

Comments to Appendix G6 - Botanical Impact Assessment

1. CONTEXT:

The recommendations in the Botanical Impact Assessment (BIA) are based on two short site visits conducted only in spring - a significant limitation it downplays.

2. SUMMARY OF COMMENTS:

Detailed scrutiny of the BIA, supported by feedback from experts, show that it is **severely flawed** because:

- 2.1. It failed to conduct a complete botanical survey that accounts for species found in all seasons.
- 2.2. Both visits – one a scoping study – were conducted in spring and lasted a few hours.
- 2.3. It failed to identify various Species of Conservation Concern found in a study by Dr Brian Du Preez and is likely to have missed others.
- 2.4. It failed to assess the impact beyond the site on the environment, including the impact of walkways, firebreaks, and the construction site.
- 2.5. It downplayed its limitations, which could lead to flawed conclusions.
- 2.6. Insufficient emphasis was placed on the upper station's location in the Mont Rochelle Nature Reserve as part of the Cape Winelands Biosphere Reserve in the Cape Floral Region Protected Areas World Heritage Site, designated by UNESCO in 2004 with the highest level of protection in perpetuity in accordance with the Protected Areas Act where there should be no high impact development and activities should only be aimed at conservation.
- 2.7. It failed to mention that the upper station is in a UNESCO World Heritage site and the obligations associated with this status and the retention thereof.
- 2.8. It failed to examine the site's high impact at a local scale and instead focused on its impact on a broader scale.
- 2.9. It failed to consider the Environmental Management Plan for the Mont Rochelle Nature Reserve and whether the Upper Station and associated activities are compliant with it.
- 2.10. Despite these flaws, the BIA concludes that the impact of the Upper Station is medium to low negative and there are no red flags "or any other obstacles that would prohibit the development."

Conclusion:

No properly informed decisions can be made based on the BIA's conclusions. Its endorsement of Skytram is made using limited information obtained in two short site visits and a once-off plant species list which only provides a snapshot of the area's botanical richness. Based on these survey inadequacies alone, **the Botanical Impact Assessment should be disregarded.**

"The no-go alternative is the best option for the Franschhoek Skytram project, contrary to the recommendations of the specialist reports prepared for environmental authorization." Dr Brian Du Preez.

3. THE EXPERTS:

Quotations in the comments below taken from separate comments attached as Appendices 1, 2 3, 4 and 5 made by five experts - Dr Ruida Pool-Standvliet, Dr Gert von Tonder, Dr Brian du Preez, Guy Palmer, and Anso Le Roux. Below are brief CVs for each of them. It is hoped that given their qualifications, expertise and experience, due weight and recognition will be given to their comments quoted here and given separately.

Dr Ruida Pool-Standvliet:

An Ecologist at Cape Nature, Dr Pool-Standvliet has a Doctoral degree in Natural Sciences of the Ernst-Moritz-Arndt University in Greifswald, Germany. Currently she holds a scientific position with the Western Cape Nature Conservation Board and is based at the Scientific Services section in Stellenbosch, South Africa. Working in landscape conservation, she has been involved with land use management and implementation aspects of the UNESCO MAB Programme for more than 25 years. She is a registered Professional Natural Scientist with the South African Council for Natural Scientific Professions (SACNASP). Since 2014 UNESCO has recognized her on their International Roster of Experts.

Dr Brian du Preez:

He has studied the Cape Flora in particular since his first year 2011. He has built up an impressive list of new species discovered (+10), rediscovery of species listed as extinct (4), dozens of data deficient and long last seen species found, and hundreds of threatened species found and monitored. His passion is for conservation of biodiversity, especially of species that are often overlooked by others. His academic focus is on legume systematics in the GCFR, one of the most diverse plant groups of the region, and a group with many threatened and undescribed species. He has completed his PhD and is looking to further his career both academically, by revising the genus *Indigofera* for the whole of Southern Africa, and also on the conservation side by providing high quality, botanical studies for EIAs to ensure that our rich plant diversity is not lost due to infrastructure developments.

Guy Palmer:

A Cape Winelands Biosphere Reserve board member (2016/ present) and retired CapeNature, Scientific Services, Biodiversity Manager (1970/2015).

Dr Gert van Tonder:

Gert van Tonder (M. Eng. Robotics, University of Pretoria; Ph.D. Neuroscience, Kyoto University) is a neuroscientist and moss garden designer, resident in Kyoto since 1995. Between 1996 and 1999 he trained as a classical Japanese-style gardener at the Ueoto Japanese Landscaping Company in Kyoto. He has worked as associate professor in the neuroscience of human visual perception at Kyoto Institute of Technology between 2003 to 2014, and as visiting professor at Stanford, Princeton, and other universities between 2011-2015. In 2014, he was named Whitney B. Oates Fellow by the Princeton Humanities Council in recognition of his graduate course, Perception and Aesthetics in Japanese Gardens, on the intersections between perception, cognition, and aesthetics. His research has been featured in major scientific and media outlets, including Nature, New York Times, BBC, CNN, NHK World, National Geographic, Discovery Channel, Scientific American, among others and has been exhibited at the British Museum. He is concurrently an external researcher in vision research at Kyoto University, while working as a moss garden designer in Franschhoek. His landscaping work in the Western Cape aims to capture the

quintessential aspects of Japanese design aesthetics and techniques, embodied with local materials from the Winelands.

Anso le Roux

Anso le Roux has the following qualifications: UNISA National Diploma Nature Conservation (obtained with distinction). UNISA Master of Science in Environmental Science (Cum Laude): An Ecological Assessment of the Holsloot River, Western Cape, South Africa. UNISA PhD in Environmental Sciences: The Vegetation Ecology of the Witteberg and Dwyka Groups South of Worcester, Western Cape Province, South Africa.

She is a registered scientist with the South African Council for Natural Scientific Professions 120186 Pr.Sci.Nat. Ecological Science. She is a Research Fellow at the Department of Biodiversity and Conservation Biology (Faculty of Natural Sciences), University of the Western Cape. She is an Honorary Lecturer at the Imperial College, London. She is an author and co-author of various semi-scientific and scientific articles as well as Conservation Ecology study material for the Nature Conservation curriculum (Unisa).

