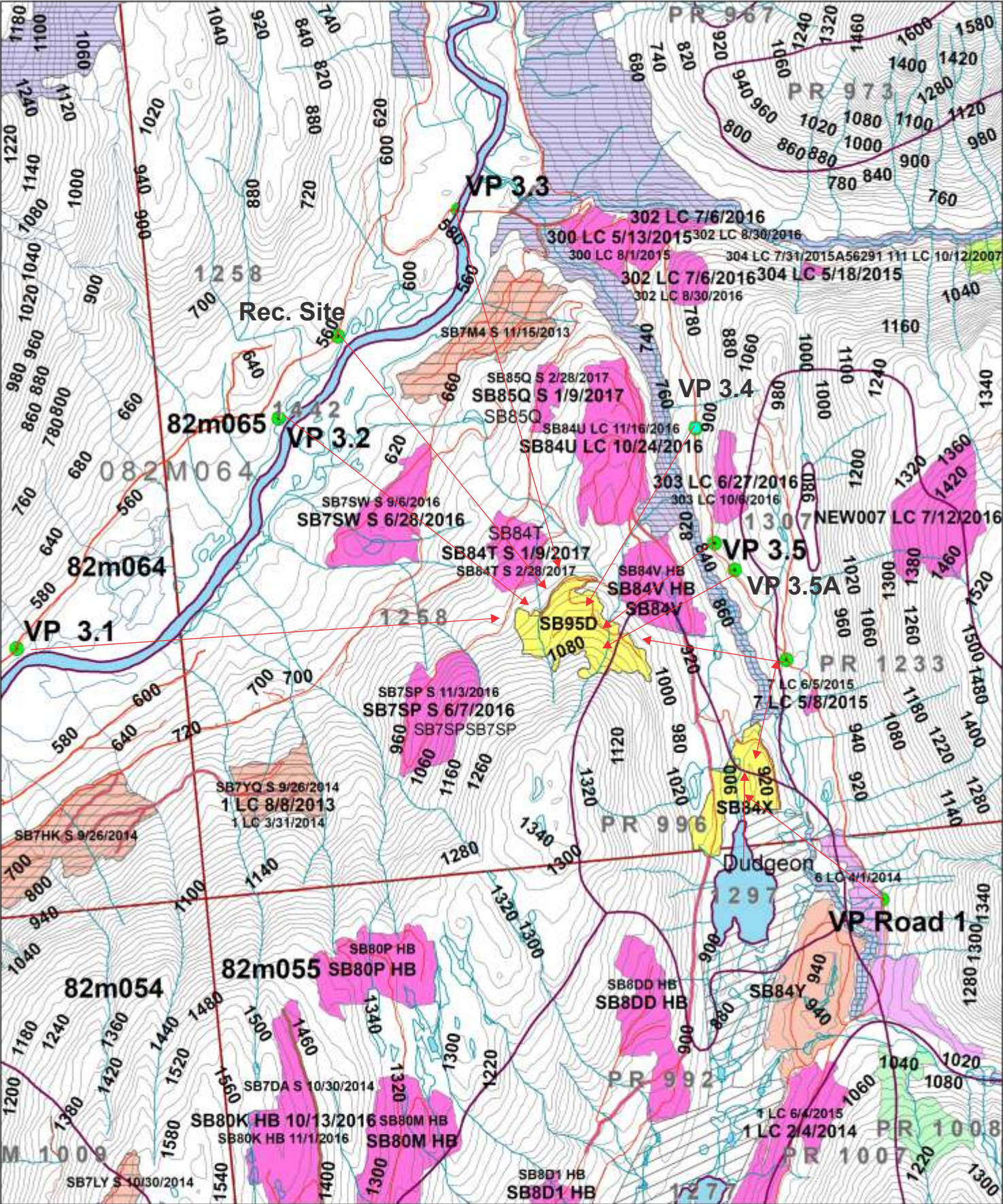


**North-East Harbour
Final Visual Assessment
October 21, 2017
RDI Resource Design Inc**



- VQO_Kamloops
 - RoadEvents2017
 - Contours
 - Harbour1718main
 - RoadsNorthAdams2
 - WTRAs_20170911
 - FTEN-older13-15
 - FTEN-10-12
 - FTEN-13-15
 - FTEN-LC-16-17
 - MH_Ogma
 - TKAOgma
 - <all other values>
- BLOCK_STAT**
- HB
 - LC
 - S
 - RDI_Clearwater_2014_WTRA
 - NorthThompson_VPs
 - TrimTrans1718
 - Dudgeon2
 - DudgeonLak
 - AdamsRiverClip
 - A71702_A83305_BlockShape
 - Harbour2015_VPs
 - East_park_shapefile



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8	Viewpoint 3.4
9	Viewpoint 3.5 with Percent Alteration
10	Viewpoint 3.6 with Percent Alteration
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13	Viewpoint Dudgeon Lake (east view)

Discussion and Conclusions

A visual impact assessment was conducted by RDI for the proposed cutblocks SB95D and SB84X plus a complexity of related existing cutblocks. The analysis cutblocks lay within VSU996 which has an established VQO of Partial Retention, and are located in mapsheet 082m065. Having no opportunity for on-site orientation, RDI sought and tested best viewing opportunities along the roads and on Dudgeon Lake using Visual Nature Studio. The trial approaches consumed considerable rendering effort. In all, 8 viewpoints were selected for analysis. The major portion of SB95D is outside of the VSU on the north-west facing part of the landform. The viewpoints on the west side of Adams River up to and including the bridge crossing (Viewpoint 3.3) see only this unclassified landform. The nearest VSU to the south seen from the west side of the river is VSU 1013 which has an established VQO of Modification. That VSU contains proposed cutblocks SB95C and SB95E which are assessed in a separate report by RDI.

