



## The Stockholm Solution: Experiences over the last years

**Johan Östberg**

Swedish University of Agricultural Sciences

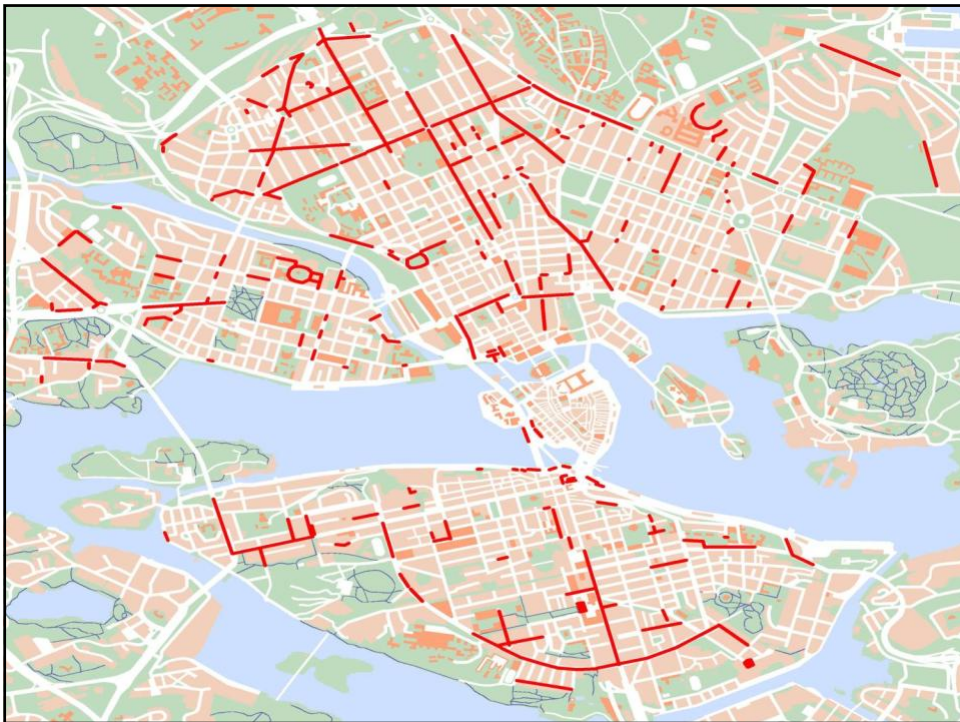
Phone: +46 40 41 51 26

E-mail: [johan.ostberg@ltj.slu.se](mailto:johan.ostberg@ltj.slu.se)