Although her primary work involves phytosociological research (vegetation surveys, plant identification as well as data gathering, -management and -analysis), she is furthermore involved in taxonomic studies as well as ecological monitoring related to questions arising from the long-term vegetation ecology study that she is conducting. She is involved with lecturing and supporting students with fieldwork, plant identification as well as assisting with other ecological assessments in the Breede River Valley. Her contribution to students includes lecturing (geology, soils, and vegetation communities) as well as data collection, analyses and reporting regarding vegetation projects.

She is involved with the annual monitoring of veld condition at the Postberg Nature Reserve as well as privately owned game farms. She recently initiated a collaboration between the South African Department of Agriculture, the Agricultural Research Council of South Africa, and the University of the Western Cape to study the response of *Aspalathus amoena* (and other threatened endemic plant species) to disturbance in the Breede Alluvium Fynbos. This resulted in the registration of a MSc research project earlier this year of which Anso is a co-supervisor. The study aims to understand the ecology of seemingly secondary successional plant species, such as *A. amoena* and intact patches of alluvial Fynbos in the Breede River Valley to ensure proper land use and farm planning that would protect the species and ensure connectivity between intact Fynbos populations.

Her private collection of photographs, Flora of Mosaic Mountain Veld South of Worcester, Western Cape, South Africa, is published on the JSTOR Global Plants Database. JSTOR Global Plants is an essential resource for institutions supporting teaching and research in botany, ecology, and conservation studies where high-resolution type specimens and related materials from community contributors around the world are archived: <https://plants.jstor.org>. She helps with plant identification, talks and creating awareness regarding plant poaching.

4. DETAILED COMMENTS:

Statement page 5:

#vi. Limitations and Assumptions states:

.... two site visits since both were undertaken in spring..." Therefore, some plant species could have been missed.

The age of the vegetation is a limitation...

Comment:

The BIA downplays or excludes limitations:

- **Number of site visits:** Two site visits were conducted. It should be emphasised that **the first site visit was a scoping exercise:** "The first excursion (20 October 2021) was a scoping exercise to consider the location for the placement of the upper Sky-Tram station and an access route to permit transport of building materials and, later, service vehicles to the restaurant," (pg. 16).
- **Time spent on site:** The botanical survey of the upper station took a mere four hours. This is insufficient for a proper botanical evaluation, as sufficient information cannot be collected, and many species of conservation concern (SCC) were likely missed in the on-site time. The statement that "From a botanical perspective, specifically on Middagkransberg, due to the development of the Franschoek Sky-Tram, there are no 'red flags'" cannot be relied on when based on a single survey in such a short period.
- **Difficulty in identifying species:** As Dr Gert van Tonder points out: "What complicates any survey in the area is that many species will only be noticed if you walk right next to it – even from two meters away, their cryptic growth forms may render them difficult to spot; they may only be noticeable when flowering, but then their flowering cycles can also be erratic. From personal experience, I can testify that on each walk around the area in question, I have always stumbled upon specimens overlooked on previous visits."
- **Formal survey protocols lead to large inaccuracies when faced with high diversity areas:** "Formal protocols for assessment had to be followed," explains Dr Van Tonder, "which ironically means that generic profiles of the wider biodome must form the blueprint for survey results, and as such create large inaccuracies when confronted with an area of high diversity."

Being based on a single four-hour site visit in spring and thus unrepresentative of flowering in other seasons the conclusions of the BIA are unsustainable and cannot be relied on in the decision-making process.

Statement page 5:

#vi. states: Season was not a limitation for the two site visits since both were undertaken in spring. However, there may still be plant species unaccounted for that are summer or autumn flowering. Therefore, some plant species could have been missed. The assumption is that such plants could occur elsewhere in similar habitats in Mont Rochelle Nature Reserve.

Comment:

The season is clearly a limitation. The BIA does not provide an accurate picture of the botanical wealth in the areas. Many plant species were unaccounted for since site visits were not undertaken in summer, autumn, or winter. "One example is *Protea scorzonifolia* (listed as Vulnerable) collected on Middagkrans," explains Dr Pool-Stanvliet. The utmost care should be taken when deciding the future of a UNESCO World Heritage site.

Yet this report fails to mention that the upper station is in a World Heritage Site. Why? By omission it downplays the significance of the site and fails to address the provincial, national, and international obligations associated with UNESCO sites.

Statement page 5:

#vi states: The age of the vegetation is a limitation because some species that need a longer time post-fire to contribute to the plant community may also have been missed in the survey. It is assumed, however, that the number of such species would be small.

Comment:

It is fair to assume that species that need a longer time post-fire to contribute to the plant community **have been missed**. In the case of recent fire, some plants take a few years to reach maturity and flower," explains Anso le Roux. "Any vegetation survey done in immature veld would most likely not produce a comprehensive report whereby decisions regarding the permanent loss of vegetation, as well as probable future degradation of the peripheral areas can be made."

It would be prudent to permit the vegetation to recover sufficiently to allow a proper assessment of the plant species when they flower. The assumption that "the number of such species would be small" requires clarification as no foundation for this assumption is provided.

The Map dated 11 May 2023, on page 19 of Appendix G8 to the pre-A BAR, indicates that the last fire on the site was 3-4 years ago. A google search revealed it was in late February 2019. The second visit was 3 years and 7 months after the fire – insufficient time for a full recovery of the site.

Statement – Page 6/7:

Terms of Reference – not quoted here.

Comment:

The Protected Areas Act of 2003 is omitted from the list of applicable Acts. Also omitted is the inclusion of the site of the Upper station in the UNESCO Cape Winelands Biosphere Reserve and the Mont Rochelle Nature Reserve.

The Terms of Reference list "Comments of Cape Nature" but as these have not been annexed the right is reserved to make further comments when these have been made available.

Statement page 6:

#1 states: The proposal is to offer domestic and international tourists the opportunity for an effort-free ascent to the peak of Middagkransberg from where it would be possible to have a 360° view of the mountains and valleys of part of the 'Boland' of the Western Cape, as well as to partake of fine cuisine at the high-altitude restaurant.

