

I. HEUNINGNES AND KARS RIVERS

Field Note I4. Kars River

The Kars River, which runs through the Study Area, is ~65 km long. It starts ~20 km west of Napier, goes through the Hard Dunes east of Bredasdorp, to the point where it joins the Heuningnes River on the Bredasdorp Plain (Figure 1).

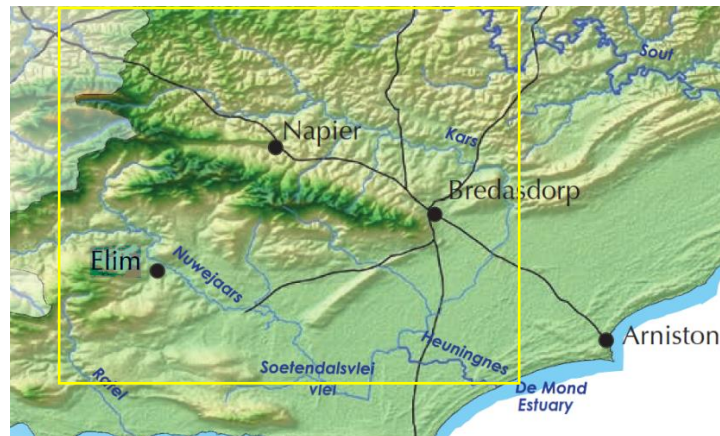


Figure 1. Top and bottom: 3-D Map of the Kars River. Box in top figure enlarged in the boom bottom. Arrows point to: yellow - the origins of the main tributary from the west; white - the location where the Kars River joins the Heuningnes River; blue arrow points to the Poort tributary.

Source: Rivers of the Breede Water Management Area, 2011.

The Kars River drains the Overberg southern Rûens (Bokkeveld shale hills; Chapter S) in the north and the Bredasdorp Mountains, of the TMG Group (Chapter C) in the south (Figure 2). The author is unaware of any study of this river.

