BULLETIN

News from SubTerra, Inc.®

Howard Hanson Dam
Blasting Near the Concrete Intake Tower and Gate Structures
Cumberland, Washington

As part of the installation of a Cofferdam and Fish Passage Restoration Project, Traylor Brothers, Inc. under the direction of the US Army Corps of Engineers contracted ***SubTerra, Inc.*** *to provide pre-blast and pre-construction inspections and to review and monitor blasting.*

SubTerra, Inc.'s scope of work included:

1. Conducting pre-blast and pre-construction inspections, checking for stability in all structures in the vicinity to the blasting, excavation, and construction sites.
2. Blast Consultant and Blast Vibration Specialist responsible for developing blast plans and monitoring blast vibrations using HF vibration monitoring equipment and video.

This photograph shows an initial sinking shot located about 100-ft from the intake tower and bridge structure.

Blast monitors were located on key structures at five different locations.

The photograph below shows a sinking shot located approximately 40-ft from the coffer dam. Most shots were designed using a scaled distance of 5 to limit vibrations to below 16 in/sec.

The photograph below shows a sidewall blast that was successfully drilled, loaded, matted, and shot just above the waterline.

Over 70 blasts were detonated during Phase I excavation with all recorded vibrations below 16 in/sec and no observed structure damage.

PO Box 520, 218 East North Bend Way, North Bend, WA 98045
Phone (425) 888-5425 info@subterra.us Fax (425) 888-2725