Comment:

The view from the decking is a 180-degree view due to the viewing deck being below the ridge line. There is a very similar view from the parking area at the top of the Franschhoek Pass the drive to which and descent from which are also effort-free and offer the opportunity of stops at the intermediate viewpoints and a spectacular drive down the Villiersdorp side to and ascent from the Du Toit River bridge. Adventure tourists will choose to hike, and already make use of the Mont Rochelle and Berg River Dam trails. The altitude of 1029m is not impressive when compared to international restaurants at over 3000m and cannot be considered a unique selling point.

Statement page 6:

#1 states: Careful note has been taken of the requirements and recommendations of CapeNature and the Botanical Society of South Africa for proactive assessment of the botanical sensitivity of proposed development sites and follows published guidelines for evaluating potential impacts on the natural vegetation in an area earmarked for some form of development (Brownlie 2005, Cadman et al. 2016). The 2020 Species Environmental Assessment Best Practice Guideline and protocols for terrestrial biodiversity specialists (Government Gazette, 2020; Enviro Insight, 2020) have been applied.

Comment:

Notwithstanding these guidelines, the BIA does not consider:

- The HIGH impact of the upper station on critically endangered vegetation at a LOCAL scale;
- The broader impact beyond the site footprint (upper station and restaurants) of new footpaths and firebreaks the full extent of which, Dr Pool-Stanvliet says in her comments, "should have been included in the botanical assessment in order to give a clear indication of the true impact on the Critically Endangered vegetation on site,"
- Wildfire risk, litter, crime, pathway routes, vegetation clearing and the impact during the construction phase of workers living on-site and their access route.

Statement page 12:

3.2.2 states: "In contrast to the shale and mudstones of the Moorreesburg Formation, the rocks of the Franschhoek Formation, also of the Malmesbury Group (and notably NOT of the Table Mountain Group) are sandstones. These sedimentary sandstone rocks give rise to shallow, rocky, well-drained, nutrient- poor soils, unsuitable for agriculture."

Comment:

This statement is entirely false as the Franschhoek formation does not only consist of sandstone as Anso le Roux points out.

Statement page 15:

#4 states: Haute Cabrière was first visited on 20 October 2021. The area proposed for the Lower Station and parking is completely transformed, so no further attention was given to that, since no plants or vegetation would be affected at this site.

Comment:

Gert van Tonder states: "Their assessment that there is no fynbos of interest at the lower site is also flawed. They have clearly not surveyed the area properly. For example, at the lower site a hectare of Eucalyptus has been removed in 2020 and the remnant fynbos restored. It includes various vulnerable plant species".

Therefore, the statement is false and further investigation is required.

Statement page 16:

#15 states: The second site visit (Figure 2) was undertaken by the author and Mr Doug Jeffery on 29 September 2022. Initially Middagkransberg was enveloped in mist from the southeast wind, but it cleared by mid- morning to permit a successful botanical evaluation of the proposed Upper Station site. Approximately four hours were spent at the site and the surrounding slopes.

Comment:

It appears from Figure 2 that a considerable length of time may have been spent walking from the top of the Franschhoek pass to and from the proposed site.

Statement page 16:

#5.1 states: According to the national vegetation classification published in 2005 (Mucina, Rutherford & Powrie 2005) and updated in 2018 (SANBI, 2018) the vegetation occurring at Haute Cabrière would have been Cape Winelands Shale Fynbos (Critically Endangered) [Government Gazette, 2022]. All this vegetation is now lost to cultivation and even the small remnants shown in Figure 18 are also isolated and have low ecological value.

Comment:

The loss of this critically endangered Winelands Shale Fynbos is a **serious red flag** for what is to come if the competent authority permits the developer to proceed with this development, especially since the critically endangered Kogelberg Sandstone Fynbos is found at the proposed upper station.

Statement page 16 and 17:

#5.1 states: "In contrast to the lower altitude vegetation that would have been found where the lower Sky-Tram station would be built at Haute Cabrière, the vegetation found on Middagkransberg, where the upper Sky-Tram station and associated amenities would be constructed is Kogelberg Sandstone Fynbos, a Critically Endangered vegetation type [Government Gazette, 2022] that extends from this location southwards to the Kogelberg at Betty's Bay and Kleinmond, on the sandstone peaks and slopes.

Kogelberg Sandstone Fynbos is an extremely species-rich vegetation type with numerous endemic species, found extensively on the mountain ranges from Franschoek south-eastwards to the Kogelberg, with considerable species-richness at the local scale, i.e., the number of species found in a specified area (alpha diversity).

However, not only is this vegetation species-rich at the local scale, but it also has a high beta diversity which is the difference in species diversity between samples or communities i.e., the turnover of species along geographic or ecological gradients (Kent, 2012). Since the area targeted for the construction and operation of the Upper Station and associated infrastructure would occupy a relatively small area, the vegetation, although representative of Kogelberg Sandstone Fynbos, is not largely different from the same vegetation type found further south on the Hottentots-Holland Mountains and Kogelberg Mountains.

This is important since the species-richness of the limited area that is envisaged to be lost due to construction and operation on Middagkransberg is nowhere near the species-richness of Kogelberg Sandstone Fynbos over its entire range. With respect to the Upper Station site, the impact of the proposed infrastructure would be at the beta diversity scale and therefore the loss of species would be relatively very small.

