#### Tabula non-rasa

Embracing the principles of tabula non rasa, we embark on a journey of understanding and harmonising with our surroundings. It begins with immersing ourselves in the context, delving into the stories etched within the landscape, and uncovering the intricate relationships between nature and culture. Every element is essential, every connection meaningful, as we seek to comprehend the complexities that shape the present state. Rather than imposing our will upon the landscape, we become collaborators with nature's wisdom. We strategically introduce new elements, carefully chosen to resonate and coalesce seamlessly with the prevailing ecosystem.

# Reinforcing Ecosystems of Østmarka

To improve nature at Østmarka it is necessary to look at its wider context, how it is positioned in the Lade green structure and where the missing links are. We see that Østmarka has a great potential to become a link between various parts of the area, especially between the natural coastline and the urban landscape. We propose to create those links by reforestation of Østmarka, but also by creating connections along the streets, through the botanical garden and agricultural area, so that the wildlife can thrive.

We envision the design to improve the existing landscape and its potential, rather than changing it. We approach landscape development from the perspective of the soil, its condition and potential. We propose to enrich the soil condition and increase the soil organic carbon by reforestation: regeneration of the existing forest and planting new forest areas on the site.

By planting native species of trees, fruit trees, shrubs, perennials and herbaceous vegetation, it is possible to attract new animal, bird and insect species to the site. By not only supporting the existing species, but also creating habitats for new species, Østmarka will become an addition to the current ecosystem. It is important to introduce all the levels of planting:

- pioneer species, hardy fast growing seeds to shelter the soil like clover, dandelion
- perennials, grasses and herbs, like lupine, bugleweed, wood anemone, primrose (according to the sun conditions)
- shrubs, like hazel, elderberry, Guelder rose or common dogwood, that also provide fruits and nuts for animals during the winter season,
- pioneer trees, like silver birch or common aspen.
- slow-growing trees, like pedunculate oak, European beech, wych elm and bird cherry

Reforestation should happen in the already existing forest to improve its quality, but also southwards of the site. This will create natural connections and diversify the landscape by creating open and closed parts, sunny and shadowy zones, attractive for both nature and people.

We envision this process to be an aim of the city and the community. By introducing the Miyawaki method for the reforestation, all social groups will be invited to participate. It is an opportunity to integrate and educate the young generation, elderly, local communities and nearby hospital residents by collective planting tree seedlings. Forests planted according to the Miyawaki method grow at an impressive tempo and therefore all people involved will be able to witness the process of forest development rather than waiting years for results.

# **Biophilic Clusters**

Østmarka, a realm of flora and fauna, lies in a harmonious coexistence with its surroundings. Unlike traditional cities, where buildings and streets dominate, Østmarka thrives as a domain where nature itself dictates the spatial structure. The project site, neighbouring a hospital complex, plays a significant role in its socio-cultural environment.

The design of Østmarka is rooted in the concept of biophilic clusters. Inspired by the way plants and animals gather in groups to interact, each cluster revolves around a specific function. The central nursing cluster houses buildings with diverse functions such as a school, cultural centre, and a nature information point. These structures are complemented by amenities in the adjacent public spaces of other clusters, like playgrounds, communal gardens, and nature paths. This approach enhances the relationship between nature and culture, reinforcing qualities of hybridization.

## Nature and Nurture Intertwined

To preserve the integrity of nature, the border between architecture and the natural environment is deliberately blurred. New buildings are carefully integrated around existing trees to minimise any disturbance to the soil and the delicate ecosystem it supports. Lightweight, modular structure, raised ground floors and lack of basements ensure foundation piling can be done with as little impact to the soil as possible. Use of heavy equipment is drastically limited and the volume of concrete poured into the ground is almost negligible.

Furthermore, the architecture itself contributes to the nurturing of nature by creating additional habitats for flora and fauna, fostering a symbiotic link between the living world and the cultural world. Native inclusive solutions, like bird houses in roof tiles, will happen in the already existing buildings, as well as the new developments. The design foresees solutions like an insect hotel, bat and bird houses and hedgehog spots, all integrated into architecture. Additionally, we propose two types of the ecological

roofs: green roofs, with sedum and moss to extend the nectar period for insects, as well as stony roofs that will create nesting opportunities for birds, such as oyster catcher.

# Adaptability and Flexibility

Recognizing the challenges of the planning process, the project embraces adaptability and organic growth. The green path and adjacent clusters form the spatial structure, providing a flexible framework that accommodates any necessary changes during a participatory design process. Rather than a rigid, finished product, Østmarka is envisioned as an open-ended journey, inspiring involved parties to contribute to its evolution. The project is a vision that is supposed to inspire the involved parties and direct into a way of thinking of the site in terms of an open-ended process, not a finished product.

Existing buildings are integral to the new structure and can be preserved, while new structures can be introduced if renovation proves impractical. The use of a modular structure for both nursing and residential units enhances adaptability, catering to varying needs and functions. This flexibility accounts for the changing demographics of society, ensuring that the project remains relevant over time.

We chose the same modular structure for both nursing and residential units due to the huge need for adaptability in this project. Modular structure can accommodate varied needs, apartments sizes and functions. By making buildings that consist of multiple small volumes, we make it adaptable to the landscape.

Every residential unit is also designed in such a way that it can be adjusted to changing needs of the society. Statistics tell us that the percentage of elderly people in society will be constantly growing. Because of this, the nursing home may potentially need more space in the future. We accommodated that possibility in the layout of residential units. Bigger apartments can be partially turned into a common space. Smaller apartments can be simply divided into nursing units. The addition of external corridors (also made in the same system) makes sure that one floor of residential function can be turned into one unit of nursing rooms.

## Phasing: Organic Growth for Sustainable Harmony

The phasing of Østmarka reflects the principles of organic growth and sustainable development. Emphasising the symbiotic relationship between buildings and green spaces, the project unfolds in a series of thoughtful steps.

We imagine the implementation process as closely related to the organic growth phases. Each step will be designed as a complete whole and in addition each step will be discussed and agreed with residents through participation processes.

Step 1: Existing Situation - Østmarka's fragmented green structure is acknowledged, and buildings are currently separate from the natural landscape.

Step 2: Planting Seedlings - The first phase involves connecting the stepping stones of green to create a continuous ecosystem. Initial clusters begin to take shape, with central public spaces being redeveloped to include cluster-specific facilities and native plantings.

Step 3: Growth - The green landscape matures, with clusters becoming denser and more defined as new buildings emerge, integrating seamlessly into their natural surroundings.

Step 4: Bloom - The final phase witnesses full realisation of Østmarka's harmonious design. The green spaces flourish and reach their final shape and size, while clusters reach their maximum density with the addition of the last buildings. At this stage, Østmarka becomes a fully functional, organic organism, thriving in its symbiotic connection between nature and culture.



#### Conclusion

Østmarka's journey from a domain of nature to a flourishing network of biophilic clusters showcases the power of integrating architecture with the living world. By embracing adaptability and organic growth, the project not only reinforces the interwoven relationship between nature and nurture but also offers a sustainable and harmonious future for the community and the environment. Østmarka stands as a testament to the potential of blending natural and human temporalities, resulting in a thriving landscape where humanity and nature coexist in perfect harmony.