

4.5

REMAINDER OF FARM KLIPFONTEYN 711, DIVISION CALEDON, OVERSTRAND MUNICIPAL AREA: APPLICATION FOR AMENDMENT OF A SITE DEVELOPMENT PLAN, AMENDMENT OF CONDITIONS OF APPROVAL, CONSENT USE AND DEPARTURE: MESSRS PLAN ACTIVE TOWN- AND REGIONAL PLANNERS ON BEHALF OF IRVIN AND JOHNSON LTD

Rem 711 GRCAL (3330/2019)

SW van der Merwe
29 May 2023

(028) 313 8900

Hermanus Administration

1. EXECUTIVE SUMMARY

An application was received from Plan Active on behalf of Irvin & Johnson Ltd (I&J) on Remainder of Farm Klipfontein No. 711, Division Caledon in terms of the Overstrand Municipal Land Use Planning By-Law, 2015 (By-Law) for the following:

- ❖ **amendment of a site development plan** in terms of Section 16(2)(l) of the By-Law to accommodate the existing abalone farm as well as proposed expansion;
- ❖ **amendment of conditions of an existing approval** in terms of Section 16(2)(h) of the By-Law;
- ❖ **consent use** in terms of Section 16(2)(o) of the By-Law to accommodate agricultural industry (processing of abalone) and renewable energy infrastructure;
- ❖ **departure** in terms of Section 16(2)(b) of the By-Law to exceed the maximum permitted floor space from 5000m² to 21294,50m²;
- ❖ **departure** in terms of Section 16(2)(b) of the parking ratio from 331 on-site parking bays to 236 on-site parking bays, and
- ❖ **departure** in terms of Section 16(2)(b) of the By-Law for building line relaxation as follows:
 - eastern lateral building line from 30m to 15m to accommodate a substation and security building;
 - southern lateral building line from 30m to 5,8m to accommodate a security building and filling higher than 1m, and
 - western lateral building line from 30m to 13m to accommodate a lapa.

A Locality Plan of the property concerned is attached as Annexure A. The Motivation Report from the applicant in support of the proposal is attached as Annexure B. The Site Development Plan (SDP) is attached as Annexure C and the Environmental Authorisation (EA) attached as Annexure D.

2. DECISION AUTHORITY

Municipal Planning Tribunal

3. BACKGROUND / SITE HISTORY

The application property is situated on the Dangerpoint Peninsula, 8km southwest of Gansbaai. The property measures 253,5405ha in extent, zoned for agricultural purposes and developed with an abalone farm. Access to the property is obtained via Marine Drive, Birkenhead. Surrounding properties are zoned for agriculture, single residential, group housing and tourist facility purposes.

The property owner obtained consent use to conduct an abalone farm dated 7 October 1991. On 23 March 1992 condition 2.(iv) of the former approval had been amended requiring the remainder of the property that comprises of Overberg Dune Strandveld to be managed (opposed to be declared) as a nature reserve. The abalone farm on the property is operational since 1998. Currently the developed footprint amounts to ± 10 ha.

Since 1998 the abalone farm had been extended in accordance with approved building plans. Save for a concept SDP that accompanied that 1991 application there is not a formal approved SDP in terms of planning legislation, which is addressed as part of the application.

The abalone farm reached its full production capacity of 500t p/a during 2016. Abalone currently is either packed on the farm or transported to and processed at an existing processing plant in Hermanus. The application entails expansion of the current operations from 500t p/a to 1700t p/a, the establishment of an abalone processing facility (initially in an existing building (temporary facility) and later when demand justifies in a separate building) as well as a solar panel platform in accordance with approved Environmental Authorisations dated 8 March 2019 (abalone farm expansion and solar platform), 11 June 2019 (processing facility) and 15 December 2020 (temporary processing facility).

Having had regard to the background above, the application entails approval of a SDP, amendment of conditions of approval firstly to accommodate the existing development as well as proposed expansion of the abalone farm in three phases (34ha), a photo photovoltaic pv plant (2,5ha) and new access road (1,5ha) and construction footprint (2ha) set out as follows:

Phase 1 (developed footprint 15ha)

Phase one will cater for an addition 600t p/a abalone production including the following:

- seawater intake;
- eight abstraction pipelines feeding a pumphouse;
- delivery pipelines from pumphouse to header tank;
- 6ha grow out platform with abalone tanks, seaweed production ponds, sump and recirculation facility;
- effluent channel / discharge pipeline from grow-out platform to coast, and
- associated buildings (offices, stores, ablutions, blower rooms, grading areas, pack house, workshop, basket cleaning, work areas (kelp processing)).

Phase 2 (developed footprint 11ha)

Phase 2 will cater for an additional 300t P/A production with infrastructure similar to phase 1. Additional infrastructure will include:

- seawater intake, pump house and eight delivery pipelines;
- delivery pipelines to elevated header tanks (2000m² in total);
- 6ha grow-out platform for abalone tanks, seaweed production ponds, sumps and recirculation facility / tank;
- 300m effluent discharge pipeline / effluent channel, and

- associated buildings (offices, stores, ablutions, blower rooms, grading areas, basket cleaning area and work areas (kelp processing)).

Phase 3 (developed footprint 8ha)

Phase 3 will cater for an additional 300t P/A production and will include the following:

- seawater for this phase will be supplied from phase 2 infrastructure (including intake, delivery pipes and header tanks);
- 6ha grow-out platform for abalone tanks, seaweed production ponds, sumps and recirculation facility / tank, and
- 200m effluent discharge pipeline / channel.

Agri-industry (abalone processing)

Currently abalone is transported to Hermanus for processing. The proposed development will increase production capacity of the farm from 500t p/a to 1700t p/a. Due to increased threat of hijacking it is proposed to establish an abalone processing facility on-site. The processing facility will be situated inside the farm security area and measures 4000m² in extent. The building will have a footprint of 60m by 50m with a GLA of 3000m². The facility comprises processing areas, store, diesel fired boiler, off-loading and parking areas with a new access from Van Blommenstein Street.

The facility will have a production capacity of \pm 350t (sale weight) with only fresh abalone produced on the Danger point farm to be processed. Waste will be frozen and sold to turn into fertilised or alternatively disposed off at an approved refuse facility. Sewage disposal to occur via municipal treatment facility or on-site package plant. There will be no effluent discharge from processing plant to the sea.

Following the public participation process the applicant indicated that due to the impact of covid the proposed agri-industry facility is to be housed within an existing building on the premises for a temporary period until market conditions justifies the development of the proposed abalone processing facility as shown on the SDP. This is considered a minor amendment however it was recirculated to the objectors and relevant internal- and government departments for comment to which not further objections were received. A separate EA for the temporary agri-industry facility had been issued, being considered a non-substantive amendment to the original approved EA.

Utility services (photo voltaic plant)

Proposal comprises a 2,5ha photo voltaic plant (pv plant) with a capacity of up to 10MW to offset the farms electricity use.

The PV facility will be located on a ridge, have a relatively low profile and is not considered visually intrusive (as per the VIA), following implementation of mitigation measures.

Having had regard to the above the application is set out as follows:

- ❖ amendment of the SDP to accommodate the existing abalone farm as well as proposed expansion;
- ❖ amendment of the conditions of approval dated 7 October 1991 to accommodate 4 additional security huts / labourers cottages;

- ❖ consent use to accommodate renewable energy infrastructure (photo voltaic plant) and agricultural industry (abalone processing facility);
- ❖ departure to exceed the maximum permitted floor space from 5000m² to 21294,50m²;
- ❖ departure of the parking ratio from 331 on-site parking bays to 236 on-site parking bays;
- ❖ departure of the southern and western lateral building lines from 30m to 18m and 13m to accommodate an existing guard house (SDP building 18) and lapa, and
- ❖ proposed departures to accommodate the following:
 - eastern lateral building line from 30m to 15m to accommodate a security building and substation (SDP buildings 24 and 25);
 - southern lateral building line from 30m to 5,8m to accommodate a pumphouse, and
 - southern lateral building line infill more than 1m above natural ground at the phase 7B platform within the building line.

4. SUMMARY OF APPLICANT'S MOTIVATION

Only the main points of motivation area summarised as follows (the detailed report is attached as Annexure B):

- ❖ Aquaculture in SA is identified as a critical growth industry, contributing to economic growth, and providing employment opportunities.
- ❖ Aquaculture production in Overberg contributes significantly to the sector and economic growth of SA.
- ❖ Proposed expansion will contribute to the aforesaid growth (economic and employment creation)
- ❖ The proposed expansion is located on the southern portion of the property close to the existing operations.
- ❖ Location took in account pumping costs, topography, and distance from sensitive receptors.
- ❖ Proposed extension area is situated in a low-lying dune slack behind an existing dune ridge line.
- ❖ Proposed abalone processing facility will be situated to the south adjacent the above extension area, whilst lowering of the platform and minimised roof height will mitigate potential impacts.
- ❖ Environmental approvals had already been obtained, thus considered impact on biophysical, heritage, visual, services, traffic, and noise impacts favourable.
- ❖ The proposed departures will not impact upon vested rights of adjoining property owners, views and visual impact is kept to a minimum.
- ❖ The encroachment of the existing floor space restriction of 5000m² to 21294,50m² is in line with the use rights for aquaculture on the property and required for an improved abalone farm.
- ❖ Ample parking areas exist on the property whilst excessive parking areas will be to the detriment of the environment.
- ❖ Application of the parking ratio for agri-industry as per the new Ovestrand Land Use Scheme will not be detrimental to the potential of the property or the proposed expansion.
- ❖ Environmental Authorisation considered impact on the natural and biophysical environment.
- ❖ Employment opportunities will be created both direct and indirect.
- ❖ Character of the area will not be adversely impacted upon, subject to application of mitigation measures as per EA and Visual Impact Assessment (VIA).

- ❖ The proposal will result in increased exportation and influx of foreign currency.
- ❖ Positive social impact – i.e. provision of unskilled employment opportunities for local community, skills development improved education in line with I&J corporate policies.
- ❖ Contribute to reduction of unemployment and poverty.
- ❖ Presence of I&J act as deterrent for poaching along this stretch of coastline.
- ❖ Processing plant will strengthen economic viability of the farm, provides additional employment opportunities, risk of hijacking will be minimised, remainder of the property is managed as a conservation area.
- ❖ PV plant is located between phase 1 and 2 development footprints and will be placed above the proposed abalone tanks. The arrays although situated on a ridge will have low profile and would not be visually intrusive as per the VIA.
- ❖ Electrical capacity for expansion is available subject to network upgrade and Eskom capacity increases.
- ❖ Electrical demand will be offset by the development of a photo voltaic plant of 10MVA (MW).
- ❖ Floor space encroachment is required as a result of the operational requirements and abalone farm expansion in order to improve operational efficiency and meeting market demand.
- ❖ Proposal will be operated in accordance with industry norms and standards and will not negatively impact natural vegetation or result in fragmentation of agricultural land.
- ❖ Amendment of conditions of approval to permit 4 labourer's cottages / security buildings for skeleton staff and required for security purposes.
- ❖ Existing and proposed building line encroachments are accommodated in the EA and will not impact upon vested rights or area character.
- ❖ Character of the environment: With implementation of mitigation measures the proposal will not unacceptably impact on the area character and heritage / scenic qualities. The proposal will not be out of character with the surroundings whilst only some roofs will be marginally visible. The existing farm already altered the coastal character.
- ❖ Economic impact: Consistent with and supports national policy framework for aquaculture development in SA. Proposal in line with planning policies on regional level and will contribute to stimulation of direct and indirect employment opportunities also benefitting the local community, economic development, increased exposition and inflow of foreign currency.
- ❖ Social impact: I&J is a large employer with Gansbaai / Hermanus with a permanent staff complement of 220 people, the majority being historic disadvantaged individuals. The proposed expansion project will create 265 additional jobs / 3% increase in the area, skills development and education in line with company corporate strategy. Security provided by I&J on premises also serves to curb / reduce abalone poaching.
- ❖ Impact on engineering Services - Electricity: Current electrical supply to be upgraded to cater for expansion subject to network upgrades and Eskom capacity increases. A PV plant will be developed of 10MW to offset electricity use of the abalone farm. Domestic power supply to the farm will be provided from existing sources.
- ❖ Sewage: Sewage and wastewater (greywater) will be collected in conservancy tanks and be removed via honeysucker to the Gansbaai Wastewater Treatment works. Greywater will be collected and used for toilet and irrigation purposes during post construction rehabilitation and ongoing vegetation management.

- ❖ Water supply: The existing bulk water supply had been upgraded and is sufficient to accommodate the proposed development. Domestic water for abalone facility and processing facility will be supplied from existing services on the farm. Development proposal provides for seawater intakes and outlets as part of the EA. Effluent discharge to the sea takes place via seaweed production ponds removing excess nutrients in accordance with an effluent discharge permit and a monitoring programming. Seaweed also serves as food for abalone. Domestic effluent from the temporary processing facility will be discharged via existing conservancy tanks on the farm.
- ❖ Stormwater reticulation: The necessary on-site stormwater management measures will be implemented by the applicant.
- ❖ Solid waste: The sufficient capacity at the municipal waste facility for construction phase waste. Waste from processing facility will be turned into fertilizer and / removed to an approved waste facility.
- ❖ Traffic impact, parking and access: Current access to I&J occur via Marine Drive. Proposal entails creation of a new 2,5m access road off Van Blommenstein Street, Birkenhead aligned with the existing power line on the I&J property used by vehicles more than 2 ton. A berm will be created acting to reduce noise and visual impact. Vehicles below 2 ton will use the existing Marine Drive access in accordance with the recommendations in the TIA.
- ❖ Conveyancing certificate confirms there is no title deed restriction prohibiting the proposed land use.
- ❖ Proposal is consistent with the PSDF and MSDF.
- ❖ Proposal is consistent with the Overstrand Strategic Environmental Management Framework, 2014.
- ❖ Heritage Impact Assessment was conducted as part of the EIA process considering the heritage value and impact of the proposal and incorporated in the EA approval conditions.
- ❖ Proposal complies with the spatial planning policies applicable to the area.
- ❖ The proposal is consistent with the planning principles in terms of LUPA and SPLUMA.

5. ADMINISTRATIVE COMPLIANCE

Methods of advertising		Date published	Closing date for comments
Advertisement	Yes	08 November 2019	13 December 2019
Notices	Yes	08 November 2019	13 December 2019
Internal Department	Yes	08 November 2019	13 December 2019
Ward councillor	Yes	08 November 2019	13 December 2019
Total comments	Three (3)		
Was public participation undertaken in accordance with Section 46 - 50 of the By-Law on Municipal Land Use Planning?			Yes
Was the application processed correctly? (if no, elaborate below):			Yes
Is the proposal consistent with the principles referred to in Chapter 2 of SPLUMA and Chapter VI of LUPA?			Yes

6. SUMMARY OF COMMENTS FROM ORGANS OF STATE AND/OR MUNICIPAL DEPARTMENTS

Name	Date received	Summary of comments.
Department of Transport and Public Works	05/11/2019	Attached as Annexure I.
Telkom	05/12/2019	Attached as Annexure J.
Fire Services	13/11/2019	No objection. Structures to comply to the National Fire Protection Regulations SANS-T:2011 and community fire safety By-Law.
Breede-Gouritz Catchment Management Agency	23/12/2019	Attached as Annexure K.
Environmental Section	16/01/2020	No objection.
Heritage Western Cape	17/01/2020	Attached as Annexure L.
Department of Environmental Affairs and Development Planning: <i>Development Planning</i>	30/01/2020	Attached as Annexure M.
Department of Agriculture (Provincial)	06/02/2020	No objection.
Fire Services	28/07/2022	Attached as Annexure N.
Waste Management	05/08/2022	Attached as Annexure O.
District Health	30/08/2022	Attached as Annexure P.
Services Report	22/09/2022	Attached as Annexure Q.
CapeNature	28/09/2022	Attached as Annexure R.

7. SUMMARY OF COMMENTS RECEIVED DURING PUBLIC PARTICIPATION

Three objections were received from C Kruger and J Koen, owners of Erf 6 Birkenhead, AP Spengler on behalf of Everal CC, owner of Erf 5, Birkenhead and Dr AM Louw, owner of Erf 9 Birkenhead. The objections are attached as Annexure G and response from the applicant is attached as Annexure H.

Following the closure of the public participation process the applicant indicated that I&J do not intend to commence with the proposed agri-industry (abalone processing) until such time that the marked demand requires development thereof. In the interim it is proposed to accommodate the facility within an existing building on the premises. The proposal is considered a non-substantive amendment and was circulated to the objectors and effected in and external departments. No further objections or comments were received.

The main grounds of objection are summarised below followed by the applicant's response and town planners' response after each point of objection.

One of the objectors (C Kruger & J Koen) could not find a copy of the zoning certificate in the notice of the application she received.

Response from applicant

A copy of the zoning certificate dated 20 June 2013 is available on request.

Response from town planner

The zoning certificate was appended to the application. In terms of the By-Law there is no requirement for a zoning certificate to be distributed to interested and affected parties as part of the public participation process. The application was advertised in the local media whilst registered notices were served on interested and affected parties clearly indicating where further information regarding the application could be obtained from.

The objectors are against the proposed new road since the suggested road will border their property which will have serious noise, pollution, and security implications. One of the objectors (C Kruger and J Koen) objects to the departure from 30m to 15m to accommodate the development of the road on their erf boundary. They do not object to the departure from 30m to 15m to accommodate the substation and security building on the eastern farm boundary. They want the road to be constructed on the 30m building line. According to the objectors no berm will dampen or mitigate the noise and pollution from the heavy vehicles visiting the farm on a 12-hourly cycle.

Response from applicant

Firstly, a road can be constructed within a building line and no departure / deviation from the zoning scheme regulations' building lines are required for the new extension of Van Blommenstein Street. It is evident that the objectors failed to understand this. The objectors did not object to the actual departure applied for on the eastern farm boundary to accommodate the substation and security building.

The only existing access to Danger Point I&J is along the existing Marine Drive. The road is narrow and the restricted road verges do not present the opportunity to widen the road. If one considers the problems already experienced and recorded during the environmental impact assessment processes, there is no doubt that an alternative access via Van Blommenstein Street is urgently required to allow all vehicles heavier than two tons to make use of this alternative road.

Due to the continuous current existing transport access complaints by residents on the Marine Drive access and those also raised during the impact assessment process for the abalone processing facility and expanded abalone farm, I&J have decided to upgrade a new access road along Van Blommenstein Street and along an existing twin-track running along the eastern I&J border fence to gain access to the facility. This road is planned to be 6 metres (not 4 metres - as per the revised Environmental Authorization issued) with regular by-pass sections to allow for traffic flow. Vehicles smaller than two tons will use Marine Drive and those heavier than two tons will use the access via Van Blommenstein Street.

Based on the above, the alternative ways of access have been assigned a ranking ranging from “most preferred” (3) to “least preferred” (1) (see Table 2 below). The two Van Blommenstein alternatives are scored slightly higher than the Marine Drive alternative. For Van Blommenstein Alternative 2 (approved alternative), the key issues relating to the alignment adjacent to the powerline (namely noise and visual) can be mitigated by the construction of a noise barrier, while for Alternative 3 the clearance of vegetation and associated fragmentation related to the alternative down the middle of the property cannot be mitigated. Thus, considering all the above, access of heavy vehicles via the extension of Van Blommenstein Street Alternative 2 adjacent the existing power line was considered to be the preferred alternative.

Table 2: Rating of access alternatives

Key environmental considerations	Alternative 1 (Marine Drive)	Alternative 2 (Van Bloemenstein adjacent to power line)	Alternative 3 (Van Bloemenstein down middle of property)
Vegetation	3	2	1
Heritage	3	2	2
Noise	1	2	3
Visual	2	3	3
Traffic / Safety	2	3	3
TOTAL	11	12	12

Key: 1 = Least preferred; 3 = Most preferred

In order to quantify the various noise sources and impact on the various noise receptors, a specialist noise impact assessment was conducted. The study stipulated that there would be a slight increase in the noise levels at Erf 5 (not the objectors' property which is Erf 6) with the proposed additional entrance via Van Blommenstein Street at Erf 5 due to the vehicles over two tons being rerouted along this road instead of gaining access via Marine Drive. Vehicle noise related to the processing facility and expanded abalone farm was thus found to indicate a slight increase in noise levels at Erf 5, the second highest noise receptor recorded at the various locations on the farm.

In managing noise specifically related to vehicle traffic, the Noise Impact Assessment stipulated that efforts should be directed at:

- Minimising individual vehicle engine, transmission, and body noise/vibration. This is achieved through the implementation of an equipment maintenance program. Service providers (i.e. kelp suppliers) and contractors should be required to implement an equipment maintenance program.
- Maintain road surfaces regularly to avoid potholes etc.
- Keep all roads well maintained and avoid steep inclines or declines to reduce acceleration/brake noise.
- Avoid unnecessary idling at all times.

- Minimising the need for trucks / equipment to reverse. This will reduce the frequency at which disturbing but necessary reverse warnings will occur. Alternatives to the traditional reverse 'beeper' alarm such as a 'self-adjusting' or 'smart' alarm could be considered. These alarms include a mechanism to detect the local noise level and automatically adjust the output of the alarm so that it is 5 to 10 dB above the noise level near the moving equipment. The promotional material for some smart alarms does state that the ability to adjust the level of the alarm is of advantage to those sites 'with low ambient noise level' (Burgess & McCarty, 2009). Also, when reversing, vehicles should travel in a direction away from NR's if possible.
- Limiting traffic, specifically heavy vehicle traffic to hours between 06:00 and 18:00 as far as possible.
- Where possible, other non-routine noisy activities such as construction, decommissioning, start up and maintenance, should be limited to day-time hours.
- A noise complaints register must be kept.

Access via the extension of Van Blommenstein Street is preferred from a traffic engineering perspective in terms of safety for employees, surrounding residents and pedestrians to that of Marine Drive. The Van Blommenstein Street alternative was also preferred when considering traffic noise, with the considered alternative road alignment down the middle of the I&J property resulting in the lowest noise levels for neighbouring receptors. However, the approved access way adjacent to the powerline can be mitigated to similar levels by the construction of a noise barrier / berm on the eastern side of the proposed road.

Response from town planner

The impact of the proposed new access road had been considered as part of the specialist studies that accompanied the EIA. The extension of Van Blommenstein Street onto I&J property and new access parallel with the property boundary was considered the most desirable alternative in terms of the EIA. Also note that the location of the road is not on the rear property boundaries of the objectors' erven but in excess of 30m away as is evident from the SDP. Thus, the proposal with the implementation of mitigation measures as per the EIA is not considered to unacceptably detract from vested rights of the adjoining property owners or character of the area. The existing access via Marine Drive will be retained for vehicles below 2 ton, whilst vehicles above 2 ton will use the Van Blommenstein access. It is also proposed that the use of this new access road for heavy vehicle traffic be limited between the hours of 6:00 to 18:00.

One of the objectors (C Kruger and J Koen) suggests that the motivation report is full of untruths / lies and information is strategically hidden in garble and misnamed.

Response from applicant

We fail to understand the comment of the objector and consider this comment to be non-factual and inappropriate. The motivation report was based on and included all information from specialist studies. The proposed development is fully described in detail. There would be no benefit to any consultant or the client to "hide" or "misname" information. This comment should be dismissed.

Response from town planner

The comment from the objector should be dismissed and is not supported by factual evidence. Furthermore, specialist reports were submitted and accepted in the EIA process in which the objectors also commented. The EA being granted no appeals had been submitted to the competent authority.

According to C Kruger and J Koen the applicants display reluctance to attend to public access to the seashore for all South Africans and tourist in terms of the Environmental Management Integrated Coastal Management Act (Act no. 24 of 2008) according.

Response from applicant

This concern was adequately addressed in the EIA process and the response to the same concern raised will remain unchanged for the purposes of the land use application. We quote from EnviroAfrica's response submitted in the EIA process:

“DEA&DP: Coastal Management acknowledges in its comment that the nature of the proposed activity warrants the siting thereof within the coastal protection zone. While the Section 63 of the ICM Act is supported in general there are two very important site-specific considerations that need to be considered with public access to the coast in the immediate vicinity of the Danger Point abalone farm.

The coastal public property along the abalone farm area covered by this BAR has virtually no beaches, no boat launching areas and is mostly very rocky and underwater at high tide. However, at low tide the area is accessible from the Birkenhead light house. The processing plant will be positioned within the work area of the expansion footprint as stipulated; only this area will have security fencing. The proposed expansion project would not change the current situation in terms of access to the coast. I&J has been informed of the “Overberg Coastal Access Audit and Pilot Study” and it has indicated that it will engage in this study and provide comment in this regard.”

The statement that I&J denied access to the coast due to the development of the abalone farm is incorrect. The public coastal area along the larger I&J property has very little in the way of beaches, boat launching areas and is mostly very rocky and mostly underwater at high tide.

Historically I&J had allowed local inhabitants access across its property to the coast through a system of written permits issued on request and accompanied by a key to unlock a gate in the fence. This practice continued after the development of the abalone farm. Unfortunately, the presence of armed groups of abalone poachers detected crossing the property to access the sea and who threatened I&J staff and others forced a change. I&J was obliged to improve security and to avoid any members of the public falling foul of the armed poachers the concession to grant access was withdrawn. Unfortunately, the poaching problem has not been resolved and is still very prolific along that coast.

Response from town planner

Applicants comment above is noted and agreed with.

The application indicates that a large portion of the subject property will be retained for conservation – conservation of what?

Response from applicant

As contemplated in the respective EIA' Botanical Reports the remainder of the farm must be managed as a conservation area / nature reserve to ensure long-term maintenance of ecological process and functioning and contribute to regional conservation targets.

Response from town planner

In terms of the historic approval conditions the consent use for aquaculture was granted subject to the remainder of the property being managed as a nature reserve as per the applicants comment above. This is to remain as such.

8. SUMMARY OF APPLICANT'S REPLY TO COMMENTS

See paragraph 7 above.

9. MUNICIPAL ASSESSMENT OF COMMENTS

See paragraph 7 above.

The application was also circulated to all relevant government and municipal departments who did not object to the proposal.

10. MUNICIPAL PLANNING EVALUATION

10.1 Background

N/A

10.2 (In)consistency with the Spatial Planning and Land Use Management Act, 2013 (Act 16 of 2013)

The application is in line with the planning objectives applicable to this application, namely:

Spatial Justice

The proposed development being situated within proximity to Gansbaai providing access to opportunities (i.e. economic development, employment, skills development) is not considered to further perpetuate historical spatial development imbalances.

Spatial Sustainability

The proposed development comprises a mixed development of agricultural related land uses (aqua culture, agri-industry and renewable energy infrastructure) thus allowing for a functional economy to flourish. Environmental Authorisation had been issued. Subject to compliance with the EA and the applicable mitigation measures the proposed development is not considered to have an adverse impact on agricultural land or environmentally sensitive areas.

Efficiency

The proposed development will facilitate the efficient use of the application property within the limit of the existing carrying capacity of the property as per the approved EA's.

Spatial Resilience

The proposal is aligned with the principles of the applicable policy and spatial planning documents that adheres to the principle of spatial resilience.

Good Administration

Good procedure was followed and with a good public participation process.

10.3 (In)consistency with the principles referred to in Chapter VI of the Land Use Planning Act, 2014 (Act 3 of 2014)

Same as Point 10.2 above.

10.4 (In)consistency with the IDP/Various levels of SDF's/Applicable policies

Provincial Spatial development Framework

The proposed development is considered consistent with the PSDF since the proposed development promotes sustainable use of agricultural / biodiversity within heritage and ecological and visual carrying capacities whilst it will also strengthen the rural economy. The proposed development will ensure that the remainder of the property is managed as a nature reserve serving to the project the character of the Danger Point Peninsula.

The EA that was granted deals with the environmental, visual, traffic, noise and heritage related impacts of the proposed development as well as mitigation of anticipated impacts in terms of the Environmental Management Plans for both construction and operational phases of the development.

Overstrand Spatial Development Framework

The proposal is consistent with the SDF (2006 and confirmed by Council on 27 March 2019) that earmarks the property for conservation agriculture and aquaculture (existing abalone farm footprint) and Dangerpoint Conservancy purposes. The existing and proposed land uses is therefore consistent with the SDF and will not compromise the integrity of the IDP and SDF.

Strategic Environmental Management Framework

The SEMF promotes good environmental practices and regulation of emerging aquaculture and mariculture sector, carefully located with regards to environmental and visual impact criteria. The EA's confirmed that the proposal is not in conflict and that the proposed development can be mitigated to acceptable levels.

Dangerpoint Precinct Plan

The policy mainly deals with residential areas surrounding the application property. One of the goals of the precinct plan is stated as: "*to ensure that development should not further undermine the sense of coastal wilderness and scenic quality.*" The application property is earmarked as a private nature reserve and provision is made for two off-grid eco resorts, ecological corridors, whilst the existing abalone farm is indicated as urban development.

10.5 (In)consistency with guidelines prepared by the Provincial Minister

N/A

10.6 Impact on Municipal Engineering Services

The municipal Engineering Services Department viewed the proposal positively subject to conditions of approval being adhered to, including payment of bulk infrastructure contribution levy.

10.7 Outcomes of investigations/applications i.t.o other legislation

Environmental Authorization (EA) was granted (attached as per Annexure D) whilst heritage related impacts (archaeological and visual impacts) were dealt with as part of the EA.

10.8 Existing and proposed zoning comparisons and considerations

The property is zoned for agricultural purposes with consent use for aquaculture. The application seeks approval of a site development plan for the existing and extended abalone farm, amendment of condition of approval, consent use (agricultural industry and utility services) and building line departure, floor space and parking ratio departure through an application process.

11. THE DESIRABILITY OF THE PROPOSAL

The subject property is zoned for agricultural purposes with consent use approval to conduct an abalone farm. The applicant obtained EA for the expansion of the abalone farm to a production capacity of 1700t pa in three phases as well as the development of a processing facility for abalone, a photo voltaic plant to supplement electricity and a new access road from Van Blommenstein Street following an existing track on the property situated west of Birkenhead. The total development footprint will increase to 40ha.

Forward planning documents

Aquaculture in SA is identified as a critical growth industry, contributing to economic growth, and providing employment opportunities. Aquaculture production in Overberg contributes significantly to the sector and economic growth of SA. The proposal will contribute to the aforesaid growth (economic and employment creation) and is considered fully consistent with the applicable planning policy framework as discussed under paragraph 10.4 above.

Environmental Authorisation

The applicant is in possession of an approved EA for both the upgrade of the farm comprising three phases to a production capacity of 1700t / pa, the development of a new access road and photo voltaic plant. A separate EA was granted for the proposed abalone processing facility as well as the temporary location thereof in an existing building on the southern side of the farm. Although two site alternatives were considered the southern location had been approved in terms of the EA, subject to mitigation measures (i.e. building to be situated lowest topographical point, lowering of the platform and height of the processing building).

The EA was informed by several specialist reports dealing with the impact on the natural environment as well as a Heritage, Noise and Visual Impact Assessments, including mitigation measures. The Environmental Management Plan submitted with the EA (both construction and operational phases, including a Maintenance Management Plan was approved). The aforesaid deals with mitigation measures to ensure the proposed expansion of the abalone farm is not to the detriment of the natural and built environment.

Character of the area

Birkenhead Township borders the application property to the east and is developed with residential properties, albeit in a rural setting. To the north is the Romansbaai Beach and Fynbos Estate residential development that is bordered to north by the Aquinion Abalone Farm. The Gansbaai area is mainly made up by fishing communities.

The property is situated on the southern portion of Dangerpoint which have a high scenic and recreation as well as heritage value and also contains the Birkenhead Lighthouse established in 1895. Marine Drive is considered a local scenic route with high amenity value for both residents and tourists.

The existing abalone farm already altered the landscape. The proposed extension area, save for the PV plant is situated in a low-lying dune slack that will mitigate its visual impact. The proposed processing facilities location will utilise the lowest topographical point of the location, whilst the lowered platform and 8m building height restriction will aid to mitigate visual impact. Buildings will be largely single storey and only the upper portions of some double storey buildings that will be visible.

Having had regard to the above, the proposed development comprising amendment of the SDP, conditions of approval, departures and consent use is not considered to have an adverse impact on the character of the area and sense of place subject to implementation of the mitigation measures as part of the EA approval conditions.

Economic and social impact

The proposal is consistent with and supports the national policy framework for the development of the aquaculture sector in South Africa. The proposed expansion of the farm will secure direct and indirect employment opportunities during both construction and operational phases and contribute to education and skills development in the area. I&J in the Gansbaai / Hermanus area is a large employer with a permanent staff complement of 220 people, the majority of which is from historically previous disadvantaged individuals. The proposed expansion is expected to create another 265 jobs and will have a significant positive impact upon local communities in the area. Further, the presence of I&J and its security has helped to reduce poaching in the immediate area.

Engineering Services

Electricity

Additional supply will be required for implementation of the proposed expansion. An additional 4,5MW will be required and confirmed to be made available by the municipality subject to network upgrades and capacity increase. Eskom confirmed that the additional capacity will be made available. In addition, a 10MW pv plant will be developed to offset electricity use of the farm. Backup power is provided by generators.

Sewage and grey water

Sewage from office- and administration buildings and ablution facilities in the grow-out buildings will be collected by means of conservancy tanks and disposed by “honeysuckers” to the Waste Treatment Works.

To reduce sewage effluent, greywater will be collected and used for toilets as well as irrigation purposes.

Water

Bulk water supply had been upgraded by I&J with municipal agreement providing an additional supply of 3000kl per month. Domestic water is supplied from existing services on the farm.

The development will also abstract seawater via delivery pipelines to land based header tanks and abalone tanks from where seawater is discharged to the sea. The farm requires a continuous flow of seawater and abstraction and discharge occur at the same rate. Effluent discharge is directed via seaweed production ponds in order to remove excess nutrients.

Water from the processing plant will not be discharged to the sea. In terms of the EA for the processing facility the abalone wash water may not be irrigated and will be collected in conservancy tanks. Wastewater from the temporary processing facility will be disposed off via the existing seawater recirculation effluent stream. Due to the dilution factor effluent will be diluted and not be detectable over and above the present effluent from the farm that has a discharge permit and a monitoring programme in place and monitored by DEADP.

Solid waste

There is sufficient capacity at the municipal waste disposal site to receive solid waste from the development.

The proposed abalone processing facility is estimated to generate 80-ton abalone guts and beaks per annum. It will be sold to turn into fertilizer, or in case of oversupply disposed of at an approved waste facility. It is also estimated that ±70ton shells per annum will be sold, or in case of oversupply be disposed off at an approved waste facility, or alternatively to turn it to fertilized by means of an anaerobic process. The temporary processing facility will not discharge any solids as cut offs from processed abalone will be frozen and disposed off in the existing solid waste stream.

Services conclusion

The municipal Engineering Services Department viewed the proposal positively subject to conditions of approval being adhered to, including payment of bulk infrastructure contribution levy.

Parking and access

Access to the property is currently obtained via Marine Drive, Birkenhead. Three alternatives were considered, namely:

- To continue directing all traffic via Marina Drive
- Proposed access via Van Blommenstein Street onto the I&J property comprising a 2,5km surfaced access along the existing powerline, or

- Proposed access via Van Blommenstein Street onto the I&J property comprising a 2,5km surfaced access running along the middle of the I&J property.

The second access alternative was approved in terms of the EA since it was recommended in terms of the TIA as the best alternative to keep the impact upon the existing coastal road (Marine Drive) and indigenous vegetation on the side to the minimum. This was also the preferred option from a traffic engineering perspective having had regard to safety of employees, surrounding residents and pedestrians above Marine Drive. As such all vehicles heavier than two ton will be routed via V Blommenstein Road. Lighter vehicles will be able to access the site via Marine Drive or Van Blommenstein Street. The new access would be adjacent the power line and maintain a distance of just over 30m from the rear property boundaries along Birkenhead. Visual and noise impacts will be mitigated by a noise barrier and planted berm.

Access to the temporary abalone processing facility will still occur via Van Blommenstein Street.

The SDP provides for seven on-site parking areas at key locations in order to keep impact on workflow operations to the minimum. Most of the workers are transported to the site by bus.

The parking ratio for industrial properties is applicable to abalone farms, which ratio in the approved Overstrand Land Use Scheme, 2020 are 2 parking bays per 100m² GLA up to 500m², thereafter 1 per 100m² GLA opposed to 2 bays per 100m² in terms of the former Overstrand Integrated Zoning Scheme applicable to this application. The application for departure of the applicable parking ratio will ensure on-site parking provision in accordance with the current land use scheme, which imposes a lesser parking requirement on the applicant. Since the abalone farm operates in a secure access-controlled environment, departure of the parking ratio is in line with the 2020 Land Use Scheme and will not impact upon the surrounding road network.

Heritage

Impact upon heritage resources was considered as per of the EIA process. There are archaeological sites present, such as a well-preserved shell midden which will be avoided with a buffer, whilst motoring during construction will mitigate impact to low significance, whilst the proposed location for the proposed processing facility had an insignificant impact on archaeological resources.

During construction at the abalone farm in the early 1980's nine graves associated with the Birkenhead Shipwreck were discovered, all within 100m from the high-water mark. The proposed development in accordance with the specialist report.

Desirability

The proposed development is considered consistent with the applicable spatial planning policies that seeks to protect the natural environment, the rural character of the area provided that mitigation measures are implemented in accordance with the various specialist reports. Further, the departure of the floor space restriction of 5000m² is essential to ensure sustainable development and upgrading of the abalone farm.

The proposed development, provided that the mitigation measures as per the specialist reports be implemented, will not unacceptably detract from the rural character and scenic qualities of the surrounding area. Furthermore, the proposed development will provide for economic development thus having a positive social economic impact through the creation of employment opportunities in an area with high levels of unemployment.

All relevant state and municipal departments support the application, and no objections were received from neighbouring properties.

Having had regard to the evaluation above the application is considered desirable for the following reasons:

- Environmental Authorisation was granted.
- The proposal is supported by CapeNature.
- The proposed development complies with the applicable policy and forward planning documents.
- The proposed development is consistent with the planning principles in terms of LUPA and SPLUMA.
- The proposed development contributes to sustainable development and investment in the area whilst also providing additional employment opportunities.
- The remainder of the property is to be managed as a nature reserve in terms of the EA's.
- The development via the implementation of mitigation measures will not unacceptably detract from the rural character of the area, heritage resources or the natural environment.
- The development via the implementation of mitigation measures will not unacceptably detract from the vested rights of adjoining properties.
- The site layout was amended to ensure the development footprint avoids archaeological areas of significance.
- The development will generate renewable energy

13. RECOMMENDATION

1. that the objections/comment be noted;
2. that the application in terms of Section 16(2)(h) of the Overstrand Municipality By-Law on Municipal Land Use Planning, 2015 (By-Law) applicable to Remainder of Farm Klipfonteyn No. 711, Division Caledon for amendment of the Site Development Plan to accommodate the existing abalone farm and proposed expansion, **be approved** in terms of the provisions of Section 61 of the By-Law;
3. that the application in terms of Section 16(2)(l) of the By-Law applicable to Remainder of Farm Klipfonteyn No. 711, Division Caledon for amendment of Conditions of an existing Approval, **be approved** in terms of the provisions of Section 61 of the By-Law;
4. that the application in terms of Section 16(2)(o) of the By-Law applicable to the Remainder of Farm Klipfonteyn No. 711, Division Caledon for consent use to accommodate agricultural industry (processing of abalone) and renewable energy infrastructure, **be approved** in terms of the provisions of Section 61 of the By-Law;

5. that the application in terms of Section 16(2)(b) of the By-Law applicable to Remainder of Farm Klipfonteyn No. 711, Division Caledon for departure to exceed the maximum permitted floor space from 5000m² to 21294,50m² and the parking ratio from 331 on-site parking bays to 236 on-site parking bays, **be approved** in terms of the provisions of Section 61 of the By-Law;
6. that the application in terms of Section 16(2)(b) of the By-Law applicable to Remainder of Farm Klipfonteyn No. 711, Division Caledon for departure to encroach the following building lines:
 - eastern lateral building line from 30m to 15m to accommodate a substation and security building;
 - southern lateral building line from 30m to 5,8m to accommodate a security building and filling higher than 1m, and
 - western lateral building line from 30m to 13m to accommodate a lapa;**be approved** in terms of the provisions of Section 61 of the By-Law;
7. that the approvals in paragraphs 2. to 6. above be subject to the following:
 - (a) that a detailed Site Development Plan be submitted for municipal approval prior to commencement of the development to the satisfaction of the municipality (amongst others the SDP shall demonstrate compliance with the mitigation measures and the relevant setback's as per the EA);
 - (b) that the development be limited to the buildings, structures and uses indicated on the approved SDP as per paragraph (a) above;
 - (c) that the remainder of the subject property be managed as a conservation area in accordance with the provisions of the EA;
 - (d) that the development be implemented strictly in accordance with the provisions of the EA;
 - (e) that the height of all buildings be restricted to 8,5m (eaves level) and 10,5m (top of the roof / gable) from base level;
 - (f) that the height of the feed manufacture and storage building may not exceed 8,5m;
 - (g) that commercial rates and service tariffs as determined by the annual budget be made applicable, which tariffs are automatically adjusted in terms of the annual budget;
 - (h) that building- and/or engineering plans be submitted to the Building Department for approval, and that all conditions of the Building- and Fire Departments be complied with at that stage;
 - (i) that all the conditions of Department of Transport and Public Works, Telkom, Breede-Gouritz Catchment Management Agency, Heritage Western Cape, and Cape Nature (attached as Annexures I-L and Annexure R), be complied with;

- (j) that all the conditions from Fire Services, Waste Management, District Health and Engineering Services (attached as Annexures N-Q), be complied with;
 - (k) that condition 2 of the approval of the Overberg District Municipality dated 7 October 1991 be amended to read as follows:

“only skeleton staff be housed on site and that only 2 + 3bedroom houses for management staff and four security huts / labourers cottages be permitted;
 - (l) that this approval does not absolve the owner/applicant from compliance with any other relevant legislation, and
 - (m) that all other development parameters as prescribed in the relevant Zoning Scheme be complied with.
8. that the applicant/persons who commented be notified of their right of appeal in terms of Section 78 of the Overstrand Municipality By-Law on Land Use Planning, 2015 with regard to the above conditions of approval.

14. REASONS FOR RECOMMENDATION

- ❖ Environmental Authorisation was granted.
- ❖ The proposed development complies with the applicable policy and forward planning documents.
- ❖ The proposed development is consistent with the planning principles in terms of LUPA and SPLUMA.
- ❖ The proposed development contributes to sustainable development and investment in the area whilst also providing additional employment opportunities.
- ❖ The remainder of the property will be managed as a Nature Reserve.
- ❖ The development via the implementation of mitigation measures will not unacceptably detract from the rural character of the area, heritage resources or the natural environment.
- ❖ The development will not adversely impact vested rights of adjoining property owners, subject to implementation of mitigation measures.
- ❖ The site layout was amended to ensure the development footprint avoids archaeological areas of significance.
- ❖ The development will generate renewable energy (with the possibility to feed excess power into the grid).

15. ANNEXURES

Annexure A:	Locality Plan
Annexure B:	Motivation Report
Annexure C:	Site Development Plan
Annexure D:	Environmental Authorisation, dated 28 November 2019
Annexure E:	Environmental Management Plan
Annexure F:	Construction Management Plan
Annexure G:	Objections
Annexure H:	Response from applicant
Annexure I:	Comment: Department of Transport and Public Works
Annexure J:	Comment: Telkom

Annexure K: Comment: Comment: Breede-Gouritz Catchment Management Agency
Annexure L: Comment: Heritage Western Cape
Annexure M: Comment: Department of Environmental Affairs and Development Planning: *Component: Planning*
Annexure N: Comment: Fire Services
Annexure O: Comment: Waste Management
Annexure P: Comment: District Health
Annexure Q: Services Report
Annexure R: Comment: CapeNature

SIGNATURES**AUTHOR:**

Name: **S VAN DER MERWE**

SACPLAN Reg No: **A/1850/2014**

Signature: _____

Date: _____



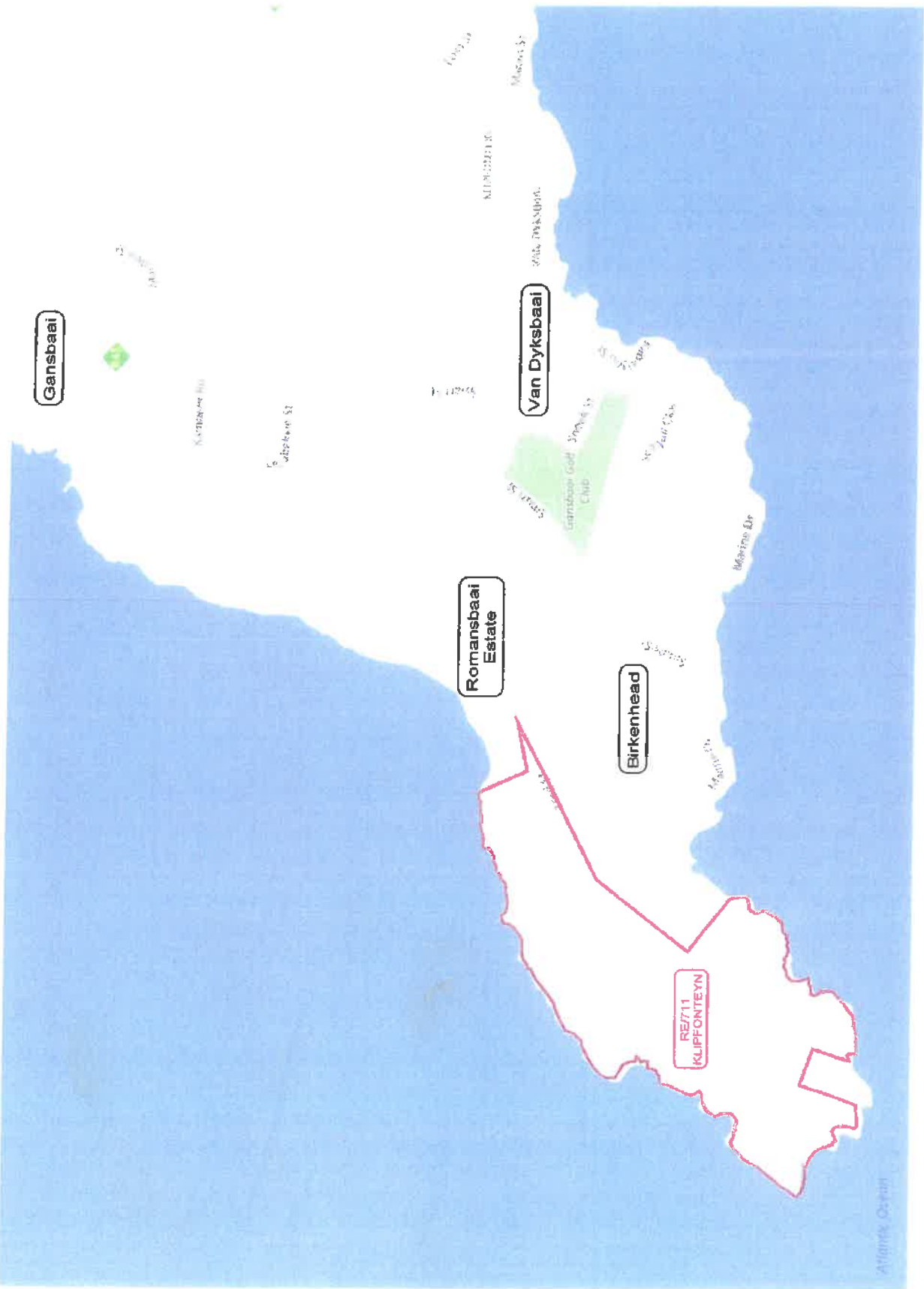
Scale: NTS
Drawing Nr: 5871/1/2019
Date: JULY 2019

Plan Description:
LOCALITY MAP

Property Description:
**REMAINDER FARM
KLIPFONTEYN NO. 711**

All distances approximate
and subject to survey.
COPY RIGHT RESERVED

Stads- en Streekskeplanners
Towns & Regional Planners



257

PLAN Town & Regional Planner
Stads- en Streeksbeplanner

Active



Magnolia St / Str
Box / Posbus 296
HERMANUS
7200
Tel: (028) 313 1673
Fax / Faks: (028) 312 1351
Email: planaactive@hermanus.co.za
Website: www.planaactive.co.za

TP. n. Ahoat
(S. ud K. N. N. C.)

Our reference: PA18026/ML
Your reference: Rem 711 GRCAL
Application ID: 3330/2019

24 MAY 2022

THE MUNICIPAL MANAGER
OVERSTRAND MUNICIPALITY
P.O. BOX 20
HERMANUS
7200

FILE NO.	Form 711 ✓
	Klipfontein
SCAN NO.	
	Form 711
COLLABORATOR NO.	
	1688207

FOR ATTENTION: MR SCHALK VAN DER MERWE

Sir

REVISED APPLICATION

REMAINDER FARM KLIPFONTEIN NO. 711: PROPOSED AMENDMENT OF THE SITE DEVELOPMENT PLAN, AMENDMENT OF THE CONDITIONS OF APPROVAL, CONSENT USE AND DEPARTURE

- I&J LIMITED

Reference is made to our application dated 12 September 2019.

We understand that all outstanding comments / consents on the application were received, and that the application was referred to the case officer for the compilation of the report for consideration. Our client has recently informed that the impact of the Covid pandemic necessitated I&J to reconsider the timing of the development of the new (permanent) processing facility. Due to current fluctuating markets, it was decided to temporarily accommodate the processing facility in an existing structure on the farm until such time as the investment into the enterprise and increase in demand make the development of the permanent processing facility a viable option for I&J.

The proposal to accommodate a temporary processing facility in an existing structure on the farm was submitted to the Department of Environmental Affairs & Development Planning in November 2020. A separate EA (in addition to the EA issued for the permanent processing facility) was issued for the temporary abalone processing facility on 15 December 2020 (copy attached).

However, the need for a processing facility still exists since our client needs to move the abalone processing facility from Walker Bay to I&J Dangerpoint farm for security reasons, as there is a large increase in illegal abalone poaching and theft of abalone. In order to proceed an existing building, located within 100 metres of the high-water mark of the sea, that was used for finfish production and processing, has been identified for the relocation of the abalone processing facility. I&J intends to accommodate the proposed processing facility use in an existing structure on the subject property currently used for storage purposes. The structure marked as "R&D Building" will be converted to

Divine Inspiration Trading 329 (Pty) Ltd. trading as Plan Active
Reg. No. 2006/030921/07
Vat No. 4770250340

John M. Laethan: Ndlip (Town Planning) Tech Wvwatersrand: MSAPJ
Pauline Spronk: B (Soc Sci) US BA Hon UNISA
Menké Lerou: B. Art et Scien Cum Laude (Town Planning) UNW: SACTRP

TP

25 MAY 2022

the temporary processing facility until such time as the permanent (new) processing facility is developed. It is important to note that it is not proposed to accommodate and / or develop two processing facilities. Only the temporary processing facility will at first be operational. As soon as the new processing facility is developed and fully operational, the use will be relocated to the new building and the R&D Building will revert to a storage building again.

We herewith amend the existing land use application to include the use of an existing building (R&D building) on the subject property for temporary abalone processing facility purposes. Since the R&D building was included on the initial site development plan, the footprint has always formed part of the floor area and GLA of the proposed development. The site development plan therefore in fact remains "unchanged" with merely a note added to the plan to confirm the proposed change of use of the R&D building from storage to temporary abalone processing facility.

The proposal to accommodate the processing facility in an existing building at first (on temporary basis) and later developing the new building and relocating the use to the new building, has no impact on the proposed GLA of the development. The GLA of the R&D Building of 1180m² is already included in the total GLA of the development. The permanent (new) processing facility will have a GLA of 3000m² and the latter was also already included in the total GLA of the development. No additional GLA is therefore required to accommodate the change of use of the building. Our client will merely take up 1180m² of the processing facility use at first and on temporary basis in the R&D building. All development parameters remain unchanged.

The processing of abalone and the infrastructure associated therewith will be similar to the processes and infrastructure described for the permanent processing facility.

To define "temporary" in terms of a time frame will not be possible for our client as future farm expansion is solely dependent on the parent company AVI Ltd's appetite to invest in I&J Aquaculture. With the current economic outlook, investment for expansion does not seem to be in the near future. But again, this is solely dependent on market fluctuation and increase in demand for product. Ultimately the idea is to get the site development plan approved with both the temporary and permanent processing facilities indicated should there be any significant changes soon. We therefore motivate that the temporary processing facility should not be limited to a definite time frame, but rather to a condition of approval stipulating that the existing R&D Building be used as temporary processing facility until the permanent (primary) processing facility building is complete and fully operational. The temporary processing facility must then be reverted to its previous land use.

There will be no discharge of solids at the temporary processing facility as the cut-offs from the processed abalone will be frozen and will be used under an existing contract in the same waste stream as the existing solid waste disposal.

The domestic effluent will also be disposed of into a conservancy tank and transported to the Gansbaai sewage works as is presently done by a tanker truck.

The location of the existing building that will be converted to a temporary abalone processing facility is such that the wash water effluent can be discharged via the existing seawater recirculation effluent stream. The existing wastewater effluent stream from the abalone farm has a volume of 8500m³ per hour, while the wash water stream from the temporary abalone processing facility will be approximately 1m³ per hour when in operation. Therefore, the dilution factor of the effluent from the processing plant will be diluted to such an extent that it would not be detectable over and above what is present in the effluent from the abalone farm at present.

The abalone farm also has an existing discharge permit for the effluent discharged to the sea and has a monitoring programme in place that is operated by the Department of Environmental Affairs and Tourism.

Thus, as a result the volume of abalone that will be processed by the temporary abalone processing facility can be accommodated by the annual production output per year of the existing abalone farm. The existing building to be used as temporary processing facility (i.e. for agri-industrial purposes) is 1180m² in extent, which is less than the threshold of 2000m² as stipulated in terms of the NEMA EIA Regulations, 2014 (as amended).

No development will take place within 100m of the high watermark of the sea, since the building that will be used for the processing of abalone already exists. No new roads must be developed to accommodate the temporary processing facility. Access to the R&D building that will be utilised for the processing of abalone is existing.

Since the GLA remains unchanged with the proposed temporary abalone facility addition, the parking provision as applied for in the original submission remains unchanged. No new roads and / or parking areas must be constructed to accommodate the temporary use of the R&D Building as an abalone processing facility. The full set of revised plans inclusive of the parking layouts is attached.

KLS Engineers updated the Civil Engineering Services Report and confirmed that the temporary use of the R&D Building as an abalone processing facility has no additional impact on the civil services. Refer to their services report with addendums attached. Since the GLA remains unchanged, the impact on the bulk services levies payable remains unchanged.

It is our opinion that the proposed addition to the application (temporary abalone facility) has a low impact on the existing land use application, due to the following reasons:

- The temporary use will be accommodated in an existing building;
- The temporary use will fall away once the permanent abalone facility is developed and fully operational;
- The R&D Building is positioned on the western farm boundary, ±450m north-west of the proposed permanent abalone facility footprint and, as a result, farther away from the lighthouse and the Birkenhead Township;
- No new parking areas or access roads are proposed to accommodate the temporary processing facility;
- An EA was issued for the temporary processing facility – confirming that the impact in terms of the environment can be successfully mitigated.
- No additional impact on the civil services is anticipated.
- Bulk services calculations remain unchanged since the R&D Building's GLA was already included in the total industry GLA of the proposed development.

In the light of the low impact the revised application has, we herewith request that the public participation period / advertising of the revised application be waived and that notices merely be served on the previous objectors. We also request that the case officer's discretion be used when re-circulating the revised application to the departments (internal and external).

Find attached the following documents to replace the original documents:

- Revised motivation report,
- Revised set of plans / site development plan dated 25 April 2022,
- Updated Civil Engineering Services Report compiled by KLS Engineers (Ref. 16045, Revision B with Addendum 1 dated 12-08-2021 and Addendum 2 dated May 2022).

We trust that you find the above in order.

Yours faithfully

A handwritten signature in black ink, appearing to be 'M. LERM', written in a cursive style.

M. LERM Pr. Pln (A/158/2009)
PLAN ACTIVE

**PROPOSED AMENDMENT OF THE SITE
DEVELOPMENT PLAN, AMENDMENT OF THE
CONDITIONS OF APPROVAL,
CONSENT USE AND DEPARTURE**

REMAINDER FARM KLIPFONTEIN NO. 711

DIVISION CALEDON

OVERSTRAND MUNICIPALITY

MOTIVATION REPORT – REVISION 1

1. BACKGROUND

The company Plan Active has been appointed by Mr B.R. Lucke, on behalf of Irvin and Johnson Limited, the owners of Remainder Farm Klipfontein No. 711, to apply for the amendment of the site development plan, the amendment of conditions of approval, consent use and departure to accommodate the expansion of the existing abalone farm on the subject property.

The consent use to operate an abalone farm on the property was approved by the Overberg District Municipality on 7 October 1991. An amendment to condition 2(iv) was approved on 23 March 1992. The Overstrand Municipality confirmed the zoning for the subject property in their letter dated 29 November 2010 as well as the way forward for any future land use applications for the property.

I&J has farmed abalone at its land-based aquaculture facility on the Danger Point peninsula since 1998. The facility has expanded significantly over the years reaching its current authorised production capacity of 500 ton per annum (t/a) in 2016. Abalone farmed on the site is currently either packaged as finished product on the farm or transported to and processed at an existing processing plant in Hermanus. I&J is now proposing the expansion of the current abalone operation from 500 t/a to 1 700 t/a - based on the current market demand for abalone.

All previous environmental and related authorisations were in place to allow for the current abalone operations on the subject property. A new basic environmental impact assessment was submitted

in 2018 to upgrade the approved abalone farm to a 1700 ton per annum facility with a solar panel platform. The Environmental Authorisation (EA) was issued on 8 March 2019 for the proposed 1700 t/a facility with solar panel platform.

A new processing facility is also proposed as part of the expansions to the abalone farm. Due to the increase in the threat to hijack unprocessed abalone during delivery, I&J decided to construct a processing facility at their Danger Point abalone farm to process the abalone produced on site in future. The impact of the recent Covid pandemic necessitated I&J to reconsider the timing of the development of the new (permanent) processing facility. Due to current fluctuating markets, it was decided to temporarily accommodate the processing facility in an existing structure on the farm until such time as the investment into the enterprise and increase in demand make the development of the new permanent processing facility a viable option for I&J. The permanent (new) processing facility was considered a separate and independent project for the purposes of the EIA and a separate basic environmental impact assessment was followed for the proposed new processing facility. The EA dated 11 June 2019 is attached. The proposal to accommodate a temporary processing facility in an existing structure on the farm was submitted to the Department of Environmental Affairs & Development Planning in November 2020. A separate EA (in addition to the EA issued for the permanent processing facility) was issued for the temporary abalone processing facility on 15 December 2020 (copy attached).

2. APPLICATION DETAILS

Application is made for the following:

- The amendment of the site development plan for Remainder Farm Klipfontein No. 711 in terms of Chapter 4, Section 16(2)(l) of the Overstrand Municipality's By-law on Municipal Land Use Planning, 2016;
- The amendment of conditions of an existing approval in terms of Chapter 4, Section 16(2)(h) of the Overstrand Municipality's By-law on Municipal Land Use Planning, 2016;
- The consent use in terms of Chapter 4, Section 16(2)(o) of the Overstrand Municipality's By-law on Municipal Land Use Planning, 2016, to accommodate utility services (renewable energy infrastructure) on Remainder Farm Klipfontein No. 711;
- The consent use in terms of Chapter 4, Section 16(2)(o) of the Overstrand Municipality's By-law on Municipal Land Use Planning, 2016, to accommodate an agricultural industry (temporary and permanent abalone processing facility) on Remainder Farm Klipfontein No. 711;

- The departure (building lines, total permissible floor space and minimum parking requirements) of Remainder Farm Klipfontein No. 711 in terms of Chapter 4, Section 16(2)(b) of the Overstrand Municipality's By-law on Municipal Land Use Planning, 2016.

3. GENERAL APPLICATION INFORMATION

3.1 PROPERTY DESCRIPTION

The subject property is situated on the Danger Point Peninsula approximately 8 km south-west of Gansbaai.

The subject property is 253,5405ha in extent and is held by title deed no. T12588/1960.

The subject property is situated in an agricultural and nature conservation environment.

3.2 ZONING

Remainder farm Klipfontein No. 711 is zoned Agriculture Zone I with a consent use for aquaculture. Refer to a copy of the zoning certificate dated 20 June 2013. The initial letter of approval from the Overberg District Municipality (dated 7 October 1991) and confirmation of rights letter from Overstrand Municipality dated 29 November 2010 are attached.

Surrounding properties are zoned for agriculture, single residential, group housing and tourist facility purposes.

3.3 LAND USE

Remainder Farm Klipfontein No. 711 has been the land-based aquaculture facility of I&J since 1998. A footprint area of ±10ha has been developed to date. The largest extent of the property consists of natural vegetation of Overberg Dune Strandveld which carries a conservation status of Least Threatened. There are also some relatively small calcrete outcrops of Agulhas Limestone Fynbos (Vulnerable) on the site and Seashore Vegetation in a narrow belt along the coast. None of these latter vegetation types occur on the proposed processing facility and road footprint.

The facility's current authorised production capacity is 500 t/a. Abalone farmed on the site is currently either packaged as finished product on the farm or transported to and processed at an existing processing plant in Hermanus.

Land uses that surround Remainder Farm Klipfontein No. 711 are farms, single residential properties (Van Dyksbaai to the east; Romansbaai to the north-west; Birkenhead Residential Estate; residential properties along Marine Drive to the east of the subject property) and recreational land uses (Gansbaai Golf Course). The nearest residential areas are that of Van Dyksbaai and Gansbaai some 4 kilometres away. The nearest industrial area is located in Gansbaai.

3.4 THE POTENTIAL OF THE PROPERTY (DESIRABILITY OF THE PROPOSED UTILIZATION)

Aquaculture is one of the fastest growing industries in the world due to the increasing demand for freshwater and marine fish and seafood, as well as overexploitation and declining yields from wild stock worldwide. The commercial farming of aquatic animals and plants as food sources has thus been identified as an important industry that has the potential to enhance food security for the growing world population.

In South Africa, aquaculture has also been identified as a critical growth industry with strong potential to contribute to economic growth and job creation. The South African national aquaculture production, which stood at 3 485 tons in 2003, had grown to an estimated 4 802 tons in 2013 (excluding seaweed and ornamentals species). Aquaculture production in the Overberg District Municipal area contributes substantially to the sector and economic growth of South Africa. And the proposed expanded abalone farm for I&J will undeniably continue towards this growth.