Comment:

Several points are of concern:

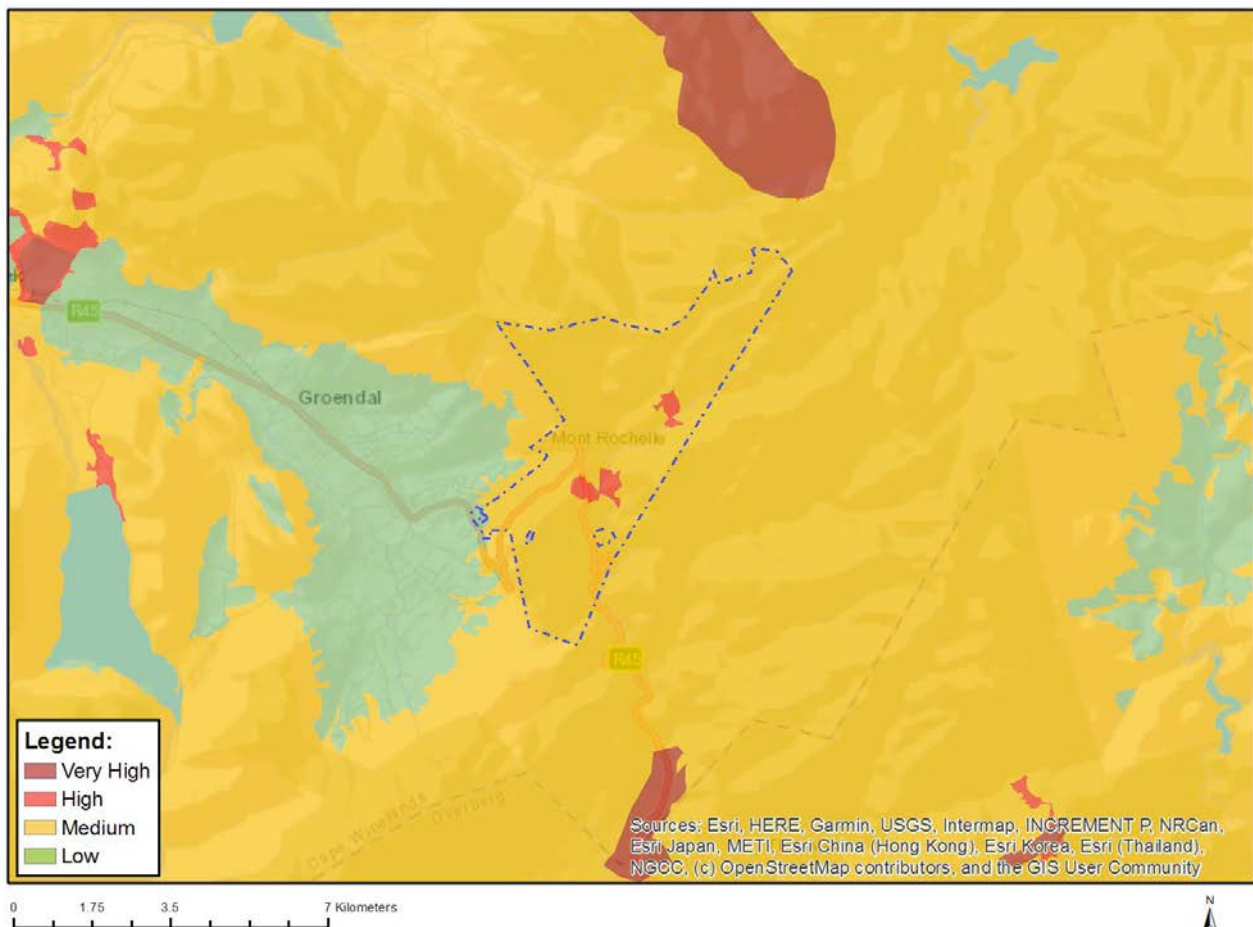
- Dr Pool-Stanvliet points out that in the BIA: "It is also stated that this vegetation type is not only vegetation-rich at the local scale, but it also has a high beta diversity (p. 16). This is directly contradicted by the statement on page 17 that the 'impact would be at beta diversity scale and therefore the loss of species would be relatively very small'."
- Dr Pool-Stanvliet also points out that "It is also stated [in the BIA] that the vegetation on the small area of the upper station 'is not largely different from the vegetation type found further south' (p. 16)," and "that the species-richness of the small area of the upper station that will be lost is 'nowhere near the species-richness of Kogelberg Sandstone Fynbos over its entire range' (p. 16, 17)." She goes on to say "These statements do not ring true due to the fact that the botanical assessment was way too limited to prove the lack of richness of the vegetation on the site of the upper station. The faunal impact assessment states that the 'loss of mountain fynbos habitat associated with Kogelberg Sandstone Fynbos is considered of high conservation concern' (p. 45)."
- Anso le Roux states: The Middagkrans area does not consist of one vegetation type only. Cape Winelands Shale Fynbos (Endangered) occurs just to the south of the proposed area and Shale Band Vegetation occurs to the east of the mountain.
- The loss of this vegetation type is downplayed by stating that the loss is negligible compared to the overall species richness. There is failure to mention that this plant type, which contains a high number of threatened species, is quite literally found nowhere else in the world.
- The argument for why vegetation loss is acceptable also focuses on species richness. It fails to acknowledge the interconnectedness of habitats and ecosystems and ignores other factors crucial to ecosystem health, like habitat fragmentation, disturbance of species, and changes to the ecosystem. **Importantly, it ignores the high impact on a local scale.**

Statement page 21:

#6.2 states: The National Web-based Environmental Screening Tool

Comment:

Please provide the data inputs used for and by this screening tool to allow for further comment. From the image below, taken from Appendix L1 Screening Report, it appears that the data for the area is extremely limited. The areas shown as highly sensitive appear to be the sites of the parking, entrance to the MRNR and 2 houses and 1 partly built house within the MRNR. MRNR is a nature reserve because of its high sensitivity but it is not shown as such by the screening tool.



Comment:

The National Web-based Environmental Screening Tool evaluates the sensitivity of the Lower Station development footprint for the plant species theme where the sensitivity is Low. The BIA accepts this evaluation. The data collected in the BIA indicates that the sensitivity of plant species at the Upper Station is Low, which is less than that given by the analysis of the National Web-based Environmental Screening Tool for the Upper Station site. It is confusing that the National Web-based Environmental Screening tool is used in some instances and not others.

Statements page 21:

#6.2 states: The result was that the site has a MEDIUM sensitivity with respect to the relative plant species theme (Figure 19). Eighteen (18) species are listed as sensitive, the identification of which has been obtained from SANBI but withheld from this report as per protocols. All the other species listed have MEDIUM sensitivity. Very few of the listed species were recorded on the site, indicating that the site has LOW botanical constraints.

