

# VINGE



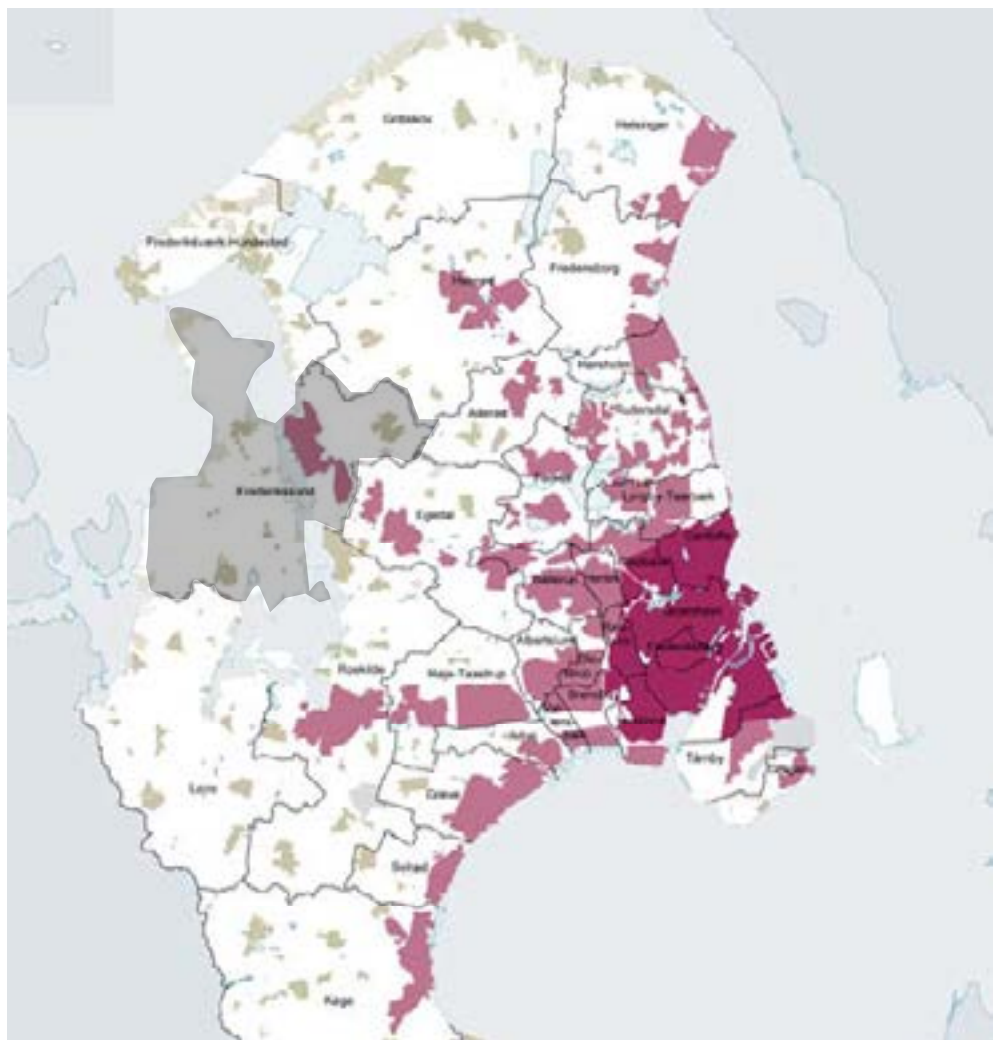
FREDERIKSSUND  
KOMMUNE

GLARSEN ARCHITECTS

EFFEKT

MOE

MARIANNE LEVINSEN LANDSKAB



## Frederikssund

15.725 inhabitants in the city of  
Frederikssund

44.401 inhabitants in the  
municipality of Frederikssund

36 km. From copenhagen city  
centre

S-train line

"Fingerplanen" is from 1947

The area becomes a part of the  
regional plans in 1978

VINGE





## Frederikssund - Vinge


20,000 inhabitants in the city of Vinge  
Frederikssund Municipality owns 70 ha.  
in the centre and 25 ha. in the north

19. november 2013 - new City Council  
and new Mayor in Frederikssund  
Vinge got political support:

**"Inhabitants before next election"**

Time pressure which has influenced the  
process of development

VINGE

An aerial photograph of a rural landscape, likely in Norway, showing a mix of green agricultural fields, some yellow fields, and a road. A dashed white line runs diagonally across the image, possibly indicating a boundary or a planned development area. The text 'Vinge' is visible in the middle-left, and 'Store Rorback' is visible in the middle-right. The image is split vertically by a thin black line.

