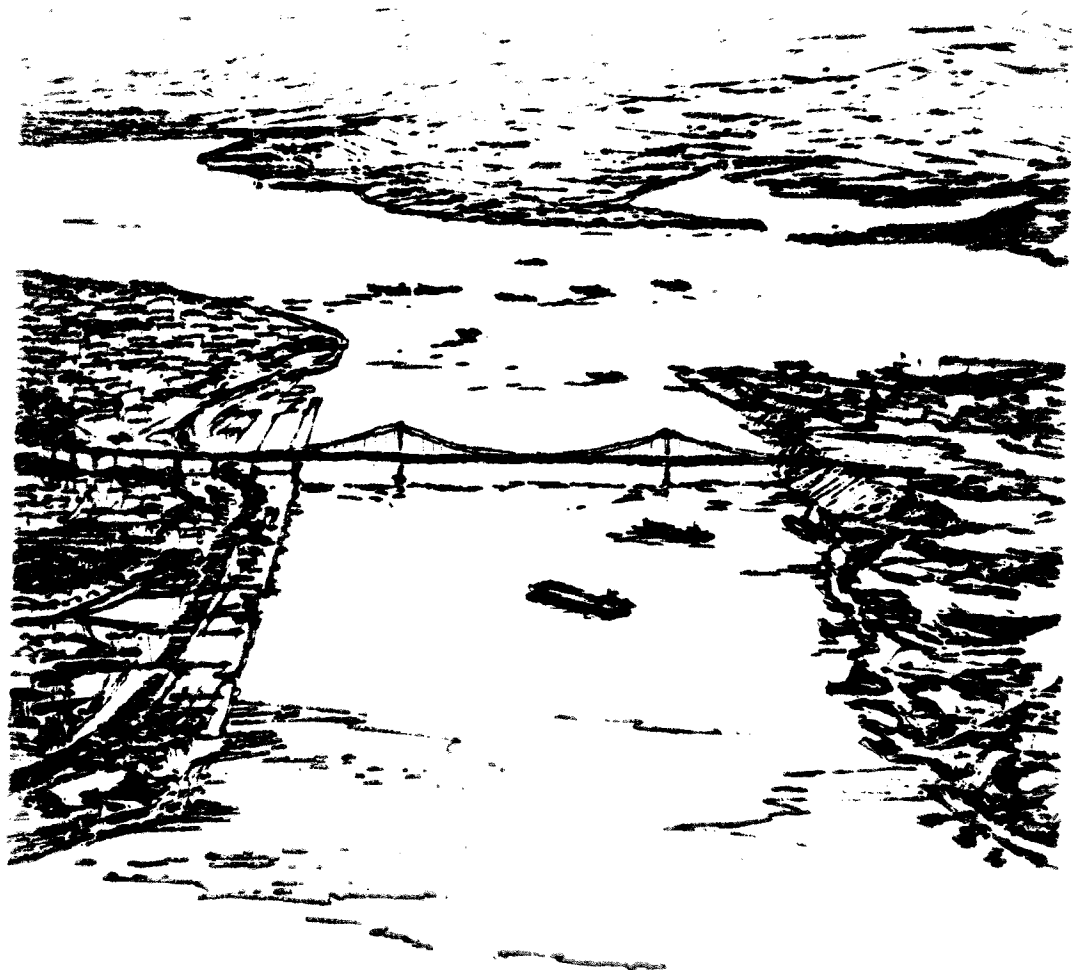


ADMINISTRAÇÃO - GERAL DO PORTO DE LISBOA

Hydro-morphological study Tagus Estuary

Extra work I and III
Quantitative morphological calculations



June 1982 / P473

PORT AND WATERWAY ENGINEERS


hydronamic^{bv}
sliedrecht holland

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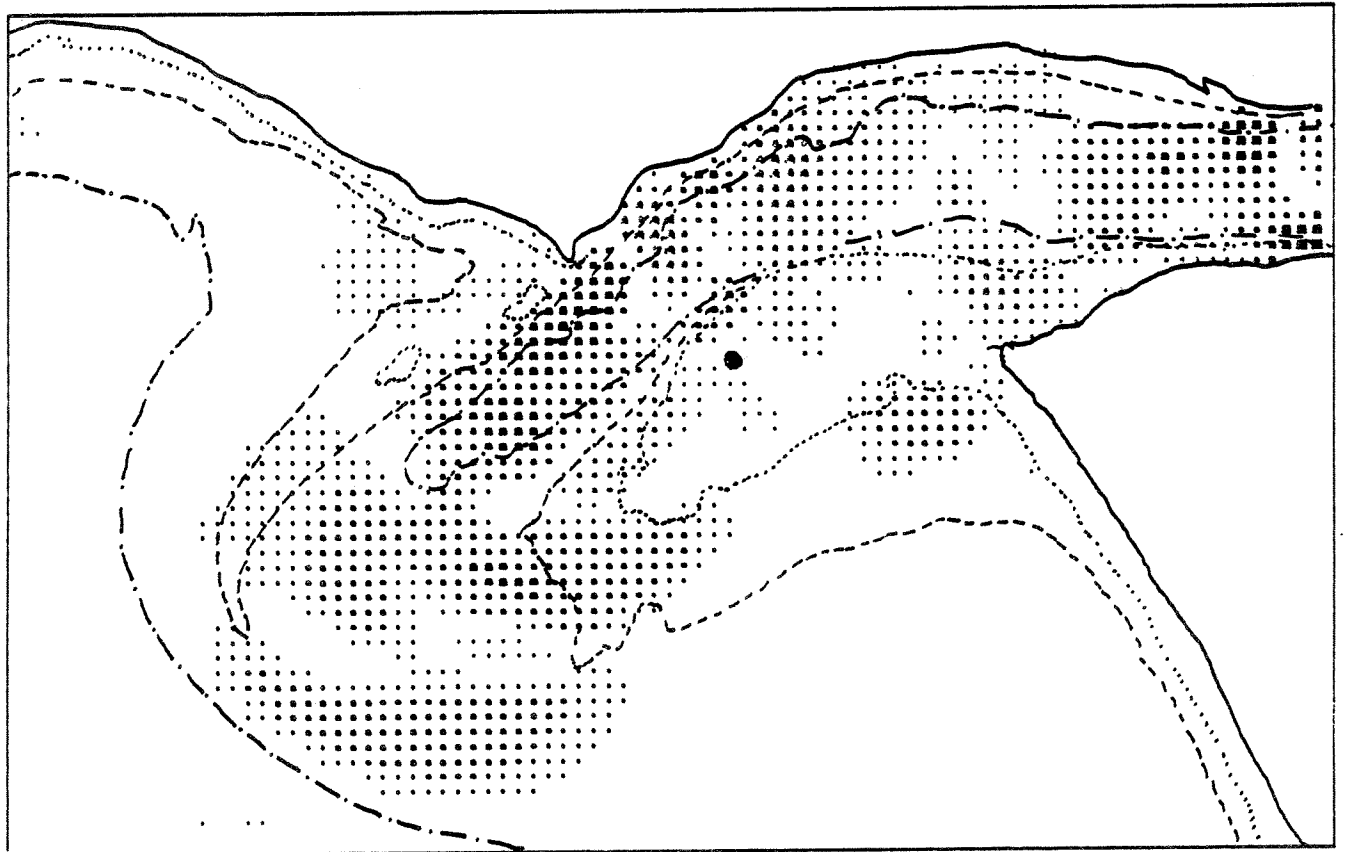
In our reports on the influences of the various alternatives of the Bugio terminal, the results of the morphological calculations are presented qualitatively only, because at that moment the final calibration of the sediment transport formula was not ready.