A draft report was completed by RDI on September 26, 2017. BCTS was encouraged to determine visibility locations and take photography. Tyson Luedtke was able to collect excellent photographs, including from 2 additional viewpoints – the old Rec. Site located at 27.7km on the Tum Tum FSR (occasionally used by hunters), between viewpoints 3.2 and 3.3 (the bridge crossing), 3.4, and a better viewing opportunity just south of viewpoint 3.5, named 3.5A.

The visual simulations were used to determine percent alteration from viewpoints 3.3 (the bridge crossing), 3.4, 3.5, 3.6, Road 1, and Dudgeon Lake. These views also were used to conduct visual force analysis. When compared with the Luedtke photography, the greater screening in the photos indicated that the VQOs could easily be met from each of the 6 viewpoints from which percent alteration was calculated, either being fully screened (3.4, 3.6, Road 1), partly screened, or validated by design and scale (3.3, 3.5). Dudgeon Lake stands alone as validated by simulation alone (open viewing).

RDI had to determine the percent alteration in the simulations prior to requesting and receiving photography as the Harbour projects were given top priority for completion by BCTS. While photo analysis resulted in significant improvements for VQO achievement, the exercise with percent alteration calculation nevertheless will prove to be valuable should roadside clearing occur and expose the hillsides.

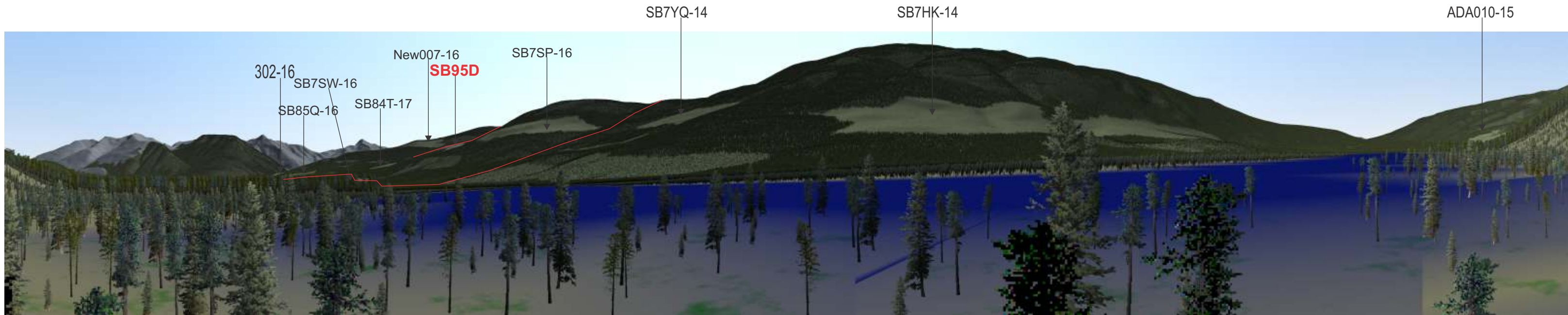


Ken B. Fairhurst. RPF. PhD
RDI Resource Design Inc
October 21, 2017

Viewpoint Simulation / Photography Validation

Cutblock Visibility by Viewpoint			Simulation % Alt. proposed and Non-veg	Photo Verification	Predicted VQO Achievement
Viewpoint	SB95D	SB84X			
3.1*	Screened	NA	NA		Yes (Screened)
3.2*	Screened	NA	NA		Yes (screened)
old Rec. Site*	Likely	NA	NA		Yes (partly screened)
3.3 (bridge)*	Open	NA	14.03%	similar alteration	Yes (Modification estimated, no VQO)
3.4*	Screened	NA	10.93%	nil alteration	Yes (Screened)
3.5	Open	Screened	3.00%	similar alteration 3.5A	Yes (Screened)
3.5A*	Open	Screened	NA	similar alteration 3.5A	Yes (Screened)
3.6*	Screened	Screened	8.69%	nil alteration	Yes (Screened)
Road 1*	Screened	Screened	9.76%	nil or minor alteration	Yes (Screened)
Dudgeon Lake (west view)	NA	Open	5.32%	NA	Yes (open)
Dudgeon Lake (east view)	NA	Open	NA	NA	NA

*verified by photography, simulations may provide more open viewing



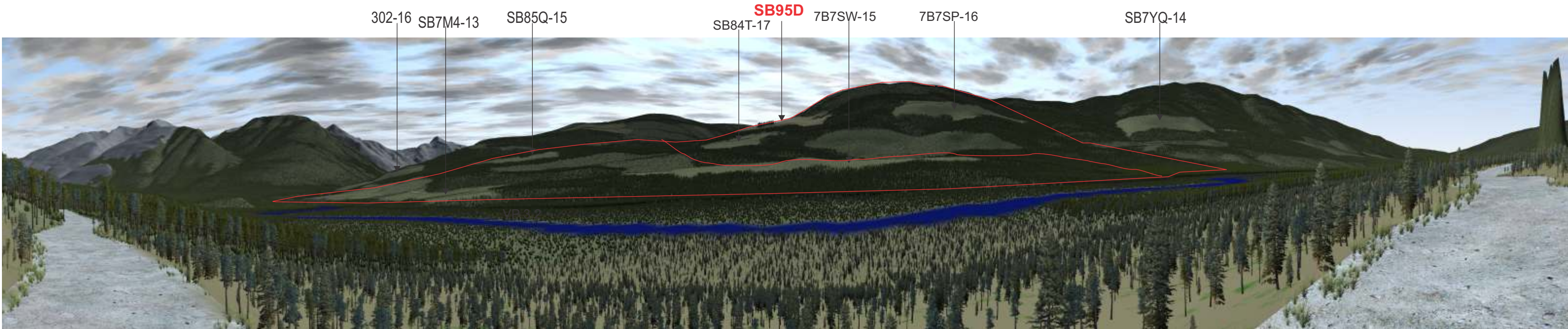
Viewpoint 3.1-River- with clearing- no on-site viewpoint determination



Photos by Tyson Leudtke, September 2017

VP 3.1

SB95D is a minor element in the landform as identified in red by RDI. The visible portion of the cutblock and entire landscape are outside of current Visual Landscape Inventory. Nearest VSU to south (4k) is Modification. Photo evidence from Tyson Leudtke indicates full screening. No further analysis deemed necessary by RDI.