Greenfield – advantages but also disadvantages

limited context – no given solutions

Since Vinge is a completely new development we have a unique opportunity to be a frontier among sustainable developments where Smart City initiatives can be implemented from the very beginning.





# Vinge

Masterplan by Hening Larsen and Effekt

20.000 inhabitants

4000 workplaces

370 ha. / 914 acres

The visions behind Vinge is described with five key points

- **Sustainability**, utilize the latest technology and possibility for testing and research.
- **The City in the Green**, a green heart in the city centre. Nature should be present everywhere.
- **Community**, creating safe environments for kids, young, adults and elderly people.
- **Variation and multiplicity**, with a healthy mix of people, functions and high architectural diversity will create attractive city environments.
- **Health and movement**, possibility for play in the streets and activities in the nature will be highly prioritised.

V NGE

# The Delta District

The actual development of Vinge starts with the Delta District  
450 homes, 1000 inhabitants, 4 different housing types: City  
development, clustered community housing, row houses and villas

## Quality program:

### **1. Best possible view for all.**

Landscape, view, shelter, and light decide the shape of the buildings.

### **2. All dwellings have appurtenant outdoor space.**

Outdoor spaces have space for socializing and private pockets.

### **3. Direct connection between transportation, dwelling and nature.**

Access from car to dwelling and from dwelling to nature is unhindered.

### **4. Built-up area should display value of nature.**

Natural biotopes is boosted.

### **5. The Architecture should compliment the landscape.**

The development must maintain its quality over time.

### **6. Rainwater is handled at the surface**

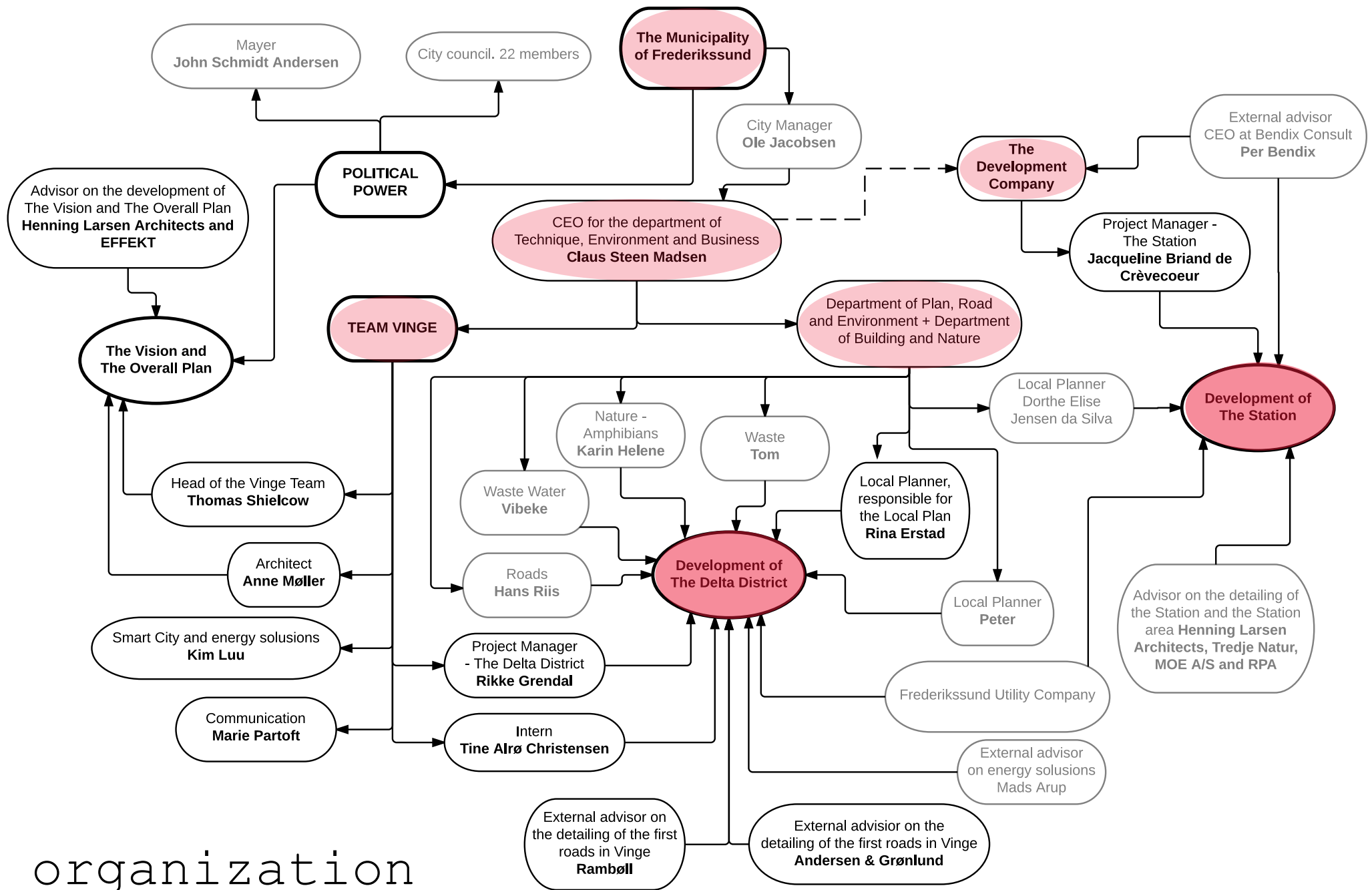
Recreational elements on the surface handle the rainwater.

