

ruderalis project

expérimental

ecological

pedagogical

economical



**natural conquest concept for the Newmarket site
Leeds Air Valley**

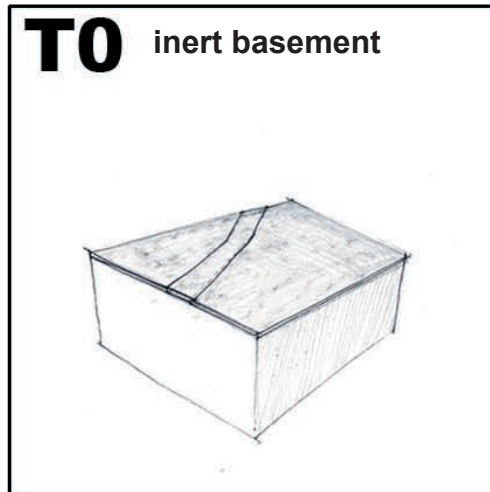
Olivier SIGAUT eco consulting, urban ecology expert

Camille FLORENT landscape planning, ecology

Sara SOBRAL architect, designer

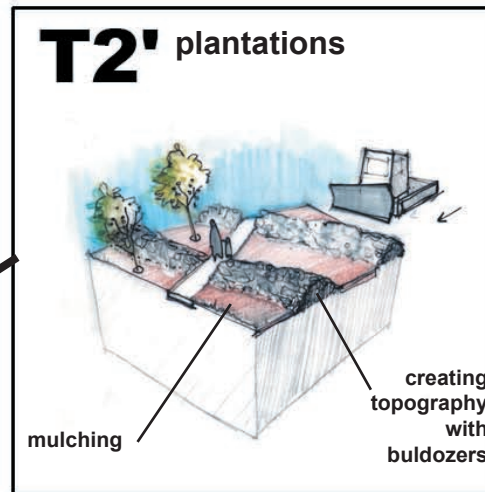
biapi 2009

1 THE CONCEPT : ECONOMICAL AND ECOLOGICAL PROCESS

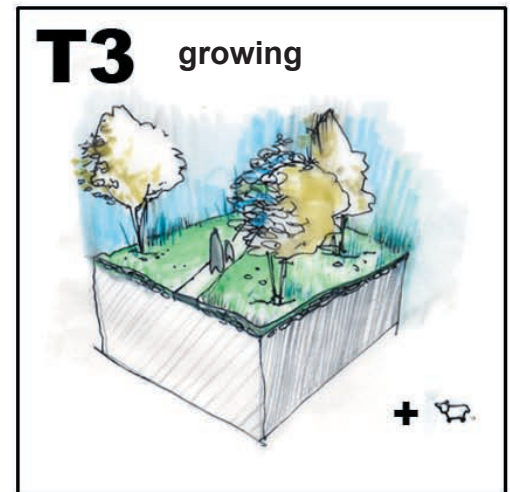
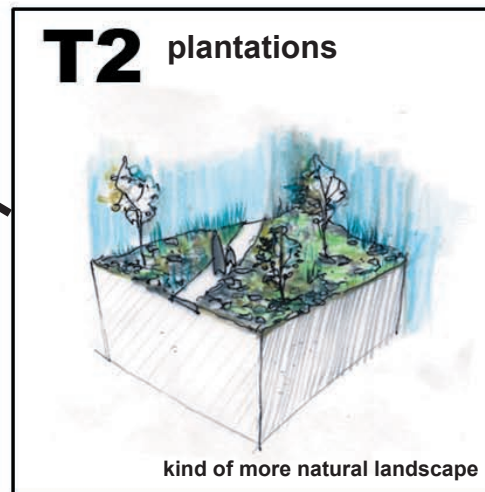
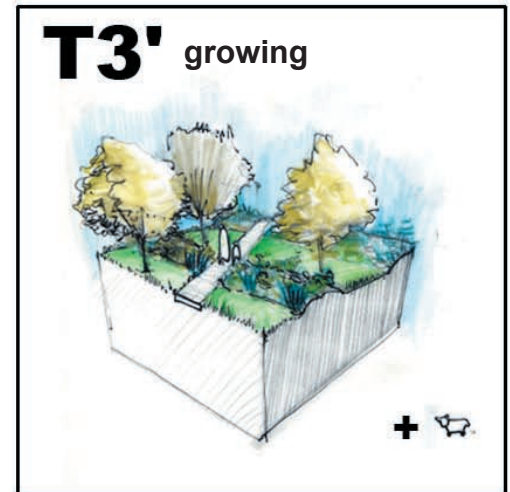


