



**DRAFT AMENDMENT MOTIVATION REPORT FOR THE
AUTHORISED 140MW BRANDVALLEY WIND ENERGY
FACILITY NORTH OF THE TOWN MATJIESFONTEIN
WITHIN THE KAROO HOOGLAND, KAROO, WITZENBERG
AND LAINGSBURG LOCAL MUNICIPALITIES IN THE
WESTERN AND NORTHERN CAPE PROVINCE**

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CONTACT: MAGDALENA LOGAN

March 2023

<u>APPLICABLE LEGISLATION</u>	<u>COMPETENT AUTHORITY REFERENCE NUMBER/S</u>
<p>NEMA EIA Regulations (2014, as amended) (National DFFE)</p>	<p>DFFE Ref: 14/12/16/3/3/1/900/AM1 Dated: 14 February 2019</p> <p>DFFE Ref: 14/12/16/3/3/2/900/AM2 Dated: 11 October 2021</p> <p>DFFE Ref: 14/12/16/3/3/2/900/AM3 Dated: 23 August 2022</p> <p>DFFE Ref: 14/12/16/3/3/2/900/AM4 (withdrawn) Dated: 25 January 2023</p> <p>DFFE Ref: 14/12/16/3/3/2/900/AM5 (Current Application)</p>
<p>Report Title</p> <p>Author (EAP/EAPs)</p> <p>Specialist Sub-Consultants</p>	<p>DRAFT AMENDMENT MOTIVATION REPORT FOR THE AUTHORISED 140MW BRANDVALLEY WIND ENERGY FACILITY NORTH OF THE TOWN MATJIESFONTEIN WITHIN THE KAROO HOOGLAND, KAROO, WITZENBERG AND LAINGSBURG LOCAL MUNICIPALITIES IN THE WESTERN AND NORTHERN CAPE PROVINCE</p> <p>Kristen Shaw - Terramanzi Group (Pty) Ltd</p> <p>Wendy Mey – Terramanzi Group (Pty) Ltd</p> <p>Agricultural Impact – Johann Lanz (C/O Johann Lanz)</p> <p>Avifaunal Impact – Birds and Bats unlimited (C/O Rob Simmons)</p> <p>Bat Impact – Animalia Consultants (C/O Werner Marais)</p> <p>Ecological Impact – Trusted Partners (C/O Malcome Logie)</p> <p>Freshwater Impact – SAS (C/O Stephen van Staden)</p> <p>Heritage Impact– PGS Heritage (C/O Wouter Fourie)</p> <p>Noise Impact – Safetech (C/O Dr Brett Wiliams)</p> <p>Social Impact – Tony Barbour Consultancy (C/O Tony Barbour)</p> <p>Visual Impact – SAS (C/O Sanja Erwee)</p> <p>Traffic Impact – JGAfrika (C/O Adrian Johnson)</p> <p>Geotechnical – JGAfrika (C/O Priantha Subrayen)</p>

Applicant	Brandvalley Wind Farm (RF) (Pty) Ltd
Report Version	Draft Amendment Motivation Report for PPP
Submission Date	06 March 2023

Please use the following as a reference for this Report: Terramanzi Project # 230102 – Brandvalley WEF

Project Title: Draft Amendment Motivation Report for PPP for the authorised 140MW Brandvalley Wind Energy Facility North of the Town Matjiesfontein within the Karoo Hoogland, Karoo, Witzenberg and Laingsburg Local Municipalities in the Western and Northern Cape Province

Purpose of this Document:

The Applicant Brandvalley Wind Farm (RF) (Pty) Ltd wishes to undertake two amendments to the authorised 140MW Brandvalley Wind Energy Facility, which is located north of the Town Matjiesfontein within the Karoo Hoogland, Karoo, Witzenberg and Laingsburg Local Municipalities in the Western and Northern Cape Province. The WEF has been authorised by the Competent Authority, namely the National Department of Environmental Affairs in the Environmental Authorisation (EA) and subsequent EA Amendments as follows:

- DFFE Ref: 14/12/16/3/3/1/900/AM1
Dated: 14 February 2019
- DFFE Ref: 14/12/16/3/3/2/900/AM2
Dated: 11 October 2021
- DFFE Ref: 14/12/16/3/3/2/900/AM3
Dated: 23 August 2022
- DFFE Ref: 14/12/16/3/3/2/900/AM4 (withdrawn)
Dated: 25 January 2023

The WEF was awarded Preferred Bidder Status under Round 5 of the Renewable Energy Independent Power Producer Procurement Programme (herein referred to as the REIPPPP) and subsequently has reached Financial Close and is thus under construction. Terramanzi Group (Pty) Ltd (hereinafter referred to as TMG), has been appointed by the Applicant as the Independent Environmental Assessment Practitioner (EAP) to conduct the required Environmental Permitting Process in terms of the National Environmental Management Act, 1998 (Act 107 of 1998) (as amended) (hereinafter referred to as the NEMA) and the NEMA Environmental Impact Assessment (EIA) Regulations (2014, as amended). In light of the above information the Applicant was required to undertake a **Part 2 Amendment Application Process** in terms of GN R. 982 (section 31), 983, 984 and 985 of the NEMA EIA Regulations (2014, as amended).

The following amendments have been applied for:

Non-Substantive Amendments:

- The Amendment being applied for is of an administrative nature in order to update the name and details of the relevant contact details of the Holder of the EA to ensure that the information contained in the EA is up to date and accurate.

Substantive Amendments:

- The Applicant Brandvalley Wind Farm (RF) (Pty) Ltd requests minor realignments of road sections B2, B11, and B16 where there are technical challenges.
 - The reason for this amendment is to confirm the final road alignment for the Brandvalley Wind Energy Facility (WEF) To confirm the context of this Part 2 Application, the original approval for the WEF included 58 Wind Turbine Generators (WTGs) and associated roads and infrastructure, this has been reduced to 32 WTGs (within the approved AM3), resulting in a significant decrease in the development footprint. During the engineering final layout design, post the approval of AM3, it became evident that certain portions of roads, were not buildable due to slope and other engineering constraints, thus required a re-alignment. This re-alignment is now presented in this Part 2 AM. .

- We have reviewed the final road alignment of the Brandvalley WEF and consider the changes minor and insignificant, with the only areas around sections B2 and B16 requiring additional comment. This will be provided as part of this Amendment Motivation Report. Additionally, section B11 will have a portion of the ring road dropped as this is no longer required by the Applicant. These changes will accomplish a decrease in the overall impacts on the environment, especially from a Terrestrial Ecology and Biodiversity point of view.
- As noted above, construction for the BID awarded Project is underway on the remainder of the site due to BID timing requirements. However, the above portions of the road build will only be completed once this amendment application process has been processed by the Competent Authority, which is of the utmost urgency.

Summary of What the Amendment Motivation Report Entails and Details:

- Details of the Environmental Assessment Practitioner (EAP);
- Location of the authorised activity and proposed amendments;
- Plan which locates the activity as authorised and activities applied for at an appropriate scale;
- Description of the authorised activity and amendments applied for;
- Assessment of all impacts related to the proposed amendments;
- The need and desirability for the project;
- Description of the public consultation process followed;
- An Environmental Impact Assessment;
- An Environmental Management Programme (EMPr); and
- Undertakings under oath or affirmation by the Environmental Assessment Practitioner (EAP)

Public Participation Process (PPP) for the Amendment Motivation Report

As per the requirements of the NEMA EIA Regulations (2014, as amended) GNR 982, the Draft Amendment Motivation Report for Comment was released to relevant Stakeholders in terms of GNR 982, Regulation 41(2) (a)(b)(c)(d) in order to inform them of this proposed amendment to the Environmental Authorisation for the Brandvalley WEF located in the Western Cape and Northern Cape Province. The 30-day Public Participation Process (PPP) commenced on 06 March 2023 and concludes on 05 April 2023.

All comments received during the public consultation processes will be recorded and addressed in the Comments and Response Report which will be attached and submitted with the Final Amendment Motivation Report to the National Department of Forestry Fisheries and the Environment (DFFE) for Decision.

The draft Amendment Motivation Report was made available electronically at the following website link from 06 March 2023 for comment: <https://terramanzi.egnyte.com/fl/1MHagXFC2o>

All comments must be submitted directly to Terramanzi Group (Pty) Ltd, the “EAP”, as follows:

- Electronic mail: comments@terramanzi.co.za; or
- Post: Postnet Suite 211, Private Bag X26, Tokai, Cape Town, 7966
- For Attention: Wendy Mey
- Tel no: (021) 701 5228
- Visit us at www.terramanzi.co.za

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- 230102 - Brandvalley WEF - Part 2AA – Realignment of Road B2 Map - February 2023
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- Heritage Impact – Booth Heritage Consulting(C/O Celeste Booth, March 2016)
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- Avifaunal Impact – Birds & Bats Unlimited (C/O Rob Simmons, February 2023)
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- Social Impact – Tony Barbour Consulting (C/O Tony Barbour, February 2023)
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- Newspaper Advertisements (provincial & local) – February 2023
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Appendix E – Draft Environmental Management Programme (EMPr)

- Recently approved Environmental Management Programme
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Appendix F – Competent Authority Correspondence

- Acknowledgement of receipt of Part 1 AA - request for Part 2 AA - 14/12/16/3/3/2/900/AM4 - December 2022
- Acknowledgement of Withdrawal - 14/12/16/3/3/2/900/AM4 - December 2022
- 230102 - Brandvalley WEF – Pre – Application Reference Email – February 2023

Appendix G – EAP Curriculum Vitae

- Fabio Venturi - Concise CV – 2023
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Appendix H – Amendment Application form

Appendix I – Definitions and Terminology

1 DEFINITIONS AND TERMINOLOGY REFERRED TO IN THIS REPORT

PLEASE REFER TO APPENDIX I FOR THE DEFINITIONS AND TERMINOLOGY REFERRED TO IN THIS REPORT

2 INTRODUCTION

2.1 PROJECT OVERVIEW

The Brandvalley WEF was granted an Environmental Authorisation (EA) (DFFE Ref: 14/12/16/3/3/2/900) 23 November 2016 and subsequently amended via EA's dated 14 February 2019 (DFFE Ref: 14/12/16/3/3/1/900/AM1), 11 October 2021 (DFFE Ref: 14/12/16/3/3/2/900/AM2), and 23 August 2022 (DFFE Ref: 14/12/16/3/3/2/900/AM3), The Project was awarded PREFERRED BIDDER STATUS on 28 October 2021 within the REIPPPP BID Window 5 and is therefore classified as a SIP Project to be expedited in terms of Schedule 2 Section 17(2)) of the Infrastructure Development Act (Act No. 23 of 2014). The Project has subsequently reached Financial Close. After the submission of the Final Layout and its approval dated 23 August 2022 (DFFE Ref No. 14/12/16/3/3/2/900/AM3) final surveying was undertaken, and the civil engineers identified safety risks that required urgent and immediate attention. Specifically, sections B2, B11 and B16 of the approved internal road network were considered too steep to grade and posed a safety risk for the transportation of abnormal loads/infrastructure without blasting away a majority of the mountainside. These serious safety concerns precipitated the need for minor but important design adjustments and an urgent amendment application. The urgency is driven by the fact that the Project is a preferred bidder and is about to commence with construction (as per Notice of Intent to construct letter issued 25 November 2022). The proposed minor adjustments do not change the scope of the impacts and in fact, decrease the nature of the impacts and this is discussed in detail within this motivational letter and there is no reason to suggest why the proposed Amendment should not be approved by the Competent Authority

An Environmental Authorisation (EA) (DFFE Ref: 14/12/16/3/3/2/900– dated 23 November 2016) was granted for the 140MW Brandvalley Wind Energy Facility North of the Town Matjiesfontein within the Karoo Hoogland, Karoo, Witzenberg and Laingsburg Local Municipalities in the Western and Northern Cape Province.

As per the EA, the main components of the *147 MW Brandvalley Wind Energy Facility* are as follows:

- *58 wind turbines with a maximum generating capacity of 147MW in total;*
- *Concrete foundations approximately 25m in diameter and 4m deep per turbine;*
- *690V/33/kV transformer of 10m x 10m per hard standing area per turbine;*
- *Laydown areas of approximately 70m x 50m per turbine (total 20.3ha);*
- *Construction camp of 10ha and onsite batching plant of 1ha;*
- ***200m access road corridor to accommodate slight shift in alignments that are fully informed by the final detailed design of access road Alternative 1 and internal road network, up to 9m in width;***
- *Buildings;*
- *Overhead 33kV powerlines and underground cabling;*
- *Low voltage yard of the 33/132kV onsite substation Position Number 4. The total footprint of the 33/132kV onsite substation (including both high voltage (Eskom yard) and low voltage yards (IPP yard)) will be up to 200m x200m;*
- *Lighting system;*
- *Fencing of the site construction camp; and*

- *4 x 120m tall wind measuring lattice masts strategically placed within the wind farm development footprint to collect data on wind conditions during the operational phase.*

Subsequent amendment applications were undertaken for the Brandvalley WEF since the first issue in 2016. Positive EAs were granted for the amendment applications undertaken thus far. These are detailed as follows:

- Amended EA issued by DFFE on 14 February 2019, Reference: 14/12/16/3/3/1/900/AM1
 - Change the contact details of the EA holder
 - Amend technical wind turbine specifications.
- Amended EA issued by DFFE on 11 October 2021, Reference: 14/12/16/3/3/2/900/AM2
 - Extension of validity of the EA to 23 November 2026
- Amended EA issued by DFFE on 23 August 2022, Reference: 14/12/16/3/3/2/900/AM3
 - Amend technical wind turbine specifications i.e from 58 turbines to 32 wind turbines
 - Approve the EMPR and Final Layout
- A Part 1 AA was submitted for the minor realignment of roads with the DFFE Reference 14/12/16/3/3/2/900/AM4. This amendment was withdrawn on the 25th of January 2022 after an email has been received from the department on 14 December 2022 stating that a Part 2 Amendment process should be followed.
- The Applicant now proposes to undertake the following Part 2AA:
 - Change in contact details of the holder of the EA on Page 2 of the EA
 - Minor realignment of road section B2, B11 and B16 where there are technical challenges

In summary for this Part 2 AA the following applies:

- The applicant has undergone a Part 2 AA in 2022 that was approved on 23 August 2022 with the DFFE reference number 14/12/16/3/3/2/900/AM3 This amendment was to amend technical specifications and to approve the EMPR and final layout.
- Final surveying was undertaken of the site before construction, and the civil engineers identified safety risks that required urgent and immediate attention. Specifically, sections B2, B11 and B16 of the approved internal road network were considered too steep to grade and posed a safety risk for the transportation of abnormal loads/infrastructure without blasting away a majority of the mountainside. These serious safety concerns precipitated the need for minor but important design adjustments and an urgent Part 2 amendment application (this Report).
 - Specialists have provided verification letters providing comment on the minor realignments of the approved road layout
 - A revision to the already approved EMPR (approved on 23 August 2022 with the DFFE reference number 14/12/16/3/3/2/900/AM3) has been made where necessary and indicated in **yellow**. The revised EMPR is Appended in Appendix E of this motivation report.

Figure 2.1. below indicates the current approved Brandvalley WEF road layout as per DFFE reference 14/12/16/3/3/2/900/AM3 dated 23 August 2022

Figure 2.2. below indicates the approved Brandvalley WEF road layout with the newly proposed building layout. The original 200m Corridor that was authorised in the EA with DEA reference 14/12/16/3/3/2/900– dated 23 November 2016 is indicated in Orange. This illustrates that the minor realignments in road sections B2 and B16 are the only changes that require comment.

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 March 2023

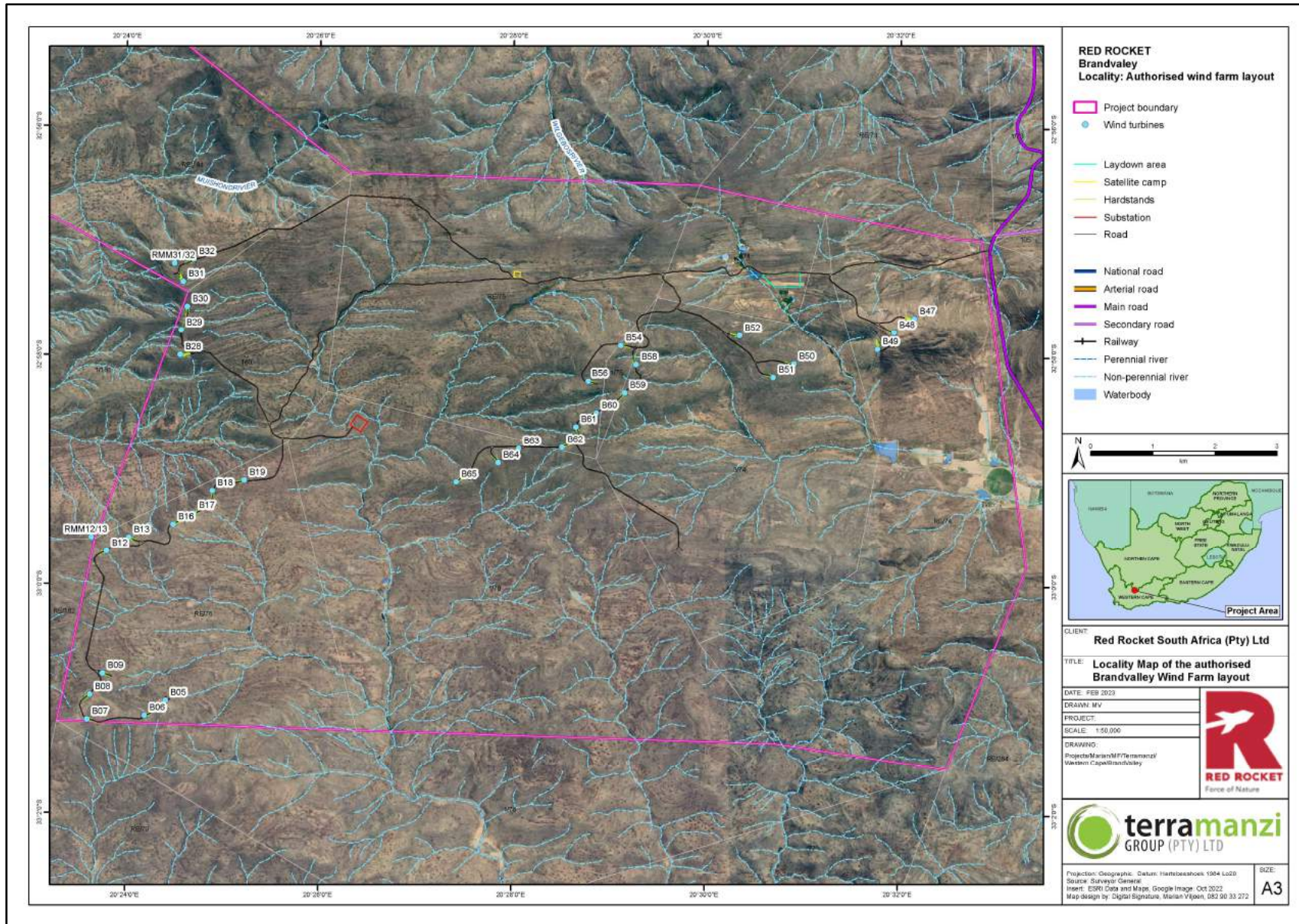


Figure 2.1: This figure shows the current authorised Brandvalley WEF road layout (as approved by DFFE on 23 August 2022)

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 March 2023

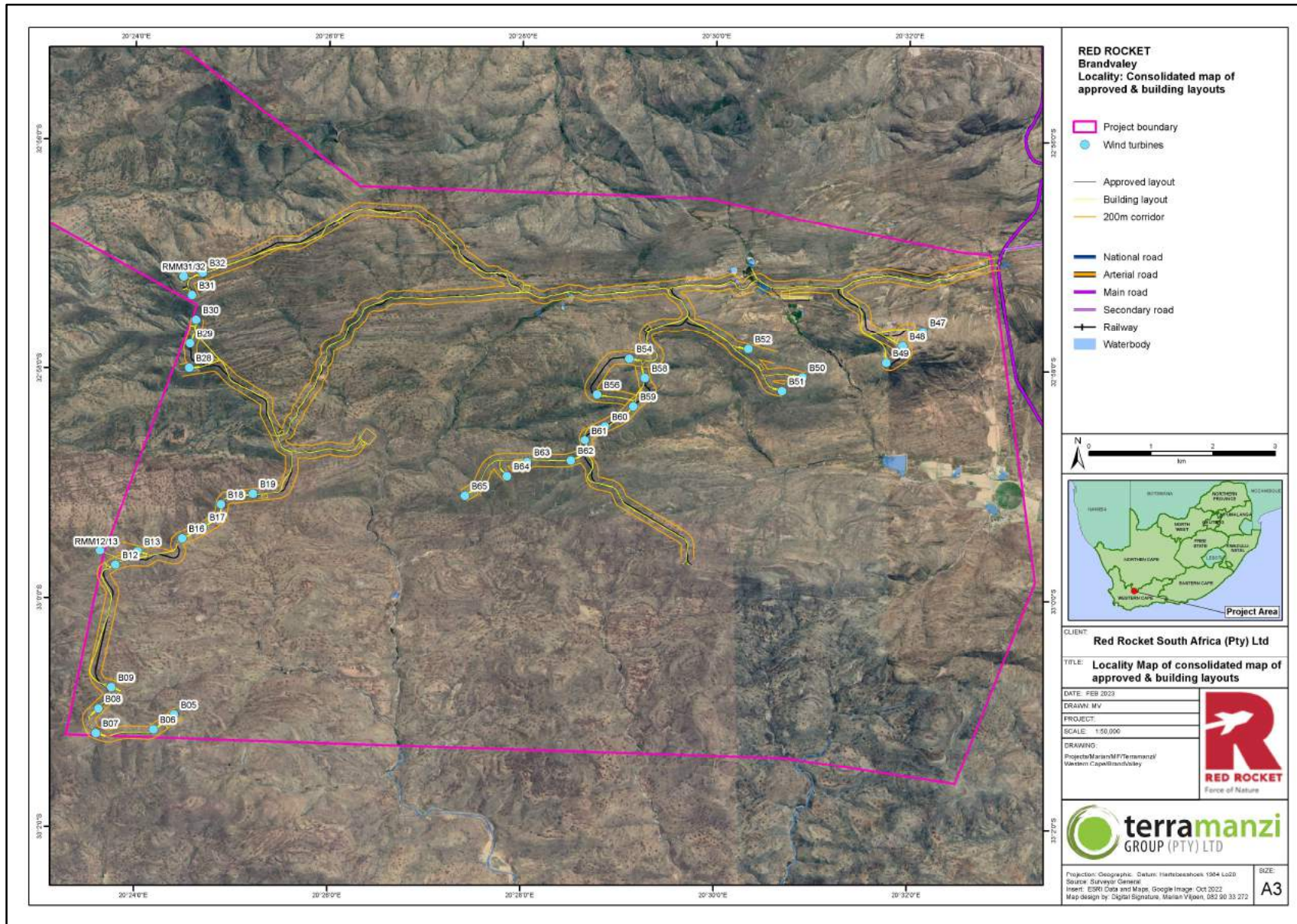


Figure 2.2: This figure shows the current approved Brandvalley WEF road layout with the newly proposed road layout within the authorised 200m corridor

The Applicant, Brandvalley Wind Farm (RF) (Pty) Ltd, wishes to undertake amendments to the authorised Brandvalley WEF located North of the Town Matjiesfontein within the Karoo Hoogland, Karoo, Witzenberg and Laingsburg Local Municipalities in the Western and Northern Cape Province

2.1.1 Non-Substantive Amendment

Amendment 1: Change in contact details of the holder of the EA on Page 2 of the EA:

From:

Dr Kilian Hagemann

Brandvalley Wind Farm (RF) (Pty) Ltd

125 Buitengracht Street

5th Floor

CAPE TOWN

8001

Telephone Number: (021) 300 0613

Cell Phone Number: 082 7689 830

Email Address: brandvalley@g7energies.com

To:

Matteo Brambilla

Brandvalley Wind Farm (RF) (Pty) Ltd

14th Floor, Pier Place Building

Heerengracht Street

Foreshore

CAPE TOWN

8001

Tel: +27(0)72 212 1531

Email: m.logan@redrocket.energy

2.1.2 Substantive Amendment

Amendment 2: Minor Realignments of the authorised roads B2, B11 and B16

The Brandvalley WEF was granted an Environmental Authorisation (EA) (DFFE Ref: 14/12/16/3/3/2/900) 23 November 2016 and subsequently amended via EA's dated 14 February 2019 (DFFE Ref: 14/12/16/3/3/1/900/AM1), 11 October 2021 (DFFE Ref: 14/12/16/3/3/2/900/AM2), and 23 August 2022 (DFFE Ref: 14/12/16/3/3/2/900/AM3),

The Project was awarded PREFERRED BIDDER STATUS on 28 October 2021 within the REIPPPP BID Window 5 and is therefore classified as a SIP Project to be expedited in terms of Schedule 2 Section 17(2) of the Infrastructure Development Act (Act No. 23 of 2014).

