

GROUND STABILITY CONSTRAINTS MAP OF THE SUGARLOAF CONE REGION OF UNALASKA ISLAND, ALASKA

by
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1986

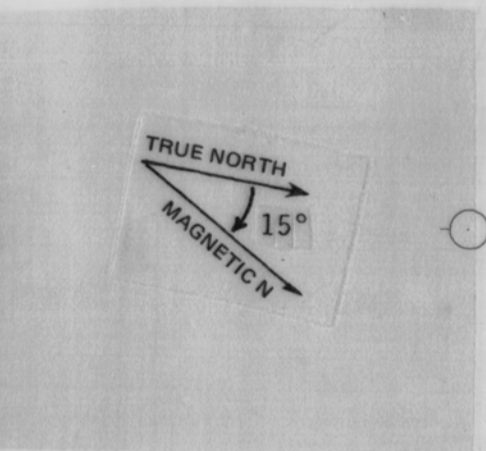


This map was adopted from an unpublished D.G.S. map entitled "Unconsolidated deposits and geologically recent volcanic rocks and faults of the Makushin Volcano and Dutch Harbor region, Unalaska Island, Alaska" by Reeder, J.W., Swanson, K.F., and Larsen, M.J.

EXPLANATION OF SYMBOLS

- UNSTABLE ROCK SLOPES - Regions of Recent (Holocene or slightly older) bedrock landslides and regions of extensive rock falls.
- UNSTABLE SOIL SLOPES - Regions of shallow till and undifferentiated drift over bedrock that are characteristic of small slump failures. Individual failures have extended 160 feet onto the Makushin (Broad Bay) Valley.
- POTENTIALLY UNSTABLE SOIL SLOPES - Regions of shallow till and undifferentiated drift over bedrock that might fail if excavated for roads and powerline installations. A dashed boundary indicates the presence of volcanically derived deposits on top of the till or drift.
- SEASONALLY UNSTABLE SOILS - Regions of pronounced soil solifluction.
- HIGH POTENTIAL FOR SUBSIDENCE AND FISSURING - Regions of high potential for subsidence and fissuring due to liquefaction and consolidation of soils during large earthquakes.
- POTENTIAL FOR SUBSIDENCE AND FISSURING - Regions of potential for subsidence and fissuring due to liquefaction and consolidation of soils during large earthquakes.
- POTENTIAL FOR SUBSIDENCE - Regions of potential for subsidence due to consolidation of soils caused by man-made surface loads such as road fill.
- ACTIVE FAULT ZONE - Fault (fracture) marked by a surface scarp due to recent (Holocene) movements.
- POTENTIAL FOR DEBRIS FLOWS - Regions of potential for nonvolcanically derived debris and mud flows.

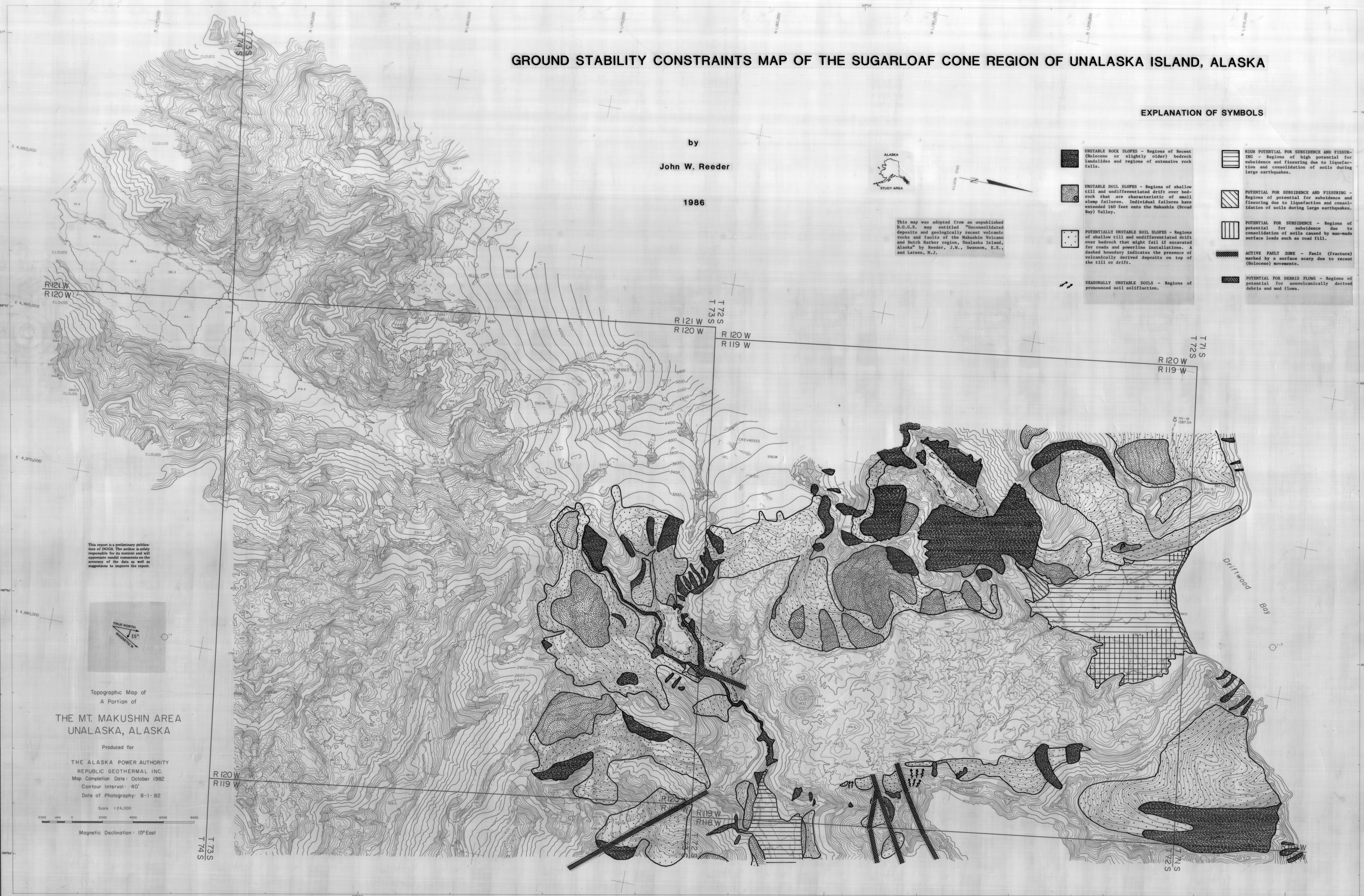
This report is a preliminary publication of BOKS. The author is solely responsible for its content and will appreciate candid comments on the accuracy of the data as well as suggestions to improve the report.



Topographic Map of
A Portion of
**THE MT. MAKUSHIN AREA
UNALASKA, ALASKA**

Produced for
**THE ALASKA POWER AUTHORITY
REPUBLIC GEOTHERMAL INC.**
Map Completion Date: October 1982
Contour Interval: 40'
Date of Photography: 8-1-82

Scale 1:24,000
Magnetic Declination: 15° East



Prepared by NORTH PACIFIC AERIAL SURVEY, INC.