

**PUBLIC UTILITY DISTRICT NO. 1 of CHELAN COUNTY**

P.O. Box 1231, Wenatchee, WA 98807-1231 • 327 N. Wenatchee Ave., Wenatchee, WA 98801

(509) 663-8121 • Toll free 1-888-663-8121 • [www.chelanpud.org](http://www.chelanpud.org)

January 31, 2018

Mr. Jon Riedel  
National Park Service  
2105 State Route 20  
Sedro Woolley, WA 98284

Re: **Lake Chelan Hydroelectric Project No. 637**  
**Monitoring the Stehekin River Channel**

Dear Mr. Riedel:

Section 6.3 of Chapter 4: Stehekin Area Implementation Plan of the Lake Chelan Comprehensive Plan requires that Public Utility District No. 1 of Chelan County (Chelan PUD) perform monitoring of topographical changes in the lower Stehekin River channel during the period of the New License. Monitoring includes up to five re-surveys of up to seven cross sections, preparing two-dimensional hydraulic models, aerial photographs taken of the Stehekin River mouth and flats at five to 10-year intervals, and providing copies of all results to the National Park Service (NPS). The purpose of the monitoring program is to provide topographical and photographic data to aid in documenting any long-term trends of change in the river channel.

Please find the attached copies of monitoring program results collected to date. Chelan PUD is planning to obtain aerial photographs of the Flats during the coming spring drawdown.

Please feel free to contact Gene Yow (509) 661-4305 or me if you have any questions.

Sincerely,

Jeffrey G. Osborn  
License Compliance Supervisor  
[jeff.osborn@chelanpud.org](mailto:jeff.osborn@chelanpud.org)

cc: Gene Yow, Chelan PUD

Attachment A: Monitoring Program Results

## MEMORANDUM

To: Gene Yow

From: Bill Christman

Date: 10/12/17

RE: Stehekin River monitoring results obtained per requirements of the Lake Chelan Hydroelectric Project's operating license

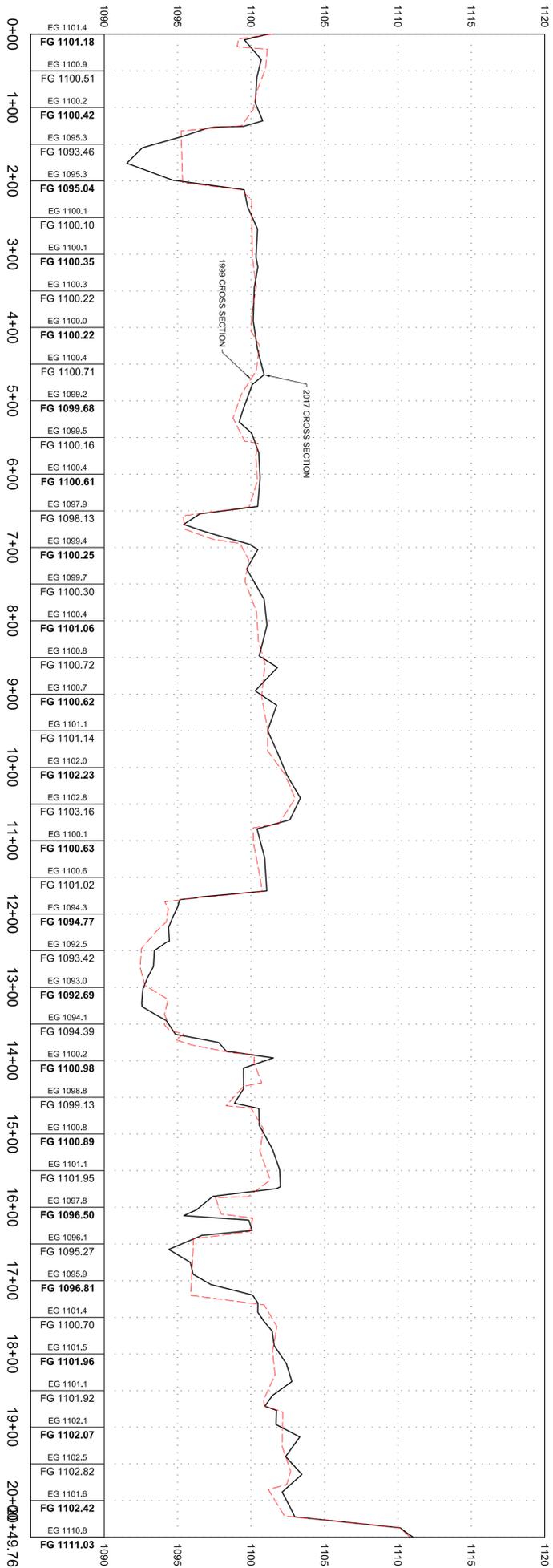
The attached plan and section sheets are based on measurements collected during October 2017. As required by the license, we measured the current state of existing river sections originally surveyed during the relicensing process. Six sections were surveyed. The license requires five or more sections. We chose the sections based upon the previous hydraulic river model output, looking for areas where the lake might exert an influence, and sections upstream of that where geomorphic activity has been observed that isn't associated with lake level regimes or timing.

