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Project Nr: STS 25-2052

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Attention: Cliff Dorse

RE: DRAFT BIODIVERSITY OFFSET REPORT FOR MACASSAR WWTW EXPANSION

Thank you for your comments on the Biodiversity Offset Strategy for the Macassar WWTW expansion project. Below are STS's responses (highlighted in blue) to the comments provided.

Report Overview

1. Much of this report reads more like a mine closure method statement than a Biodiversity Offset Specialist's report. Unnecessary detail should be removed.

Throughout the report, unnecessary information has been removed, as per the suggestions detailed in the comments below. It is also important to note that enough context is required for the public who may not understand the intricate details of Offsets to ensure the document is widely understood.

2. Why were the management requirements provided by the BMB ignored?

All management requirements as provided by BMB and discussed on site between Jacques van der Merwe (BMB) and Bianca Bleuler (STS) on 5 November 2024 have been incorporated into the Offset Report. It is unclear as to which management requirements this comment refers.

Following communications on 09/12/2024, it was clarified that the comments pertain to the how the sites will be managed operationally. The following has been added to the report: For successful operational management of the offset areas, necessary staff and resources will be required to ensure management and coordination of activities. The following key elements should be included for the proposed offset sites:

➤ **Option 1:**

- Operational staff are already in place for this area, reducing the immediate need for additional personnel. However, any expansion of activities or area coverage should include a review of resource requirements.

➤ **Option 7 (if included in the offset):**

- Additional staff resources will be required to manage and monitor this area effectively, particularly if incorporated into the offset framework.
- Recommended staff and resource allocation should be evaluated based on the final inclusion and specific management needs of the site.

➤ **Option 8:**

- The site will be managed as part of the Witzands Aquifer Nature Reserve, requiring dedicated personnel to oversee day-to-day operations and ensure the offset's objectives are achieved.
 - The recommended staff component includes a **Site Supervisor** (who would be responsible for coordinating all activities, managing field teams, and ensuring compliance with management plans), and **Field Rangers** (minimum of two to conduct regular patrols, monitor biodiversity, and support ecological management activities).
 - Additional resources required include a suitable **vehicle** for field operations and transport as well as equipment necessary for monitoring, invasive species control, and habitat management.

3. It is recommended that (after comments have been addressed and the report updated) this report be independently assessed by a Biodiversity Offset Specialist with suitable local experience and track record.



Please liaise with Zutari Cape Town and the Cape Town: Wastewater Treatment Branch (WWTB) regarding this issue. Please note this report was reviewed internally by a consultant with extensive experience in biodiversity offsets.

4. Thereafter, the offset report should be assessed by the Provincial Biodiversity Offset Advisory Panel.

From communication with Zutari, it is our understanding that the Provincial Biodiversity Offset Advisory Panel has already had a high-level look at the Offset Report. Detailed reviews will be conducted as part of the review during the BAR application process.

Candidate offset sites

5. Option 7 Paardevlei site: Why is long-term stewardship proposed for a state-owned site that will be incorporated into the Paardevlei Nature Reserve, which is to be proclaimed as a Section 23 Nature Reserve under the NEMPAA?

This has already been amended in the latest version of the report.

6. Why has the City Human Settlements Department not been engaged to establish availability of land at Paardevlei for Option 7, as previously recommended by the BMB?

The WWTB has been in communication with Human Settlements for several months regarding this issue; at the date of the development of this memorandum, no decision has been made regarding the availability of Option 7 for offset purposes. For this reason, and as recommended by Clifford Dorse (Biodiversity Management Branch (BMB)) in the comments received in the initial "Memorandum of Understanding", consideration for its inclusion or exclusion has been made.

Unsuitable candidate offset sites

7. Option 2 is already managed for biodiversity conservation by the BMB in the Macassar East Nature Reserve and is in process for proclamation under NEMPAA. Option 2 also serves as the established Macassar East Conservation Land Bank, providing biodiversity offsets for existing (mostly Human Settlements) developments. Double-dipping is not acceptable to meet the additionality requirement for a biodiversity offset. This option should not have been included.

