APPENDIX G – IMPACTS TABLES

(PROPOSED REFURBISHMENT AND CONSTRUCTION OF COASTAL INFRASTRUCTURE WITHIN THE KING SABATA DALINDYEBO LOCAL MUNICIPALITY, HOLE IN THE WALL, EASTERN CAPE)

Issues and potential impacts of the project on the environment (and vice versa) were identified by way of field investigations, desktop studies and interaction with I&APs. Key issues and impacts requiring further investigation were addressed by specialist studies (Appendix D) and/or further detailed input from the environmental and technical teams. Specialist studies were guided by the Terms of Reference to ensure that to ensure that issues and associated impacts were correctly identified, understood and addressed, thereby enabling an integrated assessment of the development proposal.

Mitigation measures were identified with inputs from the specialists, the design engineers and the EAP team. Information was collated, evaluated and integrated. Thereafter, the significance of each impact was assessed using the assessment conventions outlined below. It should be noted that the significance of an impact is a function of all the attributes outlined below, and the relationships between them. The assessment conventions are applied qualitatively by the EAP, based on an understanding of the receiving environment, the proposed project components and activities, and the information gathered from different sources, including specialists, available literature and the public.

Conventions applied to the impact assessment

Criteria	Rating Scales	Definition
Nature	Positive	This is an evaluation of the overall impact of the construction, operation and management that the proposed upgrade and construction of coastal infrastructure would have on the affected environment (social, biophysical and economic)
	Negative	
	Neutral	
Spatial extent	Low	Site-specific, affects only the development footprint
	Medium	Local (< 2 km from site)
	High	Regional (within 30 km of site) to national
Duration	Very low	Temporary (less than 1 year)
	Low	Short term (1-4 years, i.e. duration of construction phase)
	Medium	Medium term (5-10 years)
	High	Long term (impact will only cease after the operational life of the activity) to permanent
Intensity	Low	Negligible alteration of natural systems, patterns or processes
	Medium	Noticeable alteration of natural systems, patterns or processes
	High	Severe alteration of natural systems, patterns or processes
Irreplaceability of resource caused by impacts	Low	No irreplaceable resources will be impacted (the affected resource is easy to replace/rehabilitate)
	Medium	Resources that will be impacted can be replaced, with effort
	High	Project will destroy unique resources that cannot be replaced
Reversibility of impacts	Low	Low reversibility to non-reversible
	Medium	Moderate reversibility of impacts
	High	High reversibility of impacts
Consequence (a combination of spatial extent, duration, intensity and irreplaceability of impact on resources).	Low	A combination of any of the following: - Intensity, duration, extent and impact on irreplaceable resources are all rated low - Intensity is low and up to two of the other criteria are rated medium

Criteria	Rating Scales	Definition
		- Intensity is medium and all three other criteria are rated low
	Medium	Intensity is medium and at least two of the other criteria are rated medium
	High	Intensity and impact on irreplaceable resources are rated high, with any combination of extent and duration Intensity is rated high, with all of the other criteria being rated medium or high
Probability (the likelihood of the impact occurring)	Low	It is highly unlikely or there is a less than 50% chance that an impact will occur
	Medium	It is between 50 and 75% certain that the impact will occur
	High	It is more than 75% certain that the impact will occur or it is definite that the impact will occur
Significance (all impacts including potential cumulative impacts)	Low	Low consequence and low probability Low consequence and medium probability Low consequence and high probability
	Medium	Medium consequence and low probability Medium consequence and medium probability Medium consequence and high probability High consequence and low probability
	High	High consequence and medium probability High consequence and high probability

Assessment of potential impacts resulting from the proposed refurbishment and construction of coastal infrastructure at Hole in the Wall, at a local, regional and national scale during planning, construction and operation with and without mitigation.

