

N. DE HOOP VLEI GORGE

Field Note N9a. Archaeology - Dams

A historical dam system is located in Die Mond, in the southeastermost end of the De Hoop Vlei (Figures 1). The area is a shallow depression, named here the Die Mond Depression, which hosts a series of dolines, on a SW-NE direction (See chapter E for dolines).

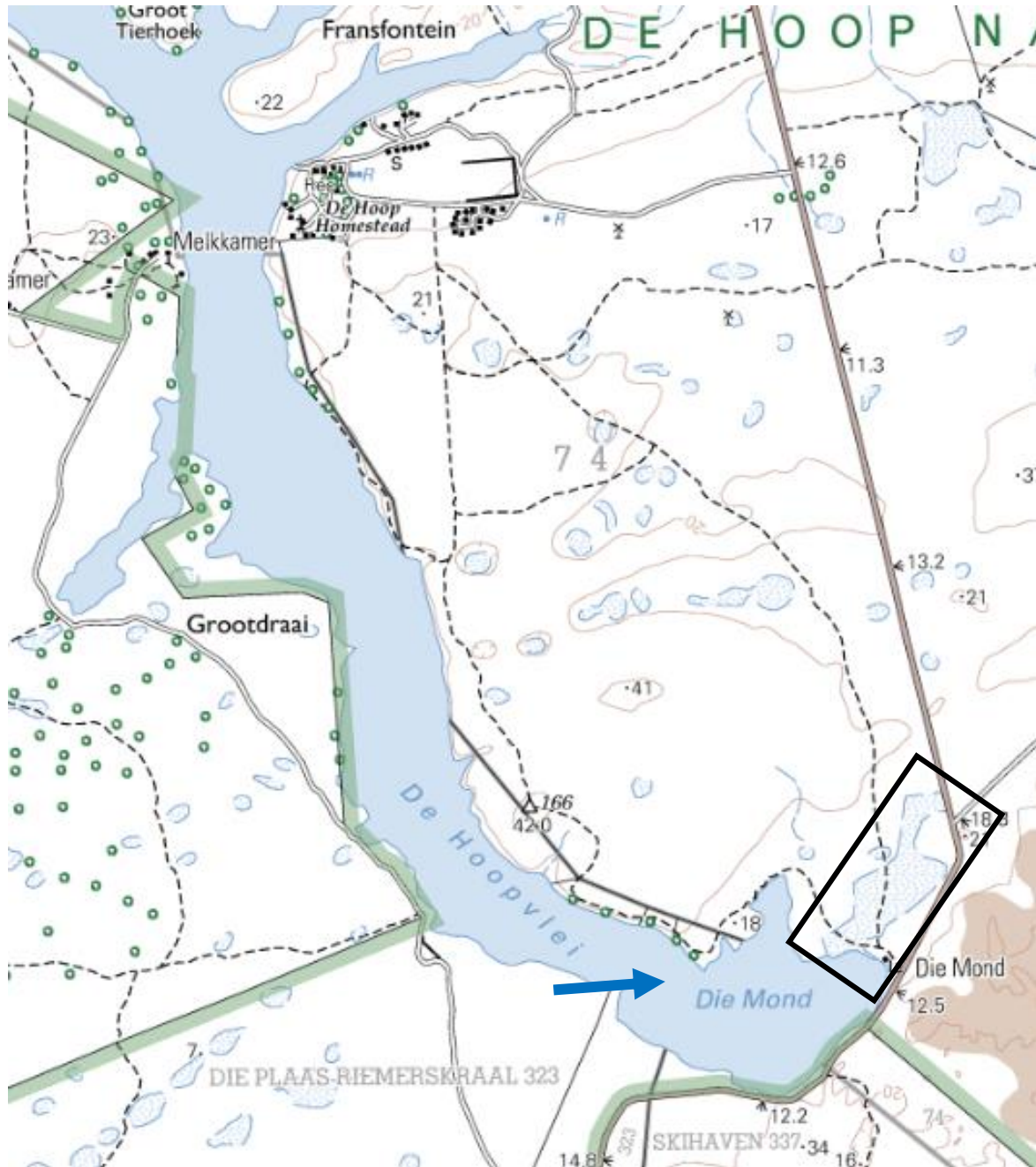


Figure 1. Topography map of the south part of De Hoop Vlei Gorge. Arrow points to Die Mond. Box indicates the Die Mond Depression, shown in Figure 2.

Upon the water level in the vlei, the depression is at times full and at times dry (Figures 2 to 8).



Figure 2. Satellite image of the Die Mond Depression when it was flooded.



Figure 3. Satellite image of the Die Mond Depression when it is dry. Boxes indicate: red – front doline; white – middle dolines; yellow – back dolines.