In the mean time this work is done (see volume 3.1 of the main study) and now it is possible to quantify the above mentioned morphological calculations.

In fig. 1 the present day siltation is presented.

In fig. 2, 4, 6, 8 and 10 the siltation for each alternative is given while in fig. 3, 5, 7, 9 and 11 the differences in siltation between the existing siltation and the new situation are given.

For a qualitative discussion can still be referred to our reports on extra work I and extra work III.



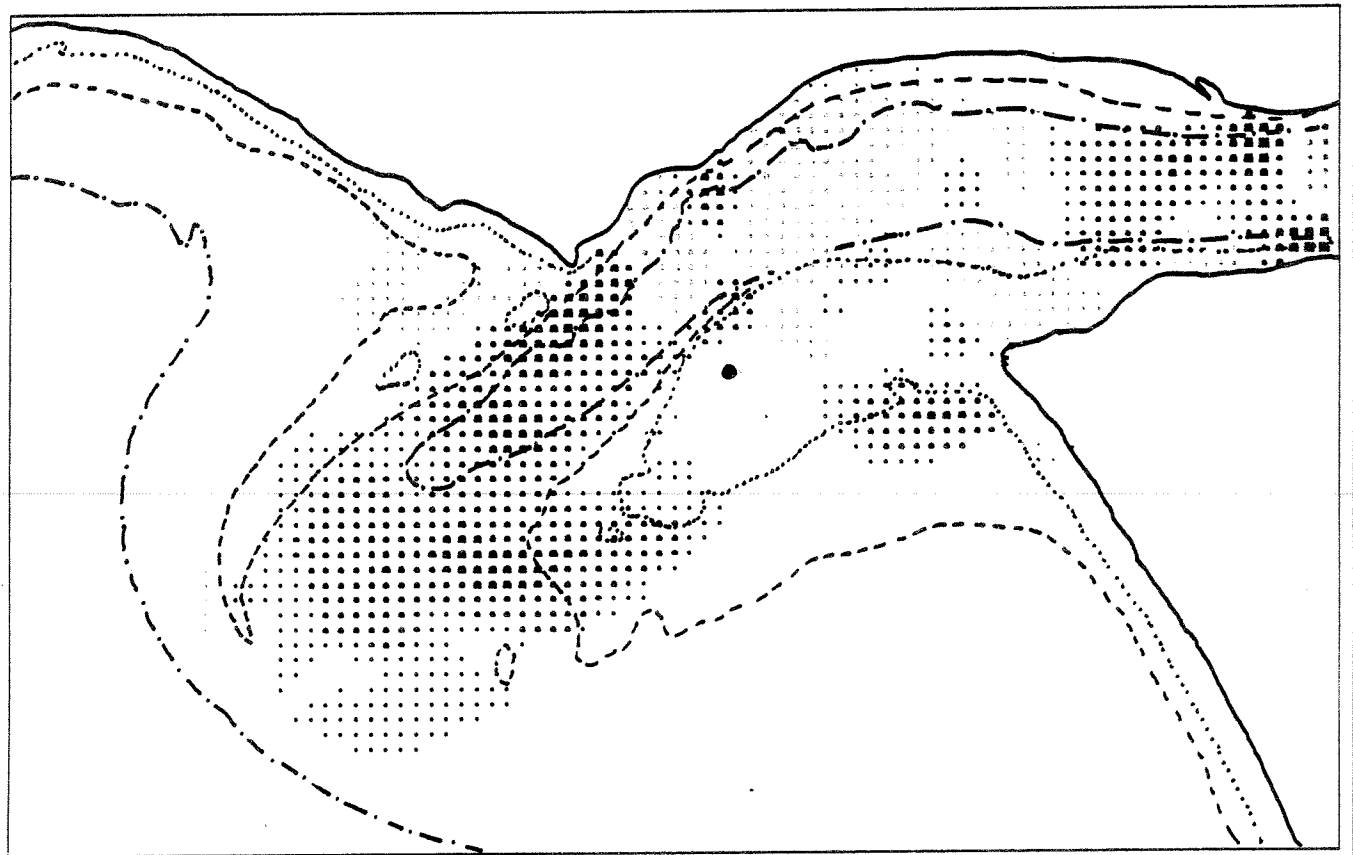
Existing situation

scale 1 : 100000

- erosion of 250 cm or more
- erosion of 125 cm
- sedimentation of 250 cm or more
- sedimentation of 125 cm