Following the approval of the EMPR and the Final Layout on 23 August 2022 (DFFE Ref No. 14/12/16/3/3/2/900/AM3), a final survey was conducted. During this survey, civil engineers identified safety risks that required immediate attention. Specifically, sections B2, B11, and B16 of the internal road network that had been approved were deemed too steep to grade and posed a safety risk for the transportation of abnormal loads/infrastructure. This would require the removal of a significant portion of the mountainside through blasting.

These serious safety concerns precipitated the need for **minor but important design adjustments** and an urgent amendment application. The urgency is driven by the fact that the Project is a preferred bidder and is about to commence with construction (as per Notice of Intent to construct letter issued 25 November 2022). The proposed minor adjustments do not change the scope of the impacts and in fact, decrease the nature of the impacts and this is discussed in detail within the motivational letter and there is no reason to suggest why the proposed Amendment should not be approved by the Competent Authority.

Following on from the department's email dated 14 December 2022 (attached as Appendix F), the requirement for a Part 2 Amendment Application (AA) to confirm the final road alignment for the Brandvalley Wind Energy Facility (WEF) is acknowledged. This WEF is a REIPPPP BID Round winner and is currently under construction. To confirm the context of this Part 2 Application, the original approval for the WEF included 58 Wind Turbine Generators (WTGs) and associated roads and infrastructure. The number of WTGs was reduced to 32 WTGs (14/12/16/3/3/2/900/AM3 dated 23 August 2022), resulting in a significant reduction in the development footprint.

The final road alignment has been reviewed and the changes are deemed to be **minor and insignificant**, with the only areas around sections B2 and B16 requiring additional comment. This is provided as part of this Amendment Motivation Report. Additionally, section B11 will have a portion of the ring road dropped as this is no longer required by the Applicant. These changes will accomplish a decrease in the overall impacts on the environment, especially from a Terrestrial Ecology and Biodiversity point of view.

As noted above, construction for the BID awarded Project is underway on the remainder of the site due to BID timing requirements. However, the portions B2 and B16 of the road build will only be completed once this amendment application process has been processed by the Competent Authority, which is of the utmost urgency.

In Summary the Amendment 2 is to authorise road section B2,B11 and B16:

From:

As stated above the second amendment to be done in this Part 2 Amendment Application is to **amend and realign three road sections** (B2, B11 and B16) from the Final Layout with the approval dated 23 August 2022 (DFFE Ref No. 14/12/16/3/3/2/900/AM3), due to safety risks from an engineering perceptiveness

To:

These serious safety concerns precipitated the need for minor but important design adjustment. The realignment of Road B2, B11 and Road B16 are minor deviations from the approved Final Layout dated 23 August 2022 (DFFE Ref No. 14/12/16/3/3/2/900/AM3). Whilst these refinements in the final layout emanate from a safety requirement for engineering and operational use of the roads, these do not change the scope of the EA, nor do they increase the level or nature of the impacts. Conversely, there are co-incidental positive benefits on general biodiversity, and Engineering.

Figure 2.3. below indicates the **Locality Map of the New Building Layout** with minor realignments which forms the basis on this part 2 amendment motivation report.

Figure 2.4. below indicates the **Locality Map of the New Building Layout** in comparison to the previously approved and authorised layout which forms the basis on this part 2 amendment motivation report.

Figure 2.5. below indicates the **approved** Brandvalley WEF road layout with the **newly proposed** building layout. The **original 200m Corridor** that was authorised in the EA with DEA reference 14/12/16/3/3/2/900– dated 23 November 2016) is indicated in Orange to show that the minor realignments in road sections B2 and B16 are the only changes that require additional comment.

Figure 2.6. *Map indicating the minor realignments of road B2 (in Yellow) which forms the basis on this part 2 amendment motivation report.in comparison to the previously authorised layout (in Black) and the authorised 200m road layout corridor (DFFE Ref: 14/12/16/3/3/2/900) authorised 23 November 2016*

Figure 2.7. *Map indicating the minor realignments and the relinquishment of road B11 (in Yellow) which forms the basis on this part 2 amendment motivation report.in comparison to the previously approved and authorised layout (in Black) and the authorised 200m road layout corridor (DFFE Ref: 14/12/16/3/3/2/900) authorised 23 November 2016*

Figure 2.8. *Map indicating the minor realignments of road B16 (in Yellow) which forms the basis on this part 2 amendment motivation report.in comparison to the previously approved and authorised layout (in Black) and the authorised 200m road layout corridor (DFFE Ref: 14/12/16/3/3/2/900) authorised 23 November 2016*

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Please note that no additional Listed Activities in terms of the National Environmental Management Act (No. 107 of 1998) (NEMA); Environmental Impact Assessment (EIA) Regulations (2014, as amended) are triggered by the proposed amendments.

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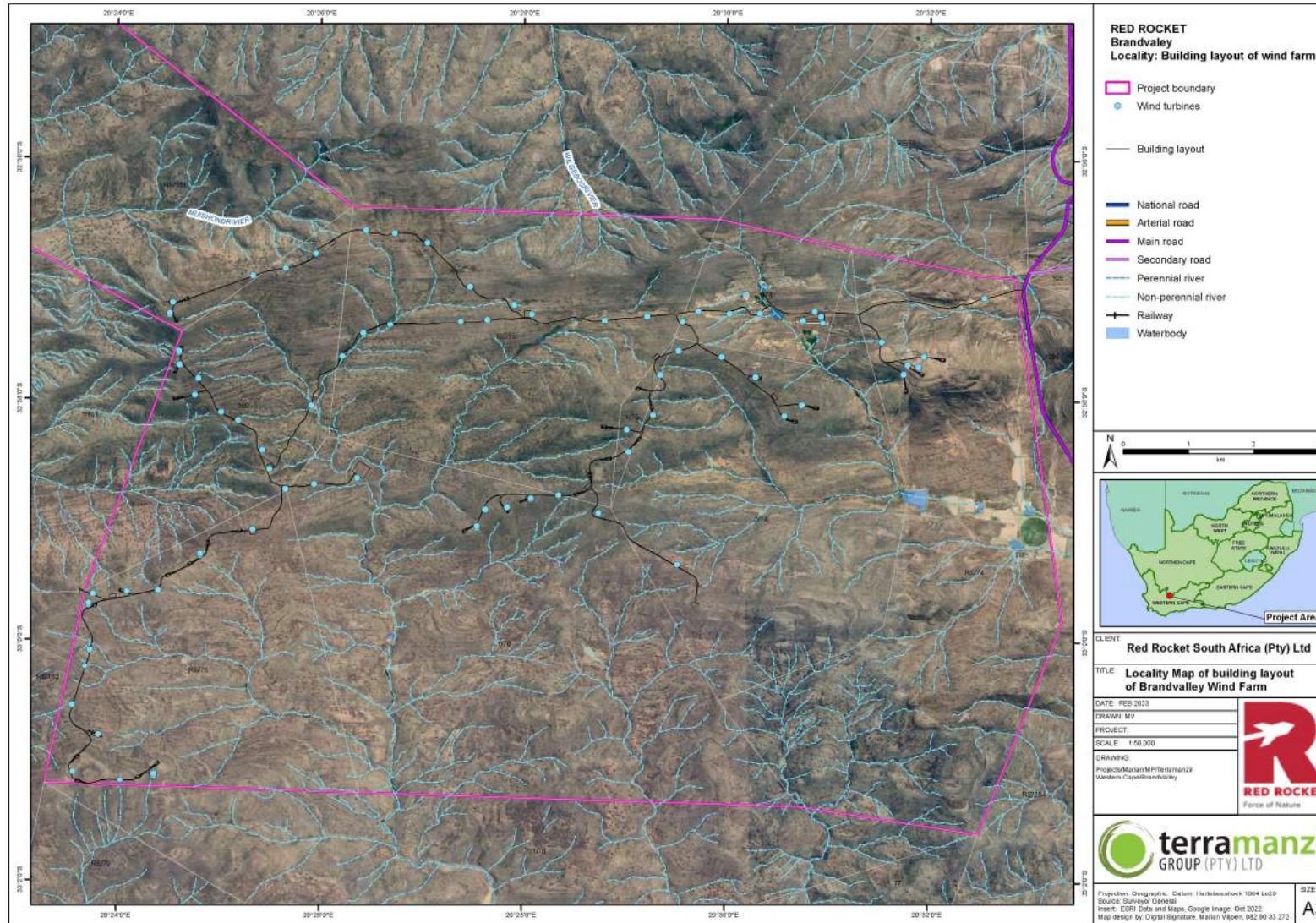


Figure 2.3: Locality Map of the New Building Layout with minor realignments (Preferred Layout)

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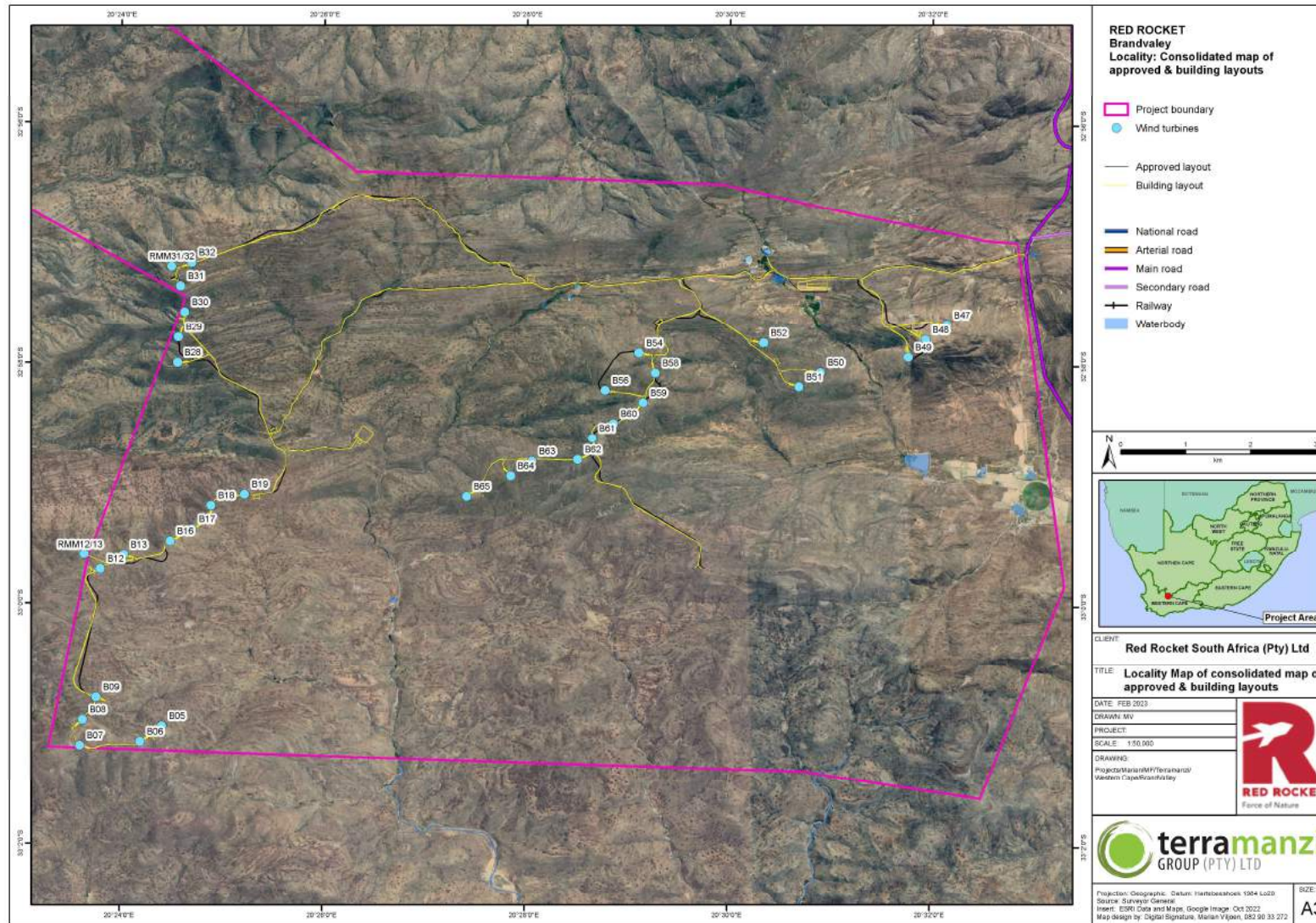


Figure 2.4: Locality Map of the New Building Layout (in Yellow) in comparison to the previously approved and authorised layout (In Black)

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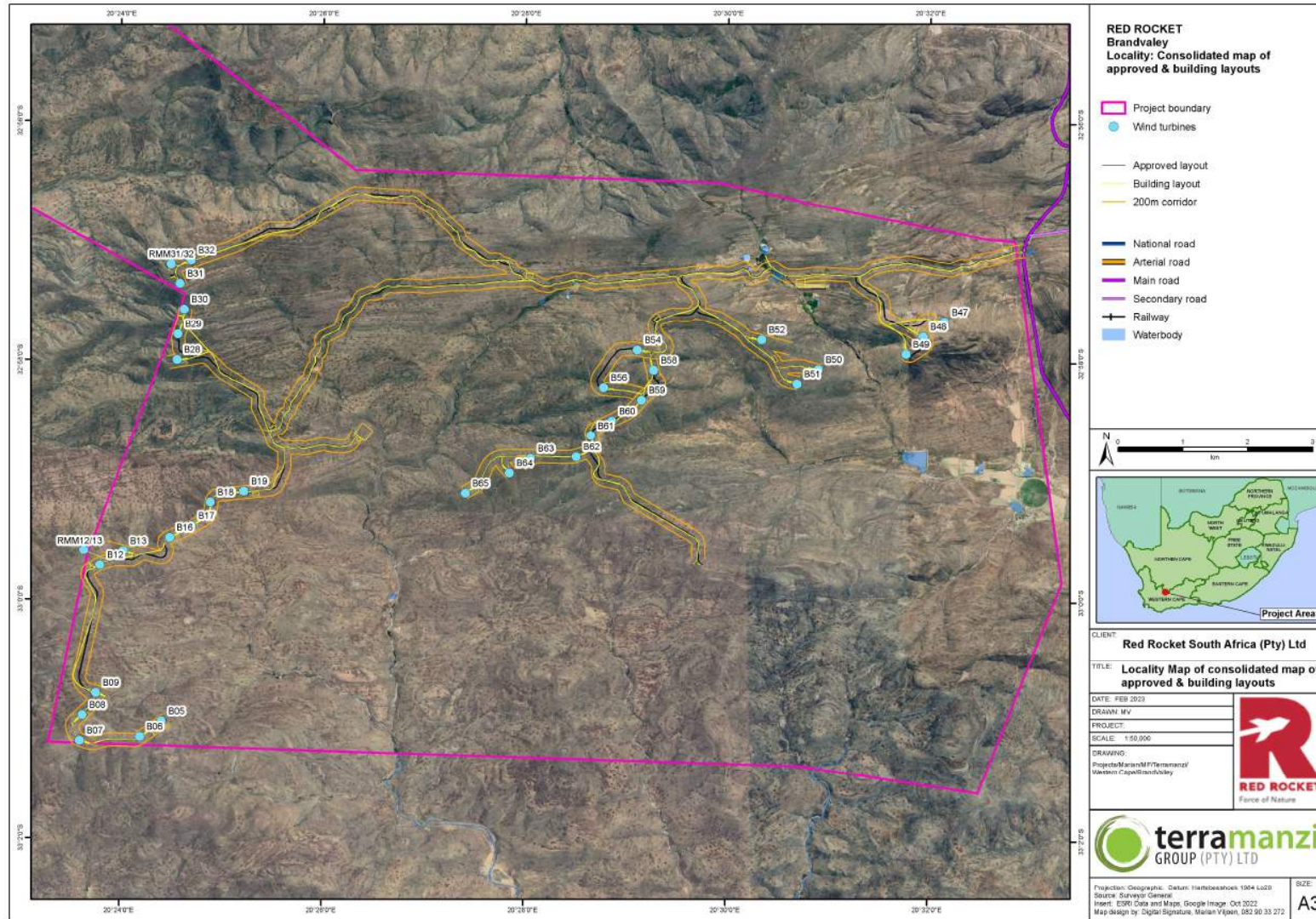


Figure 2.5: This figure shows the current approved Brandvalley WEF road layout with the newly proposed road layout within the authorised 200m corridor

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Figure 2.6: Map indicating the minor realignments of road B2 (in Yellow) in comparison to the previously approved and authorised layout (in Black) with the authorised 200m Corridor (in Orange)

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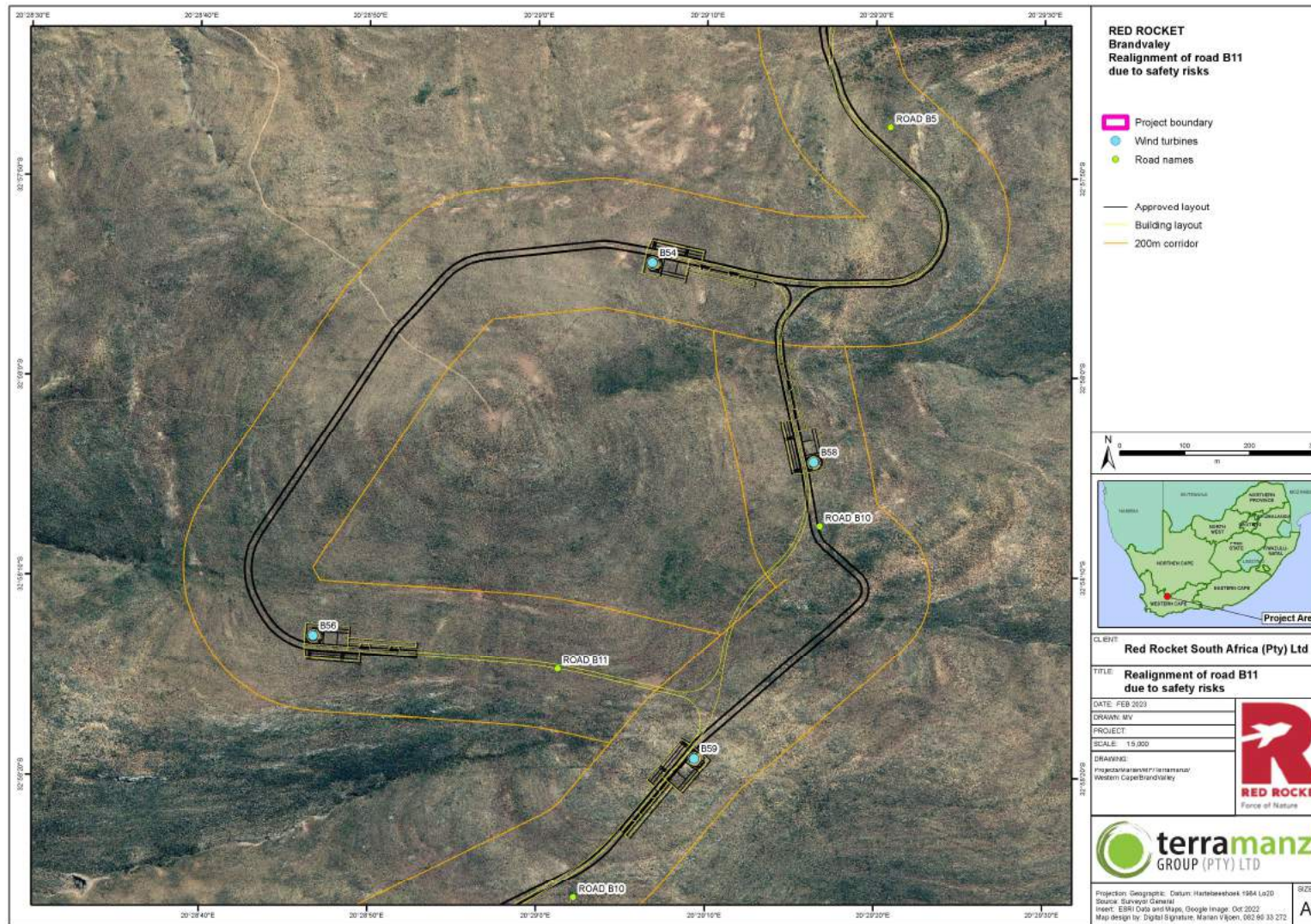


Figure 2.7: Map indicating the minor realignments and the relinquishment of road B11 (in Yellow) in comparison to the previously authorised layout (in Black) and the approved 200m Corridor

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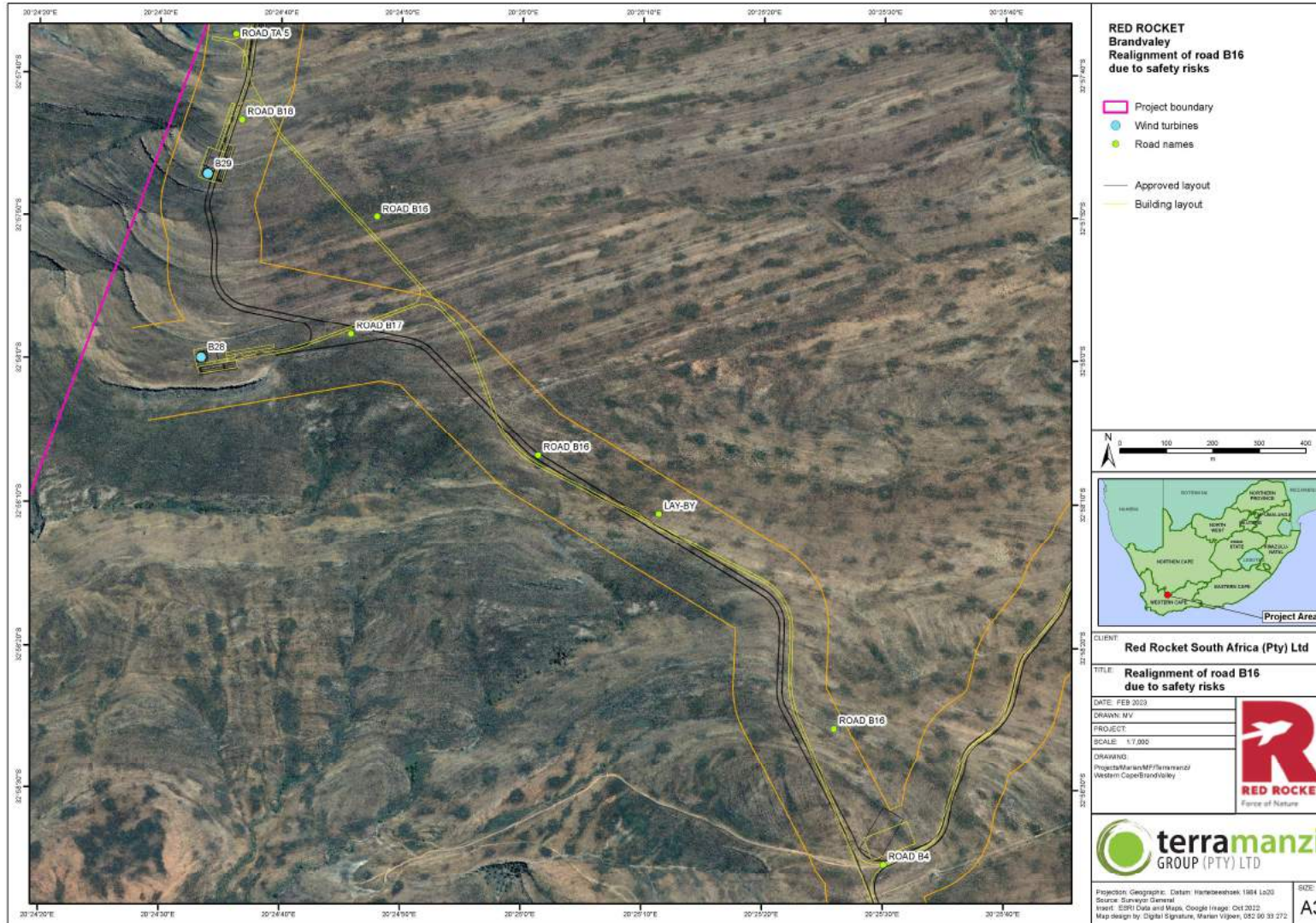


Figure 2.8: Map indicating the minor realignments of road B16 (in Yellow) in comparison to the previously approved and authorised layout (in Black) and the approved 200m Corridor

The proposed new road layout (yellow) is a minor realignment to the authorised road layout (black). The original 200m Corridor that was approved in the EA with DEA reference 14/12/16/3/3/2/900–dated 23 November 2016 is indicated in Orange to show that the minor realignments in road sections B2 and B16 are the only changes that require additional comment. The reason for this amendment is due to safety risks from an Engineering perspective identified in consultation with the professional team after a final site survey was done.

