

BC Timber Sales - Kamloops
Clearwater Field Team

David Lake Visual Assessment

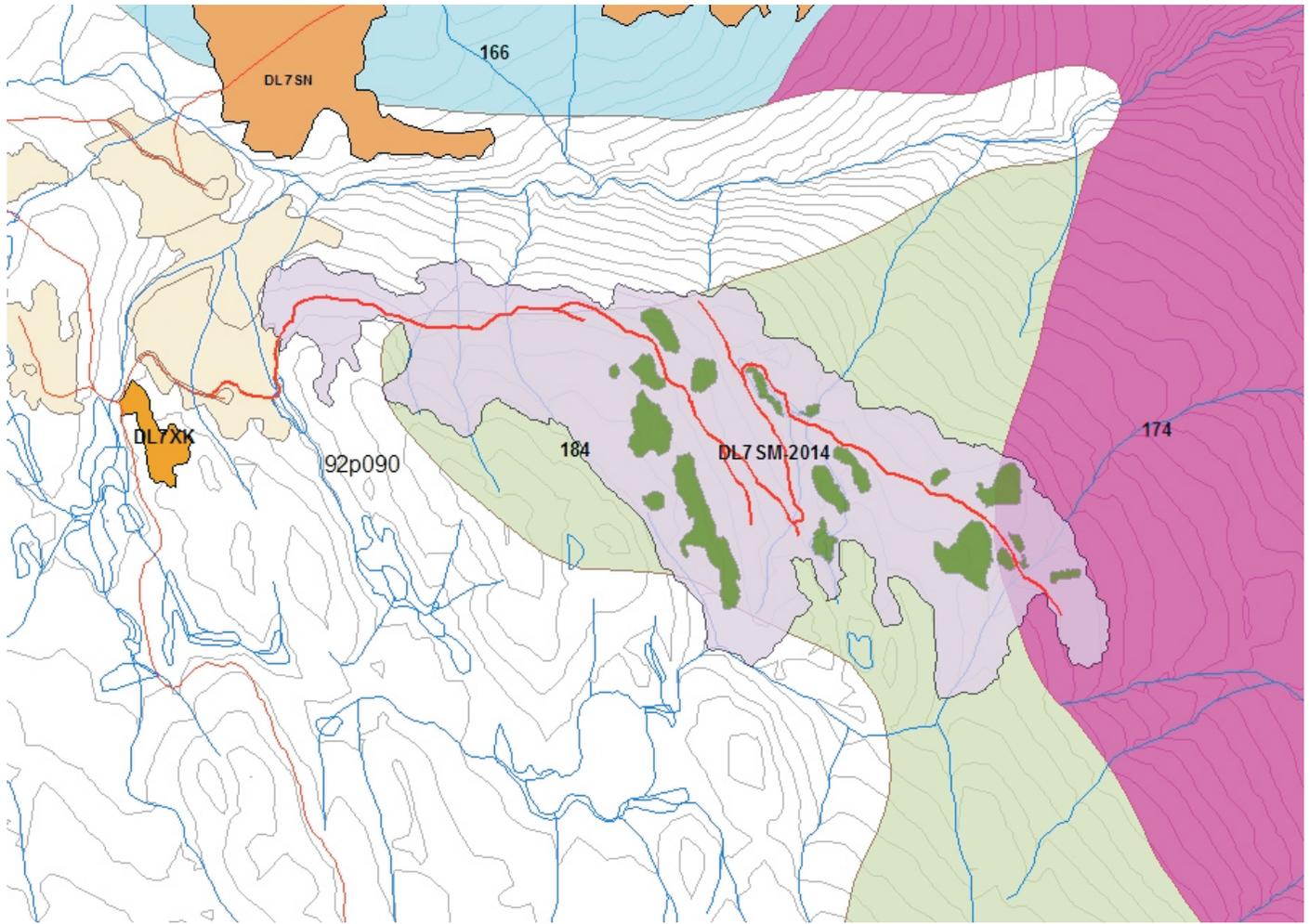
A89947 (DL7SM) 2014 Amendment

with Reference to September 2012 Report Blocks
DL7SM, DL7SN, DL7UJ, DL7UP, DL7XK, DL7XL, DL7R6, DL7R8, DL7UU

produced by
RDI Resource Design Inc
January, 2014

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DL7SM 2014 with WTPAs and Roads

Visual Impact Assessment Summary Table

Clearwater Field Team

BCTS Kamloops Business Area

| | | | | | | | | | |
|---|--------------------------------|----------------------|---|------------------|----------|--------------------------|------|----------------------|---------------|
| Licence Number | A89947 A89948 A90519 | CP# & BLK #, or RP#: | DL7SM DL7SN DL7UJ DL7UP DL7XK DL7XL DL7R6 DL7R8 DL7UU | Map Reference #: | 92p090 | Proposed year of Harvest | 2014 | Proposed Silv System | CC with WTPAs |
| Type of Proposed Alteration (e.g. Cutblock, Road or Pipeline R/W, Oil lease, etc.) | | | | | Cutblock | | | | |

| Licence | Block | Mapsheet | VSU # |
|---------|-------|----------|-----------|
| A89947 | DL7SM | 92p090 | 184-174 |
| A89948 | DL7SN | 92p090 | 166 |
| | DL7UJ | 92p090 | 144-NVS** |
| | DL7UP | 92p090 | 144-NVS* |
| | DL7XK | 92p090 | NVS* |
| | DL7XL | 92p090 | NVS* |
| A90519 | DL7R6 | 92p090 | NVS* |
| | DL7R8 | 92p090 | 166-NVS* |
| | DL7UU | 92p090 | NVS* |

*NVS in VSU column means entire area is outside of VSU coverage.

