

A.	Impact Rating: Construction	Pre-Darling Brug & Waaboomsrivier Irrigation Boards: Water division structure, Pipelines, Canal Rehab																	
No.	ASPECT	IMPACT	WITHOUT MITIGATION					WITH MITIGATION					Short Description of Mitigation Measures						
			Probability	Extent	Duration	Magnitude	Receiving Environment	Without Mitigation Score (Baseline)	Probability	Extent	Duration	Magnitude	Receiving Environment	With Mitigation Score (Impact assessment)					
		Potential loss vulnerable or endagred vegetation (Breede Shale Fynbos- Least Threatened) and associated habitat	-4	-2	-4	-4	-1	-3	-1	-2	-2	-3	-1	-1,8	<p><b>No loss of Breede Shale Fynbos is expected as the area is disturbed</b></p> <p>*A suitably qualified ECO must be appointed; *All effort must be made to protect remaining buffer zone and its vegetation next to the stream; *When working in any remaining natural veld and next to the river, natural veld and riparian vegetation must be demarcated and access routes pre-determined; *Before any work is done physically demarcate the footprint of the proposed development &amp; access routes route and strictly prohibit any vehicles or construction related activities outside of the demarcated footprint area - This can be done with danger tape, which should be removed once the construction activities have been completed; *Ensure signs are put up reminding workers to stay on the existing roads; Indiscriminate cleaning of areas must be avoided; * All alien plants to be removed within the construction footprint and immediate surroundings; * An intergrated waste plan to be agreed upon and implemented; * Environmental Awareness training to be conducted with all workers; *Alien invasive plants to be removed in the footprint. In the riparian zone, alien vegetation must be done by hand, leaving the root system intact so that it can still bind the soil, the correct chemicals must be used to ensure the alien plant will die.</p>				

1	Botanical	Loss of CBAs/ESA's	-4	-2	-4	-4	-1	-3	-1	-2	-2	-3	-1	-1,8	<p><b>CBA/ESA are already highly compromised in the area;</b> Before any work is done physically demarcate the footprint of the proposed development &amp; access routes and strictly prohibit any vehicles or construction related activities outside of the demarcated footprint area; * Ensure signs are put up reminding workers to stay on the existing roads/ in the construction footprint; *Indiscriminate cleaning of areas must be avoided; * Environmental Awareness training to be conducted with all workers;*All effort must be made to protect remaining buffer zone and its vegetation next to the stream; *When working in any remaining natural veld and next to the river, natural veld and riparian vegetation must be demarcated and access routes pre-determined; *Alien invasive plants to be removed in the footprint. In the riparian zone, alien vegetation must be done by hand, leaving the root system intact so that it can still bind the soil, the correct chemicals must be used to ensure the alien plant will die.</p>
		Soil contamination from vehicles on site	-2	-2	-2	-2	-1	-1,8	-1	-2	-1	-1	-1	-1	-1,2

		Destabilisation of river banks from site prep and alien clearing	-4	-2	-4	-8	-2	-4	-2	-2	-2	-2	-2	-2	<p>Indiscriminate cleaning of areas must be avoided; * Environmental Awareness training to be conducted with all workers; *All efforts must be made to protect the remaining buffer zone and its vegetation next to the stream; *All alien invasive plant species within the footprint must be removed. In the riparian zone alien vegetation must be removed by hand, leaving the root system intact so that it can still bind the soil. However, where necessary the correct chemicals must be used to ensure that the alien invasive plant will die. *All effort must be made to protect remaining buffer zone and its vegetation next to the stream; *When working in any remaining natural veld and next to the river, natural veld and riparian vegetation must be demarcated and access routes pre-determined; *Alien invasive plants to be removed in the footprint. In the riparian zone, alien vegetation must be done by hand, leaving the root system intact so that it can still bind the soil, the correct chemicals must be used to ensure the alien plant will die.</p>
2	Water	Loss of riparian habitat	-4	-2	-4	-8	-2	-4	-2	-1	-4	-4	-2	-2,6	<p><b>The riparian habitats are already considered to be disturbed/deneutralised . To mitigate further disturbance:</b>*Before any work is done physically demarcate the footprint &amp; access routes and strictly prohibit any vehicles or construction related activities outside of the demarcated footprint area. * Ensure signs are put up reminding workers to stay on the existing roads. * Indiscriminate cleaning of areas must be avoided;* Environmental Awareness training to be conducted with all workers; *As a precautionary measure, importance must be given to emergency preparedness with regards to any spillages or leakage of hydrocarbons/ concrete on site; *Ready-mix concrete is proposed. *All effort must be made to protect remaining buffer zone and its vegetation next to the stream; *When working in any remaining natural veld and next to the river, natural veld and riparian vegetation must be demarcated and access routes pre-determined; *Alien invasive plants to be removed in the footprint. In the riparian zone, alien vegetation must be done by hand, leaving the root system intact so that it can still bind the soil, the correct chemicals must be used to ensure the alien plant will die.</p>