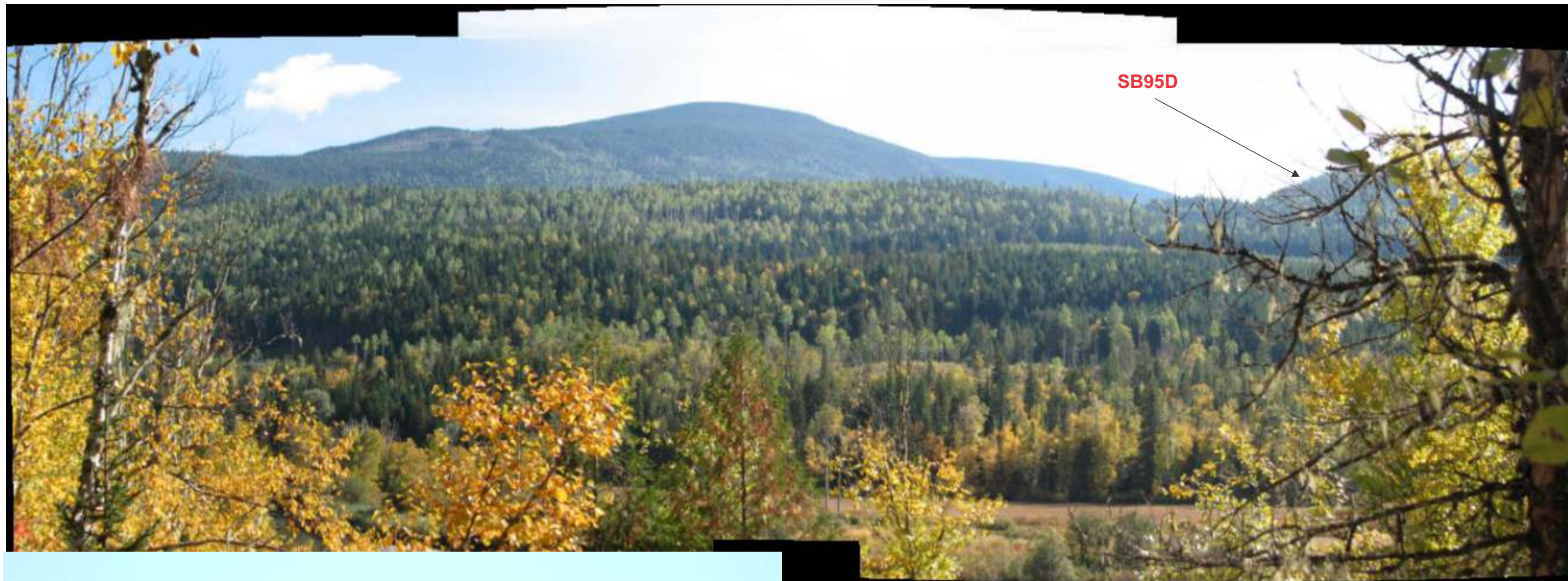
Viewpoint 3.2 - with VP clearing - visibility subject to on-site inspection- no on-site viewpoint determination