Part of the offset alternative analysis is to assess the suitability of options of offset. As the reserve is not yet proclaimed, its status as a nature reserve was unknown at the start of the analysis. Only following the analysis, and investigating the findings thereof, this option was identified as unsuitable for offset purposes as provincial databases indicated it as waiting formal proclamation. Given this, it was not considered a feasible option for offset purposes because of the additionality principle stipulated in the National Biodiversity Offset Guidelines (NBOG). Furthermore, pre-empting its unsuitability as an offset site would void the important step of alternatives analysis.

8. Option 3 does not align to the Cape Town BioNet 2024, and includes land already lost to informal settlement several years ago. If this is to be retained, even as a non-preferred option, the boundary must be updated.

Unfortunately, as the report (excluding the Rehabilitation and Management Plan and Offset Budget Sections) was submitted for public participation, we are unable to make significant changes to the report without triggering the need to undertake another public participation period, which would result in significant consequences for the project as the BAR submission date is 10 December. This option won't be used for offsetting purposes and was identified as unsuitable for such purposes.

9. Option 4, the Swartklip site on Erf 75850, Khayelitsha, is owned by Airports Company South Africa SOC Ltd (ACSA) not Denel. Please correct this.

This has been amended.

10. Furthermore, Option 4 has existing offsets for the Cape Town International Airport, and a proposed on-site conservation area to mitigate for the proposed mixed-use development on site. Swartklip should not have been included in the original candidate sites assessed, because it does not offer additionality.

This option won't be used for offsetting purposes and was identified as unsuitable for such purposes.

11. Why did Option 4 score so poorly for habitat condition, when the majority of the site is CBA 1a (irreplaceable high / medium condition) on the Cape Town BioNet 2024?

This option won't be used for offsetting purposes and was identified as unsuitable for such purposes.





12. For Option 5, the information provided on landownership and status is incorrect. Portion 1 of Farm 544 was included in the old Driftsands Nature Reserve. Note that Driftsands Nature Reserves was deproclaimed (abolished) on 21 November 2022. Please refer to the Western Cape Provincial Gazette Notice 8685.
[Amended.](#)
13. Option 6, the Denel site, has repeated information from Option 5. A site cannot be both 12.7 km northwest and immediately east of the development footprint. Please correct this.
[This is a typo and has been corrected.](#)
14. Please update the text and maps to reflect the Cape Town BioNet 2024, available on City of Cape Town Map Viewer.
[Maps have been added to the document.](#)

Additional Conservation Action

15. "As an Additional Conservation Action (ACA), rehabilitation efforts that focus on the Eerste River, located immediately east of the WWTW will take place. This area is degraded, as evidenced by the presence of invasive species such as *Cenchrus clandestinus* (formerly *Pennisetum clandestinum*) and *Acacia cyclops*, as well as areas of erosion. Targeted rehabilitation activities in this area would significantly benefit the ecosystem, particularly as the river flows into the estuary." This is a blurry line between terrestrial biodiversity offset and wetland offset and may in fact be over-reaching for this biodiversity offset requirement. Why was this ACA not considered earlier in the mitigation hierarchy to decrease the residual impact?
[To clarify, ACAs are not part of the mitigation hierarchy but rather constitute positive impacts that are above and beyond mitigation requirements. The ACA in question was proposed to enhance ecological outcomes and is explicitly designed to deliver additionality—benefits that would not occur without this specific intervention. Furthermore, ACAs are intended to complement and not replace mitigation or offset requirements. Their selection is informed by opportunities to maximise ecological benefits in a meaningful way, supporting ecosystem resilience and function beyond what the mitigation hierarchy alone addresses. Thus, the additionality provided by this ACA fully aligns with the principles of ecological integrity and sustainable environmental management. While the Eerste River rehabilitation may address both terrestrial and wetland attributes, the blurred line between biodiversity and wetland offsets is justified because the goal is ecological enhancement as well as goods and services delivery as well as biodiversity support rather than meeting the strict offset obligations. This holistic approach recognises that ecosystems function as interconnected systems, and improving one component, such as the riparian zone, positively influences adjacent and downstream systems, including wetlands and the estuary.](#)
16. It is unclear from the vague dot on the map provided whether this proposed ACA is in fact inside the Macassar East Nature Reserve, or on WWTW land.
[The point is outside of the WWTW; however, activities associated with the ACA would not be at the cost of the BMB but rather the proponent. As part of the ACA, they would have to provide funding to assist with such activities \(if within BMB managed land\) or appoint suitable specialist to implement the ACA if within the footprint area.](#)