Comment:

The absence of recorded species may not necessarily indicate low botanical constraints but could instead - and most likely - be attributed to insufficient survey efforts with a single site visit of a few hours only in spring.

Statement page 23:

#6.3 states: The Sky-Tram upper station and other buildings and boardwalks would all be in an area classified as Critically Endangered and would result in complete removal of all the vegetation on the footprint.

Comment:

This is cause for major concern and should not be ignored or excluded from the botanical impact study. The pathways, boardwalks, and firebreaks must be included in the area of assessment.

As Dr Pool-Stanvliet points out: "The botanical assessment refers to the area of the upper station as being 4789 m² in extent (p. 29). This extent excludes any fire breaks. Although fire breaks are usually brush-cut, continuous application of this management intervention eventually leads to the loss of species. The full extent of fire breaks should have been included in the botanical assessment in order to give a clear indication of the true impact on the Critically Endangered vegetation on site."

Gert van Tonder attempts to quantify this true impact: "My estimate, looking at the visible degradation of the ecosystem around the Table Mountain Upper Cable Station for comparison, is that the combined impact of construction, fire breaks, human activity under the cable lines, visitors who deviate from marked paths and the inevitable effect of pollution spread through wind will negatively impact an area of at least 3 square kilometres, the worst of these being the area to the South and West of the Upper Cable Station, as these affect slow seepage alpine wetland that contributes water into the entire lower riverine sections of the Mt. Rochelle and upper Theewaterskloof areas.

Because the actual area of the reserve is just a 14km x 14km square land area, the cable car development could therefore impact more than 1% of the Mt. Rochelle-HottentotsHolland reserve – a totally unacceptable figure. In stark contrast to the proposal, the developers could do well by looking at the utmost care with which visitor accommodation has been erected at the Kogelberg reserve, impacting less than a 0.01% footprint of the area!"

Statement page 24:

#6.4 states: No species of conservation concern were found on the site footprint (sensu Raimondo et al. 2009). However, the ecosystem concerned has different species flowering all through the year so a 'spring snapshot' will not necessarily yield a list of all the species found in the area. Therefore, it is possible that one or more plant species of conservation concern (also known as Red List species) can occur. An example is the possible

occurrence of the range restricted *Gladiolus rhodanthus* (Saunders, R. & R. 2021) that has been recorded at other places in the Mont Rochelle Nature Reserve (iNaturalist). Occurrence at Middagkransberg can only be verified in December 2023 and January 2024 since it is now past its flowering season (February 2023).

Comment:

The statement implicitly acknowledges the inadequacy of an assessment based solely on a single "spring snapshot".

Statement page 30:

#8.1 states: The impact of the No-Go alternative would be Neutral i.e. no degradation (negative impacts) from development or other activities nor improvement (positive impacts) that would influence the status quo.

Comment:

Taking the statement on page 20, "This proclaimed reserve is protected in perpetuity, hence the green shading in Figure 18, meaning that, regardless of the veld type, history, condition or sensitivity, it has the highest level of protection possible as a provincial nature reserve" into consideration, **the No Go alternative best protects the Mont Rochelle Nature Reserve in perpetuity and is the most desirable alternative.**

Statement page 31:

#8.2.1 states: The Lower Station would be constructed on an area that has already been highly disturbed. Therefore, any further disturbance...would not result in any further negative effects...

Comment:

This statement assumes that further disturbance has no additional impact because the area is already disturbed. This is not necessarily the case as disturbed areas can still hold ecological value. **The existing level of disturbance needs to be better quantified, and further degradation needs to be analysed.**

Statement page 31:

#8.2.1 states: The cable between the Lower Station and the Upper Station would result in minimal disturbance during construction and no disturbance during operation.

Comment:

Please provide evidence to support this statement, including specific reference to vegetation clearing requirements. See Figures 19 and 22 from the Integrated Fire Management Plan which illustrate the proposed fire break areas.

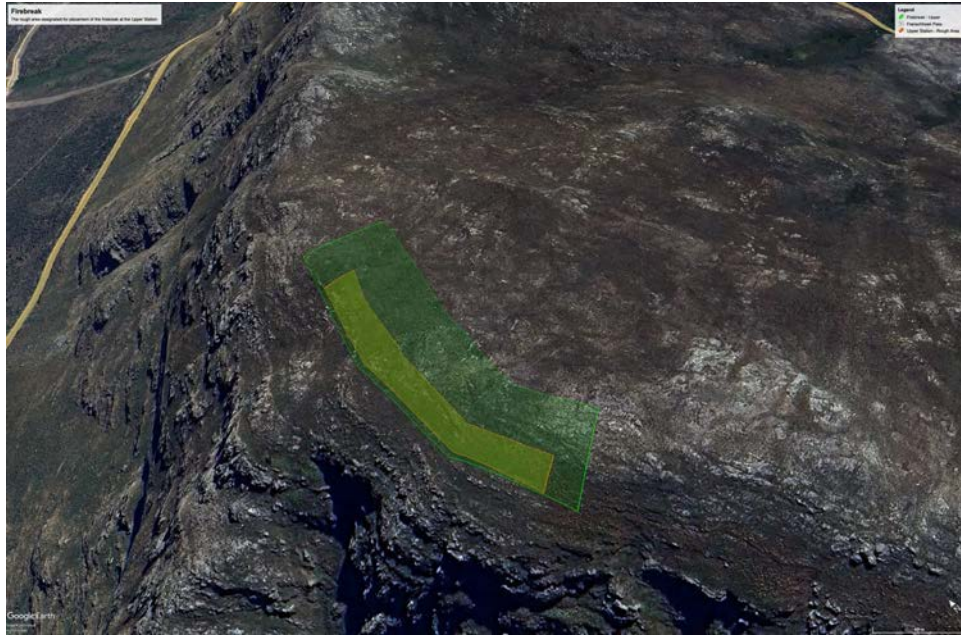


Figure 19: Approximate placement of 30m wide firebreak extending around Upper Station structures except for underneath the platform, trimmed down to ankle height. Exact placement to be finalised when construction takes place.

