



# Request for Proposals:

## West of Cascade Reroute

Issued: December 2, 2022

Proposals Due: December 30, 2022

The Superior Hiking Trail Association (SHTA) seeks proposals from individuals and businesses with expertise and extensive experience in constructing new hiking trail according to modern, sustainable construction techniques and standards, including, but not limited to: clearing; building tread; installing puncheon and boardwalk; using local, on-site stone to build retaining walls and other trail improvement features.

### **About the SHTA:**

The SHTA is a non-profit organization tasked with the maintenance and renewal of the approximately 320-mile long Superior Hiking Trail (SHT) that follows the rugged terrain along Minnesota's north shore of Lake Superior from the Wisconsin border at its Southern Terminus to the Canadian Border at the Northern Terminus.

### **About the Project:**

The project is located on the very popular Cascade River Loop, on the west side of the Cascade River. The loop is accessed from Highway 61, near Cascade Lodge in the south and County Road 45 (Pike Lake Road) in the north. This section is approximately

halfway between Lutsen and Grand Marais, MN. The project is located entirely within the Superior National Forest, managed by the US Forest Service.

This reroute is about  $\frac{2}{3}$  miles long, with the goal of moving the trail upstream and away from a failed bridge to a location that is less severe that will require a much smaller structure to cross. The reroute crosses 4 small drainages that will require puncheon for an estimated total of 300 feet. Much of the planned route crosses flat terrain (about 1200 feet) which may require additional puncheon or raised tread. In addition to the trail construction, we would like to build a new campsite, which will consist of 5 individual tent pads, about 8x10 feet in size and a common area about 10x15 feet. There will be a short access trail (about 50 feet long) coming off the main trail for access. Precise location of the campsite is still under review.

The trail must be built with a finished tread width of 18 to 24 inch, full-bench construction, with a cleared corridor width of approximately 36 inches on either side of the center of the trail, for a total cleared width of 72 inches, or six feet. Trail can be roughed in with machinery, not to exceed 48-inch track width, but must be finished with a hand crew.

**NOTE: This project is not yet fully approved by the USFS. Approval is pending a field review, which is scheduled for mid-July of 2023. Permission to proceed is expected after field work is completed, with the possibility of some minor adjustments.**

**Deliverables:**

1. **Tread Construction:** Most of the work will involve tread construction, most of which will be standard full-bench trail, but there are some flat areas (approximately under 1000 feet) that may need to be built with raised tread. In some areas, it may be necessary to install uphill ditches, but this will be determined based on the quality of the native soils for tread construction and the presence of hillside seeps (which are common on the SHT).
2. **Structure Construction:**
  - a. There is an estimated 300 feet of puncheon in five separate locations.
  - b. Puncheon is typically 32 inches to 48 inches wide.
  - c. Structures are typically constructed with treated lumber for the sub-structure (sills and stringers) and rough-sawn lumber (tamarack preferred, but treated is ok) for the decking. Contact the SHTA's Trail Operations Director for local lumber sources if needed.
  - d. It will be the contractor's responsibility to bring in the lumber and hardware.
  - e. SHTA will provide design specifications and plans for all wooden structures (puncheon and boardwalk) that are SHTA-preferred methods of

construction. Other styles or construction methods are permissible (if they meet or exceed the standards of the designs provided) but must be discussed with SHTA prior to construction.

**3. New Campsite:**

- a. Four tent pads measuring approximately 8x10 feet
  - b. One tent pad measuring approximately 10x12 feet
  - c. A central common area measuring approximately 10x15 feet
  - d. Access trail between the trail and the campsite, approximately 50 feet long
4. **Stone:** Use of stone is encouraged throughout for steps, checks, drainage reinforcement and tread hardening.

**5. Decommissioning of Old Trail and Removal of Materials:**

- a. Attention must be paid at each end to blend the new trail into the old in such a way that the eye is drawn in the direction that we want people to travel, which will aid in keeping people on the new route.
- b. In order to discourage people from using the old (decommissioned) trail once the reroute is completed, the contractor should obliterate any evidence of the decommissioned trail, especially at each end, and possibly block off with trees, brush, or other obstructions.
- c. Lumber from the structures on the decommissioned trail should be torn up, hauled out and disposed of properly.

