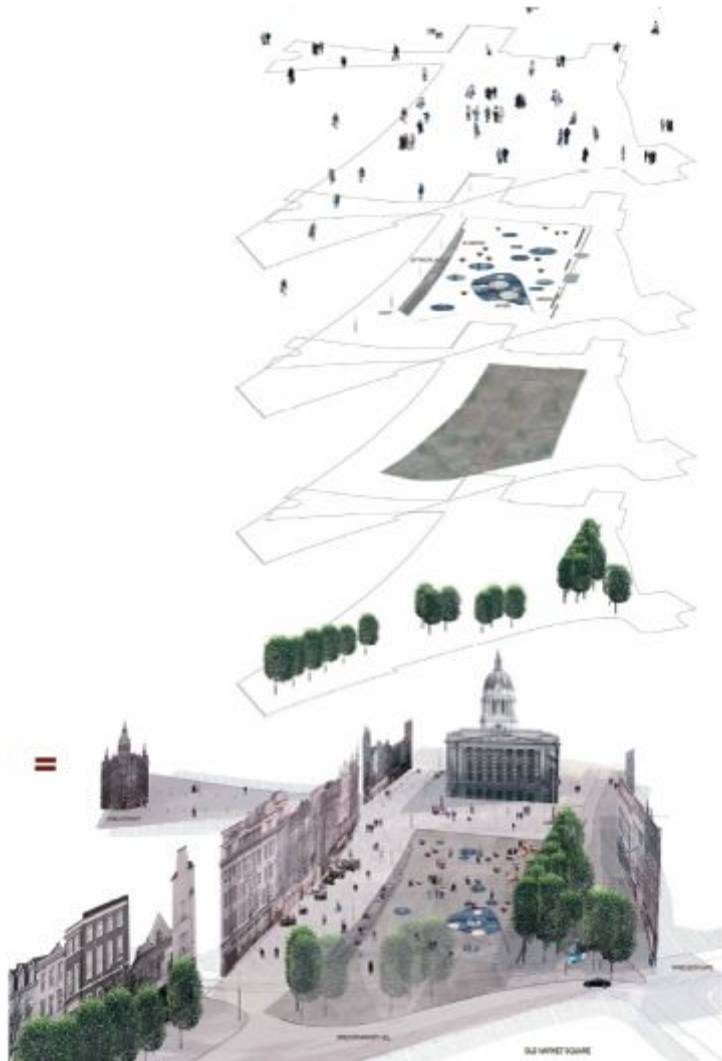


# Ecological Urbanism Advanced Studio 2024: Interdisciplinary Master Studio and Study Tour



with Schulze + Grassov Urban Design

# A planning process with people in focus



**Life !**

**Spaces**

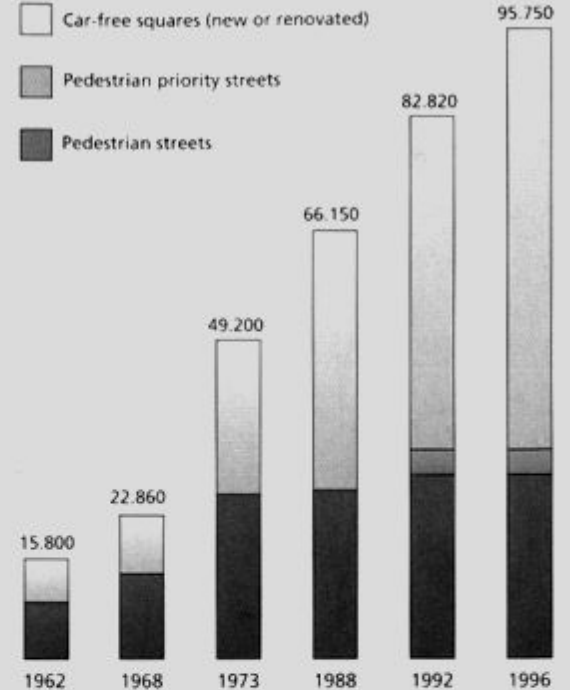
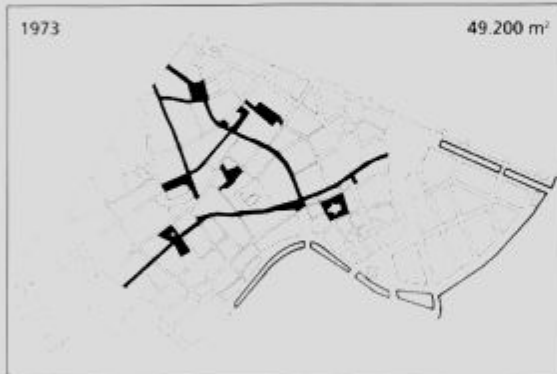
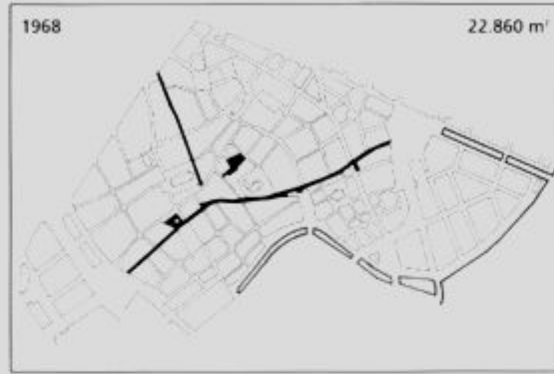
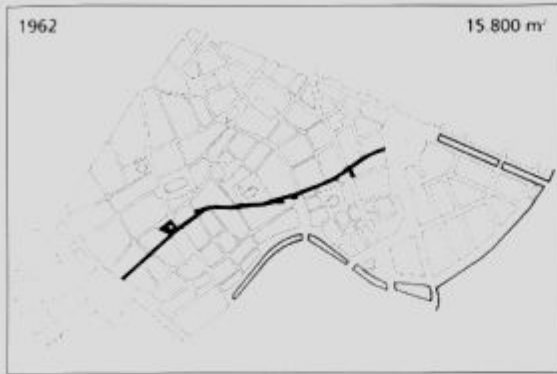
**Buildings**



# Denmark's Public Space Design Streets and Squares for City Life



# DEVELOPMENT OF CAR-FREE STREETS AND SQUARES 1962-1996



Development of pedestrian areas in Copenhagen city center from 1962 to 1996 (in square meters)

Illustrated on this page are 34 years of gradual transformation of Copenhagen city center.

By 1996, the city center had some 96.000 m<sup>2</sup> set aside for people activities, a six-fold increase from the first stage in 1962. The bar graph above shows that the creation of pedestrian streets was actually finished by 1973. Effort has been concentrated subsequently on reclaiming and improving the city squares – the potential oases of the city.