Rehabilitation and Management Plan summary

17. This summary should be separated into the three options. Some of the measures proposed are not appropriate for all sites. For example, Cape Flats Dune Strandveld is not fire dependent, and depending on fire history may actually benefit from fire exclusion.
[Please note that the plan provided is a **conceptual** rehabilitation and management plan and that the report states that "should this offset obtain approval, comprehensive site visits to the Target Offset Areas should be conducted to gain a deeper understanding of the ecological systems within the area. Following this visit, the Rehabilitation and Management Plan should be further updated to provide more detailed guidance on management activities for these areas. This will require the compilation of a more detailed offset implementation plan for each of the respective Offset Areas, as applicable". Furthermore, it is stated in several instances that management plans \(e.g., fire management plans, etc\) must be developed by a suitably trained specialist at the appropriate intervals. Given the fact that the sites will be proclaimed as nature reserves, they will require their own management plans. Thus, the concerns raised in this comment would be considered during the development of the detailed management plans if the project and associated offset where to obtain environmental authorisation and approval. The following has](#)





been added to the report (in the introductory section of the Rehabilitation and Management Plan Section): *"If the offset obtains approval, separate, detailed management plans would be required to be developed by suitably trained individuals for each of the Offset Sites"*.

18. Where are the erosion control measure gabions proposed for?

Gabions are not necessarily proposed for erosion control. They are purely provided as an example of a management measure that could be implemented if deemed appropriate by a specialist (as indicated in the report): *"To address the erosion concerns within the landscape, the following management actions can be recommended (however, a specialist should be contacted to address erosion concerns)"*.

19. Where is the flood risk modelling assessment for the proposed gabions and other erosion control measures?

This matter falls outside the scope of the current offset report. Addressing these concerns would require input from a specialist responsible for managing erosion as part of the rehabilitation and management activities during the implementation phase, should the offset be approved.

20. Who will maintain these gabions?

Within the offset sites, if gabions were deemed appropriate for use, then the implementing agent would be responsible for the gabions.

Offset Conditions

21. "A formal Offset Agreement is in place between the CoCT's Wastewater Treatment Branch and the Biodiversity Management Branch." If this is "in place" and signed by both Directors, why is it not included in Appendix G?

The signed agreement was only provided to STS on 29 November 2024 (after the submission of the offset report for comment to CoCT). The signed agreement has been added to the report.

22. "Offset Site Legal Security: The offset sites must be legally secured as conservation areas under appropriate legislative frameworks (e.g., the National Environmental Management: Protected Areas Act, 2003..." This contradicts the previous statements that the offset sites will enter into stewardship agreements.

This has been amended, and reference to stewardships removed.

Offset calculations

23. The premise that Atlantis Sand Fynbos offers a trading-up scenario is invalid, because there is only 44.4% of Cape Flats Dune Strandveld remaining (Cape Town BioNet 2024), not 56% as used in these calculations.

As per the NBOG, the remaining extent of the Cape Flats Dune Strandveld is 56%. Please refer to page 67 of the NBOG (<chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://cer.org.za/wp-content/uploads/1999/01/NEMA-National-Biodiversity-Offset-Guideline-23-June-2023.pdf>). In order to use the guidelines recommended calculations, use of the table to identify basic offset ratios (refer to Section 7.2.1 of the guidelines), requires use of the remaining extent as indicated in the guidelines is required. Secondly, as the report (excluding the Rehabilitation and Management Plan and Offset Budget Sections) was submitted for public participation, we are unable to make significant changes to the report without triggering the need to undertake another public participation period, which would result in significant consequences for the project as the BAR submission date is 10 December.

24. Why is a 30:1 ratio discussed? It does not apply to Cape Flats Dune Strandveld since this vegetation type is not Critically Endangered and there is more than 30% remaining.

Boucher (2023) recommended a 30: 1 ratio for the project. Reference to the 30: 1 ratio in this instance pertains to that. The matter has been clarified in the text.

Institutional arrangements

25. The following year's budget allocation cannot depend solely on completion of an audit. This runs the risk of not allocating budget appropriately or on time if the audit is delayed or not completed annually.

Comment is noted; however, audits must take place to ensure appropriate use of funds. Audits can take place timeously to reduce risk. This management the release of fees will be at the





discretion of the oversight committee and need not be detailed at this point in the decision-making process.