Design Specification

Due to Engineering safety risks, the applicant Brandvalley Wind Farm (RF) (Pty) Ltd wishes to modify the already approved road layout that was approved on the 23rd of August 2022 (DFFE Ref No. 14/12/16/3/3/2/900/AM3).

As per page 8 of the EA dated 23 November 2016 with the DEA Reference 14/12/16/3/3/2/900 the Brandvalley WEF facility was approved with: *“a 200m access road corridor to accommodate slight shift in alignments that are fully informed by the final detailed design of access road Alternative 1 and internal road network, up to 9m in width; Buildings;”* The 200m corridor was assessed and approved on 23 November 2016 with the DEA Reference 14/12/16/3/3/2/900 to accommodate any alignments in the road layout.

An EMPR and Final Layout of the Brandvalley WEF was submitted to the DFFE and approved on 23 August 2022 (DFFE Ref No. 14/12/16/3/3/2/900/AM3). Following the approval of the EMPR and the Final Layout a final survey was conducted. During this survey, civil engineers identified safety risks that required immediate attention. Specifically, sections B2, B11, and B16 of the internal road network that had been approved were deemed too steep to grade and posed a safety risk for the transportation of abnormal loads/infrastructure. This would require the removal of a significant portion of the mountainside through blasting.

The original 200m Corridor that was approved in the EA with DEA reference 14/12/16/3/3/2/900–dated 23 November 2016) is indicated in Orange in **Figure 2.4** this corridor shows that the minor realignments in road sections B2 and B16 are the only realignments that require additional comment as these road section deviates outside of the originally approved 200m Corridor. All specialists have assessed these minor deviations of B2, B11 and B16 and deemed that the development is acceptable and implementable.

The design specifications of the road layout will be amended as follows:

Road Section B2

- Road B2, which is required to deliver the turbines to position B49, has been realigned to follow the natural contour of the mountain.

Road Section B16

- Road B16, which is required to deliver the turbines to positions B29 and B30, has been realigned to avoid the excessive and unfeasible amount of fill that would be required to reduce the excessive gradient.

Road Section B11

- In addition to the amendments to roads B2 and B16 there will also be minor amendments to other road sections entailing reducing / eliminating or shortening roads. For example, we are eliminating the section of the road between WTG 54 & WTG 56 as it's no longer required and rather making use of the road between WTG B56 and B59 (Road B11).

Specialist Studies Completed

The following specialist studies were undertaken:

Original Assessment (2016) Reports

- Avifaunal Impact – African Insights (C/O Tony Williams, March 2016)
- Bat Impact – Animalia Zoological (C/O Werner Marais, May 2016)
- Ecological Impact – Simon Todd Consulting (C/O Simon Todd, August 2016)
- Freshwater Impact – Scherman Colloty & Associates (C/O Brian Colloty, July 2016)
- Agricultural Impact – EOH (C/O Roy de Kock, March 2016)
- Visual Impact – EOH (C/O Thomas King, March 2016)
- Noise Impact – Safetech (C/O Dr Brett Williams, March 2016)
- Heritage Impact – Booth Heritage Consulting (C/O Celeste Booth, March 2016)
- Archaeological Impact – Nature Viva (C/O John Almond, March 2016)

Part 2 Amendment Assessment (2021) Reports

- Avifaunal Impact – Birds & Bats Unlimited (C/O Rob Simmons, November 2021)
- Bat Impact – Animalia Zoological (C/O Werner Marais, November 2021)
- Ecological Impact – Trusted Partners (C/O Malcome Logie, November 2021)
- Freshwater Impact – SAS (C/O Christel du Preez & Stephan van Staden, July 2021)
- Agricultural Impact – Johann Lanz (C/O Johann Lanz, November 2021)
- Visual Impact – Sivist (C/O Kerry Schwartz, March 2022)
- Noise Impact – Safetech (C/O Dr Brett Williams, November 2021)
- Heritage Impact – CTS Heritage (C/O Jenna Lavin, November 2021)
- Social Impact – Tony Barbour Consulting (C/O Tony Barbour, November 2021)
- Traffic Impact – JGAfrika (C/O Iris Wink, November 2021)
- Geotechnical Impact – JGAfrika (C/O Jan Norris, November 2021)

The following specialist assessments were undertaken based on the current amendments proposed:

Current Amendment proposed Specialist Verification Letters – 2023

- Avifaunal Impact – Birds & Bats Unlimited (C/O Rob Simmons, February 2023)
- Bat Impact – Animalia Zoological (C/O Werner Marais, February 2023)
- Ecological Impact – Trusted Partners (C/O Malcome Logie, February 2023)
- Freshwater Impact – SAS (C/O Stephan van Staden February 2023)
- Agricultural Impact – Johann Lanz (C/O Johann Lanz, February 2023)
- Visual Impact – SAS (C/O Stephan van Staden & Sanja Erwee, February 2023)
- Noise Impact – Safetech (C/O Dr Brett Williams, February 2023)
- Heritage Impact – PGS Heritage (C/O Wouter Fourie, February 2023)

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- Social Impact – Tony Barbour Consulting (C/O Tony Barbour, February 2023)
- Traffic Impact – JGAfrika (C/O Adrian Johnson, February 2023)
- Geotechnical Impact – JGAfrika (C/O Priantha Subrayen, February 2023)

The draft Amendment Report was compiled to assess the potential impacts that the proposed amendments to the Brandvalley WEF authorised road layout may have on the receiving environment. The content of the report has been based on the impact assessment included within the EIA process undertaken in 2016 and comparing it to the potential impacts that may be expected, based on specialist input, should these amendments be approved.

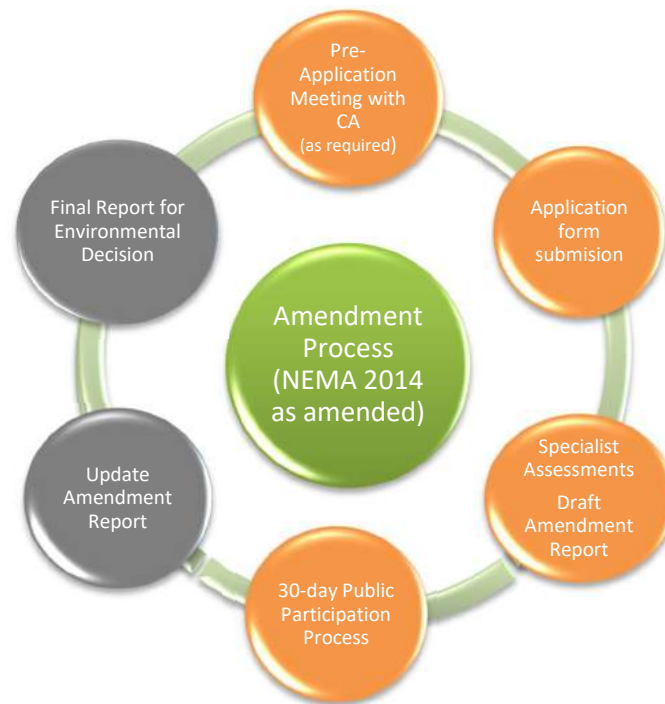
The draft Amendment Report will be subjected to a 30-day Public Participation Process (PPP) which commences on 06 March 2023 and concludes on 05 April 2023. All comments received during the 30-day PPP for the draft Amendment Report will be recorded and addressed in the Comments and Response Report (C&RR). The C&RR will then accompany the Final Motivation Report for Decision.

2.2 ENVIRONMENTAL APPLICATIONS RELATED TO THIS PROJECT

COMPETENT AUTHORITY REFERENCE NUMBER	COMPETENT AUTHORITY	PURPOSE OF APPLICATION
An Environmental Authorisation (EA) (DFFE Ref: 14/12/16/3/3/2/900– dated 23 November 2016)	National Department of Environmental Affairs	DEA has approved a development envelope for the Brandvalley Wind Energy Facility which includes 58 turbines with associated infrastructure, and a 200m road layout corridor,
An amendment was made to the Environmental Authorisation dated 14 February 2019 (DFFE Ref No. 14/12/16/3/3/1/900/AM1)	National Department of Environmental Affairs	Change the contact details of the EA holder and to amend technical specifications.
An amendment was made to the Environmental Authorisation dated 11 October 2021 (DFFE Ref No. 14/12/16/3/3/2/900/AM2)	National Department of Environmental Affairs	Extend the validity of the Environmental Authorisation to 23 November 2026 as condition 7 of the Environmental Authorisation dated 23 November 2016 (DFFE Ref No. 14/12/16/3/3/2/900) required commencement within 5 years from the date of issue.
Amended EA dated 08 January 2018, with reference number 14/12/16/3/3/2/900/AM3	National Department of Environmental Affairs	Extension of validity of the EA
An amendment was made to the Environmental Authorisation dated 23 August 2022 (DFFE Ref No. 14/12/16/3/3/2/900/AM3)	National Department of Environmental Affairs	Amend technical wind turbine specifications i.e from 58 turbines to 32 wind turbines
A Part 1 AA was submitted for the minor realignment of roads with the DFFE Reference 14/12/16/3/3/2/900/AM4.	National Department Forestry, Fisheries and the Environment: This amendment was withdrawn on the 25th of January 2022 after an email has been received from the department on 14 December 2022 stating that a Part 2 Amendment process should be followed.	Change in the contact details of the EA Holder and minor realignments in the already approved road Layout
Application for Amendment of EA with reference number 14/12/16/3/3/2/900/AM5.: Current Application		The Applicant now proposes to undertake the following Part 2AA: a. Change in contact details of the holder of the EA on Page 2 of the EA b. Minor realignment of road section B2, B11 and B16 where there are technical challenges

2.3 BRIEF OVERVIEW OF THE PROCESS

The **Amendment Process** can be broadly broken down into the following key phases. The process proposed is in keeping with the requirements stipulated in the EIA Regulations (GN R. 982 of 2014, as amended) refer:



The phases highlighted in grey above illustrate the phases to be completed. The phase highlighted in orange is currently underway or complete. The process is aligned with the requirements stipulated in the NEMA EIA Regulations (2014, as amended). The application requirements as set out in Notice No.'s R. 982, R. 983, R. 984 and R. 985, promulgated in terms of Section 5 of the National Environmental Management Act (Act 107 of 1998) (as amended) and the requirements of DFFE have been followed in the preparation of this Amendment Motivation Report.

2.4 AMENDMENT REPORT CONTENT

This document is the Draft Amendment Motivation Report for PPP and contains all information, which is necessary for an appropriate understanding of the project. It describes the scope of the assessment and the consultation process that was undertaken throughout the Amendment process.

In terms of Section 32 of GN. R 982 (as amended), an Amendment Report, must include the information as specified in Table 2.1 below.

Table 2.1: Content of this Final Amendment Motivation Report and where to find the information in this report

Regulation	Scope and Content	Relevant Sections
GNR 982 R32	<i>The Applicant must submit within 90 days of the application for amendment, a report reflecting:</i>	

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(1)(a)	(i)	<i>An assessment of all impacts related to the change;</i>	Section 8
	(ii)	<i>Advantages and disadvantages associated with the proposed change;</i>	Section 6, 7 & 11
	(iii)	<i>Measures to ensure avoidance, management and mitigation of impacts associated with such proposed change; and</i>	Section 8
	(iv)	<i>Any changes to the EMPr</i>	Section 10
		which report -	
		<i>(aa) had been subjected to a PPP process which had been agreed to by the CA and which was appropriate to bring the proposed change to the attention of potential and registered I&APs including organs of state which have jurisdiction in respect of any aspect of the relevant activity and the CA, and</i>	Section 11 & Appendix D
		<i>(bb) reflects the incorporation of comments received including any comments of the CA, or</i>	To be Included in the Final Amendment Motivation Report
(1)(b)		<i>a notification in writing that the report will be submitted within 140 days of receipt of the application by the CA as significant changes have been made or significant new information has been added to the report which changes or information was not contained in the report consulted on during the initial PPP contemplated in sub regulation (1)(a) and that the revised report will be subjected to another PPP of at least 30 days.</i>	N/A

3 PROJECT DETAILS

3.1 ENTITY RESPONSIBLE FOR DEVELOPMENT OF THE PROJECT

Table 3.1: Details of the entity responsible for the development of Brandvalley WEF

DETAIL	DESCRIPTION
Applicant Name:	Brandvalley Wind Farm (RF) (Pty) Ltd.
Responsible Person:	Magdalena Logan
Address:	14th Floor, Pier Place Building Heerengracht Street Foreshore
Contact Details:	072 212 1531

3.2 ENVIRONMENTAL ASSESSMENT PRACTITIONER (EAP) DETAILS, EXPERTISE AND INDEPENDENCE

In terms of NEMA (as amended), an independent Environmental Assessment Practitioner (EAP) must be appointed in terms of section 12 to 14 of the EIA Regulations. Terramanzi Group (Pty) Ltd (TMG) has been appointed to undertake this Application for Amendment of the Environmental Authorisation on behalf of the Applicant.

Wendy Mey is the independent EAP responsible for this report. Wendy was involved in the compilation and review of this Amendment Motivation Report. Wendy is an environmental consultant with more than 15 years of experience. She is a registered EAP with the Environmental Assessment Practitioners Association of South Africa (EAPASA). Wendy holds a BSc in Chemical Engineering from the University of KwaZulu Natal, and is a senior member of the Environmental Services Team at Terramanzi Group (Pty) Ltd.

Kristen Shaw is an environmental consultant and the Co-Author of this report. Kristen holds a Ba in Psychology, Geography and Environmental Management and a BSc (Hons) in Environmental Sciences, with Geography and Environmental Management from the North West University. She is a member of the Environmental Services Team at Terramanzi Group (Pty) Ltd and registered as a Candidate EAP with The Environmental Assessment Practitioners Association of South Africa (EAPASA) (2022/4741), waiting on approval of registration.

This Report was also reviewed by Fabio Venturi whose career spans over 20 years in the industry, across both the government and private sectors of the green economy. Fabio's entrepreneurial drive to innovate and influence has resulted in multiple industry firsts and awards. Fabio is an Accredited Professional with the GBCSA, a Certified Environmental Scientist, served on the South Africa Environmental Industry Body, that being the Western Cape Committee Branch of the South African Affiliate of the International Association for Impact Assessment (IAIAsa), and sat on the National Executive Committee (NEC) of IAIAsa, is a founding member of the Environmental Assessment Practitioner's Association of South Africa (EAPASA), and is a Certified Carbon Footprint Analyst and Energy Efficiency Auditor.

TMG hereby declares that they have no conflicts of interest related to the work of this Report. Specifically, TMG declares that they have no personal financial interests in the property and/or activity being assessed in this report, and that they have no personal or financial connections to the relevant

property owners, developers, planners, financiers or consultants of the property or activity, other than fair remuneration for professional services rendered for this Report to the Competent Authority. TMG declares that the opinions expressed in this Report are independent and a true reflection of their professional expertise.

TMG is a Level 4 Broad Based Black Economic Empowerment Company and is professionally accredited with a number of relevant industry bodies, in line with the Preferential Procurement Policy Framework Act No. 5 of 2000 (PPPFA).

Please refer to Appendix G for the EAP's Curriculum Vitae

3.3 LOCATION OF ACTIVITY

The authorised Brandvalley WEF project site is situated North of the Town of Matjiesfontein within the Karoo Hoogland, Witzenberg and Laingsburg Local Municipalities in the Western and Northern Cape Province. A study area of approximately 25,521.98 hectares, located on a site between the towns of Matjiesfontein (approximately 26km north) and Sutherland (approximately 64km south) is where the proposed wind farm and associated infrastructure will be established (refer to Figure 3.1. below).



Figure 3.1: Brandvalley WEF project location. The extent of the site is demarcated by the white polygon

The GPS co-ordinates for centre point of site is 32°58'54.76"S, 20°27'23.21"E

The R354 road, runs east of the Brandvalley WEF properties, while the N1 is located in northern direction from the affected properties. It is anticipated that farming will continue on the site, with the exception of the areas affected by development activities.

The proposed amendments are to be undertaken within the authorised area which extends to three local municipalities north of the town of Matjiesfontein

The approximate coordinates of the Brandvalley WEF project:

- North: 32°56'44.40"S, 20°26'3.13"E
- East: 32°57'43.98"S, 20°31'59.81"E
- Middle Point: 32°58'35.49"S, 20°26'24.19"E
- South: 32°59'37.71"S, 20°29'41.24"E
- West: 33° 1'5.67"S, 20°23'33.47"E

The project will cover an area of approximately 25,521.98 hectares, which includes the following farms as detailed in Table 3.2 below:

Table 3.2: Affected Brandvalley property sites

PROPERTY NAME	SG21 DIGITAL CODE	FARM SIZE (HA)	MUNICIPALITY
The Remainder of Barendskraal 76	C04300000000007600000	1,523.7	Laingsburg LM/ Central Karoo DM/ Western Cape
Portion 1 of Barendskraal 76	C04300000000007600001	2,828.6	Laingsburg LM / Central Karoo DM / Western Cape
The Remainder of Brandvalley 75	C04300000000007500000	1,981.9	Laingsburg LM / Central Karoo DM / Western Cape
Portion 1 of Brandvalley 75	C04300000000007500001	56.3	Laingsburg LM / Central Karoo DM / Western Cape
The Remainder of Fortuin 74	C04300000000007400000	2,454.98	Laingsburg LM / Central Karoo DM / Western Cape
Portion 3 Fortuin 74	C04300000000007400003	1,868.4	Laingsburg LM / Central Karoo DM / Western Cape
The Remainder of Kabeltouw 160	C019000000000016000000	1,082.8	Witzenberg (Ceres) LM/ Cape Winelands DM/ Western Cape
The Remainder of Muishond Rivier 161	C019000000000016100000	4,051.8	Witzenberg (Ceres) LM/ Cape Winelands DM/ Western Cape
Portion 1 of Muishond Rivier 161	C019000000000016100001	3391	Witzenberg (Ceres) LM/ Cape Winelands DM/ Western Cape
Portion 1 of Fortuin 74 (Ou Mure)	C04300000000007400001	408.9	Laingsburg LM / Central Karoo DM / Western Cape

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The Farm Rietfontein 197	C07200000000019700000	5,873.6	Karoo Hoogland LM/ Namakwa DM/ Northern Cape
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The land proposed to be leased for the project comprises privately owned farms, all located adjacent to one another, and is identified as a prime site for wind energy generation.

The project location has not been amended as per what has been authorised by the Competent Authority (DEA). The Environmental Assessment Practitioner (EAP) has previously assessed the Project footprint, based on the available information and independent specialists' assessments undertaken, and can advise that due to **no fatal flaws** having been identified, the Competent Authority granted an Environmental Authorisation for the Brandvalley WEF.

A Strategic Environmental Assessment (SEA) was completed for Southern Africa for the identification of Renewable Energy Development Zones (REDZs) for the development of potential wind and solar projects, which would be of national strategic importance in terms of green energy in support of the country's electrical demand and economy.

The Brandvalley WEF site is situated within Renewable Energy Development Zone 2 (which falls under the jurisdiction of the Central Karoo, Cape Winelands and Namakwa District Municipalities). Therefore this project is considered to be of national strategic importance. Refer to Figure 3.2. below.

