

Scale towards sustainability



Kjellander Sjöberg

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Swedish Design Movement Paris

In September 2021, Swedish design and architecture will take over the Swedish Institute in Paris. Kjellander Sjöberg participates with two projects addressing the climate change through two different scales. Within the framework of the Swedish Design Movement initiative, more than thirty designers, architects, fashion designers and producers will share their knowledge and experience, with the common belief that the design of our physical environment has an overarching significance for the development of a sustainable society.

The aim of the Swedish Design Movement is to accelerate actions to achieve the Global Sustainable Development Goals set out in the Agenda 2030. Institut Suédois will become a platform for interaction between different stakeholders to discuss and act on the fundamental challenges through exhibition, discussions, workshops and events.

Institut Suédois

3 September - 3 October 2021

11 rue Payenne
F-75003 Paris
France

Introduction

Today's society has a unique opportunity: to imagine and create built environments for contemporary, inclusive lifestyles that exist within nature and resource constraints.

The search for new forms of human settlement, business and culture is on, based on long-term visions and adaptive potential.

The two presented projects of various scales seek to provide a path forward, towards a future that is still promising and safe, respecting the planetary boundaries, and setting out to establish a framework for vibrant communities with growth and opportunities for everyone.

We guide this quest by six key principles, recognising that many answers to the climate crisis can be found in a meaningful and sensitive design of the urban fabric, providing spatial context for a thriving public space and social dynamics of progress and renewal.

Nature, Climate, Resources, Lifestyle, Urban Fabric, Society



Meridian Water has a rich cultural heritage and is a part of the Lee Valley Regional Park.



Meridian Water is a place that serves the community: connected, local, authentic, green, blue and vibrant.

Meridian Water London

The masterplan for Meridian Water is about creating opportunities. With attention to what is already there, this major regeneration project envisions a quality environment for local people. Assets and threats that drive placemaking and character are the natural green and blue landscapes of the Lee Valley Regional Park, traversing the site with canals, paths and flooding infrastructure.

Delivery of education facilities, jobs, culture, places to meet, play and eat; green open space such as parks and recreational community areas are key, in an area that is disconnected and one of London's most deprived.

Meridian Water is not one place, but many. A benchmark for innovative 21st-century city-making. A series of walkable micro-neighbourhoods connected by a green network and a vibrant main street will provide many places to call home with their own flavour and identity.

The overall objective of London Borough of Enfield is to create 10000 homes and 4000 jobs with a target open green space ratio of 30%, distributed across the 80 hectares area.

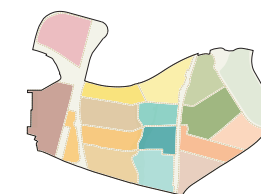
The status of the masterplan is conceptual development leading up to public consultation in AW 21-22.

Urban Fabric

The urban grain of Meridian Water is rich and messy, with diversified places of various scales and densities, to achieve the vision of shaping a pleasant human experience.

Animated streets are complemented by a finer mesh of spatial typologies such as yards, courts and mews inspired by the industrial heritage.

The 15-minute-city approach establishes 16 liveable micro-neighbourhoods providing easy access to daily life essentials, creating a highly connected environment that is inclusive and long-term adaptive.



The Micro-neighborhoods



Key Places



The Green Loop towards Market Square



Maker's Place from Bridge Street



Industrial heritage: Lee River Navigation Towpath and the Drumsheds.

Nature

Meridian Water has a distinct landscape character informed by the Lee Valley Regional Park with striking wild nature and existing industry. The interconnected, high-performance system providing health and microclimate benefits simultaneously serves programmatic, aesthetic and technical functions such as flood and wind mitigation and preventing overheating. Growing space, food production, trees and plants provide habitats alongside active roofs reinforcing to the ecosystem services.



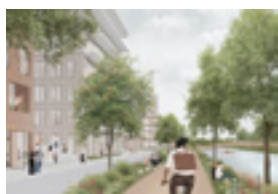
The Green Loop



The Blue Network



The Green Loop towards East Bank



Lea River Path towards Edmonton Marshes



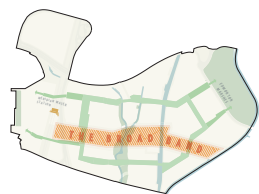
Maker's Yard – an inviting place to meet, collaborate and work.

Society

Meridian Water is a place that serves the community, focusing on what a community needs to thrive. It sets out to be an urban environment that improves health of a diverse population. The key strategy focuses on employment and creation of jobs, bringing forward opportunities for a range of entrepreneurial skills and experiences, offering education and training for human growth. A comfortable place for all with proximity to every-day amenities, culture, social infrastructure, work, friends and local events.



The Main Street



The Broad Band



Community Yard and Community Kitchen



Neighbourhood Street with social activities



Gjuteriet - intense activity in the industrial Kockums wharf area of Malmö in 1917.

Gjuteriet Malmö

Reuse and revitalisation of the built environment is a fundamental sustainable strategy. Gjuteriet, a former foundry in an industrial wharf in central Malmö is a prominent heritage landmark, an important part of the city's identity.

