



Habitat

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Investigation into Visual Impact a result of the relocation “Soldiers’ Memorial”– the so-called ‘Troepie’ statue – to the South African Defence Force Memorial complex situated at the Voortrekker Monument.

This letter of is in response to the questions raised by the Provincial Heritage Resource Authority - Gauteng specifically: *“Please also note that more detail would be required e.g. the scales, impact and visual impressions related to the final proposal.”*

1. Introduction:

In order for us to assess the visual impact of the proposed relocation we need to define the spatial context / sphere of influence of the Memorial in terms of visibility, and to identify possible sensitive viewer locations. This spatial context is determined by a visibility analysis, and the proximity of viewer locations to the proposed intervention.

As humans we visually perceive spatial dimensions in the context of relative size, brightness, colour and texture information. The location and arrangement of objects relative to the contextual relations determine the dominance of that feature within the spatial context. In order for us to understand visual dominance, obtrusiveness or undesirable elements we need to fully contextualize the spatial domain and model reality to convey knowledge by means of symbolic representation as in maps or computer generated graphics.

In this assessment the following broad steps were undertaken:

Data Sourcing. Information with regard to the proposed project location, type of intervention and surrounding context are important to determine visibility and exposure. In this respect spatial data (location and layout) was predetermined.

Data processing. In order to conduct spatial analysis, data need to be prepared in the required format. For the purpose of a view shed analysis digital spatial data was used. A view-shed analysis was undertaken to determine visibility. This is based on the spatial distribution and heights of infrastructure and the actual visibility in the contest of the site. To understand the visibility of the site important influences are exerted by contextual elements that we map including the local:

- Topography;
- Land use / Land cover;
- Vegetation;
- Visibility.

Interpretation: Through the interpretation of the data captured we can model the reality and it is possible to identify sensitive environments or areas upon which the project could have a potential visual impact. Critical areas will be highlighted during this phase and suitable recommendations made.

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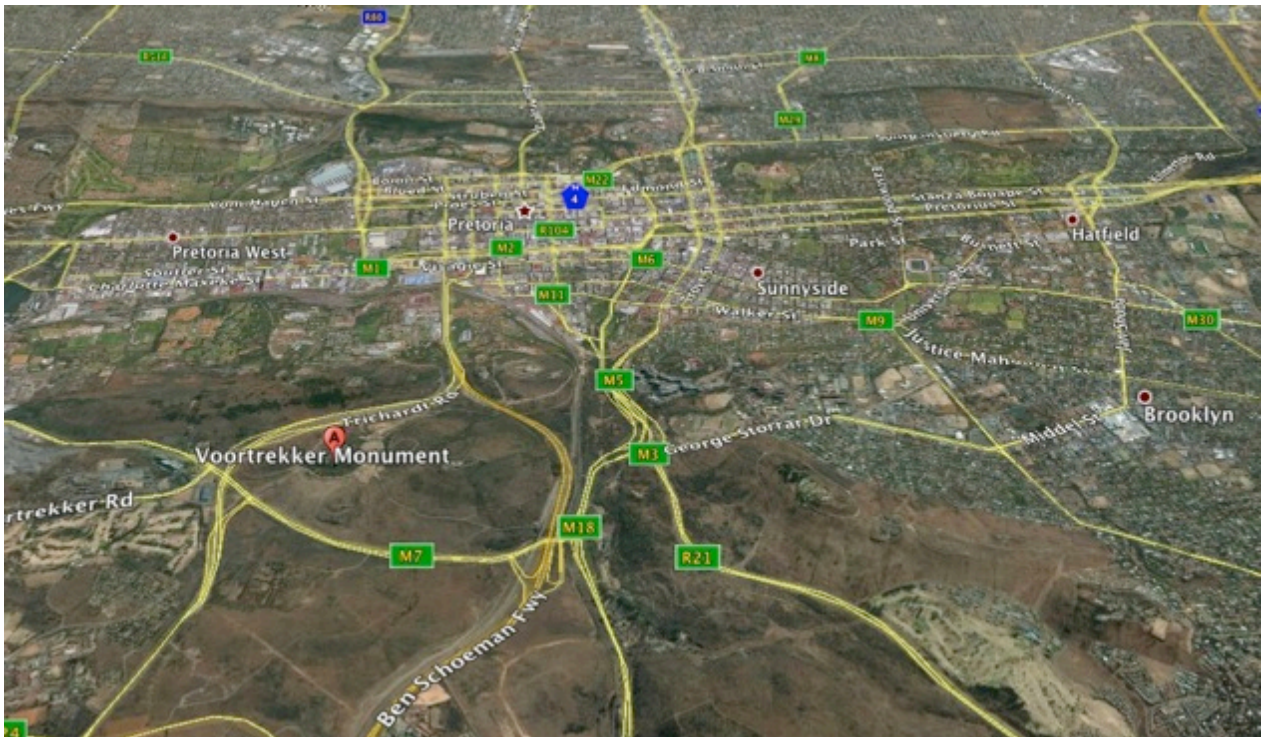
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2. Site description and location:



The Voortrekker monument is visually one of the most prominent features situated at the southern entrance to the City of Tshwane.



