

APPENDIX K: NEED AND DESIRABILITY

The following table describes the need and desirability for the proposed development in terms of this Department's guideline on Need and Desirability (March 2013)/DEA Integrated Environmental Management Guidelines.

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<p>1. How will this development (and its separate elements/aspects) impact on the ecological integrity of the area?</p>	<p>Construction work will take place inside the Palmiet River and adjacent wetlands.</p> <p>The freshwater specialist identified the following impacts to be addressed: aquatic habitat impacts, water quality impacts, flow impacts, spread of alien invasives and increased erosion.</p> <p>Aquatic habitat impacts: The wetland habitat associated with the Palmiet River, particularly on its northern bank will need to be traversed by the road leading to the new proposed bridge. The new crossing is located near an existing disturbed area and thus much of the activities will have limited impact where they are placed within already modified habitats.</p> <p>Water quality impacts: During construction, runoff from areas which have been cleared of vegetation can cause an increase in the amount of sediment in the runoff to the Palmiet River. Excess soil, unused concrete or other materials associated with construction are often dumped, out of the way, into the riparian zones of rivers so that it does not hamper agricultural activities. Longer-term sedimentation issues relate to the potential for erosion of the river banks if all the cover vegetation is removed and the area is not properly rehabilitated afterwards.</p> <p>Flow impacts: A bridge always has the potential to impact the flow in a river due to the presence of structures within the river channel or if there is inadequate capacity for the bridge to allow for the full spectrum of flows in the river. The proposed bridge structure makes adequate provision for the low flow in the river. The very high flows will pass over the structure.</p> <p>Invasion with alien vegetation and increased erosion potential: Numerous invasive alien plant species have been observed in the vicinity of the proposed crossing. By definition, these species are fast-growing and recruit rapidly in disturbed areas. Disturbance associated with the construction of the bridge</p>

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	<p>across the Palmet River could facilitate the further spread of these species. The spread of these species can result in the loss of indigenous plant species, especially within riparian and wetland areas. Furthermore, many of the woody alien species will, if allowed to grow unchecked, reduce the flow and habitat integrity in the river and wetland area. The potential invasive alien plant growth impacts would be much the same for both the proposed and recommended alternative crossing locations. The preferred route as a result of existing disturbance within the river channel already contains some alien invasive plants (in particular kikuyu grass on the eastern bank).</p> <p>The freshwater specialist proposed the following mitigation measures:</p> <p>Construction Phase</p> <p>It is recommended that the final alignment of the access road from the north should avoid the permanently wet portion of the channelled valley bottom wetland. Careful design of the bridge approaches will be required to avoid erosion and the adjacent banks.</p> <p>Work within the river channel should be limited (in time and extent) as far as possible and rehabilitated immediately after construction has taken place with the revegetation of disturbed areas with suitable local indigenous vegetation.</p> <p>The construction phase activities should be conducted during summer when flow in the river channel is low.</p> <p>In particular, any rubble and debris arising from the construction activities and removal of the existing structure should be cleared from the river channel and riparian zone once construction activities are complete and should not impede flow in the river. The site of the existing crossing should be rehabilitated and revegetated to resemble the adjacent riverbanks.</p>

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	<p>No dumping of soil and or any other material should take place within the Palmiet River or associated wetland.</p> <p>Good housekeeping measures associated with the construction works should be addressed in the construction Environmental Management Plan for the Project to minimise the potential for contamination of the Palmiet River during this phase of the project.</p> <p>The new culvert structure should not be placed higher or lower than the base level of the river channel to ensure that low flows are not impeded. The culvert structure should also be placed within the active channel of the river.</p> <p>Operation Phase</p> <p>The river channel upstream of the river crossing should be kept clear of sediment, cobbles and woody debris that could impede flow through the structure during low and higher flow events.</p> <p>The longer-term disturbance of the riparian zone and associated wetland area adjacent to the road crossing should be kept to a minimum. The path or roadway should be demarcated with poles to ensure that the area of disturbance remains within the delineated path. Ongoing monitoring and management of the disturbed areas within the wetland / riparian zone should be undertaken to ensure that the area stays cleared of eroded areas and invasive alien plant growth.</p> <p>The longer-term rehabilitation and management of the river channel at the river crossing should be managed using an approved Management Maintenance Plan (MMP) for the site. The MMP should form part of the Environmental Management Programme for the project and include method statements for the removal of sediment and debris upstream of the bridge as well as revegetation of indigenous plants and control of alien invasive plants as well as erosion control measures should they be required.</p>