Built in 1910, currently in a state of a ruin, the transformation process aims at integrating various past states of the building, many ad hoc adaptations and layers added over time for new functions, as well as providing an architectural solution to decay and exposure to weather.

The intended new use is an open, informal, social work space and a meeting place with inherent flexibility; inspiring, retaining some of the gritty character intact.

The untouched tectonic loadbearing steel structure wrapped in a classical brick façade envelope is preserved and overlayed with a new rich spatial sequence.

The design approach keeps the original impressive spatial experience. The scale of the large volume remains present whilst introducing new complementary timber elements; either suspended, replacing the old overhead cranes, or placed directly on the concrete floor.



West elevation of Gjuteriet, photo and drawing. Above: current state; a vibrant collage of historical layers. Below: added brick layer and climate-proof screen to combat frost weathering.

Resources

Core focus of the revitalisation is to work with circular economy in favour of the planetary aspects. Added elements utilise recycling and upcycling of industrial materials recovered from demolitions in the wharf area: bricks, sheet metal, stairs, steel profiles, chequer plates, etc., harvested, cleaned and collected in a central library in one of the existing sheds of Varvsstaden. This mindset of choosing according to what is available rather than merely esthetical has been adopted during the whole design process.



1. Architectural concept 2. The eroded brick walls 3. Existing loadbearing steel frame 4. Added timber structures



Gjuteriet transformation under construction.
The new timber frame being rapidly assembled on site during summer of 2021.

Climate

Material sustainability is the main strategy to minimise the use of resources and climate impact by making smart choices. Besides preserving building elements, new construction is mainly made of timber to minimise CO₂ emissions and the overall ecological footprint. Timber is a regenerative material, and if managed properly, forests promote biodiversity and vital ecosystems. It is also a lightweight material which reduces the load on the existing structure and thus the need for a new carbon intensive foundation.



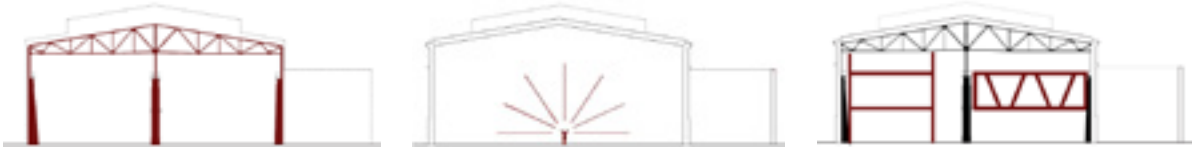
Circular economy with recycling and upcycling.
Materials from demolished industrial buildings, compiled in a material library to be used in new projects.



The added timber structure is suspended from the existing steel frame, creating a sequence of spaces with vertical connections between floors and activities.

Lifestyle

The vision is to create an inspiring workplace for people to visit, meet in, network and exchange ideas – open, informal, healthy and genuine. Oatly as the tenant requested a bespoke solution grounded in the company values and sustainable philosophy. Interconnected spaces for all departments and activities, full of daylight, open to the surrounding community and the nearby university, offering public programmes on the street level for exhibitions, art, seminars and co-creation events as well as a café and a restaurant.



Structure and materiality preserved Generous spatiality Gjuteriet with platforms



Exhibition Swedish Institute Paris



Exhibition Swedish Institute Paris



Model Masterplan Meridian Water



Recycled metal panels Gjuteriet

Swedish Design Movement Paris 2021

Initiative:
The Swedish Institute in Stockholm, in collaboration with Architects Sweden, the Swedish Fashion Association, the Swedish Federation of Wood and Furniture Industry, the Swedish Society of Crafts and Design (Svensk Form), representatives of the towns and regions of Gothenburg, Malmö, Stockholm, Umeå, West Sweden, and other partners including Business Sweden and Visit Sweden.

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On behalf of Kjellander Sjöberg:
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Andrea Roverato
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Meridian Water

Client: London Borough of Enfield
Collaboration: Mae Architects, Periscope, Jacobs Engineering, Useful Projects, 5th Studio
Partner in charge: Stefan Sjöberg
Team: Angela Woda, Jakub Jílek, Astrid Gabrielsson, Charles Gårdeman, Ludvig Wallmon, Karl Graflund, Robert Magnusson Årebro, Andrea Sclafani, Monika Jachimowska, Mariada Stamouli, Elias Brulin

Gjuteriet

Client: Varvsstaden
Contractor: PEAB
Collaboration: Sted Landskap, BK Konsult, Matter by Brix
Tenant: Oatly
Partner in charge: Stefan Sjöberg
Team: Johan Pitura, Hannes Haak, Sylvia Neiglick, Simon Estié, Sebastian Mardi, Per Hedefält, Michael Westerlund, Susanna Bremberg, Stefan Rydin, Karin Lindström

Kjellander Sjöberg 2021

Established 1998 in Stockholm, Kjellander Sjöberg is a multi-nationality medium-sized office, led by three partners: Mi Inkinen, Ola Kjellander and Stefan Sjöberg. The award-winning office has continuously been recognised for its influence in contemporary architecture, urban practice and the architectural discourse.

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