creating obstacles is better to snare the organic sedimentation

impulse nature with ruderalis plantings

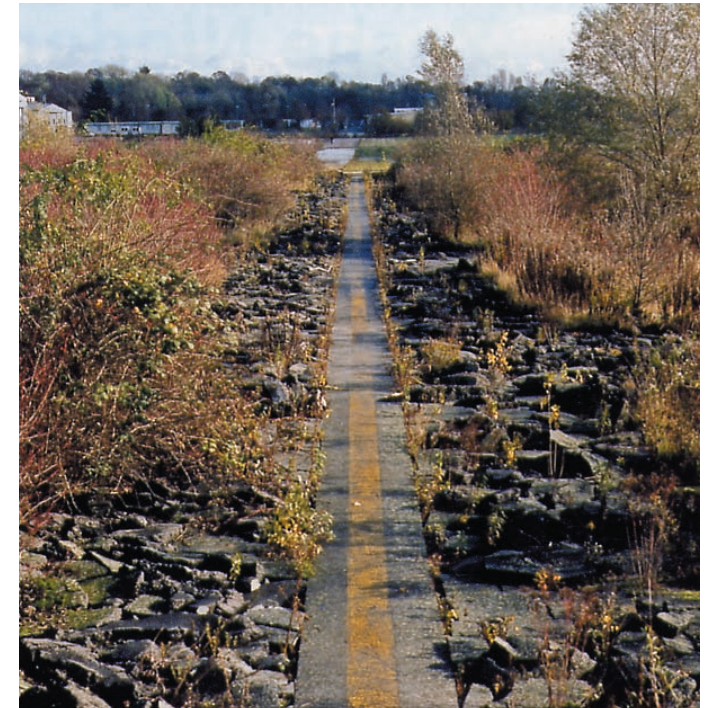


pastoral management thanks to sheeps





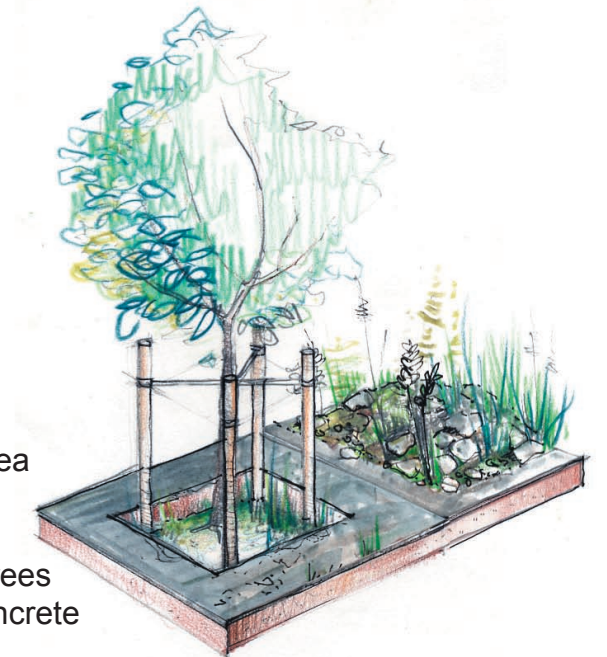
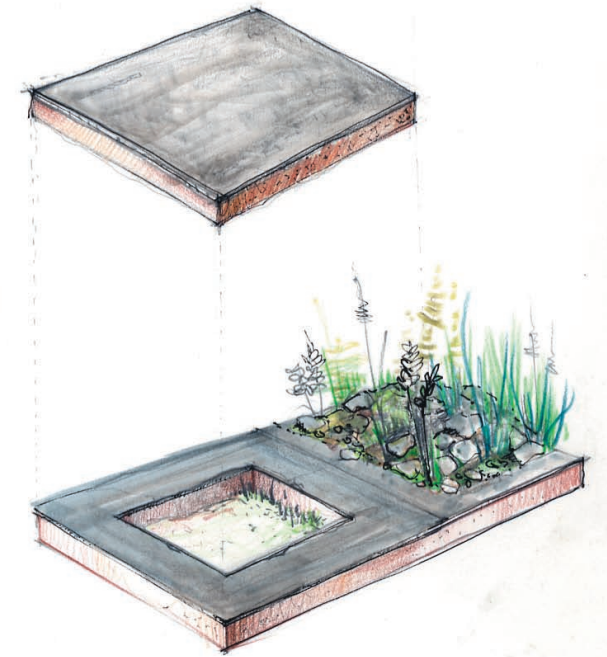
example of an ecological landscaping process for the reconversion of a military airport in Germany



