

Representative Clients

- Puget Sound Energy
- King County Roads Division
- City of Issaquah - On-Call Geotechnical Services
- City of Puyallup
- PACE Engineers
- Port Blakely Communities
- City of Burien
- WSDOT - Statewide On-Call Geotechnical Services
- Suncadia
- Plum Creek Timber Company
- Weyerhaeuser
- King County Library System
- Parsons Brinckerhoff
- City of Black Diamond
- Palmer Coking Coal Company
- EnCana Oil & Gas USA

Geotechnical

Geologic



ICICLE CREEK ENGINEERS

Geotechnical, Geologic and Environmental Services

WBE Certified

29335 NE 20th Street • Carnation, WA 98014 • www.iciclecreekengineers.com

Phone (425) 333-0093 • Fax (425) 996-4036

Contact Kathy Killman, LEG, President at kkillman@iciclecreekengineers.com

ICICLE CREEK ENGINEERS

- Bonneville Power Administration
- Parametrix
- Edmonds Community College
- HDR Engineering
- Duncan Oil
- Green River Community College
- ABKJ
- US Army Corp of Engineers
- King County Fire Protection District 47
- RH2 Engineering
- Intracorp
- Grays Harbor County
- City of Marysville
- Merrill & Ring Forest Products
- Washington State DNR
- Key Bank
- Kennedy/Jenks Consultants
- Jordan Exploration

Hydrogeologic

Environmental Services



Geotechnical Engineering

- Road and bridge design
- Foundation engineering
- Pile and micropile design
- Slope stability analysis/design
- Retaining structure design
- Earthquake engineering
- Pavement evaluation and design
- Preload and surcharge analysis/design
- Deep excavation and shoring design
- Erosion and drainage analysis
- Detention and infiltration pond design
- Water tank foundation design
- Earth dam and reservoir design
- Expert witness services
- Site development feasibility studies
- Construction observation and testing

Engineering Geology and Hydrogeology

- Geologic hazards assessment and mitigation
- Geologic and geomorphic mapping
- Coal mine hazards assessment and mitigation
- Erosion hazards assessment and mitigation
- Mine reclamation planning
- Landslide evaluation, mitigation and design
- Industrial mineral resource evaluation
- Rock slope stability evaluation
- Hydrogeologic evaluation and testing
- River scour and streambank analysis
- Construction dewatering analysis/design
- Water resource and ground water evaluation
- Infiltration evaluation

Environmental Services

- Environmental Impact Statement support
- Permitting and regulatory liaison
- Forest Practices application support
- NEPA and SEPA support
- Underground storage tank compliance support
- Underground storage tank removal monitoring
- Site characterization
- Remedial design and planning
- Soil and ground water remediation monitoring
- Ground water monitoring
- Phase I and II Environmental Site Assessments



North SPAR Issaquah, Washington

The North SPAR project connects the South Sammamish Plateau Access Road (South

SPAR) with the existing Issaquah-Fall City Road SE, Issaquah-Pine Lake Road and the relocated Vaughn Hill Road. The road project is approximately 4,690 feet long. The main roadway consists of four through lanes and a concrete bridge structure spanning North Fork Issaquah Creek. ICE provided geotechnical, geologic and environmental consulting services to King County and Parsons Brinckerhoff for the EIS phase then completed the preliminary and final geotechnical design of the road project. ICE provided on-call services during construction of the North SPAR project through completion in 2003. *Client: King County Roads Division*



Issaquah Highlands Issaquah, Washington

This master-planned community features high-density residential neighborhoods with associated infrastructure including about 30 miles of roads. The project area is characterized by variable topography and is underlain by complex geology and numerous abandoned coal mines. Extensive grading was required to accommodate roadways and building pads. Since 1996, ICE has provided geological and coal mine hazard assessments, geotechnical design services, and construction observation services, including geotechnical design recommendations for five stormwater detention ponds that were reviewed and approved by the Washington State Department of Ecology Dam Safety Office. *Client: Port Blakely Communities*

Ice Creek Engineers

ICE, a certified **Women's Business Enterprise (WBE)**, provides geotechnical, geologic, hydrogeologic and environmental services to clients throughout the Pacific Northwest. Our firm, based in Carnation, Washington, was founded in 1996 with the goal of providing practical, innovative and cost-effective engineering consulting services. Every project that ICE undertakes is staffed with experienced professionals so that we can achieve these goals. We begin each project by developing a clear understanding of our client's needs and concerns, focusing on obtaining a thorough understanding of site-specific geologic and hydrogeologic conditions to provide the best solutions for our clients. We maintain a full-service soils laboratory. ICE was recently selected as an on-call geotechnical consultant for WSDOT and the City of Issaquah.

Electron Flume Rockslide Assessment and Repair Pierce County, Washington



A 140-foot-long segment of the elevated wooden flume structure was destroyed by a rockslide. ICE completed a geological assessment of the rockslide and provided geotechnical design criteria for several repair options. The selected option included rock-bolting a portion of the flume to the steep rock face.

Client: Puget Sound Energy