





## Foreland excavation

## Scheller en Oldeneler Buitenwaarden

In the coming years, Groot Salland Water Board will work on the River IJssel in order to keep Zwolle and the surrounding area safe and dry. In the Scheller en Oldeneler Buitenwaarden (Outer Forelands of Schellerwade and Oldeneel), a new water channel will be constructed between Oldeneel and the Engelse Werk. Work will start in 2011 and be completed in 2015.

### Space for the river

This project is part of the national 'Space for the River' programme: 39 government measures for the purposes of both increasing safety and protecting the area against flooding in the future. In addition to safety, the programme will also improve the environmental quality, as the area will be made more attractive and will offer more space for nature and recreation.

Groot Salland Water Board, with centuries of experience in such matters, will ensure that the plans are carried out correctly and punctually. In the past, such planning has been carried out by the Municipality of Zwolle. The excavation of the forelands will ensure that the water level of the IJssel at Zwolle will be reduced by 8 cm during normative high-water. Prevention of floods is the number one priority, although attention is also given to the special significance of the IJssel to Zwolle. It is an area of natural beauty, where people go to enjoy the water and the nature. We wish to strengthen this aspect of the IJssel. The phasing out of farmland will allow the nature to blossom once again, and we will ensure that the newly created countryside is made accessible, allowing everybody from Zwolle and beyond to enjoy it.

### Inconvenience caused by the work will be minimised

Of course, the measures taken as part of the 'Space for the River' programme are not all positive for everyone. In the interest of public safety, the familiar environment must change.

Some people in the planned area will even have to move. Furthermore, the work involved in creating the channels will also cause problems. In conjunction with all government bodies involved, Groot Salland Water Board will strive to notify residents of the area and surrounding areas of all developments, to involve them in the plans and, wherever possible, to compensate for any inconvenience and damage.

### What is going to happen, and where?

The Scheller en Oldeneler Buitenwaarden are situated to the south-west of Zwolle, on the eastern bank of the IJssel. The planned area is roughly 135 hectares in size. Situated near the IJsseldijk is the Engelse Werk, a park with a romantic English landscape style. The foreland is going to change significantly. The following

is a short summary of the work planned:

- On the site, which currently consists of mainly farmland, a system of channels will be constructed
- The Zandwinplas, currently 20 m deep, will be shallowed and filled in. This is
  necessary to secure the overflow area. Furthermore, it will allow the creation
  of a wonderful nature area (with, amongst others, a habitat for the corncrake).
- Two residents of the foreland will be relocated to two houses that will be built on the dike.





Future situation

### What will the area look like in the future?

- The channels will go under the new railway bridge on the Hanzelijn.
   The larger channel will have an open connection to the IJssel, giving the countryside a chance to develop in the transition between water and land.
   The southern part of the area will be grassland.
- Upstream, water will be supplied by means of a culvert (a shaft or tube that
  connects waterways with each other). This will enable replacement of the
  water in the channels. When the water level rises, the forelands will fill up
  first via the downstream connection with the IJssel. It is expected that
  the overflow will be filled in for several weeks at a time, and will be flooded
  into the area.
- The land outside the dike(s) will be redesigned and include recreational facilities.

### **Groot Salland Water Board and Space for the River**

The foreland excavation in the Scheller en Oldeneler Buitenwaarden is not the only 'Space for the River' project in the Zwolle area. To the north of the railway bridge over the IJssel, the displacement of the Westenholte dike will take place. In Deventer, Groot Salland Water Board will also conduct excavations in the forelands of the Keizers-, Stobben- and Olsterwaarden and Bolwerksplas, Worp and Ossenwaard.

# 'Prevention of floods is the number one priority'

### **Facts and figures**

### Motivation for 'Space for the River'

- In 1993 and 1995, the river's waters were extremely high
- In 1995, 250,000 people had to be evacuated due to high-water level

### **Schedule**

- Plan development: Up to 2009
- Predesign of zoning plan: 2010
- Adoption of zoning plan: 2011
- Commencement of work: 2011
- Completion of work: 2015

### Scale/details

- By normative high-water levels, 16,000 m³ per second at Lobith equates to an 8 cm reduction
- Average width of new channels: approximately 75 m
- Depth at deepest points of the new channels: up to 2.79 m
- Maximum excavation depth: 4 m
- Maximum amount of excavated earth: 1,300,000 m<sup>3</sup>
- Relocation of two houses to become dike residences
- Zandwinplas (20 m deep) to be shallowed and filled in
- Construction of footpaths
- New cross-channel connections

### **Financing**

• Budget: approximately € 17 million