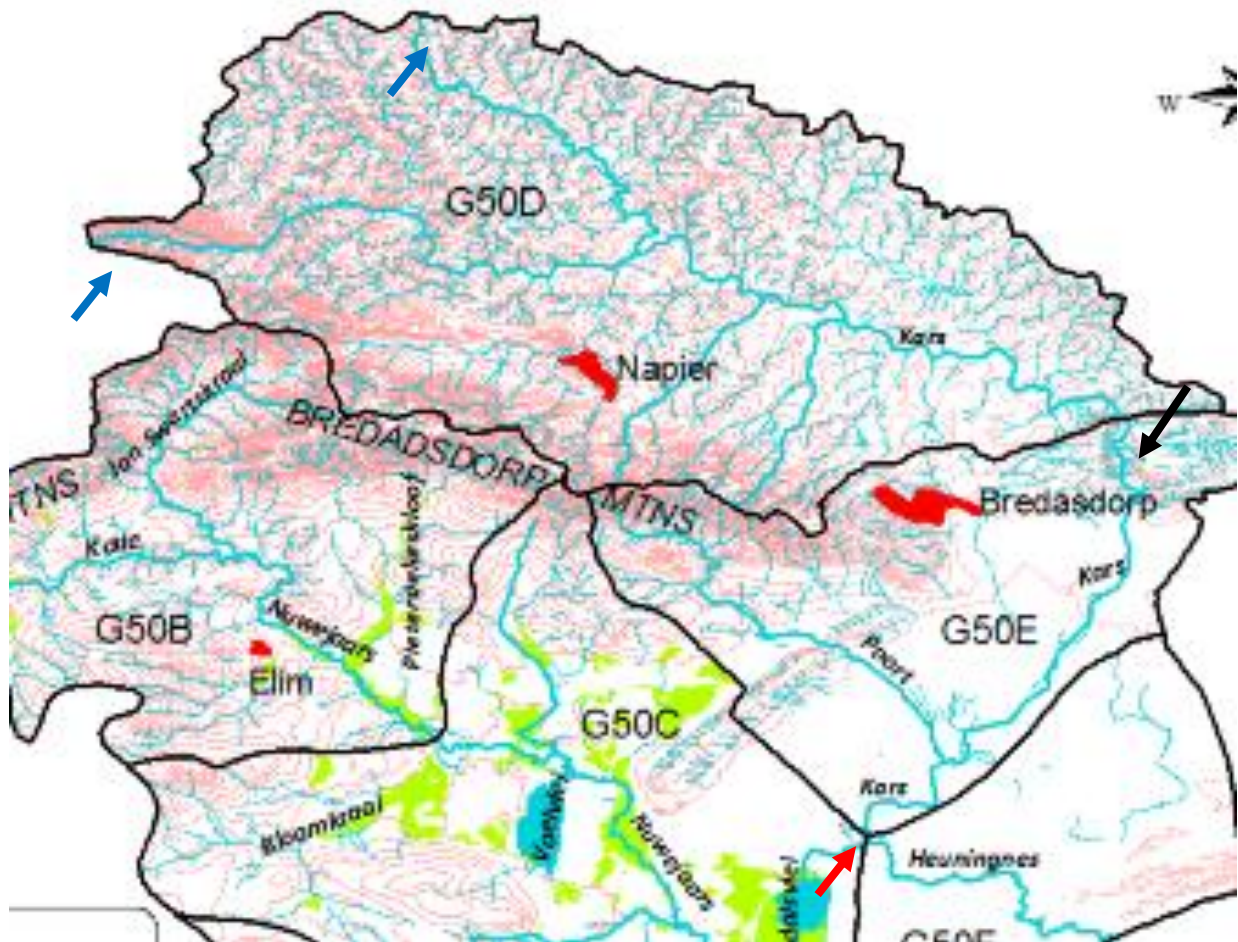


Figure 2. Map of the Kars River catchment area (sections G50D and G50E). Blue arrows point to the origins of the main tributary from the west. Black arrow points to the point where the Kars River goes through the Hard Dunes. Red arrow points to the point where the Kars River joins the Heuningnes River.

Source: D Mazvimavi: Report to the Water Research Commission, 2018

The Kars River can be divided into three main parts: the northern (north of Bredasdorp), the gorge and the southern (south of Bredasdorp (Figures 3 to 7).



Figure 3. Satellite image of the Kars River. Boxes: yellow – northern part; red – the gorge; white – southern part. Boxes enlarged below. Arrow points to Bredasdorp.



Figure 4. Satellite image of the northern part of the Kars River. Arrow points to Bredasdorp.