### **7. The neighbourhood is sustainable**

The city development is long-term and climate secure with sturdy landscape.



VINGE



organization





visions

VINGE





Concept plan  
made by SLA and  
Rambøll

All seven cri-  
teria from the  
quality program  
have influence on  
the nature and  
are connected to  
the nature avai-  
lable in the  
area.

Water is influen-  
ced by three of  
the seven  
quality crite-  
ria.

The water solu-  
tion system is  
the main identi-  
ty for the di-  
strict.



combine the technical function and recreation  
- rainwater is handled on the surface!!

**DELTAKVARTERET**  
Vandløb - 1:5000

**VINGE**

**SLA**  
Urbanity | Strategy | Landscape

**RAMBOLL**

Warwickshire - 150000

### Integration

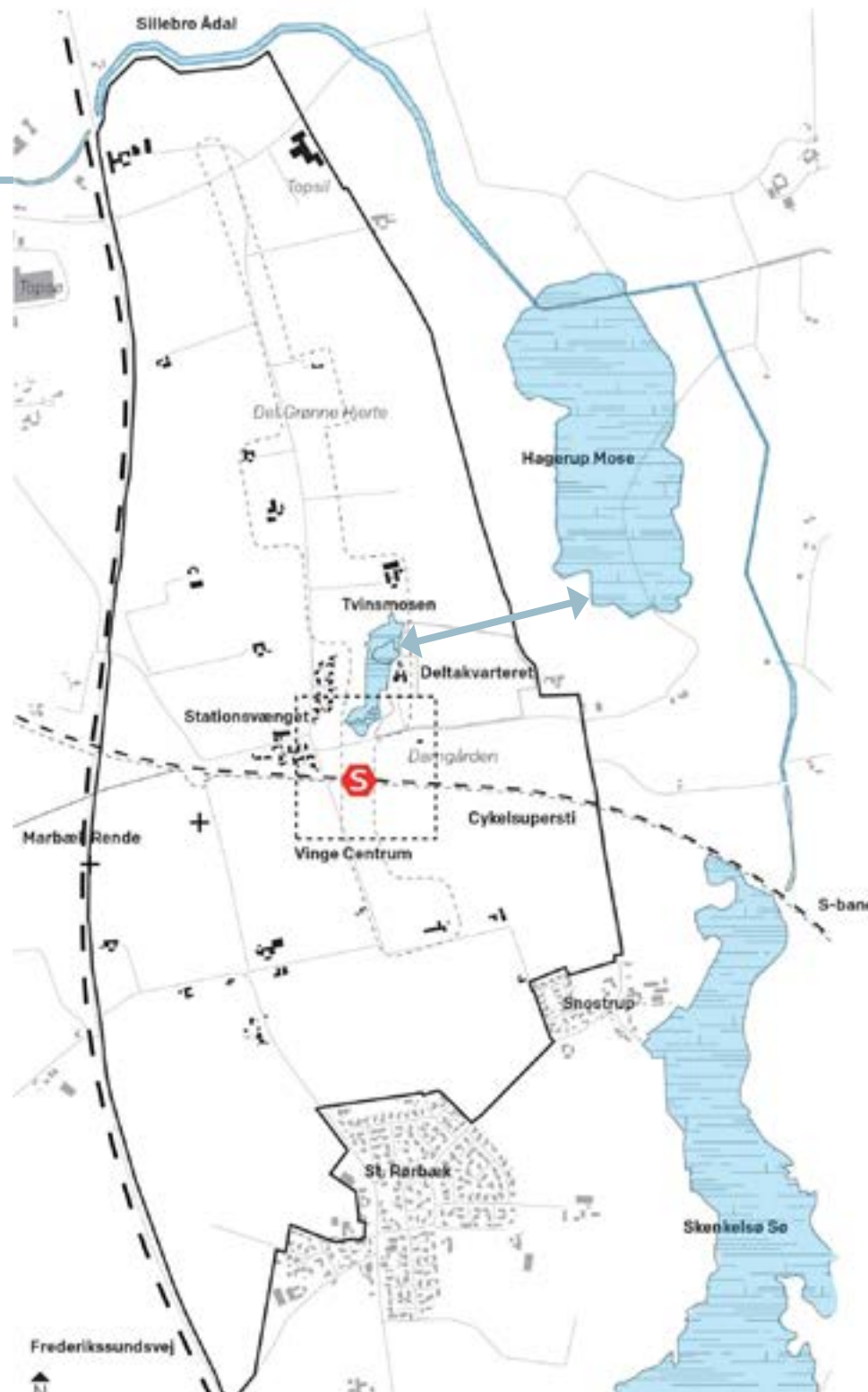
Wetland  
Forest  
Shrubland  
Grassland  
Bare  
Water  
Tidal  
Marsh  
Pasture  
Cropland  
Rangeland  
Dry/Lowland