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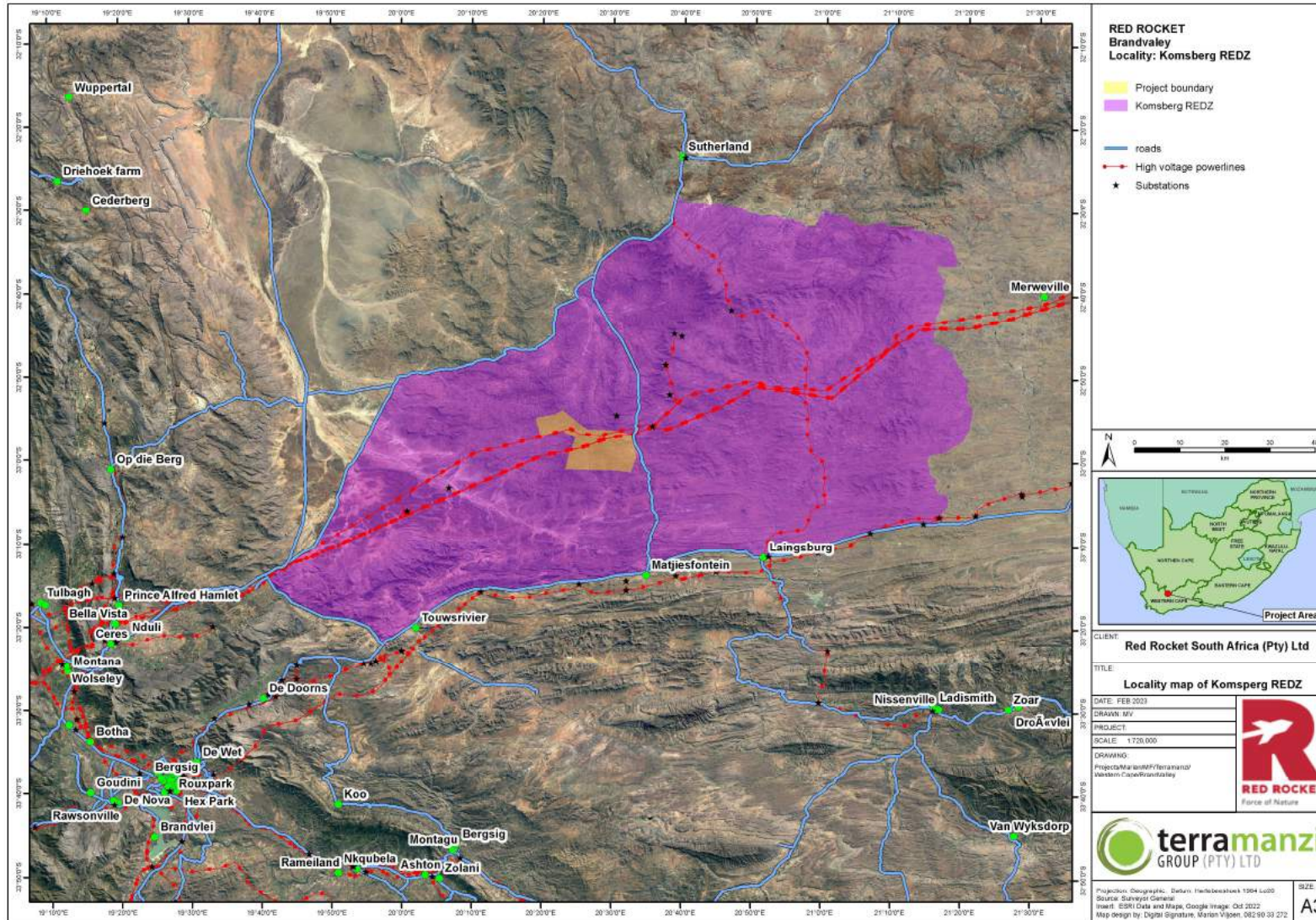


Figure 3.2: The Brandvalley WEF (indicated in yellow) falls within the Komsberg Renewable Energy Development Zone (REDz)

4 SCOPE OF THE PROPOSED AMENDMENT

4.1 DESCRIPTION OF PROPOSED AMENDMENTS

The Applicant, Brandvalley Wind Farm (RF) (Pty) Ltd, wishes to undertake amendments to the authorised Brandvalley WEF located North of the Town Matjiesfontein within the Karoo Hoogland, Karoo, Witzenberg and Laingsburg Local Municipalities in the Western and Northern Cape Province

4.1.1 Non-Substantive Amendment

Amendment 1: Change in contact details of the holder of the EA on Page 2 of the EA:

From:

Dr Kilian Hagemann

Brandvalley Wind Farm (RF) (Pty) Ltd

125 Buitengracht Street

5th Floor

CAPE TOWN

8001

Telephone Number: (021) 300 0613

Cell Phone Number: 082 7689 830

Email Address: brandvalley@g7energies.com

To:

Matteo Brambilla

Brandvalley Wind Farm (RF) (Pty) Ltd

14th Floor, Pier Place Building

Heerengracht Street

Foreshore

CAPE TOWN

8001

Tel: +27(0)72 212 1531

Email: m.logan@redrocket.energy

4.1.2 Substantive Amendment

Amendment 2: Minor Realignments of the authorised roads B2, B11 and B16

The Brandvalley WEF was granted an Environmental Authorisation (EA) (DFFE Ref: 14/12/16/3/3/2/900) 23 November 2016 and subsequently amended via EA's dated 14 February 2019 (DFFE Ref: 14/12/16/3/3/1/900/AM1), 11 October 2021 (DFFE Ref: 14/12/16/3/3/2/900/AM2), and 23 August 2022 (DFFE Ref: 14/12/16/3/3/2/900/AM3),

Following the approval of the Final Layout on 23 August 2022 (DFFE Ref No. 14/12/16/3/3/2/900/AM3), a final survey was conducted. During this survey, civil engineers identified safety risks that required immediate attention. Specifically, sections B2, B11, and B16 of the internal road network that had been approved were deemed too steep to grade and posed a safety risk for the transportation of abnormal loads/infrastructure. This would require the removal of a significant portion of the mountainside through blasting.

From:

As stated above the second amendment to be done in this Part 2 Amendment Application is to **amend and realign three road sections** (B2, B11 and B16) from the Final Layout with the approval dated 23 August 2022 (DFFE Ref No. 14/12/16/3/3/2/900/AM3), due to safety risks from an engineering perspective

To:

These serious safety concerns precipitated the need for minor but important design adjustment. The realignment of Road B2, B11 and Road B16 are minor deviations from the approved Final Layout dated 23 August 2022 (DFFE Ref No. 14/12/16/3/3/2/900/AM3). Whilst these refinements in the final layout emanate from a safety requirement for engineering and operational use of the roads, these do not change the scope of the EA, nor do they increase the level or nature of the impacts. Conversely, there are co-incident positive benefits on general biodiversity, and Engineering.

These serious safety concerns precipitated the need for **minor but important design adjustments** and an urgent amendment application. The urgency is driven by the fact that the Project is a preferred bidder and is about to commence with construction (as per Notice of Intent to construct letter issued 25 November 2022). The proposed minor adjustments do not change the scope of the impacts and in fact, decrease the nature of the impacts and this is discussed in detail within the motivational letter and there is no reason to suggest why the proposed Amendment should not be approved by the Competent Authority.

We have reviewed the final road alignment and consider the changes **minor and insignificant**, as these minor deviations of Road B2 and B16 are just outside the approved 200m road corridor (approved 23 November DEA reference 14/12/16/3/3/2/900) that requires additional comment. This will be provided as part of the Amendment Motivation Report. Additionally, section B11 will have a portion of the ring road dropped as this is no longer required by the Applicant. These changes will accomplish a decrease in the overall impacts on the environment, especially from a Terrestrial Ecology and Biodiversity point of view.

As noted above, construction for the BID awarded Project is underway on the remainder of the site due to BID timing requirements. However, the above portions of the road build will only be completed once this amendment application process has been processed by the Competent Authority, which is of the utmost urgency.

The proposed new road layout (yellow) is a minor realignment to the already authorised road layout. The reason for this change is due to safety risks from an Engineering perspective identified in consultation with the professional team after a final site survey was done.

Figure 4.1. below indicates the **Locality Map of the New Building Layout** in comparison to the previously approved layout and the 200m road layout corridor approved 23 November 2016 (DEA Ref: 14/12/16/3/3/2/900)

Figure 4.2. *Map indicating the minor realignments of road B2 (in Yellow) which forms the basis on this part 2 amendment motivation report. in comparison to the previously approved and authorised layout (in Black) with the authorised 200m Corridor (in Orange)*

Figure 4.3. *Map indicating the minor realignments and the drop of road B11 (in Yellow) which forms the basis on this part 2 amendment motivation report. in comparison to the previously approved and authorised layout (in Black) with the authorised 200m Corridor (in Orange)*

Figure 4.4. *Map indicating the minor realignments of road B16 (in Yellow) which forms the basis on this part 2 amendment motivation report. in comparison to the previously approved and authorised layout (in Black) with the authorised 200m Corridor (in Orange)*

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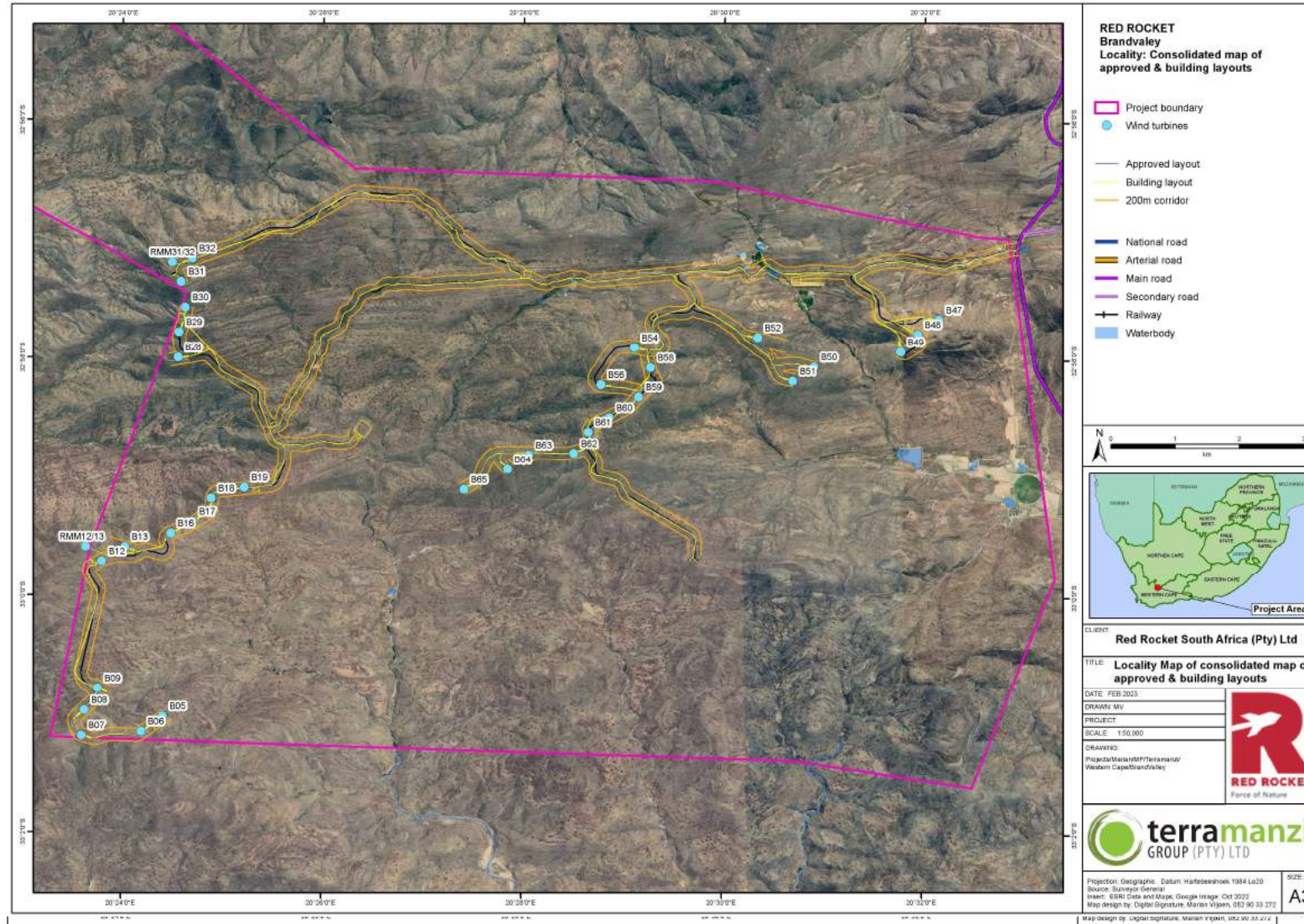


Figure 4.1: Locality Map of the New road Layout (in Yellow) in comparison to the previously approved road layout (In Black) within the approved 200m corridor

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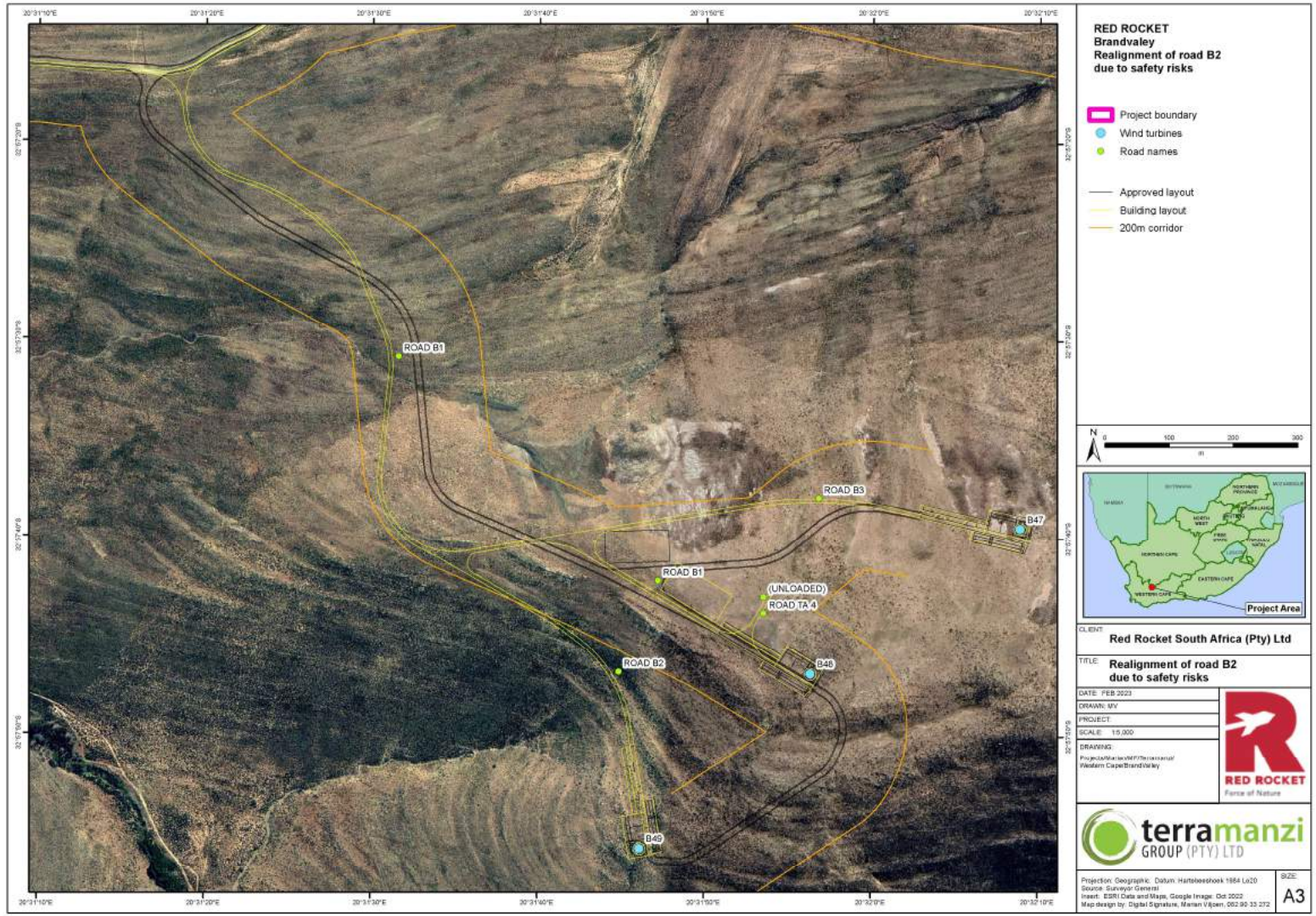


Figure 4.2: Map indicating the minor realignments of road B2 (in Yellow) in comparison to the previously approved and authorised layout (in Black) with the authorised 200m Corridor (in Orange)

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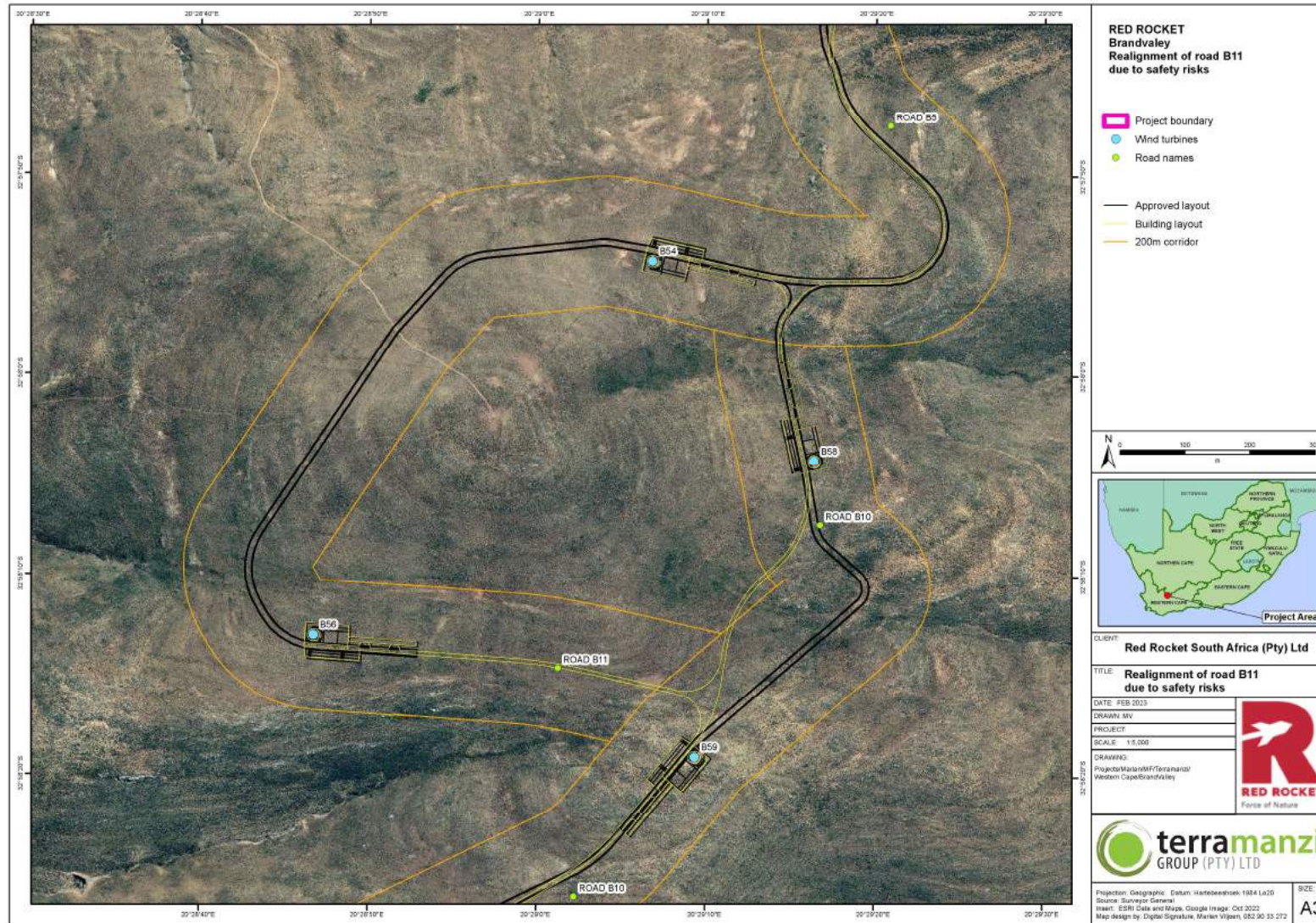


Figure 4.3: Map indicating the minor realignments and the drop of road B11 (in Yellow) in comparison to the previously approved and authorised layout (in Black) with the authorised 200m Corridor (in Orange)

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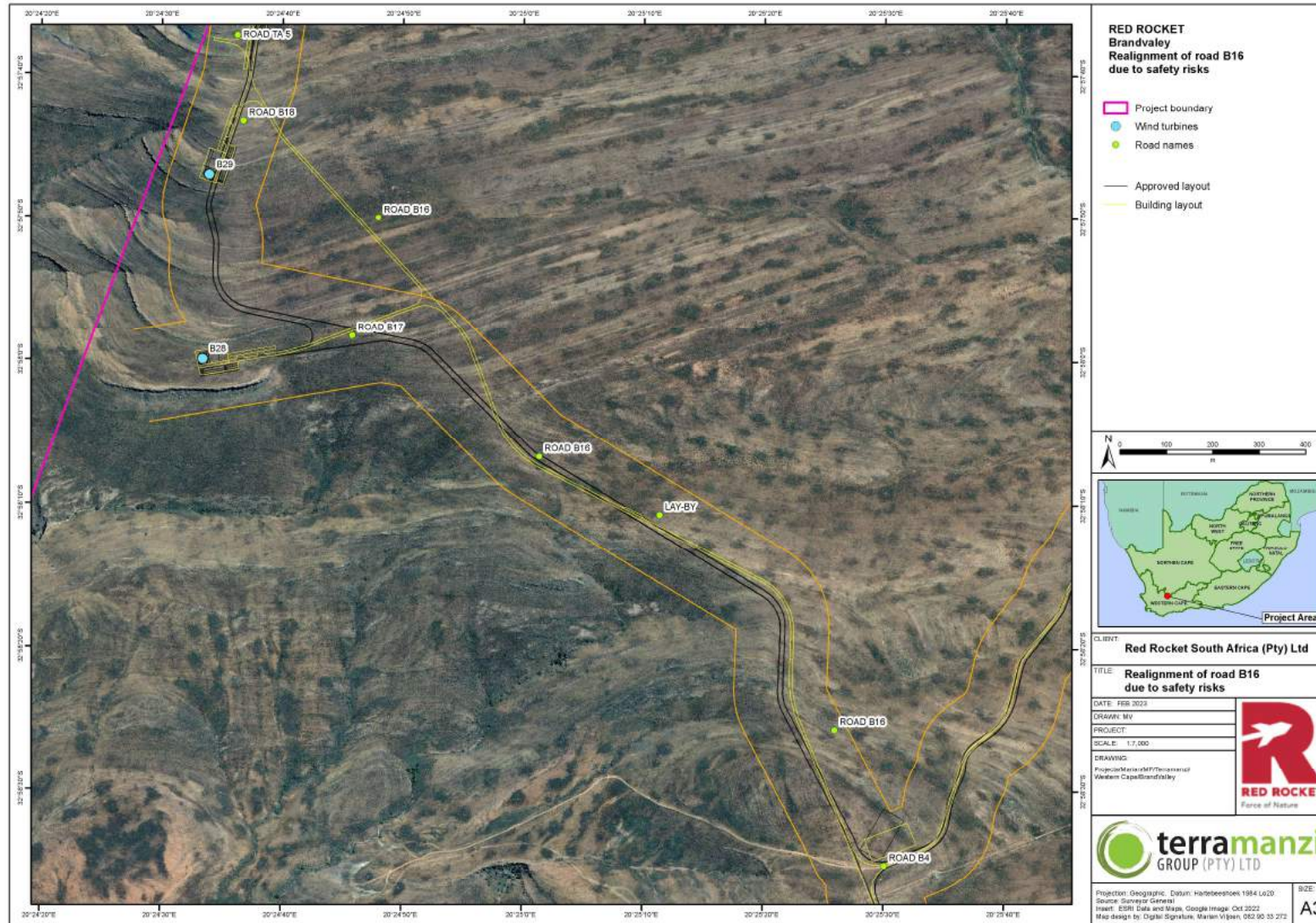


Figure 4.4: Map indicating the minor realignments of road B16 (in Yellow) in comparison to the previously approved and authorised layout (in Black) with the authorised 200m Corridor (in Orange)

4.2 LISTED ACTIVITIES TRIGGERED

This Section is not applicable to this Project as this is an Amendment Motivation Report for an existing and authorised development and there are **no new activities triggered**.

Please refer to Appendix I for a copy of the Environmental Authorisation that summarises all approved listed activities.

5 LEGISLATIVE CONTEXT

The Amendment triggers the following National Statutes:

- National Environmental Management Act (Act No. 107 of 1998) and the NEMA EIA Regulations (2014, as amended)

The different sets of legislative requirements are housed under the National Environmental Management Act (Act No. 107 of 1998) as amended, as illustrated below. The proposed amendments to the Environmental Authorisation will trigger the National Environmental Management Act (Act No. 107 of 1998) (as amended) and the NEMA EIA Regulations (2014, as amended), resulting in an Amendment Process to be undertaken.

