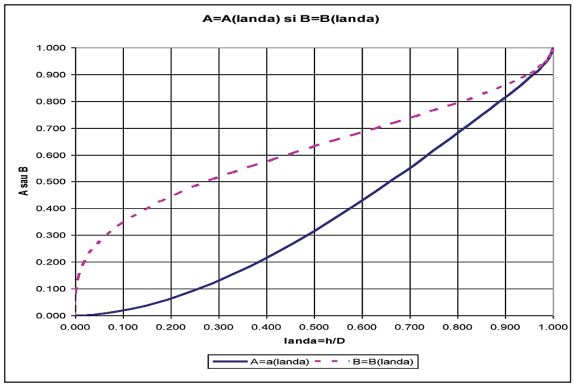
Hydraulic calculation of irrigation canal closure (Water conveyance structure I) c metal structure of corrugated steel sheet that can support the load

Goal of the project: Hydraulic calculation of irrigation canal closure (Water conveyance structure I) c metal structure of corrugated steel sheet that can support the load.

Short description of the project: Investments Butterfly Park & Golf - Golf and Leisure found that it is crossed by irrigation canal Fântânele - Sag, reason for which the hydraulic study on closing (intubation) its metallic structure of corrugated steel sheet that can support the load of future traffic of the golf course.



Project implemented by:
Faculty of Civil Engineering, Department of Hydrotechnical Engineering

Implementation period:
February 2012- August 2012

Main activities:
Determination of transport capacity of water conveyance structure I.
Study the possibility of intubation CA I channel of 2.9 km in the following variants:
• metal structure of corrugated steel sheet, circular section with a diameter of D-1400 mm to D-4000 mm; - with high density polyethylene pipe (HDPE) D-2000 mm to D-2800 mm;
•metal structure of corrugated steel sheet: 2 pipes of 2100 mm, 1 pipe of 3000 mm and 1 of 3100 mm, 1 pipe of 4000 mm, 2 pipes of 2200 mm, 1 pipe of 2000 mm and 1 of 2300 mm, 2 pipes of 2800 mm
For all these variants were prepared curves Q=Q(h), A=A(landa), B=b(landa).

Results: The study revealed the need to use pipes with small roughness (smaller than the existing channel) Example: HDPE pipe version, PREMO, PAFSIM, etc.

Fields of interest: Design the optimal hydraulic structures

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Secretary Nistor Alexandra

Research centre:
Research Centre for Hidrotechnics

Aplicability and transferability of the results:
Efficient design of technical and economic solutions intubation water conveyance structure CA I from irrigation system Sagu-Fântânele-Arad on the area where it crosses the golf course "Butterfly" Park & Golf.

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