Only one property or site alternative was considered for the proposed application, since I&J is the owner of Remainder Farm Klipfontein 711 and the proposed project is an expansion of the existing abalone operation. Various locations on the subject property were considered for the proposed development, but logically it was decided to locate the proposed expansion development on the southern portion of the farm as close as possible to the existing operation. Other factors taken into consideration included topography, pumping costs and proximity to sensitive receptors (e.g. increase distance between development and residential developments). In addition, the location of the proposed development is in a low-lying dune slack area behind an existing dune ridge line, which largely screens it from nearby sensitive visual receptors. For the proposed abalone processing plant two location alternatives on the subject property were considered (a northern and

a southern location). The southern location as indicated on the site development plan was the approved alternative in terms of the EIA process. There is a lowest topographical position at the approved southern location point and the latter together with the lowering of the platform and minimising the height of the proposed processing plant, proves that the subject property has the potential to be developed with a processing plant at this specific (approved) location. All the aforementioned factors prove that, although sensitive receptors and conservation worthy areas exist, the subject property has the potential to accommodate the proposed expansion development.

All environmental approvals for the I&J Abalone Farm were already obtained for the existing and proposed new extended abalone facility. In addition, the subject property is already zoned for aquaculture purposes. As a result, the desirability of the proposed abalone farm was already considered, and the municipality and the Department of Environmental Affairs & Development Planning are satisfied that the proposed abalone farm is not in conflict with the relevant environmental and land use legislation and spatial planning policies.

The desirability of the approved land use (expansion of the existing abalone facility, processing plant and renewable energy infrastructure) was therefore already considered with reference to the impact on biophysical, heritage, visual, services, traffic and noise impacts and favourably evaluated and approved.

In addition, the subject property has the potential to accommodate the proposed departure (building lines only). The Overstrand Zoning Scheme Regulations (2013) stipulate that 30m building lines apply to properties greater than 10ha. Some existing structures encroach the applicable building lines and it is intended to keep these structures since it already form part of the existing operation on the site and the potential impact of these structures were considered in the EIA process. The existing (unauthorised) guard house position (no. 18 on the site development plan) was determined to be next to the existing road near the existing abalone facility. The existing lapa within the western lateral building line (no. 20 on the SDP) has been in existence for at least 15 years and was indicated on the previous site development plan (SDP). However, a building line relaxation application was not approved in the past to accommodate this structure at its current position. Furthermore, the proposed new structures namely the security building and substation at the proposed new Van Blommenstein entrance indicated as no. 24 and 25 on the SDP, the new pump house within the southern lateral building line and the infill within the southern lateral building line at the proposed new facility (phase 7B) south of the proposed new administration building indicated as no. 7 is to:

- Position the security building and substation next to the proposed new access road that is an extension of Van Blommenstein Road. The position of the road next to the farm

boundary necessitates the placing of these two structures within the building lines to save cost (with reference to fencing and service installation and connection).

- The pump house position speaks for itself – close to the water to ensure effective facility operations.
- The infill can be accommodated within this building line since the southern position for the expansion facility is the lowest topographical area to ensure visual impacts are kept to a minimum.

The proposed departure will have no impact on the adjacent properties and the impact on other important elements (environmental, visual, etc.) were already considered and positively decided upon. The deviations will ensure that the structures are clustered together close to the existing and phase 1 operation. The proposal and even the departures proposed are in line with previous conditions of approval to keep the development on the southern portion of the subject property.

The environmental authorisation already concluded that a 1700 ton/annum abalone facility can easily be accommodated on the subject property. It is therefore expected that the total floor space will increase for a proposed facility of this extent. The total floor space can therefore easily be accommodated on site since the impact of a 1700 ton/annum facility (and associated infrastructure) was already considered during the EIA process. It is submitted that the encroachment of the total floor space from 5 000m² to 21 294,50m² is in line with the existing aquaculture land use rights for the subject property and it is to an improved abalone farm. Consequently, the farm has the potential to accommodate the increased total floor space.

Although ample space exists on site, the need for excessive amounts of parking proofs to be inefficient and detrimental to the environment (since more parking implies greater disturbance of the vegetation footprint). The means of transport to the abalone facility as well as the proposed new draft parking requirements for agricultural industries proof that the provision of less parking on site will not be detrimental to the potential of the property for the proposed expansion development.

3.5 PROPOSED DEVELOPMENT

The following are proposed:

- The amendment of the site development plan for Remainder Farm Klipfontein No. 711 in terms of Chapter 4, Section 16(2)(l) of the Overstrand Municipality's By-law on Municipal Land Use Planning, 2016;
- The amendment of conditions of an existing approval in terms of Chapter 4, Section 16(2)(h) of the Overstrand Municipality's By-law on Municipal Land Use Planning, 2016;
- The consent use for utility services in terms of Chapter 4, Section 16(2)(o) of the Overstrand Municipality's By-law on Municipal Land Use Planning, 2016, to accommodate a renewable energy infrastructure (a 2,5ha photovoltaic power plant) on Remainder Farm Klipfontein No. 711;
- The consent use in terms of Chapter 4, Section 16(2)(o) of the Overstrand Municipality's By-law on Municipal Land Use Planning, 2016, to accommodate an agricultural industry (temporary and permanent abalone processing facility) on Remainder Farm Klipfontein No. 711;
- The departure of Remainder Farm Klipfontein No. 711 in terms of Chapter 4, Section 16(2)(b) of the Overstrand Municipality's By-law on Municipal Land Use Planning, 2016, to relax the applicable building lines as follows:
 - Eastern lateral building line from 30m to 15m to accommodate the proposed substation and security building (buildings no. 24 and 25);
 - Southern lateral building line from 30m to 23m to accommodate the existing security building (building no.18);
 - Southern lateral building line to allow for the infill of higher than 1m at the Phase 7B platform within the building line;
 - Southern lateral building line from 30m to 5,8m to accommodate the proposed pumphouse;
 - Western lateral building line from 30m to 13m to accommodate the existing lapa.
- The departure (permanent departure from the provisions of the Overstrand Zoning Scheme Regulations, 2013) of Remainder farm Klipfontein No. 711 in terms of Chapter 4, Section 16(2)(b) of the Overstrand Municipality's By-law on Municipal Land Use Planning, 2016, to deviate from the total permissible floor space of 5 000m² to ±21 258,50m² for all buildings;
- The departure (permanent departure from the provisions of the Overstrand Zoning Scheme Regulations, 2013) of Remainder Farm Klipfontein No. 711 in terms of Chapter 4, Section 16(2)(b) of the Overstrand Municipality's By-law on Municipal Land Use Planning, 2016, to deviate from the minimum parking requirements to provide a total of 235 parking bays in lieu of 331 parking bays.

The current abalone farming operation has been operational for 23 years and I&J would operate the proposed expanded facility in a similar manner to that at present. The facility has expanded incrementally over the years reaching its current authorised production capacity of 500 t/a in 2016. I&J is now proposing the expansion of the current abalone operation from 500 t/a to 1 700 t/a, based on the current market demand for abalone. I&J has an existing right to engage in marine aquaculture (Right No. 08556) and several permits in terms of the MLRA.

For the purposes of this application the following should be noted:

- An Environmental Authorisation for the proposed 1700 ton/annum abalone facility was issued on 8 March 2019;
- An Environmental Authorisation for the proposed new abalone processing plant on the subject property was issued on 11 June 2019;
- An Environmental Authorisation for the proposed temporary abalone processing plant within an existing building (R&D building) on the subject property dated 15 December 2020;
- The land use approval for consent use for aquaculture was issued on 7 October 1991.
- An amendment to condition 2(iv) of the consent letter dated 7 October 1991 was approved on 23 March 1992.

3.5.1 THE EXPANDED ABALONE FARM

An application is submitted for the amendment of the site development plan and conditions of approval to accommodate the proposed expansion development on Remainder farm Klipfontein No. 71.

The proposed development footprint will be approximately 400 000m² (40ha), comprising the proposed expansion in three phases (total of 34ha), photovoltaic (PV) power plant (2,5ha) and a new access road (1,5ha). The construction footprint is estimated to be an additional 2ha.

The phases of the proposed expansion development will be as follows:

Phase 1:

Phase 1 will cater for an additional 600 t/a production and include the following:

- An intake facility located off the south-western side of the headland approximately 160m offshore at a water depth of approximately 2m to 3m. To avoid entrainment of marine organisms' water would be drawn into the intake pipes through a 19mm mesh cage mounted at the seaward end of the intake pipes to screen out organisms and coarse material (e.g. drift kelp and other dislodged algae) before being pumped to the abalone

farm.

- Eight abstraction pipelines (60cm in diameter) installed on concrete casted pedestals along the seabed from the intake to a new onshore pump house (approximately 220m²).
- Delivery pipelines from the pump house to an elevated header tank(s) (2 000m³ in total), and from the header tank(s) to a grow-out platform.
- A 6ha grow-out platform for abalone tanks, seaweed production ponds, sumps and a re-circulation facility/tank.
- An effluent channel or discharge pipeline for coastal discharge from the grow-out platform, located on the north-western side of the headland.
- Associated buildings (e.g. offices, stores, ablutions, blower rooms, grading areas, pack house, workshop, basket cleaning area, etc.) and work areas (e.g. kelp processing). Most of the buildings will be single storey, except for the grading areas, pack house, workshop and generator cluster.

This phase would have a total development footprint of approximately 15ha and would be developed over a period of five to eight years. The SDP includes a separate development phase plan for phase 1 and indicates the order in which the infrastructure for this phase will be developed.

Phase 2:

Phase 2 will cater for an additional 300 t/a production with infrastructure largely similar to Phase 1. Additional infrastructure would include the following:

- Seawater intake, pump house and eight delivery pipelines located off the north-western side of the headland.
- Delivery pipelines to an elevated header tank(s) (2 000m³ in total).
- A 6ha grow-out platform for abalone tanks, seaweed production ponds, sumps and a re-circulation facility/tank.
- An approximately 300m long effluent discharge pipeline or effluent channel located off the north-western side of the headland which would extend into the tidal zone.
- Associated buildings (e.g. offices, stores, ablutions, blower rooms, grading areas, basket cleaning area, etc.) and work areas (e.g. kelp processing).

This phase would have an additional development footprint of approximately 11 ha and would be developed over a period of five years after Phase 1.

Phase 3:

Phase 3 would cater for an additional 300 t/a production. This phase would include the following:

- Seawater for this phase would be supplied from the Phase 2 infrastructure (including intake, delivery pipes and header tanks).
- A 6ha grow-out platform for abalone tanks, seaweed production ponds, sumps and a re-circulation facility/tank.
- An approximately 200m long effluent discharge pipeline or effluent channel located off the north-western side of the headland which would extend into the tidal zone.
- No additional buildings would be required for this phase.

This phase would have an additional development footprint of approximately 8ha and would be developed over a period of four years after Phase 2.

3.5.2 ABALONE PROCESSING FACILITY

Abalone farmed on the site is currently either packaged as finished product on the farm or transported to and processed at an existing processing plant in Hermanus. I&J is now proposing the expansion of the current abalone operation from 500 t/a to 1 700 t/a - based on the current market demand for abalone. Due to the increase in the threat to hijack unprocessed abalone during delivery, I&J decided to construct a processing facility at their Danger Point abalone farm to process the abalone produced on site.

The impact of the recent Covid pandemic necessitated I&J to reconsider the timing of the development of the processing facility. Due to current fluctuating markets, it was decided to temporarily accommodate the processing facility in an existing structure on the farm until such time as the investment into the enterprise and increase in demand make the development of the new permanent processing facility a viable option for I&J. The permanent (new) processing facility was considered a separate and independent project for the purposes of the EIA and a separate basic environmental impact assessment was followed for the proposed new processing facility. The EA dated 11 June 2019 is attached. The proposal to accommodate a temporary processing facility in an existing structure on the farm was submitted to the Department of Environmental Affairs & Development Planning in November 2020. A separate EA (in addition to the EA issued for the permanent processing facility) was issued for the temporary abalone processing facility on 15 December 2020 (copy attached).

An application is therefore submitted for a consent use of Remainder farm Klipfontein No. 711 for

an agricultural industry to accommodate a temporary and permanent abalone processing facility on the subject property.

a. Permanent abalone processing facility

The Environmental Authorisation (EA) dated 11 June 2019 indicates that due to the sensitivity of both the internal and external biosecurity as well as security against criminal elements from outside the abalone farm, certain factors were taken into consideration when selecting alternative locations for the processing facility, i.e. placement inside the security fence of the abalone farm. Two locations were identified on the subject property where the processing plant could be developed.

The southern (approved) alternative entails the development of an abalone processing facility on Remainder farm Klipfontein No. 711 of $\pm 4000\text{m}^2$ in extent. The processing facility will consist of processing areas, stores, a diesel fired boiler, off-loading areas and a parking area. A new 50m access road will be developed from the new access road (extension of Van Blommenstein Street). The southern alternative was the preferred and authorised alternative since it is less intrusive on the skyline as seen from Marine Drive scenic route. From a visual perspective, this alternative is preferred as the height of the proposed structure will be 8m. The access required for the proposed processing facility will result in the removal of 120m^2 of indigenous vegetation as opposed to 250m^2 as required for the alternative northern location. The approved location for the processing facility is located closer to the existing abalone production area from where the abalone to be processed will be sourced.

The northern location alternative considered for the processing facility is similar to the southern (authorised) location, except that it was located approximately 450m north of the approved alternative. The northern location alternative was not preferred for the following reasons:

- Negative visual impact on the Marine Drive scenic route;
- The access that will be required from the new access road (Van Blommenstein Street) will result in the removal of 250m^2 indigenous vegetation as opposed to 120m^2 required for the approved southern alternative.
- It is located farther away from the existing abalone production area.

The proposed processing facility will have diameters of 60m x 50m and the footprint and Gross Leasable Area (GLA) of the new building will be 3000m^2 . Refer to a copy of the floor layout plans, elevation plan and roof plan attached. Provision is made for sufficient parking and loading zones as indicated in the area schedule and elaborated on in *Section 3.9.2 Traffic Impact, Parking and Access*.

The abalone products that will be processed on site will consist of frozen whole, frozen shucked, dried and canned shucked product. The processing facility infrastructure will consist of the processing plant inclusive of processing areas, offices, stores and loading area. There will be a small diesel fired boiler to produce steam for the canning process. There will be a small holding cold store in the facility to store the processed product before it is supplied to the markets. The facility will produce ± 350 tons of sale weight processed abalone per annum. Only fresh abalone produced on the I&J Danger Point farm will be processed.

The waste product will consist of ± 80 tons per annum abalone guts and beaks and ± 70 tons per annum of abalone shells. The guts and beaks will be frozen and sold to turn into fertilizer, or in case of not being able to sell due to over-supply, disposed of at an approved dump site via the Overstrand Municipal waste stream to Karwyderskraal. The shells will also be sold and in case of oversupply will also be disposed of via the existing Overstrand municipal waste stream to Karwyderskraal. It is also being investigated to turn this waste product into a fertilizer by means of an anaerobic process on site or elsewhere (e.g. an anaerobic digester treating up to 1 ton per day).

The minimal sewage effluent generated at the processing facility will either be disposed of via the existing municipal treatment facility, or if the I&J farm development expansion is approved, treated in a package plant that will be installed to service the larger development. The small quantities of solids removed during recycling of the wash water will be disposed of via the existing municipal waste stream on the farm. A portion of this water will have to be discharged and this will either be via the existing effluent treatment system on the farm, or it may be disposed of via a soak away as it conforms to the legislation under the National Water Act (see letter of confirmation from BGCMA in Appendix E of the relevant EIA Report). I&J indicated that there will be no discharge of processing plant water to sea.

As confirmed in the EA the negative impacts of the proposed processing facility can be mitigated to an acceptable low significance. The positive impact of the proposed facility is as follows:

- The development will strengthen the economic viability of the farm and provide additional employment opportunities;
- The risk of hijacking of vehicles transporting unprocessed abalone will be minimized;
- The remainder of the farm will be managed as a conservation area.

b. Temporary abalone processing facility

As previously mentioned, to develop the new processing facility at this time proves to be risky due to fluctuating markets and pending investments. Therefore, due to financial constraints, I&J is not able to construct the permanent processing facility at this stage. However, the need for a processing facility still exists since our client needs to move the abalone processing facility from Walker Bay to I&J Dangerpoint farm for security reasons, as there is a large increase in illegal abalone poaching and theft of abalone. In order to proceed an existing building, located within 100 metres of the high-water mark of the sea, that was used for finfish production and processing, has been identified for the relocation of the abalone processing facility. I&J intends to accommodate the proposed processing facility use in an existing structure on the subject property currently used for storage purposes. The structure marked as "R&D Building" will be converted to the temporary processing facility until such time as the permanent (new) processing facility is developed. It is important to note that it is not proposed to accommodate and / or develop two processing facilities. Only the temporary processing facility will at first be operational. As soon as the new processing facility is developed and fully operational, the use will be relocated to the new building and the R&D Building will revert to a storage building again.

The proposal to accommodate the processing facility in an existing building at first (on temporary basis) and later developing the new building and relocating the use to the new building, has no impact on the proposed GLA of the development. The R&D Building's GLA of 1180m² is already included in the total industry GLA of the development. The permanent (new) processing facility will have a GLA of 3000m² and the latter was also already included in the total GLA of the development. No additional GLA is therefore required to accommodate the change of use of the building. Our client will merely take up 1180m² of the processing facility use at first and on temporary basis in the R&D building. As a result, a note was merely added to the site development plan indicating the change of use of the existing R&D building. All development parameters remain unchanged.

The processing of abalone and the infrastructure associated therewith will be similar to the processes and infrastructure described for the permanent processing facility.

To define "temporary" in terms of a time frame will not be possible for our client, as future farm expansion is solely dependent on the parent company AVI Ltd's appetite to invest in I&J Aquaculture. With the current economic outlook, investment for expansion does not seem to be in the near future. But again, this is solely dependent on market fluctuation and increase in demand for product. Ultimately the idea is to get the site development plan approved with both the temporary and permanent processing facilities indicated should there be any significant changes

soon. We therefore motivate that the temporary processing facility should not be limited to a definite time frame, but rather to a condition of approval stipulating that the existing R&D Building be used as temporary processing facility until the permanent (primary) processing facility building is complete and fully operational. The temporary processing facility then must be reverted to its previous land use.

There will be no discharge of solids at the temporary processing facility as the cut-offs from the processed abalone will be frozen and will be used under an existing contract in the same waste stream as the existing solid waste disposal.

The domestic effluent will also be disposed of into a conservancy tank and transported to the Gansbaai sewage works as is presently done by a tanker truck.

The location of the existing building that will be converted to a temporary abalone processing facility is such that the wash water effluent can be discharged via the existing seawater recirculation effluent stream. The existing wastewater effluent stream from the abalone farm has a volume of 8500m³ per hour, while the wash water stream from the temporary abalone processing facility will be approximately 1m³ per hour when in operation. Therefore, the dilution factor of the effluent from the processing plant will be diluted to such an extent that it would not be detectable over and above what is present in the effluent from the abalone farm at present.

The abalone farm also has an existing discharge permit for the effluent discharged to the sea and has a monitoring programme in place that is operated by the Department of Environmental Affairs and Tourism.

Thus, as a result the volume of abalone that will be processed by the temporary abalone processing facility can be accommodated by the annual production output per year of the existing abalone farm. The existing building to be used as temporary processing facility (i.e. for agri-industrial purposes) is 1180m² in extent, which is less than the threshold of 2000m² as stipulated in terms of the NEMA EIA Regulations, 2014 (as amended).

No development will take place within 100m of the high watermark of the sea, since the building that will be used for the processing of abalone already exists. No new roads must be developed to accommodate the temporary processing facility. Access to the R&D building that will be utilised for the processing of abalone is existing.

3.5.3 PHOTOVOLTAIC (PV) POWER PLANT

In addition, an application is also submitted for a consent use for utility services to accommodate a 2,5ha photovoltaic power plant on the subject property. The photovoltaic (PV) power plant of up to 10 MVA (or MW) will be developed to offset I&J's electricity usage. The PV power plant will have a footprint of 2,5ha and will be located between the Phase 1 and 2 development footprints as indicated on the site development plan. The PV panels may also be placed above the proposed abalone tanks.

A total of at least 2,5 hectares of Overberg dune strandveld will be removed to create the platform for constructing the proposed PV power plant. This loss of natural vegetation is likely to have an impact of medium to high significance without mitigation and medium significance with mitigation.

Although the solar PV facility is located on a ridge, the PV arrays have a relatively low profile, which means these would not be visually intrusive. As confirmed in the Visual Impact Assessment dated August 2018 undertaken by Bernard Oberholzer Landscape Architect and Quinton Lawson Architect *the visual impact significance would be medium without mitigation, and medium-low with mitigation when developed in line with the recommendations of the VIA report.*

3.5.4 GENERAL APPLICATION INFORMATION: EXPANDED ABALONE FARM, ABALONE PROCESSING PLANT AND PV POWER PLANT

An application is submitted for the amendment of the approved site development plan for Remainder farm Klipfontein No. 711 to accommodate the proposed expansion abalone facility, PV power plant and abalone processing facility. The existing land uses and structures on Remainder farm Klipfontein No. 711 are summarized on the SDP as follows:

EXISTING FARM; 500TON

AREAS: GREEN CIRCLED NUMBERS

EXISTING BUILDINGS

1. RESIDENCE	- 106m ²
2. RESIDENCE	-81m ²
3. RESIDENCE	-81m ²
4. RESIDENCE	- 91m ²
5. PUMP HOUSE	-111m ²
6. SECURITY AND SCRUB	-36m ²
7. LAB & OFFICE	-228.50m ²
8. RECEPTION	-47m ²
9. HATCHERY	-168m ²
10.PUMP ROOM 1	-20m ²
11.SETTLEMENT 1	-540m ²
12.DIATOMS	-323m ²
13.WORKSHOP	-262m ²
14.PUMP ROOM 2	-56m ²
15.PUMP ROOM 3	-64m ²
16.SETTLEMENT 3	- 559m ²
17.BLOWER/GENERATOR	-49m ²
18.HEADER TANK	-250m ²
19.OFFICE	-24m ²
20.GUARD HOUSE	-21m ²
21.PACKING & REST ROOM	-309m ²
22.GRADING	-182m ²
23.BLOWER ROOM	-31.50m ²
24.R & D BUILDING & STORE	-1180m ²
25.HEADER TANK	-180m ²
26.ABFEED STORE	-92m ²
27.PUMP ROOM 4	-98m ²
28. N/A -	
29. Removed	
30. WOODEN CABINS	-144m ²
31.HEADER TANK	-220m ²
32.TEA ROOM	-88m ²
33.BLOWER ROOM	-104m ²
34.BLOWER ROOM	-115m ²
35.RECIRCULATION PUMP HOUSE	-77m ²
36.ELECTRICAL BUILDING	-35m ²
37.BUILDING	-20m ²
38.HEADER TANK	-405m ²
39.ABLUTION	-160m ²
40.STORAGE BUILDING	-206m ²
41.BLOWER BUILDING	-172m ²
42.GRADING BUILDING	-345m ²
43.SUB STATION GENERATOR BUILDING	-382m ²
44.SHED TANKS 4	-720m ²
45.SHED TANKS 1	-584m ²
46.SHED TANKS 2	-563m ²

FUTURE BUILDINGS

47.ADMIN BUILDING	- 328m ²
-------------------	---------------------

NEW ADDITIONAL BUILDINGS TO SDP

51. FILTERS SLAB & PROTEIN SKIMMERS	-108.00m ²
52. LOCKER ROOM	- 14.00m ²
53. FILTERS SLAB & PROTEIN SKIMMERS 3 x 77.00m ²	= 231.00m ²

REMOVED/DEMOLISHED BUILDINGS

29.SECURITY BUILDINGS	
66m ² x 3	198m ²
50. GUARD HUT	27m ²

TOTAL BUILDINGS	- 10 211m ²
Floor Space total	- 9067m ²

TANK PLATFORMS, DAMS, KELP & BASKET CLEANING	-44 900m ² +-
--	--------------------------

The revised site development plan makes provision for the following new land uses and buildings:

PROPOSED PHASE 7 EXPANSION ZONING: Agricultural Zone AG1

500 TON

Consent Use : Aquaculture & Utility services - renewable energy infrastructure

BUILDING:	SIZE	AREA	AMOUNT of BUILDINGS	COVERED	CODE	PARKING REQUIREMENTS (A)
1 Security Manager Building	4x9m	35m ²	1	Y	(B)	Calculated as per industry specifications 2 bays per 100m ² of GLA up to 500m ² . thereafter 1 bay per 100m ²
2 Seaweed Harvesting Area Seaweed Harvesting Building	20x20m 4x6m	24m ²	1 1	Y	(A)	
3 Basket Clearing Building	20x20m	400m ²	1	Y	(A)	
4 Seaweed Pond Dosing/Store	4x8m	32m ²	1	Y	(A)	TOTAL INDUSTRY GLA = 1124 50m ²
5 Recirculation Building	6.5x13.5m	87.75m ²	2	Y	(A)	Parking Required = 116 80
6 Store	14x16m	224m ²	1	Y	(A)	(B)
7 Grading / Office / Tea Room	16x18m	Ground floor - 288m ² First floor - 288m ²	2	Y	(A) (B)	Calculated as per office specifications 4 bays per 100m ² of GLA
8 Store / Ablution - Double Storey	14x16m	Ground floor - 224m ² First floor - 224m ²	2	Y	(A) (A)	TOTAL OFFICE GLA = 1003 00m ²
9 Fan Room	6x10m	60m ²	2	Y	(A)	Parking Required = 40 12
10 Fan Room & HV Substation	6x10m & 4x7m	60m ² & 28m ²	2	Y	(A)	(C)
11 Seaweed Pond Dosing/Store	4x8m	32m ²	1	Y	(A)	Calculated as per loading zone specifications. 1 bay per 500m ² FOR 151 1000m ² of GLA. thereafter 1 bay per 1000m ²
12 Generator Cluster	12x30m	360m ²	1	Y	(A)	TOTAL GLA = 12 227 50m ²
13 Tractor Workshop	16x16m	256m ²	1	Y	(A)	Loading bays Required = 15 25
14 Workshops & Office	8x10m 8x10m	80m ² 80m ²	1 1	Y Y	(A) (B)	Loading bays Provided = 18
15 Company Store	16x16m	256m ²	1	Y	(A)	TOTAL PARKINGS REQUIRED = 156.47
16 Admin / Security Building - Front gate	6x8m	36m ²	2	Y	(B)	DISABLED PARKINGS REQUIRED = 8 as per T7 1 6 of Overland Scheme
17 Site Office	4x10m	40m ²	1	Y	(B)	TOTAL PARKINGS PROVIDED = 185
18 Security Building - Main Gate	6.5x11.5m	75m ²	1	Y	(B)	DISABLED PARKINGS INCLUDED = 13
19 Solar Substation	6x6m	36m ²	1	Y	(A)	Approved Existing Parkings = 50
20 Wooden structure/Lapa	6x9m	54m ²	1	Y	(A)	
21 Kosk / Ablution	10x15m	150m ²	1	Y	(A)	
22 Admin Building	10x10m	100m ²	1	Y	(B)	
23 Pump House 7A & 7B	7x20m	140m ²	1	Y	(A)	
24 Security Building	4x6m	24m ²	1	Y	(B)	
25 HV Substation	3x3m	9m ²	1	Y	(A)	
26 Live Pack house. Prepacking Packing tanks. Live Export		4420m ²		Y	(A)	
27 Processing Building	60x50m	3000m ²	1	Y	(A)	
28 Header Tank	28.5x72m	2052m ²	1			
29. Wooden buildings (stores)	4x9m	36m ²	3	Y	(B)	
Phase 7 Platforms Solar Platform		55 130m ² 25 000m ²				
TOTAL BUILDINGS/STRUCTURES TOTAL FLOOR SPACE GLA		14 279.50m ² 12 227.50m ²			(minus Header tank)	

The area schedule for the subject property inclusive of the existing and proposed development is as follows:

AREAS:				
EXISTING FARM		PHASE 7 EXPANSION		TOTAL
TOTAL BUILDINGS	-10 211m ²	TOTAL BUILDINGS	-14 279,50m ²	24 490,50m ²
TOTAL FLOOR SPACE	- 9067m ²	TOTAL FLOOR SPACE	-12 227,50m ²	21 294,50m ²
PLATFORMS, DAMS, KELP & BASKET CLEANING	-44 900m ² +/-	PLATFORMS	- 65 130m ²	110 030m ²
PARKING	- 49 bays	SOLAR PLATFORM	- 25 000m ²	25 000m ²
		PARKING	- 186 bays	235 bays
		LOADING ZONES	- 18 bays	18 bays
COVERAGE Buildings	0,40%	COVERAGE Buildings	0,56%	0,96% Buildings
TOTAL COVERAGE	2,17%	TOTAL COVERAGE	4,12%	6,29%
TOTAL COVERAGE	5,51 Hect	TOTAL COVERAGE	10,44 Hect	15,95 Hect
FARM	-253,5405 Hect			

The above tables indicate the existing and proposed building descriptions, amount of buildings proposed, covered / open structures, the size of the structures and the amount of parking bays required. Refer to the proposed site development plan attached for easy reference to each of the structures mentioned in the above tables. Detailed building plans for the phased development of the structures on the subject property will be submitted to the town planning and building development departments once the site development plan is approved.

A kiosk, change rooms and ablutions, tea room and offices and an administrative building will be constructed for the employees as part of the new abalone expansion development. There is currently four (4) dwellings on the subject property (all two- and three-bedroom units) occupied by managing and supervising staff on the premises.

The additional GLA for the expansion of the agricultural industry (aquaculture) on Remainder farm Klipfontein No. 711 will amount to 11 224,50m². The additional GLA of the new respective offices / security buildings and administrative building will amount to 1003m² GLA. The existing GLA of the subject property will therefore be expanded with another 12 227,50m² GLA (inclusive of the processing facility). Refer to the Gross Leasable Area tables for the existing farm and proposed expansion below:

EXISTING FARM

PARKING REQUIREMENT:

Industry, Warehouse & Storage = 2 bays per 100m² of GLA up to 500m², thereafter 1 bay per 100m².

BUILDING:	SIZE:
5. Pump House	111m ²
6. Security & Scrub	36m ²
7. Lab &	146.50m ²
9. Hatchery	168m ²
10. Pump Room 1	20m ²
11. Settlement 1	540m ²
12. Dialoms	323m ²
13. Workshop	262m ²
14. Pump Room 2	56m ²
15. Pump Room 3	64m ²
16. Settlement 3	559m ²
17. Blower/Generator	49m ²
21. Packing and Restroom	309m ²
22. Grading	182m ²
23. Blower Room	31.50m ²
24. R & D Building & Store	1180m ²
<i>TEMPORARY USE OF BUILDING AS PROCESSING BUILDING</i>	
26. Abfeed Store	92m ²
27. Pump Room 4	98m ²
33. Blower Room	104m ²
34. Blower Room	115m ²
36. Electrical Building	35m ²
37. Building	20m ²
40. Storage Building	206m ²
41. Blower Building	172m ²
42. Grading Building	345m ²
43. Substation Generator	382m ²
44. Shed Tanks 4	720m ²
45. Shed Tanks 1	584m ²
46. Shed Tanks 2	563m ²
TOTAL AREA =	7473.00m ²
TOTAL = PARKINGS	79.73

LOADING ZONE REQUIREMENT:

Loading = 1 bay per 500m² for 1st 1000m² of GLA, thereafter 1 bay per 1000m².

TOTAL AREA =	7473.00m ²
TOTAL LOADING	8.473

PARKING REQUIREMENT:

Office = 4 bays per 100m² of GLA.

BUILDING:	SIZE:
7. Office	82m ²
8. Reception	47m ²
19. Office	24m ²
20. Guard House	21m ²
30. Wooden Cabins	144m ²
32. Tea Room	88m ²
39. Ablution	180m ²
47. Future Admin Building	328m ²
52. Locker Room	14m ²
TOTAL AREA =	908.00m ²
TOTAL = PARKINGS	36.32

LOADING ZONE REQUIREMENT:

Loading = 1 bay per 500m² for 1st 1000m² of GLA, thereafter 1 bay per 1000m².

TOTAL AREA =	908.00m ²
TOTAL LOADING	0.908

PARKING REQUIREMENT:

Dwelling House = 2 bays per dwelling.

BUILDING:	SIZE:	AMOUNT:
1. Residence	106m ²	2
2. Residence	81m ²	2
3. Residence	81m ²	2
4. Residence	91m ²	2

TOTAL = 8 PARKINGS

PROPOSED PHASE 7 EXPANSION

GROSS LEASABLE AREA :

PARKING REQUIREMENT:

Industry, Warehouse & Storage = 2 bays per 100m² of GLA up to 500m², thereafter 1 bay per 100m².

BUILDING:	SIZE:
2. Seaweed Harvesting Building	24m ²
3. Basket Cleaning Building	400m ²
4. Seaweed Pond Dosing/Store	32m ²
5. Recirculation Building x 2	175.50m ²
6. Store	224m ²
7. Grading / Office / Tea Room x 2	576m ²
8. Store / Ablution - Double Storey x 2	896m ²
9. Fan Room x 2	120m ²
10. Fan Room & HV Substation	176m ²
11. Seaweed Pond Dosing/Store	32m ²
12. Generator Cluster	360m ²
13. Tractor Workshop	256m ²
14. Workshops	80m ²
15. Company Store	256m ²
19. Solar Substation	36m ²
20. Wooden structure/Lapa	54m ²
21. Kiosk / Ablution	150m ²
23. Pump House 7A & 7B	140m ²
25. HV Substation	9m ²
26. Live Pack house, Prepacking, Packing tanks, Live Export	4120m ²
27. Processing Building	3000m ²
29. Wooden buildings (stores)x 3	108m ²

TOTAL AREA = 11 224.50m²
TOTAL = PARKINGS 116.89

LOADING ZONE REQUIREMENT:

Loading = 1 bay per 500m² for 1st 1000m² of GLA, thereafter 1 bay per 1000m².

TOTAL AREA = 11 224.50.00m²
TOTAL LOADING 12.225

PARKING REQUIREMENT:

Office = 4 bays per 100m² of GLA.

BUILDING:	SIZE:
1. Security Manager Building	36m ²
7. Grading / Office / Tea Room - First floor x 2	576m ²
14. Office	80m ²
16. Admin / Security Building - Front gate x 2	72m ²
17. Site Office	40m ²
18. Security Building - Main Gate	75m ²
22. Admin Building	100m ²
24. Security Building	24m ²

TOTAL AREA = 1003.00m²
TOTAL = PARKINGS 40.12

LOADING ZONE REQUIREMENT:

Loading = 1 bay per 500m² for 1st 1000m² of GLA, thereafter 1 bay per 1000m².

TOTAL AREA = 1003.00m²
TOTAL LOADING 1.003

The total floor space for all buildings on the subject property will amount to ±21 294,50m². The current zoning of the subject property only allows for a total floor space of 5 000m². Consequently, an application is submitted for a departure to deviate from the permissible floor space of 5 000m² to ±21 294,50m² to accommodate the proposed expansion development, PV power plant and abalone processing facility as indicated on the site development plan. The infrastructure associated with abalone farms take up a lot of space and cannot be compared to a typical agricultural related farm building setup with the same zoning. It is submitted that the encroachment of the total floor space is in line with the existing aquaculture land use rights for the subject property and is to an improved abalone farm in line with the environmental authorisation issued for an upgraded 1700 ton facility with PV power plant and new processing facility. It is therefore expected that the total floor space will increase for a proposed facility of this extent.

The services infrastructure of the proposed expanded abalone facility and abalone processing facility is addressed in *Section 3.9.1 Provision of Services*.

For security the expanded abalone development will be enclosed with electric fencing. Night time lighting at the existing facility is currently used to illuminate key infrastructure (e.g. administration block, pump house and generator room) and for security purposes. As no significant additional night time lighting would be required for operational functions in the expanded operations, night time lighting would remain similar to present levels. Furthermore, to increase safety and security on site, the use of infra-red technology at night on the perimeter of the property is being proposed to detect trespassers. Additional lights would only activate when a security breach is triggered. Thus, under normal operating conditions, the impact of lighting at night would remain similar to that at present.

For I&J to protect its investment all necessary measures are taken to prevent the introduction and spread of disease and pests. These measures are detailed in I&J's existing protocol for biosecurity, which is included in the Operation EMPr.

The expanded abalone farm will be operated in accordance with standard industry practices.

The proposed change in land use will not have a negative impact on any natural vegetation, views or conservation worthy portions on the subject property. Basic environmental impact assessments (EIA's) were undertaken and approved for the expanded abalone farm and processing facility. The Environmental Authorisations included the approval of Environmental Management Programmes (EMPr's).

The proposal will not lead to the fragmentation of ownership of land and therefore adheres to the objectives of the Agricultural Land Act, Act 70 of 1970.

Application is also made for the amendment of the conditions of approval of the Overberg District Municipality's decision letter dated 7 October 1991, to:

"2. The Council decided that the application for consent use under a primary zoning of Agriculture Zone I be approved subject to the following conditions:-

ii) Only skeleton staff be housed on site and that that only 2 + 3 bedroom houses for management staff and 1 x double labourers cottages be built."

Currently there are four residences (indicated as no. 1 to 4 in the existing structures schedule) on the subject property. These residences all have two and three bedrooms as per the condition of

approval. However, four new labourers' cottages (indicated as buildings no. 1, 16, 18 and 24 in the proposed expansion schedule) are proposed as part of the expansion development. Similar structures have in fact been on the existing farm (indicated as security buildings no. 29 and security hut no. 50 in the existing structures schedule – to be demolished / removed) and will be demolished or removed from its current position and replaced with the four new security huts / buildings. The security huts are used for work and living purposes on the subject property. These structures were added / relocated to ensure increased security and less corruption on the subject property 24/7. It is therefore crucial as part of the security measures for the existing and expansion development that guards are always present on the premises. Since much has changed relating to abalone security and the risks involved since 1991 (when this approval was issued), it is therefore submitted that this condition can be revised to read as follows:

"2. The Council decided that the application for consent use under a primary zoning of Agriculture Zone 1 be approved subject to the following conditions:-

ii) Only skeleton staff be housed on site and that that only 2 + 3 bedroom houses for management staff and 4 x security huts / labourers cottages be built."

It is submitted that revised condition 2.iv) does not have to be amended or removed to accommodate the proposed expansion development and processing facility. This condition reads *"that the property be managed as a nature reserve with control over access and movement of vehicles and pedestrians."* As explained in the report both the EA's issued stipulated that it is a condition of approval that the remainder farm must be managed as a conservation area / nature reserve to ensure long-term maintenance of ecological process and functioning to contribute to regional conservation targets.

The letter of approval dated 7 October 1991 also stipulated the following condition laid down by the Department of Nature Conservation in their letter of consent dated 24 May 1991:

"2. Development of the site should be confined to the area indicated on the southern side of the peninsula, and limited expansion should be allowed only to the South-east. (This will prevent encroachment on the more visible North side);"

It is evident from the SDP that the proposed expansion development was kept to the southern to south-eastern side of the subject property. The northern side remains intact for nature conservation purposes. It is therefore submitted that this previous condition of approval is still met for the proposed expansion development and processing facility.

All other conditions referred to in the above decision letter were adhered to and / or will still be adhered to with the abalone expansion development and processing facility.

The proposed abalone farm will comply with the land use restrictions for Agriculture Zone I with consent use where applicable. The Overstrand Zoning Scheme Regulations (2013) determine that 30m building lines apply to farms greater than 10ha in extent. Remainder farm Klipfontein No. 711 is 253,54ha in extent and 30m building lines apply. Some of the existing but unauthorised and new structures encroach the applicable building lines. It is intended to keep the existing (unauthorised) structures since it already forms part of the existing abalone operation on the site. In addition, the potential impact of these structures was considered in the EIA processes. The existing (unauthorised) guard house position (building no. 18 in the expansion area schedule) was determined to be next to the existing road near the existing and extended abalone facility. The existing lapa used for recreational purposes by the employees of I&J positioned within the western lateral building line (building no. 20 in the expansion area schedule of the SDP) has been in existence for at least 15 years and was indicated on the previous site development plan (SDP). However, a building line relaxation application was not approved in the past to accommodate this structure at its current position.

Furthermore, the proposed new structures namely the security building and substation at the proposed new Van Blommenstein Road entrance indicated as structures no. 24 and 25, the new pump house within the southern lateral building line and the infill within the southern lateral building line at the proposed new facility (phase 7B) south of the proposed new administration building indicated as structure no. 7 (all of the aforementioned forms part of the expansion development area schedule on the SDP) is to:

- Position the security building and substation next to the proposed new access road that is an extension of Van Blommenstein Road. The position of the road next to the farm boundary necessitates the placing of these two structures within the building lines to save cost (with reference to fencing, services installation and connection).
- The pump house position speaks for itself – close to the water to ensure effective facility operations.
- The infill can be accommodated within this building line since the southern position for the expansion facility is the lowest topographical area to ensure visual impacts are kept to a minimum.

Application is therefore made for a departure to deviate from the 30m building lines as follows:

- Eastern lateral building line from 30m to 15m to accommodate the proposed substation and security building (buildings no. 24 and 25);
- Southern lateral building line from 30m to 23m to accommodate the existing security building (building no.18);
- Southern lateral building line to allow for the infill of higher than 1m at the Phase 7B platform within the building line;

- Southern lateral building line from 30m to 5,8m to accommodate the proposed pumphouse;
- Western lateral building line from 30m to 13m to accommodate the existing lapa used for recreational purposes.

Take note that the administration building (building no. 47 on the expansion area schedule of the SDP) was already approved but not constructed. Buildings no. 52 and 53 already exist (protein skimmers and locker room) but remain unauthorised structures. Building plans will be submitted for buildings no. 52 and 53 once the new revised SDP is approved.

An application is also submitted for the deviation from the parking requirements. Refer to Section 3.9.2 *Traffic Impact, Access and Parking* of this report.

The anticipated additional employment of the proposed expansion development will amount to ±265 people resulting in a total work force of approximately 485 by 2027, which would have a significant positive impact on local communities in the project area.

The proposed amendment to the site development plan, the amendment of the conditions of approval, consent use and departure do not propose activities that will lead to uncalled for smoke, smell, noise or dust and will therefore not have a negative impact on the adjacent property owners or the ambiance of the area.

The proposed amendment of the site development plan, conditions of approval, consent use and departure do not have a negative impact on the surrounding farms as the subject property's zoning will remain unchanged. The subject property's land use rights for aquaculture purposes has vested, this application proposes an expansion development for the existing I&J Danger Point abalone farm.

To conclude: We are of the opinion that the proposal was already evaluated and considered with regards to the environmental impact, visual impact and heritage impact. The proposed site development plan was approved by the Department of Environmental Affairs and confirms that the site development plan for consideration is the most compact and unobtrusive option for development that still respects the rural vernacular and does not impact on the existing agricultural and aquaculture land uses in the immediate vicinity.

Section 3.6 addresses the impact on the character of the area and surrounding land uses. Sections 3.11 and 3.12 motivates the application further in terms of the applicable local and regional spatial planning policies and other relevant legislation.

The proposed amendment to the approved site development plan, amendment of the conditions of approval, consent use and departure are in line with the approved land use and not in contrast to the existing land use tendencies in the surrounding environment. Consequently, we do not foresee any problems with the proposed application.

3.6 CHARACTER OF THE ENVIRONMENT: COMPATIBILITY WITH SURROUNDING LAND USES

The amendment of the site development plan, amendment of the conditions of approval, consent use and departure will have a low impact visually, environmentally and with regards to the sense of place. The Birkenhead Township consists of rural erven that have some permanent residents and some that only visit over weekends and holidays. Some residents are retired, and some are still active in work. The Birkenhead Township borders on the eastern boundary of the I&J Danger Point property. The Van Dyksbaai and Gansbaai residential developments have a similar social and economic makeup.

The Gansbaai area is mainly made up of fishing communities. In addition, Remainder Farm Klipfontein No. 711 is situated near existing operational abalone culture facilities.

The proposed application implies the approval of a revised site development plan - as such the proposed expansion of the approved abalone farm will not be out of character with the immediate surrounds.

The site of the proposed abalone expansion project is currently undeveloped and in a natural state. The existing abalone farm at the southern tip of the peninsula has, however, altered the coastal landscape, creating a more commercial farming character. However, the low structures and the nature of the topography results that the existing abalone farm tends to be only visible from the lighthouse and ships at sea. With the current development, the Danger Point Peninsula is a landform of high scenic and recreational value.

As stipulated in the EIA Reports Romansbaai is $\pm 2,3$ km from the proposed processing facility and 350m from the new access road. The nearest house in the Birkenhead township is ± 400 m from the new access road and ± 700 m from the processing facility. The Danger Point Lighthouse is ± 550 m from the permanent processing facility. The temporary processing facility in the existing structure (R&D building) is positioned ± 450 m north-west of the proposed permanent processing

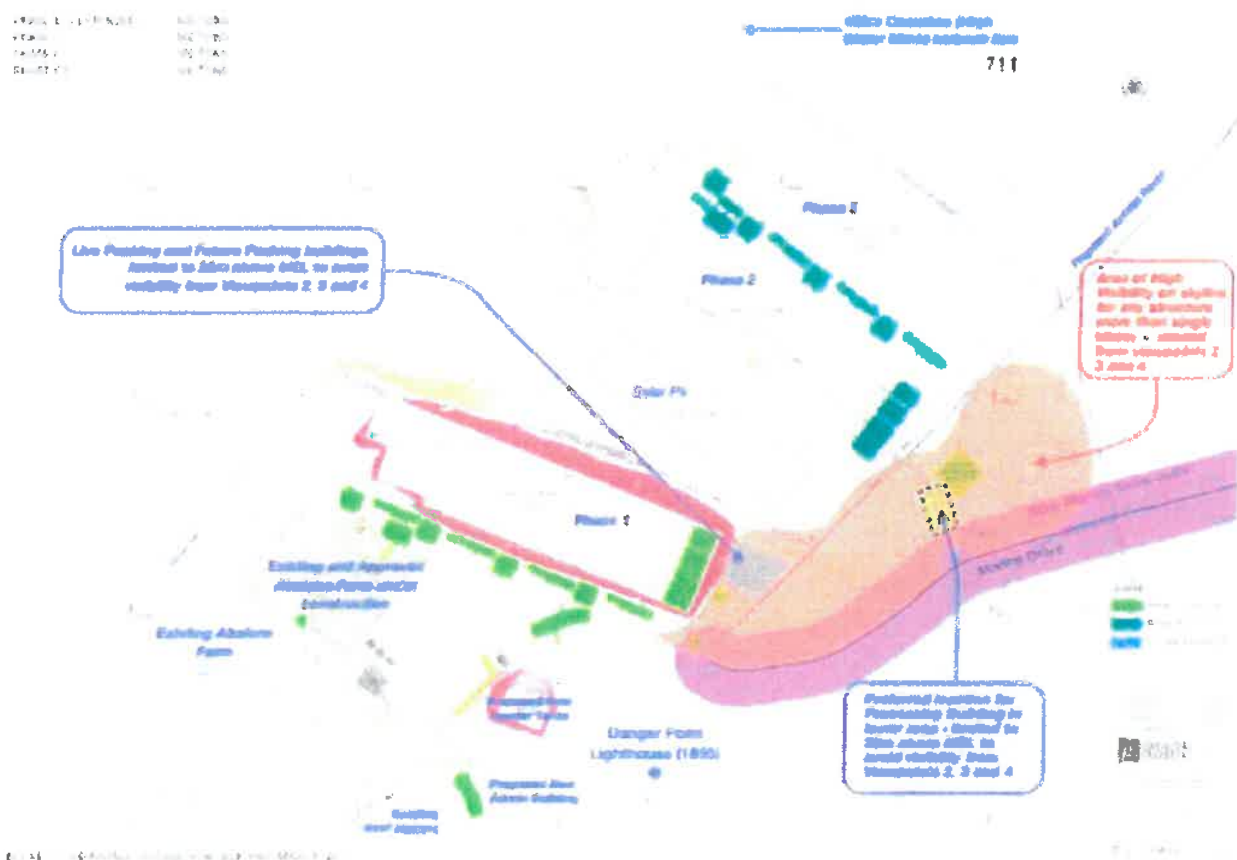
facility. The impact of the temporary processing facility will therefore be considerably lower on the character of the area (the Danger Point Lighthouse and the Birkenhead township) since the proposed use will be accommodated in an existing structure positioned farther away from the lighthouse and the Birkenhead township. The visual impact of the temporary processing facility use within the existing R&D Building on the character of the area will be minimal since the structure already exists and due to its current position on the western property boundary.

The EIA Reports and EA's confirmed that while the development will increase the footprint of the existing operation, the expansion will be set amongst the existing infrastructure which is located in the extreme western part of the site, well away from the surrounding developed areas. In addition, the pipelines will be submerged as oppose to being exposed above ground. As the proposed development largely comprises of single-storey buildings and a relatively low profile photovoltaic power plant, it is only the upper portion of some of the double storey buildings that would be marginally visible. The lowering of these buildings in the area of high visibility and the mitigation measures provided in the Visual Impact Assessment (VIA), will minimize the impact on the surrounding environment significantly.

Marine Drive is considered a local scenic route; the numerous rocky coves and headlands being high in scenic and amenity value, and popular with both residents and visitors. Single residential properties are strung out along Marine Drive to the east of the site and the Romansbaai residential estate lies immediately to the north-east. In addition, the Danger Point Lighthouse, which was commissioned in 1895 and protected in terms of the NHRA, is a valuable visitor and tourist attraction.

As stipulated in the Visual Impact Assessment compiled by B. Oberholzer and Q. Lawson dated August 2018 the necessary mitigation measures will be implemented to keep the visual impact to the surrounding properties to a minimum. Some mitigation measures include to keep all future abalone farm development west of the proposed new access road to reduce visual impact on the lighthouse precinct and Marine Drive scenic route, except for the proposed processing plant, which has specific constraints. Another is to maintain the visual integrity of the skyline seen from the Marine Drive scenic route and coastal residences, allowing the historic lighthouse to serve as a landmark. The correct siting, lowering of the platform and height of the proposed processing plant will also mitigate potential visual impacts. In addition, low, mono-pitch roofs without gables are proposed for larger buildings (the pack house and processing facility); the buildings will not be painted white but rather a grey-green colour; low walls, berms and shade structures will reduce the visual impact of parking areas; and buildings and infrastructure will be screened with planted earth berms (artificial dunes) where possible. The administration building will also be one storey to avoid the building to protrude above the skyline.

For the proposed processing facility, the visual impact identified in the specialist VIA study compiled by B. Oberholzer and Q. Lawson dated July 2018 was that the location of the proposed processing facility at the approved southern location was acceptable with mitigation measures, the most important being to limit the building height to 8m and locate the building in the lowest depression at the preferred location so that the roofline does not break the Danger Point skyline. Refer to the VIA report for the viewpoints from the neighbouring properties to Danger Bay (photomontages). It is evident that the visual impact will be greatest from the Danger Point Lighthouse site. The expansion facility will be moderately visible from Marine Drive overlooking Kruismansbaai and from the Marine Drive and Smuts Street intersection. The facilities will be marginally visible from Marine Drive gravel road at Blok se Baai. The facilities will neither be visible from the fence line at the end of Van Blommenstein Street nor from Romansbaai Beach and Fynbos Estate. Also refer to the SDP: Mitigation Measures Plan below that was extracted from the VIA:



Drawing 4 - Site Development Plan - Mitigation Measures

Most of the vegetation on site is characterised by Overberg Dune Strandveld with thicket elements. There are also some relatively small calcrete outcrops of Agulhas Limestone Fynbos on the site

and Duneveld (seashore vegetation) in a narrow belt along the coast. The expansion of the abalone farm requires the clearance of ±40ha of natural vegetation. As stipulated in the Environmental Authorisation (EA) a search and rescue operation of all conservation worthy species will be commissioned. The potential impacts on vegetation that may result from the proposed development will be further mitigated by the implementation of the conditions of the EA and the mitigation measures stipulated in the Environmental Management Programme (EMPr). Refer to the Botanical Assessment dated 27 July 2018 compiled by Fynbos Ecoscapes Botanical Consulting for detail concerning the vegetation, impact assessment and mitigation measures proposed. The identified impact, for the proposed processing facility is the physical removal of ±2600m² of least threatened Overberg Dune Strandveld for placement of the processing facility, was found to be medium by the specialist Botanical Assessment compiled by Fynbos Ecoscapes dated 31 July 2018.

The EIA and Marine Ecology Report compiled by Pisces Environmental Services (Pty) Ltd dated August 2018 confirmed that there are no marine protected areas in the immediate vicinity of the project area. Potential impacts on marine features that may result from the proposed development will be mitigated by the measures stipulated in the EMPr. Refer to the Marine Ecology Report dated August 2018 for detail concerning the description of the affected environment, the key issues and sources of potential environmental impact on the marine ecology, mitigation measures and monitoring recommendations proposed.

The EA's confirmed that the expansion of the abalone farm and related processing facility will result in an increase in traffic on the road network during the construction phase and the operational phase. The Traffic Impact Assessment (TIA) compiled by Deca Consulting Engineers dated July 2018 concluded that the proposed development will be accommodated subject to the implementation of the recommendations made in the TIA (as included in the EMPr).

In addition, the EA for the expansion development stipulates that numerous archaeological sites have been identified on the site, most of which are of low Grade IIIIC archaeological significance. The most significant site identified within the development footprint is a well-preserved shell midden. To mitigate the biophysical impact of the development, provisions are made to buffer the shell midden site and sensitive calcrete areas, while the remainder of the property will be conserved and managed accordingly.

From the above it is evident that the proposed expansion development with PV power plant and new processing facility will unquestionably have an impact on the character of the area. However, as motivated in the EIA and as confirmed in the EA, the potential impacts of the proposed expansion development can be mitigated to an acceptable level to ensure minimal impacts,

compatibility with the surrounding land uses and a positive impact on the character of the area.

3.7 ECONOMIC IMPACT

As stipulated in the EIA Report compiled by SLR Consulting SA (Pty) Ltd dated October 2018 the proposed project is considered to be consistent with and in support of the broad national policy framework for the development of the aquaculture sector in South Africa. On a regional level the proposed project is in line with the planning frameworks for the region and the development of the aquaculture sector, which can contribute significantly to local economy through the provision of employment opportunities for individuals and procurement opportunities for locally based small- and medium-sized enterprises.

Due to the size of the project there is no reason to believe that the proposed project would have any significant negative macro-economic consequences for the economy. However, the proposed development would stimulate direct and indirect employment opportunities in the long-term, as well as contribute to improved education and skills development in the area. I&J is a relatively large employer in the Gansbaai / Hermanus area with a permanent staff complement of approximately 220 people, of which the majority form part of the historically previously disadvantaged individuals. The proposed abalone expansion project would create an additional 265 jobs resulting in a total work force of approximately 485 by 2027, which would have a significant positive impact on local communities in the project area. In addition, the proposed expansion project would result in increased product exportation and inflows of foreign currency. Considering the 2011 employment figures of 9 086 in the Greater Gansbaai and Stanford area (Ward 1, 2 and 11) (Overstrand IDP), these additional jobs would result in a roughly 3% increase in the number of jobs in this area. The proposed expansion of the farm would thus bring favourable employment to local communities and local businesses by means of strengthening local suppliers.

The proposed new processing plant (temporary and permanent facilities) will stimulate direct and indirect employment opportunities over the long-term. The indirect employment opportunities would be generated through the increased expenditure in the relevant project areas and the provision of support services (e.g. transport services, security, etc.), while the direct employment opportunities relate to the jobs directly created as a result of the proposed processing plant.

3.8 SOCIAL IMPACT

As stipulated in the EIA Report compiled by SLR Consulting SA (Pty) Ltd dated October 2018 I&J is a relatively large employer in the Gansbaai / Hermanus area with a permanent staff complement of approximately 220 people, of which the majority form part of the historically previously disadvantaged individuals. The proposed abalone expansion project would create an additional 265 jobs resulting in a total work force of approximately 485 by 2027. As mentioned in *Section 3.7 Economic Impact* this would result in a roughly 3% increase in the number of jobs in this area.

The provision of unskilled employment opportunities for the local community would have a positive impact on the lives of those employed, as well as the well-being of their dependents. Furthermore, I&J's CSI Strategy would also contribute to improved education and skills development in the area. The impact associated with increased employment and local project spending is of great positive significance for the area.

It is well known that crime is driven by poverty and unemployment, and the youth unemployment rate in the Overstrand is of great concern, as in most regions in the Province. The proposed project and the creation of additional local unskilled employment opportunities could contribute to the reduction of unemployment and poverty in the Gansbaai area. Blompark and Masekhane which are suburbs of Gansbaai consist of lower income group residents that either work in the fishing, industrial, agricultural and services industries in and around Gansbaai. Amongst this community there is also a large unemployed component and it is from this source that the workforce of I&J abalone farm consists.

Abalone poaching is a national problem in South Africa and is unfortunately occurring along a substantial stretch of the Western Cape coastline. Most of the security concerns are related to the presence of abalone poachers and the poaching of natural stock from the sea, rather than from the I&J abalone farm itself. I&J has confirmed that it has had no incidences of abalone theft from its Danger Point operation. Thus, the presence of I&J cannot on its own be considered as an attraction to poaching on the peninsula and associated security issues in the Birkenhead Township. The security provided by I&J on its property has probably reduced the level of poaching of natural stocks (and number of poachers) on the peninsula that may have occurred if I&J was not present.

I&J, as part of the Danger Point community, would support (subject to board approval) proposals to improve the security on the peninsula, and has had discussions with various stakeholders in this regard. The impact associated with increased crime associated directly with the proposed

expansion of the abalone farm is of low significance with mitigation.

3.9 IMPACT ON EXTERNAL ENGINEERING SERVICES

3.9.1 PROVISION OF SERVICES

Overstrand Municipality's Engineering Services Department commented on the availability of services during the respective EIA processes. In addition, the provision of services infrastructure was fully addressed in the EIA Reports dated October 2018 and 14 February 2019. The following information was derived from the final EIA Reports:

3.9.1.1 Electricity

I&J currently has sufficient supply of electricity at its current Danger Point operation. This supply would have to be increased for the proposed new project phases. The Overstrand Municipality has indicated that a supply of up to 4.5 MVA (or MW) can be made available to the I&J operation, but this would be subject to network upgrades and Eskom capacity increases. Eskom has confirmed that this additional capacity will be made available to the Overstrand Municipality, which can be utilised for the proposed expansion project. There would be sufficient time for the municipal supply to be made available to I&J, as I&J's demand would increase incrementally over a 10-year period. As part of the proposed project I&J is also considering the possible development of a photovoltaic (PV) power plant of up to 10 MVA (or MW) to offset their electricity usage. The power plant would be 2.5 ha in extent and Eskom will be the electricity provider to the subject property. In case of power failure, a dedicated standby diesel generator will supply power to the pump stations.

Domestic power supply to the proposed abalone facility and processing plant will be supplied from the existing services on the farm.

3.9.1.2 Sewerage and grey water

Conservancy tanks would be used to collect sewage and wastewater (greywater) from the office buildings and ablution facilities in the new grow-out areas. Based on the predicted water demand of 3 000 kl per month, it is envisaged that up to 678kl of sewage and 2 322kl of wastewater would be generated per month at full production of 1 700 t/a (refer to the table below). Effluent would be collected in conservancy tanks before being removed by "honeysucker" and taken to the Gansbaai Waste Water Treatment Works for treatment. In order to reduce the volume of effluent that is removed from site I&J is proposing to collect the greywater component separately and use it for toilets and for irrigation during post construction rehabilitation and for ongoing vegetation maintenance.

Table 1: Sewage & effluent generation for the expanded abalone farm

Phase	Production capacity (t/a)	No. employees on site	Sewage (kl/month)	Grey water / effluent (kl/month)	No. of 6 kl "honey suckers" per month
Current	500	240	138 */**	0 *	23 **
Phase 1	600	200	180	774	30
Phase 2	300	200	180	774	30
Phase 3	300	200	180	774	30
Total	1 700	840	678	2 322	113

* Currently sewage and greywater is not separated.

** Based on Overstrand Municipality records for April 2018.

3.9.1.3 Water

a. Bulk water supply

I&J applied to the Overstrand Municipality for an additional water supply and the municipality subsequently agreed to upgrade the existing 1 000 kilolitres (kl) per month bulk water supply to site (at I&J's cost). The Overstrand Municipality has confirmed that the new water pipeline will be able to supply I&J with 100 kl of water per day (i.e. 3 000kl per month) in accordance with the Overstrand Master Plan. The proposed new facilities would incrementally increase I&J's water demand over a 10-year period to approximately 3 000kl per month. There is no requirement for further upgrade to the bulk water supply infrastructure. I&J has indicated that it will continue to explore methods of reducing its municipal water demand.

Domestic water supply to the proposed abalone facility and processing facility will be supplied from the existing services on the farm.

b. Water flow as part of the key operation activities

Seawater abstraction

Seawater would be abstracted via the delivery pipelines to the land-based header tank(s) and abalone tanks. The seawater intake structures would be designed for a maximum feed water abstraction capacity of approximately 9 000m³/h for Phase 1 and a further 15 000m³/h for Phase 2 and 3 (i.e. a total of 24 000m³/h for the expansion project). In order to avoid excessive biofouling in the intake pipes, intake velocities in the order of 2.2 m/s on average are required. Intake structures would be periodically cleaned of fouling organisms using high pressure water jets. When excess debris collects on the suction screens, pumps would be switched off allowing the debris to fall away from the screens. Divers may also be used to remove debris.

Effluent discharge

The abalone farm produces an effluent stream containing small quantities of waste feed, abalone faeces and dissolved nutrients. All effluent originates from the abalone grow on units, which themselves are highly sensitive to water quality. As the facility would require a continuous seawater through flow system, effluent discharge would occur at the same rate as the rate of abstraction, i.e. 24 000 m³/h for all three phases. The effluent would be discharged under gravity feed, with discharge(s) located in the upper intertidal zone above the high-water mark. Prior to discharge effluent would pass through seaweed production ponds. The green foliose alga, *Ulva lactuca*, is cultivated in the system both to remove excess nutrients from the effluent and as food for the abalone.