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	<p>There needs to be an investigation into the erosion of the river channel within the property and upstream of the property as well as at the headwaters of the Eikenhof Dam. This would require a wider approach than just the landowner at the bridge but also requires the involvement of all parties with land and infrastructure within the eroded river reach. The existing erosion is of concern given that there is peat wetland along this river reach.</p> <p>Control of alien invasive plant species should be undertaken with a specific focus on the <i>L.camara</i>, <i>R. flagellaris</i>, <i>Acacia</i> species and <i>P. clandestinum</i>. These species are known to do well in riparian and wet habitats. They should be controlled by manual removal or the application of appropriate herbicides. Manual removal should not be carried out by any machinery larger than a chainsaw.</p>
<ul style="list-style-type: none"> • How were the following ecological integrity considerations taken into account? <ul style="list-style-type: none"> ○ Threatened Ecosystems, 	<p>No threatened ecosystems will be impacted by the proposed bridge construction.</p>
<ul style="list-style-type: none"> ○ 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, 	<p>Construction work will take place inside the Palmiet River and adjacent wetlands. See Item 1 above.</p>
<ul style="list-style-type: none"> ○ Critical Biodiversity Areas ("CBAs") and Ecological Support Areas ("ESAs"), ○ Conservation targets, ○ Ecological drivers of the ecosystem, 	<p>According to CapeFarmMapper (version 3), the riparian zone of the Palmiet River and the channelled valley bottom wetland along the river are mapped as a CBA. The Management objective of the CBA area is to maintain in a natural or near natural state with no further loss to natural habitat. And further that degraded areas should be rehabilitated. A Freshwater Specialist was appointed to assess the activities and provide recommendations and mitigation measures. These have been included in the method statements of the construction activities as well as the Environmental Management Programme of the development.</p>

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	See Item 1 above for the mitigation measures.
<ul style="list-style-type: none"> o Environmental Management Framework 	There is no EMF formulated for the area.
<ul style="list-style-type: none"> o Spatial Development Framework, and 	The bridge construction will not deviate from the municipal SDF as the proposed bridge construction will allow Eikenhof Fruit Farms (Pty) Ltd. to safely access orchards on the opposite side of the Palmiet River. Further, a specialist was appointed to provide inputs regarding the construction activities that will occur in the Palmiet River.
<ul style="list-style-type: none"> o Global and international responsibilities relating to the environment (e.g. RAMSAR sites, Climate Change, etc.). 	<p>The potential impacts associated with the proposal are limited and not expected to extend beyond the site.</p> <p>There are no RAMSAR sites present on site.</p> <p>The proposal is not expected to have an impact on Climate Change.</p>
<ul style="list-style-type: none"> • 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? 	The proposed bridge will have an impact on the wetland areas, refer to item 1 above. No measures were explored to avoid the impacts as the proposed bridge location is the only suitable location. The impacts will be remedied by implementing the management and mitigation measures as listed in item 1 above.
<ul style="list-style-type: none"> • 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 impacts? What measures were explored to enhance positive impacts? 	<p>Refer to item 1 above for the impacts identified.</p> <p>Pollution and degradation of the biophysical environment will be avoided as far as possible, however, where impacts cannot be avoided, measures to reduce negative impacts to an acceptable level have been provided.</p> <p>Refer to the EMPr of the draft BAR (Appendix H) which provides management measures to mitigate all potential impacts associated with the proposed development.</p>