26. In Figure 20, who makes up the Environmental Advisory Committee for this proposed development's offset site(s)?

In this case, the BMB, WWTB, DEA&DP and DFFE

27. A stewardship agreement is not the preferred option to secure the proposed offset sites. Rather, they should be proclaimed as Section 23 Nature Reserves in perpetuity under the National Environmental Management Protected Areas Act 2003.

Figure amended accordingly.

28. It may not be appropriate to delay the Authority's decision until all of the criteria for the offset site(s) are fulfilled. Rather, these criteria and activities should be made conditions of approval in the record of decision.

Comment noted.

Proponent

29. "The Proponent may opt to enter into a stewardship or partnership programme..." This is not an acceptable option for a biodiversity offset. A reactive Stewardship agreement or proclamation is required. Securing the site in perpetuity should be made a condition of authorisation. It is not up to the proponent to decide.

Statement has been amended: "The Proponent will be responsible for entering into reactive Stewardship agreements and/or proclaiming the offset areas as nature reserves (under the NEMPAA (preferred option))".

30. "The Proponent will be responsible for the appointment of an Implementing agent to monitor and audit the rehabilitation requirements as well as the Contractor performance;" This suggests only an oversight role for the implementing agent, rather than a management authority role with reserve supervisor, field rangers, people and conservation officers, etc. Why is the implementing agent not appointed to manage the offset sites? If the implementing agent is not the management authority for the offset sites, who will manage them on the ground daily?

Amended to read the following: "The Proponent will be responsible for appointing an Implementing Agent tasked with managing the offset sites, overseeing daily operations, and ensuring the effective implementation of management activities. The Implementing Agent's responsibilities will include monitoring and auditing rehabilitation requirements, as well as supervising and evaluating contractor performance if contractors are appointed. This comprehensive role ensures the offset sites are effectively managed on the ground, addressing both operational and ecological requirements to achieve the offset objectives".

31. "Should ownership of the property change, the role and responsibility for compliance with this Implementation Plan as well as long-term maintenance must also be transferred." Which property does this refers to?

Amended to the following: "Should ownership of any property change, the role and responsibility for compliance with this Implementation Plan as well as long-term maintenance must also be transferred".

Implementing Agent

32. The implementing agent cannot be held responsible for auditing itself. Please clarify this role.

Amended to the following: "the Proponent will be responsible for appointing an independent auditor to assess the Implementing Agent's compliance with the offset management and rehabilitation requirements".

33. The list of mandated activities for the implementing agent reads as if their role is to act as an ECO rather than a nature reserve management authority. This lack of understanding of on-the-ground management requirements must be corrected.

The list of mandated activities has been revised to reflect additional responsibilities, which include the following key aspects of on-the-ground management: 1) supervising field teams (including rangers and other personnel) responsible for ecological maintenance, invasive species control, and habitat management, 2) establishing and enforcing conservation protocols for the long-term sustainability of the offset sites, 3) engaging with stakeholders, including local communities and conservation officers, to ensure the offset sites are integrated into the broader ecological and social landscape, and 4) proactively managing risks, such as fires or erosion, through rapid response mechanisms and preventative measures.





Audit

34. Why is the competent authority not involved in the audit?

[Amended to include them.](#)

35. How often should an audit be conducted? When is the first audit due? Is this a once-off or repeated activity? More details are required.

[The following has been added to the report: It is common practice for audits to be conducted periodically to ensure ongoing accountability and the achievement of biodiversity offset objectives. The following should be noted:](#)

- [• Frequency of Audits: audits should be conducted annually during the initial phases of the offset implementation \(e.g., during active rehabilitation and the early stages of offset management\). Afterward, as the offset sites stabilize and biodiversity gains are established, the frequency may be reduced to every two to three years, depending on the findings and recommendations from earlier audits and at the discretion of the Oversight committee;](#)
- [• Timing of the First Audit: the first audit should occur within one year of the offset implementation commencement, ensuring early-stage activities are progressing as planned;](#)
- [• Duration of Auditing Activities: auditing should be a repeated activity throughout the lifespan of the offset program, continuing until biodiversity offset objectives are demonstrably achieved, which may span several years or even decades. This ensures sustained compliance and long-term biodiversity gains; and](#)
- [• Justification for Periodic Audits: regular audits are critical to adapting management strategies, addressing unforeseen challenges, and ensuring transparency in financial and biodiversity outcomes. The findings from these audits should guide continuous improvement in offset management.](#)

Table 7 Key principles

36. Permits to collect seed and propagate plant material in the Western Cape are obtained from CapeNature, not DEADP/DFFE.