No.	Description and Nature of Impact	Mitigation	Nature (Positive, Negative, Neutral)	Spatial Extent (Low, Medium, High)	Duration (Very Low, Low, Medium, High)	Intensity (Low, Medium, High)	Irreplaceability (Low, Medium, High)	Reversibility (Low, Medium, High)	Consequence (Low, Medium, High)	Probability (Low, Medium, High)	Significance (Low, Medium, High)
DESIGN/PLANNING PHASE											
1	Visual impacts	Unmanaged	Negative	Low	High	Medium	Medium	High	Medium	Medium	Low
		Managed	Positive	Low	High	Low	Low	High	Low	Medium	Low
2	Impacts on the coastal and dune habitat	Unmanaged	Negative	Low	Medium	Medium	High	High	Medium	High	Medium
		Managed	Positive	Low	Short	Low	Medium	Medium	Low	Medium	Low
3	Impacts on CBA's, ESA's and water resources	Unmanaged	Negative	Low	Medium	High	High	High	Medium	High	High
		Managed	Negative	Low	Short	Low	Medium	Medium	Low	Medium	Low
4	Impacts on tourism and economic stimulation	Unmanaged	Negative	Low	Medium	Low	N/A	High	Low	Medium	Low
		Managed	Positive	Low	High	Low	N/A	High	Low	Low	Low
CONSTRUCTION PHASE											
1	Impact on Terrestrial Critical Biodiversity Areas (CBA's)	Unmanaged	Negative	Medium	High	Low	Medium	Medium	Low	High	Low
		Managed	Neutral	Medium	High	Low	Low	High	Low	High	Low
2	Impact on Terrestrial	Unmanaged	Negative	Low	High	Medium	Medium	Low	Medium	Medium	Low
		Managed	Negative	Low	High	Low	Low	Medium	Low	Low	Low

No.	Description and Nature of Impact	Mitigation	Nature (Positive, Negative, Neutral)	Spatial Extent (Low, Medium, High)	Duration (Very Low, Low, Medium, High)	Intensity (Low, Medium, High)	Irreplaceability (Low, Medium, High)	Reversibility (Low, Medium, High)	Consequence (Low, Medium, High)	Probability (Low, Medium, High)	Significance (Low, Medium, High)
	Ecological Support Areas (ESA's)										
3	Impact on Aquatic Ecological Support Areas (ESA's)	Unmanaged	Negative	Medium	High	Low	Medium	Medium	Low	High	Low
		Managed	Negative	Medium	High	Low	Low	High	Low	High	Low
4	Impact on strategic water source areas	Unmanaged	Negative	Low	High	Low	Medium	Low	Low	High	Low
		Managed	Positive	Low	High	Low	Low	Medium	Low	High	Low
5	Disruption of geomorphological drivers and features	Unmanaged	Negative	Low	High	Medium	Low	Medium	High	High	Medium
		Managed	Positive	Low	High	Low	Low	High	Medium	High	Low
6	Disruption of the sand sharing system (sediment transport)	Unmanaged	Negative	Low	High	Medium	Low	Medium	High	High	Medium
		Managed	Positive	Low	High	Low	Low	High	Medium	High	Low
7	Disturbance of the prevalent coastal habitat	Unmanaged	Negative	Low	High	Low	Medium	Medium	High	High	Medium
		Managed	Negative	Low	High	Low	Low	High	Medium	High	Low
8	Impact cultural heritage resources	Unmanaged	Not anticipated	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
		Managed	Not anticipated	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

No.	Description and Nature of Impact	Mitigation	Nature (Positive, Negative, Neutral)	Spatial Extent (Low, Medium, High)	Duration (Very Low, Low, Medium, High)	Intensity (Low, Medium, High)	Irreplaceability (Low, Medium, High)	Reversibility (Low, Medium, High)	Consequence (Low, Medium, High)	Probability (Low, Medium, High)	Significance (Low, Medium, High)
9	Increased noise levels	Unmanaged	Negative	Low	Low	Low	Low	High	Low	Medium	Medium-low
		Managed	Negative	Low	Very low	Low	Low	High	Low	Low	low
10	Increased dust emissions	Unmanaged	Negative	Low	Low	Low	Low	High	Low	Low	Low
		Managed	Negative	Low	Low	Low	Low	High	Low	Low	Low
11	Increased crime and criminal activity	Unmanaged	Negative	Low	Low	Low	N/A	Medium	Low	Low	Low
		Managed	Negative	Low	Low	Low	N/A	High	Low	Low	Low
12	Impacts on existing infrastructure and land use	Unmanaged	Negative	Low	Low	Low	Low	High	Low	Medium	Low
		Managed	Positive	Low	Low	Low	Low	High	Low	Low	Low
OPERATIONAL PHASE											
1	Impact on Critical Biodiversity Areas (CBA's)	Unmanaged	Negative	Low	High	Medium	High	Medium	Medium	Medium	Medium
		Managed	Positive	Low	High	Low	Medium	High	Low	Low	Low
2	Impact on Ecological Support Areas (ESA's)	Unmanaged	Negative	Low	High	Medium	High	Medium	Medium	Medium	Medium
		Managed	Positive	Low	High	Low	Medium	High	Low	Low	Low
3	Impact on strategic water source areas	Unmanaged	Negative	Low	High	Medium	High	Medium	Medium	Medium	Medium
		Managed	Positive	Low	High	Low	Medium	High	Low	Low	Low
4		Unmanaged	Negative	Low	High	Medium	High	Medium	Medium	Medium	Medium

