Request for Proposals
Porcupine and Meridian Cabin Design and Construction
Chugach National Forest, Alaska

Background and Statement of Work:
The National Forest Foundation (NFF), in partnership with the U.S. Forest Service (USFS), is seeking design and construction services for two new public use cabins on the Chugach National Forest. One cabin will be within the Porcupine Campground near Hope, AK and the other in the vicinity of Meridian Lake near Seward, AK. This is a design build project that involves a qualified designer and contractor to design a USFS-approved cabin, foundation, and site layout design to be used for construction of both or one cabin and site. Construction should be complete no later than September 30, 2024. The completed design and specifications will become U.S. Forest Service property to be used at USFS discretion.

Interested parties may submit a proposal for both cabins or for a single cabin.

These cabins are the first of approximately 12 cabins to be built on the Chugach National Forest and 13 cabins on the Tongass National Forest in the coming years. Many cabins will be in remote or semi-remote locations, and all cabins are located in bear country. Through these cabin projects, the intent is to bolster local Alaskan economies by utilizing local (Alaskan) wood products, local contractors, and support opportunities for local workforce development, to the extent feasible.

Information Requested
If interested in submitting a bid for this project, please provide a proposal for the above statement of work by providing:

- technical approach
- design-build team (contractors and sub-contractors)
- schedule
- work experience
- cost
- capacity for this project
- experience in similar projects

Specific requirements are detailed below.
I. PROJECT OVERVIEW AND REQUIREMENTS

General Specifications

(a) Description of Work – This Request for Proposals is for services related to the design and construction of 16’ x 20’ cabins, the foundations, 12’ x 16’ covered decks attached to the cabins, approximately 20’ approach ramps, and site amenities. The contractor shall be responsible for completing the following deliverables in coordination with NFF and USFS:

1. Complete design for the cabin
   i. Design elements may include but are not limited to; parking, gravel pads, fire rings, wood sheds, picnic tables, toilets and walking paths. Area technical surveys will be available for the selected contractor to review and use in the design process. Design elements should closely follow the requirements in Appendices A, B, C and D.
   ii. Shop drawings will detail the dimensions and a cut list providing the necessary information needed to manufacture and assemble the cabin.

2. Create a design brief and subsequent draft plans and specifications for review and discussion at 60%, 90%, and 100%.
   i. The design brief shall include the design management approach and any design and/or construction concerns or constraints due to schedule, budget, materials, constructability, transport, code, compliance etc.
   ii. The Contractor shall present to the NFF and USFS at meetings at the 60%, 90%, 100% completion stages to discuss comments and required changes. The draft plans should be shared 10 days prior to each review meeting. The design brief, 60%, and 90% designs, structural calculations, and specifications can be shared in pdf. 100% designs and specifications must be provided in both pdf and original format (AutoCAD/Word).
   iii. Submit shop drawings, construction details, assembly instructions and other submittals to illustrate all aspects of the proposed cabin design and assembly procedure. The submittal for review and approval by NFF and USFS will be made prior to cabin construction.
   iv. Design and layout will need to be approved by NFF and relevant USFS staff before construction. If there are elements of the design that can begin prior to 100% final construction drawings and specifications approval, it will require written approval by NFF and USFS.
   v. Maintain a full set of construction drawings and specifications on site and annotate with red line changes in the field to reflect as-built conditions.
   vi. Incorporate red line changes upon construction completion to produce accurate as built record drawings. The as-built record drawings shall meet the same requirements as the 100% final
construction drawings and are to be stamped by a licensed engineer and/or architect as appropriate.

3. Construction of a new cabin, foundation, and site amenities after the NFF/USFS has approved designs, drawings, and specifications will include the following:
   i. Prior to commencing any work on construction, the Contractor Representative shall meet with NFF and USFS in a pre-work meeting to review the preliminary construction drawings and specifications, work plans, and submittals. Construction may commence upon approval of the work plan and procedures.
   ii. Procuring all building materials and transporting them to the project site.
   iii. Constructing a 16’ x 20’ accessible cedar cabin with a full loft, including excavation, fill and foundation work. See Appendices for lumber specifications.
   iv. Constructing and installing interior cabin furniture.
   v. Construction or installation of all site amenities (outlined in the Appendices) which may include pathways, parking areas, outhouse, fire rings, picnic tables, ABA accessible ramp to access the deck of the cabin, and other items.
   vi. Cleaning construction site of all construction material and waste.

(b) Project Location – The proposed location for the Porcupine Cabin is located at 60° 55' 52.2401"N, 149° 39' 50.3899"W, just north of the Porcupine Campground in Hope, Alaska, situated along the shore of Turnagain Arm. Additional information is found in Appendix C. The proposed location for the Meridian Lake Cabin is located at 60°17’5.89”N, 149°21’53.13”W, off the Iditarod National Historic Trail (INHT) at Meridian Lake. To get to the cabin site from Anchorage, travel south on the Seward Highway to the Grayling Lake Trailhead, located at milepost 13.25 on the West side of the highway. Hike in on the INHT following the signs for Meridian Lake (stay right at the first junction). About 1.2 miles down the INHT there is a primitive spur trail that heads north to a dispersed campsite. The cabin location is about .2 miles down this trail. Additional information is found in Appendix D.

(c) Work Schedule – The contractor should propose a timeline for the 60%, 90%, and 100% design for review and discussion to ensure that all required reviews are complete prior to January 31, 2024. Design submittal procedures are described in Appendix A. The final work schedule shall be mutually agreed upon by NFF and the Contractor. Once the work schedule is agreed upon, a USFS representative will be assigned to inspect the project at key points during the cabin construction, including:
   1. After excavation/before backfill for footings (if applicable),
   2. During concrete work (if applicable),
   3. Before floor structure is covered up by subfloor,
   4. Before roof structure and insulation is covered by sheathing/waterproofing, and
   5. Final inspection and as-built records

(d) List of Attachments
   1. Appendix A. Standard Cabin Specifications
2. Appendix B. USFS Standard Cabin Layouts
3. Appendix C. Porcupine Cabin Specifications
4. Appendix D. Meridian Lake Cabin Specifications

Other Project Requirements and Specifications

1. **Utilities** – In many locations there will be no or limited sanitation, water, electrical or housing services available. The Contractor shall make its own arrangements for temporary facilities if needed. See Appendices C and D for site specific information.

2. **Specifications** – Project work shall be accomplished in accordance with the following:
   - All designs will be based on information provided in appendices and discussions with NFF and USFS.
   - All final designs will be in AutoCAD, file format .dwg, and Adobe pdf. They must be stamped by a licensed engineer and/or architect as appropriate.
   - Designs must follow Forest Service Outdoor Recreation Accessibility Guidelines (FSORAG) and Architectural Barriers Act (ABA) guidelines.
   - All designs must meet the most current International Building Codes requirements.

Insurance Requirements

Upon selection of the winning bid, the Contractor agrees that it has and shall maintain the following insurance coverage indicated below. The effective date of all coverage shall precede the start of any work.

a. State minimum workers’ compensation insurance coverage for its employees, if any.

b. Broad form general liability, property damage, and automotive liability insurance in the minimum amount of $1,000,000 for bodily injury, death, or damage to property of any person and $2,000,000 for bodily injury, death, or damage to property of more than one person. The Contractor shall name NFF an Additional Named Insured and provide NFF with a certificate of insurance evidencing such coverages, prior to the initiation of the Scope of Services.

c. Contractor shall provide professional errors and omissions liability insurance if its Scope of Services includes professional services. Professional services for purposes of this section include, but are not limited to performing: architecture, engineering, landscape architecture, land surveying or planning, geological investigation, interior design/space planning, preparation and signing or stamping of drawings, maps, surveys or construction specifications, consulting, or design and development of computer software, programs or websites by the Contractor or by subcontractors on behalf of the Contractor. The minimum coverage limits required are $1,000,000 for each claim and $1,000,000 annual aggregate.

