## Research Project Status Report

January 1, 2007 – March 31, 2007

| Project Title   |  | Agmt./Task No.  | Item No.             | Agency Bgt. No.    |  |
|---|--|---|----------------------|--------------------|--|
| Subsurface Drainage for Landslide and Slope Stabilization   |  |   |                      |                    |  |
| Research Agency   |  | Start Date  | Estimated Completion | Revised Completion |  |
| WSDOT   |  | 3/2007  | 12/2010              |                    |  |
| Principal Investigator(s)   |  | Technical Contact   |                      |                    |  |
| Balasingham Muhunthan (Washington State University) and Roger Beckie (University of British Columbia)   |  | Tom Badger 360.709.5461   |                      |                    |  |
| WSDOT Program Manager   |  | FHWA or Other Technical Contact   |                      |                    |  |
| Kim Willoughby 360.705.7978   |  | Mike Adams  |                      |                    |  |
| Funding Source  |  | Schedule Status   |                      |                    |  |
| CA, MD, MS, MT, NH, OH, PA, TX, WA, WY  |  | ☑ On schedule       ☐ Ahead of schedule         ☐ On revised schedule       ☐ Behind schedule |                      |                    |  |
| Research Area   |  |   |                      |                    |  |
| ☐ Bridges & Structures ☐ Operations & Materials   | ☐ Environment ☐ Traffic & Intelligent Transportation Sys | Highway Design & Safety  Mobility & Intermodal Planning  ems Evaluation                       |                      |                    |  |
| Original Estimated Cost   | Revised Cost   | % Funds Expen   | ded %                | % Work Completed   |  |
| \$ 300,000  |  | 2%  |                      | 1%                 |  |
| Objective   |  |   |                      |                    |  |
| (1) Provide best practices and guidance for subsurface drainage applications for slope stabilization, including subsurface investigation and testing, groundwater-flow characterization, analysis, drain configurations and design, installation methods, monitoring, and maintenance. (2) Evaluate new applications of existing materials and technologies, such as trenchless technologies (horizontal directional drilling, micro tunneling, guided boring, etc.) and other innovative technologies and materials, for stabilizing slopes using subsurface drainage. |  |   |                      |                    |  |

## **Project Progress:**

The first TAC meeting was just held in Seattle, WA on March 28-29, 2007. The TAC members relayed information regarding their states use and successor failure of subsurface drainage. Roger Beckie provided a summary of the state of the knowledge, and Balasingham Muhunthan spoke about the scope of work. Discussions followed and Muhunthan and Beckie will revise the scope of work based on those discussions. Plans are to start this summer or fall with a PhD student at WSU.

## **New Period Proposed Activity:**

Revise scope of work and get contract/task order in place.

Page 1 4/25/2007