## Problems for New Planted Urban Trees



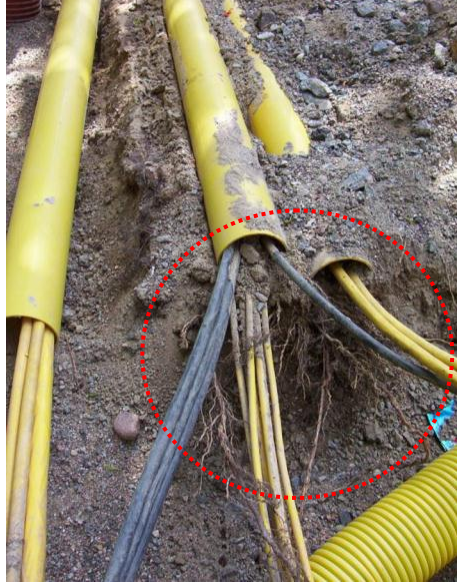
## Problems for Mature Urban Trees



**Massive amount of roots in a railway  
embankment, Stockholm Sweden.**



**Massive amount of roots in cable covers for electrical wires, Stockholm Sweden.**

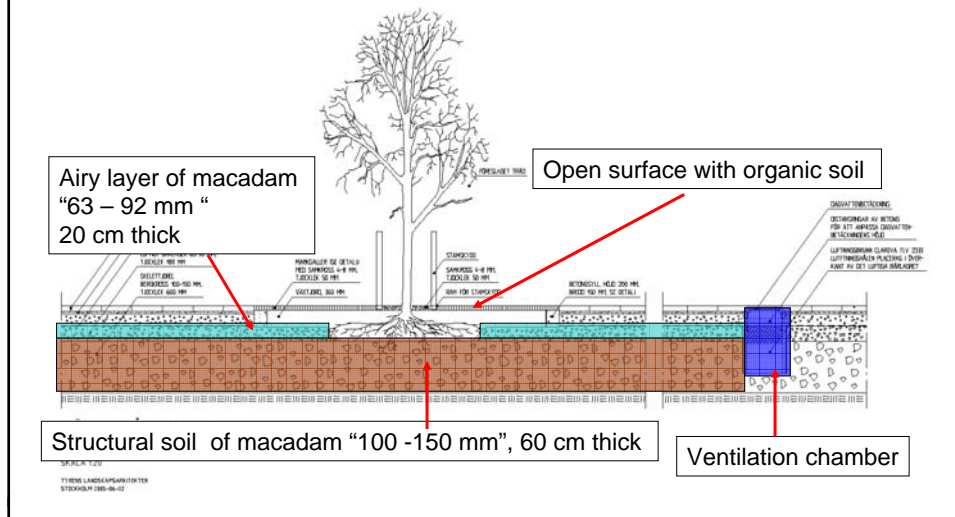


**Missouri pea gravel bed**





## Using a rock base growing substrate which are a benefit for both for trees and stormwater management



## Stone fraction 300-650 (mm)





























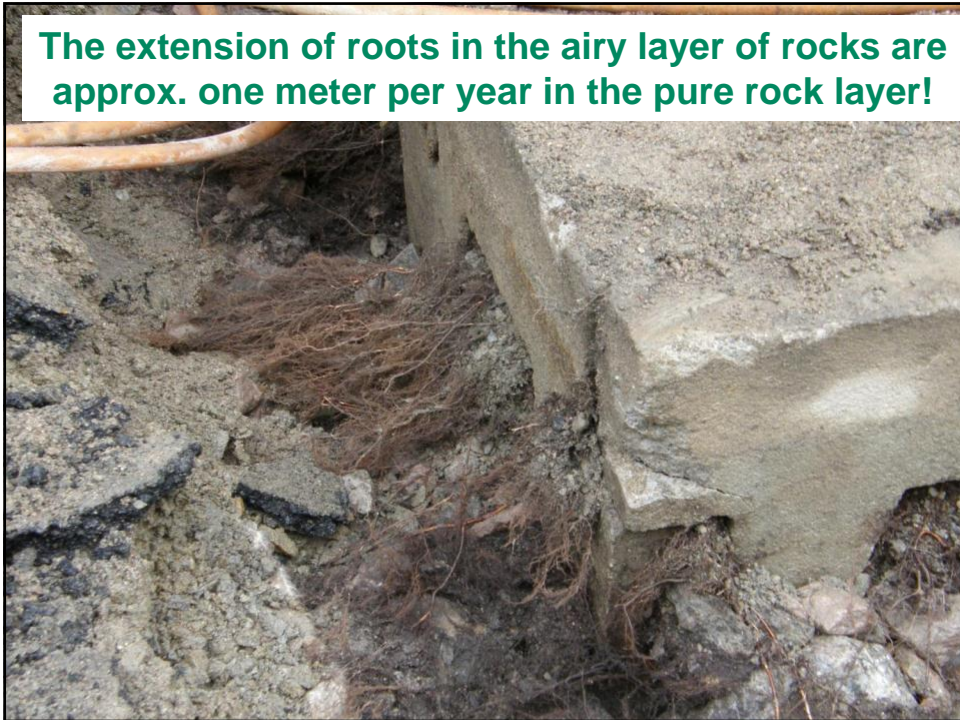


## Infiltration of water from roofs and sidewalks

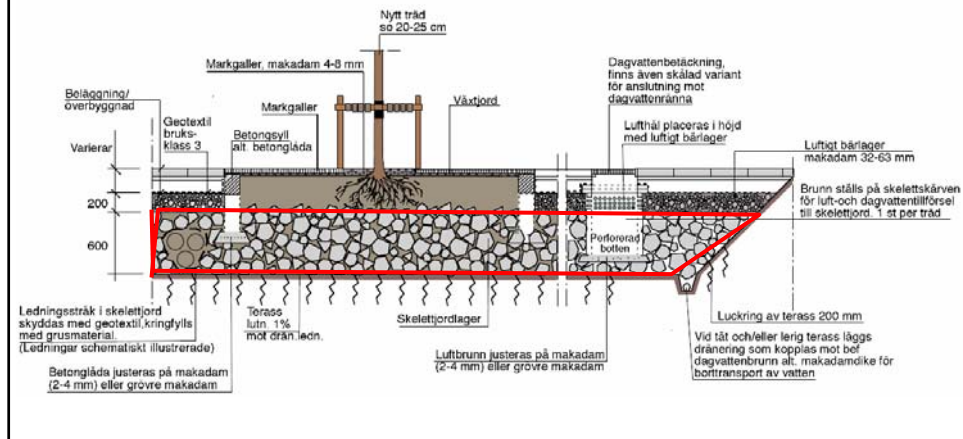




**The extension of roots in the airy layer of rocks are approx. one meter per year in the pure rock layer!**



## Measurements of infiltration capacity in the structural soli



## 100 mm water on 4 m2 of 60 cm Structural Soil







**Rainwater from 2500 m<sup>2</sup> of roofs and sidewalks leads in to the soil pit of 12 trees and in the airy layer and the structural soil beneath the sidewalk.