efforts and allows us to hit the ground running on this project.
- **WATERFRONT DESIGN AND CONSTRUCTION EXPERTS:** Our team has been working together for 16 years, ever since PPM was known as Hurlen Construction. We've done 22 waterfront projects together in that time including many waterfront and dock rehabilitations and new construction, many with upland facilities similar to this. You will see this in our selected project experience herein. PPM specializes in heavy civil marine construction projects involving concrete, pile driving, structural steel, over water structures, industrial coatings, heavy mechanical, complex schedules, and critical subcontractor/vendor coordination, especially in remote and challenging areas in Alaska.

Again, thank you for the opportunity to submit our qualifications for this project. We look forward to the opportunity to be able to apply our expertise for the benefit of Haines Borough. If you have any questions about our qualifications or approach, please do not hesitate to reach out me using the contact information below.

Sincerely,

Chris Willis
206.331.3873
chrisw@pacificpile.com

PROJECT TEAM PROFILE

PROJECT TEAM

PACIFIC PILE & MARINE (PPM)

PPM is a specialty heavy civil and marine contractor specializing in pile-supported structures and complex foundation systems, especially in challenging environments. PPM's delivered services include various driven and drilled pile foundation projects, sheet pile bulkheads, trestles, shoring, armoring, and civil works to name a few. PPM's projects often involve alternative delivery contracting methods such as DB and Construction Manager/General Contractor (CM/GC) along with preconstruction phases, accelerated schedules, shortened material delivery windows, and environmental considerations such as permitting and operational limitations due to surrounding wildlife and permitting restrictions.

PPM maintains offices in Anchorage, Seattle, and Nanaimo to service the coastal Western United States and Canada. PPM has a strong safety program and seasoned workforce of over 130 union and staffed construction professionals. PPM has successfully delivered more than $300M in alternate delivery projects involving marine structures and/or nearshore construction over the past 10 years, with more than $30M in construction involving CM/GC delivery services. PPM has delivered more than $400M of Alaska marine and highway infrastructure projects in the past 10 years, with over $50M currently under contract and/or in construction.

Pacific Pile & Marine's "Great Safety Catch" program represents the culture that is carried by all our employees who are always looking for ways to improve our safety program. It is representative of our dedication and the work we do every day. Our top-down safety culture starts with our Company Leadership and flows down to the workforce completing our projects.

PND ENGINEERS, INC. (PND)

PND is a dynamic civil engineering firm with more than 100 full-time employees. Founded in 1979, PND is headquartered in Anchorage with offices in Juneau and Palmer; Seattle; Houston; Portland; and Vancouver. PND is a full-service multidisciplinary engineering firm, including general civil, structural, geotechnical, marine, coastal, hydraulic and hydrologic engineering; construction engineering; value engineering; surveying; inspection; quality assurance; contract administration; fabrication inspection; permitting; site remediation; and in-house research. PND maintains a sufficiently large workforce of licensed engineers and surveyors to ensure a stable pool of professionals in all offices at all times that can be drawn upon on short notice to meet specific project needs. PND specializes in marine structural inspection, condition assessment, and marine facility engineering. PND has designed more than 200 docks and piers in the last decade, and successfully completed the design, retrofit, and/or rehabilitation of more than a thousand marine projects worldwide over the past 40-years. PND approaches projects with the goal of maintaining or increasing the life service of existing facilities, ensuring capacity and amenities are adequate for current and anticipated future users and minimizing long-term maintenance cost. PND consistently embraces a teamwork approach with the client to develop sound, economical, and constructible options. PND has built its reputation designing waterfront structures and has extensive experience in the design of bulkheads, docks, dolphins, floats, fender systems, boat launches, transfer bridges, and many other marine facilities.

PND EXPERIENCE IN HAINES

- Lutak Dock Condition Assessment & Structural Analysis
- Lutak Dock Bathymetry
- Port Chilkoot Dock
- Letnikof Cove Boarding Float
- Letnikof Cove Harbor Refurbishment
- Portage Cove Harbor Moorage Reconstruction
- Portage Cove Harbor Expansion
- Haines Street Improvements
- Portage Cove Harbor Dredging and Wave Barrier
- Portage Cove Harbor Boat Launch Ramp and Uplands Parking

PROJECT TEAMING EXPERIENCE

Our team's combined history teaming on large-scale projects in Alaska locales places us in a prime position to meet safety, quality, and compliance goals for the Lutak Dock Project. Our tight-knit associations allow designs tailored to meet the capabilities of the construction equipment that will be used on the project, creating a safer working environment for everybody involved in the field.

Providing constructability input early in the design phase about material costs, lead times, and our means and methods allows the design to be customized to our installation procedure, often reducing cost, accelerating the schedule, and protecting marine coatings, ultimately giving you a better final product.

Pacific Pile & Marine (PPM) and PND Engineers (PND) staff have collaborated on nearly 50 projects, dating back to 1996 when PPM was doing business as Hurlen Construction Company. When American Civil Constructors acquired Hurlen, our collaboration remained intact; we've worked together on 20 projects over the last 15 years, including critical design-build projects. One of our first design/build collaborations together was the design/build project at Adak Small Boat Harbor in 2002 in the middle of the Aleutian Chain.

In 2009 (as PPM), our two firms collaborated with the U.S. Army Corps of Engineers (USACE) and the City of Unalaska to design-build the Carl E. Moses Boat Harbor on Amaknak Island in Captains Bay – an award-winning $32M project.

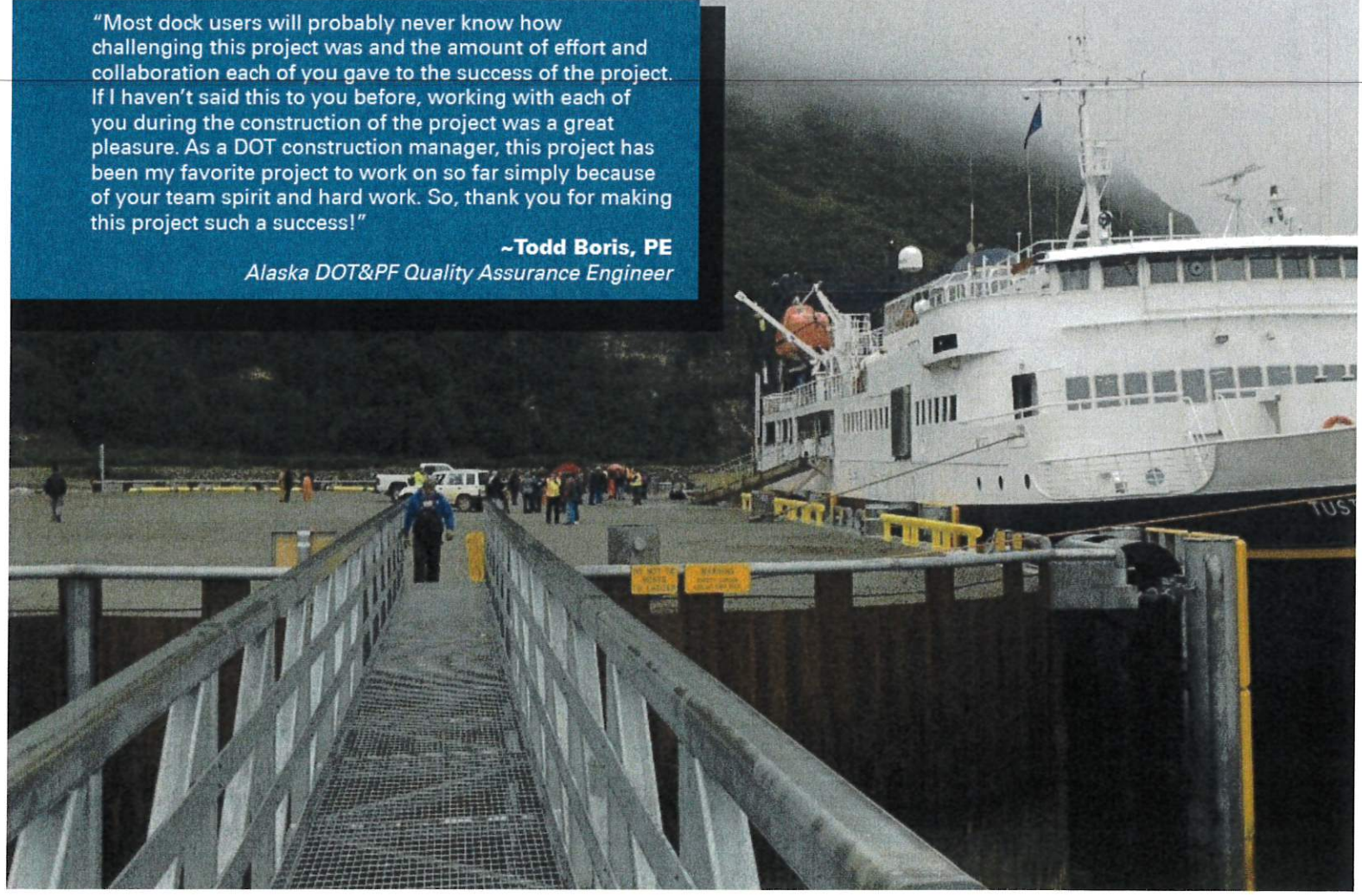
In 2013, PND provided initial scoping and concept design to PPM for construction of the Offshore Systems, Inc. Dutch Harbor Marine Terminal, a facility in the Aleutians that serves bulk freight carriers and marine oil field service vessels.

In 2015, PPM constructed the Chignik Public Dock, a sheet-pile bulkhead dock in the Aleutians designed by PND for the Alaska Department of Transportation. PND and PPM worked together to effectively construct the facility while cost-efficiently addressing challenging site conditions and adhering to the project schedule.

Currently, PND and PPM are working together on a design-build project for the U.S. Navy at the Manchester Fuel Depot in Puget Sound, the Pentagon's largest single-site fuel terminal in the United States.

"Most dock users will probably never know how challenging this project was and the amount of effort and collaboration each of you gave to the success of the project. If I haven't said this to you before, working with each of you during the construction of the project was a great pleasure. As a DOT construction manager, this project has been my favorite project to work on so far simply because of your team spirit and hard work. So, thank you for making this project such a success!"

~Todd Boris, PE
Alaska DOT&PF Quality Assurance Engineer



PROJECT TEAM MEMBER QUALIFICATION

PROPOSED MANAGEMENT STRUCTURE

As the design-builder and prime contractor, PPM will be primarily responsible in ensuring both the design and construction activities are achieved with attention to scope, schedule, and budget to meet the project requirements. PPM Project Director Chris Willis will be the single point of contact. Chris will coordinate the direct communications between the design team and Haines Borough. The organizational chart below shows the team breakdown. Detailed resumes can be found in the Appendix.

PAST AND PRESENT PERFORMANCE

RELEVANT EXPERIENCE MATRIX

The PPM and PND team have successfully delivered many marine dock projects throughout Alaska for federally funded projects. We are providing below a list of relevant projects completed by our team members that best represent our understanding of the community in Haines, our knowledge of federal guidelines, and our commitment to serving Alaska.

PROJECT NAME	RELEVANT CRITERIA									
	FEDERALLY FUNDED PROJECT	ALASKA PROJECT	COMPLETED ON-TIME	COMPLETED WITHIN BUDGET	ZERO SAFETY INCIDENTS	FEDERAL PERMITTING	ENVIRONMENTAL REQUIREMENTS	COMMUNITY SIMILAR TO HAINES	DOCK REPLACEMENT	COMMUNITY ENGAGEMENT
HOONAH CARGO DOCK *(CITY OF HOONAH, ALASKA MARINE LINES)*	•	•	•	•	•	•	•	•	•	•
PORTAGE COVE HARBOR EXPANSION *(HAINES BOROUGH, AK)*		•	•	•	•	•	•	•	•	•
PORT CHILKOOT DOCK *(HAINES BOROUGH, AK)*		•	•	•	•	•	•	•	•	•
CHIGNIK PUBLIC DOCK *(AKDOT, (LAKE AND PEN BOROUGH AND CITY OF CHIGNIK BAY)*	•	•	•	•	•	•	•	•	•	•
TENAKEE SPRINGS FERRY TERMINAL *(AKDOT)*	•	•	•	•	•	•	•	•	•	•
SITKA AIRPORT/BREAKWATER *(AKDOT)*	•	•	•	•	•	•	•	•		
KODIAK FERRY TERMINAL *(AKDOT)*	•	•	•	•	•	•	•	•	•	
CARL E. MOSES BOAT HARBOR DESIGN-BUILD PROJECTS *(USACE ANCHORAGE)*	•	•	•	•	•	•	•	•	•	•

TEAM CAPACITY

PPM and PND have immediate capacity to take on new work. As indicated in the table below, both firms have projects in varying stages of design and construction with workloads tapering off mid 2022.

NAME	ROLE	YEARS EXP.	RESPONSIBILITIES	CURRENT ASSIGNMENTS	PROJECTED AVAILABILITY
CHRIS WILLIS	Contract Authority	40	As Contract Authority, Chris will have responsible charge of the project. He is authorized to bind the firm to any contractual agreements. He will provide oversight during all phases of the project. He will also make sure resources are made available to successfully complete the project through construction.	» NOAA Ketchikan Homeport » Sitka Seaplane Base » Hoonah Bulkhead Dock	35%
DICK SOMERVILLE, PE	Engineering QC Manager	42	As Engineering Quality Control Manager, Dick will review and comment on all project deliverables prior to submittal, ensure calculations are correct, and verify drawings and specifications have been checked in accordance with the project quality plan.	» NOAA Ketchikan Homeport » Sitka Seaplane Base » Hoonah Bulkhead Dock	40%
JOHN DEMUTH, PE, SE	Design Manager & Marine Design Lead	33	As Design Manager, John will provide design oversight, coordinate work with design team, meet with Haines Borough and PPM regularly to ensure overall project design is tracking and ensure design budget and schedule are maintained. As Marine Design Lead, John will lead production of design calculations, drawings and specifications.	» NOAA Ketchikan Homeport » Sitka Seaplane Base » False Island Dock Cathodic Protection	40% Pre-Con 60% Construction
TYLER BRADSHAW, PE	Civil Engineering Lead	16	As Civil Engineering Lead, Tyler will lead a team of engineers providing civil site plan, grading and drainage, utilities and associated interface with upland infrastructure.	» NOAA Ketchikan Homeport » Valdez Small Boat Harbor » Juneau Pioneer Home	60%
SEAN SJOSTEDT, PE	Geotechnical Lead	11	As Geotechnical Lead, Sean will oversee geotechnical investigations, analysis, and reporting for the design team.	» Mt. Edgecumbe Medical Center » Sitka Seaplane Base » Haines Public Safety Building	50%
BRENNA HUGHES, MS, CH	Permitting	10	As Permitting Lead, Brenna will provide environmental permitting support including all documentation necessary for NEPA, USACE, NOAA/NPWS (IHA), ADEC and others.	» Seward Freight Dock » Seward Passenger Dock » Hakalau Forest Refuge NEPA	50%
IAIN BROWN, PLS	Surveying	10	As Surveying Lead, Ian will conduct all necessary field surveys, compile data and develop project base maps with critical topography and bathymetry.	» Saxman Boat Launch Ramp » Kodiak Fire Station » Bristol Bay Borough LIDAR Master Planning	60%
BEN HAIGHT, PE	Design Lead	47	As Electrical Design Lead, Ben will lead a team of engineers providing demolition plans, power and lighting design, and interface for upland utilities as necessary.	» NOAA Ketchikan Homeport » Hoonah Bulkhead Dock » Ketchikan Promenade	60%
RANDY DOWNING, PE	Electrical Design Lead	15	As Mechanical Design Lead, randy will lead a team of engineers providing demolition plans, fuel system design, and coordinate with civil and electrical designers as necessary.	» Sitka Seaplan Base » Hoonah Bulkhead Dock	60%
KATIE LABORDE	Estimating Manager	5	As Cost Estimator, Katie will be responsible for developing cost estimates at the designated intervals, and coordination all estimating efforts to ensure that an accurate and complete estimate for the project is prepared.	» Palmer Station Pier Replacement » Port of Alaska Modernization » Shemya, AK Fuel Pier Repair	30%
STEWART WILLIS	Project Manager	7	As Construction Project Manager, Stewart will be in charge of managing the schedule progress reports, and overall progress.	» Port of Anchorage Modernization Program	60%
CHRIS LUNDFELT	General Superintendent	32	During Pre-Construction Chris will be responsible for reviewing the design concept for risk, constructability, and alternative methods to provide value engineering ideas of ways to alter or re-sequence the work to reduce costs, shorten the construction window, and/or improve safety, and provide value engineering ideas. During Construction Chris will be responsible for overseeing all aspects of in-house labor, and managing all trades, suppliers, and subcontractors.	» Palmer Station Pier Replacement » Shemya, AK Fuel Pier Repair	20% Pre-Con 90% Construction
MATT ROLF	Safety Director	11	As the Safety Manager,Matt will provide input on the design and construction methods to incorporate safety measures from the earliest stages possible. During the project the will ensure all of PPM's stringent safety protocols are adhered to during the project.	» Seattle Multimodal Terminal Build » Palmer Station Pier Replacement » Port of Alaska Modernization	80%

HIGHLIGHTED PROJECT EXPERIENCE

HOONAH MARINE INDUSTRIAL CENTER & CARGO DOCK

Hoonah, AK

The City of Hoonah contracted with PND for design, permitting and contract administration for extensive federally funded improvements over four phases of work. Located in Port Fredrick, the Hoonah Marine Industrial Center is a modern boat haul out and cargo dock facility. The facility accommodates up to 220-ton vessels by allowing for both vessel storage and repair. The first phase of the improvements included development of a three-acre waterfront staging and service area with quarry development for rock material sources directly across the Gartina Highway. Phase two included a 220-ton boat haulout pier and the Marine Travelift equipment.

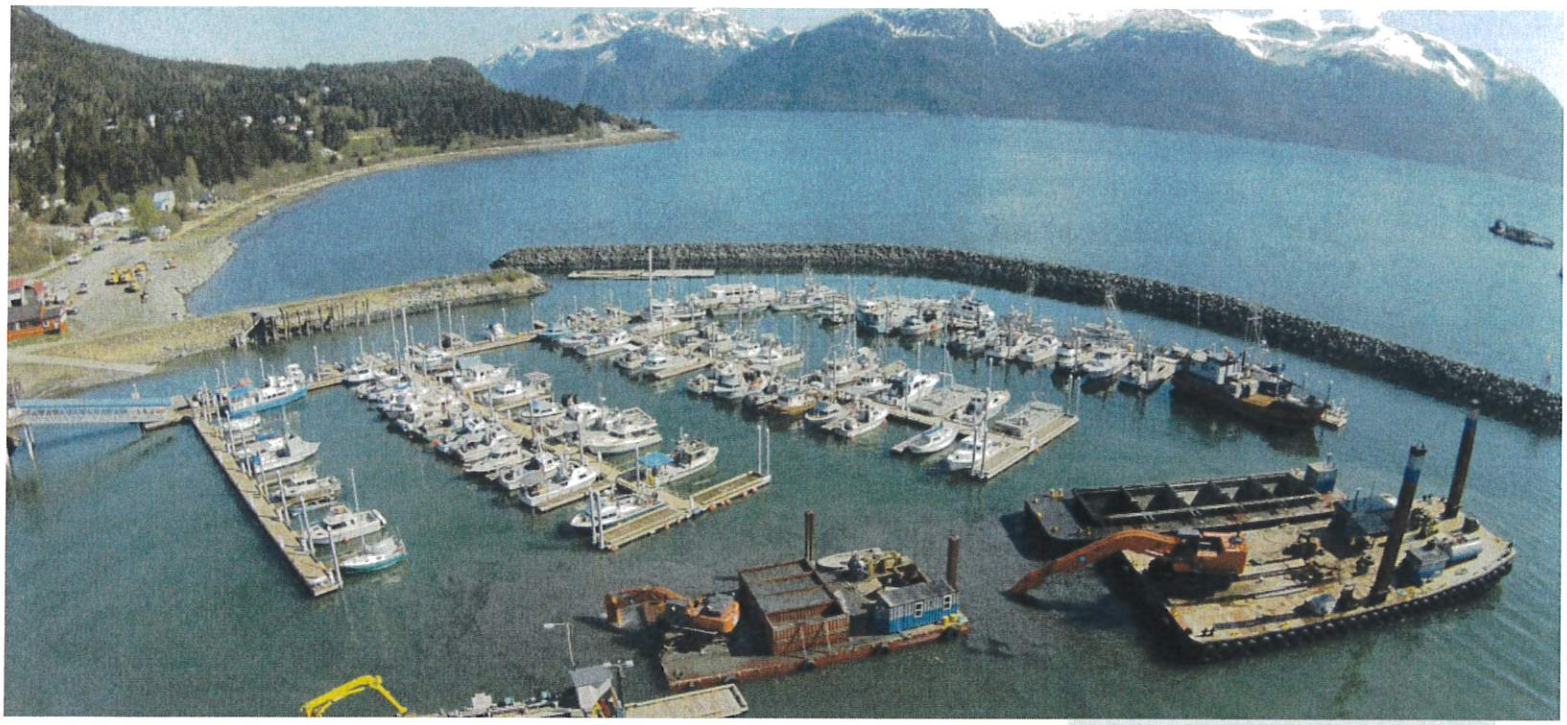
Phase III included a concrete wash down facility, an office, restrooms, yard surfacing, security fencing, area lighting and utilities. Utility improvements included the distribution of power to electrical pedestals for utilization by vessel operators and illumination by high-mast lighting.