The main street "Strøget"  
before 1962





80.000 people per 24 hours in the summer

“Strøget” to day



# Car invasion 1950 - 60s

Streets and squares are taken over by cars







Strædet - før .....og efter

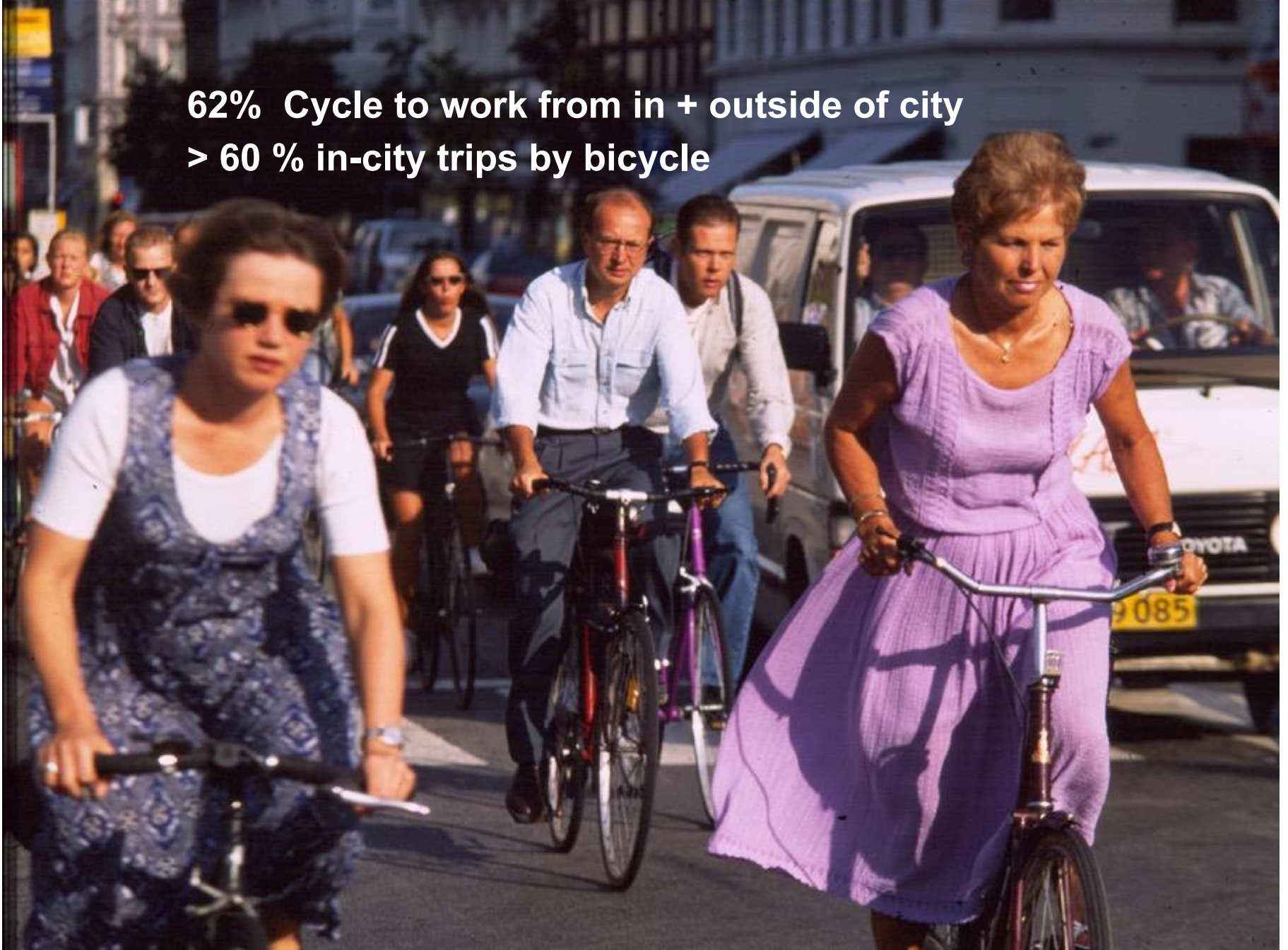


# Nyhavn - before .....and after 1980





**62% Cycle to work from in + outside of city  
> 60 % in-city trips by bicycle**





# Going to work in the municipality of Copenhagen

70% continue to bike in the winter





Cycling for all – it's just a way of getting around.





Inviting public spaces foster *public life*.





# A new Urban Culture: An “Edgy” City







Embracing the city's waterfronts







# Using Urban Nature to make a Liveable, Sustainable City + Adapt to Climate Change







**A New Urban Culture: A Green City**



# Layering Space



<https://www.publicspace.org/works/-/project/g363-the-city-dune>

**City Dune / Harbour Highline**





<https://www.ingka.com/news/ikea-takes-another-step-into-cities-with-new-sustainable-store-in-central-copenhagen/>



