Waste Management in Copenhagen Port – case study on new investment

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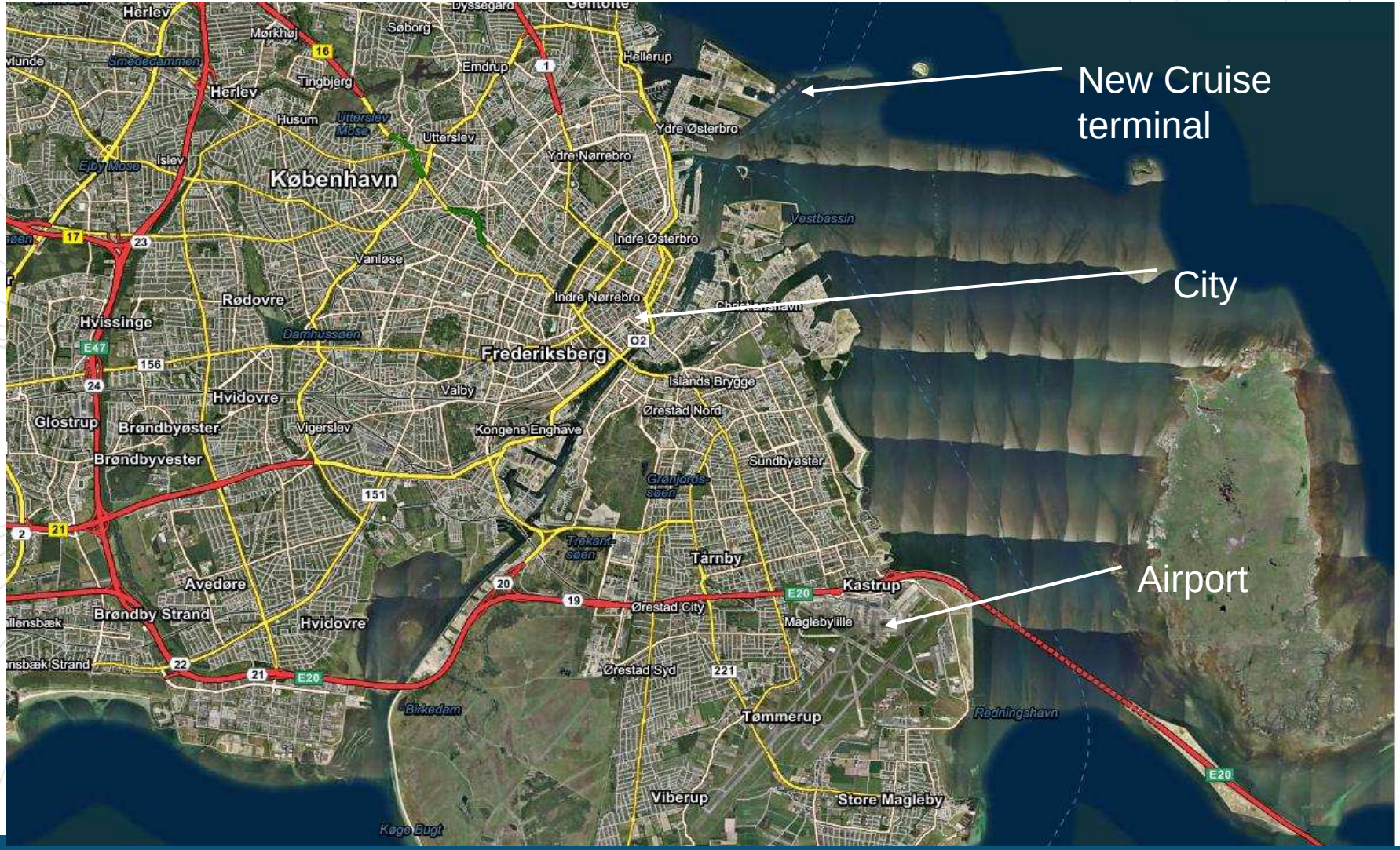