Phase IV improvements are currently under design and include a heavy-capacity sheet pile bulkhead dock for freight and cargo pass/pass operations, large uplands yard for barge operations and a loading ramp for ro/ro operations.

KEY PERSONNEL INVOLVEMENT: Dick Somerville, John DeMuth, Tyler Bradshaw, Sean Sjostedt, Brenna Hughes, Iain Brown

RELEVANCE

- Federally Funded Project
- Alaska Project
- Federal Permitting
- Environmental Requirements
- Dock/Waterfront Project
- Community Engagement
- PND design and construction management/ inspection
- Gravel fill uplands with armor rock slope protection
- High-capacity bulkhead for AML freight and cargo operations; pass/pass and ro/ro
- Mooring/breasting dolphins



PORTAGE COVE HARBOR EXPANSION

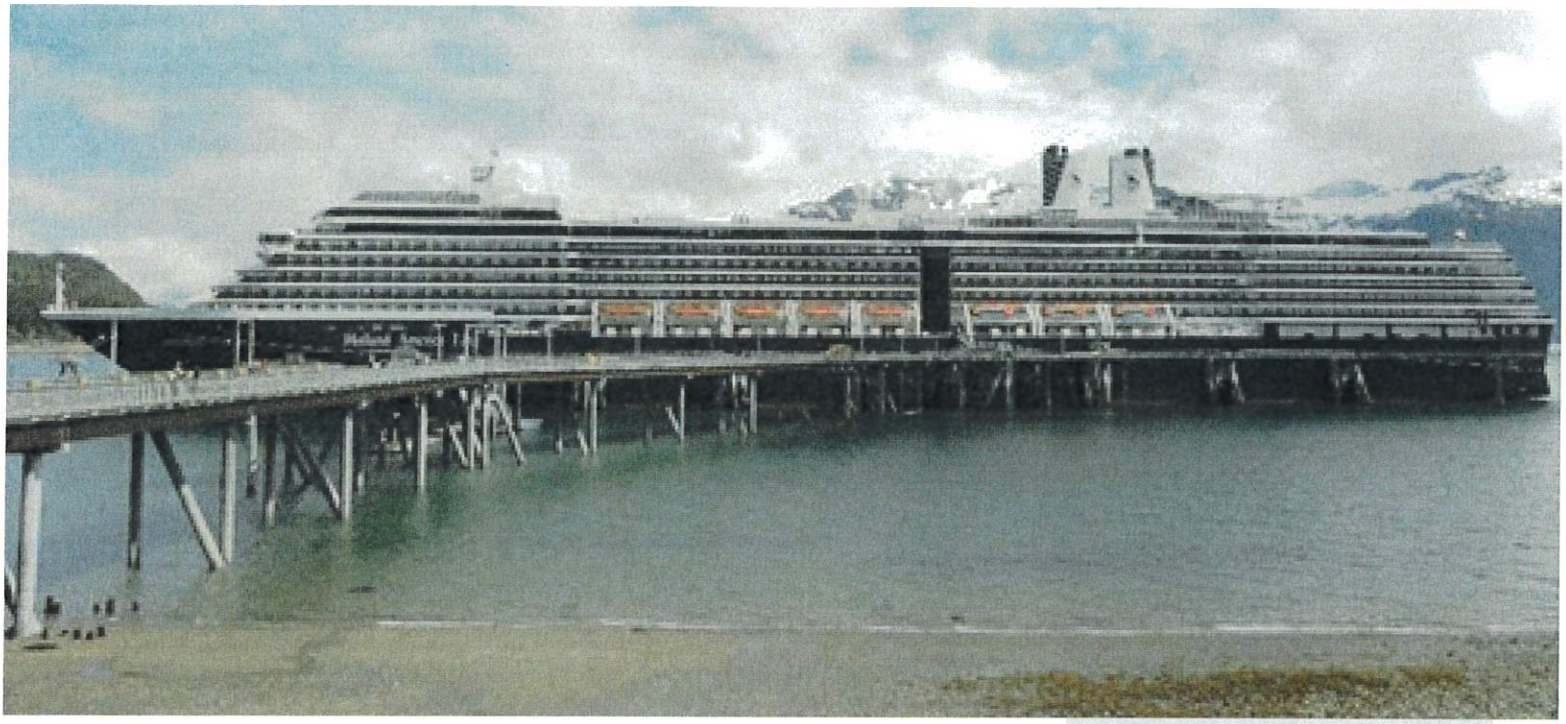
Haines, AK

The Portage Cove Harbor Expansion had three main aspects - 110,000 CY of dredging to expand the harbor basin, installing 630 LF of vertical steel wall as a wave barrier to protect the expanded harbor from severe weather conditions and extensive pipe utilities. The wave barrier utilized a combi-wall structural section consisting of large diameter pipe piles with prefabricated welded sheet pile interlocks. The combi-wall was braced with a large steel waler at the top connected to steel pile caps and batter pile dolphins at 32' intervals to resist lateral loads along the wall. PND designed the wall to resist significant Alaska environmental loads including strong 100+ MPH winds which can generate a 7+ foot design wave with a short period of 5 seconds in this high seismic zone. This wave combined with an extreme tidal range of 25+ feet required the combi-wall design to handle the design loads at a wide range of tidal elevations and water depths. During the geotechnical investigation, PND determined that a deep soft layer of marine soil overlaid a denser glacial till which allowed the use of special finned pile tips designed by PND. The use of these pile tips reduced costs on the project significantly by optimizing the pile sizes and embedment lengths needed to satisfy the required tension and compression forces. PND integrated the wave barrier into the end of an existing USACE rubble mound breakwater to extend the harbor protection. PND designed the armor stone reconfiguration around the nose of the existing breakwater to account for wave run up at the transition into the combi-wall.

KEY PERSONNEL INVOLVEMENT: Chris Willis, Chris Lundfelt, Stewart Willis, Dick Somerville

RELEVANCE

- Alaska Project
- Environmental Requirements
- Federal Permitting requirements
- Community Similar to Haines (Haines Project)
- Dock/Waterfront Project



PORT CHILKOOT DOCK

Haines Borough, AK

The Port Chilkoot Dock is located immediately south of downtown Haines on the waterfront near Fort Seward. The facility provides moorage for visiting cruise ships as well as small ferries and tour boats, which utilize a lightering float accessed by a gangway off the end of the dock's approach trestle. While the main dock had been replaced in 1995, the approach trestle was of older construction, had exceeded its useful service life and severe deterioration of the timber structure compromised the safety of visitors and the general public. The Haines Borough retained PND to design the new facility. PND provided surveying, permitting, geotechnical, design and construction administration and inspection services for the Port Chilkoot Dock Renovations project. The approach trestle was replaced with a wider, steel pipe pile supported, timber framed approach dock. The existing lightering float was modified to accommodate the additional weight of a new longer, wider aluminum framed gangway that was installed to improve access to the lightering float. New domestic water and electrical systems were also installed throughout the limits of the project.

KEY PERSONNEL INVOLVEMENT: Dick Somerville, John DeMuth, Tyler Bradshaw, Sean Sjostedt

RELEVANCE

- Alaska Project
- Environmental Requirements
- Community Similar to Haines (Haines Project)
- Dock/Waterfront Project
- Community Engagement
- Constructed by PPM
- Design and construction management/inspection by PND
- Mooring/breasting dolphins with fendering
- Removal of existing fuel system

CHIGNIK PUBLIC DOCK (AKDOT)

Chignik, AK

PND provided design plans and specifications, assisted with permit applications and drawings, and provided cost estimates to replace a dilapidated structure with a new multiuse public facility in this small, remote community in the Aleutian Islands. The dock provides a berthing location for Alaska Marine Highway System (AMHS) ferries that meets the needs of local and regional communities. The dock serves as an all-tide deep-draft facility that accommodates medium and large vessel berthing and provides moorage for AMHS vessels. The modern high-capacity sheet-pile bulkhead is 310 feet long. Amenities included a boat lift structure, boat storage areas, and uplands areas. The project was designed in phases for financing purposes, while project documents met requirements for Federal Highway Administration and Alaska Department of Transportation & Public Facilities grant funding. PND's involvement began in the early 2000s with development of the initial preliminary design, estimates, economic feasibility studies, geotechnical investigations, funding request documents, and permitting. PND provided construction administration and inspection services while Pacific Pile & Marine was involved in the construction phase.

The Chignik Dock survived an 8.2-magnitude seismic event in 2021, as well as a M7.8 in July 2020 and M7.6 in October 2020. After a Lake and Peninsula Borough official inspected the dock August 2, 2021, no issues or structural damage were reported. Chignik Harbormaster Aloys Kopun, who was in Kodiak for the M9.2 quake in 1964, was in Chignik during the M8.2. He said the recent quake felt more violent than the '64 earthquake, saying the ground in Chignik moved like waves in water.

KEY PERSONNEL INVOLVEMENT: Dick Somerville, John DeMuth, Chris Willis, Chris Lundfelt, Stewart Willis

RELEVANCE

- Federally Funded Project
- Alaska Project
- Federal Permitting
- Environmental Requirements
- Community Similar to Haines
- Dock/Waterfront Project
- Dolphin Installation
- Upland Infrastructure
- Rock Installation

TENAKEE SPRINGS FERRY TERMINAL (AKDOT) (PND)

Tenakee Springs, AK

PND Engineers, Inc (PND) was retained by the Alaska Department of Transportation and Public Facilities (AKDOT&PF) to design an improved replacement facility for the Tenakee Springs ferry terminal. PND managed a multidisciplinary team of consultants to provide permitting support, geotechnical engineering, environmental loading analysis, structural engineering, corrosion protection engineering, electrical engineering, mechanical engineering, bid support and construction support services. PND also assisted AKDOT&PF in evaluating the contractor's value engineering proposal to replace the pile-supported staging dock with a gravel fill pad and armor rock slope protection. The goal of the value engineering proposal was to minimize rock anchor drilling close to shore to avoid possible damage to the local underground hot springs. PND then worked with the contractor and the state to incorporate the fill pad into the final design.

Throughout the project, schedule was carefully managed to ensure the fast-paced schedule could be achieved prior to federal funds expiring.
The original ferry terminal dock was constructed on piles driven through minimal overburden and bearing on the shallow bedrock that exists at the site. However, to meet current code requirements, the piles needed to be socketed and anchored into the bedrock. The nearshore piles were of particular concern, including those for the planned staging dock. To protect the local hot springs, the contractor provided a value engineering proposal to AKDOT & PF to construct a fill pad in place of the pile supported staging dock. This value engineering proposal ultimately saved construction costs, reduced future maintenance and extended the useful service life.

KEY PERSONNEL INVOLVEMENT: Dick Somerville, John DeMuth

RELEVANCE

- Federally Funded Project
- Alaska Project
- Environmental Requirements
- Community Similar to Haines
- Dock/Waterfront Project
- Community Engagement
- Gravel fill pad staging area with armor rock slope protection
- Mooring/breasting dolphins – capacity for AMHS vessels and AML barges
- Cathodic protection for steel pipe piles
- Fuel system replacement
- Electrical power and lighting upgrades

ROCKY-GUITIERREZ RUNWAY SAFETY IMPROVEMENTS (AKDOT)

Sitka, AK

The Federal Aviation Administration, in cooperation with the Alaska Dept. of Transportation contracted with PPM to place fill at the south end of Runway 29 for future extension of the paved runway surface. The fill quantity required was in excess of 500,000 CY. Fill material included 60,000 CY of Armor Stone weighing 8,500 to 17,000 pounds ea., 160,000 CY Type A filter stone graded between 600 and 2,600 pounds, and 314,500 CY of 8-in minus Type B material. While most material was sourced locally, the Armor Stone had to be mined by PPM from a granite quarry near Prince Rupert, BC and barged to site.

On this project our rock supplier ran into problems with being able to produce rock in time and to the USACE specifications. To rectify the situation PPM took over the quarry in Northern BC, Canada and carried out its own quarrying and production of Large Armor Stone, we transported the Armor stone via road to Prince Rupert and barged the armor rock to Sitka, without PPM's ability to take over the quarrying operations the project would not have been completed in time.

KEY PERSONNEL INVOLVEMENT: Chris Willis

RELEVANCE

- Federally Funded Project
- Alaska Project
- Federal Permitting
- Environmental Requirements
- Community Similar to Haines
- Dock/Waterfront Project
- Rock Installation

KODIAK FERRY TERMINAL (AKDOT)

Kodiak, AK

Complete wharf structure with steel framing superstructure and pre-cast panels with 700 CY of cast-in-place pile caps and crane rail supported on (66) driven and socketed piles. (2) dolphins were installed supported by (3) drilled piling with post-tensioned cable rock anchors were installed. The pile schedule included 7,600 LF of 36-in steel pipe pile and diameter and 6,600 LF of 30-in steel pipe pile. Pile installation called for 36-in and 30-in diameter socketed piles up to 175-ft long and then socketing using drill equipment, 15-ft into bedrock using a down-the-hole drill utilizing drilling shoes to advance the pile while drilling. Piling was installed using a combination of land and barge mounted equipment. Extensive overburden and complex soils conditions consisting of deep sands, silts, and clays required drilling. The shore side was supported by construction of a 400 LF Open Cell Bulkhead/ Seawall consisting of PS31 20-ft sheets comprising 11 cells backfilled with 30,000 CY core stone, 3,000 CY filler stone, and 10,000 CY large armor stone. Project required electrical infrastructure to support the new, all-electric container crane and installation of and (2) high-mast light poles.

KEY PERSONNEL INVOLVEMENT: Chris Willis, Chris Lundfelt

RELEVANCE

- Federally Funded Project
- Alaska Project
- Federal Permitting
- Environmental Requirements
- Community Similar to Haines
- Dock/Waterfront Project
- Dolphin Installation
- Upland Infrastructure
- Rock Installation

CARL E. MOSES DESIGN-BUILD PROJECTS

Unalaska, AK

Inner Harbor and Uplands Improvements: Selected by the City of Unalaska to provide design-build services for the construction of the Carl E Moses Boat Harbor to accommodate vessels up to 150-ft in length. Construction involved installation of (149) 24" diameter steel pile up to 170-ft in length socketed 20-ft into bedrock. Pile system utilized moment frames to support load requirements. 1,320-ft of main walk floats and 2,310-ft of finger floats were installed all equipped with power, lighting, domestic water, and dry standpipe fire suppression system. Work included mooring slips to accommodate 60' to 150' vessels, aluminum gangways, transfer bridge and drive down floats; approximately 1,320 total feet of main walk floats and 2,310 total feet of finger floats, all equipped with power, lighting, domestic water, and dry standpipe for fire suppression systems. Work was performed from floating platform involving drilling footing holes and setting foundation seal casings. Drilling was performed in up to 130-ft of water using a NUMA reverse circulation drill system within an inch of planned location. Upland work consisted of new harbor masters building. 2012 Outstanding Civil Engineering Project of the Year by American Society of Civil Engineers (ASCE). After the harbor portion was completed, PPM was hired by the US Army Corps of Engineers to construct $14,000,000.00 precast concrete floating breakwater.

KEY PERSONNEL INVOLVEMENT: Chris Willis, Chris Lundfelt, John DeMuth, Dick Somerville

RELEVANCE

- Federally Funded Project
- Alaska Project
- Federal Permitting
- Environmental Requirements
- Community Similar to Haines
- Dock/Waterfront Project
- Upland Infrastructure

PROJECT APPROACH

RECOMMENDED CONTRACTING METHOD

We understand the history of this project and we understand that the project is currently at the conceptual design stage and Haines Borough (Owner) has provide conceptual drawings showing three phases of work. PPM together with their design partner PND, recommend Progressive Design Build as the most appropriate and cost-effective contracting method to deliver this project for the Owner.

Progressive Design-Build (PDB) refers to the way a construction project design is developed by the Owner and the Design-Builder in a step-by-step process. According to the Design-Build Institute of America (DBIA), Progressive Design-Build allows the design and construction team to collaborate during the earliest stages of project development. This enables the greatest amount of engagement between the three key players in a construction contract: the owner, the designer, and the contractor.

Progressive Design Build Approach

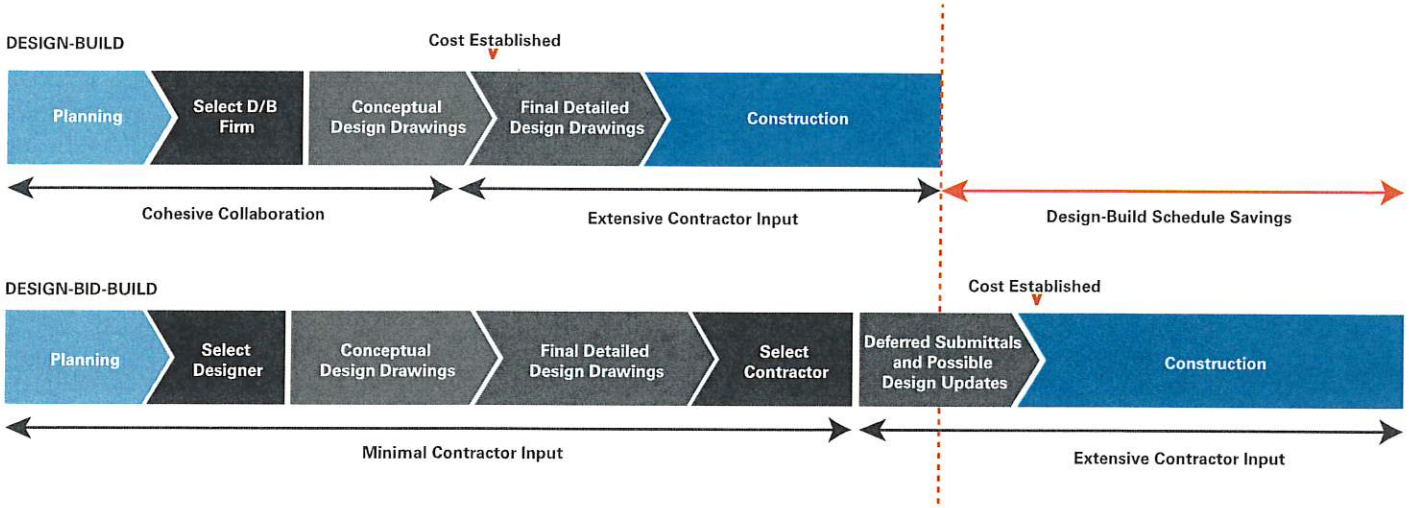
The following write up is the long form description from the Design Build Institute of America. We recommend understanding the difference between the different contracting methods available and this write up is one of those resources. However, as mentioned in our cover letter we believe in the "Keep it Simple" method and so have provided on the following page a simplified graphic to explain the difference in scope, schedule, and sequencing between design-build and design-bid-build.

"What is Progressive Design-Build? Design development, preconstruction services and the negotiation of a firm contract price (either lump sum or guaranteed maximum price) for Phase Two; and (b) Phase Two including final design, construction and commissioning. Phase One Services are also called Preliminary or Preconstruction Services. The design-builder first collaborates with the owner and its consultants to create or confirm the project's basis of design, programming requirements and then advances that design. Design and other project decisions are based on cost, schedule, quality, operability, life cycle and other considerations, with the design-builder providing ongoing, transparent cost estimates to ensure that the owner's budgetary requirements are being achieved. At the point in time where the design has been advanced to an appropriate level of definition that aligns with the owner's requirements, the design-builder will provide a formal commercial proposal (including the overall contract price) for Phase Two services. The proposal is often established when the design is approximately 40 to 60 percent complete, but it can occur anytime (including as One application of design-build delivery is via a stepped, or progressive process (commonly referred to as Progressive Design-Build or PDB). PDB uses a qualifications-based or best value selection, followed by a process whereby the owner then "progresses" towards a design and contract price with the team (thus the term "Progressive").

While procurement laws vary for public owners, some have the flexibility to implement a PDB procurement approach that essentially replicates that used by private sector owners. PDB core features include the following: The design-builder is retained by the owner early in the life of the project and, in some cases, before the design has been developed at all. The design-builder is generally selected primarily, if not exclusively, on qualifications and the designbuilder's final project cost/price and schedule commitment is not established as part of the selection process. The design-builder delivers the project in two distinct phases with: (a) Phase One including budget level Progressive Design-Build 4 late as 90 to 100 percent design completion), depending on the amount of control the owner desires to maintain over the design definition. Phase Two Services are also called Final Design and Construction Services. Once the owner and design builder agree upon commercial terms (including the project's price and schedule), the design-builder will complete the design and construction of the facility in accordance with those commercial terms. The design-builder will also be responsible for any testing, commissioning, and other services that have been agreed upon. If, for any reason, the parties cannot reach agreement on the Phase Two commercial terms, then the owner may consider an "off-ramp" option — where it can use the design and move forward with the project through another contract strategy. As discussed more later, a PDB relationship can be established with the parties entering into two separate contracts for each phase of work or a single contract that covers both phases. Also, while there appears to be a "bright line" between Phase One and Phase Two Services, the pragmatics of expediting project schedules often require that some Phase Two work be started before the commercial proposal has been agreed upon. As a result, many PDB projects allow the design-builder to proceed on "early work" packages for discrete elements of the physical work (e.g., procurement of long lead items, demolition or site work) before Phase Two authorization."