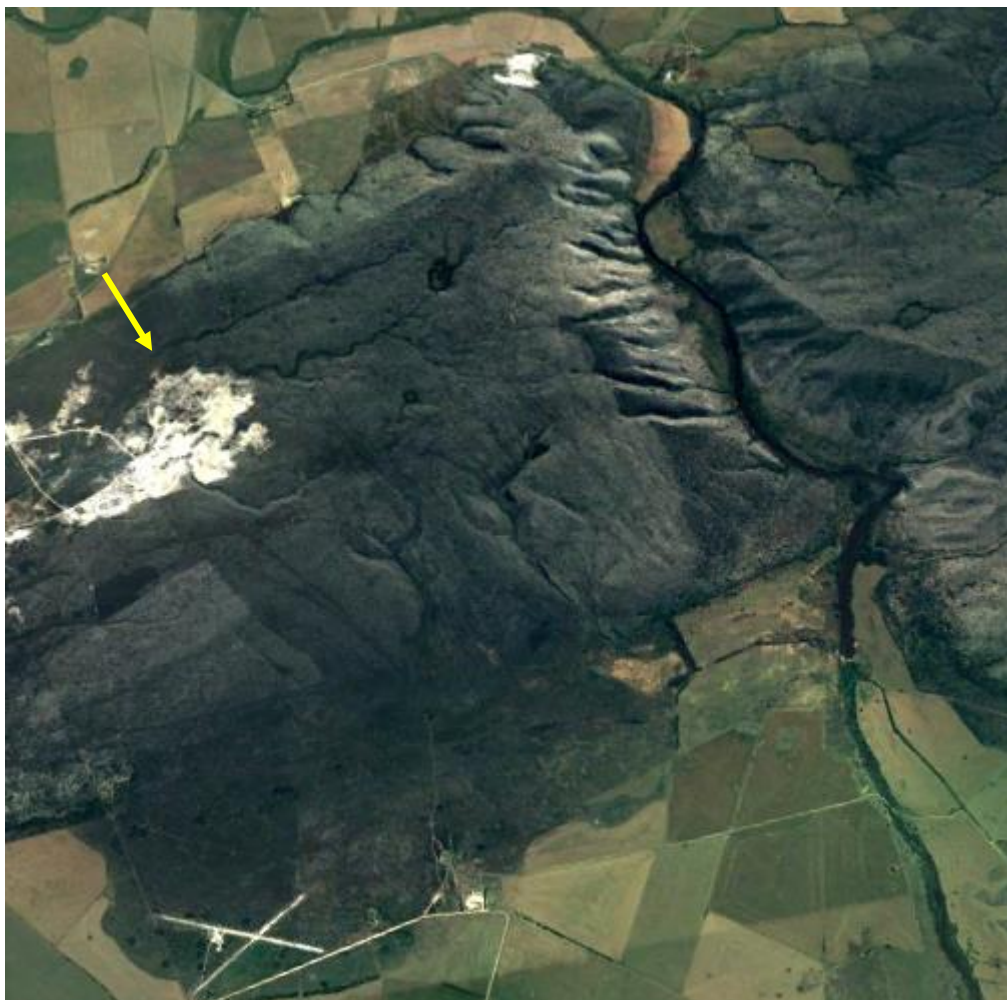


Figure 5. Satellite image of the Kars River Gorge. Arrow points to Bredasdorp lime quarry.



Figure 6. Satellite image of the southern part of the Kars River (orange arrows). Yellow arrow points to the Heuningnes River. White arrow points to the location where the Kars River joins the Heuningnes River.