The minimal sewage effluent generated at the processing facility will either be disposed of via the existing municipal treatment facility, or if the I&J farm development expansion is approved, treated in a package plant that will be installed to service the larger development. The wash water used in the plant will be municipal water and will be recycled to a large extent and re-used. The small quantities of solids removed during recycling of the wash water will be disposed of via the existing municipal waste stream on the farm. A portion of this water will have to be discharged and this either be via the existing effluent treatment system on the farm, or it may be disposed of via a soakaway as it conforms to the legislation under the National Water Act. I&J indicated that there will be no discharge of processing plant water to sea. The EA for the processing facility stipulates that the abalone wash water may not be used for irrigation purposes at the abalone processing facility. The wash water must be discarded via existing conservancy tanks on the abalone farm.

The domestic effluent from the temporary processing facility will also be disposed of into a conservancy tank and transported to the Gansbaai sewage works as is presently done by a tanker truck.

The location of the existing building that will be converted to a temporary abalone processing facility is such that the wash water effluent can be discharged via the existing seawater recirculation effluent stream. The existing wastewater effluent stream from the abalone farm has a volume of 8500m³ per hour, while the wash water stream from the temporary abalone processing facility will be approximately 1m³ per hour when in operation. Therefore, the dilution factor of the effluent from the processing plant will be diluted to such an extent that it would not be detectable over and above what is present in the effluent from the abalone farm at present.

The abalone farm also has an existing discharge permit for the effluent discharged to the sea and has a monitoring programme in place that is operated by the Department of Environmental Affairs and Tourism.

3.9.1.4 Stormwater reticulation

The necessary stormwater management arrangements will be made to effectively manage the outflow system of the abalone farm.

3.9.1.5 Solid waste

The municipal waste disposal site at Gansbaai has enough capacity to receive the waste from the proposed expansion development. Waste generated during the construction phase will be delivered to the waste disposal site by the developer.

The waste product from the abalone processing facility will consist of ±80 tons per annum abalone guts and beaks and ±70 tons per annum of abalone shells. The guts and beaks will be frozen and sold to turn into fertilizer, or in case of it not being able to sell due to over-supply, disposed of at an approved dump site via the Overstrand Municipal waste stream to Karwyderskraal. The shells will also be sold and in case of oversupply will also be disposed of via the existing Overstrand municipal waste stream to Karwyderskraal. It is also being investigated to turn this waste product into a fertilizer by means of an anaerobic process on site or elsewhere (e.g. an anaerobic digester treating up to 1 ton per day).

There will be no discharge of solids at the temporary processing facility as the cut-offs from the processed abalone will be frozen and will be used under an existing contract in the same waste stream as the existing solid waste disposal.

3.9.1.6 Services Reports

GLS Consulting compiled a CES Report on request of Overstrand Municipality's Engineering Services Department in October 2020. A copy of the report with annexes was submitted to Overstrand Municipality in October 2020. The CES Report concluded the following:

- *That the developer of the remainder of Farm 711 in Kleinbaai may be liable for the payment of a Development Contribution (as calculated by the Overstrand Municipality) for bulk sewer infrastructure as per Council Policy.*
- *There is no sewer infrastructure located within close proximity of the proposed development site as a large portion of Kleinbaai is currently serviced with septic tanks. The proposed development can be accommodated by on-site conservancy tanks as an interim solution.*

- *In the longer term (when the existing erven in Kleinbaai are serviced with a full waterborne sanitation system), it is proposed that the interim conservancy tanks are replaced with a private pump station (or internal gravity network if possible) to connect to the future sewer system.*

A Civil Engineer Services Report was compiled by KLS Engineers and revised in August 2021. The municipal engineering services department confirmed in August 2021 that the KLS Services Report, Ref. 16045, Rev. B and Addendum 1 dated 12-08-2021 contains sufficient information. The municipality's engineering services department issued their services report to the town planning department in October 2021.

The revised proposal to include the temporary abalone processing in the application was sent to KLS Engineers. KLS Engineers confirmed in Addendum 2 dated May 2022 that the first two pages of Appendix C of the latest services report, are to be replaced with the attached 3 pages dated 25 April 2022 (attached to the application). The remainder of the services report (11 pages) remains the same as before. KLS Engineers confirmed that the following new note on the revised set of SDP's has no influence on the recommendations regarding civil engineering services, covered under Services Report Rev. B (June 2021) and Addendum 1 dated 12-08-2021:

<p>SPECIAL NOTE. EXISTING R & D BUILDING TO BE USED AS TEMPORARY PROCESSING FACILITY UNTIL PRIMARY PROCESSING BUILDING IS COMPLETED R & D BUILDING REVERTED TO STORAGE THEN.</p>

To conclude: the positions of the respective services infrastructure are indicated on the SDP. The necessary existing services and unallocated municipal capacity is available for the abalone expansion development and abalone processing facility (temporary and new) as currently supplied by the municipality. The abalone expansion development and processing facility will require no additional services provision. There are no elements of the processing facility (temporary and permanent) that need to be provided for in the municipal infrastructure planning (refer to the EIA Reports and appendices attached).

Where additional services infrastructure is required to accommodate the proposed expansion development, additional capacity is available for upgrade.

3.9.2 TRAFFIC IMPACT, PARKING AND ACCESS

The existing I&J abalone facility currently takes access from the existing coastal road (Marine Drive / OP4019) which originates at DR1214 (Main Road) at approximately 1,6km and runs in a south-western direction towards the existing I&J access gate and Danger Point lighthouse situated on Portion 8 of the farm 711. Three alternative ways of access were considered for the proposed expansion development, namely:

- **Alternative 1: Marine Drive.** All traffic to and from the abalone farm would continue to use Marine Drive.
- **Alternative 2: Via Van Bloemenstein Street and a proposed new 2.5 km surfaced road aligned along the existing power line on I&J's property.**
- **Alternative 3: Via Van Bloemenstein Street and a proposed new 2.5 km surfaced road aligned down the middle of the I&J property (as suggested by the Birkenhead Conservancy).**

A Traffic Impact Assessment dated July 2018 was undertaken by Deca Consulting Engineers. This study along with the various specialist studies conducted for the site, concluded that a new access route aligned adjacent to the power line on I&J's property (i.e. alternative 2) will be the best alternative to keep the impact on the existing coastal road (Marine Drive) and the indigenous vegetation on the site to a minimum.

Access via the extension of Van Bloemenstein Street is preferred from a traffic engineering perspective in terms of safety for employees, surrounding residents and pedestrians to that of Marine Drive. The Van Bloemenstein Street alternative was also preferred when considering traffic noise, with the considered alternative road alignment down the middle of the I&J property resulting in the lowest noise levels for neighbouring receptors. However, the approved access way adjacent to the powerline can be mitigated to similar levels by the construction of a noise barrier / berm on the eastern side of the proposed road.

In terms of visual considerations, as Marine Drive is a local scenic route and is overlooked by several private residences, the alternative via Van Bloemenstein Street remains the preferred new access route. Refer to the EIA Reports and Visual Impact Assessments undertaken for more detail in this regard.

The new access will be via Van Bloemenstein Street and a proposed 2,5km surfaced road. For this preferred and approved alternative, all vehicles heavier than two tons in weight would be routed via Van Bloemenstein Street, with lighter vehicles accessing the site either via Marine Drive or Van Bloemenstein Street. The proposed new road would extend from Van Bloemenstein Street

(which would also be surfaced) and be aligned adjacent to the existing power line on I&J's property, to the existing facility entrance. The road will be 4m wide with lay-bys provided for vehicle passing.

Based on the above, the alternatives have been assigned a ranking ranging from "most preferred" (3) to "least preferred" (1) (see Table 2 below). The two Van Bloemenstein alternatives are scored slightly higher than the Marine Drive alternative. For Van Bloemenstein Alternative 2 (approved alternative), the key issues relating to the alignment adjacent to the powerline (namely noise and visual) can be mitigated by the construction of a noise barrier, while for Alternative 3 the clearance of vegetation and associated fragmentation related to the alternative down the middle of the property cannot be mitigated. Thus, considering all the above, access of heavy vehicles via the extension of Van Bloemenstein Street Alternative 2 adjacent the existing power line was considered to be the preferred alternative.

Table 2: Rating of access alternatives

Key environmental considerations	Alternative 1 (Marine Drive)	Alternative 2 (Van Bloemenstein adjacent to power line)	Alternative 3 (Van Bloemenstein down middle of property)
Vegetation	3	2	1
Heritage	3	2	2
Noise	1	2	3
Visual	2	3	3
Traffic / Safety	2	3	3
TOTAL	11	12	12

Key: 1 = Least preferred; 3 = Most preferred

The recommendations of the TIA for the proposed expansion of the I&J Abalone Farm and processing facility include:

- A right-turn lane should be provided on the northern approach of the Main Road (DR1214) / Swart Street (OP4018) / OP4019 Intersection by 2025 for safety reasons;
- With the realisation of the new access road (Alternative 2), Van Bloemenstein Street should be surfaced with a width of at least 6,8m. Bell-mouths at intersections should have radii of at least 15m;
- With the newly formed intersection with the extension of Van Bloemenstein Street to form the new access to the I&J property, stop control should be placed on the Lord Roberts Street leg of the intersection with Van Bloemenstein Street forming the through road;
- New booms or gates at entrances should be placed to allow adequate stacking distances of at least 20m.
- All proposed parking bays should have dimensions of 2,5m x 5,0m with aisle widths of at least 7,0m.
- No public transport improvements are proposed on the surrounding road network

The Traffic Impact Assessment for the abalone processing facility found that Class A access is available along Marine Drive and that the traffic related to the processing facility along Marine Drive will be minor (average 12 vehicles entering in the morning and 4 departing; 11 departing in the afternoon and 5 entering). If Marine Drive was to be used as the sole access to the abalone processing facility, a section of $\pm 370\text{m}$ of existing twin track would need to be upgraded from the existing entrance to Danger Point Abalone to the turn-off onto the 50m existing twin track to the abalone processing facility. Thus, the total area of removal of natural least threatened Overberg Dune Strandveld to establish the abalone processing facility and access road if only Marine Drive is to be used as sole access will be a total of $\pm 3230\text{m}^2$. The management objective for the site development is thus to clear only the minimum area required to place the facility and entrance with very limited parking.

Due to the constant raising of issues by I&APs during the EIA process relating to the use of large vehicles of Marine Drive for access to the I&J Danger Point abalone farm, I&J has taken a decision to upgrade an access via the existing Van Blommenstein Street onto the I&J property and from there upgrade the existing twin track on the property leading down to the existing control entrance of the farm. This would result in clearing $\pm 3000\text{m}^2$ of natural vegetation to upgrade this section of road. All vehicles larger than 2 tons will then use this access route while those smaller than 2 tons will still use Marine Drive as an access. The distance from the access point onto the farm at Van Blommenstein Street to the preferred (approved) processing facility location will be ± 2180 metres.

The expansion of the existing abalone facility with processing plant will result in an increase in traffic on the road network during the construction phase and the operational phase. The TIA's dated June / July 2018 concluded that the proposed development will have a low traffic impact during the construction as well as operational phases and thus can be accommodated subject to the implementation of the recommendations made in the TIA's. These recommendations have also been included in the EMPr. The temporary abalone processing facility will take access from the existing farm roads and make use of existing loading zones positioned south-west of the R&D Building.

Dedicated parking areas (refer to the site development plan – parking layouts / blocks 1 to 7) with a total of two hundred and thirty-five (235) parking bays will be created on site. There are no parking requirements stipulated in the Overstrand Zoning Scheme Regulations (2013) for aquaculture developments. It was confirmed by the municipality that the parking requirements for agricultural industry will apply to aquaculture uses. This implies that provision must be made for 2 parking bays per 100m^2 GLA for the agricultural industry and 6 bays per 100m^2 GLA for the offices and administrative buildings. The Overstrand Zoning Scheme Regulations (2013) are currently in

the process of being revised and the latest proposed amendments to the parking requirements for agricultural industries will be as follows: 2 parking bays per 100m² up to 500m² GLA and 1 parking bay for every 100m² GLA that follows. The proposed new parking requirements for offices will be as follows: 4 parking bays per 100m² GLA. However, since the amendments to the zoning scheme regulations are not approved yet, an application is submitted for a departure to deviate from the existing parking requirements to allow the proposed parking requirements as mentioned above to be applied to this application.

The existing approved abalone facility has 49 parking bays. It is proposed to deviate from the required amount of parking bays of 281 as per the existing parking requirements to 235 parking bays proposed for this application. A total of 8 parking bays for the disabled are required and provision is made for 17 parking bays (included in the total amount of 235 parking bays). It is submitted that the deviation can be considered for your favourable consideration since the 235 parking bays to be provided will comply with the new parking requirements as stipulated in the table below. The provision of parking is therefore as follows – based on the proposed revised parking requirements:

Proposed land use	GLA (m ²)	Parking required	Parking provided
A. Aquaculture industry	11 224,50	117	
B. Offices / administrative buildings	1003	40	
Existing approved abalone farm (inclusive of existing offices and four existing residences)	9067	124	49
TOTAL	21 294,50	281	236

The site development plan distinguishes between seven parking areas to keep the impact on the hygiene and workflow operations to a minimum. Since most of the labourers are transported to the site with busses, the latter emphasizes that the need for 281 parking bays for the expansion development with processing facility is superfluous. The security huts / buildings are also occupied by labourers that travel to the site per bus / minibus and thus parking for these structures is considered unnecessary.

The Overstrand Zoning Scheme Regulations (2013) stipulate that 1 loading zone must be provided per 500m² GLA and thereafter 1 loading zone per 1000m². For the total GLA of the proposed

expansion agricultural industry with processing facility (12 227,50m²) 13 loading zones are required on site. The proposed site development plan makes provision for 18 loading zones and is therefore fully compliant.

3.10 TITLE DEED

The title deed no. T12558/1960 and pivot title deed no. T8461/1929 have no restrictions that prohibit the proposed land use. Refer to the conveyancer's certificate compiled by H.L. van Zyl from Van Zyl Kruger Attorneys dated 13 August 2019.

There is no bond registered against the subject property.

3.11 FORWARD PLANNING & OTHER LAND USE DOCUMENTS

3.11.1 WESTERN CAPE PROVINCIAL SPATIAL DEVELOPMENT FRAMEWORK (PSDF, 2014)

DEVELOPMENT OUTSIDE THE URBAN EDGE

The PSDF (2014) highlights the Province's unique agricultural resources, its natural capital in the form of its biodiversity, and its scenic and cultural resources, which are all regarded as significant spatial assets. It encourages the sustainable use of the agricultural and biodiversity resources and cautions against wasteful use of arable rural land in the light of the limited potential for agricultural expansion in the Province. In addition, the PSDF supports the safeguarding of significant natural, cultural and productive landscapes.

The PSDF recognizes Government's limited ability to grow the provincial economy. However, it highlights Government's ability to contribute to a thriving economy through providing appropriate regional infrastructure that could lead to the realization of economic opportunities within specific sectors such as agriculture, agri-tourism and tourism. The spatial policies aim to diversify and strengthen the rural economy. Fishing and aquaculture are included in the spectrum of activities identified as comprising the rural economy.

As explained in the EIA Reports the PSDF (2014) stipulates that existing economic assets should be targeted to lever the regeneration and revitalization of urban economies. To achieve the aforementioned, agri-processing and agri-tourism practices are targeted. In addition, the PSDF

also states that opportunities for mariculture and aquaculture should be permitted providing they do not exceed ecological and visual impact carrying capacities.

All possible ecological (marine ecology and vegetation), heritage, traffic, noise and visual impacts and the required mitigation measures for the proposed abalone development were addressed in the EIA process and the application was considered to be in line with the strategies and principles of the PSDF (2014). Consequently, the proposal is consistent with the PSDF's criteria to reach the Province's objectives to strengthen and diversify the existing economic assets in the region.

It is also deemed to be consistent with the specific Spatial Policy E2, as it would entail substantive private investment in the local largely rural economy of Gansbaai and provide job opportunities and sustainable livelihoods to members of the local community.

3.11.2 OVERSTRAND SPATIAL DEVELOPMENT FRAMEWORK (2006)

As stipulated in the Environmental Authorization the promotion of aquaculture is generally supported in terms of the forward planning on municipal level in policies such as the Spatial Development Frameworks and Integrated Development Plans.

The *Overstrand Spatial Development Framework (2006)* earmarks Remainder Farm Klipfontein No. 711 for conservation-agriculture, aquaculture (the footprint of the existing abalone facility) and Danger Bay Conservancy Area purposes. The existing zoning for the subject property is Agriculture Zone 1 with consent use for aquaculture purposes. This will remain unchanged with the proposed application entailing the expansion of the existing aquaculture farm and additional secondary rights in the form of renewable energy infrastructure. The proposed land use is in line with the existing spatial planning guidelines for the area:

- The subject property will be used for aquaculture and conservation purposes.
- The Integrated Coastal Management Bill (2007) provides that those activities dependent on a coastal location should, in respect of access to the sea, enjoy preference over those that are not. The proposed expanded abalone facility will support sustainable coastal development in the Overberg Region;
- The proposed expansion of the abalone farm and related renewable energy infrastructure will lead to economic growth and development, which will stimulate the creation of jobs on a sustainable basis. This is one of the key strategies of the Overstrand SDF.

In addition, the development of Remainder Farm Klipfontein No. 711 will not compromise the integrity of the approved IDP or SDF of the Overstrand Municipality. Consequently, the proposed

amendment of the site development plan, consent use and departure are compatible with the spatial planning policies for the Overstrand area

3.11.3 STRATEGIC ENVIRONMENTAL MANAGEMENT FRAMEWORK (SEMF; 2014)

As stipulated in the EIA Report for the abalone expansion development the main purpose of the SEMF is to inform decision-making regarding development and land use applications in the area. The SEMF specifies general guidelines for natural resources management, which include general resource management recommendations in respect to marine ecosystems off the coast of the Overstrand Municipality. Against this background, it is acknowledged that the socio-economic context of the proposed expansion of an existing abalone farm at Danger Point near Gansbaai area must be taken into consideration, specifically in relation to the need for local economic growth in order to create jobs. Thus, industries in the coastal areas should be related to agriculture and aquaculture, beneficiation, retail, services, the green economy and tourism, as opposed to hosting large-scale factories, which are not considered desirable in the Overstrand area. The SEMF thus advocates good environmental practice and effective regulation of the emerging aquaculture and mariculture sector to avoid potentially serious negative impacts on the health of ecosystems. In this regard the SEMF concludes that *"whilst mariculture and aquaculture projects should be encouraged, they should be carefully located with regard to environmental and visual impact criteria."*

As confirmed in the respective EA's the Department of Environmental Affairs and Development Planning (DEA&DP) is satisfied that the proposed development will not conflict with the general objectives of integrated environmental management and that any potentially detrimental environmental impacts resulting from the development can be mitigated to acceptable levels.

3.11.4 DANGER POINT PRECINCT PLAN (2015)

The Danger Point Precinct Plan (2015) does not give or take away the existing real rights of the properties concerned which are determined by their current zoning. The Precinct Plan merely provides guidelines as to:

- How development applications should be adjudicated, as and when they are submitted;
- How Council should amend its SDF in this study area as when it is reviewed; and,
- Any operational and capital or maintenance projects, if applicable, that should be

addressed in the IDP.

The policy deals mainly with the residential areas surrounding the I&J property. One of the stated goals for the precinct is that " *Development should not further undermine the sense of coastal wilderness and scenic quality.*"

The Precinct Plan earmarks Remainder Farm Klipfontein No. 711 for Private Nature Reserve purposes with two off-grid eco-resort nodes identified on the subject portion. The already developed abalone farm is indicated as urban development on the Precinct Plan. An East-west biological corridor link is also proposed to link the nature area proposed on the Birkenhead township erven across to Lord Roberts Street with that proposed on Remainder Farm Klipfontein No. 711.

Although the proposed development is in conflict with the Danger Point Precinct Plan, it is in line with the consent use of the current zoning of "Agriculture Zone 1". In addition, overall the proposed development is economically efficient.

The precinct plan also deals with building design and siting guidelines and states: "*The height of ridge lines of buildings, except for protuberances such as chimneys, to be generally below topographical ridgelines and should sit 'in' rather than 'on' the landscape.*" The following are also indicated in the policy: *The roof slope shall be largely parallel with the ground slope, walls to be natural or earthy or light-coloured plaster, and roofs dark green or charcoal.* It is submitted that the necessary mitigation measures were taken to ensure that the guidelines of the Danger Point Precinct Plan are considered and met where possible.

As contemplated in the respective EIA reports the remainder of the farm will still be managed as a conservation area / nature reserve to ensure long-term maintenance of ecological process and functioning and contribute to regional conservation targets.

To conclude: As confirmed in the EIA Reports the proposed expansion development is consistent with and in support of the broad national policy framework for the development of the aquaculture in South Africa. On a regional level the proposed project is in line with the planning frameworks for the region and the development of the aquaculture sector, which can contribute significantly to local economy through the provision of employment opportunities for individuals and procurement opportunities for locally based small- and medium-sized enterprises.

3.12 OTHER RELEVANT LEGISLATION FOR CONSIDERATION OF THE APPLICATION

3.12.1 HERITAGE VALUE

Since the proposed expansion development and abalone processing facility involve changing the character of a site larger than 5000m² the proposed application triggers Section 38 of the National Heritage Resources Act, 1999 (Act No. 25 of 1999). Notices of Intent to Develop and Heritage Impact Assessment Reports for the proposed expansion development and the proposed abalone processing facility on Remainder Farm Klipfontein No. 711 were submitted to Heritage Western Cape (HWC) during the Basic Environmental Impact Assessments undertaken. Refer to a copy of the Heritage Impact Assessments compiled by the Agency for Cultural Resource Management (ACRM) dated January 2018 and October 2018 respectively.

Numerous archaeological sites/finds have been identified on site, most of which are of low Grade IIIC archaeological significance. The most significant archaeological site identified within the development footprint is a well-preserved shell midden, which has a medium (Grade IIIB), potential high (Grade IIIA), archaeological significance. The avoidance of this site (with a 30-40m buffer) and archaeological monitoring during construction would mitigate this impact to low significance.

To date nine graves from the wreck of the HMS Birkenhead (1852) have been accidentally uncovered during early construction work at the I&J abalone farm in the 1980s. The burials were all uncovered less than 100m from the high-water mark.

An insignificant impact on archaeological resources for the preferred location of the processing facility was found by the specialist heritage impact assessment dated January 2018.

The VIA report stipulated that in a Heritage and Scenic Resources Report (Winter, S. and Oberholzer, B. 2014), prepared as part of the Western Cape Provincial Spatial Development Framework, Danger Point it was listed as follows:

"Prominent landmark defining the edge of Walker Bay. Its associations with the famous Birkenhead wreck (graves of the Birkenhead survivors) and related lighthouse, which is a prominent landmark feature."

Danger Point currently has no heritage protection, but was considered as having "historical, aesthetic and social value" of local significance.

The Overstrand Heritage Survey (Baumann, N. *et al* 2009) prepared for, and adopted by the Overstrand Municipality, contained several references to the Danger Point peninsula and

The summary of the potential environmental impact of the proposed abalone expansion project (Project 1) as derived from the EIA Report compiled by SLR Consulting SA (Pty) Ltd dated October 2018 is as follows:

- Impact on marine ecology: The wave-dominated nearshore environment is well adapted to minor disturbances, high suspended sediment concentrations and periodic deposition and resuspension of sediment. Thus, impacts experienced during construction and maintenance operations would be short term and at a sublethal level. Where the biota is physically removed within the development footprint, recolonisation would be rapid (two to five years) with a similar community to that previously present. Impacts during construction and maintenance are considered to be of VERY LOW significance with mitigation. Key mitigation measures include ensuring the pipelines are located in existing gullies in order to minimise the need for bedrock removal (using low energy rock breaking technology), implementation of good house-keeping practices and the removal of accumulations of excavated sediments or rock stockpiles from the coastal zone.

During operation the intake of water directly from the ocean would result in loss of marine species as a result of impingement and entrainment. However, the installation of a 19 mm mesh screen at the seaward end of the intake pipes would mitigate this impact to some extent, resulting in a highly localised impact of LOW significance with mitigation.

Effluent from the abalone farm would pass through seaweed production ponds, which would provide some form of cleaning prior to discharge, and as a result it is regarded as relatively innocuous. The slightly elevated levels of nutrients and suspended solids would only pose a low environmental risk to receiving waters given the highly productive nature of the ecosystem. Discharges may also result in pathogens (diseases) and parasites being transferred to the wild abalone population. However, the likelihood of this occurring is very low considering the current biosecurity protocol that would be implemented in the proposed future phases. Although the impact related to effluent discharge will persist over the operational lifetime of the facility, it is assessed to be INSIGNIFICANT with mitigation.

The impact on the genetic profiles of wild populations of the same species is considered to be highly unlikely considering that I&J use a broodstock that originates from the South-Western Cape coast and spat is thus genetically indistinguishable from wild stock and well-adapted to the natural environment. This impact is considered to be INSIGNIFICANT.

- Impact on vegetation within the development footprint: The proposed project would result in the loss of approximately 40ha of indigenous vegetation from the site (i.e. approximately 16% of the total erf size). Most of the vegetation within the proposed development footprint

is Overberg Dune Strandveld (Least Threatened). However, patches of Agulhas Limestone Fynbos (Vulnerable) may also be impacted. Considering the development as a whole, the loss of vegetation within the development footprint is considered to be of MEDIUM-HIGH significance with mitigation. The key mitigation measures include the implementation of no-go areas, maintenance of ecological corridors, a search and rescue operation, rehabilitation and management of the remainder of the site as a conservation area.

- Impact on archaeological resources: The installation of the proposed facilities and infrastructure could disturb cultural heritage material, such as shell middens, graves and other archaeological material. Numerous archaeological sites / finds have been identified on site, most of which are of low Grade IIIC archaeological significance. The most significant archaeological site identified within the development footprint is a well-preserved shell midden, which has a medium (Grade IIIB), potential high (Grade IIIA), archaeological significance. The avoidance of this site (with a 30-40m buffer) and archaeological monitoring during construction would mitigate this impact to LOW significance.

An insignificant impact on archaeological resources for the preferred location of the processing facility was found by the specialist heritage impact assessment dated January 2018.

- Impact of additional traffic: The proposed expansion project (inclusive of the processing facility) would have the potential to generate a total of 72 additional trips during the AM peak hour and 53 additional trips during the PM peak hour at full phase development (2030). Based on the current traffic pattern, the split between heavy and light vehicles generated by the proposed expansion project would be 15:57 (heavy: light) during the AM peak hour and 20:33 (heavy: light) during the PM peak hour.

A comparison of the background and project-related level-of-service (LOS) at intersections in 2025, 2030 and 2034, indicates that the proposed project would only decrease the LOS at the Main Road (DR1214) / Swart Street (OP4018) / Smuts Street (OP4019) intersection. The proposed expansion project would, however, result in a decrease in the LOS along the access road alternatives, with Access Alternative 1 (i.e. access via Marine Drive) affecting more road sections than Alternative 2 (i.e. access via Van Bloemenstein Street).

Based on the anticipated traffic volumes and associated LOS, the proposed expansion project (both access alternatives) would have an impact of LOW significance. Although both access alternatives are considered to be of similar significance, access via the extension of Van Bloemenstein Street would affect less road sections and is preferred from

a traffic engineering perspective in terms of safety for employees, surrounding residents and pedestrians.

- Impact of project related noise: Noise would be emitted by construction equipment used for activities such as land clearing, site preparation, excavation, clean-up, and landscaping. Noise generated during construction is highly variable since it is characterised by variations in equipment power output. Construction and diesel mobile equipment generally produce noise in the lower end of the frequency spectrum. Reverse or moving beeper alarms on the other hand emit at higher frequency ranges and are often heard over longer distances. With the implementation of the proposed mitigation, the residual noise impact would be of LOW significance.

During operation the two most significant noise sources would be the blower rooms and traffic. For the Marine Drive access alternative, simulations indicate that at full phase development noise levels from I&J operations would not exceed the IFC day- and night-time guidelines of 55 dBA and 45 dBA, respectively, in the case of the Birkenhead Township or Romansbaai Estate. These levels would only be exceeded at the Danger Point Lighthouse, which is situated closest to the I&J operation. With the exception of the Danger Point Lighthouse which could experience a maximum day-time increase of 17.6 dBA, the expected increase in day- time noise levels along Marine Drive and at Romansbaai range from less than 1 dBA to 6.3 dBA for Phase 1 and from less than 1 dBA to 7.8 dBA for all three phases, depending on the location of the receptor and which access alternative is implemented.

For the alternative of redirecting all heavy vehicle traffic accessing the site via Van Bloemenstein Street, noise levels from I&J operations at full phase development would also not exceed the IFC day- and night-time guidelines of 55 dBA and 45 dBA, respectively, in the Birkenhead Township or Romansbaai Estate. The day-time noise impact along Marine Drive would be less than 3 dBA for all phases. For a person with average hearing acuity, an increase of less than 3 dBA in the general ambient noise level is not detectable. Day-time noise levels (largely limited to AM and PM peak traffic hours) at the Koen / Kruger property (approximately 105m from the Van Bloemenstein Street extension alternative) would, however, increase by 3.8 dBA above background in Phase 1 and to 6.1 dBA above background at full-phase development. The cumulative noise levels could, however, be reduced by 10 to 15 dBA with the construction of a noise barrier, which would interrupt the direct, straight-line path between the source of the noise and the noise receptor. Noise levels, however, at the residences along Van Bloemenstein Street, which would experience a day-time noise increase in the order of between 1.5 and 5 dBA in Phase 1 and between 3

to 6 dBA in Phase 3, could not be mitigated by a noise barrier as it would impede access. However, the selection of road surfacing could mitigate the noise impact to some extent, e.g. porous road surfaces (e.g. open grade bitumen rubber) would result in lower noise levels than surfaces with random chippings and grooving (SANS 10210 standard).

The impact related to project-related noise is considered to be of LOW significance with mitigation. Key mitigation measures include equipment siting, equipment design and specifications, erecting a noise berm and the implementation of a noise monitoring programme.

- Impact on air quality during construction: During construction dust generated from vegetation clearing, bulk earthworks and the movement of vehicles on unsurfaced roads may contribute to elevated particulate matter levels in the air on a local scale. For dust / wind-blown sand to affect the Birkenhead residents along Marine Drive the key wind directions would have to be from the west-south-west (<5% frequency) and south-west (<10% frequently). The dispersion conditions at Danger Point are generally good due to high occurrence of strong wind conditions. Periods of reduced dispersion potential are characterised by stable atmospheric (inversion) conditions, which occur with winds from the north-east, north, north-north-east, north-north-west and east-north-east, which are less common at Danger Point (10% of the year). The highest concentrations of low-level air emissions from construction vehicles are, therefore, likely to occur during these wind directions, i.e. blowing away from Birkenhead residents. The impact related to air quality during construction is considered to be VERY LOW with mitigation, which includes the implementation of a dust management programme.

The proposed expansion of the abalone farm would not result in any odours or emissions, other than that related to exhaust gas emissions produced by the combustion of gas or liquid fuels in generators, vehicles and other engines. Most emissions would occur along the access road from increased traffic and at the generator cluster. The impact related to air quality during operation is considered to be VERY LOW with mitigation, which includes the implementation of a maintenance plan for all diesel motors and generators.

- Impact on the cultural landscape and sensitive visual receptors: The Danger Point peninsula is a visually sensitive landscape feature. Potential visually sensitive receptors include the lighthouse, the Marine Drive scenic route and a number of residences along the route. The location of the proposed development in a low-lying dune slack area behind an existing dune ridge line largely screens it from nearby sensitive visual receptors, resulting in it not being significantly visible beyond about 1,5km. In addition, the

existing abalone facility provides some visual absorption capacity. It would, however, be visible from the Danger Point Lighthouse and partially visible from Marine Drive and a number of residences to the east. As the proposed development is largely comprised of single-storey buildings and a relatively low-profile PV power plant, it is only the upper portion of some of the double-storey buildings that would be marginally visible above the existing ridge. The lowering of the height of these buildings in the area of high visibility or their relocation would result in a residual impact of MEDIUM significance.

- Impact on job creation and community upliftment: refer to Section 3.7 Economic Impact.
- Increased crime and landowner security: refer to Section 3.8 Social Impact.

The summary of the potential environmental impact of the proposed abalone processing facility as derived from the EIA Report compiled by EnviroAfrica Environmental Consultants dated February 2019 is as follows:

- Geological: Identified impact is the physical disturbance of the geological structure of the soil on the development footprint in order to place the various elements of the proposed processing facility consisting of a facility disturbance footprint of 2 600m²
- Ecological: Identified impact is the physical removal of 2 600m² of least threatened Overberg Dune Strandveld for placement of the proposed processing facility found to be medium by the specialist botanical assessment. A search and rescue of transplantable plant material prior to construction as well as the erection of temporary fencing around the proposed development area to ensure no damage to the natural flora outside the development footprints are proposed as a few of the mitigation measures.
- Heritage: An insignificant impact on archaeological resources for the proposed location of the processing facility was found by the specialist heritage impact assessment.
- Traffic: The identified impact found in the specialist TIA indicated that there was a very slight increase in trips associated with the proposed processing facility along Marine Drive when compared to the present.
- Socio-economic: The identified impact was that 55 new jobs would be created at the proposed processing facility and that better security management of unprocessed abalone product would result with a concomitant reduction in risk of unprocessed abalone being hijacked by criminal elements during transport to the existing off-site processing facility in

Hermanus.

- **Noise:** Impact identified in the specialist noise study was that there would be a very slight noise increase that would be barely perceptible associated with the proposed processing facility.
- **Visual:** The visual impact identified in the specialist VIA study was that the location of the proposed processing facility was acceptable with mitigation measures, the most important being to limit the building height to 8 metres and locate the building in the lowest depression at the preferred location so that the roofline does not break the Danger Point skyline.
- **Air quality:** The specialist air quality report identified that odours would not emanate from the proposed processing facility because only fresh abalone would be processed at the facility.

For both the previous consent use approval as well as the latest EA's issued, it is a condition of approval that the remainder farm must be managed as a conservation area / nature reserve to ensure long-term maintenance of ecological process and functioning to contribute to regional conservation targets.

An Environmental Authorisation (EA) for the expansion development (project 1 above) was issued on 8 March 2019. An EA for the proposed permanent abalone processing facility (project 2) was issued on 11 June 2019. A third EA was issued on 15 December 2020 for the temporary abalone processing facility. Detail pertaining to both the environmental impact assessments (visual impact, heritage impact, marine ecology impact, traffic impact, noise impact, air quality impact and vegetation impact) was included in all the relevant basic impact assessment reports attached to this application.

The Department of Environmental Affairs & Development Planning confirmed in the EA dated 15 December 2020 that the volume of abalone that will be processed by the temporary abalone processing facility can be accommodated by the annual production output per year of the existing abalone farm. The existing building to be used as temporary processing facility (i.e. for agri-industrial purposes) is 1180m² in extent, which is less than the threshold of 2000m² as stipulated in terms of the NEMA EIA Regulations, 2014 (as amended).

With the temporary processing facility, no development will take place within 100m of the high watermark of the sea, since the building that will be used for the processing of abalone already

exists. No new roads must be developed to accommodate the temporary processing facility. Access to the R&D building that will be utilised for the processing of abalone is existing.

Various Environmental Authorisations and other related authorisations / permits for the existing abalone farm were issued over the years. A list of the authorisations issued were compiled and the latter together with copies of the various authorisations are attached.

All conditions as stipulated in the EA's will be met for the proposed expansion development and temporary and permanent abalone processing facility.

3.13 PLANNING PRINCIPLES

Spatial justice: I&J takes their corporate social responsibility seriously. They believe that healthy attitudes and strong bodies make for a good society where people, families, individuals, and businesses can live in harmony together – with a respect for life, for achievement of dreams, for encouragement and hope, for jobs and success, for coming home to smiles and food on the table.

I&J is a foundation in the community because they understand health and happiness goes hand-in-hand with care and consideration – which is why they contribute 1% of their pre-tax profit every year, they donate fish, and the people give freely in their time and effort to support causes that make their world and community a better place to live.

As stipulated in *Section 3.7 Economic Impact* and *Section 3.8 Social Impact* I&J is a relatively large employer in the Gansbaai / Hermanus area with a permanent staff complement of approximately 220 people, of which the majority form part of the historically previously disadvantaged individuals. The proposed abalone expansion project would create an additional 265 jobs resulting in a total work force of approximately 485 by 2027, which will have a significant positive impact on local communities in the project area. The proposed expansion of the farm would thus bring favourable employment to the local communities and local businesses by means of strengthening local suppliers.

The provision of unskilled employment opportunities for the local community would have a positive impact on the lives of those employed, as well as the well-being of their dependents. Furthermore, I&J's CSI Strategy would also contribute to improved education and skills development in the area.

The proposed abalone expansion and abalone processing facility project will create an additional 265 jobs resulting in a total work force of approximately 485 by 2027, which would have a significant positive impact on local communities in the project area. In addition, the proposed expansion project would result in increased product exportation and inflows of foreign currency. Overall, the proposed development is considered to be economically efficient.

It proves to be more efficient to allow the building line deviations since the impact of the existing and new structures will be minimal and the environmental impact of these existing and new structures was already considered. The EA's were based on the expanded abalone facility inclusive of the PV power plant and processing facility and it was concluded that any possible impacts can be mitigated. The total parking to be provided will suffice once the parking requirements policy is revised and therefore it proves to be efficient to allow the deviation in line with the proposed revised parking policy.

Spatial resilience: Not applicable to this application.

Good administration: Our firm is committed to the principle of good administration and will cooperate with the Overstrand Municipality to ensure a time efficient, uncomplicated land use planning process. The land use application will follow due process as stipulated in the relevant municipality's bylaw and related provincial and national land use planning legislation. All measures will be taken to ensure an efficient and streamlined process within the applicable timeframes as stipulated by the Overstrand Municipality's By-law on Municipal Land Use Planning, 2016.

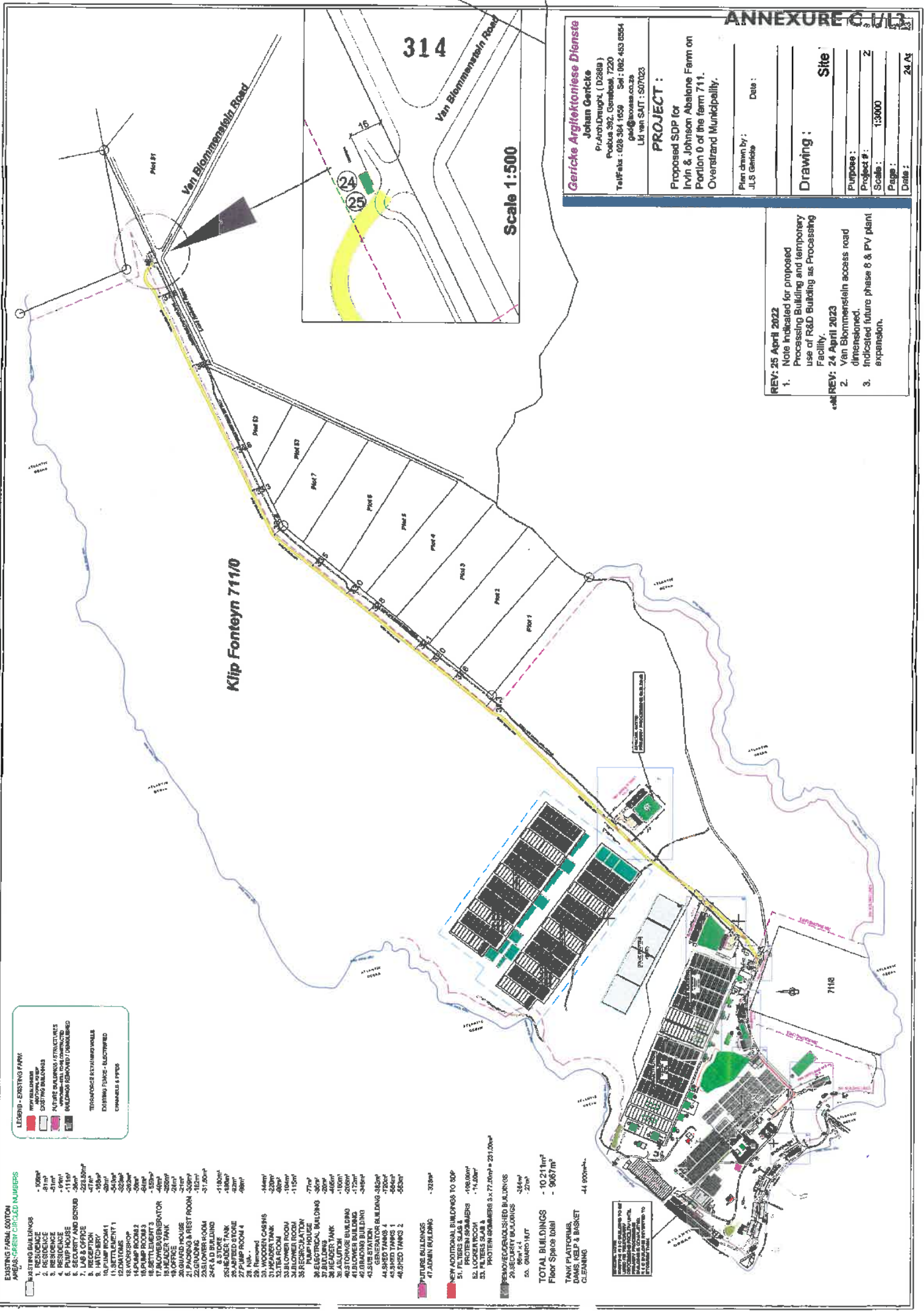
4. RECOMMENDATION

When this application is evaluated it is important to take note of the following:

- The proposed amendment of the site development plan, amendment of the conditions of approval, consent use and departure will not have a negative impact on the existing or future mari-culture activities;
- Possible environmental impacts of the proposed development can be mitigated to acceptable levels as stipulated in the EIA Reports and Environmental Authorisations;
- The remainder farm will be managed as a conservation area / nature reserve to ensure long-term maintenance of ecological process and functioning to contribute to regional conservation targets;

- The environmental authorisations address and mitigate all possible impacts concerning the fauna and flora, the heritage value of the site, the visual impact of the proposed development and the environmental impact as a whole;
- The proposal is compatible with the existing character of the area;
- Services infrastructure for the proposed expansion abalone development and respective temporary and permanent processing plants can easily be provided without having a negative impact on the environment;
- The zoning will remain Agriculture Zone 1: Agriculture (AG1) with consent uses (utility services and agricultural industry);
- The proposed land use application complies with the spatial planning policies of the area;
- The application is fully compliant with the applicable planning principles described in the LUPA (2014) and SPLUMA (2013).

The application can be supported for your favourable evaluation. The opinion is held that this application will have no negative impacts in the area and that it will contribute towards the Overstrand mari-culture and fishing industry's significance and value.



- LEGEND - EXISTING FARM:**
- EXISTING BUILDINGS
 - EXISTING BUILDINGS TO BE DEMOLISHED
 - EXISTING BUILDINGS TO BE RECONSTRUCTED
 - EXISTING BUILDINGS TO BE RECONSTRUCTED WITH CHANGES
 - EXISTING BUILDINGS TO BE RECONSTRUCTED WITH CHANGES & PV PANELS
 - TEMPORARY RETAINING WALLS
 - EXISTING FENCE - UNCUT/CHIPPED
 - CHANGING FENCE

- EXISTING FARM, SECTION AREAS - GREEN CIRCLED NUMBERS**
- 1. RESIDENCE - 108m²
 - 2. RESIDENCE - 81m²
 - 3. RESIDENCE - 51m²
 - 4. RESIDENCE - 111m²
 - 5. FLUID HOUSE - 20m²
 - 6. SECURITY AND STORAGE - 228.50m²
 - 7. LAB & OFFICE - 471m²
 - 8. RECEPTION - 471m²
 - 9. PUMP ROOM 1 - 30m²
 - 10. PUMP ROOM 2 - 30m²
 - 11. SETTLEMENT 1 - 54.5m²
 - 12. OATMANS - 333m²
 - 13. WOODEN SHED - 30m²
 - 14. PUMP ROOM 3 - 41m²
 - 15. PUMP ROOM 4 - 41m²
 - 16. SETTLEMENT 2 - 55m²
 - 17. BLOWER ROOM - 40m²
 - 18. OFFICE TANK - 20m²
 - 19. OFFICE - 21m²
 - 20. GUARD HOUSE - 30m²
 - 21. PACKING & REST ROOM - 10m²
 - 22. STORAGE ROOM - 51.20m²
 - 23. STONE & STONE - 1180m²
 - 24. HEADER TANK - 18m²
 - 25. PUMP ROOM 5 - 40m²
 - 26. PUMP ROOM 6 - 40m²
 - 27. N/A -
 - 28. N/A -
 - 29. Removed -
 - 30. WOODEN CASHS - 34m²
 - 31. WOODEN CASHS - 40m²
 - 32. TEA ROOM - 10m²
 - 33. BLOWER ROOM - 10m²
 - 34. BLOWER ROOM - 115m²
 - 35. FLOOR HOUSE - 77m²
 - 36. ELECTRICAL BUILDING - 50m²
 - 37. BUILDING - 20m²
 - 38. HEADER TANK - 40m²
 - 39. STORAGE BUILDING - 200m²
 - 40. STORAGE BUILDING - 200m²
 - 41. BLOWER BUILDING - 172m²
 - 42. BRACHING BUILDING - 348m²
 - 43. DYE STATION - 382m²
 - 44. SHED TANKS 1 - 720m²
 - 45. SHED TANKS 2 - 584m²
 - 46. SHED TANKS 3 - 582m²
 - 47. ADMIN BUILDINGS - 328m²

- NEW ADDITIONAL BUILDINGS TO SDP**
- 51. FILTERS SLAB & PROTEIN SHIMMERS - 178.00m²
 - 52. FILTERS SLAB & PROTEIN SHIMMERS - 14.00m²
 - 53. FILTERS SLAB & PROTEIN SHIMMERS 3 x 72.26m² = 231.20m²
 - 54. SECURITY BUILDINGS - 244m²
 - 55. GUARD HUT - 27m²
- TOTAL BUILDINGS**
- Floor Space Total - 10,211m²
 - Floor Space Total - 9,067m²
 - TANK PLATFORMS, DAMS, KEMP & BASKET CLEANING - 44,900m²

THESE ARE THE PROPOSED BUILDINGS TO BE CONSTRUCTED ON THE SITE. THE EXISTING BUILDINGS TO BE DEMOLISHED ARE SHOWN IN RED. THE EXISTING BUILDINGS TO BE RECONSTRUCTED ARE SHOWN IN GREEN. THE EXISTING BUILDINGS TO BE RECONSTRUCTED WITH CHANGES ARE SHOWN IN BLUE. THE EXISTING BUILDINGS TO BE RECONSTRUCTED WITH CHANGES & PV PANELS ARE SHOWN IN YELLOW.

Gerické Argitektontiese Dienste
 Johan Gerické
 Pr. Arch/Draught (D26889)
 Poedus 362, Gematbakk, 7220
 Telfone : 028 304 1650 Fax : 082 453 0554
 gaj@soosaa.co.za
 Lid van SAIT : S07023

PROJECT :
 Proposed SDP for
 Irvin & Johnson Abalone Farm on
 Portion 0 of the farm 711.
 Overstrand Municipality.

Plan drawn by : JLS Gerické Date :
 Drawing : Site
 Purpose :
 Project # : Z
 Scale : 1:3000
 Page : 24 of 24
 Date : 24 Apr

- REV: 25 April 2022**
- Note indicated for proposed Processing Building and temporary use of R&D Building as Processing Facility.
- REV: 24 April 2023**
- Van Blommestein access road dimensioned.
 - Indicated future phase 6 & PV plant expansion.

315

Geritcke Argitektoniese Dienste
 Johan Geritcke
 Pr. Arch. Draught. (D2868)
 P.O. Box 392, Genabess, 7220
 Telf: 029 284 1659 Fax: 029 453 8554
 gerd@argitek.co.za
 Ltd van SAUT : 507023

PROJECT :

Proposed SDP for
 Irvin & Johnson Abalone Farm on
 Portion 0 of the farm 711,
 Overstrand Municipality.

Plan drawn by :
 JLS Geritcke

Date :

Drawing :

Larger Site P

Purpose :






Project # :

Scale : 1:1500






Page : 2

Date : 24 April

LEGEND BUILDINGS

-  EXISTING BUILDINGS
-  APPROVED FUTURE BUILDINGS
-  NEW ADDITIONAL BUILDINGS TO APPROVED SDP
-  PROPOSED PHASE 7 EXPANSION BUILDINGS
-  PROPOSED FUTURE PHASE 8 EXPANSION BUILDINGS

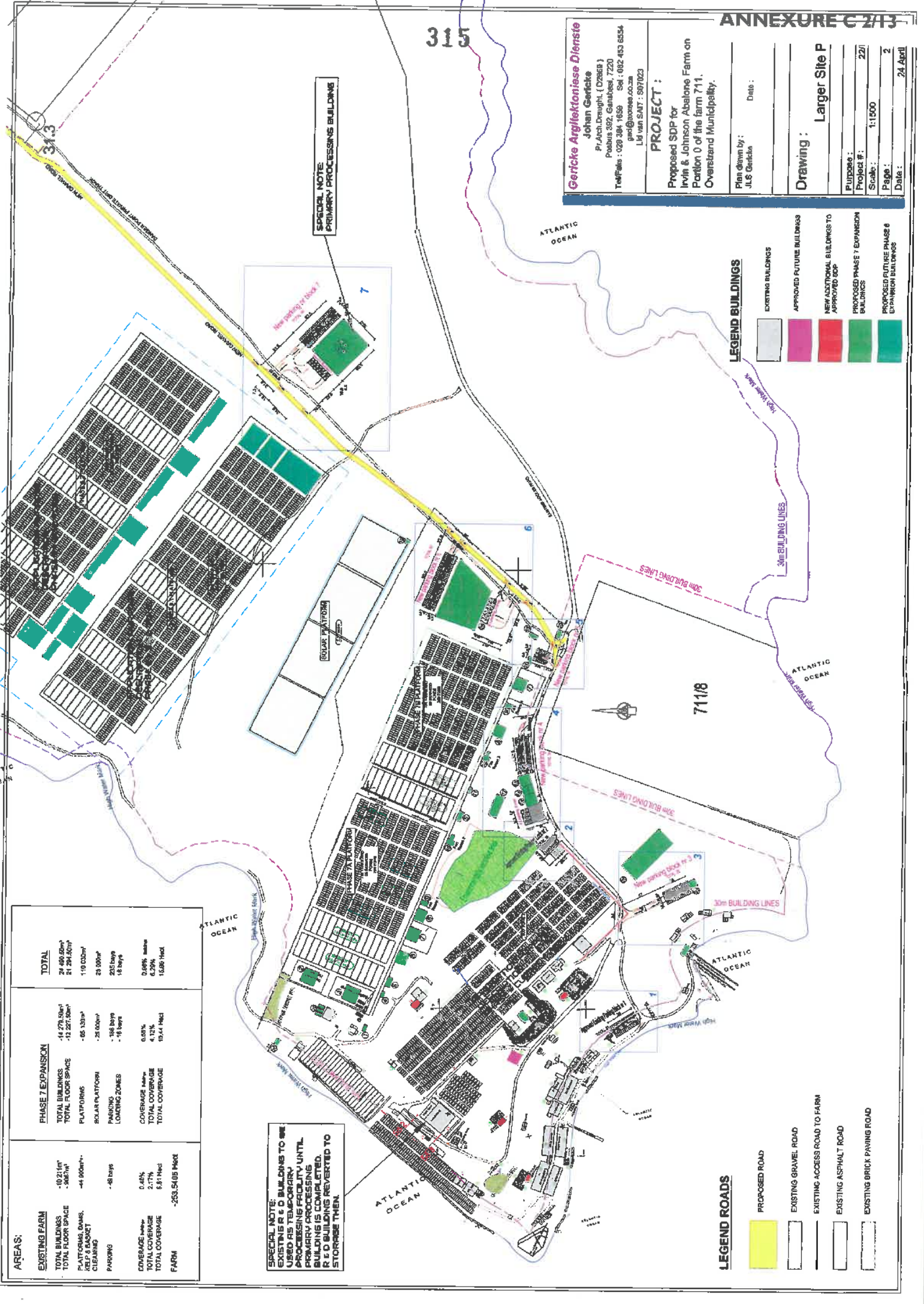
LEGEND ROADS

-  PROPOSED ROAD
-  EXISTING GRAVEL ROAD
-  EXISTING ACCESS ROAD TO FARM
-  EXISTING ASPHALT ROAD
-  EXISTING BRICK PAVING ROAD

SPECIAL NOTE
 PRIMARY PROCESSING BUILDING

SPECIAL NOTE:
 EXISTING R & D BUILDINGS TO BE
 USED AS TEMPORARY
 PROCESSING FACILITY UNTIL
 PRIMARY PROCESSING
 BUILDING IS COMPLETED.
 R & D BUILDING REVERTED TO
 STORAGE THEN.

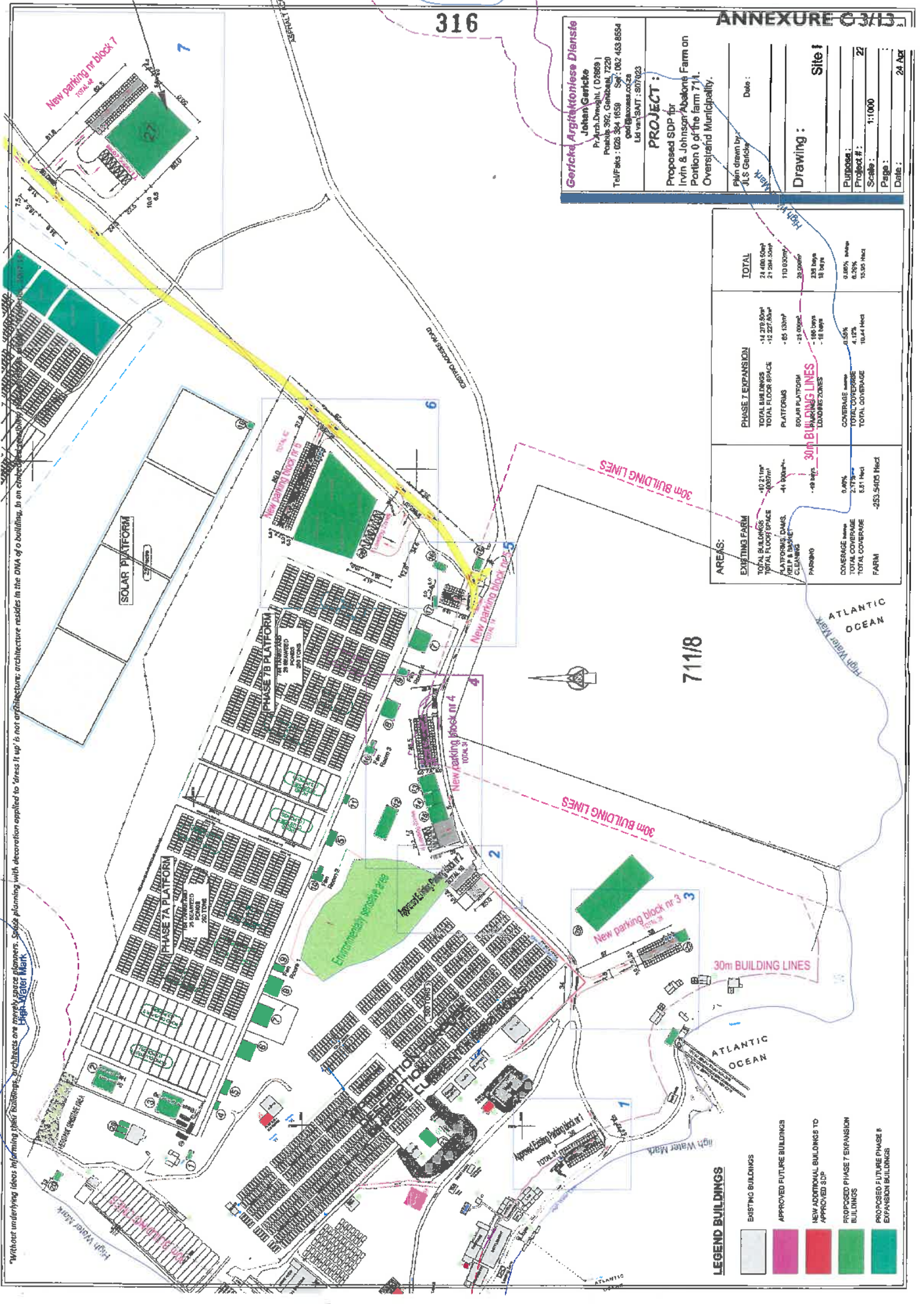
AREAS:	EXISTING FARM	PHASE 7 EXPANSION	TOTAL
TOTAL BUILDINGS	-10,21m ²	-14,279,50m ²	24,489,69m ²
TOTAL FLOOR SPACE	-3687m ²	-12,267,50m ²	16,254,97m ²
PLATFORMS, BAYS, RELF & BAGNET CLEANING	-44,900m ²	-85,133m ²	130,033m ²
PARKING	-48 bays	-25,600m ²	25,600m ²
		-168 bays	225 bays
		-16 bays	10 bays
COVERAGE	0,48%	0,68%	0,69%
TOTAL COVERAGE	2,77%	4,12%	6,29%
TOTAL COVERAGE	6,57 Hect	19,64 Hect	15,08 Hect
FARM	-253,5405 Hect		



Geritche Argintonlose Dianstie
 Johan Geritche
 P-Just. Broughtl. (0)8689 1
 Pombils: 397, Gansbaai, 7220
 Telfaxs : 028 384 1659 Sph: 082 463 6554
 gad@geritche.co.za
 Lid van SNT: 507623

PROJECT:
 Proposed SDP for
 Irvin & Johnson/Abelone Farm on
 Portion 0 of the farm 711,
 Ovensstrand Municipality.

Plan drawn by: J.S. Geritche	Date:
Drawing:	
Site 1	
Purpose:	1:1000
Project #:	2
Scale:	1:1000
Page:	24
Date:	24 Nov

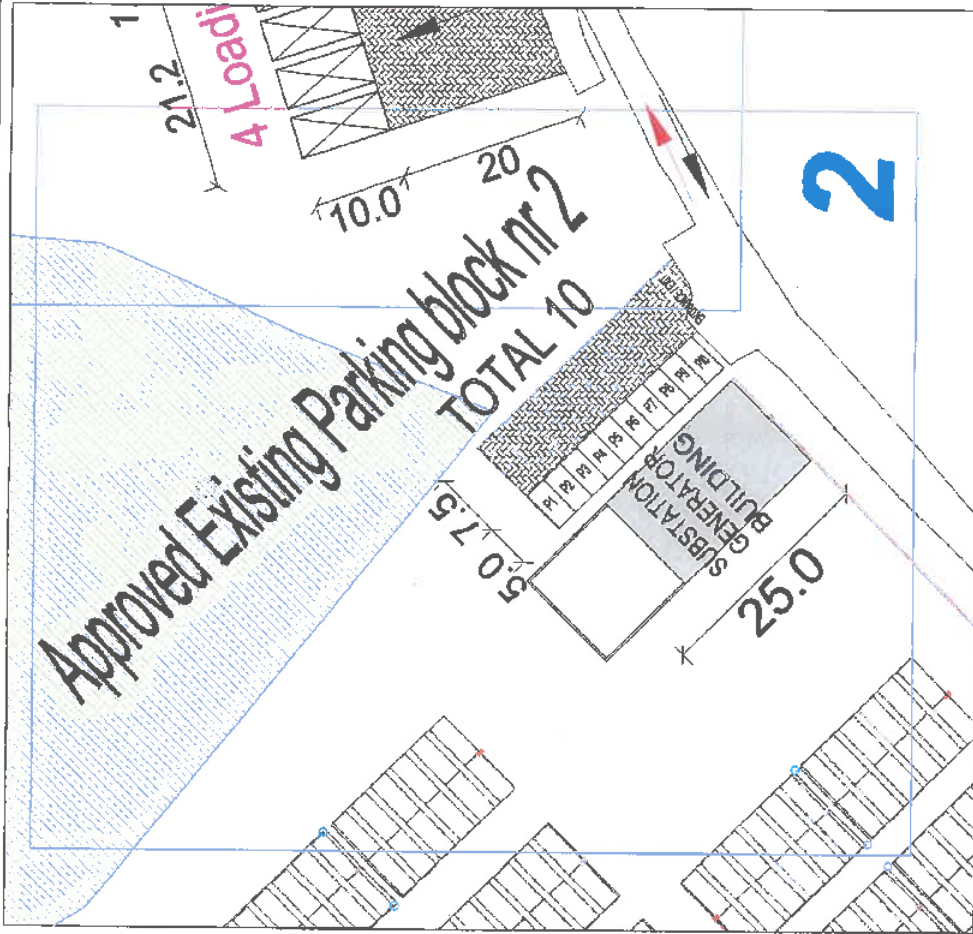


Without underlying ideas informing their buildings, architects are merely space planners. Space planning with decoration applied to dress it up is not architecture; architecture resides in the DNA of a building. In an architectural assembly, the DNA of a building is not architecture; architecture resides in the DNA of a building. In an architectural assembly, the DNA of a building is not architecture; architecture resides in the DNA of a building.