**SLA**  
Utility | Mining | Healthcare  
**RAMBOLL**

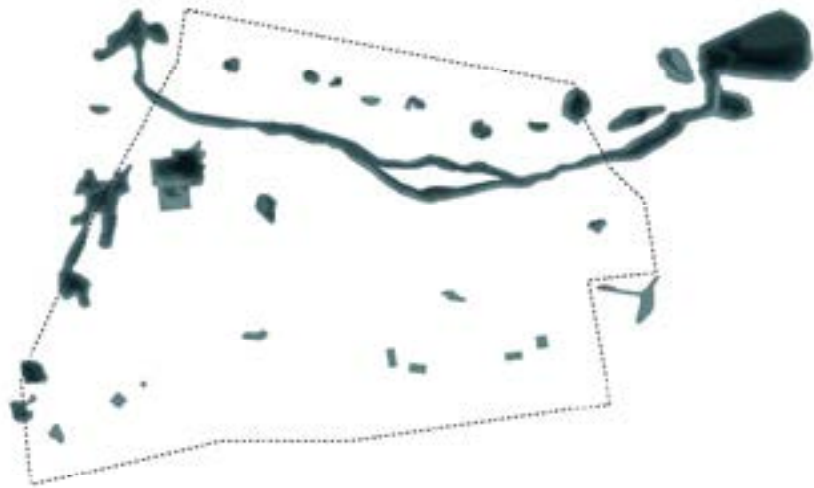
# VINGE



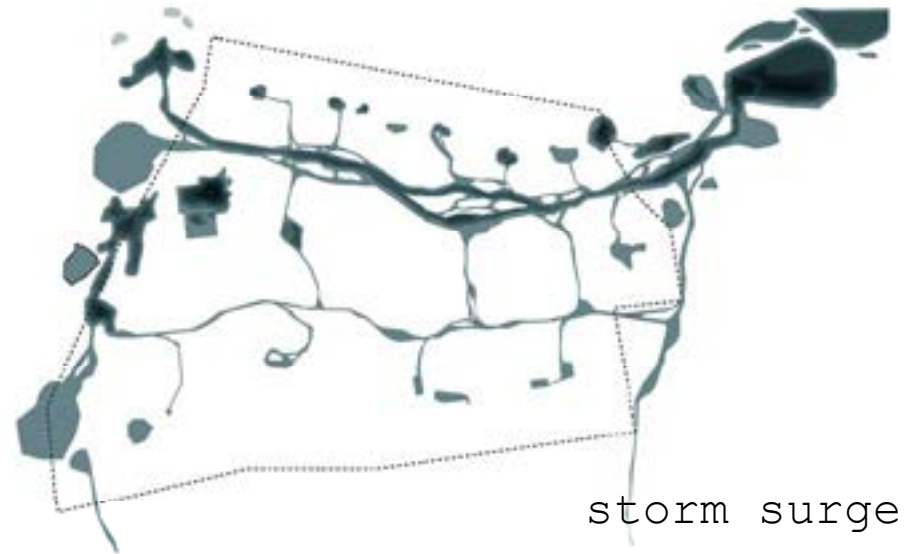
Roskilde  
Fjord



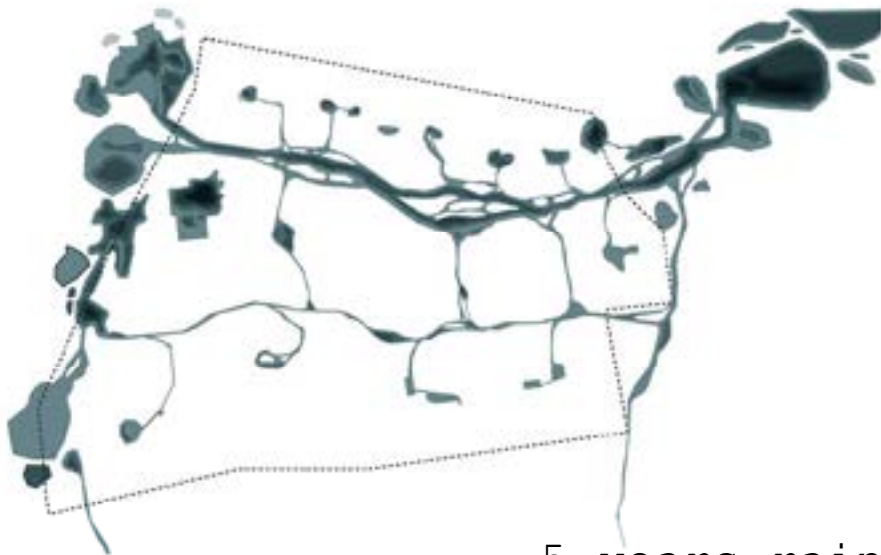
The recreational waterway could be a part of a bigger water structure connecting lakes so you can canoe from the Delta district to Roskilde Fjord.