City Ikea

Image credit: Lars Gemzoe



# Sustainable District Planning: Nordhavn (Cobe)



1

2

3

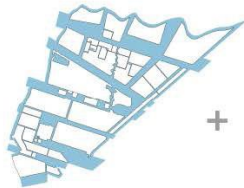
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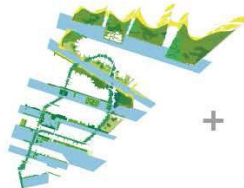
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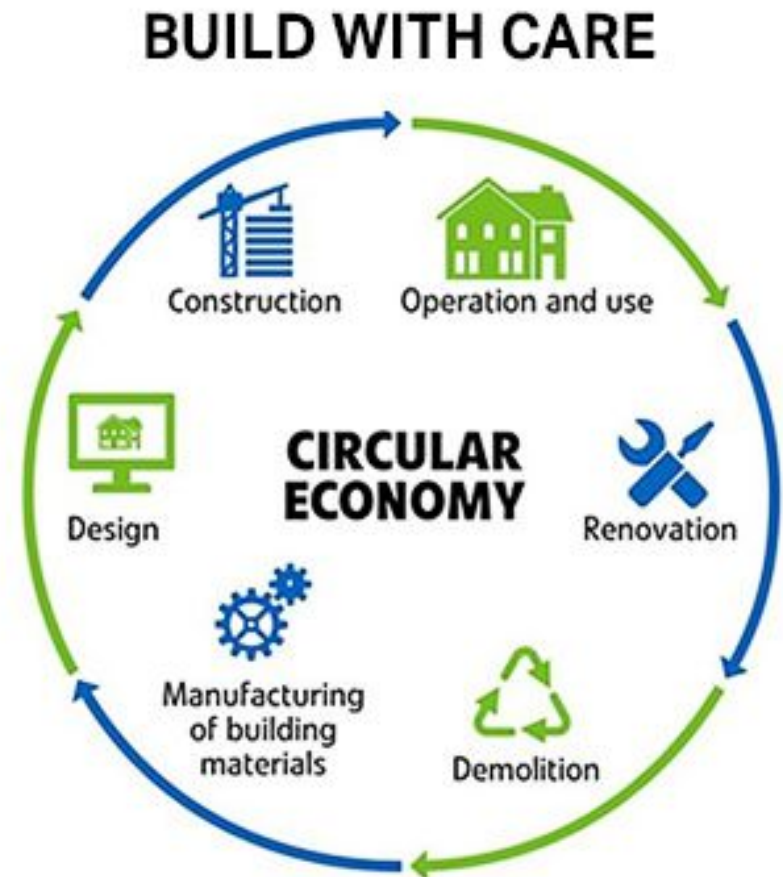






“The **circular economy** represents an unprecedented opportunity for our industry. We must rethink the way we build and design into a scalable, value-driven practice of the resource **economy.**” - *Kasper Guldager Jensen, GXN, Home.Earth*

- **Closed-loop Systems**
- **Circular Thinking**
- **Cradle to Cradle**
- **Nature-Based Solutions**





not

STATE  
OF  
GREEN

[Challenges](#) [Sectors](#) [Partners](#) [Solutions](#) [Events](#)

POLICY

# Copenhagen – Carbon Neutral by 2025



FEATURED IN CREATING SMART, GREEN AND LIVEABLE CITIES

[Home](#) » [Find partners](#) » [City of Copenhagen](#) » [Copenhagen – Carbon Neutral by 2025](#)