Our Recommendation

PPM recommends the Owner establish a Phase One, Preconstruction Services Contact with the PPM/PND team to develop the project program with community input, phasing and budgeting allowing the Owner and PPM/PND to produce a design and budget for each of the Planning Commission reviews required at 35%, 65% and 95% Stages. Phase Two would be the establishment of a Guaranteed Maximum Price (GMP) price for the Final 100% design and construction to be negotiated between the Owner and PPM/PND.



The schedule on page 19 shows a conceptual schedule based upon the Progressive Design Build approach to the contract with the 35%, 655 and 95% Planning Commission meetings and milestones incorporated.

The key to this schedule is the permitting process durations.

Because Phase 1 does not involve pile driving, we believe the permitting process can be started at 35% conceptual design stage and that permits can be secured within 6 months to allow an early start to Phase 1 construction. Phase 2 involves in-water demolition and pile driving for the new bulkhead wall and dolphins. The permitting process for this will take a year and 65% conceptual drawings are normally required for successful permit application. The development of the design and budgeting process allows a 100% GMP price to be agreed between the Owner and Contractor/Design Team that coincides with the start of the Phase 1 construction. The adoption of this approach allows an early start to permitting and allows long lead materials to be identified and purchased as soon as possible. This is a very important consideration given the supply chain issues and escalatory forces that the world is currently facing in these volatile times.

PERMITTING

PND performs environmental permitting services on nearly all of the waterfront projects they design and routinely interact with local, state, and federal agencies during this phase. PND will lead development of pertinent documents and environmental studies including drawings; quantities; applications; resource studies, field investigations, alternatives analysis; and biological assessment. The permitting process often becomes the critical path for project schedules due to potential National Environmental Policy Act (NEPA) requirements and Endangered Species Act (ESA) and Marine Mammal Protection Act (MMPA) consultations. PND will work diligently with the Borough to ensure the required approvals and permits are obtained in a timely manner. PND has recently completed several Environmental Assessments and Categorical Exclusions on behalf of federal partners and is prepared to lead or assist the Borough with any NEPA documentation required by the federal granting agency, which is anticipated to be a Categorical Exclusion. PND also routinely assists clients by developing Incidental Harassment Authorization (IHA) applications along with the protected species monitoring programs and community outreach necessary to make these projects a success.

COMMUNITY ENGAGEMENT

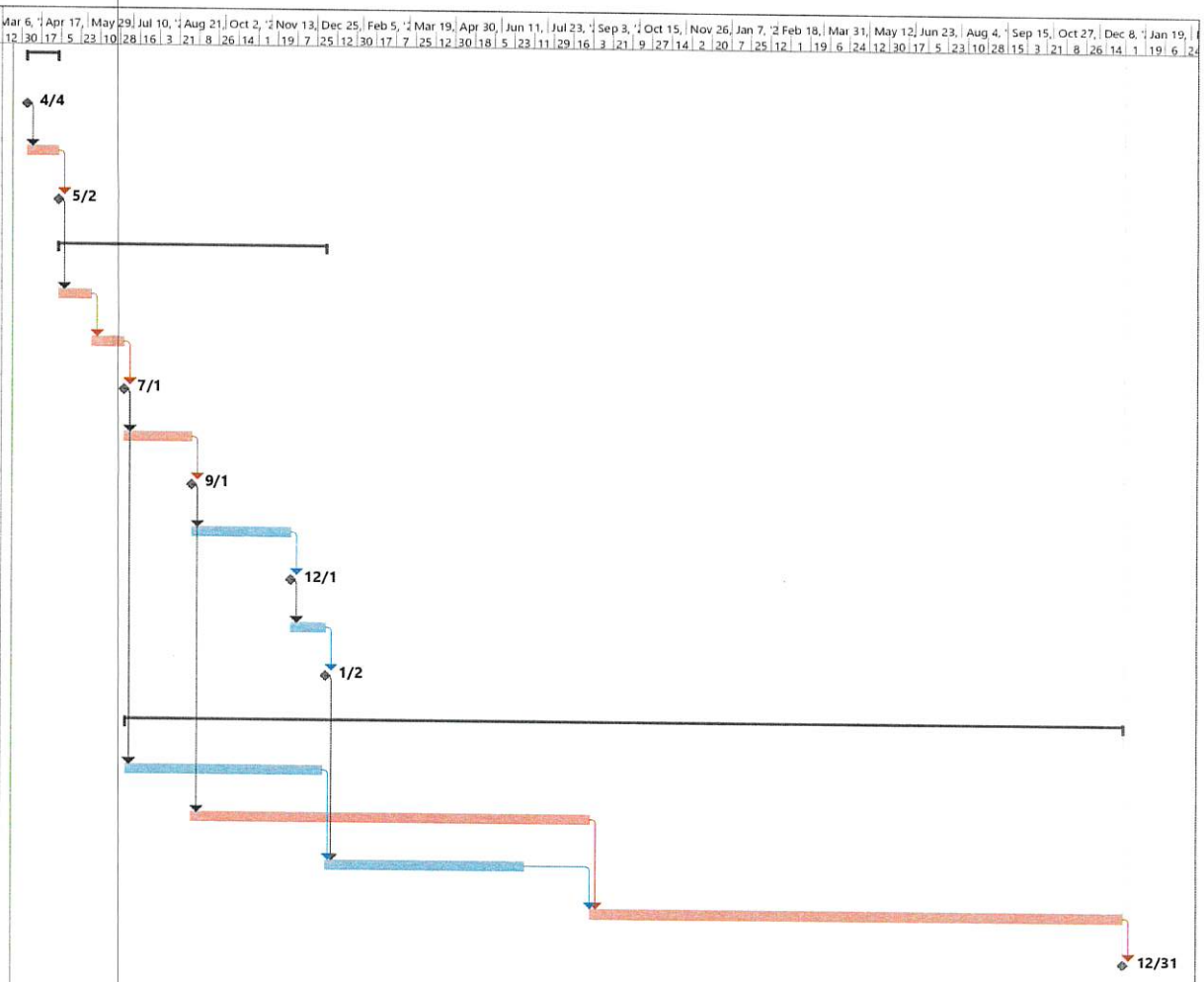
At least one community workshop will be held during this process. The workshop format will be defined in collaboration with Borough staff in response to the specific objectives of the planning process. Each workshop will be structured as an event for the entire community and use techniques that engage the interest of participants; maximize opportunities for input and discussion; and incorporate citizen input into the planning process. We will also develop and update a project website to keep the community advised of project progress.

PROJECT ENHANCEMENTS

As discussed previously, we understand the value engineering that has already gone into this project to get a financially feasible project for the Borough. As such there are limited enhancements we can propose until we move into the investigation stage of the project. However, our team has identified the following enhancements that our team brings:

- *Efficient Dolphin Design:* PND has vast experience with mooring/breasting dolphin designs for cruise ship terminals, AMHS ferry terminals and AML barge terminals. PND utilizes internal dolphin designs that are cost-effective and structurally efficient through control of load application/positioning and use of Spin Fin pile tips to reduce required pile lengths. PND is also proficient with use of AKDOT dolphin designs and adept at combining the benefits of each design approach.
- PND has significant experience in designing DOT style dolphins for the State of Alaska and PPM has a proven track record with installing them. PND would utilize their patented SPIN FIN™ design for the piles to reach capacity with reduced pile embedment. This helps to cut down on pile lengths and saves cost.
- The SPIN FIN™ design also saves cost by avoiding the need for pile drilling and tension anchors within the pile. Both anchors and drilling increase the amount of man hours, material, and equipment that go into installing the pile and creates added cost that will not be involved with installing piles with Spin Fins. Since this is a PND patent, this is the only team capable of offering this cost benefit.
- *Open Cell Design:* PND's OPEN CELL SHEET PILE™ (OCSP™) design is another patented design that PND holds. This sheet pile wall design provides cost savings, reliability and longevity. The sheet pile wall has been effective in similar weather conditions across Alaska. PPM has installed this design on numerous occasions and is very familiar with the design and installation requirements. Utilizing this method will provide significant seismic enhancements and a greater life of the dock.
- We will explore using the OCSP vs combi-wall, solder pile, or any other wall combination types. We believe this will provide high load capacity (for AML operations and upland storage), no tie rods/mechanical connections, can use galvanized sheets or install anodes for extended service life. Provides project with cost-effective alternative retaining wall structure that has high load capacity, increased wall height capability, ability to add-on for future expansion, durability and long service life.
- *Pile Extraction vs Cut-Off with Divers:* PPM would fully extract sheet piling rather than using the diver cut-off method. Full extraction provides cost and safety benefits for the Borough. Extraction of sheet piling would involve PPM's equipment and crew to perform the work. Divers add additional cost to perform the work since PPM would need to subcontract that work. Additionally, PPM equipment and labor will still be onsite to support when cutting off piles. Although PPM has experience with this method, having divers at the point of cut-off puts them in a potentially dangerous situation if something goes wrong with the crane while hoisting.
- *Reusing Materials:* PPM will recover the existing fill and armor rock from within the sheet pile wall for beneficial reuse on the project. This will provide cost savings of purchase, loading, and transport of imported rock that may not be necessary for the project.
- *Combi-Wall in Front of Existing Dock:* A combi wall design in front of the existing dock will allow for increased structural capacities while reducing cost in comparison to a traditional sheet pile dock.
- Increased Upland Storage: Increased upland storage will allow for the Borough to provide and charge for additional boat storage during the winter seasons allowing them to create revenue during the icy season.
- *Bubble Curtain System:* PPM will use a bubble curtain system. This is an innovative system that has perforated hoses and rings mad specifically for hydroacoustic reduction which may be required by the IHA.

ID	Task Name	Duration	Start	Finish
1	**RFP**	**21 days**	**Mon 4/4/22**	**Mon 5/2/22**
2	RFP Submission	0 days	Mon 4/4/22	Mon 4/4/22
3	Selection Phase	29 days	Mon 4/4/22	Mon 5/2/22
4	Phase 1 Preconstruction Services Contract Award	0 days	Mon 5/2/22	Mon 5/2/22
5	**Phase 1 Preconstruction Services**	**175 days**	**Tue 5/3/22**	**Mon 1/2/23**
6	Program Review and Community Input	30 days	Tue 5/3/22	Wed 6/1/22
7	35% Design & Budget	30 days	Thu 6/2/22	Fri 7/1/22
8	35% Planning and Commisioning Meeting	0 days	Fri 7/1/22	Fri 7/1/22
9	65% design and budget	62 days	Sat 7/2/22	Thu 9/1/22
10	65% Planning and Commisioning Meeting	0 days	Thu 9/1/22	Thu 9/1/22
11	95% Design and Budget	91 days	Fri 9/2/22	Thu 12/1/22
12	95% Planning and Commisioning Meeting	0 days	Thu 12/1/22	Thu 12/1/22
13	Negotiate 100% GMP for Design and Construction	32 days	Fri 12/2/22	Mon 1/2/23
14	NTP on Phase 1 and 2 Construction	0 days	Mon 1/2/23	Mon 1/2/23
15	**Construction**	**652 days**	**Mon 7/4/22**	**Tue 12/31/24**
16	Phase 1 Permitting	180 days	Mon 7/4/22	Fri 12/30/22
17	Phase 2 Permitting	365 days	Fri 9/2/22	Fri 9/1/23
18	Phase 1 Construction	182 days	Tue 1/3/23	Mon 7/3/23
19	Phase 2 Construction	487 days	Sat 9/2/23	Tue 12/31/24
20	Final Completion	0 days	Tue 12/31/24	Tue 12/31/24



Project: Lutak Dock Replacement

Task	Project Summary	Manual Task	Start-only	Deadline	Manual Progress
Split	Inactive Task	Duration-only	Finish-only	Critical	
Milestone	Inactive Milestone	Manual Summary Rollup	External Tasks	Critical Split	
Summary	Inactive Summary	Manual Summary	External Milestone	Progress	

PROFESSIONAL SERVICES RATE SCHEDULE

Professional:	Staff Engineer I	$100.00
	Staff Engineer II	$115.00
	Staff Engineer III	$125.00
	Staff Engineer IV	$130.00
	Staff Engineer V	$135.00
	Staff Engineer VI	$150.00
	Senior Engineer I	$145.00
	Senior Engineer II	$155.00
	Senior Engineer III	$165.00
	Senior Engineer IV	$175.00
	Senior Engineer V	$190.00
	Senior Engineer VI	$210.00
	Senior Engineer VII	$225.00
	Environmental Scientist I	$105.00
	Environmental Scientist II	$125.00
	Environmental Scientist III	$140.00
	Environmental Scientist IV	$155.00
	Environmental Scientist V	$170.00
	Environmental Scientist VI	$180.00
Surveyors:	Senior Land Surveyor I	$115.00
	Senior Land Surveyor II	$125.00
	Senior Land Surveyor III	$135.00
Technicians:	Technician I	$60.00
	Technician II	$85.00
	Technician III	$95.00
	Technician IV	$105.00
	Technician V	$130.00
	Technician VI	$150.00
	CAD Designer III	$85.00
	CAD Designer IV	$100.00
	CAD Designer V	$120.00
	CAD Designer VI	$130.00

Reimbursables

These rates include all markups and multipliers on labor rates for personnel, including overtime. Reimbursable expenses include but are not limited to:

- Travel, transportation and freight charges directly associated with the project.
- Lodging, per diem and vehicle rental directly associated with the project.
- Third party and direct costs for reproduction, material testing, equipment rental, specialty tools and testing devices, and other similar job costs.
- Direct project related consumables including fuel, small tools, safety and special equipment expenses.

All third party reimbursable expenses, including subconsultant fees, shall include a 10% administrative fee.

APPENDIX A: Resumes

CHRIS WILLIS, EXECUTIVE VP / CHIEF ESTIMATOR

Years of Experience

40

Education

- Higher Nation Degree Civil Engineering

Licenses/Certifications

- HCSS Heavy Bid Training
- Primavera SureTrak Training

Mr. Willis has over 40 years experience in the construction industry. Chris worked with international construction companies as a project manager and estimator in heavy-marine and heavy-construction. Chris is experience using HCSS estimating software as well as Primavera and MS Project scheduling software. He has advanced working knowledge of the design and construction of various heavy civil and marine construction projects.

Relevant Project Experience

Palmer Station Pier Replacement, National Science Foundation, Leidos Inc, Anvers Island, Antarctica - $30M Preconstruction planning, procurement and construction services to replace the existing sheet pile bulkhead pier with a steel pipe pile-supported concrete pier. The existing pier was originally built in 1967 and is in a severely deteriorated condition in critical need of replacement. The new pier will consist of 36-in and 32-in steel pile supporting a concrete deck structure. Palmer Station is located on Anvers Island and is the only U.S. station located north of the Antarctic Circle. It is one of three U.S. research stations in Antarctica operated by the U.S. Antarctic Program (USAP). Palmer Station's pier is essential to the safe delivery of cargo and personnel in support of the USAP scientific mission. Material and equipment are mobilized from Seattle, WA. The distance between Seattle, WA and Palmer Station, Antarctica is over 8,700 nautical miles (nm). The project site is a 4-day passage from Punta Arenas, Chile by way of the Drake Passage. No barge has ever successfully crossed the Drake Passage. The construction season is limited due to ice and weather. Construction cannot begin until the sea ice has sufficiently vacated and has to be completed prior to ice returning. Major materials include 36-, 32-, and 24-in steel pipe piling and H-piling; precast concrete caps (up to 70-tons) and panels; fender panels, bollard, and bull rail; and misc. structural steel. Site generally consists of exposed bedrock requiring piling to be drilled and socketed with 20-30-ft of embedment. Includes upland civil earthworks adjacent to the pier. The project is divided into two phases: Phase 1 - procurement, prefabrication, mobilization/deployment; and Phase 2 - construction. Phase 1 consists of significant preconstruction planning and integration with stakeholders and engineers. Work will be performed with two Manitowoc 2250 300-ton crawler cranes, one working from a 400x100 barge and the other from shore. Following construction, all demolished and unused construction materials and waste are required to be transported away from site back to Seattle, WA by barge. The transit time for tow is two (2) months each direction. Work will be performed on-ice for 4.5 months working 7:12 shifts (12-hr shifts, 7-days per week). Project is subject to significant COVID mitigation protocols include extended U.S. and international quarantine periods and marine mammal observations along with extreme environmental management controls.

Pacific Pile&Marine

Port of Alaska Modernization Program Petroleum and Cement Terminal - Phase 2, Municipality of Anchorage, Port of Alaska, Anchorage, AK - $73M Construction of monopile breasting and mooring dolphins. Consisted of furnish and installation of three (3) each 144-inch-diameter breasting dolphins with dolphin caps and furnish and install six (6) each 144-inch-diameter mooring dolphins with dolphin caps. Included installation of catwalk system joining breasting and mooring dolphins to existing PCT platform; construction of fendering system consisting of seven (7) each fendering elements, four (4) constructed on the existing PCT platform, three (3) constructed on the breasting dolphins; landside utility work to extend municipal power and water systems to PCT; PCT operations building; and topside components on the PCT platform and dolphins. Heavy equipment includes PPM's Pacific Lifter, a 1,000 ton lift capacity derrick barge with American 509 Revolver, 450 ton Demag CC2500 crawler crane, and American 9310 crawler crane. Work performed in coordination with independent, 3rd party marine mammal observers. PPM is one of only a few heavy contractors in North America with the equipment and expertise to carry out a project involving material components of this size and the associated complexities for handling and installing.

Palmer Station Pier Replacement, CM/GC Preconstruction Services, National Science Foundation, Leidos Inc, Anvers Island, Antarctica - $730k Provided Construction Manager/General Contractor (CM/GC) Services needed for the planning, procurement and construction of a steel pile supported concrete deck pier to support operations located at Palmer Station, Antarctica. Consisted of pre-planning; estimates; design recommendations and value engineering; shop drawing and technical submittals necessary for the procurement of materials; logistics planning for the delivery of materials, equipment and personnel to Palmer Station; integration with Palmer Station and Leidos personnel, pier users, engineers; and other stakeholders. Included 35%, 65%, and 95% design phases. Due to the complex nature of working in Antarctica, the preplanning phase was especially crucial. Planning documents developed to reduce risk included Construction Plan, Logistics Plan, Environmental Management Plan, Project Safety Plan, Quality Control Plan, and Project Schedule. As part of this pre-planning effort PPM as the CM/GC participated in and/or led a series of planning and partnering meetings and design workshops and reviews.

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White Rock Pier Reconstruction, City of White Rock, White Rock, BC - $3.2M Reconstructed sections of the pier damaged during a sudden storm. Also replaced piling and timber components around the areas that collapsed. Reconstructed sections consisted of a more resilient structural system similar in appearance to the original structure. Involved demolition of the existing timber pier structure, installation of (66) steel pipe pile, (21) precast concrete pile, (22) precast concrete slabs, timber stringers, decking, handrail, and bullrail, utilities and timber repairs.

Portage Cove Harbor Expansion, Haines Borough, Haines, AK - $13.3M Work involved the removal and reinstallation of a seaplane float, installation of rock for rubble mound breakwater including Class II thru IV Armor Rock, 16-in dia. wastewater outfall, dredging and disposal of more than 80,000 CY of sediment, installation of steel pile-supported wave barrier including 24-in dia. w/ sheet pile wave barrier pile, installation of 30-in dia. bearing pile and 30-in dia. SPIN FIN pile, and replacement of 16-in dia. moorage pile and installation of 12.75-in dia. transient float pile.

Kodiak Ferry Terminal, Alaska Department of Transportation and Public Facilities, Kodiak, AK - $13.7M Demolition, removal, and replacement of the existing 12,141 SF Pier 1 dock facility in its entirety including timber piles; bracing; decking; fender systems (including steel piles); bollards; cleats; water and electrical utilities; fuel system piping and equipment; lighting; fencing; safety equipment; and other dock appurtenances. Existing timber deck replaced with a precast concrete deck. Called for approx. 21,577-ft3 of excavated material including backfill with aggregate base course for grading and Type II, Class B asphalt concrete. Riprap slope protection was also placed. New concrete dock called for 5,091-ft of concrete decking complete with concrete retaining walls, (5) marine fenders, pipe bollards, stairway replacement, and covered walkway. Design of forms and falsework and on-shore and off-shore survey including the calculations for pile layout was the responsibility of the contractor. (10) 17-in galvanized pipe pile totaling 672-ft and (88) 21-in galvanized pipe pile totaling 5,531-ft were installed with drilled sockets to achieve specified penetration into bedrock. 198lb pile anodes were installed by commercial divers. This work was performed in accordance with a designated wildlife observer responsible for monitoring for wildlife activity during pile driving and extraction.

Pier 3 Replacement, City of Kodiak, Kodiak, AK - $29.5M Complete dock structure with crane rail supported on 36-, 30-, and 26-in driven and socketed piles up to 175-ft long driven to bedrock and then socketing using drill equipment, 15-ft into bedrock. 400-ft revetment was constructed from -40 to +10 consisting of 30,000 CY core stone, 3,000 CY filler stone, and 10,000 CY large armor stone. Included pile-supported, socketed pier with steel framing superstructure and pre-cast panels with 700 CY of cast-in-place pile caps, 300-ft OPEN CELL™ bulkhead wall using PS31 20-ft sheets, and (2) high-mast light poles. Project also involved installation of (2) rock anchored dolphins and steel fender piling.