2 THE PIONEERS PLANTS ARBORETUM

concrete des-
troying expérience
in a old factory

Le Transformateur
Saint Nicolas de
Redon



the pre greening area

easy to built,
the roots of some trees
can expose the concrete

this is a test of some species

pioneers arboretum

- 12 *Acer negundo*
- 44 *Populus nigra italica*
- 25 *Morus alba*
- 25 *Robinia pseudoacacia*

Pre geening area

- 250 *Morus alba*
- 350 *Paulownia tomentosa*
- 600 Plants

- 350 *Ailanthus altissima*

- 300 *Betula nigra*

- 800 Plants
- 500 *Fraxinus exelsior*

100 *cotoneaster franchetii*
100 *cotoneaster dammeri*
100 *cotoneaster microphyllus*
100 *cotoneaster lacteus*
100 *Salix rosmarinifolia*
100 *Hippophae ramnoides*

100 *Salix alba*
100 *Salix caprea*
100 *Salix fragilis*
100 *Iris pseudoacorus*
200 *Typha latifolia*
200 *Alnus glutinosa*

TiP

MPT

ERF

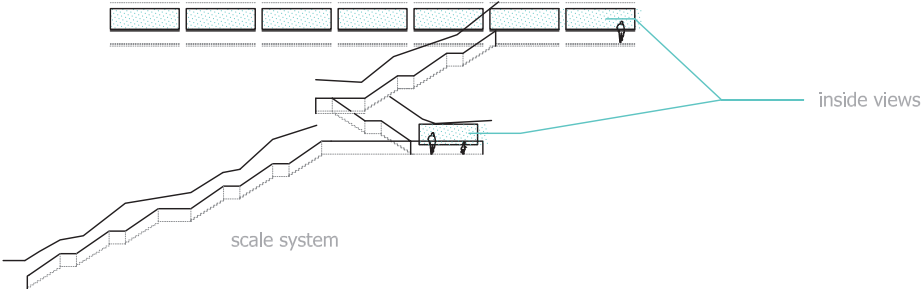
Adm

Ba

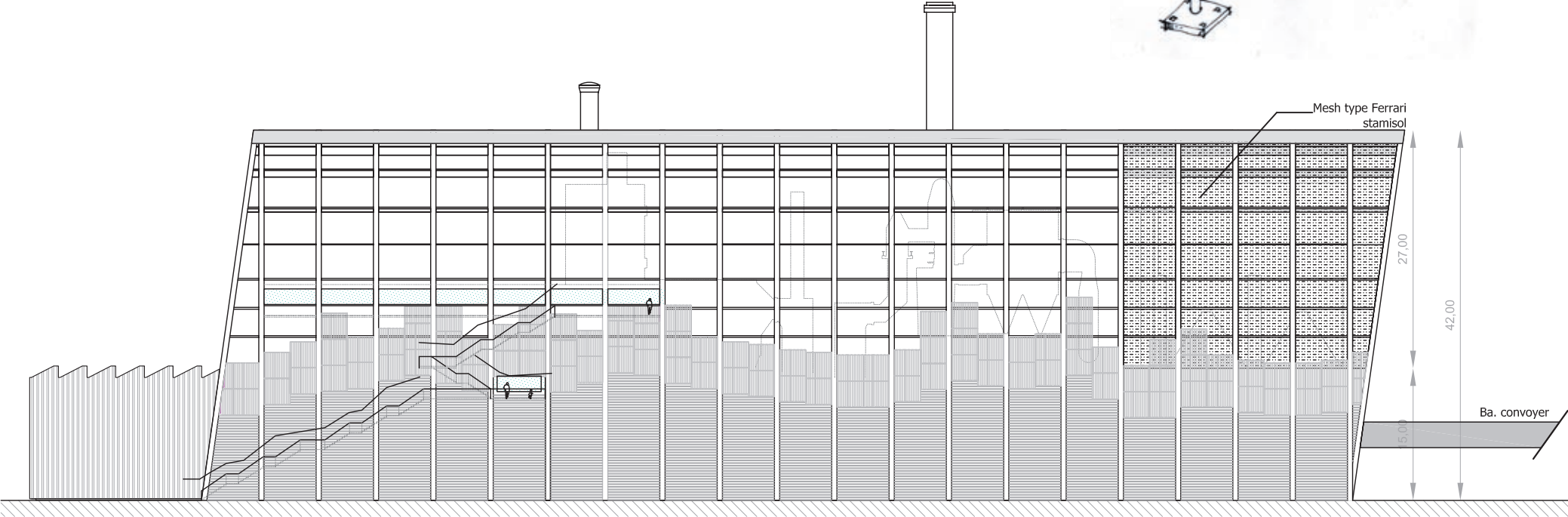
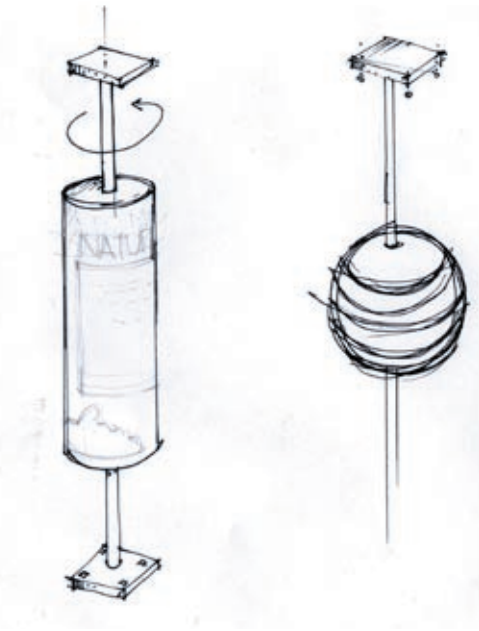
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3 GARDEN'S PEDAGOGICAL PURPOSE