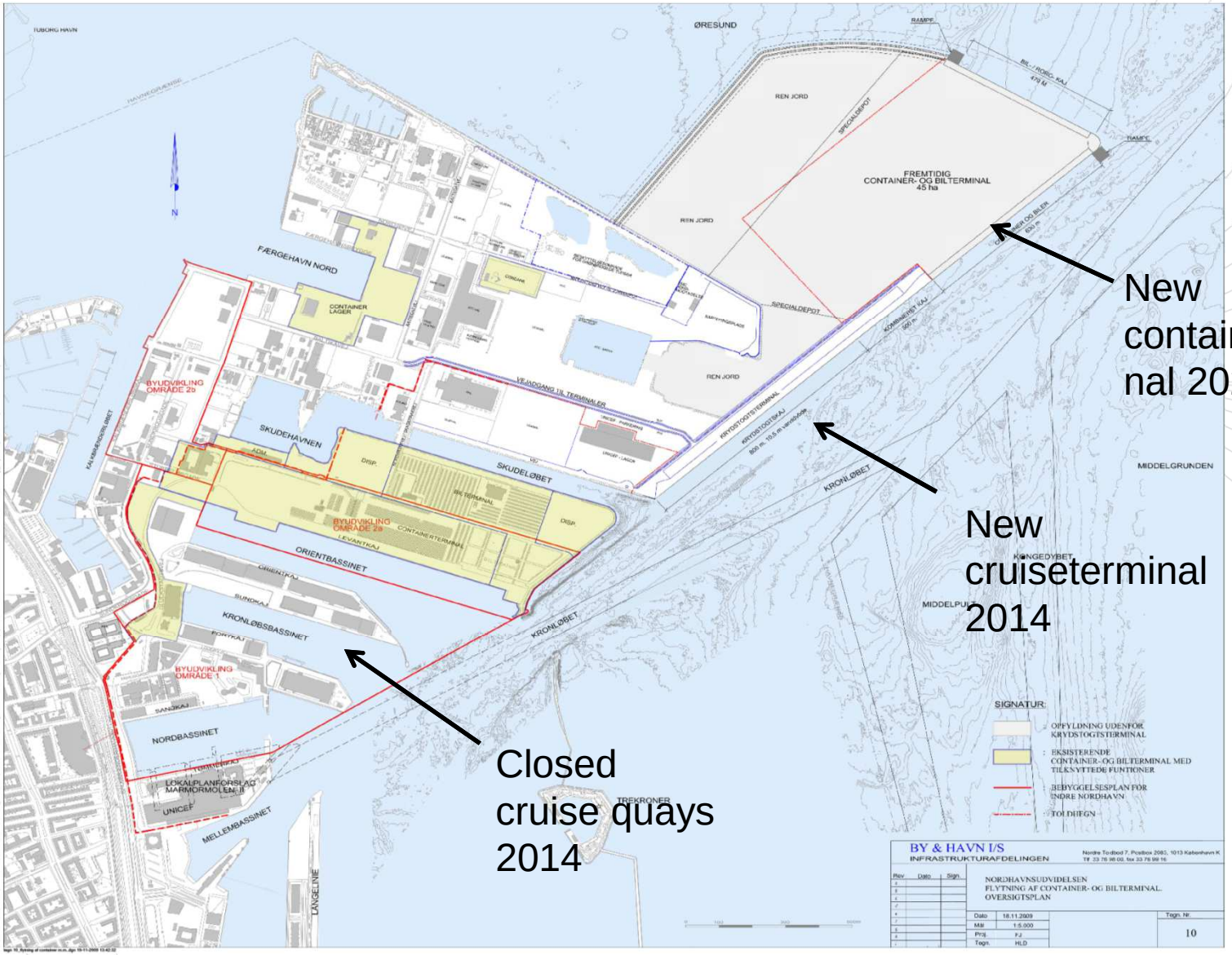
Business idea

"We create port, terminal and transport solutions across Europe."

