

APPENDIX K: NEED AND DESIRABILITY

Questions	Answers
Securing ecological sustainable development and use of natural resources	
1. How will this development (and its separate elements/aspects) impact on the ecological integrity of the area?	The proposed development entails the establishment of a storage facility on Portion A of Erf 21277 in Aalwyndal, Mossel Bay. The development is proposed on Portion A which comprises 1.44ha along Nagtegaal Street and will be rezoned from Single Residential Zone 1 to Industrial Zone 1 (light industry) in line with the Spatial Development Framework for the Aalwyndal precinct to accommodate the proposed self-storage facility. In total, the proposed development will consist of 456 small self-storage units and a development area of 8562 m². Only a small area (<0.4 ha) in the north-western corner of the site can possibly be described as completely transformed due to agricultural activities. The remainder of the site comprises fynbos in a degraded state. Given the disturbed state of the site, the impact on vegetation type per se is of a low to moderate concern. The impact will be slightly more for the three encountered Species of Conservation Concern (<i>Hermannia lavandulifolia</i> (Vul), <i>Polygala pubiflora</i> (Vul) and <i>Ruellia pilosa</i> (Vul)), which are mostly still well represented in the larger Mossel Bay area. A Search and Rescue plan has been drafted to secure all observed member of the SCC as mentioned above within the delineated development footprint.
1.1 How were the following ecological integrity considerations taken into account: Threatened Ecosystems; Sensitive, vulnerable, highly dynamic or stressed ecosystems, such as coastal shores, estuaries, wetlands, and similar systems require specific attention in management and planning procedures, especially where they are subject to significant human resource usage and development pressure; Critical Biodiversity Areas ("CBAs") and Ecological Support Areas ("ESAs");	The current approved development footprint was assessed and the following ecological factors should be considered; - Three Species of Conservation Concern¹ were recorded on site, namely <i>Hermannia lavandulifolia</i> (Vul), <i>Polygala pubiflora</i> (Vul) and <i>Ruellia pilosa</i> (Vul) - North Langeberg Sandstone Fynbos is not currently listed as a threatened vegetation type (DEA 2011). About 92% of it remains, while 13% is formally conserved in the Boosmansbos Wilderness Area and an additional 45% in mountain catchment areas

	Conservation Targets; Ecological drivers of the ecosystem; Environmental Management Framework; Spatial Development Framework; and Global and international responsibilities relating to the environment (e.g. RAMSAR sites, Climate Change, etc.).	(Mucina & Rutherford 2006). This rating is reaffirmed in the 2018 National Biodiversity Assessment (Skowno et al. 2019). - No water resources were observed within the construction boundary or immediate development footprint. - The site does not form part of the Mossel Bay CBA network. It is located between two aquatic ecological support areas (drainage lines), with a large critical biodiversity area (CBA) located further away to the west. According to Section B of the 2022- 2027 revised EMF of the Mossel Bay Municipality; the area is partially classified as Urban Core and Tourist Activity Zone. The area accommodates the bulk of the economic activity areas in the Mossel Bay Municipal Area. The Aalwyndal area has been earmarked as an intensification area to bring residential opportunities closer to the main economic activity areas. The urban edge includes the main expansion area of Aalwyndal (Area 36) and the Mossel Bay Airport (Area 48).
1.2	How will this development disturb or enhance ecosystems and/or result in the loss or protection of biological diversity? What measures were explored to firstly avoid these negative impacts, and where these negative impacts could not be avoided altogether, what measures were explored to minimise and remedy (including offsetting) the impacts? What measures were explored to enhance positive impacts?	Only a small area (<0.4 ha) in the north-western corner of the site can possibly be described as completely transformed due to agricultural activities. The remainder of the site comprises fynbos in a degraded state. Given the disturbed state of the site, the impact on vegetation type per se is of a low to moderate concern. The impact will be slightly more for the three encountered Species of Conservation Concern (<i>Hermannia lavandulifolia</i> (Vul), <i>Polygala pubiflora</i> (Vul) and <i>Ruellia pilosa</i> (Vul)), which are mostly still well represented in the larger Mossel Bay area. A Search and Rescue plan has been drafted to secure all observed member of the SCC as mentioned above within the delineated development footprint.
1.3	How will this development pollute and/or degrade the biophysical environment? What measures were explored to firstly avoid these impacts, and where impacts could not be avoided altogether, what measures were explored to minimise and remedy (including offsetting) the	This proposed development will not contribute to any pollution nor degradation to the biophysical environment. This proposed amendment will have a positive biophysical impact to the environment since the majority of the site is already in a disturbed and degraded state.