Port Lions Small Boat Harbor, Native Village of Port Lions, Port Lions, AK - $4M Construction of a 650-ft rubble-filled causeway, consisting of 100,000 CY of 18-in minus shot rock, 15,000 CY of 6-in minus shot rock. The causeway was armored on both the inside (shore-facing) and outside (sea-facing) slopes, using a 0.5-1.3-ft dia. rip rap on the inside slope and 3.67-4.25-ft dia. armor rock on the outer slope. The OPEN CELL SHEET PILE wall constructed was comprised of (550) piling at an average length of 65-ft. Required backfill and vibracompaction. New ferry dock structure included mechanical and electrical utilities. Dolphins were supported by drilled-in steel pipe pile. Front face had fender system. Work was performed in a remote location.

Port Lions City Dock, City of Port Lions, Port Lions, AK - $14.5M Constructed a 650-ft rubble-filled OCSP cellular dock including utilities and dolphins.

Port of Nome Inner Harbor High Ramp & Float Phasing, City of Nome, Nome, AK - $4M Constructed an open circular sheet pile cell, structural steel and a concrete ramp to provide barge access for loaders. (2) mooring dolphins were constructed with rock anchors. Existing 48-in dia. 70-ft long mono-pile dolphins were re-driven including one receiving rock anchor. Dolphins consisted of 30-in dia. 70-ft King Pile with 1.00t wall, 80-ft batter pile, and 30-in dia. fender pile. Circular cell consisted of PS31 flat sheets ranging from 25- to 15-ft with 24-in dia. anchor and bollard piles and 30-in dia. landing fender.

Port Chilkoot Dock and Letnikof Cover Harbor Renovations, City Borough of Haines, Haines, AK - $6.2M Demolition of the existing timber approach trestle and main dock, uplands modifications, retaining wall, concrete abutment, aluminum gangway, timber trestle, queuing decks and approach dock, moorage float modifications, steel pipe piles, power and lighting, and a water system. Additive alternates included a mooring dolphin and additional power and lighting improvements. The work at Letnikof Cove was included as an additive alternate and consisted of partial demolition of the existing timber trestle, approach dock addition, gangway replacement, moorage float system maintenance, anchor chain replacement, seasonal timber floats, gangway landing float, and rock-socketed steel piles.

Hydaburg Small Boat Harbor Renovations, City of Hydaburg, Hydaburg, AK - $3.8M Furnished and installed new floating docks, access trestle modifications, new fish cleaning station, and associated potable water, fire suppression, and electrical utilities. Floating docks included new main floats A and B, new marginal or head walk float, a breakwater float, and various Tee and finger floats. Also installed owner-furnished aluminum access gangway, owner-furnished piling, and other owner furnished items. Project included demolishing and removing existing floating docks and utilities from the site. Portions of the existing electric utilities salvaged and incorporated into the project. Pontoons transported from WA.

Robert E. Galovin Small Boat Harbor, City of Sand Point, Sand Point, AK - $8.8M Furnished and installed new timber floating docks, galvanized steel piling, (2) new 6- x 80-ft aluminum access gangways, gangway platforms, and associated dry standpipe fire suppression, electrical and lighting utilities. Included renovation of the timber grid including driving salvaged timber piling, and demolition and removal of existing floating docks.

Design-Build Services, Swift Reservoir Trestle Installation, Natt McDougal Company, Skamania County, WA - $10M Contracted to design, furnish, and install portions of the trestle, mooring tower and dolphin for the Swift Downstream Fish Passage Project. Involved drilling rock anchors in 150-ft of water. Up to 210-ft pile 3-ft in dia. was driven top down over 250-ft through 40-ft of rock and in some cases more than 60-ft of overburden. Guides for floating structure being constructed by Natt McDougal were set in 150-ft of water within 1.5-in of location. Critical lift was required to place 100-ft stair flight, over 130,000lbs for stair tower. Lay down area was located miles from point of installation accessible by floating gear requiring careful logistical coordination and control to ensure safe, efficient operations were performed at all times.

Carl E. Moses Breakwater, United States Army Corps of Engineers, Dutch Harbor - Unalaska, AK - $12.5M Contracted to construct and install floating breakwaters to complete the Carl E. Moses Harbor in Unalaska. Included (2) concrete floating breakwaters, (1) 476-ft the other 804-ft long. Breakwaters were designed to enclose the new harbor. Floating breakwaters were constructed in Tacoma, WA in 98-ft long modules and towed across the Gulf of Alaska. Towing efforts required strong logistical planning. Floating breakwaters were moored using stud-link anchor chain and 40 ton concrete anchor blocks.

Sitka-Rocky Gutierrez Airport Runway Safety Area Improvements, Alaska Department of Transportation, Sitka, AK - $25.7M Contracted to construct a 280-ft landmass extension to Runway end 29 of the Sitka Rocky Gutierrez Airport into Middle Channel for future runway expansion. Extension required embankment construction in subtidal marine waters to depths of 90-ft below Mean Lower Low. A total of 180,000 CY of armor stone ranging in size from 500- to 17,000lbs used to protect 360,000 CY of fill rock. Riprap stone was precision placed with the aid of real-time GPS. Our custom-built, multi-beam survey boat was used to perform surveys to verify site conditions and confirm structure placement.

Design-Build Services, Carl E. Moses Small Boat Harbor, City of Unalaska, Dutch Harbor - Unalaska, AK - $30.6M Selected by the City of Unalaska to provide design-build services for the construction of the Carl E. Moses Small Boat Harbor. Project involved the fabrication and installation of hot-dip galvanized steel floats with grating. Floats sit on fastened steel pontoons for ease of access and repairs. Floats are anchored using robust pile system utilizing moment frames to support specific load requirements. The new boat harbor can accommodate vessels ranging from 60- to 150-ft in length. Also included a drive down float. Upland work consisted of a new harbor masters building and waste-oil building. Due to the remoteness of the location, careful scheduling and material controls were in place throughout the project.

Former Scott Paper Mill Cleanup, Port of Anacortes, Anacortes, WA - $15.5M Multi-phase project sponsored by the Port of Anacortes and Kimberly Clark. Phase II involved both water-based dredging and upland excavation of contaminated soils, removing existing revetment structures and construction of new structures, installation of new small boat facility and installation of an offload apron on an existing pier. Project also involved improvements to the existing pier facility, removal of existing timber-based breakwater and construction of (2) new attenuator structures.

Hebgen Dam Cellular Cofferdam, NorthWestern Energy, LLC., West Yellowstone, MT - $10.4M Design-build a free-standing cellular cofferdam structure to provide the means to regulate flow through the Dam's intake in the event additional stop-log distress occurs. Also provided the means to dewater the inflow face of the intake structure in order for the structural repairs and seismic upgrade to be performed. The proposed structure was a freestanding cellular cofferdam constructed of interlocking flat web steel sheet piles filled with granular backfill material forming a traditional arrangement of (2) circular cells and an interior radial connecting cell. The top of the structure is at an elevation of 6,540-ft and the bottom of the structure is founded on existing bedrock. The circular cells are approx. 58-ft in dia. and spaced at approx. 70-ft from center. Sheet pile length ranges from 85- to 90-ft.

Marine Terminal Berths 2 and 3 Interim Action Dredging, Port of Olympia, Olympia, WA - $1.6M Maintenance dredging of 9,700 CY of contaminated material along the port facility pier. The dredged sediment was then transported by rail to landfill and a thin sand layer was placed through the dredge prism to prevent cross contamination.

Small Boat Harbor Entrance Surge Protection, Municipality of Skagway, AK - $3.3M Built a wave barrier wall to protect the harbor from swells. Involved king pile, spin fin piling and sheet pile. Built a promenade on top of the wall. Surveying was a challenging component with arc wall. Pile driving, fabrication, surveying and welding were required for the project.

Sandpoint North & South (Sand Creek Byway), Sandpoint, ID - $7.5M Phase installed temporary sheet pile crane pads at piers 1, 2, and 3, drove test piles, drove pile, SP bridge pile restrike, installed bridge temporary access, drove sheet pile for cofferdams. Unloaded the pipe and sheet pile at point of installation. Drove, spliced, and cut-off test and production piles and permanent sheet piles. Installed, removed, and preloaded all temporary sheet piles. Designed, furnished, installed, and removed a 30- by 300-ft work bridge.

Dakota Creek Shipyard Redevelopment, Dakota Creek Industries, Anacortes, WA - $14.1M Major redevelopment and expansion of the Dakota Creek Industries (DCI) Shipyard. During Phase I, demolished and removed 24,000 SF of timber dock, 1,000 creosote treated piles, 250-ft of abandoned marine railway, buildings and utilities. Dredging and excavation activities involved dense, difficult and contaminated materials. Dredged more than 30,000 CY of contaminated material using an environmental-sealed bucket, placed material on flat decks and transported for disposal at an upland disposal site. 105,000 CY of non-contaminated material dredged utilizing custom bucket configurations with a jet-probe to loosen material. Constructed (13) circular sheet-pile open cells to be back filled for additional dock space. An innovative 450-ft long OPEN CELL bulkhead with heavy-load capacity and up to 49-ft of vertical face was used. Over two acres of upland development including a state-of-the art two-stage stormwater treatment system with new outfall was developed as well as (2) deep water berths. Shipyard structures were relocated and rip rap slope protection placed. Phase II consisted of constructing a 370-ft long heavy-load pier utilizing SPIN FIN pile technology and a ballast deck system and completion of uplands. Central pier was designed to handle a 275 ton crane with a 220-ft boom. Project was a finalist for AGC's 2010 Build Washington Project of the Year award.

St. Herman Harbor Boat Lift Facility, City of Kodiak, Kodiak, AK - $10.4M Constructed new boat lift piers consisting of steel pipe piles, composite steel and concrete deck girders, and concrete backwall. Constructed dolphins consisting of steel pipe piles, rock anchors, steel pile cap, and fenders. Installed prefabricated catwalks.

Ketchikan Berth 3 Reconfiguration, Ketchikan, AK - $34M Ketchikan's Berth 3 consisted of constructing 21,000 SF of pile-supported dock with drilled pile-to-bedrock anchored connections, (5) deepwater 48-in dia. steel pipe pile dolphins with drilled and pinned pile to bedrock connections and 18,000 SF hardwood decked promenade as well as installing 26,000 SF of monolithic concrete floats held in place by socketed piling, and a 15,000 SF floating dock accessed by a 130-ft long transfer span.

Campbell River Cruise Ship Terminal, Campbell River Indian Band, Vancouver, BC - $10.2M Construction of a multipurpose dock to serve as a landing platform for passengers access between ship and shore. Consisted of 750 ton concrete pontoon linked to a shore by a 140-ft long gangway and 200-ft long trestle. The facility spans 1,400-ft off shoreline. (164) pilings were installed under (8) mooring and berthing dolphins. Construction was conducted under extreme conditions, including high winds, tides, and fast currents. Anchoring barges and derricks became a key factor in maintaining maritime and employee safety while constructing the terminal.

Terminal 91 Berths H, I, J Fender Replacement, Port of Seattle, Seattle, WA - $750K Demolition of 1,000-ft of timber fender system, driving (100) new fender pile and installation of (33) new steel fender panels were all accomplished while accommodating tenant needs at an active Port of Seattle Terminal.

Whittier Ferry Terminal Improvement Project, Alaska Department of Transportation, Whittier, AK - $750K After demolishing the existing terminal, 18,000 CY of material was dredged to accommodate deeper draft vessels. The new terminal consisted of (7) driven pile dolphins, transfer span upgrades, and a new terminal building. 8 weeks before the scheduled terminal opening, a 75-year storm event caused nearly $1,000,000 in damage to the facility and the contractor's equipment. The contractor accelerated their schedule, mobilized new materials from Tacoma, WA, and completed the terminal on time.

Adak Small Boat Harbor, City of Adak, Adak, AK - $5.1M Construction of an open cell sheet pile wall with excavation and dredging to form a new small boat harbor. Due to environmental reasons and permitting restrictions, the project had to be completed during the winter months. Involved massive mobilization of construction, quarrying and rock blasting equipment and transfer of all material from Seattle to the island via tug and barge. The tow to the island took 4 weeks. In order to produce necessary riprap materials, blasting and development of a quarry commenced upon arrival. A 100 ton crawler crane, part of the mobilization, was used to install sheet piling. After sheet piling was completed, dredging to deepen the harbor started with riprap placement on the slopes.

Terminal 18 Fender System Replacement & Berth 5 Deepening, Port of Seattle, Seattle, WA - $1.8M After installing 1,000 LF of underwater sheet pile bulkhead, sediments were precision dredged from between the pier piling to prevent slope failure and material sloughage into the deep draft slip. Once the slope sediments were removed, (50) new fender piles were driven and a new fender system was constructed. Dredging and fender system upgrades were all performed without impacting the movement of ships and containers in the active container handling facility.

Pacific Sound Resources (PSR) Remedial Action, Seattle, WA - $6M Pacific Sound Resources (PSR) Remedial Action, EPA, Seattle, WA - $6M Dredged and capped the offshore areas of the old Pacific Sound Resources Site in Elliot Bay. PSR engaged in the business of timber treatment at their West Seattle plant, which expelled harmful chemicals into the waters of Puget Sound for decades. Shortly after the EPA shut PSR down, the location was deemed a Superfund Site. During the project, the biggest challenge was setting up survey controls to meet the extremely tight tolerances required of the owner. Differential GPS was used in conjunction with boom angle indicators and electronic tide gauges to ensure the Derrick Barge placed a sediment cap to a tolerance of inches. Monitoring the capping progress was performed using a hydrographic survey boat yielding data used to create contour maps, cross sections and volume calculations on a daily basis. During this project the successful partnering with the government on some Value Engineering proposals was accomplished, saving tax payers more than $2,400,000.

Lockheed Shipyard Remediation, Lockheed, WA - $8.6M Dredged and disposed of heavy metal contaminated soils including debris, removal of thousands of creosote treated wooden pile, demolition of 30,000 SF of creosote timber docks and the recycling of wood, concrete, concrete with rebar and steel. The major components of RA included replacing the existing deteriorated bulkhead wall, removal of all existing pier structures including timber piling and portions of the existing shipway structures from aquatic areas of the site while maintaining stability, dredge contaminated sediments from the channel and slope areas, design the dredge prisms, perform post-dredge sediment verification sampling and analysis, construct on-site mitigation area, create intertidal habitat with clean soil, and cap the slope area. All work had to be performed within the highest environmental standards to avoid spreading contamination.

Jacobsen Dock Cruise Ship Pier, SE, Juneau, AK - $5M Designed and constructed a cruise ship pier in Juneau. Involved pile driving (143) 36-in and 24-in dia. steel piles using a floating derrick barge. Pile length varied from 120- to 320-ft. The pile was pitched using an APE 200 Vibro-hammer and driven to bearing capacity using an ICE 180 or an ICE 120-S diesel hammer depending upon location. All the steel piles and structural steel was transported to Alaska on our barges. Fast tracking the project demanded intense materials control to ensure on-time completion. Project was completed 2 weeks early.

CHRIS LUNDFELT, SUPERINTENDENT

Years of Experience

32

Licenses/Certifications

- Certified Industrial First Aid & CPR
- Certified Welding Card
- UAA Anchorage Alaska 1987/1988
- USCG Tankerman Inland Water & Open Ocean Merchant Mariner (expired)
- Unlimited Certified welder AWS D1.1, D1.2 & D1.5 SMAW/GMAW
- Emergency Medical Technician II (expired)
- NCCCO Lattice Boom Crawler/Lattice Boom Truck, Large Hydraulic/Small Hydraulic, Rigger, Digger/Derrick crane
- HAZWOPER 80hr
- MSHA 30 and MSHA 10 Supervisors training (expired)
- HUET/ Coldwater survival (Royal Dutch Shell/Sparrows)
- Certified Pedestal Crane operator (Royal Dutch Shell- SEATRAX)
- TWIC – Transportation Workers Identification Credential (expired)
- NSTC- North Slope Training Cooperative
- Member Operating Engineers Local 302 (1990 to Present)

Prior Work History

- North Star Terminal & Stevedore
- Swalling Construction
- West Construction
- Sandstrom & Sons
- Norcon Construction
- H.C. Price
- Houston Contracting
- Earth Movers (later Houston/NANA)
- CDC/SERVS (Later TCC)
- CATCO/Crowley

Pacific Pile&Marine

Relevant Project Experience

Palmer Station Pier Replacement, National Science Foundation, Leidos Inc, Anvers Island, Antarctica - $30M Preconstruction planning, procurement and construction services to replace the existing sheet pile bulkhead pier with a steel pipe pile-supported concrete pier. The existing pier was originally built in 1967 and is in a severely deteriorated condition in critical need of replacement. The new pier will consist of 36-in and 32-in steel pile supporting a concrete deck structure. Palmer Station is located on Anvers Island and is the only U.S. station located north of the Antarctic Circle. It is one of three U.S. research stations in Antarctica operated by the U.S. Antarctic Program (USAP). Palmer Station's pier is essential to the safe delivery of cargo and personnel in support of the USAP scientific mission. Material and equipment are mobilized from Seattle, WA. The distance between Seattle, WA and Palmer Station, Antarctica is over 8,700 nautical miles (nm). The project site is a 4-day passage from Punta Arenas, Chile by way of the Drake Passage. No barge has ever successfully crossed the Drake Passage. The construction season is limited due to ice and weather. Construction cannot begin until the sea ice has sufficiently vacated and has to be completed prior to ice returning. Major materials include 36-, 32-, and 24-in steel pipe piling and H-piling; precast concrete caps (up to 70-tons) and panels; fender panels, bollard, and bull rail; and misc. structural steel. Site generally consists of exposed bedrock requiring piling to be drilled and socketed with 20-30-ft of embedment. Includes upland civil earthworks adjacent to the pier. The project is divided into two phases: Phase 1 - procurement, prefabrication, mobilization/deployment; and Phase 2 - construction. Phase 1 consists of significant preconstruction planning and integration with stakeholders and engineers. Work will be performed with two Manitowoc 2250 300-ton crawler cranes, one working from a 400x100 barge and the other from shore. Following construction, all demolished and unused construction materials and waste are required to be transported away from site back to Seattle, WA by barge. The transit time for tow is two (2) months each direction. Work will be performed on-ice for 4.5 months working 7:12 shifts (12-hr shifts, 7-days per week). Project is subject to significant COVID mitigation protocols include extended U.S. and international quarantine periods and marine mammal observations along with extreme environmental management controls.

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SR519 Seattle Multimodal Terminal at Colman Dock, Washington State Ferries, Seattle, WA - $114M Phased demolition and construction of the Washington State Ferries flagship terminal along the Seattle waterfront. Key elements of the project include replacement of a timber trestle with a new concrete and steel trestle, main terminal building, reconfiguring the dock layout, replacing the vehicle transfer span and the overhead loading structures of the northernmost Slip 3, replacing the King County Water Taxi facility on the south edge of the Dock, constructing a new entry building, elevated plaza and view platform, and mitigation for an additional 5,200 SF of overwater coverage. Construction is being performed in stages as it is an occupied facility which must continue to operate during construction. Implementation of the project involves complex scheduling, phasing and coordination. The project also encompasses a complex technical work environment. An estimated 7,400 tons of creosote-treated timber piles will be removed from Elliott Bay and open up an area of shoreline and near-shore habitat. Other environmental considerations include stormwater treatment for all new and replaced areas of the trestle and remediation of contaminated sediments. The completed project will provide a modern, safe, and efficient terminal to support the region's transportation infrastructure to stimulate economic development and the movement to allow for future growth. Contract delivery is GCCM.

Phase 2 New Harbor Development: Upland Facilities and Inner Harbor Facilities, City of Valdez, Valdez, AK - $26.9M Multi-year, phased project for new harbor facilities and increased vessel moorage, a drive down float facility, and utilities and support services. Inner Harbor Facilities included 50,000 CY of in-water rock and sediment removal, a 320-ft long sediment containment berm, 51,100 SF moorage float system and associated (191) piling (driven and socketed), 3 gangway ramps, a 90' x 90' drive down float and 17' x 144' transfer bridge and associated socketed and tensioned piling and concrete abutment, as well as power/

lighting, water, dry fire suppression, sewer pumpout, and bilge water pumpout services to the floats.

Portage Cove Harbor Expansion, Haines Borough, Haines, AK - $13.3M Work involved the removal and reinstallation of a seaplane float, installation of rock for rubble mound breakwater including Class II thru IV Armor Rock, 16-in dia. wastewater outfall, dredging and disposal of more than 80,000 CY of sediment, installation of steel pile-supported wave barrier including 24-in dia. w/ sheet pile wave barrier pile, installation of 30-in dia. bearing pile and 30-in dia. SPIN FIN pile, and replacement of 16-in dia. moorage pile and installation of 12.75-in dia. transient float pile.

Chignik Public Dock, Alaska Department of Transportation & Public Facilities, Chignik, AK - $12M Removed and salvaged existing Class "B" armor rock along the existing fill area to modify the existing armor rock slope protection to enlarge the footprint including construction of new sections to accommodate installation of the 54,000 SF bulkhead dock structure with associated fender systems, access catwalk, upland staging and access areas, and other related features. Included breasting dolphin; mooring dolphin; each supported by 30-in pile, installation of an OPEN CELL SHEET PILE Bulkhead comprised of approx. (935) sheets and backfilled with 73,600 CY of material; concrete pads; face beam; 50-ton bollards; (5) fender systems along the dock face and (1) on the breasting dolphin, each requiring (2) steel pin piles; catwalk; and miscellaneous structural metals and composite materials. Dock structure supported by (20) 30-in steel pile.