[Amended.](#)

37. "All stakeholders that will be affected by the rehabilitation measures will be identified and involved in the rehabilitation planning throughout the project lifecycle (as required)." This is beyond the scope of a biodiversity offset requirement, is far too broad, and may unduly delay necessary rehabilitation efforts. The BMB does not support this clause and recommends its removal.

[Statement has been removed.](#)

38. "Rehabilitation planning will be informed and accordingly adjusted based on stakeholder views, cultures and/or customs, possible uses and needs of the landscape." This is beyond the scope of a biodiversity offset requirement, opens opportunity for unrealistic and potentially unachievable stakeholder expectations, and may unduly delay necessary rehabilitation efforts. The BMB does not support this clause and recommends its removal.

[Statement has been removed.](#)

39. The open-ended nature of statements pertaining to stakeholder engagement will place unfair (and possibly un-funded) burden on the implementing agent.

[As above, the statement has been removed.](#)

40. Requirement for stakeholder engagement in any management activity within the offset site(s) must be substantiated by reference to the relevant clause(s) in the National Biodiversity Offset Guideline 2023; otherwise, this entire section should be omitted.

[With reference the management plans, stakeholder engagement has been removed.](#)

41. There are no Grassland conservation targets for Cape Town. The grassland biome does not occur naturally in Cape Town. All references to "grassland" must be replaced with "strandveld" or "fynbos and renosterveld" (according to the relevant offset site).

[Amended accordingly.](#)

42. Stack burning of alien invasive brush is not considered best ecological practice in the Fynbos Biome. Stack burning often causes soil damage, associated loss of soil fauna, and facilitates secondary invasion. Stack burning should only be considered if there is risk to infrastructure or high risk of arson.

[Reference to stack burning removed from report.](#)





43. If mulch is the only option for erosion control, it should be chipped on site from indigenous plant material only, to avoid introducing further invasive species. This indigenous plant material could be obtained from firebreak maintenance brush-cut material. No foreign material should be brought into a conservation area or nature reserve.
[Report updated to reflect recommendation.](#)
44. No livestock grazing will be permitted in any of the biodiversity offset areas.
[Jacques van der Merwe indicated that game is present on Option 8 and that game camps would be required to ensure successful rehabilitation any rehabilitated sites.](#)
45. There is no requirement for a “grazing plan” in the fynbos biome, since the dominant ecosystem driver is not (or no longer) large mammal herbivory. Please remove all reference to grazing and grazing plan.
[As per on-site communication between Jacques van der Merwe \(BMB\) and Bianca Bleuler \(STS\) on 5 November 2024, eland and grey rhebuck are located on the site. Jacques indicated the need for selective grazing camps etc, hence the inclusion of such recommendations within the report.](#)

Table 8 Objectives and Control Measures

46. Much of the detail in this report is inappropriate and unnecessary in an offset report. For example, the detail on how to assign management units and what software to use to map habitat condition. Where the offset specialist has over-stepped the boundaries of their role, this should be removed from the offset report and not be made condition of environmental authorisation.
[Reference to management units and applicable software has been removed.](#)
47. Most of the “hardworks and softworks” intervention measures listed are inappropriate for use in a nature reserve.
[The report has been updated, having reference to such interventions removed.](#)
48. BMB will not permit the use of alien plants such as “Vetiver grass hedges” inside BMB-managed conservation areas or nature reserves.
[Reference to this has been removed.](#)