Figure 4. Enlargement of the red box in Figure 3. Yellow arrow points to a canal, which delivered water to the front doline (blue arrow).



Figure 5. The canal (arrow) to the front doline is easily discerned when the depression is flooded.



Figure 6. The canal to the front doline. The walls have been eroded. View to the west.



Figure 7. The walls of the canal were cladded with stones, to prevent erosion. The cladding has disintegrated with time.



Figure 8. Views on the dolines. Top – from the south on the front (arrow) and middle dolines; Middle - from the south on the back dolines; bottom – from the road, to the south, on the northernmost back doline.

To store water in the depression, a dyke was built across it and a canal was dug, to deliver water from the vlei to the dolines (Figures 9 to 14).



Figure 9. Satellite image of the dolines, containing water.



Figure 10. The middle dolines, the dyke (yellow arrow) and the canal (blue arrow).



Figure 10. The dyke. View to the northwest. The depression is on the right, the vlei on the left.



Figure 11. The dyke was cladded on the west (vlei) side. View to the east. The depression is on the left, the vlei on the right.



Figure 12. The vlei side of the sluice gate in the dyke.



Figure 13. The depression side of the sluice gate in the dyke.



Figure 14. The canal extends from the dyke (arrow) into the middle dolines. View to the south-southwest. (This is probably “Cloete’s Sloot”; read last page of this Field Note).

The back dolines were also walled, and a canal was cut into them from the middle dolines (Figures 15 to 18).



Figure 15. The area between the middle and the back dolines.

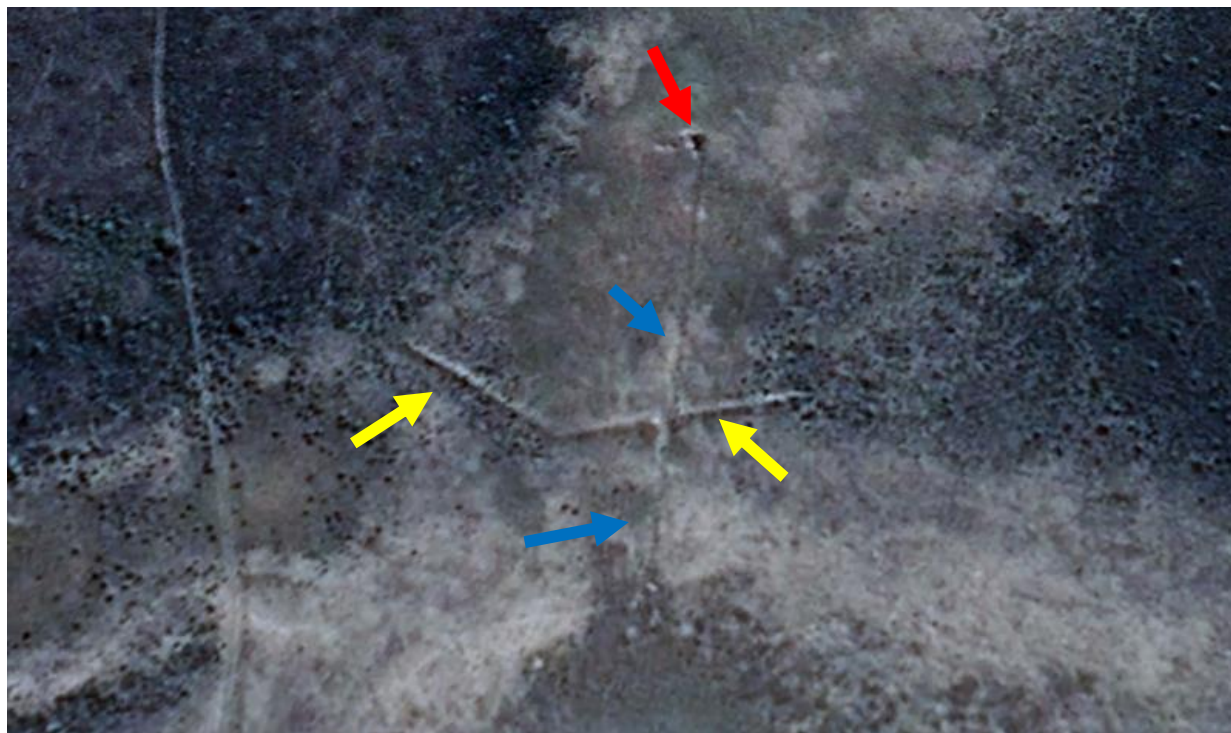


Figure 16. Enlargement of the boxed area in Figure 15. The low dyke (yellow arrows) and the canal (blue arrows) can be easily recognised. Red arrow points to a sinkhole (Figure 18).

