

# SPONGE CITY TRANSFORMATION

## Weyermannshaus West, Bern



DESIGN PROJECT SIE 2026

Nature-based solutions reducing urban runoff and retoring hydrological resilience in a redeveloping industrial district.

### Context & challenge

- Industrial past & soil contamination
- Highly sealed surfaces
- Flood risk & climate change

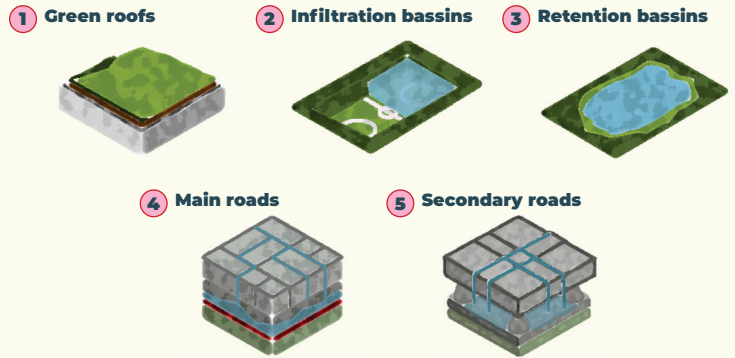
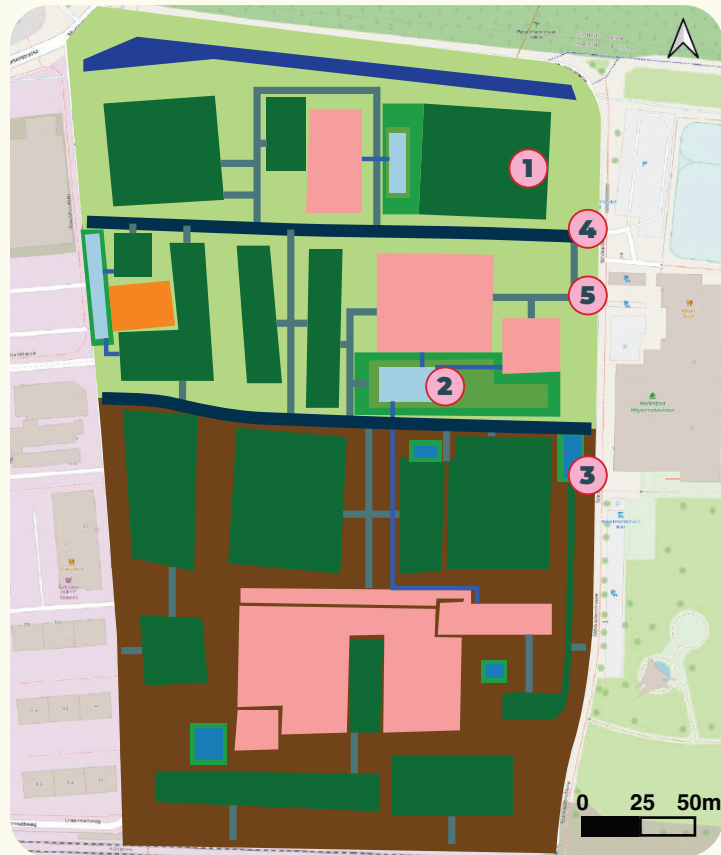
### Opportunities

- Absence of nearby protected groundwater
- Useful and highly advantageous topography
- Favorable soil for water infiltration

### Goal

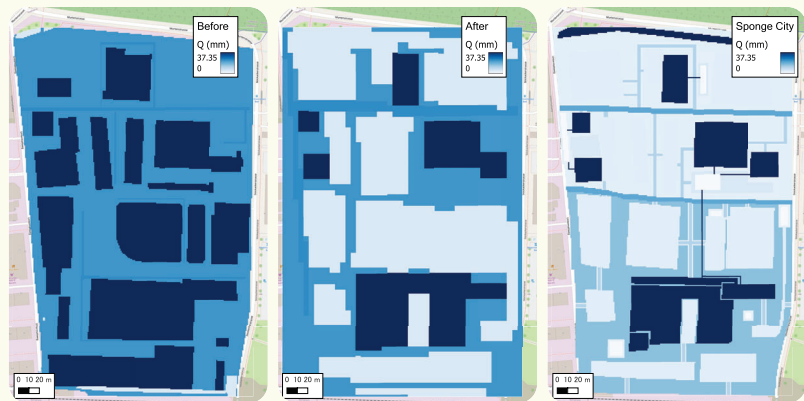
- Reduce runoff
- Restore the water cycle
- Create multifunctional public spaces

### SPONGE CITY STRATEGY

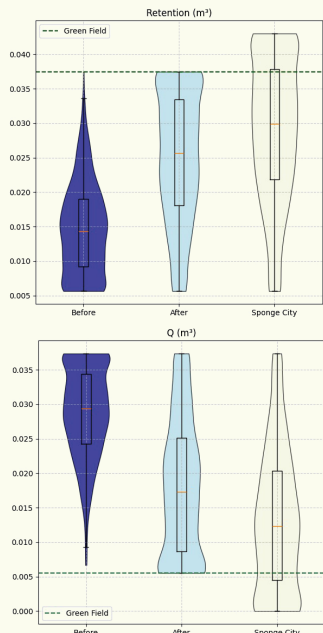


### RESULTS (10-year return period)

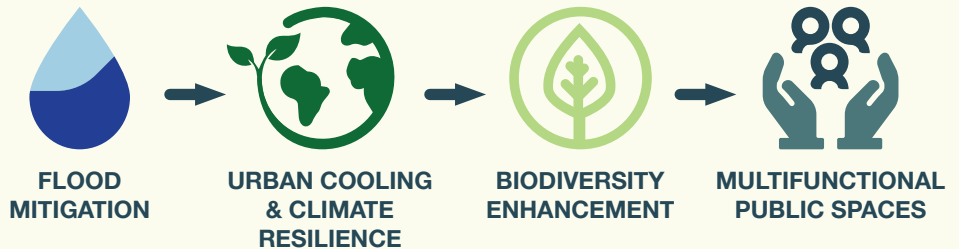
#### Runoff comparison



#### Runoff statistics



#### Impact



#### Limitations

- Soil data approximated
- Long drainage times in main pond
- Maintenance dependency
- Extreme rainfall uncertainty

#### Recommendations

- Perform infiltration tests
- Engage residents early
- Improve maintenance strategy
- Design for climate extremes