** Block is in previously unmapped visible area

VISUAL LANDSCAPE INVENTORY LABEL Kamloops LRMP

| VSU# | VSC | VAC | EVC | eVQO |
|------|-----|-----|-----|------|
| 166 | 3 | M | R | M |
| 144 | 3 | M | M | M |
| 174 | 2 | M | R | PR |
| 184 | 2 | L | R | PR |

EVC does not exceed eVQO in any VSU

VIEWPOINTS & VIEWING CONDITIONS

| Block | VP 3rd* | VP21 | VP22 | VP24 |
|--------------|--|---|----------------------|--|
| (View Dist.) | (5km-MG) | (3km-MG) | (4km-MG) | (8+km-BG) |
| VP Type | Road Informal; Canyon Feat.; Significant | Road Informal; Buffalo Ranch; Significant | Road Informal; Minor | Road Informal; Wells Gray Guest Ranch; Significant |
| DL7SM | VIS | VIS | VIS | VIS** |
| DL7SN | VIS | VIS | VIS | VIS** |
| DL7UJ | VIS | VIS | NVS | NVS |
| DL7UP | NVS | NVS | NVS | NVS |
| DL7XK | NVS | NVS | NVS | NVS |
| DL7XL | NVS | NVS | NVS | NVS |
| DL7R6 | NVS | NVS | NVS | NVS |
| DL7R8 | NVS | NVS | NVS | NVS |
| DL7UU | NVS | NVS | NVS | NVS |

*VP 3rd is at Third Canyon

** Potentially Visible Only

ASSESSING BASIC VQO DEFINITION

Do the proposed alterations, in combination with any existing Non-Veg alterations, achieve the basic VQO definition for the established VQO from each of the identified viewpoints?

| | | | |
|---|-------------------------------------|-------------------------------------|-------------------------------------|
| VP 3rd Canyon VSU 184-174 (PR) Yes | VP 21 VSU 184-174 (PR) Yes | VP 22 VSU 184-174 (PR) Yes | VP 24 VSU 184-174 (PR) No* |
| VSU 166-174/144(PR) Yes | VSU 166-174(PR) Yes | VSU 166-174(PR) Yes | VSU 166-174(PR) Yes |
| VSU144 (M)-NVS Yes | VSU144 (M)-NVS Yes | | |

If applicable state reasons why the proposal does not achieve the basic definition.

Rationale for combining VSUs.

*VSU 184 is a narrow ridgetop sliver seen together with the much larger VSU 174 at the base. Block DL7SM crosses both VSUs. The VSUs were combined for logical analysis (landform as seen from viewpoints). The alteration is somewhat large from VP 24 but well-designed. The viewpoint offers only potential viewing towards the blocks, in background view.

Although VSUs 166 and 144 have M VQO, these were combined along with the north portion of VSU 174 laying at the base of VSU 166 for logical analysis, with the aim of meeting PR. Block DL7SN is fully located in VSU 166. Block DL7UJ is fully located in an area marked in Visual Landscape Inventory as NVS (not visible) adjacent to VSU 144.

Partial Retention is defined as "an alteration of a forest landscape resulting from the presence of cutblocks or roads, such that, when assessed from a viewpoint that is representative of significant public viewing opportunities, the alteration (a) is easy to see, (b) is small to moderate in scale, and (c) has a design that appears natural and is not angular or geometric."¹

If applicable, which basic VQO definition would the proposed alteration in combination with any existing Non-VEG alterations meet?

N/A or P R PR M MM EM

The proposed alterations in their entirety meet PR from all viewpoints with the exception of the "potential" view from VP 24 which is a background view (8.5km) and only potential if seen through the trees

ASSESSING VISUAL DESIGN

Do the proposed alterations exhibit elements of good visual design?

YES NO

Do the proposed alterations respond to the lines of force analysis?

YES NO

If No why?

Design principles and practices used to blend the proposed alteration(s) with the landscape (e.g. edge treatment & feathering, irregular boundaries, leave trees/patches, etc.):

The blocks are screened for the most part by intervening trees and topography along the Wells Grey Park Road. Blocks DL7SM and DL7SN are most evident, with possible glimpses DL7UJ further away in glimpse views from 3rd Canyon, and the first two from longer-term views from VP 21 (Buffalo Ranch), VP22 - a roadway view, and in background view from VP24 (Blackhorse Guest Ranch). The blocks are well-designed, following lines of force. The planned WTPAs in DL7SM break up the block considerably. A recommended addition of two more WTPAs designed by RDI would further the reduction of overall form and scale.

Are there existing human made alterations visible in the unit showing no or poor design?

NO YES

¹ Forest and Range Evaluation Program, 2008. Protocol for Visual Quality Effectiveness Evaluation Procedures and Standards, p.10.

ASSESSING SCALE OF ALTERATION - see viewpoint image sheets for details

| Percent Alteration | | |
|--------------------|--------------|----------------------|
| | VSUs 184-174 | VSUs 166-174/144/NVS |
| 3rd Canyon | 0.03 | 6.12 |
| VP21 | 0.9 | 5.74 |
| VP22 | 6.95 | 3.57 |
| VP24 | 11.19 | 1.20 |

See rationale for combining VSUs on previous page

FOREGROUND ALTERATIONS AND SCREEN DESIGN

Is the visible portion of proposed alteration within 1 kilometre of the viewing locations? _____

YES NO

Does vegetative or landform screening exist? _____ WTPAs YES in DL7SM NO

If yes, what type: Deciduous Coniferous Mixed Forest Landform

Would the screen hide proposed operations? _____ YES NO Partial

Is vegetative screen designed properly ie responds to lines of force, shape & scale and remains a viable unit for future removal? _____ YES NO N/A

Is vegetative screen expected to be windfirm? _____ YES NO N/A

If alteration would not be screened or only partially screened, describe the actions proposed to reduce the visual impact in the immediate foreground (e.g. landing location, roadside clean-up, etc.)

