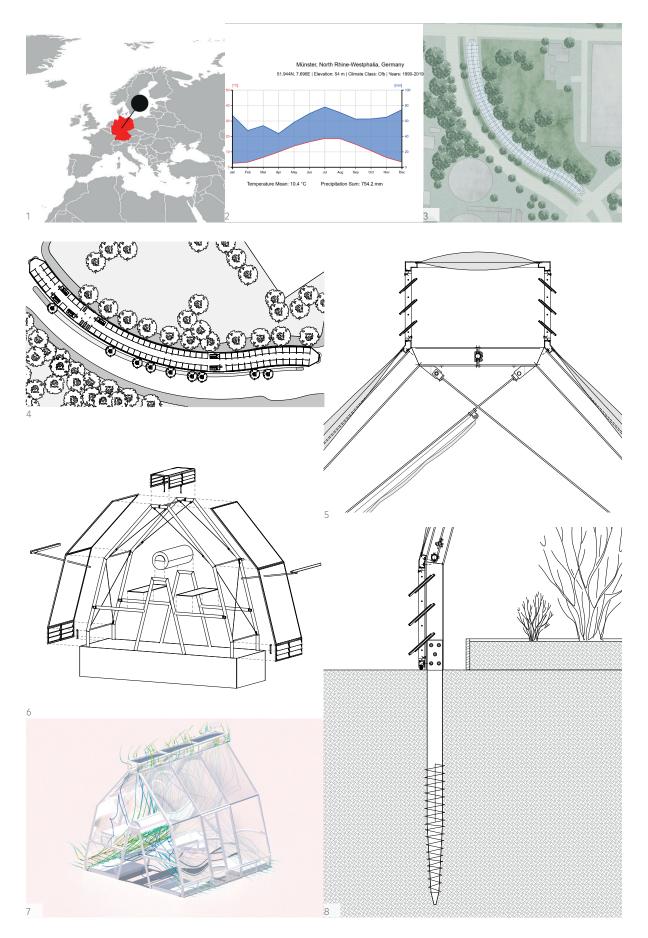
Urban Nature Snake

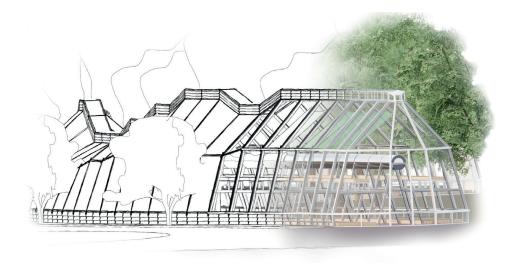
Muenster | Germany Student project by Max Müller & Julian C. Wessel











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Aspects geography | Topography | Vegetation

The project is located in a densely built-up urban area. However, no green area will be sealed as the base area, because roads that will be deconstructed are used. The climate is European mild.

Building volume | Zoning

The building consists of a modular and reversible structure in lightweight construction, which is scalable in size.

Building shell | Shadow | Ventilation

The structure was formulated as a skeleton building. Four metal frames of different heights are lined up at 3 m intervals and span the, in this case, 9 m wide street. Towards the south, the building is shaded with solar sails. Aeration of the building interior is generated by louvre windows.

Material | Construction | Building techniques

The frame construction was made of steel. The outer shell consists of stretched ETFE-pillows. Inside, flower boxes were built as a mixed construction of steel and wood.

Sustainability | Energy | Ecology

The main focus of this design was to avoid soil sealing, respectively to use already sealed area. The theme of sustainability is reflected in all the materials used in the project. The steel used for the frames is recycled according to its material cycle and can be fully reused. As the ETFE-pillows reach the end of their useful life, they will be divided into sections, which will be processed into valves and other smaller components.

A case study for urban farming was designed for parcel 106 on Corrensstraße in the Sentrup district of Münster. To realize this, the planned roadway reduction was used. On the then unused asphalt areas a greenhouse was created on 1300 m². Due to the simple structure of the construction, it allows a very high flexibility. Apart from the fact that the interior can be equipped not only with plant beds, but also allows a mixed use with café, store and similar areas, there is also the possibility to dismantle the project again and rebuild it elsewhere. Moreover, since the existing road is used for the realization, unsealed area is completely preserved. The construction meanders along the street and with its aesthetics creates an inner-city, natural eye-catcher. The project demonstrates a high degree of ecological awareness and creates added value in the urban space for the population.

Picture Credits 4

(1) Available from: https://freevectormaps.com/world-maps?ref=top-nav [30.07.2021].

- (2) Available from: https://climatecharts.net/ [30.07.2021].
- (3-11) © by Max Müller & Julian C. Wessel [2021]