ISSUE	DESCRIPTION OF IMPACT	NATURE OF IMPACT	SPATIAL SCALE (EXTENT)	TEMPORAL SCALE (DURATION)	CERTAINTY SCALE (PROBABILITY/ LIKELIHOOD)	SEVERITY / BENEFICIAL SCALE	SIGNIFICANCE PRE-MITIGATION	MITIGATION MEASURES	REVERSABILITY/ MITIGATION	SIGNIFICANCE POST-MITIGATION
CONSTRUCTION PHASE										
GENERAL IMPACTS										
VISUAL / SENSE OF PLACE	During construction, activities such as increased traffic and dust generation may temporarily negatively impact the visual aesthetics of the area, particularly if viewed from the seaward side of the proposed site. *Cumulative impact would be MODERATE should the proposed Zone 10 Power Plants be developed.* *No-go alternative would result however still result in a visual impact related to the current mining operation within the proposed LNG Hub location.*	**DIRECT**	**STUDY AREA**	**SHORT TERM**	**PROBABLE**	**SLIGHT**	**LOW -**	• *Disturbance to the natural vegetation to be kept to the minimum;* • *Dust control measures such as wetting and covering of stockpiles to be implemented when necessary; and* • *Effective waste management.*	*EASILY ACHIEVABLE*	**LOW -**
		CUMULATIVE	**STUDY AREA**	**SHORT TERM**	**POSSIBLE**	**SLIGHT**	**LOW -**		*ACHIEVABLE*	**LOW -**
		NO-GO	**STUDY AREA**	**SHORT TERM**	**PROBABLE**	**SLIGHT**	**LOW -**		DIFFICULT	**LOW -**
WASTE MANAGEMENT	During construction, the waste generated will largely be construction waste (rubble, cement waste, packaging, small amounts of hazardous materials), with small amounts of domestic waste from workers on-site. It is anticipated that on-site chemical toilets will be used for sanitation during construction, and it must be ensured that the contents thereof are properly disposed of. *Cumulative impact would be LOW as the surrounding environment is largely devoid of pollution, apart from sporadic illegal dumping along undeveloped plots along the R334 towards the N2 intersection.* . *No-go alternative would result in no impact related to general waste as the site does not currently experience issues regarding waste*	**DIRECT**	**LOCALISED**	**SHORT TERM**	**POSSIBLE**	**SLIGHT**	**LOW -**	• *A waste management plan incorporating recycling and waste minimisation must be implemented. The Waste Management Plan must be explained to all employees as part of the environmental induction training;* • *A waste management plan should be in place and should address classification of waste streams, segregation at source, control of waste on site before disposal, removal of wastes from site, and record keeping;* • *The Contractor must identify and separate materials that can be reused or recycled to minimise waste, e.g. metals, packaging and plastics, and provide separate marked bins/ skips for these items. These wastes must then be sent for recycling and records kept of recycling;* • *No disposal of wastes, other than at registered landfill sites;* • *No waste may be burned;* • *Sufficient portable on-site weather & vermin proof bins with lids need to be provided and appropriately placed and emptied regularly (contents to be disposed of at a licenced landfill site, and proof of disposal retained for auditing purposes);* • *Ensure that construction materials (e.g. bags of cement) are suitably stored and protected to avoid wastage;* • *All construction materials must be stored in a central and secure location with controlled access with an appropriate impermeable surface.* • *The recommendations of the Stormwater Management Plan must be implemented to mitigate the impacts of runoff water on pollution; and* • *Excess excavated material that cannot be used for backfill should not be allowed to accumulate on site and should be disposed of at a formal landfill site or suitable spoil site identified in conjunction with the ECO*	*EASILY ACHIEVABLE*	**LOW -**
		CUMULATIVE	**STUDY AREA**	**SHORT TERM**	**POSSIBLE**	**MODERATE**	**LOW -**		*ACHIEVABLE*	**LOW -**

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		NO-GO	**NO IMPACT**							
STORMWATER MANAGEMENT AND EROSION	Pollution of Soil and Stormwater, and increase in erosion due to vegetation clearing, earthworks and construction prescence. *Cumulative impact would be moderate as there are a range of activities, including roads, which contribute to erosion at localised levels. However, these activities are not prevalent in the area.* . *No-go alternative would still present a level of stormwater runoff and erosion due to the current mining activities and existing impermeable surfaces.*	**DIRECT**	**LOCALISED**	**SHORT TERM**	**POSSIBLE**	**MODERATE**	**LOW -**	*The recommendations of the stormwater management plan must be implemented to avoid soil erosion and siltation of drainage line;* *Disturbance of soil and the natural vegetation to be kept to the minimum;* *Use existing access tracks where possible;* *Handling of hazardous liquids over impermeable surfaces only to prevent leaks or spills; and* *An erosion control plan must be compiled by a suitably experienced specialist, outlining specific recommendations for stabilisation of dunes that are cleared or disturbed during construction. This must be compiled in conjunction with a revegetation plan by a suitably experienced specialist in coastal vegetation*	*EASILY ACHIEVABLE*	**LOW -**