6895 pixels

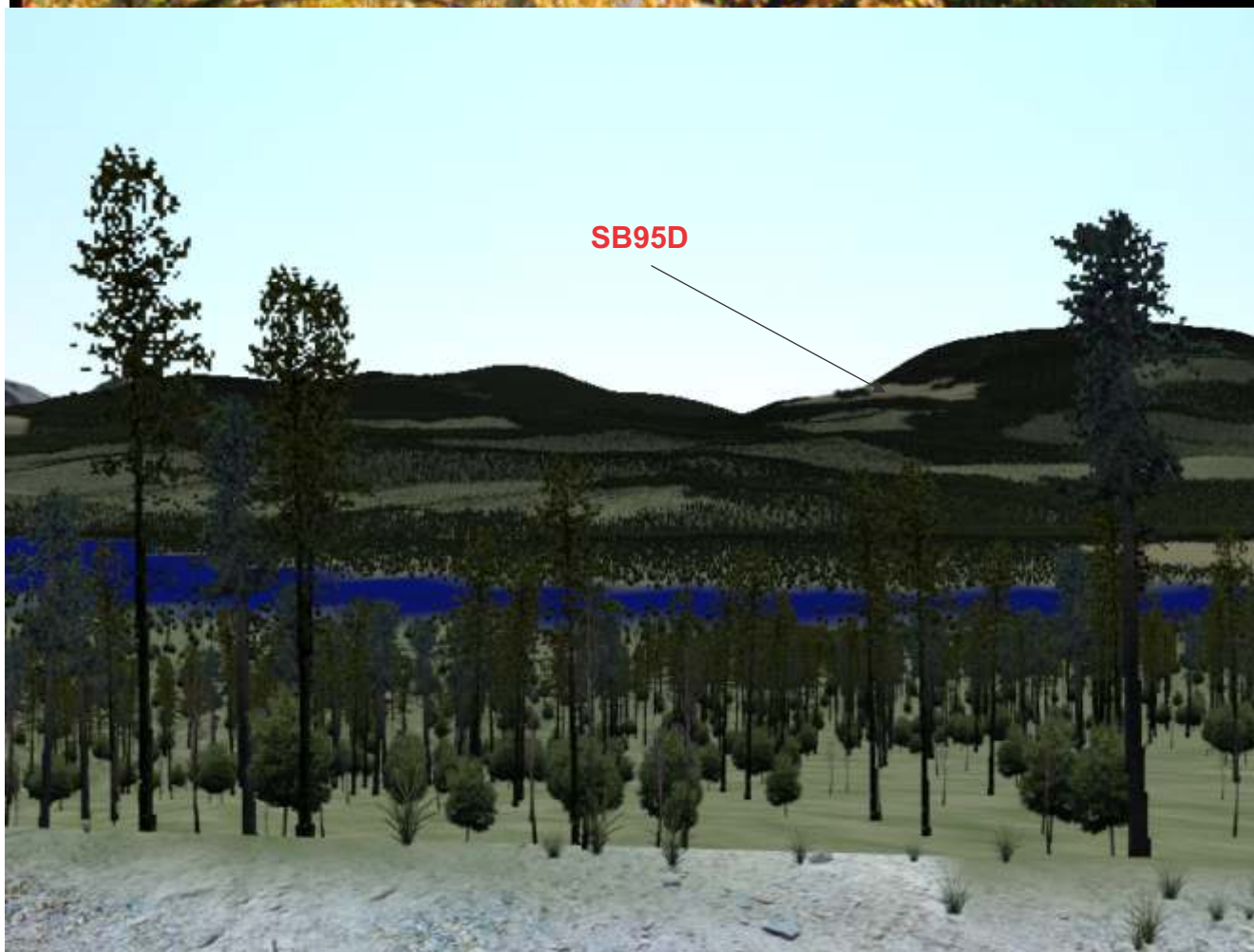


Photos by Tyson Leudtke, September 2017

SB95D is a well-shaped compatible element in the landform as identified in red by RDI. New and existing cutblocks follow visual force lines. Presence of recent alteration in the same landform (SB84T-17; SB7SP-16) The visible portion of the cutblock and entire landscape are outside of current Visual Landscape Inventory. Nearest VSU to south (4k) is Modification. Photo evidence from Tyson Leudtke indicates full screening. No further analysis deemed necessary by RDI.



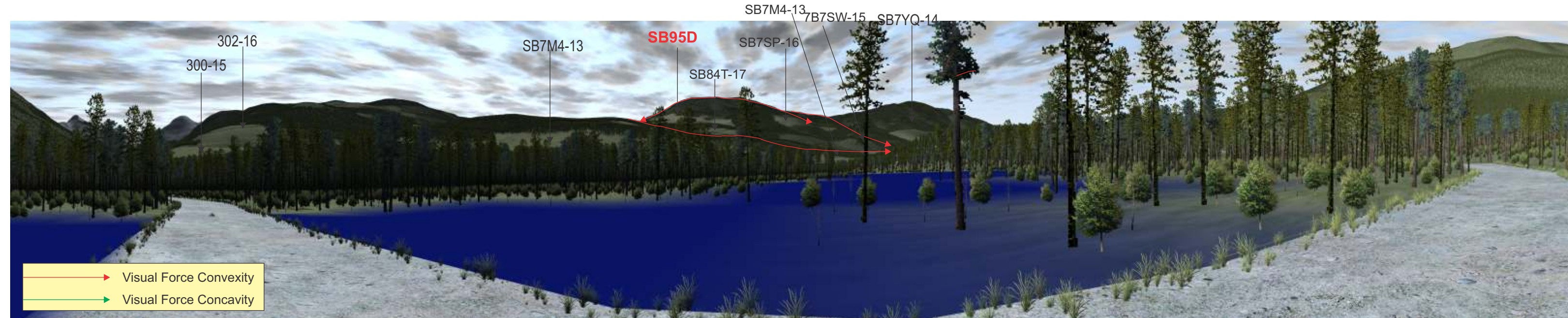
Photos by Tyson Leudtke, September 2017



SB95D is a well-shaped compatible element in the landform as identified in red by RDI. New and existing cutblocks follow visual force lines. Presence of recent alteration in the same landform (SB84T-17; SB7SP-16) The visible portion of the cutblock and entire landscape are outside of current Visual Landscape Inventory. Nearest VSU to south (4k) is Modification. Photo evidence from Tyson Leudtke indicates partial screening. No further analysis deemed necessary by RDI.

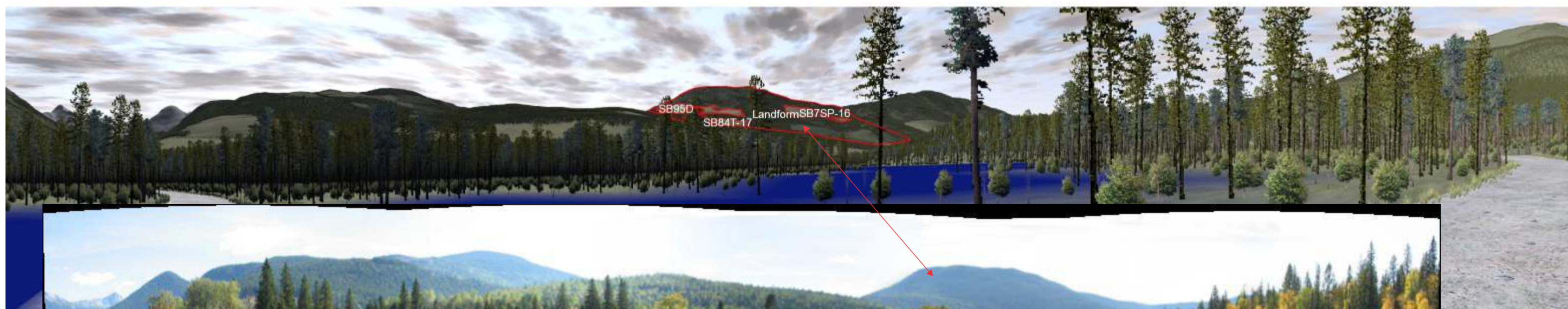
Viewpoint Old Rec. Site

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Viewpoint 3.3 - Bridge - no VP clearing- no on-site viewpoint determination