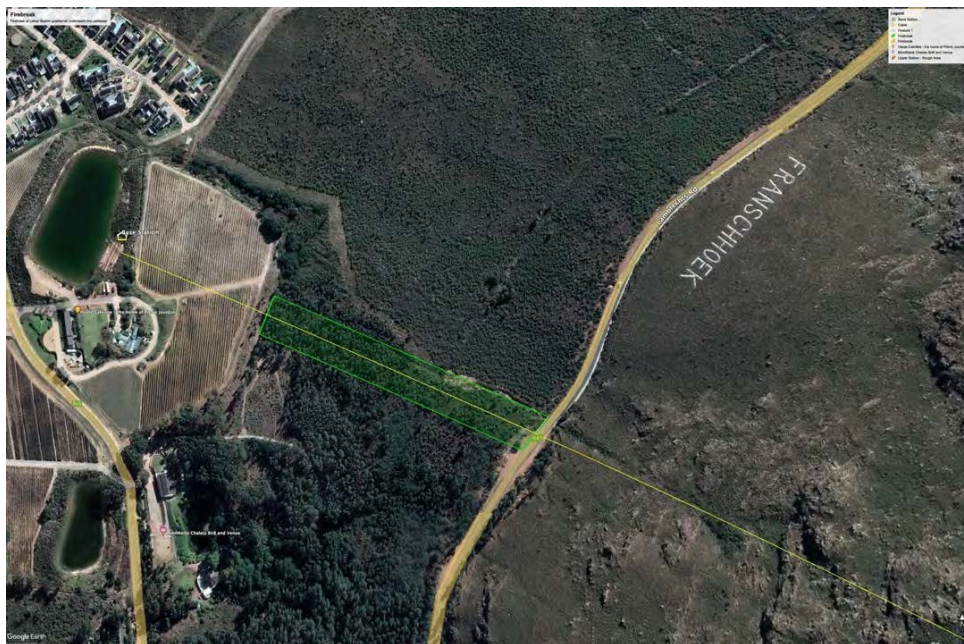


Figure 22: Firebreak location above Lower Station placed between Haute Cabriere vineyards and the R45 Franschoek Pass. The footprint of the firebreak, at 40m in width, is indicated by the green polygon.

Statement page 31:

#8.2.1 states: The Upper Station for Alternative 1 would be built on 'Level 1007'. The development would result in the loss of ±4444m² on the mountain ridge of Middagkransberg". The alternative is 4789m².

Comment:

This loss needs to be quantified: How many plant species will be lost? Which plant species? How will this impact the surrounding ecosystem for animals that rely on them? How will it impact ecological corridors?

Statement page 31:

#8.2.1 states: Very little opportunity would be available for mitigation of any negative impact and what little mitigation could be carried out, e.g. possible translocation of a few plants, would have no bearing on lowering negative impacts.... Mitigation for Alternative 2 would be very limited.

Comment:

What mitigation efforts, besides translocation were considered? Anso Le Roux explains that translocation won't work because "fynbos plants do not tolerate root disturbance".

Why were they insufficient? As limited mitigation efforts are deemed possible, this is of grave concern and a **red flag**, especially when considering the site's World Heritage status. It is simply not acceptable to proceed with any activity that could cause the degree of negative impact that would be caused by Skytram.

Statement page 31:

#8.2.1 states: From a botanical viewpoint, there would be very little difference between the impact on the plant community at 'Level 1007' compared with that at 'Level 1017'...

Comment:

Plant communities may be similar, but potential differences in species composition and ecological function should still be considered in separate areas. It ensures a thorough EIA, which errs on the side of caution.

Statement page 31:

#8.2.1 states: Given the extensive distribution of the sandstone fynbos, at a regional scale, the impact would be Low Negative from a botanical point of view, particularly since no plant species of conservation concern were found within the Alternative 2 footprint (Table 2).

Comment:

This statement focuses on the regional scale while neglecting the local impact. "It is incorrect to look at the impact of the proposed development at a broad scale", explains Dr Brian du Preez, "as the impact of the proposed development is high at the local scale, and the vegetation here is comparably different to other areas of Kogelberg Sandstone Fynbos."

Even if the vegetation type is widespread, the specific site might hold unique ecological value, serve as a critical wildlife corridor for Leopards or contribute to habitat connectivity.

The BIA bases this assertion on one four-hour visit that did not find any SCC. Groups of I&APs visited the site and conducted surveys, which found species present that were not listed by the BIA. This is confirmation that not finding plants in a four-hour visit does not mean they are not there. **The statement that the impact would be low negative is therefore rejected.**

Statement page 32:

#8.2.1 states: The operational phase would involve the management of tourists in terms of their impact on the vegetation beyond the footprint of the Upper Station and associated amenities and the proposed footpaths.

Comment:

The impact of the project on critically endangered vegetation beyond the footprint is crucial – taking into consideration firebreaks, footpaths, and people. This cannot be left to the Mont Rochelle Management to deal with as they are a volunteer body who are not trained in this field of expertise. Additionally, they are under resourced to perform this important function. Consideration must be given to this impact **prior to endorsing this development**. The BIA must cover precisely where these “footpaths and associated amenities” will be located and what the impacts will be pre and during construction, and during the operational phase.

The exclusion of detailed consideration of the impact of people, paths, walkways, and firebreaks on the reserve from the BIA and EIA is a flaw.

Statement page 32:

#8.2.1 states: In this instance, the aim should be to ensure that hikers remain on a single path and do not make ad hoc paths down the mountain slopes. The impact of such use in the operational phase is rated as Medium Negative for all alternatives and, with mitigation by management of tourist activities, the impact could be reduced to Low Negative in the operational phase.

Comment:

How will the achievement of this aim be ensured? The Operational Management Plan is ill-defined. The measures recommended therein are superficial and vague. Human nature will prevail, leading to very seriously adverse, and potentially irreversible consequences – there are many examples of such cases from which one can learn.

Statement pages 33-36:

Refer to tables 1-5.

Comment:

Please explain the methodology used / standards applied to arrive at these conclusions.