ADDITIONAL CONSIDERATIONS

Does the EVC in adjacent units exceed the established VQO for those units and how would this affect the management of the present unit proposed for alteration? _____ YES NO

Comments: _____

Has this VIA submission incorporated all known alterations proposed within the Visual Sensitivity Unit for the next 5 years? (i.e. all blocks proposed by the same or different licensees) _____ YES NO

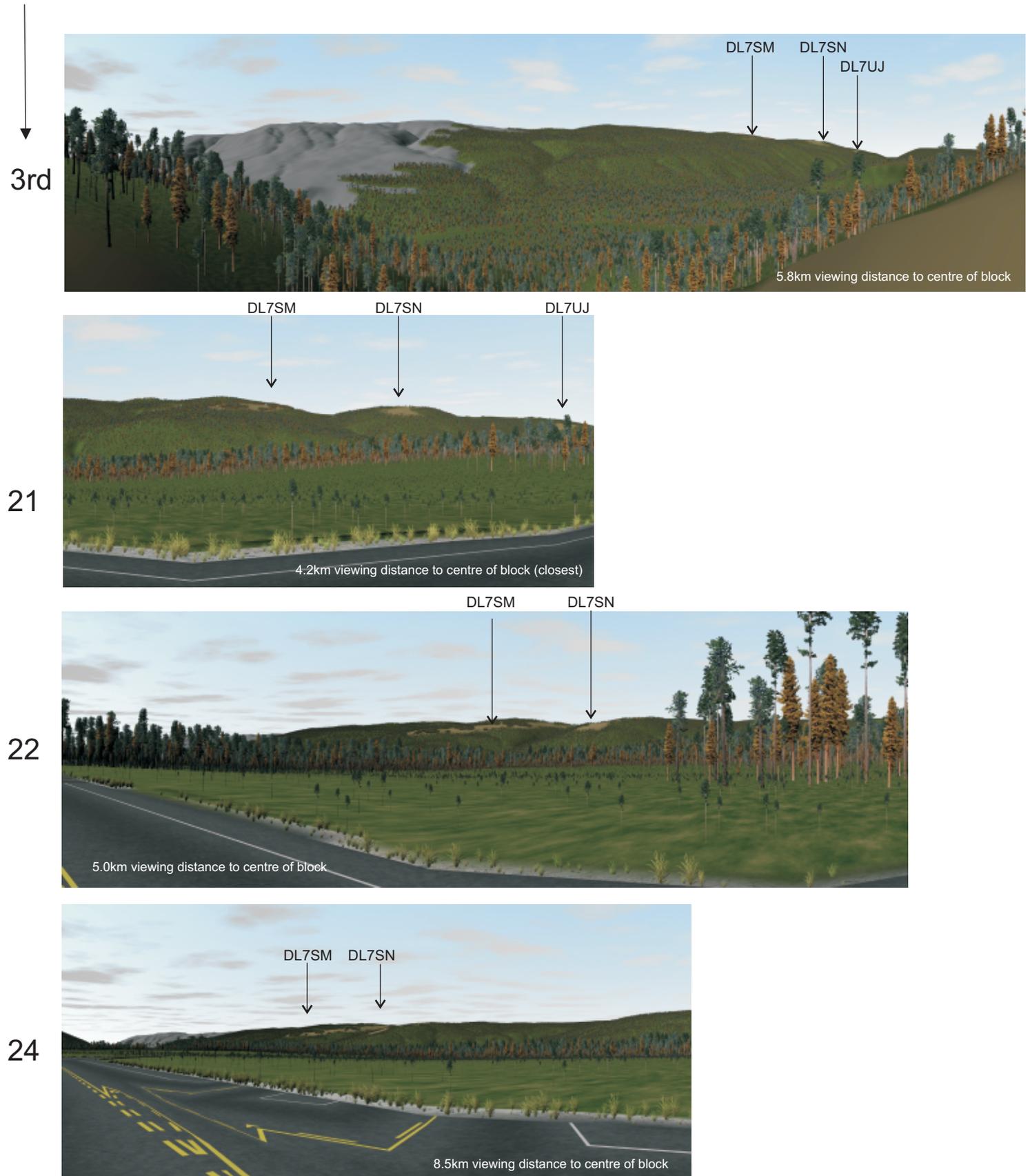
Comments: _____



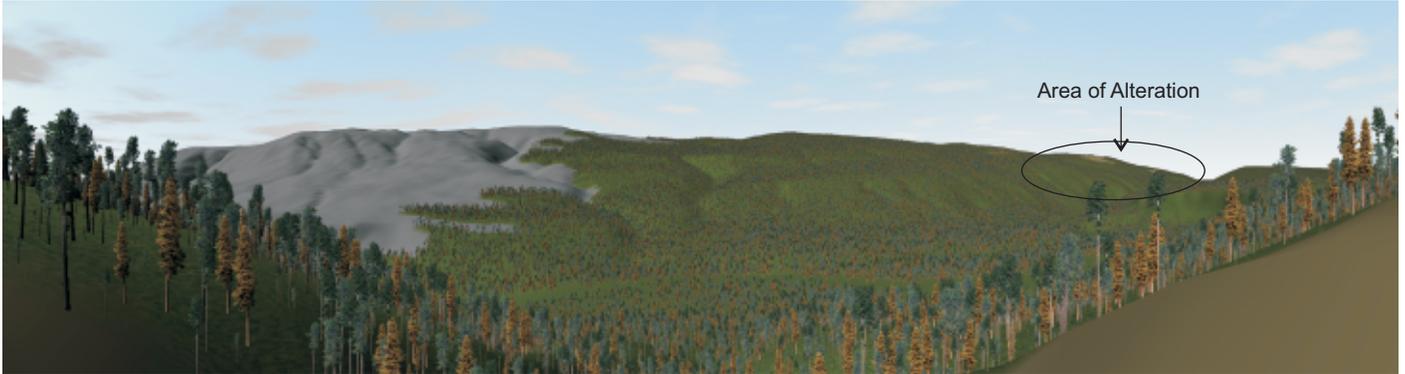
Completed by: Ken B. Fairhurst, R.P.F.