6633 pixels



Photos by Tyson Leudtke, September 2017

Percent Alteration Viewpoint 3.3 (Bridge)		
Features	AREA2	% Alt.
Landform	67062.73	
SB95D	3956.59	5.90%
SB84T-17	1960.01	2.92%
SB7SP-16	3490.52	5.20%
Sum Alt.	9407.12	14.03%

SB95D is a well-shaped compatible element in the landform as identified in red by RDI. New and existing cutblocks follow visual force lines. Viewing distance 3.2k. Presence of recent alteration in the same landform (SB84T-17; SB7SP-16) The visible portion of the cutblock and entire landscape are outside of current Visual Landscape Inventory. The Percent Alteration will Achieve Modification Category of Altered Forest. Modification is the VQO of the closest VSUs 4k to the south along the river. Open view confirmed by Leudtke photos. No further analysis or adjustments deemed necessary by RDI.

Viewpoint 3.3-Bridge

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- Visual Force Convexity
- Visual Force Concavity

Viewpoint 3.4 - no viewpoint clearing- no on-site viewpoint determination

8452 pixels

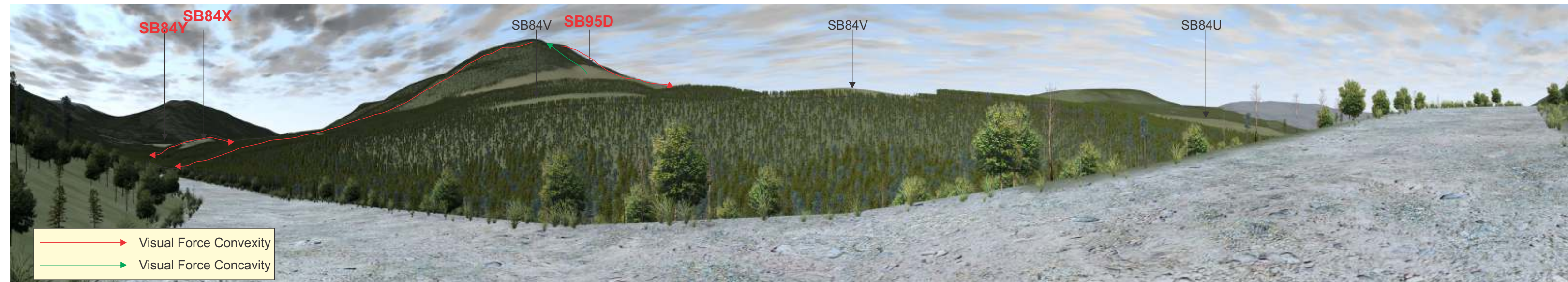
SB95D is a well-shaped compatible element in the landform as identified in red by RDI. New and existing cutblocks follow visual force lines. Viewing distance 1050m. Presence of recent alteration in the same landform (SB84V) also compatible in the landform. The visible portion of the cutblock and entire landscape are partly within VSU 258 (VLI_Poly 996). The VQO for that VSU is Partial Retention. VQO achieved is Modification by Percent Alteration. The viewpoint represents transient travel along the low-use road. The landform is a minor component in the view, and is dominated by the foreground alteration (SB84U-HC) in a separate landform. Fully screened view confirmed by Leudtke photos. No further analysis or adjustments deemed necessary by RDI.

Percent Alteration Harbour Viewpoint 3.4		
Features	AREA2	% Alt.
Landform	142073.73	
SB96D	12992.97	9.15%
SB84V-HC	2530.92	1.78%
Sum Alt.	15523.89	10.93%



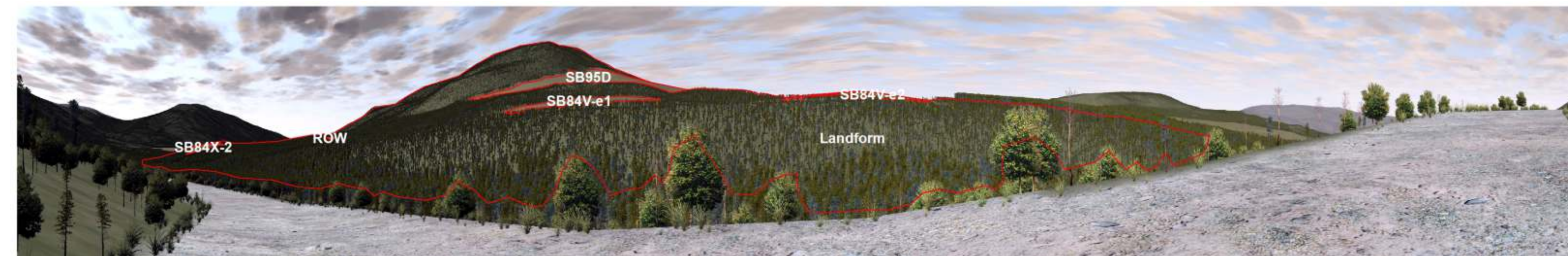
VP 3.4(A) VP 3.4(B)
Photos by Tyson Leudtke, September 2017