Table 10 On-site execution

49. ‘Walkdowns’ to mark SCC and ‘Search and Rescue’ from the proposed WWTW expansion site do not constitute biodiversity offset actions. Why are these included
[It has been removed.](#)
50. “Should the Contractor and/or the implementing agent not have the expertise to identify and mark the AIPs, it is the responsibility of the Contractor to appoint a suitably qualified botanist to assist.” There should not be a situation in which the implementing agent lacks the expertise to identify alien invasive plants. Unnecessary sub-contracting out to specialists should be avoided to contain management costs.
[If the implementing agent has the expertise required, then no sub-contracting would be required.](#)
51. Many of the execution measures proposed involve human-made infrastructure. This should only be considered as a last resort, with preference for natural interventions.
[Report amended to state the following: “Where necessary, stormwater must be managed within the Offset Areas, e.g., Offset Option 1 will require stormwater management given its location immediately adjacent to the Macassar WWTW. Similarly, Option 8 which is mountainous will require appropriate management of stormwater to limit erosion. **Note:** Natural interventions should be considered as a first choice; human-made infrastructure and associated activities \(e.g., reprofiling\) should be considered as a last resort”.](#)
52. Planting in spring is too late in the fynbos biome’s winter rainfall region. Reseeding should take place at the onset of the rainy season (late autumn) and planting should occur early enough in the rainy season (i.e. early winter) to facilitate unaided establishment.
[Amended accordingly in the text.](#)
53. Planting in early winter should eliminate the need to irrigate planted material.
[Noted.](#)
54. “Annual burning of wetland areas should be avoided. Late winter or early spring burns (July - September) should be considered every 2 - 3 years; and”. The fire management recommendations are highly inappropriate for the fynbos biome. No annual burning will be permitted for any of the proposed sites. No burning (except possibly for brush piles) may take place in July-September in Cape Town, as this is outside of the natural fire season. Planned





ecological burns should only take place in late summer, from February to early April, but not after the first good rains. A fire return period of 2-3 years in the fynbos biome is too short to allow long-lived species to set sufficient seed to persist. This will lead to altered community composition and native species loss; and goes against the management objective of biodiversity conservation in these offset sites.

The above statement has been removed. Broad recommendations have been kept allowing the implementing agent the freedom to implement management plans as deemed necessary.

55. "Rangeland condition" is inappropriate in the fynbos biome context and must not be the focus for management interventions.

Amended to vegetation condition.

Table 11 Rehabilitation principles

56. Engineers, horticulturalists and landscape architects should not be decision-makers for rehabilitation or restoration in the proposed biodiversity offset sites.

Reference to these individuals has been removed and necessary specialist information corrected.

57. All reference to "stakeholder engagement" should be removed from all activities related to rehabilitation and restoration. This is beyond the requirements of the NEMPAA and associated Regulations for the Proper Administration of Nature Reserves 2012.

Removed as requested.

58. Guidance for management activities should come from national and provincial legislation, not from online book summaries.

The context of this comment is unclear, nor to what it is actually referring to.

59. The primary goal of biodiversity conservation is not for an "aesthetically pleasing" landscape. This and similar narrative must be removed to avoid unrealistic, subjective expectations.

Amended in text.

60. "... getting a good grass cover..." is not the first goal of restoration in the fynbos biome. Re-vegetation may only be with site-specific locally indigenous species. Grasses should not be the dominant or pioneer species in any of the preferred offset sites.

Amended to state: "... good vegetation cover..."

Rehabilitation recommendations

61. Initial reseeding and phased replanting do not constitute "passive management". Reseeding and planting are considered active restoration. Passive restoration would only involve alien clearing and fire management.

Recommendations pertaining to reseeding and replanting have been removed.

Table 12 Rehabilitation activities and recommended rehabilitation measures

62. Why is this table written like a method statement for construction, rather than the requirements for a biodiversity offset?

The table has been amended in the report – the amended version ensures the table is aligned with biodiversity offset principles and reflects an ecological rather than a construction-centric approach.

63. Why are such stringent "construction phase" measures are needed if rehabilitation in the proposed biodiversity offset sites is minimal?

This has been addressed as per the comment above.

64. There should not be any reference to "pre-construction state" anywhere in this offset report. This "copy-paste" shows lack of engagement on and understanding of the sites concerned.

Amended as above.

65. What "adverse soil conditions" are present in the proposed offset sites? Unsubstantiated statements such as this must be corrected or removed.

This statement relates to the revegetation section which has been removed from the document (to align with passive rehabilitation measures).

66. The recommendation that "Preferred species should have larger biomass and prolific root system" fails to account for the nature of the vegetation types present in these proposed offset





sites. Restoring appropriate structure and function for the plant community is more important in the fynbos biome.

[This statement relates to the revegetation section which has been removed from the document \(to align with passive rehabilitation measures\).](#)

67. Under no circumstance will reseeding with “Mayford Biomosome Fynbos mixture” or any other commercially available premix be permitted anywhere in any of the proposed offset sites. This is an irresponsible recommendation for protected area restoration.