		CUMULATIVE	**STUDY AREA**	**SHORT TERM**	**POSSIBLE**	**MODERATE**	**LOW -**		*ACHIEVABLE*	**LOW -**
		NO-GO	**LOCALISED**	**SHORT TERM**	**POSSIBLE**	**SLIGHT**	**LOW -**		*ACHIEVABLE*	**LOW -**
HERITAGE	Damage or destruction to heritage resources on the site may occur due to earthworks and excavations during construction or during maintenance activities, both of marine and onshore infrastructure. *Cumulative impact, on a localised scale, would be high as the area does contain illegal dump sites, at times. These sites are located to the west of the site and not on the site itself.* *No-go alternative would still present a risk of disturbance or destruction of heritage resources through the current mining operations at the proposed LNG and Gas Hub location.*	**DIRECT**	**LOCALISED**	**SHORT TERM**	**POSSIBLE**	**MODERATE**	**LOW -**	*An archaeologist must be present on-site during vegetation clearing of selected strips of vegetation (to be identified by the archaeologist). Clearing must be by small machinery, or the least invasive method of clearing.* *Monitoring by an archaeologist must take place during all earthmoving activities, including, but not limited, to trenching and piling.* *If any concentrations of heritage material / fossils are exposed during construction, all work in that area must cease and it must be reported immediately to the Albany Museum so that the required investigations can be undertaken. This could entail Phase 2 mitigation (to be determined by the Albany Museum).* *After vegetation clearing a report must be sent to SAHRA for review and guidance on the way forward.* *Any excavations in the Salnova formation must be examined and sampled by a professional palaeontologist WHILE fresh bedrock is still exposed. The presence of a palaeontologist is required on site soon after exposure.* *Should historic remains be uncovered during construction of the port infrastructure , all works must cease until SAHRA has been contacted to advise the way forward*	*DIFFICULT*	**LOW -**
		CUMULATIVE	**STUDY AREA**	**SHORT TERM**	**POSSIBLE**	**MODERATE**	**LOW -**		*DIFFICULT*	**LOW -**
		NO-GO	**STUDY AREA**	**SHORT TERM**	**POSSIBLE**	**MODERATE**	**LOW -**		*DIFFICULT*	**LOW -**
DUST	Dust is likely to be a potential nuisance due to the construction activities. *Cumulative impact would be moderate should the adjacent sites be developed simultaneously. Improper management of a neighbouring sites would exacerbate the impact.* . *No-go alternative would still present a risk of dust nuisance through the current mining operations and transportation of material at the proposed LNG and Gas Hub location..*	**DIRECT**	**STUDY AREA**	**SHORT TERM**	**PROBABLE**	**SLIGHT**	**LOW -**	*Clear vegetation in a phased manner;* *Areas to be cleared of vegetation or topsoil shall be cleared only when required, and shall be rehabilitated immediately on completion of the construction activity in that area;* *Access roads should be kept to a minimum and their length and width should be minimised to reduce the surface area from which dust can be generated;* *When transporting fine materials, dust tarps should be installed on vehicle;* *Limit speeds on access and internal roads;*	*ACHIEVABLE*	**LOW -**
		CUMULATIVE	**STUDY AREA**	**SHORT TERM**	**POSSIBLE**	**MODERATE**	**MODERATE -**		*ACHIEVABLE*	**LOW -**
		NO-GO	**STUDY AREA**	**LONG TERM**	**PROBABLE**	**SLIGHT**	**LOW -**		*DIFFICULT*	**LOW -**

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								• *When necessary, appropriate dust control measures (such as wetting of soil and covering of stockpiles) shall be implemented;* • *Maintain a complaints register to monitor levels of nuisance experienced by neighbours and respond to complaints by increasing the frequency and/or intensity of the dust suppression.* • *Fugitive/nuisance dust must be reduced by implementing one of or a combination of the following:* ▪ *Damping down of un-surfaced and un-vegetated areas* ▪ *Retention of vegetation where possible* ▪ *Excavations and other clearing activities must only be done during agreed working times and permitting weather conditions to avoid drifting of sand and dust into neighbouring area* ▪ *A speed limit of 40km/h must not be exceeded on dirt roads* • *Any complaints or claims emanating from the lack of dust control must be attended to immediately by the Contractor.*		