Prohibited Telecommunications Services and Equipment

The Contractor is responsible for compliance with the prohibition on certain telecommunications and video surveillance services or equipment identified in 2 CFR 200.216.
Payment/Performance Security

Contractor shall post cash, a letter of credit, bond, or other financial security that is easily convertible into cash in a form acceptable to the NFF, in its sole determination, to assure completion of the work required under any subsequent agreement and payment of all amounts lawfully due to all persons supplying or furnishing to the Contractor or Contractor's subcontractors with labor, laborers, materials, rental machinery, tools or equipment used or to perform the work. Contractor may incorporate required associated costs into mobilization costs or other approved expenses.

a. Work that is classified as construction in accordance with the Miller Act or Little Miller Act or if required per conditions of the funding source, payment and performance bonding will be required in the full amount of any Agreement. For the purposes of this Request for Proposal, construction is defined as “any contract greater than $100,000 for the construction, alteration, or repair of any public building or public work where the federal government is the owner”, or

b. If Contractor is not self-performing at least 85% of the work or if the cost of materials is in excess of the larger of $100,000 or 50% of the agreement total, payment and performance bonding will be required in the full amount of the agreement, or

c. If the value of the agreement is in excess of $250,000, Contractor will be required to post financial security in a form acceptable to the NFF in the amount of 5% of the total agreement value up to $250,000 in total financial security.

American Made Products. The work associated with this RFP is subject to Build America, Buy America Act. P.L. 117-58, Secs 70911-70917, and as such, domestic content procurement preference requires all iron and steel, manufactured products and construction materials used within the scope of this Agreement, be produced in the United States.

Federal Exclusion Verification

The selected Contractor vendor will be required to affirm that neither it nor its principals are presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.

II. REQUIRED COMPONENTS

Technical Proposal

Please provide a detailed technical approach to the work, including a proposed schedule for completing the design and construction.

Contractor Qualifications
I. **Past Experience** – Please provide a brief explanation of previous work experience designing and/or constructing cabins including remote locations and any experience working with land management agencies.

II. A list of key personnel and their experience to complete architectural, engineering and construction tasks.

III. Methods used to maintain or maximize quality during the design and construction portions of the work.

IV. **References** – Please provide three professional references that can speak to past performance.

**Pricing Schedule**

Please submit the bid schedules listed in Appendix C for Porcupine Cabin and Appendix D for Meridian Lake Cabin, or both. The first schedule is for completing the project with as much Alaskan wood as feasible and the second is for wood sourced from other locations. Prevailing wages and certified payroll are required.

**Davis Bacon Wages for Construction**

Davis-Bacon wage rates must be applied for all laborers and mechanics employed by contractors or subcontractors in the performance of construction, alteration, or repair work. Laborers and mechanics shall be paid wages at rates not less than those prevailing on similar projects in the locality, as determined by the Secretary of Labor in accordance with subchapter IV of chapter 31 of title 40, United States Code (commonly referred to as the “Davis-Bacon Act”). The work for these cabins will be performed in Kenai Peninsula Borough, Alaska.

**Contractor Selection Process**

This is a request for proposals only and bids furnished are not offers from the National Forest Foundation. This request does not commit the National Forest Foundation to pay any costs incurred in the preparation or submission of the proposal or to contract for supplies or services.

The NFF will use the Evaluation Factors below to review each submitted bid. Based on the outcomes of that selection process, the NFF will notify successful and unsuccessful bidders by October 20, 2023, and will prepare a separate contract document.
Evaluation Factors and Relative Importance

The following criteria will be used in the evaluation of submitted proposals, ordered from highest weighting (level 3) to lowest weighting (level 1).

**Level 3 Criteria**
- Price / cost
- Equipment and contractor capability
- Timing of when contractor can begin and/or finish the project
- Past performance, references, and USFS feedback

**Level 2 Criteria**
- Technical proposal / proposed approach to project, including quality assurance and quality management.
- Overall strategic benefits to meeting NFF goals and grant needs, requirements, and timelines

**Level 1 Criteria**
- Benefits to the local community
- Relationship to local community

**Point of Contact**
Please submit any questions about the project in writing to the Point of Contact.

Kenzie Barnwell  
National Forest Foundation, Chugach Stewardship Coordinator  
mbarnwell@nationalforests.org

Responses will be shared with known interested parties by email or otherwise posted at [https://www.nationalforests.org/rgp](https://www.nationalforests.org/rgp).

**Pre-bid Meeting**
The National Forest Foundation and the USFS will provide a virtual pre-bid meeting to answer any questions about the scope of work for the project. The first meeting will be held online via Microsoft Teams and by conference line on Tuesday, October 3 between 10:00-11:00AM. RSVP to mbarnwell@nationalforests.org. To attend the meeting online:

[Click here to join the meeting.](#)

To call into the meeting, dial +1406-998-6119 and use the conference ID number: 181 008 57#

In-person meetings at Porcupine Cabin site and Meridian Lake Cabin site are available upon request. Please email mbarnwell@nationalforests.org.

**Bid Submission**
Submit bids via email to mbarnwell@nationalforests.org by October 13, 2023.

**Equal Opportunity Provider**
In accordance with Federal law and U.S. Department of Agriculture policy, the National Forest Foundation is prohibited from discriminating on the basis of race, color, national origin, sex, age, religion, political beliefs, or disability.
Appendix A: Standard Cabin Specifications

Contents:
1. Cabin and Site Design:
   a. Design Requirements
   b. Site Layout
   c. Structural Design Parameters
   d. Functional Requirements
   e. Cabin and Site Element Descriptions
   f. Accessible routes
   g. Heating systems
   h. Outhouse system
2. Cabin Material Specifications
3. Project Requirements
4. Government Furnished Materials
5. Required Contractor Submittals
6. Design Submittal Procedures
7. Erosion and Sedimentation Control Plan (ESCP)
8. Project Completion

1. Cabin and Site Design

   a. Design Requirements:
      Engineering drawings that describe all aspects of the concept drawings.
      - Include the following drawings:
        o Unless specified otherwise, site layout shall show laydown and
          disturbance areas, access, parking (where applicable), cabin layout
          (with porch, stairs and ramp) and site amenities (to include outhouse,
          woodshed, benches, fire ring, and picnic table)
        o Plan views
        o Elevation views
        o Section views
        o Foundation and floor framing plans and elevations
        o Interior Furniture
        o Details (including for all connections)
        o General and specific notes regarding design and construction
        o Cross referenced details and sheet numbers
      - Drawing standards: Drawings shall be scaled and of sufficient detail for
        fabrication and installation. Construction documents shall show the size,
        section, and relative locations of structural members with floor levels, column
        centers, and offsets dimensioned.
      - Drafting standards: Use Forest Service AutoCAD standards (or similar
        professional drafting standards)
• Design calculations, justification, and documentation demonstrating compliance with all criteria outlined.
• A complete list of materials to be supplied by the Contractor.
• Manufacturer’s specification sheets for all products and materials including windows, doors, roofing, fibergrate, insulation, and site amenities.
• Assembly instructions and construction detail drawings for all cabin elements such as roof assembly with roof supports, ventilation systems (if applicable)and snow stops, walls, window installations, foundation, insulation, stairs, loft deck with guardrail, porch deck and ramp with bull rail or guard rail, heating system details, site amenities, etc.

b. Site Layout

Situate the cabin so it takes advantage of the best views, reduces the number of trees that need to be removed and reduces impacts visually or otherwise on other users. Consider easy access to the outhouse, on and off the deck, to the woodshed, fire ring and other site features. Local conditions such as prevailing wind, sunlight, snow berms, and view of the site from trails and others should be taken into consideration. Contractor to provide recommendations and options for the NFF and USFS to select the final location.

