HASSELL MATRIX ASSESSMENT

EXISTING LANDSCAPE VISUAL CHARACTER

This is an assessment of the visual character of the existing landscape. The probable chance caused by the development is assessed against the degree of change caused through development of agricultural practice.

Description	Value	Typical Character/Use
Unmodified landscape/natural	5	No or minimal impact associated with the actions of man. National parks, coastlines, native forest areas.
Natural transition landscape	4	A changing landscape character associated with the interface between natural areas and modified rural, pastoral or agricultural zones.
Modified rural landscape, agricultural, pastoral areas	3	Typical character is rural landscape, defined by field patterns, forestry plantations, and agricultural areas and associated small-scale roads and buildings.
Rural transition landscape	2	Transitional landscape associated with the interface between rural, agricultural areas and more developed suburban pr urban zones.
Highly modified landscape, urban/industrial	1	Substantially developed landscape. High level of visual impact associated with buildings, factories, roads and other related infrastructure.

DEGREE OF VISUAL MODIFICATION

This is an assessment of the degree of visual change that will occur within the context of the existing landscape due to the proposal development, and the existing landscapes ability to absorb or mitigate visual effect or change.

Degree of Visual Modification (expressed as percentage of change)	Value	Description of Visual Modification
80-100%	5	Substantial visual impact. The existing landscape character is completely changed or modified to accommodate the development.
60-79%	4	Increasing visual impact. The landscape is seen as changed permanently with the development dominating the existing landscape
40-59%	3	Moderate visual impact. Medium level of change to the landscape character. The landscape is less able to mitigate or absorb change due to the scale, frequency or extent of the development.
20-39%	2	Limited impact. The development is noticeable within the landscape, however the capacity for the landscape to absorb the development through vegetation growth, landform is high.
0-19%	1	No or minor visual impact within the landscape. The development is considered in keeping with existing landscapes character.

HORIZONTAL VISUAL EFFECT (HVE)

The field of vision (FOV) experienced by the human eye is described as an angle of 200° horizontally. Using this fixed visual reference, an assessment of the possible impact of development within this measurable area is undertaken. The centre of the development is established and an angle of 100° each side is defined. The extent of visual effect within this zone is then measured. The overall assessment is made of the entire development, rather than of the individual objects that may form the proposal. This measurement of effect is then described as a percentage of the panorama.

Degree of Horizontal Visual impact (expressed as an angle of impact and percentage of change)	Value	Description of Visual Modification
161-200° (80-100% of the panorama measure at 200° FOV)	5	Substantial horizontal visual impact. Visual impact throughout the whole panorama.
121-160° (60-80% of the panorama measure at 200° FOV)	4	Increasing visual impact.
81-120° (40-60% of the panorama measure at 200° FOV)	3	Moderate visual impact.
41-80° (20-40% of the panorama measure at 200° FOV)	2	Limited visual impact.
0-40° (0-20% of the panorama measure at 200° FOV)	1	No or minor visual impact.

VERTICAL VISUAL IMPACT (VVE)

The vertical visual effect measures in a similar way to the assessment of horizontal visual effect, but the field of view is described as 150°. This assessment ensures that the visual effect in relation to proximity is considered.

Degree of Vertical Visual impact (expressed as an angle of impact and percentage of change)	Value	Description of Visual Modification
121-150° (80-100% of the panorama measure at 150° FOV)	5	Substantial visual impact
91-120° (60-80% of the panorama measure at 150° FOV)	4	Increasing visual impact.
61-90° (40-60% of the panorama measure at 150° FOV)	3	Moderate visual impact.
31-60° (20-40% of the panorama measure at 150° FOV)	2	Limited visual impact.
0-30° (0-20% of the panorama measure at 150° FOV)	1	No or minor visual impact within the landscape

DISTANCE OF VISUAL EFFECT

This is a measurement of how visual is modified by distance. The effect of scale, topography, vegetation and weather, changes with distance, and in turn changes the degree of visual effect.

Location of Development (from viewpoint)	Value	Description
0 to 0.5 km	5	Adjacent
0.5 to 1 km	4	Foreground
1 km to 3 km	3	Middle ground
3-5 km	2	Distant middle ground
5 km and greater	1	Background

FINAL VISUAL EFFECT VALUE

Degree of Visual Effect	Value (total of previous criteria)	*VSC Rating
Severe	21 to 25	2 (High) - 1 (Very High)
Substantial	17 to 20	3 (Moderate) - 2 (High)
Moderate	13 to 16	3 (Moderate)
Slight	9 to 12	5 (Very Low) - 4 (Low)
Negligible	5 to 8	5 (Very Low)

Note: *Timberline's recommendation on the correlation of VSC Rating and Final Visual Effects Value.

VSC RATING CLASS DESCRIPTION

*VSC Rating	Description
1 (Very High)	Very high sensitivity to human-made visual alteration. The area is extremely important to viewers. There is a very high probability that the public would be concerned if the Visual Sensitivity Unit was visually altered in any way or to any scale.
2 (High)	High sensitivity to human-made visual alteration. The area is very important to viewers. There is a high probability that the public would be concerned if the Visual Sensitivity Unit was visually altered.
3 (Moderate)	Moderate sensitivity to human-made visual alteration. The area is important to viewers. There is a probability that the public would be concerned if the Visual Sensitivity Unit was visually altered.
4 (Low)	Low sensitivity to human-made visual alteration. The area is moderately important to viewers. There is a risk that the public would be concerned if the Visual Sensitivity Unit was visually altered.
5 (Very Low)	Very low sensitivity to human-made visual alteration. The area may be somewhat important to viewers. There is a small risk that the public would be concerned if the Visual Sensitivity Unit was visually altered.