AREAS:	PHASE 7 EXPANSION	TOTAL
EXISTING FARM	TOTAL BUILDINGS	TOTAL BUILDINGS
-10 211m ²	-14 276,50m ²	24 487,50m ²
TOTAL FLOOR SPACE	TOTAL FLOOR SPACE	21 284,50m ²
41 000m ²	-65 130m ²	110 030m ²
PLATFORMS, DAMS, WELP & BASKET CLEANING	SOLAR PLATFORM	29 200m ²
PARKING	LOADING ZONES	232 10m ²
		18 10m ²
COVERAGE	COVERAGE	0,80% 100%
2,77%	TOTAL COVERAGE	0,78%
63,1 Hect	TOTAL COVERAGE	15,05 Hect
TOTAL COVERAGE		
-253,5405 Hect		

LEGEND BUILDINGS

[Grey Box]	EXISTING BUILDINGS
[Pink Box]	APPROVED FUTURE BUILDINGS
[Red Box]	NEW ADDITIONAL BUILDINGS TO APPROVED SDP
[Light Green Box]	PROPOSED PHASE 7 EXPANSION BUILDINGS
[Dark Green Box]	PROPOSED FUTURE PHASE 8 EXPANSION BUILDINGS



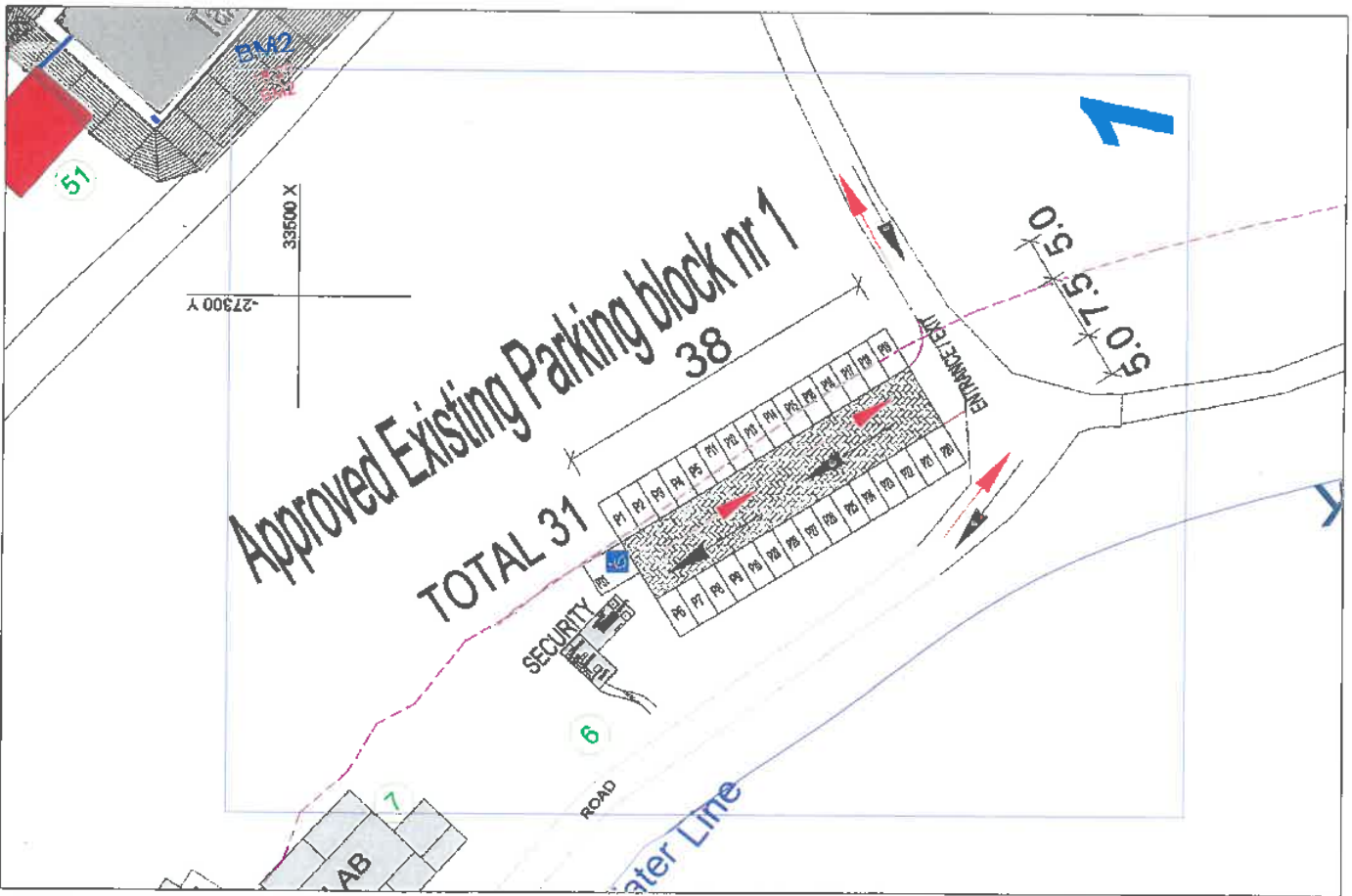
Gerichte Architectoniese Dienste
 Johan Gerichte
 P.O. Box 1094, (D5949)
 Park Road, Durbanville, 7200
 Telephone: 021 934 4105 Cell: 082 483 8654
 Fax: 021 934 4109 E-mail: jg@gerichte.co.za
 L&E no SAIR : 507023

PROJECT :
 Proposed SDP for
 Irvin & Johnson Abalone Farm c/o
 Porton 0 of the farm 711,
 Overstrand Municipality.

Plan drawn by: A.S. Gerichte Date: _____

Drawing :
 Parking Layout 1
 Existing Fe

Purpose :	221
Project # :	1:200
Scale :	4
Page :	13
Date :	24 April 2013



318

30m

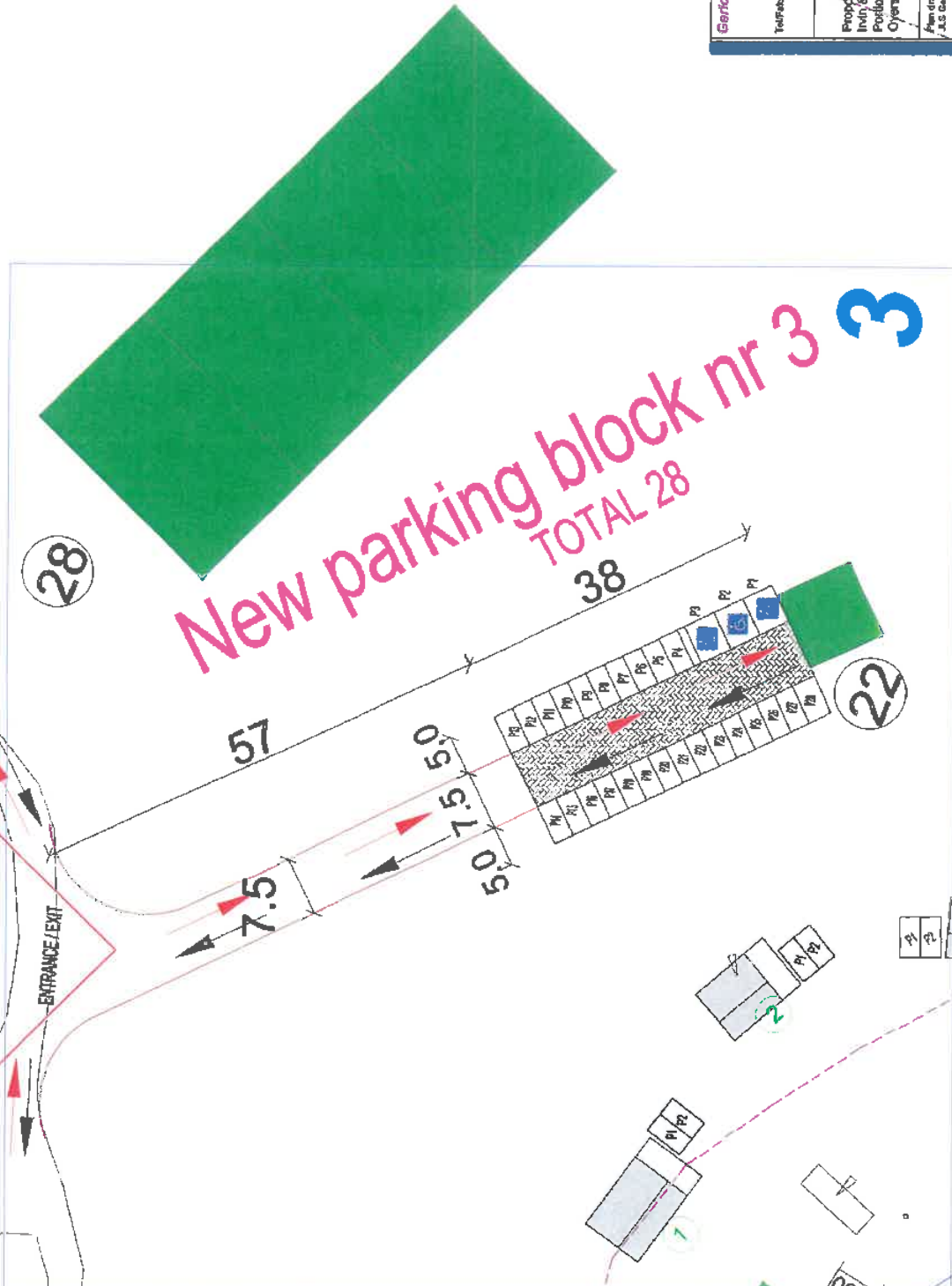
Gericke Architectoniese Diens
Johnes Gericke
 Private Practice (P2289)
 Poshie 382, Cambridge, 7200
 Tel/Fax: 021 301 0350 Fax: 021 463 6564
 g@gericke.co.za
 Lit van SAAT: 307023

PROJECT:
 Proposed SDP for
 Ivin & Johnson Abalone Farm on
 Position 0 of the farm 711,
 Oysterland Municipality.

Plan drawn by:
 J.C. Gericke Date:

Drawing:
 Parking Lay
 Phase 7 Expar

Purpose:
 Project #:
 Scale: 1:200
 Page: 5
 Date: 24 April 2013



New parking block nr 3
 TOTAL 28

30m

5.80

SECTION PHASE 7A (K5)
 SECTION PHASE 7B (K5)

AT

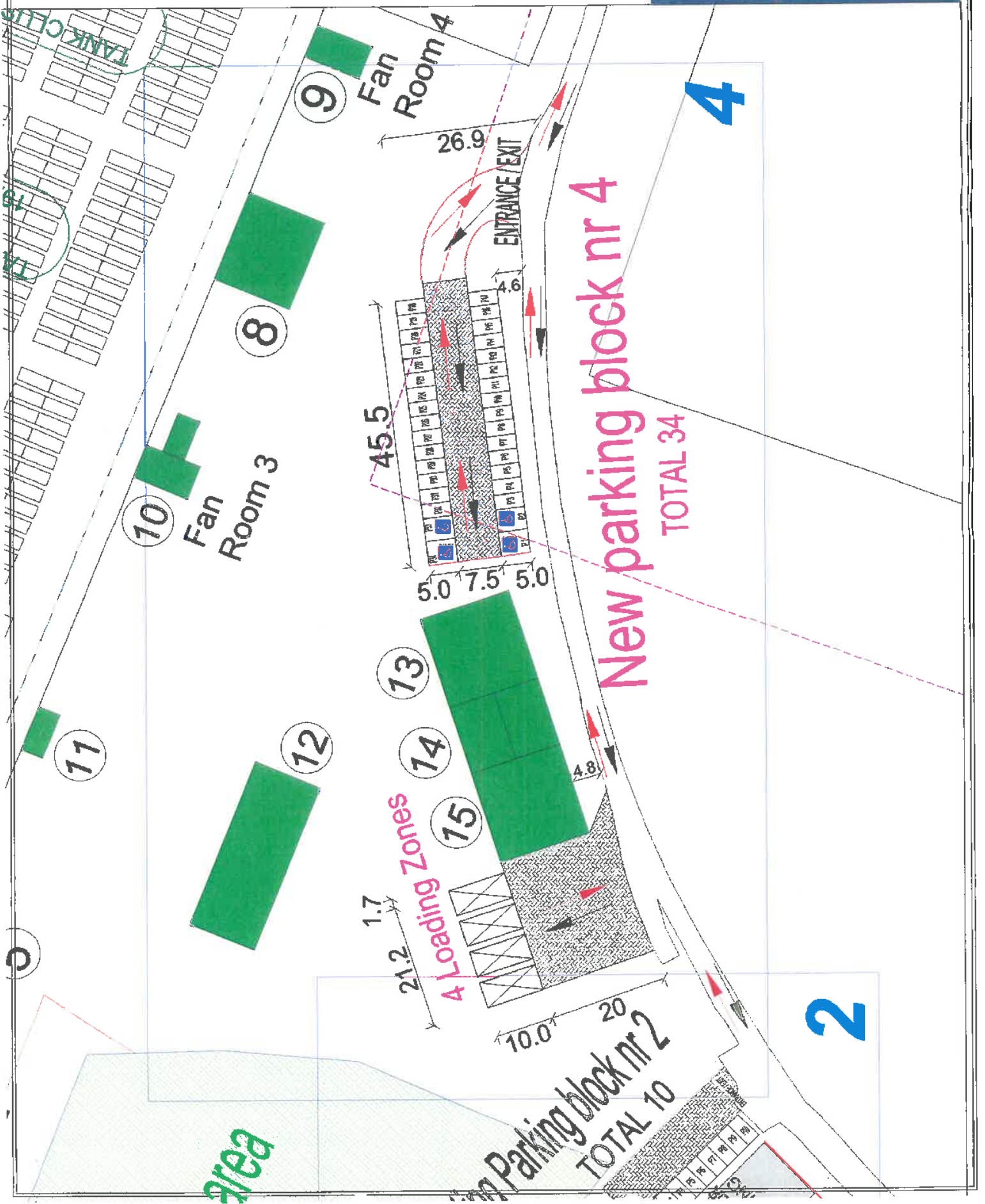
Gerelike Afdelingsdiens
 Johan Gerelike
 P. Arch. Bregent. (Dorp)
 Postbus 302, Gerelike, 7220
 TW/tele: 029 354 1659 fax: 029 493 6564
 e-mail: j.g@gerelike.nl
 L. van der Vliet: 029 354 1659

PROJECT :
 Proposed SDP for
 Irvin & Johnson Abatene Farm on
 Portion D of the farm 711,
 Overstrand Municipality.

Drawing : Parking Layout
 Phase 7 Expansion

Purpose :
 Project # : 23/0/06
 Scale : 1:200
 Page : 6 of 12
 Date : 24 April 2023

ANNEXURE C
ANNEXURE C



320

Gerda Agri-tekniiese Dienste
 Johan Gerde
 P. van Liering (0088)
 P.O. Box 59, Gerde St. 762-AS 084
 Telfoon: 087 43 11 11 / 087 43 11 12
 e-pos: info@gerda.co.za
 Lit van SAIT: 507029

PROJECT :

Proposed SDP for
 Irish & Johnson Abalone Farm on
 Portion 6 of the farm 711,
 Overstrand Municipality.

Plan drawn by:
 J.S. Gerde

Date:

Drawing :

Parking Lay
 Phase 7 Expa

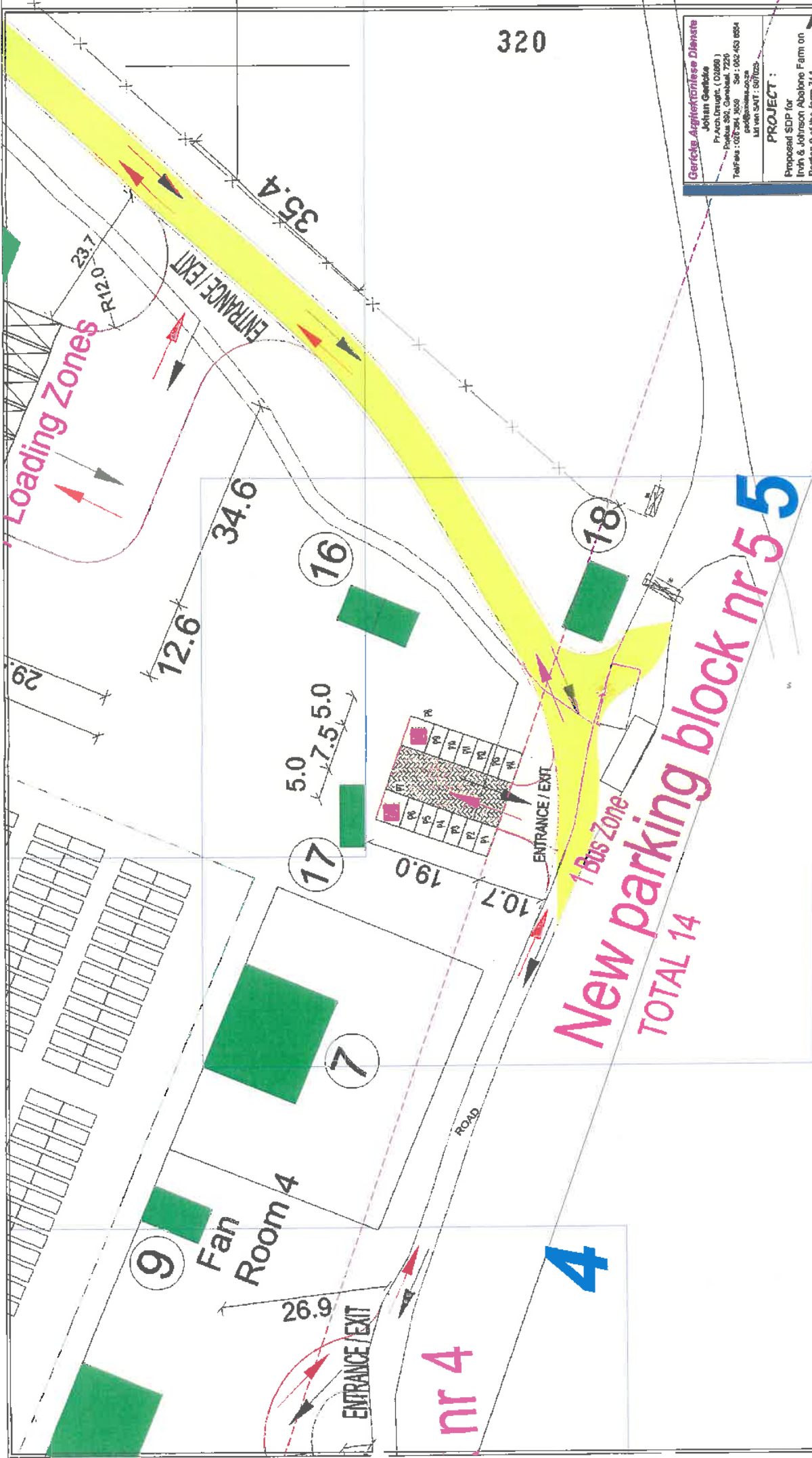
Purpose:

Project #:

Scale: 1:200

Page: 24

Date: 24 Apr



Gerette Argitektoniese Dienste

Johann Gerette
P. Arch. Draught. (Dorpis)
P. 302, Gerobuit, 7220
Tel/Fax: 029 364 1029 Sot: 029 453 1584
Lodewykstr. 10
L. van OAT: 907023

PROJECT:

Proposed SDF for
Ivan & Johnson Abalone Farm
Portion 0 of the farm 711,
Overstrand Municipality.

Plans drawn by:
J.G. Gerette

Date:

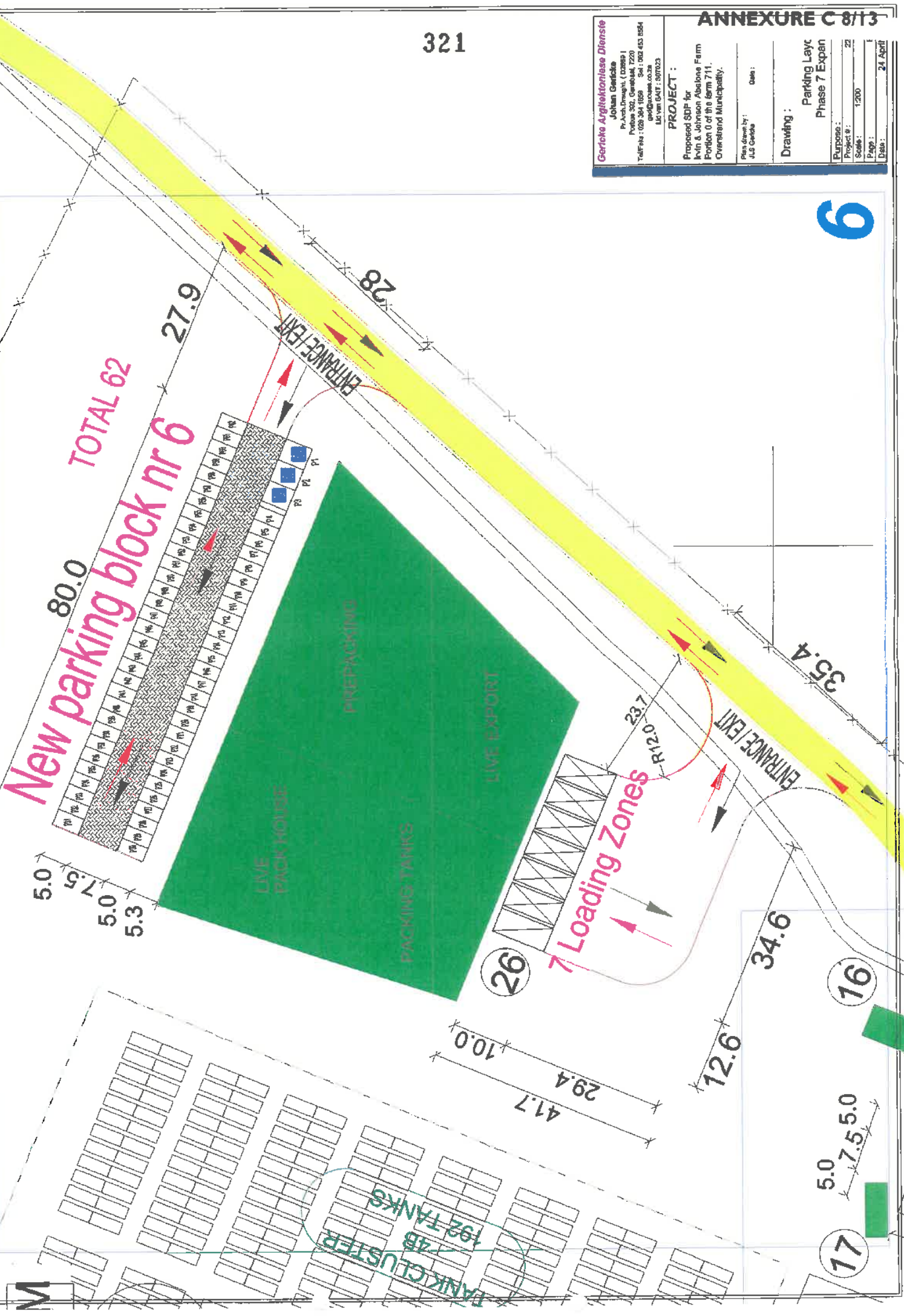
Drawing:

Parking Layc
Phase 7 Expan

Purpose: 23
Project #: 23
Scale: 1:200
Page: 24 April
Date:

New parking block nr 6
TOTAL 62
80.0

6



322

ANNEXURE C-11

Gerda's Architectural Services

Joyla Gerbale
Project Designer (Civil)
10011 10th Street, Suite 100
Tulsa, Oklahoma 74116
Tel: (918) 484-1859 Fax: (918) 483-0584
gerda@gerdasas.com
Lic. No. 6417 - SMT023

PROJECT :
Proposed SDP for
Frederick Johnson Ableson Farm on
Portion 1 of the farm 711,
Overland Municipality.

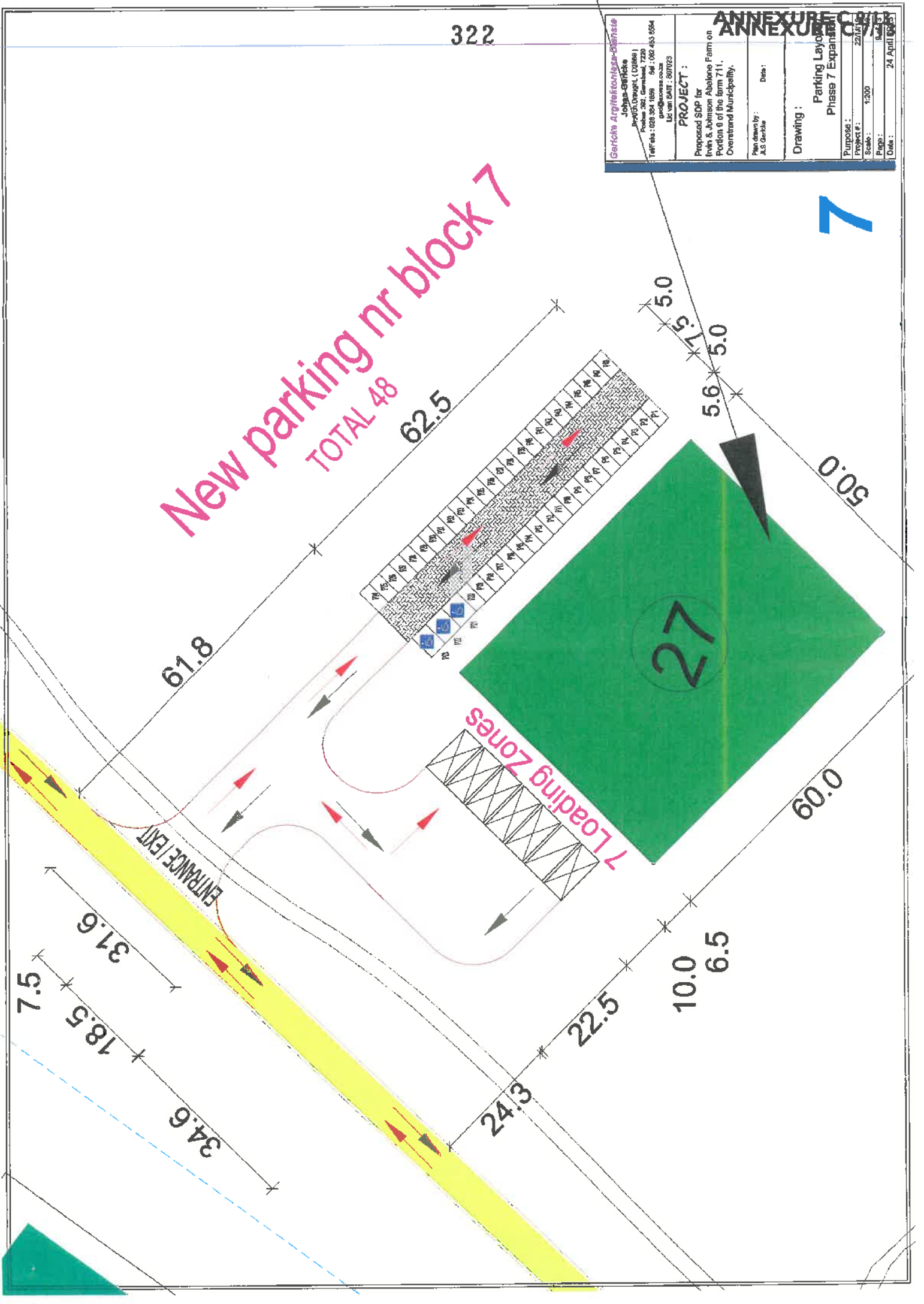
Plan drawn by:
J.S. Gerbale
Date:

Drawing :
Parking Layout
Phase 7 Expansion

Purpose :
22/1/2018
Project # :
1:200
Scale :
1:200
Page :
1 of 1
Date :
24 April 2018

New parking nr block 7
TOTAL 48

7



EXISTING FARM

PARKING REQUIREMENT:
Industry, Warehouse & Storage = 2 bays per 100m² of GLA up to 500m², thereafter 1 bay per 100m².

BUILDING:	SIZE:
5. Pump House	111m ²
6. Security & Scrub	36m ²
7. Lab &	146.50m ²

8. Hatchery	168m ²
10. Pump Room 1	20m ²
11. Settlement 1	540m ²
12. Diatom	323m ²
13. Workshop	262m ²
14. Pump Room 2	56m ²
15. Pump Room 3	64m ²
16. Settlement 3	599m ²
17. Blower/Generator	49m ²
21. Packing and Restroom	309m ²
22. Grading	182m ²
23. Blower Room	31.50m ²
24. R & D Building & Store	1180m ²

TEMPORARY USE OF BUILDING AS PROCESSING BUILDING

26. Abfeed Store	92m ²
27. Pump Room 4	98m ²
33. Blower Room	104m ²
34. Blower Room	115m ²
36. Electrical Building	35m ²
37. Building	20m ²
40. Storage Building	206m ²
41. Blower Building	172m ²
42. Grading Building	345m ²
43. Substation Generator	382m ²
44. Shed Tanks 4	720m ²
45. Shed Tanks 1	584m ²
46. Shed Tanks 2	563m ²

TOTAL AREA = 7473.00m²
TOTAL = PARKINGS 79.73

LOADING ZONE REQUIREMENT:
Loading = 1 bay per 500m² for 1st 1000m² of GLA, thereafter 1 bay per 1000m².

TOTAL AREA = 7473.00m²
TOTAL LOADING 8.473

PARKING REQUIREMENT:
Office = 4 bays per 100m² of GLA.

BUILDING:	SIZE:
7. Office	82m ²
8. Reception	47m ²
19. Office	24m ²
20. Guard House	21m ²
30. Wooden Cabins	144m ²
32. Tea Room	88m ²
39. Ablution	160m ²
47. Future Admin Building	328m ²
52. Locker Room	14m ²

TOTAL AREA = 908.00m²
TOTAL = PARKINGS 36.32

LOADING ZONE REQUIREMENT:
Loading = 1 bay per 500m² for 1st 1000m² of GLA, thereafter 1 bay per 1000m².

TOTAL AREA = 908.00m²
TOTAL LOADING 0.908

PARKING REQUIREMENT:
Dwelling Houses = 2 bays per dwelling.

BUILDING:	SIZE:	AMOUNT:
1. Residence	106m ²	2
2. Residence	81m ²	2
3. Residence	81m ²	2
4. Residence	91m ²	2

TOTAL = 8 PARKINGS

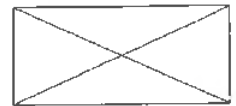
PARKING AREAS 1 & 2 ON SDP

TOTAL PARKINGS REQUIRED = 124.05
DISABLED PARKINGS REQUIRED = 6
as per 17.1.6 of Overstrand Scheme

TOTAL PARKINGS PROVIDED = 49
DISABLED PARKINGS INCLUDED = 1

TOTAL LOADING ZONES PROVIDED = 3

4.5



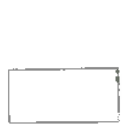
Loading Bay

4



Disabled Parking Bay

2.5



Normal Parking Bay

Gerické Argifaktionese Olenavé
- Johan Gerické
P. Arch. Degree. (Diplom)
Pobosa 392, Gerické, 7208
Tel/Fax: 08 443 554
jg@gerické.com
Lisvan SAN: 807023

PROJECT:
Proposed SDP for
Irvin & Johnson Athlete Farm on
Portion 6 of the farm 711,
Overstrand Municipality.

Plan drawn by:
JLS Gerické
Date:

Drawing:
Parking Layout Calculat
Phase Cul

Purpose:
Project # : 22
Scale : 1:250
Page : 19
Date : 24 April

PROPOSED PHASE 7 EXPANSION

GROSS LEASABLE AREA :

PARKING REQUIREMENT:
Industry, Warehouse & Storage = 2 bays per 100m² of GLA up to 500m², thereafter 1 bay per 100m².

BUILDING:	SIZE:
2. Seaweed Harvesting Building	24m ²
3. Basket Cleaning Building	400m ²
4. Seaweed Pond Dosing/Store	32m ²
5. Rectification Building x 2	175.50m ²
6. Store	224m ²
7. Grading / Office / Tea Room x 2	576m ²
8. Store / Ablution + Double Storey x 2	896m ²
9. Fan Room x 2	120m ²
10. Fan Room & HV Substation	176m ²
11. Seaweed Pond Dosing/Store	32m ²
12. Generator Cluster	360m ²
13. Tractor Workshop	256m ²
14. Workshops	80m ²
15. Company Store	256m ²
19. Solar Substation	36m ²
20. Wooden structure/Lapa	54m ²
21. Kloof / Ablution	150m ²
23. Pump House 7A & 7B	140m ²
25. HV Substation	9m ²
26. Live Pack house, Prepacking, Packing tanks, Live Export	4120m ²
27. Processing Building	3000m ²
28. Wooden buildings (stores)x 3	108m ²

TOTAL AREA = 11 224.50m²
TOTAL = PARKINGS 116.88

LOADING ZONE REQUIREMENT:
Loading = 1 bay per 500m² for 1st 1000m² of GLA, thereafter 1 bay per 1000m².

TOTAL AREA = 11 224.50m²
TOTAL LOADING 12.225

PARKING REQUIREMENT:
Office = 4 bays per 100m² of GLA.

BUILDING:	SIZE:
1. Security Manager Building	36m ²
7. Grading / Offices / Tea Room - First floor x 2	576m ²
14. Office	80m ²
16. Admin / Security Building - Front gate x 2	72m ²
17. Site Office	40m ²
18. Security Building - Main Gate	75m ²
22. Admin Building	100m ²
24. Security Building	24m ²

TOTAL AREA = 1003.00m²
TOTAL = PARKINGS 40.12

LOADING ZONE REQUIREMENT:
Loading = 1 bay per 500m² for 1st 1000m² of GLA, thereafter 1 bay per 1000m².

TOTAL AREA = 1003.00m²
TOTAL LOADING 1.003

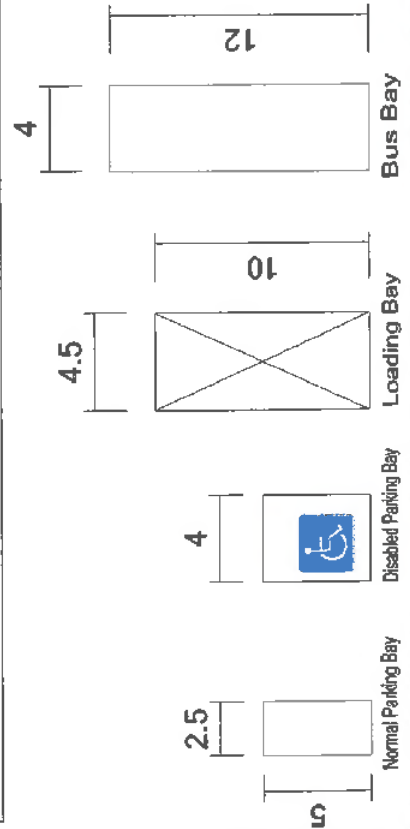
PARKING AREAS 3, 4, 5, 6 & 7 ON SDP

TOTAL PARKINGS REQUIRED = 156.47
DISABLED PARKINGS REQUIRED = 8
as per 17.1.6 of Overstrand Scheme

TOTAL PARKINGS PROVIDED = 186
DISABLED PARKINGS INCLUDED = 16

TOTAL LOADING ZONES PROVIDED = 18

TOTAL BUS ZONES PROVIDED = 1



Gardcke Argithaltonfese Dienste
Johann Gerdtle
Praxis: Im Berg (12000)
Postfach 381, Gensbach, 7226
Telefon: 07143 80111 Fax: 0714 43 8664
E-Mail: gardcke@argithaltonfese.de
USt-Id-Nr.: DE27023

PROJECT:
Proposed SDP for
Irvin & Johnson Abatene Farm on
Portion 0 of the farm 711,
Overstrand Municipality.

Drawn by:
J.S. Gerdtle

Date:

Drawing:
Parking Layout Calcula
Phase 7 Expan

Purpose:
Project #:
Scale: 1:250
Page:
Date: 24 Aug

325

ANNEXURE C 12/13

Geritke Architectonische Dienstleistungen

Johann Geritke
Project Manager (12000)
Project Engineer (75000)
Tel/Fax: 031 261 1850 / 031 261 1854
info@geritke.com
List price GNT: 807023

PROJECT:

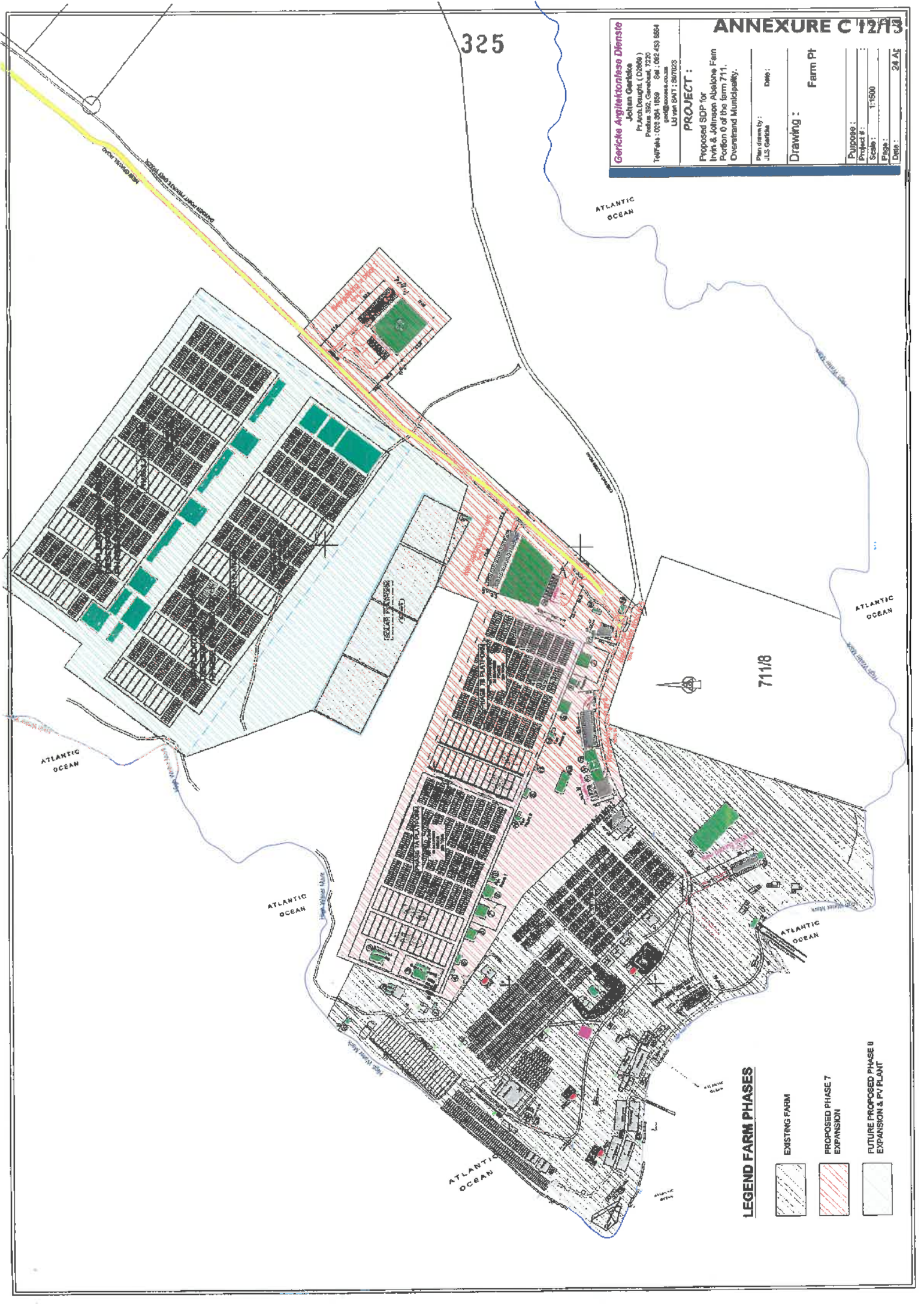
Proposed SDP for
Irish & Johnson Abalone Farm
Portion 0 of the farm 711,
Overstrand Municipality.

Plan drawn by:
J.S. Geritke




DWG:

Drawing: Farm Pt

Purpose: _____
Project #: _____
Scale: 1:1500
Page: _____
Date: 24 Aug



LEGEND FARM PHASES

-  EXISTING FARM
-  PROPOSED PHASE 7 EXPANSION
-  FUTURE PROPOSED PHASE 8 EXPANSION & PV PLANT



PROJECT :

Proposed SDP for Irvin & Johnson Abalone Farm on Portion 0 of the farm 711, Overstrand Municipality.

Plan drawn by: J.L.S. Gertse

Date :

Drawing :

Aerial Ima

Purpose :

Project # :

Scale :

Pages :

Date :

22/

13000

13

24 April 2

327



Directorate: Development Management
(Region 1)

REFERENCE: 16/3/3/5/E2/4/1075/19
ENQUIRIES: Lorretta Osborne
DATE OF ISSUE: 2019 -11- 2 8

The Board of Directors
Irvin & Johnson Aquaculture (Pty) Ltd
PO Box 1628
CAPE TOWN
8000

Attention: Mr M Ahmed

Tel: (021) 440 7251
E-mail: Ashaque@ij.co.za

Dear Sir

APPLICATION IN TERMS OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998 (ACT 107 OF 1998) AND PART 1 OF THE ENVIRONMENTAL IMPACT ASSESSMENT REGULATIONS, 2014 (AS AMENDED) FOR THE AMENDMENT OF THE ENVIRONMENTAL AUTHORISATION ISSUED ON 8 MARCH 2019: THE UPGRADE OF AN EXISTING ABALONE FARM ON REMAINDER OF FARM KLIPFONTEIN NO. 711, DANGER POINT NEAR GANSBAAI

1. With reference to the above application, the Department hereby notifies you of its decision to **grant** amendment of the Environmental Authorisation issued on 8 March 2019 (DEA&DP Ref: 16/3/3/2/E2/4/1027/18) together with the reasons for the decision in terms of Part 1 of the EIA Regulations, 2014 (as amended).
2. In terms of Regulation 4 of the Environmental Impact Assessment Regulations, 2014 (as amended), you are instructed to ensure, within 14 days of the date of the Environmental Authorisation, that all registered interested and affected parties ("I&APs") are provided with access to and reasons for the decision, and that all registered I&APs are notified of their right to appeal.
3. Your attention is drawn to Chapter 2 of the Appeal Regulations, 2014, which prescribes the appeal procedure to be followed. This procedure is summarized in the attached Environmental Authorisation.

Yours faithfully

DIRECTOR: DEVELOPMENT MANAGEMENT (REGION 2)
DEPARTMENT OF ENVIRONMENTAL AFFAIRS AND DEVELOPMENT PLANNING

CC: (1) Mr J Crowther/ Mr J Blood (SLR Consulting (South Africa))
(2) Mr B Kondokter (Overstrand Municipality)
(3) Mr C Groenewald (Overstrand Municipality)
(4) mm@odm.org.za (Overberg District Municipality)

Fax: (021) 461 1120
E-mail: bkondokter@overstrand.gov.za
E-mail: cgroenewald@overstrand.gov.za

6th Floor, 1 Dorp Street, Cape Town, 8001
Tel: +27 21 483 3696/4349 Fax: +27 21 483 3633
E-mail: Lorretta.Osborne@westerncape.gov.za

Private Bag X9086, Cape Town, 8000
www.westerncape.gov.za/eadp



Directorate: Development Management
(Region 1)

REFERENCE: 16/3/3/5/E2/4/1075/19
ENQUIRIES: Loretta Osborne
DATE OF ISSUE: 2019 -11- 2 8

ENVIRONMENTAL AUTHORISATION

APPLICATION IN TERMS OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998 (ACT 107 OF 1998) AND PART 1 OF THE ENVIRONMENTAL IMPACT ASSESSMENT REGULATIONS, 2014 (AS AMENDED) FOR THE AMENDMENT OF ENVIRONMENTAL AUTHORISATION ISSUED ON 8 MARCH 2019: THE UPGRADE OF AN EXISTING ABALONE FARM ON REMAINDER OF FARM KLIPFONTEIN NO. 711, DANGER POINT NEAR GANSBAAI

With reference to your application for the abovementioned, find below the outcome with respect to this application.

A. DECISION

By virtue of the powers conferred on it by the National Environmental Management Act, 1998 (Act No. 107 of 1998) ("NEMA") and the Environmental Impact Assessment ("EIA") Regulations, 2014 (as amended), the Department herewith **grants** the amendment of the Environmental Authorisation issued on 8 March 2019 (DEA&DP Ref: 16/3/3/2/E2/4/1027/18), in terms of Part 1 of the EIA Regulations, 2014 (as amended).

1) The Environmental Authorisation is amended as set out below:

a) **Section A: Details of the applicant for this environmental authorisation:**

*"The Board of Directors
Irvin & Johnson Limited
% Mr M Ahmed
PO Box 1628
CAPE TOWN
8000*

*Tel: (021) 440 7251
E-mail: Ashaque@ij.co.za*

The abovementioned applicant is the holder of this Environmental Authorisation and is hereinafter referred to as "the holder".

is amended to read:

The Board of Directors
Irvin & Johnson Aquaculture (Pty) Ltd
% Mr M Ahmed
PO Box 1628

6th Floor, 1 Dorp Street, Cape Town, 8001
Tel: +27 21 483 3696/4349 Fax: +27 21 483 3633
E-mail: Loretta.Osborne@westerncape.gov.za

Private Bag X9086, Cape Town, 8000
www.westerncape.gov.za/eadp

CAPE TOWN
8000

Tel: (021) 440 7251

E-mail: Ashaque@ij.co.za

b) Section B: List of activities authorised:

"The proposal entails the expansion of an existing abalone farm at Danger Point in Gansbaai from 500 tons per annum (t/a) to 1700 t/a. The total footprint to be developed will be approximately 40 hectares. The development will take place in three phases namely:

Phase 1 will cater for an additional 600 t/a production:

This phase entails the development of:

- An intake facility located on the south-western side of the headland, approximately 160 metres offshore at a water depth of approximately 2 to 3 metres;
- Eight abstraction pipelines (60 centimetres in diameter) installed on concrete casted pedestals along the seabed from the intake facility to a new onshore pump house (220 square metres);
- Delivery pipelines from the pump house to an elevated header tank(s) (2000 cubic metres in total), and from the header tank(s) to a grow-out platform;
- A 6 hectare grow out platform for abalone tanks, seaweed production ponds, sumps and re-circulation facility/ tank;
- An effluent channel or discharge pipeline for coastal discharge from the grow-out platform, located on the north-western side of the headland; and
- Associated buildings (e.g. offices, ablutions, grading and processing areas, pack house etc.).

This phase will have a total development footprint of approximately 15 hectares and will be developed over a period of five to eight years.

Phase 2 will cater for an additional 300 t/a production:

This phase entails the development of:

- Additional infrastructure, including seawater intake pipelines, a pump house and eight delivery pipelines located on the north-western side of the headland;
- Delivery pipelines to an elevated header tank(s) (200 cubic metres in total);
- A 6 hectare grow-out platform for abalone tanks, seaweed production ponds, sumps and re-circulation facility/ tank;
- An approximately 300-metre-long effluent discharge pipeline or effluent channel located on the north-western side of the headland which would extend into the tidal zone; and
- Associated buildings (e.g. offices, ablutions, grading and processing areas etc.).

This phase will have an additional footprint of approximately 11 hectares and will be developed over a period of five years after Phase 1.

Phase 3 will cater for an additional 300 t/a production:

This phase entails the development of:

330

- A 6 hectare grow-out platform for abalone tanks, seaweed production ponds, sumps and re-circulation facility/ tank; and
- An approximately 200-metre-long effluent discharge pipeline or effluent channel located on the north-western side of the headland which would extend into the tidal zone.

This phase will have an additional footprint of approximately 8 hectares and will be developed over a period of four years after Phase 2.

In addition to the development phases, conservancy tanks will be used to treat sewage and wastewater. Access to the development will be provided via Van Bloemenstein Street and the development of a new 2.5 kilometre road. Electricity, water supply and solid waste services will be provided by the Overstrand Municipality. A photovoltaic power plant of up to 10 MVA with a development footprint of 2.5 hectares will also be developed to offset the electricity usage."

is amended to read:

The proposal entails the expansion of an existing abalone farm at Danger Point in Gansbaai from 500 tons per annum (t/a) to 1700 t/a. The total footprint to be developed will be approximately 40 hectares. The development will take place in three phases namely:

Phase 1 will cater for an additional 600 t/a production:

This phase entails the development of:

- An intake facility located on the south-western side of the headland, approximately 160 metres offshore at a water depth of approximately 2 to 3 metres;
- Eight abstraction pipelines (60 centimetres in diameter) installed on concrete casted pedestals along the seabed from the intake facility to a new onshore pump house (220 square metres);
- Delivery pipelines from the pump house to an elevated header tank(s) (2000 cubic metres in total), and from the header tank(s) to a grow-out platform;
- A 6 hectare grow out platform for abalone tanks, seaweed production ponds, sumps and re-circulation facility/ tank;
- An effluent channel or discharge pipeline for coastal discharge from the grow-out platform, located on the north-western side of the headland; and
- Associated buildings (e.g. offices, ablutions, grading and processing areas, pack house etc.).

This phase will have a total development footprint of approximately 15 hectares and will be developed over a period of five to eight years.

Phase 2 will cater for an additional 300 t/a production:

This phase entails the development of:

- Additional infrastructure, including seawater intake pipelines, a pump house and eight delivery pipelines located on the north-western side of the headland;
- Delivery pipelines to an elevated header tank(s) (200 cubic metres in total);
- A 6 hectare grow-out platform for abalone tanks, seaweed production ponds, sumps and re-circulation facility/ tank;

- An approximately 300-metre-long effluent discharge pipeline or effluent channel located on the north-western side of the headland which would extend into the tidal zone; and
- Associated buildings (e.g. offices, ablutions, grading and processing areas etc.).

This phase will have an additional footprint of approximately 11 hectares and will be developed over a period of five years after Phase 1.

Phase 3 will cater for an additional 300 t/a production:

This phase entails the development of:

- A 6 hectare grow-out platform for abalone tanks, seaweed production ponds, sumps and re-circulation facility/ tank; and
- An approximately 200-metre-long effluent discharge pipeline or effluent channel located on the north-western side of the headland which would extend into the tidal zone.

This phase will have an additional footprint of approximately 8 hectares and will be developed over a period of four years after Phase 2.

In addition to the development phases, conservancy tanks will be used to treat sewage and wastewater. Access to the development will be provided via Van Bloemenstein Street and the development of a new two-way 2.5 kilometre road with a width of 6m. Electricity, water supply and solid waste services will be provided by the Overstrand Municipality. A photovoltaic power plant of up to 10 MVA with a development footprint of 2.5 hectares will also be developed to offset the electricity usage.

c) 2. Alternatives: Preferred Layout Alternative (Herewith authorised):

"This alternative entails the expansion of an existing abalone farm at Danger Point in Gansbaai from 500 tons per annum (t/a) to 1700 t/a. The total footprint to be developed will be approximately 40 hectares. The development will take place in three phases namely:

Phase 1 will cater for an additional 600 t/a production:

This phase entails the development of:

- *An intake facility located on the south-western side of the headland, approximately 160 metres offshore at a water depth of approximately 2 to 3 metres;*
- *Eight abstraction pipelines (60 centimetres in diameter) installed on concrete casted pedestals along the seabed from the intake facility to a new onshore pump house (220 square metres);*
- *Delivery pipelines from the pump house to an elevated header tank(s) (2000 cubic metres in total), and from the header tank(s) to a grow-out platform;*
- *A 6 hectare grow out platform for abalone tanks, seaweed production ponds, sumps and re-circulation facility/ tank;*
- *An effluent channel or discharge pipeline for coastal discharge from the grow-out platform, located on the north-western side of the headland; and*
- *Associated buildings (e.g. offices, ablutions, grading and processing areas, pack house etc.).*

This phase will have a total development footprint of approximately 15 hectares and will be developed over a period of five to eight years.

Phase 2 will cater for an additional 300 t/a production:

This phase entails the development of:

- *Additional infrastructure, including seawater intake pipelines, a pump house and eight delivery pipelines located on the north-western side of the headland;*
- *Delivery pipelines to an elevated header tank(s) (200 cubic metres in total);*
- *A 6 hectare grow-out platform for abalone tanks, seaweed production ponds, sumps and re-circulation facility/ tank;*
- *An approximately 300-metre-long effluent discharge pipeline or effluent channel located on the north-western side of the headland which would extend into the tidal zone; and*
- *Associated buildings (e.g. offices, ablutions, grading and processing areas etc.).*

This phase will have an additional footprint of approximately 11 hectares and will be developed over a period of five years after Phase 1.

Phase 3 will cater for an additional 300 t/a production:

This phase entails the development of:

- *A 6 hectare grow-out platform for abalone tanks, seaweed production ponds, sumps and re-circulation facility/ tank; and*
- *An approximately 200-metre-long effluent discharge pipeline or effluent channel located on the north-western side of the headland which would extend into the tidal zone.*

This phase will have an additional footprint of approximately 8 hectares and will be developed over a period of four years after Phase 2.

In addition to the development phases, conservancy tanks will be used to treat sewage and wastewater. Access to the development will be provided via Van Bloemenstein Street and the development of a new 2.5 kilometre road. Electricity, water supply and solid waste services will be provided by the Overstrand Municipality. A photovoltaic power plant of up to 10 MVA with a development footprint of 2.5 hectares will also be developed to offset the electricity usage.

This alternative is preferred since it is less intrusive on the skyline as seen from Marine Drive scenic route. The layout takes into consideration the vegetation on site and heritage buffers around significant heritage features."

is amended to read:

This alternative entails the expansion of an existing abalone farm at Danger Point in Gansbaai from 500 tons per annum (t/a) to 1700 t/a. The total footprint to be developed will be approximately 40 hectares. The development will take place in three phases namely:

Phase 1 will cater for an additional 600 t/a production:

This phase entails the development of:

- An intake facility located on the south-western side of the headland, approximately 160 metres offshore at a water depth of approximately 2 to 3 metres;
- Eight abstraction pipelines (60 centimetres in diameter) installed on concrete casted pedestals along the seabed from the intake facility to a new onshore pump house (220 square metres);
- Delivery pipelines from the pump house to an elevated header tank(s) (2000 cubic metres in total), and from the header tank(s) to a grow-out platform;
- A 6 hectare grow out platform for abalone tanks, seaweed production ponds, sumps and re-circulation facility/ tank;
- An effluent channel or discharge pipeline for coastal discharge from the grow-out platform, located on the north-western side of the headland; and
- Associated buildings (e.g. offices, ablutions, grading and processing areas, pack house etc.).

This phase will have a total development footprint of approximately 15 hectares and will be developed over a period of five to eight years.

Phase 2 will cater for an additional 300 t/a production:

This phase entails the development of:

- Additional infrastructure, including seawater intake pipelines, a pump house and eight delivery pipelines located on the north-western side of the headland;
- Delivery pipelines to an elevated header tank(s) (200 cubic metres in total);
- A 6 hectare grow-out platform for abalone tanks, seaweed production ponds, sumps and re-circulation facility/ tank;
- An approximately 300-metre-long effluent discharge pipeline or effluent channel located on the north-western side of the headland which would extend into the tidal zone; and
- Associated buildings (e.g. offices, ablutions, grading and processing areas etc.).

This phase will have an additional footprint of approximately 11 hectares and will be developed over a period of five years after Phase 1.

Phase 3 will cater for an additional 300 t/a production:

This phase entails the development of:

- A 6 hectare grow-out platform for abalone tanks, seaweed production ponds, sumps and re-circulation facility/ tank; and
- An approximately 200-metre-long effluent discharge pipeline or effluent channel located on the north-western side of the headland which would extend into the tidal zone.

This phase will have an additional footprint of approximately 8 hectares and will be developed over a period of four years after Phase 2.

In addition to the development phases, conservancy tanks will be used to treat sewage and wastewater. Access to the development will be provided via Van Bloemenstein Street and the development of a new two-way 2.5 kilometre road with a width of 6m. Electricity, water supply and solid waste services will be provided by the Overstrand Municipality. A photovoltaic power

plant of up to 10 MVA with a development footprint of 2.5 hectares will also be developed to offset the electricity usage.

This alternative is preferred since it is less intrusive on the skyline as seen from Marine Drive scenic route. The layout takes into consideration the vegetation on site and heritage buffers around significant heritage features.

d) **2. Alternatives: Access Alternative 2 (Herewith authorised):**

"This alternative entails the use of Van Bloemenstein Street and a new 2.5 kilometre surfaced road aligned along the existing powerline on the property by all traffic to and from the expanded abalone facility.

From a traffic engineering perspective, this alternative is preferred in terms of safety for employees, surrounding residents and pedestrians. It will also result in the lowest noise levels."

is amended to read:

This alternative entails the use of Van Bloemenstein Street and a new two-way 2.5 kilometre surfaced road with a width of 6m aligned along the existing powerline on the property by all traffic to and from the expanded abalone facility.

From a traffic engineering perspective, this alternative is preferred in terms of safety for employees, surrounding residents and pedestrians. It will also result in the lowest noise levels.

B. REASONS FOR THE DECISION

In reaching its decision, the Department took, inter alia, the following into consideration:

1. The amendment applied for is in terms of Part 1 of the EIA Regulations, 2014 (as amended) and will not change the scope of the Environmental Authorisation issued on 8 March 2019 (attached as Annexure A).
2. As part of the detailed design, it was found that the approved 4m road with lay-bys will not be suitable as an access road. The construction of a two-way 2.5km road with a width of 6m will still fall within the construction footprint of 2ha as assessed in the final Environmental Impact Assessment Report dated October 2018. It will provide improved traffic flow and road safety. Although the approved 4m road with lay-bys will be replaced with a new two-way 2.5km road with a width of 6m, it will not result in an increased level or nature of impact.
3. The environment and the rights and interests of interested and affected parties ("I&APs") will not be adversely affected by the decision to amend the Environmental Authorisation.
4. A Public Participation Process in terms of the EIA Regulations, 2014 (as amended) is not applicable for this application, since the application relates to non-substantial changes to the original environmental authorisation and therefore registered I&APs were not required to comment on this application.

C. CONDITIONS

1. All conditions contained in the Environmental Authorisation issued on 8 March 2019 (attached hereto) still remain unchanged and in force.

D. APPEALS

Appeals must comply with the provisions contained in the National Appeal Regulations 2014 (as amended).

1. An appellant (if the holder of the decision) must, within 20 (twenty) calendar days from the date on which notification of the decision was sent to the holder by the Competent Authority –
 - 1.1 Submit an appeal in accordance with Regulation 4 of the National Appeal Regulations 2014 (as amended) to the Appeal Administrator; and
 - 1.2 Submit a copy of the appeal to any registered I&APs, any Organ of State with interest in the matter and the decision-maker i.e. the Competent Authority that issued the decision.
2. An appellant (if NOT the holder of the decision) must, within 20 (twenty) calendar days from the date on which the holder of the decision sent notification of the decision to the registered I&APs–
 - 2.1 Submit an appeal in accordance with Regulation 4 of the National Appeal Regulations 2014 (as amended) to the Appeal Administrator; and
 - 2.2 Submit a copy of the appeal to the holder of the decision, any registered I&AP, any Organs of State with interest in the matter and the decision-maker i.e. the Competent Authority that issued the decision.
3. The holder of the decision (if not the appellant), the decision-maker that issued the decision, the registered I&AP and the Organs of State must submit their responding statements, if any, to the appeal authority and the appellant within 20 (twenty) calendar days from the date of receipt of the appeal submission.
4. The appeal and the responding statement must be submitted to the address listed below:

By post: Western Cape Ministry of Local Government, Environmental Affairs and Development Planning
Private Bag X9186
CAPE TOWN
8000

By facsimile: (021) 483 4174; or

By hand: Attention: Mr Marius Venter (Tel: 021 483 2659)
Room 809
8th Floor Utilitas Building, 1 Dorp Street, Cape Town, 8001

Note: For purposes of electronic database management, you are also requested to submit electronic copies (Microsoft Word format) of the appeal, responding statement and any supporting documents to the Appeal Authority to the address listed above and/ or via e-mail to DEADP.Appeals@westerncape.gov.za

- A prescribed appeal form as well as assistance regarding the appeal processes is obtainable from Appeal Authority at: Tel. (021) 483 2659, E-mail DEADP.Appeals@westerncape.gov.za or URL <http://www.westerncape.gov.za/eadp>.

336

E. DISCLAIMER

The Western Cape Government, the Local Authority, committees or any other public authority or organisation appointed in terms of the conditions of this Environmental Authorisation shall not be responsible for any damages or losses suffered by the holder, developer or his/her successor in any instance where construction or operation subsequent to construction is temporarily or permanently stopped for reasons of non-compliance with the conditions as set out herein or any other subsequent document or legal action emanating from this decision.

Your interest in the future of our environment is appreciated.

Yours faithfully



MR. ZAHIR TOEFY
DIRECTOR: DEVELOPMENT MANAGEMENT (REGION 1)

DATE OF DECISION: 28/11/2019

CC: (1) Mr J Crowther/ Mr J Blood (SLR Consulting (South Africa))
(2) Mr B Kondokter (Overstrand Municipality)
(3) Mr C Groenewald (Overstrand Municipality)
(4) mm@odm.org.za (Overberg District Municipality)

Fax: (021) 461 1120
E-mail: bkondokter@overstrand.gov.za
E-mail: cgroenewald@overstrand.gov.za

-----END-----

Annexure A



Directorate: Development Management
(Region 1)

EIA REFERENCE: 16/3/3/2/E2/4/1027/18
NEAS REFERENCE: WCP/EIA/0000411/2018
ENQUIRIES: Lorretta Osborne
DATE OF ISSUE: 2019-03-08

The Board of Directors
 Irvin & Johnson Limited
 PO Box 1628

CAPE TOWN
 8000

Attention: Mr M Ahmed

Tel: (021) 440 7251
 E-mail: Ashaque@ji.co.za

Dear Sir

APPLICATION FOR ENVIRONMENTAL AUTHORISATION AND THE ADOPTION OF A MAINTENANCE MANAGEMENT PLAN ("MMP") IN TERMS OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998 (ACT 107 OF 1998) AND THE ENVIRONMENTAL IMPACT ASSESSMENT REGULATIONS, 2014, (AS AMENDED): THE EXPANSION OF AN EXISTING ABALONE FARM ON REMAINDER OF FARM KLIPFONTEIN NO. 711, DANGER POINT NEAR GANSBAAI

1. With reference to the above application, the Department hereby notifies you of its decision to grant Environmental Authorisation and to **adopt** the MMP, attached herewith, together with the reasons for the decision.
2. In terms of Regulation 4 of the Environmental Impact Assessment Regulations, 2014, (as amended), you are instructed to ensure, within 14 days of the date of the Environmental Authorisation, that all registered Interested and Affected Parties ("I&APs") are provided with access to and reasons for the decision, and that all registered I&APs are notified of their right to appeal.
3. Your attention is drawn to Chapter 2 of the National Appeal Regulations, 2014 (as amended), which prescribes the appeal procedure to be followed. This procedure is summarized in the attached Environmental Authorisation.