	impacts? What measures were explored to enhance positive impacts?	A Search and Rescue plan has been drafted to secure all observed member of the SCC as mentioned above within the delineated development footprint, which are to be transplanted on suitable undeveloped erven.
1.4	What waste will be generated by this development? What measures were explored to firstly avoid waste, and where waste could not be avoided altogether, what measures were explored to minimise, reuse and/or recycle the waste? What measures have been explored to safely treat and/or dispose of unavoidable waste?	Builders' rubble will occur during the construction of the development. Builders' rubble is transported to the Mossel Bay registered Landfill site and/or stored by the contractor at their premises to be re-used as aggregate. Some domestic waste will be generated during the operational phase of the proposed development and will be collected by the Mossel Bay Municipality and disposed of at a registered landfill.
1.5	How will this development disturb or enhance landscapes and/or sites that constitute the nation's cultural heritage? What measures were explored to firstly avoid these impacts, and where impacts could not be avoided altogether, what measures were explored to minimise and remedy (including offsetting) the impacts? What measures were explored to enhance positive impacts?	FC Holm CC was appointed to undertake a visual impact assessment for the proposed rezoning and development of a portion of Erf 21277, Aalwyndal, Mossel Bay. Briefly, although Aalwyndal has a sense of rural charm it does not present a distinctive scenic or cultural sense of place that must be protected and scenic, cultural and historical significance of the area is rated as low. The topography of the area furthermore serves to visually isolate Aalwyndal and partially screen views towards the proposed new developments planned for Erf 21277, Mossel Bay, from surrounding developments and scenic routes. Together with the above, the visual absorption of the development site itself is low due to a lack of screening vegetation and relatively flat topography, the visual absorption capacity of the area is moderate to high due to the screening effect of existing structures and taller vegetation in the areas surrounding the development site. Numerous visual impact mitigation measures have been suggested and should be implemented during both the construction and operational phases to ensure a low visual impact of the development.

		Together with the above, the applicant has readily obtained a Positive Record of Decision from Heritage Western Cape stating that the site visit revealed no archaeological materials of any sort. Also, impacts on fossil heritage resources due to disturbance of the soil profile formed on the weathered Skurweberg Formation underlying the Erf 21277 Portion A are not anticipated. Please refer to Sections E and H for a detailed description of the mitigation measure put in place.
1.6	How will this development use and/or impact on non-renewable natural resources? What measures were explored to ensure responsible and equitable use of the resources? How have the consequences of the depletion of the non-renewable natural resources been considered? What measures were explored to firstly avoid these impacts, and where impacts could not be avoided altogether, what measures were explored to minimise and remedy (including offsetting) the impacts? What measures were explored to enhance positive impacts?	Non-renewable resources will not directly be affected by the proposed development. The need for water, electricity and sewerage disposal is very limited due to the nature of the development proposal. A conservancy tank is proposed for the toilet facility of the administrative office building, to be serviced by a private contractor as the need occurs. A water connection is available for the basins and the toilet. Electricity connections are also readily available.
1.7	How will this development use and/or impact on renewable resources and the ecosystem of which they are part? Will the use of the resources and/or impact on the ecosystem jeopardise the integrity of the resource and/or system taking into account carrying capacity restrictions, limits of acceptable change, and thresholds? What measures were explored to firstly avoid the use of resources, or if avoidance is not possible, to minimise the use of resources? What measures were taken to ensure responsible and equitable use of the resources? What measures were explored to enhance positive impacts? (1) Does the proposed development exacerbate the increased dependency on increased use of resources to maintain economic growth or does it reduce resource dependency (i.e. de-	No freshwater resources were observed within the immediate development footprint, no renewable natural resources including the remnant vegetation within and along the development footprint will be jeopardised as the three SCC will be search and rescued prior to construction.