FIRE	Risk of runaway fires from construction activities related to having people on site, such as cooking, smoking or burning of vegetation might lead to the burning of surrounding vegetation.. *Cumulative impact is LOW due to the temporary nature of the risk during construction and is dependent on the simultaneous construction within the SEZ and the perceived cumulative increase in ignition risks. . .* *No-go alternative would, apart from the existing woody alien fuelwood on site, not increase the risk of ignition and subsequent veld fires, and the no-go impact is therefore considered low.*	**DIRECT**	**STUDY AREA**	**SHORT TERM**	**UNLIKELY**	**SEVERE**	**MODERATE -**	• *No fires on or around the site allowed;* • *Sufficient fire-fighting equipment to be maintained and be accessible on sites at all times; and* • *Any incidents or accidents must be recorded, and a record thereof must be kept on site.* • *There must be no burning of construction waste or debris onsite.* • *Cooking and burning of vegetation is not permitted on site.* • *Smoking on site must be confined to a designated area in the vicinity of the site office which must be equipped with the necessary fire extinguishers.*	*ACHIEVABLE*	**LOW -**
		CUMULATIVE	**STUDY AREA**	**SHORT TERM**	**UNLIKELY**	**SEVERE**	**MODERATE -**		*ACHIEVABLE*	**LOW -**
		NO-GO	**STUDY AREA**	**MEDIUM TERM**	**UNLIKELY**	**MODERATE**	**LOW -**		*ACHIEVABLE*	**LOW -**
DAMAGE TO OTHER INFRASTRUCTURE	While the project layout is intended to fit into the existing or yet to be developed services infrastructure in the sez, there is a potential remains for damage to existing services infrastructure (both underground and above ground) during excavation and other construction related activities. This may result in temporary disruptions to these services, affecting other tenants in the sez. *Cumulative impact would be moderate if the disruption of infrastructure / services results in further cumulative disruptions for surrounding tenants / landowners* . *No-go alternative would have no impact*	**DIRECT**	**STUDY AREA**	**SHORT TERM**	**UNLIKELY**	**MODERATE**	**LOW -**	• *Existing infrastructure and services within or close to the construction footprint are to be located (via GPR if necessary) and demarcated prior to construction activities commencing;* • *Relevant authority agencies and/or Department of the service supplied are to be notified should existing infrastructure be damaged by construction related activities; and* • *Other users are to be notified of any planned disruptions to services ahead of time.*	*EASILY ACHIEVABLE*	**LOW -**
		CUMULATIVE	**MUNICIPAL**	**SHORT TERM**	**UNLIKELY**	**MODERATE**	**LOW -**		*ACHIEVABLE*	**LOW -**
		NO-GO	**NO IMPACT**							
OPERATIONAL PHASE										
GENERAL IMPACTS										
VISUAL	While the LNG and Gas Hub site is sheltered to an extent from sensitive receptors along the N2 and inland, opportunities for visual screening may be limited for receptors along the coast and for offshore viewers (such as visitors to the MPA).	**DIRECT**	**STUDY AREA**	**LONG TERM**	**DEFINITE**	**SLIGHT**	**LOW -**	• *Effective waste management; and* • *Disturbance to the natural vegetation to be kept to the minimum;*	*DIFFICULT*	**LOW -**

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	Cumulative impact would be MODERATE should the proposed Zone 10 Power Plants be developed. *No-go alternative would result however still result in a visual impact related to the current mining operation within the proposed LNG Hub location.*	**CUMULATIVE**	**STUDY AREA**	**LONG TERM**	**DEFINITE**	**MODERATE**	**MODERATE -**		*DIFFICULT*	**MODERATE -**
		NO-GO	**STUDY AREA**	**MEDIUM TERM**	**DEFINITE**	**SLIGHT**	**LOW -**		*DIFFICULT*	**LOW -**