Statement page 37:

#8.3 states: ...There is no clear or obvious indirect impact at this stage of assessment, but such impacts may become apparent during the operation of the Sky-Tram...

Comment:

"There is no clear or obvious indirect impact at this stage of assessment" because an assessment of the area away from the development site was not conducted. A wait-and-see attitude cannot be applied for a project on a World Heritage Site, that impacts delicate mountain ecosystems. A wider area must be assessed to avoid *"impacts that may become apparent during operation."*

The assertion that there is no clear or obvious impact should be disregarded.

Statement page 37:

8.4 states: Cumulative impacts on natural vegetation at the Lower Station would be negligible.

Comment:

Please clarify the basis for this statement in the context of the information requested about #8.2.1.

Statement page 37:

#8.4 states: The proposed development of the Franschhoek Sky-Tram would be in an area known for its natural beauty, this being the drawcard for tourists. The Upper Station and amenities will be placed in a declared provincial nature reserve and in Critically Endangered Kogelberg Sandstone Fynbos.

Comment:

Not only will the Upper Station and amenities be placed in a declared provincial nature reserve and in Critically Endangered Kogelberg Sandstone Fynbos; they will be placed in the Mont Rochelle Nature Reserve, which is part of the Cape Winelands Biosphere Reserve.

The Biosphere Reserve is included in the Cape Floral Region Protected Areas World Heritage Site, which was designated by UNESCO in 2004 and extended in 2015. As a nature reserve, it has the highest level of protection in accordance with the Protected Areas Act and is protected in perpetuity.

Since the natural beauty is already acknowledged to be a “drawcard for tourists”, there is no need for a Skytram. Hikers can currently enjoy pristine natural beauty. Without the cable car and its associated negative environmental impacts, they will continue to do so for decades to come!



A hiker taking in the views from Middagkrans

Statement page 37:

#8.4 states: However, the cumulative impact due to loss of only 4789m² of undisturbed natural vegetation will be very small in relation to the extensive vegetation type concerned (Tables 2 & 4).

Comment:

The BIA does not consider the impact at a local scale which, as previously mentioned, is high, according to Dr du Preez. Impact beyond the site must be considered.

Statement page 37:

#8.5 states: Residual impacts. Given the location of the proposed Upper Station with its associated amenities, it would not block any ecological corridors, and it would not severely impact a threatened ecosystem.

Comment:

The report contains no evidence to support this claim.

Dr Gert van Tonder points out: "Another potential significant ecological role of the summit line is that it serves as the highest altitude bridge connecting the Mont Rochelle nature reserve with the peaks extending into the Hottentots Holland Reserve. For leopards and other mammals that traverse summit lines it is therefore crucial to minimize human presence in this area. It is bad enough as it is to have a mountain pass running through this area, but the cable car venue is almost certain to significantly disturb animals – such as leopards, the Cape Red Rock Rabbit, Ribbok and other mammals and birds sensitive to disturbance.

Occasionally one can spot Secretary Birds patrolling the rocky Eastern riparian slopes. These precocious visitors are certain to disappear from this region if the intrusion into their habitat of a cable car station and up to 600 people is allowed. The increased human presence along the lower Berg River Dam Road has already caused Secretary Birds to abandon their known nesting sites on the Western side of the Berg River Valley, and the same will happen at Middagkrans."

Statement page 37:

#8.5 states: In addition, no threatened plant species were found on the site.

Comment:

This statement should be disregarded. Some I&APs visited the site where they found SCC species which the BIA does not mention (See: Du Preez Botanical Consulting Report).

Statement page 37:

#8.5 states: The ecosystem around the development would function normally, water courses would not be impeded, and the development would not lead to loss of a threatened ecosystem or loss of ecosystem services.

Comment:

There is no evidence to support this.

Statement:

#8.5 states: In fact, the loss would be very small in the context of the extensive distribution of Kogelberg Sandstone Fynbos.

Comment:

This contradicts the previous statement, which says, "...the development would not lead to loss..."

Statement:

#8.5 states: It is therefore important that this development should be looked at in the regional context in that the ecosystem that would be affected is extensive and there would be no loss of irreplaceable habitat, specific niches nor any plant species of conservation concern.

Comment:

According to Dr du Preez, "It is incorrect to look at the impact of the proposed development at a broad scale, as the impact of the proposed development is high at the local scale, and the vegetation here is comparably different to other areas of Kogelberg Sandstone Fynbos."

The statement "and there would be no loss of irreplaceable habitat, specific niches, nor any plant species of conservation concern" should be disregarded, as the BIA has not demonstrated it with an adequate study.

Dr du Preez rightly points out: "The botanical specialist report failed to identify the SCC recorded in this report, likely missed other SCC on the site, and did not provide reasons why other SCC were not recorded on the site as is typically considered best practice."

Statement page 37:

#8.5 states: There are instances at other places in the Cape Fold Mountains where the high peaks host endemic and rare species, sometimes confined to one mountain peak. It is not the case here.

Comment:

According to Dr Pool-Stanvliet, "This statement cannot be considered true due to the fact that there is simply not sufficient information on the presence of endemic species in Middagkrans. One example that comes to mind is the possible presence of Colophon beetles."

Statement page 37:

#8.5 states: Therefore, the residual impacts of the proposed development would be Low Negative."

Comment:

This statement is rejected based on the points raised above. The proposed development impact would be high negative.

Statement page 38:

9 General Assessment and Recommendations states: Similarly for the Upper Station with associated amenities the impact of the station would be the same for both alternatives: Low Negative in the context of the vegetation type and its extensive distribution.

#9 states: Residual impacts from the development are rated as Low Negative.

Comment:

As shown repeatedly throughout this comment report, "low negative" is not the case, and these comments should be disregarded.

Statement page 38:

#9 states: No meaningful mitigation would be possible to limit the negative impact at the footprint of the Upper Station. Only minimal mitigation could be achieved by search and rescue, particularly of geophytes.

Comment:

With so many red flags already identified (development is in an environmentally sensitive area, a BIA report lacking in detail, evidence of high impact at a local scale, unsubstantiated statements), not being able to provide meaningful mitigation is another reason why environmental approval should not be granted.

