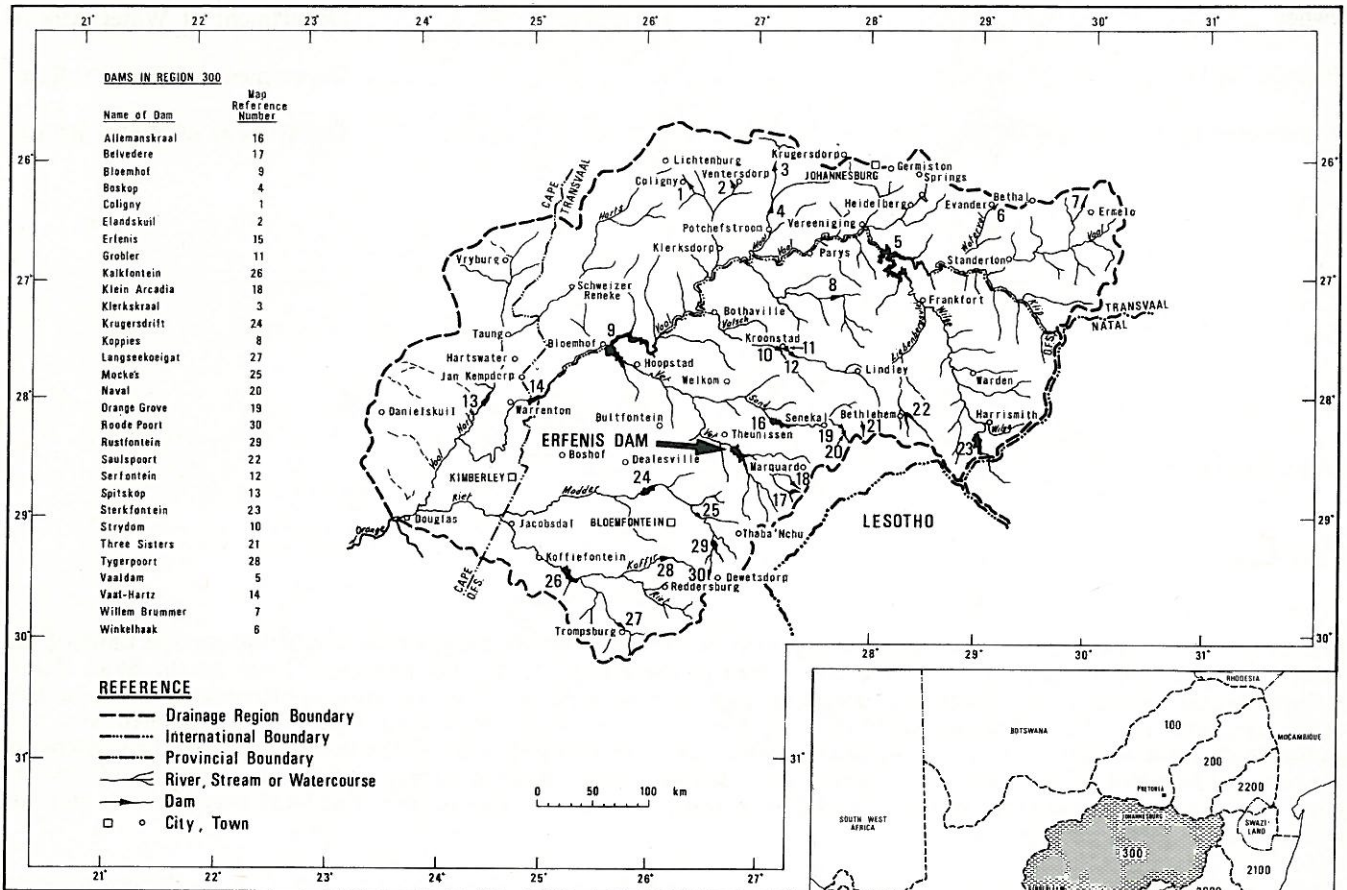
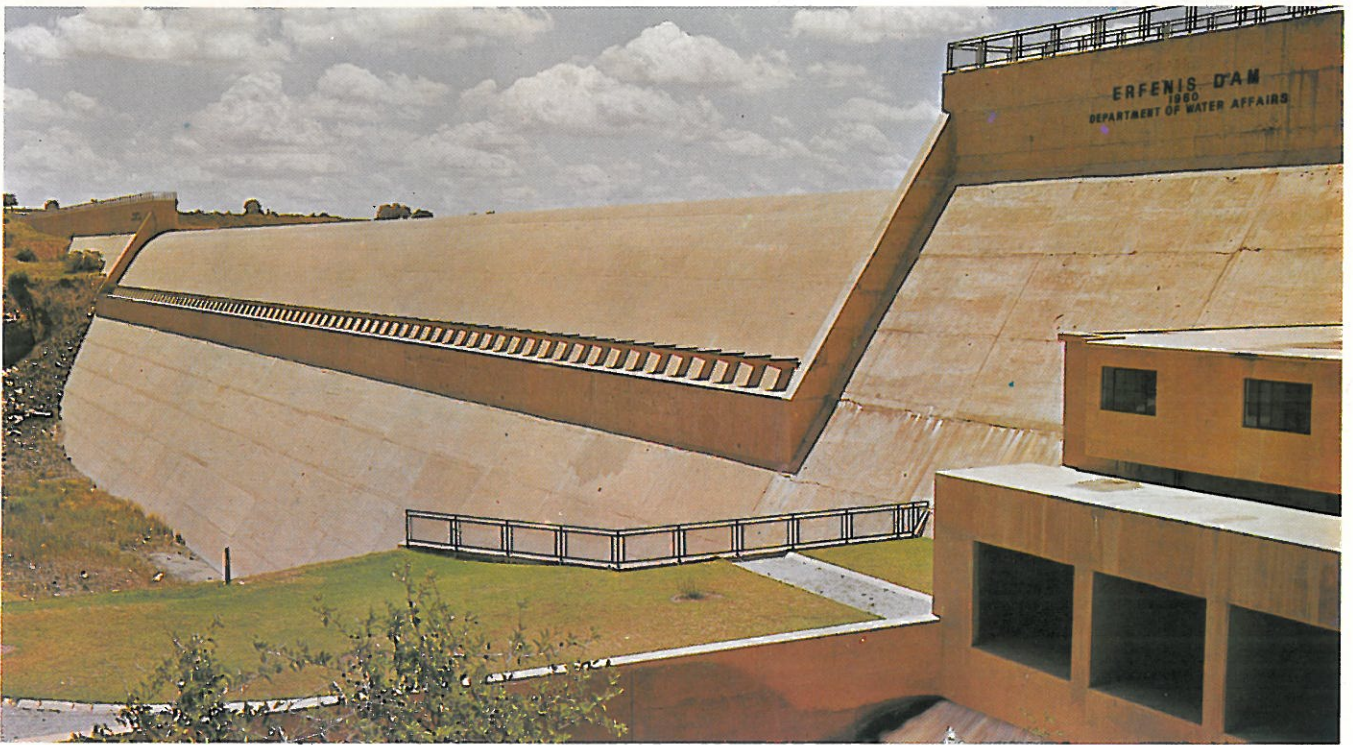
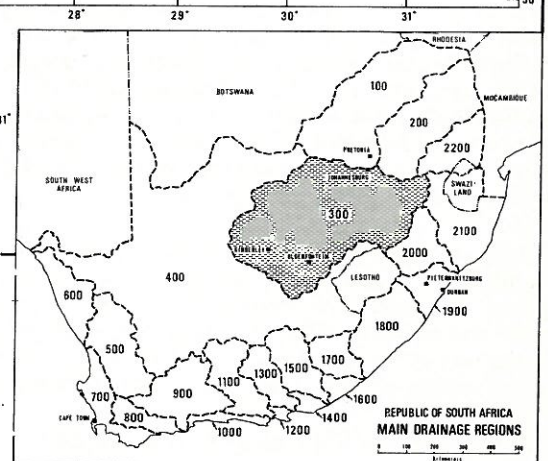