Date Completed: January 10, 2014

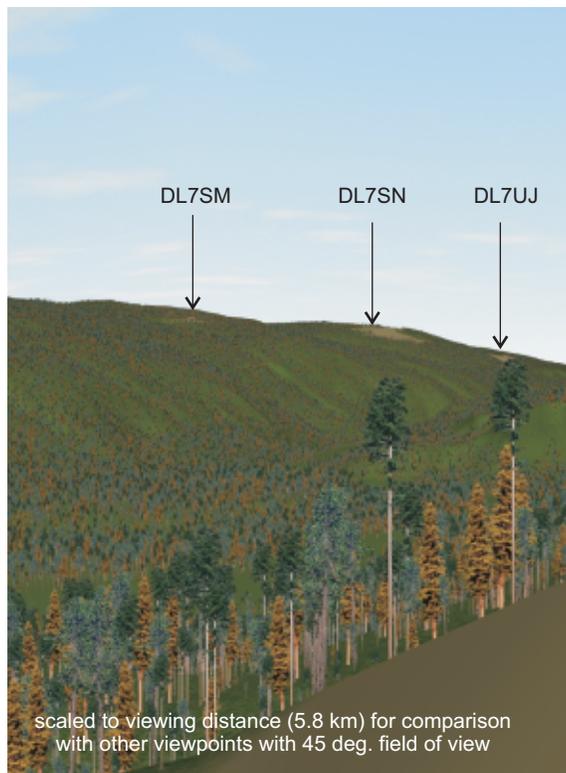
Viewpoint



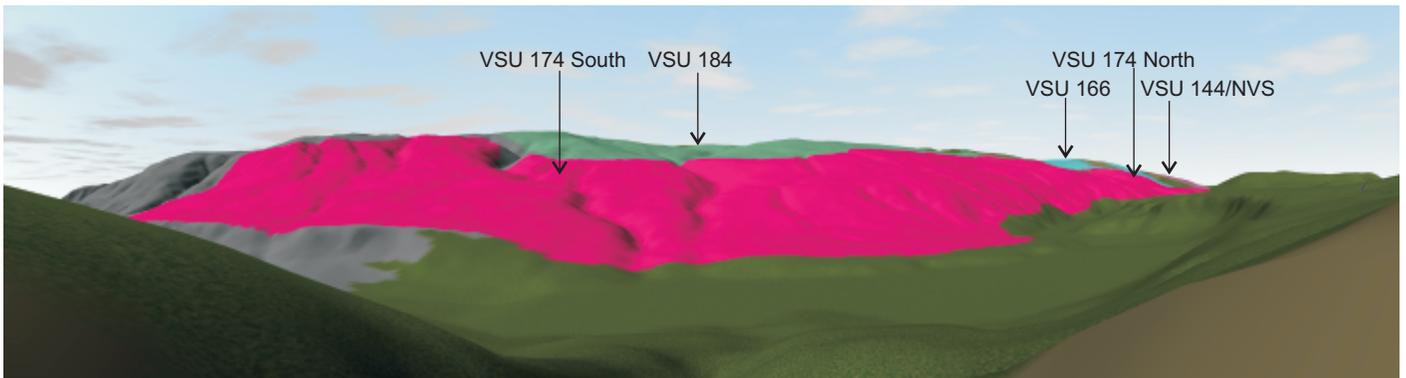
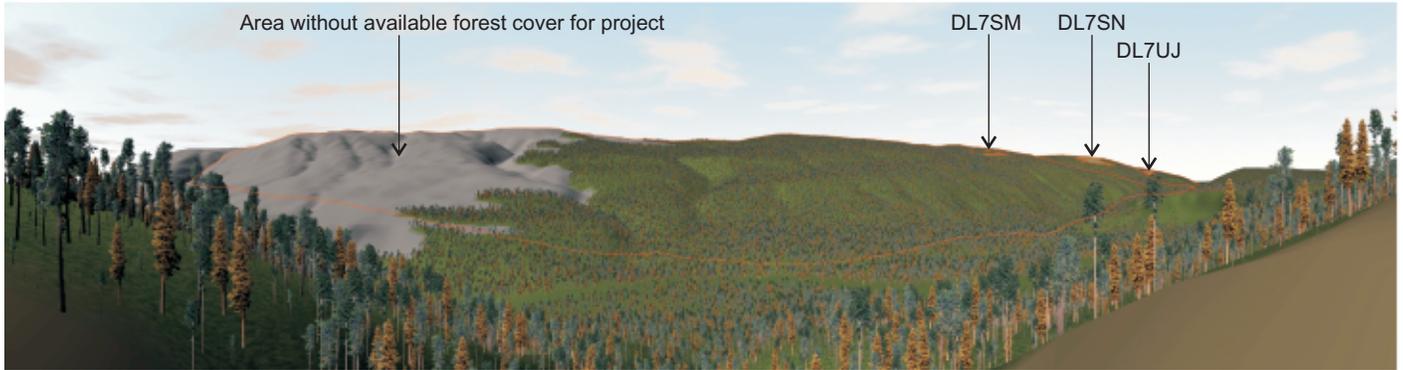
All views scaled to viewing distance for comparison , 45 deg. field of view.
See next pages for detailed viewpoint analyses.