[Noted. This statement relates to the revegetation section which has been removed from the document \(to align with passive rehabilitation measures\).](#)

68. What “site prior to clearance” is referred to for seed collection? No clearance is to take place inside any of the proposed offset sites.

[This statement relates to the revegetation section which has been removed from the document \(to align with passive rehabilitation measures\).](#)

69. The list of “species selection” includes species that are not appropriate (e.g. *Aristida diffusa* and *Cynodon dactylon*) and suggests a lack of understanding of the dynamics of the vegetation types to be conserved. This list must be edited and then approved by the BMB.

[This statement relates to the revegetation section which has been removed from the document \(to align with passive rehabilitation measures\).](#)

Alien and Invasive Plant Species Clearing

70. “Follow-up control should be done on a minimum of two to three follow-ups per growing season, especially within the first year of control” is unrealistic and unlikely achievable.

[Amended to the following: “Follow-up control should be done on a minimum of once per growing season \(i.e., annually\)”.](#)

71. “It is important to note that AIP control must be conducted from the outer sections inwards to contain the existing AIP and prevent the further spread of AIP species.” This is not necessarily the best strategy, because it may depend on the state of invasion of neighbouring properties, density of invasion, fire history, terrain, resource availability for restoration post-clearing, and other variables. Please leave expert decision-making to the management authority.

[Statement has been removed.](#)

Table 13 Objectives and control measures for AIP clearing

72. The Table 13 Mechanical Control section should be deleted, as it is not best practice methods for the fynbos biome.

[Removed as requested.](#)

73. The Western Cape is a winter rainfall region, so in summer, soils are dry and stack burning is not recommended or permitted. This must be corrected.

[Mechanical Control section as per comment above.](#)

74. No firewood will be “chopped and supplied to the surrounding local communities” by the City of Cape Town.

[Mechanical Control section as per comment above.](#)

75. Please correct the “growing season” throughout the document. Cape Town is not in a summer rainfall area, and it is not best practice to install irrigation in a protected area.

[Amended as requested.](#)

76. “Follow-ups must be done for a minimum of three (3) times a year during the growing season (September – April) for the first three (3) years and thereafter a minimum period of four (4) years on an annual basis to ensure that new AIP and/or encroacher species infestation does not occur within the rehabilitated areas.” This should be adjusted to local best practice.

[Amended as requested.](#)

Revegetation activities

77. Few, if any, tree species naturally occur in the three vegetation types in these proposed offset sites. Blanket statements such as “Planting of trees...” should be removed.

[The revegetation section has been removed \(to align with passive rehabilitation actions\).](#)

78. “Shared dominant species are the exception and can be translocated across vegetation types.” Please remove this irresponsible statement. No species from the Macassar WWTW





development footprint or surrounding strandveld may be translocated to offset option 8, as this is far beyond a genetically acceptable geographical distance to move plants.

The revegetation section has been removed (to align with passive rehabilitation actions).

79. "Acquire the knowledge of a veld management expert to advise on management strategies to reach a healthy and diverse vegetation community." If the BMB is the implementing agent for the offset sites, then remove this statement since there is sufficient in-house expertise.

The revegetation section has been removed (to align with passive rehabilitation actions).

Table 15 Fire management plans

80. "Firebreaks should be established throughout the site". Note that this is not necessary according to the National Veld and Forest Fire Act 1998, as this legislation only requires a landowner to implement measures to prevent the spread of fire onto a neighbouring landowner's property. As such, only perimeter firebreaks are required. Internal firebreaks cut annually would only be required to protect infrastructure. Internal firebreaks needed for ecological burning operations can be prepared ahead of the burn and need not be cut annually.

Amended.

81. Due to budget cuts, Working on Fire labour is unlikely to be available for firebreak maintenance.

Amended.

Wildlife management

82. Please confirm whether eland is currently resident on option 8, as much of the area is unfenced.

As per on-site communication between Jacques van der Merwe (BMB) and Bianca Bleuler (STS) on 5 November 2024, eland and grey rhebuck are located on the site.

Table 16 wildlife management plans

83. The proposed wildlife management plan(s) must not be aimed at "supporting optimal savanna health and biodiversity". Change "savannah" to "fynbos".