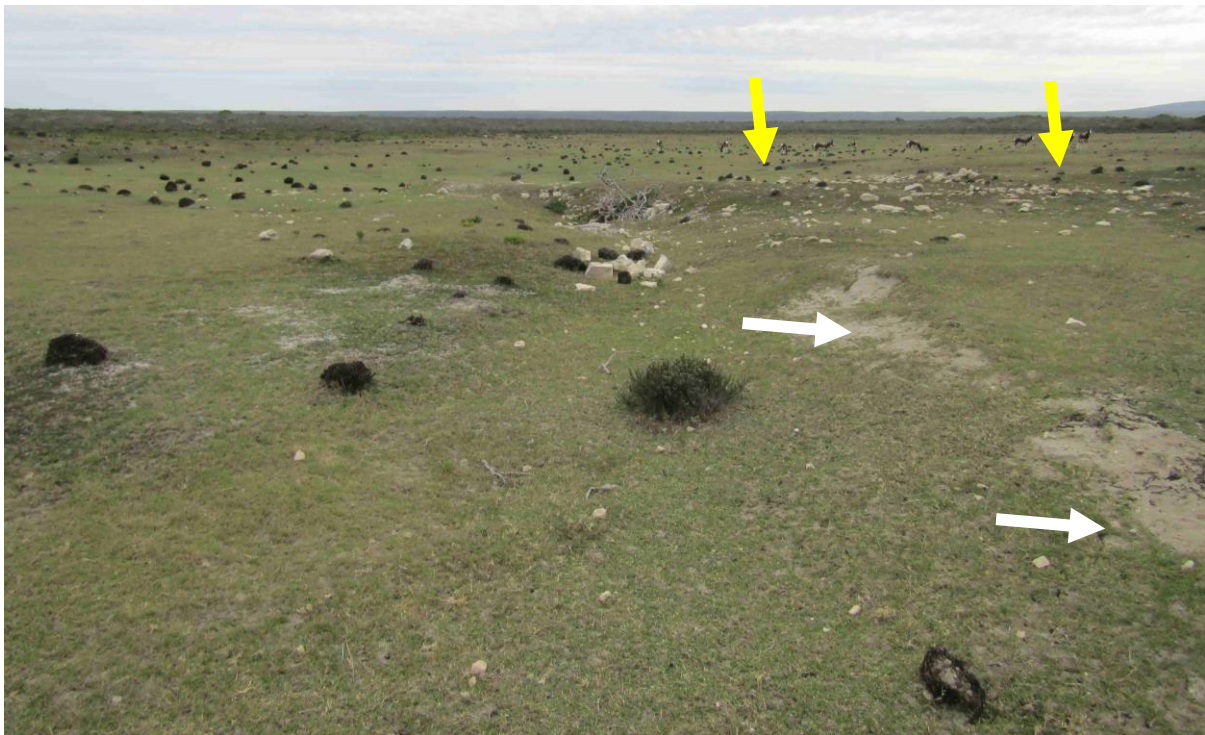


Figure 17. The low dyke of (yellow arrows), and the canal to (white arrows), the back dolines.



Figure 18. Sinkhole at the back dolines. When a stone was dropped into the hole (Feb 2020) it hit water. Such sinkholes are at the core of the debate on the drainage of the De Hoop Vlei (read below). See also Field Note N7a and Chapter W.

The dyke, sluice gate, canal and sinkhole are most probably the historical features mentioned in the following paragraph (From Shirley E Butcher's MSc thesis "Environmental factors and the water regime of De Hoop Vlei", 1993 (part of the introduction):

To compensate for the supposed blockage of the original sinkhole, two channels were dug. The timing and sequence of these attempts is uncertain. A channel known as "Cloete's sloop" was dug in an easterly direction near to Die Mond to drain into another sinkhole which, it is claimed, is connected to the same underground watercourse as others in the area (and possibly the original sinkhole) (J. Macquiere, pers. comm.). It is even possible that "Cloete's sloop" was dug many years previously for irrigation purposes during a period of high water levels, as Cloete was no longer associated with De Hoop at the time of the 1906 flood. The remains of this channel are still evident and "Cloete's sloop" is now operated by a sluice gate in the dyke constructed by the Cape Department of Nature Conservation in 1958 (Van der Merwe, 1976). It is still regarded as an overflow outlet and its last recorded use was during the winter of 1962 according to the diary kept by the Nature Conservation Officer at De Hoop. The channel does not have an even downward gradient and it is doubtful whether this ineffectual-looking ditch could play any significant role in flood control.

Read also Field Note N8b and in the Appendices.