**





Planted at the size of 35– 40 cm, after six years the trees have a size of 70 – 80 cm.



**Tree at the left are the original tree approx. 100 years old.  
Tree at the right planted six year ago!!**

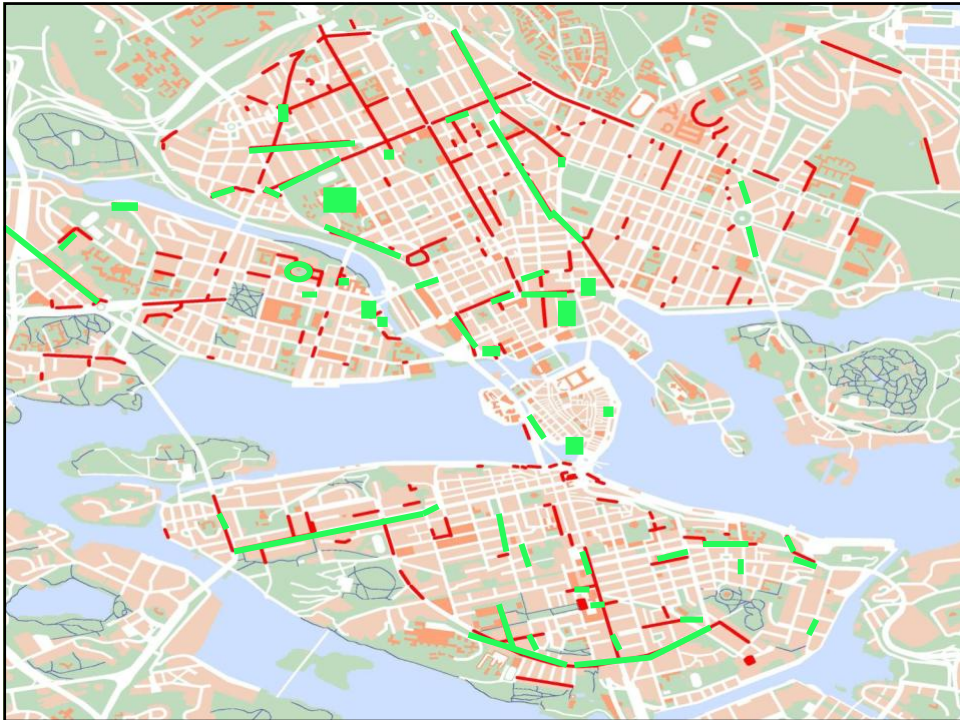


**An area with bad functions for aesthetics values and  
stormwater management!!**





The same area after replanting and reconstruction. All roof and surface water are infiltrated into rooting area of the trees!!



PLANTING BEDS IN THE CITY OF STOCKHOLM  
A HANDBOOK

2009.02.23 GHI00322



PFLANZGRUBEN IN DER STADT STOCKHOLM  
EIN HANDBUCH

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### Contact information



Johan Östberg, PhD Student

Swedish University of Agricultural  
Sciences

Department of Landscape Architecture,  
Planning and Management

Phone: +46 40 41 51 26

Mobile: +46 709 10 81 01

E-mail: [johan.ostberg@ltj.slu.se](mailto:johan.ostberg@ltj.slu.se)