Yours faithfully

DIRECTOR: DEVELOPMENT MANAGEMENT (REGION 1)
DEPARTMENT OF ENVIRONMENTAL AFFAIRS AND DEVELOPMENT PLANNING

CC: (1) Mr J Crowther/ Mr J Blood (SLR Consulting (South Africa))
 (2) bkondakter@overstrand.gov.za (Overstrand Municipality)
 (3) cgroenewald@overstrand.gov.za (Overstrand Municipality)
 (4) mm@odm.org.za (Overberg District Municipality)

Fax: (021) 461 1120

6th Floor, 1 Dorp Street, Cape Town, 8001
 Tel: +27 21 483 3696/4349 Fax: +27 21 483 3098
 E-mail: Lorretta.Osborne@westerncape.gov.za

Private Bag X9086, Cape Town, 8000
www.westerncape.gov.za/eadp



Directorate: Development Management
(Region 1)

EIA REFERENCE: 16/3/3/2/E2/4/1027/18
NEAS REFERENCE: WCP/EIA/0000411/2018
ENQUIRIES: Lorretta Osborne
DATE OF ISSUE: 2019 -03- 08

ENVIRONMENTAL AUTHORISATION

APPLICATION FOR ENVIRONMENTAL AUTHORISATION AND THE ADOPTION OF A MAINTENANCE MANAGEMENT PLAN ("MMP") IN TERMS OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998 (ACT 107 OF 1998) AND THE ENVIRONMENTAL IMPACT ASSESSMENT REGULATIONS, 2014 (AS AMENDED): THE EXPANSION OF AN EXISTING ABALONE FARM ON REMAINDER OF FARM KLIPFONTEIN NO. 711, DANGER POINT NEAR GANSBAAI

With reference to your application for the abovementioned, find below the outcome with respect to this application.

DECISION

By virtue of the powers conferred on it by the National Environmental Management Act, 1998 (Act No. 107 of 1998) ("NEMA") and the Environmental Impact Assessment ("EIA") Regulations, 2014 (as amended), the Competent Authority herewith **grants Environmental Authorisation** to the applicant to undertake the listed activities specified in Section B below with respect to preferred Layout Alternative and Access Alternative 2 described in the Environmental Impact Assessment Report ("EIAR"), dated October 2018.

In terms of the NEMA, viz. the EIA Regulations, 2014 (as amended) and (Listing Notices 1, 2 and 3 of 2014 in Government Gazette No. 40772 of 7 April 2017) the Competent Authority hereby **adopts the MMP** for the expansion of an existing abalone farm on Remainder of Farm Klipfontein No. 711, Danger Point near Gansbaai included as part of the Operational Environmental Management Programme as Appendix 9 in the EIAR dated October 2018.

The applicant for this Environmental Authorisation is required to comply with the conditions set out in Section E below.

A. DETAILS OF THE APPLICANT FOR THIS ENVIRONMENTAL AUTHORISATION

The Board of Directors
Irvin & Johnson Limited

6th Floor, 1 Dorp Street, Cape Town, 8001
 Tel: +27 21 483 3696 Fax: +27 21 483 3098
 E-mail: Lorretta.Osborne@westerncape.gov.za

Private Bag X9086, Cape Town, 8000
www.westerncape.gov.za/eadp

% Mr M Ahmed
 PO Box 1628
CAPE TOWN
 8000

Tel: (021) 440 7251
 E-mail: Ashaque@jj.co.za

The abovementioned applicant is the holder of this Environmental Authorisation and is hereinafter referred to as "the holder".

B. LIST OF ACTIVITIES AUTHORISED

Listed Activities	Activities/Project Description
<p>Listing Notice 1 of 2014-</p> <p>Activity Number: 1</p> <p><i>The development of facilities or infrastructure for the generation of electricity from a renewable resource where -</i></p> <p><i>(i) the electricity output is more than 10 megawatts but less than 20 megawatts; or</i></p> <p><i>(ii) the output is 10 megawatts or less but the total extent of the facility covers an area in excess of 1 hectare;</i></p> <p><i>excluding where such development of facilities or infrastructure is for photovoltaic installations and occurs -</i></p> <p><i>(a) within an urban area; or</i></p> <p><i>(b) on existing infrastructure.</i></p>	<p>The development entails the construction of a photovoltaic power plant of up to 10 megawatts and covering an area of 2.5 hectares.</p>

<p>Listing Notice 1 of 2014-</p> <p>Activity Number: 19A</p> <p><i>The infilling or depositing of any material of more than 5 cubic metres into, or the dredging, excavation, removal or moving of soil, sand, shells, shell grit, pebbles or rock of more than 5 cubic metres from-</i></p> <p><i>(i) the seashore;</i> <i>(ii) the littoral active zone, an estuary or distance 100 metres inland of the high-water mark of the sea or an estuary, whichever distance is the greater; or</i> <i>(iii) the sea-</i></p> <p><i>but excluding where such infilling, depositing, dredging excavation, removal or moving-</i></p> <p><i>(f) will occur behind a development setback;</i> <i>(g) is for maintenance purposes undertaken in accordance with a maintenance management plan;</i> <i>(h) falls within the ambit of activity 21 in this Notice, in which case that activity applies;</i> <i>(i) occurs within existing ports or harbours that will not increase the development footprint of the port or harbor; or</i></p> <p><i>where such development is related to the development of a port or harbor, in which case activity 26 in Listing Notice 2 of 2014 applies.</i></p>	<p>Infilling or depositing and excavation of more than 5 cubic metres of material will take place within and removed from the seashore, littoral active zone and the sea.</p>
<p>Listing Notice 1 of 2014-</p> <p>Activity Number: 34</p> <p><i>The expansion of existing facilities or infrastructure for any process or activity where such expansion will result in the need for a permit or licence or an amended permit or licence in terms of national or provincial legislation governing the release of emissions, effluent or pollution, excluding-</i></p> <p><i>(i) where the facility, infrastructure, process or activity is included in the list of waste management activities published in terms of section 19 of the National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008) in which case</i></p>	<p>The expansion of the facility will result in the need to amend the current Coastal Waters Discharge Permit for the additional effluent discharge, which would be greater than 50 cubic metres per day.</p>

<p>the National Environmental; Waste Act, 2008 applies;</p> <p>(ii) the expansion of existing facilities or infrastructure for the treatment of effluent, wastewater, polluted water or sewage where the capacity will be increased by less than 15 000 cubic metres per day; or</p> <p>(iii) the expansion is directly related to aquaculture facilities or infrastructure where the wastewater discharge capacity will be increased by 50 cubic metres or less per day.</p>	
<p>Listing Notice 1 of 2014 –</p> <p>Activity Number: 41</p> <p>The expansion and related operation of facilities, infrastructure or structures for aquaculture of-</p> <p>(i) finfish, crustaceans, reptiles or amphibians, where the annual production output of such facility, infrastructure or structures will be increased by 20 000kg (wet weight) or more;</p> <p>(ii) molluscs and echinoderms where the annual production output of such facility, infrastructure or structures will be increased by 30 000kg (wet weight) or more; or</p> <p>(iii) aquatic plants where the annual production output of such facility, infrastructure or structures will be increased by 60 000kg (wet weight) or more;</p> <p>excluding where the expansion of facilities, infrastructure or structures is for purposes of sea-based cage culture in which case activity 42 in this Notice will apply.</p>	<p>The expansion of the facility will result in the increase of annual production output and the production of additional seaweed.</p>
<p>Listing Notice 1 of 2014 –</p> <p>Activity Number: 43</p> <p>The expansion and related operation of hatcheries or agri-industrial facilities outside industrial complexes, where the development footprint of the hatcheries or agri-industrial facilities will be increased by 2000 square metres or more.</p>	<p>The development will be expanded outside of an industrial complex.</p>
<p>Listing Notice 1 of 2014 –</p> <p>Activity Number: 46</p> <p>The expansion and related operation of infrastructure for the bulk transportation of sewage, effluent, process water, wastewater, return water, industrial discharge or slimes</p>	<p>The expansion and related operation of infrastructure (abstraction and delivery pipes) will be expanded with an internal diameter of 0.6 metres for the bulk transportation of seawater intake and return water. The throughput capacity will be increased by more than 10%.</p>

<p>where the existing infrastructure-</p> <ul style="list-style-type: none"> (i) has an internal diameter of 0.36 metres or more; or (ii) has a peak throughput of 120 litres per second or more; and (a) where the facility or infrastructure is expanded by more than 1000 metres in length; or (b) where the throughput capacity of the facility or infrastructure will be increased by 10% or more; <p>excluding where such expansion-</p> <ul style="list-style-type: none"> (aa) related to transportation of water or storm water within a road reserve or railway line reserve; or (bb) will occur within an urban area. 	
<p>Listing Notice 1 of 2014 -</p> <p>Activity Number: 52</p> <p>The expansion of structures in the coastal public property where the development footprint will be increased by more than 50 square metres, excluding such expansions within existing ports or harbours where there will be no increase in the development footprint of the port or harbour and excluding activities listed in activity 23 in Listing Notice 3 of 2014, in which case that activity applies.</p>	<p>The expansion of the facility will increase the development footprint by more than 50 square metres in the coastal public property.</p>
<p>Listing Notice 1 of 2014 -</p> <p>Activity Number: 54</p> <p>The expansion of facilities-</p> <ul style="list-style-type: none"> (i) in the sea; (ii) in an estuary; (iii) within the littoral active zone; (iv) in front of a development setback; or (v) if no development setback exists, within a distance of 100 metres inland of the high-water mark of the sea or an estuary, whichever is the greater; <p>in respect of-</p> <ul style="list-style-type: none"> (a) fixed or floating jetties and slipways; (b) tidal pools; (c) embankments; (d) rock revetments or stabilising structures including stabilising walls; or (e) infrastructure or structures where the development footprint is expanded by 50 square metres or more. <p>but excluding-</p> <ul style="list-style-type: none"> (aa) the expansion of infrastructure or structures within existing ports or harbours 	<p>The abstraction pipelines may require stabilizing structures to ensure they are not damaged by wave action.</p>

<p>that will not increase the development footprint of the port or harbour; or (bb) where such expansion occurs within an urban area.</p>	
<p>Listing Notice 2 of 2014 – Activity Number: 15 The clearance of an area of 20 hectares or more of indigenous vegetation, excluding where such clearance of indigenous vegetation is required for- (i) the undertaking of a linear activity; or (ii) maintenance purposes undertaken in accordance with a maintenance management plan.</p>	<p>The expansion of the facility would require the clearance of an area of approximately 40 hectares of indigenous vegetation.</p>
<p>Listing Notice 3 of 2014 – Activity Number: 4 The development of a road wider than 4 metres with a reserve less than 13.5 metres. (i) Western Cape: i. areas zoned for use as public open space or equivalent zoning ii. areas outside urban areas; (aa) areas containing indigenous vegetation; (bb) areas on the estuary side of the development setback line or in an estuarine functional zone where no such setback line has been determined; or iii. Inside urban areas: (aa) areas zoned for conservation use; or (bb) areas designated for conservation use in Spatial Development Frameworks adopted by the competent authority.</p>	<p>A road will be developed outside an urban area, which contains indigenous vegetation.</p>
<p>Listing Notice 3 of 2014 – Activity Number: 12 The clearance of an area of 300 square metres or more of indigenous vegetation except where such clearance of indigenous vegetation is required for maintenance purposes undertaken in accordance with a maintenance management plan. Western Cape i. within any critically endangered or endangered ecosystem listed in terms of section 52 of the NEMBA or prior to the publication of such a list, within an area that has been identified as critically</p>	<p>Clearance of more than 300 square metres of indigenous vegetation within the littoral active zone or 100 metres inland from the high-water mark of the sea will be required.</p>

<p>endangered in the National Spatial Biodiversity Assessment 2004;</p> <p>ii. within critical biodiversity areas identified in bioregional plans;</p> <p>iii. within the littoral active zone or 100 metres inland from high water mark of the sea or an estuarine functional zone, whichever distance is the greater, excluding where such removal will occur behind the development setback line on erven in urban areas;</p> <p>iv. on land, where, at the time of the coming into effect of this Notice or thereafter such land was zoned open space, conservation or had an equivalent zoning; or</p> <p>v. on land designated for protection or conservation purposes in an Environmental Management Framework adopted in the prescribed manner, or a Spatial Development Framework adopted by the MEC or Minister.</p>	
--	--

The abovementioned list is hereinafter referred to as "**the listed activities**".

The holder is herein authorised to undertake the following alternative that includes the listed activities as it relates to the development:

The proposal entails the expansion of an existing abalone farm at Danger Point in Gansbaai from 500 tons per annum (t/a) to 1700 t/a. The total footprint to be developed will be approximately 40 hectares. The development will take place in three phases namely:

Phase 1 will cater for an additional 600 t/a production:

This phase entails the development of:

- An intake facility located on the south-western side of the headland, approximately 160 metres offshore at a water depth of approximately 2 to 3 metres;
- Eight abstraction pipelines (60 centimetres in diameter) installed on concrete casted pedestals along the seabed from the intake facility to a new onshore pump house (220 square metres);
- Delivery pipelines from the pump house to an elevated header tank(s) (2000 cubic metres in total), and from the header tank(s) to a grow-out platform;
- A 6 hectare grow out platform for abalone tanks, seaweed production ponds, sumps and re-circulation facility/ tank;
- An effluent channel or discharge pipeline for coastal discharge from the grow-out platform, located on the north-western side of the headland; and
- Associated buildings (e.g. offices, ablutions, grading and processing areas, pack house etc.).

This phase will have a total development footprint of approximately 15 hectares and will be developed over a period of five to eight years.

Phase 2 will cater for an additional 300 t/a production:

This phase entails the development of:

- Additional infrastructure, including seawater intake pipelines, a pump house and eight delivery pipelines located on the north-western side of the headland;
- Delivery pipelines to an elevated header tank(s) (200 cubic metres in total);
- A 6 hectare grow-out platform for abalone tanks, seaweed production ponds, sumps and re-circulation facility/ tank;
- An approximately 300-metre-long effluent discharge pipeline or effluent channel located on the north-western side of the headland which would extend into the tidal zone; and
- Associated buildings (e.g. offices, ablutions, grading and processing areas etc.).

This phase will have an additional footprint of approximately 11 hectares and will be developed over a period of five years after Phase 1.

Phase 3 will cater for an additional 300 t/a production:

This phase entails the development of:

- A 6 hectare grow-out platform for abalone tanks, seaweed production ponds, sumps and re-circulation facility/ tank; and
- An approximately 200-metre-long effluent discharge pipeline or effluent channel located on the north-western side of the headland which would extend into the tidal zone.

This phase will have an additional footprint of approximately 8 hectares and will be developed over a period of four years after Phase 2.

In addition to the development phases, conservancy tanks will be used to treat sewage and wastewater. Access to the development will be provided via Van Bloemenstein Street and the development of a new 2.5 kilometre road. Electricity, water supply and solid waste services will be provided by the Overstrand Municipality. A photovoltaic power plant of up to 10 MVA with a development footprint of 2.5 hectares will also be developed to offset the electricity usage.

C. SITE DESCRIPTION AND LOCATION

The listed activities will be undertaken on Remainder of Farm Klipfontein No. 711, Danger Point near Gansbaai.

The SG21 digit code is: C01300090000000000711,

Co-ordinates: Latitude: 34° 37' 40.46" South
Longitude: 19° 17' 53.08" East,

Refer to Annexure 1: Locality Map and Annexure 2: Site Plan.

The above is hereinafter referred to as "the site".

D. DETAILS OF THE ENVIRONMENTAL ASSESSMENT PRACTITIONER

SLR Consulting (South Africa)
% Mr J Blood
PO Box 10145
CALEDON SQUARE
7905

Tel.: (021) 461 1118

Fax: (021) 461 1120

E. CONDITIONS OF AUTHORISATION

Scope of authorisation

1. The holder is authorised to undertake the listed activities specified in Section B above in accordance with, and restricted to, preferred Layout Alternative and Access Alternative 2, described in the EIA dated October 2018 on the site as described in Section C above.
2. The Environmental Authorisation is valid for a period of **five years** from the date of issue within which commencement must occur.
3. The construction of all three phases of the expansion of the abalone farm must be concluded within **twenty years** from the date of commencement of the first listed activity.
4. The holder shall be responsible for ensuring compliance with the conditions by any person acting on his/her behalf, including an agent, sub-contractor, employee or any person rendering a service to the holder.
5. Any changes to, or deviations from the scope of the alternative described in Section B above must be accepted or approved, in writing, by the Competent Authority before such changes or deviations may be implemented. In assessing whether to grant such acceptance/approval or not, the Competent Authority may request information, in order to evaluate the significance and impacts of such changes or deviations, and it may be necessary for the holder to apply for further authorisation in terms of the applicable legislation.

Written notice to the Competent Authority

6. Seven calendar days' notice, in writing, must be given to the Competent Authority before commencement of clearing and construction activities. The notice must:
 - 6.1 make clear reference to the site details and EIA Reference number given above; and
 - 6.2 also include proof of compliance with the following conditions described herein:

Conditions: 7, 8, 12, 18, 19 and 20.

Notification and administration of appeal

7. The holder must in writing, within 14 (fourteen) calendar days of the date of this decision—
 - 7.1 notify all registered Interested and Affected Parties ("I&APs") of –
 - 7.1.1 the outcome of the application;
 - 7.1.2 the reasons for the decision as included in Annexure 3;
 - 7.1.3 the date of the decision; and
 - 7.1.4 the date when the decision was issued.

- 7.2 draw the attention of all registered I&APs to the fact that an appeal may be lodged against the decision in terms of the National Appeals Regulations, 2014 (as amended) detailed in Section G below;
- 7.3 draw the attention of all registered I&APs to the manner in which they may access the decision; and
- 7.4 provide the registered I&APs with:
 - 7.4.1 the name of the holder (entity) of this Environmental Authorisation;
 - 7.4.2 name of the responsible person for this Environmental Authorisation;
 - 7.4.3 postal address of the holder;
 - 7.4.4 telephonic and fax details of the holder;
 - 7.4.5 e-mail address, if any, of the holder; and
 - 7.4.6 contact details (postal and/or physical address, contact number, facsimile and e-mail address) of the decision-maker and all registered I&APs in the event that an appeal is lodged in terms of the 2014 National Appeals Regulations (as amended).
8. The listed activities, including site preparation, must not commence within 20 (twenty) calendar days from the date of issue of this Environmental Authorisation. In the event that an appeal is lodged with the Appeal Authority, the effect of this Environmental Authorisation is suspended until the appeal is decided i.e. the listed activities, including site preparation, must not commence until the appeal is decided.

Management of activities

9. The draft Construction Environmental Management Programme and the Operational Environmental Management Programme (hereinafter referred to as the "EMPr") dated October 2018, submitted as part of the application for Environmental Authorisation, is hereby approved and must be implemented.
10. The MMP adopted as part of this Environmental Authorisation must be implemented.
11. The EMPr and MMP must be included in all contract documentation for all phases of implementation.

Monitoring

12. The holder must appoint a suitably experienced environmental control officer ("ECO"), or site agent where appropriate, before commencement of any clearing or construction activities to ensure compliance with the EMPr and the conditions contained herein.
13. A copy of the Environmental Authorisation, EMPr, MMP, audit reports and compliance monitoring reports must be kept at the site of the authorised activities, and must be made available to anyone on request, including on a publicly accessible website.
14. Access to the site referred to in Section C must be granted, and the environmental reports mentioned above must be produced, to any authorised official representing the Competent

Authority who requests to see it for the purposes of assessing and/or monitoring compliance with the conditions contained herein.

Auditing

15. In terms of Regulation 34 of the NEMA EIA Regulations, 2014 (as amended), the holder must conduct environmental audits to determine compliance with the conditions of the Environmental Authorisation, the EMP, MMP, and submit Environmental Audit Reports to the Competent Authority. The Environmental Audit Report must be prepared by an independent person and must contain all the information required in Appendix 7 of the NEMA EIA Regulations, 2014 (as amended).

The holder must undertake an environmental audit quarterly for the duration of the construction phase and submit Environmental Audit Reports to the Competent Authority once every six months during the construction phase. The final Environmental Audit Report must be submitted to the Competent Authority six months after operation commenced.

The holder must, within 7 days of the submission of each of the above-mentioned reports to the Competent Authority, notify all potential and registered I&APs of the submission and make the report available to anyone on request and on a publicly accessible website (if applicable).

Specific Conditions

16. Should any heritage remains be exposed during excavations or any other actions on the site, these must immediately be reported to the Provincial Heritage Resources Authority of the Western Cape, Heritage Western Cape. Heritage remains uncovered or disturbed during earthworks must not be further disturbed until the necessary approval has been obtained from Heritage Western Cape.

Heritage remains include: meteorites, archaeological and/or palaeontological remains (including fossil shells and trace fossils); coins; indigenous and/or colonial ceramics; any articles of value or antiquity; marine shell heaps; stone artifacts and bone remains; structures and other built features with heritage significance; rock art and rock engravings; and/or graves or unmarked human burials including grave goods and/or associated burial material.

17. A qualified archaeologist and/or palaeontologist must be contracted where necessary (at the expense of the holder) to remove any heritage remains. Heritage remains can only be disturbed by a suitably qualified heritage specialist working under a directive from the relevant heritage resources authority.
18. The development areas for each of the construction phases must be clearly demarcated prior to commencement of clearing and construction activities for that particular phase. All areas outside the development footprint must be treated as no-go areas.
19. A Search and Rescue operation must be conducted within the development footprint during late autumn and late spring. Bulbs, succulents and any other species deemed to be transplantable must be relocated to areas already under rehabilitation or into the remaining property. This relocation must be undertaken by a suitably qualified and experienced

botanical specialist prior to commencement of clearing activities and confirmation thereof submitted to CapeNature.

20. A Workplan for conducting test excavations across the proposed expansion site for each phase must be submitted to Heritage Western Cape prior to commencement of clearing and construction activities for approval and must also be submitted to this Department for record keeping purposes.

F. GENERAL MATTERS

1. Notwithstanding this Environmental Authorisation, the holder must comply with any other statutory requirements that may be applicable when undertaking the listed activities.
2. Non-compliance with a condition of this Environmental Authorisation or EMPr may render the holder liable to criminal prosecution.
3. If the holder does not commence with the listed activities within the period referred to in Condition 2, this Environmental Authorisation shall lapse for that activities, and a new application for Environmental Authorisation must be submitted to the Competent Authority. If the holder wishes to extend the validity period of the Environmental Authorisation, an application for amendment in this regard must be made to the Competent Authority prior to the expiry of the environmental authorisation.
4. The holder must submit an application for amendment of the Environmental Authorisation to the Competent Authority where any detail with respect to the Environmental Authorisation must be amended, added, substituted, corrected, removed or updated. If a new holder is proposed, an application for Amendment in terms of Part 1 of the EIA Regulations, 2014 (as amended) must be submitted.

Please note that an amendment is not required if there is a change in the contact details of the holder. In this case, the Competent Authority must only be notified of such changes.

5. The manner and frequency for updating the EMPr is as follows:
Amendments to the EMPr must be done in accordance with Regulations 35 to 37 of the EIA Regulations, 2014 (as amended) or any relevant legislation that may be applicable at the time.

G. APPEALS

Appeals must comply with the provisions contained in the National Appeal Regulations 2014 (as amended).

- I. An appellant (if the holder of the decision) must, within 20 (twenty) calendar days from the date on which notification of the decision was sent to the holder by the Competent Authority –
 - 1.1 Submit an appeal in accordance with Regulation 4 of the National Appeal Regulations 2014 (as amended) to the Appeal Administrator; and

- 1.2 Submit a copy of the appeal to any registered I&APs, any Organ of State with interest in the matter and the decision-maker i.e. the Competent Authority that issued the decision.
2. An appellant (if NOT the holder of the decision) must, within 20 (twenty) calendar days from the date on which the holder of the decision sent notification of the decision to the registered I&APs-
 - 2.1 Submit an appeal in accordance with Regulation 4 of the National Appeal Regulations 2014 (as amended) to the Appeal Administrator; and
 - 2.2 Submit a copy of the appeal to the holder of the decision, any registered I&AP, any Organs of State with interest in the matter and the decision-maker i.e. the Competent Authority that issued the decision.
3. The holder of the decision (if not the appellant), the decision-maker that issued the decision, the registered I&AP and the Organs of State must submit their responding statements, if any, to the appeal authority and the appellant within 20 (twenty) calendar days from the date of receipt of the appeal submission.
4. The appeal and the responding statement must be submitted to the address listed below:

By post: Western Cape Ministry of Local Government, Environmental Affairs and Development Planning
Private Bag X9186
CAPE TOWN
8000

By facsimile: (021) 483 4174; or

By hand: Attention: Mr Jaap de Villiers (Tel: 021 483 3721)
Room 809
8th Floor Utilitas Building, 1 Dorp Street, Cape Town, 8001

Note: For purposes of electronic database management, you are also requested to submit electronic copies (Microsoft Word format) of the appeal, responding statement and any supporting documents to the Appeal Authority to the address listed above and/ or via e-mail to Jaap.DeVilliers@westerncape.gov.za.

- A prescribed appeal form as well as assistance regarding the appeal processes is obtainable from Appeal Authority at: Tel. (021) 483 3721, E-mail Jaap.DeVilliers@westerncape.gov.za or URL <http://www.westerncape.gov.za/eadp>.

H. DISCLAIMER

The Western Cape Government, the Local Authority, committees or any other public authority or organisation appointed in terms of the conditions of this Environmental Authorisation shall not be responsible for any damages or losses suffered by the holder, developer or his/her successor in any instance where construction or operation subsequent to construction is temporarily or permanently stopped for reasons of non-compliance with the conditions as set out herein or any other subsequent document or legal action emanating from this decision.

Your interest in the future of our environment is appreciated.

Yours faithfully



MR ZAHIR TOEFY
DIRECTOR: DEVELOPMENT MANAGEMENT (REGION 1)

DATE OF DECISION: 08/03/2019

CC: (1) Mr J Crowther/ Mr J Blood (SLR Consulting (South Africa))
(2) bkondokter@overstrand.gov.za (Overstrand Municipality)
(3) cgroenewald@overstrand.gov.za (Overstrand Municipality)
(4) mm@odm.org.za (Overberg District Municipality)

Fax: (021) 461 1120

ANNEXURE 1: LOCALITY MAP

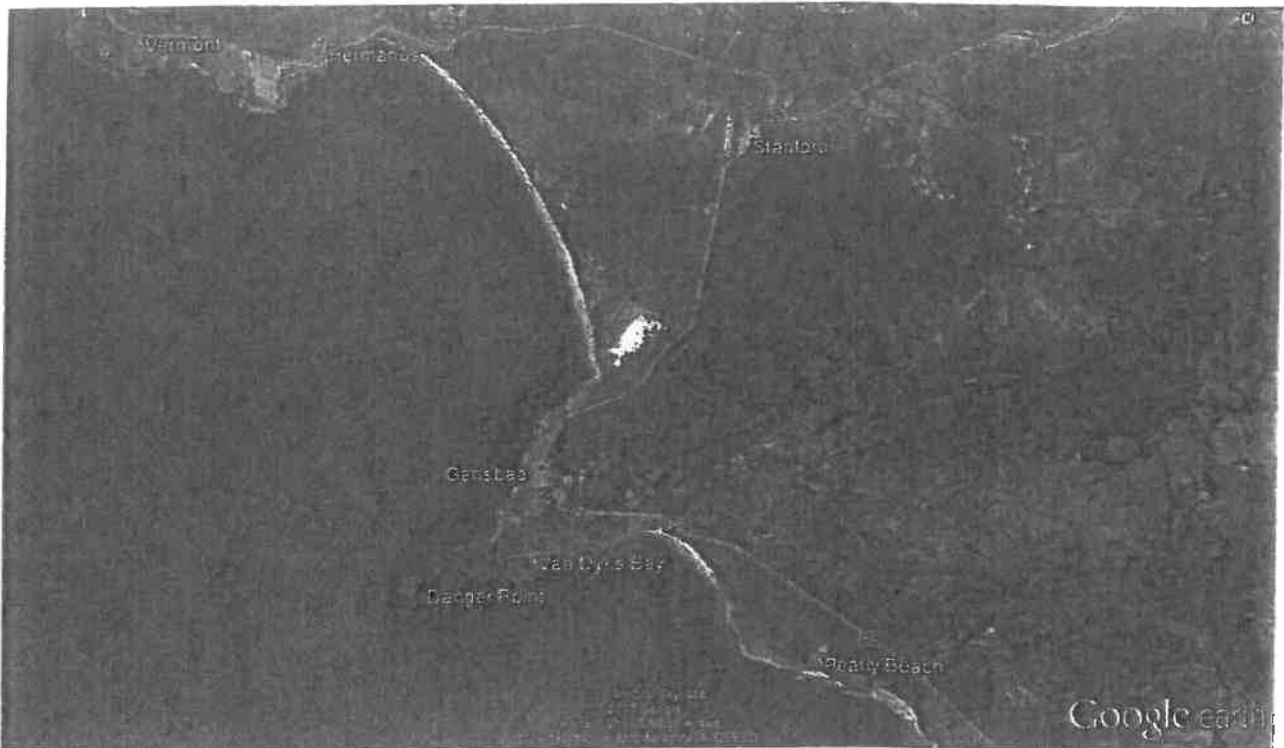


Figure 1: Locality map of Remainder of Farm Klipfontein No. 711, Danger Point near Garisbaai

ANNEXURE 2: SITE PLAN

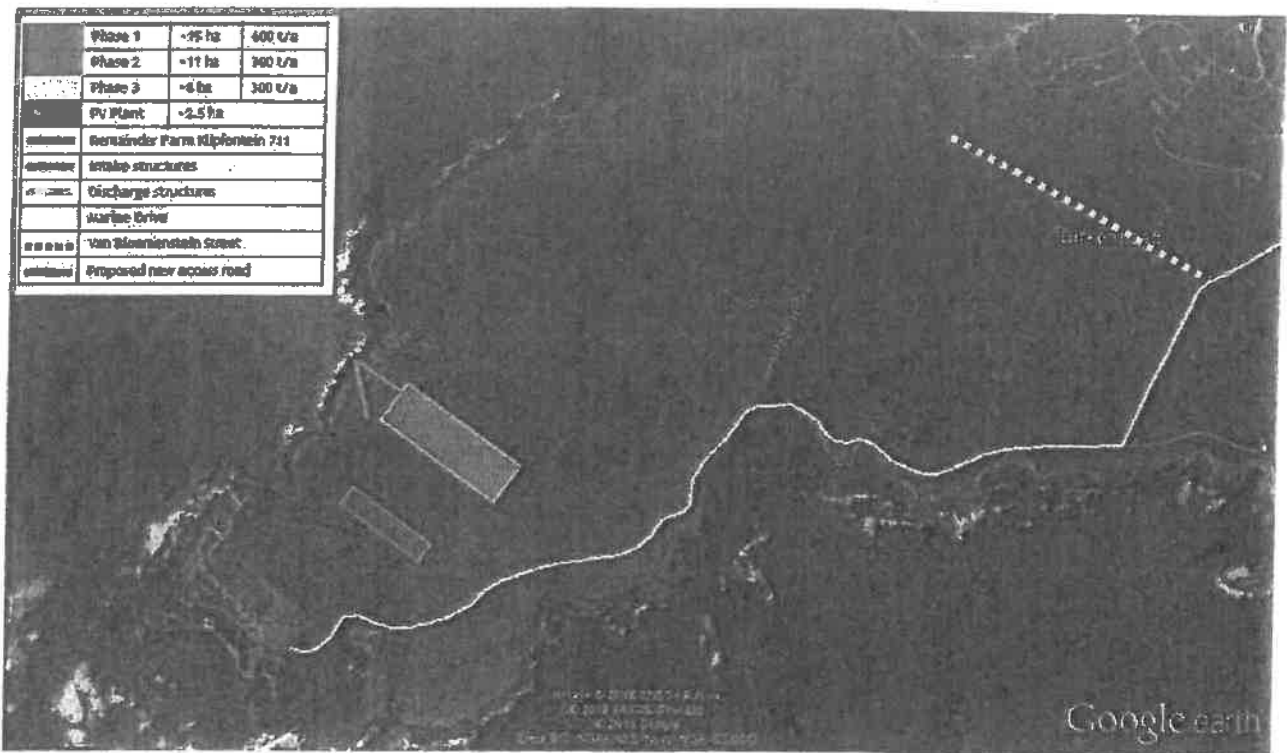


Figure 2: Site Plan of the areas for construction on Remainder of Farm Klipfontein No. 711, Danger Point near Gansbaai

ANNEXURE 3: REASONS FOR THE DECISION

In reaching its decision, the Competent Authority considered, amongst others, the following:

- a) The information contained in the Application Form submitted on 19 April 2018, the Scoping Report submitted on 1 June 2018 and the EIAR dated October 2018, the EMPr and the MMP submitted together with the EIAR on 31 October 2018 and the additional information dated 13 November 2018 and 6 December 2018;
- b) Relevant information contained in the Departmental information base, including the Guidelines on Public Participation and Alternatives (dated March 2013);
- c) The objectives and requirements of relevant legislation, policies and guidelines, including Section 2 of the National Environmental Management Act, 1998 (Act No. 107 of 1998);
- d) The comments received from I&APs and responses to these, included in the EIAR dated October 2018 and the additional information dated 13 November 2018 and 6 December 2018; and
- e) The balancing of negative and positive impacts and proposed mitigation measures;

No site visits were conducted. The competent authority had sufficient information before it to make an informed decision without conducting a site visit.

All information presented to the Competent Authority was taken into account during the consideration of the application for Environmental Authorisation. A summary of the issues that were considered to be the most significant for the decision is set out below.

1. Public Participation

The public participation process included:

- Giving written notices and Background Information documents to the owners and occupiers of land adjacent to the site where the listed activities are to be undertaken, the municipality and ward councillor, and the various Organs of State having jurisdiction in respect of any aspect of the listed activities on 15 November 2017, 8 January 2018, 19 April 2018 and 7 September 2018;
- Placing site notices on 16 November 2017;
- Placing a newspaper advertisement in the "Hermanus Times" newspaper and "Gansbaai Courant" newspaper on 16 November 2017;
- Public meetings were held on 12 January 2018 and 26 February 2018;
- Circulating the in-process draft Scoping Report to I&APs for public review from 20 April 2018; and
- Circulating the draft EIAR for comment to I&APs for public review from 7 September 2018.

All the concerns raised by I&APs were responded to, and adequately addressed during the public participation process. Specific management and mitigation measures have been considered in this Environmental Authorisation, MMP and in the EMPr, in order to adequately address the concerns raised.

The Competent Authority concurs with the Environmental Assessment Practitioner's responses to the issues raised during the public participation process, and has included appropriate conditions in this Environmental Authorisation and in the EMPr.

2. Alternatives

The following alternatives were considered:

Preferred Layout Alternative (Herewith authorised):

This alternative entails the expansion of an existing abalone farm at Danger Point in Gansbaai from 500 tons per annum (t/a) to 1700 t/a. The total footprint to be developed will be approximately 40 hectares. The development will take place in three phases namely:

Phase 1 will cater for an additional 600 t/a production:

This phase entails the development of:

- An intake facility located on the south-western side of the headland, approximately 160 metres offshore at a water depth of approximately 2 to 3 metres;
- Eight abstraction pipelines (60 centimetres in diameter) installed on concrete casted pedestals along the seabed from the intake facility to a new onshore pump house (220 square metres);
- Delivery pipelines from the pump house to an elevated header tank(s) (2000 cubic metres in total), and from the header tank(s) to a grow-out platform;
- A 6 hectare grow out platform for abalone tanks, seaweed production ponds, sumps and re-circulation facility/ tank;
- An effluent channel or discharge pipeline for coastal discharge from the grow-out platform, located on the north-western side of the headland; and
- Associated buildings (e.g. offices, ablutions, grading and processing areas, pack house etc.).

This phase will have a total development footprint of approximately 15 hectares and will be developed over a period of five to eight years.

Phase 2 will cater for an additional 300 t/a production:

This phase entails the development of:

- Additional infrastructure, including seawater intake pipelines, a pump house and eight delivery pipelines located on the north-western side of the headland;
- Delivery pipelines to an elevated header tank(s) (200 cubic metres in total);
- A 6 hectare grow-out platform for abalone tanks, seaweed production ponds, sumps and re-circulation facility/ tank;
- An approximately 300-metre-long effluent discharge pipeline or effluent channel located on the north-western side of the headland which would extend into the tidal zone; and
- Associated buildings (e.g. offices, ablutions, grading and processing areas etc.).

This phase will have an additional footprint of approximately 11 hectares and will be developed over a period of five years after Phase 1.

Phase 3 will cater for an additional 300 t/a production:

This phase entails the development of:

- A 6 hectare grow-out platform for abalone tanks, seaweed production ponds, sumps and re-circulation facility/ tank; and
- An approximately 200-metre-long effluent discharge pipeline or effluent channel located on the north-western side of the headland which would extend into the tidal zone.

This phase will have an additional footprint of approximately 8 hectares and will be developed over a period of four years after Phase 2.

In addition to the development phases, conservancy tanks will be used to treat sewage and wastewater. Access to the development will be provided via Van Bloemenstein Street and the development of a new 2.5 kilometre road. Electricity, water supply and solid waste services will be provided by the Overstrand Municipality. A photovoltaic power plant of up to 10 MVA with a development footprint of 2.5 hectares will also be developed to offset the electricity usage.

This alternative is preferred since it is less intrusive on the skyline as seen from Marine Drive scenic route. The layout takes into consideration the vegetation on site and heritage buffers around significant heritage features.

Intake and Discharge pipeline options:

Effluent seawater may be discharged via a channel or pipeline. Pipelines are the preferred option since it will be buried and the construction areas rehabilitated afterwards, which would ensure connectivity along the coastal zone and minimise the impact on ecological processes.

Powerline options:

A powerline will be developed to connect phase 1 and phase 2 to the photovoltaic power plant on the site. It is preferable to develop the powerline underground to reduce the visual impact.

Access Alternative 1:

This alternative entails the use of the existing coastal access road (Marine Drive) by all traffic to and from the expanded abalone facility.

This alternative was not preferred since it will result in a negative traffic impact along Marine Drive.

Access Alternative 2 (herewith Authorised):

This alternative entails the use of Van Bloemenstein Street and a new 2.5 kilometre surfaced road aligned along the existing powerline on the property by all traffic to and from the expanded abalone facility.

From a traffic engineering perspective, this alternative is preferred in terms of safety for employees, surrounding residents and pedestrians. It will also result in the lowest noise levels.

Access Alternative 3:

This alternative entails the use of Van Bloemenstein Street and a new 2.5 kilometre surfaced road aligned down the middle of the property by all traffic to and from the expanded abalone facility.

This alternative was not preferred since it would encroach on the remaining intact portion of indigenous vegetation on the site.

"No-Go" Alternative:

The option of not expanding the current facility was considered. However, it is not preferred since it will not provide an opportunity to increase the economic viability of the farm, job creation and community upliftment.

3. Impact Assessment and Mitigation measures

3.1 Activities need and desirability

Currently the demand for abalone surpasses the supply of the commodity, resulting in large scale poaching. The expansion will help to address the growing demand for abalone. It will also lead to more efficient operation of the existing Abalone Culture Division, which will increase job security.

3.2 Biodiversity and Biophysical Impacts

The facility is located on Remainder of Farm Klipfontein No. 711, Danger Point and is situated approximately 8 kilometre south-west of Gansbaai. The expansion of the facility requires the clearance of approximately 40ha of natural vegetation. According to the Botanical Assessment, most of the area is characterized by Overberg Dune Strandveld, which is classified as least threatened in terms of Section 52 of the National Environmental Management Biodiversity Act, 2004 (Act No. 10 of 2004) ("NEMBA") including two patches of Agulhas Limestone Fynbos, which is classified as vulnerable in terms of Section 52 of NEMBA. Large portions of the site are mapped as a Critical Biodiversity Area and an Ecological Support Area. Some thicket species are present on the leeward side of an old coastal dune and calccrete outcrops are present on the site. Furthermore, minimal alien vegetation species are present on the property. Some conservation worthy species have been noted, which includes, *inter alia*: *Diosma demissa* and *Satyrium carneum*. Given the presence of these species and the likelihood of others, a search and rescue operation (included in Section E, Condition 19) of all conservation worthy species will be commissioned. The potential impacts on vegetation that may result from the proposed development will be further mitigated by the implementation of the conditions of this Environmental Authorisation and the mitigation measures in the EMPr (accepted in Section E, Condition 9).

There are no marine protected areas in the immediate vicinity of the project area. The installation of the intake and discharge structures would require trenching in the intertidal and shallow subtidal zones to a suitable depth, as well as concrete work to provide support to the pipeline and stability on the seabed. Despite the unavoidable disturbance of the intertidal and shallow subtidal habitats, the activities would remain localised and confined to within a hundred metres of the intake and discharge structures with rapid natural recovery of disturbed habitats expected. The potential impacts on marine features that may result from the proposed development will be further mitigated by the implementation of the maintenance measures of the MMP and the mitigation measures in the EMPr.

An MMP has been compiled to address routine maintenance activities taking place in the affected area of the seashore. The maintenance of the structures authorised in this Environmental Authorisation forms part of this MMP. It must be noted that the accepted maintenance activities only relate to the activities described in the MMP. Should any new activities and associated infrastructure, not included in the MMP, require maintenance and if any of the applicable listed activities are triggered, an Environmental Authorisation must be obtained prior to the undertaking of such activities. It remains the responsibility of the proponent to determine if any other listed activities are triggered and to ensure that the necessary Environmental Authorisation is obtained.

The fact that the MMP is adopted by the Competent Authority does not absolve the applicant from its general "duty of care" set out in Section 28(1) of the NEMA, which states that "Every person who causes, has caused or may cause significant pollution or degradation of the environment must take reasonable measures to prevent such pollution or degradation from occurring, continuing or recurring, or, in so far as such harm to the environment is authorised by law or cannot reasonably be avoided or stopped, to minimise and rectify such pollution or degradation of the environment." (Note: When interpreting their "duty of care" responsibility, cognisance must be taken of the principles of sustainability contained in Section 2 of NEMA).

3.3 Construction Phase Impacts, e.g. Noise, Dust

The construction phase of the development will result in dust impacts. However, this impact will be of low significance with the implementation of the mitigation measures in the EMPr.

Noise during the construction phase is anticipated, but will be of a temporary nature and noise during the operational phase will be negligible. With the implementation of mitigation measures from the Environmental Noise Specialist Study, dated September 2018, conducted by Airshed Planning Professionals, the residual noise impact would be of low significance.

3.4 Visual Impact

While the development will increase the footprint of the existing operation, the expansion will be set amongst the existing infrastructure which is located in the extreme western part of the site, well away from any other developed areas. In addition, the pipelines will be submerged as oppose to being exposed above ground. As the proposed development largely comprise of single-storey buildings and a relatively low profile photovoltaic power plant, it is only the upper portion of some of the double-storey buildings that would be marginally visible. The lowering of these buildings in the area of high visibility and the mitigation measures provided in the Visual Impact Assessment, dated August 2018, will minimize the impact on the surrounding environment significantly.

3.5 Traffic Impact

The expansion of the facility will result in an increase in traffic on the road network during the construction phase and the operational phase. The Traffic Impact Assessment dated July 2018, conducted by Deca Consulting Engineers, concluded that the proposed development will be accommodated subject to the implementation of the recommendations made in the abovementioned Traffic Impact Assessment. These have been included in the EMPr.

3.6 Heritage Impact

Numerous archaeological sites have been identified on the site, most of which are of low Grade IIIIC archaeological significance. The most significant site identified within the development footprint is a well preserved shell midden. To mitigate the biophysical impact of the development, provisions are made to buffer the shell midden site and sensitive calcrete areas, while the remainder of the property will be conserved and managed accordingly.

The development will result in both negative and positive impacts.

The development will result in both negative and positive impacts.

Negative Impacts:

- The development will result in the loss of natural vegetation and impact on the marine resources during construction and operation, which will be effectively mitigated to a low negative significance.
- It was determined that the potential negative impacts during the construction phase of the development, such as noise, traffic and visual impacts, will be of low significance after mitigation.

Positive Impacts:

- The development will ensure the economic viability of the farm and provide additional employment opportunities.
- The remainder of the farm will be managed as a conservation area.

4. National Environmental Management Act Principles

The National Environmental Management Principles (set out in Section 2 of the NEMA, which apply to the actions of all organs of state, serve as guidelines by reference to which any organ of state must exercise any function when taking any decision, and which must guide the interpretation, administration and implementation of any other law concerned with the protection or management of the environment), *inter alia*, provides for:

- the effects of decisions on all aspects of the environment to be taken into account;
- the consideration, assessment and evaluation of the social, economic and environmental impacts of activities (disadvantages and benefits), and for decisions to be appropriate in the light of such consideration and assessment;
- the co-ordination and harmonisation of policies, legislation and actions relating to the environment;
- the resolving of actual or potential conflicts of interest between organs of state through conflict resolution procedures; and
- the selection of the best practicable environmental option.

5. Conclusion

In view of the above, the NEMA principles, compliance with the conditions stipulated in this Environmental Authorisation, compliance with the EMPr and the MMP, the Competent Authority is satisfied that the proposed listed activities will not conflict with the general objectives of integrated environmental management stipulated in Chapter 5 of the National Environmental Management Act, 1998 (Act No. 107 of 1998) and that any potentially detrimental environmental impacts resulting from the listed activities can be mitigated to acceptable levels.

-----END-----

PROPOSED EXPANSION OF AN EXISTING ABALONE FARM AT DANGER POINT NEAR GANSBAAI

Construction Environmental Management Programme

Remainder Farm Klipfontein 711, Danger Point, Western Cape

Prepared for: Irvin and Johnson Limited

Authority Ref: 16/3/3/6/7/1/E2/4/1002/18

SLR Project No: 720.09026.00001

Report No: 3

Revision No: 1

October 2018

SLR



DOCUMENT INFORMATION

Title	Construction Environmental Management Programme for the proposed expansion of an existing abalone farm at Danger Point near Gansbaai
Sub-title	Construction Environmental Management Programme
Project Manager	Jeremy Blood
Project Manager e-mail	jblood@slrconsulting.com
Author	Jeremy Blood
Reviewer	Jonathan Crowther
Keywords	Aquaculture, abalone, I&J, Irvin and Johnson, Danger Point
Status	Construction EMPr for submission to DEA&DP
Authority Reference No	16/3/3/6/7/1/E2/4/1002/18
SLR Project No	720.09026.00001
Report No	3
Revision No	1
Report Date	October 2018

DOCUMENT REVISION RECORD

Rev No.	Issue Date	Description	Issued By
A	August 2018	Construction EMPr issued for client review	Jeremy Blood
B	September 2018	Construction EMPr issued for I&AP review	Jeremy Blood
C	October 2018	Construction EMPr updated based on I&AP comment on draft EIR and issued to DEA&DP for decision-making	Jeremy Blood

BASIS OF REPORT

This document has been prepared by an SLR Group company with reasonable skill, care and diligence, and taking account of the manpower, timescales and resources devoted to it by agreement with Irvin and Johnson Limited for part or all of the services it has been appointed by the Client to carry out. It is subject to the terms and conditions of that appointment.

SLR shall not be liable for the use of or reliance on any information, advice, recommendations and opinions in this document for any purpose by any person other than the Client. Reliance may be granted to a third party only in the event that SLR and the third party have executed a reliance agreement or collateral warranty.

Information reported herein may be based on the interpretation of public domain data collected by SLR, and/or information supplied by the Client and/or its other advisors and associates. These data have been accepted in good faith as being accurate and valid.

SLR disclaims any responsibility to the Client and others in respect of any matters outside the agreed scope of the work.

The copyright and intellectual property in all drawings, reports, specifications, bills of quantities, calculations and other information set out in this report remain vested in SLR unless the terms of appointment state otherwise.

This document may contain information of a specialised and/or highly technical nature and the Client is advised to seek clarification on any elements which may be unclear to it.

Information, advice, recommendations and opinions in this document should only be relied upon in the context of the whole document and any documents referenced explicitly herein and should then only be used within the context of the appointment.

EXPERTISE OF ENVIRONMENTAL ASSESSMENT PRACTITIONER

NAME	Jonathan Crowther
RESPONSIBILITY ON PROJECT	Project leader and quality control.
DEGREE	B.Sc. Hons (Geol.), M.Sc. (Env. Sci.)
PROFESSIONAL REGISTRATION	Pr.Sci.Nat., CEAPSA
EXPERIENCE IN YEARS	30
EXPERIENCE	Jonathan Crowther is the Operations Manager for the Environmental Management Planning and Approvals team in Africa. He holds a Master's Degree in Environmental Science and has 30 years of relevant experience. He has expertise in a wide range of environmental disciplines, including EIAs, EMPrs, Environmental Planning and Review and Public Consultation. Jonathan is a Registered Professional Natural Scientists (Pr.Sci.Nat.) and a Certified Environmental Practitioner of South Africa (CEAPSA).

NAME	Jeremy Blood
RESPONSIBILITY ON PROJECT	Project management, public participation process, report writing and specialist study review
DEGREE	B.Sc. Hons (Bot.), M.Sc. (Cons. Ecol.)
PROFESSIONAL REGISTRATION	Pr.Sci.Nat., CEAPSA
EXPERIENCE IN YEARS	19
EXPERIENCE	Jeremy Blood holds a Master's Degree in Conservation Ecology and has over 17 years of experience in a range of environmental disciplines, including EIAs, EMPrs, Environmental Auditing and Monitoring in South Africa, Namibia, Mozambique and Kenya. He has expertise in a wide range of projects, including oil / gas, mining and infrastructure. He is a Registered Professional Natural Scientists and a Certified Environmental Practitioner of South Africa.

CONTENTS

1	INTRODUCTION	1
1.1	PROJECT BACKGROUND	1
1.2	AIMS OF THIS DOCUMENT	1
1.3	STATUS OF THIS DOCUMENT	1
2	ADMINISTRATION AND REGULATION OF ENVIRONMENTAL OBLIGATIONS	5
2.1	ORGANISATIONAL STRUCTURE	5
2.1	ROLES AND RESPONSIBILITIES.....	5
2.1.1	DEPARTMENT OF ENVIRONMENTAL AFFAIRS AND DEVELOPMENT PLANNING	5
2.1.2	APPLICANT	5
2.1.3	ENGINEER.....	6
2.1.4	RESIDENT ENGINEER.....	6
2.1.5	CONTRACTOR.....	6
2.1.6	ENVIRONMENTAL CONTROL OFFICER	7
2.1.7	ENVIRONMENTAL OFFICER.....	7
2.2	EMPR ADMINISTRATION	8
2.3	NOTIFICATION OF COMMENCEMENT OF CONSTRUCTION	8
2.4	INFORMATION BOARD(S).....	8
2.5	METHOD STATEMENTS	8
2.6	ENVIRONMENTAL AWARENESS PLAN AND TRAINING.....	10
2.7	MEETINGS.....	10
2.8	INSPECTION PROCEDURES	10
2.9	RECORD OF ACTIVITIES.....	11
2.10	FINES.....	11
2.11	INTERNAL REVIEW AND AUDITING	12
2.12	PERMITS AND LICENCES	12
2.12.1	VEGETATION CLEARING AND PLANT / SEED COLLECTION.....	12
2.12.2	ARCHAEOLOGICAL PERMIT	12
3	ENVIRONMENTAL SPECIFICATIONS.....	13
3.1	CONSTRUCTION CAMP	13
3.1.1	LOCATION OF CONSTRUCTION CAMP	13
3.1.2	TOILET FACILITIES.....	13
3.1.3	ACCOMMODATION.....	13
3.1.4	GENERAL AESTHETICS.....	13
3.2	SITE DEMARCATION AND NO-GO AREAS	14
3.3	SITE CLEARING.....	16
3.3.1	VEGETATION CLEARING AND PLANT / SEED COLLECTION.....	16
3.3.2	TOPSOIL.....	16
3.4	MATERIALS HANDLING AND STORAGE	17
3.4.1	HANDLING.....	17
3.4.2	STOCKPILING.....	17
3.4.3	STORAGE OF HAZARDOUS SUBSTANCES	17

3.4.4	STORAGE OF EQUIPMENT.....	18
3.5	REFUELLING AND MAINTENANCE.....	18
3.5.1	REFUELLING.....	18
3.5.2	MAINTENANCE.....	19
3.6	ACCIDENTAL LEAKS AND SPILLS.....	19
3.7	WASTE MANAGEMENT.....	20
3.7.1	HYDROCARBON AND HAZARDOUS WASTE.....	20
3.7.2	SOLID WASTE.....	20
3.7.3	WASTEWATER.....	21
3.8	EROSION AND SEDIMENTATION CONTROL.....	21
3.9	WORK IN INTERTIDAL AREAS.....	22
3.10	TRAFFIC ACCOMMODATION.....	22
3.11	CEMENT AND CONCRETE BATCHING.....	23
3.12	ROCK-BREAKING TECHNOLOGY.....	23
3.13	ROAD SURFACING MATERIALS.....	24
3.14	FIRE CONTROL.....	24
3.15	NOISE CONTROL AND WORKING HOURS.....	25
3.16	DUST CONTROL.....	25
3.17	PROTECTION OF NATURAL FEATURES, FLORA AND FAUNA.....	26
3.18	PROTECTION OF HERITAGE AND CULTURAL FEATURES.....	26
3.19	TOILETS.....	27
3.20	WATER PROVISION.....	27
3.21	EATING AREAS.....	27
4	VEGETATION REHABILITATION.....	29
4.1	VEGETATION REHABILITATION PLAN.....	29
4.2	GENERAL.....	29
4.3	SEED COLLECTION AND STORAGE.....	29
4.4	SEARCH AND RESCUE.....	30
4.5	NURSERY / HOLDING FACILITY.....	30
4.6	MULCH.....	30
4.7	FERTILISER.....	31
4.8	LANDSCAPING AND GROUND SURFACE PREPARATION.....	31
4.9	EROSION CONTROL MEASURES.....	31
4.10	HYDROSEEDING / HYDROMULCHING.....	32
4.11	PLANTS / TREES.....	32
4.12	TIMING.....	33
4.13	ESTABLISHMENT AND MAINTENANCE OF VEGETATION.....	33
4.13.1	IRRIGATION.....	33
4.13.2	TREE ESTABLISHMENT.....	33
4.13.3	MONITORING AND RESEEDING.....	33
4.13.4	ALIEN ERADICATION.....	33

APPENDICES

- APPENDIX 1: METHOD STATEMENT CONTROL SHEET
- APPENDIX 2: ENVIRONMENTAL DO'S AND DON'TS
- APPENDIX 3: LIST OF FINES

LIST OF FIGURES

- FIGURE 1-1: LOCATION OF I&J'S EXISTING ABALONE FACILITY ON REMAINDER FARM KLIPFONTEIN 711 (RED OUTLINE) AT DANGER POINT. THE PROPOSED DEVELOPMENT FOOTPRINTS IS ALSO SHOWN (WHITE OUTLINE).....2
- FIGURE 1-2: GOOGLE EARTH IMAGE OF THE PROJECT AREA ILLUSTRATING THE EXISTING FACILITY AND EXPANSION PROJECT FOOTPRINT3
- FIGURE 1-3: SITE DEVELOPMENT PLAN4

ACRONYMS AND ABBREVIATIONS

Acronym / Abbreviation	Definition
CEAPSA	Certified Environmental Practitioner of South Africa
DEA&DP	Department of Environmental Affairs and Development Planning
EAP	Environmental Assessment Practitioner
ECO	Environmental Control Officer
EIA	Scoping and Environmental Impact Assessment
EIR	Environmental Impact Assessment Report
EMPr	Environmental Management Programme
EO	Contractor's on-site Environmental Officer or Site Agent.
GN	Government Notice
HWC	Heritage Western Cape
I&APs	Interested and Affected Parties
I&J	Irvin & Johnson Limited
NEMA	National Environmental Management Act, 1998 (No. 107 of 1998)
RE	Resident Engineer
SLR	SLR Consulting (South Africa) (Pty) Ltd

GLOSSARY

The definitions given below are for explanatory purposes only and are applicable to this Construction Environmental Management Programme. In the event that any conflict arises between the definitions contained herein and those contained within the contract documentation, those within the contract documentation shall prevail.

ALIEN INVASIVE PLANTS: Plants that do not naturally occur in an area. These plants may also be referred to as exotic plants.

CONTRACTOR: The natural or juristic person or partnership whose tender has been accepted by or on behalf of the Developer / Employer (in terms of SAICE General Conditions of Contract, 2010).

ENVIRONMENT: The surroundings within which humans exist and that are made up of – (i) the land, water and atmosphere of the earth; (ii) micro-organisms, plant and animal life; (iii) any part or combination of (i) and (ii) and the interrelationships among and between them; and (iv) the physical, chemical, aesthetic and cultural properties and conditions of the foregoing that influence human health and wellbeing.

ENVIRONMENTAL MANAGEMENT: That part of the overall management process which seeks to ensure, as far as possible, that no avoidable impact is caused to the environment and that when this is unavoidable that the consequences are understood prior to the impact being caused and that the impact is then mitigated as far as possible.

ERADICATION PROGRAMME: The organised clearing and rehabilitation of land infested by invasive alien species of plant.

GROUNDWATER: The water that fills the natural openings present in the rock or unconsolidated sands.

HAZARDOUS: Contains an element of risk. Dangerous or toxic to life.

HAZARDOUS SUBSTANCES: This means any substance or mixture of substances, product or material declared to be a hazardous substance under Section 2(1) of the Hazardous Substance Act (1973), as amended.

HERBICIDE: See 'Pesticide'.

MAINTENANCE: The complete upkeep, support and protection of areas / regions / sites.

METHOD STATEMENTS: Written statements which contain details regarding construction procedures, materials (where applicable), timing, storage methods (where applicable) and sketches of proposed construction. Method Statements shall be submitted for work near environmental sensitive regions of the site. This includes environmentally sensitive aspects of the work such as fencing, cement, poisons and oil storage, treatment of waste water, provision of ablution facilities, etc.

MITIGATION: The implementation of practical measures to avoid or reduce adverse impacts or enhance beneficial impacts of an action.

NO-GO AREA: Areas where construction activities are prohibited are referred to as No-Go Areas.

PESTICIDE: Pesticides are chemicals used by humans to kill organisms that threaten their health and well-being, pets and livestock or cause damage to crops. This includes insecticides, herbicides, fungicides, acaricides, nematocides and rodenticides (after Fuggie et al, 1992).

POLLUTION: Any change in the environment caused by substances, radioactive or other waves, noise, odours, dust or heat, emitted from any activity, including the storage or treatment of waste or substances, construction and the provision of services, whether engaged in by any person or an organ of state, where that change has an adverse effect on human health or well-being or on the composition, resilience and productivity of natural or managed ecosystems, or on materials useful to people, or will have such an effect in the future.

REHABILITATION: To re-establish or restore to a healthy sustainable capacity or state.

SITE: The 'site' refers to the cadastral entity(ies) awarded to the Contractor and any other area reasonably required by the Contractor to undertake the construction activities in order to fulfil the contract.

WATERCOURSE: (a) a river or spring; (b) a natural channel in which water flows regularly or intermittently; (c) a wetland, lake or dam into which, or from which, water flows. A reference to a watercourse includes, where relevant, its bed and banks.

1 INTRODUCTION

1.1 PROJECT BACKGROUND

Irvin & Johnson Limited (hereafter referred to as "I&J") has farmed abalone at its land-based aquaculture facility on the Danger Point peninsula since 1998. The facility is located on Remainder Farm Klipfontein 711 (see Figure 1-1) and is situated approximately 8 km south-west of Gansbaai.

The facility has expanded incrementally over the years reaching its current authorised production capacity of 500 tons per annum (t/a) in 2016. I&J is now proposing the expansion of the current abalone operation from 500 t/a to 1 700 t/a, based on the current market demand for abalone (see Figure 1-1 to Figure 1-3 for proposed development footprint).

The proposed project requires Environmental Authorisation in terms of the National Environmental Management Act, 1998 (No. 107 of 1998) (NEMA), as amended. SLR Consulting (South Africa) (Pty) Ltd (hereafter referred to as "SLR"), in association with EnviroAfrica (Overberg) CC (hereafter referred to as "EnviroAfrica"), have been appointed as the independent environmental consultants to undertake the EIA for the proposed abalone expansion project. This Construction Environmental Management Programme (EMPr) has been compiled as part of the Scoping and Environmental Impact Assessment (hereafter collectively referred to as "EIA") process in compliance with Appendix 4 of the EIA Regulations 2014 (as amended).

In a separate and independent project, I&J is also proposing to develop an abalone processing facility on Remainder Farm Klipfontein 711. This project is neither dependant on nor material to the proposed expansion project and, since it does not constitute incremental decision-making, it is being subject to a separate Environmental Authorisation process.

1.2 AIMS OF THIS DOCUMENT

The purpose of this EMPr is to ensure that impacts associated with the construction phase(s) are avoided and, where they cannot be avoided, are kept to a minimum and rehabilitated. The EMPr, which has as its basis the mitigation measures listed in the Environmental Impact Report (EIR), sets environmental targets for the Contractor (or selected sub-contractors) and reasonable standards against which the Contractor's performance can be measured during the construction phase.

This document will form the basis for the environmental specifications that the Contractor, in terms of the construction contract, will be obliged to adhere to during construction. This document will be included in the contract documentation for the construction phase and will thus form a binding agreement between the Contractor and the Applicant (I&J).

1.3 STATUS OF THIS DOCUMENT

The development and implementation of environmental specifications is an on-going process that is iterative in nature. Any significant revisions to the EMPr document must be approved by the Department of Environmental Affairs and Development Planning (DEA&DP) before the EMPr is revised.