# Öresund Region (Denmark – Sweden)





**DENMARK**

**SWEDEN**



**Porous Public Space**  
Urban Nature for Climate Adaptation



# Malmö, Sweden: Sustainability Renaissance





# Malmö, Sweden: Sustainability Renaissance



**Western Harbour / Bo01**



# OPEN STORMWATER MANAGEMENT SYSTEM



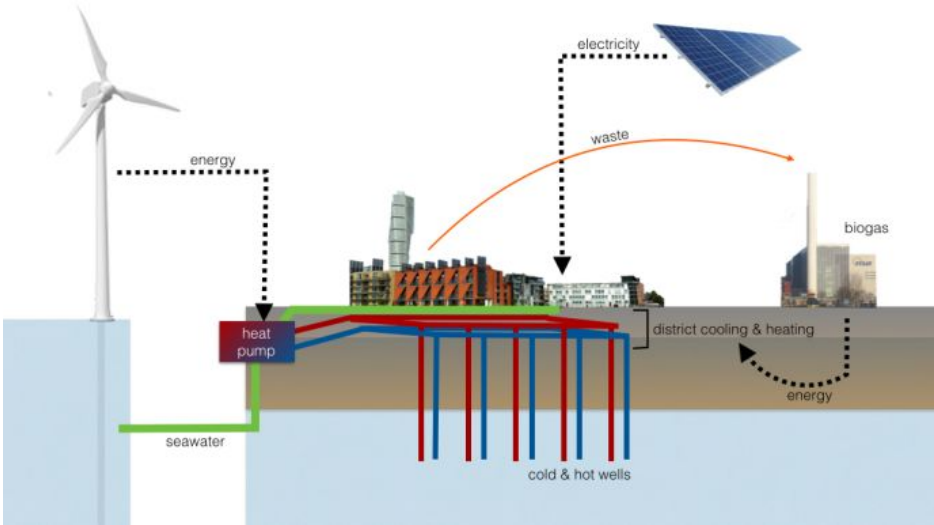


# GREEN SPACE FACTOR





# CLOSED LOOP RENEWABLE ENERGY INFRASTRUCTURE



urbanecologycmu



Green Roof Institute, Augustenborg, Hyllie, Bike System, Cycle Kitchen, Amphitheater, Rosengård, etc. in Malmö....





# The Study Tour: Copenhagen + Malmo



**Cycling**



**Office Visits**



**Site Tours**



**Instruction**





## Copenhagen, Århus, Malmö

### Cycling

Copenhagen Left

Cycling in Heels

Cycling in Suits

Cycling with Coffee

Cycling in Style

Hand Signals

Grade-Separated Cycle Tracks

Dedicated Bike Lanes

Bicycle Right-of-Way

Bicycle Culture

Helmet or no Helmet?

Topography

Cargo Bikes

Bike Parking

Bike Racks

Bikes on the Metro





## The Trip: Copenhagen + Malmö

### Office Visits

Schulze + Grassov

Gehl Architects

COBE

Schønherr

SLA

City of Copenhagen







## The Trip: Copenhagen + Malmö

### Site Tours

Bo01, Malmö Harbor Tour

Pildammsparken

Rosengård

Cykelkoket/ STPLN

Ordrupgaard Museum

Kvarterhuset

ØsterG ro

Vennelyst Allotment Garden

Augustenborg

Superkilen

Maritime Youth House

Amager Children's House

Banana Park

Hother's Plads courtyard

Eastern Cemetery

Sydhavn I Skolen

Amager Strandpark







## The Trip: Copenhagen + Malmö

### Instruction

Louise Grasso, Schulze + Grasso

Sofia Schuff, Cititek

Bettina Werner, Cititek

Lars Gemzoe, Gehl Architects

Birgitte Svarre, Gehl Architects

Ulrik Nielsen, Gehl Architects

Bettina Carlsen,

City of CPH, Bicycle Planning

Lykke Leonardsen,

City of CPH, Climate Adaptation

John Block, Scandinavian Green Roof Institute

Catarina Rolfsdatter-Jansson, Bo01





# Field Drawing and Media Studies





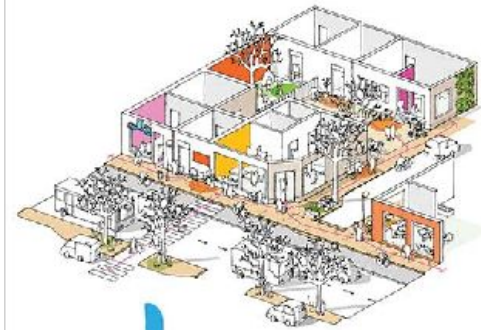


Porous Public Space  
Urban Nature for Climate Adaptation

## The Trip: Schulze + Grassov

### Introduction to the People Parameters for Public Space

## PEOPLE PARAMETERS FOR PUBLIC SPACE



**+** SCHULZE  
GRASSOV



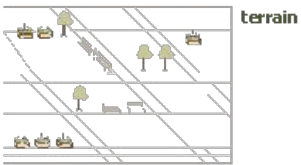
# Copenhagen Precedents

Taasinge Plads  
Lindevangsparken  
Hothers Plads  
Skt. Annae Plads  
Biblioteket

Israel Plads  
Vester Volgade  
Kvarterhuset  
Amager Children' Culture House  
Skt. Hans Torv  
Superkilen  
Norreport Station

OsterGRO  
Tag Tomat Projects  
Fredericksberg Plazas  
SEB City Dunes

## Scales



## Typologies

**Stormwater Mitigation**  
elements that slow, spread or soak up excess rainwater, examples: rain gardens, swales, permeable paving, disconnected downspouts, etc.