Powhatan Wreck Removal, Samson Tug & Barge, Sitka, AK - $1.3M Removal of the Tug Powhatan which sank in front of the Samson Tug & Barge (Samson) dock in Starrigavan Bay, approx. 7-miles north of Sitka, at a depth of roughly 160-ft and transportation from the site for disposal.

Swan Lake Reservoir Expansion, Southeast Alaska Power Agency, Ketchikan, AK - $6.4M Swan Lake Hydroelectric facility is located approx. 22 miles northeast of Ketchikan, accessible only by boat or seaplane. The existing facility was a 174-ft tall dam, 86,000 acre-ft reservoir with 2,217-ft long power tunnel and powerhouse with a generating capacity of 22 megawatts (MW). Purpose of the project was to raise the reservoir elevation at the existing facility and included selective demolition of concrete and related materials of the existing concrete dam spillway; parapet walls, and intake structure; construction of new concrete piers on the existing spillway; modifications to the existing parapet walls on the dam and adjacent to the existing intake; fabrication and installation of fabricated metal walkways, ladders, and platforms on the new concrete piers; installation of new vertical lift gate including fabricated steel gate guide embeds, 16- x 23-ft fabricated steel gate, hydraulic operating cylinders, and piping; hydraulic power unit (HPU); installation of new flashboard gate system including fabricated steel gate embed guides, flashboard panels, post and cable system, friction plate assembly, and trigger system; and installation of electrical power and control/instrumentation system for the new vertical lift gate, including all electrical panels, wire, conduit, and electrical equipment.

Anton Larsen Bay Dock Installation, Kodiak Island Borough, Kodiak, AK - $946K Included handling, transportation and installation of (3) 12- x 40-ft mooring floats and (1) 6-ft wide by 80-ft long gangway. The work included procurement, transportation and installation of all other components necessary for a complete dock installation, including piling systems, landside improvements and other elements. The work also included demolition and disposal of the existing dock system, including bulkhead, gangway, dock, and pilings.

Kodiak Ferry Terminal Pier 1 and Uplands Improvements, Alaska Department of Transportation & Public Facilities, Kodiak, AK - $13.7M Demolition, removal, and replacement of the existing 12,150 SF Pier 1 including timber piles; bracing; decking; fender systems (including steel piles); bollards; cleats; water and electrical utilities; fuel system piping and equipment; lighting; and other dock appurtenances. New dock called for 5,092 LF of decking complete with retaining walls, 5 marine fenders, pipe bollards, stairway replacement, and covered walkway. Design of forms and falsework and on-shore and off-shore survey was the responsibility of the contractor. (88) 22-in galvanized pipe pile totaling 5,532 LF were installed with drilled sockets. 200lb pile anodes installed by divers. Work was performed with a designated wildlife observer during pile driving and extraction. Called for approx. 800 CY of excavated material including backfill with aggregate base course for grading and Type II, Class B asphalt concrete. Riprap slope protection was also placed.

Port Lions Small Boat Harbor, Native Village of Port Lions, Port Lions, AK - $4M Construction of a 650-ft rubble-filled causeway, consisting of 100,000 CY of 18-in minus shot rock, 15,000 CY of 6-in minus shot rock. The causeway was armored on both the inside (shore-facing) and outside (sea-facing) slopes, using a 0.5-1.3-ft dia. rip rap on the inside slope and 3.67-4.25-ft dia. armor rock on the outer slope.

The OPEN CELL SHEET PILE wall constructed was comprised of (550) piling at an average length of 65-ft. Required backfill and vibracompaction. New ferry dock structure included mechanical and electrical utilities. Dolphins were supported by drilled-in steel pipe pile. Front face had fender system. Work was performed in a remote location.

Furie Monopod Installation, Crowley Marine, Kenai, AK - $14.8M Crane and barge support to assist with installation of a monopod platform in Cook Inlet; the first new installation since the late 1990's.

Pier 3 Replacement, City of Kodiak, Kodiak, AK - $29.5M Complete dock structure with crane rail supported on 36-, 30-, and 26-in driven and socketed piles up to 175-ft long driven to bedrock and then socketing using drill equipment, 15-ft into bedrock. 400-ft revetment was constructed from -40 to +10 consisting of 30,000 CY core stone, 3,000 CY filler stone, and 10,000 CY large armor stone. Included pile-supported, socketed pier with steel framing superstructure and pre-cast panels with 700 CY of cast-in-place pile caps, 300-ft OPEN CELL™ bulkhead wall using PS31 20-ft sheets, and (2) high-mast light poles. Project also involved installation of (2) rock anchored dolphins and steel fender piling.

Royal Dutch Shell EP Alaska Ventures, Dutch Harbor/ Valdez/ Beaufort Sea, AK Longshore Superintendent, Crane Operator Manitowoc 4100 offshore barge-mounted crawler.

GMD Fort Greely Missile Defense Project, Ft. Greely, AK Crane Operator Grove GMK 5230, Manitowoc 2250 placing/de-emplacing live missiles in silos.

Port of Anchorage Expansion, City of Anchorage, Anchorage, AK Crane Operator Manitowoc 4100, 2250 & 4000 driving piles, closed sheet cells, vibro compaction.

Maintenance Dredging Port of Anchorage and the City of Homer, AK Crane Operator Manitowoc 777T, 4000, 3900T.

Subsea Crane Services, Cook Inlet, AK Crane Operator Manitowoc 4000, 4100, 3900.

State Wide Rental Crane Services, Alaska Crane Operator Manitowoc M250, 2250, 4100, 4000, 3900T, 777T up to 350' of boom and Grove up to 130-ton.

Dayville Road New Bridge Construction and Replacement, State of Alaska, Valdez, AK Crane Operator Manitowoc 4000.

Indian River Bridge Replacement, Sitka, AK Crane Operator Manitowoc 2900.

CD3 Pipeline Bridge, Conoco Phillips, Kuparuk, AK Crane Operator Manitowoc 4100, Terex RT.

Port MacKenzie Dock Loading Facility, Cook inlet, AK Crane Operator Manitowoc 4100.

Alyeska Sea Foods Dock Replacement, Dutch Harbor, AK Crane Operator American 9299.

Bear Valley Railroad Bridge Replacement , Alaska Railroad, Whittier, AK Crane Operator Manitowoc 4000.
Harbor Crown Dock Replacement, Dutch Harbor, AK Crane Operator American 9299.

Seward Meridian Bridge new construction, State of Alaska, Wasilla, AK Crane Operator Grove truck crane, Manitowoc 3900T.
Willow creek bridge girder placement, State of Alaska, Willow, AK Crane Operator Grove truck crane.

L, V, S, T, X & Z Drill site tie-ins ConocoPhillips, Prudhoe Bay, AK Crane Operator Grove RT & Hydro-Tester.

Oliktock Drill site tie-ins BPXA, Prudhoe Bay, AK Crane Operator Grove RT & Hydro-Tester.

East Dock Water Injection Module Placement BPXA, Prudhoe Bay, AK Crane Operator American 11320 and Grove RT.

GC 1, GC2, Skid 50,CGF1 Tie-ins ConocoPhillips/ BPXA, Prudhoe Bay, AK Crane Operator Grove RT, CAT 583 Side boom.

West Dock STP plant piping replacement BPXA, Prudhoe Bay, AK Crane Operator Grove RT.

L&V Pipelines BPXA, Prudhoe Bay, AK Crane Operator Link Belt RT, Cat 583 Side boom & Hydro-Tester.

CD 2&3 Pipelines ConocoPhillips, Alpine, AK
Crane Operator Link Belt RT, 583 Side boom & Hydro-Tester.

Kuparuk River Crossing Pipelines BPXA, Prudhoe Bay, AK Crane Operator Link Belt 418 and RT, CAT 583.
Badami Pipelines BPXA, Prudhoe Bay, AK VSM Drilling/ Fabrication Welder.

BPXA, Prudhoe Bay, AK R&D welder qualifying welding procedures for offshore pipelines, specialty fabrication of VSM supports and drill fabrication.

Tarn Pipelines ConocoPhillips, Prudhoe Bay, AK
VSM Drilling/ Fabrication Welder.

APSC/TAPS Pipeline Heavy Equipment Support Valdez Terminal, Valdez, AK HD Field Mechanic/ Welder supporting various terminal contractors and projects.

APSC/TAPS Pipeline repairs including digs at PS10, Top of the World, PS 11 & 12, Thompson Pass HD Field Mechanic/Welder.

Oilspill Response APSC/TAPS, Valdez, AK Certified Welder, tasked with maintenance welding and repairs of oil spill barges and related Eq, R& D fabrication.

Oilfield support BPXA/ConocoPhillips, Prudhoe Bay, AK HD Mechanic/ Welder. Rollagon Operator – Supplying Construction Materials and Fuel to Arctic Circle Villages.

STEWART WILLIS, PROJECT ENGINEER

Years of Experience

7

Education

- Bachelor or Science, Geology
  Western Washington University

Licenses/Certifications

- Certified Erosion & Sediment Control Lead (CESCL)
- Turbidity Monitoring
- AutoCAD Trained
- OSHA 40-Hour HAZWOPER

Mr. Willis has been responsible for heavy civil marine projects for Pacific Pile & Marine inclusive of the successful Port of Alaska Modernization Project that has been underway for the past two years. His hands-on, in-the-field experience has provided considerable insight into cost reporting and schedule adherence. He has been responsible for on-site project management with an emphasis on safety and quality control. Stewart has demonstrated an ability to efficiently manage all aspects of complex high priority projects while maintaining positive working relationships with all parties involved.

Relevant Project Experience

Port of Alaska Modernization Program Petroleum and Cement Terminal - Phase 2, Municipality of Anchorage, Port of Alaska - $73M
Construction of monopile breasting and mooring dolphins.
Consisted of furnish and installation of three (3) each 144-inch-diameter breasting dolphins with dolphin caps and furnish and install six (6) each 144-inch- diameter mooring dolphins with dolphin caps. Included installation of catwalk system joining breasting and mooring dolphins to existing PCT platform; construction of fendering system consisting of seven (7) each fendering elements, four (4) constructed on the existing PCT platform, three (3) constructed on the breasting dolphins; landside utility work to extend municipal power and water systems to PCT; PCT operations building; and topside components on the PCT platform and dolphins. Heavy equipment includes PPM's Pacific Lifter, a 1,000 ton lift capacity derrick barge with American 509 Revolver, 450 ton Demag CC2500 crawler crane, and American "9310 crawler crane. Work performed in coordination with independent, 3rd party marine mammal observers. PPM is one of only a few heavy contractors in North America with the equipment and expertise to carry out a project involving material components of this size and the associated complexities for handling and installing.

Georgetown Wet Weather Treatment Station - Outfall, King County, Seattle, WA - $5.3M Work primarily consists of outfall construction which for 306 LF of 54-in OD HDPE outfall pipe into the Lower Duwamish Waterway. 106 LF of the outfall pipe is installed within a shored trench with the remaining 200 LF installed on existing grade or within a shallow burial. The final 50-ft of the outfall includes (8) 20-in duckbill valves for diffusion of effluent into the waterway. Outfall calls for precast concrete anchors bolted onto the pipe to provide weight and stability. Outfall work calls for trestle, excavation and shoring. Work also calls for the removal and disposal of steel and creosote pilings and other debris along the shoreline, post-construction restoration of the shoreline armoring, and restoration of an existing upper-intertidal swale. 19 LF of 60-in ID, lined and coated, steel effluent conveyance pipe is also to be installed along with a drop structure. Drop structure is to be constructed of cast-in-place concrete within a shored and dewatered excavation area. Pipe spools will be cast into structure walls for connection to effluent conveyance and outfall pipes with be a flap gate check valve on entrance to drop structure.

Pacific Pile&Marine

Chignik Public Dock, Alaska Department of Transportation & Public Facilities, Chignik, AK - $12M Removed and salvaged existing Class "B" armor rock along the existing fill area to modify the existing armor rock slope protection to enlarge the footprint including construction of new sections to accommodate installation of the 54,000 SF bulkhead dock structure with associated fender systems, access catwalk, upland staging and access areas, and other related features. Included breasting dolphin; mooring dolphin; each supported by 30-in pile, installation of an OPEN CELL SHEET PILE Bulkhead comprised of approx. (935) sheets and backfilled with 73,600 CY of material; concrete pads; face beam; 50-ton bollards; (5) fender systems along the dock face and (1) on the breasting dolphin, each requiring (2) steel pin piles; catwalk; and miscellaneous structural metals and composite materials. Dock structure supported by (20) 30-in steel pile.

Mukilteo Ferry Terminal Phase 1 Tank Farm Demolition and Dredging, Washington State Ferries, Mukilteo, WA - $8M This project was the first step of the Mukilteo Multimodal Project to relocate the existing ferry terminal. This phase involved demolishing the former U.S. Department of Defense Fuel Supply Point Facility which included a large pier extending into Possession Sound. Construction was expected to take approx. two years with in-water work constrained by fish windows. 138,080 SF of over-water pier was removed containing approx. 3,900 creosote-treated piles. Removal of these piles represented approx. 4 percent of the remaining creosoted piles in the Puget Sound Region. An additional 7,716 tons of toxic creosoted timber was removed during demolition. Piles were removed with a vibratory hammer with disposal to a landfill in Eastern Washington. Project also involved dredging approx. 21,000 CY of sediment for the new ferry terminal alignment. Sediment was sampled and determined to be suitable for open-water disposal. Marine wildlife monitors were active throughout in-water works.

Pier 54 Piling and Apron Replacement, Ivar's Inc., Seattle, WA - $7.7M Demolition of existing apron and piling and installation of 18- and 24-in dia. steel piling and stub pile. Included precast concrete pile caps, deck pans and cast-in-place topping slab and barrier. Involved extensive sub-cap under dock work and close coordination with design engineers to verify existing conditions and update the design as needed.

MATT ROLF, CSP, CHST

Years of Experience

11

Education

- B.S., Safety & Health Management
  Minor in Psychology
  Central Washington University

Professional Registrations

- Certified Rigging Inspector Level I
- Certified Safety Professional
  #CSP-30921
- OSHA 30 Construction
- OSHA 10 Construction
- Associate Safety Professional
  #ASP-24487
- Certified Forklift/Boom/Scissor Lift
  Train the Trainer
- HAZWOPER Training
- HAZWOPER Supervisor Training
- Construction Health & Safety Tech.
- Competent Industrial Fall
  Protection Rescuer
- Hazardous Energy Competent Person
- Qualified Rigger in Chain, Wire Rope,
  & Synthetic Slings
- Qualified Signalperson for Hand,
  Voice, & Radio Signals
- Fall Protection Competent Person
- Scaffold User Competent Person
- Trenching & Excavation
  Competent Person
- Confined Space Competent Person
- Basic CPR, AED, &
  First Aid Certification
- OSHA 500 OSHA Authorized
  Construction Trainer
- OSHA 510 OSHA Standards for the
  Construction Industry
- Firefighter I
- HazMat First Responder
- Washington State Emergency
  Medical Technician

Pacific Pile&Marine

Relevant Project Experience

2019 - 2020: HSE Manager 1 — American Bridge Company, Coraopolis, PA Responsible for establishing Site Specific Safety Plans for the Washington State Convention Center Addition (~$125M scope budget) and SR520 Montlake to Lake Washington Bridge Replacement (~$129M scope budget) projects. Conduct daily site safety inspections; purchase and distribute safety supplies, maintain employee safety records; lead weekly safety meetings; provide necessary training to employees; and keep corporate MSDS files updated regularly. Project scope for WSCC Addition consists of structural steel erection, decking, stairs, and miscellaneous metals (~20,500 tons of steel).

2017 - 2019: Safety Manager — Venture General Contracting, LLC., Seattle, WA Administered the Safety & Health Management program for a full-service commercial and multi-family general contracting company (24+/- projects, ~$265M annual volume). Manage safety department consisting of (2) Safety Coordinators that cover projects at the field level. Investigate all injuries and accidents, track documentation, inspect projects for safety and health issues, and ensure compliance with all local, state, and federal requirements. Manage workers' compensation claims ((3) OSHA Recordable injuries and no compensable claims in the past 14 months) from opening through closure. Establish and manage the corporate level department budget. Administer post-accident drug testing program for all personnel and for-cause testing for craft workers.

2017: Safety Director — Foushée & Associates Co., Inc, Bellevue, WA Manage all aspects of company Safety & Health Management programs for a small general contractor (12 +/- projects, ~$70M annual volume). Administer drug testing programs for union craft workers and office personnel. Investigate all accidents, track documentation, inspect projects for safety and health issues and ensure compliance with all local, state, and federal requirements.

2012 - 2016: Environmental, Health, & Safety Manager — Andersen Construction, Portland, OR Assist in the administration of safety, accident and fire protection programs to maintain a safe work environment at multiple projects (20+/- projects, ~$230M annual market volume). Conduct work area surveillance inspections, air sampling tests, employee-contractor safety training programs, etc. Investigate and ensure proper documentation of all accidents, safety violations, unsafe conditions, etc. Establish department budget. Interview, hire, and supervise safety department interns from Central Washington University Safety & Health Management program.

2011 - 2012: Safety Specialist — Associated General Contractors of Washington, Seattle, WA

2010 - 2011: Site Safety Professional — Valley Electric Co., Everett, WA

2009: Safety Intern — Northwest Construction, Inc., Bellevue, WA

DICK SOMERVILLE, P.E. | VICE PRESIDENT

Project Role: Quality Control Manager

PND ENGINEERS, INC.

Mr. Somerville has over 40 years of civil engineering and project management experience in Alaska. His background includes planning, permitting, site investigations, design, construction inspection and contract administration for a variety of public and private clients focusing on ports, harbors and waterfront projects. Following five years of employment with Alaska DOT&PF, Dick has worked in the private sector since 1980 and joined PND in 1987. Mr. Somerville is a principal of the firm and the manager of PND's Juneau Office, where he currently manages a staff of 17 engineers and technicians.

Mr. Somerville's engineering experience has included planning, design and construction projects. Projects have included large earthworks, erosion control, water and sewer utility projects, dredging, bridges, docks, cranes, moorage floats, boat launch facilities, marine haulouts, breasting dolphins, retaining walls, sheet pile structures, harbor infrastructure, roadways, parking, staging and work yards. As a planning and design manager he has conducted public presentations, developed needs assessments, scoping studies, condition assessments, produced civil and marine facility designs, technical specifications, contract documents, permits and cost estimates on several hundred public and private projects in Alaska.

EDUCATION

B.S. Civil Engineering, University of Alaska Anchorage

REGISTRATION

Professional Civil Engineer: AELC #8845

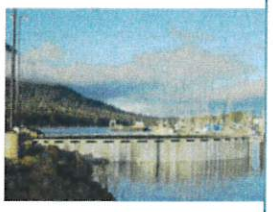
REFERENCES

Dennis Gray, Hoonah City Administrator, 907.945.3663 ext. 24

Glorianne Wollen, Petersburg Harbormaster; 907.772.4688

Carl Uchytil, P.E., CBJ Port Director; 907.586.0294

Hoonah Marine Industrial Center



Petersburg Bulkhead Dock Petersburg Marine Terminal

SELECTED RELEVANT PROJECT EXPERIENCE

Hoonah Marine Industrial Center, AK. Principal in Charge/Project Manager. Mr. Somerville is the project manager and principal in charge of this phased implementation project funded by state and federal agencies. The first phase included a three-acre waterfront staging area. The second phase included a boat haulout pier and 200-ton Marine Travelift. The third phase provided a heated wash down pad, utility building, final site grading, drainage, utilities and lighting. Phase four is currently under design and includes a sheet pile bulkhead dock for pass/pass operations, large uplands yard for barge operations and a loading ramp for ro/ro operations. Mr. Somerville has managed facility planning, concept design alternatives, cost estimating, public involvement, topographic and bathymetric surveys, geotechnical investigations, slope stability analysis, environmental documentation, mitigation plans, permit acquisition, final engineering design, contract administration and construction inspection for all phases of this extensive waterfront project.

Petersburg Marine Terminal, Petersburg, AK. Principal in Charge/Project Manager. Mr. Somerville was the principal in charge and project manager under contract with the Petersburg Borough for this project. He managed planning, concept alternatives, cost estimating, public involvement, surveys, geotechnical investigations, environmental studies, permitting, final design, contract administration and construction inspection for this multi-phase project. Completed improvements under the first two phases include 80,000 cubic yards of dredging, creation of 6 acres of operational uplands, pile supported approach dock with steel grated deck, high-capacity transfer bridge, vehicle accessible drive down float, large vessel moorage, water, power and lighting. The improvements included a heavy capacity sheet pile bulkhead loading dock with uplands expansion and lighting for increased staging of freight and marine equipment.

Wrangell Marine Service Center, Wrangell, Alaska. Principal in Charge/Project Manager. Mr. Somerville was the project manager and principal in charge of this multi-phased boat haulout and marine service center in Wrangell. He managed the planning, permitting, surveying, geotechnical investigations, public involvement, design and construction administration services for the project. Improvements include a boat haulout pier, 150-ton and 300-ton boat lifts, seven acres of heavy concrete paved uplands storage and service yard, a sheet pile bulkhead, wash down pad and treatment facility, water, sewer, power and electrical utilities, and port security fencing. Mr. Somerville also participated in the economic feasibility study for this project leading to successful EDA grant funding.