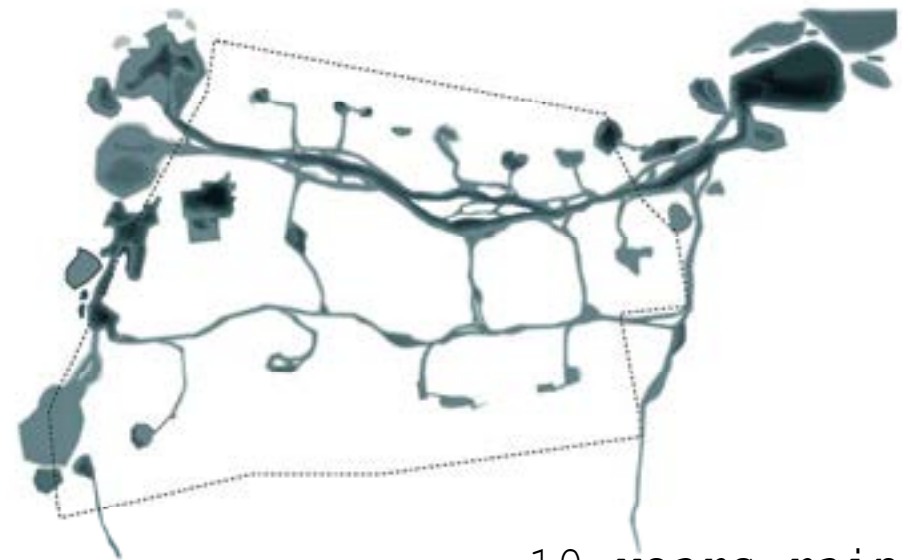
normal water level



storm surge

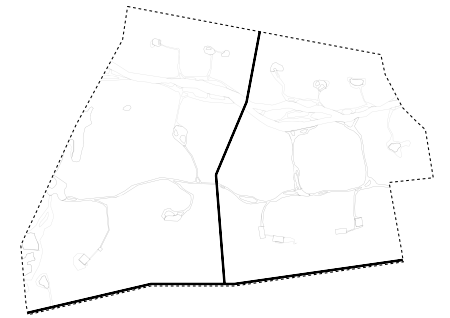


5 years rain

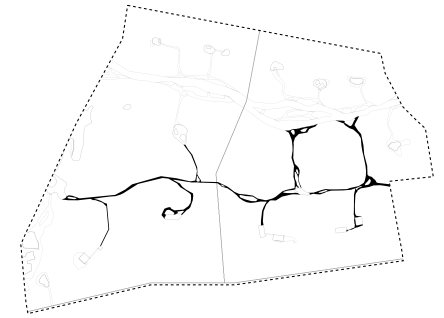


10 years rain



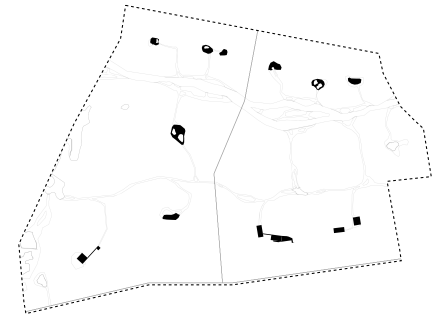


trench and trough  
- stormwater management along roads

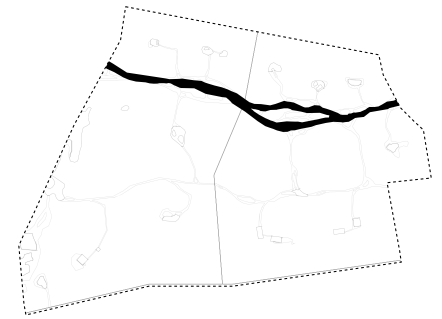


side branches  
- stormwater management between dwellings





decentralized delay  
- small lakes with permanent water table



clean "Delta"

