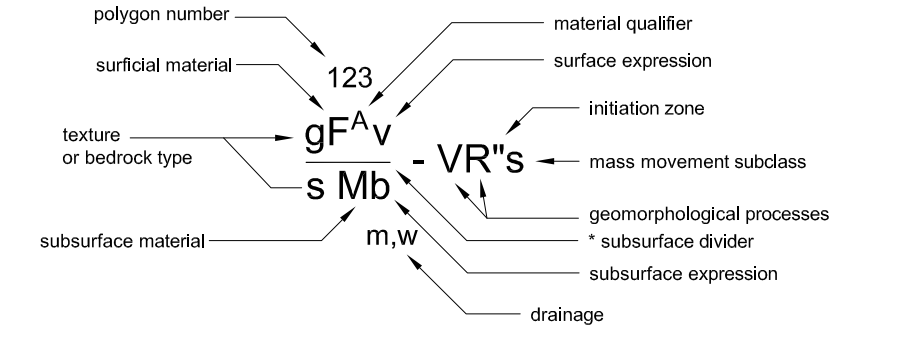


**LEGEND**

**EXAMPLE OF MAP SYMBOLS**



\* The subsurface divider divides layered units which are identified by groups of letters arranged one above the other where one or more kinds of surficial materials overlie a different material or bedrock.

**TERRAIN LEGEND \*\***

|  |   |  |
|--|---|--|
| <p><b>SURFICIAL MATERIALS:</b></p> <ul style="list-style-type: none"> <li>E Eolian</li> <li>M Morainal (Till)</li> <li>F Fluvial</li> <li>F<sup>G</sup> Glacioluvial</li> <li>C Colluvial</li> <li>U Undifferentiated Sediments</li> <li>R Bedrock</li> <li>D Weathered Bedrock</li> <li>V Volcanic</li> </ul>               | <p><b>TEXTURE:</b></p> <ul style="list-style-type: none"> <li>c Clay (&lt; .002 mm)</li> <li>z Silt (.002 - .06 mm)</li> <li>s Sand (.06 - 2 mm)</li> <li>p Pebbles (2 - 64 mm, (sub) rounded)</li> <li>k Cobbles (64 - 256 mm, (sub) rounded)</li> <li>b Boulders (&gt;256 mm, (sub) rounded)</li> <li>r Rubble (64 - 256 mm, (sub) angular)</li> <li>a Blocks (&gt; 256 mm, (sub) angular)</li> <li>x Angular Fragments (&gt; 2 mm)</li> <li>g Rounded Clasts (&gt; .06 mm)</li> <li>d Mixed Rounded and Angular Fragments (&gt; 2 mm)</li> </ul> | <p><b>MODIFYING PROCESSES:</b></p> <ul style="list-style-type: none"> <li>V Gullied or Gully</li> <li>A Snow Avalanching</li> <li>M Minor Avalanching Active</li> <li>M Major Avalanching Active</li> <li>AO Old Avalanche Track</li> <li>AM Mixed Major and Minor Tracks, Active</li> <li>B Braided</li> <li>AN Anastomosing</li> <li>M Meandering</li> <li>C Channelled by Glacial Meltwater</li> <li>H Kettled</li> <li>S Seepage Evident</li> <li>R Rapid Mass Movement</li> <li>M Mass Initiation Zone</li> <li>RB Rockfall</li> <li>RD Debris Flow</li> <li>RT Bedrock Slump</li> <li>RT Debris Torrent</li> <li>RS Slow Mass Movement</li> <li>RS Debris Slide</li> <li>MS Mass Movement</li> <li>MI Mass Movement Initiation Zone</li> <li>TC Tension Cracks</li> <li>LS Lateral Spread of Fractured Bedrock</li> <li>FI Falling Slump in Bedrock</li> <li>FS Falling Slump in Surficial Material</li> <li>N Nivation</li> <li>IC Irregular Channel</li> </ul> |
| <p><b>COMPLEX MAP UNIT SYMBOLS:</b></p> <p>aCb/R where:</p> <ul style="list-style-type: none"> <li>/ = Greater than (i.e. 60/40 proportionally)</li> <li>b = Blanket (&gt; 1 m thick)</li> <li>v = Veneer (&lt; 1 m thick)</li> <li>// = Much greater than (i.e. 80/20 proportionally)</li> <li>≡ = Discontinuous</li> </ul> | <p><b>(SUB) SURFACE EXPRESSIONS:</b></p> <ul style="list-style-type: none"> <li>t Terrace - stepped topography</li> <li>Plain - 0 to 5% slope</li> <li>f Fan - up to 26% slope</li> <li>Thin veneer (&lt; 20cm)</li> <li>Cone - steeper than 26% slope</li> <li>Ridged - elongated slopes steeper than 26%</li> <li>Hammocky - 26-70% slopes</li> <li>Steep - steeper than 70%</li> <li>m Rolling - elongated slopes with 5-26% slopes</li> <li>Undulating - slopes less than 26%</li> </ul>  |  |
| <p><b>MATERIAL QUALIFIERS</b></p> <p>Superscript:</p> <ul style="list-style-type: none"> <li>A Active</li> <li>I Inactive</li> </ul>   | <p><b>BEDROCK TYPES</b></p> <ul style="list-style-type: none"> <li>uf Shale</li> <li>eb mafic Extrusive</li> <li>ea felsic Extrusive</li> <li>sl Slate / Phyllite</li> <li>el Intermediate Extrusive</li> <li>la felsic Intrusive</li> <li>fm Gneiss / Schist</li> <li>um Sandstone</li> <li>gr Granite</li> <li>nm Metasandstone</li> </ul>  |  |

