City Water Circles

Hétszínvirág Kindergarten

Zugló
Budapest XIV.
Hungary

Lessons from the project

Main goals of the project

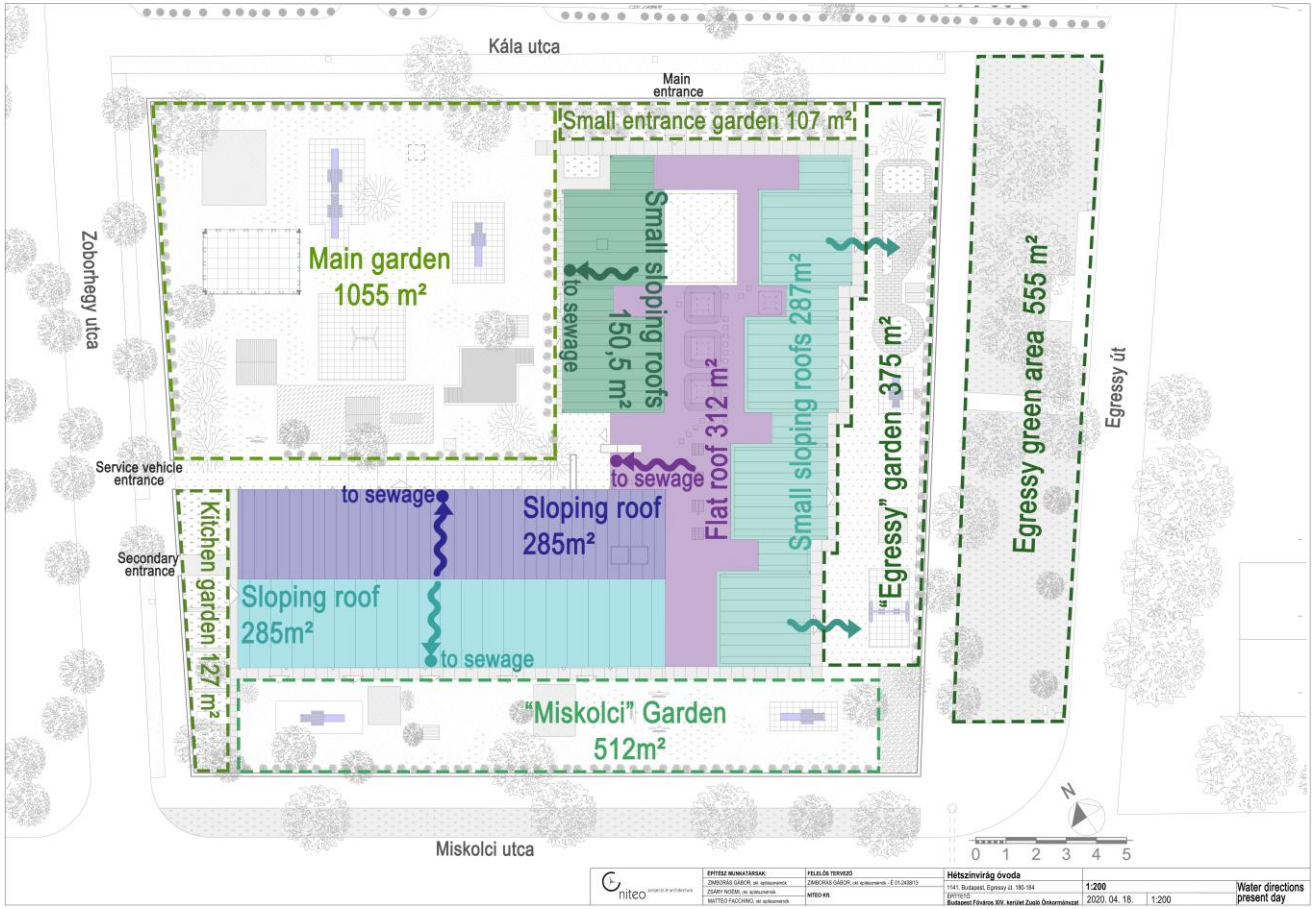
- Improving the ecology on the micro level with an enhanced waterbalance and some greywater re-use

- Creating a better outdoor play environment with more natural affordances

Approach – A range of measures

- Retention of rainwater with green roof
- Attenuation of surface runoff
- Storing the stormwater in natural infiltration well
- Improving infiltration
- Adjusting green surfaces according to rainwater distribution
- Optimising the ratio of permeable and non-permeable surfaces
- Greywater reuse in a new outdoor toilet and for irrigation
- Educating by playing – water and climate elements in the playgrounds

Natural water balance from precipation

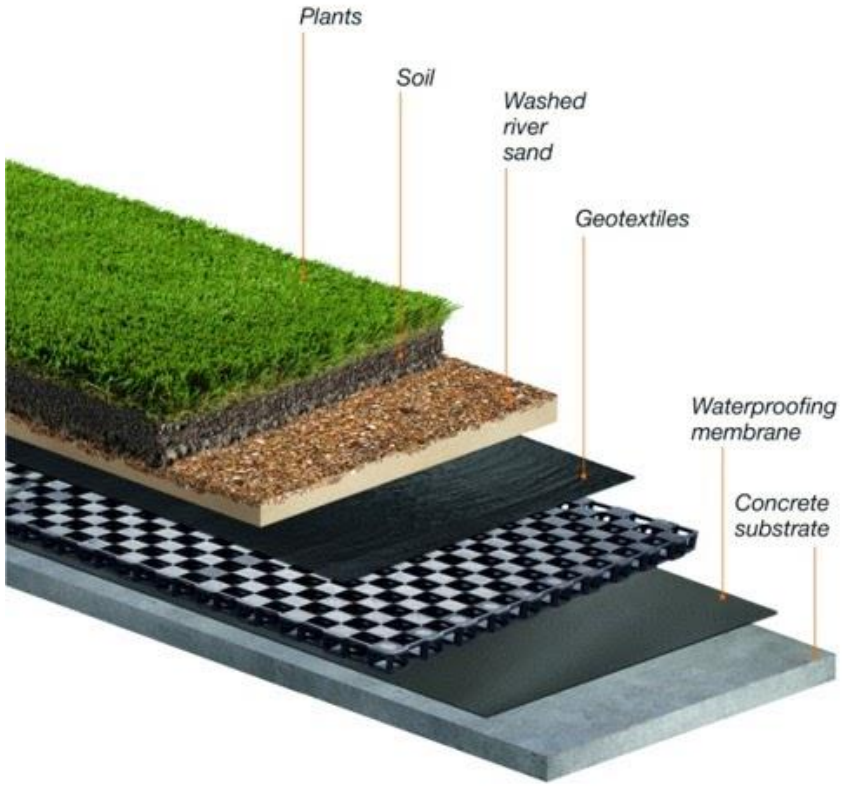


- Surplus in the winter period
- Clear deficit in the summer months
- But cloudbursts with stormwater in the summer

Lessons 01

Rain-gardens used in Scandinavia or Germany cannot be adapted with the same typology in Hungary, due to the long dry periods

Lessons 02



- The majority of measures requires a range of professions (both in design and implementation phase)
- A lot of small tasks
- Replication is feasible only if it is carried out at the same time for a number of similar existing buildings (same typology)

Lessons 03

Easy implementation of replication

- Changing the surfaces for better infiltration (permeable surfaces)
- New EU and US research: dangers of micro-granules in rubber surfaces (especially children playing on the ground)
- Natural alternatives: sand and small fracture gravel
- Long pedestrian way to door
- Combination w/ natural loose materials: affordance-rich play environments

Thank you for your attention

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