c. Structural Design Parameters

Design to International Building Code current version.

d. Functional Requirements

Below are Forest Service functional requirements:
• Ability to provide overnight shelter for up to 8 people at one time,
• Provide an accessible, approachable cabin camping experience for groups of all ages, experience, and mobility levels,
• Year-round use and access,
• Complying with ABA and FSORAG guidelines,
• Heating system to allow for comfortable year-round use,
• Minimum 50-year lifespan on the structure, and
• Operable windows for adequate lighting and air flow as well as views of the setting.

e. Cabin and Site Elements

All cabin and site design elements shall include the USFS Standard Cabin Drawing in Appendix B.
• Enclosed loft and stairs with door at the bottom of the stairs to control heat
• 12’ x 16’ covered porch
• Single door access from porch with ADA ramp to the porch
• Fiberglass exterior door
• Minimum cabin height off the ground: 18”
• A metal bear-resistant food locker on porch that does not block windows and has a level top that could be used as a cook surface approximately 16-19 cubic feet in size
• Include aggregate surfacing around the cabin and all site amenities.
• Accessible Fire Rings – Pilot Rock Accessible Fire Ring FS-30/18/PA with single level, flip-back cooking grate or approved equal
• Include four, two person benches that could be used on the porch or around the firepit
• Woodsheds – Wood storage sheds must be large enough to accommodate and be separated and signed to delineate seasoned and unseasoned wood. The woodsheds must allow airflow, while preventing moisture intrusion
• Picnic Tables - tables must be ABA accessible.
• The cabin’s first floor, ramp, and deck will meet FSORAG and ABA standards
• Approximately 4’ overhang on the deck is required, with no snow shed from roof onto deck, ramp or entrance walkway.
• The countertops shall be plywood with stainless steel covering.
• The stairway shall be fully enclosed with 2x6 T&G spruce decking.
• The bottom bunk to be 18” wider than the top bunk to provide seating while allowing both bunks to accommodate two people.
• There shall be an option for metal wainscoting around the outside of the cabin for zones with deep frost, high snow, or wind-driven rain, to match metal roofing. Wainscot shall be placed on all sides over log walls with proper detailing (z-flashing, furring, rainscreen, insulation, pest control, foam backer rod, caulking, etc.)

f. Accessible routes
All routes to and from the cabin, toilet and woodshed need to meet FSORAG and ABA accessibility standards, including reconstructing existing access routes.

  g. Heating systems
Unless otherwise specified in site specific appendices furnish and install a new woodstove, stove pipe, floor and wall protectors as recommended by the manufacturer. Site specific requirements may require alternative or additional back-up heat sources, including but not limited to kerosene, diesel fuel, propane, etc. Woodstove specifications include:

  a) Model – Blaze King Princess 32, 51,000 BTU’s, with the following options added: Ultra Pedestal with Ash Drawer, Solid Door, and Rear Heat Shield.

  b) Woodstove Accessories include:
  • Spark Protection Mat - Follow recommended manufacturer's installation instruction for floor protection. PE 32 Hearth Pad is available from the manufacturer.
  • Roof Flashing: Pre-painted sheet metal, configured to fit tightly to chimney riser and seal to metal roofing system.
  • Insulated chimney connector pipe for installation through 1st floor and loft, appropriate ceiling/roof support packages and insulation shields, insulated chimney and chimney rain cap such that the installed stove and chimney comply with UL 127 and/or UL-103HT. Pipe that passes through the 1st and 2nd floors shall be protected per IBC and fire code. Snow diverters shall be installed on roof around chimney with ground snow loads greater than 50 psf.
h. Outhouse system
All cabin outhouse systems are identified in site specific appendices.

2. Cabin Material Specifications

The following specifications are guidelines for general bidding purposes. The contractor's
designer of record shall develop final specifications for materials ensuring compatibility,
durability, availability, constructability, code compliance, and associated installation and testing
requirements. Storage, handling, preparation, and installation shall follow the manufacturer's
instructions.

a) Inside the cabin, the roof materials, loft floor, trim, and furnishings could be Sitka Spruce,
   White Spruce, or Hemlock.

b) Decks shall be UC4A or UC4B treated lumber except for the top rail on railings which
   should be cedar.

c) The wall logs shall be double tongue and groove 4 x 6' timbers. Alaska Yellow Cedar or
   Western Red Cedar is acceptable. To ensure quality, the USFS is requesting that all
   timbers/lumber produced for this cabin project be graded using the WWPA & WCLIB
   grade standards. Alaska Yellow Cedar shall be dried and graded in accordance with
   Western Wood Products Association (WWPA). Western Red Cedar shall be dried and
   graded in accordance with WWPA (Western Cedars)

d) Cabin flooring, first floor – Tuf Tread Industrial Panel or Skid Guard Industrial Panel.
   Storage, handling, preparation, and installation shall follow the manufacturer's
   instructions.

f) Ramp decking and stairs - T2510 Safe-T-Span pultruded pedestrian grating
   manufactured by Grating Pacific or approved equal

g) Trim - Provide rake trim in full lengths. Provide window and door trim as lengths to be cut
   for installation.

h) Stair treads, exterior - "Fibertred" fiberglass molded stair treads by "Fibergrate" or
   approved equal. Storage, handling, preparation, and installation shall follow the
   manufacturer's instructions. Specifications as follows:
   • Resin: "corvex"
   • Thickness: 1-½ "
   • Color: dark gray;
   • Clip type: M-2, stainless steel, four per tread.

i) Concrete – Provide Type I or Type II Concrete, conforming to the following:
   • Cement content = 611 pounds per cubic yard minimum
   • Water/cement ratio = 0.45 maximum
   • Slump = 5 inches maximum
   • Air content = 5-½ % ± 1-½ %
   • Coarse aggregate = AASHTO M43 with 100% passing 1.5" sieve
   • 28-day compressive strength = 4000-4500 psi minimum
   • Do not use calcium chloride or admixtures containing chloride from sources other
     than impurities in admixture ingredients.
   • Provide ASTM A615 GR 60 steel reinforcing bar.
j) Fasteners – for bolts, all-thread, nuts, and washers, provide ASTM type A325 steel hardware (per ASTM specification F3125) unless otherwise noted. All hardware shall be hot-dip galvanized unless otherwise noted. Use washers under bolt heads and nuts. All connections shall be snug-tightened. Ensure compatibility with pressure treated lumber, where applicable, and that dissimilar metals are not an issue.

k) Window frame type – Vinyl. The window door shall slide open. The frame color shall be selected by NFF/USFS from the manufacturer's full pallet (white is not desirable).

l) Window glazing type – Low E, Double Pane, Tempered

m) Exterior door material – Fiberglass

n) Exterior door style – Standard, with picture window on top of door

o) Exterior door locksets - Commercial grade, round knob passage locksets

p) Roof – Roofing panels shall be standing seam metal roof, formed from 24-gauge zinc coated steel with paint topcoat. Flashing shall be fabricated from the same material and finish. Color: Brown or green (submit color sample to NFF for approval prior to purchasing). Include ventilation system details, if applicable.

q) Clamp-on snow stops -- installed on roof edges and above the chimney to protect from sliding snow. Fasteners should not penetrate the roof. Fasteners should be clamp-on style that attach to the standing seam ridges on the roof. Exact snow guard model, size, location, and quantity shall be approved by the manufacturer. Written certification for the type of roof and environmental conditions is required from the snow guard manufacturer. An example of an acceptable manufacturer is S-5!, with ColorGard and DualGard being acceptable products.

r) Insulation – Floor and Ceiling insulation, R-20 (equivalent to 4” XPS foam board). Insulation may be either foam board or fiberglass batt, and must be installed in a manner that is resistant to mold, moisture, pests (termites, mice, birds, etc.)

