

2 September 2021

Robyn Thompson
CES
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Dear Ms Thompson

RE: PROPOSED ACCESS ROAD UPGRADES FOR THE HAGA HAGA WIND ENERGY FACILITY IN THE GREAT KEI LOCAL MUNICIPALITY, EASTERN CAPE

1. Introduction and terms of reference

The Haga Haga Wind Energy Facility (WEF) was authorised on 5/07/2019 (DFFE Reference: 14/12/16/3/3/2/1087). The Environmental Authorisation (EA) received an amendment on 03/06/2021 (DFFE Reference: 14/12/16/3/3/2/1087/AM1). The original EIA included a 42-turbine layout and associated internal road network, and the amendment reduced the number of turbines to 36 and the internal road network was changed to match. The internal road layout will be built as per the layout submitted during the amendment, within allowable micro siting limits. The WEF has not yet been constructed.

Several of the access points to the proposed WEF on farm portions described in Table 1 and shown in Figure 1 now require upgrading, and a separate Basic Assessment is required for this new application.

The environmental consultant appointed by the developer for the proposed access road Basic Assessment (BA), CES, has appointed OGS to review the available geotechnical information, including the preliminary geotechnical report for the approved WEF development by Outeniqua Geotechnical Services (OGS, 2017) in light of the proposed access road upgrades and provide comment on any potential impacts and possible mitigation measures that may be adopted as part of this BA process.

Table1: Proposed access road upgrades

MAP REF	FARM PORTION	UPGRADE DESCRIPTION
1	RE of Farm 94	Widening of existing intersection
	Portion 2 of Farm 94	Existing road needs to be widened and realigned slightly
2	RE of Farm 111 and Portion 1 of Farm 111	Existing road needs to be widened and realigned slightly
3	Portion 2 of Farm 69	Existing intersection to be widened
4	RE of Farm 225	Existing road needs to be widened and realigned
5		Existing intersection to be widened
6	RE Farm 222 and RE Farm 288	Road widening and/or vegetation trimming and possible clearance