In terms of s50(2) of the National Environmental Management: Protected Areas Act of 2003, commercial activity in a national park, reserve, or UNESCO world heritage site "may not negatively affect the survival of any species in or significantly disrupt the integrity of the ecological systems of the national park, nature reserve or world heritage site."

The comments made herein, in the Appendices hereto and in the comments from Dr Bool Smuts show that there is a high risk of the survival of species being negatively affected and significant disruption of the ecological system of the Mont Rochelle Nature Reserve as part of a world heritage site by the Upper Station of Skytram and its use.

Statement page 38:

#9 states: No rare or threatened plant species were found during the survey. The probability of the occurrence of species of conservation concern (SCC) in the development footprint of the Upper Station is moderate to low.

Comment:

Multiple visits by I&APs in the short time provided for public participation, revealed evidence that SCC are located at this site (See: Du Preez Botanical Consulting Report). **Therefore, this entire paragraph should be disregarded.**

Statement page 38:

#9 states: The data collected in this study indicates that the sensitivity of plant species at the Upper Station is Low, which is less than that given by the analysis of the National Web-based Environmental Screening Tool for the Upper Station site.

Comment:

There is not enough data collected in the BIA study to make this statement. In the opinion of Dr Pool-Stanvliet, "For a more detailed species list, field visits should be conducted at least once every season, – i.e. four times a year. Without an extensive scrutinization of species throughout the course of at least a year, a once-off species list will only be a snapshot of the real botanical wealth of an area."

Statement page 38:

#9 states: ...there are no fatal flaws or any other obstacles that would prohibit the development...

Comment:

There are fatal flaws and enough evidence raised above to suggest that the development should not proceed. In addition, **there is documented evidence of red species such as *Aspalathus divaricata* on the site** (See: Du Preez Botanical Consulting Report).

Statement page 38:

9 states: All construction activities must be confined to a restricted zone. No other parts of the mountain should be accessed during construction.

Comment:

Please clarify what an acceptable size for the restricted zone is, assuming it will be larger than the site itself. Detail of the environmental impact, mitigation measures to safeguard against pollution and fire should be provided together with detail of who will enforce all mitigation measures.

Statement page 38:

#9 states: All possible tourist activities in the future should, as far as possible, be limited to the Upper Station with associated amenities and designated footpaths.

Access to the rest of the mountain should be controlled by permit and it is recommended that a specific, well-managed pathway should be constructed in conjunction with the management of Mont Rochelle Nature Reserve for people to descend the mountain on foot.

Comment:

The words "as far as possible" can be so widely and loosely interpreted that they are effectively meaningless so that there will be no practical limitation of "all possible tourist activities".

Where will these paths be? **The path routes and their impact on the flora and fauna species must be included in the EIA, as must the impact of the people using these paths or deviating off them.**

Statement Page 39:

#10 states: From a botanical perspective, specifically on Middagkransberg, due to the development of the Franschhoek Sky-Tram, there are no 'red flags'.

Comment:

The statement that there are 'no red flags' is rejected because:

- The report completely ignores the fact that the upper station is located in one of, if not the most, florally diverse regions anywhere with thousands of plant species crammed into this biome. [Kogelberg-Hottentots Holland-Jonkershoek floristic biome].
- Development is in an environmentally sensitive area, yet no proper mitigation is provided.
- The surveys were inadequate because:
 - I. Only two site visits were made, one of which was a scoping exercise, and the recommendations and findings were effectively based on a few hours on site; and
 - II. As these surveys were only in spring, other plant species were missed.
- The limitations of the report are downplayed resulting in a "low negative".
- Of the failure to identify and highlight limitations we identified such as:
 - The difficulty in finding species unless you're next to them, and that formal survey protocols lead to large inaccuracies when faced with high diversity areas.
- No mention is made of Middagkransberg being in a World Heritage Site.
- Failure to address the provincial, national and international obligations associated with UNESCO sites.
- Too little emphasis is placed on Middagkransberg being in a provincial reserve and part of endangered Kogelberg Sandstones Fynbos.
- There is no explanation as to why certain SCCs were missed as required by best practice.
- The focus is on the impact at the regional scale while ignoring the effect at a local scale.
- The BIA contradicts itself.
- It failed to discuss the impact of walkways, all the people on the landscape, the firebreaks, and construction.
- It failed to identify SCCs that might have been expected to have been found that were later found by I&APs and the botanists contributing to these comments.

Statement page 39:

#10 states: ... There are thus no botanical constraints that have been identified and the development is supported with the proviso that in the long-term operational phase, tourist management is given the highest priority to limit unwelcome impacts caused by unacceptable use of the local natural environment.

Comment:

For the reasons outlined in the comments already raised regarding #10 above, the statement that the development is supported is unacceptable. **Building the Skytram is an unacceptable and unnatural use of the local natural environment!**

Given the proviso that tourism management is the biggest operational risk, one would expect it to be explained in more detail in the BIA and EIA. A thorough Environmental Management Plan is imperative, which ensures that if the competent authority approves this project, effective people management is enforced.

Noteworthy is that the Mont Rochelle Environmental Management Plan (EMP) is not discussed or mentioned in the BIA.

Statement page 39:

The assessed impact on the vegetation type as a whole is rated as Low- Medium to Low Negative.

Comment:

Having regard to the weight of the cumulative impact of the inadequacies of the surveys, the omissions and unsubstantiated statements identified in these comments, the assessment in the BIA that the botanical impact of Skytram will be "Low-Medium" or Low-Negative" is unsustainable. Its impact will be High at a local scale.

end comments

NOTE TO APPENDICES:

5 separate pdf files form appendices for this document:

Botanical Appendix 1 - Anso le Roux - comments - April 2024.pdf

Botanical Appendix 2 - Brian du Preez - report - May 2024.pdf

Botanical Appendix 3 - Guy Palmer - comments - April 2024.pdf

Botanical Appendix 4 - Dr Ruida Pool-Stanvliet - comments - April 2024.pdf

Botanical Appendix 5 - Gert van Tonder - comments - May 2024 .pdf

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