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<ul style="list-style-type: none"> 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? 	<p>Limited amount of construction waste will be produced during the construction phase. The EMPr includes measures to minimise, reuse and recycle waste during the construction phase (Appendix H of the draft BAR).</p>
<ul style="list-style-type: none"> 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? 	<p>The proposal will not disturb any landscapes that constitutes national cultural heritage.</p>
<ul style="list-style-type: none"> 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? 	<p>The proposal will not have any impact on non-renewable natural resources.</p>
<ul style="list-style-type: none"> How will this development use and/or impact on renewable natural 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? 	<p>The proposal is not expected to impact any renewable natural resources.</p> <p>Measures to avoid, mitigate and manage impacts will be included in the EMPr (Appendix H of the draft BAR).</p>
<ul style="list-style-type: none"> <ul style="list-style-type: none"> 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-materialised 	<p>The proposal is for a bridge construction and will make use of resources such as various building materials but the project is relatively small therefore will not</p>

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<p>growth)? (note sustainability requires that settlements reduce their ecological footprint by using less material and energy demands and reduce the amount of waste they generate, without compromising their quest to improve their quality of life)</p> <ul style="list-style-type: none"> ○ 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 this the proposed development alternative?) ○ Do the proposed location, type and scale of development promote a reduced dependency on resources? 	<p>contribute significantly to economic growth in the supply chain in sourcing the resources.</p> <p>The bridge construction is justified because there is a need for safe access for the farm workers.</p> <p>The proposed location does not necessarily promote a reduced dependency on resources as there will be a need for resource allocation for construction purposes but this will be temporarily.</p>
<ul style="list-style-type: none"> ● How were a risk-averse and cautious approach applied in terms of ecological impacts? <ul style="list-style-type: none"> ○ 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? 	<p>The proposal was assessed according to the criteria drawn up from the EIA Regulations published by the Department of Environmental Affairs and Tourism (April 1998) in terms of the Environmental Conservation Act, 1989 (Act No. 73 of 1989).</p> <p>Refer to Section J, Question 2.4 of the draft BAR for the gaps, uncertainties and assumptions on the proposed development. The proposal has been assessed and all potential impacts and risks have been provided in Section H of the draft BAR.</p>
<ul style="list-style-type: none"> ● How will the ecological impacts resulting from this development impact on people's environmental right in terms following: <ul style="list-style-type: none"> ○ 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? 	<p>The proposed development is not expected to have negative impacts on peoples' environmental rights. Measures to avoid, mitigate and manage negative impacts and promote positive impacts have been included in the EMPr (Appendix H of the draft BAR).</p> <p>The overall positive impacts associated with the proposal exceed the negative impacts.</p>

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<ul style="list-style-type: none"> ○ Positive impacts: e.g. improved access to resources, improved amenity, improved air or water quality, etc. What measures were taken to enhance positive impacts? ○ 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.)? • Based on all of the above, how will this development positively or negatively impact on the ecological integrity objectives/targets/considerations of the area? • 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" in terms of ecological considerations? 	<p>One of the principles of the EMPr (Appendix H of the draft BAR) is that negative impacts on the environment and on people's environmental rights be anticipated and prevented, and where the impacts cannot be avoided or prevented, the impacts are minimised and remedied.</p> <p>The EMPr (Appendix H of the draft BAR) also encourages and promotes community well-being and empowerment through environmental training of workers during the construction phase.</p>
<ul style="list-style-type: none"> • 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? 	<p>The potential impacts of the proposed new bridge over the Palmiet River are all on a local scale. The activity is very unlikely to have impacts upon the larger Palmiet River system, downstream of the site as the Eikenhof Dam is only 700m downstream of the proposed river crossing. The impacts on the Eikenhof Dam are likely to be of low significance. The activity could potentially increase the amount of sediment being carried into the dam as a result of disturbed soil and vegetation as well as loss of wetland function/services. Currently, the riparian vegetation along the river at the site is not dominated by alien vegetation, but numerous alien plant species are present, particularly at the preferred crossing alternative. Disturbance of the area will however further facilitate the spread of most of the alien species observed at the site. If the proposed activity goes ahead, the loss of some wetland/riparian habitat is inevitable. However, this loss is considered to be of low significance considering that there is already some localised disturbance at the proposed site.</p>