**Access for the Project (see map in Appendix):**

1. Take Cook County Road 45 (Pike Lake Road) west off of Cook County Road 7
2. Travel approximately five miles (you will pass the SHT trailhead and cross the Cascade River) to where the road comes to a 4-way intersection
3. At the intersection, turn left, or southbound on to Forest Road 159 for approximately one mile
4. Take the ski trail for about one mile, heading west
5. From this point, an access road must be built to where it intersects the reroute, about ¼ mile

**Specifications:**

**1. Duties and Responsibilities of Contractor.**

1. Contractor is expected to possess the necessary experience, skills and craftsmanship to build high quality and sustainable natural surface hiking (or experience with similar) trails meeting or exceeding accepted industry standards.
2. Contractor, crew, and any subcontractors associated with this project are expected to conduct themselves in a professional manner at all times.

2. **Field Layout and Design.** The reroute has been carefully laid out, but some minor adjustments may be permitted. Certain parts of the alignment are more sensitive (see a and b below), while other parts will have more flexibility.

Contractor and SHTA should discuss this in advance, preferably during the initial site visit, to identify these specific areas. If the contractor deviates from the established route, or outside any agreed upon buffer without permission, they may be required to fix the work without additional compensation.

1. Corridor width shall be 6 feet wide, or 3 feet to either side of the centerline, and 8 feet high.
2. Contractor should try to preserve large trees (8+” DBH) within this corridor and move the trail around them if possible
3. **Site Meeting/Visits.** Contractor will participate in an on-site construction meeting with the SHTA to discuss the project prior to commencement of work. SHTA will perform regular site visits as the project continues. Contractor needs to schedule a meeting with the SHTA any time there is uncertainty with the project.
4. **Trail Construction.** Contractor and all crew members shall be required to be knowledgeable of and have proven capability of meeting or exceeding the trail building standards as defined in the MN DNR’s Trail Planning, Design, and Development Guidelines along with all general standards and conditions defined in this RFP or otherwise adopted for this project prior to and during construction. Specifics include:
  1. **Trail building techniques.** The Contractor is expected to be fully versed in the techniques used to build sustainable hiking trails; this includes, but is not limited to, understanding and applying rolling grades, inslope/outslope tread, knicks, grade reversals, rock armoring and trail hardening (including wooden structures), climbing/descending turns, water diversions, etc.
  2. **Trail grades.** Grades shall not exceed guidelines as defined in referenced manuals, typically not exceeding ten percent (10%), unless approved by the SHTA. All trail grades must be sustainable, as determined by the Contractor.
  3. **Surface water control features.** The trail shall use rolling contour or grade system, with the trail traversing hills or side slopes and incorporating natural grade reversals (which are typically required every 20 feet to 50 feet. If a grade reversal is not feasible, other surface water drainage structures at the same frequency to minimize the effects of water flow and erosion shall be required, such as rolling grade dips and knicks; the Contractor is expected to be fully versed in trail building techniques commonly used to prevent trail erosion and ensure long-term sustainability.
  4. **Trail Construction in Flat Terrain.** Where the trail needs to be constructed on flat ground, Contractor needs to take added and adequate measures (trail hardening, including, but not limited to: boardwalk,

stonework, or elevated tread and/or ditching) to ensure that the trail is sustainable and wetlands are protected.