The river appears to be responding positively to the new license's lake level management regime, which tends to keep the lake levels lower during the fall. The survey measurements show evidence of deepening of the lower river channel, particularly in the area of cross section 2.

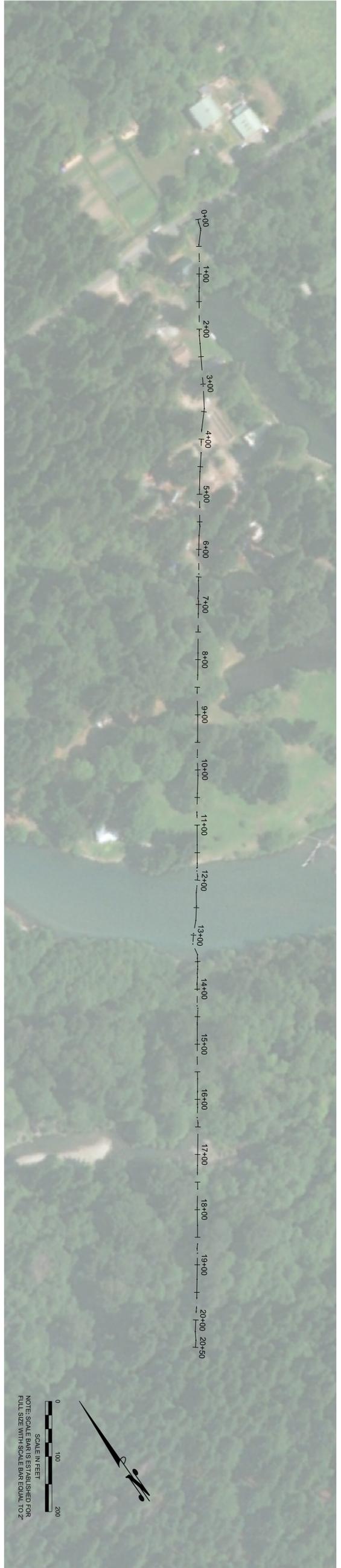








**RIVER SECTION 5 PROFILE**  
 SCALE H:1"=100', V:1"=5'



**RIVER SECTION 5 PLAN**  
 SCALE 1"=100'

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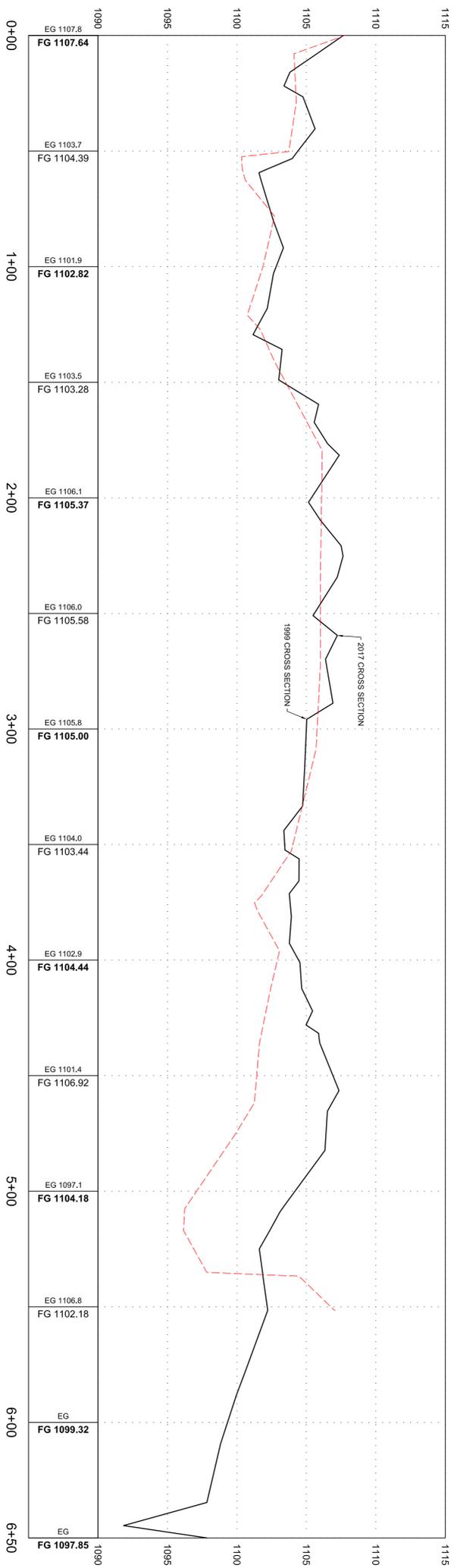
ERLANDSEN  
 250 SIMON ST. SE  
 EAST WENATCHEE, WA 98802  
 PH: 509.884.2562