Viewpoint 3.4



Viewpoint 3.5- no viewpoint clearing- on-site photography confirmed open viewing

7156 pixels



Percent Alteration Harbour Viewpoint 3.5		
Features	AREA2	% Alt.
Landform	856533.31	
ROW	120.96	0.01%
SB84X-2	1298.77	0.15%
SB95D	13886.45	1.62%
SB84V-e2	3849.46	0.45%
SB84V-e1	6570.93	0.77%
Sum Alt.	25726.59	3.00%



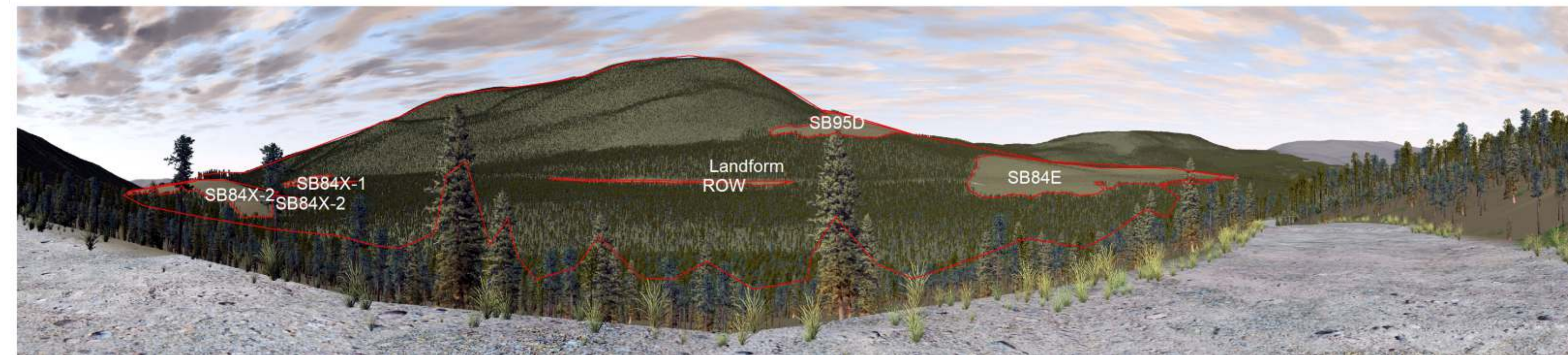
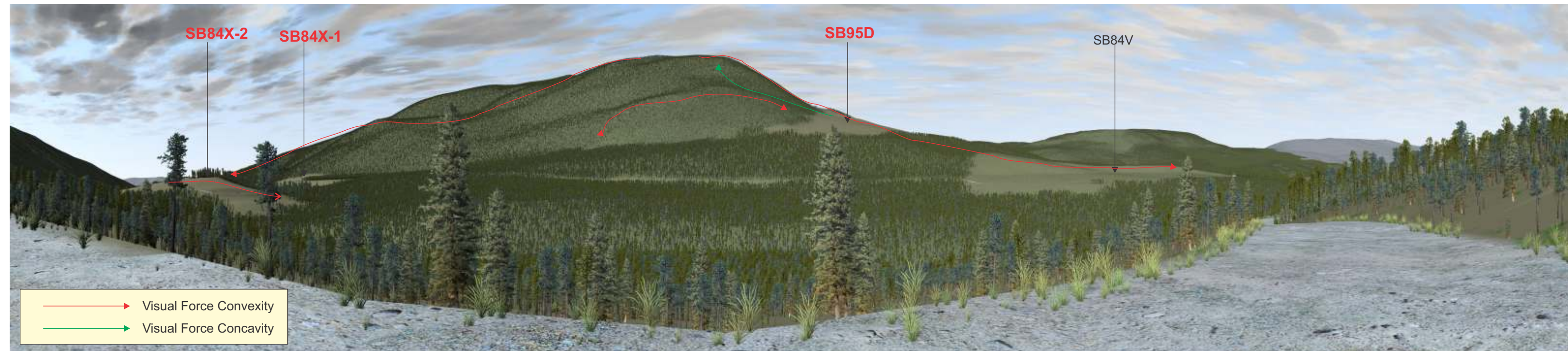
3.5A near VP 3.5

Photos by Tyson Leudtke, September 2017

RDI Resource Design Inc
October 21, 2017

SB95D has good shape following lines of force and repeats the form of SB84V (existing). The majority of SB84V is mainly obscured on the ridgeline. SB84X-2 occupies a small hillside within the main landform (25m elev.) and is NVS according to photos. RDI considers this hill to be too small to isolate it from the main landform. The VSU also incorporates the hill. (See also Dudgeon Lake, Road 1, and 3.6 Viewpoints). SB84Y (existing) is seen near SB84X outside of the main landform, and forms an acceptable pattern. It is NVS in the photo. SB84U is outside the main landform on the right, also screened in the photo. Together, proposed and existing alterations of 3% Percent Alteration and are well within the Partial Retention Category of Altered Forest (1.5% to 7.0%).

Viewpoint 3.5



Percent Alteration Viewpoint 3.6		
Features	AREA2	% Alt.
Landform	1335849.12	
SB84X-2	26421.25	1.98%
SB84X-1	3288.04	0.25%
SB95D	17823.46	1.33%
SB84V-E	63121.36	4.73%
ROW	5491.01	0.41%
Sum Alt.	116145.12	8.69%



VP 3.6(A)



VP 3.6(B)