stairs to visit the green wall



information, education,
non linear pedagogical support



eco path

TiP

MPT

ERF

Adm

Ba

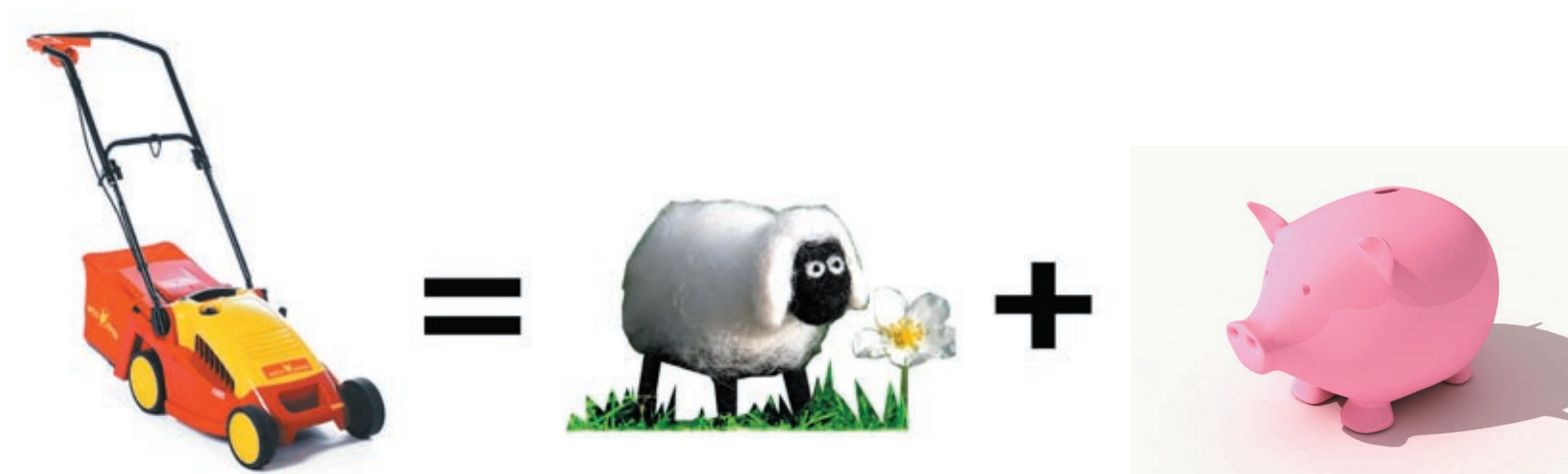


4 THE ORIGINAL PASTORAL MANAGEMENT AREA

A scotish sheep is more sustainable than a lawn mower.