5. **Tread Construction.** The Contractor shall typically follow these basic steps to construct a **full bench** cut sustainable trail, including:
  1. **Excavating the tread.** Cutting the entire specified trail width into the side slope; excess soil shall be broadcast down slope of the trail (failure to disperse material down slope and away from the trail tread will not be allowed).
  2. **Cutting the backslope.** Backslope shall be compacted and naturally blend into the slope above the trail; maximum backslope shall be at natural angle of repose, but not exceed 45-degree angle unless approved by Construction Manager.
  3. **Outslope the tread.** Typically 5 percent to ensure proper sheet flow of water across the trail tread, rather than down the trail tread; where the existing surface sideslope is less than 5 percent, the outslope shall conform to the existing sideslope; removed material shall be broadcast down slope of the trail in a thin layer; the critical point where the trail tread meets the downhill slope shall be rounded and well compacted.
  4. **Fine rake and compact the tread.** The entire width of the trail tread shall be evenly raked and then compacted by mechanized equipment furnished by the Trail Builder; soil compaction shall be completed with adequate soil moisture content to ensure proper compaction; fine raking shall leave the trail tread flat and even, with no areas for water runoff to pocket.
  5. **Finish the tread and trail corridor.** Remove any flagging and broadcast organic material originally raked off of the trail tread location down slope over the loose soil from the tread excavation; 'leave no trace' principles will apply; the area adjacent to the trail shall be restored to appear undisturbed; restoration of disturbed areas shall include but not be limited to raking and leveling disturbed soil adjacent the trail tread, spreading leaves and other similar organic material over exposed soil, and removing all evidence of construction and equipment.
5. **Mechanized Equipment Best Practices.** It is the intent of the SHTA to minimize the impacts of construction, especially mechanized equipment. As such:
  1. All equipment will be clean and free of debris before being introduced to the work site. Equipment is subject to inspection at the start and during the project.

2. All mechanized equipment shall be in good mechanical condition, free of any fluid leaks and be equipped with spark arrestors if applicable.
3. Each machine will be equipped with a readily accessible fully charged fire extinguisher.
4. Machine service and fueling is not permitted within 500 feet of a wetland or drainage.
5. A spill kit suitable for five gallons of fluid will be onsite and within 500 feet of mechanized equipment whenever equipment is being operated.
6. Using mechanized equipment equipped with tracks is strongly recommended. All track marks will be raked smooth and affected areas will be finished to have a natural shape, e.g., spoils piles rounded, smoothed and cleared of significant brush, blade edges blended.
7. Scarring of trees within and outside the corridor is to be avoided.
8. Machine access is restricted to the trail corridor, separate access routes may only be created and used with prior written permission of the SHTA. Any approved access route must be retired and reclaimed back to its original condition upon project completion. Any proposed turnarounds shall be approved prior to construction and must be retired and reclaimed back to its original condition upon project completion.

Any equipment that does not meet these criteria shall be shut down until in compliance. If not correctable, it will be removed from the project site at the request of the Owner and at no additional cost to the Owner. As part of their bid package, the contractor will be asked to supply the expected list of mechanized equipment required to complete the project.

6. **Performance and Progress Assessment.** If the SHTA feels that the project is not moving according to schedule, or that the work is not up to industry standards, the Contractor will be notified and must take steps to remedy the matter. If improvements are not made satisfactorily, the SHTA reserves the right to remove the Contractor from the project.
7. **Quality Control and Crew Expectations.** As previously defined, the Contractor shall employ workers skilled and experienced for the specific task required. The Contractor and crew leaders are responsible for the performance and professional manner of all crew members. Any crew or crew member acting in a nonprofessional or inappropriate manner that jeopardizes the health, safety and welfare of other crews working on the site, or the public at large, will be cause for dismissal of that member or the entire crew, at the discretion of the SHTA. Failure to immediately address such issues may be cause for cancellation of the contract.