No.	Description and Nature of Impact	Mitigation	Nature (Positive, Negative, Neutral)	Spatial Extent (Low, Medium, High)	Duration (Very Low, Low, Medium, High)	Intensity (Low, Medium, High)	Irreplaceability (Low, Medium, High)	Reversibility (Low, Medium, High)	Consequence (Low, Medium, High)	Probability (Low, Medium, High)	Significance (Low, Medium, High)
	Impact on coastal areas and resources	Managed	Positive	Low	High	Low	Medium	High	Low	Low	Low
5	Impacts associated with wastewater, surface water and runoff	Unmanaged	Negative	Medium	High	Medium	High	Medium	Medium	Medium	Medium
		Managed	Positive	Low	High	Low	Medium	Medium	Low	Low	Low
6	Impact associated with solid waste	Unmanaged	Negative	Low	High	Medium	N/A	Medium	Medium	Medium	Medium
		Managed	Positive	Low	High	Low	N/A	High	Low	Low	Low
7	Impact on the socio-economic environment	Unmanaged	Negative	Medium	High	Medium	N/A	N/A	Low	Low	Low
		Managed	Positive	High	High	Medium	N/A	N/A	Medium	Medium	High
DECOMMISSIONING PHASE											
Not Applicable - It is unlikely that the proposed refurbishment and construction of the coastal infrastructure at Hole in the Wall will be decommissioned. If decommissioning does take place, the developer must abide by the relevant environmental regulations at the time of decommissioning.											

Assessment of cumulative impacts on the receiving environment resulting from the proposed refurbishment and construction of coastal infrastructure at Hole in the Wall, at a local, regional and national scale, during planning, construction and operation with and without mitigation.

No.	Description and Nature of Impact	Mitigation	Nature (Positive, Negative, Neutral)	Spatial Extent (Low, Medium, High)	Duration (Very Low, Low, Medium, High)	Intensity (Low, Medium, High)	Irreplaceability (Low, Medium, High)	Reversibility (Low, Medium, High)	Consequence (Low, Medium, High)	Probability (Low, Medium, High)	Significance (Low, Medium, High)
CUMULATIVE IMPACTS ACROSS ALL PHASES											
1	Impacts on CBA's, ESA's and fauna	Yes, as outlined in the EMPr	Positive	Medium	High	Low	Medium	High	Medium	Medium	Low
2	Impacts on Coastal and dune conditions	Yes, as outlined in the EMPr	Positive	Medium	High	Low	Medium	High	Medium	Medium	Low
3	Impacts on water resources	Yes, as outlined in the EMPr	Positive	Medium	High	Low	Medium	High	Medium	Medium	Low
4	Socio-economic impacts	Yes, as outlined in the EMPr	Positive	Medium	High	Low	N/A	N/A	Low	Medium	High

Assessment of potential impacts on the No-go alternative at Hole in the Wall

No.	Description and Nature of Impact	Mitigation	Nature (Positive, Negative, Neutral)	Spatial Extent (Low, Medium, High)	Duration (Very Low, Low, Medium, High)	Intensity (Low, Medium, High)	Irreplaceability (Low, Medium, High)	Reversibility (Low, Medium, High)	Consequence (Low, Medium, High)	Probability (Low, Medium, High)	Significance (Low, Medium, High)
NO DEVELOPMENT ALTERNATIVE											
1	Biophysical impacts	Not applicable	Negative	Medium	High	High	High	Low	Medium	High	High
2	Socio-economic impacts	Not applicable	Negative	Medium	High	Medium	N/A	N/A	High	High	High