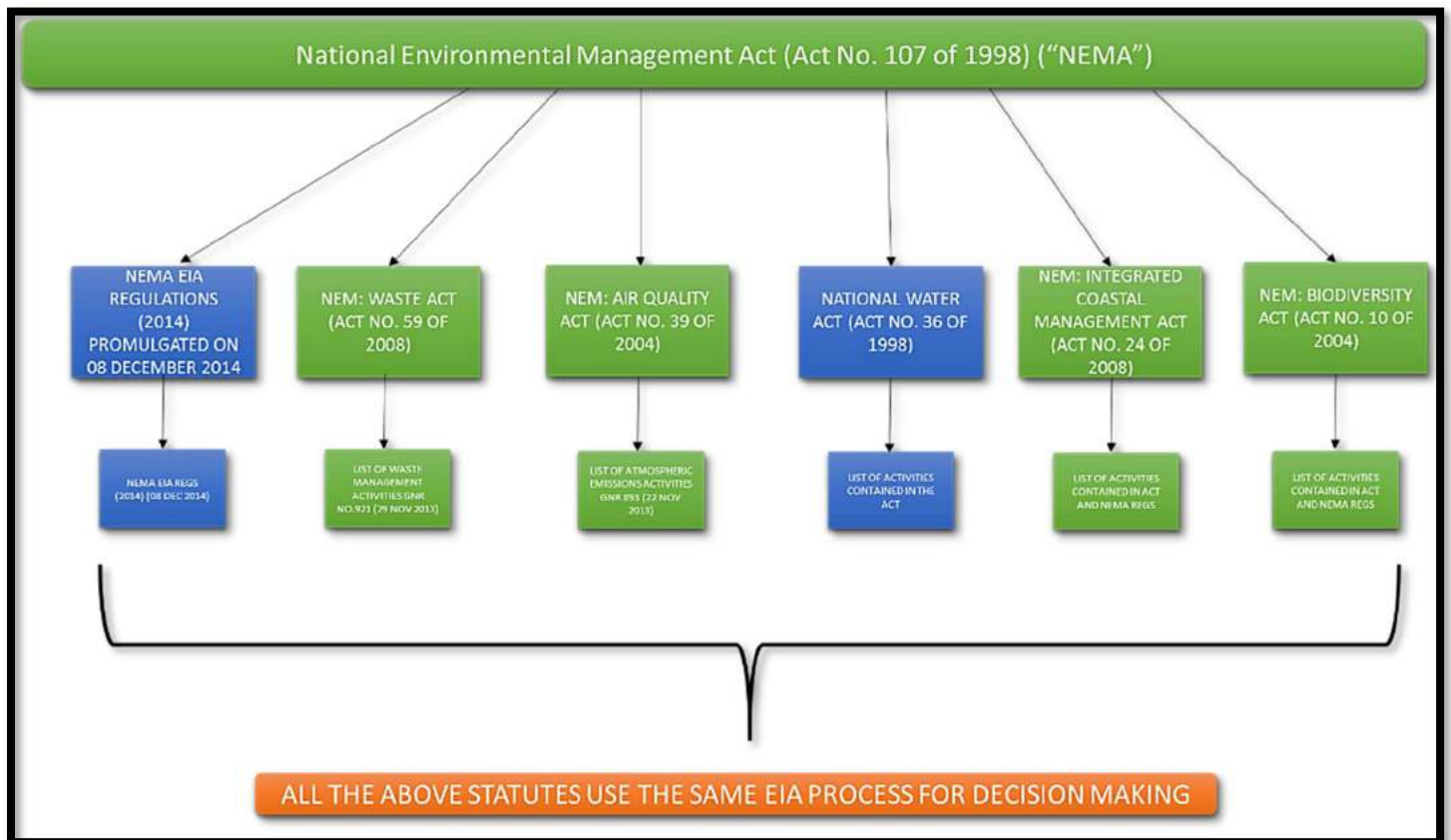


Figure 5.1: Illustration of the Environmental Authorisation Process in terms of the NEMA.

NEMA EIA Regulations (2014, as amended)

- The NEMA EIA Regulations (2014) were published on 08 December 2014, amended on 07 April 2017 and corrected on 13 July 2018, and deal with activities that may have an impact on the environment
- The National Department of Environmental Affairs is the Competent Authority (now referred to as the National Department of Forestry, Fisheries and the Environment, DFFE)

Requirements of a Part 2 Substantive Amendment Process

Regulation 31 of the NEMA EIA Regulations (2014, as amended) states that:

“An environmental authorisation may be amended by following the process prescribed in this Part if the amendment will result in a change to the scope of a valid environmental authorisation where such change will result in an increased level or nature of impact where such level or nature of impact was not –

- (a) assessed and included in the initial application for environmental authorisation; or*
- (b) taken into consideration in the initial environmental authorisation;*

and the change does not, on its own, constitute a listed or specified activity.”

The Applicant therefore wishes to apply for a non-substantive as well as a substantive amendment to the EA issued, in terms of Regulation 31 and 32 of the NEMA EIA Regulations (2014, as amended). A combined Part 2 Substantive Amendment Process was followed for the required Part 1 (non-substantive) and Part 2 (Substantive) amendments. As per sub-regulation 31(a) the proposed application for the amendments as listed in section 4.1 were not considered as part of the initial EIA process undertaken, therefore these (potential) impacts need to be assessed according to the change in level or nature of impact.

6 MOTIVATION FOR NEED AND DESIRABILITY FOR THE ACTIVITY

The need and desirability of the authorised wind energy facility has been thoroughly assessed and approved; therefore, the nature and scope of this amendment application does not require a comprehensive assessment of need and desirability. However, the historical motivation is included below for thoroughness and ease of reference.

This section outlines the purpose of considering the activity “need” and “desirability” in accordance with the National Environmental Management Principles in terms of NEMA which serve as a guide for the interpretation, administration and implementation of NEMA and the NEMA EIA Regulations (2014, as amended).

The National Environmental Management Principles specifically *inter alia* require the following:

- “Environmental Management must place people and their needs at the forefront of its concern” and equitably serve their interests;
- “Environmental Management must be integrated, acknowledging that all elements of the environment are linked and interrelated, and it must take into account the effects of decisions on all aspects of the environment and all people in the environment by pursuing the selection of the best practicable environmental option;
- “Environmental justice must be pursued so that adverse environmental impacts shall not be distributed in such a manner as to unfairly discriminate against any person”; and
- “Decisions must take into account the interests, needs and values of all interested and affected parties”;
- “The Environment is held in public trust for the people, the beneficial use of environmental resources must serve the public interest and the environment must be protected as the people's common heritage”.

Motivation for the proposed amendment

The amendment to the authorised WEF’s road layout is based on changes and improvements in the road layout employed for wind energy facilities. As such, should the amendment not be granted, already approved road layout that would result in a bigger environmental impact due to the blasting of the mountain side will be used by the developer for implementation as part of the Renewable Energy Independent Power Producer Procurement Programme (REIPPP).

Please note that the Brandvalley WEF has been authorised by the National Department of Environmental Affairs (DEA) and therefore the general need and desirability of the activity has been approved by the DEA in the Environmental Authorisation (DEA Ref: 14/12/16/3/3/2/900–dated 23 November 2016)

Further, the proposed amendments **do not warrant any additional considerations in terms of the need and desirability** of the project as the WEF will occur within the already authorised development footprint and the proposed changes are deemed acceptable by the professional team of independent specialists.

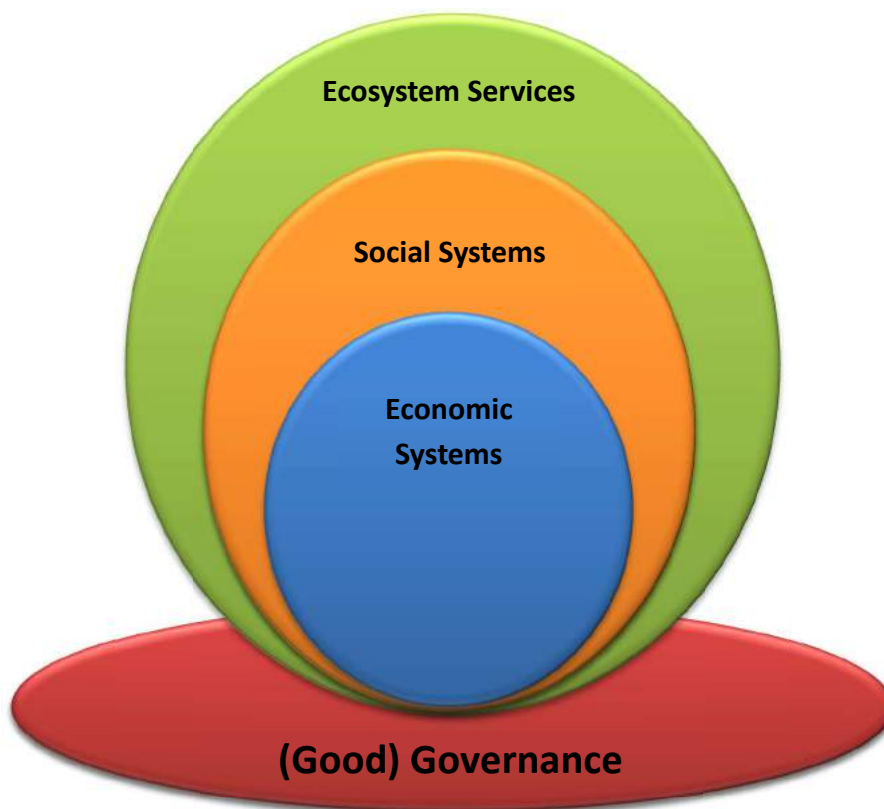
Need and desirability must thus be considered in the context of sustainable development which “speaks” to social, economic and environmental considerations and takes a long-term strategic view to environmental management.

6.1 SUSTAINABLE DEVELOPMENT

Sustainable development is best summarised by an extract from the United Nations World Commission on Environment and Development and reads as follows:

"Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs... As such it requires the promotion of values that encourage consumption standards that are within the bounds of the ecologically possible and to which all could reasonably aspire."

(Our Common Future, WCED, 1987)¹.



The widely accepted interdependence model of sustainability recognises that social and economic systems **have never been and can never be independent of the natural system.**

This model further supports the belief that **interactions** between and within component systems will result in **feedback** throughout the system

Endorsed by the National DEA

(Mebratu, 1998)

Although already undertaken during the previous EIA process, it was important that the Impact Assessment Phase carefully considered and assessed the broad principles of sustainable development in order to clearly demonstrate the “need and desirability” of the authorised WEF in the context of NEMA.

¹United Nations. 1987. "Report of the World Commission on Environment and Development." General Assembly Resolution 42/187, 11 December 1987

6.2 BRANDVALLEY WEF NEED AND DESIRABILITY SUMMARY

The need and desirability of the WEF has been approved by the DEA through the Environmental Authorisation (with DEA Ref: 14/12/16/3/3/2/900) issued for the project on 23 November 2016, and a summary as extracted from the Environmental Impact Assessment (EIA) report is provided below for ease of reference:

- *The project site has high wind resources as confirmed by onsite wind monitoring campaigns. The economic viability of a WEF and success in the REIPPP directly depend on the strength of the wind resource, amongst other key factors.*
- *Being located within a Renewable Energy Development Zone (Zone 2 – Komsberg), an identified area of strategic importance for large scale wind farm development in support of the South African economy.*
- *The national need for establishment of additional generation capacity through renewable energy resources.*
- *Wind generation is the lowest cost of electricity generation and thereby reducing the impacts of climate change.*
- *The local need for community upliftment through additional employment opportunities to be potentially created within the project area and economic development contributions to be committed in terms of the REIPPPP.*
- *Landowner support for the wind farm development.*
- *The proximity to the N1 and secondary roads for access during the construction and operation phases for the transportation of material and components.*

The motivation above addresses the broader need and desirability for the WEF in the area and the proposed amendment does not change the context of the above and therefore the motivation remains as is.

7 MOTIVATION FOR THE PROPOSED AMENDMENTS TO THE BRANDVALLEY WEF

This section provides a concise motivation for the requested amendment to the Environmental Authorisation for the Brandvalley WEF.

7.1 NON-SUBSTANTIVE AMENDMENT

Amendment 1: Change in contact details of the holder of the EA on Page 2 of the EA:

From:

Dr Kilian Hagemann

Brandvalley Wind Farm (RF) (Pty) Ltd

125 Buitengracht Street

5th Floor

CAPE TOWN

8001

Telephone Number: (021) 300 0613

Cell Phone Number: 082 7689 830

Email Address: brandvalley@g7energies.com

To:

Matteo Brambilla

Brandvalley Wind Farm (RF) (Pty) Ltd

14th Floor, Pier Place Building

Heerengracht Street

Foreshore

CAPE TOWN

8001

Tel: +27(0)72 212 1531

Email: m.logan@redrocket.energy

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The contact details of the EA Holder need to be updated to reflect Matteo as the new point of contact, as Killian no longer has any authority over the project. Updating the contact information to reflect the current contact person is necessary to meet the BID Round requirements.

7.2 SUBSTANTIVE AMENDMENTS

Amendment 2: Minor Realignment of the approved road layout

The Brandvalley WEF was granted an Environmental Authorisation (EA) (DFFE Ref: 14/12/16/3/3/2/900) 23 November 2016 and subsequently amended via EA's dated 14 February 2019 (DFFE Ref: 14/12/16/3/3/1/900/AM1), 11 October 2021 (DFFE Ref: 14/12/16/3/3/2/900/AM2), and 23 August 2022 (DFFE Ref: 14/12/16/3/3/2/900/AM3),

The Project was awarded PREFERRED BIDDER STATUS on 28 October 2021 within the REIPPPP BID Window 5 and is therefore classified as a SIP Project to be expedited in terms of Schedule 2 Section 17(2) of the Infrastructure Development Act (Act No. 23 of 2014).

After the submission of the Final Layout and its approval dated 23 August 2022 (DFFE Ref No. 14/12/16/3/3/2/900/AM3) final surveying was undertaken, and the civil engineers identified safety risks that required urgent and immediate attention.

Due to Engineering safety risks, the applicant, Brandvalley Wind Farm (RF) (Pty) Ltd) wishes to modify the approved road layout that was authorised on the 23rd of August 2022 (DFFE Ref No. 14/12/16/3/3/2/900/AM3).

As per page 8 of the EA dated 23 November 2016 with the DEA Reference 14/12/16/3/3/2/900 the Brandvalley WEF facility was approved with: *“a 200m access road corridor to accommodate slight shift in alignments that are fully informed by the final detailed design of access road Alternative 1 and internal road network, up to 9m in width; Buildings;”* The 200m corridor was assessed and approved on 23 November 2016 with the DEA Reference 14/12/16/3/3/2/900 to accommodate any alignments in the road layout.

An EMPR and Final Layout of the Brandvalley WEF was submitted to the DFFE and approved on 23 August 2022 (DFFE Ref No. 14/12/16/3/3/2/900/AM3). Following the approval of the EMPR and the Final Layout a final survey was conducted. During this survey, civil engineers identified safety risks that required immediate attention. Specifically, sections B2, B11, and B16 of the internal road network that had been approved were deemed too steep to grade and posed a safety risk for the transportation of abnormal loads/infrastructure. This would require the removal of a significant portion of the mountainside through blasting.

The original 200m Corridor that was approved in the EA with DEA reference 14/12/16/3/3/2/900–dated 23 November 2016) is indicated in Orange in Figure 2.4. This corridor shows that the minor realignments in road sections B2 and B16 are the only changes that require additional comment as these road sections deviate outside of the originally approved 200m Corridor. All specialists have assessed these minor deviations of B2, B11 and B16 and deemed that the development is acceptable and implementable.

The reasons for realigning the approved road layout are outlined in the Engineering statement provided in Appendix C. As per the Engineering statement:

“The environmental approval contained a preliminary road layout from which two minor deviations are necessary to make the project constructable and safe, not only during construction, but also during the operational phase of the project. The deviations are required to allow the abnormally large vehicles transporting the wind turbine generators and towers to site, to safely ascend and descend the mountainous terrain.

During the detailed design process, and in consultation with the Turbine Supplier and the specialist Abnormal Loads Transport Contractor, it became evident that whilst the majority of the roads on the approved road layout were buildable and acceptable in terms of gradients and turning radii (or at least excessive gradients could be mitigated through cut and fill earthworks), there existed 2 sections of roads where the gradient of the approved road alignment was too steep and simply too dangerous to construct for the specification of turbines being employed on the project. The steep gradients in these 2 instances could not be feasibly mitigated through cut and fill earthworks. Due to health and safety concerns and, being professionally liable for the design and execution, the civil engineering designers, the turbine supplier and the specialist transporter contractor were not prepared to sign off on and execute the construction of the roads on the approved alignment. Although not the main motivation for the realignments, it is also noted that the realigned roads result in a reduced road footprint / disturbed area.”

Specific details of the two proposed realignments are provided in the sections below as per the Engineering statement:

7.2.1.1 Road Section B2

Road B2, which is required to deliver the turbines to position B49, has been realigned to follow the natural contour of the mountain. The approved road was designed to run from position B48 to B49. The turning radius of the approved road as it approaches turbine B49 is too small for the abnormal load truck delivering the turbines. Enlarging the turning radius to be in compliance with the turbine supplier’s and transporter’s specification results in the road having to pass through a valley with descent and ascent slopes in excess of 20%, resulting in a k-value (k-value refers to the change in gradient of a road) that far exceeds the maximum permitted k-value of the turbine supplier’s and transporter’s specification (see Figure 7.2.1). The above turning radii, gradient and k-value constraints cannot feasibly be mitigated with cut-to-fill earthworks without realigning the road. The revised alignment has a maximum gradient of 18% and has turning radii and k-values which are within the turbine supplier’s and transporter’s specification

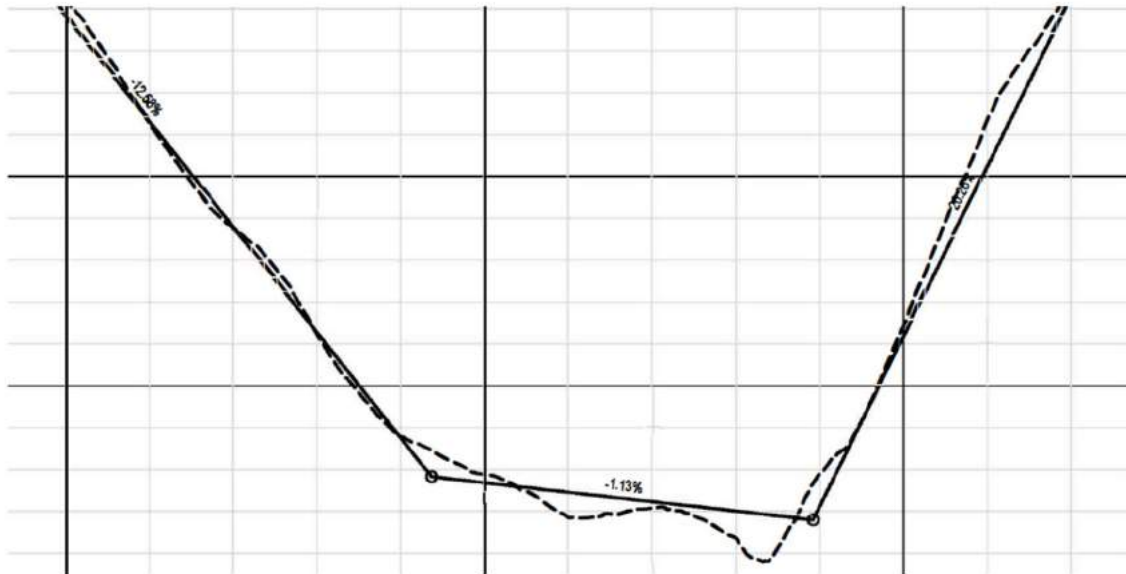


Figure 7.2. 1: Descent and ascent slopes resulting in excessive k-value as road bottoms out through valley.

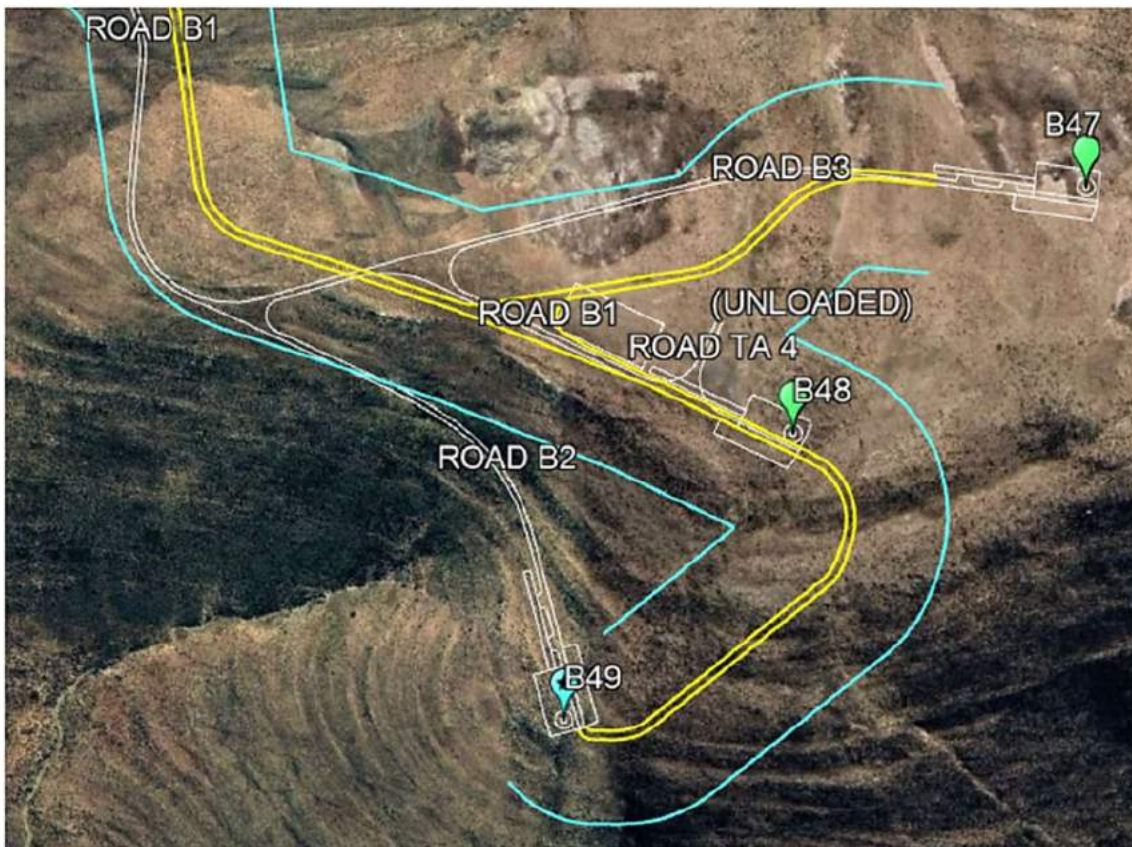


Figure 7.2. 2: Plan showing horizontal re-alignment of Road B2 (Yellow – approved layout, White - proposed deviation blue the approved 200m road corridor DEA reference 14/12/16/3/3/2/900– dated 23 November 2016). Note new alignment (white) follows contour of mountain.

7.2.1.2 Road Section B16

Road B16, which is required to deliver the turbines to positions B29 and B30, has been realigned to avoid the excessive and unfeasible amount of fill that would be required to reduce the excessive gradient. The approved road has a gradient in excess of 30% and passes through a valley with a descent slope of 32% and an ascent slope of 10%, resulting in a k-value (k-value refers to the change in gradient of a road) that far exceeds the maximum permitted k-value (see Figure 7.2.3). The above gradient and k-value constraints cannot feasibly be mitigated with cut-to-fill earthworks without realigning the road. The revised alignment has a maximum gradient of 18% and has turning radii and k-values which are within the turbine supplier's and transporter's specification.