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<p>2. “promoting justifiable economic and social development”</p> <ul style="list-style-type: none"> • What is the socio-economic context of the area, based on, amongst other considerations, the following considerations? <ul style="list-style-type: none"> ○ The IDP (and its sector plans' vision, objectives, strategies, indicators and targets) and any other strategic plans, frameworks of policies applicable to the area ○ Spatial priorities and desired spatial patterns (e.g. need for integrated or segregated communities, need to upgrade informal settlements, need for densification, etc.) ○ Spatial characteristics (e.g. existing land uses, planned land uses, cultural landscapes, etc.), and ○ Municipal Economic Development Strategy (“LED Strategy”) 	<p>The proposal is aligned with all the relevant policies and guidelines.</p>
<ul style="list-style-type: none"> • 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? <ul style="list-style-type: none"> ○ Will the development complement the local socio-economic initiatives (such as local economic development (LED) initiatives), or skills development programs? 	<p>The benefits to society in general and to the local communities will include:</p> <ul style="list-style-type: none"> • Positive traffic safety impacts.
<ul style="list-style-type: none"> • How will this development address the specific physical, psychological, developmental, cultural and social needs and interests of the relevant communities? 	<p>The new proposed access to the orchard will ensure that the orchard can be continued to be farmed and produce fruit to the packhouse. This will have a positive economic impact for the packhouse. The new access point will eliminate the safety risk on the road which is also a positive impact.</p>
<ul style="list-style-type: none"> • Will the development result in equitable (intra- and inter-generational) impact distribution, in the short- and long-term? Will the impact be socially and economically sustainable in the short- and long-term? 	<p>The impacts associated with the bridge crossing will result in low environmental impacts with the potential positive impacts for road users and farm workers, the impacts will be socially and economically sustainable.</p>
<ul style="list-style-type: none"> • In terms of location, describe how the placement of the proposed development will: 	<p>The new proposed access to the orchard will ensure that the orchard can be continued to be farmed and produce fruit to the packhouse. This will have a</p>

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<ul style="list-style-type: none"> ○ result in the creation of residential and employment opportunities in close proximity to or integrated with each other, ○ reduce the need for transport of people and goods, ○ result in access to public transport or enable non-motorised and pedestrian transport (e.g. will the development result in densification and the achievement of thresholds in terms public transport) ○ compliment other uses in the area ○ be in line with the planning for the area, ○ for urban related development, make use of underutilised land available with the urban edge ○ optimise the use of existing resources and infrastructure ○ opportunity costs in terms of bulk infrastructure expansions in non-priority areas (e.g. not aligned with the bulk infrastructure planning for the settlement that reflects the spatial reconstruction priorities of the settlement) ○ discourage "urban sprawl" and contribute to compaction/densification, ○ 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 ○ encourage environmentally sustainable land development practices and processes ○ take into account special locational factors that might favour the specific location (e.g. the location of a strategic mineral resource, access to the port, access to rail, etc.), 	<p>positive economic impact for the packhouse. The new access point will eliminate the safety risk on the road which is also a positive impact.</p>

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<ul style="list-style-type: none"> ○ the investment in the settlement or area in question will generate the highest socio-economic returns (i.e. an area with high economic potential), ○ 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 ○ in terms of the nature, scale and location of the development promote or act as a catalyst to create a more integrated settlement? 	
<ul style="list-style-type: none"> • How were a risk-averse and cautious approach applied in terms of socio-economic impacts? <ul style="list-style-type: none"> ○ What are the limits of current knowledge (note: the gaps, uncertainties and assumptions must be clearly stated)? ○ What is the level of risk (note: related to inequality, social fabric, livelihoods, vulnerable communities, critical resources, economic vulnerability and sustainability) 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? 	<p>The proposal was assessed according to the criteria drawn up from the EIA Regulations published by the Department of Environmental Affairs and Tourism (April 1998) in terms of the Environmental Conservation Act, 1989 (Act No. 73 of 1989).</p> <p>Refer to Section J, Question 2.4 of the draft BAR for the gaps, uncertainties and assumptions on the proposed development. The proposal has been assessed and all potential impacts and risks have been provided in Section H of the Draft BAR.</p>
<ul style="list-style-type: none"> • How will the socio-economic impacts resulting from this development impact on people's environmental right in terms following: <ul style="list-style-type: none"> ○ 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? ○ Positive impacts. What measures were taken to enhance positive impacts? 	<p>The proposed development is not expected to impact on people's environmental right. Measures will be provided in the EMPr (Appendix H) to avoid any impacts on people's environmental right during the construction phase.</p> <p>I&APs will be provided with opportunities to comment on the proposed development during this BA process, thereby ensuring that all people's needs, rights and concerns will be addressed through this process.</p>

