STATE OF THE HULIN RESERVOIR BANKS IN THE YEAR 2020

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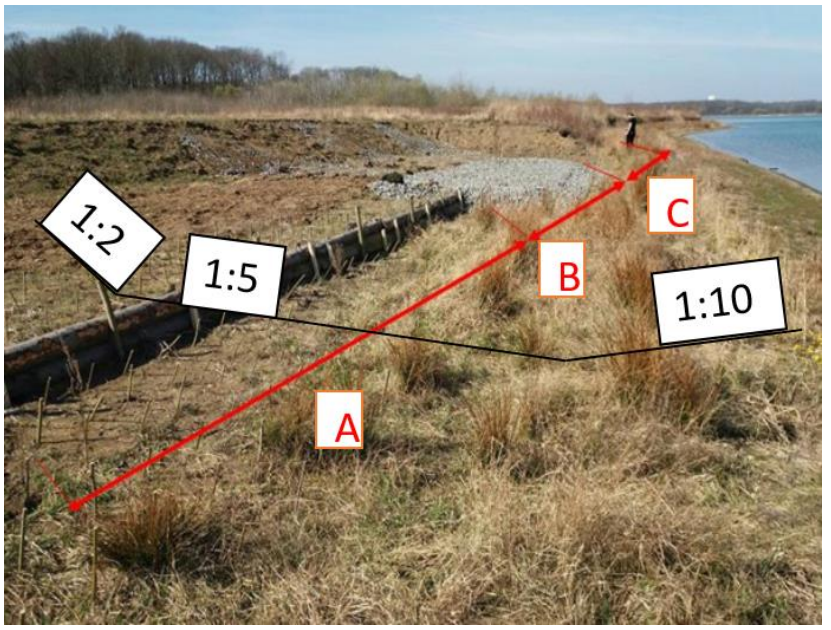
INTRODUCTION:
The banks of water reservoir in the Gravel pit Hulin were threated by the bank abrasion, which is a process of mechanical rock disturbance. Therefore, in 2017, the bank reinforcement were designed. The project dealt with the optimal biological bank stabilization.

PROJECT DESIGN:
The experimental plots were divided into three 30 meter long parts (A, B, C). A different stabilization was performed in each part of this area and three specific bank slopes were performed (see the table and figure below):

Part	Type of stabilization
A	A stabilizing palisade (transversely laid logs stabilized by piles) was treated by removing the weed. One pilot was added and the collapsed soil form the side slope removed.
B	This part is fitted only with willow cuttings was in very good condition. About 85 % of willow cuttings were attached. Planting of willow stabilization stands was supplemented with reeds (10 tubers of *Typha latifolia*) to support the stabilization effect of shrub willows.
C	This part was covered with a layer of gravel with the planting of 5 – 7 rows of willow cuttings.



The most appropriate and most effective technique

CONCLUSION:
The type C of reinforcement acts as a natural breakwater on the erosion platform. It was found that the waves do not reach significantly the steepest part of the slope, which would result
in deformation. The measure proposed is very effective.

The results of the research show that the use of distributed gravel in combination with willow shrub (at least five rows) is the most suitable stabilization measure against the formation of erosion wall.

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