8. **Backcountry Protocol/Safety.** The Contractor and crew members shall be familiar with backcountry operation and safety protocols as well as be familiar and adept at “leave no trace” practices. Cell reception is spotty. Having back-up communication and navigation devices is strongly recommended. Contractor is responsible for providing all necessary Personal Protective Equipment. Crew members operating machinery or a chainsaw should work in close proximity with at least one other person. Each crew should have an OSHA-compliant first aid kit readily available.
9. **Construction Facilities and Site Protection.** The Contractor is responsible for maintaining the work site in a safe and responsible manner. This includes erecting and maintaining fences and barricades when necessary to provide adequate protection for their own and other crews, and other authorized project members. The Contractor shall secure, properly cover and protect his own equipment, materials and work against damage of any kind until this project is complete and the SHTA takes possession. The Contractor shall maintain a neat and orderly job site and shall promptly remove all debris and dispose of the debris legally off site. The Contractor shall remove all temporary fences, barricades, signs, etc. upon completion of the work.
10. **Tree and plant protection.** The Contractor shall protect trees and root systems outside of the defined trail tread, front slope, and back slope area from damage from construction equipment or damage due to soil compaction. The Contractor shall erect snow fences or flagging around any trees or plants designated by the SHTA to be protected or at other locations as directed.
11. **Working with Volunteers.** Volunteers may be involved with this project in some capacity; the Contractor must indicate whether they are willing and able to work with, or supervise, volunteers, and how that affects bid pricing.

### **Invasive Species Prevention**

Contractors must follow Minnesota DNR’s Operational Order 113, which requires preventing or limiting the introduction, establishment and spread of invasive species during activities on public waters and DNR administered lands. This applies to all activities performed on all lands under this grant-funded contract and is not limited to lands under DNR control or public waters. Duties are listed under Sections II and III (p. 5-8) of Operational Order 113 which may be found at:  
[http://files.dnr.state.mn.us/assistance/grants/habitat/heritage/oporder\\_113.pdf](http://files.dnr.state.mn.us/assistance/grants/habitat/heritage/oporder_113.pdf).

### **Prevailing Wage**

All State funded or partially State funded work against this contract is subject to the prevailing wage requirements pursuant to Minnesota Statutes 177.41 to 177.44 and corresponding Minnesota Rules 5200.1000 to 5200.1120 as established by the Minnesota Department of Labor and Industry. Specifically, all contractors and all tiers of

subcontractors must pay all laborers and mechanics the established prevailing wages for work performed under the contract. Failure to comply with the aforementioned may result in civil or criminal penalties. The Department of Labor and Industry has a web page with Frequently Asked Questions about prevailing wages at:

<http://www.dli.mn.gov/business/employment-practices/prevailing-wage-information>.

For questions regarding the Prevailing Wage Laws, contact the Department of Labor and Industry at 651.284.5091.

**Please include the following information with your proposal:**

1. Cost estimates for the project, broken down into mobilization costs, labor, travel and lodging.
2. Labor costs should be broken down into:
  1. Bringing in materials for puncheon
  2. Tree and brush clearing and removal, if this is an additional cost
  3. Tread construction on reroute
  4. Cost of lumber, hardware, and other materials
  5. Structure (puncheon) construction
  6. Removal and disposal of approximately 600 lf of old puncheon
  7. Decommissioning/closure of the old trail
3. Your availability, or potential start date.
4. Your qualifications for constructing a natural surface trail and your past experience building and maintaining hiking trails or other recreational trails, including creating accurate cost estimates.
5. Documented evidence (photos, organizational newsletters or other material) of trail construction or repair projects you have overseen or participated in.
6. At least two references from customers of your work. (If you work for a nonprofit organization, please provide testimonials or references from volunteers who have worked with you.)
7. A list of all equipment (make, model, year and width) that will be used on this project must be submitted with bid for approval.
8. A list of all equipment operators with hours of experience on each piece of equipment must be supplied with bid.

**PLEASE SUBMIT YOUR PROPOSAL NO LATER THAN December 30, 2022.**

**Send Proposal, or questions to:**

Tamer Ibrahim, Trail Operations Director  
Superior Hiking Trail Association  
[tbrahim@superiorhiking.org](mailto:tbrahim@superiorhiking.org)  
218-370-8393