The site of the relocated memorial is situated to the northwest of the Voortrekker monument as indicated above. Provision was made in the design of the South African Defense Force Memorial complex constructed at the Voortrekker Monument for the relocation of the “Troepie” memorial.

3. Views and View-shed

The Voortrekker monument is visually prominent due to the fact that it beaks the horizon line and protrude 40 above the crest of the hill. Subsequently the Voortrekker monument is visible when viewed from almost any locality around the city south of the Magaliesberg.

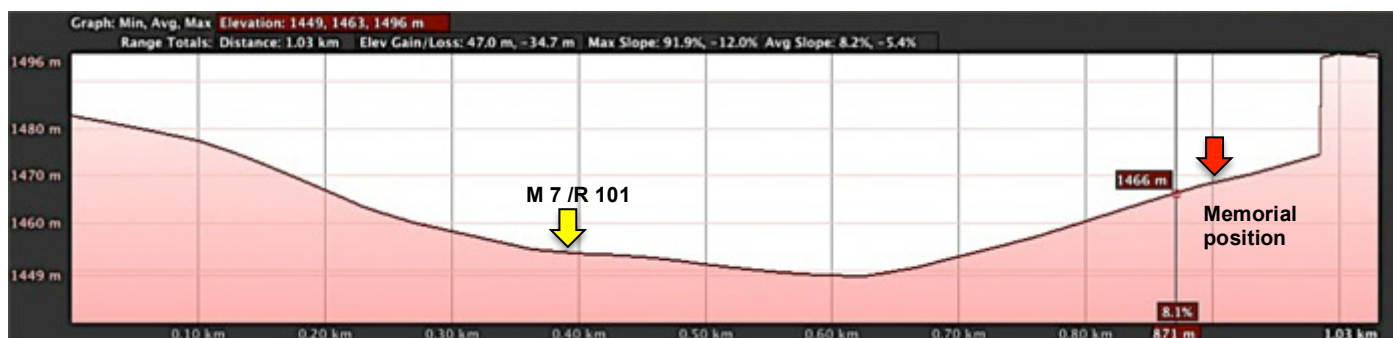
The site for the relocated memorial is very different. The site is situated approximately five meters below the crest of the hill (Voortrekker Monument base) and surrounded by large indigenous trees.

In starting out the modeling of visibility is theoretical being based on the Digital Terrain Model data, it does not take into account the effect of buildings, trees etc. The view-shed therefore signifies a worst-case scenario. The immediate landscape surrounding the observer has a determining influence on long distance views. It is expected that the woodland character of the landscape will offer a large degree of visual absorption capacity and screening effects.

The topographic features of the site and surrounding context further limit the visibility to the potential view-shed as indicated below:



Visual resources originate from the natural environment, as topographical features shape it and vegetation cover the topography presents an undulating character forming an enclosed valley between the proposed site and the hill further to the north. The relocated memorial may thus only be visible from the R101 and the M7. Both these roads have relatively high travel speeds of between 80 and 100 km/h. The potential visual impact of the site is also affected by the location of existing buildings and vegetation that limit views for the R101.



The location of trees and bush clumps, as well as existing infrastructure such as roads and transmission lines, may provide some further visual absorption capacity to mitigate the potential visual impact.

4. Findings:

The following two images indicate the relative scale and massing of the memorial in the context of the memorial garden.





As can be seen from the illustrations the Memorial not only fits in the context but the scale and massing is in check with the surrounding elements of the landscape. Visually the Memorial will not break the skyline or protrude beyond the surrounding elements. Collectively the memorial and the amphitheater on the opposite side of the road form a contained space with no “visual bleed” or spill over to the adjacent landscape. This can be confirmed by looking at the views towards the site from the R101.



Position of Memorial as viewed from the M7 when traveling in an easterly direction.



View of the memorial (from the R101 traveling in a westerly direction) obstructed by existing buildings on site.

5. Recommendations

From the discussion and graphic illustrations it should be evident that there will be no visual impact on the existing Voortrekker Monument site as viewed from the surrounding area.

Please feel free to contact us should you have any questions or queries

Regards



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