

Kruger Projects & Designs cc

Engineering: Mechanical · Marine · Structural

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Lourens River Street 144, Strand, South Africa

To whom it may concern

Date: 22 March 2023

Inspection & structural report: High Africa Zipline and support structure report



The structures were inspected during the building process and then on final completion.

Design requirements:

- The zipline system was design for single person usage. The maximum person loading allowed will be 120 kg. Single operator, one client on the zip line and one client only at top station
- Currently a single line system is installed but a second line can be installed to a lower station.
- Only one person on any of the ziplines at any time.
- Single operator and two clients always allowed on lower platform.

Member DA Kruger *Pr Tech Eng, MSAIMechE, FSAIMENA, NHBRC*

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- Only one person on the staircase always going up or down to lower station.
- The structure is design for adventure park purposes and not for residential or commercial building purposes. Loading as per notes in this document and not as per SANS requirements
- Anchor blocks: Approved for WLL of 2 ton in cable tension.

Zipline system including all cable, connections: Inspected and approved in collaboration with suppliers. The supplier / installer is required to inspect this system as per their recommendation.

Existing timber structure: It was inspected and found to be able to support the additional loadings for the zip line.

Lower zipline support station: The first station build by other was found to be too low for the zipline geometry, resulting in too high speed at end of zip line. The platform was then extended to the new height as per picture above.

Inspection requirements:

Zipline: as per supplier recommendations

Existing / upper station structure: No modification allowed without approval from the engineer.

Lower support station: No modification allowed without approval from the engineer.

General Inspection for timber structures.

All structural fasteners (bolts nuts and washer as well as timber screws) to be checked on weekly basis.

All primary structural timber members to be checked in daily basis for cracks larger than 3 mm and or major deformations.

Staircase treads and handrailing. Daily check in daily basis for cracks larger than 2 mm and or major deformations.

Conclusion:

The structure are found fit for purpose as described above and can be used within the limits as noted above

No modifications allowed unless approved by the engineer.



Signed: DA Kruger Pr Tech 200570135