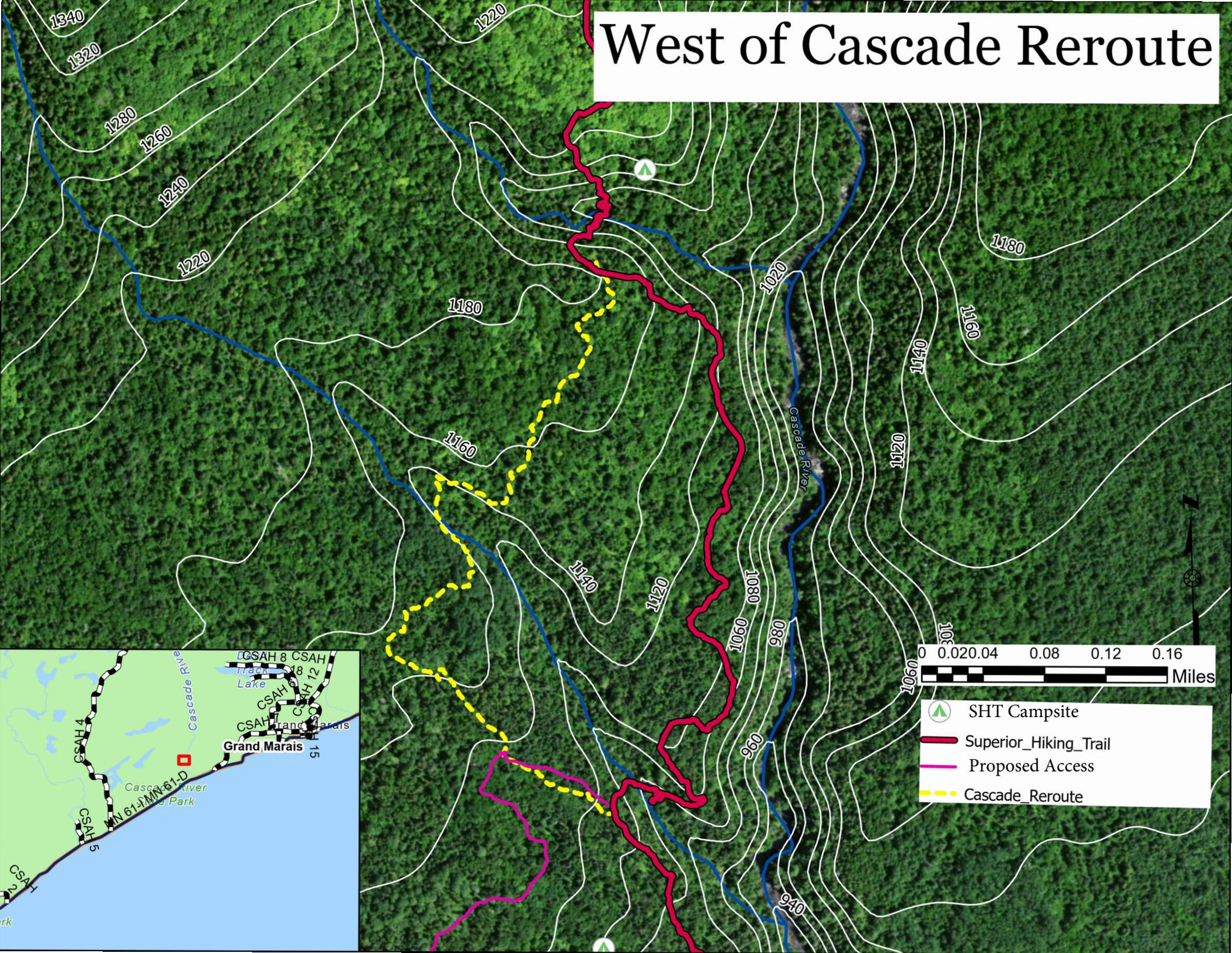
**Please contact me with any questions sooner rather than later. I will have limited availability the week of the 18th, but will have more availability the week prior to the deadline. Thank you.**

“Funding for this project was provided by the Minnesota Environment and Natural Resources Trust Fund as recommended by the Legislative-Citizen Commission on Minnesota Resources (LCCMR)”

**Appendix A: Project Location**

**Location Overview**

# West of Cascade Reroute



0 0.020.04 0.08 0.12 0.16 Miles

- SHT Campsite
- Superior\_Hiking\_Trail
- Proposed Access
- Cascade\_Reroute

# West of Cascade Access

