

9 ALTERNATIVE SENSITIVITY ANALYSIS

This section provides a short sensitivity matrix, which compares the three different alternatives and their associated environmental sensitivities.

TABLE 35: ALTERNATIVE SENSITIVITY MATRIX

Sensitivity	Alternative 1	Alternative 2	Alternative 3
Geology	None	None	None
Climate	None	None	None
Topography	None	None	None
Land Use	Traverses short section of ash dump, surrounding land used as grazing for cattle	Traverses Witbank Dam and farmland	Traverses Witbank Dam and agricultural land
Surface Water	Traverses only a short section of the un-named tributaries on site	Traverses a large section of the Witbank Dam	Traverses the largest Section of the Witbank Dam
Soils & Land Capability	Mainly agricultural and non sensitive soils	Along sensitive wetland and clay soils	Along sensitive wetland and clay soils
Flora	None	Sensitive vegetation units and plants present	Sensitive vegetation units and plants present
Fauna	None	None	None
Wetlands	None	Traverses wetland	Traverses wetland
Visual	Low Visibility	Moderate visibility	Highly visibility
Social	Low to None – Site specific	Low– Site specific	Low– Site specific
Heritage	Low	Low	Low
Total Sensitivities	1	4	4

On the basis of the matrix presented above, it is suggested that the Bravo 5 Alternative 1 be utilised as the preferred alternative for the proposed project, as it has the least sensitive features associated with the alignment.