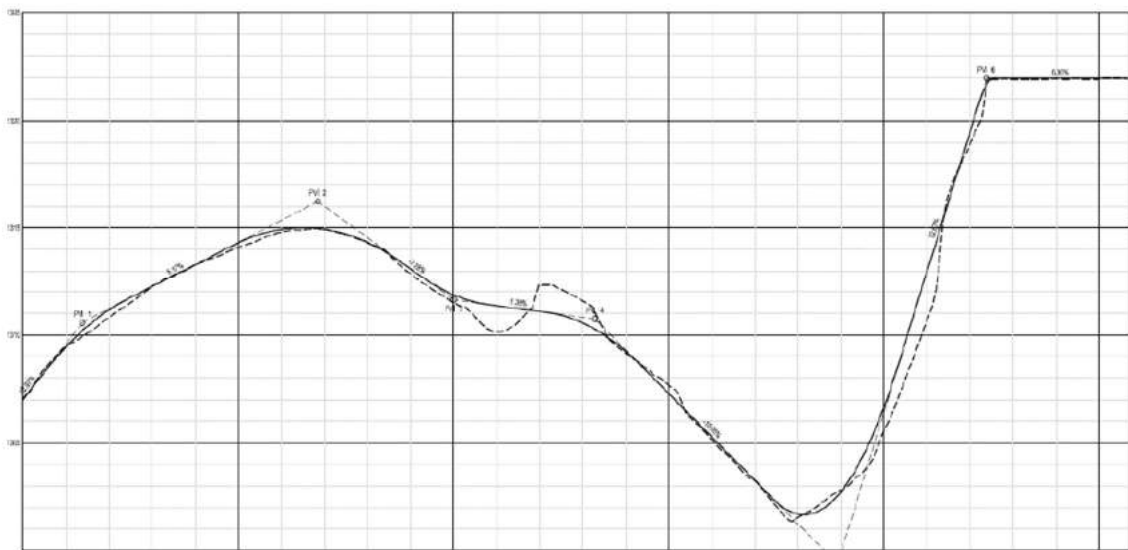


Figure 7.2. 3: Long section of Road B16

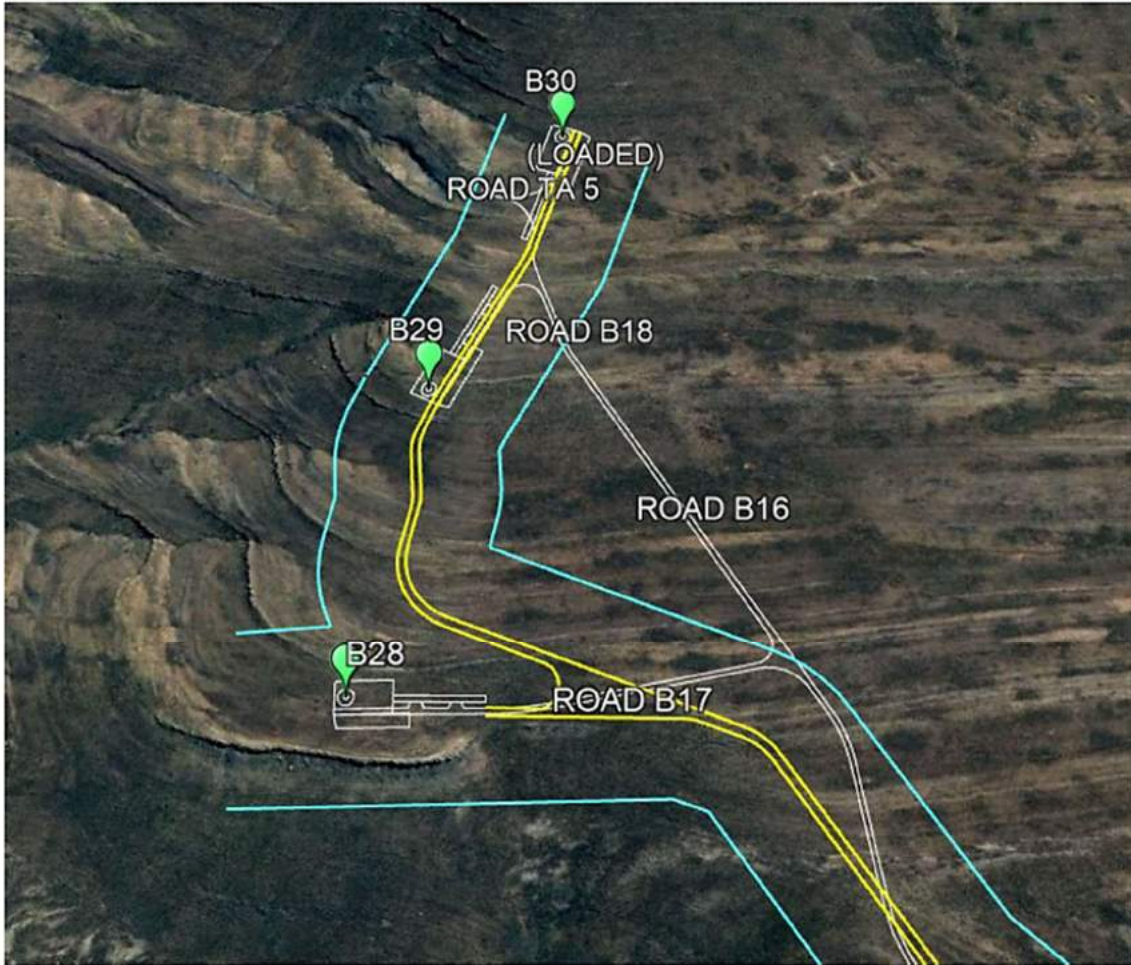


Figure 7.2. 4: Plan showing horizontal re-alignment of Road B16 (Yellow – approved layout, White - proposed deviation blue the approved 200m road corridor DEA reference 14/12/16/3/3/2/900–dated 23 November 2016). Note new alignment (white) follows contour of mountain.

7.2.1.3 Other Minor realignments such as Road Section B11

In addition to the amendments to roads B2 and B16 (detailed above), there will also be minor amendments to other road sections entailing reducing / eliminating or shortening roads. For example, the section of the road between WTG 54 & WTG 56 is eliminated as it's no longer required, instead making use of the road between WTG B56 and B59 (Road B11).

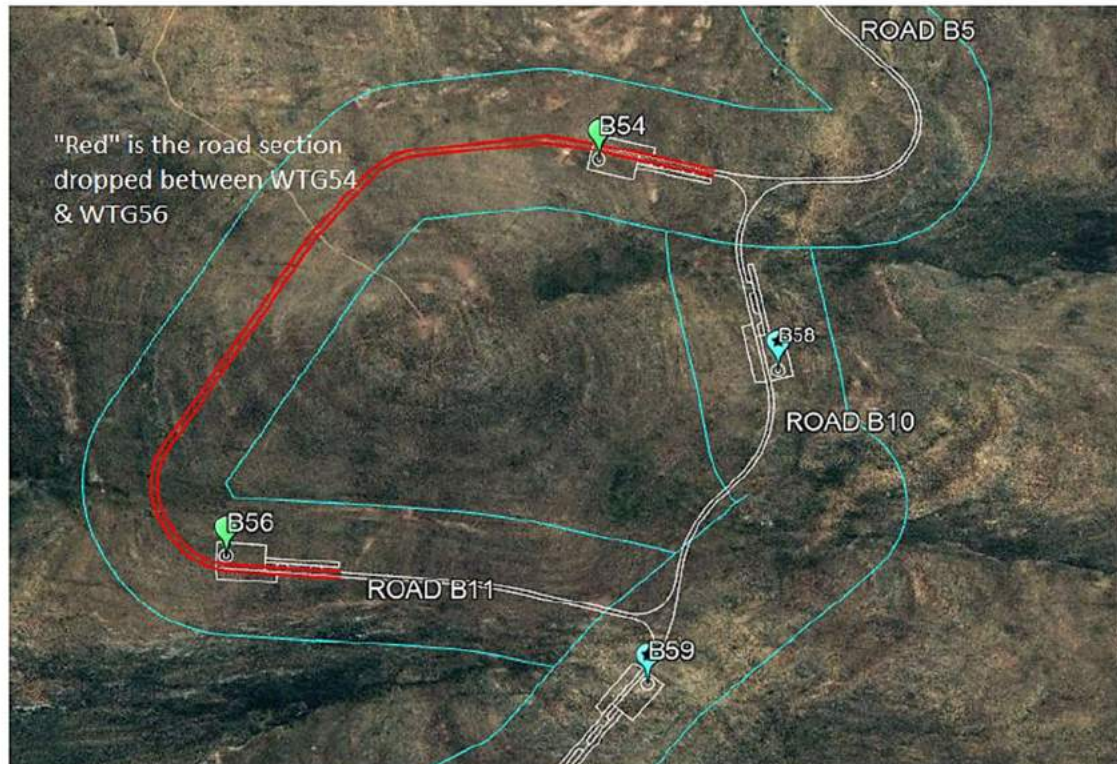


Figure 7.2. 5: Dropping of road between B54 and B56 (Red – approved layout, White - proposed Realignment of road B11, blue the approved 200m road corridor DEA reference 14/12/16/3/3/2/900– dated 23 November 2016)

In Summary

As stated above the second amendment to be done in this Part 2 Amendment Application is to amend and realign three road sections (B2, B11 and B16) from the Final Layout with the approval dated 23 August 2022 (DFFE Ref No. 14/12/16/3/3/2/900/AM3), due to safety risks from an engineering perspective.

These serious safety concerns precipitated the need for minor but important design adjustment. The realignment of Road B2, B11 and Road B16 are minor deviations outside of the approved 200m corridor (DFFE Ref: 14/12/16/3/3/2/900) 23 November 2016 and minor deviations from the approved Final Layout dated 23 August 2022 (DFFE Ref No. 14/12/16/3/3/2/900/AM3). Whilst these refinements in the final layout emanate from a safety requirement for engineering and operational use of the roads, these do not change the scope of the EA, nor do they increase the level or nature of the impacts. Conversely, there are co-incidental positive benefits on general biodiversity, and Engineering.

The amendment to the proposed wind energy facility is based on minor changes and improvements in the already authorised road layout. As such, should the amendment not be granted, the approved layout has safety risks and will have a bigger environmental impact than the newly proposed realigned layout. There are no changes to the originally authorised footprint of the facility. Individual turbine footprints and foundation size will remain the same.

8 IMPACT ASSESSMENT OF THE PROPOSED AMENDMENTS

8.1 SUMMARY OF SPECIALIST STUDY FINDINGS FOR THE PROPOSED AMENDMENTS

The following specialist verification assessments were undertaken based on the current amendments proposed:

Further, the specialists were consulted as part of this current amendment process in order to ascertain if the proposed amendments to the Brandvalley WEF's road layout would result in additional impacts on the site and its surroundings. Each specialist's verification assessments confirm that the minor realignments made to the authorised road layout are deemed acceptable

Current Amendment proposed Specialist Verification Letters – 2023

- Avifaunal Impact – Birds & Bats Unlimited (C/O Rob Simmons, February 2023)
- Bat Impact – Animalia Zoological (C/O Werner Marais, February 2023)
- Ecological Impact – Trusted Partners (C/O Malcome Logie, February 2023)
- Freshwater Impact – SAS (C/O Stephan van Staden February 2023)
- Agricultural Impact – Johann Lanz (C/O Johann Lanz, February 2023)
- Visual Impact – SAS (C/O Stephan van Staden & Sanja Erwee, February 2023)
- Noise Impact – Safetech (C/O Dr Brett Wiliams, February 2023)
- Heritage Impact – PGS Heritage(C/O Wouter Fourie, February 2023)
- Social Impact – Tony Barbour Consulting (C/O Tony Barbour, February 2023)
- Traffic Impact – JGAfrika (C/O Adrian Johnson, February 2023)
- Geotechnical Impact – JGAfrika (C/O Priantha Subrayen, February 2023)

The updated specialist statements are attached as Appendix C to this Amendment Motivation Report. The section to follow details the updated specialist verification letters as received which can be reviewed under Appendix C of this amendment motivation report.

8.1.1 Agricultural Impact Findings (*Updated Specialist Statement 2023*)

Johann Lanz (C/O Mr Johann Lanz) (hereinafter referred to as the “Bat Specialist”) was appointed to provide a specialist statement to the updates the Avifaunal Impact Assessment undertaken for the previous EIA (2016).

Mr Roy de Kock, an agricultural and soil specialist from EOH Coastal and Environmental Services, undertook the 2016 agricultural assessments. Subsequently, Johann Lanz was appointed in 2021 and 2023 to review the previous studies and consider the effect of the proposed amendments on the previous impacts with reference to the final road layout. The outcome of the assessment is outlined in a 2021 and 2023 Specialist Statement included in Appendix C.

The Agricultural Specialist findings for the WEF development is as follows:

The specialist has noted the following in his Specialist Statement:

“Johann Lanz, who assessed the final layout and EMPr for the most recent authorised amendment in November 2021, was appointed as an independent specialist to conduct this Specialist Amendment Letter

The layout of the Brandvalley Wind Energy Facility was previously assessed as low and acceptable in terms of agricultural impact because it is on land of very low potential which is rated as low agricultural sensitivity. The proposed amendment will not change the nature or significance of the impact as previously assessed. There are no agricultural advantages or disadvantages related to it. The amendment does not require any changes or additions to the mitigation measures for agricultural impacts that were recommended for the authorised development, and there are therefore no required changes to the EMPr. The agricultural impact of the amended project will therefore remain the same as the impact of the authorised development, as assessed in the original specialist assessment report.

Therefore, from an agricultural impact point of view, the amendment is assessed as acceptable and it is recommended that it be authorised.”

Given the above outcome, this Brandvalley Amendment is supported in terms of agricultural impacts. Based on the information presented by the Agricultural Specialist, the proposed WEF amendment development is acceptable and implementable. The agricultural impact ratings that were reported remain relevant without any change as long as mitigation measures as detailed and required in the EMPr (Appendix E) are implemented.

8.1.2 Bat Impact Findings (Updated Specialist Statement 2023)

Animalia (C/O Mr Werner Marais) (hereinafter referred to as the “Bat Specialist”) undertook the 2016 and 2021 bat assessments. Subsequently, the specialist has been appointed to review the previous studies in the context of the proposed amendments. The outcome of this assessment is described in the 2023 Specialist Statement included in Appendix C. A summary is provided below.

The Bat Specialist findings for the WEF development is as follows:

The specialist has noted the following in his Specialist Statement:

“Animalia Consultants (Pty) Ltd) undertook the bat EIA impact assessment and preconstruction monitoring for the Brandvalley WEF completed in 2016. The project received environmental authorisation, and the original approval for the WEF included 58 Wind Turbine Generators (WTGs) and associated roads and infrastructure, this has been reduced to 32 WTGs in subsequent amendments, resulting in a significant development footprint reduction. Minor changes are proposed to the approved EMPr road layer (named: “230102 – Brandvalley Wind Farm approved EMPr Layout – 02 February 2023”). Animalia has reviewed the proposed road layout changes and the impacts on bats are considered as insignificant. Therefore, from a bat impact perspective the specialist has no objection to the proposed road layout changes being approved.

However, operational phase bat mortality monitoring is compulsory for a minimum of 2 years, preferably for 3 years. Operational monitoring should commence on the Commercial Operation Date (COD) of the WEF.”

Based on the information presented by the Bat Specialist, the proposed WEF amendment development is acceptable and implementable. The Bat impact ratings that were reported remain relevant without any change as long as mitigation measures as detailed and required in the EMPr (Appendix E) are implemented. This Brandvalley Amendment is supported in terms of Bat impacts.

8.1.3 Avifaunal Impact Findings (*Updated Specialist Statement 2023*)

Birds & Bats unlimited (C/O Mr Rob Simmons) (hereinafter referred to as the “Avifaunal Specialist”) was appointed to provide a specialist statement to the updates the Avifaunal Impact Assessment undertaken for the previous EIA (2016).

Dr. Tony Williams, an avifauna specialist from African Insights, undertook the 2016 avifauna assessments. Subsequently, Rob Simmons from Birds and Bats Unlimited was appointed in 2021 and 2023 to review the previous studies and consider the effect of the proposed amendments on the previous impacts with reference to the final road layout. The outcome of the assessment is outlined in a 2023 Specialist Statement included in Appendix C.

The Avifaunal Specialist findings for the WEF development is as follows:

The specialist has noted the following in his Specialist Statement:

Birds & Bats Unlimited (BBU) surveyed the avian raptor component in 2021 following the 2016 African Insights (Williams 2016), survey and Birds & Bats Unlimited have thus experience of the priority raptors within the proposed BWEF. As such, BBU were asked to re-assess possible impacts of minor road alignments at three different sections of the authorised layout especially with respect to any possible impacts on the threatened species present.

BBU have inspected the maps proposing the road layouts based on experience of the terrain and the avifauna.

The re-alignments at roads B2, B11 and B16 each straighten the authorised roads and thus reduce the length of the proposed road system within the wind farm None of the re-alignments pass through wetland areas or close to any cliff sites that may harbour any of the Endangered or Vulnerable red data species on site. Thus, in this respect the amendments proposed by the engineers present no additional risks or threats to the avifauna of the Brandvalley wind farm.

Thus, as the avifaunal specialist, BBU sees no reason that the BWEF amendments should not receive Environmental Authorisation.

Based on the information presented by the Avifaunal Specialist, the proposed WEF amendment development is acceptable and implementable. The Avifaunal impact ratings that were reported remain relevant without any change as long as mitigation measures as detailed and required in the EMPr (Appendix E) are implemented. This Brandvalley Amendment is supported in terms of Avifaunal impacts.

8.1.4 Ecological Impact Findings (*Updated Specialist Statement 2023*)

TRUSTED PARTNERS Environmental Services (C/O Mr Malcome Logie) (hereinafter referred to as the “Ecologist”) was appointed to provide a specialist statement to update the Ecological Impact Assessment undertaken for the previous EIA (2016).

Mr Simon Todd, an ecology specialist from 3Foxes Biodiversity Solutions, undertook the 2016 ecology assessments. Subsequently, Trusted Partners was appointed in 2021 and 2023 to review the previous

studies and consider the effect of the proposed amendments on the previous impacts with reference to the final road layout. The outcome of the assessment is outlined in a 2023 Specialist Statement included in Appendix C

The Ecologist findings for the WEF development are as follows:

The specialist has noted the following in his Specialist Statement:

“Trusted Partners has extensive knowledge of BV WEF, and several for the adjacent WEFs, and have previously compiled the TERRESTRIAL ECOLOGY & BIODIVERSITY WALKDOWN REPORT for the project (Report N#: TP210521-01A – REVISION 1 dated 2021/11/20). The site assessment was undertaken in the time-period between August 30, 2021, and September 11, 2021. The Level-of-Effort was three persons, consisting of two Natural Scientists and one Technician. The site walkdown was undertaken shortly after a particularly rainy period, which was evident in the notable flowering proliferation, which progressed throughout the site visit period. While the seasonal response of local flora does vary throughout the year, with certain species flowering during different seasons, the time during which the walkdown was undertaken is deemed to have been at a time that would most effectively identify the most species. Many geophytic species which may be dormant for large parts of the year were visible, if not flowering

Regionally, the vegetation occurring within the area surrounding the site and area of influence is broadly according to the national vegetation classification and descriptions for Central Mountain Shale Renosterveld on the higher mountains and slopes, transitioning with Koedoesberge-Moordenaars Karoo on the lower mountains and valleys in the south, east and west with strong Tanqua Karoo influences in the west and Tanqua Escarpment Shrubland in the north. Tanqua Wash Riviere elements are found encroaching towards the site from the west, into the lower lying valleys running south, north and westwards.

The BV WEF footprint (Figure 8.1) is located exclusively within Central Mountain Shale Renosterveld which is the predominant vegetation occurring on higher lying mountains, slopes and valleys within the site area at altitude of around 1 050–1 500 m. Regionally, this unit occurs within the Northern and Western Cape Provinces particularly on the southern and south-eastern slopes of the Klein-Roggeveldberge and Komsberg below the Roggeveld section of the Great Escarpment (facing the Moordenaars Karoo) as well as farther east below the Besemgoedberg and Suurkop, west of Merweville and in the west in the Karookop area between Losper se Berg and high points around Thyshoogte.

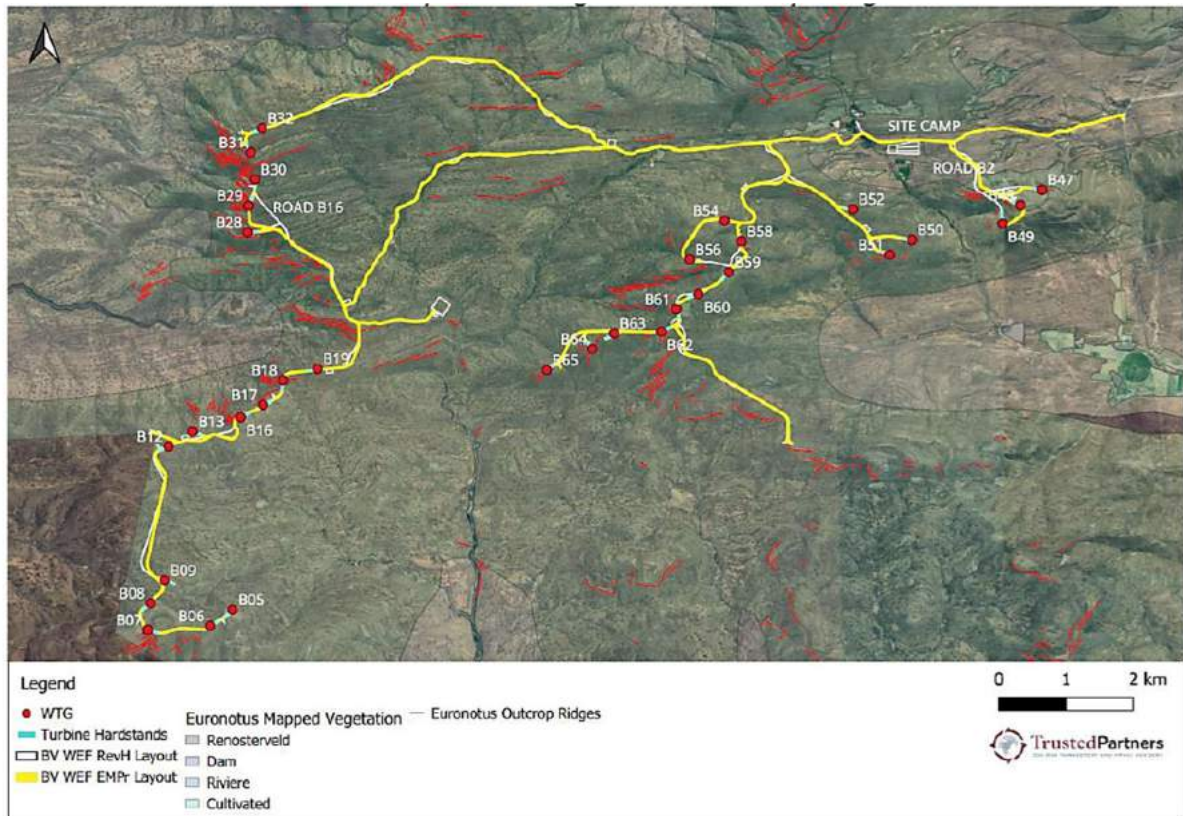


Figure 8.1: BV WEF – Layout + Vegetation Type and Rocky Ledges

The vegetation occurs on slopes and broad ridges of low mountains and escarpments, with tall shrubland dominated by Renosterbos and large suites of mainly non-succulent karoo shrubs and with a rich geophytic flora in the undergrowth or in more open, wetter or rocky habitats. Soils are clayey, overlying mudstones and subordinate sandstones. Glenrosa and Mispah forms are prominent and Land types mainly Ib and Fc. A general list of species that are represented in the vegetation type and conservation status characteristics is provided in Table 8.1.