3. Project Requirements

Project work must be accomplished in accordance with the following:

- All designs will be based on information provided in the specific Site Specification sections for each cabin and discussions with NFF and USFS.
- The final designs (specifications, drawings) will be in Word (in 3-part CSI format) and AutoCAD (file format *.doc or *.dwg), and Adobe (*.pdf). They will need to be stamped by an Alaska registered Architect or Professional Engineer.
- Shop drawings shall bear the stamp of an Alaska registered Architect or Professional Engineer. Calculations shall be prepared and stamped by a Professional Engineer registered in the state of Alaska.
- Designs must follow Forest Service Outdoor Recreation (FSORAG) accessibility guidelines and meet ABA Architectural Standards.
- All design must meet the most current International Building Codes requirements.
- Submit manufacturer’s color samples for all products where color choices are available, such as roofing, windows, and doors.
- Submit all material and product data and certifications as required by designer’s specifications for construction materials such as aggregate gradation and results of concrete testing.
- Receive approval for areas to dispose of clearing and grubbing material, out of sight of cabin site and nearby trails.
• Implement methods to contain, clean up, and dispose of all construction related
  (including camp facilities) debris, and discharges of petroleum products and/or other
  materials hazardous to the land, air, water and wildlife. Ensure all fueling operations
  occur in a safe and environmentally responsible manner. Comply with the
  requirements of 18 AAC 75 and AS 46, Oil and Hazardous Substances Pollution
  Control

4. Government Furnished Materials
The USFS will furnish the Cabin Identification Sign to be installed at the site by the contractor.

5. Required Contractor Submittals
The Contractor shall provide submittals throughout the project, including the safety plan, fire
plan, mobilization plan, erosion and sedimentation control plan (ESCP), project schedule,
communication plan, cabin kit shop drawings if applicable. The safety plan should include bear
safety and food and garbage storage. Further submittal requirements include:

• Interim Design Submittal (60%)
• Final Design Submittal (90%)
• Design Complete Submittal (100%)
• Field changes and final construction document updates (as-built drawings and
  specifications)

After the final design submission and review conference of the design package, revise the
design package to incorporate the comments generated and resolved in the final review
conferences, perform and document a back-check review and submit the final, design complete
documents, which represents "Released for Construction" documents.

6. Design Submittal Procedures
a) A detailed schedule of submittals will be outlined in a pre-work meeting with the
  Contractor, the NFF and USFS.

b) All submittal drawings and calculations shall bear the stamp or signature of qualified
  personnel.

c) A design brief shall be submitted prior to the 60% design submittal and shall include the
  design management approach and any design and/or construction concerns or
  constraints due to schedule, budget, materials, constructability, transport, code
  compliance, etc.

d) Provide submittals in a timely manner to ensure sufficient time to complete all required
  reviews prior to January 31, 2024. The contractor should propose a timeline with 60%,
  90%, and 100% design for review and discussion. The NFF and USFS require submitted
  designs to be reviewed and approved by the USFS. To facilitate this process, design
  levels of 60% and 90% completion are required to ensure work will not progress too far
  on a design not likely to meet approval.

e) The NFF and USFS will review the submittal and, within 10 working days, provide a
  written response to the contractor outlining any corrections to the proposed working
  drawings. The Contractor will then have 10 working days to submit the corrected shop
  drawings for approval.

f) Fast track design and construction will be permitted on this project. Fast-tracking may
  include preliminary designs to facilitate the ordering of long-lead materials for cabin walls
  or other needed materials.
g) Pre-Construction Meeting: Upon final approval of all design documents and submittals, but prior to construction, the Contractor, including the lead construction representative.field superintendent to be involved in construction, shall meet with NFF to review the "released for construction" documents including drawings, specifications, work plans, permits and submittals. "Notice to Construct" may commence upon approval of the construction documents, work plan and procedures. The final design approval followed by Pre-Construction review meeting of the final design documents, work plans and procedures will constitute Notice to Construct.

7. Erosion and Sedimentation Control Plan (ESCP)
Base the ESCP to avoid and prevent erosion and to trap all sediment before it leaves the project site. Address all ground disturbing activities required by the contract as well as those planned for your operations. Provide the following information in the ESCP:

a) A Site Map displaying the following:
   - Approximate locations of drainage patterns and nearby water bodies are likely to receive discharges from disturbed areas of the project.
   - Approximate areas of soil disturbance.
   - Proposed locations, quantities, and types of erosion and sediment control methods.

b) A Written Narrative briefly describing the proposed control measures to be implemented at the construction site, and off-site areas if necessary.

c) Clearly describe for each major activity, appropriate control measures and the period during the construction process that the measures will be implemented.

d) Ensure that all temporary or permanent erosion and sediment control materials do not introduce non-native or invasive species. The use of straw bales and other materials that may introduce any weed seeds or that may result in the germination of an invasive is prohibited.

e) Specifically address your plan for controlling and managing erosion and sedimentation during construction at the following locations:
   - All construction adjacent to existing drainages, streams, lakes, water bodies, wetlands, and other sensitive areas.
   - Designated disposal sites and material sites.
   - Any additional sites which may be sensitive due to the proposed construction operation (including contractor supplied material and disposal sites, staging areas, and stockpile locations).
   - Inspections. Identify the Contractor personnel responsible for inspection of the project’s erosion and pollution control measures.
   - Responsible Party. Clearly identify for each measure shown in the plan, the Contractor and/or subcontractors that will implement and maintain the measure.

8. Project Completion
The contractor is responsible to provide a complete and usable cabin and site upon completion of this project. The contractor is responsible for a high level of workmanship in the execution of work. Inspection of work shall be performed periodically while work is being performed and prior to contractor leaving the site. NFF/USFS will conduct these inspections and provide final acceptance of the work.
# Standard Cabin Layouts

## 16' x 20' Square Log Cabin - Full Loft

### Project Location Map

**Travel Directions:**
- Cabins listed by nearest Forest Service Ranger District. New cabins generally located near existing road system. Anan Cabin accessible only by boat/floating plane.
- Approximate latitude and longitude listed here, as well as general snow, wind, and seismic loads.

### Floor Plan

<table>
<thead>
<tr>
<th>Forest</th>
<th>Ranger District</th>
<th>New or Replace</th>
<th>Cabin Name</th>
<th>Latitude</th>
<th>Longitude</th>
<th>Snowload Level</th>
<th>Wind Load Level</th>
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<td>-149.03948</td>
<td>85</td>
<td>1.5</td>
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</tbody>
</table>

**Porcupine Cabin, Hope, Ak**
- 1 mile from Grayling Trailhead, Seward Highway, Mile 13.4

**Meridian Lake Cabin,** 1.5 miles from Grayling Trailhead, Seward Highway, Mile 13.4

This project (FY 23-FY 24) is separate from other projects (FY 23-FY 24) not in this contract.

---

**Recommended by:**

- Timberline Design Office
- Recreation Staff
- Forest Engineer
- Facilities Branch

**Approved by:**

- Forest Recreation Staff Officer
- District Ranger
- Forest Supervisor
- Facilities Program Manager

---

[Source: USDA Forest Service]
CABIN ROOF DECK
METAL ROOFING (STANDING SEAM, 24 GAUGE)
30# ROOFING FELT
2' CDX PLYWOOD
14' LONG 2" X 6" DOUBLE T&G BOARDS
OPTIONAL, EXTRUDED POLYSTYRENE
FOAM BOARD INSULATION WITH FURRING STRIPS.

FRONT ELEVATION
SCALE: 1/4" = 1'-0"

BACK ELEVATION
SCALE: 1/4" = 1'-0"

BEAR RESISTANT FOOD STORAGE LOCKER
16-18 CF
CONFIRM FINAL FIELD LOCATION WITH GOVT. REP.

