

D600 Roads Deactivation Project

Investment Schedule No.: **COTFL446455**

Project No.: **6455012**

Recipient: **Cascadia Forest Products Limited, West Island Timberlands.**

MoF District: **Port Alberni District, Coast Region**

Watershed: **Moon Creek**

Project Location: **48° 45' N Latitude, 125° 00' W Longitude.**

Project Roads: **D600, D600A, D600A-1, D600D, D600E.**

Project Objectives:

The purpose of this project was to mitigate the hazard of landslides or significant erosion occurring from old logging roads listed above. These roads are located on steep cross slopes above Moon Creek, a tributary to the Klanawa River and other unnamed tributaries draining directly into the Pacific Ocean. Failure along any section of these roads could produce sediment that could impact the fish habitat along Moon Creek and the Klanawa River. The road conditions were evaluated and associated hazards at specific locations along each road were identified. From this evaluation a road deactivation prescription was prepared to mitigate the identified hazards. It was not within the project scope to assess the open slope conditions beyond the road right of way.

The project is not located within a community watershed.

Introduction:

A field reconnaissance along these roads, constructed prior to 1990, showed that large volumes of fill had been placed over steep cross slopes. Slumping fills and tension cracks were evident along many sections of these roads, and several large slope failures had already occurred off the D600 road. These roads cross Es1 and Es2 classified terrain, which is considered to be high and moderate hazard terrain where landslide failures can occur. The reconnaissance level assessment identified the hazard as high along a number of sections of these roads. This information can be found in the Road Deactivation Report. A residual hazard rating was completed after the road deactivation work was completed and is identified in the Summary of Work Completed Report. These reports must be read in conjunction with this Project Completion Abstract to understand road conditions assessed in June, 2005 and the residual hazards remaining after the road deactivation project was completed.

Previous road deactivation work was minimal with only a few shallow poorly constructed cross-ditches in a few locations. No fill retrieval appears to have been completed in the past.

Road Deactivation Prescription Project Plan:

A Road Deactivation Summary Report was completed by Dale A. Ostapowich, P.Eng. for the project roads when the road deactivation report was completed. This summary report, gives the site location, a list of inspected roads, a brief history of the project, the purpose and procedures of the work completed, observations of terrain conditions, stream classifications for streams in the vicinity of this project, a summary of deactivation recommendations proposed, safety procedures to be followed, and an indication of residual landslide hazards to be expected.

**D600 Roads
Project Completion Abstract**

The road deactivation prescriptions were completed by walking all the identified roads and recording road conditions, including cross slope angles, fill slope angles, drainage conditions, road surface conditions, evidence of slumping road fills, ditch and road drainage conditions including location and sizing of any culverts or bridges. Cross-section data was gathered typically between 30 m to 50 m intervals and at additional sites where a significant change in slope or road conditions were observed. This data helps to estimate the fill depths. These measurements are considered a reconnaissance level survey and were all made using a hand held inclinometer and fill slope lengths are estimated. This site information is provided in the "Site Description" column of the Road Inspection Notes and Work Recommendations part of the Road Deactivation Report.

The "Work Recommended" column of the Road Inspection Notes and Work Recommendations part of the Road Deactivation Report details the deactivation work to be done. This includes the length and extent of fill retrieval to be completed; location, depth, side slopes and alignment of proposed cross-ditches; locations where existing cross-ditches are to be removed or improved, and locations where culverts are to be removed. The road hazard rating was included in the "Work Recommended" section of the report. A Definitions Section was included in this report which explains in further detail the various road deactivation techniques to be completed.

The Road Deactivation Report for the D600 Roads dated 2005/06/17 needs to be read in conjunction with this Project Completion Abstract.

Description of Completed Work:

The deactivation work was started on August 4, 2005 and was completed on September 22, 2005 using two tracked hydraulic excavators throughout the project. All roads were permanently deactivated with large sections completely rebuilt. The deactivation work closely followed the deactivation prescriptions as presented. Only one substantial modification was made with an addition of 65 m fill retrieval on the D600A road. These roads are no longer accessible to vehicle traffic. A list of the works follows.

<u>Road</u>	<u>Length (m)</u>	<u>Length of Pullback (m)</u>	<u>Cross-ditches Installed</u>	<u>Cross-ditches Repaired</u>	<u>Culverts Removed</u>
D600	4016	2112	19	0	8
D600A	667	143	0	0	1
D600A1	76	38	0	0	0
D600D	187	66	0	1	0
D600E	217	85	1	0	0
Total	5163	2444	20	1	9

The road deactivation was completed in order to reduce the hazard of slides occurring from the roads to the extent that was safe and practicable. The hazards have been reduced to low residual hazard as a consequence of this work being completed on these roads. There is still a low residual hazard either because further work could not be done safely or because there is inherent hazard in the natural slope condition.

Total Project Cost: \$135,450.28