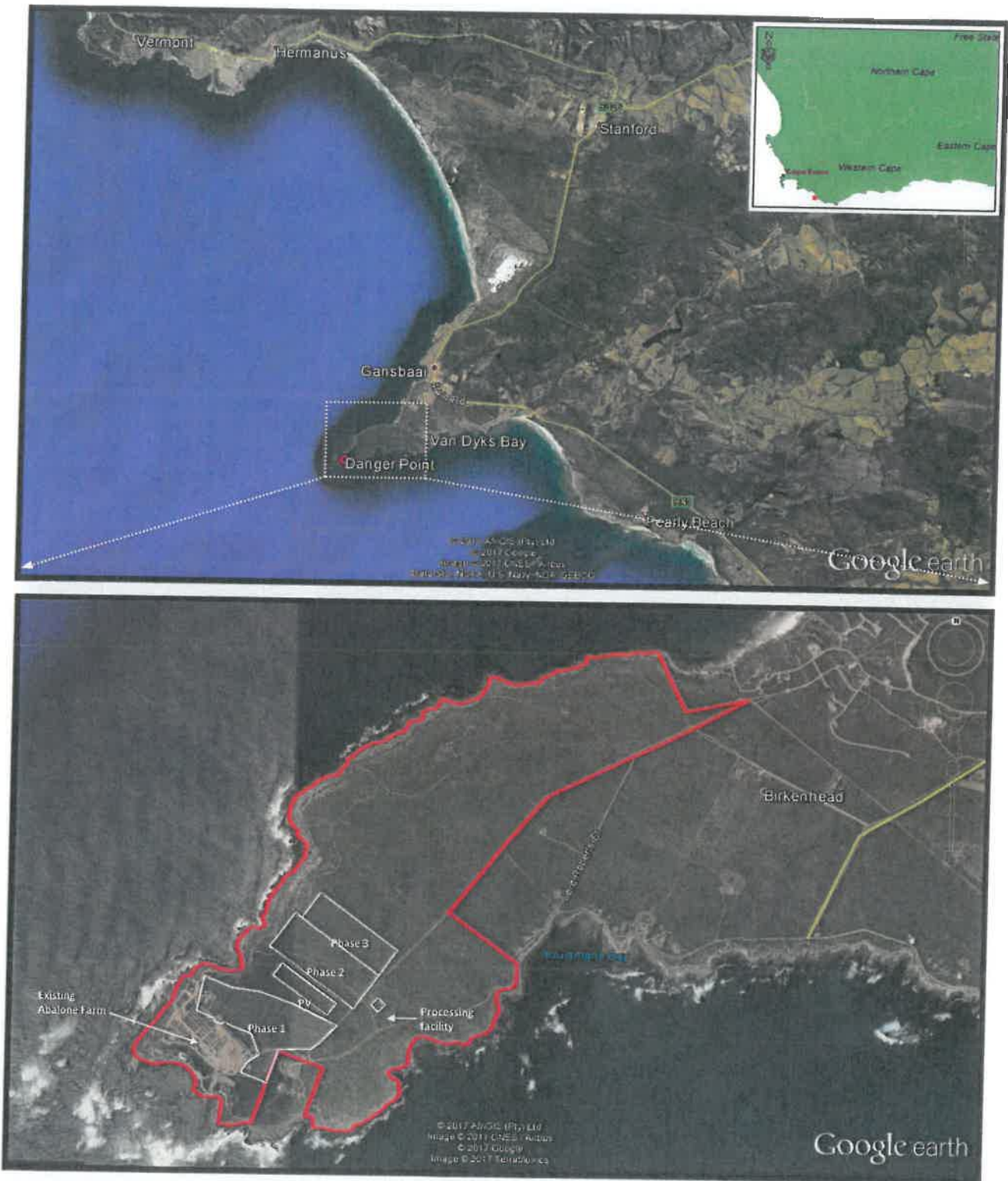


FIGURE 1-1: LOCATION OF I&J'S EXISTING ABALONE FACILITY ON REMAINDER FARM KLIPFONTEIN 711 (RED OUTLINE) AT DANGER POINT. THE PROPOSED DEVELOPMENT FOOTPRINTS IS ALSO SHOWN (WHITE OUTLINE)

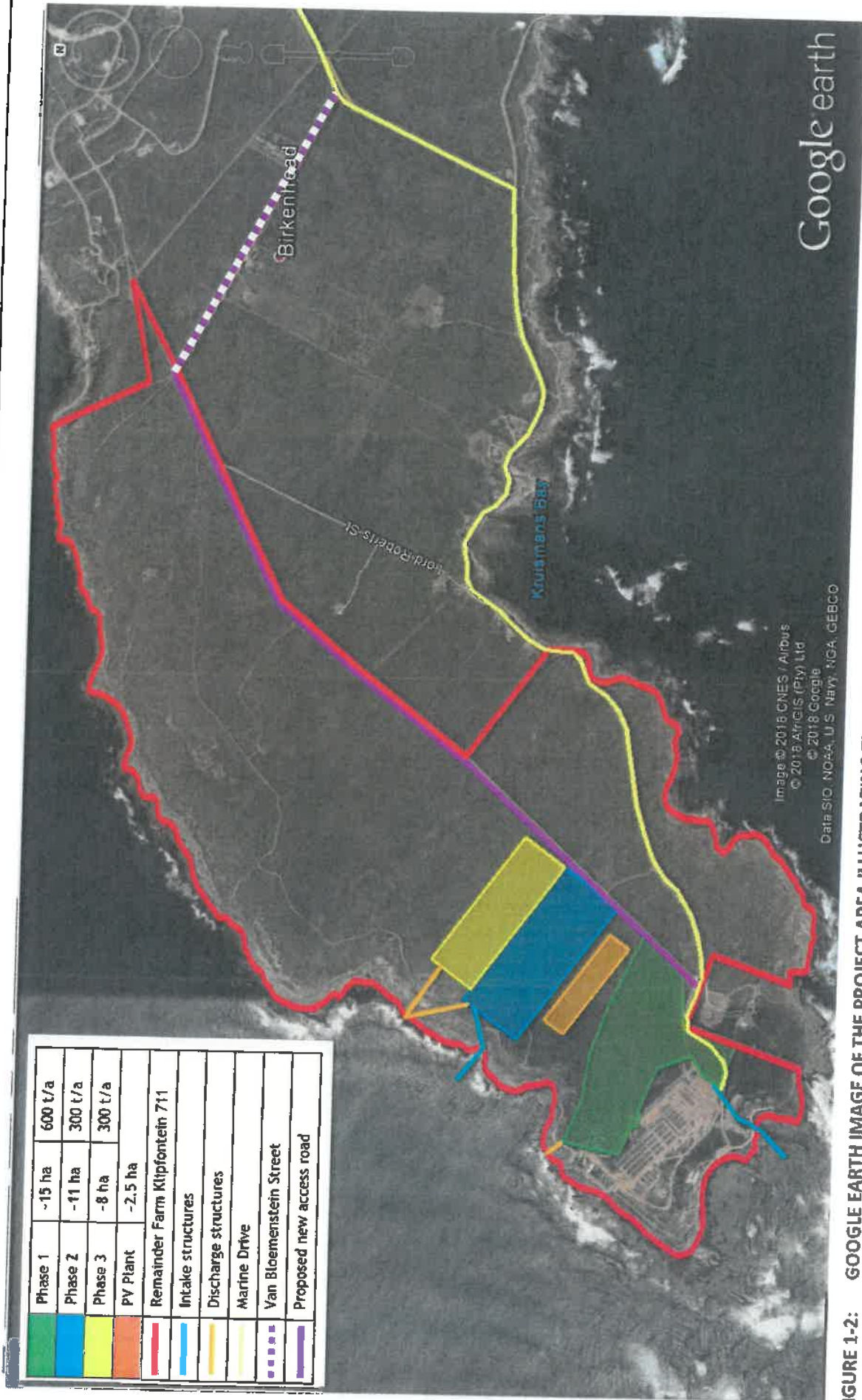


FIGURE 1-2: GOOGLE EARTH IMAGE OF THE PROJECT AREA ILLUSTRATING THE EXISTING FACILITY AND EXPANSION PROJECT FOOTPRINT

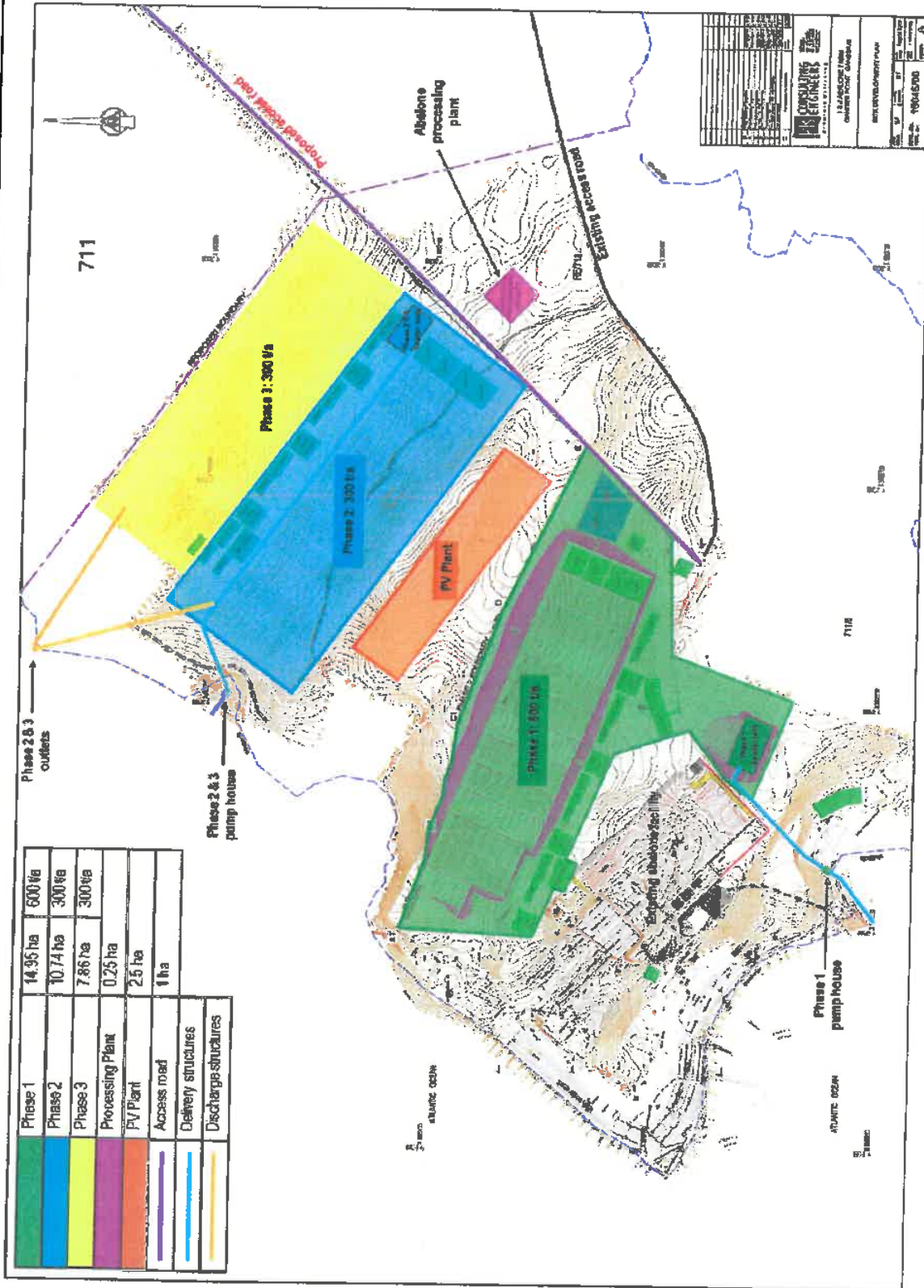
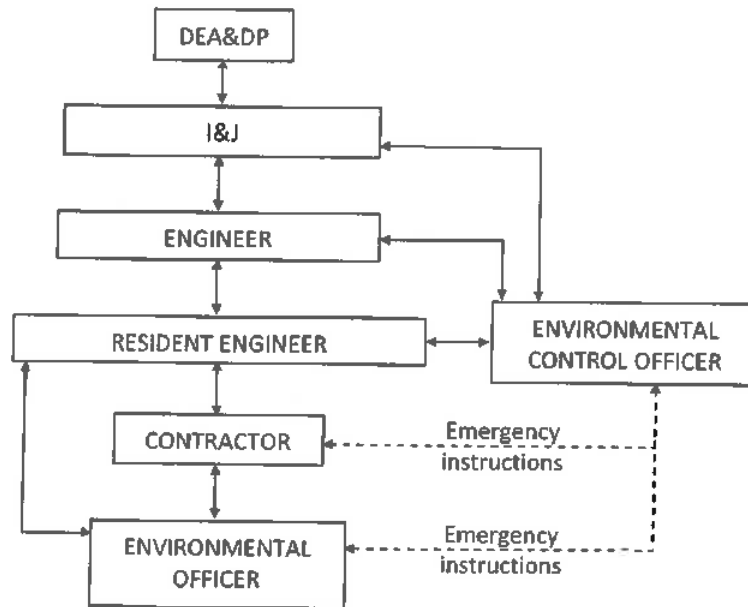


FIGURE 1-3: SITE DEVELOPMENT PLAN

2 ADMINISTRATION AND REGULATION OF ENVIRONMENTAL OBLIGATIONS

2.1 ORGANISATIONAL STRUCTURE

Details of the management structure for this EMPr are presented below. All official communication and reporting lines including instructions, directives and information shall be channelled according to the management structure presented below.



2.1 ROLES AND RESPONSIBILITIES

The implementation of this EMPr requires the involvement of several stakeholders, each fulfilling a different but vital role to ensure sound environmental management during the construction phase.

2.1.1 DEPARTMENT OF ENVIRONMENTAL AFFAIRS AND DEVELOPMENT PLANNING

DEA&DP is the designated authority responsible for authorising this EMPr and has overall responsibility for ensuring that I&J complies with this EMPr and any conditions listed in the Environmental Authorisation.

DEA&DP shall also be responsible for approving any significant amendments that may be required to the EMPr. DEA&DP may further perform random site inspections to check compliance with the Construction EMPr.

2.1.2 APPLICANT

The Applicant, I&J, is ultimately responsible for the implementation of the EMPr and the financial cost of all environmental control measures. I&J must ensure that any person acting on its behalf complies with the conditions / specifications contained in this EMPr. I&J is responsible for the appointment of an Engineer, Contractor and Environmental Control Officer (ECO).

I&J shall address any site problems pertaining to the environment at the request of the DEA&DP, Engineer and/or the ECO.

2.1.3 ENGINEER

The Engineer shall oversee the planning, design and construction phases of the project.

The Engineer shall appoint a Resident Engineer (RE) to act as I&J's on-site implementing agent. The Engineer shall address any site problems pertaining to the environment at the request of the RE and / or the ECO. The Engineer shall also be responsible for issuing penalties for contravention of the EMPr.

2.1.4 RESIDENT ENGINEER

The RE shall act as I&J's on-site implementing agent and has the responsibility to ensure that their obligations are executed in compliance with the EMPr. Any on-site decisions regarding environmental management are ultimately the responsibility of the RE. The RE shall assist the ECO where necessary and shall have the following responsibilities in terms of the implementation of this EMPr:

- Reviewing and approving the Contractor's Method Statements with input from the ECO where necessary;
- The day-to-day monitoring and verifying that the EMPr and Method Statements are adhered to at all times and taking action if specifications are not followed;
- Keeping a photographic record of construction activities on site;
- Assisting the Contractor in finding environmentally responsible solutions to problems with input from the ECO where necessary;
- Ordering the removal of person(s) and/or equipment not complying with the EMPr specifications;
- Issuing fines for transgressions of site rules and penalties for contravention of the EMPr;
- Delaying any construction activity if he/she believes the environment has been or is likely to be seriously harmed / impacted;
- Providing input into the ECO's ongoing review of the EMPr; and
- Communicating environmental issues to the Environmental Officer.

2.1.5 CONTRACTOR

The Contractor shall have the following responsibilities:

- To implement all provisions of the EMPr. If the Contractor encounters difficulties with specifications, he / she must discuss alternative approaches with the RE and / or the ECO prior to proceeding;
- To ensure that all staff, including Sub-contractors, are familiar with the EMPr;
- Monitoring and verifying that the environmental impacts are kept to a minimum;
- To make personnel aware of environmental issues and to ensure they show adequate consideration of the environmental aspects of the project;
- To prepare the required Method Statements (see Section 2.5);
- To report any incidents of non-compliance with the EMPr to the RE and / or the ECO; and
- To rehabilitate any sensitive environments damaged due to his / her negligence. This shall be done in accordance with the RE's specifications.

Failure to comply with the EMPr may result in fines (see Section 2.10) and reported non-compliance may result in the suspension of work or termination of the contract by the Engineer.

The Contractor shall appoint, at his / her own cost, a competent individual as the on-site Environmental Officer (EO) or Site Agent. The EO must be appropriately trained in environmental management and must possess the skills necessary to impart environmental management to all personnel involved in the contract.

2.1.6 ENVIRONMENTAL CONTROL OFFICER

The ECO's duties shall include, *inter alia*, the following:

- Reviewing Method Statements;
- Advising the Contractor and / or the RE on environmental issues within defined construction areas;
- Undertaking regular site visits to ensure compliance with the EMPr and verifying that environmental impacts are kept to a minimum throughout the contract;
- Completing environmental checklists during site visits;
- Keeping a photographic record of progress on site from an environmental perspective;
- Assisting the Contractor, EO and / or the RE in finding environmentally acceptable solutions to construction problems;
- Recommending additional environmental protection measures should this be necessary;
- Assisting the RE in ensuring that the necessary environmental authorisations and permits have been obtained;
- Presenting the initial environmental awareness training course to the Contractor's site management staff;
- Ensuring that DEA&DP is informed of work progress on site;
- Reporting any incidents that may or have caused damage to the environment or breaches of the EMPr to DEA&DP;
- Recommending the issuing of fines for transgressions of site rules and penalties for contraventions of the EMPr (via the RE);
- Advising on the removal of person(s) and/or equipment not complying with the specifications (via the RE); and
- Compiling a final environmental audit report at the conclusion of the construction phase for submission to DEA&DP and Engineer.

The ECO shall visit the site monthly per development phases, or more frequently as required during the initial stages of construction.

The ECO shall communicate directly with the RE. Should problems arise on site that cannot be resolved between the ECO and the RE, the ECO shall take the matter up with the Engineer and / or I&J. If I&J does not respond the ECO shall take the matter up with DEA&DP.

2.1.7 ENVIRONMENTAL OFFICER

The EO shall be responsible for monitoring, reviewing and verifying the Contractor's compliance with the EMPr during the construction phase. The EO's duties in this regard shall include, *inter alia*, the following:

- Monitoring and verifying that the EMPr and Method Statements are adhered to at all times and taking action if specifications are not followed;
- Monitoring and verifying that environmental impacts are kept to a minimum;
- Inspecting the site on a daily basis with regard to compliance with the EMPr;
- Keeping accurate and detailed records of these inspections;
- Completing weekly checklists;
- Assisting the RE and ECO in finding environmentally responsible solutions to problems;
- Supervision of work where environmental management is a key aspect (e.g. in sensitive areas, with high environmental risk, etc.);
- Keeping a record of on-site incidents and accidents and how these were dealt with;
- Reporting any incidents of non-compliance with the EMPr to the RE and / or the ECO; and
- Keeping a register of complaints on site and recording community comments and issues, and the actions taken in response to these complaints.

2.2 EMPr ADMINISTRATION

Copies of the EMPr shall be made available to the Engineer, RE, Contractor, EO and the ECO.

Copies of this EMPr shall be kept at the site office(s) and shall be distributed to all senior contract personnel. All senior personnel shall be required to familiarise themselves with the contents of this document.

Any significant revisions to the EMPr document must be approved by DEA&DP before the EMPr is revised. The ECO shall be responsible for the implementation and distribution of any "approved" revisions to the EMPr.

2.3 NOTIFICATION OF COMMENCEMENT OF CONSTRUCTION

The ECO shall give DEA&DP at least one week's (or as specified in the Environmental Authorisation) written notice prior to the commencement of construction. A general notification letter shall also be sent to neighbouring residents (including Birkenhead Township and Romansbaai Beach and Fynbos Estate) listed on the EIA database.

2.4 INFORMATION BOARD(S)

The Contractor shall be responsible for erecting information boards on site. The number and locations of these boards shall be agreed upon by the Engineer.

The contents of the information board shall be provided by the Engineer, and will essentially be to advise the public of the construction operation and the prohibition on entering certain areas. The information board shall also provide the name and contact number of the RE, EO and ECO.

2.5 METHOD STATEMENTS

The Contractor shall submit written Method Statements to the RE and ECO for all environmentally sensitive aspects of the work. A Method Statement Control Sheet, signed by the Contractor, must accompany each

Method Statement (a pro forma Control Sheet is provided in Appendix 1). Method Statements shall cover applicable details with regard to:

- Construction procedures;
- Materials and equipment to be used;
- Getting equipment to and from site;
- How the equipment/material will be moved while on site;
- How and where material will be stored;
- The containment (or action to be taken if containment is not possible) of leaks or spills of any liquid or material that may occur;
- Timing and location of activities;
- Compliance/non-compliance with the Specifications; and
- Any other information deemed necessary by the Engineer, RE or ECO.

Method Statements shall be submitted to the RE and ECO at least **five (5) days prior** to the commencement of operations. It should be noted that Method Statements must contain sufficient information and detail to enable the RE and ECO to apply their minds to the potential impacts of the works on the environment. The Contractor will also need to thoroughly understand what is required of him / her in order to undertake the works.

Work shall not commence until Method Statements have been approved by the RE. Failure to submit Method Statements may cause the RE to order the Contractor to suspend part or all of the works concerned until a Method Statement has been submitted and approved. Failure to submit Method Statements at least five days prior to commencing the relevant activity may also result in a fine (see Section 2.10). Any damage caused to the surrounding environment by work done without prior approval shall be rehabilitated at the Contractor's cost.

Based on the specifications in this EMPr, the following Method Statements are required as a minimum:

- MS1:** Construction camp location and layout (Section 3.1.1);
- MS2:** Site clearing (Section 3.3);
- MS3:** Hazardous substances (Section 3.4.3);
- MS4:** Solid waste management (Section 3.7.2);
- MS5:** Wastewater (Section 3.7.3);
- MS6:** Erosion and sediment control (Section 3.8);
- MS7:** Work in intertidal areas (Section 3.9);
- MS8:** Cement and concrete batching (Section 3.11);
- MS9:** Fire control (Section 3.14);
- MS10:** Dust control programme (Section 3.16); and
- MS11:** Vegetation Rehabilitation Plan (Section 4.1).

The RE and / or the ECO shall specify any additional Method Statements that may be required. Where relevant the Method Statements indicated above can be combined on agreement with the RE or ECO.

2.6 ENVIRONMENTAL AWARENESS PLAN AND TRAINING

Before the commencement of any work on site, the Contractor's site management staff shall attend an environmental awareness-training course presented by the ECO. The Contractor shall liaise with the ECO prior to the commencement date of construction to fix a date and venue for the course.

The information presented at the course shall be communicated by the Contractor to the rest of his Employees on the site, to any new Employees coming onto site after the initial training course and to his / her suppliers. The presentation shall be conducted, as far as is possible, in the Employees' language of choice. As a minimum, training shall include:

- Explanation of the importance of complying with the EMPr;
- Discussion of the potential environmental impacts of construction activities;
- Explanation of the management structure of individuals responsible for matters pertaining to the EMPr.
- Employees' roles and responsibilities, including emergency preparedness;
- Explanation of the mitigation measures that must be implemented when carrying out their activities;
- Explanation of the specifics of the EMPr and its specification; and
- Explanation of the Environmental Do's and Don'ts (see Appendix 2).

In addition, prior to the commencement of any work on site, the ECO and EO shall attend a briefing session by an archaeologist. The briefing should provide for the following:

- The importance of archaeological resources;
- Legislation governing heritage resources;
- Site / artefact identification;
- Sampling / data collection and management; and
- Permit requirements and application process.

The Contractor shall keep records of all environmental training sessions, including names of attendees, dates of their attendance and the information presented to them. Records of environmental training sessions shall be submitted to the ECO.

2.7 MEETINGS

I&J, Engineer, Contractor, RE, EO and ECO shall attend scheduled construction site meetings on a monthly basis throughout the contract period.

2.8 INSPECTION PROCEDURES

The day-to-day monitoring and verification that the EMPr is being adhered to shall be undertaken by the RE and the EO.

The ECO shall visit and inspect the site once a month to ensure that correct operational procedures are being implemented and that the Contractor is complying with the environmental specifications in the EMPr. Additional site inspections by the ECO may be needed during the initial and final stages of the project.

The ECO shall address any queries to the RE. If the queries cannot be resolved at this level, they shall be referred to the Engineer and, if necessary, to I&J.

2.9 RECORD OF ACTIVITIES

The RE, ECO and EO shall keep a record of activities on site, including but not limited to meetings attended, Method Statements received and approved, issues arising on site, cases of non-compliance with the EMPr, penalties/fines issued and corrective action taken to solve problems that arise. In addition, the Contractor shall keep a record of complaints from I&APs.

The RE and EO shall undertake photographic monitoring of the contract. This shall include a photographic record of all areas that will be impacted by the construction activities prior to construction activities commencing. The ECO shall monitor all sensitive work environments, which may also include photographic monitoring.

2.10 FINES

A system of fines shall be implemented to ensure compliance with the EMPr (see Appendix 3). Where the Contractor inflicts non-repairable damage upon the environment or fails to comply with any of the environmental specifications of the EMPr this would constitute a breach of Contract for which the Contractor may be liable to pay a fine. The Contractor is deemed not to have complied with the EMPr if:

- There is evidence of contravention of the EMPr specifications, including any non-compliance with an approved Method Statement;
- Construction activities take place outside the defined boundaries of the site;
- Environmental damage ensues due to negligence;
- The Contractor fails to comply with corrective or other instructions issued by the Engineer within a specific time period; and/or
- The Contractor fails to respond adequately to complaints from the public.

If excessive infringement with regard to any of the above (as determined by the Engineer) is registered, then I&J reserves the right to terminate the Contractor's contract.

The system of fines shall be implemented in the following way:

- Fines shall be issued per incident at the discretion of the Engineer;
- Fines shall be issued in addition to any remedial costs incurred as a result of non-compliance with the environmental specifications;
- The Engineer shall inform the Contractor of the contravention and the amount of the fine, and will deduct the amount from the Contractor's monthly Payment Certificates; and
- Fines, including but not limited to those activities presented in Appendix 3, shall be imposed by the Engineer on the Contractor, his staff and/or the Sub-contractors' staff for contravention of the environmental specifications. Where there are ranges, the amount shall depend on the severity and extent of the damage done to the environment.

Failure by any Employee of the Contractor or their Sub-contractors to show adequate consideration to the environmental aspects of the contract shall be considered sufficient cause for the RE or ECO to recommend to the Engineer to have that Employee removed from the site. The RE or ECO may, through the Engineer, also order the removal of equipment that is causing continual environmental damage.

2.11 INTERNAL REVIEW AND AUDITING

The Contractor and EO shall establish an internal review procedure to monitor the progress and implementation of the EMPr.

Where necessary, and upon the recommendation of the RE and / or the ECO, procedures that require modification shall be changed to improve the efficiency of the EMPr. Any significant revisions to the EMPr document must be approved by DEA&DP and recorded in the revised EMPr. Any non-significant changes or adjustments to the EMPr shall be registered in the daily records of the RE. Adjustment and update of the original EMPr document is not required when these *ad hoc* changes are made.

At the conclusion of each construction phase, an environmental audit report shall be compiled and submitted to DEA&DP. This report shall be compiled by the ECO, in collaboration with the RE, EO and the Contractor. It shall, as a minimum, outline the implementation of the EMPr, and highlight any problems and issues that arose during the construction period to report, on a formal basis, the lessons learned from this project.

2.12 PERMITS AND LICENCES

2.12.1 Vegetation Clearing and Plant / Seed Collection

The ECO shall apply to CapeNature for a permit to clear vegetation and collect indigenous plant species (Search and Rescue operation) prior to construction commencement.

In addition, a permit is required from the Department of Agriculture, Forestry and Fisheries (DAFF) for the removal of plants or parts of plants that are protected in terms of the National Forests Act, 1998 (No. 84 of 1998) (NFA), as amended. White milkwood trees (*Sideroxylon inerme*), which occur on site at Danger Point in low thicket clumps, are protected in terms of GN R767 (5 August 2005) and as such may not be cut, disturbed, damaged or destroyed without a permit. Thus, the ECO shall apply for a permit to remove milkwood trees within the development footprint.

2.12.2 Archaeological Permit

An archaeologist shall inspect the site for surface archaeological resources once vegetation clearing operations have been completed, but prior to the commencement of bulk earthworks. If surface archaeological resources are visible, these might need to shovel be tested if specified by the archaeologist, under permit, to determine the potential significance of the deposits. Thus, if necessary, it is recommended that the ECO or an appointed archaeologist apply to Heritage Western Cape (HWC) for a collection (disturbance) permit prior to shovel testing.

3 ENVIRONMENTAL SPECIFICATIONS

3.1 CONSTRUCTION CAMP

3.1.1 Location of Construction Camp

"Construction Camp" refers to all storage stockpiles sites, site offices, container sites, other areas required to undertake construction and rest areas for workmen.

- a) The construction camp(s) shall be located at an easily accessible point(s) and within an area of low environmental sensitivity that is visually unobtrusive in the landscape and screen these with shade cloth or similar material. The camp site location shall avoid the area of high visibility (see Figure 3-1).
- b) No camp establishment shall be allowed within 30 m of the high water mark or at sites declared as no-go areas.
- c) No camp establishment shall be allowed within sensitive areas of indigenous vegetation.
- d) The Contractor, RE, ECO and landowner shall agree on mutually acceptable location(s) for the establishment of camp(s).
- e) The RE shall approve the final location of all camps prior to their establishment.
- f) The Contractor shall submit a Method Statement indicating the layout and preparation of the construction camp(s).

MS1: The Contractor shall submit a Method Statement indicating the location, preparation and layout of the construction camp(s). The plan shall include the location and layout of waste storage and treatment facilities, ablution facilities, stockpiling and spoil areas and hazardous material storage areas. The demolition and removal of these facilities on completion of construction works shall also be detailed.

3.1.2 Toilet Facilities

- a) Refer to Section 3.19.

3.1.3 Accommodation

- a) No living accommodation shall be made available on site for any of the Contractor's Employees and no Employees shall be allowed to sleep overnight on site.
- b) A night watchman shall be allowed within the construction camp(s) with written permission from I&J and RE.

3.1.4 General Aesthetics

- a) The Contractor shall take reasonable measures to ensure that construction camp does not have an unreasonable impact on the aesthetics of the area or cause a reasonably avoidable disturbance to the surrounding users.
- b) All construction areas shall be kept neat and tidy at all times.
- c) Different materials and equipment shall be kept in designated areas and storing/stockpiling shall be kept orderly.

- d) Lighting shall be of the downward facing spill off type.

3.2 SITE DEMARCATION AND NO-GO AREAS

The 'site' refers to the total area where the contract will take place, as awarded to the Contractor, and any other area reasonably required by the Contractor to undertake the construction activities in order to fulfil the contract.

- a) Once the design has been finalised and the associated construction site has been determined, the area located outside of the site shall be clearly demarcated with a temporary fence and regarded as a 'no-go' area.
- b) The following no-go areas shall also be established on site:
- A 30-40 m buffer zone (or no-go area) shall be established around the shell midden site (Site 6521 at S34°37.310' E19°17.518' – see Figure 3-1). This buffer zone shall be pegged out by a land surveyor, in consultation with a professional archaeologist, during detailed design stage.
 - A buffer shall be established around the Birkenhead grave 'Hotspot' area (see Figure 3-1).
 - A 20 m no development buffer shall be implemented around the two sensitive calcrete areas¹ on site so that the Phase 1 and 2 grow-out platforms avoid these areas (see Figure 3-1). This buffer zone shall be pegged out by a land surveyor, in consultation with a suitably qualified botanist.
- c) The Contractor shall maintain in good order all demarcation fencing and barriers for the duration of construction activities, or as otherwise instructed.
- d) The RE may declare additional no-go areas at any time during the construction phase as deemed necessary and/or at the request of the ECO.
- e) Dedicated access routes shall be established and demarcated between the proposed Van Bloemenstein Street extension and the three development platforms. This will later become the main access route to the various phases.
- f) The Contractor shall ensure that his/her staff do not enter private properties adjacent to the construction site under any circumstances except on official business.
- g) Entry into no-go areas without the RE's permission will result in a penalty (see Appendix 3).
- h) The Contractor shall be responsible for any clean-up and/or rehabilitation of all areas impacted outside designated construction areas.

¹ Note: the pipeline alignment through the north-western side of the peninsula must be finalised in consultation with a suitably qualified botanist to ensure minimum impact on Agulhas Limestone Fynbos.

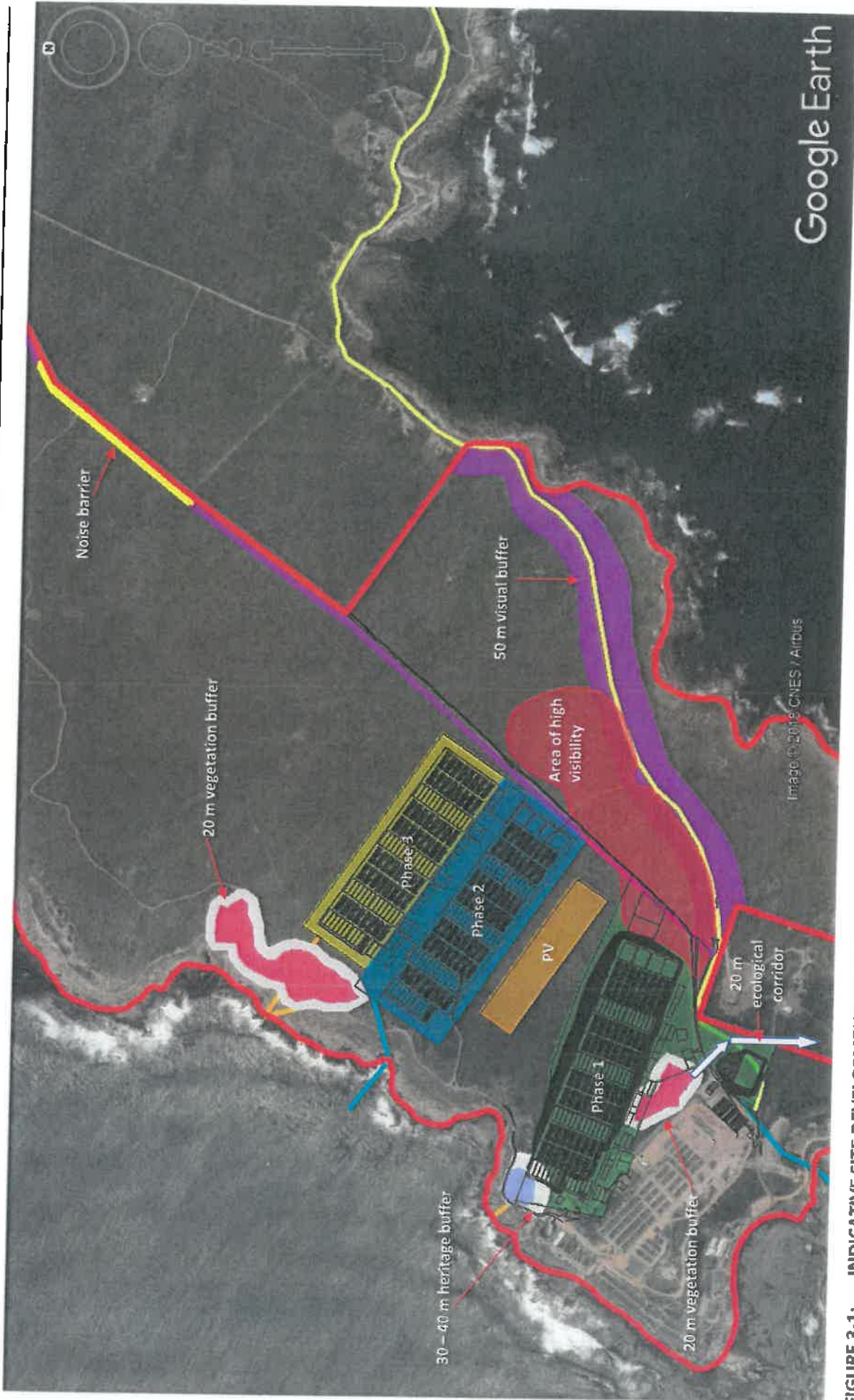


FIGURE 3-1: INDICATIVE SITE DEVELOPMENT PLAN SHOWING KEY ENVIRONMENTAL SENSITIVITIES AND RECOMMENDED BUFFERS AND CORRIDORS

3.3 SITE CLEARING

3.3.1 Vegetation Clearing and Plant / Seed Collection

- a) RE or ECO must ensure a permit has been obtained from CapeNature and DAFF to clear vegetation and collect indigenous plant species (see Section 2.12.1).
- b) No vegetation clearing shall take place without written approval of the Method Statement by the RE.
- c) No vegetation clearing shall take place until seed collection and a search and rescue of transplantable plant species has been undertaken in the area by a suitably qualified botanist or rehabilitation / landscaping contractor. It is recommended that bulbs are collected in spring (July – October), while succulents and shrubs are collected in autumn after the first winter rains.
- d) Rescued plant material shall either be planted directly into areas already under rehabilitation or into the remaining conservation area that will not be disturbed in the near future. Alternatively, plant material can be maintained within a temporary nursery for later use during revegetation of disturbed areas (see Section 4.5).
- e) Seed collection may be undertaken within no-go areas with approval from the RE and ECO.
- f) Before clearing of vegetation, the Contractor shall ensure that all litter and non-organic material is removed from the area to be cleared.
- g) Vegetation clearing shall take place in a phase manner in order to retain vegetation cover for as long as possible in order to reduce the size of areas where dust can be generated by wind.
- h) All indigenous plant material cleared from site shall be stockpiled for mulching. All remaining vegetation shall be removed and disposed of at an approved landfill site or burnt on site. Any burning will require a permit from the local municipality.
- i) An archaeologist shall inspect the site for surface archaeological resources once vegetation clearing operations have been completed, but prior to the commencement of bulk earthworks. If surface archaeological resources are visible, these might need to shovel tested, under permit, to determine the potential significance of the deposits.

3.3.2 Topsoil

- a) Topsoil (an approximately 150 mm layer) shall be removed from areas to be disturbed during construction activities, including temporary activities such as storage and stockpiling, and stockpiled for rehabilitation purposes. Since large areas will be covered by infrastructure and will not be rehabilitated (e.g. grow-out platforms), only sufficient topsoil needs to be stockpiled for the rehabilitation of disturbed areas outside the development footprint (including noise barrier). The total volume of topsoil required for rehabilitation purposes (assuming 150 mm layer) shall be determined by the Engineer.
- b) Topsoil shall only be stripped after the search and rescue operation has been undertaken and when work in that area is about to take place.
- c) Topsoil stockpiles shall be convex and no more than 2 m high.
- d) Stockpiles shall be located in areas agreed to by the RE and ECO.
- e) Topsoil stockpiles shall not be subject to compaction greater than 1 500 kg/m² and shall not be pushed by a bulldozer for more than 50 m.
- f) Topsoil stockpiles shall be monitored regularly to identify any alien plants, which shall be removed when they germinate to prevent contamination of the seed bank.

- g) Appropriate measures, as agreed with the RE, shall be taken where necessary to protect topsoil stockpiles from erosion by wind or water by providing suitable stormwater cut-off drains, containment using hessian or similar material and/or by establishing suitable temporary vegetation.
- h) Stockpiles shall not be covered with materials such as plastic that may cause it to compost or would kill the seed bank.
- i) The Contractor shall be held responsible for the replacement, at his / her own cost, for any unnecessary loss of topsoil due to his failure to work according to the requirements of this EMPr.

MS2: The Contractor shall submit a Site Clearing Method Statement for all areas where the Contractor is required to, or intends to, clear vegetation and remove topsoil, either within the development footprint or at the other designated construction areas outside the development footprint. The Method Statement shall clearly indicate the location and shall detail any search and rescue and/or seed collection to take place, what is to be cleared and how this will be done; where and how cleared material would be stored or disposed of, etc.

3.4 MATERIALS HANDLING AND STORAGE

3.4.1 Handling

- a) The Contractor shall ensure that all suppliers and their delivery drivers are aware of procedures and restrictions in terms of this EMPr.
- b) I&J shall establish and enforce an access policy for the Contractor and all Sub-contractors. This policy shall ensure all vehicles greater than two tonnes access the site via the Van Bloemenstein Street extension.
- c) The Contractor (and suppliers) shall ensure that all materials are appropriately secured to ensure safe passage between destinations.
- d) Loads including, but not limited to sand, stone chip, refuse, paper and cement, shall have appropriate cover to prevent them spilling from the vehicle during transit. Where this is not practical (e.g. hauling material from cut to fill), the Contractor shall ensure that construction vehicles are not overfilled.
- e) The Contractor shall be responsible for any clean-up resulting from the failure by his Employees or suppliers to properly secure transported materials.
- f) The Contractor shall ensure that delivery drivers are supervised during offloading.

3.4.2 Stockpiling

- a) The Contractor shall plan his activities so that materials excavated from cuttings, in so far as possible, can be transported direct to and placed at the point where it is to be used.
- b) Areas for the temporary stockpiling of excavated and imported material and other construction material shall be as agreed with the RE and ECO.

3.4.3 Storage of Hazardous Substances

- a) All fuel, oil and other hazardous substances (i.e., fuel, oil, poisons, etc.) shall be confined to demarcated, adequately bunded areas within the construction camp and stored in suitable containers.
- b) The storage of any hazardous materials shall not take place within 30 m of the high water mark.

- c) Hazard signs indicating the nature of the stored materials shall be displayed on the storage facility or containment structure.
- d) Suitable fire fighting equipment, to the approval of the RE, shall be supplied and installed by the Contractor in the hazardous substances storage area.
- e) The relevant Material Safety Data Sheets for all hazardous chemical substances (as defined in the Regulations for Hazardous Chemical Substances) shall be submitted to the RE. The Contractor shall have a copy of the Material Safety Data Sheets readily available and ensure that he / she or his / her Employees who are required to use such substances are fully conversant with the safe handling precautions, protective equipment to be used and storage precautions to be taken.
- f) The Contractor shall ensure that run-off from any fuel / oil or hazardous substance storage area is contained.
- g) The following conditions related to the temporary storage of fuel must be implemented:
 - Fuel shall be stored in steel tank(s) supplied and maintained by the fuel suppliers;
 - The fuel tank(s) shall be designed and installed in accordance with relevant Oil Industry standards and SANS codes where applicable for aboveground storage tanks;
 - Tank(s) shall be adequately bunded (110% of volume) and shall have some form of oil-water separation; and
 - The floor and wall of the bund area shall be impervious to prevent infiltration of any spilled / leaked fuel, oil or hazardous substance into the soil.

MS3: The Contractor shall submit a Method Statement detailing the location of storage, methods intended for storage of oil, fuel and other hazardous substances. This Method Statement should also detail precautions that shall be implemented to prevent and mitigate any spills and leakage of these substances.

3.4.4 Storage of Equipment

- a) All plant, construction equipment, vehicles or other items shall be stored within the construction camp, unless prior arrangements have been made with the RE or ECO.
- b) Drip trays shall be provided for stationary plant (such as compressors, pumps, generators, etc.) and for "parked" plant (e.g. mechanised equipment).

3.5 REFUELLING AND MAINTENANCE

3.5.1 Refuelling

- a) Where reasonably practical, plant and vehicles shall only be refuelled in a demarcated refuelling/servicing area (as agreed to with the RE and ECO) using suitable equipment (e.g. funnels).
- b) The surface under the refuelling/servicing area shall be protected against pollution (e.g. the use of drip trays) to the reasonable satisfaction of the RE and ECO prior to any refuelling activities.
- c) The Contractor shall ensure that there is always a supply of absorbent material readily available to absorb/breakdown spills and where possible is designed to encapsulate minor hydrocarbon spillage. The quantity of such materials shall be able to handle the total volume of the hydrocarbon/ hazardous

substance stored on site. This material must be accepted by the RE prior to any refuelling or maintenance activities.

- d) No re-fuelling shall occur within 20 m of the high water mark.

3.5.2 Maintenance

- a) All vehicles and equipment shall be kept in good working order and serviced regularly. Leaking equipment shall be repaired immediately or removed from the site.
- b) Where reasonably practical, maintenance activities shall only be undertaken in a demarcated maintenance area (as agreed to with the RE and ECO).
- c) No maintenance or refuelling activities shall be allowed within 20 m of the high water mark, unless this is absolutely necessary.
- d) When servicing equipment, drip trays shall be used during the collection of waste oil and other lubricants. All hazardous waste from maintenance activities shall be disposed of as specified in Section 3.7.1.
- e) The washing of equipment shall be restricted to urgent maintenance requirements only. All washing shall be undertaken in the maintenance area, and these areas must be equipped with suitable wastewater collection measures. The use of detergents for washing shall be restricted to low phosphate and nitrate containing, low sudsing-type detergents.
- f) Cutting tools and saws shall be kept sharp to reduce frictional noise.
- g) Conveyor rollers, trolley, etc. shall be sufficiently lubricated.

3.6 ACCIDENTAL LEAKS AND SPILLS

- a) The Contractor shall ensure that his / her Employees are aware of the procedure to be followed for dealing with spills and leaks.
- b) Any accidental leak and spill of fuel, oil or other hazardous substances is to be reported to the RE or ECO immediately so that the best remediation method can be quickly implemented.
- c) In the event of a large spill, the RE or ECO shall inform the local authority's Pollution Control Department and Fire Brigade immediately.
- d) In the event of a hydrocarbon spill, the source of the spillage shall be isolated and the spillage contained. The area shall be cordoned off and secured.
- e) The Contractor shall ensure that there is always a supply of absorbent material readily available to absorb / breakdown spills. The quantity of such materials shall be able to handle the total volume of the hydrocarbon / hazardous substance stored on site. This material must be accepted by the RE prior to any refuelling activities.
- f) Hydrocarbon contaminated material and / or soil shall be collected and stored in a bunded area until future disposal (see Section 3.7.1).
- g) The relevant Material Safety Data Sheets for all hazardous chemical substances (as defined in the Regulations for Hazardous Chemical Substances) shall be on site. Procedures detailed in the Material Safety Data Sheets shall be followed in the event of a spill or emergency situation.
- h) The Contractor shall be liable to arrange for professional service providers to clear the area affected by the spill, if required.

- i) The Contractor shall submit a Method Statement detailing the precautions that shall be implemented to limit spills and leakage of these hydrocarbons and other hazardous substances (see Section 3.4.3).

3.7 WASTE MANAGEMENT

3.7.1 Hydrocarbon and Hazardous Waste

- a) All hydrocarbon (e.g. fuel, oils and contaminated soil / materials) and other hazardous waste resulting from spills, refuelling and maintenance activities shall be disposed of in a licensed hazardous waste site or, where possible, sold to an approved used-oil recycling company.
- b) Used oil, lubricants, cleaning materials, etc. from the maintenance of vehicles and machinery may be collected in holding tanks prior to disposal.
- c) No hydrocarbon and hazardous waste shall be burnt or buried on site. Under no circumstances shall the spoiling or burial of tar or bituminous products be allowed on site. Unused or rejected tar or bituminous products shall be returned to the supplier's production plant.
- d) The Contractor shall provide disposal certificates issued by the hazardous waste disposal facility to the RE. In addition, disposal certificates shall be kept at the site office for inspection by any relevant authority.

3.7.2 Solid Waste

Solid waste includes all construction waste (rubble, cement bags, old cement, tags, wrapping materials, timber, cans, wire, nails, etc.) and surplus food, food packaging, organic waste, etc.

- a) The Contractor shall be responsible for the establishment of a solid waste control and removal system that is acceptable to the RE and ECO in order to prevent the spread of waste in, and beyond, the construction area.
- b) The Contractor shall ensure that the site is kept free of litter. The general cleanliness of the site shall form part of the RE's and ECO's inspections.
- c) At all places of work the Contractor shall provide bins (with lids) of sufficient number and capacity to store solid waste produced on a daily basis. The lids shall be kept firmly on the bins at all times.
- d) Bins shall be emptied on a weekly basis or more frequently as required.
- e) Solid waste may be temporarily stored at the construction camp site in a designated area approved by the RE prior to collection and disposal.
- f) An integrated waste management approach shall be used, based on the principles of waste minimisation, reduction, re-use and recycling of materials. Containers for recycling of at least glass, paper, metals and plastics shall be provided at the construction camp. Waste storage containers shall be covered, tip-proof, weatherproof and scavenger proof. The waste storage area shall be fenced off to prevent wind-blown litter.
- g) No waste material or litter shall be burnt or buried on site.
- h) All solid waste shall be disposed of offsite at an approved landfill site. The Contractor shall supply the RE with certificates of disposal.

MS4: The Contractor shall submit a Method Statement detailing a solid waste control system (storage, provision of bins, site clean-up schedule, bin clean-out schedule, etc.) to the RE for approval.

3.7.3 Wastewater

- a) The Contractor(s) shall prevent pollution of surface or groundwater from the release, accidental or otherwise of contaminated water (including contamination with chemicals, oils, fuels, cement, sewage, construction water, water carrying products, etc.) as a result of construction activities.
- b) The Contractor shall be responsible for the construction and operation of necessary collection facilities in order to prevent such pollution and / or settlement of suspended matter, and shall dispose of the collected waste as approved by the RE.
- c) Water from any kitchen, showers, laboratories, sinks, etc. shall be discharged into a conservancy tank for removal from the site.
- d) The Contractor shall ensure that water runoff from fuel depots, workshops, truck washing areas and concrete swills passes through a oil separation / settlement system before being released or alternatively is directed into a conservancy tank for disposal at a location approved by the RE.
- e) Temporary stormwater drainage from the works shall be designed in collaboration with the RE and ECO.
- f) No wastewater shall be disposed of directly or indirectly into the sea.

MS5: The Contractor shall submit a Method Statement detailing how wastewater is to be collected from all wastewater generating areas (e.g. maintenance areas, bunds, etc.), as well as storage and disposal methods.

3.8 EROSION AND SEDIMENTATION CONTROL

- a) The Contractor shall, as an ongoing exercise, provide sedimentation and erosion control to the satisfaction of the RE.
- b) During construction the Contractor shall protect areas susceptible to erosion by installing necessary temporary and permanent drainage works as soon as possible and by taking measures necessary to prevent surface water from being concentrated in streams and from scouring slopes, banks or other areas.
- c) A soil saver (such as Geojute 250) shall be used to stabilise exposed topsoil areas during rehabilitation and planted with local, fast growing pioneer species such as *Tetragonia decumbens* and *Carpobrotus acinaciformis*.
- d) During construction the Contractor shall implement measures to prevent the migration of material (fines) from the works into the sea. This may include the use of cut-off trenches, straw bales or geofabric siltation barriers constructed across the site at specific points.
- e) Any runnels or erosion channels developed during the construction period shall be backfilled and compacted, and the areas restored to an acceptable condition (as determined by the RE).
- f) Stabilisation of cleared areas to prevent and control erosion and/or sedimentation shall be actively managed. The method of stabilisation shall be determined in consultation with the RE and ECO. Consideration and provision shall be made for the following methods (or combination thereof):
 - Brushcut packing (no alien plant material may be used for this purpose);
 - Mulch or chip cover (no alien plant material may be used for this purpose);
 - Straw stabilising (at a rate of one bale/m² rotated into the top 100 mm of the completed earthworks – only straw bales held with string (not wire) may be used);

- Watering;
 - Planting/sodding;
 - Hand seeding/sowing;
 - Application of soil binders and anti-erosion compounds; and/or
 - Mechanical cover/packing structures (including the use of Geofabric, hessian cover, log/pole fencing or shade-net fencing).
- g) The EO shall demarcated stabilised areas with painted stakes or hazard tape.
- h) Traffic and movement over stabilised areas shall be restricted and controlled by the EO, and damage to stabilised areas shall be repaired and maintained by the Contractor to the satisfaction of the RE and ECO.
- i) In areas where construction activities have been completed and where no further disturbance would take place, rehabilitation and revegetation should commence as soon as possible.

MS6: A Method Statement shall be developed to deal with erosion and sedimentation issues, especially the migration of fines from the works into the sea.

3.9 WORK IN INTERTIDAL AREAS

- a) A Method Statement must be prepared prior to undertaking work in the intertidal area for consideration by the RE and ECO. The Method Statement shall include a motivation for the need of mechanised work in the intertidal area and measures that will be adopted to reduce the impact of such activity.
- b) Any work requiring access in the intertidal area by machinery and vehicles shall be undertaken at slow speed and with clean vehicles (no leaks, etc.) and along a single track.
- c) Traffic in the intertidal area shall be restricted to the minimum required, and the dedicated access route shall be clearly demarcated.
- d) No excavated material shall be dumped in the intertidal and subtidal zones.
- e) Any substantial sediment accumulations below the high water mark shall be levelled to follow the natural profile.

MS7: A Method Statement shall be prepared and submitted to the RE and ECO detailing how work in the intertidal area shall be undertaken (including timing and phasing of activities, access, etc.). The Method Statement shall include a motivation for the need of mechanised work in the intertidal area and measures that will be adopted to reduce the impact of such activity.

3.10 TRAFFIC ACCOMMODATION

- a) I&J shall establish and enforce an access policy for the Contractor and all Sub-contractors. This policy shall ensure all vehicles heavier than two tonnes access the site via the proposed Van Bloemestein Street extension alternative.
- b) Dedicated access routes shall be established and demarcated between the proposed Van Bloemestein Street extension and the three development platforms. This will later become the main access route to the various phases.

- c) The Contractor shall appoint a traffic safety officer who shall be responsible for ensuring that construction activities do not obstruct traffic and that adequate traffic accommodation measures are put in place.
- d) The Contractor shall also ensure that adequate vehicular traffic accommodation, signage and safety measures (as appropriate) are put in place on site.
- e) The Contractor shall ensure that access is maintained at all times for landowners and other road users in a suitable condition.

3.11 CEMENT AND CONCRETE BATCHING

- a) The concrete batching activities shall be located in an area of low environmental sensitivity to be identified and approved by the RE. The mixing of concrete in the intertidal zone shall be prohibited.
- b) Concrete mixing directly on the ground shall not be allowed and shall take place on impermeable surfaces to the satisfaction of the RE.
- c) The Contractor shall ensure that water runoff from batching areas swills passes through a settlement system before being released or alternatively is directed into a conservancy tank for disposal at a location approved by the RE.
- d) Contaminated water storage facilities shall not be allowed to overflow and appropriate protection from rain and flooding shall be implemented.
- e) Unused cement bags shall be stored undercover and away from surface runoff.
- f) Used (empty) cement bags shall be collected and stored in weatherproof containers to prevent wind-blown cement dust and water contamination. Used cement bags shall not be used for any other purpose and shall be disposed of on a regular basis via the solid waste management system (see Section 3.7.2).
- g) All excess concrete shall be removed from site on completion of concrete works and disposed of at a licence landfill site.
- h) Washing of the excess into the ground shall not be allowed.
- i) All excess aggregate shall also be removed from site.

MSB: The Contractor shall submit a Method Statement detailing cement storage, concrete batching areas and methods, method of transport of cement and concrete, storage and disposal of used cement bags, etc. for each concrete batching operation.

3.12 ROCK-BREAKING TECHNOLOGY

- a) Rock-breaking technology, which directs energy into the rock (e.g. chemical rock splitting), shall be used.
- b) Percussion drilling and rock breaking shall be restricted to the absolute minimum required.
- c) Onshore rock breaking shall be scheduled when shore-birds are breeding in the immediate vicinity.
- d) All rock-breaking activities shall be conducted in accordance with recognised standards and safety requirements. Rock-breaking shall only be undertaken by a registered blaster once the relevant blasting permit has been obtained.
- e) Visual observation shall be undertaken prior to rock breaking ("pre-blast" survey) to ensure there are no marine mammals and flocks of diving seabirds present in the immediate vicinity (500 m radius) of the blast site.

3.13 ROAD SURFACING MATERIALS

- a) Overspray of bitumen products outside of the road surface and onto roadside vegetation shall be prevented using a method approved by the RE.
- b) When heating of bitumen products, the Contractor shall take cognisance of appropriate fire control measures (see Section 3.14).
- c) Stone chip / gravel excess shall not be left on road / paved area verges. This shall be swept / raked into piles and removed to an area approved by the RE.
- d) Water quality from runoff from any fresh bitumen surfaces shall be monitored by the RE and remedial actions taken where necessary.

3.14 FIRE CONTROL

- a) No open fires shall be allowed on site for the purpose of cooking or warmth. *Bona fide* braai fires (such as braai fires) shall be limited to the traditional "month end" braais and not individual daily cooking fires. These fires shall be lit within the construction camp or site office area.
- b) The Contractor shall take all reasonable steps to prevent the accidental occurrence or spread of fire. The Contractor shall appoint a fire officer who shall be responsible for ensuring immediate and appropriate action in the event of a fire.
- c) The Contractor shall ensure that all site personnel are aware of the procedure to be followed in the event of a fire.
- d) The appointed fire officer shall notify the local Fire and Emergency Service in the event of a fire and shall not delay doing so until such time as the fire is beyond his / her control.
- e) The Contractor shall ensure that there is basic fire-fighting equipment on site at all times. This equipment shall include fire extinguishers and beaters.
- f) The Contractor shall pay the costs incurred by organisations called to put out fires started by himself/herself, his/her staff or any sub-contractor. The Contractor shall also pay the costs incurred to reinstate burnt areas as deemed necessary by the RE.
- g) Any work that requires the use of fire may only take place at that designated area and as approved by the RE. Fire-fighting equipment shall be available in these areas.
- h) The Contractor shall ensure that the telephone number of the local Fire and Emergency Service are displayed at the site offices.
- i) The Contractor shall ensure compliance with the requirements of the Veld & Forest Fires Act, 1998 (No. 101 of 1998) in terms of establishing a Fire Protection Association with the landowners.
- j) Smoking is not allowed on site, other than at designated smoking points. Cigarette butts shall not be discarded on the ground.

MS9: The Contractor shall submit a fire control and fire emergency Method Statement to the RE for approval. The Method Statement shall detail the procedures to be followed in the event of a fire and the name of the appointed fire officer. The Method Statement shall include a fire permit from the Fire Chief if alien vegetation is to be burnt on site.

3.15 NOISE CONTROL AND WORKING HOURS

- a) The Contractor shall be familiar with and adhere to, any local by-laws and regulations regarding the generation of noise and hours of operation. In addition, the provisions of SANS 10103 regarding the generation of noise shall apply to all areas within audible distance of residents whether in urban, peri-urban or rural areas.
- b) The Contractor shall endeavour to keep noise generating activities to a minimum. In this regard:
- Unnecessary idling times shall be avoided at all times.
 - Construction materials such as beams, and bricks shall be lowered and not dropped.
 - Machines used intermittently shall be shut down between work periods or throttled down to a minimum and not left running unnecessarily. This will reduce noise and conserve energy.
 - Acoustic covers of engines and compressors shall be closed when in use or idling.
 - The need for trucks/equipment to reverse shall be minimised. This will reduce the frequency at which disturbing but necessary reverse warnings will occur. Alternatives to the traditional reverse 'beeper' alarm, such as a 'self-adjusting' or 'smart' alarm, could be considered. These alarms include a mechanism to detect the local noise level and automatically adjust the output of the alarm is so that it is reduced to only 5 to 10 dBA above the noise level near the moving equipment.
 - Traffic, specifically heavy vehicle traffic, shall be limited to hours between 06:00 and 18:00, as far as possible.
 - The Contractor shall restrict all operations that result in undue noise disturbance to local communities and/or dwellings to daylight hours on weekdays or as otherwise agreed with the local authority.
- c) The Contractor shall warn local communities and/or residents that could be disturbed by noise generating activities well in advance.
- d) Any change in the noise emission characteristics of equipment shall serve as trigger for withdrawing it for maintenance.

3.16 DUST CONTROL

- a) The Contractor shall ensure that the generation of dust is minimised and shall implement a dust control programme to maintain a safe working environment, minimise nuisance for surrounding residential areas / dwellings and protect damage to natural vegetation, etc.
- b) The Contractor shall ensure that exposed areas and material stockpiles are adequately protected against the wind (e.g. wetting exposed soil / gravel areas during windy conditions, covering of material stockpiles, rotovate straw in sand, apply commercial dust palliatives, shade-net fencing, etc.).
Note: Under no circumstances may potable water be used for dust suppression.
- c) Appropriate dust suppression measures, to the satisfaction of the RE, shall be used when dust generation is unavoidable, particularly during prolonged periods of dry, windy weather. Such measures may include the use of temporary stabilising measures (e.g. chemical soil binders, straw, brush packs, chipping etc.).
- d) The location of stockpiles shall take into consideration the prevailing wind directions and locations of sensitive receptors.
- e) Vegetation clearing shall, where possible, take place in a phased manner in order to retain vegetation cover for as long as possible.
- f) Construction vehicles shall comply with speed limits and haul distances shall be minimised.

- g) Material loads shall be suitably covered during transportation. Where this is not practical (e.g. hauling material from cut to fill), the Contractor shall ensure that construction vehicles are not overfilled and, if necessary, continually damp down with low levels of water.

MS10: The Contractor shall submit a dust control Method Statement to the RE for approval. The Method Statement shall detail the procedures to be followed to control dust.

3.17 PROTECTION OF NATURAL FEATURES, FLORA AND FAUNA

- a) The Contractor shall not permit his Employees to make use of any natural water sources for the purposes of swimming, personal washing and the washing of machinery or clothes.
- b) The Contractor shall not deface, paint, damage or mark any natural feature (e.g. rocks, etc.) situated on or around the site for survey or any other purposes unless agreed beforehand with the RE. Any features affected by the Contractor in contravention of this clause shall be restored / rehabilitated to the satisfaction of the RE.
- c) The Contractor shall be responsible for informing all Employees about the need to prevent any harmful effects on natural vegetation on or around the construction site as a result of their activities.
- d) Clearing of natural vegetation shall be kept to a minimum (see Section 3.3.1). The removal, damage and disturbance of natural vegetation without the written approval of the RE are prohibited.
- e) Before vegetation clearing takes place in any construction area, search and rescue and seed collection shall be undertaken. Search and rescue of all transplantable plant species within the areas that would be affected by construction shall place before any work starts (see Section 3.3.1).
- f) The use of herbicides is prohibited unless approved by the RE.
- g) The Contractor shall ensure that no hunting, trapping, shooting, poisoning or otherwise disturbance of any fauna takes place.
- h) The feeding of any wild animals is prohibited.
- i) The use of pesticides is prohibited unless approved by the RE.
- j) No domestic pets or livestock are permitted on site.

3.18 PROTECTION OF HERITAGE AND CULTURAL FEATURES

- a) An archaeologist shall inspect the site for surface archaeological resources once vegetation clearing operations have been completed, but prior to the commencement of bulk earthworks. If surface archaeological resources are visible, these might need to shovel tested if specified by the archaeologist, under permit (see Section 2.12.2), to determine the potential significance of the deposits.
- b) Monitoring of bulk earthworks shall be undertaken for subsurface archaeological deposits. This monitoring can be undertaken in consultation with the appointed ECO and the Contractor's EO, who will be on site during the entire Construction Phase. Since it is not necessary for the archaeologist to be on site permanently, the archaeologist shall visit the site at least once a week during bulk earthworks or as the need arises.
- c) Should any human remains be disturbed, exposed or uncovered during excavation, these must immediately be reported the South African Police Service and, if suspected that the remains are older than 60 years, the HWC.