VP 3rd Canyon South (GPS 1796) South of Bridge 1522-1529

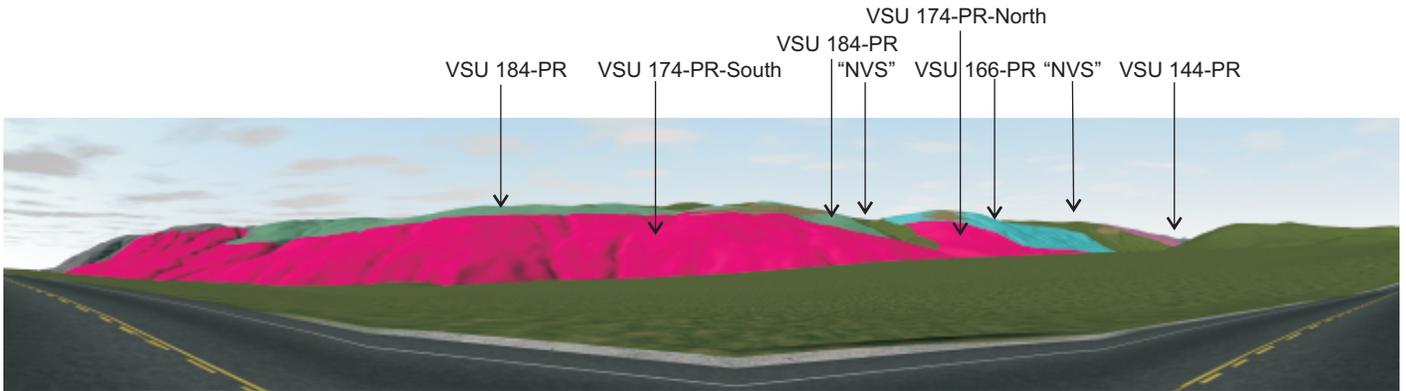
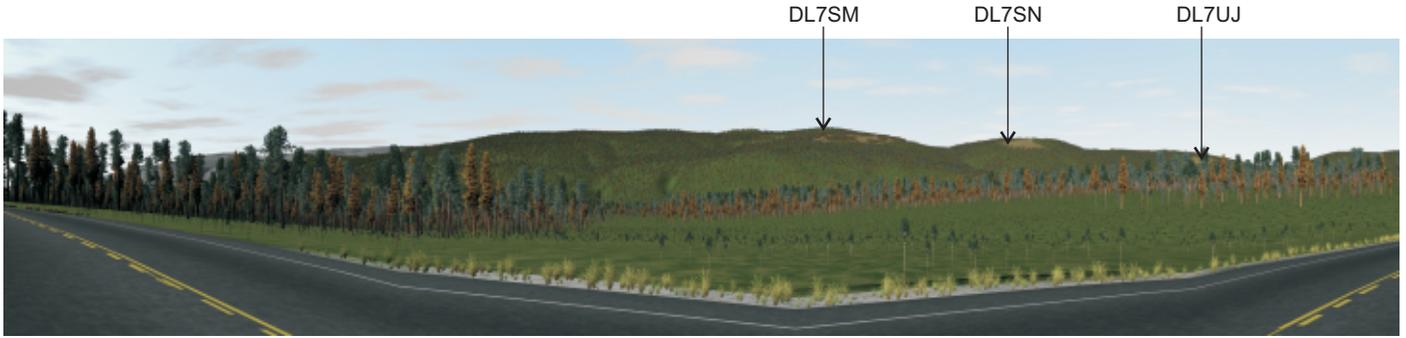


Viewpoint at Third Canyon



| David Lake 3rd Canyon Viewpoint Percent Alteration | | |
|--|-----------|--------------|
| Desc_ | AREA2 | % alt |
| VSU174S/184 | 843970.38 | 0.03% |
| DL7SM | 248.38 | |
| DL7SM | 25.46 | |
| DL7SM | 17.73 | |
| VSU174N/166/144/NVS | 21177.11 | 6.12% |
| DL7SN | 1026.60 | |
| DL7SN | 24.90 | |
| DL7UJ | 245.58 | |

Viewpoint at Third Canyon Percent Alteration



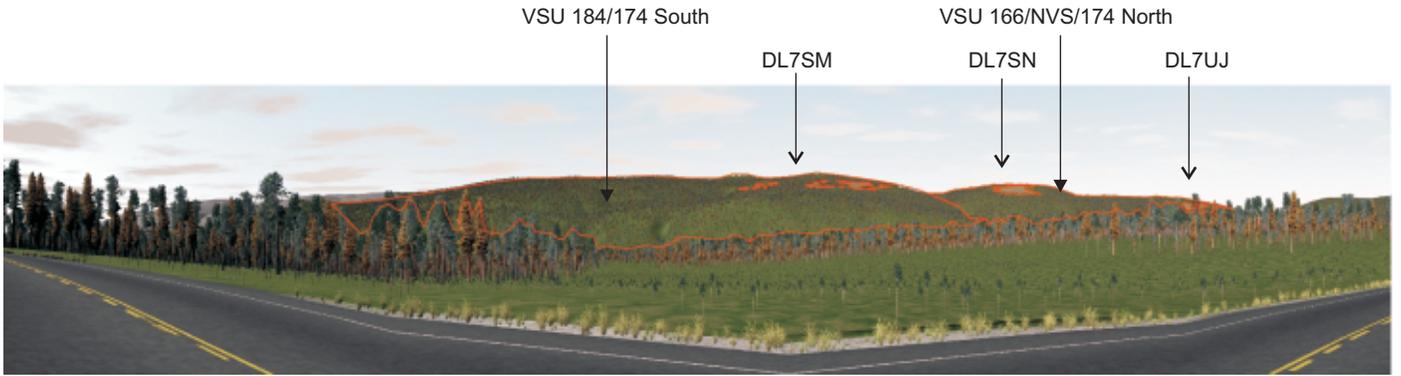
Visual Sensitivity Units with VQOs



scaled to viewing distance (4.2 km) for comparison with other viewpoints with 45 deg. field of view (closest viewpoint)

