

# PROJECT SHEET

FORELANDS EXCAVATION DEVENTER

ROOM FOR THE RIVER

# INTRODUCTION

The river Ussel narrows at Deventer. This bottleneck is an obstacle at high tide. The river needs to be given more space. The project Room for the River Deventer seeks to improve water safety by excavating six large secondary ditches (also known in Dutch as "hanks") along a length of approximately 10 kilometres. The activities are performed in the foreland areas of the Ussel. The size of the area is approximately 5.40 square kilometres. The area has been designated a Bird Directive Area and a Natura 2000 area. The project implements various measures to improve the spatial quality. Spatial quality includes such things as improving land-scape and nature values in the river area as well as creating additional recreational opportunities.

# **TENDERING**

This Engineer & Construct project is performed by the Usselfront Consortium, consisting of Boskalis Nederland and Van Hattum & Blankevoort, which is responsible for the construction of a concrete (submerged) retaining wall, a quay wall and the modifications of the pillars of the Wilhelmina bridge. The consortium is supported by the consulting engineers Witteveen + Bos. Usselfront has entered the most economically advantageous tender for the works for Room for the River in Deventer and achieved high scores in the evaluation criteria of schedule, risk registry and nuisance limitation during the implementation

# **DETAILS**

Client	Water Board Groot Salland
Location	Deventer
Period	2011 - 2015
Contractor	Usselfront Consortium
Type of contract	E&C



- A excavation Munnikenhank
- **B** from North to South: excavation Munnikenhank, Stobbenhank and Zandweerdplas





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### **ACTIVITIES**

A total of approximately 2.7 million m³ of soil, sand and clay will be excavated at the six hanks: Hengforderwaard land, Munnikenhank, Stobbenhank, Zandweerdplas, Bolwerksplas and de Ossenwaard. The goal hereby is the optimal re-use of the soil. A large part of the excavated sand, soil and clay is removed by ship. The resulting sand will be put on the market. Some sand was also relocated to other projects. For example, to Urk where Boskalis constructed a 1,100 metre long guide dam in the Usselmeer for the construction of a windmill park. Much sand and clay is relocated to the Hoogwatergeul Veessen-Wapenveld project and used ther for the construction of dykes. The fact that practically all the soil,

**AERIAL BOMBS** 

award the project to Boskalis.

A complicating factor is the presence of approximately twenty aerial bombs from the Second World War, necessitating disposal operations before excavations of the area could commence.

sand and clay is not transported by road but by land,

was a major consideration on the part of the client to

The disposal operations caused the closure of gas lines

and stopping road, shipping, train and air traffic, among other things. Nearby residents, and the residents of De Worp and Deventer in a broader sense, were carefully informed of this. An environment manager maintains communications with all parties involved throughout the project.

# **LANDSCAPING**

The works involve creating new landscaping in the hanks, both for nature and recreation. A new water sports complex has been built in the Zandweerdplas by the Consortium, a new mooring pier will be built and a 300 metre long quay in the Bolswerkseplas (near the centre of Deventer) for the ferry across the Ussel, inspired by the old "ship bridge".

### **SCHEDULE**

In Autumn 2011, the consortium started preparatory activities, such as detailing the design and the schedule. Following this, the actual excavation activities commenced in the Deventer forelands. The river-widening measures are to be completed by 2015.









- c aerial bomb from the Second World War
- **D** hydraulic excavation Munnikenhank
- E excavation Worpfront
- F excavation Stobbenhank

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