fig. 1



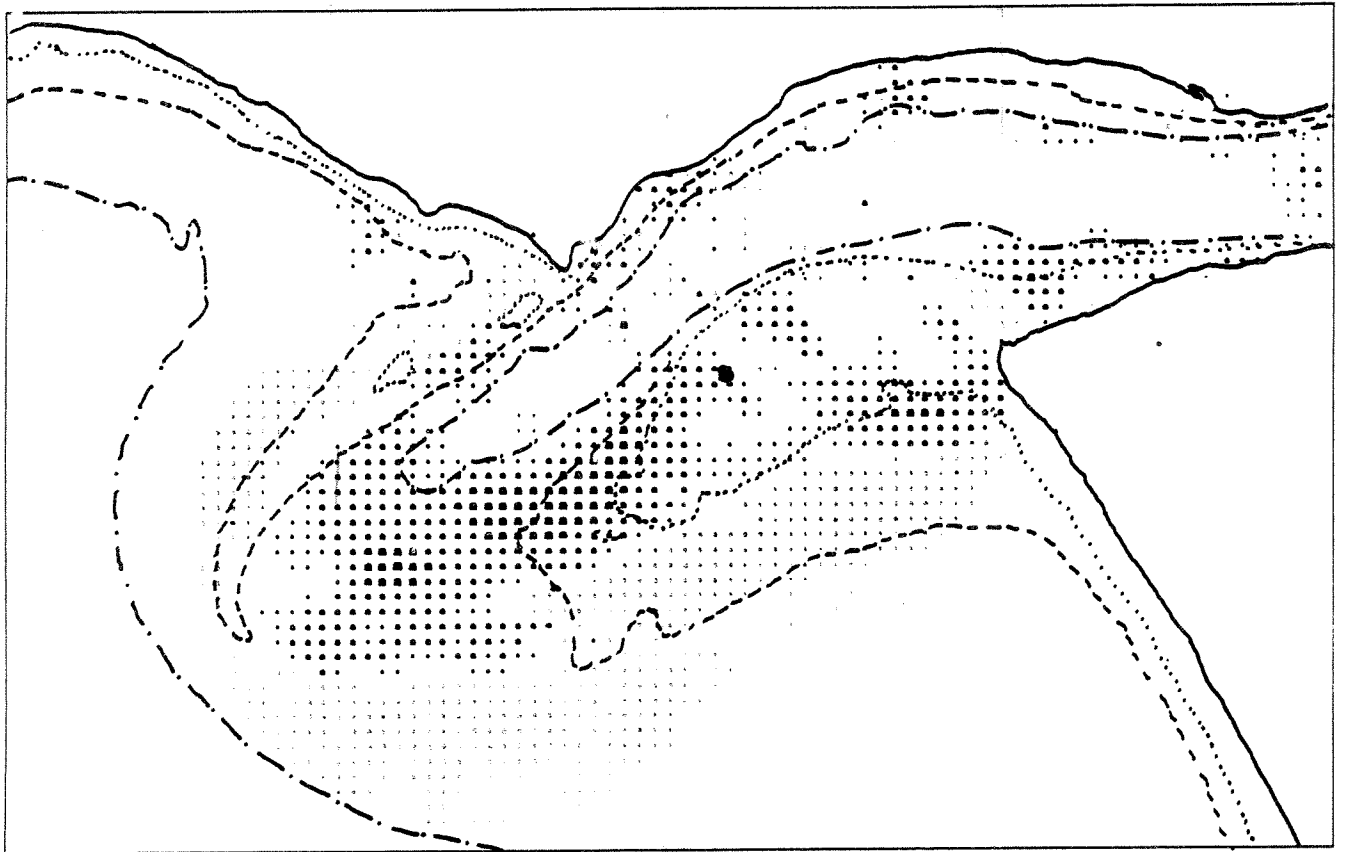
Dredged channel only (alternative 1)