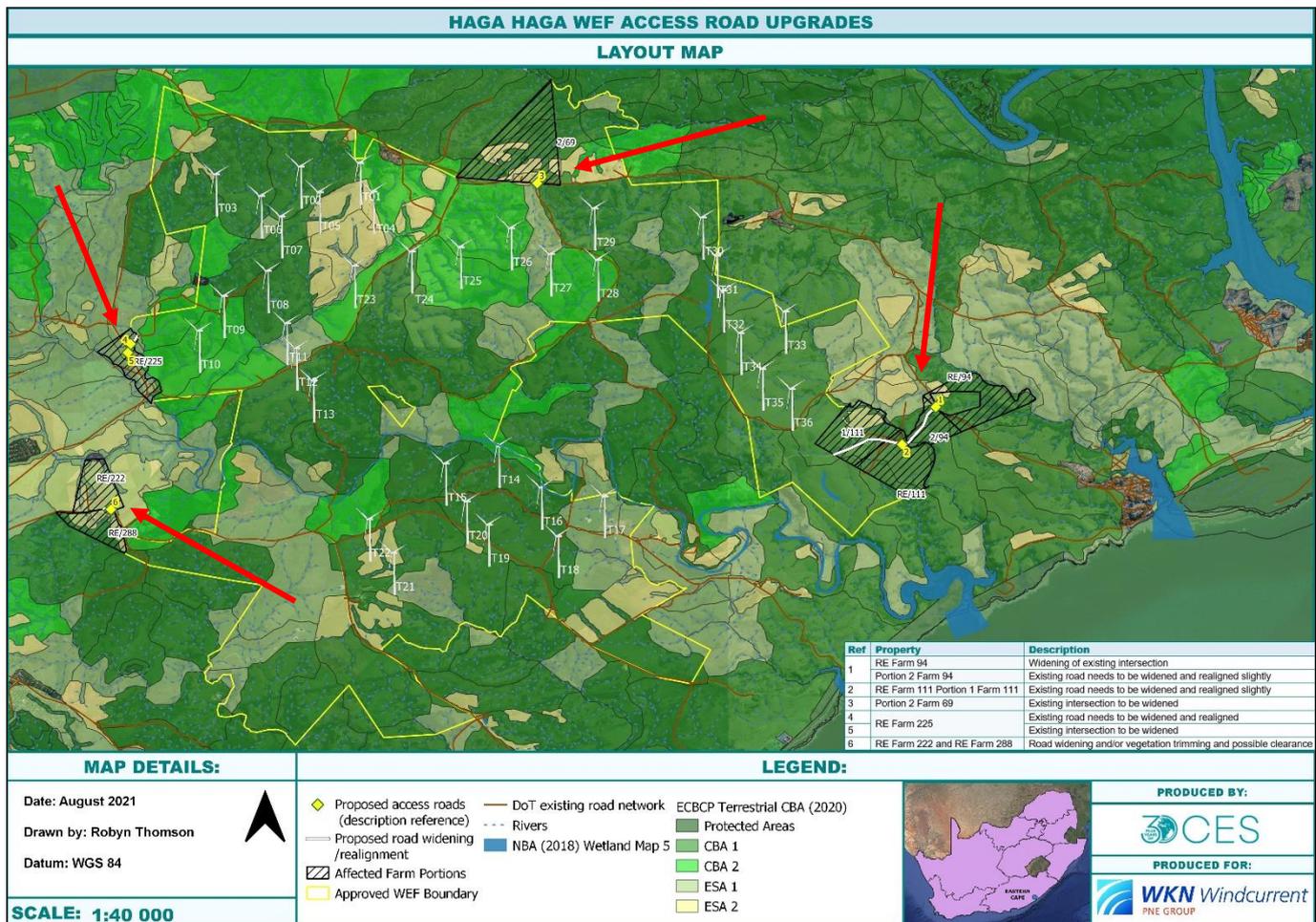


Figure 1: Site layout plan showing proposed widening of access roads (refer to red arrows)

2. Information review

The preliminary geotechnical report prepared for the WEF by OGS (OGS, 2017) described the general geology and geotechnical conditions of the area. This assessment defined suitable areas for development and highlighted potential constraints and possible geotechnical risks associated with the proposed WEF development layout and specifications. The report concluded that the geology of

the site was generally suitable for the proposed development, and also provided preliminary recommendations for the engineering design. In terms of environmental impacts, the main constraints identified in the report related to topographical features, including steep slopes, natural drainage lines and areas of poor drainage which relate to potential erosion and/or unstable ground.

Through the EA process, which incorporated other specialist studies, several zones of low environmental sensitivity or "buildable areas" were identified on the site, which were deemed suitable to accommodate wind turbines.

Subsequent assessments were also carried out following amendments to the proposed infrastructure and site layout by the developer, following the granting of EA, and this was documented in a brief report by OGS dated 14 September 2020.

3. Assessment of impacts of proposed access road upgrades

Investigations were then focussed on the proposed widening of roads under the new Basic Assessment. Specific attention was drawn to roads which cross natural drainage lines at two positions, viz: on the boundary between Portion 2 of Farm 94 and Remainder of Farm 111 (32°41'45.98"S; 28°17'52.68"E), and on Remainder of Farm 225 (32°40'38.71"S; 28° 9'26.20"E). At these locations, engineering and environmental challenges may be anticipated, such as earthworks within a 32m river buffer zone, working in/with saturated ground conditions, erosion control, cut/fill embankment stability, degradation of water courses, etc. However, elsewhere normal engineering is envisaged, and the impact of the proposed widening is considered to be negligible and generally acceptable within tolerable limits. Similarly, cumulative impacts within the greater context of the Haga Haga WEF are also negligible, and there are no additional conditions applicable. Such work would require careful consideration in the design and execution, and supervision would be required by the ECO as normal.

4. Conclusions

The proposed access road upgrades do not present any significant additional environmental impact in terms of geotechnical aspects, other than those identified in the original assessment and no additional conditions are required for the management of impacts associated with the access road upgrades.

Yours faithfully

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

Iain Paton Pr Sci Nat Pr Tech Eng

References

Outeniqua Geotechnical Services (OGS). 2017. Preliminary Geotechnical Report. Proposed Haga Haga Wind Energy Facility in the Eastern Cape Province of South Africa. Unpublished Internal Report.