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18 June 2021

Jo-Anne Thomas
Savannah Environmental

Dear Ms Thomas,

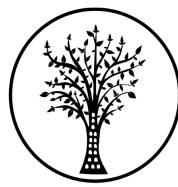
**RE: CULTURAL LANDSCAPE ASSESSMENT AS PART OF THE HERITAGE IMPACT ASSESSMENT
PROCESS IN RENEWABLE ENERGY DEVELOPMENT ZONES**

Legislative Mandate

The National Heritage Resources Act (NHRA, Act 25 of 1999) primarily employs two mechanisms to ensure the effective conservation and management of significant heritage resources. These mechanisms are the Formal Protections detailed in Part I of Chapter II of the NHRA and the General Protections detailed in Part II of Chapter II of the NHRA. Formal Protections include the declaration of National and Provincial Heritage Sites, Heritage Areas as well as the establishment of the Heritage Register. The General Protections include permitting requirements for alterations to structures that are older than 60 years (Section 34) and permit requirements for impacts to archaeological and palaeontological heritage resources (Section 35), amongst others.

Applications for renewable energy developments, in general, fall under section 38 of the NHRA, a section that falls within Part II of Chapter II - the General Protections. This section of the heritage legislation is triggered by developments of a certain scale, size or nature such as the change of character to a site exceeding 5000m². Section 38(8) of the NHRA specifically deals with such developments that also trigger other legislation that requires an assessment of impacts, for example, in terms of NEMA.

Section 38(8) of the NHRA requires that any assessment of impacts from such developments also include an assessment of impacts to heritage resources that satisfies certain criteria detailed in section 38(3) of the NHRA. Section 38(8) also requires heritage authorities to comment on such heritage impact assessments, and that the relevant decision-making authorities (such as the DEFF) take this comment into consideration prior to issuing the authorisation (such as the Environmental Authorisation or equivalent). This is to ensure that any significant heritage resources that may be impacted by the proposed development are identified and appropriately managed or mitigated against impacts prior to authorisation.



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In terms of section 38(3) of the NHRA, it is required that impacts to all heritage resources be assessed in an HIA. “All heritage resources” includes archaeological heritage, palaeontological heritage, the built environment as well as the cultural landscape more broadly.

Cultural Landscape

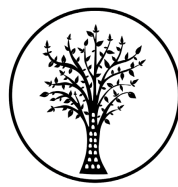
According to Jensen (2020), “The idea of a cultural landscape is fundamental. The term may be given varied meanings, yet, at its core, it unites the products of so-called ‘natural’ ecological processes and phenomena on the one hand, and the products emerging from the processes of transformation of the ‘natural’ site by people in constructing their ‘built’ world, on the other. Any area consists of many sites, most of which have been inhabited by people for thousands of years. These places have been moulded, shaped and changed both by natural processes and by people engaged in adapting the environment to their pursuits.

Cultural landscapes are what one generation inherits from another: in them are embedded values held dear by those gone by. It is the duty and task of any one generation to evaluate that which is inherited and to take appropriate decisions for the future: not only from the perspective of the short-term and how it may be useful to them in a selfish way, but also from a more inclusive communal and longer-term view. It may be considered human nature to act with self-interest, hence the need for government ideals and guidance, such as an appropriate planning and heritage resources control system whereby the longer term and the public good may be addressed responsibly.”

According to the African Landscape Convention “Landscapes are the result of unique combinations of biophysical, cultural and social processes evolving over time and interwoven with memory, perception and tradition. They include land, water systems, marine areas and island configurations and play a vital role in human nurture, fulfilment and in shaping individual and collective identity.

Landscapes range from the outstanding and the memorable, to the familiar and the commonplace. All landscape architects practicing in Africa, notably members of IFLA Africa, representing a diverse array of cultures spread across the continent, have a duty to care for and ensure that the distinctive characteristics and potential of their landscapes are not compromised through insensitive or inappropriate change, and that their communities are not diminished or endangered by inappropriate development.

Landscape shapes the culture and identity of a community, a neighbourhood, a city and a nation. Landscape is the powerful connection between communities and the land, the places where people live, work and play. It is the physical, social and cultural context of our lives. It gives us a unique sense of place. The sustainable management and planning of resilient landscapes and



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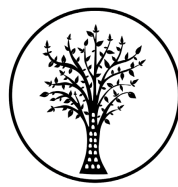
communities includes the preservation of common and distinctive heritage, improving ecological health and well-being, increasing the productive capabilities of land and encouraging sustainable approaches to development and change. This approach aims to maintain important life-supporting functions such as water quality and biodiversity, while providing for the appropriate utilisation of landscapes for sustainable social, cultural, and economic development.