Unalaska Marine Center, Unalaska, Alaska. Civil Engineering/Construction Administration. Mr. Somerville was part of a multi-disciplinary team to develop the City of Unalaska's Marine Industrial Center Dock. Mr. Somerville performed civil design and construction administrative services for this project which included a new port facility consisting of a 700-foot sheet pile bulkhead, several mooring and breasting dolphins, pile supported crane rails, a container crane, approximately 4 acres of cargo laydown yard and marine fueling facilities. Heavy reinforced concrete paving was placed over much of the site following fill consolidation by vibracompaction techniques. Site utilities included storm drains, water, power and high mast lighting.

Unisea Port Complex, Unalaska, Alaska. Construction Administration. Mr. Somerville performed construction administration for the Unisea Port Complex which consisted of 1,200 linear feet of sheet pile bulkhead in 40 feet of water. Dock accessories included a reinforced concrete deck and curb, a fender system, cleats, ladders, bollards, and a cathodic protection system. The bulkhead is backfilled with nearly 150,000 cubic yards of shot rock fill obtained from a hillside immediately behind the site. The fill alone created approximately 3.2 acres of new waterfront land, and the excavation created an additional 1.5 acres. Extensive federal permitting was required to allow fill of this magnitude in Iliuliuk Bay. Another element of this project was the foundation system design for 50,000 square feet of fish processing buildings.

Auke Bay Loading Facility, Juneau, Alaska. Principal in Charge/Project Manager. Mr. Somerville was the project manager and principal in charge of a $12 million marine loading facility in Auke Bay. Improvements include a 3-acre storage and work yard, highway access, commercial vessel loading ramp, marine retaining walls, pile supported approach dock, heavy capacity transfer bridge, drivable work float with hydraulic cranes, power, lighting and security systems. Mr. Somerville managed all surveying, geotechnical and environmental investigations, permitting, design, contract administration and construction inspection.

Cruise Ship Terminal Staging Areas, Juneau, AK. Principal in Charge/Project Manager. Mr. Somerville provided extensive transportation and uplands operational master planning services followed by final design, contract administration and inspection services on this multi-phase project to improve vehicle and pedestrian circulation at Juneau's congested Cruise Ship Terminal and South Franklin Street. Improvements included expansion of pile supported seawalks and platform docks, reconfigured Franklin Street and A & B Zone parking for passenger coaches, service vans and vehicles in three adjacent parking lots. Landscape and hardscape features with covered shelters, planting beds, architectural rails, signage, traffic markings and site lighting compliment the movement of cruise visitors on foot and in vehicles along Juneau's constrained and crowded waterfront corridor.

Statter Harbor Improvements, Juneau, Alaska. Principal in Charge/Project Manager. Mr. Somerville managed master planning, environmental assessment, permitting, final design, contract administration and inspection services for extensive upland and marine facility improvements at Statter Harbor. He supervised the site layout for uplands and marine components including highway egress, parking, site circulation, pedestrian walkways, harbor moorage facilities, kayak launch, boat launch, tour loading float, covered shelters, seawalk, beach access stairway, restrooms and other recreational activities for this multi-phased project.

Petersburg Harbor Facilities Plan and Scow Bay Marina, Petersburg, Alaska. Principal in Charge/Project Manager. Mr. Somerville was the principal in charge and project manager of the Petersburg Harbor Facilities Plan, preparing concept designs, cost estimates, environmental permitting and extensive public involvement for the redevelopment of all three established downtown harbors in Petersburg. He also prepared concept designs and cost estimates for a marine facility at Scow Bay which provided moorage, 150-ton boat haulout, boat launch ramp, heavy load sheet pile bulkhead, staging, utilities, lighting, wash down, restrooms and parking.

Port of Juneau Cruise Ship Berths, Juneau, Alaska. Principal in Charge/Project Manager. Mr. Somerville was the project manager and principal in charge of the design and construction of two offshore floating concrete pontoon docks in downtown Juneau. The berths accommodate cruise ships up to 1,100 feet in length at each berth. The marine facilities also include transient moorage floats, two pile supported approach docks, two vehicle transfer bridges, 17 rock anchored and socketed mooring and breasting dolphins, catwalks, gangways, water, sewer, power and lighting utilities and other upland staging infrastructure in support of tourism activities. The design includes over 31,000 linear feet of large (24-48 inch) diameter steel piles with specialized pile tips anchored into bedrock with water depths over 100 feet. Mr. Somerville managed all planning, permitting, site investigations, surveying and final design for the project and is currently administering the construction for this $54 million contract.

Hoonah Marine Facilities Condition Assessment, Hoonah, Alaska. Principal in Charge/Project Manager. Mr. Somerville was the principal in charge and project manager of the Hoonah Marine Facilities Condition Assessment for several of Hoonah's marine facilities including the inner harbor moorage floats and loading dock, seaplane float, downtown approach dock and the City Warehouse Dock. An assessment was performed on the floats, piles, gangways, docks and other associated structures and components of the facilities. The purpose of these inspections was to identify general facility conditions and to note problems and deficiencies that affect life and function of the structures, personal safety and code compliance. The report included observations of the condition of the facilities and provided an estimated remaining safe and usable service life for each facility.

Unisea Port Complex, Unalaska, Alaska. Construction Administration. Mr. Somerville performed construction administration for the Unisea Port Complex which consisted of 1,200 linear feet of sheet pile bulkhead in 40 feet of water. Dock accessories included a reinforced concrete deck and curb, a fender system, cleats, ladders, bollards, and a cathodic protection system. The bulkhead is backfilled with nearly 150,000 cubic yards of shot rock fill obtained from a hillside immediately behind the site. The fill alone created approximately 3.2 acres of new waterfront land, and the excavation created an additional 1.5 acres. Extensive federal permitting was required to allow fill of this magnitude in Iliuliuk Bay. Another element of this project was the foundation system design for 50,000 square feet of fish processing buildings.

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Cruise Ship Terminal Staging Areas, Juneau, AK. Principal in Charge/Project Manager. Mr. Somerville provided extensive transportation and uplands operational master planning services followed by final design, contract administration and inspection services on this multi-phase project to improve vehicle and pedestrian circulation at Juneau's congested Cruise Ship Terminal and South Franklin Street. Improvements included expansion of pile supported seawalks and platform docks, reconfigured Franklin Street and A & B Zone parking for passenger coaches, service vans and vehicles in three adjacent parking lots. Landscape and hardscape features with covered shelters, planting beds, architectural rails, signage, traffic markings and site lighting compliment the movement of cruise visitors on foot and in vehicles along Juneau's constrained and crowded waterfront corridor.

Statter Harbor Improvements, Juneau, Alaska. Principal in Charge/Project Manager. Mr. Somerville managed master planning, environmental assessment, permitting, final design, contract administration and inspection services for extensive upland and marine facility improvements at Statter Harbor. He supervised the site layout for uplands and marine components including highway egress, parking, site circulation, pedestrian walkways, harbor moorage facilities, kayak launch, boat launch, tour loading float, covered shelters, seawalk, beach access stairway, restrooms and other recreational activities for this multi-phased project.

Petersburg Harbor Facilities Plan and Scow Bay Marina, Petersburg, Alaska. Principal in Charge/Project Manager. Mr. Somerville was the principal in charge and project manager of the Petersburg Harbor Facilities Plan, preparing concept designs, cost estimates, environmental permitting and extensive public involvement for the redevelopment of all three established downtown harbors in Petersburg. He also prepared concept designs and cost estimates for a marine facility at Scow Bay which provided moorage, 150-ton boat haulout, boat launch ramp, heavy load sheet pile bulkhead, staging, utilities, lighting, wash down, restrooms and parking.

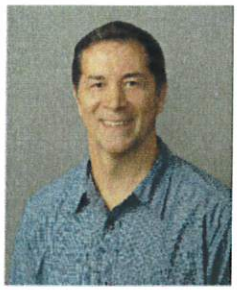
Port of Juneau Cruise Ship Berths, Juneau, Alaska. Principal in Charge/Project Manager. Mr. Somerville was the project manager and principal in charge of the design and construction of two offshore floating concrete pontoon docks in downtown Juneau. The berths accommodate cruise ships up to 1,100 feet in length at each berth. The marine facilities also include transient moorage floats, two pile supported approach docks, two vehicle transfer bridges, 17 rock anchored and socketed mooring and breasting dolphins, catwalks, gangways, water, sewer, power and lighting utilities and other upland staging infrastructure in support of tourism activities. The design includes over 31,000 linear feet of large (24-48 inch) diameter steel piles with specialized pile tips anchored into bedrock with water depths over 100 feet. Mr. Somerville managed all planning, permitting, site investigations, surveying and final design for the project and is currently administering the construction for this $54 million contract.

Hoonah Marine Facilities Condition Assessment, Hoonah, Alaska. Principal in Charge/Project Manager. Mr. Somerville was the principal in charge and project manager of the Hoonah Marine Facilities Condition Assessment for several of Hoonah's marine facilities including the inner harbor moorage floats and loading dock, seaplane float, downtown approach dock and the City Warehouse Dock. An assessment was performed on the floats, piles, gangways, docks and other associated structures and components of the facilities. The purpose of these inspections was to identify general facility conditions and to note problems and deficiencies that affect life and function of the structures, personal safety and code compliance. The report included observations of the condition of the facilities and provided an estimated remaining safe and usable service life for each facility.

JOHN DeMUTH, P.E., S.E. | VICE PRESIDENT

Project Role: Design Manager/Marine Design Lead

PND ENGINEERS, INC.



Mr. DeMuth has over 33 years of diversified experience in the engineering development, design and construction management of waterfront facilities throughout Alaska. He was raised in Southeast Alaska and grew up commercial fishing which has provided an applicable understanding of how Alaska's harbors and waterfront facilities are utilized and operated. His design experience includes pile supported and sheet pile bulkhead docks, vessel mooring/berthing structures, fendering systems, pedestrian gangways, drive-down float facilities, harbor float systems, boat launch ramps, barge ramps, boat haul outs, and seaplane facilities. Mr. DeMuth also has extensive fabrication and construction inspection as well as condition assessment experience acquired from many hours in the field examining a wide range of marine facilities across the State of Alaska. This affords him with a wealth of knowledge pertaining to what does and does not work in Alaska's challenging environment. His background and engineering experience combine to benefit clients from the planning and concept development, to design, and on through construction and final completion of a project.

EDUCATION

B.S. Civil Engineering
Montana State University

REGISTRATIONS

Professional Civil Engineer: AELC #8847

Professional Structural Engineer: AELT #14159

REFERENCES

Erich Schaal, P.E.
CBJ Port Engineer
907.586.0397

Carl Uchytil, P.E.
CBJ Port Director
907.586.0294

Glorianne Wollen
Petersburg Harbormaster
907.772.4688

Tenakee Springs Ferry Terminal

Juneau Cruise Ship Berths

Hoonah Marine Industrial Center

SELECTED RELEVANT PROJECT EXPERIENCE

Statter Harbor Phase IIIB, Juneau, AK. Project Manager. Mr. DeMuth is PND's project manager for the third phase of the City and Borough of Juneau's Statter Harbor Improvement project currently under construction. He coordinated and directed PND staff and an electrical subconsultant to assist the CBJ with planning, permitting, design development, bid assistance and construction administration and inspection for this new commercial-use area of the harbor specifically intended to accommodate the tourism industry. The project includes a 300-ft long concrete block MSE wall with armor-rocked toe and side-slopes, a 10-ft wide by 100-ft long ADA compliant gangway, and 600 lineal feet of 16-ft wide, heavy-duty timber moorage floats designed to provide a home base for whale watching vessels and safely accommodate large groups of boarding and disembarking passengers. The project will be completed this spring as scheduled and within budget.

Tenakee Springs Ferry Terminal Improvements, Tenakee Springs, AK. Project Manager. Mr. DeMuth was the project manager for PND and led a multidiscipline team of electrical, mechanical and environmental subconsultants in collaborating with AKDOT to provide design services and assistance with contract administration and construction inspection for replacement of the community's multi-use dock facility. The facility serves primarily as a ferry terminal, but also accommodates barges for delivery of bulk fuel and freight. The steel pile supported dock with precast concrete deck panels consists of an approach dock, a main dock, and a staging dock where access to AMHS ferry vessels is provided via a steel, multi-girder transfer bridge that lands onto a floating platform. The bridge landing platform includes a lift tower assembly that allows adjustment of the bridge height to be compatible with a number of different ferry vessel configurations. Three mooring/breasting dolphins with energy-absorbing fender panels serve to accommodate a multitude of AMHS vessels as well as the fuel and freight barges. Shallow bedrock at the site required many of the dock and dolphin piles to be socketed and/or rock anchored.

Shoemaker Bay Harbor, Wrangell, AK. Project Manager. Mr. DeMuth was the project manager, coordinating and directing PND staff and an electrical subconsultant to assist the City and Borough of Wrangell to plan, permit and develop the design for a complete removal and replacement of the harbor's moorage float system and upland access. Over 32,000 square feet of heavy-duty timber floats with polyethylene floatation were laid out and designed with finger floats ranging from 3ft by 24ft up to 8ft by 60ft. Potable water, fire protection, and sewer pump out systems, as well as modern power and lighting systems were included in the design.

Port of Juneau Cruise Ship Berths, Juneau, AK. Project Design Manager. As the project design manager, Mr. DeMuth was a key member of PND's team that provided master planning, concept development, final design and construction management for two floating berths to accommodate post Panamax cruise ships along Juneau's downtown waterfront. Major elements included pile supported approach docks, drive-down transfer bridges, floating concrete pontoons, and mooring/breasting dolphins with heavy-duty fendering systems and interconnecting catwalks. The project required a phased construction sequence over two years to allow for continued use of the existing cruise ship docks and seawalks between phases. PND also performed a structural analysis of all existing, adjacent waterfront docks to access the suitability of use by the Contractor for their construction equipment and material staging. This $54 million project was completed a week ahead of schedule, under budget, and with change orders less than 0.1% of the original bid amount.

Crescent Harbor Float Replacement – Preliminary Design, Sitka, AK. Project Manager. As project manager for PND, Mr. DeMuth led the effort in working with electrical and environmental subconsultants and the City and Borough of Sitka to develop the preliminary design report and concept layout for the first phase of Crescent Harbor's float replacement. In addition to discussions with CBS harbor staff, a questionnaire was developed and mailed to harbor patrons/users to establish the criteria for developing the preliminary design layout and identify potential construction and cost impacts. A public meeting was conducted to present the preliminary design and receive further input from the community.

CBJ Cruise Ship Berths Safety Improvements, Juneau, AK. Project Design Manager. As PND's project manager, Mr. DeMuth collaborated with the CBJ in an effort to improve the pedestrian experience along Juneau's waterfront by developing an ADA compliant design solution for the Steamship Dock's sloped transition area located immediately south of the downtown parking garage and library building. The Steamship Dock and Cold Storage Dock, both timber docks of 1960's vintage where successfully joined together with a cost-effective solution that met ADA requirements and CBJ's budget. Although new high-capacity glulams were utilized to provide the stringer lengths required and minimize splices, the overall timber dock character was maintained for these historical waterfront structures.

Sitka Transient Float, Sitka, AK. Project Design Manager. Mr. DeMuth was PND's project design manager and was responsible for construction management for the 16ft wide by 980ft long transient moorage float which also serves as a breakwater for Sitka's Thomsen Harbor. Float connections and internal pile hoops incorporated heavy-duty, energy-absorbing rubber, and steel pipe piles were socketed into bedrock to anchor the float. Potable water and fire protection systems, and modern power and lighting systems were included in the design.

Petersburg Marine Terminal, Petersburg, Alaska. Lead Design Engineer. Mr. DeMuth was the lead designer and assisted with management of the contract administration and construction inspection. The work included three acres of shot rock fill uplands with armor rock slopes, a sheet pile bulkhead dock with fendering, a pile supported approach dock with steel grating deck, drive-down steel pipe pontoon float, steel tube truss-framed transfer bridge, dredging, water, sewer, power, lighting, grading and drainage; all constructed over three contract phases.

Carl E. Moses Harbor, Unalaska, AK. Project Design Manager. Mr. DeMuth was PND's project design manager and assisted with the construction management for this $30 million design-build project. The heavy steel pipe-framed float system utilized high energy-absorbing connectors to provide both strength and long-term durability. Float system was anchored by heavy-wall, steel pipe pile socketed into bedrock and installed with structural moment-frame connections. Electrical, domestic water, and dry standpipe fire suppression systems were designed to accommodate commercial vessels 60'-150' in length. A drive-down float with a hydraulic crane was included to assist commercial fishery loading operations.

Hoonah Marine Industrial Center, Hoonah, AK. Lead Design Engineer. Mr. DeMuth was lead designer and a key PND team member for the planning, design and construction management of the 200-ton boat haul out facility. Phase I of the project included construction of a three-acre waterfront staging and service area with quarry development for a rock material source adjacent to the project site. Phase II consisted of the construction of a steel pile supported, pre-stressed concrete decked boat haul out pier w/ fendering system, while Phase III added an uplands wash down pad with water treatment and storm water bypass systems, utility building with office space and restroom with shower, electrical power pedestals in the boat yard and high mast lighting. Phase IV of the project was intended to include a bulkhead dock facility which is identified in the scope of work for this project.

BRENNA HUGHES, MS, CH | Environmental Scientist

Project Role: **Permitting**

PND ENGINEERS, INC.

Since joining PND in 2016, Brenna Hughes has prepared regulatory permit applications and associated consultation documents for port and harbor construction, assisted with environmental planning for community and resources development, managed protected species observer programs, analyzed geotechnical and hydrologic data, and conducted research and documentation for project National Environmental Policy Act (NEPA) review. Brenna also has more than seven years of experience planning, permitting, and executing geophysical and hydrographic surveys for marine construction. Her experience includes environmental and physical site surveys, preparation of biological and environmental assessments, wetland delineation and permitting, and coordination with multiple agencies.

EDUCATION

M.S., Science Management, University of Alaska Anchorage

B.S., Geology, University of Alaska Fairbanks

Adjunct Professor of Hydrography & GIS, UAA Geomatics, 2018-present

CERTIFICATIONS

NSPS Certified Hydrographer (CH), #313, 2017

USACE Wetland Delineation, 2016

AK-CESCL Erosion & Sediment Control Lead, 2017, 2020

REFERENCES

Norm Regis, Harbormaster, City of Seward, 907.224.3138

Joy Baker, Port Director, City of Nome, 907.304.1905

Jed Dixon, Project Manager, Crowley Fuels, 907.777.5598

Crowley Fuels Dock

UniSea G1 Dock

SELECT RELEVANT PROJECT EXPERIENCE

Crowley Fuels Dock Replacement, Kotzebue, AK. Project Permits. This dock replacement and expansion required preparation of an Incidental Harassment Authorization (IHA) application, a Subsistence Plan of Cooperation, and a Biological Assessment (BA) and Essential Fish Habitat (EFH) assessment. Brenna coordinated early engagement of agency reviewers to expedite final permit receipt. Work required extensive modeling of underwater construction sounds and marine mammal occurrence and activities to assess construction impacts. She also assisted during the construction phase as a Protected Species Observer (PSO) advisor and prepared observation reports following project completion.

Unalaska Marine Center Dock Expansion, Unalaska, AK. Project Permits. Brenna supported spatial analysis and reporting on a pre-construction observer program to update marine mammal occurrence data in Dutch Harbor for incidental take requests. Following completion of the program, she prepared the project's BA and IHA applications for in-water construction.

UniSea G1 Dock Replacement, Unalaska, AK. Project Permits. Brenna coordinated with multiple agencies to ensure compliance with project permits and respond to permitting needs throughout construction. She managed the project's PSO program, analyzed sighting data, and prepared related reports. She also assisted with planning and reporting for an acoustic monitoring study of construction-related noise that has since been used for similar projects.

Harbor 360 Hotel Dredging, Seward, AK. Dredge Disposal Permitting. Brenna prepared a sampling and analysis plan for evaluation of potentially contaminated harbor dredge materials for Major Marine Tours' mooring basin. She acquired sampling permits, coordinated the sampling effort, and authored the final characterization report. Once the soils were determined safe for dredging, she acquired offshore disposal permits for the dredging operation.

Seward North and South Harbor Launch Ramps, Seward, AK. Project Permits. Brenna supervised permit application preparation for the south launch ramp and coordinated with PSOs during construction. For the north launch ramp and float facilities, she coordinated with permit agencies, prepared applications, a biological evaluation, and associated documents. She participated in U.S. Army Corps of Engineers (USACE) Section 408 Civil Works dredge project coordination and acted as a non-federal designee for endangered species consultations.

Main Bay Dock Replacement, Prince William Sound, AK. Project Permits. Brenna prepared project permits to improve Prince William Sound Aquaculture Corporation's Main Bay Hatchery. She coordinated with multiple state and federal agencies, including USACE, for project permitting.

IAIN BROWN, P.L.S. | Senior Surveyor

Project Role: Surveying Lead

PND ENGINEERS, INC.

Iain Brown has 10 years of surveying experience in Alaska, encompassing topographic design surveys, right-of-way research and right-of-way staking, differential leveling, road, and pipeline design and construction, as-builts, hydrographic surveys, control surveys, and building design and construction. He also has experience in completing final easement drafting and platting for Alaska Division of Lands for both upland and offshore projects. He utilizes current survey technology, including GNSS receivers, robotic total stations, laser scanners, satellite mapping, echo sounders, AutoCAD, Civil3D, drone mapping systems, and photogrammetry software.