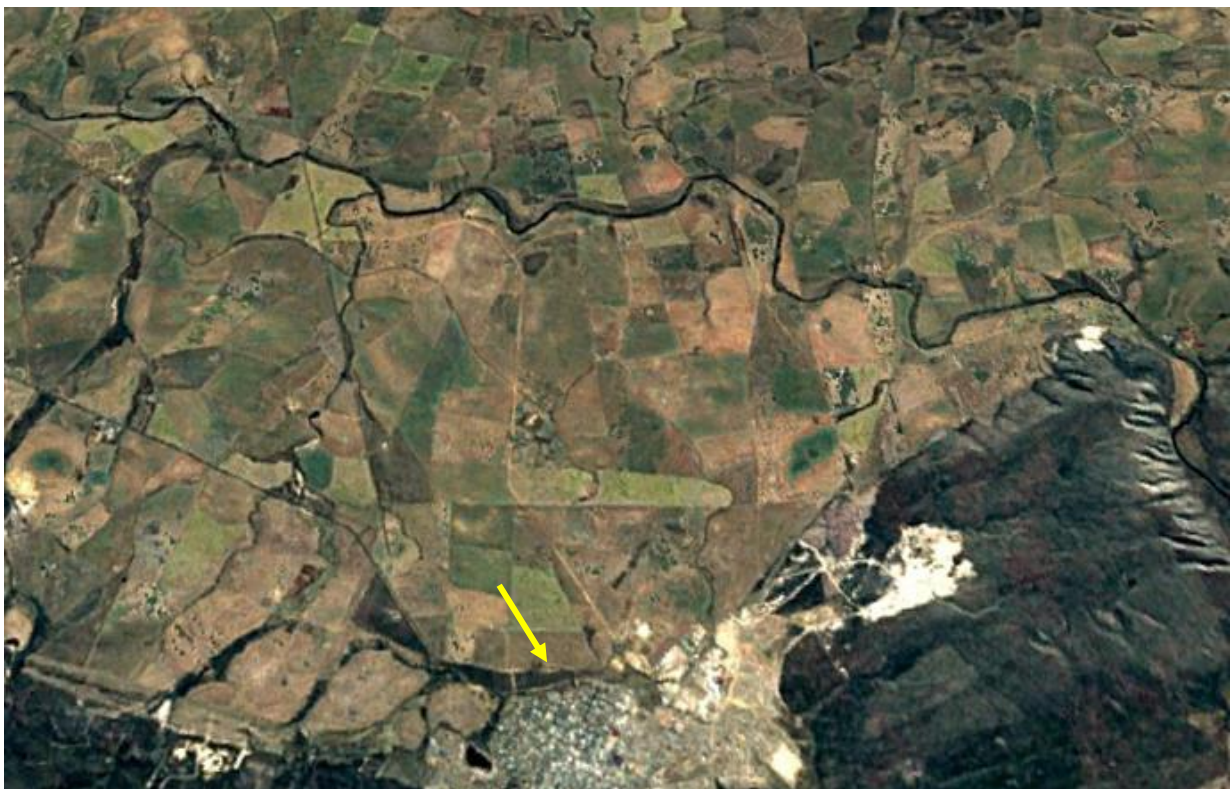


Figure 7. Satellite images of the northern part of the Kars River. Top – the western section, near Napier (arrow); bottom – the eastern section, near Bredasdorp (arrow).

About 6 km north of Bredasdorp, near Karsrivier Farm, the river goes under the R319 bridge (Figure 8).



Figure 8. The Kars River bridge north of Bredasdorp (on R319). Top – view to the south; bottom – view to the north; bottom - same point and view during flooding.

(Source of bottom photograph - Dep of water Affairs, 2012: Breede – Overberg Catchment Management Strategy).

East of the bridge, the river flows between the Kars lime quarry and the farm Rhenosterfontein (Figures 9 and 10).