	materialised growth)? (2) Does the proposed use of natural resources constitute the best use thereof? Is the use justifiable when considering intra- and intergenerational equity, and are there more important priorities for which the resources should be used (i.e. what are the opportunity costs of using these resources?) (3) Do the proposed location, type and scale of development promote a reduced dependency on resources?	
1.8	How were risk-averse and cautious approach applied in terms of ecological impacts? What are the limits of current knowledge (note: the gaps, uncertainties and assumptions must be clearly stated)? What is the level of risk associated with the limits of current knowledge? Based on the limits of knowledge and the level of risk, how and to what extent was a risk-averse and cautious approach applied to the development.	The precautionary approach, i.e. a conservative approach that overstates negative impacts and understates benefits, was applied. Gaps in knowledge, assumptions and limitations were assessed and discussed in the report.
1.9	How will the ecological impacts resulting from this development impact on people's environmental right in terms of the following: (1) Negative impacts: e.g. access to resources, opportunity costs, loss of amenity (e.g. open space), air and water quality impacts, nuisance (noise, odour, etc.), health impacts, visual impacts, etc. What measures were taken to firstly avoid negative impacts, but if avoidance is not possible, to minimise, manage and remedy negative impacts? (2) Positive impacts: e.g. improved access to resources, improved amenity, improved air or water quality, etc. What measures were taken to enhance positive impacts?	The effective and equitable functioning of land markets is not negatively affected by this land use application. It is stated that all current and future costs to all parties for the provision of infrastructure and social services in land developments must be considered. This land use application will not increase costs to the Municipality but rather increase revenue. The property falls within the urban edge, within which development proposals will be considered. A further study, The Aalwyndal Precinct Plan, was completed in 2018 to guide future development in Aalwyndal. This area has been earmarked for intensified urban development that will include plans to enlarge the present Mossel Bay Airfield. Erf 21277, Mossel Bay, is situated within the area where noise levels are considered unsuitable for residential purposes and has been identified as suitable for commercial development, including services related to the Airfield such as storage. The proposed storage development will have a positive socio-economic impact in providing

		employment opportunities during both the constructional and operational phase, both in terms of running the facility and in terms of the business that will be able to operate from the facility. Additionally, this will also bring about economic growth within the area as the access and use of storage is also a common requirement in modern society and this has been identified by the proponent as a need in the area.
1.10	Describe the linkages and dependencies between human wellbeing, livelihoods and ecosystem services applicable to the area in question and how the development's ecological impacts will result in socio-economic impacts (e.g. on livelihoods, loss of heritage site, opportunity costs, etc.)?	The potential socio-economic impact of the proposed amendment is discussed and assessed in Section G of this report.
1.11	Based on all of the above, how will this development positively or negatively impact on ecological integrity objectives/targets/considerations of the area?	Potential positive and negative impacts are discussed and assessed in Section G.
1.12	Considering the need to secure ecological integrity and a healthy biophysical environment, describe how the alternatives identified (in terms of all the different elements of the development and all the different impacts being proposed), resulted in the selection of the "best practicable environmental option" (BPEO) in terms of ecological considerations?	Refer to 1.11 above. Further refer to Section H for the advantages and disadvantages of the proposed amendments. A few alternatives were considered for the proposed development to ensure building-, ecological-, and legislative restrictions are adhered to.
1.13	Describe the positive and negative cumulative ecological/biophysical impacts bearing in mind the size, scale, scope, and nature of the project in relation to its location and existing and other planned developments in the area?	Refer to Section G for the cumulative impacts.
Promoting justifiable economic and social development		
2.1	What is the socio-economic context of the area, based on, amongst other considerations, the following considerations: (1) The IDP; (2) Spatial priorities and desired spatial patterns; (3) Spatial characteristics; and (4)	Section C of this Report provides the socio-economic context of the region and Mossel Bay Municipal area. The IDP, SDF and other planning documents were consulted, refer to Section E.

	Municipal Economic Development Strategy?	The property falls within the urban edge, within which development proposals will be considered. A further study, The Aalwyndal Precinct Plan, was completed in 2018 to guide future development in Aalwyndal. This area has been earmarked for intensified urban development that will include plans to enlarge the present Mossel Bay Airfield. Erf 21277, Mossel Bay, is situated within the area where noise levels are considered unsuitable for residential purposes and has been identified as suitable for commercial development, including services related to the Airfield such as storage.
2.2	Considering the socio-economic context, what will the socio-economic impacts be of the development (and its separate elements/aspects), and specifically also on the socio-economic objectives of the area? Will the development complement the local socio-economic initiatives (such as local economic development (LED) initiatives), or skills development programs?	Refer to 1.10 above. The proposed storage development will have a positive socio-economic impact in providing employment opportunities during both the constructional and operational phase, both in terms of running the facility and in terms of the business that will be able to operate from the facility. Additionally, this will also bring about economic growth within the area as the access and use of storage is also a common requirement in modern society and this has been identified by the proponent as a need in the area
2.3	How will this development address the specific physical, psychological, developmental, cultural, and social needs and interests of the relevant communities?	A positive psychological and social impact is considered as the proposed development The proposed storage development will contribute in providing employment opportunities during both the constructional and operational phase, both in terms of running the facility and in terms of the business that will be able to operate from the facility. Additionally, this will also bring about economic growth within the area as the access and use of storage is also a common requirement in modern society and this has been identified by the proponent as a need in the area. During the PPP, KAPPEC will consider and respond to any concerns raised by stakeholders to ensure any concerns from the community are addressed.
2.4	Will the development result in equitable (intra- and inter-generational) impact distribution, in the short- and long-term? Will the	The operation phase of the development will have an intergenerational impact which will be sustainable in both the short and long term.