EDUCATION

B.S. Geomatics (Survey Emphasis), 2012, University of Alaska, Anchorage

REGISTRATION

Professional Land Surveyor, Alaska #107707

REFERENCES

Stan Brown, Survey Unit Manager, DNR, 907.269.8521

Matt McGuan, P.E., USCG CEU Juneau, 907.463.2430

Scott McLane, PLS, McLane Consulting, 907.398.0051

Downtown Waterfront Improvements

Mendenhall Glacier Recreation Area

SELECTED RELEVANT PROJECT EXPERIENCE

Downtown Waterfront Improvements, Juneau, Alaska. Survey Lead. As lead surveyor, Iain completed all research and coordination, and led survey crews in design topographic and as-built survey of the waterfront area, including the street, sidewalks, buildings and parking area as well as the existing dock area. Completed topographic basemap for engineering use and design purposes.

Mendenhall Glacier Recreation Area, Juneau, Alaska. Survey Lead. Iain performed retracement of the initial control survey and provided a new control survey, creating a control network of monuments and control points. Performed design topographic survey for the proposed Steep Creek bridge site, the proposed pedestrian bridge, and new visitor center sites. The survey team completed bathymetric survey for the entirely of Mendenhall Lake, approximately 1100 Acres for USCG navigability study. using RTK methodologies integrated with survey grade sonar. The survey team also performed ground support activies for 3 miles of drone lidar data collection along the proposed lakeshore trail. Iain Led the drafting efforts for existing conditions, verified all LiDAR data, performed records research, and coordinated cost estimates for future work.

Portage Cove Harbor Boat Launch Improvements, Haines, Alaska. Survey Lead. Iain was the lead surveyor and completed a design topographic survey of the area including the surrounding street and approaches. Recovered and verified the survey control that was already in place, and as-built all of the existing structures on the property including the utilities. He made an updated basemap for engineering use and design.

Pelican Harbor, Pelican, Alaska

PND Survey was contracted to perform a full design survey of the existing harbor in Pelican for design and dredging purposes. The team as-built the entire harbor, including all adjacent buildings and boardwalks, existing docks and floats, and all pilings and utilities. The team completed a full topographic survey, meshing it seamlessly with a bathymetric survey completed with a single beam sonar unit integrated into the teams GNSS receivers. Iain completed all design drafting for the engineering team to use.

NOAA Homeport Dock, Ketchikan, Alaska

Iain and the PND survey team performed a design survey for improvements and replacement of existing facilities at the NOAA Homeport Site in Ketchikan. The team completed a full control survey, boundary survey and topographic and as-built of the site. Scope including bathymetric data extending 500 feet offshore and extremely difficult areas of survey under the existing structures to be replaced. The team used a combination of robotic survey methods and GNSS RTK receivers to complete this job. Iain performed all the drafting for engineering design purposes.

El Capitan Facility Improvements, Prince of Wales Island, Alaska

PND survey performed topographic and as-built survey for the USFS at the El Capitan Cave facilities on Prince of Wales Island. The team completed topographic survey for 7 different individual areas using combined methods, performed drone missions for new orthophotography, and as-built the existing facilities at the cave entrance, using a Trimble SX10 laser scanner. Iain reviewed and stamped all the design survey deliverables being provided to the USFS.

SEAN SJOSTEDT, P.E. | SENIOR ENGINEER

Project Role: Geotechnical Lead

PND ENGINEERS, INC.

Mr. Sjostedt has 11 years of engineering experience in Alaska, specializing in geotechnical and civil engineering as both a design engineer and project manager. His geotechnical experience includes planning and implementing complex onshore and offshore geotechnical investigations of varying magnitudes, deep and shallow foundation design, and slope stability and settlement analysis. His geotechnical work has contributed to a wide range of projects including docks, harbors and other waterfront infrastructure, as well as roads, parking lots and building sites for public and private clients across Alaska. His civil design experience includes site planning and layout, surface drainage, subsurface utility design, and grading plans for many industry sectors. Sean's engineering experience is complimented with 5 years of construction experience in Alaska prior to joining PND.

EDUCATION

B.S. Civil Engineering, University of Idaho

REGISTRATION

Professional Civil Engineer:
Alaska #102428

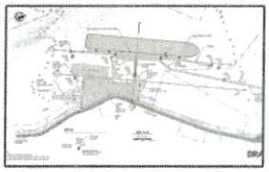
REFERENCES

Dennis Gray, Hoonah City Manager, 907.945.3663 ext. 24

Kirk Miller, AKDOT Southcoast Region Preconstruction Engineer, 907.465.1215

Mitch McDonald, AKDOT Southcoast Region Engineering Geologist; 907.465.4554

Offshore drilling at Gravina Freight Dock



Hoonah Multi-Use Berthing Facility Concept

SELECTED RELEVANT PROJECT EXPERIENCE

Portage Cove Harbor Expansion, Haines, AK. Geotechnical Engineer. Mr. Sjostedt participated in two stages of onshore and offshore geotechnical investigations in support of a multi-phase waterfront improvements and harbor expansion project in Haines. Findings were used to analyze rubble-mound and pile-supported breakwater alternatives, and develop recommendations for large upland expansion fills and pile-supported structures.

Hoonah Bulkhead and Dock, Hoonah, AK. Geotechnical Engineer. Mr. Sjostedt is leading the geotechnical analysis task for this proposed sheet pile bulkhead and multi-purpose dock project in Hoonah, Alaska. Project complexities include weak, liquefiable soil over shallow bedrock. Special construction techniques including vibro-compaction may be utilized to mitigate some of these challenges and improve global stability.

Gravina Freight Dock and Layup Facility, Ketchikan, AK. Lead Geotechnical Engineer. Mr. Sjostedt led the geotechnical efforts for this multi-facility geotechnical investigation in Ketchikan. The investigation was a combination onshore/offshore drilling program supporting the design of an upland causeway, transfer bridge, moorage float, barge ramp, and mooring/breasting pile structures. Sean performed geotechnical analyses including embankment stability and settlement, bearing capacity, and axial and lateral pile loading analyses. He provided geotechnical design recommendations for many project components including the causeway, transfer bridge abutment foundation, and float/dolphin anchor piles.

Kake City Dock Improvements, Kake, AK. Lead Geotechnical Engineer. Mr. Sjostedt led the field investigation, geotechnical analyses and reporting on the subsurface investigation at the site of this earthen dock expansion project in Kake. Analyses included settlement, liquefaction and stability assessments on the very soft marine clay at the site, as well as staged fill placement recommendations to ensure stability during construction.

Port Chilkoot Dock Improvements, Haines, AK. Geotechnical Engineer. Mr. Sjostedt led the field investigation efforts to facilitate the design of a reconstructed pile-supported cruise ship dock in Haines. Recommendations were subsequently provided for dock support piles.

Hoonah Multi-Use Berthing Facility, Hoonah, AK. Geotechnical Engineer. Mr. Sjostedt assisted in the offshore geotechnical investigation for a proposed city-owned berthing facility supporting the cruise ship and freight industries. The marine drilling investigation findings were used to develop recommendations for upland expansion fills, a sheet pile bulkhead barge dock, barge landing ramp, and support piles for dolphins and a floating pontoon.

NOAA Ketchikan Homeport, Ketchikan, AK. Lead Geotechnical Engineer. Mr. Sjostedt led the onshore/offshore geotechnical drilling investigation in support of the design of a new floating dock, transfer bridge, office building, and other various site improvements. The marine facility in Ketchikan is the homeport for the *Fairweather*, a NOAA hydrographic surveying vessel.

Scow Bay Boat Haul-Out Facility, Petersburg, AK. Lead Geotechnical Engineer. Mr. Sjostedt planned, organized and managed the geotechnical investigation supporting a proposed vessel haul-out facility in Petersburg. The investigation consisted of onshore test pits and offshore borings. The results were used to perform settlement, stability, and liquefaction analyses for a rubble-mound breakwater extension to protect the proposed haul-out facility.

TYLER BRADSHAW, P.E. | SENIOR ENGINEER

Project Role: Civil Engineering Lead

PND ENGINEERS, INC.

Tyler Bradshaw, PE, is a senior registered engineer with 16 years of experience in civil, water and wastewater engineering in both design and construction engineering settings. In addition to design, his background includes project management, permitting, public involvement, presentations, administration of construction contracts and onsite construction inspection with PND Engineers. Prior to joining PND, Mr. Bradshaw served in the United States Air Force gaining experience in project and personnel management. Mr. Bradshaw's design and project management experience in civil and utility works throughout all phases of design and construction includes grading, pavement, roads, erosion and sediment control measures, environmental best management practices, pedestrian and ADA site accessibility, containment dikes, embankments, riprap, confinement and disposal of contaminated soils, retaining walls, buried and suspended pipelines, fire suppression systems, potable water systems, wastewater and storm water systems.

EDUCATION

B.S. Engineering Science, Colorado State University

REGISTRATION

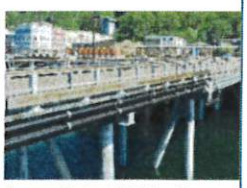
Professional Civil Engineer:
Alaska # 14651

REFERENCES

Erich Schaal, P.E., CBJ Port Engineer
907.586.0398

Karl Hagerman
Petersburg Public Works Director
907.772.4430

Timothy Calhoun, PE
NOAA Facility Engineering Office
206-526-6647 (Office)
206-471-2468 (Cell)



Juneau Cruise Ship Berths

Heritage Harbor Outfall

SELECT PROJECT EXPERIENCE

Haines Borough Portage Cove Harbor Expansion, Haines AK. Civil Project Manager, Lead Design Engineer Mr. Bradshaw designed the civil upland, parking area and wastewater outfall at Portage Cove in Haines. The project included more than 100,000 cubic yards of dredging and upland fill of the tidelands for the expanded parking and boat launch area. The project also included storm water facilities and the 2,400 linear foot 16-inch HDPE treated wastewater outfall for sole wastewater treatment plant in Haines. The pipe connects downstream of the wastewater treatment plant and is buried beneath roadway and parking areas for 600 linear feet before continuing in a submarine trench to the outfall in Portage Cove located 80 feet below MLLW. Other tasks included extensive geotechnical site investigations and permitting with USACE, and ADEC.

Port of Juneau Cruise Ship Berths. Civil and Utilities Design Lead and Project Manager. Work included design of over 5,000 linear feet of 1-inch through 8-inch HDPE pipe traversing through several unique environments. The design includes connections to CBJ water and sewer infrastructure within Front Street, which is AKDOT right of way. Mr. Bradshaw developed applications and obtained all required permits. Design tasks included developing a full hydraulic model of CBJ's downtown water system. Mr. Bradshaw's comfort and familiarity with HDPE pipe design is made clear within this design as he tackled the multitude of HDPE pipe design considerations. These include varying internal and external pressures, traffic loads on buried pipe, high external temperature fluctuations on above grade pipe, varying fluids and flow rates, high degrees of thermal expansion and contraction, abrasion, freeze protection, air release, pressure release, winterization, bending, buoyancy for submerged and intertidal pipe, and seismic loads on hangers and suspended pipe.

Statter Harbor Improvements, Juneau AK. Civil Project Manager and Lead Design Engineer Mr. Bradshaw was lead designer and civil design project manager on this 7-acre parking and marine recreation facility recently completed in Auke Bay. Civil design included traffic analysis and intersection design to AASHTO AKDOT and CBJ standards, 3,700 tons of ACP pavement, more than 1,000 square yards of CIP concrete pavement for sidewalks and slabs, 4,000 linear feet of curb and gutter, ADA compliant accessible facilities, and more than 8,000 square feet of concrete block retaining wall. Utilities included 2,000 linear feet of storm drain systems, a sewer force main and manholes for future restroom, and 1,000 feet of HDPE water services connected to the 16-inch main within the AKDOT right of way. Other tasks included extensive geotechnical site investigations and permitting with USACE, ADEC and AKDOT.

NOAA Ketchikan Homeport: Lead Civil, Water, Fire Suppression and Wastewater Systems Designer Mr. Bradshaw is currently the project manager for site civil, float and utilities design for the reconstruction of NOAA's waterfront vessel Fairweather's homeport facility. The design includes buried and float mounted water, sewer, storm and fire suppression systems. A comprehensive frost protection system was designed including insulated and heat traced utility systems. Project includes multiple sewer lift stations to transfer vessel waste to municipal systems. Management duties included coordination with local water, fire and building authorities. Tyler developed contract documents and technical specifications for all systems to federal standards.

BENJAMIN C. HAIGHT, PE

Principal Electrical Engineer

OVERVIEW

Ben Haight founded Haight & Associates (HAI) in 1980 (originally BC Haight, Consulting Engineers), which RESPEC acquired in 2021. With over 48 years of electrical engineering experience, Ben has been practicing in Alaska since 1975.

As a principal electrical engineer, Ben provides leadership to the electrical team. He initiates projects and performs the preliminary design work, research, analysis, and planning as required. Ben guides his staff's efforts to fulfill the requirements for design, document development, and construction services. He continually provides the staff with technical guidance, defines and ensures quality assurance, reviews contract document standards, and manages project scheduling.

A significant part of Ben's experience includes projects involving waterfront facilities. These include dock, boat harbors, fish processing plants, hatcheries, freight yards, and boat haul-out and maintenance yards. The electrical systems for these projects include power distribution with connections for refrigerated containers, maintenance receptacles, and boat shore power. They also include low- and high-level lighting, and surveillance and security cameras. Ben maintains a presence and involvement with energy conservation. His projects almost always include attention to minimizing energy consumption. His goal is to obtain the best system efficiencies economically feasible.

TECHNICAL EXPERTISE

- Special Electrical Systems
- Educational Electrical Systems
- Power Distribution and Generation Systems
- Lighting and Lighting Controls
- Fire Detection and Alarm Systems

EDUCATION

- BS in Electrical Engineering, Washington State University, Pullman, WA (1972)

REGISTRATIONS & LICENSES

- Professional Electrical Engineer in Alaska – EE4800 (1979)

PROFESSIONAL MEMBERSHIPS

- National Society of Professional Engineers
- Institute of Electrical and Electronics Engineers
- Illuminating Engineering Society of North America
- National Fire Protection Association
- Association of Energy Engineers

WORK HISTORY

- RESPEC (2021–Present)
- Haight & Associates, Inc. (2002–2021)
- Haight & McLaughlin, Inc. (1994–2002)
- BC Haight Consulting Engineers (1980–1994)
- USCG, 17th District, Juneau (1975–1980)
- US Bureau of Reclamation, Grand Coulee Dam, Washington (1973–1975)

PROJECT EXPERIENCE

Wrangell Marine Service Center, City and Borough of Wrangell, Wrangell, Alaska. As a subconsultant to PND Engineers, Ben was a member of the team that designed and constructed the Marine Service Center, a facility designated for boat maintenance. The facility includes a boat haul-out, boat maintenance pads with power pedestals containing receptacles for welding and general maintenance, and high-level lighting. The project included collaboration with the municipal utility to install medium voltage underground feeders and padmount transformers on site.

Haines Borough Port Chilkoot Dock, Haines Borough, Haines, Alaska. This project replaced the main approach for the Port Chilkoot dock. As a subconsultant to PND Engineers, Ben was a member of the team that designed the replacement and enhancement of the electrical systems. The systems included all new lighting along the approach dock and on the main dock. The project provided power for a new branch panel at the head of the gangway to the small vessel float with circuits for maintenance receptacles, shore power, and the future installation of a new gangway lift.

Lutak Dock, Haines Borough, Haines, Alaska. As a subconsultant to PND Engineers, Ben provided electrical engineering support for the team assessing the existing Lutak Dock in 2012. Ben provided a condition assessment for the lighting, utility power on site, and the service power for the on-site buildings and refrigerated containers.

Alaska Marine Lines Freight Yard, Alaska Marine Lines, Skagway, Alaska. As a subconsultant to Anchor Electric, Ben provided the design to install high-level lighting and refrigerated container power receptacles for the freight yard.

Hoonah Marine Industrial Center, City of Hoonah, Hoonah, Alaska. As a subconsultant to PND Engineers, Ben designed the electrical systems for high-level lighting, power pedestals with receptacles for boat maintenance and storage, and electrical systems for a building with an office, restrooms, and a storage area. The electrical system included a standby generator for the building.

RANDY P. DOWNING

PROFESSIONAL ENGINEER / MECHANICAL ENGINEER / PROJECT MANAGER

PROFESSIONAL PROFILE

Mr. Downing has 15 plus years of experience providing innovative engineering solutions for industrial, commercial, and government clients. He has comprehensive knowledge of multiple engineering disciplines. Randy is a reliable construction manager providing services including permitting, critical path scheduling and analysis, contractor interaction, and cost analysis tracking systems. He is consistently recognized for outstanding contributions and commended for perseverance, efficiency, positive attitude, and priority management skills.

907-745-6986

rdowning@gne-ak.com

137 E. Arctic Ave., Palmer, AK, 99645

EDUCATION

BACHELOR OF SCIENCE // MECHANICAL ENGINEERING TECHNOLOGY
Oregon Institute of Technology, Klamath Falls, OR

ARCTIC ENGINEERING
University of Alaska

EXPERTISE

- Operations Manager (2021)
- Principal Engineer (2021)
- Bentley AutoPIPE
- Bentley PlantFLOW
- MathCAD
- AutoCAD
- Microsoft Projects

WORK EXPERIENCE

Mechanical Engineer, Great Northern Engineering

Work experience covers all aspects of project engineering. This ranges from meeting with clients to determine a scope of work, writing contract proposals, developing engineering budgets, negotiating fees, develop comprehensive design and critical thinking of multi-disciplinary elements, site visits, estimating, coordinating drafting and engineering scopes of work, responsible for keeping projects within budget and on time, all project relevant code studies, writing contract specifications, report writing, permitting, writing comprehensive commissioning documents, providing and instilling successful construction engineering programs, answering technical RFI's, DCVR's, submittals, AS-BUILTING, client turnover, write and compile Owner Operational and Maintenance Manuals.

Relevant Pipeline Work: Provided the pipeline design for the PCT modernization project. Designed and engineered the hose tower loading/offloading arm system, berthing lines, pipe supports, buried pipeline design and tie-in to the Port of Alaska Valve Yard (POAVY) and new stripping system. Performed in depth analysis of the hose tower loading arm mechanical design, developed the pipe stress analysis for the berthing line piping to survive a large seismic event and return the system back to service within a few days.

Terminal Facility, Delta Western

Designed new terminal facility at the Port of Anchorage. Provided the design for a 50k barrel methanol storage tank (API 650 tank with floating roof design) control building, vapor combustion unit, civil drainage system, user pipeline, loading and offload rack, loading lane, loading rack shelter, and complete project specifications. Designed facility P&ID's, coordinated user line installation with the POAVY. Performed project management as the owner representative for bid solicitation, to answer technical questions, provide permitting assistance and alternate value engineered cost saving option designs.

SKILLS

TECHNICAL

- Microsoft Word
- Microsoft Excel
- API/ASME Codes
- ASHRAE
- International Building Codes
- NFPA Codes (30/31A, 11, 13, 58)
- EPA/ADEC Regulations
- SPCC Plans
- Permitting Requirements
- Cryogenic Facilities
- HVAC Systems
- Potable Water and Vent, Wastewater System Design
- Commercial and Industrial Building Design
- Arctic Regions Design
- Aviation Fueling Systems
- Oil and Gas Systems

CERTIFICATIONS

- Professional Engineer, State of Alaska, License Number 14853
- North Slope Training Cooperative (NSTC), 2015

WORK EXPERIENCE CONTINUED

Relevant Pipeline Experience
Provided the design for multiple petroleum pipelines, designed casings, marine vault connections, provided hydrotesting certifications, transfer pump systems, active and passive cathodic protection design, barge connections, marine fueling cabinets, marine barge connections, valve yard and manifold design, pipe support design, vibration and seismic calculations and design.

Shoreside Petroleum Pipeline Expansion
Provided the design for a pipeline that extended from Shoreside Petroleum's existing facility in Seward, AK. The pipeline consisted of several casings and two new underground concrete vaults that serviced the Alaska Railroads freight dock. Served as the project manager for the project and provided the hydrotesting certification.

Balyhoo Piping
provided the design for a 2-mile-long buried pipeline at Dutch Harbor, AK. This design included sizing a fuel transfer pump to transfer fuel to nearby tank farms as well as barge connections for various docks. The design also included cathodic protection design and pipeline casing design for an airport runway crossing.

Fuel Facility Upgrades, Shoreside Petroleum
Designed new 91k barrel bulk fuel storage tank farm. Designed four 22,800-barrel API-650 fuel storage tanks for jet fuel, gasoline and ULSD. Provided the piping design, AFFF plans, secondary containment design, P&ID design, comprehensive piping isometric, performed piping stress analysis, tie-in to existing loading pumps and facility integration design.

Fuel Facility Upgrades, AFSC
Designed the new 400k barrel tank farm, civil drainage system, facilities P&ID's, API 650 tank design, and piping systems design. Performed piping stress calculations (ASME B31.3), API 650 Appendix E seismic calculations. Provided inter-tank transfer design and filter train design. Performed the facility jet fuel hydraulics and the aqueous film forming fluid (AFFF) calculations and report. Provided written specifications, attended weekly meetings, provided site support and construction services, Submittals and RFIs.