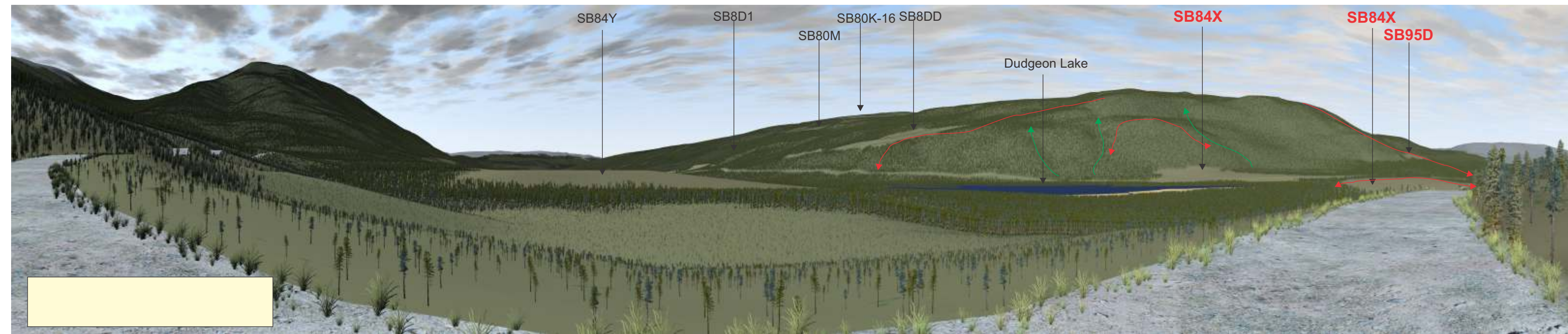


VP 3.6(C)

Photos by Tyson Leudtke, September 2017

SB95D has good shape following lines of force. SB84X-1 is low and is shaped well and compatible with the landform. SB84X-2 occupies a small hillside within the main landform (25m elev.). RDI considers this hill to be too small to isolate it from the main landform. The VSU also incorporates the hill. (See also Dudgeon Lake and Road 1 Viewpoints). Existing cutblock SB84V is prominent on the right side of the landform and acceptable shape. Together, proposed and existing alterations exceed the Partial Retention (1.5% to 7.0%). Overall pattern closely meets PR. Leudtke photos indicate full screening. RDI makes no design suggestions for this transient low-traffic view. See also Dudgeon Lake and Road 1 viewpoints.

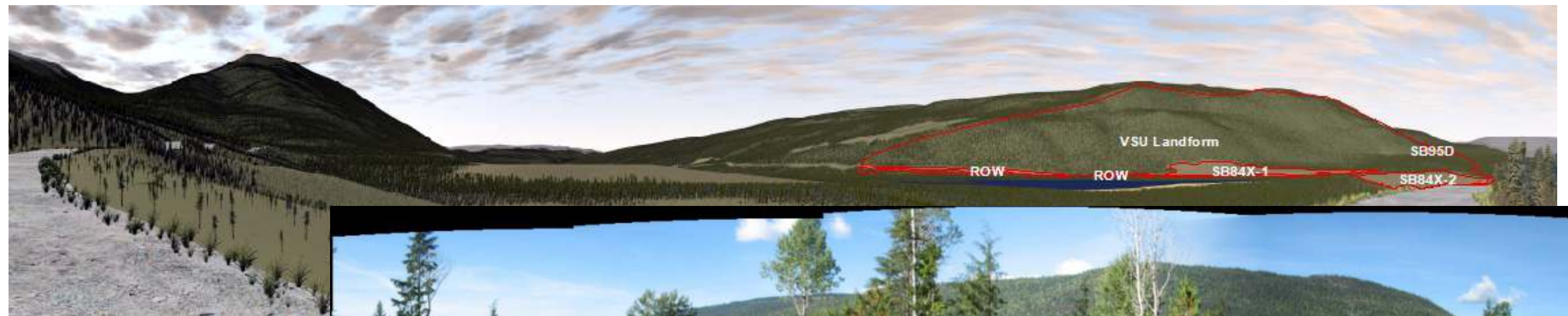
Viewpoint 3.6



Viewpoint Road 1 - with no VP clearing

See photos for on-site viewpoint determination

6065 pixels

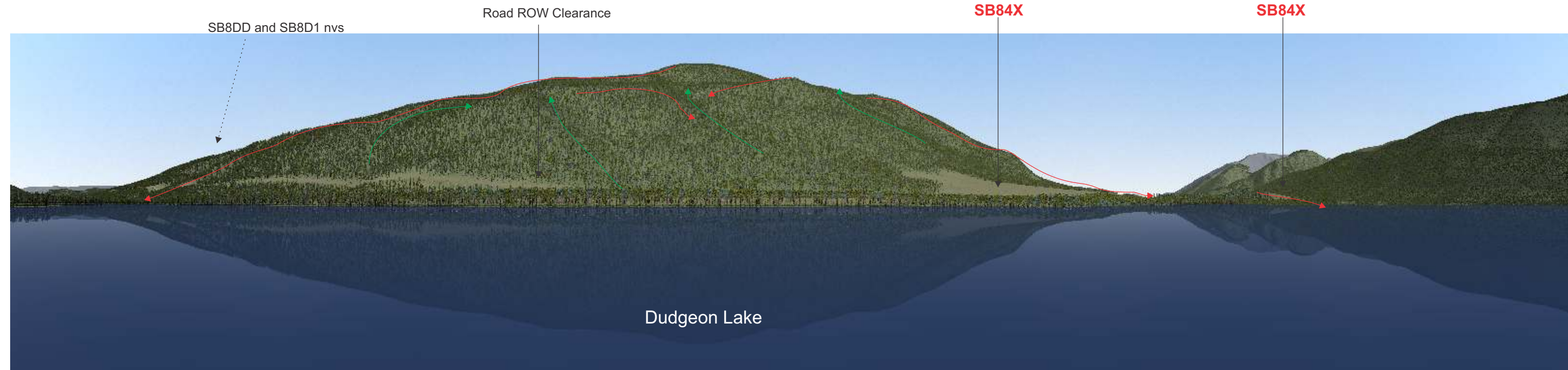


Percent Alteration Road1 Viewpoint		
Features	AREA2	% Alt.
VSU Landform	373086.51	
SB95D	923.33	0.25%
SB84X-2	14273.91	3.83%
SB84X-1	16229.11	4.35%
ROW	4975.30	1.33%
Sum Alt.	36401.65	9.76%