3.19 TOILETS

- a) The Contractor shall provide suitable sanitary arrangements (e.g. chemical toilets) as per building guidelines (SABS 0400). There should be one toilet for every 15 workers on site (Operational Health and Safety Act No. 85 of 1993).
- b) Toilets must be easily accessible and shall be secured in order to prevent them from blowing over.
- c) Toilet/s shall be located where there will be a concentration of labour. The siting of toilets shall be done in consultation with the RE or ECO to ensure that they are easily accessible for Employees.
- d) Toilets shall not be more than 50 m away from where construction activities are being undertaken.
- e) Toilets shall not be sited within 30 m of the high water mark.
- f) The Contractor shall be responsible for ensuring that all ablution facilities are maintained in a clean and sanitary condition to the satisfaction of the RE or ECO.
- g) The Contractor shall provide toilet paper.
- h) The Contractor shall appoint a suitable Sub-contractor to empty toilets on a regular basis.
- i) The Sub-contractor shall ensure that there is no spillage when the chemical toilets are cleaned and that the contents are properly removed from site.
- j) The Contractor shall be responsible for enforcing the use of these facilities.
- k) Performing ablutions outside of established toilet facilities is strictly prohibited (refer to List of Fines, Appendix 3).

3.20 WATER PROVISION

- a) The Contractor shall be responsible for ensuring that there is access to clean drinking water for all Employees on site.
- b) All drinking water must be from a legal source and comply with recognised standards for potable use.
- c) If water is stored on site, drinking water and multi-purpose water storage facilities shall be clearly distinguished and demarcated.

3.21 EATING AREAS

- a) The Contractor shall establish eating areas, as agreed with the RE. These areas shall provide adequate temporary shade to ensure that Employees do not move off site to eat.
- b) The Contractor shall provide adequate refuse bins at all eating areas to the satisfaction of the RE and shall ensure that all eating areas are cleaned up on a daily basis.
- c) Collected waste shall be stored in a central waste area within the construction camp that has been approved by the RE and ECO.
- d) Any cooking of food on site shall be done using gas cookers.
- e) No natural water resource shall be used for washing of pots, plates, clothing, etc.

4 VEGETATION REHABILITATION

4.1 VEGETATION REHABILITATION PLAN

- a) I&J (or its Engineer) shall appoint a suitably experienced rehabilitation / landscaping consultant to compile a vegetation rehabilitation plan. The vegetation rehabilitation plan shall include the following:
- Seed collection, harvesting methods and locations and seed storage methods;
 - Search and rescue;
 - Handling of plant material rescued (translocation areas, propagation, etc.);
 - Establishment and maintenance of a project-specific nursery, if required;
 - Seed mix;
 - Topsoil, mulch, fertiliser and soil stabiliser requirements and application;
 - Erosion control measures;
 - Landscaping and revegetation methods for each area, i.e. hydroseeding / hydromulching, planting, including locations and timing;
 - Procurement requirements and a list of species of plants to be procured, if any;
 - Vegetation establishment and maintenance requirements for all revegetated areas; and
 - The use of any herbicides, pesticides and other poisonous substances, if required.

MS11: A vegetation rehabilitation plan shall be compiled and implemented. The plan shall detail the procedures / specifications listed below.

Note: This plan must be submitted to CapeNature for comment prior to finalisation thereof.

4.2 GENERAL

- a) All areas disturbed by construction activities, storage and stockpiling areas, etc. shall be rehabilitated to the satisfaction of the RE.
- b) Hydroseeding / hydromulching are expected to be the most suitable methods of revegetation for most areas.
- c) Avoidance is preferred over translocation and search and rescue should be undertaken only for plants/trees for which translocation is likely to be successful.
- d) Revegetation of construction areas shall take place as soon as possible after completion of construction works. The timing of revegetation shall take cognisance of maintenance requirements and provision shall be made for any irrigation requirements.
- e) No construction equipment, vehicles or unauthorised personnel shall be allowed onto areas that have been revegetated.

4.3 SEED COLLECTION AND STORAGE

- a) Indigenous seed shall be harvested from areas that are free of alien vegetation, either within construction areas prior to site clearing or from suitable neighbouring areas.
- b) Seed should be gathered by vacuum harvester or other approved mass collection method. Harvested seed shall be free of excessive quantities of organic and/or substrate material.

- c) Following harvesting, seed shall be dried under cool airy conditions. Seed shall be insect free and shall be stored in suitable containers under cool conditions that are free of rodents or insects. No wet, mouldy or otherwise damaged seed is acceptable.
- d) The Contractor shall provide adequate facilities for the storage of collected seed in rodent- and insect-free, cool, dry conditions to the satisfaction of the RE.
- e) Seed collection shall be an ongoing exercise throughout the construction period in order to ensure that sufficient seed is collected for use in revegetation.
- f) Only if the harvested seed quantities are insufficient may additional seed be bought. Any procurement of seed for use in revegetation shall be from reputable sources only.

4.4 SEARCH AND RESCUE

- a) Search and rescue of transplantable plant species within construction areas shall be undertaken before any site clearing takes place. Search and rescue shall include the collection of plants, cuttings and, where applicable, seed. It is recommended that bulbs are collected in spring (July – October), while succulents and shrubs are collected in autumn after the first winter rains.
- b) Rescued plant material shall either be planted directly into areas already under rehabilitation or into the remaining property (which will be managed as a conservation area) that will not be disturbed in the near future. Alternatively, plant material can be maintained within a temporary nursery for later use during revegetation of disturbed areas (see Section 4.5).
- c) The Contractor shall provide nursery / holding facilities, if necessary, for any rescued plant material that is deemed suitable for later use in revegetation to the satisfaction of the RE.
- d) Plants shall be protected from wind during transportation with 20% density shade cloth. No plants with exposed roots shall be subjected to prolonged exposure to drying winds and sun or subjected to water logging.
- e) The Contractor shall ensure that the plants are in a good condition and free from plant diseases and pests.

4.5 NURSERY / HOLDING FACILITY

- a) The establishment of an on-site nursery or holding facility to store or propagate indigenous plants for use in revegetation is preferred to the procurement of plants / trees from commercial sources.
- b) Nursery plants shall be grown from locally obtained seed, cuttings and plants.

4.6 MULCH

- a) Mulch shall be used in all areas where revegetation has to take place. Mulch shall be obtained from all areas where indigenous vegetation is cleared (after removal of alien vegetation and search and rescue of transplantable plant species).
- b) Mulch shall be free of alien species.
- c) Plant material shall be reduced by either mechanical means (chipper) or by hand-axing to pieces no longer than 100 mm.
- d) No harvesting of mulch vegetation outside of construction areas shall be allowed.

- e) Every effort shall be taken to ensure the retention of as much seed as possible in mulch made from indigenous vegetation and mulches shall be collected in such a manner that the loss of seed is restricted.
- f) Bush-cut mulch shall be stored for as short a time-period as possible, and seed released from stockpiles shall be collected for use in revegetation.
- g) Compost from a local source may be used as mulch during revegetation, but must be approved by the RE. Compost shall be well decayed, friable and free from weed seeds.
- h) Seed free, half-composted material, such as mulled-bark, may be used as an additive to extend indigenous mulch. No more than 50% compost shall be used under these circumstances.
- i) Wood chips (including bark), which are half composted and have not been treated with preservatives can also be used as mulch during revegetation. Wood chips shall only be obtained from indigenous species removed during site clearing of construction areas. Chips shall be no longer than 50 mm in length or breadth and the RE shall approve the source of the chips.

4.7 FERTILISER

- a) The use, storage and handling of fertiliser shall be strictly controlled.
- b) Care shall be taken when using fertilisers near no-go areas, the high water mark and other sensitive natural areas.
- c) Soil shall be well watered and moist before any fertiliser is applied.

4.8 LANDSCAPING AND GROUND SURFACE PREPARATION

- a) Cut and fill slopes shall be shaped and trimmed to approximate the natural condition and contours as closely as possible.
- b) Compacted soil shall be ripped along the contour and hand-trimmed. Topsoil shall then be spread evenly over the surface.
- c) The topsoiled slopes shall be scarified by hand, creating drills parallel to the contours. The drills should be approximately 50 mm deep and 100 mm to 150 mm apart.
- d) Prior to revegetation, the Contractor shall ensure that the area is clear of any building materials and other foreign debris.
- e) All visible weeds shall be removed from the area before replacing topsoil.

4.9 EROSION CONTROL MEASURES

- j) Stabilisation of cleared / rehabilitated areas to prevent and control erosion shall be actively managed. Consideration and provision shall be made for the following methods (or combination thereof):
 - Brushcut packing (no alien plant material may be used for this purpose);
 - Mulch or chip cover (no alien plant material may be used for this purpose);
 - Straw stabilising (at a rate of one bale/m² rotated into the top 100 mm of the completed earthworks – only straw bales held with string (not wire) may be used);
 - Watering;
 - Planting/sodding;
 - Hand seeding/sowing;
 - Application of soil binders and anti-erosion compounds; and/or

- Application of a soil saver (such as Geojute 250) to stabilise exposed topsoil areas during rehabilitation and plant with local, fast growing pioneer species such as *Tetragonia decumbens* and *Carpobrotus acinaciformis*.
- Erection of shade-net fencing on large denuded areas to reduce wind velocity.
- Placement of logs (100 to 150 mm) or soil sausages on slope gradients of 1:2 or greater in order to reduce slope lengths and slope subsidence.
- Placement of logs or soil sausages in horizontal lines at intervals of between 1.5 m to 2 m prior to topsoiling. The logs and soil sausages shall be secured with wooden and/or steel pegs at approximately 200 to 300 mm spacing.
- Cut-off trenches above large steep slopes.

4.10 HYDROSEEDING / HYDROMULCHING

- a) The hydroseeder shall be capable of pumping the specified seed mix, fertiliser, soil stabiliser, etc. at the specified rates over the areas to be seeded.
- b) Specified seed mixtures shall be added with the hydroseeding mixture in such a proportion as to achieve an application rate of 50 kg per hectare. The indigenous and the commercial pioneer grass seed mix proportions shall be specified in the vegetation rehabilitation plan.
- c) The hydroseeder shall have an agitation system, which shall be sufficient to agitate, suspend and homogeneously mix the specified slurry.
- d) The slurry distribution lines shall be large enough to prevent stoppage. The discharge line shall be equipped with hydraulic spray nozzles suitable for the even distribution of the slurry on the various slopes to be seeded.

4.11 PLANTS / TREES

- a) The handling, maintenance and planting of plants / trees shall be undertaken under supervision of the appointed rehabilitation / landscaping consultant.
- b) The Contractor shall ensure that each plant / tree is handled and packed in the approved manner for that species or variety, and that all necessary precautions are taken to ensure that the plants arrive on site in a proper condition for successful growth.
- c) Plants shall be protected from wind during transportation.
- d) No plants or plants with exposed roots shall be subjected to prolonged exposure to drying winds and sun, or subjected to water logging or force-feeding at any time after purchase.
- e) The Contractor shall ensure that the plants are in a good condition and free from plant diseases and pests.
- f) All plants supplied by the Contractor shall be healthy, well formed, and well rooted. Roots shall not show any evidence of having been restricted or deformed at any time. The potting materials used shall be weed free.
- g) There shall be sufficient topsoil around each plant to prevent desiccation of the root system.

4.12 TIMING

- a) Although revegetation should take place as soon as possible after construction, hydroseeding should ideally be carried out during the wet season between May to August to benefit from the growing season.
- b) If revegetation takes place during the dry season, irrigation of planted areas may be necessary.

4.13 ESTABLISHMENT AND MAINTENANCE OF VEGETATION

4.13.1 Irrigation

- a) As noted above, irrigation may be required if revegetation takes place in the dry season. The Contractor shall be responsible for maintaining the desired level of irrigation necessary to maintain vigorous and healthy growth, as advised by the appointed rehabilitation / landscaping contractor.
- b) Water used for the irrigation of revegetated areas shall be free of chlorine and other pollutants that will have a detrimental effect on the plants.
- c) Where hydroseeding is undertaken, the commencement of watering may be postponed until seeds have germinated and growth begins.

4.13.2 Tree Establishment

- a) Any trees planted as part of the revegetation shall be watered three times weekly in summer, once weekly in winter, or otherwise as specified by the appointed rehabilitation / landscaping contractor.
- b) The Contractor shall ensure that all trees planted on site are disease and pest free. Any methods used to control any diseases and/or pests, including the use of herbicides and pesticides, must be approved by the RE.
- c) Trees that die or become diseased so that they appear to be in a badly impaired condition shall be promptly removed and replaced as soon as possible.
- d) Trees shall be kept free from dead wood, broken branches, etc.

4.13.3 Monitoring and Reseeding

- a) Regular assessment shall be undertaken to ascertain the vegetation cover during the construction and maintenance phases. Re-seeding shall be undertaken as required in order to meet the specified vegetation coverage.

4.13.4 Alien Eradication

- a) The Contractor shall be responsible for ensuring that all revegetated areas remains free of invasive alien species during the contract and maintenance period; after which I&J shall assume responsibility.

AFRICAN OFFICES

South Africa

CAPE TOWN

T: +27 21 461 1118

FOURWAYS

T: +27 11 467 0945

SOMERSET WEST

T: +27 21 851 3348

Namibia

WINDHOEK

T: + 264 61 231 287

SWAKOPMUND

T: + 264 64 402 317



APPENDIX 1

METHOD STATEMENT CONTROL SHEET

**EXPANSION OF I&J's EXCISING ABALONE FARM AT
DANGER POINT NEAR GANSBAAI**

METHOD STATEMENT CONTROL SHEET

MS Number:

THIS SECTION TO BE COMPLETED BY CONTRACTOR/METHOD STATEMENT AUTHOR

TITLE:
DESCRIPTION:
SUBMITTED BY:

DATE REQUESTED BY RE: DATE SUBMITTED:

DATE RESPONSE REQUIRED BY: DATE WORK START:

REVIEW SCHEDULE		
DATE	AUTHORITY	COMMENTS

DISTRIBUTION AND AUTHORISATION			
	RE	ECO	CONTRACTOR
Name			
Signature			
Date			

CONTRACTOR NOTE: METHOD STATEMENTS SHOULD ADDRESS THE FOLLOWING:

1. WHAT:	Brief description of the work to be undertaken
2. HOW:	Detailed description of the process of work, methods and materials
3. WHERE:	Description/sketch/map of locality of work (where applicable)
4. WHEN:	Due commencement date and completion date estimate (day/night work)

APPENDIX 2

ENVIRONMENTAL DO'S AND DON'TS

DO'S AND DON'T'S

- Workers & equipment must stay inside the site boundaries at all times
- Do not swim in or drink from streams
- Do not throw oil, petrol, diesel, concrete or rubbish in the stream
- Do not work in the stream without direct instruction
- Do not damage the banks or vegetation of the stream
- Protect animals on the site
- Ask your supervisor or Contractor's Manager to remove animals found on site
- Do not damage or cut down any trees or plants without permission
- Do not pick flowers
- Put cigarette butts in a rubbish bin
- Do not smoke near gas, paints or petrol
- Do not light any fires without permission
- Know the positions of fire fighting equipment
- Report all fires
- Do not burn rubbish/ vegetation without permission
- Work with petrol, oil & diesel in marked areas
- Report any petrol, oil & diesel leaks or spills
- Use a drip tray under vehicles & machinery
- Empty drip trays after rain & throw away where instructed
- Try to avoid producing dust - wet dry ground & soil
- Do not make loud noises around the site, especially near schools and homes
- Report or repair noisy vehicles



- Use the toilets provided
- Report full or leaking toilets
- Only eat in demarcated eating areas
- Never eat near a river or stream
- Put packaging & leftover food into rubbish bins
- Do not litter - put all rubbish (especially cement bags) into the bins provided
- Report full bins to your supervisor
- The responsible person should empty bins regularly
- Always keep to the speed limit
- Drivers - check & report leaks
- Ensure loads are secure & do not spill
- Know all the emergency phone numbers
- Spot fines of between R20 and R2 000
- Removal from site
- Construction may be stopped
- Report any breaks, floods, fires, leaks and injuries to your supervisor
- Ask questions!



MOETS EN MOENIES

Werkers en gereedskap moet ten alle tye binne die terreingrense bly.

Moenie van strome drink of daarin swem nie.

Moenie olie, petrol, diesel, sement of rommel in strome gooi nie.

Moenie in strome werk sonder direkte instruksie nie.

Moenie strooioewers en plantegroei beskadig nie.

Beskerms diere op die konstruksie terrein.

Vra u toesighouer of Kontraktbestuurder om diere van die terrein te verwyder.

Moenie enige plante of bome beskadig of afsmag sonder toestemming nie.

Moenie blomme pluk nie.

Gooi sigarettstompies in 'n asblik.

Moenie rook naby gas, verf of petrol nie.

Moenie sonder toestemming enige vuur maak nie.

Weet waar brandbestrydings-toerusting gestoor word. Meld alle vuur onmiddellik aan.

Moenie rommel verbrand sonder toestemming nie.

Werk slegs in gemerkte areas met petrol, olie & diesel.

Meld alle petrol, olie en diesel lekkasies aan.

Gebruik 'n drupbek onder voertuie en masjinerie.

Maak drupbakke leeg na reën, maar nie in riviere nie.

Probeer om nie stof te maak nie.

Maak droë grond nat met water.

Moenie harde geluide maak op die terrein nie, veral naby skole en huise.

Meld raseryge voertuie aan of herstel dit.



Gebruik die toilette wat voorsien is. Meld vol of lekkende toilette aan.



Eet slegs in gemerkte gebiede.

Moenie naby riviere of strome eet nie.

Gooi verpakking en orige kos in vuilnisbakke.



Moenie vuilnis rondstrooi nie - gooi alle vuilnis (veral sementbakke) in vuilnishouers.

Maak vol vuilnishouers aan by u toesighouer.

Vuilnishouers moet gereeld leeggemaak word.



Moet nooit die spoedperk oorskry nie.

Bestuurders - gaan vertrule na en meld lekkasies of rokerige waartuie aan.

Maak seker dat alle vragte stewig is en nie mors nie.



Maak seker dat u alle nood telefoonnommers ken.



Boetes tussen R20 en R20 00

Verwydering vanaf die konstruksie terrein.









Konstruksie mag gestop word.










Meld alle brekasies, vuur, vloede, lekkasies en beserings aan by u toesighouer.

Vra vroe!

EMAZENZIWE NE MAZINGENZIWA

	Abazabanzi nezibhobo abazisebenzisayo mabangaphumi mazo ngaphayo kwezayithi
	Sukuqubha okanye usele amanzi onlambo Sukugalela soil, petrol, diesel, concrete okanye inkukuma emlanjeni Sukonakalisa iindonga (zomlambo) okanye izirryalo
	Khusela izilwanyana ezilapho esayithini Xelela supervisor ukuba zikiswe ezozilwanyana
	Ungonakalisi okanye ugwule imithi ngaphandle kwemvume Sukwamba izityele
	Xa uqabile ukutshaya galela emgqomeni (izitomp! zecuba) Sukutshaya kufuphi negesi, ipayinti ne petrol Sukubasa umililo ngaphandle kwemvume Zazi izicima milo opho zikhoyo Sukutshisa inkukuma naphandle kwemvume
	Sebenzisa ipetroli, oil na diesel endaweni yayo Faka izitya sokukhonzala phansi kwamashini Ungagaleli oil emlanjeni
	Zama ungenzi utshuli fefa ngamenzi emhlabeni
	Sukwenza ingxole eshayithini ngokumbi kufuphi nesikolo nezi ndlu Yaziso ulungise isithuthi esonakeleyo

	Sebenzisa itoller (izindlu zangasese) Xele xa zizeleyo
	Tyela kwindemo eyenzelwe eko Sukutyela kufuphi nomlambo Lahla emgqomeni yonke inkukuma
	Sulahia inkukuma phantzi Galela emgqomeni yonke inkukuma xele xa izale imigqomo Xele xa umgqomo uzele
	Gcina isantya umajubi makoylungisa inqwalo xa yonakale Qonondisa umthwalo ubotshiswe emqeleni
	Zazi inombolo zangozi
	Inthwalo ngokwaphula umthetho yi R20 - R2000 Okanye ugqothwe emsebenzini Contract leyo imiswe
	Ripota wonke unamakalo ofana nokuphakeza, isiphongo usililo, ukwaza kwemashini mngozini kwi supervisor Buzisa xa unombuzo

APPENDIX 3

LIST OF FINES

Expansion of I&J's existing abalone farm at Danger Point near Gansbaai

SCHEDULE OF FINES FOR ENVIRONMENTAL DAMAGE OR EMPr TRANSGRESSIONS

(Based on City of Cape Town: Detailed Environmental Specifications – Version 6: 2007)

Note: The maximum fine for any environmental damage will never be less than the cost of applicable environmental rehabilitation.

Construction EMPr TRANSGRESSION OR RESULTANT ENVIRONMENTAL DAMAGE	MIN. FINE	MAX. FINE
Failure to comply with prescriptions regarding appointment of an Environmental Officer and monitoring of Construction EMPr compliance.	R 500	R 1 000
Failure to comply with prescriptions regarding environmental awareness training.	R 500	R 5 000
Failure to comply with prescriptions regarding method statements.	R 500	R 5 000
Failure to report environmental damage or Construction EMPr transgressions to the RE or ECO.	R 500	R 1 000
Failure to carry out instructions of the RE or ECO regarding the environment or the Construction EMPr.	R 500	R 1 000
Failure to comply with prescriptions regarding construction camp.	R 500	R 5 000
Failure to comply with prescriptions posting of emergency numbers.	R 500	R 1 000
Failure to comply with prescriptions regarding information boards.	R 500	R 1 000
Failure to comply with prescriptions regarding site demarcation and enforcement of 'no go' areas.	R 500	R 5 000
Failure to comply with prescriptions regarding site clearing.	R 500	R 5 000
Failure to comply with prescriptions for supervision for loading and off loading of delivery vehicles.	R 500	R 1 000
Failure to comply with prescriptions for securing of loads to ensure safe passage of delivery vehicles.	R 500	R 1 000
Failure to comply with prescriptions for the storage of imported materials within a designated contractor's yard.	R 500	R 1 000
Failure to comply with prescribed administration, storage or handling of hazardous substances.	R 500	R 1 000
Failure to comply with prescriptions regarding equipment maintenance and storage.	R 500	R 1 000
Failure to comply with fuel storage, refuelling, or cleanup prescriptions.	R 500	R 5 000
Failure to comply with prescriptions regarding procedures for emergencies (spillages and fires).	R 1 000	R 5 000
Failure to comply with prescriptions for solid waste management.	R 500	R 5 000
Failure to comply with prescriptions for the use of ablution facilities.	R 500	R 1 000
Failure to comply with prescriptions regarding water provision.	R 500	R 1 000
Failure to comply with prescriptions for the use of designated eating areas.	R 500	R 1 000
Failure to comply with prescriptions regarding fire control.	R 500	R 5 000
Failure to comply with prescriptions to work in the intertidal area.	R 500	R 5 000
Failure to comply with prescriptions to prevent water pollution, sedimentation and erosion control	R 500	R 5 000
Failure to comply with prescriptions to traffic accommodation and temporary bypasses	R 500	R 5 000
Failure to comply with prescriptions to the protection of natural features, flora, fauna and archaeology.	R 500	R 5 000
Failure to comply with prescriptions regarding speed limits.	R 500	R 1 000
Failure to comply with prescriptions regarding working hours / noise control	R 500	R 1 000
Failure to comply with prescriptions regarding dust control.	R 500	R 1 000
Failure to comply with prescriptions regarding cement and concrete batching	R 500	R 5 000
Failure to comply with prescriptions regarding surfacing materials	R 500	R 5 000
Failure to comply with prescriptions regarding alien eradication	R 500	R 5 000

For each subsequent similar offence committed by the same individual, the fine shall be doubled in value to a maximum value of R 50 000.



**Danger Point Aquaculture
Operation Environmental Management Programme**

October 2018

Description of environmentally sustainable practices and mitigation strategies for the preservation of the local environment

TABLE OF CONTENTS

1	INTRODUCTION AND BACKGROUND	1
2	AIMS OF THIS DOCUMENT.....	1
3	ADMINISTRATION AND REGULATION OF ENVIRONMENTAL OBLIGATIONS	1
4	INSPECTIONS AND AUDITING	1
5	ENVIRONMENTAL AWARENESS TRAINING	2
6	GOVERNMENT REPORTING REQUIREMENTS	2
7	PERMITTING AND LICENCING	3
8	HABITAT & BIODIVERSITY	4
8.1	Terrestrial	4
8.1.1	Rehabilitation.....	4
8.1.2	Veld Fire Management Plan.....	5
9	ANIMAL HEALTH	5
9.1	Escapees	5
9.2	Broodstock	6
9.3	Biosecurity, disease and pest control	7
9.3.1	Purchase of supplies and services	8
9.3.2	Preventive Action.....	8
9.3.3	Corrective action.....	8
9.3.4	Reviews	8
9.4	Technical Aspects of Biosecurity	9
9.4.1	Contact Areas.....	9
9.4.2	Hygiene Control Points (HCP)	9
9.4.3	Access Control.....	9
9.4.4	Protective Clothing	10
9.4.5	Fomites cleaning and disinfection	10
9.4.6	Vector and Pest Control.....	10
9.4.7	Water and Air Supply	10
9.4.8	Fixed Structures	11
9.4.9	Stock Movements	11
9.4.10	Stock Management	11
9.4.11	Broodstock Management	11
9.4.12	Surveillance.....	12
9.5	Feed.....	12
10	FIRE AND SAFETY	13

11	MAINTENANCE AND REFUELLING	13
12	WASTE MANAGEMENT.....	14
12.1	Hydrocarbon Waste	14
12.1.1	Chemicals.....	14
12.1.2	Diesel.....	15
12.2	Biological Waste	15
12.3	Solid Waste.....	15
12.4	Effluent.....	16
12.4.1	Daily Monitoring:	16
12.4.2	Monthly Monitoring	17
13	NOISE MANAGEMENT	18
13.1	General Operation.....	18
13.2	Noise Monitoring	18
13.3	Maintenance	19
13.4	Traffic	19
14	TRAFFIC MANAGEMENT	20
15	MAINTENANCE MANAGEMENT PLAN	20
15.1	Introduction	20
15.2	Maintenance activities and impacts.....	20
15.3	Method Statement.....	21
15.3.1	Authority notification	21
15.3.2	Environmental Awareness Plan and Training	21
15.3.3	Access in Intertidal Areas.....	22
15.3.4	Waste Management	22
15.3.5	Rock-breaking technology	22
15.3.6	Maintenance and Refuelling.....	22
15.3.7	Cement and Concrete Batching	23
15.3.8	Fire Control	23
15.3.9	Restoration and Rehabilitation.....	24

1 INTRODUCTION AND BACKGROUND

Irvin and Johnson Limited (hereafter referred to as "I&J") has farmed abalone at its land-based aquaculture facility on the Danger Point peninsula since 1998. The facility has expanded incrementally over the years reaching its current authorised production capacity of 500 tons per annum (t/a) in 2016. I&J is now proposing the expansion of the current abalone operation from 500 t/a to 1 700 t/a, based on the current market demand for abalone.

The abalone farm has an ethos of sustainability and strives towards minimising its impact on the environment. There are various protocols and specifications in place that ensure I&J can achieve this philosophy in the existing operation, as well as the proposed expansion project.

2 AIMS OF THIS DOCUMENT

The purpose of this Operation Environmental Management Programme (hereafter referred to as EMPr) is to ensure that impacts associated with the existing operation and the proposed expansion project are avoided and, where they cannot be avoided, are kept to a minimum and rehabilitated. The EMPr, which has as its basis I&J's existing operation EMPr / protocols and the mitigation measures listed in the Environmental Impact Report (EIR), sets environmental targets and reasonable standards against which I&J's performance can be measured during operation.

The development and implementation of environmental specifications is an on-going process that is iterative in nature.

3 ADMINISTRATION AND REGULATION OF ENVIRONMENTAL OBLIGATIONS

I&J is ultimately responsible for the implementation of the EMPr and the financial cost of all environmental control measures. I&J has appointed an internal Environmental Control Officer (ECO) to ensure the EMPr and associated specifications described herein are implemented.

Copies of this EMPr will be kept on site and all senior management personnel will be required to familiarise themselves with the contents of this document.

4 INSPECTIONS AND AUDITING

Danger Point Aquaculture prides itself at being one of the first recipients of the Aquaculture Stewardship Council's certification in Africa, which provides certification of sustainable farming practices. Various audits will be undertaken to ensure compliance, including financial, risk and safety, environmental and energy. In addition, the farm will perform annual internal audits of its processes in preparation for external review and ensure compliance.

The following audits will be undertaken:

- Risk Audit - Bi-annual audit (Annual certification for fire including smoke detection systems, gas, boilers, lightning and earth leakage).
- Financial audit - Annual (Separate business audit every three years).
- Department of Agriculture, Forestry and Fisheries (DAFF) - Annual.
- National Regulator for Compulsory Specifications (NRCS audits - Annual).
- Aquaculture Stewardship Council (ASC) surveillance audits - Annual.

It should be noted that the Department of Agriculture, Forestry and Fisheries (DAFF) issue various operational permits annually, which are routinely inspected on an ad hoc basis.

5 ENVIRONMENTAL AWARENESS TRAINING

I&J will undertake an annual training programme, which will be compulsory for all staff. The programme will include (but is not limited to) the following relevant topics:

- Internal biosecurity and animal health – Three monthly.
- External biosecurity – Bi-annually.
- Internal Oil and Diesel spill – Annually.
- Standard Operating procedures – Three monthly.
- Internal Red Tide mitigation and identification training - Annually.
- External Red Tide mitigation training – Annually.
- Good manufacturing practices – Annually.
- HACCP refresher courses – Annually.

It should also be noted that I&J currently sponsors the Youth Environment Programme run by the Whale Coast Conservation Trust. The Youth Environment Programme (YEP) raises awareness and encourages commitment to changing the way resources are consumed and environment risk and degradation. The main objectives of this programme are to increase knowledge of and appreciation of nature, introduce the concept of ecology and interconnectedness of organisms in nature, and provide life skills and leadership training.

6 GOVERNMENT REPORTING REQUIREMENTS

I&J will comply with the reporting requirements of all permits, licences and approvals. The following is a list of the reporting requirements as per the current permit conditions:

- Records of:
 - > System malfunctions resulting in disposal of effluent not in accordance with permit.
 - > Unexplained mortalities.
 - > The presence of disease listed by the World Organization for Animal Health (OIE) or signs of disease that Department deems significant, and Abalone Tubercle Mycosis caused by *Haliotis Noduliformans*.
 - > Broodstock collection.
 - > Destruction or processing of broodstock not fit for production.

- > Research animals collection.
- > Defects or deficiencies in coastal outfall channels.
- > Movement document obtained from DAFF to notify intended movement of abalone (broodstock or spat receipt or dispatch) as part of the Molluscan Shellfish and Monitoring program Standard. This is for transparency in movement of animals from a disease management zone.
- > Biotoxin testing for food safety (Paralytic Shellfish Poisoning (PSP), Diarrhetic Shellfish Poisoning (DSP)), *Escherichia coli*, *Vibrio*, *Salmonella*, Heavy Metals, Pesticides and Radionuclides.
- > Annual stock inspection results.
- > Monitoring results:
 - Exact daily and monthly discharge volumes, and findings of monitoring and channel inspections (Quarterly reporting).
 - Phytoplankton monitoring.
- Compliance with:
 - > Traceability protocols implemented by Department for Food Safety and Compiiances.
 - > Requirements for wet storage in SA Molluscan Shellfish Monitoring and Control Programme Manual when holding molluscan shellfish.
- Provide mechanisms and procedure for detection of problems in operation prior to and during discharge of effluent.
- Updated contingency plan.
- Biosecurity audits (internal and external).
- Veterinary Procedural Notice (yearly notice issued by DAFF for farm to be registered as an exporting facility.)

7 PERMITTING AND LICENCING

In order to operate the abalone farm, various permits need to be in place.

I&J holds a 15-year Mariculture Right (Right No. 08556) and a number of permits in terms of the Marine Living Resources Act, 1998 (No. 18 of 1998) (MLRA). Permits include:

- Permit for grow-out, packing and transport (Permit No. 1800481).
- Permit for hatchery and broodstock collection (Permit No. 1800478).
- Permit for seaweed cultivation (Permit No. 1800480).

I&J will comply with permit conditions and apply for any amendments where necessary. Permit conditions vary on an annual basis and include for example, effluent testing, reporting requirements (see Section 6), Animal Health Management, Stock Surveillance, Biosecurity Protocol and Policy Implementation.

8 HABITAT & BIODIVERSITY

8.1 Terrestrial

The remainder of the erf outside the development footprint will continue to be managed as nature reserve and left undisturbed to ensure long-term maintenance of ecological processes and functioning and contribute to regional conservation targets.

8.1.1 Rehabilitation

Areas disturbed as a result of the proposed expansion project will be rehabilitated as per the Construction EMPr, after which these area will be maintained to ensure successful rehabilitation. Maintenance of these areas shall involve the following:

Erosion control:

As an ongoing exercise, erosion control will be implemented on site (mainly in rehabilitation areas). Areas susceptible to erosion will be protected by installing necessary temporary and permanent drainage works and by taking necessary measures to prevent surface water from being concentrated in streams and from scouring slopes, banks or other areas. Any runnels or erosion channels developed on site will be backfilled and compacted, and the areas restored to an acceptable condition. Cleared areas will be stabilised to prevent and control erosion and/or sedimentation shall be actively managed. The method of stabilisation will be determined in consultation with the rehabilitation specialists and the ECO. Consideration and provision will be made for the following methods (or combination thereof):

- Brush-cut packing (no alien plant material may be used for this purpose);
- Mulch or chip cover (no alien plant material may be used for this purpose);
- Straw stabilising (at a rate of one bale/m² rotated into the top 100 mm of the completed earthworks – only straw bales held with string (not wire) may be used);
- Watering;
- Planting/sodding;
- Hand seeding/sowing;
- Application of soil binders and anti-erosion compounds;
- Mechanical cover/packing structures (including the use of Geofabric, hessian cover, log/pole fencing). Cover problem area with shade-cloth and irrigate to promote rapid regrowth of the fynbos; and/or
- Shade-net fencing on large denuded areas to reduce wind velocity.

To minimise damage and ensure vegetation recovery, traffic and movement over stabilised areas will be restricted and controlled by the relevant party.

Alien Eradication:

I&J's alien vegetation clearing programme targets invasive alien vegetation (as listed in the Conservation of Agricultural Resources Act, No. 43 of 1983) on the entire site, but specifically within

the area that is managed as nature reserve. The following specifications relate to the alien vegetation clearing programme:

- Alien clearing will be undertaken as per Department of Water Sanitation standard practice.
- Eradication will commence in the least infected areas and from highest lying areas.
- Special care will be taken to protect indigenous vegetation from trampling, herbicide drift, etc.
- The use of herbicides will be encouraged in preference to vehicle-driven brush cutting and grading.
- Herbicide treatment will be applied to alien vegetation that is cut as this will minimise the risk of re-growth.
- All trees and saplings will be cut down at ankle height where possible and herbicides applied immediately after cutting.
- Colour dyes will be used with the herbicides to clearly mark areas that have been treated.
- Herbicides will not be applied when conditions are windy, so as to avoid spray drift.
- No herbicides will be applied when rain is forecast within two days.
- Protective clothing and masks will be worn at all times during application of herbicides.
- The instructions on the labels of the herbicides will be adhered to.
- Unused herbicides and empty herbicide containers will not be disposed of on site.

8.1.2 Veld Fire Management Plan

I&J will engage with the Overstrand Municipality and surrounding landowners regarding the preparation and implementation of a Fire Management Plan for the Danger Point Peninsula.

9 ANIMAL HEALTH

The well-being of the stock on the farm is imperative to maintaining both a healthy farm operation, as well as ensuring the outflow of water is uncontaminated and innocuous.

The farm will continue to participate in an Animal Health Programme, as it has been doing since 1998, whereby both active and passive surveillance of stock health is performed.

Six to eight weekly stock inspections will be performed in the hatchery and the grow-out areas. Biological data will be collected during the health assessment. All stock inspection reports will be submitted to the General Manager in charge of the I&J aquaculture division and kept on file, allowing for ongoing long-term monitoring of the stock's well-being.

9.1 Escapees

The Danger Point abalone farm is located close to the shoreline where wild abalone populations exist. Therefore, every effort will be made to negate any mixing of farmed abalone with the wild population. These efforts will include reducing the chance of farmed individuals being transferred to the wild populations, as well as minimising the chance of infections and parasites moving between the adjacent populations. It must be noted that the farmed abalone is of high value and takes years

to reach harvestable size and, thus, all measures will be put in place to ensure there are no escapees. These measures will include, but are not limited, to the following:

- All baskets containing abalone will have lids fitted to prevent access to farmed stock from seabirds that could act as carriers between the two populations.
- The settlement sump will be regularly cleaned, at least twice a month, to ensure any farmed individuals that have been washed to that point are removed before outflow to the ocean. Any abalone found in this area will be recorded on a check sheet (Sheet EZ5RS4) and disposed of together with any dead individuals (see Section 12.2).
- Any individuals located in the weaning effluent channels will be removed, recorded on the check sheet EZ5RS4 and disposed of (refer to Section 12.2).
- All other effluent and channels will be checked weekly for abalone, which will be removed and disposed of (refer to Section 12.2).
- A strict process will be followed to exterminate and dispose of any dead abalone (along with individuals found in effluent channels and settlement pump).
- Within the weaning trays, the mesh on the effluent pipes will be cleaned daily, ensuring no individuals are able to escape. A standard cleaning operating procedure will be followed.
- A secondary stand-up pipe will be included in the grow-on tanks to minimise the risk of juvenile abalone escaping via the effluent channels. Any individuals located outside of the tanks will be recorded and disposed of (refer to Section 12.2).

Monitoring records of escapees will allow the farm to accurately gauge if any improvements are required to any of the tanks in order to reduce the risk of stock escaping.

9.2 Broodstock

In order to ensure good stock management it is important that the broodstock (stud animals) be managed in a way to prevent inbreeding and ensure the economically desirable traits (such as growth rate and disease resistance) are maintained or improved. For this purpose, I&J is part of a co-operative breeding programme with five other farms in the area to ensure that the genetic integrity of the abalone stock is maintained.

The transfer of broodstock between farms will be strictly managed through a set of quarantine rules. Quarantining individuals with co-habitants before adding them to a population will be routine and an effective way of monitoring and removing the threat of adding disease/abnormalities to farm stock. The following quarantine rules will apply to the transfer of individuals between farms:

- The quarantine area will be entirely isolated from the other areas.
- A co-habitation trial in the quarantine area will be undertaken with any new introductions.
- All animals that appear or behave abnormally, or die, during the trial will be submitted for diagnostic examination.
- Co-habitants will be sampled and sent for external health assessments.
- If any of the diagnostic or health examination results on either the cohabitants or broodstock provide evidence for or a strong likelihood of primary infectious disease, the broodstock will be rejected and destroyed, and disposed of at a registered landfill waste facility.

- No animals other than the broodstock and cohabitants will be held in the quarantine area during the cohabitation trail.
- Access to the quarantine area will be controlled and limited to only essential staff. Protective clothing used by these staff shall not leave the quarantine area.

9.3 Biosecurity, disease and pest control

In order for I&J to ensure the sustainability and health of its abalone farm investment, all measures will be taken to prevent the introduction and spread of pathogens (disease) and pests (parasites). In this regard, I&J will adhere to its biosecurity policy / standard (i.e. Biosecurity and Animal Welfare Policy), which it developed based on the Abalone Farmers Association of South Africa biosecurity standards (prepared by Amanzi Biosecurity). In addition to this policy, I&J will adhere to a documented Biosecurity Manual, which will be revised annually. The following is a brief overview of the measures that will be put in place to ensure there is no cross contamination from any external or internal sources (extracted from the farms Animal Welfare Policy):

Organisation: The farm will undertake all the necessary activities, and in such a manner, to meet the requirements of the biosecurity standard. All personnel responsible for implementing the biosecurity standard will be designated and have the authority and resources to carry out their assigned duties. This will include the ability to implement, maintain and improve the biosecurity standard, including the implementation of any identified corrective action to the biosecurity standard.

I&J will delegated a responsible person as the Biosecurity Co-ordinator who is tasked with ensuring that the biosecurity plan is implemented and maintained. In addition a Biosecurity Team will ensure the biosecurity measures are in place during working and non-working hours. The Biosecurity Co-ordinator will have access to upper level management in order to facilitate the formulation of policies, and implementation and updating of the biosecurity plan.

Document Control: All documents used in biosecurity will be approved by management and Biosecurity Coordinator, prior to distribution and implementation.

A record of current documentation in circulation will be kept to ensure no obsolete documents are in use. All policy or procedure documents will be kept on site at all locations where the specific use is prescribed.

All documents will be uniquely identifiable and include the date and issuing authority information.

Record Keeping: All documents pertaining to the fulfilment of management, technical requirements, audits, corrective actions and preventative measures pertaining to biosecurity will be filed for a period of five years. I&J will have measures in place to protect records from loss or amendment.

Environmental Management: Policies and procedures will be put in place to maintain favourable environmental conditions for the abalone, which minimises stress and maximises growth rate. These will include but are not limited to:

- Guaranteed constant power supply. In the event of primary supply failure, auxiliary supply will be supplied from a generator cluster on auto start sequence.
- Policies and procedures that ensure the constant functioning of critical pumps, blowers and equipment to secure continual supply of sufficient water and air to the cultured abalone.
- Policies and procedures that ensure that the abalone stocking densities are maintained at levels that do not negatively affect the welfare of the environment or the abalone.
- Policies and procedures that ensures best practice in terms of batch management ensuring minimal cross-contamination.
- Policies and procedures that minimise the stress on abalone during any handling procedures.

9.3.1 Purchase of supplies and services

- I&J will adhere to its current policies and procedures that ensure that suppliers and service providers do not compromise biosecurity.
- Preference will be given to suppliers and service providers accredited to ISO or equivalent standards for HACCP.
- I&J will maintain a list of approved suppliers and service providers.
- All suppliers and service providers will be assessed before approval to establish if they pose a risk to biosecurity.
- Records will be kept of all suppliers and services.

9.3.2 Preventive Action

- I&J will continually monitor operations for deviation from policies by conducting independent annual audits on the relevant processes.
- I&J will periodically conduct internal audits, as stipulated in the biosecurity plan, of all activities to verify compliance with the biosecurity plan.
- Records will be kept of all audit processes, findings and corrective action.
- Biosecurity training will be held on a three monthly basis.

9.3.3 Corrective action

- I&J will comply with its current corrective action procedure should any deviation from the biosecurity plan occur.
- An investigation will be undertaken of the cause, as well as measures to prevent any recurrence of the deviation.
- Additional measures, including surveillance and quarantine, will be considered for implementation when a deviation is known to increase a disease risk.

9.3.4 Reviews

- I&J Management will review the biosecurity plan annually taking into account all policies and procedures.
- Reviews will include reports, audit findings, corrective action and preventive measures.

- All actions taken following the review will be recorded and carried out within an agreed time frame.

9.4 Technical Aspects of Biosecurity

9.4.1 Contact Areas

- The abalone farm will be securely fenced and normal access is controlled through one security point.
- Only one sea launching site access will be available and access is allowed by prior arrangement with management under special circumstances.
- All access points to the farm and internally to different farm sections will contain Hygiene Control Points (HCP).
- All primary production areas will have a HCP with a hand and boot wash facility at their entrance.
- Only abalone will be cultivated in the production areas.
- Packing of live abalone will take place in a separate contact area.
- No other species will be packed in the same contact area at the same time.

9.4.2 Hygiene Control Points (HCP)

- The HCP located at the farm entrance will consist of a vehicle sanitation station.
- The following will be provided at all HCP at the primary access:
 - > Foot baths with approved effective concentration of disinfectant for boot sanitation.
 - > Hand washing facilities with scrubbing and rinsing basins supplied with approved disinfectant soap.
 - > Continuous potable freshwater plumbed and supplied for washing of hands.
 - > Secondary disinfectant spray for hands.
- The stations will be cleaned daily including replacement of footbath with clean water and disinfectant.
- All production areas will have at least one HCP.
- A minimum of hand washing and foot baths will be present at all production HCPs.
- Records will be kept of any changes or maintenance to any HCP station.

9.4.3 Access Control

- All personnel and visitors will only be allowed access to contact areas once passing through the applicable HCP facilities.
- All visitors will be questioned and recorded as to their recent activities with regard to other contact areas.
- Access will only be granted if a visitor is deemed not to pose an unacceptable risk.
- All visitors will be accompanied by authorised personnel.

- All areas with restricted access will be clearly marked, and only authorised personnel will be allowed access.
- A record of all authorised personnel will be kept on site.
- All visitors and personnel will be clearly identifiable and distinguishable at all times when within a production area.
- All visitors passing through the production area will be supplied with water boots and an overcoat.

9.4.4 Protective Clothing

- I&J will adhere to its current policies and procedures with regard to the use of protective clothing.
- Personnel will be provided with suitable overalls, boots and other protective clothing.

9.4.5 Fomites cleaning and disinfection

- I&J will adhere to its current policies and procedures regarding the disinfection and cleaning of all fomites (i.e. objects or materials which are likely to carry infection).
- Only fomites that can be effectively disinfected will undergo disinfection for the purpose of reuse.
- Disinfection will take place only with approved registered disinfectants in accordance with manufacturer's recommendations.
- Any fomite used in primary production areas will be used only within that contact area.
- Where possible fomites made of non-porous materials will be used.
- All fomites used in direct contact with abalone will be of a nature that minimises the risk to the abalone.
- I&J will adhere to its current policies and procedures for cleaning tanks.
- When stock is being moved it will always be placed into clean tanks, which have been disinfected prior to use.

9.4.6 Vector and Pest Control

- I&J will adhere to its current policies and procedure for prevention and control of pest and vectors in all contact areas.
- No pets will be allowed into any production areas.

9.4.7 Water and Air Supply

- I&J will adhere to its current policies and procedures for maintenance and hygiene of the delivery and effluent systems, including pumps, header tanks, channels and pipes.
- All activities that affect water quality or quantity will be monitored and recorded.
- Incoming water will have no contact with effluent water, unless the farm goes on to recirculation as is required during a red tide or external coastal pollution event.

- All pumps and blowers will be housed in enclosed concrete buildings and shall not be exposed to any aerosols or disease containing substances.

9.4.8 Fixed Structures

- I&J will adhere to its current policies and procedures to ensure that the hygiene standards are maintained in all buildings and abalone housing units.
- All buildings in production areas will be structured in such a way so that hygiene within the building can be maintained.
- Floors and walls in buildings will be non-porous so that disinfection is possible.

9.4.9 Stock Movements

- All abalone stock transferred to I&J from an outside source will only be undertaken once an appropriate health examination is undertaken by Amanzi Biosecurity (or other) and it does not detect any significant disease or pest.
- All such abalone will be moved into a quarantine area for a period of eight weeks, where it will be monitored for any signs of disease.
- Only abalone that are declared disease free after this process will be allowed in the production area.
- Any livestock returned due to disruption in shipment will be placed in a dedicated contact area that is not in contact with the primary production area for holding until repacked for live export.

9.4.10 Stock Management

- All abalone in the production area will be documented in terms of batch and size class.
- I&J will adhere to its current policies and procedures to manage crawl-outs and escapees.
- I&J will adhere to its current policies and procedures to manage disposal of any dead animals.
- No abalone will be disposed of through effluent channels.
- Any mortalities will be recorded on a mortality sheet, and disposed of accordingly (see Section 12.2).

9.4.11 Broodstock Management

- I&J will adhere to its current Policies and procedures to monitor the welfare of broodstock.
- Broodstock will be kept in a completely separate production area.
- All broodstock will be clearly marked and identifiable.
- Newly acquired broodstock will be quarantined for eight weeks.
- Any mortalities in the broodstock will be investigated and will undergo a health examination.

9.4.12 Surveillance

- I&J will continue to subscribe to an independent health monitoring programme to be conducted bi-monthly by Amanzi Biosecurity (or other).
- I&J will adhere to its current policies and procedures to monitor day to day health internally.
- Records will be kept of all health monitoring reports.
- All supervisor level personnel working in production areas will be trained to identify signs of disease. Records will be kept of this training.
- Any negative changes in production parameters shall be investigated for the presence of disease. If any of these changes cannot be attributed to management or environmental changes or the cause is unknown, the samples will be submitted for diagnostic examination by a qualified veterinarian. Any abalone infected with a non-endemic or emerging disease will be destroyed.
- Abalone or products from a diseased population will be processed separately from any other abalone.
- All contaminated waste from diseased abalone, including shells, will be disposed of in such a manner that it does not pose any risk of transmission or environmental contamination, and will be collected in sealed leak proof container marked bio hazardous waste.
- I&J will adhere to its current policies and procedures for the disposal of production effluent from diseased abalone in designated quarantine areas.
- During an emergency event (e.g. an algal bloom), a Reactive Response Plan will be implemented as part of the biosecurity manual.

9.5 Feed

The method of handling feed is important for both the health of the stock and the surrounding environment. The following measures will be implemented to ensure that both the health of the stock and the adjacent environment are preserved.

- Only feeds that have been approved and checked for aspects relating to collection, harvest, storage, transport and production will be used.
- Only formulated feeds that have ISO or equivalent accreditation, which provides assurance of traceability and quality control for all ingredients, will be used.
- All records pertaining to delivery and use of feeds will be recorded.
- I&J will adhere to its current policies and procedures for the storage of formulated feeds.
- I&J will adhere to its current policies and procedures for the storage and production of fresh feeds.
- No fresh feed will be collected and harvested in areas in close proximity to any processors or other producers.
- Fresh feed will only be harvested from a sustainable source.
- Areas of harvest will be well-managed and documented.
- Right holders for concession areas will be compliant with all local laws.
- I&J will adhere to its current policies and procedures for the use of algal cultures in the hatchery.

- I&J will adhere to its current policies and procedures for the use of all feed.

10 FIRE AND SAFETY

- I&J's fire defence system at Danger Point will include the use of fire extinguishers, smoke detectors and pyroelectric (or passive) infrared (PIRs) sensors. During a fire alarm (smoke detectors and PIRs) the standby person will receive a fire alarm notification. The responsible person will then follow the Standard Operating Procedure.
- I&J will also have a designated trained fire team. This team will undergo monthly firefighting training. In the event of a fire which, the team cannot extinguish, all personnel will be evacuated and the local fire brigade will be contacted to attend to the fire.
- Evacuation procedures and assembly points will be posted at all departments.
- Two monthly evacuation drills will be conducted.
- In the case of an emergency, a standby water trailer, which uses the hoses for tank cleaning, will be available.
- Closedown procedures will be in place and daily checklists will be completed to minimise the risk of fire in the work place.
- All fire extinguishers, smoke detectors and PIRs will be on a fixed maintenance schedule to ensure they are serviced and tested regularly by an accredited company.

11 MAINTENANCE AND REFUELLING

- All vehicles and equipment will be kept in good working order and serviced regularly. Leaking equipment will be repaired immediately or removed from the site.
- Where reasonably practical, maintenance activities will only be undertaken in a demarcated maintenance area.
- When servicing equipment, drip trays will be used during the collection of waste oil and other lubricants.
- The washing of equipment will be restricted to urgent maintenance requirements only. All washing will be undertaken in a dedicated maintenance area, and these areas will be equipped with suitable wastewater collection measures. The use of detergents for washing will be restricted to low phosphate and nitrate containing, low sulphur-type detergents.
- Where reasonably practical, plant and vehicles will only be refuelled in a demarcated refuelling/servicing area using suitable equipment (e.g. petrol funnels).
- The surface under the refuelling/servicing area will be protected against pollution (e.g. the use of drip trays).
- There will always be a supply of absorbent material readily available to absorb/breakdown spills. The quantity of such materials will be able to handle the total volume of the hydrocarbon/hazardous substance stored on site.
- No re-fuelling will occur within 30 m of the high water mark.

12 WASTE MANAGEMENT

I&J will adhere to its current procedures for the disposal of chemical, biological, non-biological and effluent waste, as detailed below.

Employees will receive annual training to ensure all waste is properly disposed of and that chemical and hydrocarbon spills are prevented, and where they cannot be prevented they are managed. In the event of an accidental leak or spill, all employees will thus be aware of the procedure to be followed when dealing with the leak / spill. Leaks or spills will be reported to the ECO immediately so that the appropriate measures can be put in place to mediate the leak / spill. In the event of a large spill, the ECO will inform the local authority's Pollution Control Department and Fire Brigade immediately.

- In the event of a hydrocarbon spill, the source of the spillage will be isolated and the spillage contained. The area shall be cordoned off and secured.
- There will always be a supply of absorbent material readily available to absorb/breakdown spills. The quantity of such materials shall be able to handle the total volume of the hydrocarbon/hazardous substance stored on site.
- Hydrocarbon contaminated material and / or soil shall be collected and stored in a purpose built bunded area until future disposal.
- The relevant Material Safety Data Sheets for all hazardous chemical substances (as defined in the Regulations for Hazardous Chemical Substances) will be on site. Procedures detailed in the Material Safety Data Sheets will be followed in the event of a spill or emergency situation.
- A professional service provider will be contracted to clear the area affected by the spill, if required.

12.1 Hydrocarbon Waste

12.1.1 Chemicals

I&J will adhere to its current Diesel and Oil Spill Procedure, as described below.

- Chemicals will be stored in a chemical storage facility.
- Chemicals will be issued by staff trained in Hazardous Chemicals and Substance Control.
- Incoming and outgoing chemicals will be logged and linked with monthly chemical audits to monitor leakage and theft.
- Material Safety Data Sheets will be available for all chemicals stored at the facility.
- PPE for the handling of chemicals will be available at the facility.
- A chemical spill shower will be situated in front of the facility in case of chemical contact with handler.
- Used oil, lubricants, cleaning materials, etc. from the maintenance of vehicles and machinery will be collected in holding tanks prior to disposal.
- No hydrocarbon and hazardous waste will be burnt or buried on site.
- I&J will keep on file all disposal certificates issued by the hazardous waste disposal facility.

12.1.2 Diesel

- Diesel tanks will be located in a cement building, consisting of a cement floor, diesel tanks stand, and a bund wall surrounding the tanks. The local authority certification will be displayed.
- The volume of the bund area will be large enough to contain the total volume of the diesel in the tanks (110% bunding).
- The building will include a sump so that any spills in the bund can be drained and disposed of in the correct manner.
- Accurate meters will monitor diesel usage, which will ensure that all fuel is accounted for and should a small leak arise, it can be detected quickly, with the appropriate response.
- Fuel taps to generators will be closed off when generators are filled with diesel to minimise the potential for spills or leakages.

12.2 Biological Waste

I&J will adhere to its current protocols to manage the biological waste generated by the abalone farming. These protocols are centred on minimising the impact on the coastal environment.

Organic sludge will be removed twice monthly from channels and taken to a dedicated desiccating area to decompose naturally.

Abalone shells and fresh mortalities will be removed, placed in plastic bags, buckets or waste bins, and transported to the municipal landfill (comprehensive operating procedures are in place for this) for disposal, ensuring no farmed abalone, even dead, are released into the wild population.

As mentioned previously, checklists (for dead abalone and escapees) will be used to record the number of escaped or deceased abalone. Documents will be signed when animals are removed from site, complimented with a freezer checklist, which will ensure that any individuals leaving the site are recorded.

All biological waste will be transported to the local municipal licenced landfill for disposal.

12.3 Solid Waste

I&J's waste management system adopts the core principle of reduce, re-use and recycle waste, working towards zero waste to landfill. A solid waste control and removal system has been established in order to prevent the spread of waste in, and beyond, the operational area.

- An integrated waste management approach will be used, based on the principles of waste minimisation, reduction, re-use and recycling of materials. Containers for recycling of at least glass, paper, metals and plastics will be provided at relevant locations. Waste storage containers will be covered, tip-proof, weatherproof and scavenger proof. The waste storage area will be fenced off to prevent wind-blown litter.
- Bins (with lids) of sufficient number and capacity will be provided at all places of work to store solid waste produced on a daily basis. The lids will be kept firmly on the bins at all times.
- Bins will be emptied on a weekly basis or more frequently as required.

- No waste material or litter will be burnt or buried on site.
- All non-recyclable solid waste will be disposed of off-site at an approved landfill site.
- All recycle solid waste will be collected by approved recycle waste contractors.

12.4 Effluent

Although the effluent seawater will only contain small quantities of waste feed, abalone faeces and dissolved nutrients, the correct disposal of this effluent is imperative for the farm and adjacent marine ecosystem. The majority of effluent water comes directly from the grow-out units containing abalone, which themselves are highly sensitive to water quality. This ensures that the effluent is relatively innocuous. Danger Point is located on a highly turbulent and dynamic section of coastline, ensuring quick dilution and dispersion of effluent.

Effluent outflows will be monitored as indicated below in order to ensure no decline in the receiving water quality

12.4.1 Daily Monitoring:

12.4.1.1 Phytoplankton Monitoring:

Red Tide and consequently the increased dinoflagellate and diatom concentrations can lead to irritability of the gills of the abalone and in worst cases elevated stress levels and mortalities. Some dinoflagellate species are known to produce and release toxins which are harmful when ingested and absorbed by abalone.

Water samples will be taken every morning at Pump house 1 and analysed. The sampling frequency will be increased if cell counts are elevated. As of 16 January 2017, Amanzi Biosecurity has been contracted to conduct daily sampling and analysis of incoming water. Results will be sent daily to the Farm Manager for review and necessary action if required.

Testing for the following harmful dinoflagellates will be undertaken: *Akashiwo sanguinea*, *Alexandrium spp*, *Dinophysis acuminata*, *Dinophysis fortii*, *Dinophysis hastate*, *Dinophysis mitra*, *Dinophysis rotundata*, *Dinophysis tripos*, *Gonyaulax pollygramma*, *Gonyaulax spinifera*, *Karenia cristata*, *Karenia mikimotoi*, *Karenia spp*, *Lingulodinium polyedrum*, *Protoceratium reticulatum*, *Pseudo-nitzschia australis* and *Pseudo-nitzschia spp*.

12.4.1.2 Temperature, DO, pH and Ammonia

12.4.1.2.1 Settlement Tanks

Temperature and Dissolved Oxygen (DO) will be tested daily in all settlement tanks, as these parameters have a direct influence on behaviour, feeding patterns and the well-being of the animals. The continuous monitoring allows for trending of results which assist the farm management to be alerted when levels fluctuate and differ from the norm. The farm will adjust the feeding and management regime as is necessary to keep the parameters within the norm.

12.4.1.2.2 Grow-on

Temperature, pH, DO and Ammonia will be tested daily in two randomly selected grow-on baskets. Measurements will be taken daily for one week in the same baskets in the same tank. Thereafter, another set of tanks will be selected at random. These parameters have a direct influence on animal behaviour, feeding patterns and the well-being of the animals. Ammonia level results give an indication of the amount of waste present in baskets and the influence of degrading food products on the abalone. The farm will constantly monitor the Ammonia results, in combination with temperature in the tanks and in the incoming water, and if necessary the farm will adjust the feeding and management regime.

12.4.2 Monthly Monitoring

Monthly chemical analysis will be conducted by an independent laboratory (CSIR Stellenbosch) in accordance with the Coastal Waters Discharge Permit. Incoming and effluent water will be compared for variations in the following:

12.4.2.1 Total Ammonia Nitrogen (NH₃-N)

Total Ammonia nitrogen (NH₃-N) will be monitored in both the incoming and effluent waters in accordance with Coastal Waters Discharge Permit regulations. Incoming water monitoring points will include Header Tanks 1, 2 and 3. Outgoing water points will include Post Ulva effluent, Recirculation effluent and Pre-weaning effluent. Records of results (certificates) will be kept on site.

The upper annual median concentration limit for total ammonia nitrogen in effluent or receiving water beyond mixing zone, as prescribed in the Coastal Waters Discharge Permit, is <0.6 mg/L. If levels above 0.6mg/L are encountered, remedial action will be taken and adjustments made.

12.4.2.2 Total Suspended Solids (TSS)

Total Suspended Solids will be measured in both the incoming and the effluent waters at the same locations as for ammonia (see above). The upper annual median concentration limit for Total Suspended Solids in effluent or receiving water beyond mixing zone, as prescribed by the Coastal Waters Discharge Permit, is <0.5 mg/L. If levels above 5 mg/L are encountered, remedial action will be taken and adjustments made.

The following physical and chemical properties will also be tested and results kept on site:

- Electrical Conductivity.
- pH (Lab) (20°C).
- Chemical Oxygen Demand.
- Turbidity.
- Total Dissolved Solids (Measured).
- Zinc as Zn Dissolved.
- Nitrate (NO₂) + Nitrite (NO₃).
- Phosphate (PO₄).

12.4.2.3 Adjustment of operational practices

- The annual median concentration of ammonia and TSS will be monitored and operational practices will be adjusted if:
 - > the annual median concentration of ammonia exceeds 0.6 mg/L as per the Abalone Aquaculture Dialogue Standards, the South African Water Quality Guidelines or the limits as set out in the CWDP conditions to reduce nutrient levels in the effluent to below the guideline values. This can be achieved by better control of abalone feeding regimes, or increasing the number of seaweed production ponds through which the effluent is run before discharge.
 - > the annual median concentration of TSS exceeds 5 mg/L, as per the Abalone Aquaculture Dialogue Standards or the limits as set out in the CWDP conditions in order to reduce TSS levels in the effluent to below the guideline values. This can be achieved by introducing filters to remove the TSS before discharge of the effluent or by adjusting feeding rates.

13 NOISE MANAGEMENT

13.1 General Operation

- Machines that are used intermittently will be shut down between work periods or throttled down to a minimum and not left running unnecessarily. This would reduce noise and conserve energy.
- All acoustic covers of engines and compressors will be kept closed when in use or idling.
- All doors to blower rooms, pump houses and generator rooms will be closed at all times.
- Other non-routine noisy activities, such as start-up and maintenance, will be limited to day-time hours, where possible.
- A noise complaints register will be kept on site.

13.2 Noise Monitoring

A noise monitoring programme will be implemented as specified below.

- A noise monitoring programme will be implemented prior to and post each development phase. The seven sites included in the baseline survey (Airshed, 2018¹) will be incorporated in the environmental noise monitoring programme.
- In the event that repeat noise related complaints are received, short term (24-hour) ambient noise levels will be measured as part of investigating the complaints. The results of the measurements will be used to inform any follow up interventions. The investigation of complaints will include an investigation into equipment or machinery that likely result or resulted in noise levels annoying to the community.
- The following procedure will be adopted for all noise surveys:

¹ Airshed Planning Professionals (Airshed). 2018 Environmental Noise Specialist Study for the proposed expansion of the I&J abalone farm at Danger Bay near Gansbaai. May 2018.