Table 8.1: Central Mountain Shale Renosterveld

Geophytic herbs	<i>Bulbine asphodeloides</i> , <i>Drimia intricata</i> , <i>Othonna auriculifolia</i> , <i>Oxalis obtusa</i> . Succulent
Grasses	<i>Ehrharta calycina</i> , <i>Karoochloa purpurea</i> , <i>Merxmullera stricta</i>
Herbs	<i>Crassula deceptor</i> , <i>C. muscosa</i> , <i>C. tomentosa</i> var. <i>glabrifolia</i> , <i>Senecio radicans</i> , <i>Dianthus caespitosus</i> subsp. <i>caespitosus</i> , <i>Heliophila pendula</i> , <i>Lepidium desertorum</i> , <i>Osteospermum acanthospermum</i> , <i>Senecio hastatus</i> .
Low Shrubs	<i>Elytropappus rhinocerotis</i> (d), <i>Amphiglossa tomentosa</i> , <i>Asparagus capensis</i> var. <i>capensis</i> , <i>Chrysocoma ciliata</i> , <i>C. oblongifolia</i> , <i>Diospyros austro-africana</i> , <i>Eriocephalus africanus</i> var. <i>africanus</i> , <i>E. ericoides</i> subsp. <i>ericoides</i> , <i>E. eximius</i> , <i>E. grandiflorus</i> , <i>E. microphyllus</i> var. <i>pubescens</i> , <i>E. pauperrimus</i> , <i>E. purpureus</i> , <i>Euryops imbricatus</i> , <i>Exomis microphylla</i> , <i>Felicia</i>

	<i>filifolia</i> subsp. <i>filifolia</i> , <i>F. muricata</i> subsp. <i>muricata</i> , <i>F. ovata</i> , <i>Galenia africana</i> , <i>Helichrysum dregeanum</i> , <i>H. lucilioides</i> , <i>Hermannia multiflora</i> , <i>Lessertia fruticosa</i> , <i>Lycium cinereum</i> , <i>Nenax microphylla</i> , <i>Pelargonium abrotanifolium</i> , <i>Pentzia incana</i> , <i>Pteronia ambrariifolia</i> , <i>P. glauca</i> , <i>P. glomerata</i> , <i>P. incana</i> , <i>P. sordida</i> , <i>Rosenia glandulosa</i> , <i>R. humilis</i> , <i>R. oppositifolia</i> , <i>Selago albida</i> , <i>Tripteris sinuata</i> , <i>Zygophyllum spinosum</i> .
<i>Succulent Shrubs</i>	<i>Delosperma subincanum</i> , <i>Drosanthemum lique</i> , <i>Euphorbia stolonifera</i> , <i>Trichodiadema barbatum</i> , <i>Tylecodon reticulatus</i> subsp. <i>reticulatus</i> , <i>T. wallichii</i> subsp. <i>wallichii</i> . Woody Climber: <i>Asparagus aethiopicus</i>
<i>Biogeographically Important Taxa</i>	None recorded in descriptions
<i>Edemic Taxa</i>	None recorded in descriptions
<i>Conservation Status</i>	Least Concern
<i>Conservation Target</i>	Target 27 % (National Biodiversity Assessment, 2018).
<i>Conserved in</i>	None conserved in statutory or private conservation areas.
<i>Threat activities</i>	Only about 1% transformed. Erosion moderate.
<i>Protection Level</i>	Not Protected
<i>Remarks</i>	This is a very poorly known renosterveld type despite its interesting biogeographical borderline position. The unit straddles the Fynbos, Succulent Karoo and marginally the Nama-Karoo Biomes. It does not appear to have any endemic species.

Trusted Partners has extensive and detailed knowledge of the biodiversity across the Koedeosberge, specifically Brand Valley WEF and the three adjacent WEFs: viz. Roggeveld WEF, Kareebosch WEF and Rietkloof WEF. As such we draw on a greater understanding of the biodiversity of the region rather than just the particular WEF footprint. Whereas, road sections B2, B16 and B11 are situated in what can be considered as uniform Central Mountain Shale Renosterveld which is not regarded as being a sensitive vegetation type:

- The impact on terrestrial ecological process of the proposed realignment of Road B2 does not result in any additional negative impact on biodiversity. However, it is expected that any transient impact resultant from a lesser need for blasting for the proposed route does have a positive benefit compared to the current approved alignment. In addition, the resultant footprint from cut-and-fill road section is lesser for the proposed new routing especially from the Y-junction to the WTG B49 (Figure 8.2). Inasmuch that the proposed alignment is shorter in distance than the approved alignment, there is a direct reduced impact on terrestrial biodiversity.

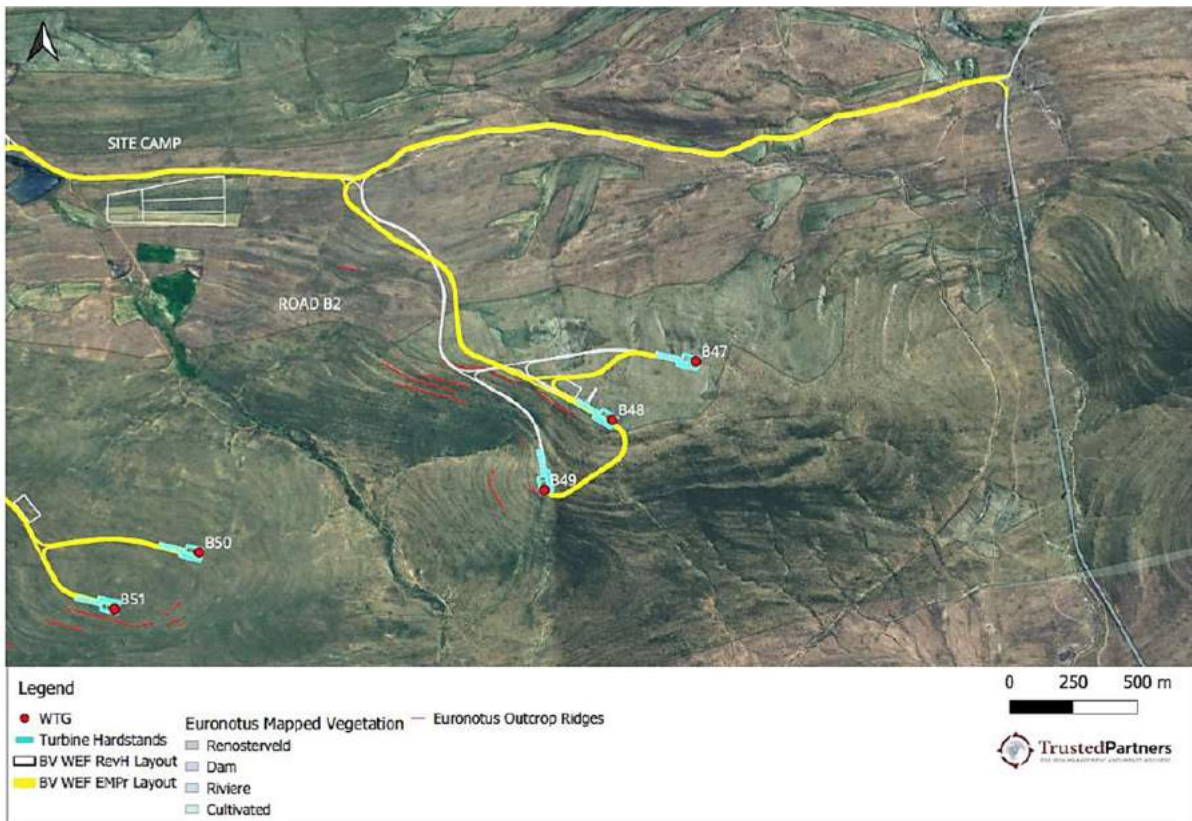


Figure 8.2: BV WEF - Road B2 Realignment

- *The impact on terrestrial ecological process of the proposed realignment of Road B16 is lesser for the proposed realignment, in that the proposed routing avoids nearby rocky outcrops between WTG B28 and WTG B29 (Figure 8.3). These rocky outcrops have some degree of sensitivity and the proposed alignment negates the need for large cut-and-fill sections (blasting, earthen moving and impacted footprint), thereby further significantly reducing negative impact on terrestrial ecology by avoidance of the rocky edges in this area. Again, it is expected that any transient impact resultant from a lesser need for blasting for the proposed route does have a positive benefit compared to the current approved alignment.*

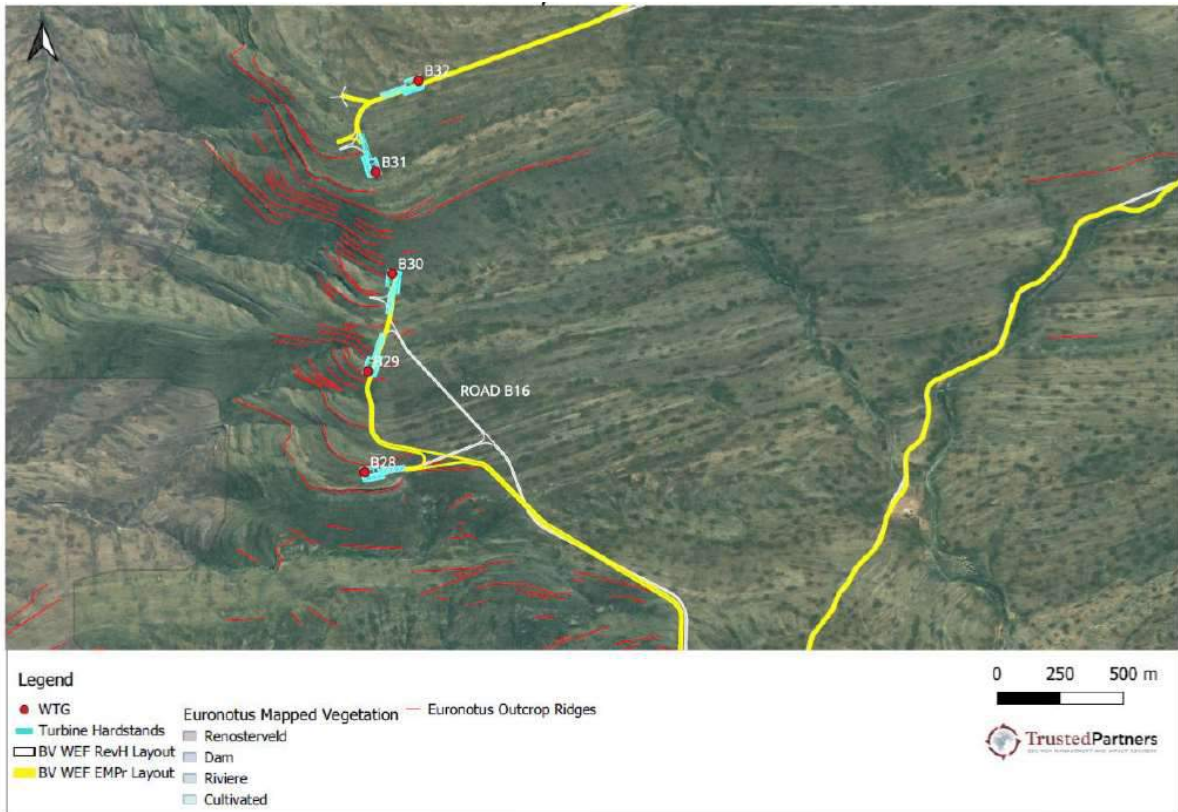


Figure 8.3: BV WEF - Road B16 Realignment

- The removal of the “ring-road” section of Road B11 from WTG B54 to WTG B 56 reduces the overall impact footprint of the WEF and as such there is a reduction in the impact on environmental processes and biodiversity.

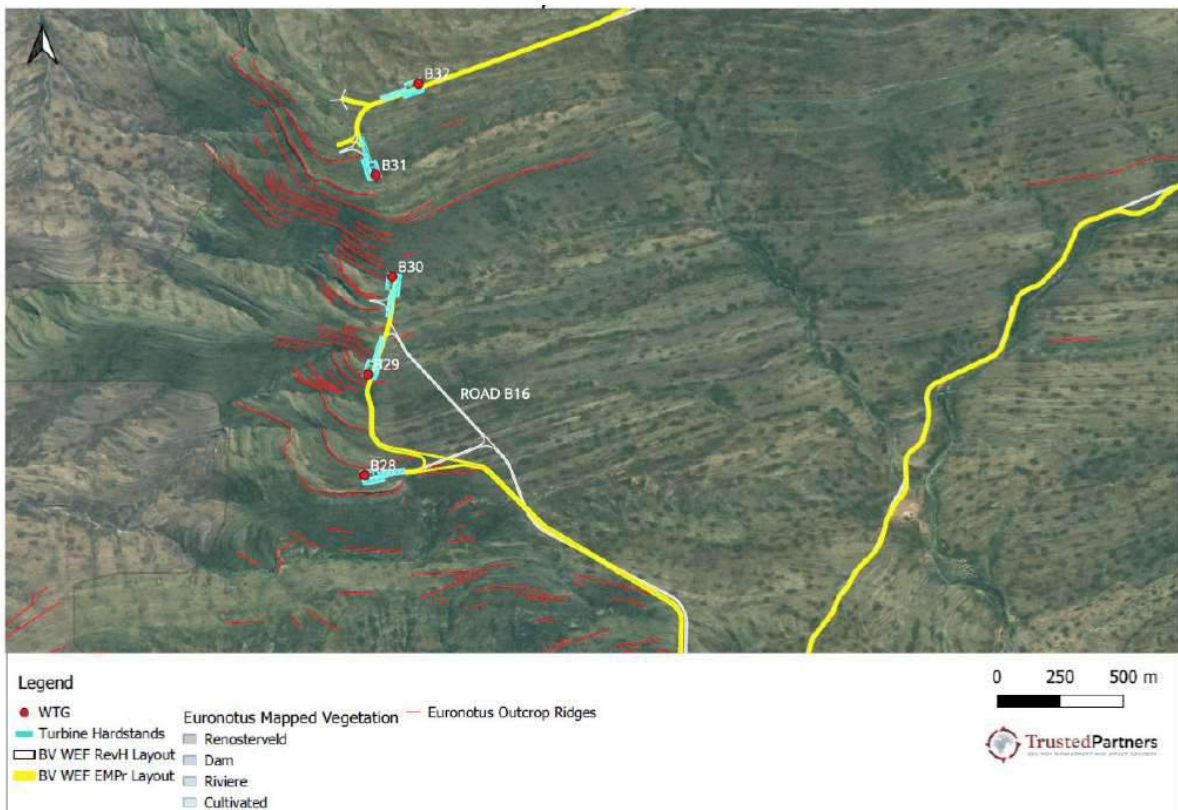


Figure 8.4: BV WEF - Road B11 Realignment

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As such, based on our detailed knowledge and onsite assessments at BV WEF, Trusted Partners are of the opinion that the proposed realignments are minor in magnitude and shall not increase or change the scope of the proposed or assessed layouts, since the development footprint and hence operational activities are retained within in same vegetation type (i.e., Central Mountain Shale Renosterveld) and that impact to the rocky-ledge areas is reduced (by avoidance of these ledges especially in the area between WTG B28 and B29). The removal of the superfluous ring-road section of Road B11 reduces the overall impact of the WEF of ecological process and biodiversity.

Concluding Statement

The above requested realignment of the WEFs internal roads are minor in nature and do not transgress Conditions 73 or 74 (NPAES Structures) of the Environmental Authorisation (DEA Reference: 14/12/16/3/3/2/900). The proposed realignment of Road B2 (Figure 8.2) and Road B16 (Figure 8.3) are minor deviations that would not be more than 9 m wide and with the 30 m demarcated buffer zone.

Whilst the realignments emanate from a safety requirements for engineering and operational use of the roads there is a co-incident positive benefits on general biodiversity. With the proposed amendments regarded as minor changes and not constituting a scope change or layout change, there are no reasons from a terrestrial biodiversity perspective not to approve the proposed realignments of Road B2, Road B16 and Road B11.

Based on the information presented by the ecologist, the proposed WEF amendment development is acceptable and implementable. The ecological impact ratings that were reported remain relevant without any change as long as mitigation measures as detailed and required in the EMPr (Appendix E) are implemented.

This Brandvalley Amendment is supported in terms of ecological impacts.

8.1.5 Heritage Impact Findings (Updated Specialist Statement 2023)

PGS Heritage (C/O Mr Wouter Fourie) (hereinafter referred to as the “Heritage Specialist”) was appointed to provide a specialist statement for an update the Heritage Impact Assessment undertaken for the previous EIA (2016).

Mrs Celeste Booth, a heritage specialist from Booth Heritage Consulting, undertook the 2016 heritage assessments. Dr John Almond, a palaeontology specialist from Natura Viva, undertook the 2016 palaeontology assessments. Subsequently, CTS Heritage has been appointed in 2021 to review the previous studies (both heritage and palaeontological) and consider the effect of the proposed amendments on the previous impacts with reference to the final layout. Wouter Fourie from PGS Heritage was appointed to provide specialist input and a statement to the proposed amendment of the road layout The outcome of the assessment is outlined in the 2023 Specialist Statement included in Appendix C

The Heritage Specialist findings for the WEF development is as follows:

The specialist has noted the following in his Specialist Statement:

“Any new Guidelines / Protocols

None

Current Baseline Heritage status

Since the original assessment, the baseline heritage environment has remained the same. Findings relating to cultural heritage and palaeontology (2016, 2021, 2022) for the project are still applicable.

Specialist comment

Our evaluation of the original HIA and subsequent documentation (AM1-3 documents, EMPR and Cultural Management Plan (CHMP)) has shown that we envisaged the projected impact to remain the same.

We have further evaluated the cumulative impact related to the number of other proposed wind and solar renewable projects in the vicinity of the approved Brandvalley Facility.

The reduction in the number of turbines during 23 August 2022 (DFFE Ref: 14/12/16/3/3/2/900/AM3), will reduce the negative cumulative load on heritage resources within the larger project area.

The management measures as included in the HIA, EMPR and CHMP(2016, 2021 and 2022) remain true and need to be implemented and are listed below:

Based on the information presented by the Heritage Specialist, the proposed WEF amendment development is acceptable and implementable. The Heritage impact ratings that were reported remain relevant without any change as long as mitigation measures as detailed and required in the EMPr (Appendix E) are implemented.

This Brandvalley Amendment is supported in terms of heritage impacts.

8.1.6 Visual Impact Findings (Updated Specialist Statement 2023)

Scientific Aquatic Services (Pty) Ltd (C/O Stephen van Staden) (hereinafter referred to as the “Visual Specialist”) was appointed to provide a specialist statement for an update the Visual Impact Assessment undertaken for the previous EIA (2016).

Mr Michael Johnson, a visual specialist from EOH Coastal and Environmental Services, undertook the 2016 visual assessments. Subsequently, SiVEST has been appointed in 2021 to review the previous studies and consider the effect of the proposed amendments on the previous impacts with reference to the final layout. Stephen van Staden from Scientific Aquatic Services (Pty) Ltd was appointed to provide specialist input and a statement to the proposed amendment of the road layout. The outcome of the assessment is outlined in the 2023 Specialist Statement included in Appendix C

The Visual Specialist findings for the WEF development is as follows:

The specialist has noted the following in his Specialist Statement:

Scientific Aquatic Services (SAS) has been requested to provide visual specialist input and/or comment in respect of the Part two (2) Amendment Application for the Brandvalley WEF, in particular the road realignments in the B2, B11 and B16 sections. The visual specialist letter was based on the original

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VIA's undertaken for the project as well as the subsequent Visual Specialist inputs in the subsequent amendments.

Assumptions and limitations

Given the fact that the proposed Part 2 Amendment WEF (reduction from 58 WTGs to 32 WTGs) and associated infrastructure (in particular the roads) is within the project area originally assessed for the Brandvalley WEF VIA, it has been assumed that the baseline conditions as well as the receptor locations in the visual assessment zone remain largely unchanged. This has been confirmed with the use of Google Earth Digital Satellite Imagery.

Summary of the previous VIA

EOH Coastal and Environmental Services (EOH CES) undertook a VIA for the proposed 147 megawatt (MW) Brandvalley Wind Energy Facility (WEF) in March 2016, which was planned to consist of 70 WTGs. During the assessment two access road alternatives were assessed, and the outcome from a visual perspective was that access road alternative 1 is acceptable as it had the smallest viewshed. The following bullets summarises the landscape of the receiving environment associated with the Brandvalley WEF as well as the outcome of the impact assessment:

- The land use activities within the project area and a 20 km radius thereof were dominated by sheep farming (farmsteads) and other agricultural activities and tourist accommodation;
- The project area is situated in a remote and rural area with limited development and the sense of place is typical of the Karoo landscape – vast open valley separated by steep-sided hills. Dry river beds trace along the valley floors;
- There are two Eskom transmission lines within the area, detracting from the otherwise undisturbed and high scenic quality of the area;
- The project area lies on the western side of the R354 road, and the broader area is accessible via good quality gravel roads;
- The project area varies in height between 674 metres above sea level (masl) and 1297 masl;
- The vegetation associated with the project area will not assist in screening the view as it is short vegetation cover, with exposed bare ground. Trees have however been planted around most of the homesteads;
- The access roads associated with the proposed WEF will result in visual impacts affecting the landscape and rural sense of the place of the area. The overall significance of these impacts was rated as Moderate Negative.

In March 2016 the layout for the Brandvalley WEF was amended; the turbines were reduced to 58, the width of the internal access roads was reduced from 12 m to 9 m and small section of the access roads were removed or realigned. Specialist comment from a Visual Assessment Practitioner in respect of the amended layout was provided in the form of a single page addendum letter dated 02 August 2016, and further comment was provided in respect of the proposed EA amendment (14/12/16/3/3/2/900/AM1) in a letter dated 28 June 2018. The last visual specialist comment was provided in March 2022, as part of the Part 2 Amendment, where it was stated that “although the landscape to the north and north-east of Brandvalley WEF was undergoing significant change as a result of the development of the Roggeveld, Karusa and Soetwater WEFs, there has been little change since 2018 in the baseline characteristics and the number of sensitive receptors across the remainder of the project area “ SiVest (2022).

Specialist Comment and Conclusion

Since the Brandvalley WEF is located within a rural area, dominated by extensive sheep farming, there are limited farmsteads located within a 2 km radius of the proposed internal access roads. It is important to note that a visual impact will only be experienced if there are receptors present, thus with the limited number of receptors present, the visual impact experienced is moderately low. Furthermore, due to the farming activities of the area, a gravel road network is present across the landscape. As such the introduction of additional roads is not flagged as a significant visual impact for the development as a whole.

Given the rural nature of the area and the relative absence of sensitive receptors in the area as well as the minor amendments proposed to the road layout (dated February 2023), the road realignment is deemed to have a negligible variance on the impact on visual resources identified in the VIA (2016) and the associated revision in 2018. It can be concluded that the updated layout of the Brandvalley WEF does not pose any additional negative visual impacts on the receiving environment and can be considered acceptable and appropriate for approval.

Based on the information presented by the Visual Specialist, the proposed WEF amendment development is acceptable and implementable. The Visual impact ratings that were reported remain relevant without any change as long as mitigation measures as detailed and required in the EMPr (Appendix E) are implemented.

This Brandvalley Amendment is supported in terms of Visual impacts.

8.1.7 Social Impact Findings (Updated Specialist Statement 2023)

Tony Barbour Environmental Consulting (C/O Mr Tony Barbour) (hereinafter referred to as the “Social Specialist”) was appointed to update the Social Impact Assessment undertaken for the previous EIA (2016).

Mr Tony Barbour, a social specialist from Tony Barbour Environmental Consulting and Research, undertook the 2016 socio-economic impact assessments. Subsequently, the specialist has been appointed to review the previous studies and consider the effect of the proposed amendments on the previous impacts with reference to the final road layout. The outcome of the assessment is outlined in a 2023 Specialist Statement included in Appendix C.

The Social Specialist findings for the WEF development is as follows:

The specialist has noted the following in his Specialist Statement:

Based on a review of the information provided the changes to the approved road alignment will not result in any social impacts that would have a bearing on the findings of the SIA undertaken for the Brandvalley WEF (Tony Barbour, 2016). The changes in the road alignment are therefore supported.

Based on the information presented by the Social Specialist, the proposed WEF amendment development is acceptable and implementable, provided that the prescribed mitigation measures are implemented

8.1.8 Noise Impact Findings (Updated Specialist Statement 2023)

Safetech (C/O Mr Dr Brett Williams) (hereinafter referred to as the “Noise Specialist”) was appointed to update the Noise Impact Assessment undertaken for the previous EIA (2016).

Dr Brett Williams, a noise specialist from SafeTech, undertook the original 2016 noise assessments. Subsequently, the specialist has been appointed to review the previous studies and consider the effect of the proposed amendments on the previous impacts with reference to the final road layout. The outcome of the assessment is outlined in a 2023 Specialist Statement included in Appendix C.