Design Engineering Experience
Chevron Anchorage Jet Fuel Pipeline Repair Hot Tap Welding Design
provided pipe welding calculations in accordance with API RP In-Service welding procedures and ASME BPV codes. Calculations and report provided a detailed WPS that took into consideration the base metal metallurgical properties, the weld procedure (burn rate, weld speed, stick used, etc.), heat affected zone, joint details, maximum pipeline inner temperature, stagnant petroleum (gasoline) in the pipeline during the weld process and a finite element analysis for an industry accepted method.

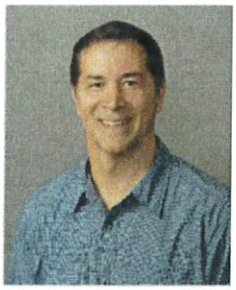
Vessel Rerate
performed numerous pressure vessel re-rating calculations in accordance with ASME BPV codes. These calculations were compiled for multiple vessels that served Hilcorps natural gas fields located in the cook inlet of AK.

Class I Well Injection
designed the module fluid transfer system, tanks, piping, tank farm secondary containment, API 650 tank design, sized tank immersion heater, pipe supports, module, pumps, anti-vibration design and P&ID's for a Class I Well Injection System for Conoco Philips. The deliverables were a construction set of drawings, P&IDs, complete piping and pump bill of materials, and specifications for Conoco Phillips.

JOHN DeMUTH, P.E., S.E. | VICE PRESIDENT

Project Role: Design Manager/Marine Design Lead

PND ENGINEERS, INC.



Mr. DeMuth has over 33 years of diversified experience in the engineering development, design and construction management of waterfront facilities throughout Alaska. He was raised in Southeast Alaska and grew up commercial fishing which has provided an applicable understanding of how Alaska's harbors and waterfront facilities are utilized and operated. His design experience includes pile supported and sheet pile bulkhead docks, vessel mooring/berthing structures, fendering systems, pedestrian gangways, drive-down float facilities, harbor float systems, boat launch ramps, barge ramps, boat haul outs, and seaplane facilities. Mr. DeMuth also has extensive fabrication and construction inspection as well as condition assessment experience acquired from many hours in the field examining a wide range of marine facilities across the State of Alaska. This affords him with a wealth of knowledge pertaining to what does and does not work in Alaska's challenging environment. His background and engineering experience combine to benefit clients from the planning and concept development, to design, and on through construction and final completion of a project.

EDUCATION

B.S. Civil Engineering
Montana State University

REGISTRATIONS

Professional Civil Engineer: AELC #8847

Professional Structural Engineer: AELT #14159

REFERENCES

Erich Schaal, P.E.
CBJ Port Engineer
907.586.0397

Carl Uchytil, P.E.
CBJ Port Director
907.586.0294

Glorianne Wollen
Petersburg Harbormaster
907.772.4688

Tenakee Springs Ferry Terminal

Juneau Cruise Ship Berths

Hoonah Marine Industrial Center

SELECTED RELEVANT PROJECT EXPERIENCE

Statter Harbor Phase IIIB, Juneau, AK. Project Manager. Mr. DeMuth is PND's project manager for the third phase of the City and Borough of Juneau's Statter Harbor Improvement project currently under construction. He coordinated and directed PND staff and an electrical subconsultant to assist the CBJ with planning, permitting, design development, bid assistance and construction administration and inspection for this new commercial-use area of the harbor specifically intended to accommodate the tourism industry. The project includes a 300-ft long concrete block MSE wall with armor-rocked toe and side-slopes, a 10-ft wide by 100-ft long ADA compliant gangway, and 600 lineal feet of 16-ft wide, heavy-duty timber moorage floats designed to provide a home base for whale watching vessels and safely accommodate large groups of boarding and disembarking passengers. The project will be completed this spring as scheduled and within budget.

Tenakee Springs Ferry Terminal Improvements, Tenakee Springs, AK. Project Manager. Mr. DeMuth was the project manager for PND and led a multidiscipline team of electrical, mechanical and environmental subconsultants in collaborating with AKDOT to provide design services and assistance with contract administration and construction inspection for replacement of the community's multi-use dock facility. The facility serves primarily as a ferry terminal, but also accommodates barges for delivery of bulk fuel and freight. The steel pile supported dock with precast concrete deck panels consists of an approach dock, a main dock, and a staging dock where access to AMHS ferry vessels is provided via a steel, multi-girder transfer bridge that lands onto a floating platform. The bridge landing platform includes a lift tower assembly that allows adjustment of the bridge height to be compatible with a number of different ferry vessel configurations. Three mooring/breasting dolphins with energy-absorbing fender panels serve to accommodate a multitude of AMHS vessels as well as the fuel and freight barges. Shallow bedrock at the site required many of the dock and dolphin piles to be socketed and/or rock anchored.

Shoemaker Bay Harbor, Wrangell, AK. Project Manager. Mr. DeMuth was the project manager, coordinating and directing PND staff and an electrical subconsultant to assist the City and Borough of Wrangell to plan, permit and develop the design for a complete removal and replacement of the harbor's moorage float system and upland access. Over 32,000 square feet of heavy-duty timber floats with polyethylene floatation were laid out and designed with finger floats ranging from 3ft by 24ft up to 8ft by 60ft. Potable water, fire protection, and sewer pump out systems, as well as modern power and lighting systems were included in the design.

Port of Juneau Cruise Ship Berths, Juneau, AK. Project Design Manager. As the project design manager, Mr. DeMuth was a key member of PND's team that provided master planning, concept development, final design and construction management for two floating berths to accommodate post Panamax cruise ships along Juneau's downtown waterfront. Major elements included pile supported approach docks, drive-down transfer bridges, floating concrete pontoons, and mooring/breasting dolphins with heavy-duty fendering systems and interconnecting catwalks. The project required a phased construction sequence over two years to allow for continued use of the existing cruise ship docks and seawalks between phases. PND also performed a structural analysis of all existing, adjacent waterfront docks to access the suitability of use by the Contractor for their construction equipment and material staging. This $54 million project was completed a week ahead of schedule, under budget, and with change orders less than 0.1% of the original bid amount.

Crescent Harbor Float Replacement – Preliminary Design, Sitka, AK. Project Manager. As project manager for PND, Mr. DeMuth led the effort in working with electrical and environmental subconsultants and the City and Borough of Sitka to develop the preliminary design report and concept layout for the first phase of Crescent Harbor's float replacement. In addition to discussions with CBS harbor staff, a questionnaire was developed and mailed to harbor patrons/users to establish the criteria for developing the preliminary design layout and identify potential construction and cost impacts. A public meeting was conducted to present the preliminary design and receive further input from the community.

CBJ Cruise Ship Berths Safety Improvements, Juneau, AK. Project Design Manager. As PND's project manager, Mr. DeMuth collaborated with the CBJ in an effort to improve the pedestrian experience along Juneau's waterfront by developing an ADA compliant design solution for the Steamship Dock's sloped transition area located immediately south of the downtown parking garage and library building. The Steamship Dock and Cold Storage Dock, both timber docks of 1960's vintage where successfully joined together with a cost-effective solution that met ADA requirements and CBJ's budget. Although new high-capacity glulams were utilized to provide the stringer lengths required and minimize splices, the overall timber dock character was maintained for these historical waterfront structures.

Sitka Transient Float, Sitka, AK. Project Design Manager. Mr. DeMuth was PND's project design manager and was responsible for construction management for the 16ft wide by 980ft long transient moorage float which also serves as a breakwater for Sitka's Thomsen Harbor. Float connections and internal pile hoops incorporated heavy-duty, energy-absorbing rubber, and steel pipe piles were socketed into bedrock to anchor the float. Potable water and fire protection systems, and modern power and lighting systems were included in the design.

Petersburg Marine Terminal, Petersburg, Alaska. Lead Design Engineer. Mr. DeMuth was the lead designer and assisted with management of the contract administration and construction inspection. The work included three acres of shot rock fill uplands with armor rock slopes, a sheet pile bulkhead dock with fendering, a pile supported approach dock with steel grating deck, drive-down steel pipe pontoon float, steel tube truss-framed transfer bridge, dredging, water, sewer, power, lighting, grading and drainage; all constructed over three contract phases.

Carl E. Moses Harbor, Unalaska, AK. Project Design Manager. Mr. DeMuth was PND's project design manager and assisted with the construction management for this $30 million design-build project. The heavy steel pipe-framed float system utilized high energy-absorbing connectors to provide both strength and long-term durability. Float system was anchored by heavy-wall, steel pipe pile socketed into bedrock and installed with structural moment-frame connections. Electrical, domestic water, and dry standpipe fire suppression systems were designed to accommodate commercial vessels 60'-150' in length. A drive-down float with a hydraulic crane was included to assist commercial fishery loading operations.

Hoonah Marine Industrial Center, Hoonah, AK. Lead Design Engineer. Mr. DeMuth was lead designer and a key PND team member for the planning, design and construction management of the 200-ton boat haul out facility. Phase I of the project included construction of a three-acre waterfront staging and service area with quarry development for a rock material source adjacent to the project site. Phase II consisted of the construction of a steel pile supported, pre-stressed concrete decked boat haul out pier w/ fendering system, while Phase III added an uplands wash down pad with water treatment and storm water bypass systems, utility building with office space and restroom with shower, electrical power pedestals in the boat yard and high mast lighting. Phase IV of the project was intended to include a bulkhead dock facility which is identified in the scope of work for this project.

BRENNA HUGHES, MS, CH | Environmental Scientist

Project Role: **Permitting**

PND ENGINEERS, INC.

Since joining PND in 2016, Brenna Hughes has prepared regulatory permit applications and associated consultation documents for port and harbor construction, assisted with environmental planning for community and resources development, managed protected species observer programs, analyzed geotechnical and hydrologic data, and conducted research and documentation for project National Environmental Policy Act (NEPA) review. Brenna also has more than seven years of experience planning, permitting, and executing geophysical and hydrographic surveys for marine construction. Her experience includes environmental and physical site surveys, preparation of biological and environmental assessments, wetland delineation and permitting, and coordination with multiple agencies.

EDUCATION

M.S., Science Management, University of Alaska Anchorage

B.S., Geology, University of Alaska Fairbanks

Adjunct Professor of Hydrography & GIS, UAA Geomatics, 2018-present

CERTIFICATIONS

NSPS Certified Hydrographer (CH), #313, 2017

USACE Wetland Delineation, 2016

AK-CESCL Erosion & Sediment Control Lead, 2017, 2020

REFERENCES

Norm Regis, Harbormaster, City of Seward, 907.224.3138

Joy Baker, Port Director, City of Nome, 907.304.1905

Jed Dixon, Project Manager, Crowley Fuels, 907.777.5598

Crowley Fuels Dock

UniSea G1 Dock

SELECT RELEVANT PROJECT EXPERIENCE

Crowley Fuels Dock Replacement, Kotzebue, AK. Project Permits. This dock replacement and expansion required preparation of an Incidental Harassment Authorization (IHA) application, a Subsistence Plan of Cooperation, and a Biological Assessment (BA) and Essential Fish Habitat (EFH) assessment. Brenna coordinated early engagement of agency reviewers to expedite final permit receipt. Work required extensive modeling of underwater construction sounds and marine mammal occurrence and activities to assess construction impacts. She also assisted during the construction phase as a Protected Species Observer (PSO) advisor and prepared observation reports following project completion.

Unalaska Marine Center Dock Expansion, Unalaska, AK. Project Permits. Brenna supported spatial analysis and reporting on a pre-construction observer program to update marine mammal occurrence data in Dutch Harbor for incidental take requests. Following completion of the program, she prepared the project's BA and IHA applications for in-water construction.

UniSea G1 Dock Replacement, Unalaska, AK. Project Permits. Brenna coordinated with multiple agencies to ensure compliance with project permits and respond to permitting needs throughout construction. She managed the project's PSO program, analyzed sighting data, and prepared related reports. She also assisted with planning and reporting for an acoustic monitoring study of construction-related noise that has since been used for similar projects.

Harbor 360 Hotel Dredging, Seward, AK. Dredge Disposal Permitting. Brenna prepared a sampling and analysis plan for evaluation of potentially contaminated harbor dredge materials for Major Marine Tours' mooring basin. She acquired sampling permits, coordinated the sampling effort, and authored the final characterization report. Once the soils were determined safe for dredging, she acquired offshore disposal permits for the dredging operation.

Seward North and South Harbor Launch Ramps, Seward, AK. Project Permits. Brenna supervised permit application preparation for the south launch ramp and coordinated with PSOs during construction. For the north launch ramp and float facilities, she coordinated with permit agencies, prepared applications, a biological evaluation, and associated documents. She participated in U.S. Army Corps of Engineers (USACE) Section 408 Civil Works dredge project coordination and acted as a non-federal designee for endangered species consultations.

Main Bay Dock Replacement, Prince William Sound, AK. Project Permits. Brenna prepared project permits to improve Prince William Sound Aquaculture Corporation's Main Bay Hatchery. She coordinated with multiple state and federal agencies, including USACE, for project permitting.

IAIN BROWN, P.L.S. | Senior Surveyor

Project Role: Surveying Lead

PND ENGINEERS, INC.

Iain Brown has 10 years of surveying experience in Alaska, encompassing topographic design surveys, right-of-way research and right-of-way staking, differential leveling, road, and pipeline design and construction, as-builts, hydrographic surveys, control surveys, and building design and construction. He also has experience in completing final easement drafting and platting for Alaska Division of Lands for both upland and offshore projects. He utilizes current survey technology, including GNSS receivers, robotic total stations, laser scanners, satellite mapping, echo sounders, AutoCAD, Civil3D, drone mapping systems, and photogrammetry software.

EDUCATION

B.S. Geomatics (Survey Emphasis), 2012, University of Alaska, Anchorage

REGISTRATION

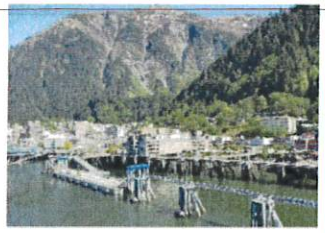
Professional Land Surveyor, Alaska #107707

REFERENCES

Stan Brown, Survey Unit Manager, DNR, 907.269.8521

Matt McGuan, P.E., USCG CEU Juneau, 907.463.2430

Scott McLane, PLS, McLane Consulting, 907.398.0051



Downtown Waterfront Improvements

Mendenhall Glacier Recreation Area

SELECTED RELEVANT PROJECT EXPERIENCE

Downtown Waterfront Improvements, Juneau, Alaska. Survey Lead. As lead surveyor, Iain completed all research and coordination, and led survey crews in design topographic and as-built survey of the waterfront area, including the street, sidewalks, buildings and parking area as well as the existing dock area. Completed topographic basemap for engineering use and design purposes.

Mendenhall Glacier Recreation Area, Juneau, Alaska. Survey Lead. Iain performed retracement of the initial control survey and provided a new control survey, creating a control network of monuments and control points. Performed design topographic survey for the proposed Steep Creek bridge site, the proposed pedestrian bridge, and new visitor center sites. The survey team completed bathymetric survey for the entirely of Mendenhall Lake, approximately 1100 Acres for USCG navigability study. using RTK methodologies integrated with survey grade sonar. The survey team also performed ground support activies for 3 miles of drone lidar data collection along the proposed lakeshore trail. Iain Led the drafting efforts for existing conditions, verified all LiDAR data, performed records research, and coordinated cost estimates for future work.

Portage Cove Harbor Boat Launch Improvements, Haines, Alaska. Survey Lead. Iain was the lead surveyor and completed a design topographic survey of the area including the surrounding street and approaches. Recovered and verified the survey control that was already in place, and as-built all of the existing structures on the property including the utilities. He made an updated basemap for engineering use and design.

Pelican Harbor, Pelican, Alaska

PND Survey was contracted to perform a full design survey of the existing harbor in Pelican for design and dredging purposes. The team as-built the entire harbor, including all adjacent buildings and boardwalks, existing docks and floats, and all pilings and utilities. The team completed a full topographic survey, meshing it seamlessly with a bathymetric survey completed with a single beam sonar unit integrated into the teams GNSS receivers. Iain completed all design drafting for the engineering team to use.

NOAA Homeport Dock, Ketchikan, Alaska

Iain and the PND survey team performed a design survey for improvements and replacement of existing facilities at the NOAA Homeport Site in Ketchikan. The team completed a full control survey, boundary survey and topographic and as-built of the site. Scope including bathymetric data extending 500 feet offshore and extremely difficult areas of survey under the existing structures to be replaced. The team used a combination of robotic survey methods and GNSS RTK receivers to complete this job. Iain performed all the drafting for engineering design purposes.

El Capitan Facility Improvements, Prince of Wales Island, Alaska

PND survey performed topographic and as-built survey for the USFS at the El Capitan Cave facilities on Prince of Wales Island. The team completed topographic survey for 7 different individual areas using combined methods, performed drone missions for new orthophotography, and as-built the existing facilities at the cave entrance, using a Trimble SX10 laser scanner. Iain reviewed and stamped all the design survey deliverables being provided to the USFS.

SEAN SJOSTEDT, P.E. | SENIOR ENGINEER

Project Role: Geotechnical Lead

PND ENGINEERS, INC.

Mr. Sjostedt has 11 years of engineering experience in Alaska, specializing in geotechnical and civil engineering as both a design engineer and project manager. His geotechnical experience includes planning and implementing complex onshore and offshore geotechnical investigations of varying magnitudes, deep and shallow foundation design, and slope stability and settlement analysis. His geotechnical work has contributed to a wide range of projects including docks, harbors and other waterfront infrastructure, as well as roads, parking lots and building sites for public and private clients across Alaska. His civil design experience includes site planning and layout, surface drainage, subsurface utility design, and grading plans for many industry sectors. Sean's engineering experience is complimented with 5 years of construction experience in Alaska prior to joining PND.

EDUCATION

B.S. Civil Engineering, University of Idaho

REGISTRATION

Professional Civil Engineer:
Alaska #102428

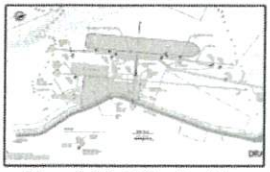
REFERENCES

Dennis Gray, Hoonah City Manager, 907.945.3663 ext. 24

Kirk Miller, AKDOT Southcoast Region Preconstruction Engineer, 907.465.1215

Mitch McDonald, AKDOT Southcoast Region Engineering Geologist; 907.465.4554

Offshore drilling at Gravina Freight Dock



Hoonah Multi-Use Berthing Facility Concept

SELECTED RELEVANT PROJECT EXPERIENCE

Portage Cove Harbor Expansion, Haines, AK. Geotechnical Engineer. Mr. Sjostedt participated in two stages of onshore and offshore geotechnical investigations in support of a multi-phase waterfront improvements and harbor expansion project in Haines. Findings were used to analyze rubble-mound and pile-supported breakwater alternatives, and develop recommendations for large upland expansion fills and pile-supported structures.

Hoonah Bulkhead and Dock, Hoonah, AK. Geotechnical Engineer. Mr. Sjostedt is leading the geotechnical analysis task for this proposed sheet pile bulkhead and multi-purpose dock project in Hoonah, Alaska. Project complexities include weak, liquefiable soil over shallow bedrock. Special construction techniques including vibro-compaction may be utilized to mitigate some of these challenges and improve global stability.

Gravina Freight Dock and Layup Facility, Ketchikan, AK. Lead Geotechnical Engineer. Mr. Sjostedt led the geotechnical efforts for this multi-facility geotechnical investigation in Ketchikan. The investigation was a combination onshore/offshore drilling program supporting the design of an upland causeway, transfer bridge, moorage float, barge ramp, and mooring/breasting pile structures. Sean performed geotechnical analyses including embankment stability and settlement, bearing capacity, and axial and lateral pile loading analyses. He provided geotechnical design recommendations for many project components including the causeway, transfer bridge abutment foundation, and float/dolphin anchor piles.

Kake City Dock Improvements, Kake, AK. Lead Geotechnical Engineer. Mr. Sjostedt led the field investigation, geotechnical analyses and reporting on the subsurface investigation at the site of this earthen dock expansion project in Kake. Analyses included settlement, liquefaction and stability assessments on the very soft marine clay at the site, as well as staged fill placement recommendations to ensure stability during construction.

Port Chilkoot Dock Improvements, Haines, AK. Geotechnical Engineer. Mr. Sjostedt led the field investigation efforts to facilitate the design of a reconstructed pile-supported cruise ship dock in Haines. Recommendations were subsequently provided for dock support piles.

Hoonah Multi-Use Berthing Facility, Hoonah, AK. Geotechnical Engineer. Mr. Sjostedt assisted in the offshore geotechnical investigation for a proposed city-owned berthing facility supporting the cruise ship and freight industries. The marine drilling investigation findings were used to develop recommendations for upland expansion fills, a sheet pile bulkhead barge dock, barge landing ramp, and support piles for dolphins and a floating pontoon.

NOAA Ketchikan Homeport, Ketchikan, AK. Lead Geotechnical Engineer. Mr. Sjostedt led the onshore/offshore geotechnical drilling investigation in support of the design of a new floating dock, transfer bridge, office building, and other various site improvements. The marine facility in Ketchikan is the homeport for the *Fairweather*, a NOAA hydrographic surveying vessel.

Scow Bay Boat Haul-Out Facility, Petersburg, AK. Lead Geotechnical Engineer. Mr. Sjostedt planned, organized and managed the geotechnical investigation supporting a proposed vessel haul-out facility in Petersburg. The investigation consisted of onshore test pits and offshore borings. The results were used to perform settlement, stability, and liquefaction analyses for a rubble-mound breakwater extension to protect the proposed haul-out facility.