ERFENIS DAM



DRAINAGE REGION 300



ERFENIS

DATA

Year of completion.....	.1960
River.....	Vet
Nearest town.....	Theunissen
Province.....	Orange Free State
Type.....	Gravity
Height above lowest foundation.....	46 m
Length of crest.....	489 m
Volume content of dam.....	0,129 million m ³
Gross capacity of reservoir.....	237,184 million m ³
Purpose.....	Irrigation
Maximum discharge capacity of spillway.....	3 170 cumecs
Type of spillway.....	Uncontrolled
Owner.....	Department of Water Affairs
Engineering by.....	Department of Water Affairs
Constructed by.....	Department of Water Affairs

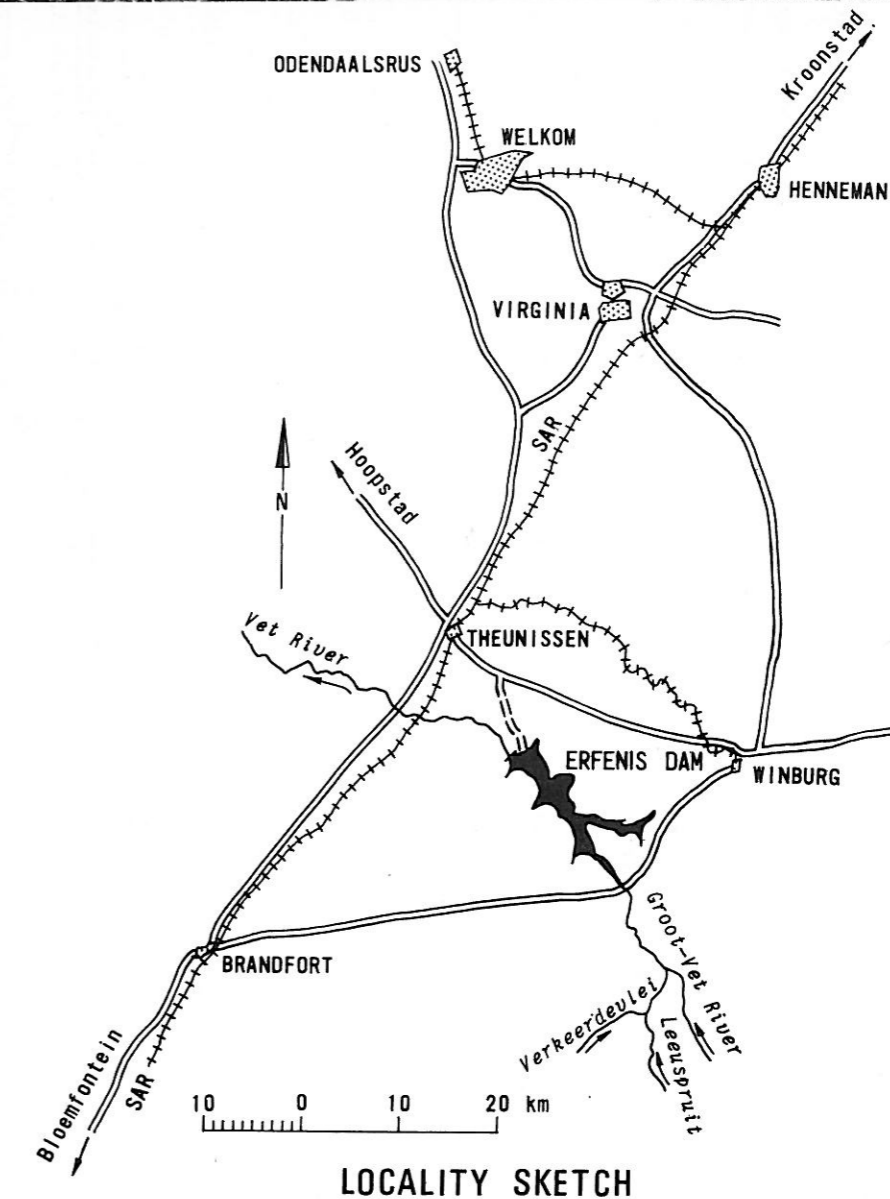
DESCRIPTION

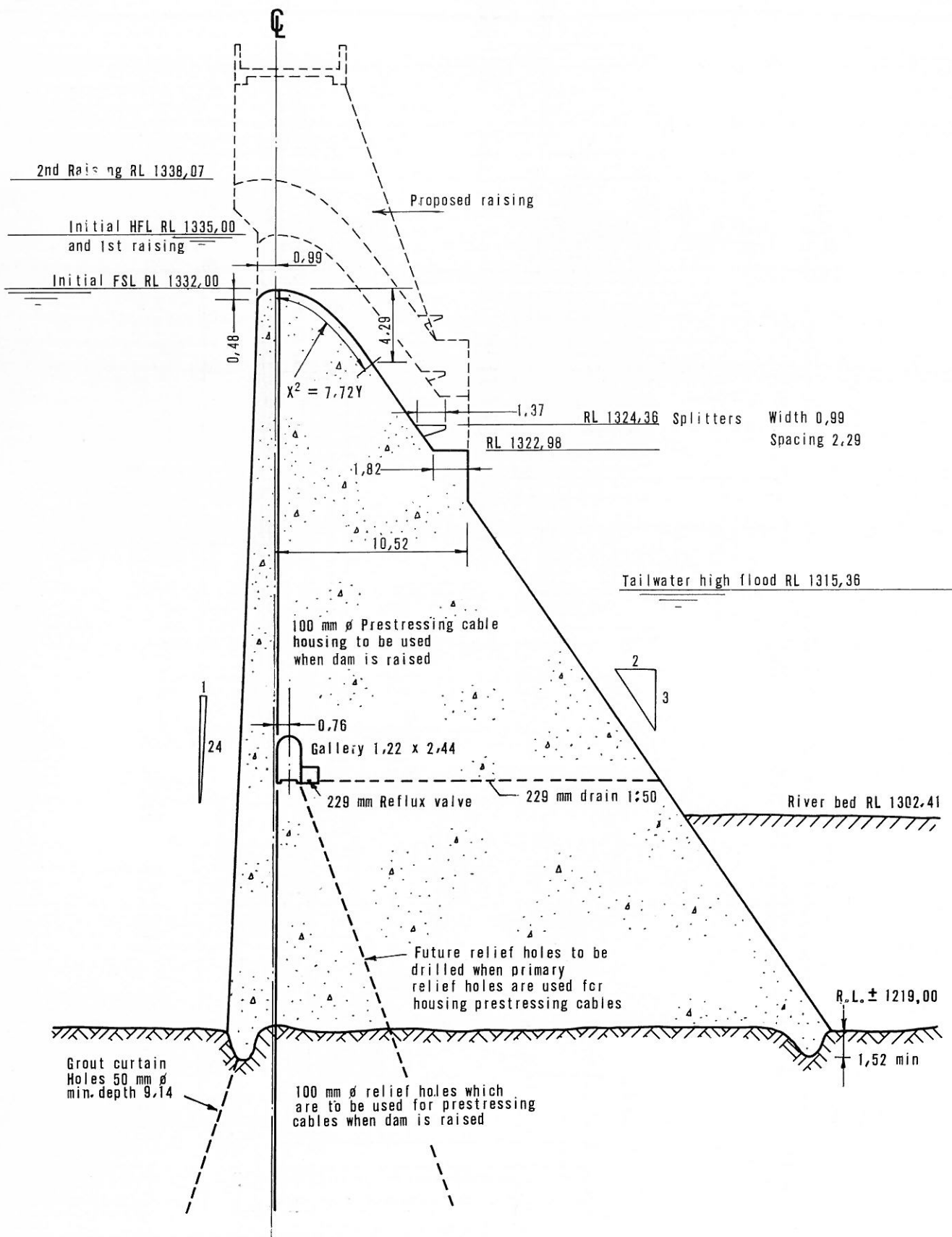
Erfenis Dam

Erfenis Dam is situated about 23 kilometres due west of the town of Winburg and is one of the storage units of the Sand-Vet Government Water Scheme. The other dam in the scheme is the Allemanskraal Dam on the Sand River. Erfenis Dam is a mass gravity concrete structure with an overspill section 183 metres long, approximately in the middle of the structure. This dam was constructed in a novel way viz. the pre-packed system. Boxes to be concreted were first packed with stone of various sizes and a cement mortar was then pumped in to fill the voids and make the contents of the box a solid block of concrete. This method was necessary as the local sand was so fine that it was unsuitable for good concrete, and coarse sand would have had to be imported over a long distance. The local fine sand was suitable for the cement intrusion process.

The main canal from the dam is on the left bank of the Vet River and extends to well below its confluence with the Sand River, a distance of about 40 kilometres. Farms traversed by the canals are each supplied with water to irrigate about 17 hectares of ground. Farms on the right bank of the river are also served by means of siphons through the river and small distributary canals. Where large patches of irrigable soil occur, the ground was bought by the State and given out as plots to settlers to be farmed on the intensive system. The two dams and their canal systems are being run as an integrated unit. The total scheduled area is 7 640 hectares.

Water from the Vet Canals is also supplied to the towns of Brandfort and Bultfontein to augment the towns' water supplies.





OVERSPILL SECTION