	impacts be socially and economically sustainable in the short- and long-term?	
2.5	In terms of location, describe how the placement of the proposed development will: (1) result in the creation of residential and employment opportunities in close proximity to or integrated with each other; (2) reduce the need for transport of people and goods; (3) result in access to public transport or enable non-motorised and pedestrian transport; (4) compliment other uses in the area; (5) be in line with the planning for the area; (6) for urban related development, make use of underutilised land available with the urban edge; (7) optimise the use of existing resources and infrastructure; (8) opportunity costs in terms of bulk infrastructure expansions in non-priority areas; (9) discourage "urban sprawl" and contribute to compaction/densification; (10) contribute to the correction of the historically distorted spatial patterns of settlements and to the optimum use of existing infrastructure in excess of current needs; (11) encourage environmentally sustainable land development practices and processes; (12) take into account special locational factors that might favour the specific location; (13) the investment in the settlement or area in question will generate the highest socio-economic returns; (14) impact on the sense of history, sense of place and heritage of the area and the socio-cultural and cultural-historic characteristics and sensitivities of the area; and (15) in terms of the nature, scale and location of the development promote or act as a catalyst to create a more integrated settlement?	The development has been readily approved, and this proposed amendment will only strengthen the factors outlined. The property falls within the urban edge, within which development proposals will be considered. A further study, The Aalwyndal Precinct Plan, was completed in 2018 to guide future development in Aalwyndal. This area has been earmarked for intensified urban development that will include plans to enlarge the present Mossel Bay Airfield. Erf 21277, Mossel Bay, is situated within the area where noise levels are considered unsuitable for residential purposes and has been identified as suitable for commercial development, including services related to the Airfield such as storage. Additionally, this will also bring about economic growth within the area as the access and use of storage is also a common requirement in modern society and this has been identified by the proponent as a need in the area.
2.6	How were a risk-averse and cautious approach applied in terms of socio-economic impacts? (1) What are the limits of current knowledge? (2) What is the level of risk associated with the	The precautionary principle was applied during the consideration of socio-economic impacts, although the operational phase impacts are considered as positive impacts which does not require mitigation.

	limits of current knowledge? (3) Based on the limits of knowledge and the level of risk, how and to what extent was a risk-averse and cautious approach applied to the development?	Gaps in knowledge, limitations and assumptions are discussed in each individual specialist report.
2.7	How will the socio-economic impacts resulting from this development impacts on people's environmental right in terms of the following: (1) Negative impacts: e.g. health (e.g. HIV-Aids), safety, social ills, etc. What measures were taken to firstly avoid negative impacts, but if avoidance is not possible, to minimise, manage and remedy negative impacts? (2) Positive impacts: What measures were taken to enhance positive impacts?	The proposed development, should it be granted, is not anticipated to negatively impact on people's environmental rights.
2.8	Considering the linkages and dependencies between human wellbeing, livelihoods, and ecosystem services, describe the linkages and dependencies applicable to the area in question and how the development's socio-economic impacts will result in ecological impacts?	It is not anticipated that the identified socio-economic impacts, which are positive, will result in ecological impacts.
2.9	What measures were taken to pursue the selection of the "best practicable environmental option" in terms of socio-economic considerations?	Refer to Section G for impacts assessed.
2.10	What measures were taken to pursue environmental justice so that adverse environmental impacts shall not be distributed in such a manner as to unfairly discriminate against any person, particularly vulnerable and disadvantaged persons? Considering the need for social equity and justice, do the alternatives identified, allow the "best practicable environmental option" to be selected, or is there a need for other alternatives to be considered?	A public participation process will be undertaken to ensure that issues and concerns raised by the public are considered and responded to. It is not anticipated that the proposed amendments will discriminate against any person.
2.11	What measures were taken to pursue equitable access to environmental resources, benefits and services to meet basic human needs and ensure human wellbeing, and what special measures were taken to ensure access	Refer to 2.10 above.