The Noise Specialist findings for the WEF development is as follows:

The specialist has noted the following in his Specialist Statement:

The information provided to me on the 7th of February 2023 indicates that the project layout and wind turbine specifications for the proposed project have not changed since the previous Environmental Authorization (DFFE Ref No.: 14/12/16/3/3/2/900/AM3) was received by your client. The Part 2 Amendment Application relates to the minor road adjustments proposed by the engineers due to safety concerns of the original road layout. These changes are shown in the Figure Annexure A. There is therefore no noise increase on the receiving environment from a human receptor perspective. The mitigation measures as identified in the original Safetech noise impact report (Report Number 26/7587 – 27th April 2016 Version 4) is still applicable for human receptors. The report is compliant with GN 320 of 20th March 2020.

Based on the information presented by the Noise Specialist, the proposed WEF amendment development is acceptable and implementable. The Noise impact ratings that were reported remain relevant without any change as long as mitigation measures as detailed and required in the EMPr (Appendix E) are implemented.

This Brandvalley Amendment is supported in terms of Noise impacts.

8.1.9 Freshwater Impact Findings (Updated Specialist Statement 2023)

Freshwater Consulting (C/O Mr Stephen van Staden) (hereinafter referred to as the “Freshwater Specialist”) was appointed to update the Freshwater Impact Assessment undertaken for the previous EIA (2016).

Dr Brian Colloty, an aquatic ecology specialist from Environmental and Scientific Assessment Services, undertook the 2016 aquatic assessments. Subsequently, FEN Consulting (Pty) Ltd has been appointed to review the previous studies and consider the effect of the proposed amendments on the previous impacts with reference to the final road layout. The outcome of the assessment is outlined in a 2023 Specialist Statement included in Appendix C.

The Freshwater Specialist findings for the WEF development is as follows:

The specialist has noted the following in his Specialist Statement:

FEN Consulting undertook a freshwater ecological assessment in July 2021 as part of the Water Use Authorisation (WUA) process for the proposed Brandvalley Wind Energy Facility (WEF) which included an assessment of the access roads and associated infrastructure between Matjiesfontein and Sutherland in the Western Cape Province (hereafter referred to as the 'proposed development'). The layout of the proposed development was updated in November 2021, the updates entailed a reduced number of turbines (32 turbines in the new proposed layout, as opposed to 58 turbines), fewer internal access road crossings, a smaller construction camp and laydown area, confirmation of batching plant locality and confirmation of the proposed 33 kV internal collector systems. Subsequently, FEN Consulting re-assessed the potential impacts of the updated layout on any watercourses and concluded that the updated layout of the proposed development does not pose any additional negative impacts to the watercourses, but will rather generate less impacts and pose less of a risk to the watercourses of the region compared to the originally assessed layout (July 2021). This opinion was presented in a memorandum submitted in November 2021. The updated layout of the proposed Brandvalley WEF has since been granted Environmental Authorisation (EA) (DFFE Ref: 14/12/16/3/3/2/900/AM3), dated 23 August 2022.

The authorised Brandvalley WEF is undergoing a Part 2 Amendment Application process following minor access road routing adjustments related to engineering and safety requirements, following detailed engineering design. This letter serves to inform this Part 2 Amendment Application process regarding the potential impacts of the proposed road realignments of the authorised Brandvalley WEF on any watercourses in the vicinity of the development. The proposed road layout changes will hereafter be referred to as the 'updated roads layout (February 2023)'

Watercourse Assessment

Most of the watercourses to be traversed by the proposed development and those identified within the investigation area can best be described as headwater episodic¹ drainage lines (EDLs) without riparian vegetation which confluence with larger ephemeral tributaries with riparian vegetation, which ultimately flow into the larger riverine systems at the base of the landscape. Although these EDLs cannot be classified as watercourses in the traditional sense, due to the lack of saturated and/or alluvial soil and riparian vegetation, they do still function as waterways, due to the episodic conveyance of water within them. However, based on the definition of a watercourse, water flows regularly or intermittently within these EDLs, conveying water from the upgradient catchment area into the downgradient tributaries and eventually into the larger river systems. As such, they may be considered as watercourses as they do function as waterways and therefore may enjoy protection in terms of the National Water Act, 1998 (Act No. 36 of 1998) should they be subjected to a 1:100 year floodline. Ephemeral tributaries with riparian vegetation and associated channelled valley bottom wetlands were also identified to be traversed by the proposed new access route. The Groot River is proposed to be traversed several times by access roads.

Please refer to the outcome of the freshwater ecological assessment (FEN Consulting, 2021) for a detailed description and documentation of the key characteristics of these watercourses.

The updated roads layout (February 2023) in comparison to the authorised roads layout (November 2021), from a watercourses impact perspective

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A final survey was undertaken by the civil engineers following the submission of the authorised Brandvalley WEF ((DFFE Ref: 14/12/16/3/3/2/900/AM3) 23 August 2022), where they identified two safety risks that required urgent and immediate attention. Specifically, the road sections B2, B11 and B16, were considered too steep to grade and posed a safety risk for the transportation of abnormal loads/infrastructure without excessive blasting and cut and fill of the majority of the mountainside. These road sections have since undergone minor realignments and are indicated as requiring additional comment from a freshwater resource management point of view. The table within the Freshwater specialist statement (Appendix C) provides a concise comparison of the updated roads layout (February 2023) versus the authorised roads layout (November 2021) relative to the watercourses. While the road sections B2, B11 and B16 are indicated as having undergone the most significant layout changes, the table below also comments on other road sections that have undergone minor realignments in relation to the delineated watercourses, where relevant. Since the underground 33 kV cabling between turbines is proposed to be buried along access roads, where feasible, it can be assumed that the updated roads layout (February 2023) also reflects the updated layout of the underground 33 kV cabling.

DWS Risk Assessment

The outcome of the DWS Risk Assessment as per the freshwater ecological assessment (FEN Consulting, July 2021 and November 2021) indicated that the construction and operation of the proposed Brandvalley WEF, were of ‘Moderate’ risk significance to the watercourses in the receiving environment, with the implementation of the recommended mitigation measures. This was predominantly attributed to the construction and upgrading of roads adjacent to and through sensitive watercourses.

It is noted that the updated roads layout (February 2023) excludes extensive upgrading of roads through and along the Groot River system, which would lead to a reduction in the significance of risks to the Groot River system. Nonetheless, the February 2023 layout still entails the upgrade of the access road along and through watercourses, which will result in direct negative impacts to the watercourses. It is the opinion of the ecologist that formalising watercourse crossings with appropriate through flow structures is considered advantageous over the long-term as existing informal watercourse crossings have resulted in erosion of the watercourses which have caused interruption of hydrological connectivity between the upstream and downstream reaches.

As such, the outcome of the DWS Risk Assessment as per the freshwater ecological assessment (FEN Consulting, 2021) is also applicable to the updated roads (and underground 33 kV cabling) layout (February 2023) of the authorised Brandvalley WEF, which was determined to pose a ‘Moderate’ risk significance to the assessed watercourses, although the extent and severity components of the risk significance are somewhat reduced. It is recommended that the mitigation measures as provided in the freshwater ecological assessment (FEN Consulting, 2021) be implemented to mitigate the significance of the expected impacts on the watercourses. It can be concluded that the updated roads layout (February 2023) of the authorised Brandvalley WEF does not pose any additional substantive negative impacts to any watercourses, but rather will generate slightly reduced impacts and pose a slightly reduced risk than the originally assessed layout to the watercourses of the region. The FEN Consulting (2021) freshwater ecological assessment is considered applicable, acceptable and appropriately accurate and comprehensive to inform the required legislative processes for the updated roads layout (February 2023) of the authorised Brandvalley WEF and subsequent development when

read in conjunction with this Memorandum, despite the changes in the layout which can largely be considered non substantive.

Based on the information presented by the Freshwater Specialist, the proposed WEF amendment development is acceptable and implementable. The Freshwater impact ratings that were reported remain relevant without any change as long as mitigation measures as detailed and required in the EMPr (Appendix E) are implemented. This Brandvalley Amendment is supported in terms of Freshwater impacts.

8.1.10 Geotechnical Impact Findings (Updated Specialist Statement 2023)

JGAfrika (C/O Priantha Subrayen) (hereinafter referred to as the “Geotechnical Specialist”) was appointed to update the Geotechnical Impact Assessment undertaken for the previous EIA (2016).

In September 2021 JG Afrika undertook a desk top geotechnical assessment for the proposed Brandvalley WEF in the Western Cape. Priantha Subrayen from JGAfrika was appointed to provide specialist input and a statement to the proposed amendment of the road layout. The outcome of the assessment is outlined in the 2023 Specialist Statement included in Appendix C

The Geotechnical Specialist findings for the WEF development is as follows:

The specialist has noted the following in her Specialist Statement:

In November 2021 JG Afrika (Pty) Ltd undertook a desktop geotechnical assessment for the proposed 147MW Brandvalley Wind Energy Facility (WEF), in the Western and Northern Cape Provinces. Following the submission of the Geotechnical report and updated road alignment comprising of minor adjustments was received. It should be noted that the geotechnical evaluation, proposed recommendations and comparative assessments submitted as part of the original desktop geotechnical report (Report reference: Proposed development of the 140MW Brandvalley Wind Energy Facility, Western and Northern Cape Province) are still valid

The updated road alignment was reviewed and the following has been concluded:

- *The proposed new road alignment does not significantly deviate from the approved alignment over the majority of the site and as such the geotechnical conditions along the proposed new route will not vary significantly from those presented in the geotechnical investigation report.*
- *Certain sections of the proposed new alignment, specifically along the steeper ridges, have now been realigned to follow the contour lines as opposed to extending over these areas. In order to accommodate the road in such cases cuts must be battered appropriately, in accordance with the Engineer’s design, to limit any slope instability issues that may arise. Blasting may be required in order to achieve the desired cut slope specifications. The main portion of the road in the vicinity of turbines B58 and B59, B49, B60 and B61 and along the link road.*

The above recommendations are purely based on high – level desktop evaluation of the study area and any further recommendations will require and additional invasive geotechnical desktop

investigation report are still valid and must be used in conjunction with the comments in this verification letter.

8.1.11 Traffic Impact Findings (Updated Specialist Statement 2023)

JG Afrika (C/O Adrian Johnson) (hereinafter referred to as the “Traffic Specialist”) was appointed to update the Traffic Impact Assessment undertaken for the previous EIA (2016).

Mr Hermanus Steyn, a traffic specialist from Aurecon South Africa, undertook the 2016 and 2018 traffic and transport assessments. Subsequently, JG Afrika has been appointed to review the previous studies and consider the effect of the proposed amendments on the previous impacts with reference to the final road layout. The outcome of the assessment is outlined in a 2023 Specialist Statement included in Appendix C

The Traffic Specialist findings for the WEF development is as follows:

The specialist has noted the following in his Specialist Statement:

General comment on impact significance

The proposed amendments do not affect the significance of any of the impacts identified in the Transport Impact Assessment (hereafter referred to as the “original TIA”) dated 18 November 2021.

General comment on mitigation measures

The mitigation measures stated in the original TIA remain applicable and no additional mitigation measures are required.

Conclusion

The changes to the internal roads of the facility, in this case B2, B11 and B16, will not have an impact on the transportation of materials, staff and components to the facility i.e., the changes do not have an impact on the traffic on the surrounding road network.

Based on the information presented by the Traffic Specialist, the proposed WEF amendment development is acceptable and implementable. The Traffic impact ratings that were reported remain relevant without any change as long as mitigation measures as detailed and required in the EMPr (Appendix E) are implemented. This Brandvalley Amendment is supported in terms of traffic

9 ENVIRONMENTAL MANAGEMENT PROGRAMME REPORT

The Brandvalley WEF was granted an Environmental Authorisation (EA) (DFFE Ref: 14/12/16/3/3/2/900) 23 November 2016 and subsequently amended via EA's dated 14 February 2019 (DFFE Ref: 14/12/16/3/3/1/900/AM1), 11 October 2021 (DFFE Ref: 14/12/16/3/3/2/900/AM2), and 23 August 2022 (DFFE Ref: 14/12/16/3/3/2/900/AM3),

The Project was awarded PREFERRED BIDDER STATUS on 28 October 2021 within the REIPPPP BID Window 5 and is therefore classified as a SIP Project to be expedited in terms of Schedule 2 Section 17(2) of the Infrastructure Development Act (Act No. 23 of 2014). After the submission of the EMPr and the Final Layout that was approved 23 August 2022 (DFFE Ref No. 14/12/16/3/3/2/900/AM3) final surveying was undertaken, and the civil engineers identified safety risks that required urgent and immediate attention.

The project was initially granted EA on 23 November 2016 with DEA Reference number: 14/12/16/3/3/2/900. As per Condition 14 of the EA, the EMPr was not approved. Subsequently The layout of the Brandvalley WEF along with the Final EMPr **was** submitted to the DFFE and **approved** On 23 August 2022 (DFFE Ref: 14/12/16/3/3/2/900/AM3

The EMPr that **is approved** on 23 August 2022 (DFFE Ref: 14/12/16/3/3/2/900/AM3 is aligned with all of the Conditions of the EA. For the purpose of this Part 2 Amendment and the minor realignment of the roads the approved EMPr has been revised to include the realigned roads map.

The approved EMPr is included in Appendix E. The new road layout map is highlighted in yellow for easy reference.

Note that the Client is not applying for an EMPr Amendment. The change entails the inclusion of the realigned road layout in the EMPr approved on 23 August 2022 (DFFE Ref: 14/12/16/3/3/2/900/AM3

Please refer to Appendix E for the EMPr.

10 PUBLIC PARTICIPATION PROCESS

10.1 OBJECTIVES OF THE PUBLIC PARTICIPATION PROCESS

The public consultation process is designed to provide information to and receive feedback from Interested and Affected Parties (I&AP), thus providing organisations and individuals with an opportunity to raise concerns and make comments and suggestions regarding the proposed amendments to the existing environmental authorisation.

The principles for the Environmental Impact Assessment (EIA) that determine communication with society at large are included in the principles of the National Environmental Management Act (NEMA) (Act 107 of 1998, as amended) and are elaborated upon in General Notice 657, titled “Guideline 4: Public Participation” (Department of Environmental Affairs and Tourism, 19 May, 2006), which states that: “*Public participation process means a process in which potential interested and affected parties (I&APs) are given an opportunity to comment on, or raise issues relevant to, specific matters.*” Public participation is an essential and regulatory requirement for an environmental authorisation process and must be undertaken in terms of the Environmental Impact Assessment (EIA) Regulations GN R.982 (December 2014, as amended). Public participation is a process that is intended to lead to a joint effort by stakeholders, technical specialists, the authorities and the proponent/developer who work together to produce better decisions than if they had acted independently.

The Public Participation Process (PPP) is designed to provide sufficient and accessible information to Interested and Affected Parties (I&APs) in an objective manner.

The purpose of the Public Participation Process (PPP) is to enable I&AP’s to:

- Understand the context of the Amendment Motivation Report;
- Become informed and educated about the proposed changes and its potential impacts;
- Raise issues of concern and suggestions for enhanced benefits; and
- Contribute relevant local information and traditional knowledge to the environmental assessment.

10.2 REQUIREMENTS FOR THIS PUBLIC PARTICIPATION PROCESS

Regulation 32 of the NEMA EIA Regulations (2014, as amended) state the following:

“1. The applicant must within 90 days of receipt by the competent authority of the application made in terms of regulation 31, submit to the competent authority –

(a) a report, reflecting-

(i) an assessment of all impacts related to the proposed change;

(ii) advantages and disadvantages associated with the proposed change;

(iii) measures to ensure avoidance, management and mitigation of impacts associated with such proposed change; and

(iv) any changes to the EMPr;

which report –

(aa) had been subjected to a public participation process, which had been agreed to by the competent authority, and which was appropriate to bring the proposed change to the attention of potential and registered interested and affected parties, including organs of state, which have jurisdiction in respect of any aspect of the relevant activity, and the competent authority, and

(bb) reflects the incorporation of comments received, including any comments of the competent authority, or

(b) a notification in writing that the report will be submitted within 140 days of receipt of the application by the CA as significant changes have been made or significant new information has been added to the report which changes or information was not contained in the report consulted on during the initial PPP contemplated in subregulation (1)(a) and that the revised report will be subjected to another PPP of at least 30 days.”

In terms of 32 (1)(a), the Amendment Report will be subjected to public consultation in line with Regulation 41.

10.3 STEPS TAKEN TO NOTIFY POTENTIALLY INTERESTED AND AFFECTED PARTIES

Identification of Stakeholders

The I&AP database developed during the previous EIA process (completed in 2016 and updated in 2022) was used to inform all I&APs during this public participation process.

Communication with Stakeholders

In terms of the NEMA EIA Regulations (2014, as amended), potential Interested and Affected Parties (I&AP's) were given **30 calendar days** within which to register and issue comments on this Draft Amendment Motivation Report (and associated annexures) from **06 March 2023 to 05 April 2023**.

- An **existing stakeholder database** from the previous EIA completed in 2016. The contact details of these stakeholders have been verified and updated in 2022 (through phone calls and emails) and these registered stakeholders have been notified via written notice (by email) of the Amendment Application and the availability of the Draft Amendment Motivation Report for a **30-day comment period**.
- **4 x Site notice boards** (with minimum dimensions of 60cm X 42cm) were erected on the boundary of the Brandvalley site (at strategic viewable locations) on 04 March 2023.
- An **advertisement** was placed in one **local newspaper (Die Courier)** and one **provincial newspaper (Cape Times)**
- The **Draft Amendment Motivation Report** (and associated annexures) for comment was made available to stakeholders through an **online electronic link** (<https://terramanzi.egnyte.com/fl/1MHagXFC2o>) via email.

Comments received during this public consultation will be recorded in a Comments and Response Report and included in the final Amendment Motivation Report for Decision.

10.4 AUTHORITY CONSULTATION

The following Authorities have been notified of the Project as part of the Public Participation process:

- Department of Forestry, Fisheries and the Environment (DFFE)
- National Energy Regulator
- Telkom
- SANPARKS

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- Western Cape Department of Environmental Affairs & Development Planning (DEA&DP)
- Department of Water & Sanitation (DWS)
- Western Cape Department of Agriculture
- Department of Energy (DoE)
- Department of Economic Development and Tourism
- SANRAL
- Western Cape Department of Transport
- Cape Winelands District Municipality
- Laingsburg, Witzenberg and Karoo Hoogland Local Municipalities
- Cape Nature
- Birdlife SA
- Heritage Western Cape
- South African Civil Aviation Authority (CAA)
- Department of Agriculture Forestry's and Fisheries
- Breede-Gouritz Catchment Management Agency

10.5 PROOF OF NOTIFICATION

A copy of the contents and proofs of the site notices, contents of the adverts and notification letters, as well as details of the interested and affected parties and the occupiers of the affected properties notified, is contained in Appendix D.

10.6 LIST OF REGISTERED INTERESTED AND AFFECTED PARTIES (I&AP'S)

The lists (databases) containing contact details of all persons notified during this PPP is contained in Appendix D.

11 EAP RECOMMENDATIONS AND CONCLUDING REMARKS

The investigation of potential environmental impacts associated with the proposed amendment indicates that the overall impacts identified during the 2016 Environmental Impact Assessment will remain the same. This was achieved through an iterative design process in collaboration with the Specialists. A key component to unlocking this outcome is the proposed minor realignments of the already approved road layout.

The potential environmental impacts related to the Brandvalley WEF have been adequately assessed and confirmed by the various independent Specialists. Please refer to their studies and supporting statements attached as Appendix C (and also summarised in Section 8 of this report).

Management measures specified by the Specialist's in their original 2016, 2022 and updated 2023 studies and specialist statements must be implemented for the WEF development site to ensure that the potential impacts identified through the environmental impact assessment process are adequately mitigated.

Further to the above, the overarching potential advantages and disadvantages of the proposed amendments to the authorised Brandvalley WEF are noted as follows:

- Advantages:
 - No additional environmental impacts associated with the proposed amendment as compared to what DEA approved in the Environmental Authorisation (dated 23 November 2016 with Ref: 14/12/16/3/3/2/900).
 - The impact on terrestrial ecological process of the proposed realignment of Road B2 does not result in any additional negative impact on biodiversity. However, it is expected that any transient impact resultant from a **lesser need for blasting** for the proposed route does have a positive benefit compared to the current approved alignment. In addition, the resultant footprint from cut-and-fill road section is lesser for the proposed new routing especially from the Y-junction to the WTG B49 The proposed alignment is shorter in distance than the approved alignment, there is a direct reduced impact on terrestrial biodiversity.
 - The impact on terrestrial ecological process of the proposed realignment of Road B16 is lesser for the proposed realignment, in that the proposed routing avoids nearby rocky outcrops between WTG B28 and WTG B29 The proposed alignment **negates the need for large cut-and-fill sections (blasting, earthen moving and impacted footprint)**, thereby further significantly reducing negative impact on terrestrial ecology by avoidance of the rocky edges in this area.
 - it is expected that any transient impact resultant from a lesser need for blasting for the proposed route does have a positive benefit compared to the current approved alignment.
 - The removal of the superfluous ring-road section of Road B11 reduces the overall impact of the WEF of ecological process and biodiversity.
 - The minor deviation outside of the approved 200m corridor (DFFE Ref: 14/12/16/3/3/2/900) on 23 November 2016) has been reviewed and the changes are deemed to be **minor and insignificant** These changes will accomplish a decrease in the overall impacts on the environment, especially from a Terrestrial Ecology and Biodiversity point of view.

The potential negative impacts of not approving the proposed amendments are:

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- The amendment to the proposed wind energy facility is based on changes and improvements in road infrastructure and layout. As such, should the amendment not be granted, could mean that the applicant would need to install and construct road section B2,B11 and B16 as previously approved on 23 August 2022 (DFFE Ref: 14/12/16/3/3/2/900/AM3), resulting in safety risks from an engineering perspective and a larger area being affected by the blasting of the mountainside.

Importantly, there were no fatal flaws or fundamental issues identified for this amendment proposal during this assessment process by the project team, the independent specialists or the independent EAP.

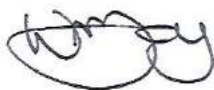
Based on the available information presented within this Amendment Report, which has been informed through independent specialist input, the EAP finds no reason why the amendments applied for, shouldn't be authorised:

This Amendment Report and supporting documentation is considered to be adequate in meeting the requirements of the relevant legislation, and the EAP believes that sufficient information is presented, and no reason why DFFE shouldn't approve these amendments.

12 OATH OF EAP UNDERTAKING ASSESSMENT

I, Wendy Mey, as the appointed Principal EAP hereby declare/affirm:

- I act as the independent environmental assessment practitioner in this application;
- I have expertise in conducting environmental impact assessments, including knowledge of the Act, Regulations and any guidelines that have relevance to the proposed activity;
- I will comply with the Act, Regulations and all other applicable legislation;
- I will perform the work relating to the application in an objective manner, even if this results in views and findings that are not favourable to the applicant;
- I will take into account, to the extent possible, the matters listed in Regulation 14 of the Regulations when preparing the application and any report relating to the application;
- I undertake to disclose to the applicant and the Competent Authority all material information in my possession that reasonably has or may have the potential of influencing - any decision to be taken with respect to the application by the Competent Authority; and - the objectivity of any report, plan or document to be prepared by myself for submission to the Competent Authority, unless access to that information is protected by law, in which case it will be indicated that such information exists and will be provided to the Competent Authority;
- I will perform all obligations as expected from an environmental assessment practitioner in terms of the Regulations;
- I am aware of what constitutes an offence in terms of Regulation 48 and that a person convicted of an offence in terms of Regulation 48(1) is liable to the penalties as contemplated in Section 49B of the Act; and
- I do not have and will not have any vested interest (either business, financial, personal or other) in the proposed activity proceeding other than remuneration for work performed in terms of the Regulations.



Signature of the EAP:

Name of Company:

Terramanzi Group

Date:

01 March 2023

Report Approved by TMG Director (internal quality control):



FABIO VENTURI

*Certified Environmental Scientist (SAIEES)
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Certified Carbon Footprint Analyst (CPSA)*