DRAWN BY: JLR      LAYOUT: RS05  
 DATE: 10/11/2017      FILE NO: 20170243\_0000-WK2.DWG  
 SCALE: AS NOTED      JOB NO: 20170243\_0000      TOLL FREE (800) 732-7442

NO:	DESCRIPTION:	DATE:

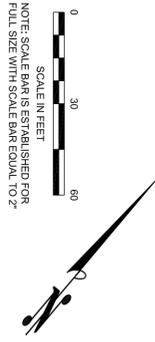


CHELAN COUNTY PUD  
 STEHEKIN RIVER CROSS SECTIONS  
 RIVER SECTION 5



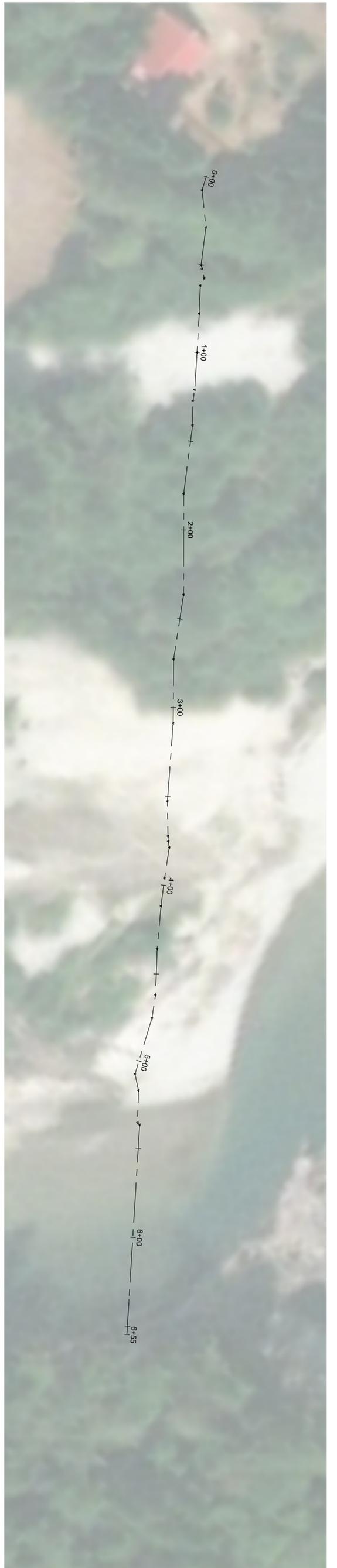
**RIVER SECTION 13 PROFILE**

SCALE H:V=30:1 V:1=5'



**RIVER SECTION 13 PLAN**

SCALE 1"=30'