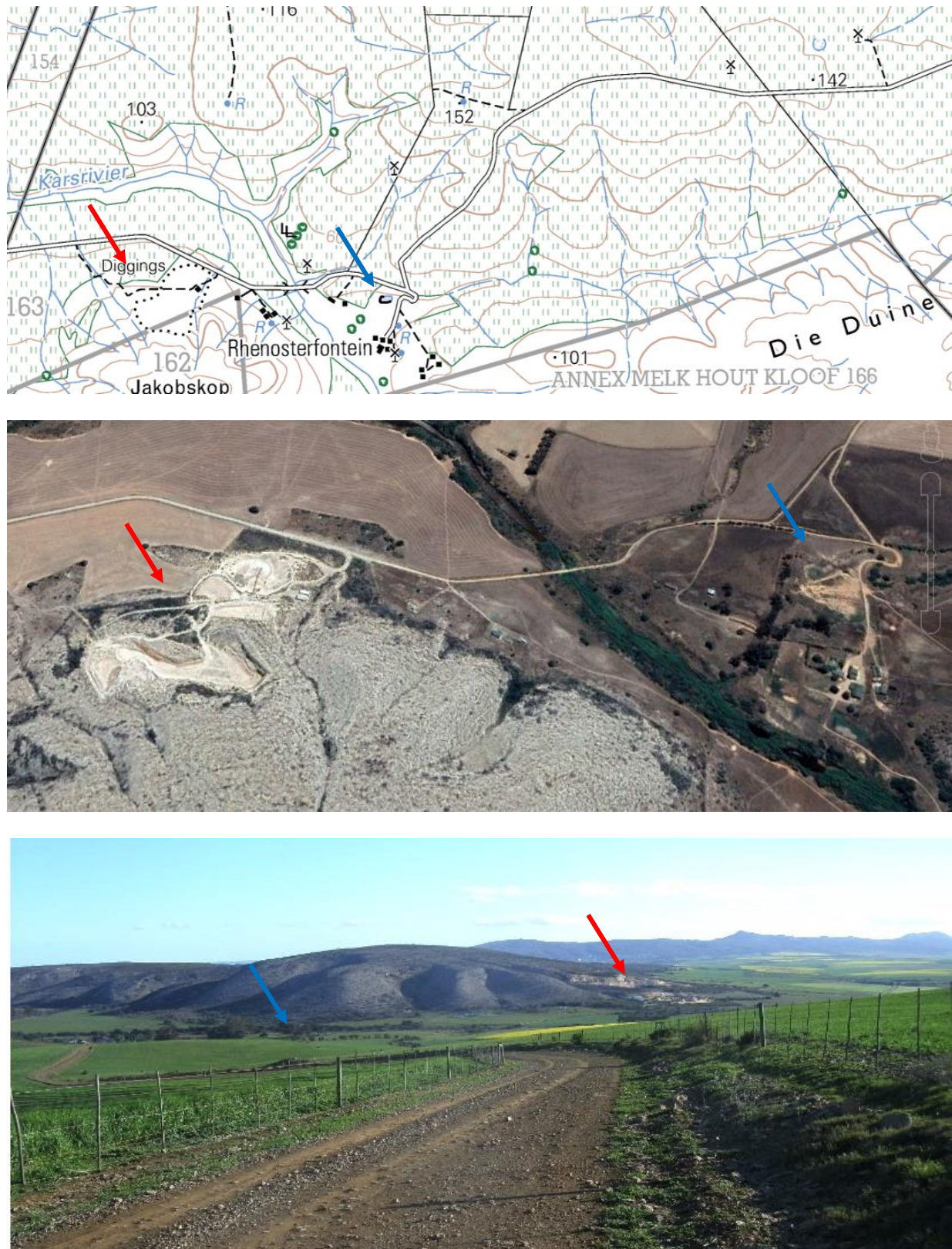


Figure 9. The Kars lime quarry (red arrow) and the farm Rhenosterfontein (blue arrow) at the north entrance to the Kars River Gorge. Top – topography map. Middle - satellite image; bottom – view from the east.



Figure 10. In the Kars lime quarry.

East of the Quarry the Kars River turns southwards and flows through the Kars River Gorge (Figures 11 to 15). The morphology, geology and archaeology of the gorge are the subjects of the following Field Notes.



Figure 11. The Kars River Gorge. View to the south.



Figure 11. Top and Bottom: the Kars River flows through the gorge. Views to the south.

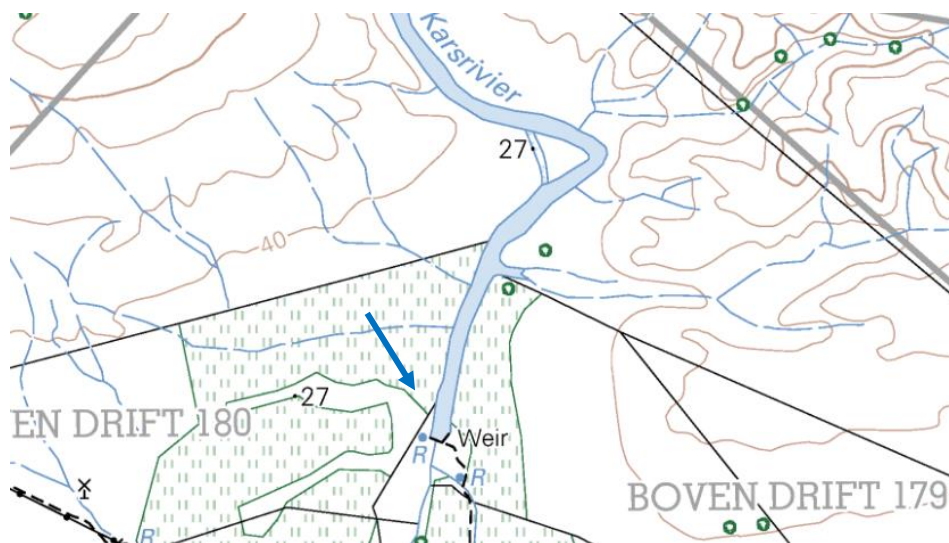


Figure 12. Top and middle: the Kars River flows through the gorge. Views to the south. Bottom – topography map showing the weir (arrow), built south of the gorge.



Figure 13. The Kars River weir south of the gorge. Top – view from the north; middle – view to the west; bottom – view from the weir to the north.

About 5 km south of the weir, near Nachtwacht farmhouse, the river goes under the bridge of the R316 (Figure 14)



Figure 14. The bridge of R316 over The Kars River. Top – topography map; blue arrow points to the bridge; red arrow points to a weir, south of the bridge (see Figure 15, bottom). Bottom – view to the south onto the bridge

From the bridge the river flows for another 250 m, where a broken weir is situated (Figures 15 and 16).



Figure 15. Satellite Image of the Kars River south of the R316 bridge, next to the Nachtwacht Farm. Yellow arrow – bridge; white arrow – weir.



Figure 16. The section of the Kars River before it enters the Kars River Vlei. Top and middle – views to the south; bottom – the weir at the entrance to the Kars River Vlei.