scale 1 : 100000

erosion of 250 cm or more
 erosion of 125 cm

- sedimentation of 250 cm or more
- sedimentation of 125 cm





difference in siltation, alt. 1

scale 1 : 100000

erosion of 100 cm or more
 erosion of 50 cm

- sedimentation of 100 cm or more
- sedimentation of 50 cm

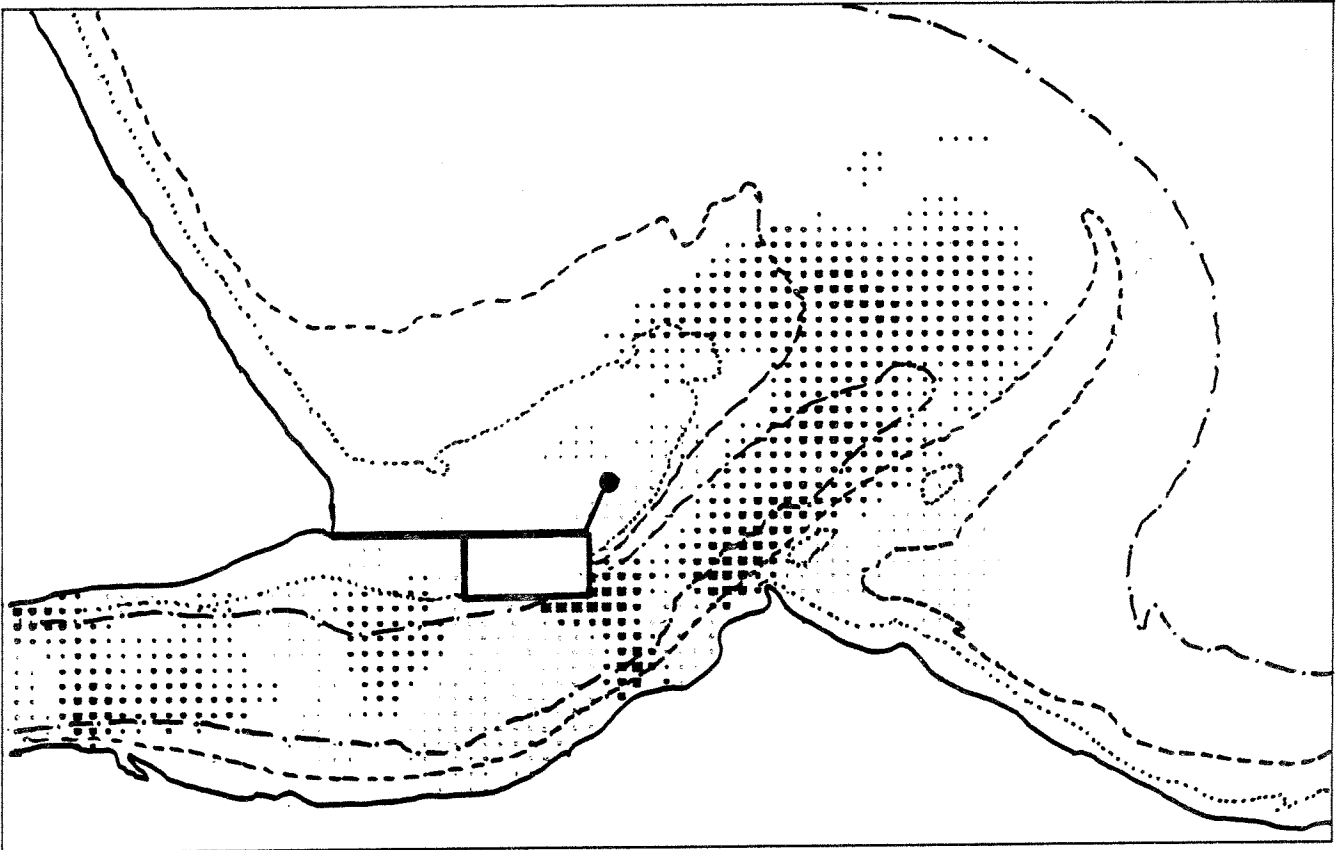


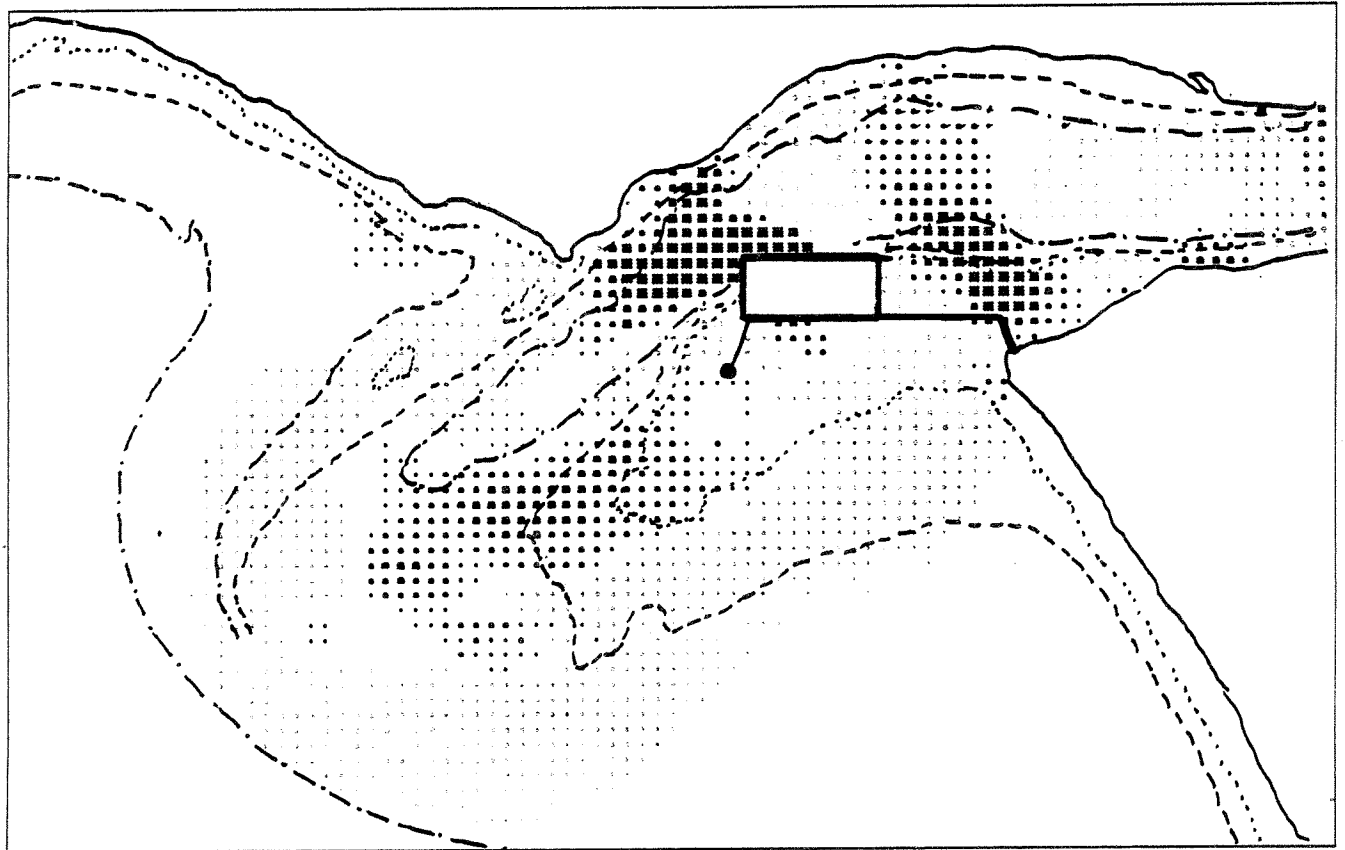
fig. 3



- sedimentation of 250 cm or more
 - sedimentation of 125 cm
 - erosion of 250 cm or more
 - erosion of 125 cm
- scale 1 : 100000

