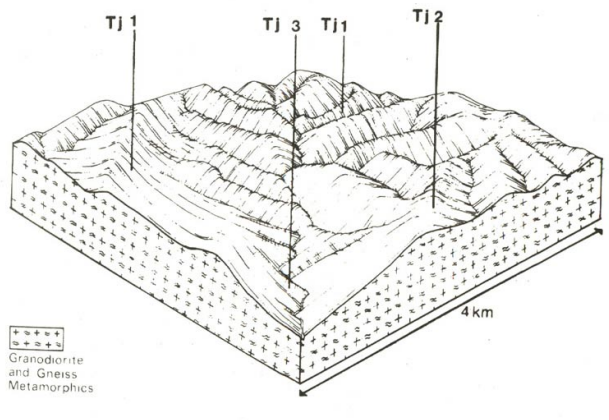
HILLY TERRAIN ON DEVONIAN METAMORPHICS

Land System: Tanjil – Freehold land and public land

This land type occurs in the northern part of the catchment, most extensively in the areas of public land to the east. It consists of steep hills with a subdued 'ridge and ravine' topography and dendritic drainage pattern. It is similar to La Trobe land system but occurs at a slightly higher elevation. This land type occurs on Devonian plutonic rocks (m, DGT) and coarsely crystalline gneissic metamophics. These areas receive some winter snow.

Brown, red and some yellow gradational soil occur. These are acid, mainly deep, moderately structured and well drained. Shallower stony variants may occur in some crest areas, and on sheltered or wetter aspects soils are deeper and more red in colour.

The native vegetation is a layered or shruby open forest with broadleaf peppermint (*E. diven*), and woolybut (*E. delagatenis*) dominating at high elevations, and messmate (*E. obliqua*), silvertop (*E. sieberi*), occurring at lower elevations.



Tanjil Land System & Components (Public and Freehold areas)

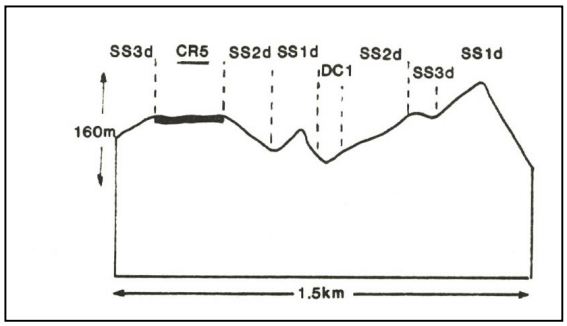
Public land

The public land mapped at 1:50, 000 scale three components have been drawn out; Tj1 steep slopes, Tj2 the crests and Tj3 the drainage floors of major watercourses. Aspect differences within Tj1 have not been separated due to the complexity of map scale.

Freehold land

Within the freehold areas, four basic mapping units have been delineated on the basis of topographic and slope differences. These are crest unit CR5, and three sideslope units SS1d, 2d, 3d based on slope differences.

HILLY TO UNDULATING TERRAIN ON DEVONIAN METAMORPHICS



Map Unit: CR5
CR5 – Crests and upper slopes

Extent of Occurrence:
172 ha – generally in the Icy Creek and Simpson's Farm areas (Freehold land only).

Landscape: Undulating crests and upper hill slopes.

Slope Range: 0-8% *Elevation Range:* 520-580 m

Relief: 2-10 m *Surface Drainage:* Well drained.

Soils: Uniform friable red brown loam (Soil Type 6).

Classification: Um6.12
Brown Earth

Depth: 40-80 cm *Surface Texture*: Clay loam

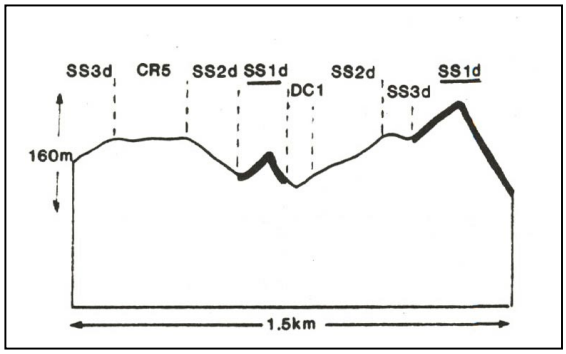
Stone/Gravel: up to 5% stones *Profile Drainage*: Well drained

Shrink-Swell Potential Low *Dispersibility*: Slight by slakes easily

CAPABILITY EVALUATION					Limiting Factors						
FOR	**Steepness**	**Site Drainage**	**Landslip Risk**	**Flood Risk**	**Proximity to River**	**Soil Depth**	**Soil Drainage/ Permeability**	**Soil Dispersability**	**Soil Shrink-Swell**	**Stones/Gravel**	**Capability Rating**
General Construction	•					●					● 3
Effluent Disposal	•					●					● 3
Erosion Risk											1
Dot size indicates importance of factor					Overall Rating: Rural-Residential Development						● 3

Limitations to Development:
1. Soil depth limitations in some areas.
2. Subsoils are moderately susceptible to slaking.

HILLY TO UNDULATING TERRAIN ON DEVONIAN METAMORPHICS



Map Unit: SS1d

SS1d – Steep hill slopes.

Extent of Occurrence:

238 ha – generally in the Icy Creek and Simpson's Farm areas (Freehold land only).

Landscape: Steep, generally straight sideslopes to hills, commonly with terracettes.

Slope Range: 25-50% *Elevation Range:* 530-700 m

Relief: 30-160 m *Surface Drainage:* Excessively well drained.