NOTE: ACCESS RAMP AND STAIRS NOT SHOWN

THIS DRAWING IS INTENDED FOR USE BY ARCHITECTS, ENGINEERS, CONTRACTORS, CONSULTANTS AND DESIGN PROFESSIONALS FOR PLANNING PURPOSES ONLY. THIS DRAWING MAY NOT BE USED FOR CONSTRUCTION.
LEFT SIDE ELEVATION

SCALE: 1/4" = 1'-0"

SNOW STOP NUMBERS AND LOCATION MAY VARY.
HEAVY DUTY SNOW DIVERTERS SHALL BE INSTALLED IN REGIONS WITH GROUND SNOW LOADS GREATER THAN 50 PSF.

NOTES:

FINISHED FLOOR ELEVATION
18" MIN ABOVE GRADE
(STAIRS, BULLRAIL OR GUARDRAIL NOT SHOWN)

FINAL ELEVATION AND FOUNDATION SYSTEM SHALL BE DETERMINED BY AN ENGINEER.
FINISHED FLOOR ELEVATIONS 36" ABOVE GRADE MAY REQUIRE ADA RAMPS WITH MULTIPLE LANDINGS. DECK/RAMP HEIGHTS 36" OR MORE ABOVE GRADE REQUIRE GUARDRAILING.

THIS DRAWING IS INTENDED FOR USE BY ARCHITECTS, ENGINEERS, CONTRACTORS, CONSULTANTS AND DESIGN PROFESSIONALS FOR PLANNING PURPOSES ONLY. THIS DRAWING MAY NOT BE USED FOR CONSTRUCTION.
RIGHT SIDE ELEVATION

-scale: 1/4" = 1'-0"

- EXTERIOR POSTS CAPABLE OF SUPPORTING HAMMOCKS.
- BEAR RESISTANT FOOD STORAGE LOCKER (16-18 CF)
- CONFIRM FINAL FIELD LOCATION WITH GOVT. REPRESENTATIVE.
- 18" MIN ABOVE GRADE (STAIRS, BULLRAIL OR GUARDRAIL NOT SHOWN)
- SNOW STOPS WINDOW, CORNER, AND BOX END TRIM.
- OVERHANG WINDOW TOP TRIM BY 1".
- WINDOW, CORNER, AND BOX END TRIM
- OVERHANG WINDOW TOP TRIM BY 1".
- ADA RAMP: MAX SLOPE 1:20 WITHOUT HANDRAILS.
- MAX SLOPE 1:12 WITH HANDRAILS.

THIS DRAWING IS INTENDED FOR USE BY ARCHITECTS, ENGINEERS, CONTRACTORS, CONSULTANTS AND DESIGN PROFESSIONALS FOR PLANNING PURPOSES ONLY. THIS DRAWING MAY NOT BE USED FOR CONSTRUCTION.
RIGHT SIDE ELEVATION

METAL ROOFING

SNOW STOPS

WAINSCOT TO BE PLACED ON ALL SIDES OVER LOG WALLS WITH PROPER DETAILING (Z-FLASHING, FURRING, RAINSCREEN, INSULATION, PEST CONTROL, FOAM BACKER ROD, CAULKING, ETC.). INTEGRATE Z-FLASHING INTO LOG WALLS.

IN EXTREME COLD REGIONS, INSULATED WAINSCOT SHOULD BE EXTENDED TO GROUND LEVEL TO PROTECT FOUNDATION FROM FROST HEAVE.

NOTE: ADDITIONAL WAINSCOT FOR HIGH SNOW OR WIND-DRIVEN RAIN ZONES. (TO MATCH METAL ROOFING, AND PROPERLY DETAILED TO PREVENT ROT OF EXISTING CABIN WALLS)

6X6 POSTS CAPABLE OF SUPPORTING HAMMOCKS.

BEAR RESISTANT FOOD STORAGE LOCKER (16-18 CF)

Confirmed final field location with Govt. representative.

ABR RAMP
MAX SLOPE 1:20 WITHOUT HANDRAILS
MAX SLOPE 1:12 WITH HANDRAILS

SCALE: 1/4" = 1'-0"
INTERIOR LOFT CROSS SECTIONS

SCALE: 1/4" = 1'-0"

STAIRWELL ENCLOSED WITH 2 X 6 T&G DECKING FOR HEAT BARRIER BETWEEN FIRST AND SECOND FLOOR

(ADD HEAT SHIELD, IF REQUIRED, FOR OPTIONAL WOOD STOVE.)

INTERIOR LOFT CROSS SECTIONS

SCALE: 1/4" = 1'-0"

STAIRWELL ENCLOSED WITH 2 X 6 T&G DECKING FOR HEAT BARRIER BETWEEN FIRST AND SECOND FLOOR

(ADD HEAT SHIELD, IF REQUIRED, FOR OPTIONAL WOOD STOVE.)

INTERIOR LOFT CROSS SECTIONS

SCALE: 1/4" = 1'-0"

STAIRWELL ENCLOSED WITH 2 X 6 T&G DECKING FOR HEAT BARRIER BETWEEN FIRST AND SECOND FLOOR

(ADD HEAT SHIELD, IF REQUIRED, FOR OPTIONAL WOOD STOVE.)
DECKING

(2X6 OR 2X8 PRESSURE TREATED LUMBER, 1 4" GAP BETWEEN BOARDS)

BULLRAIL (OR CODE COMPLIANT GUARD RAILING, IF DECK ELEVATION 24" OR MORE ABOVE GRADE)

NOTES:

6' RAMP-AGGREGATE INTERFACE (SEE RAMP END DETAIL)

DECK ELEVATION TO BE 18-36" ABOVE AGGREGATE PAD

HANDRAIL/GUARDRAIL POST

HANDRAIL/GUARDRAIL POST

COMPACTED SUBGRADE

CODE COMPLIANT GUARD RAILING FOR DECK ELEVATIONS 24" OR MORE ABOVE GRADE

BARRIERS MAY BE STEEL PIPE OR HOG MESH, WITH 4" MAX. VERTICAL OPENINGS & 2"-4" MAX HORIZONTAL OPENINGS.

TOP RAIL SHALL BE CEDAR, BUT OTHER MATERIALS SHALL BE PRESSURE-TREATED LUMBER. IF GATES ARE PROVIDED, ENSURE THEY SWING OUTWARD TO PREVENT ENTRAPMENT OF BEARS. PROVIDE SHOP DRAWINGS FOR APPROVAL.

NEW CABIN

STAIRS & RAMP PLAN

SCALE: 1/4" = 1'-0"

NOTES:

RAMP, STAIRS, BULLRAILS, HANDRAILS AND GUARDRAILS ARE CONCEPTUAL AND MAY BE MODIFIED TO WORK WITH DEVELOPED DECK DESIGN

STAIRS SECTION

SCALE: NTS

ABA COMPLIANT FIBERGRATE RAMP DECKING

FIBERGRATE STEPS, TYP.

MIN. RISE BETWEEN 4" TO FIT ELEVATION.

HANDRAIL/GUARDRAIL POST

2X12 STRINGER

-32' LENGTH

MAX. SLOPE

1:20 WITHOUT HANDRAILS OR 1:12 WITH HANDRAILS

MINIMIZE RAMP LENGTH FOUNDATION AND SUBSTRUCTURE SIMILAR TO DECK DESIGN

STAIRS ELEVATION

SCALE: NTS

5' MIN. FLAT LANDING FOR ABA RAMP

ABA RAMP LOCATION MAY BE ADJUSTED FOR LOCAL SITE CONDITIONS.

FIBERGRATE STEPS, TYP.

ADJUST FOR LOCAL SITE CONDITIONS.

MINIMIZE RAMP LENGTH FOUNDATION AND SUBSTRUCTURE SIMILAR TO DECK DESIGN.