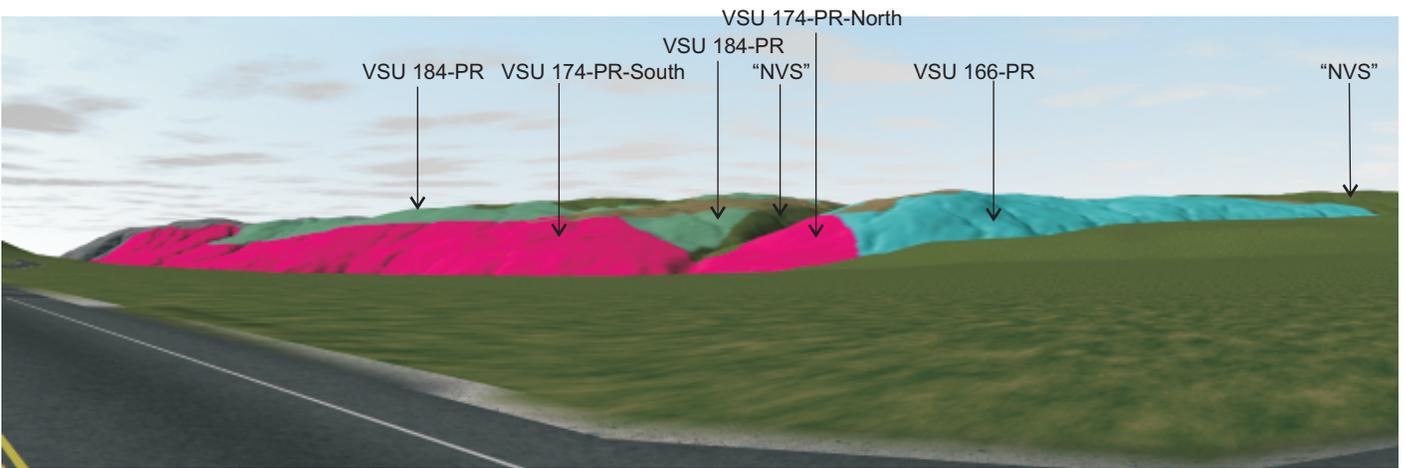
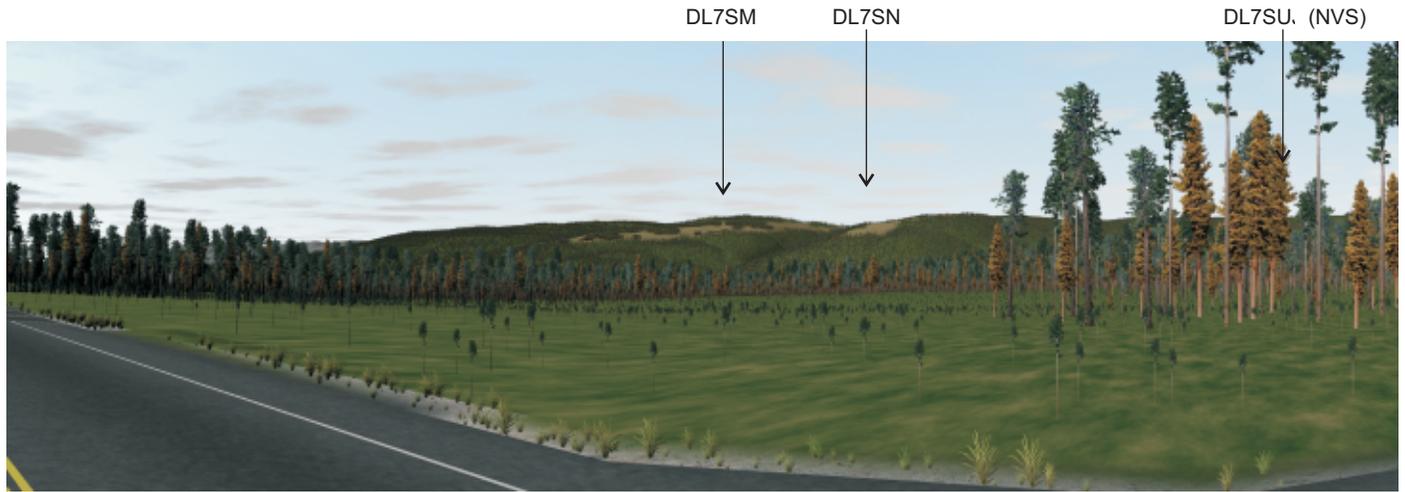
- Visual Force Convexity
- Visual Force Concavity

Viewpoint 21 Analysis



| Viewpoint 21 Percent Alteration | | |
|---------------------------------|-----------|--------------|
| Desc_ | AREA2 | Percent Alt. |
| 184/174S | 286806.64 | 0.90% |
| DL7SM | 141.06 | |
| DL7SM | 106.80 | |
| DL7SM | 80.33 | |
| DL7SM | 17.59 | |
| DL7SM | 91.68 | |
| DL7SM | 479.82 | |
| DL7SM | 74.70 | |
| DL7SM | 55.96 | |
| DL7SM | 1229.41 | |
| DL7SM | 127.07 | |
| DL7SM | 171.88 | |
| 174N/166/144/NVS | 57158.99 | 5.74% |
| DL7SN | 2383.28 | |
| DL7SN | 27.15 | |
| DL7SN | 34.43 | |
| DL7UJ | 541.42 | |
| DL7UJ | 292.54 | |

Viewpoint 21 Percent Alteration



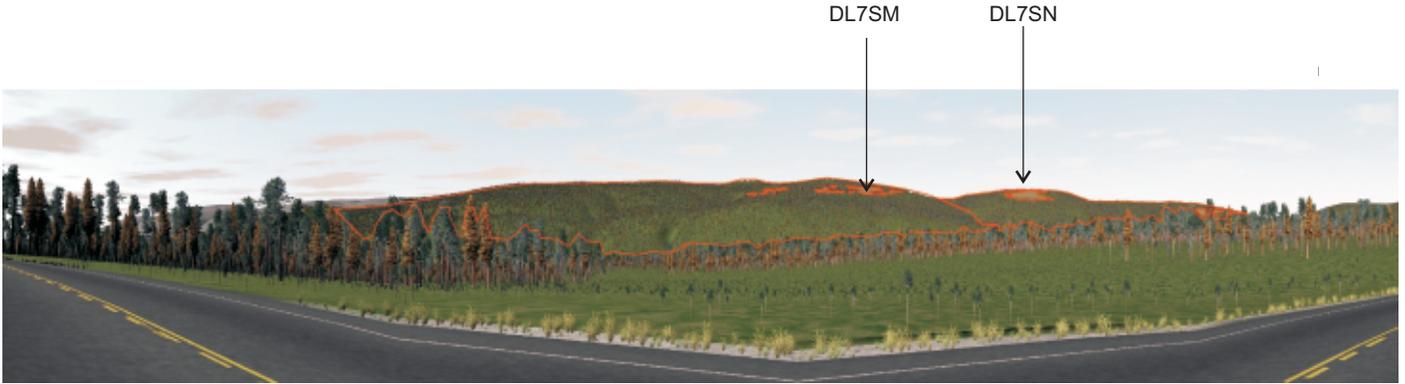
Visual Sensitivity Units with VQOs



scaled to viewing distance (5.0 km) for comparison with other viewpoints with 45 deg. field of view