Soils: Uniform friable red brown loams and structured red and brown earths (Soil Types 6, 3, 4).

Classification: Um6.12, Gn4.11, Gn4.31
Brown Earths, Red Earths

Depth: 80-120 cm *Surface Texture*: Loam to clay loam

Stone/Gravel: 1-2% small stones *Profile Drainage*: Well drained
stones and larges "floaters"

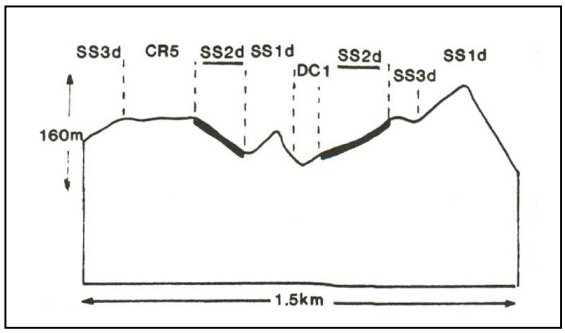
Shrink-Swell Potential Low to moderate *Dispersibility*: Slight but slakes easily

CAPABILITY EVALUATION					Limiting Factors						
FOR	**Steepness**	**Site Drainage**	**Landslip Risk**	**Flood Risk**	**Proximity to River**	**Soil Depth**	**Soil Drainage/ Permeability**	**Soil Dispersability**	**Soil Shrink-Swell**	**Stones/Gravel**	**Capability Rating**
General Construction	●		●			●				•	● 5
Effluent Disposal	●					●					● 5
Erosion Risk	●		●					●			● 5
Dot size indicates importance of factor					Overall Rating: Rural-Residential Development						● 5

Limitations to Development:

1. High erosion hazard due to slope and slaking subsoils.

HILLY TO UNDULATING TERRAIN ON DEVONIAN METAMORPHICS



Map Unit: SS2d

SS2d – Moderately steep hill slopes

Extent of Occurrence:

285 ha – generally in the Icy Creek and Simpson's Farm areas (Freehold land only).

Landscape: Moderately steep, undulating sideslopes to hills.

Slope Range: 10-25% *Elevation Range:* 420-680 m

Relief: 8-100 m *Surface Drainage:* Well drained

Soils: Structured brown and red earths (Soil Types 4, 3)

Classification: Gn4.31, Gn4.11
Brown Earths, Red Earths

Depth: 50 to greater than 120 cm *Surface Texture*: Sandy loam to loam

Stone/Gravel: 1-2% stones and Occasional rock "floaters" *Profile Drainage*: Well drained

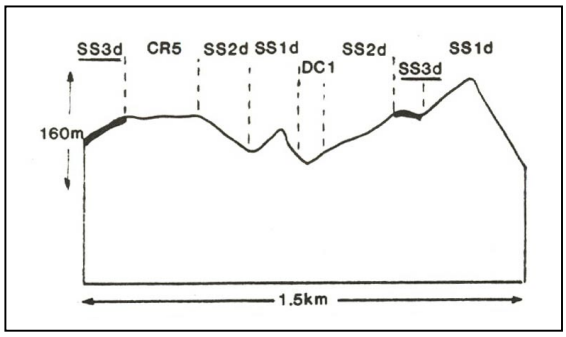
Shrink-Swell Potential Low to moderate *Dispersibility*: Slight but slakes easily

CAPABILITY EVALUATION					Limiting Factors						
FOR	**Steepness**	**Site Drainage**	**Landslip Risk**	**Flood Risk**	**Proximity to River**	**Soil Depth**	**Soil Drainage/ Permeability**	**Soil Dispersability**	**Soil Shrink-Swell**	**Stones/Gravel**	**Capability Rating**
General Construction	●					●				•	● 4
Effluent Disposal	●					●					● 3
Erosion Risk	●		●					●			● 3
Dot size indicates importance of factor					Overall Rating: Rural-Residential Development						● 4

Limitations to Development:

1. Moderate erosion hazard due to slope and slaking subsoils.

HILLY TO UNDULATING TERRAIN ON DEVONIAN METAMORPHICS



Map Unit: SS3d

SS3d – Moderate to gentle hill slopes

Extent of Occurrence:

53 ha – generally in the Icy Creek region (Freehold land only)

Landscape: Moderate to gentle, undulating sideslopes to hills

Slope Range: 5-10% *Elevation Range:* 560-660 m

Relief: 5-40 m *Surface Drainage:* Moderately well to well drained

Soils: Structured brown and red earths (Soil Types 4, 3)

Classification: Gn4.31, Gn4.11
Brown Earths, Red Earths

Depth: Greater than 120 cm *Surface Texture*: Sandy loam to loam

Stone/Gravel: Few small stones and gravel may be present in subsoil. *Profile Drainage*: Well drained

Shrink-Swell Potential Low *Dispersibility*: Slight but slakes easily

CAPABILITY EVALUATION					Limiting Factors						
FOR	**Steepness**	**Site Drainage**	**Landslip Risk**	**Flood Risk**	**Proximity to River**	**Soil Depth**	**Soil Drainage/ Permeability**	**Soil Dispersability**	**Soil Shrink-Swell**	**Stones/Gravel**	**Capability Rating**
General Construction	●	●						⬤			⬤ 3
Effluent Disposal	●	●									● 2
Erosion Risk	●							●			● 2
Dot size indicates importance of factor					Overall Rating: Rural-Residential Development						⬤ 3

Limitations to Development:

1. Moderate erosion hazard in steeper areas due to slaking susceptibility of subsoil.