\*\* Based on: Guidelines and Standards to Terrain Mapping in British Columbia. British Columbia Resource Inventory Committee, 1996.

**DRAINAGE CLASSES \*\***

|         |             |              |  |
|---------|-------------|--------------|--|
| r Rapid | m Moderate  | p Poor       | m-w indicates a gradation in drainage from moderate to well; moderate is dominant.   |
| w Well  | i Imperfect | vp Very poor | p,w Indicates mainly poor drainage with discrete well-drained areas (e.g. hummocks). |

**TERRAIN MAPPING CONVENTIONS**

**DEPTH OF MATERIAL:**  
 Plain (p), terrace (t), fan (f) or cane (c) surface expression are blankets (i.e. Consistently greater than 1 meter and generally several meters thick). Blanket (b) is not symbolised with these 4 surface expressions.

Veneers are over bedrock, unless symbolised otherwise. For example Mv indicates a shallow morainal deposit over bedrock.

**STATUS OF FLUVIAL TERRAIN UNITS:**  
 Fp, Ft units are assumed to be inactive unless otherwise identified.  
 Ft units involve a single fan or a series of coalescing fans (formerly called an apron).

Ft, Ft units are assumed to be inactive. Terraces are comprised of nearly flat to gently sloping surfaces bounded by a steep escarpment at, or near, the angle of repose. Note that the escarpments are steep, less stable slopes where cuts are prone to raveling. Where these less stable terrace edges are inclusions (<15% of the map unit area), they are not considered in the map unit slope stability rating.

Where a unit is comprised of a number of terraces, the unit encompasses them collectively. Larger, individual terrace escarpments are indicated by an on-site symbol as shown.

Very large escarpments are mapped and rated separately (i.e. FCBs - a steep scarp of a glacioluvial terrace). Where large scarps are comprised of a succession of layered materials (eg. Glacioluvial over glaciolacustrine over morainal), these are symbolised Us (ie. Undifferentiated and steep).

**COLLUVIAL TERRAINS:**  
 Cc, Cb and Cf are considered active and may consist of single or multiple deposits. The modifying process symbol -R is used only to indicate very recent activity.

**ORGANIC TERRAIN UNITS:**  
 Small, poorly drained organic deposits (fens, swamps, bogs) are symbolised Op. Veneers and blankets are not distinguished because of high variability and insufficient field-checking to separate them.