Ecological, economical, sheep are very quiet and can be ludic and pedagogic object for the public.

Finally, in the industrial landscape, this amazing event can convey a good image of the company.



On the long view we need 7 sheep for one hectare of meadow.

pastoral management test for a natural park in a urban area near Paris



the canadian passage



Only cars ca cross, not animals

pastoral management area

10ha = 70 sheep

- canadian passage
- grazing limit
- sheepfold
- fence line

TiP MPT

Adm ERF

Ba

sheepfold

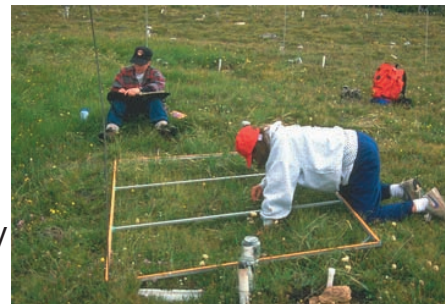
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5 THE SCIENTIFIC TOTAL BIOTOP RESERVES



L'île d'herborence
the climax garden by Gilles Clement
Lille Europe Station

the ruderales populations studies garden
in front of the building



the population studie is a typically
ecological protocol



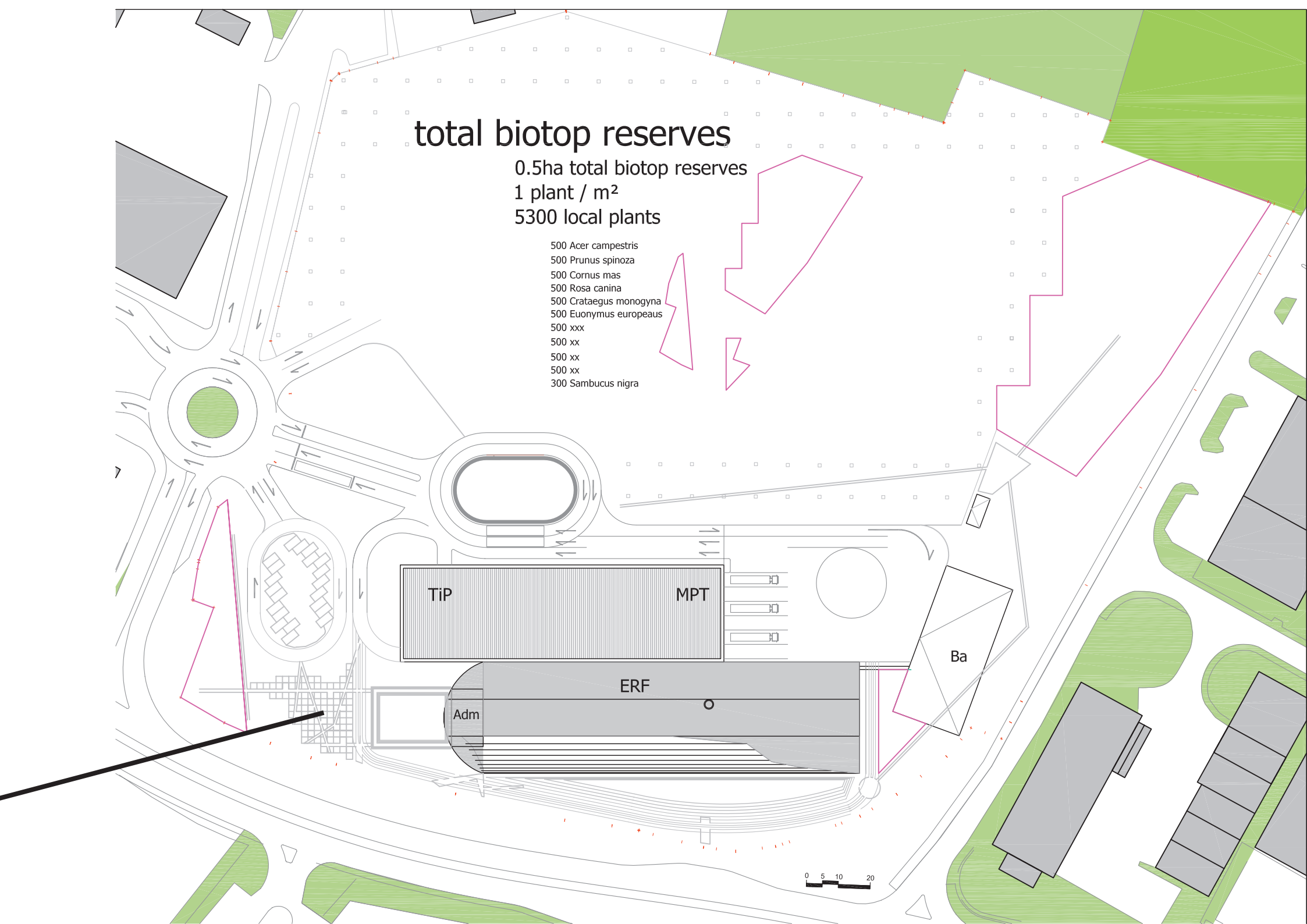
total biotop reserves

0.5ha total biotop reserves

1 plant / m²

5300 local plants

500 *Acer campestre*
500 *Prunus spinosa*
500 *Cornus mas*
500 *Rosa canina*
500 *Crataegus monogyna*
500 *Euonymus europaeus*
500 xxx
500 xx
500 xx
500 xx
300 *Sambucus nigra*



6 THE PEDAGOGICAL AND ECOLOGICAL WATER SYSTEM

water treatment with plants

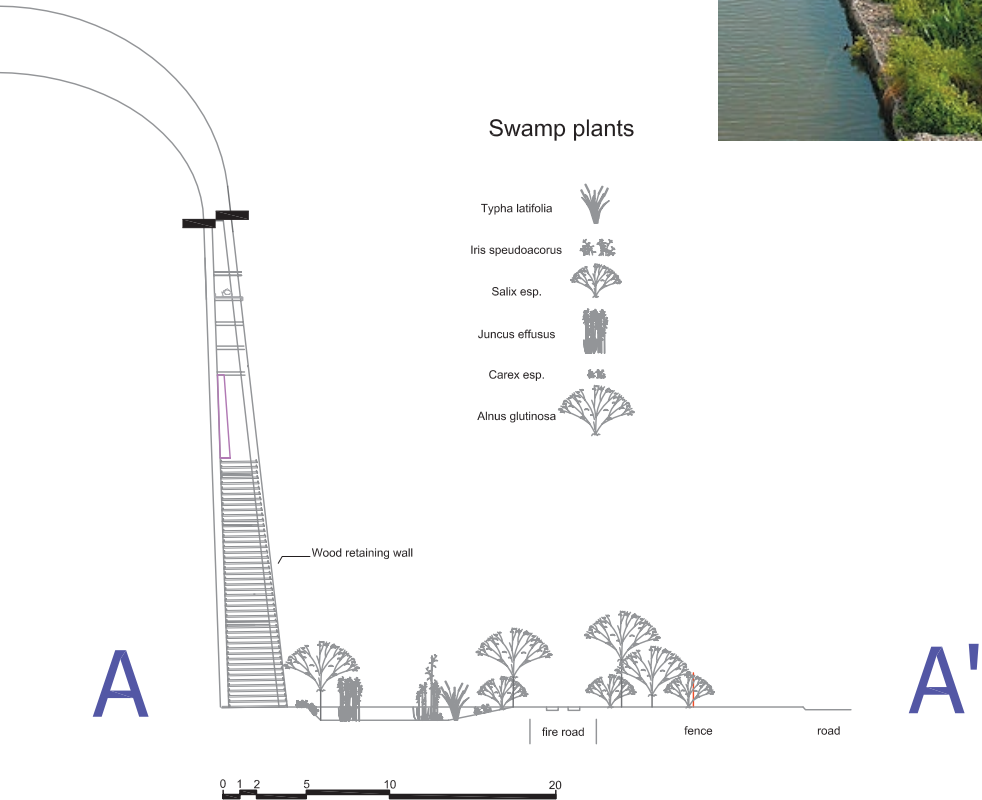


rain water tank with Geocell system



Swamp plants

- Typha latifolia
- Iris pseudoacorus
- Salix esp.
- Juncus effusus
- Carex esp.
- Alnus glutinosa



Swamp section



Geocell system

water system and excavation principe

cuttings/embankments

$$\boxed{V = 150\text{m}^3} + \text{V} = 750\text{m}^3 = \text{V} = 900\text{m}^3$$