- main lake with permanent water table



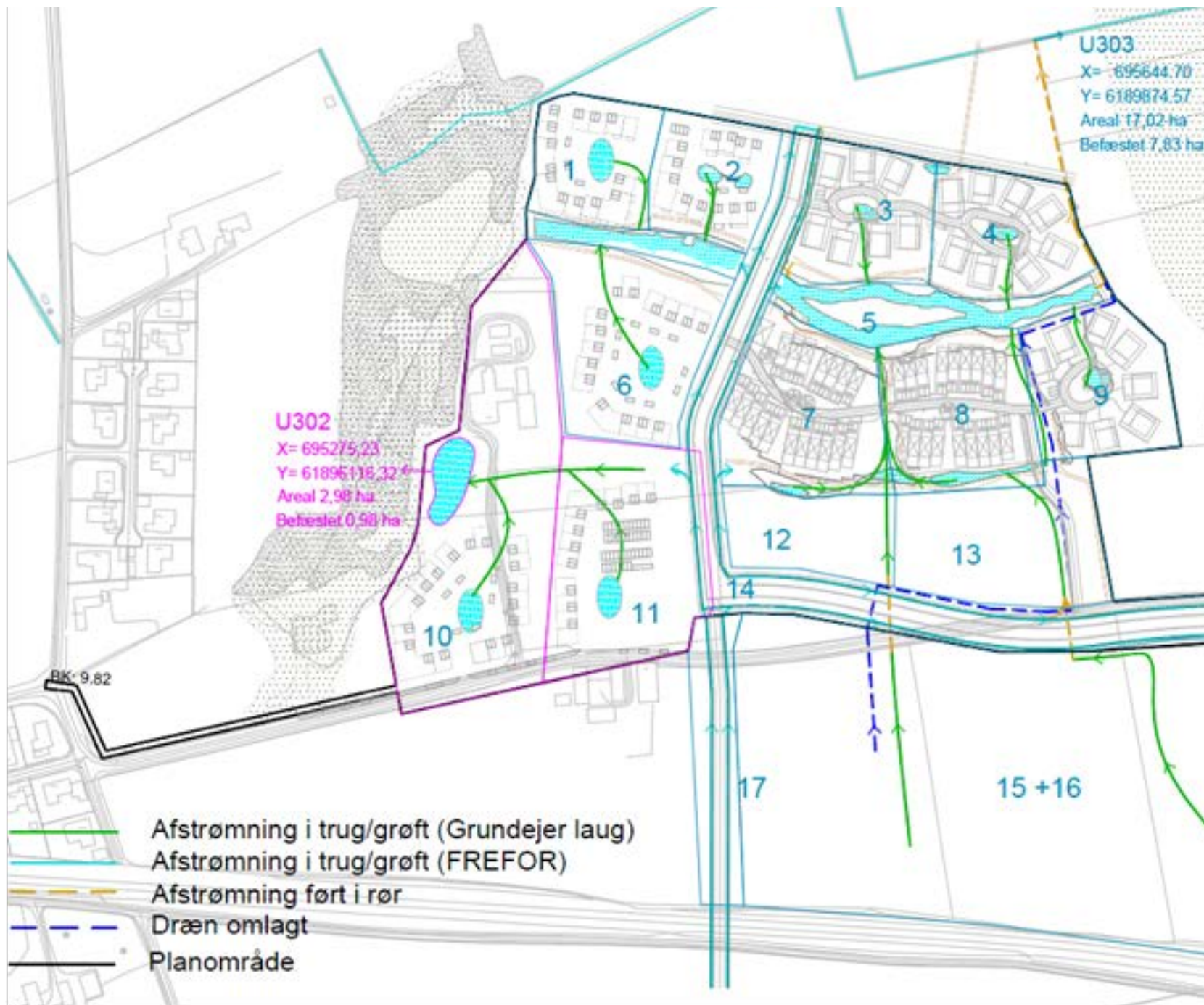
implementation



VINGE



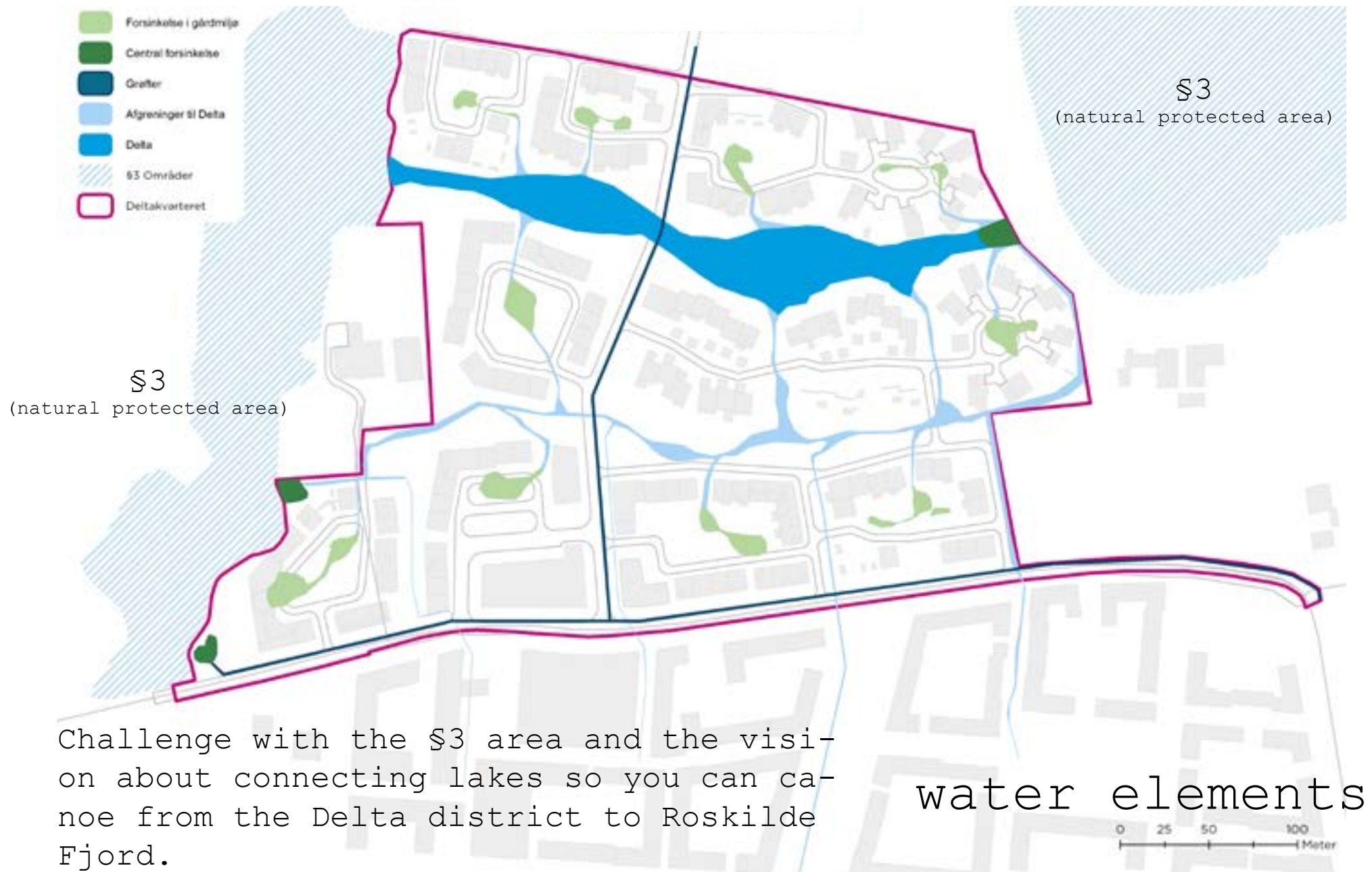
# The flow routes for rainwater

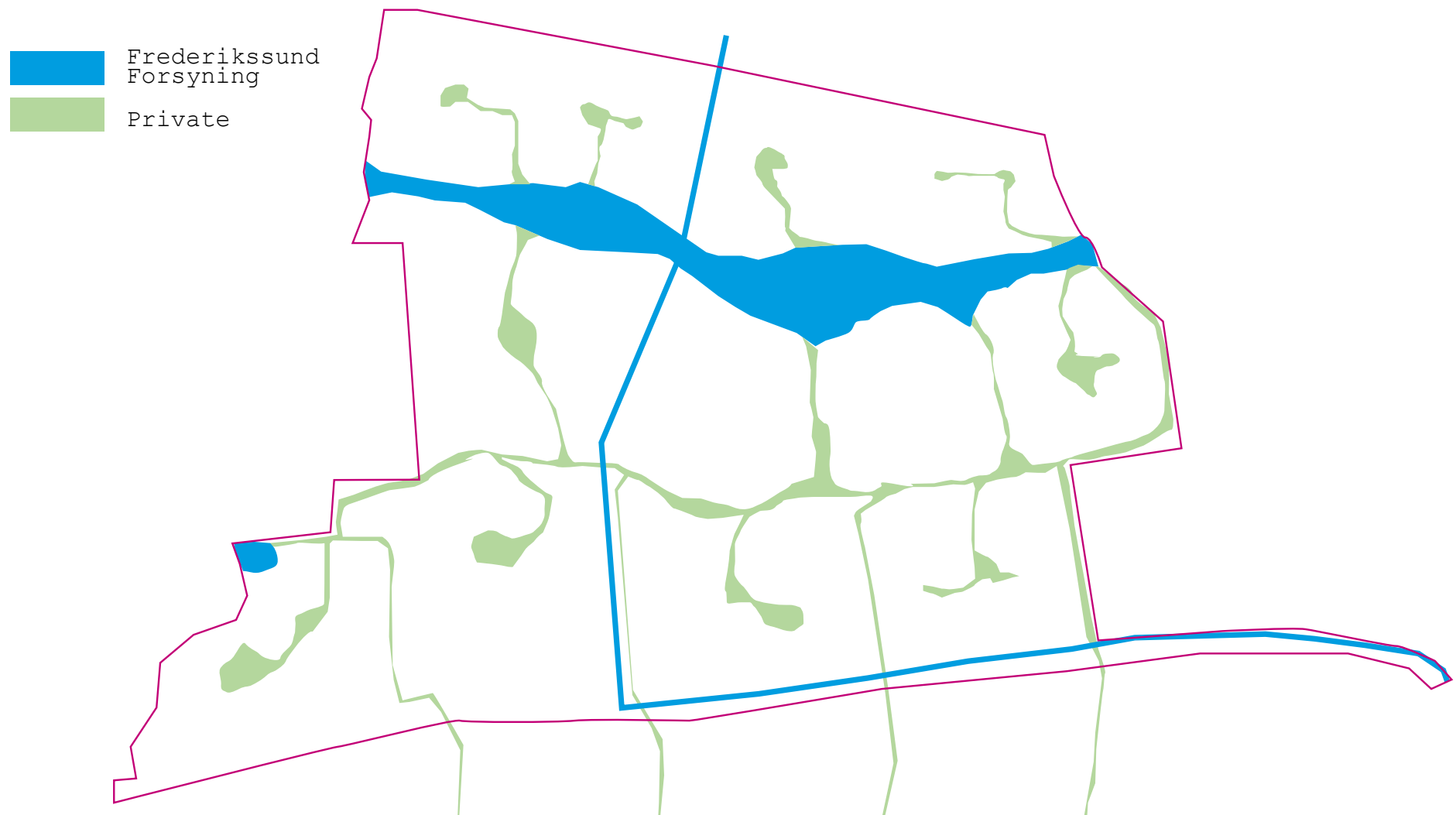


Challenge with the intention when the planning becomes more concrete,

- the physical conditions are not what you thought they were;
- Level in the area.
- not enough space to complete the intentions
- natural protected areas §3
- ect.







Local government process - wastewater appendix and an agreement with Frederikssund Forsyning about who should run and own what.

ownership



Frederikssund  
Forsyning

Frederikssund  
municipality

Frederikssund  
Forsyning



ownership along roads

Bredder - FRSK

100 års regnhændelse volumen - FRSK

Rekreativt element - FRSK

Forsinkelsesvolumen. Bilag 6 i spv plan+ skrift 30 - FF

Rensevolumen/vådvolumen, min. 250m<sup>3</sup>/red/ha. - FF

Diagram showing how to divide the lake into what is technical and what is recreation. Frederikssund Forsyning - Frederikssund municipality

responsibilities



# Planned main structure for wastewater