**GULLYING:**  
 -V is applied to both individual major gullies or branching gully systems (e.g. Mb-V), frequent means a gully spacing of <250 m.  
 -E is applied on past-glacial meltwater channels which may have overstepped existing terrain and may also be symbolised as shown below:

**DEFAULT TEXTURES:**  
 To control symbol complexity, and recognizing that certain material textures predominate within subregions, the following defaults are assumed. Specific particle sizes are indicated only if the material within a map unit is distinctively different. The defaults are:

Mv, Mb, Mw - non-stratified mixed particles (M) in a silty, sandy matrix  
 Dr - rubby material and weathered bedrock  
 Cv - rubby sandy  
 Cb, Cc, Cf - rubby to blocky; coarsest at surface with increasing infillings of silt and at depth and distance from source  
 Ft, Fc - mixes of pebbles and cobbles (+/- boulders) with sandy infillings; coarser sediments predominate towards sediment source  
 Ft, Fp - pebbly to cobbly with sandy infillings, with a thin capping of sand, silty sand or silt  
 Fg - pebbly sand to sandy boundary material  
 Lc - clay rich silt with bouldery mixed fragment inclusions

**BOUNDARY LINES AND ON-SITE SYMBOLS \*\***

|   |                   |       |                     |       |                    |       |               |   |                       |   |                                |   |                   |       |                          |       |                          |       |   |       |                |       |                         |       |               |       |            |       |             |       |                |       |                         |       |                       |       |                                 |       |               |       |             |
|---|-------------------|-------|---------------------|-------|--------------------|-------|---------------|---|-----------------------|---|--------------------------------|---|-------------------|-------|--------------------------|-------|--------------------------|-------|---|-------|----------------|-------|-------------------------|-------|---------------|-------|------------|-------|-------------|-------|----------------|-------|-------------------------|-------|-----------------------|-------|---------------------------------|-------|---------------|-------|-------------|
| — | Definite boundary | ----- | Indefinite boundary | ----- | Arbitrary boundary | ----- | Area boundary | ○ | Detailed section site | ● | Reconnaissance inspection site | ▲ | Visual check site | ----- | Meltwater channel; small | ----- | Meltwater channel; large | ----- | Scarp or terrace in surficial materials | ----- | Landslide scar | ----- | Landslide headwall scar | ----- | Tension crack | ----- | Blockfield | ----- | Strand line | ----- | Morainal ridge | ----- | Esker direction unknown | ----- | Esker direction known | ----- | Ice flow directional indicators | ----- | Trend unknown | ----- | Trend known |
|---|-------------------|-------|---------------------|-------|--------------------|-------|---------------|---|-----------------------|---|--------------------------------|---|-------------------|-------|--------------------------|-------|--------------------------|-------|---|-------|----------------|-------|-------------------------|-------|---------------|-------|------------|-------|-------------|-------|----------------|-------|-------------------------|-------|-----------------------|-------|---------------------------------|-------|---------------|-------|-------------|

**AGGREGATE POTENTIAL SYMBOLS**

|  |  |
|--|--|
| <p>Aggregate Potential by Blyth Consulting</p> <ul style="list-style-type: none"> <li>High</li> <li>Moderate</li> <li>Low</li> </ul> | <p>Aggregate Potential by Paul Savinkoff GFT</p> <ul style="list-style-type: none"> <li>High</li> <li>Moderate</li> <li>Low</li> </ul> |
|--|--|

**OTHER SYMBOLS**

|       |                         |       |                  |
|-------|-------------------------|-------|------------------|
| +     | Pit                     | ----- | Quarry Potential |
| ----- | Mollard's Prospect Area | ----- | Road             |

**Sierra / Yoyo / Desan Aggregate Potential Map**

1:40,000 scale maps created from TRIM base employed for this project.  
 094P/11, 12, 13, 14 094P/09, 10, 15, 16 094P/02, 03, 04, 05, 07, 10

November 2002  
 UTM Zone 10, NAD 83, Contour Interval: 20m

Mapped by: Heather Blyth, M.Sc., D.F.Eng., P.Geo., and Victor Levinson, Ph.D., P.Geo. (British Columbia Ministry of Energy and Mines)  
 Field Checked: September 2002  
 Monorestitution by: Paul Savinkoff GFT  
 Air Photographs by: The Province of British Columbia, 1:40,000 1997 Monochrome

For: British Columbia Ministry of Energy and Mines  
 Any revision or additional geologic information would be welcomed by the authors  
 c/o Blyth Consulting, 1844 Bueria Vista Avenue, Comox, B.C. V9M 2B7