

# SCOPE OF WORK

## ROCKSLIDE MITIGATION PROJECT

### Project Description

The Rockslide Mitigation project will mitigate slope-failure hazards on Municipal property above the northern end of Skagway's primary cruise ship berth. To address the hazards expected from slope failure at the project location, the Municipality of Skagway proposes to design a mitigation project that includes:

- Excavating the unstable rock mass at the top of the slope, which will be accomplished with conventional earthmoving equipment and drill and blast techniques. Excavated rock will be sent down the existing slide path after excavation to catchment at the toe of the slope.
- Improvement to the existing catchment area at the toe of the slope. From here, the debris will be excavated and disposed of at an offsite location.
- Stabilizing the rock mass in the head scarp of the excavation and adding rockfall protection to the resulting slope. Rockfall protection will likely include the installation of draped mesh and attenuators on the slope as well as barriers and fencing on the dock.
- Replacement of the existing monitoring system at the project site, which is expected to be damaged during construction of the proposed mitigation activities.

The project will be divided into two Phases. Phase 1 will consist of design and Phase 2 will include construction and project completion. For Phase 1, the Municipality of Skagway will engage engineers to provide the following deliverables and assistance:

- Engineer's estimate for the construction project
- 65% design
- 100% design
- Project management and administration
- Project site visit(s) and meetings
- Request for Proposal development and bidding assistance
- Permitting services

### Proposed Timeline

The Municipality of Skagway proposes to complete the Rockslide Mitigation project (Phases 1 and 2) between August of 2023 and April of 2026. Most of the Phase I work will occur between August 2023 and May 2024; however, the Municipality anticipates that a phased design approach may be needed to accommodate multiple construction steps/seasons which could extend the design effort. Furthermore, field changes to the design may require utilizing the firm contracted for design work through the completion of both Phases 1 and 2 (though construction phase engineering services are not included in this estimate). Therefore, **the timeline for Phase 1 design of the Rockslide Mitigation project may span August 2023 to April 2025, dependent on funding.**

July 20, 2023	Award of design contract
August 1, 2023	Notice to proceed / executed design contract

Aug. – Dec., 2023	Permitting
January 1, 2024	65% design
April 1, 2024	100% design
May 1, 2024	Construction RFP issued
July 11, 2024	Award of construction contract
July 18, 2024	Notice to proceed / executed construction contract
April 1, 2026	Construction Project completion

## Budget Narrative

At 10% design, the total estimated cost of the rockslide mitigation project is:

Design (Phase 1):	\$ 1,175,253
Construction (Phase 2):	<u>\$27,208,872</u>
Total Estimated Cost:	\$28,384,125

**The Municipality of Skagway intends to apply the \$1,100,000 Legislative grant and \$75,253 of municipal funds to the cost of Phase I design.**

Estimated costs for Phase I design work are detailed below, and work will be conducted on a time and materials basis in accordance with a contract(s) for professional services.

<b>Engineer's estimate</b>		<b>\$33,929</b>
<b>65% design</b>		
Site reconnaissance	\$35,410	
Geotech Design	\$65,800	
Engineering	\$140,486	
Administration	\$45,200	<b>\$286,896</b>
<b>100% design</b>		
Geotech Analysis	\$51,000	
Engineering	\$147,869	
Administration	\$51,400	<b>\$250,269</b>
<b>Project management</b>		<b>\$143,499</b>
<b>Site visits</b>		<b>\$66,078</b>
<b>RFP assistance</b>		<b>\$273,518</b>
<b>Permitting services</b>		
Site visit	\$15,049	
ACoE permitting	\$25,890	
Biological assessment	\$15,465	
Alternatives analysis	\$11,835	
DEC permitting	\$4,172	
FEMA analysis	\$15,080	
Discharge permitting	\$9,908	
Local permitting	\$1,380	
NEPA support	\$10,635	
Administration	\$11,650	<b>\$121,064</b>
<b>TOTAL COST</b>		<b>\$ 1,175,253</b>