WASTE MANAGEMENT	During operation, waste generated by the LNG and Gas Hub, FSRU and associated facilities could result in the impacts mentioned above if not adequately managed. Waste entering the stormwater system may also result in blockages and downstream contamination. *Cumulative impact would be LOW as the surrounding environment is largely devoid of pollution, apart from sporadic illegal dumping along undeveloped plots along the R334 towards the N2 intersection.* *No-go alternative would result in no impact related to general waste as the site does not currently experience issues regarding waste.*	**DIRECT**	**LOCALISED**	**SHORT-TERM**	**POSSIBLE**	**SLIGHT**	**LOW -**	• *A waste management plan incorporating recycling and waste minimisation must be implemented. The Waste Management Plan must be explained to all employees as part of the environmental induction training;* • *The developer must identify and separate materials that can be reused or recycled to minimise waste e.g. metals, packaging and plastics, and provide separate marked bins/ skips for these items. These wastes must then be sent for recycling and records kept of recycling;* • *No dumping within the surrounding area shall be permitted, and no waste may be buried or burned on site;* • *Sufficient portable on-site weather & vermin proof bins with lids need to be provided and appropriately placed and emptied regularly (contents to be disposed of at a licenced landfill site, and proof of disposal retained for auditing purposes);* • *Cleared alien vegetation should be disposed of so that it does not re-establish on site;* • *Regular (weekly) waste collection service to be provided; and* • *All staff shall be trained on correct waste management.*	*EASILY ACHIEVABLE*	**LOW**
		CUMULATIVE	**STUDY AREA**	**SHORT-TERM**	**POSSIBLE**	**SLIGHT**	**LOW -**		*EASILY ACHIEVABLE*	**LOW -**
		NO-GO	**NO IMPACT**							
STORMWATER MANAGEMENT AND EROSION	An increase in the extent of hardened surfaces from the development will increase the impermeable surface area and lead to reduced ground absorption of stormwater and increased surface water runoff. This will result in an increase in the quantity and velocity of stormwater leaving the site and could result in soil erosion and downstream sedimentation impacts if there is improper storm water management design. *Cumulative impact would be moderate as there are a range of activities, including roads, which contribute to erosion at localised levels. However, these activities are not prevalent in the area.* *No-go alternative would still present a level of stormwater runoff and erosion due to the current mining activities and existing impermeable surfaces.*	**DIRECT**	**STUDY AREA**	**LONG TERM**	**UNLIKELY**	**SLIGHT**	**LOW -**	• *Recommendations of the Stormwater Management Plan must be implemented;* • *Implementation of a site specific stormwater management plan, in accordance with the CDC's overarching stormwater management strategy for the SEZ, to ensure stormwater exiting the site meets the requirements in terms of quality and volume;* • *Harvesting of rainwater and stormwater where possible for use on site;* • *Separation of clean and dirty stormwater on site and treatment of dirty stormwater prior to discharge; Ensure all storage and handling of hazardous liquids takes place over an impermeable surface to capture any leaks or spills for disposal or further treatment; and* • *Include bunding to at least 110% of storage capacity around all fuel and chemical storage vessels where appropriate to do so, to capture any spills / leaks.*	*EASILY ACHIEVABLE*	**LOW -**
		CUMULATIVE	**STUDY AREA**	**LONG TERM**	**UNLIKELY**	**MODERATE**	**MODERATE -**		*EASILY ACHIEVABLE*	**LOW -**
		NO-GO	**STUDY AREA**	**LONG TERM**	**UNLIKELY**	**SLIGHT**	**LOW -**		*EASILY ACHIEVABLE*	**LOW -**
DECOMMISSIONING PHASE										
GENERAL IMPACTS										

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POLLUTION	Littering by construction workers could cause surface and ground water pollution. *Cumulative impact, on a localised scale, would be moderate as the area does contain illegal dump sites, at times. These sites are located to the west of the site and not on the site itself.* *No-go alternative would result in no impact related to general waste as the site does not currently experience issues regarding waste.*	**DIRECT**	**STUDY AREA**	**SHORT TERM**	**POSSIBLE**	**MODERATE**	**MODERATE -**	• *Littering must be avoided, and litter bins must be made available at various strategic points on site.* • *Refuse from the construction site must be collected on a regular basis and deposited at an appropriate landfill.*	*EASILY ACHIEVABLE*	**LOW -**
		CUMULATIVE	**STUDY AREA**	**SHORT TERM**	**POSSIBLE**	**MODERATE**	**MODERATE -**		*EASILY ACHIEVABLE*	**LOW -**
		NO-GO	**NO IMPACT**							