BULL RAIL DETAIL

SCALE: NTS

DECKING

FIBERGRATE RAMP DECKING

BA HANDRAIL SUPPORTS (BOTH SIDES)

BULLRAIL

Dalco-precast

BULLRAIL

DECKING

FIBERGRATE RAMP DECKING

ABA HANDRAIL SUPPORTS (BOTH SIDES)

GROUND STRINGERS 16" O.C. (ACTUAL SPAN BETWEEN STRINGERS DEPENDS ON THREAD MATERIALS)

4X4 2"X2"X18" BLOCK, MAX. SPACING 4' O.C. DECKING

BEAM

CHAMFER DECK AND BULLRAIL, 45 DEG X 3 4"

5" MAX.

MITER CUT REEDS FOR BOTH 2X12 AND 2X12

SET 2X12 TO SUPPORT ANGLED 2X12

2X12 WITH GRAVEL ON TOP

FIBERGRATE CLEAR STEP DECKING

HANDRAILS BOTH SIDES

RAMP END DETAIL

SCALE: NTS

DECKING

FIBERGRATE RAMP DECKING

BA HANDRAIL SUPPORTS (BOTH SIDES)

BA HANDRAIL SUPPORTS (BOTH SIDES)

DECKING
**MATERIAL LIST**

<table>
<thead>
<tr>
<th>QTY</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 EA.</td>
<td>1X8X8' UNTREATED DIM LUMBER #1 OR BTR, S4S</td>
</tr>
<tr>
<td>8 EA.</td>
<td>2X6X8' UNTREATED DIM LUMBER #1 OR BTR, S4S</td>
</tr>
<tr>
<td>1 EA.</td>
<td>4X4X4' UNTREATED DIM LUMBER #1 OR BTR, S4S</td>
</tr>
<tr>
<td>2 EA.</td>
<td>2X2X8' UNTREATED DIM LUMBER #1 OR BTR, S4S</td>
</tr>
<tr>
<td>3 EA.</td>
<td>4X8 SHT, 3/8&quot; AC PLYWOOD, A SIDE UP</td>
</tr>
<tr>
<td>5 LBS</td>
<td>16D BOX NAILS</td>
</tr>
<tr>
<td>2 LBS</td>
<td>6D (2-1/2&quot;) FINISH NAILS</td>
</tr>
<tr>
<td>4 LBS</td>
<td>2&quot; DECKING SCREWS, FOR AC PLYWOOD</td>
</tr>
<tr>
<td>1/2 GAL.</td>
<td>WOOD FINISH, SAME AS CABIN INTERIOR</td>
</tr>
</tbody>
</table>

---

**PLAN VIEW**

SCALE: 1/4" = 1'-0"

---

**SECTION VIEW**

SCALE: 1/4" = 1'-0"

---

**PROFILE VIEWS**

SCALE: 1/4" = 1'-0"
CONSTRUCT ONE 6 FT LONG TABLE FOR THE CABIN

MATERIAL LIST

<table>
<thead>
<tr>
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<th>DESCRIPTION</th>
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<tr>
<td>3</td>
<td>EA. 2x4x8' UNTREATED DIM LUMBER #1 OR BTR, S4S</td>
</tr>
<tr>
<td>5</td>
<td>EA. 2x6x9' or 7' UNTREATED DIM LUMBER #1 OR BTR, S4S</td>
</tr>
<tr>
<td>4</td>
<td>EA. 3/8&quot; x 63&quot; GALV. CARRIAGE BOLTS</td>
</tr>
<tr>
<td>8</td>
<td>EA. 3/8&quot; x 81/2&quot; GALV. CARRIAGE BOLTS</td>
</tr>
<tr>
<td>10</td>
<td>EA. 3/8&quot; x 5&quot; GALV. CARRIAGE BOLTS</td>
</tr>
<tr>
<td>22</td>
<td>EA. 3/8&quot; GALV. WASHERS</td>
</tr>
<tr>
<td>22</td>
<td>EA. 3/8&quot; GALV. NUTS</td>
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<tr>
<td>1/4</td>
<td>GAL. WOOD FINISH, SAME AS CABIN INTERIOR</td>
</tr>
</tbody>
</table>

END VIEW

SCALE: 1/4" = 1'-0"

SIDE VIEW

SCALE: 1/4" = 1'-0"
FOR THE 6'-0" TABLE CONSTRUCT:

2 EA. 6'-0" SIDE BENCHES
2 EA. 3'-0" END BENCHES

MATERIAL LIST
SUFFICIENT MATERIAL FOR A SET OF FOUR 4' BENCHES

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<tr>
<td>104 EA.</td>
<td>10 x 2-1/2&quot; EXTERIOR DECKING SCREWS (ACQ RATED)</td>
</tr>
<tr>
<td>1 QT.</td>
<td>WOOD FINISH, SAME AS CABIN EXTERIOR</td>
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</table>

SCREW SEAT TO FRAMING w/ #12 x 2" WOOD SCREWS, 6" O.C. INTO STRETCHER, ONE INTO EACH LEG

HDO OR CEDAR BENCH TOP
4x4 BENCH LEG, TYP
2H STRETCHERS
2x4 FOOT CHAMFER 1/2"

END VIEW
SCALE: 1/4" = 1'-0"

SIDE VIEW
SCALE: 1/4" = 1'-0"
FOR THE 4'-0" BENCH CONSTRUCT:

4 EA. 4'-0" PORCH BENCHES

MATERIAL LIST

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<td>16</td>
<td>2x6x8' UNTREATED DIM LUMBER, #1 OR BTR, S4S</td>
</tr>
<tr>
<td>104</td>
<td>#12 x 2-1/2&quot; EXTERIOR WOOD SCREWS (STAINLESS)</td>
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<td>1</td>
<td>WOOD FINISH, SAME AS CABIN EXTERIOR</td>
</tr>
</tbody>
</table>

PRE-DRILL & ASSEMBLE

- 2x6 BENCH BACK BOARDS (TYP.)
- 2x6 BENCH SEAT BOARDS (TYP.)
- 2x6 BENCH LEG W/ BACK SUPPORT EACH END (MIRRORED)
- 2x6 BENCH LEG W/ SEAT SUPPORT EACH END (MIRRORED)
- FLUSH WITH TOP & BACK
- FLUSH WITH FRONT
- FOR EASE OF CONSTRUCTION, USE STRAIGHT EDGE TO ALIGN FEET DURING ASSEMBLY OF LEGS

NOTES: CONSTRUCT TWO (2) ENDS FOR EACH BENCH, ENSURING THAT THEY MIRROR EACH OTHER, WITH THE SHORT LEG / SEAT SUPPORT INSTALLED TOWARD THE INSIDE.

SIDE ELEVATION
SCALE: 1/4" = 1'-0"

CUT PATTERN
SCALE: 1/4" = 1'-0"

FRONT ELEVATION
SCALE: 1/4" = 1'-0"

PRE-DRILL & ASSEMBLE

- 2x6 BENCH BACK BOARDS (TYP.)
- 2x6 BENCH SEAT BOARDS (TYP.)
- FLUSH WITH TOP & BACK
- FLUSH WITH FRONT
- SEE FINAL CUT DETAIL

FINAL CUT DETAIL (2 EACH)
OUTSIDE LEG / BACK SUPPORT
INSIDE LEG / SEAT SUPPORT
WASTE CUT, TYP.
WHEELCHAIR ACCESSIBLE A-FRAME PICNIC TABLE:

1. TABLE TO BE PLACED ON COMPACTED D-1.
2. THIS DRAWING IS INTENDED FOR USE BY ARCHITECTS, ENGINEERS, CONTRACTORS, CONSULTANTS AND DESIGN PROFESSIONALS FOR PLANNING PURPOSES ONLY. THIS DRAWING MAY NOT BE USED FOR CONSTRUCTION UNTIL VERIFIED AS SUITABLE FOR PROJECT SITE CONDITIONS.