The importance of the deep and fundamental relationship that indigenous and other peoples of the African continent have with the natural world must be acknowledged and respected. These attitudes and beliefs should influence and inform the ways in which we approach the protection, planning, design and management of our landscapes. The scope and nature of the pressures on the landscape continue to increase and a comprehensive set of principles is now required to counter these pressures and to support the diverse aspects of contemporary landscape practice in our Region. This Landscape Convention sits within a global context and framework that comprises a series of National Landscape Charters and Conventions coordinated through the International Federation of Landscape Architects (IFLA). Other significant statements about our approaches and attitudes to the landscape include, but are not limited to, the ICOMOS Charter (1964), the European Landscape Convention (2001), the Florence Declaration (2012), the Matera Resolution (2013) and the IFLA Global Accord (2017).”

REDZ Areas

In an effort to encourage renewable energy development in South Africa, the DFFE has gazetted a number of Renewable Energy Development Zones (REDZ) in which the development of renewable energy developments are actively encouraged through various incentive mechanisms. These REDZ areas were identified following the completion of a Strategic Environment Assessment (SEA) process. While the SEA process conducted did attempt to take impacts to archaeological and palaeontological heritage resources into consideration given the data available at the time, there is insufficient evidence that the SEA process looked at the identification of significant cultural landscapes in the identification of these REDZ areas.

As such, we are left in a position where broad impacts to cultural landscape heritage from renewable energy development are required to be assessed on a project-by-project basis in the HIA process. This can be unsatisfactory as REDZ areas have been gazetted for renewable energy development and the opportunity to take a broader, guiding approach to handling cultural landscapes in REDZ areas was not realised.



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Renewable Energy and the Cultural Landscape

In REDZ areas, there is a reasonable expectation that the cultural landscape of an area will be changed to be dominated, or at least heavily altered, by renewable energy development. In fact, this is the intention of the REDZ areas.

As indicated above, the cultural landscape is defined as the interaction between people and the places that they have occupied and impacted. In some places in South Africa, the cultural landscape can be more than 1 million years old where we find evidence of Early Stone Age archaeology (up to 2 million years old), Middle Stone Age archaeology (up to 200 000 years old), Later Stone Age archaeology (up to 20 000 years old), evidence of indigenous herder populations (up to 2000 years old) as well as evidence of colonial frontier settlement (up to 300 years old) and more recent agricultural layers.

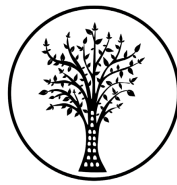
Modern interventions into such landscapes, such as renewable energy development, constitute an additional layer onto the cultural landscape which must be acceptable in REDZ areas. The primary risk in terms of negative impact to the cultural landscape resulting from renewable energy development lies in the eradication of older layers that make up the cultural landscape. There are various ways that such impact can be mitigated.

Example

For example, Jensen (2020) recommends the following as general guidelines for renewable energy development in areas of cultural landscape significance:

Ecological Criteria:

- Species and ecosystem loss should be prevented by limiting fragmentation in the landscape, and should therefore adhere to the following general recommendations:
 - o Remaining areas of endemic and endangered natural vegetation should be conserved.
 - o High and Very High Sensitivity Ecological areas (crest lines and drainage lines), should be protected from development
 - o Areas of habitat are found among the rocky outcrops and contribute to the character, as well as biodiversity of the area. Care should be taken that habitats are not needlessly destroyed.
- Careful planning should incorporate areas for stormwater runoff where the base of the structure disturbed the natural soil. Local rocks found on the site could be used to slow stormwater (instead of concrete, or standard edge treatments), and prevent erosion that would be an unfortunate consequence that would alter the character of the site. By using rocks from site, it helps to sensitively keep to the character.



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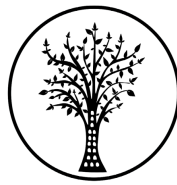
- The principle of 'tread lightly' must be applied for any activity (and associated development requirements e.g. toilets for the construction process) and should be emphasised.