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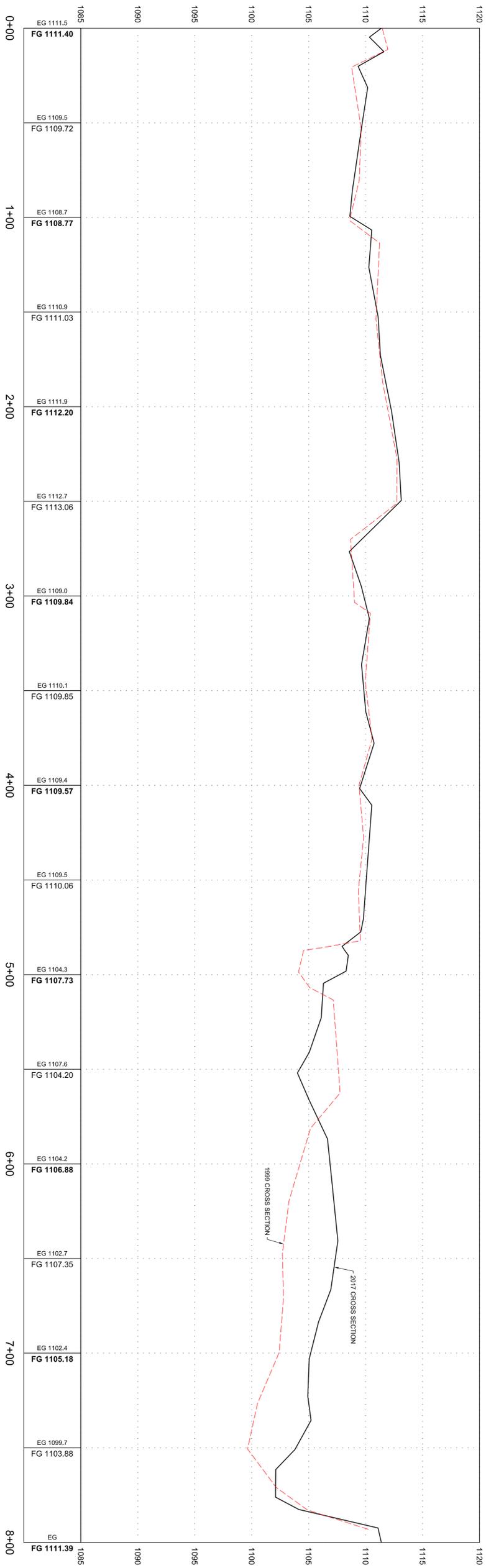
SHEET RS2

DRAWN BY: JLR LAYOUT: RS13  
 DATE: 10/11/2017 FILE NO: 20170243\_0000-WK2.DWG  
 SCALE: AS NOTED JOB NO: 20170243\_0000

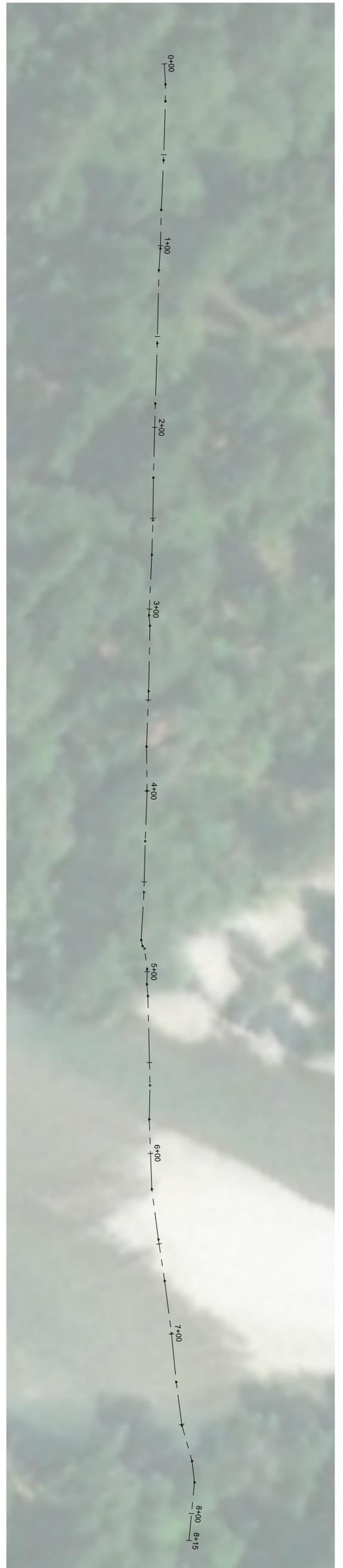
NO:	DESCRIPTION:	DATE:



CHELAN COUNTY PUD  
 STEHEKIN RIVER CROSS SECTIONS  
 RIVER SECTION 13



**RIVER SECTION 18 PROFILE**  
 SCALE H=1"=30', V=1"=5'



**RIVER SECTION 18 PLAN**  
 SCALE 1"=30'



0 30 60  
 SCALE IN FEET  
 NOTE: SCALE BAR IS ESTABLISHED FOR FULL SIZE WITH SCALE BAR EQUAL TO 2"



SHEET RS2

<http://www.erlandsen.com>

DRAWN BY: JLR LAYOUT: RS18  
 DATE: 10/11/2017 FILE NO: 20170243\_0000-WK2.DWG  
 SCALE: AS NOTED JOB NO: 20170243.0000

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NO.	DESCRIPTION:	DATE:

SHEET 6 OF 6



CHELAN COUNTY PUD  
 STEHEKIN RIVER CROSS SECTIONS  
 RIVER SECTION 18