FRONT ELEVATION
SCALE: NTS

SIDE ELEVATION
SCALE: NTS

PLAN VIEW
SCALE: NTS

ISOMETRIC VIEW
NOT TO SCALE (NTS)
WHEELCHAIR ACCESSIBLE FIRE RING:

NOTES:
1. DOUBLE WALL FIRE RING WITH PIN ANCHORS
2. FILL WITH COARSE AGGREGATE FILL TO 10 3/8" ABOVE GROUND LEVEL (CONFORMS TO ABA GUIDELINES OF MIN 9" HEIGHT ABOVE GROUND FOR FIRE BASE).
3. INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER’S SPECIFICATIONS
4. THIS DRAWING IS INTENDED FOR USE BY ARCHITECTS, ENGINEERS, CONTRACTORS, CONSULTANTS AND DESIGN PROFESSIONALS FOR PLANNING PURPOSES ONLY. THIS DRAWING MAY NOT BE USED FOR CONSTRUCTION.

PLAN VIEW

SCALE: NTS

FRONT ELEVATION

SCALE: NTS

SIDE ELEVATION

SCALE: NTS

ISOMETRIC VIEW

NOT TO SCALE (NTS)

32" NOM DIA

8" DIA. X 24" DEEP (18" MIN) CONCRETE FOOTING

FLIP-BACK GRATE

8 1/8" FLIP-BACK GRATE
WOODSHEILD FOR SEASONED AND UNSEASONED WOOD STORAGE:

NOTES:

1. FOOTINGS TO BE PLACED ON STABLE SUBGRADE OR COMPACTED D-1.
2. WOOD TO BE PRESSURE TREATED LUMBER AND ASSEMBLED WITH COMPATIBLE EXTERIOR GRADE HARDWARE.
3. THIS DRAWING IS INTENDED FOR USE BY ARCHITECTS, ENGINEERS, CONTRACTORS, CONSULTANTS AND DESIGN PROFESSIONALS FOR PLANNING PURPOSES ONLY. THIS DRAWING MAY NOT BE USED FOR CONSTRUCTION UNTIL VERIFIED AS SUITABLE FOR PROJECT SITE CONDITIONS.

PLAN VIEW: FOOTING & BEAMS
SCALE: NTS

4x6 RAILER, SIMPSON H8 TIE, TYP.

2. 6" O.C., TYP.

4x4 BRACING, TYP.

SIMPSON CC CAP, TYP.

4X6 DECKING, FASTEN W/ 2 - #10X4" EXTERIOR DECK SCREWS AT EACH BEAM.

SIMPSON HTP37Z TIE TYP., BOTH SIDES OF BEAM.

FRONT ELEVATION
SCALE: NTS

SIDE ELEVATION
SCALE: NTS

PLAN VIEW: DECKING, POSTS & NAILERS
SCALE: NTS

LEDGER BOARD, 6" LENGTH, TYP.

4X6 POST, TYP.

#4 REBAR, TYP. ALL FOOTINGS

4X4 NAILER, TYP.

METAL ROOFING

4x6 BEAM

4x6 NAILER

2x4 LEDGER BOARD, TYP.

4x6 BEAM, TYP.

14"x14"x9.5" CONCRETE FOOTING, SIMPSON CB HDG CONNECTOR, TYP.

2'-10" O.C., TYP.

R4X6 BRACKING, TYP.

16X20 SQ LOG CABIN - FULL LOFT
CHUGACH & TONGASS REGION 10 ALASKA

EXTERIOR DETAILS: WOODSHEILD

STANDARD CABIN LAYOUTS
Appendix C: Porcupine Cabin

Contents:
1. Project Location and Map
2. Conceptual Site Plan and Photos
3. Cabin and Site Design
   a. Design Requirements
   b. Structural Design Parameters
   c. Geotechnical Design Parameters
   d. Cabin and Site Element Descriptions
   e. Accessible routes
   f. Heating system(s)
   g. Drinking water source
   h. Outhouse system
   i. Locations available for onsite materials storage and/or special site cleanup requirements
4. Cabin Material Specifications
5. Other Project Information
6. Pricing Schedule

1. Project Location and Map

The proposed location for the Porcupine Cabin on the Chugach National Forest is located at 60° 55' 52.2401"N, 149° 39' 50.3899"W, just north of the Porcupine Campground in Hope, Alaska, situated along the shore of Turnagain Arm. The area is birch forest with views of Turnagain and the surrounding mountains partially visible through the trees. The area slopes gently towards the top of the bluff which then steeply goes down to sea level. The proposed cabin site is just beyond the farthest campsites in the campground.

To get to the Porcupine Campground from Anchorage, head south on the Seward Highway to the Hope Highway (approximately milepost 57.5). Turn right onto the Hope Highway and follow the road to its terminus at approximate mile 18. The campground is at the end of the road. The trail to the cabin is located between campsite 14 and 15. The cabin site is approximately 200 feet behind campsite 14.

The proposed location is in a high-use, road accessible area where recreation demand exceeds capacity. The proposed location will be a popular spot for much of the recreational public to enjoy the Chugach National Forest. The site will need work to ensure proper separation from the existing trail and adjacent campground sites.
Project Map

Anchorage

Porcupine Creek
2. Conceptual Site Plan and Photos
Site Photos:

Porcupine Campground Vault Toilet:

3. Cabin and Site Design
a. **Design Requirements:**
   Please see engineering drawings requirement descriptions outlined in Appendix A.
   - Include the following designs for Porcupine Cabin:
     - Parking facilities for 2-3 vehicles

b. **Structural Design Parameters**
   - Design to International Building Code current version
   - Structural Risk Category II
   - 50 psf ground snow load
   - Design wind load 156 mph*, Exposure Category D
   - Seismic load as required by ASCE7*
   - Floor Live Load 40 psf, 30 psf for habitable attics and sleeping areas, such as lofts; per ASCE 7-22, and 150 psf for woodsheds.
   - Frost depth of 42 inches for heated buildings and 7 feet for non-insulated or heated buildings.

c. **Geotechnical Design Parameters**
   Presumptive soil bearing capacity of 2,000 psf (IBC 2021, Table 1806.2 for silty gravel).

d. **Cabin and Site Element Descriptions**
   See Appendix A for standard cabin and site element descriptions. Porcupine Cabin specific cabin and site element descriptions include:
   - The site will include approximately 1200 sf of aggregate surfacing around the fire ring and picnic table in front of the cabin. In addition, there will be an area for a woodshed with surrounding aggregate surfacing.

e. **Accessible routes**
   All routes to and from the cabin, toilet and woodshed need to meet FSORAG and ABA accessibility standards, including reconstructing existing access routes. In addition, an existing trail will pass near the cabin so providing a sense of privacy will be important.

f. **Heating systems**
   A single wood stove with no back-up heat source will be installed (See requirements listed in Appendix A.) Users will be expected to provide wood.

g. **Drinking water source**
   A potable water source is located inside the campground via hand pump well during the summer season. The water system is winterized and closed in the fall.

h. **Outhouse system**
   There are existing vault toilets in the Porcupine Campground. Install a single hole vault toilet near the cabin that matches or closely mimics the appearance of the existing toilets (See 2. for photos), with wood siding. Vault toilet location shall be within 250 feet (pumping distance) from the campground road.
i. Locations available for onsite materials storage and special site cleanup requirements

Materials will be stored onsite in a location approved by USFS representative. The Contractor will leave the site in a state ready for visitor use.

4. Cabin Material Specifications

Please see Appendix A for standard cabin material specifications. The following specifications are guidelines for general bidding purposes. The contractor’s designer of record shall develop final specifications for materials ensuring compatibility, durability, availability, constructability, code compliance, and associated installation and testing requirements. Storage, handling, preparation, and installation shall follow the manufacturer’s instructions.