**Urban Greening**  
planting that improves air quality, reduces heat island effect, produces food, creates habitat, and provides access to nature, examples: street trees, green walls and urban agriculture

**Social Amenity**  
Places that encourage human interaction and the propagation of culture, examples: play spaces, seating areas, gathering spaces



Porous Public Space  
Urban Nature for Climate Adaptation



# SEB City Dune

## Team:

Sujing Sun, Tatyana Vashchenko

## Typology:

Urban Greening

## Description:

The City Dune was designed by SLA for their client, SEB Bank. The site had previously been dominated by a large, treeless parking lot and monolithic office building. The designers were challenged to maintain the number of existing parking stalls while humanizing the space to accommodate pedestrian and cyclist through-traffic and creating places to linger.

The terraced rooftop undergrounds two levels of parking while creating a universally accessible connection through a performative landscape which mitigates heat island effect and diverts 95% of the site's stormwater from the municipal sewer system. The sloping site is composed of shifting terraces which penetrate the surrounding SEB Bank buildings, subtly linking indoor with outdoor space.

A universally accessible path cuts its way across terraces and plantbeds, linking a future bicycle high line to street-level bike lanes. Narrow plant beds, when viewed at ground level, create the illusion of dense planting through repetitive layering of beds along each terrace. The City Dune evokes an open woodland draped across a bright hillside, an urban oasis for skateboarders and office workers alike.

**Location:** Bernstorffs Plads, Kalvebod Brygge, Copenhagen, DK



Source: <http://www.landezine.com/index.php/2011/10/park-by-sla-landscape-architecture/>



Source: <http://www.publicspace.org/en/works/g363-bymilen>



Illustration Grey and Lindstrom



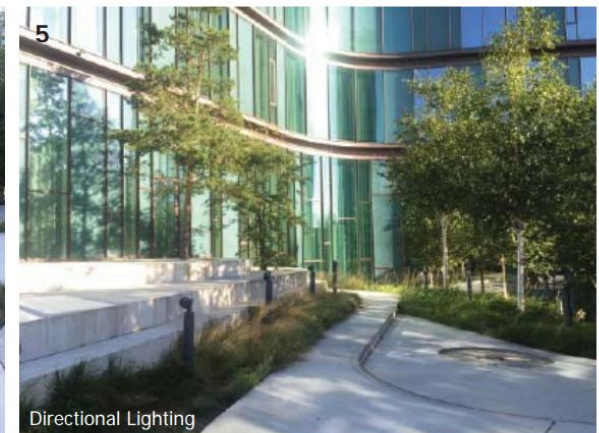
Source: <http://www.publicspace.org/en/works/g363-bymilen>



# Intervention Scale



- 1 All concrete used on site is bright white, allowing it to reflect UV light and reduce heat island effect.
- 2 One hundred and ten atomizers utilize reclaimed stormwater to emit a fine mist on very hot days, helping to cool the area and ensure survival of plant material.
- 3 Multi-tiered plantings occupy narrow planters, which in plan view, appear to be scattered across the sloping site. At eye-level, they collapse to form a layered screen.
- 4 Pavement joints highlight the facets of the multi-planed, inclined landscape, serving both a functional and aesthetic purpose.
- 5 Light posts vary in height and all feature lamps which are manipulable and directional, reducing light pollution at night.
- 6 Trees are planted alone as specimens or in groupings to form masses. The City Dune planting palette is composed of Swedish dune plants which are well suited to a bright urban hillside.
- 7 The winding path across the dune is made up of relatively large and continuous concrete pours while the spaces between ramps are formed of numerous triangular "facets" which span the slopes between path segments.







