

Marine View Drive Emergency Slide Repair

Des Moines, WA

Owner: City of Des Moines

Description: INCA Engineers provided design, construction management services, and on-site inspection for the restoration of a portion of Marine View Drive roadway that had slid approximately 10 feet due to an, approximately 400-foot wide, adjacent landslide. This project included the design of a 150-foot long space pile wall consisting of 5-foot diameter by 25-foot deep lean concrete lagging shafts and 4-foot diameter, 75-foot deep structural concrete shafts. The effort also included evaluation of alternative retaining wall systems and coordination of geotechnical efforts.

Design elements included:

- ▶ Sidewalks
- ▶ Guardrail
- ▶ Street drainage revisions
- ▶ Erosion/pollution control
- ▶ Surface restoration
- ▶ Pavement overlay
- ▶ Utility relocation coordination
- ▶ Extensive traffic control for closure of a key commuter route
- ▶ Retaining wall cap beam geometrics



INCA provided topographic design mapping of the active slide area. Mapping included right-of-way location. During construction, INCA also provided the contractor with construction staking for drilled shaft wall placement and finish grades for the cap beam and sidewalk. INCA also provided Construction Management Services, which included on-site inspection to ensure the contractor conformed to the contract and Federal Aid requirements, approval of Material Sources, review of Traffic Control Plans and Erosion Control Plans, coordinated reviews of mix designs, and other submittals. Project inspection was coordinated with the Washington State Department of Transportation TransAid Engineer to ensure Federal Aid compliance.