West terminal (alternative 2)





difference in siltation, alt. 2

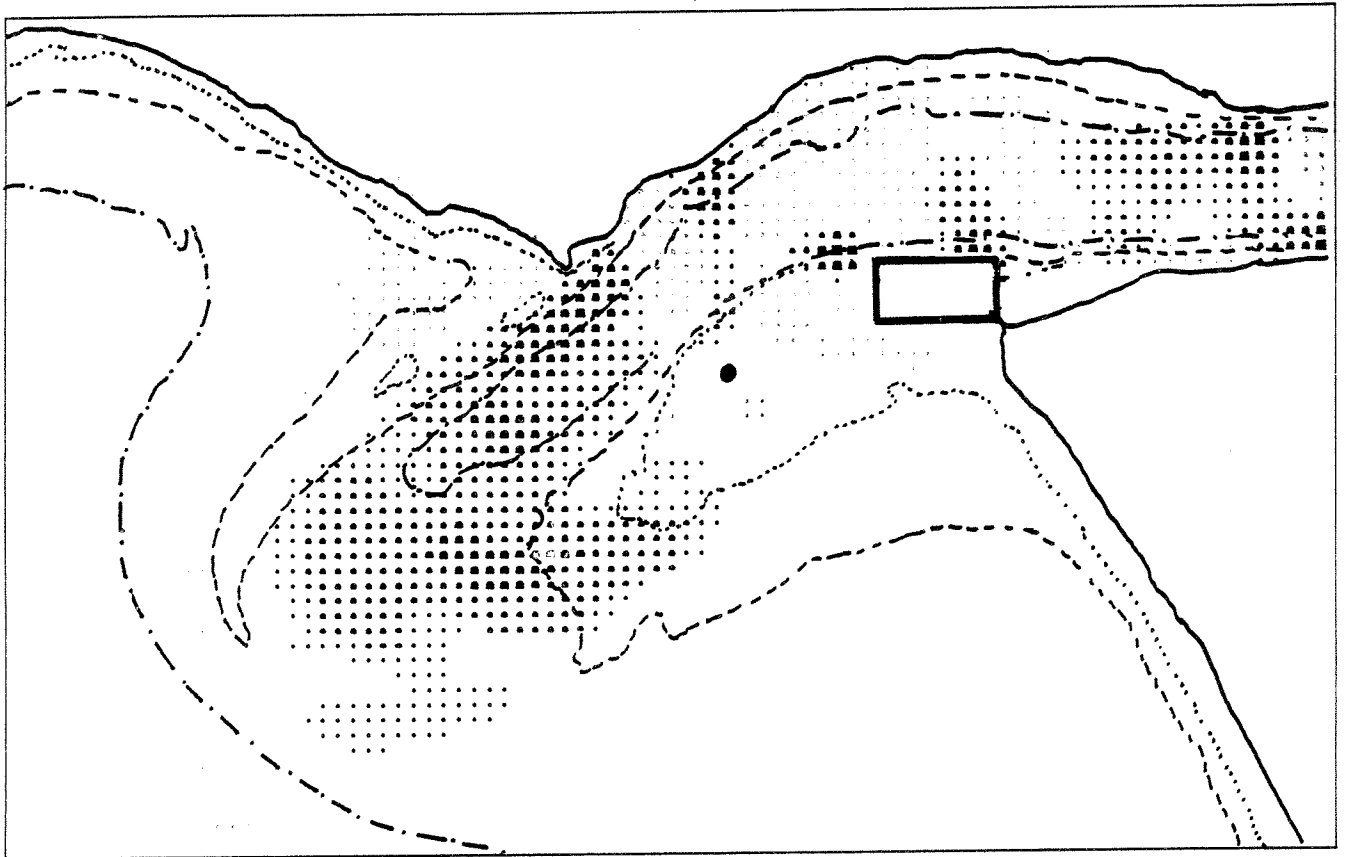
scale 1 : 100000

erosion of 100 cm or more
 erosion of 50 cm

- sedimentation of 100 cm or more
- sedimentation of 50 cm



fig. 5



East terminal (alternative 3)