5. Other Project Information

a) Utilities – Contractors will provide their own utilities with a few exceptions. Porcupine Campground has no electrical or housing services available. There is an outhouse located approximately 400 feet from the construction location, which the contractor may use unless conflicts with the public arise, and a potable water source via hand pump well available within the campground. Due to public demand at the Porcupine Campground, the contractor will not be able to camp at the campground. The USFS may be able to provide camping, without services, at the old Hope Guard Station, located on the south side of the Hope Highway at approximately milepost 12.

b) Cell Service – Cell service may be available with some cell phone providers.

c) Restriction of Hours – Porcupine Cabin location restricts construction hours to campground quiet hours. No construction/generators between 10 PM – 6 AM.

d) Work Schedule Considerations - The site is typically free from snow from April to November. The campground is open and managed by a concessionaire from Memorial Day to Labor Day. Outside the summer season, the campground is managed as no fees, no services.

e) Disruption of Campground: There should be minimal disruption for Alaska Recreation Management (ARM) and campground users.

f) NEPA: Follow all National Environmental Policy Act (NEPA) requirements.

6. Pricing Schedule

Contractor shall price work according to the two schedules below. The first schedule is for completing the project with as much Alaskan wood as feasible. Prevailing wages are required per conditions of funding sources.

Alaskan Wood Utilization Bid

<table>
<thead>
<tr>
<th>Description</th>
<th>Unit</th>
<th>Unit Cost</th>
<th>Cost</th>
<th>Source Location (nearest town)</th>
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<tbody>
<tr>
<td>Designs for cabin, foundation, site plan and shop drawings</td>
<td>1</td>
<td>Lump Sum</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Description</td>
<td>Unit</td>
<td>Cost</td>
<td></td>
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<tr>
<td>----------------------------------------------------------------------------</td>
<td>------</td>
<td>-----------------------------</td>
<td></td>
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</tr>
<tr>
<td>Designs for cabin, foundation, site plan and shop drawings</td>
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<td>Lump Sum</td>
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<tr>
<td>Mobilization</td>
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**TOTAL:**
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**TOTAL:**
Appendix D: Meridian Lake Cabin

Contents:
1. Project Location and Map
2. Conceptual Site Plan
3. Cabin and Site Design
   a. Structural Design Parameters
   b. Geotechnical Design Parameters
   c. Cabin and Site Element Descriptions
   d. Accessible routes
   e. Heating system(s)
   f. Drinking water source
   g. Outhouse system
   h. Locations available for onsite materials storage and/or special site cleanup requirements
4. Cabin Material Specifications
5. Other Project Information
6. Pricing Schedule

1. Project Location and Map

The proposed location for the Meridian Lake Cabin on the Chugach National Forest is located at 60°17'5.89"N, 149°21'53.13"W, off the Iditarod National Historic Trail (INHT) at Meridian Lake. To get to the cabin from Anchorage, travel south on the Seward Highway to the Grayling Lake Trailhead, located at milepost 13.25 on the west side of the highway. Hike in on the INHT following the signs for Meridian Lake (stay right at the first junction). About 1.2 miles down the INHT there is a primitive spur trail that heads north to a dispersed campsite. The cabin location is located about .2 miles down this trail.

The prospective cabin site is located on relatively flat ground. The cabin will be built on the east side of Meridian Lake near an existing hardened dispersed camping site. The cabin will be situated south of the existing site, on ground that is less sloped, and will utilize the existing open area for the fire ring and benches. There is a nearby backcountry privy that will be replaced with a pit toilet. There are partial views through the trees of the lake from the existing site, and the lake is approximately 15’ in elevation lower than the cabin site.

The project will include installing a woodshed and outhouse, as well as needed access routes between the site elements. The woodshed will be located near the access ramp to the cabin, and the pit toilet will be located near the existing backcountry privy. The access routes will be hardened with aggregate to provide accessible routes between features. There will be an accessible route from the existing trail into the site onto the deck, and from the cabin to the outhouse. A fire pit shall be installed on the existing campsite. An aluminum canoe is planned for fishing and lake access.
2. Conceptual Site Plan

Site and Existing Privy Photos
3. Site Specific Cabin and Design Requirements

a. Structural Design Parameters
   • Design to International Building Code current version
   • Structural Risk Category II
   • 179 psf ground snow load
   • Design wind load 156 mph*, Exposure Category D
   • Seismic load as required by ASCE7*
   • Floor Live Load 40 psf, 30 psf for habitable attics and sleeping areas such as lofts; per ASCE 7-22, and 150 psf for woodsheds
   • Frost depth of 42 inches for warm buildings and 7 feet for non-insulated or heated buildings.

b. Geotechnical Design Parameters
   The Meridian Lake area consists of shale, bedrock, and peat soils. The site is sloping towards the lake shore and grading for accessibility and drainage will have to be carefully considered. Presumptive soil bearing capacity of 2,000 psf (IBC 2021, Table 1806.2 for silty gravel).

c. Cabin and Site Element Descriptions
   See Appendix A for standard cabin and site element descriptions. Meridian Cabin specific cabin and site element descriptions include:
   • The site will include approximately 1200 sf of aggregate surfacing around the fire ring. In addition, there will be an area for a woodshed with surrounding aggregate surfacing and aggregate surfacing at the lake shore for aluminum canoe storage and lake access.
   • Accessible Fire Rings - Pilot Rock Accessible Fire Ring FS-30/18/PA with single level cooking grate or approved equal.
   • Woodsheds – Wood storage sheds must be large enough to accommodate and be signed to delineate seasoned and unseasoned wood. The unseasoned wood section must allow airflow, while preventing moisture intrusion. Seasoned woodshed section should provide means to keep wood dry and regulate moderate use by multiple users versus excessive use by single users.
   • Aluminum Canoe - Length 17’, Width 44”, Depth 14.5”, weight 112.5 lbs., 4-person capacity, 3 seats.

d. Accessible routes
   The cabin, deck, ramp, and outhouse will meet ABA standards. There will be an accessible route, hardened with aggregate, from the existing trail to the site onto the deck, and from the cabin to the outhouse. The site is sloping towards the lake shore and grading for accessibility.
and drainage will have to be carefully considered. The cabin site faces east. The predominant winds are north-south in the area but can be unpredictable especially in storms.

   e. Heating system(s)
A wood stove will be installed. See requirements listed Appendix A.

   f. Drinking water source
Users will need to provide their own water.

   g. Outhouse System
The backcountry privy will be replaced by a pit toilet, with the structure meeting ABA guidelines. The structure should be a polyurethane structure with a door, with a pitched roof that is similar in architecture to the final cabin design.

   h. Locations available for onsite materials storage and/or special site cleanup requirements
Materials will be stored onsite in a location that is approved by the USFS technical representative. The contractor will be required to leave the site in a state ready for visitor use.

4. Cabin Material Specifications
   Please see Appendix A for standard cabin material specifications. The following specifications are guidelines for general bidding purposes. The contractor's designer of record shall develop final specifications for materials ensuring compatibility, durability, availability, constructability, code compliance, and associated installation and testing requirements. Storage, handling, preparation, and installation shall follow the manufacturer's instructions.

5. Other Project Information
   a) Utilities – Contractors will provide their own utilities. Camping will be allowed on site at the Meridian Cabin location during the duration of the cabin construction, in the existing dispersed campsite, but there are no utilities available in this remote location.
   b) Cell Service – No cell service on site.
   c) Restriction of Hours – Meridian Cabin site has no restrictions.
   d) Work Schedule Considerations - Onsite construction will be May-October 2024. There can be snow on site into the spring (April) and starting in the fall from Oct-November.
   e) NEPA: Follow all National Environmental Policy Act (NEPA) requirements.

6. Pricing Schedule
The contractor shall price work according to the two schedules below. The first schedule is for completing the project with as much Alaskan wood as feasible. Please complete the associated cut list for detailed price listing for the Alaskan wood utilization option. Prevailing wages are required per conditions of funding sources.
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<th>Unit Cost</th>
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