Amended.

84. A stand-alone "Grazing Management Plan" is not appropriate in the fynbos biome, as this runs the risk of promoting an unnatural dominance of grasses.

The report suggests that grazing plans incorporate specific objectives to ensure sustainable land management. The section in italics has been included for clarity: "To implement this approach, grazing and browsing plans should incorporate specific objectives and control measures to ensure sustainable land management, particularly in areas undergoing rehabilitation (Table 16). For instance, within Option 8, game camps should be used to allow selective exclusion of eland and rhebok from newly rehabilitated areas, giving these areas the opportunity to establish without grazing pressures. As such, grazing plans should not be considered "stand-alone" but should be incorporated and interpreted in conjunction with other management plans to prevent the risk of promoting unnatural grass dominated landscapes".

85. Game camp management: the management priority in protected areas in Cape Town is not large mammal conservation. Focussing attention on rotational grazing and game camp management will be at the expense of biodiversity conservation.

Recommendations within this section were discussed on site between STS and BMB on 5 November 2024. The recommendations were further emailed to BMB for consideration on 19 November 2024.

Erosion control

86. Figure 25 photographs must be dated and the locations shown on a map to contextualise and validate the so-called 'erosion' at Macassar. In Cape Flats Dune Strandveld, dune slacks and coastal foredunes are naturally dynamic systems where bare soil is part of the cycle and does not necessarily imply erosion. Annuals and ephemerals often naturally dominate these areas, and hence for parts of the year bare soil does not equate with a lack of native species diversity.

The image has been removed and the text adjusted to indicate if erosion is a concern, then a specialist should advise on the process of correcting such issues.





87. "Soil contouring and terracing" is not best practice in strandveld, fynbos or renosterveld. This recommendation should be removed. If anything, the goal of restoration should be to counter the detrimental impacts from past ploughing in fynbos and renosterveld.
Removed as requested.
88. What evidence is there of "eroded gullies" in the Cape Flats Dune Strandveld sites? This is not visible in the Figure 25 photographs provided.
Image has been removed.
89. No foreign material (straw or other organic material) may be brought in to the proposed offset areas for use as mulch.
Text has been amended to indicate the use of indigenous vegetation for such purposes.

Table 17 Monitoring actions

90. To avoid unnecessary reporting burden, it is recommended that reporting align to financial year-end processes, rather than weekly, monthly, quarterly or "during the growing season" as variously stipulated in this table.
As long as the frequency of the monitoring, AIP control, and erosion control is conducted regularly and as stipulated by the ECO, etc, then a report produced annually is sufficient.
91. Monitoring should follow the Standard Operating Procedures already adopted by the proposed implementing agent, not as randomly outlined in this report.
Monitoring protocols can be refined in the detailed design phase of the rehabilitation plan.

Offset Strategy Budget

92. Where is this proposed budget?
As per the request of the client (WWTB), the budget has been excluded from the offset strategy and provided to the City of Cape Town independently.
93. The line items on the budget for each offset site must be detailed in this report so that decision-makers and commenting authorities can confirm that the budget adequately covers all aspects of effective management for a protected area.
A detailed budget will be submitted along with the offset report when the final BAR is submitted for review on 10 December 2024

Offset conditions and considerations

94. Remove the BMB from the commitments detailed in this paragraph. BMB is not the proponent and cannot be held liable to carry the costs of the proposed WWTW expansion development.
The wording is taken directly from the reviewed and signed Offset Agreement that is between the BMB and the WWTB.

Appendix D: Offset site selection criteria

95. Table D1 must be replaced with criteria that are applicable to Cape Town, not to "Limpopo Ridge Bushveld and Musina Mopane Bushveld".
Amended.
96. Criteria used should align with the National Biodiversity Offset Guideline 2023, not the draft National Wetland Offset Guideline 2014.
Biodiversity offsetting is Novel and rapidly developing and oftentimes there are gaps in methodologies and approaches. The NBOG 2023 do not provide detailed criteria for offset site selection. Therefore, the criteria used in this report were developed with the goal of ensuring ecological rigor, drawing from well-established, ecologically sound principles and other existing guidelines, such as the draft National Wetland Offset Guideline (2014). The criteria were adjusted and interpreted in a biodiversity-appropriate manner.

We trust we have addressed your comments satisfactorily.

Yours sincerely,

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