universally accessible path

one of many possible short-cuts

Underlay Source SLA

### Site Circulation:

Though the most obvious route through the City Dune is the universally accessible path zig-zagging its way between plantbeds, many pedestrians choose to cut across the terraces where plantbeds don't pose an obstacle. The main path forces one to slow down and view the landscape from numerous vantage points, yet the terraces do not preclude an agile pedestrian from scaling them and choosing a more direct route. To a skateboarder the concrete terraces are an amenity and invite urban play. For SEB Bank employees moving between buildings, the route is quite convenient as building entrances are located on nearly the same plane.



Source: <http://www.architectureoflife.net/en/the-city-dune/>



### Site Users (left):

Currently, the City Dune is used recreationally by skateboarders, curious cyclists, people who work locally, and the odd architectural tour group. Once the Harbour High Line is completed, the path will likely see much higher volumes of cyclist and pedestrian traffic.



# Terrain Scale

## Proposed Harbor High-line

New Ikea building is destination of Green High-line Park. The warehouse will be highly accessible for bikes, and visitors will be able to borrow a bike trailer or carrier bikes to accommodate the two-wheeled Copenhagen lifestyle. The linking green roof garden serves as a green pedestrian and cyclist park street that connects Bernstorffsgade and SEB bank's new headquarters, to the north, the Tivoli hotel and convention center to the south.



Harbor High-line

Kalvebod Brygge to IKEA

Rigsarkivet Grønne Green Roof

SEB City Dune



Image Citation



# Master Studio with Louise Grassov, Schulze + Grassov





# Follow Up: Master Studio Design Work Documented



## BELLINGHAM'S **NEW WATERFRONT**

PROPOSALS FOR A MODEL CLIMATE DISTRICT

2021 Scan Design Interdisciplinary Master Studio  
College of Built Environments, University of Washington



# The Bend

<https://watershedcommunity.org/our-purpose/the-bend-live-work-district/>

nshot



**Watershed**  
Community Development

Our Purpose

Our People

Support

News & Events



*The Bend: A Live/Work District*



# Copenhagen – Malmö Study Tour 2024

**Dates** Aug. 30 – Sept. 15, 2024

**Lodging** Copenhagen hostel and apartments, Malmö hostel,

**Airfare** Currently **\$800**

**General ≈Schedule** First day: Meet as group Friday eve., Sept. 2  
Sat/Sun: Semi-guided excursions; side trip to Sweden and Samsø  
Monday-Friday: tours of exemplary urban design and environmental encounters, sustainable transport, design offices, etc. Most travel by bicycle.  
Last day: Saturday, September 17 (lodging until Sept. 18 am)

**Program Director** Professor Nancy Rottle, FASLA, Landscape Architecture + Vincent Javet + CPH-based Master Teacher + Local Experts

**Credits** (6) For Autumn Studio, (3) for study tour, LARCH 497 -- journal to be submitted first week of fall studio), Fall Term.



## SCANDESIGN INTERDISCIPLINARY MASTER STUDIO 2024

Anticipated study tour expenses per person (estimates only)\*: Aug. 30 - Sept. 15 2024

### Organized and paid by the Program

Lodging	\$1,200
Local Transportation (bikes, taxis) Covered by Program Fee	\$400
Group program and tour costs, museum admissions, 2 group dinners (provided by grant)	\$800
<b>Paid Directly by Program</b>	<b>\$2,400</b>

### Arranged and paid by the student

Flight	\$1,000
Food and Drink	\$500
Travel Health Insurance (required)	\$50
Danish SIM card for smartphone	\$20
Study Abroad fee (required)	\$400
Program Fee	\$100
Discretionary (entertainment, supplies, shopping, etc.)	varies
<b>Estimated Total Paid by Student</b>	<b>\$2,470</b>
Possible Scan Design Foundation stipend	-\$800
Possible need-based scholarship (\$500 - \$1000) - <i>FAFSA required</i>	-\$1,000
<b>Potential out-of-pocket cost to each student</b>	<b>\$870 - \$1,860</b>