The Kars River Vlei is about 8.5 km long. During the years, furrows were excavated around the vlei to control flooding. From the south end of the vlei, the river flows through a meandering narrow course and connects to the Heuningnes River via a furrow (Figures 17 to 20).

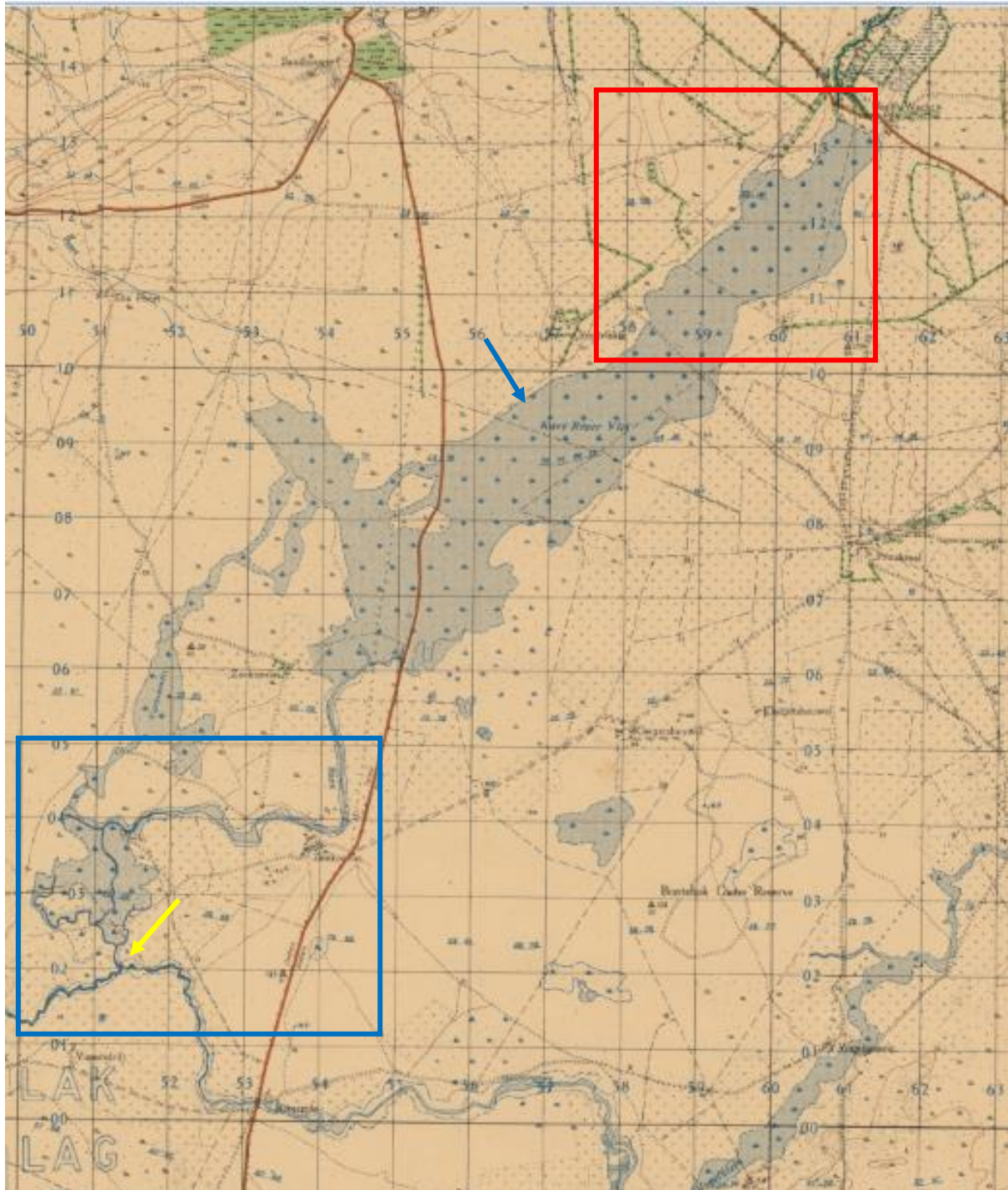


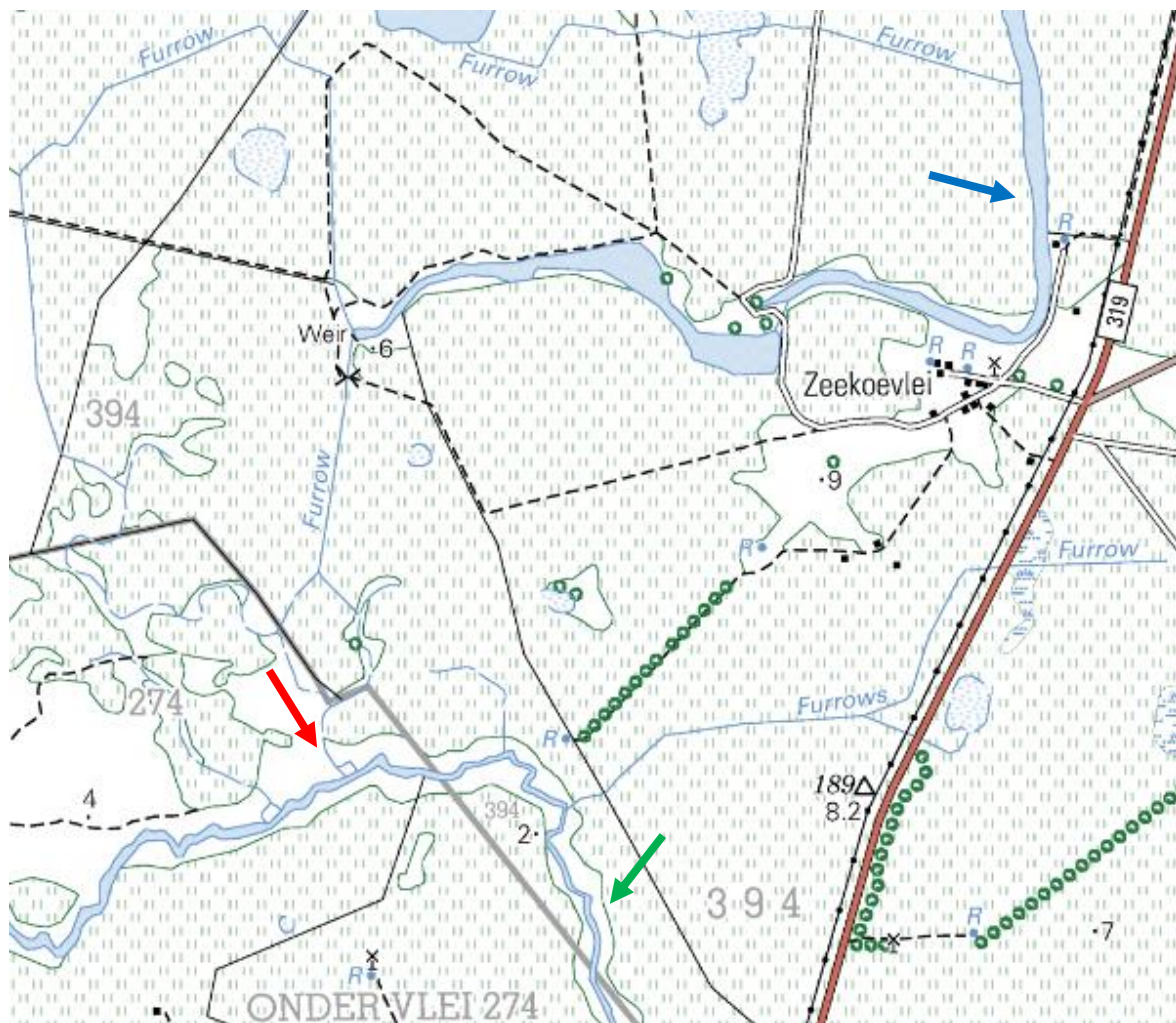
Figure 17. Topography map (1943) of the Kars River Vlei (blue arrow). Yellow arrow indicates the point where the Kars River connects to the Heuningnes River. Red box enlarged in Figure 18. Blue box enlarged in Figure 20.



Figure 18. Satellite image of the northern part of the Kars River Vlei, showing the farrows (arrows), which were dug along its banks, to prevent flooding of crops (Figure 19).



Figure 19. Top and bottom: the furrows around the vlei can be discerned from their surrounds by the light-green reeds.



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