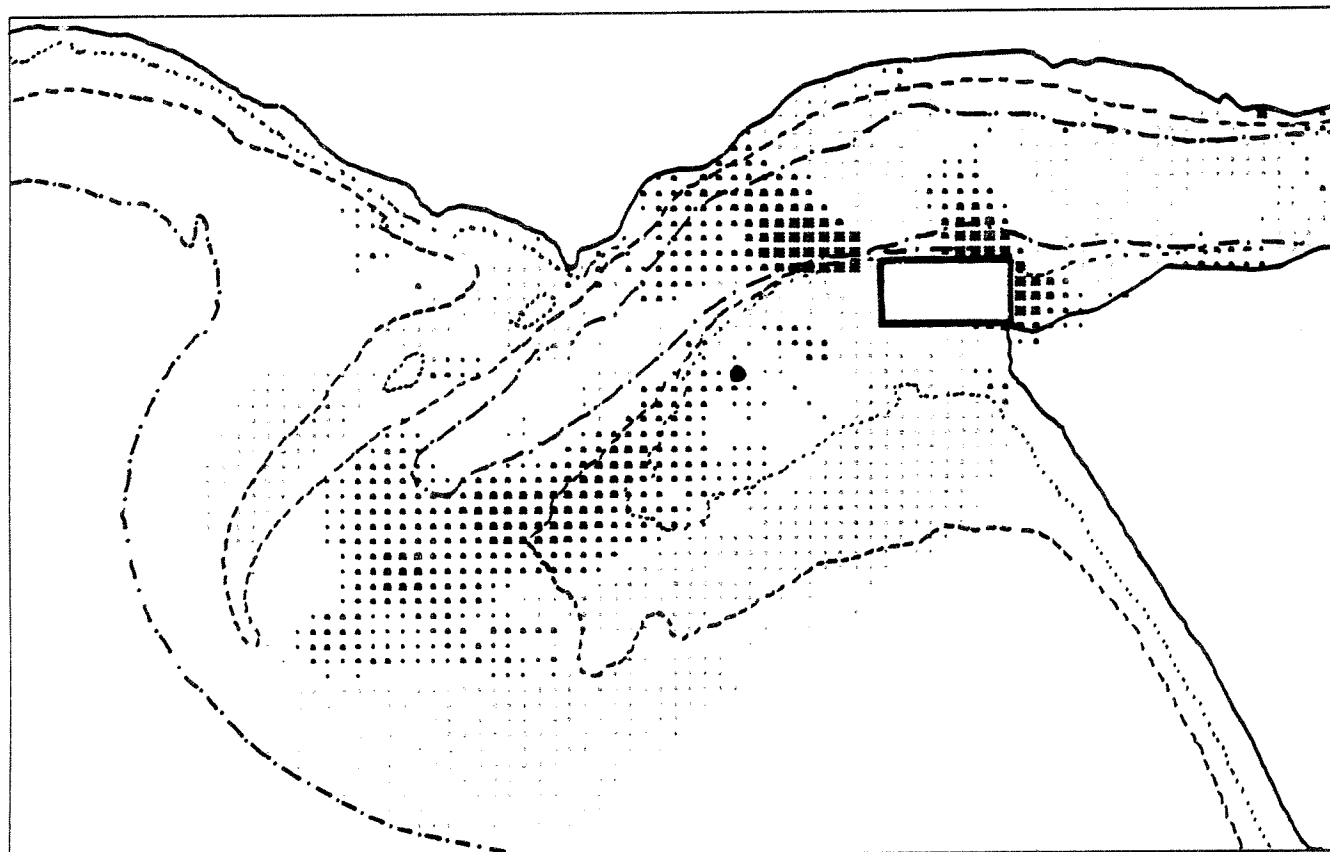
scale 1 : 100000

erosion of 250 cm or more
 erosion of 125 cm

- sedimentation of 250 cm or more
- sedimentation of 125 cm



fig. 6



difference in siltation, alt. 3

scale 1 : 100000

erosion of 100 cm or more

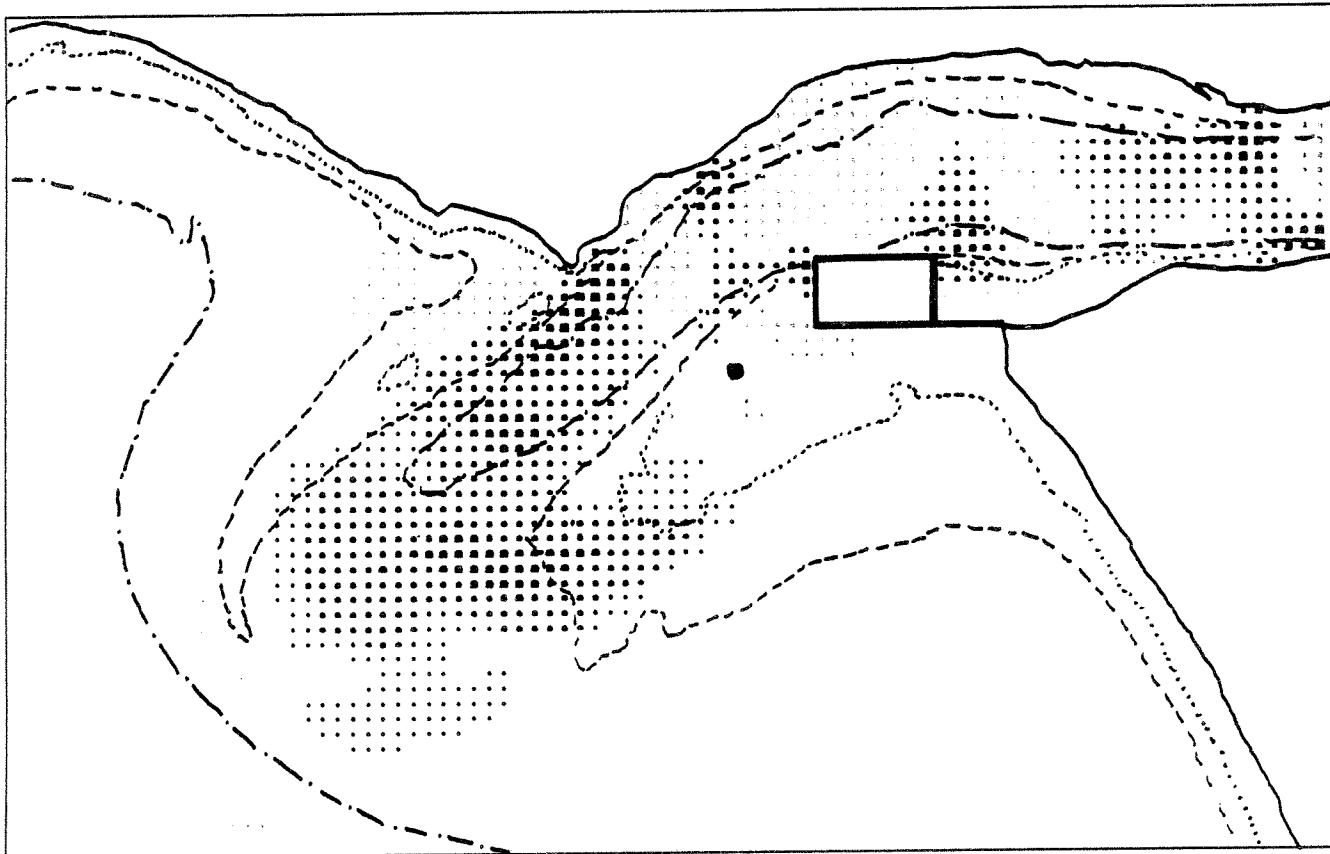
erosion of 50 cm

■ sedimentation of 100 cm or more

• sedimentation of 50 cm



fig. 7



Middle terminal without connection (alt. 4)