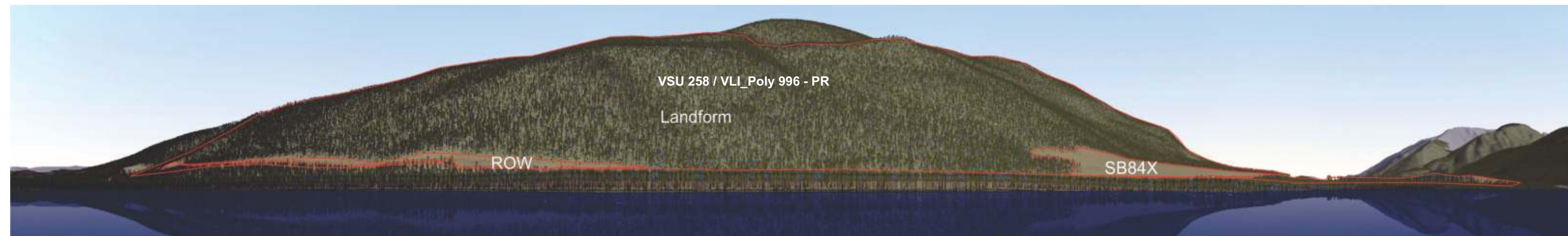
Photos by Tyson Leudtke, September 2017

SB95D is a minor element in the landform with good shape following lines of force. SB84X-1 is low and is shaped well and compatible with the landform. SB84X-2 occupies a small hillside within the main landform (25m elev.). RDI considers this hill to be too small to isolate from the main landform. The VSU also incorporates the hill. (See also Dudgeon Lake and 3.6 Viewpoints). The road ROW follows the shoreline visual force above the park boundary - no roads are evident. Total Percent Alteration of 9.76% exceeds the Partial Retention Category of Altered Forest (1.5% to 7.0%) if not screened. Design options such as elimination or modification of SB84X-2 would bring the total alteration within limits from this viewpoint. However, the viewpoint is low-use transient viewing therefor RDI makes no recommendation to change. There is recent alteration in the foreground along the east-side of the lake. Most importantly, the Leutke photos indicate little or no visibility of recent or proposed alterations.



- Visual Force Convexity
- Visual Force Concavity

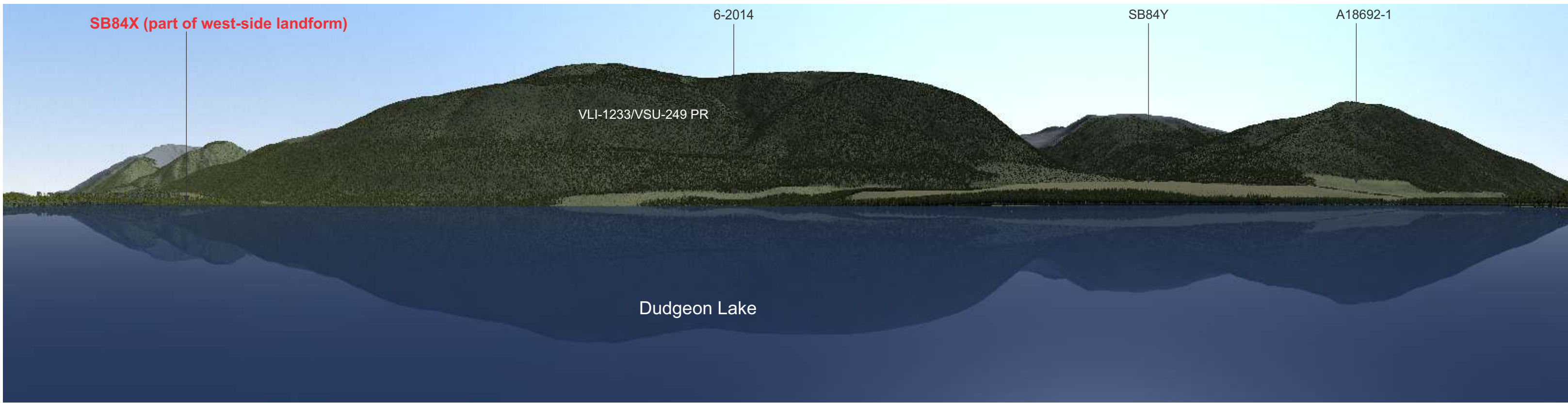
West-side Landform



Percent Alteration Dudgeon Lake VP		
Features	AREA2	
Landform	740532.10	
SB84X	21647.97	2.92%
ROW	17738.97	2.40%
Sum Alt.	39386.93	5.32%

The view from Dudgeon Lake is from within the Provincial Park boundary, providing emphasis to meet the VQO from this viewpoint. SB84X is low and to one side, and is shaped well and compatible with the landform. The block extends to a small hill on the far right side of the landform. The hill is viewed contiguously from this viewpoint and is not considered to be large enough to differentiate it as a separate landform. (See also Road 1 and 3.6 Viewpoints). The road ROW follows the shoreline visual force above the park boundary - no roads are evident. Percent Alteration meets Partial Retention Category of Altered forest. There is recent alteration along the east-side of the lake (see next page).

Dudgeon Lake Viewpoint - West View



East-side Landform

Cutblocks are low along the landforms. No new cutblocks. No roads are evident.
No previous proposal assessments requested of RDI - No further analysis by RDI.
There is recent and proposed alteration along the west-side of the lake (see previous page).