- > A trained specialist will be contracted to design and conduct any noise surveys.
- > Sampling will be carried out using a Type 1 SLM that meets all appropriate International Electro Technical Commission (IEC) standards and will be subject to annual calibration by an accredited laboratory.
- > The acoustic sensitivity of the sound level meter (SLM) will be tested with a portable acoustic calibrator before and after each sampling session.
- > Samples of 30 min to 24 hours in duration and sufficient for statistical analysis will be taken with the use of portable SLM's capable of logging data continuously over the time period. Samples representative of the day- and night-time acoustic environment will be taken.
- > The following acoustic indices will be recorded: LAeq (T), statistical noise level LA90, LAFmin and LAFmax, octave band or 3rd octave band frequency spectra.
- > The SLM will be located approximately 1.5 m above the ground and no closer than 3 m to any reflecting surface.
- > Efforts will be made to ensure that measurements are not affected by the residual noise and extraneous influences, e.g. wind, electrical interference and any other non-acoustic interference, and that the instrument is operated under the conditions specified by the manufacturer. Note: It is good practice to avoid conducting measurements when the wind speed is more than 5 m/s, while it is raining or when the ground is wet.
- > A detailed log and record will be kept on site. Records will include site details, weather conditions during sampling and observations made regarding the acoustic environment of each site.

13.3 Maintenance

- A maintenance plan will be implemented to ensure there is regular and effective maintenance of equipment, generators and plant. This will include the regular inspection and, if necessary, replacement of intake and exhaust silencers. Any change in the noise emission characteristics of equipment will serve as trigger for withdrawing it for maintenance.
- Cutting tools and saws will be kept sharp to reduce frictional noise.
- Conveyor rollers, trolley, etc. will be sufficiently lubricated.
- Noise generated by vibrating machinery and equipment with vibrating parts will be reduced through the use of vibration isolation mountings or proper balancing.

13.4 Traffic

- Individual vehicle engine, transmission and body noise/vibration will be minimised, as far as is reasonably possible. This will be achieved through the implementation of an equipment maintenance programme. Contractors will be required to implement an equipment maintenance programme.
- Unnecessary idling will be minimised, as far as is reasonably possible.
- The need for trucks/equipment to reverse will be minimised (e.g. through appropriate access road, parking and turning area design), as far as a reasonable possible. This will reduce the

frequency at which disturbing but necessary reverse warnings will occur. Alternatives to the traditional reverse 'beeper' alarm, such as a 'self-adjusting' or 'smart' alarm, will be considered. These alarms include a mechanism to detect the local noise level and automatically adjust the output of the alarm is so that it is reduced to only 5 to 10 dBA above the noise level near the moving equipment.

14 TRAFFIC MANAGEMENT

- An access policy will be established and enforced for all staff and suppliers to ensure that all vehicles heavier than two tonnes access the site via the extension of Van Bloemenstein Street (if authorised).
- Traffic, specifically heavy vehicle traffic, will be limited to daytime hours of between 06:00 and 18:00, as far as possible.
- Private road surfaces will be regularly maintained to limit potholes, etc.
- A maintenance plan will be implemented to ensure there is regular and effective maintenance of vehicles. Any change in exhaust emission characteristics will serve as trigger for withdrawing it for maintenance.

15 MAINTENANCE MANAGEMENT PLAN

15.1 Introduction

Infrastructure in the coastal zone is susceptible to damage, especially during storm events, and thus may need to be repaired and / or replaced.

These maintenance activities may trigger Listing Notice 1, Activity 19 (GN R983, as amended by GN No. 327 of 7 April 2017) of the EIA Regulations 2014, as amended. This activity refers to the infilling, depositing, excavating, etc., of more than 5 m³ of any material into or from the sea, seashore, littoral active zone or a distance of 100 m inland of the high water mark. However, where such activities are undertaken in accordance with a Maintenance Management Plan (MMP) agreed to by the relevant competent authority, this listed activity would not be applicable. Thus, this section has been compiled in order to facilitate the maintenance of infrastructure within the coastal zone that may require the removal or depositing of 5 m³ of soil, sand, shells, shell grit, pebbles or rock.

15.2 Maintenance activities and impacts

In terms of DEA&DP's "Information Document for the Development of a Maintenance Management Plan for a Watercourse" maintenance activities can broadly be defined as follows:

Maintenance category	Types of maintenance activities	Frequency	Responsibility
Category B: Emergency repairs – urgent action required to manage risk and damage to assets	Repair, removal and / or the replacement of damaged infrastructure. Infrastructure in the coastal zone (e.g. intake facility and abstraction pipelines) may be damaged and thus may need to be repaired and/or replaced. Where	In the event of infrastructure damage	I&J is the responsible party implementing the MMP.

Danger Point Aquaculture: Operation EMPr

Maintenance category	Types of maintenance activities	Frequency	Responsibility
	infrastructure cannot be repaired in situ, it would be remove and replaced. This may entail further modifications to the seabed / intertidal area (e.g. installation of concrete pedestals and associated drilling and cement work).		Work may be undertaken either by I&J and / or an appointed Contractor.

These activities may require modifications in the coastal zone, e.g. excavation and / or rock breaking technology, cement work (e.g. fastening of pedestals to substrate), etc. These activities will result in localised and periodic disturbance around the intakes and along the pipelines, which will include suspension of sediments, increased turbidity and potential smothering of biota during re-deposition, elimination or disturbance of benthic biota both within and along the pipeline, and elevated particulate matter and algal wrack following cleaning of the screens.

In addition, maintenance of coastal infrastructure may involve heavy vehicles and machinery driving on the shore with the associated potential for accidental spillages or leakages of fuel, chemicals or lubricants. In addition, noise and vibrations from excavation machinery, percussion drilling or rock breaking may have an impact on surf zone biota, marine mammals and shore birds in the area.

It should be noted that no clearance or removal of sediment at intake structures (i.e. Category A Maintenance Category) will be required due to the rocky nature of the offshore environment.

15.3 Method Statement

This section provides the environmental specifications which will be implemented in order to avoid or minimise any impacts from maintenance activities in the coastal zone.

15.3.1 Authority notification

The Overstrand Municipality (Environmental Management) will be notified at least seven working days before the commencement of any maintenance activity and at least three working days following the completion of the activity.

15.3.2 Environmental Awareness Plan and Training

Before the commencement of any maintenance activities in the coastal zone, I&J staff and / or contracted construction personnel will attend an environmental awareness-training course presented by the ECO. As a minimum, training will include:

- Explanation of the importance of complying with the MMP.
- Discussion of the potential environmental impacts of maintenance activities.
- Employees' roles and responsibilities, including emergency preparedness.
- Explanation of the specifics of the MMP and its specification.

15.3.3 Access in Intertidal Areas

- Existing access routes will be used as much as possible. In cases where none exist, a route will be created through the most degraded area avoiding sensitive / indigenous vegetation areas.
- Disturbance of the intertidal and subtidal areas will be restricted to the smallest area possible. Once the maintenance site is determined, the area located outside of the site will be regarded as a 'no-go' area.
- Traffic in the intertidal area will be restricted to the minimum required.
- Any work requiring access in the intertidal area by machinery and vehicles will be undertaken at slow speed and with clean vehicles (no leaks, etc.) and along a single track.
- Traffic in the intertidal area will be restricted to the minimum required, and the dedicated access route will be clearly demarcated.

15.3.4 Waste Management

- Responsible management of pollutants will be implemented through ensuring that the handling and storage of any pollutants / waste occurs outside of the coastal zone.
- No waste (including excavated material) will be dumped in the intertidal and subtidal zones.
- All maintenance-related waste will be removed from the coastal zone. Any excavated material (e.g. sand and stones) may, however, be levelled to follow the natural profile above the high water mark.
- Waste management will comply with the specifications in Section 12 (refer to Section 12.1 for Hydrocarbon Waste and Section 12.3 for Solid Waste).

15.3.5 Rock-breaking technology

If bedrock removal is required during installation, chemical rock breaking technology will be used, which will comply with the following specifications:

- Percussion drilling and rock breaking will be restricted to the absolute minimum required.
- Onshore rock breaking will not be scheduled when shore-birds are breeding in the immediate vicinity.
- All rock-breaking activities will be conducted in accordance with recognised standards and safety requirements. Rock-breaking will only be undertaken by a registered blaster once the relevant blasting permit has been obtained.
- Visual observation will be undertaken prior to rock breaking ("pre-blast" survey) to ensure there are no marine mammals and flocks of diving seabirds present in the immediate vicinity (500 m radius) of the site.

15.3.6 Maintenance and Refuelling

Maintenance may involve heavy vehicles and machinery driving on the shore for the installation or removal of coastal infrastructure. Maintenance and refuelling of vehicles and machinery will comply with following:

- All vehicles and equipment will be maintained in good working order so that hydrocarbon leaks or spills are minimised.
- Maintenance or refuelling activities will be undertaken in a demarcated maintenance or refuelling area that is more than 20 m above the high water mark.
- The surface under the refuelling/servicing area will be protected against pollution (e.g. the use of drip trays).
- Drip trays will be provided for stationary plant (such as compressors, pumps, generators, etc.) and for "parked" plant (e.g. mechanised equipment).
- A supply of absorbent material will be readily available to absorb / breakdown spills. The quantity of such materials will be able to handle the total volume of the hydrocarbon / hazardous substance stored on site.
- Hazardous waste (used oil, fuel, etc.) will be contained and correctly disposed of offsite (see Section 12.1).

15.3.7 Cement and Concrete Batching

The maintenance or replacement of the intake structures and abstraction pipelines may require the installation of additional concrete pedestals, which may require drilling and cement work in the coastal zone. Cement and Concrete Batching will comply with the following:

- The concrete batching activities will be located in an area of low environmental sensitivity to be identified and approved by the ECO. The mixing of concrete in the intertidal zone will be prohibited.
- Concrete mixing directly on the ground will not be allowed and shall take place on impermeable surfaces.
- The Contractor will ensure that water runoff from batching areas swills passes through a settlement system before being released or alternatively is directed into a conservancy tank.
- Unused cement bags will be stored undercover and away from surface runoff.
- Used (empty) cement bags will be collected and stored in weatherproof containers to prevent wind-blown cement dust and water contamination. Used cement bags will not be used for any other purpose and will be disposed of on a regular basis via the solid waste management system (see Section 12.3).
- All excess concrete will be removed from site on completion of concrete works and disposed of at a licence landfill site.
- Washing of the excess into the ground will not be allowed.
- All excess aggregate will also be removed from site.

15.3.8 Fire Control

- Fire control will comply with the specifications in Section 10.

15.3.9 Restoration and Rehabilitation

- All maintenance-related waste will be removed from the coastal zone (refer to Section 15.3.4 for details on waste management).
- Although active rehabilitation of intertidal communities is not possible, rapid natural recovery of disturbed habitats in the turbulent intertidal and surf-zone areas can be expected. On completion of the maintenance activities, any substantial sediment accumulations below or above the high water mark will be levelled to follow the natural profile as close as possible to the pre-maintenance state.

aconradie@overstrand.gov.za

re: comment on application for amendment of site development plan, I&J

c.c. louw@gsfa.com.na

Dear Me Alida Conradie

Herewith my comment (invited) on the proposed developments of I&J – as set out in a document dated 8 November 2019, sent to me by Town Planning, Hermanus.

As the owner of Erf 9 (5,4 ha), Birkenhead since 24.3.1988, I disapprove.

In a telephonic conversation from Windhoek with town planner Mr Schalk van der Merwe in Hermanus at the end of November, it was suggested that my family make contact with Mr Dirkie Kotzé. We will be at our holiday home in Franskraal in December and January and would like to visit the site of the proposed amendments. It is unclear from the lengthy document (58pp) what exactly will be happening at the site.

We therefore cannot approve.

Yours truly

Annatjie Louw

Dr. A.M. Louw

Email: Schalk Louw (son): louw@gsfa.com.na

(Please respond to his address – he is in the Cape at the moment - and not to the one of the Internet Café in Windhoek)

My cell no. in Namibia: 081 620 9325
in South Africa: 076 310 9106



FILE NO:	
SCAN NO:	
COLLABORATOR NO:	

11 DEC 2019

TP- D. Ahoort
440 (S. Jd Wano)

Alida Conradie - I & J ontwikkelings



From: Pierre Spengler <pierrespengler@gmail.com>
To: <aconradie@overstrand.gov.za>
Date: 2019/12/11 07:09 AM
Subject: I & J ontwikkelings

Geagte Meneer /Mev

Ek maak beswaar namens Everal B K , Erf No 5 teen enige verdere uitbreidings van I & J . Die huidige bedrywighede het alreeds n negatiewe effek op die eiendomme in Birkenhead .

Ek wil dan ook pertinent beswaar maak teen die voorgestelde pad op die AGTERSTE GRENS van Erf No 5 . Die Verkeer Sal Die Waarde Negatief beinvloed .

Die Verkeer sal dan ook Prominent Sigbaar Wees vanaf bykans die Hele Birkenhead .

Dit Moet Herlei word en Buite Sig wees van Birkenhead .

Vriendelike Groete

A P Spengler

Namens Everal BK Erf No 5

FILE NO:	
SCAN NO:	
COLLABORATOR NO:	

11 DEC 2019

TEL: 012-3454573
 FAX: 012-3453799
 E-MAIL: unique@yebo.co.za



P O BOX 88
 WINGATE PARK
 0153

10 December 2019

S Muller
 The Director: Infrastructure and Planning
 Overstrand Municipality
 P O Box 20
 HERMANUS
 7200
 E-mail: aconradie@overstrand.gov.za

FILE NO:	Rem 711 ✓
	Klipfontein
SCAN NO:	Form 711
COLLABORATOR NO:	1366954

WITHOUT PREJUDICE

Dear Mr / Ms Muller

**RE: APPLICATION FOR AMENDMENT OF SITE DEVELOPMENT PLAN AND
 CONDITIONS OF APPROVAL CONSENT USE AND DEPARTURE: PLAN ACTIVE
 IRVIN & JOHNSON LTD
 FILE REFERENCE : Rem 711 GRCA**

We are the owners of Erf no. 6, Birkenhead, Gansbaai and the neighbours to I&J.

We are registered as an I&AP to comment on the projects initiated by I&J under reference no: 720.09026.00001 & 2 which was used for the EIA process.

We studied your Motivation report and could not find the copy of the Zoning Certificate dated 20 June 2013 neither the initial letters of approval as referred to in your paragraph no. 3.2 "Zoning" Therefore, we cannot compare or confirm that the actual authorization do exist.

As stated in all our previous correspondence, we are utterly and totally against the development of an Abalone Processing Facility at I&J Danger Point and therefore against the application for amendment of site development plan and conditions of approval thereof.

Apart from all the negative issues pointed out previously, the proposed road (Alternative 2) via Van Bloemenstein Street and aligned along the existing power line on I&J Property is totally unacceptable. The suggested access road will border our property which will have serious noise, pollution and security implications. We are totally against a road with such volumes of traffic within 80 m from our dwelling on the North Western boundary of our property. That will be totally unacceptable. We as owners on that boundary were pacified by an option that this road would go straight into the I&J property and not skirt our boundary.

Based on the above, we take the strongest exception against the proposal of departing or deviating from the 30m building line along the border and existing power line to 15m.

At and around the entrance and guard houses, such deviations can be tolerated.

2/...

17 DEC 2019

-2-

We plead that this building line be retained at least at 30m West from the border fence along the existing power lines. This road will be used by at least 35 heavy vehicles per 12 hour cycle according to the Motivation Report studies. This will amount to in excess of 125 vehicle movements less than 80m away from our dwelling which is not acceptable. In the proposal reference is made to a berm which will mitigate the noise/pollution and security from these vehicles which is utter nonsense.

It is clear that Deca Consulting Engineers had not taken the incline gradient (North East) to the Van Bloemenstein access point into consideration, as it is substantial. Heavy vehicles would have to change gears, create more noise and pollution to get to the Van Bloemenstein access point. But as we all know, Messrs Deca Consulting will write what they are paid for! No berm will dampen or mitigate such noise and pollution. Again, the engineers will suggest and write what they are paid for.

The nameless composer of the Motivation Report really and truly leaves allot to be desired. As mentioned in previous appeals, information is strategically hidden in garble and misnamed to make the reader oblivious to the actual fact it portrays and its consequences.

The untruths / lies held in this motivation report is so numerous that attending to them would generate a significant document, which just again proves how un-democratic and un-realistic such reports are and that they have only one purpose and that is to "give the corporation what they want" even if it means lying and misconstruing the truth.

In closing, we again draw your attention to your reluctance and/or omission to attend to public access to the seashore for all South Africans and tourists. (Environmental Management Integrated Coastal Management Act (Act no. 24 of 2008)). Notwithstanding the Motivation Report referring to retaining a large part of the farm for conservation, conservation for what??

Yours faithfully.

**CARINA KRUGER AND JOHAN KOEN
OWNERS PLOT NO 6
BIRKENHEAD**

Our reference: PA18026/ML
Your reference: Rem 711 GRCAL
Application ID: 3330/2019

16 MARCH 2020

**THE MUNICIPAL MANAGER
OVERSTRAND MUNICIPALITY
P.O. BOX 20
HERMANUS
7200**

FOR ATTENTION: MR SCHALK VAN DER MERWE

Sir

REMAINDER FARM KLIPFONTEIN NO. 711: PROPOSED AMENDMENT OF THE SITE DEVELOPMENT PLAN, AMENDMENT OF THE CONDITIONS OF APPROVAL, CONSENT USE AND DEPARTURE

- I&J LIMITED

Reference is made to our application dated 12 September 2019, your letter dated 20 December 2019 and your email dated 11 March 2020. Three objections were received from C. Kruger and J. Koen, A.P. Spengler and Dr. A.M. Louw. The objectors are against the development of an Abalone Processing Facility at I&J Danger Point and therefore against the proposed land use application. Herewith a summary of the objection and our response thereto:

- One of the objectors (C. Kruger & J. Koen) could not find a copy of the zoning certificate in the notice of the application she received.

A copy of the zoning certificate dated 20 June 2013 is available on request.

- The objectors are against the proposed new road since the suggested road will border their property which will have serious noise, pollution and security implications. One of the objectors (C. Kruger and J. Koen) objects against the departure from 30m to 15m to accommodate the development of the road on their erf boundary. They do not object to the departure from 30m to 15m to accommodate the substation and security building on the eastern farm boundary. They want the road to be constructed on the 30m building line. According to the objectors no berm will dampen or mitigate the noise and pollution from the heavy vehicles visiting the farm on a 12-hourly cycle.

Firstly, a road can be constructed within a building line and no departure / deviation from the zoning scheme regulations' building lines are required for the new extension of Van Blommenstein Road. It

is evident that the objectors failed to understand this. The objectors did not object to the actual departure applied for on the eastern farm boundary to accommodate the substation and security building:

At and around the entrance and guard houses, such deviations can be tolerated.

The only existing access to Danger Point I&J is along the existing Marine Drive. The road is narrow and the restricted road verges do not present the opportunity to widen the road. If one considers the problems already experienced and recorded during the environmental impact assessment processes, there is no doubt that an alternative access via Van Blommenstein road is urgently required to allow all vehicles heavier than two tons to make use of this alternative road.

Due to the continuous current existing transport access complaints by residents on the Marine Drive access and those also raised during the impact assessment process for the abalone processing facility and expanded abalone farm, I&J have decided to upgrade a new access road along Van Blommenstein road and along an existing twin-track running along the eastern I&J border fence to gain access to the facility. This road is planned to be 6 metres (not 4 metres - as per the revised Environmental Authorization issued) with regular by-pass sections to allow for traffic flow. Vehicles smaller than two tons will use Marine Drive and those heavier than two tons will use the access via Van Blommenstein Road.

Based on the above, the alternative ways of access have been assigned a ranking ranging from "most preferred" (3) to "least preferred" (1) (see Table 2 below). The two Van Bloemenstein alternatives are scored slightly higher than the Marine Drive alternative. For Van Bloemenstein Alternative 2 (approved alternative), the key issues relating to the alignment adjacent to the powerline (namely noise and visual) can be mitigated by the construction of a noise barrier, while for Alternative 3 the clearance of vegetation and associated fragmentation related to the alternative down the middle of the property cannot be mitigated. Thus, considering all the above, access of heavy vehicles via the extension of Van Bloemenstein Street Alternative 2 adjacent the existing power line was considered to be the preferred alternative.

Table 2: Rating of access alternatives

Key environmental considerations	Alternative 1 (Marine Drive)	Alternative 2 (Van Bloemenstein adjacent to power line)	Alternative 3 (Van Bloemenstein down middle of property)
Vegetation	3	2	1
Heritage	3	2	2
Noise	1	2	3
Visual	2	3	3
Traffic / Safety	2	3	3
TOTAL	11	12	12

Key: 1 = Least preferred; 3 = Most preferred

In order to quantify the various noise sources and impact on the various noise receptors, a specialist noise impact assessment was conducted. The study stipulated that there would be a slight increase in the noise levels at Erf 5 (not the objectors' property which is erf 6) with the proposed additional entrance via Van Blommenstein road at Erf 5 due to the vehicles over two tons being rerouted along this road instead of gaining access via Marine Drive. Vehicle noise related to the processing facility and expanded abalone farm was thus found to indicate a slight increase in noise levels at Erf 5, the second highest noise receptor recorded at the various locations on the farm.

In managing noise specifically related to vehicle traffic, the Noise Impact Assessment stipulated that efforts should be directed at:

- Minimising individual vehicle engine, transmission, and body noise/vibration. This is achieved through the implementation of an equipment maintenance program. Service providers (i.e. kelp suppliers) and contractors should be required to implementation of an equipment maintenance programs.
- Maintain road surfaces regularly to potholes etc.
- Keep all roads well maintained and avoid steep inclines or declines to reduce acceleration/brake noise.
- Avoid unnecessary idling times at all times.
- Minimising the need for trucks / equipment to reverse. This will reduce the frequency at which disturbing but necessary reverse warnings will occur. Alternatives to the traditional reverse 'beeper' alarm such as a 'self-adjusting' or 'smart' alarm could be considered. These alarms include a mechanism to detect the local noise level and automatically adjust the output of the alarm is so that it is 5 to 10 dB above the noise level near the moving equipment. The promotional material for some smart alarms does state that the ability to adjust the level of the alarm is of advantage to those sites 'with low ambient noise level' (Burgess & McCarty, 2009). Also, when reversing, vehicles should travel in a direction away from NR's if possible.
- Limiting traffic, specifically heavy vehicle traffic to hours between 06:00 and 18:00 as far as possible.
- Where possible, other non-routine noisy activities such as construction, decommissioning, start up and maintenance, should be limited to day-time hours.
- A noise complaints register must be kept.

The detail can be found in the Noise Impact Assessment that was submitted with the application.

Access via the extension of Van Bloemenstein Street is preferred from a traffic engineering perspective in terms of safety for employees, surrounding residents and pedestrians to that of Marine Drive. The Van Bloemenstein Street alternative was also preferred when considering traffic noise, with the considered alternative road alignment down the middle of the I&J property resulting in the lowest noise levels for neighbouring receptors. However, the approved access way adjacent to the powerline can be mitigated to similar levels by the construction of a noise barrier / berm on the eastern side of the proposed road.

- **One of the objectors (C. Kruger and J. Koen) suggests that the motivation report is full of untruths / lies and information is strategically hidden in garble and misnamed.**

We fail to understand the comment of the objector and consider this comment to be non-factual and inappropriate. The motivation report was based on and included all information from specialist studies. The proposed development is fully described in detail. There would be no benefit to any consultant or the client to "hide" or "misname" information. This comment should be dismissed.

- According to C. Kruger and J. Koen the applicants display reluctance to attend to public access to the seashore for all South Africans and tourist (In terms of the Environmental Management Integrated Coastal Management Act (Act no. 24 of 2008) according.

This concern was adequately addressed in the EIA process and the response to the same concern raised will remain unchanged for the purposes of the land use application. We quote from EnviroAfrica's response submitted in the EIA process:

DEA&DP: Coastal Management acknowledges in its comment that the nature of the proposed activity warrants the siting thereof within the coastal protection zone. While the Section 63 of the ICM Act is supported in general there are two very important site-specific considerations that need to be considered with public access to the coast in the immediate vicinity of the Danger Point abalone farm.

The coastal public property along the abalone farm area covered by this BAR has virtually no beaches, no boat launching areas and is mostly very rocky and underwater at high tide. However, at low tide the area is accessible from the Birkenhead light house. The processing plant will be positioned within the work area of the expansion footprint as stipulated, only this area will have security fencing. The proposed expansion project would not change the current situation in terms of access to the coast. I&J has been informed of the "Overberg Coastal Access Audit and Pilot Study" and it has indicated that it will engage in this study and provide comment in this regard.

The statement that I&J denied access to the coast due to the development of the abalone farm is incorrect. The public coastal area along the larger I&J property has very little in the way of beaches, boat launching areas and is mostly very rocky and mostly underwater at high tide.

Historically I&J had allowed local inhabitants access across its property to the coast through a system of written permits issued on request and accompanied by a key to unlock a gate in the fence. This practice continued after the development of the abalone farm. Unfortunately, the presence of armed groups of abalone poachers detected crossing the property to access the sea and who threatened I&J staff and others forced a change. I&J was obliged to improve security and to avoid any members of the public falling foul of the armed poachers the concession to grant access was withdrawn. Unfortunately, the poaching problem has not been resolved and is still very prolific along that coast.

- The application indicates that a large portion of the subject property will be retained for conservation – conservation of what?

As contemplated in the respective EIA' Botanical Reports the remainder of the farm must be managed as a conservation area / nature reserve to ensure long-term maintenance of ecological process and functioning and contribute to regional conservation targets.

We trust that you find the above in order.

Yours faithfully



M. LERM Pr. PIn (A/158/2009)
PLAN ACTIVE



Western Cape
Government

Transport and Public Works



ROAD NETWORK MANAGEMENT

Email: Grace.Swanepoel@westerncape.gov.za

tel: +27 21 483 4669

Rm 335, 9 Dorp Street, Cape Town, 8001

PO Box 2603, Cape Town, 8000

TP- D. Thea
(S. J. van der Merwe)

REFERENCE: TPW/CFS/RP/LUD/ACC-21/30 (Job 27149)

ENQUIRIES: Ms GD Swanepoel

DATE: 5 November 2019

The Municipal Manager
Overstrand Municipality
PO Box 20
HERMANUS
7200

Attention: Mr SW van der Merwe

Dear Sir

FILE NO:	Rem 711 ✓
SCAN NO:	Klipfontein
	Farm 711
COLLABORATOR NO:	1356283

**REMAINDER FARM KLIPFONTEIN 711, DANGER POINT, GANSBAAI: MINOR ROAD 4019:
PROPOSED AMENDMENT OF SITE DEVELOPMENT PLAN, AMENDMENT OF CONDITIONS OF
APPROVAL, CONSENT USE AND DEPARTURE**

1. The land use application as referenced above was received from the Applicant on 8 October 2019.
2. The subject property is located in the Birkenhead area of Gansbaai and takes access off Minor Road 4019.
3. This application is for the following:
 - 3.1 Amendment of the site development plan;
 - 3.2 Amendment of the previous conditions of approval;
 - 3.3 Consent use to accommodate a renewable energy facility;
 - 3.4 Consent use to accommodate an abalone processing facility and
 - 3.5 Various Departures to accommodate building lines, permissible floor space and minimum parking requirements.
4. Cognisance is taken of the Traffic Impact Assessment dated June 2018, of which all the recommendations are supported.

TP
13 NOV 2019

5. It is worth noting that this Branch supports the alternative access proposal, as it would provide a better alternative for heavy vehicles.
6. This Branch offers no objection to the application in terms of the Land Use Planning Act, No 3 of 2014, subject to the following:
 - 6.1 A right-turn lane should be provided on the northern approach of the Main Road (DR1214) / Swart Street (OP4018) / OP4019 Intersection by 2025;
 - 6.2 Should Marine Drive (Alternative 1) be selected to be the preferred access alternative, the road should be inspected by a pavement engineer to assess the sub-structure and surfacing and propose repairs or upgrades where necessary in terms of the number of expected heavy vehicle trips;
 - 6.3 With the realisation of the new access road (Alternative 2), Van Bloemenstein Street should be surfaced with a width of at least 6.8 m. Bell-mouths at intersections should have radii of at least 15 m;
 - 6.4 With the newly formed intersection with the extension of Van Bloemenstein Street to form the new access to the I&J property, stop control should be placed on the Lord Roberts Street leg of the intersection with Van Bloemenstein Street forming the through road;
 - 6.5 New booms or gates at entrances should be placed to allow adequate stacking distances of at least 20m;
 - 6.6 All proposed parking bays should have dimensions of 2.5 x 5.0 m with aisle widths of at least 7.0m.
 - 6.7 All detail design plans should be submitted to the Design Directorate (Ms MK Hofmeyr 021 483 3999) of this Branch for approval and
 - 6.8 Please note that this Branch has not budgeted for any road improvements.

Yours faithfully


SW CARSTENS
For CHIEF DIRECTOR: ROAD NETWORK MANAGEMENT

ENDORSEMENTS

1. Overstrand Municipality
2. Attention: Mr S van der Merwe (e-mail: svandermerwe@overstrand.gov.za)
PlanActive Town & Regional Planners
Attention: M Lerm (e-mail: planactive@hermanus.co.za)
3. Mr SW Carstens (e-mail)
4. Mr F Fakier (e-mail)



450



ANNEXURE J 1/4

TP - A Theart
(Svd Merwe)

Division of Telkom SA SOC Ltd

10 Jan Smuts Drive
Pinelands
7404

Candice Spammer
Tel: 021 414 5582
Fax: 086 480 0617
Email: spammec1@telkom.co.za

Our Ref.: WWIP_WHMN4290_19
Your Ref.: Rem 711 GRCAL 3330

5 December 2019

Attention: S Muller

Overstrand Municipality
HERMANUS

PLANT AFFECTED – COPPER & OPTIC FIBRE:

APPLICATION FOR AMENDMENT OF SITE DEVELOPMENT PLAN AND CONDITIONS OF APPROVAL,
CONSENT USE AND DEPARTURE: REMAINDER OF FARM KLIPFONTEIN NO 711

With reference to your application received November 2019.

As important OPTIC FIBRE cables and other infrastructure are affected, please contact our representative Frederik Swart at 028 514 1199 / 081 363 7815 / Frederik5@openserve.co.za 48 hours prior to commencement of construction work.

I hereby inform you that OpenServe approves the proposed work indicated on your drawing in principle. This approval is valid for 12 MONTHS ONLY, after which reapplication must be made if the work has not been completed.

Any changes or deviations from the original planning during or prior to construction must immediately be communicated to this office.

Approval is granted, subject to the following conditions.

FILE NO: Farm Klipfontein
711
SCAN NO:
COLLABORATOR NO: 1364044

61 Oak Avenue, Highveld, Techno Park, Centurion 0157,
Private Bag X881, Pretoria, Gauteng, 0001



This wayleave, Reference Number WWIP WHMN4290_19 is valid for 12 months from date here of and is subject to the following conditions:

1. No mechanical plant or vibrator type compactors may be used within three metres of any Open Serve plant (I.E. any Telecommunication equipment above or below ground level).
2. The position of our plant affected by the proposal is indicated as approximate and **Frederik Swart** at telephone number **081 363 7815 /** email address : **FrederikS@openserve.co.za** must be contacted at least 48 hours prior to commencement of the work, upon which the actual location of Open Serve Plant will be indicated on site.
3. A written request must be submitted to Open Serve for consideration should the applicant require our plant to be relocated. The cost of such relocation will be recoverable from the applicant.
4. It is the responsibility of the applicant to verify the existence of the indicated plant and to notify Open Serve immediately should the applicant locate any Open Serve plant which is not indicated on the plans.
5. Should the applicant expose any Open Serve plant, the safeguard thereof will be the applicant's full responsibility.
6. Failing to comply with the above conditions or any special conditions addendum hereto will be regarded as gross negligence and the applicant will be held responsible for the damage or loss as a result thereof.

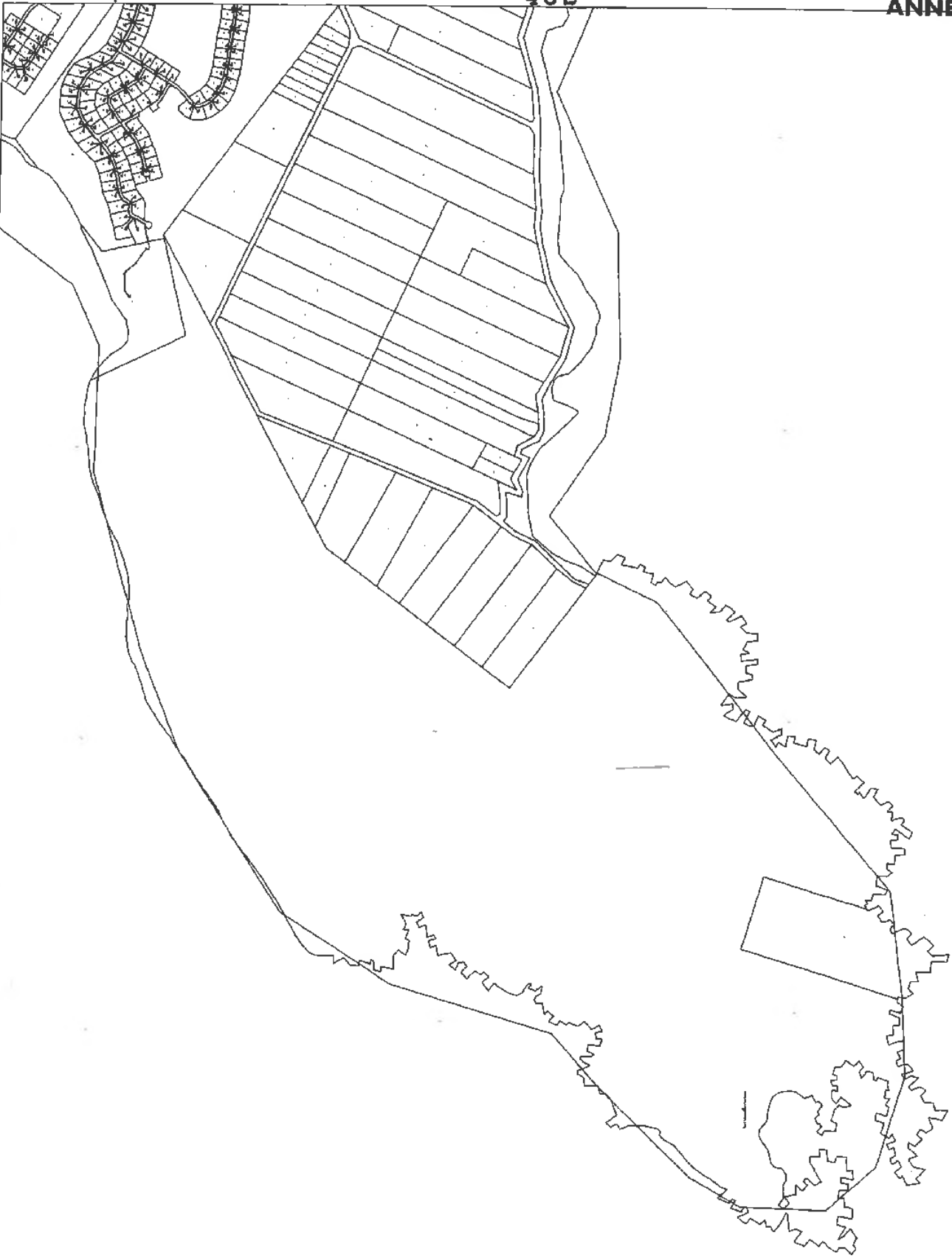
Date: 05 December 2019

By: C Spammer

For Wayleave Management
Western Cape

Legend	
1. Underground Pipe	
2. Underground Cable	
3. Manhole	
4. Street Distributio Cabinet (SDC)	
5. Jointing Pit / AJB	
6. Jointing Pillar (PJ)	
7. Pipe Junction Box (B/S)	
8. Robot Control	
9. Pole	
10. Stay	
11. Strut	
12. Aerial Cable (A/C)	

The pipeline indicated contains OPTIC FIBRE cables.
Frederik Swart @ telephone 028 514 1199 / 081 363 7815 /
FrederikS@openserve.co.za must be contacted at least 48 hours
before commencement of work.



NO.	NAME	DATE
1	...	...
2	...	...
3	...	...
4	...	...
5	...	...
6	...	...
7	...	...
8	...	...
9	...	...
10	...	...

NO.	NAME	DATE
1	...	...
2	...	...
3	...	...
4	...	...
5	...	...
6	...	...
7	...	...
8	...	...
9	...	...
10	...	...



As per sketch attached, OpenServe infrastructure WILL BE AFFECTED, consequently the conditions below and on the attached legend will apply.

Telecommunication services position is shown as accurately as possible but should be regarded as approximate only.

Should alterations or relocation of existing infrastructure be required, such work will be done at the request and cost of the applicant.

Please notify this office within 21 working days from this letter of acceptance and if any alternative proposal is available or if a recoverable work should commence.

It would be appreciated if this office can be notified within 30 days of completion of the construction work. Confirmation is required on completion of construction as per agreed requirements.

Should OpenServe infrastructure be damaged while work is undertaken, kindly contact our representative immediately.

All OpenServe rights remain reserved.

Yours faithfully



For Selwyn Bowers
Operations Manager
Wayleave Management: Western Region



TP. D. (head
(S. ud mare)
454)
cc: H. Bign...

ANNEXURE K1/2

FILE NO:	Kon Farm 711
	Klipfontein ✓ GE
SCAN NO:	Farm 711
LABORATOR NO:	1368561

BREED-GOURITZ
CATCHMENT MANAGEMENT AGENCY

51 Baring Street Worcester 6850, Private Bag X3055 Worcester 6850

Enquiries: F. Smith Tel: 023 346 8000 Fax: 023 347 2012 E-mail: fsmith@bgcma.co.za

Our Reference no: 4/10/1/G40L/Klipfontein 711 (Rem), Caledon

Date: 12 December 2019

Overstrand Municipality
P. O. Box 20
Hermanus
7200

For Attention: S. W. van der Merwe

Sir/Madam,

REMAINDER OF FARM KLIPFONTEIN NO 711, DIVISION CALEDON: APPLICATION FOR AMENDMENT OF SITE DEVELOPMENT PLAN AND CONDITIONS OF APPROVAL, CONSENT USE AND DEPARTURE: PLAN ACTIVE (obo IRVIN & JOHNSON LTD)

With reference to your letter dated 08/11/2019, together with the report by Plan Active, and with Overstrand municipal reference number Rem 711 GRCAL, (3330/2019) and received by BGCMA on 13/11/2019, herewith the following:

The BGCMA has no objection against the proposed amendment of the site development plan, but the following conditions of approval apply:

1. An agreement between Overstrand municipality and I&J Ltd should be put in place for the additional water supply.
2. The little volume of water to be discharged via soak away on the premises, should not have any detrimental effect on water resources, both surface- and groundwater resources.
3. All relevant sections and regulations of the National Water Act, 1998 (Act 36 of 1998) regarding water use should be adhered to.
4. Polluted storm water should be contained and managed in such a way that it does not pose an additional threat to surface- and groundwater resources.

Please be advised that no activities may commence without the appropriate approvals/authorizations (where needed) from the responsible authority.

The onus remains with the registered property owner to confirm adherence to any relevant legislation that such activities might trigger and/or need authorization for.

Also be advised that the comment provided is in the interest of responsible water resource management. The BGCMA will gladly comment on any additional information provided for review. The BGCMA reserves the right to revise initial comments and request further information based on any additional information that might be received.

Please do not hesitate to contact this office if you have any further queries.

Please ensure to quote the above reference in doing so.

Yours faithfully,

J. Van Staden

JAN VAN STADEN
CHIEF EXECUTIVE OFFICER (ACTING)



HN/ OVERSTRAND/GANSBAAI/ REM OF FARM KLIPFONTEIN 711
N: 12118AS1208M
Enquiries: Andrew September
andrew.september@westerncape.gov.za
021 483 9543
Date: 12 November 2018

Jonathan Kaplan
5 Stuart Road
Rondebosch
7700

TP. D/Incat
(S. Udman)

FILE NO:	Konksim 711
SCAN NO:	Klipfontein
Heritage Western Cape	
COLLABORATOR NO:	

FINAL COMMENT
In terms of Section 38(8) of the National Heritage Resources Act (Act 25 of 1999) and the Western Cape Provincial Gazette 6061, Notice 298 of 2003

FINAL COMMENT: PROPOSED EXPANSION OF EXISTING I&J ABALONE FARM ON THE REMAINDER OF FARM KLIPFONTEIN 711, GANSBAAI, SUBMITTED IN TERMS OF SECTION 38(8) OF THE NATIONAL HERITAGE RESOURCES ACT (ACT 25 OF 1999)

CASE NUMBER: 17112118AS1208M

The matter above has reference.

Heritage Western Cape is in receipt of your application for the above matter received on 28 October 2018. This matter was discussed at the Archaeology, Palaeontology and Meteorites Committee (APM) meeting held on 1 November 2018. Amongst other things the following was discussed:

- The project relates to the expansion of an Abalone Farm on I&J property situated on a peninsula with known archaeological sensitivity.
- The Heritage Impact Assessment (HIA) identified a significant site (Site 6521) in one area, which is to be cordoned off.
- The expansion is into a thickly vegetated area which renders surface survey difficult. It is known from previous excavations in the region that, while there may be low density scatters on the surface, deeper testing has revealed shell middens of varying significance.
- The Committee requires further testing across the expansion site, if possible to a depth of at least 1m.
- The Committee further expressed concerns that the iterative expansions may have a negative cumulative effect, and would be more effectively managed through a Conservation Management Plan (CMP). Such a plan should be informed by the findings of the test excavations.

FINAL COMMENT

The recommendations of the HIA dated October 2018 are endorsed in principle. However, if the project is authorised, a Workplan for conducting test excavations across the proposed expansion site must be submitted to HWC, in order that a decision can be made regarding whether further work is required (monitoring, excavations and/or a Conservation Management Plan), and whether development work may commence.

However, should any heritage resources, including evidence of graves and human burials, archaeological material and paleontological material be discovered during the execution of the activities above, all works must be stopped immediately and Heritage Western Cape must be notified without delay.

This letter does not exonerate the applicant from obtaining any necessary approval from any other applicable statutory authority.

HWC reserves the right to request additional information as required.

Should you have any further queries, please contact the official above and quote the case number.

Yours faithfully

[Signature]
.....
Dr. Mxolisi Dlamuka
Chief Executive Officer, Heritage Western Cape

www.westerncape.gov.za/cas

17 JAN 2020



Original

DEVELOPMENT MANAGEMENT: REGION 2

Angelina.Mabie@westerncape.gov.za
Tel: +27 21 483 8500
Private Bag X9086, 1 Dorp Street, Cape Town, 800
www.westerncape.gov.za/eadp



TP. A. Theart
(S. ud Nono)

REFERENCE: 15/3/2/12/BO3

021 483 8354
021 483 3633

The Municipal Manager
Overstrand Municipality
P.O. Box 20
Hermanus
7200

FILE NO:	Ronkam 711
	Klipfontein
SCAN NO:	Farm 711
COLLABORATOR NO:	1378898

FOR ATTENTION: S.W VAN DER MERWE

REQUEST FOR PLANNING COMMENT:

AMENDMENT OF SITE DEVELOPMENT PLAN, CONDITIONS OF APPROVAL, CONSENT USE AND DEPARTURE:

REMAINDER OF FARM KLIPFONTEIN NO. 711, CALEDON DIVISION

1. Your application, dated 8 November 2019, has reference.
2. After having had the opportunity to consider the application, this Directorate's planning component has no objection, in principle, to the proposed application for the expansion of the existing abalone facility to allow for an abalone processing facility and PV power plant at Danger Point in Gansbaai.
3. The development will take place in three phases, over a period of approximately 15 years, expanding the development footprint by ±34 hectares.
4. The abalone industry in South Africa generates direct permanent employment at the farm level and indirectly supports interlinked businesses, such as the seaweed and abalone processing industries. The expansion will furthermore help to address the growing demand for abalone and will lead to the more efficient operation of the existing Abalone Culture Division.

5. A positive Environmental Authorisation was issued on 8 March 2019 for the proposed expansion of an existing abalone farm to 1700t/a facility.
6. The Department reserves the right to amend its comment should any new information be obtained.



DIRECTOR: DEVELOPMENT MANAGEMENT (REGION 2)

DATE 20.1.2020

File reference:	REM 711 GRCAL
Date:	27 JULY 2022
	MM



INTERNAL MEMORANDUM

From	: Town Planning Department
Town Planner	: SW van der Merwe (Senior Town Planner)

TO:


<u>Area Manager</u>	<u>Building Control Department</u>	<u>District Health</u>	<u>Electrical Department</u>	<u>Environmental Officer</u>
<u>Fire Department</u>	<u>Infrastructure and Planning</u>	Local heritage Committee	<u>Operational Services</u>	Property Administration
Tourism	Traffic Department	<u>Ward Councillor (Clir R de Coning)</u>	<u>Waste Management</u>	

Applicant	MESSRS PLAN ACTIVE TOWN AND REGIONAL PLANNERS ON BEHALF OF IRWIN & JOHNSON
Property Details	REMAINDER OF FARM KLIPFONTEYN NO. 711, CALEDON DIVISION, OVERSTRAND MUNICIPAL AREA
Application Description	APPLICATION FOR THE AMENDMENT OF THE SITE DEVELOPMENT PLAN AND CONDITIONS OF APPROVAL, CONSENT USE AND DEPARTURE

ATTACHMENTS :

1. Notice	
2. Locality Plan	
3. Motivation	
4. Site Development Plan	

YOUR DEPARTMENT'S COMMENTS:

The fire department has no objection subject to compliance with the provisions of SANS 10400-A: 2016, SANS 10400-T:2020 and the By-Law relating fire safety.	
ASSISTANT CHIEF Enrico Solomons  PO Box 20 HERMANUS 7200 Tel: 028 318 8979 Fax: 028 318 1493	
Signature: <i>EC Solomons</i>	Date: <u>28 JUL 2022</u>
Please provide your comments (with specific reference to any conditions of approval provided above or in a separate Memo <u>by not later than the date stipulated below</u> . If you require an extension of time for submission of comments, kindly request this in writing. Should no comments be received, it will be assumed that you have no objection to the proposal and where appropriate, the Mayoral Committee will be informed accordingly.	
Signature: _____	

COMMENTS REQUIRED BY: 2 SEPTEMBER 2022



File reference:	REM 711 GRCAL
Date:	27 JULY 2022
	MM

INTERNAL MEMORANDUM

From	: Town Planning Department
Town Planner	: SW van der Merwe (Senior Town Planner)

TO:


<u>Area Manager</u>	<u>Building Control Department</u>	<u>District Health</u>	<u>Electrical Department</u>	<u>Environmental Officer</u>
<u>Fire Department</u>	<u>Infrastructure and Planning</u>	Local heritage Committee	<u>Operational Services</u>	Property Administration
Tourism	Traffic Department	<u>Ward Councillor (Cllr R de Coning)</u>	<u>Waste Management</u>	

Applicant	MESSRS PLAN ACTIVE TOWN AND REGIONAL PLANNERS ON BEHALF OF IRWIN & JOHNSON
Property Details	REMAINDER OF FARM KLIPFONTEYN NO. 711, CALEDON DIVISION, OVERSTRAND MUNICIPAL AREA
Application Description	APPLICATION FOR THE AMENDMENT OF THE SITE DEVELOPMENT PLAN AND CONDITIONS OF APPROVAL, CONSENT USE AND DEPARTURE

ATTACHMENTS :

1. Notice	
2. Locality Plan	
3. Motivation	
4. Site Development Plan	

YOUR DEPARTMENT'S COMMENTS:

No objection form solid waste planning.	
Note the attached email correspondence where the client confirms that all biological waste is sold to fertilizer companies and does not need to go to landfill.	
Signature:	
Date:	05/08/2022

Please provide your comments (with specific reference to any conditions of approval that should be imposed) in the space provided above or in a separate Memo by not later than the date stipulated below. If you require an extension of time for submission of comments, kindly request this in writing. Should no comments be received, it will be assumed that you have no objection to the proposal and where appropriate, the Mayoral Committee will be informed accordingly.

COMMENTS REQUIRED BY: 2 SEPTEMBER 2022



File reference:	REM 711 GRCAL
Date:	27 JULY 2022
MM	

INTERNAL MEMORANDUM

From	: Town Planning Department
Town Planner	: SW van der Merwe (Senior Town Planner)

TO:

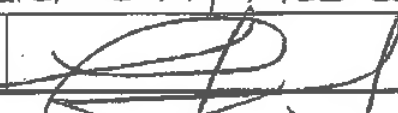
<u>Area Manager</u>	<u>Building Control Department</u>	<u>District Health</u>	<u>Electrical Department</u>	<u>Environmental Officer</u>
<u>Fire Department</u>	<u>Infrastructure and Planning</u>	Local heritage Committee	<u>Operational Services</u>	Property Administration
Tourism	Traffic Department	<u>Ward Councillor (Clr R de Coning)</u>	<u>Waste Management</u>	

Applicant	MESSRS PLAN ACTIVE TOWN AND REGIONAL PLANNERS ON BEHALF OF IRWIN & JOHNSON
Property Details	REMAINDER OF FARM KLIPFONTEYN NO. 711, CALEDON DIVISION, OVERSTRAND MUNICIPAL AREA
Application Description	APPLICATION FOR THE AMENDMENT OF THE SITE DEVELOPMENT PLAN AND CONDITIONS OF APPROVAL, CONSENT USE AND DEPARTURE

ATTACHMENTS :

1. Notice	
2. Locality Plan	
3. Motivation	
4. Site Development Plan	

YOUR DEPARTMENT'S COMMENTS:

Applicant to ensure farm is in possession of a valid Certificate of Acceptability.	
Activities on site / preventative measures should be in place to reduce any pollution.	
Signature: 	Date: 30/08/2022

Please provide your comments with specific reference to any conditions of approval that should be imposed) in the space provided above or in a separate Memo **by not later than the date stipulated below**. If you require an extension of time for submission of comments, kindly request this in writing. Should no comments be received, it will be assumed that you have no objection to the proposal and where appropriate, the Mayoral Committee will be informed accordingly.

COMMENTS REQUIRED BY: 2 SEPTEMBER 2022

**COMMENTS FROM THE ENGINEERING SERVICES DEPARTMENT FOR:
APPLICATION FOR AMENDMENT OF THE SITE DEVELOPMENT PLAN
AND CONDITIONS OF APPROVAL, CONSENT USE & DEPARTURE:
REMAINDER OF FARM KLIPFONTEIN NO 711, DIVISION CALEDON**

Water	:	According to GLS & KLS Eng. Services Reports
Sewer	:	According to GLS & KLS Eng. Services Reports
Roads and traffic	:	According to TIA
Stormwater (SW)	:	According to the master plan by the Developer
Electricity	:	According to the master plan by the Developer

Conditions:

1. That a Bulk Services Contribution Levy (BICL) be paid by the developer to supplement municipal services and amenities in accordance with the relevant legislation and as determined by the Council. The BICL tariff is adjusted by Council annually. The total BICL payable will be the amount as determined by the BICL Policy and tariff at the date of **actual payment**. BICL amounts quoted in any document will normally be applicable to the particular year in which the document was compiled and Council will not be bound by the quoted amounts.

- 1.1 **Developments containing Sectional Title Units/ Commercial Buildings** (non-free standing properties – property is not to be subdivided)

The BICLs are to be paid in full **prior** to submission of the building plans. Building Plans will not be accepted unless the BICL is paid in full.

- 1.2 **Developments with free standing properties** (property that is subdivided and plots to be sold individually).

The BICLs are payable **prior** to clearance being issued by the Income Department of the Municipality.

The contribution according to the current policy (2022/2023) is as follows:

Water	R 26 036.00 x 48.91000 =	R 1 273 420.76
Sewerage	R 17 555.00 x 48.91000 =	R 858 615.05
Stormwater	R 9 082.00 x 313.2 =	R 2 844 482.40
Roads	R 7 782.00 x 244.206734=	R 1 900 416.80
Solid Waste	R 1 574.00 x 177.48000 =	R 279 353.52
TOTAL (inclusive of VAT)	=	<u>R 7 156 288.53</u>

Note:

- 1.3 The above figures are estimates
2. that the developer at his cost constructs the internal municipal civil and electrical services for the development as well as any link or bulk municipal services that need to be provided;
 - 2.1 the Director: Infrastructure and Planning may require the developer to construct internal, link, and/or bulk municipal services to a higher capacity than warranted by the development for purposes of allowing other existing or future developments to also utilise such services, provided:
 - 2.2 the rates and prices of such work be established in terms of a system which is fair, equitable, transparent and cost effective;
 - 2.3 if link municipal services have already been provided, the developer to contribute towards the cost thereof, the Director: Infrastructure and Planning to determine the amount of such contribution in terms of a system which is fair and equitable;
3. that servitudes for municipal services be registered in favour of the Council at the developer's cost in respect of all main services to be taken over by the Council and all existing municipal services concerned crossing private property;
4. that the developer indemnifies and keep the Council indemnified against all actions, proceedings, claims and demands, costs, damages and expenses arising out of the establishment of the township, the provision of services to the township or the use of servitude areas or municipal property;
 - 4.1 for a period which shall commence on the date that the installation of the services to the township are commenced with and shall expire after completion of the maintenance period;
 - 4.2 the developer to submit an acceptable public liability insurance policy to the Council and to pay the premium in advance for the period as set out above before any work concerned may commence;
 - 4.3 the insurance to be to an amount which shall not be less than that required by the SAACE;

- 4.4 such indemnification against loss, claims or damages, to include claims pertaining to consequential damages by third parties and whether as a result of the damage to or interruption of or interference with the Council's services or apparatus or otherwise;
5. that a plan of all existing services be submitted to the Director: Infrastructure and Planning, by the developer and that any of the services that need to be relocated, be done by the developer at his cost to the satisfaction of the Director: Infrastructure and Planning:
 - 5.1 way-leaves must be obtained from the Operational Manager;
 - 5.2 such way-leaves to be obtained prior to any excavation on public property or property where existing services are located;
6. that the developer may enter into an agreement with the Council to install or upgrade bulk and/or link municipal services and amenities at an agreed cost, subject to the following:
 - 6.1 such costs to be established in accordance with a system which is fair, equitable, transparent, competitive and cost effective;
 - 6.2 such costs shall be set-off against (part or full) development contributions payable in respect of engineering services;
 - 6.3 to the extent that such costs exceed the development contributions payable, the Council will refund the developer the difference with interest calculated at the prime rate, when funds are available;
7. that plans of all the internal municipal civil and electrical (high and low voltage supply) services and such link services as required by the Director: Infrastructure and Planning, prepared by an ECSA registered professional engineer/technologist, be submitted to the Director: Infrastructure and Planning for his prior approval;
8. the "Guidelines for the Provision of Engineering Services in Residential Townships" (Blue Book), SABS 1200 specifications and the Design and Construction Standards for civil and electrical services of the Council to be used as the standard design and construction criteria with which such plans must comply;
9. the Director: Infrastructure and Planning to be notified in writing of all deviations from the Standard Design and Construction Criteria when plans are submitted for his approval and such deviations to be separately approved in writing by the Director: Infrastructure and Planning;

10. the successful completion of such works to be supervised and certified by an independent professional civil engineer/technologist i.e. a professional civil engineer/technologist who has no direct financial interest in the development, other than payment as standard professional fees for the work concerned; and
11. such independent professional civil engineer/technologist to furnish the Director: Infrastructure and Planning with satisfactory proof of his professional indemnity insurance to an amount which shall not be less than that required by the SAACE and which insurance shall be valid for the relevant contract and maintenance period;
12. that a stormwater management plan, which may include attenuation facilities to ensure that the pre-development run-off is not exceeded and that erosion and pollution is minimised, be submitted to the Director: Infrastructure and Planning for approval and that the approved management plan be implemented by the developer at his cost to the satisfaction of the Director: Infrastructure and Planning;
13. that the above stormwater management plan include the following:
 - 13.1 pre-development run-off from the catchment area;
 - 13.2 post-development run-off from catchment area;
 - 13.3 existing stormwater reticulation system and the capacity thereof;
 - 13.4 connection of internal stormwater reticulation system;
 - 13.5 overland escape routes
14. that the connection to the stormwater reticulation system be provided according to the stormwater management plan, by the developer at his cost and approved by Overstrand Municipality;
15. That the developer shall obtain all the required authorisations and approvals for the safe storage, treatment and release/disposal of stormwater in line with the relevant Overstrand bylaws and provincial and national legislation at his/her own cost.
16. that all municipal civil and electrical services installed or constructed by the developer, be maintained after completion thereof for a maintenance period, as described in the General Condition of Contract for works of Civil Engineering Construction – 2004, of 12 months, and
17. that a Certificate of Completion together with as-built services plans be provided by the independent professional engineer/technologist to the Overstrand Municipality. As-built plans to be on quality paper, together with a DXF file thereof;

18. that the developer shall be responsible for the operational costs and maintenance of street lighting, electrical reticulation and metering and all internal services;
19. that the developer provides bulk meters for water and electricity at approved positions;
20. that the solid waste removal services be provided according to the Engineering Services report and in line with the current bylaws and other legislation, at the developer cost;
21. that no biological waste will be transported or delivered to the Municipal transfer station or waste disposal facilities;
22. that an approved refuse collection area/room to sufficiently accommodate the refuse generated by the development and which is to be proved with the following:
 - a. properly ventilated;
 - b. a cement floor;
 - c. a tap and running water, as well as a drainage point which is connected to the sewer network;
 - d. is a position nearest to an access road for the development and be accessible for the refuse truck at all times, to the satisfaction of the Director: Infrastructure and Planning;
23. that the electricity reticulation and supply be provided according to the master plan by the developer;
24. that the developer appoint a consulting electrical engineer to determine the electricity demand for the development and pay a fee to Overstrand Municipality to determine the capacity in the existing electricity network;
25. that the electricity reticulation system be upgraded according to the Electrical Master Plan at the Developer's cost;
26. that the developer will be responsible for the payment of electricity bulk contributions and that the bulk contribution be determine during the compilation of the services agreement;
27. that the water network and connections be provided according to the GLS capacity report and the Engineering Services report at the developer cost;

28. that following wastewater removal options, as detailed in the KLS Engineering services report be considered in addition to the normal municipal sewer tank service for the proposed development: (i) package plant (modular wastewater treatment plant/s) (ii) future municipal full waterborne sewer connection (in accordance with GLS masterplan) (iii) an approved private sewer tank service;
29. that the final wastewater removal option be selected and incorporated into a municipal service level agreement before any phase(s) of the proposed site development commences.
30. That Overstrand Municipality reserve the right not to provide any additional sewer tanker services in order to accommodate any construction/development phase (s) of the proposed development.
31. That the developer shall obtain all the required authorisations and approvals for the safe storage, treatment and release/disposal of wastewater in line with the relevant Overstrand bylaws and provincial and national legislation at his/her own cost.
32. that the required fire hydrants be provided as per National Building Regulation SABS 0400 TT35.4;
33. that access be provided in line with the Traffic Impact assessment and that it will be the responsibility of the Developer to obtain approval and to implement the upgrading of the existing roads in order to accommodate the additional traffic;
34. that any damage to the existing roads, used as routes for access to the development, for the provision of services, be repaired by the developer.

p.p. R. Andriani
DENNIS HENDRIKS
SENIOR MANAGER:
ENGINEERING SERVICES

22/09/2022
DATE

CONSERVATION INTELLIGENCE

postal 16 17th Avenue, Voëlklip, Hermanus, 7200
physical 16 17th Avenue, Voëlklip, Hermanus, 7200
website www.capenature.co.za
enquiries Rhett Smart
telephone 087 087 866 8017
email rsmart@capenature.co.za
reference LS14/26/177/2/711_planning amendment_Danger Point
date 28 September 2022

Overstrand Municipality
P.O. Box 20
Hermanus
7200

Attention: S.W. van der Merwe
By email: alida@overstrand.gov.za

Dear Mr van der Merwe

**Application for Amendment to Site Development Plan and Conditions of Approval, Consent Use and Departure for the Temporary Processing Plant for the I&J Danger Point Abalone Farm, Remainder of Farm 711 Klipfontein, Gansbaai
(Overstrand Municipality ref: REM 711 GRCAL; 3330/2022)**

CapeNature would like to thank you for the opportunity to comment on the application and would like to make the following comments. Please note that our comments only pertain to the biodiversity related impacts and not to the overall desirability of the application.

There is an existing environmental authorisation for the expansion of the abalone farm. Subsequently the plans changed to allow for temporary facilities until the expansion can be financed. The temporary plans are to allow for a processing facility to be temporarily accommodated within a building currently used for storage. Once the expansion takes place the building will revert to its original use.

The temporary facilities as applied for in this planning application have also received environmental authorisation. The facilities associated with this application have therefore been adequately assessed with regards to the environmental impacts. CapeNature therefore does not object to this planning application.

We wish to note that all structures on the property which are located below the high water mark of the sea require a lease from CapeNature in terms of the Sea Shore Act, which will require a separate process unless this is already in place.

We further wish to note that the property is located within the Coastal Protected Environmental Management Overlay Zone (EMOZ) for the Overstrand Municipality. It must be ensured that the facility is compliant with the EMOZ Regulations.

It is noted that the departure is for an increase in the total permissible floor space for Agriculture Zone. We wish to query if an alternative could be split zoning of the property to

The Western Cape Nature Conservation Board trading as CapeNature

Board Members: Associate Prof Denver Hendricks (Chairperson), Prof Gavin Maneveldt (Vice Chairperson), Ms Marguerite Loubser, Mr Mervyn Burton, Dr Colin Johnson, Prof Aubrey Redlinghuis, Mr Paul Slack

include Open Space 1 or 3 for the remainder. We further support adherence to the 2020 Overstrand Municipal Spatial Development Framework (SDF).

CapeNature reserves the right to revise initial comments and request further information based on any additional information that may be received.

Yours sincerely

A handwritten signature in black ink, appearing to read "Rhett Smart", with a horizontal line underneath.

Rhett Smart
For: Manager (Landscape Conservation Intelligence)