Aesthetic Criteria

- Encourage mitigation measures (for instance use of vegetation) to 'embed' or disguise the proposed structures within the surrounding tourism and agricultural landscape at ground level, road edges etc;
- The continuation of the traditional use of material could be enhanced with the use of the rocks on the site as building material. This would also help to embed structures into the landscape that does not have to be standard containers that clutter the landscape.
- Using material found on the site adds to the sense of place and reduces transportation costs of bringing materials to site.
- Where additional infrastructure (i.e. roads) is needed, the upgrade of existing roads to accommodate the development should be the first consideration. The local material such as the rocks found within the area could be applied to address stormwater runoff from the road to prevent erosion.
- Infrastructure improvement, including new roads and upgrades to the road network, should be appropriate to the rural context (scale, material etc.).
- The layout of the turbines should have an emphasis on place-making, i.e. landscape-related heritage considerations, as opposed to standard infrastructure driven requirements;
- Prevent the construction of new buildings/structures on visually sensitive, steep, elevated or exposed slopes, ridgelines and hillcrests. Retain the integrity of the distinctive landscape character;
- Scale and massing should be sensitive to the surrounding landscape, although this is challenging with regard to the development of WEFs.
- Avoid visual clutter in the landscape by intrusive signage, and the intrusion of commercial, corporate development along roads
- Avoid development of infrastructure (such as buildings, wind turbines and power lines), on crests or ridgelines due to the impact on the visual sensitivity of skylines.
- Retain view-lines and vistas focused on prominent natural features such as mountain peaks or hills, as these are important place-making and orientating elements for experiencing the cultural landscape.

Historic Criteria

- The integrity of the historic farm werfs should be maintained and protected.

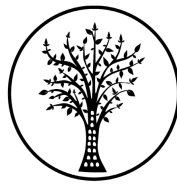


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- Names of routes and watercourses that refer to traditional use during the time of the hunter-gatherers and herders, as well as the colonial era in the Cape, should be celebrated.
- Traditional planting patterns should be protected by ensuring that existing trees are not needlessly destroyed, as these signify traces of cultural intervention in a harsh environment. These planting patterns include the trees planted around the werfs.
- In some cases, remnant planting patterns (even single trees) uphold the historic character of an area. Interpretation of these landscape features as historic remnants should occur.
- Mountain slopes have been used for traditional practices for many years, and care should be taken that any significant cultural sites, such as burials and veldkos/medicinal plant resources, are not disturbed.
- Where the historic function of a building/site is still intact, the function has heritage value and should be protected. Please take note of the items listed below:
- Surviving examples (wagon routes, outspans, and commonage), where they are owned in some public or communal way (or by a body responsible for acting in the public interest) and where they are found to be actively operating in a communal way, will have cultural and heritage value and should be enhanced and retained.
- The new roads should display minimum scale designs where possible.
- Maintain traditional movement patterns across rural landscapes or to places of socio-historical value. (a) Avoid privatization or the creation of barriers to traditional access routes. (b) Retain old roadways, which have been replaced by newer roads, for use as recreation trails.
- Respect existing patterns, typologies and traditions of settlement-making by promoting the continuity of heritage features. These include: (a) indigenous; (b) colonial; and (c) current living heritage in the form of tangible and intangible associations to place.
- Respect traditional werf settlement patterns by considering the entire werf as the component of significance. This includes the backdrop of the natural landscape against which it is sited, as well as its spatial structure. Any development that impacts the inherent character of the werf component should be discouraged.

Social Criteria

- Care should be taken that existing functions such as outspan areas (see criteria for these under historic) are not lost in the development stages, as it fulfils an important function within the cultural landscape.
- The local community around the development should benefit from job opportunities created by the proposed development;



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Economic Criteria

- Sheep or game farming should be allowed to continue below the wind turbines, alternatively, the areas below the turbines should be rehabilitated to increase biodiversity in the area.
- Care should be taken to reduce visual impact from surrounding tourism areas, by following the recommendations included in the Visual Impact Assessment

Importantly, these recommendations cannot be used as a one-size-fits-all approach to managing the negative impacts of renewable energy development on significant cultural landscapes. However, they can be used as a guide to ensure that the layers that make up a cultural landscape are conserved and enhanced as part of the creation of new renewable energy layers on the cultural landscape.

Please feel free to contact me should you have any further questions or concerns in this regard.

Yours sincerely

Jenna Lavin