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<ul style="list-style-type: none"> 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 (e.g. over utilisation of natural resources, etc.)? 	<p>No natural resources will be over-utilised. All potential environmental impact and risks associated with the proposed development were assessed as part of this BA process. Refer to the impact assessment tables included under Section H of the Draft BAR.</p>
<ul style="list-style-type: none"> What measures were taken to pursue the selection of the "best practicable environmental option" in terms of socio-economic considerations? 	<p>The proposal is not expected to have any environmental impacts that will result in fatal flaws on socio-economic impacts provided that all the mitigation and management measures to be provided in the EMP are implemented.</p>
<ul style="list-style-type: none"> 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 (who are the beneficiaries and is the development located appropriately)? <p>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?</p> <ul style="list-style-type: none"> 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 thereto by categories of persons disadvantaged by unfair discrimination? 	<p>The construction of the bridge will be carried out by farm workers, and while it does not directly aim to address issues of environmental justice, efforts have been made to minimize any potential negative environmental impacts in line with regulatory requirements.</p> <ul style="list-style-type: none"> Distribution of Impacts: The construction activities are not expected to disproportionately affect vulnerable or disadvantaged communities. In fact, the workforce consists of local farm workers, meaning that employment opportunities, albeit limited to the construction phase, will benefit local residents, particularly those engaged in farm labor. Development Location and Beneficiaries: The bridge is located to serve agricultural operations, but it is not positioned to directly address broader social inequities in the region. The benefits of this development, therefore, are primarily operational rather than social. <p>While these aspects are acknowledged, it is important to note that, given the nature and scale of the project, the alternatives considered were focused on selecting the best practicable environmental option for the specific purpose of the bridge's functionality. No further social equity considerations were deemed necessary for this limited scope</p>

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<ul style="list-style-type: none"> • 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? 	<p>The basic assessment was undertaken by an independent EAP and the relevant legislation was considered.</p> <p>Under South African environmental legislation, the Applicant is held accountable for the potential impacts of the activities that are undertaken once the EA is granted. The Applicant is responsible for managing these impacts throughout the development phases. And therefore, the Applicant has overall and total environmental responsibility to ensure that the approved EA and EMPr is adhered to, implemented and managed. The Applicant is also responsible for ensuring compliance with all other environmental and water related legislation.</p>
<ul style="list-style-type: none"> • What measures were taken to: <ul style="list-style-type: none"> ○ ensure the participation of all interested and affected parties, ○ provide all people with an opportunity to develop the understanding, skills and capacity necessary for achieving equitable and effective participation, ○ ensure participation by vulnerable and disadvantaged persons ○ promote community wellbeing and empowerment through environmental education, the raising of environmental awareness, the sharing of knowledge and experience and other appropriate means, ○ ensure openness and transparency, and access to information in terms of the process, ○ 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 	<p>One round of public participation will be undertaken as part of this BA process. The PPP will be undertaken in terms of the NEMA EIA Regulations, 2014 (as amended) and DEA&DP's Circular EADP 0028/2014 (dated 9 December 2014) on the "One Environmental Management System". Refer to Section F of the BAR for a detailed description of the PPP to be undertaken.</p> <p>Various methods will be used to notify potential I&APs of the proposed development and inform them of the opportunity to partake in the PPP. These methods include advertisements in a newspaper, site notices, written notification letters to the adjacent landowners, the owner and/or person in control of the site, and to the landowners and/or occupiers of the properties adjacent to the site.</p>