	thereto by categories of persons disadvantaged by unfair discrimination?	
2.12	What measures were taken to ensure that the responsibility for the environmental health and safety consequences of the development has been addressed throughout the development's life cycle?	Currently, no construction activities has commenced on the development site, but if the proposed amendment were to be approved, construction and operation will follow the approved EMP as compiled by Kapp Environmental Consultants.
2.13	What measures were taken to: (1) ensure the participation of all interested and affected parties; (2) provide all people with an opportunity to develop the understanding, skills and capacity necessary for achieving equitable and effective participation; (3) ensure participation by vulnerable and disadvantaged persons; (4) promote community wellbeing and empowerment through environmental education, the raising of environmental awareness, the sharing of knowledge and experience and other appropriate means; (5) ensure openness and transparency, and access to information in terms of the process; (6) ensure that the interests, needs and values of all interested and affected parties were taken into account, and that adequate recognition were given to all forms of knowledge, including traditional and ordinary knowledge; and (7) ensure that the vital role of women and youth in environmental management and development were recognised and their full participation therein were promoted.	The public participation process is outlined in Section D above and includes the process followed to ensure as many I&APs are reached and provided with an opportunity to comment on the amendment.
2.14	Considering the interests, needs and values of all the interested and affected parties, describe how the development will allow for opportunities for all the segments of the community (e.g. a mixture of low-, middle-, and high-income housing opportunities) that is consistent with the priority needs of the local area (or that is proportional to the needs of an area)?	The proposed development will bring about economic growth within the area as the access and use of storage is also a common requirement in modern society and this has been identified by the proponent as a need in the area.
2.15	What measures have been taken to ensure that current and/or future	The permanent operational phase job opportunities to be created by the

	workers will be informed of work that potentially might be harmful to human health or the environment or dangers of associated with the work, and what measures have been taken to ensure that the right of workers to refuse such work will be respected and protected?	development, along with storage facilities for residents within the larger developing Aalwyndal area. None of these job opportunities will result in potentially harmful working environments.
2.16	Describe how the development will impact on job creation in terms of, amongst other aspects: (1) the number of temporary versus permanent jobs that will be created; (2) whether the labour available in the area will be able to take up the job opportunities (i.e. do the required skills match the skills available in the area); (3) the distance from where the labourers will have to travel; (4) the location of job opportunities versus the location of impacts (i.e. equitable distribution of costs and benefits; and (5) the opportunity costs in terms of job creation.	Storage facilities employ a variety of personnel to manage operations effectively. These roles include a Site Manager overseeing overall operations, Customer Service Representatives handling inquiries and reservations, Maintenance Technicians ensuring facility upkeep, and Security Officers maintaining safety. Inventory Clerks manage records, Sales and Marketing Representatives promote the facility, and Facility Cleaners maintain cleanliness. Logistics Coordinators oversee shipments, while Accountants handle financial matters. Human Resources Coordinators manage staffing needs.
2.17	What measures were taken to ensure: (1) that there were intergovernmental coordination and harmonisation of policies, legislation and actions relating to the environment, and (2) that actual or potential conflicts of interest between organs of state were resolved through conflict resolution procedures?	The competent authority (DEA&DP) and other identified organs of state will comment on the amendment application and report during the public participation process. No conflicts of interest have arisen between organs of state to date, and it is not expected that conflicts of interest will arise. All required legislation have been incorporated and all relevant organs of state will be consulted.
2.18	What measures were taken to ensure that the environment will be held in public trust for the people, that the beneficial use of environmental resources will serve the public interest, and that the environment will be protected as the people's common heritage?	Most of the site is in a degraded state, all identified SCC individuals will be searched and rescued to ensure their protection.
2.19	Are the mitigation measures proposed realistic and what long-term environmental legacy and managed burden will be left?	Recommended mitigation measures for potential negative impacts are included and assessed in Section G of this report.
2.20	What measures were taken to ensure that the costs of remedying pollution, environmental degradation and consequent adverse health effects and of preventing, controlling or	The Holder of the EA has thus far assumed responsibility for activities on site which may result in harm to the environment. A Search and Rescue Plan along with the Environmental Management Plan was compiled which will

	minimising further pollution, environmental damage or adverse health effects will be paid for by those responsible for harming the environment?	be utilised during construction.
2.21	Considering the need to secure ecological integrity and a healthy bio-physical environment, describe how the alternatives identified (in terms of all the different elements of the development and all the different impacts being proposed), resulted in the selection of the best practicable environmental option in terms of socio-economic considerations?	Refer to Section H for advantages and disadvantages of the proposed development.
2.22	Describe the positive and negative cumulative socio-economic impacts bearing in mind the size, scale, scope and nature of the project in relation to its location and other planned developments in the area?	Refer to Section G for the cumulative impacts identified.