scale 1 : 100000

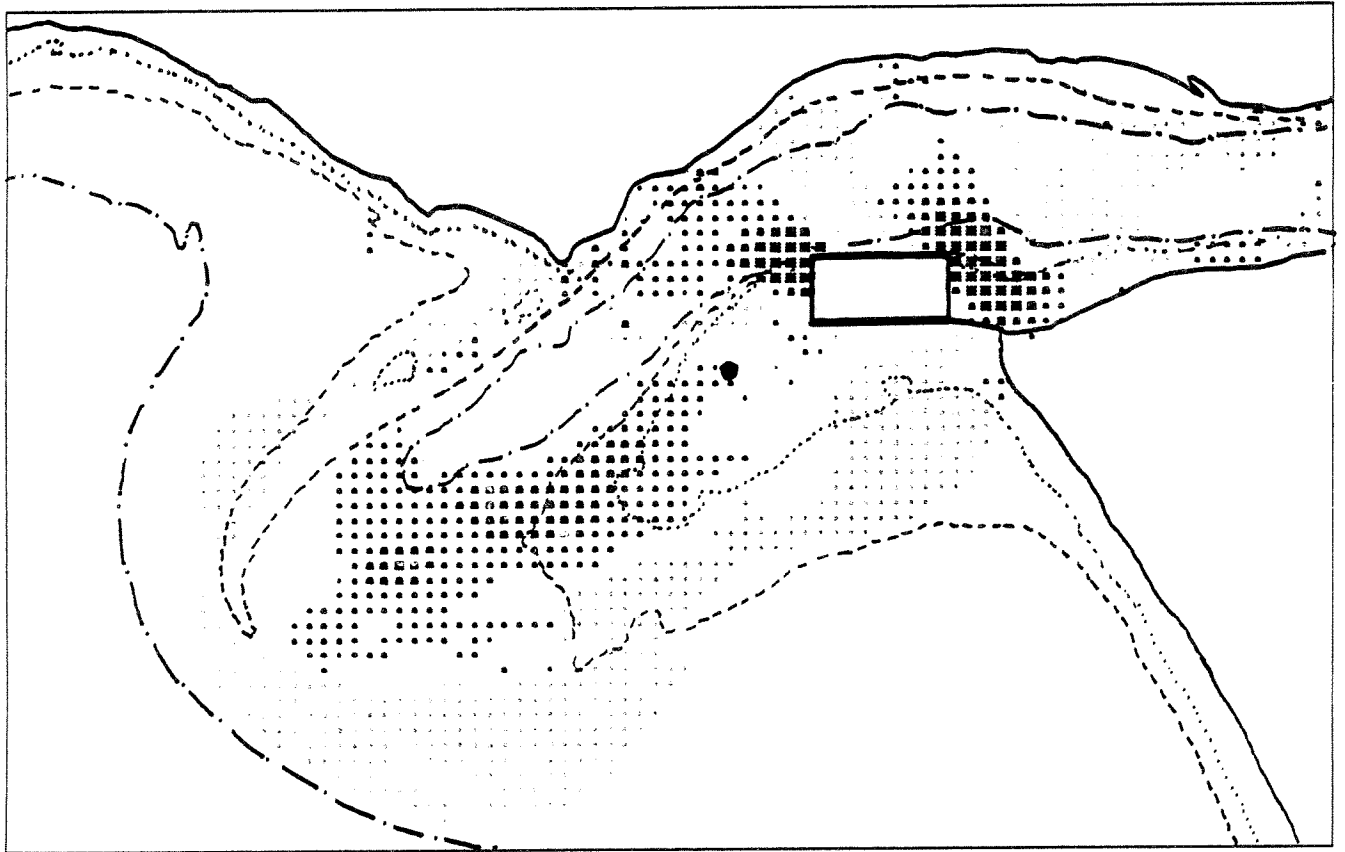
erosion of 250 cm or more

erosion of 125 cm

■ sedimentation of 250 cm or more

• sedimentation of 125 cm





differences in siltation, alt. 4

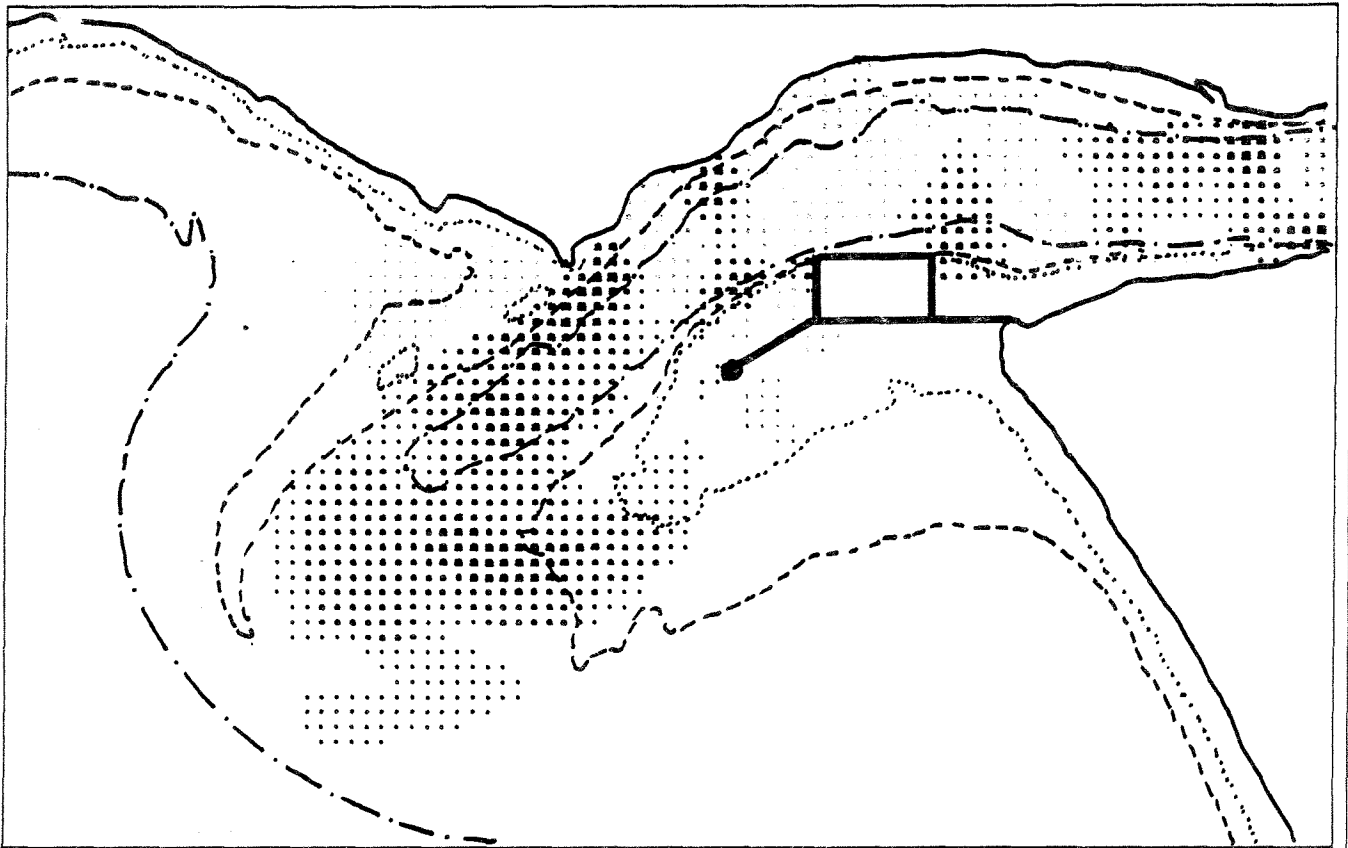
scale 1 : 100000

erosion of 100 cm or more
 erosion of 50 cm

- sedimentation of 100 cm or more
- sedimentation of 50 cm