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<ul style="list-style-type: none"> o ensure that the vital role of women and youth in environmental management and development were recognised and their full participation therein were be promoted? 	
<ul style="list-style-type: none"> • 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)? 	<p>The development of the bridge is a small-scale infrastructure project aimed primarily at improving access for agricultural purposes. It does not directly address broader community interests.</p>
<ul style="list-style-type: none"> • What measures have been taken to ensure that current and/or future workers will be informed of work that potentially might be harmful to human health or the environment or of dangers 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? 	<p>Health and safety concerns will be addressed in the EMPr (Appendix H). The Contractor shall at all times observe the Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) and ensure adequate safety precautions on the site throughout the development phase. An Environmental Control Officer (ECO) must be appointed to monitor compliance with the EMPr during the construction phase. This will be a condition of the Environmental Authorisation</p>

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	however; the Applicant is responsible to ensure compliance with the EA and EMPr.
<ul style="list-style-type: none"> • Describe how the development will impact on job creation in terms of, amongst other aspects: <ul style="list-style-type: none"> ○ the number of temporary versus permanent jobs that will be created, ○ 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), ○ the distance from where labourers will have to travel, ○ the location of jobs opportunities versus the location of impacts (i.e. equitable distribution of costs and benefits), and ○ the opportunity costs in terms of job creation (e.g. a mine might create 100 jobs, but impact on 1000 agricultural jobs, etc.). 	<p>The proposal will make use of local farm labour. Consequently, the development does not lend itself to creating a lot of employment opportunities per se.</p>
<ul style="list-style-type: none"> • What measures were taken to ensure: <ul style="list-style-type: none"> ○ that there were intergovernmental coordination and harmonisation of policies, legislation and actions relating to the environment, and ○ that actual or potential conflicts of interest between organs of state were resolved through conflict resolution procedures? 	<p>All State Departments and Organs of State that have jurisdiction over the proposed development will be consulted during the PPP undertaken as part of the BA process.</p> <p>Consultation with the State Departments and Organs of State will assist in the coordination of policies, guidelines and legislation relating to the environment.</p>
<ul style="list-style-type: none"> • 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? 	<p>The overarching purpose of the BA process is to determine, assess and evaluate the consequences (positive and negative) of a proposed development on the receiving environment (i.e., living and non-living aspects). An iterative approach will be followed as part of this BA process, in order to achieve the key purpose of Environmental Impact Assessments, which is to identify solutions, approaches or options for development that best meets the Sustainable Development objectives. Throughout the BA process there will</p>

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	<p>be opportunities to constantly refine and adapt the development proposal to respond to these issues or concerns, in relation to the environmental factors.</p> <p>The PPP to be undertaken as part of this BA process will provide members of the public (or I&APs) with the opportunity to raise any environmental concerns related to the proposed development. All issues and concerns raised will be addressed during the BA process.</p>
<ul style="list-style-type: none"> • Are the mitigation measures proposed realistic and what long-term environmental legacy and managed burden will be left? • What measures were taken to ensure that the costs of remedying pollution, environmental degradation and consequent adverse health effects and of preventing, controlling or minimising further pollution, environmental damage or adverse health effects will be paid for by those responsible for harming the environment? 	<p>Mitigation measures described under Section I of the BAR were incorporated in the EMPr (Appendix H) and it will also become conditions of the environmental authorisation, should it be granted. The Applicant will be responsible for the implementation of and for compliance with the conditions of all environmental related approvals.</p>
<ul style="list-style-type: none"> • 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 in terms of socio-economic considerations? 	<p>A description of alternatives is provided in Section F of this report. These alternatives were assessed in the BAR – refer to Section I and Section H of the BAR.</p>
<ul style="list-style-type: none"> • 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? 	<p>Impacts and risks were assessed in the BAR – refer to Section I and Section H of the BAR.</p>