- Visual Force Convexity
- Visual Force Concavity

Viewpoint 22 Analysis

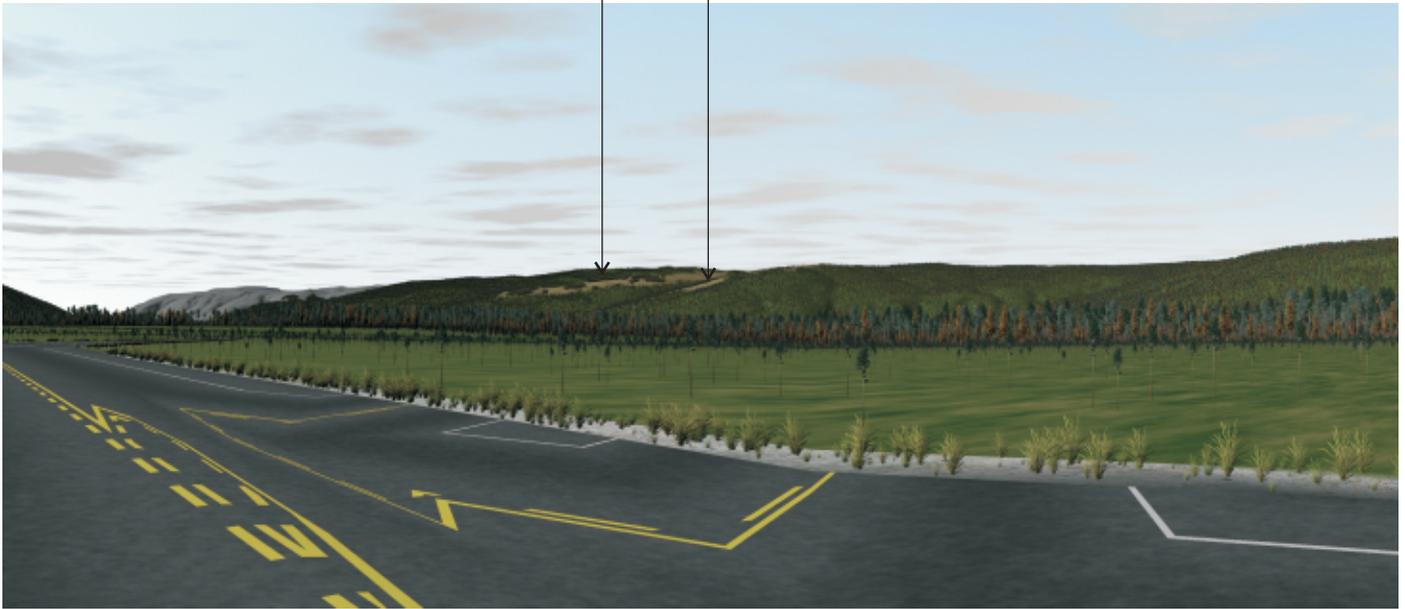


Area of Alteration

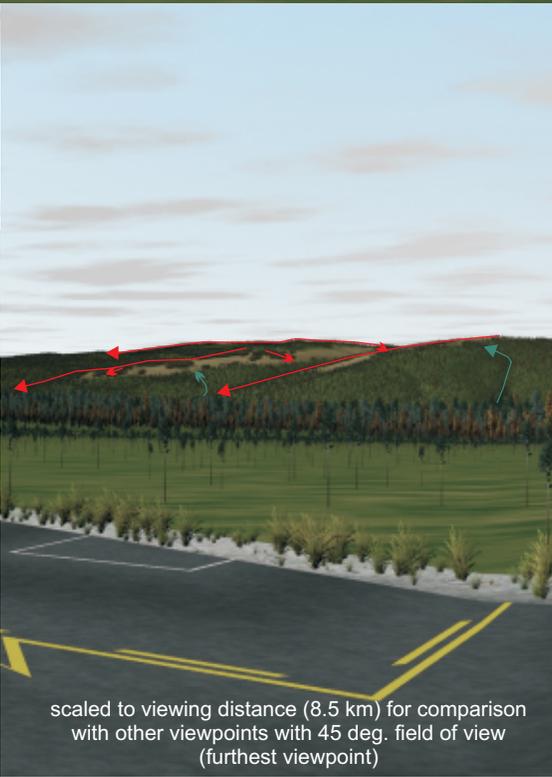
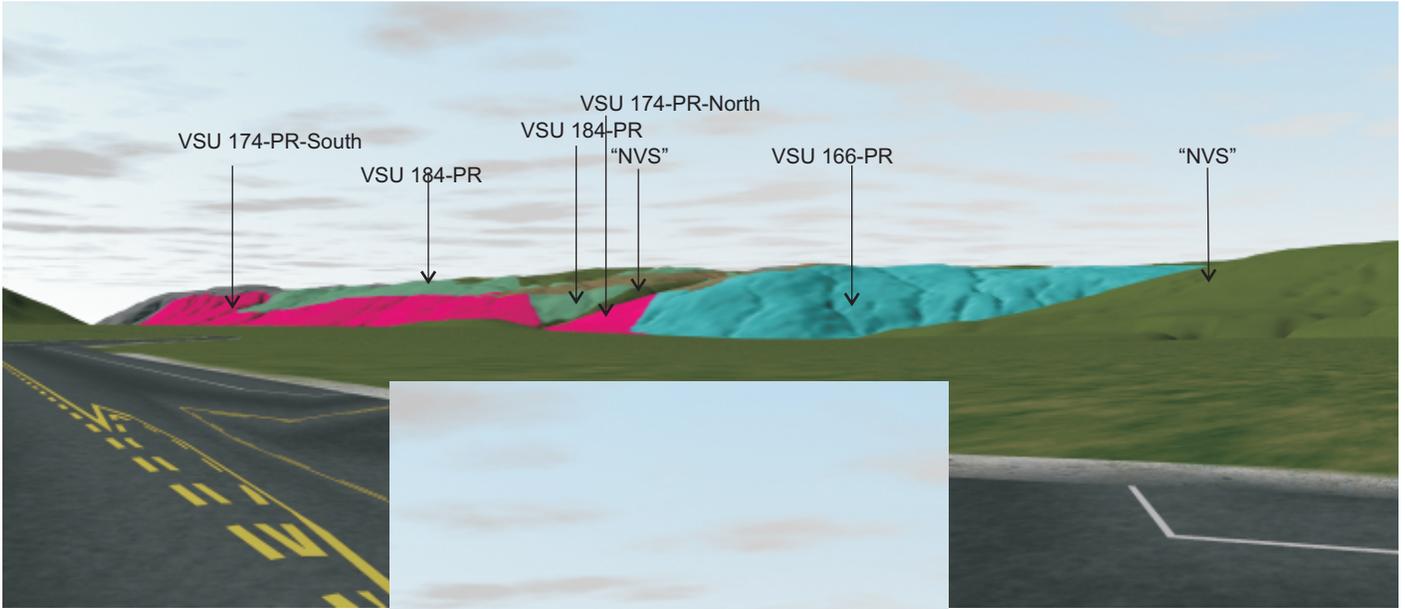
| Percent Alteration Viewpoint 22 | | |
|---------------------------------|-----------|--------------------|
| DESC_ | AREA2 | Percent Alteration |
| 174-184 | 185563.94 | 6.95% |
| DL7SM | 1276.57 | |
| DL7SM | 2988.21 | |
| DL7SM | 3778.85 | |
| DL7SM | 99.27 | |
| DL7SM | 1280.19 | |
| DL7SM | 3467.93 | |
| 174-166 | 129644.98 | 3.57% |
| DL7SN | 3988.45 | |
| DL7SN | 184.99 | |
| DL7SN | 262.11 | |
| DL7SM | 139.79 | |
| DL7SM | 13.55 | |
| DL7SM | 18.90 | |
| DL7SM | 25.52 | |