	Onsite maintenance of construction vehicles/machinery and equipment could result in oil, diesel and other hazardous chemicals contaminating surface and ground water. Surface and ground water pollution could arise from the spillage or leaking of diesel, lubricants and cement during construction activities. *Cumulative impact would be null as no other new activities, which include the use of hazardous substances are planned for this site (localised impact).* *No-go alternative would result in no impact related to hazardous waste as the site does not currently experience issues related to hazardous substances.*	**DIRECT**	**STUDY AREA**	**SHORT TERM**	**POSSIBLE**	**MODERATE**	**MODERATE -**	• *No storage of fuels and hazardous materials must be permitted near sensitive water resources. All hazardous substances (e.g. diesel, oil drums, etc.) to be stored in a bunded area.*	*EASILY ACHIEVABLE*	**LOW -**
		CUMULATIVE	**NO IMPACT**							
		NO-GO	**NO IMPACT**							
DUST	Dust is likely to be a potential nuisance due to the decommissioning activities. *Cumulative impact would be low should the neighbouring proposed Zone 10 Power Plants start decommissioning at the same time as the proposed Coega Gas Infrastructure. Improper management of a neighbouring site would exacerbate the impact.* *No-go alternative would result in no impact related to construction nuisance dust as no other decommissioning activities should be taking place on the site, that we are aware of.*	**DIRECT**	**LOCALISED**	**SHORT TERM**	**PROBABLE**	**SLIGHT**	**LOW -**	• *Fugitive/nuisance dust could be implemented through the following:* ▪ *Damping down of un-surfaced and un-vegetated areas;* ▪ *Retention of vegetation where possible; Demolitions and other clearing activities must only be done during agreed working times and permitting weather conditions to avoid drifting of sand and dust into neighbouring areas;* ▪ *A speed limit of 40km/h must not be exceeded on dirt roads.* • *Any complaints or claims emanating from the lack of dust control must be attended to immediately by the Contractor.*	*EASILY ACHIEVABLE*	**LOW -**
		CUMULATIVE	**LOCALISED**	**SHORT TERM**	**PROBABLY**	**SLIGHT**	**LOW -**		*EASILY ACHIEVABLE*	**LOW -**
		NO-GO	**NO IMPACT**							
TRAFFIC & TRANSPORT	A high number of heavy vehicle movements will occur during the decommissioning phase. This may have a detrimental effect on sensitive receptors. *Cumulative impact would be moderate should the neighbouring proposed WEF (Plan 8) start decommissioning at the same time as the proposed Albany WEF. Improper management of a neighbouring site would exacerbate the impact.* *No-go alternative would result in no impact related to traffic and transport as no other decommissioning activities should be taking place on the site, that we are aware of.*	**DIRECT**	**LOCALISED**	**SHORT TERM**	**POSSIBLE**	**MODERATE**	**MODERATE -**	• *Construction vehicles and machinery must make use of existing infrastructure such as roads as far as possible to minimise disturbance on the receiving environment.*	*ACHIEVABLE*	**LOW -**
		CUMULATIVE	**LOCALISED**	**SHORT TERM**	**POSSIBLE**	**MODERATE**	**MODERATE -**		*ACHIEVABLE*	**LOW -**
		NO-GO	**NO IMPACT**							
SOIL EROSION	After the removal of all wind turbine related structures, the disturbed soils could become exposed, unstable and prone to erosion.	**DIRECT**	**LOCALISED**	**SHORT TERM**	**POSSIBLE**	**MODERATE**	**MODERATE -**	• *After the removal of all wind turbine-related structures, the disturbed soils must be re-vegetated to avoid unnecessary soil erosion.*	*EASILY ACHIEVABLE*	**LOW -**

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	Cumulative impact would be moderate should the neighbouring proposed Zone 10 Power Plants start decommissioning at the same time as the proposed Gas Infrastructure. Improper management of a neighbouring site would exacerbate the impact.	**CUMULATIVE**	**LOCALISED**	**SHORT TERM**	**POSSIBLE**	**MODERATE**	**MODERATE -**		*EASILY ACHIEVABLE*	**LOW -**
	No-go alternative would result in no impact related to soil erosion as a result of turbine removal as no other WEFs are planned on this site.	**NO-GO**	**NO IMPACT**							
LAND-USE	Land previously unavailable for certain types of land use will now be available for those uses.	**DIRECT**	**LOCALISED**	**LONG TERM**	**POSSIBLE**	**MODERATE**	**LOW +**	*No mitigation necessary*	*ACHIEVABLE*	**LOW +**
	Cumulative impact would be moderate should the neighbouring proposed WEF (Plan 8) start decommissioning at the same time as the proposed Albany WEF. This will result in a higher portion of land returning to the status quo.	**CUMULATIVE**	**LOCALISED**	**LONG TERM**	**POSSIBLE**	**MODERATE**	**LOW +**		*ACHIEVABLE*	**LOW +**
	No-go alternative would result in no impact as the site will return to what it was used for before, i.e. the current status quo.	**NO-GO**	**NO IMPACT**							