fig. 9



Middle terminal with connection (alt. 5)

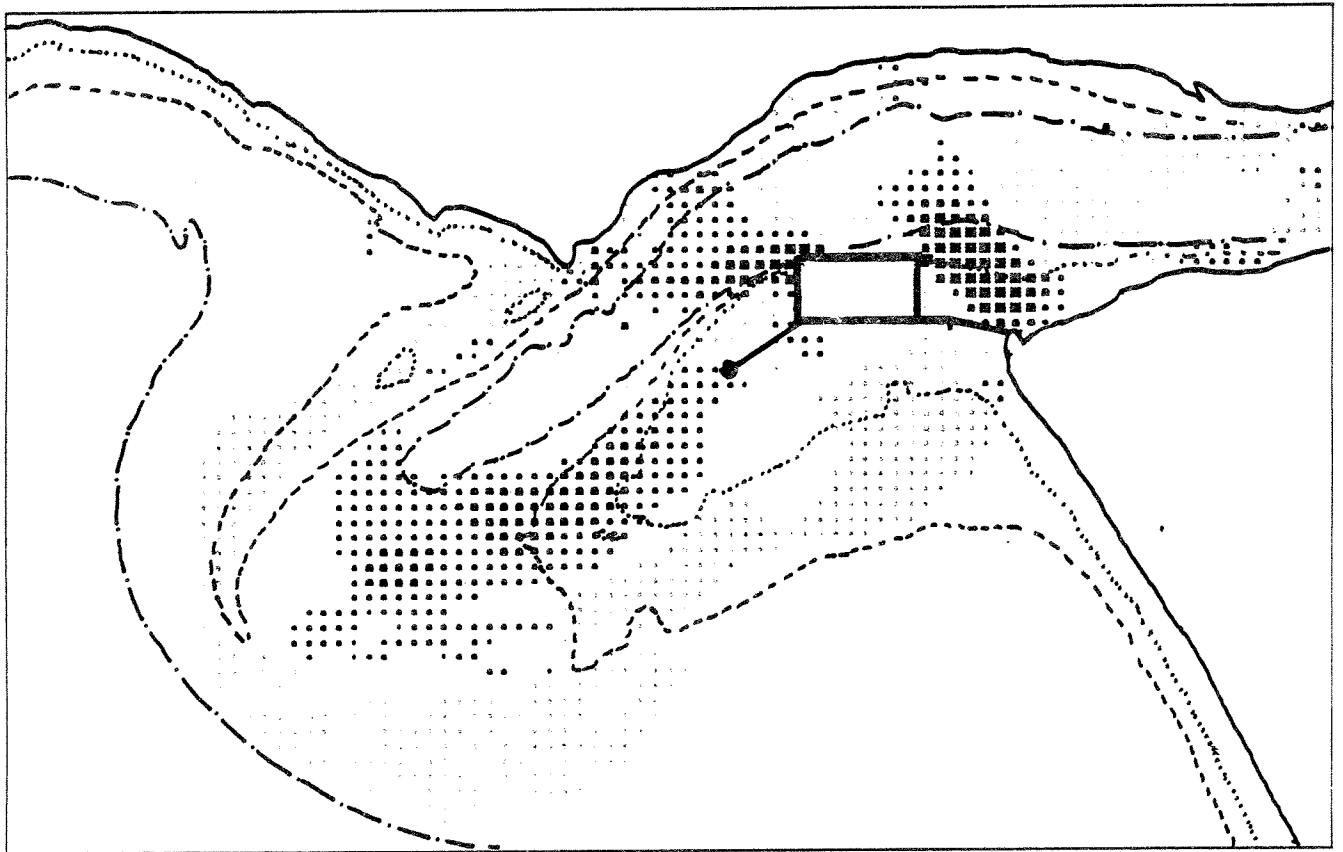
scale 1 : 100000

erosion of 250 cm or more

erosion of 125 cm

- sedimentation of 250 cm or more
- sedimentation of 125 cm





difference in siltation, alt. 5

scale 1 : 1000000

erosion of 100 cm or more

erosion of 50 cm

■ sedimentation of 100 cm or more

• sedimentation of 50 cm