Viewpoint 22 Percent Alteration

DL7SM DL7SN

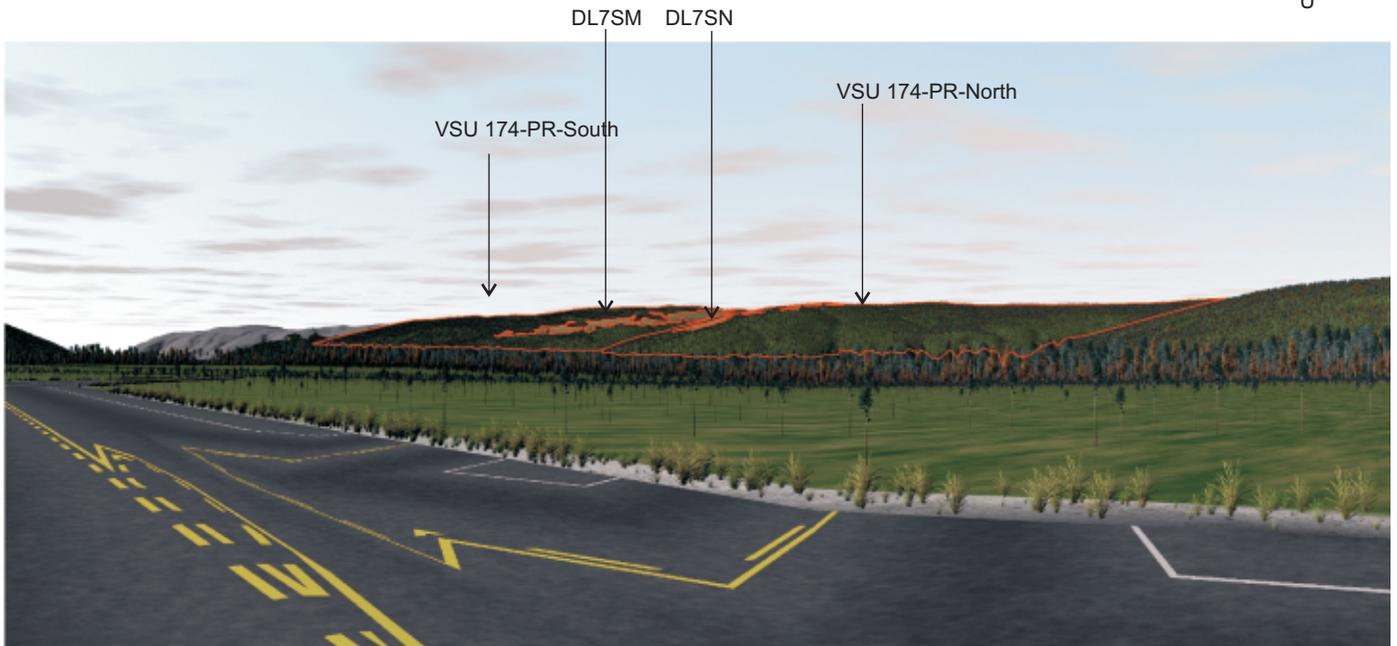


VSU 174-PR-South VSU 184-PR VSU 174-PR-North VSU 184-PR "NVS" VSU 166-PR "NVS"



- Visual Force Convexity
- Visual Force Concavity

Viewpoint 24 Analysis



Viewpoint rendered as test of potential visibility only,
 Minor visibility if any towards the blocks due to intervening screening.
 Do not use for overall percent alteration calculations.

| Viewpoint 24 Percent Alteration | | |
|---------------------------------|-----------|--------|
| Desc_ | AREA2 | |
| 174S/184 | 106513.92 | 11.19% |
| DL7SM | 457.13 | |
| DL7SM | 118.17 | |
| DL7SM | 2353.70 | |
| DL7SM | 2967.92 | |
| DL7SM | 110.05 | |
| DL7SM | 5916.23 | |
| 174N/166 | 215593.08 | 1.20% |
| DL7SN | 1577.20 | |
| DL7SN | 177.39 | |
| DL7SN | 389.79 | |
| DL7SN | 284.50 | |
| DL7SN | 154.57 | |

for demonstration, not for application

for demonstration, not for application



VP 24 (GPS1792) 1442-1455