Vision

Bridging – Expanding – Leading


New Cruise terminal
City
Airport
Herlev
Mørkhøj
Søborg
Hellerup
Smededammen
Emdrup
Tingbjerg
Husum
Utterslev Mose
Utterslev
Ydre Østerbro
Ydre Nørrebro
Islev
Eby Mose
København
Vestbassin
Indre Østerbro
Vanløse
Rødovre
Indre Nørrebro
Hvissinge
Damhussøen
Frederiksberg
Islands Brygge
Hvidovre
Valby
Ørestad Nord
Glostrup
Brøndbyøster
Vigerslev
Kongens Enghave
Brøndbyvester
Sundbyøster
Grønjords-søen
Trekant-søen
Tårnby
Avedøre
Kastrup
Ørestad City
Brøndby Strand
Hvidovre
Maglebylille
Ørestad Syd
Birkedam
Tømmerup
Rødningshavn
Viberup
Store Magleby
Køge Bugt



New containertermi nal 2020

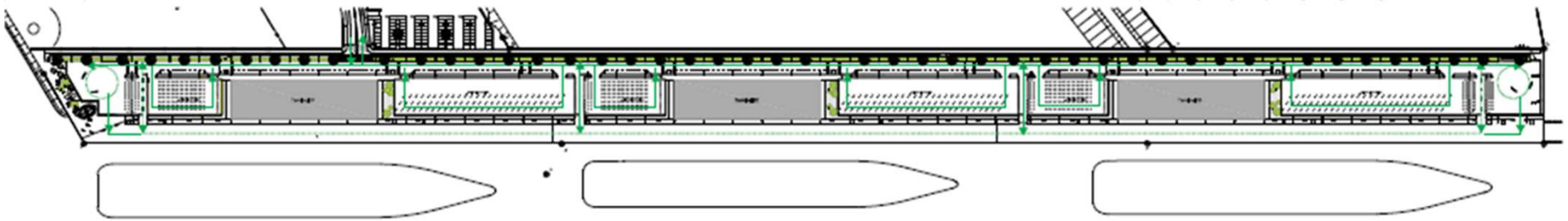
New cruiseterminal 2014

Closed cruise quays 2014

Copenhagen port areas

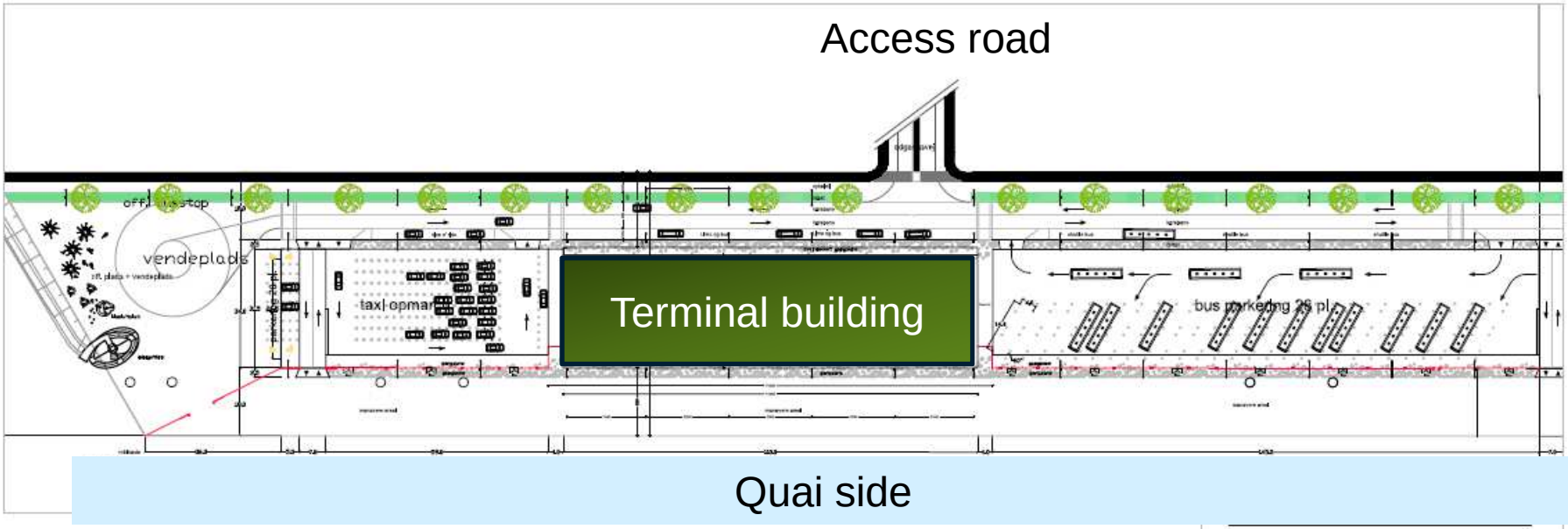
COPENHAGEN MALMÖ PORT

General data for the new cruise quay



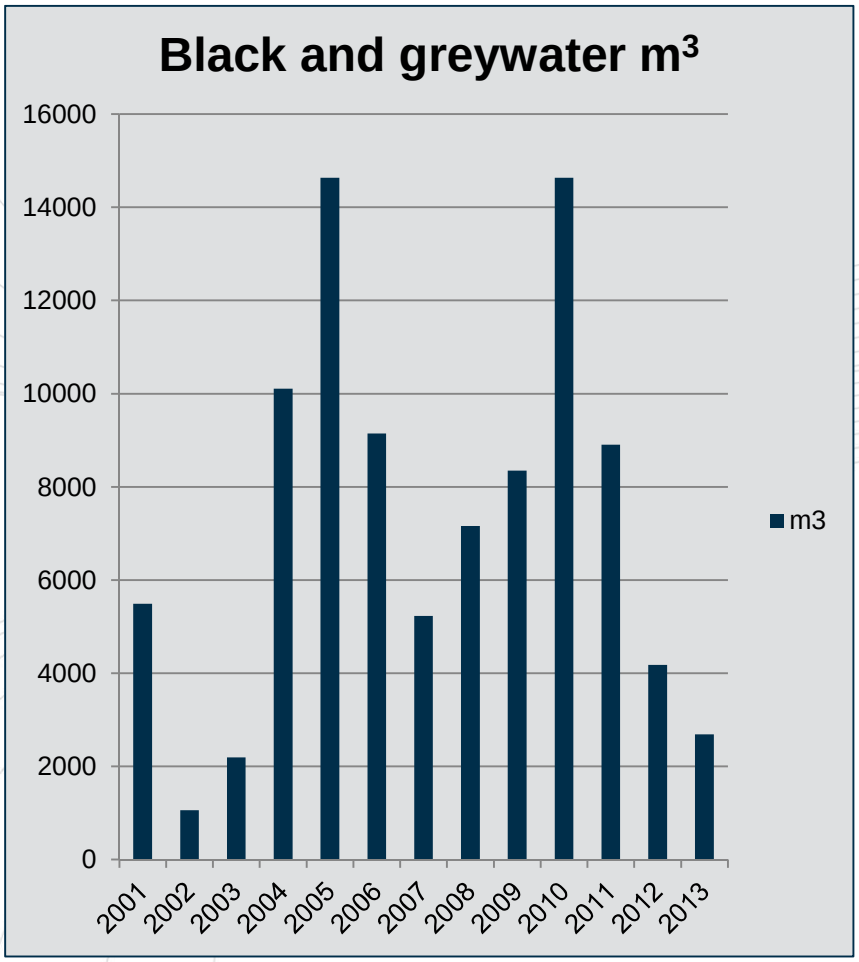
- Length 1,100 m
- Width 70 m, operation area 18 m
- 3 terminals
- Parking area for 200 cars right next to the terminals

3 similar terminals



- Taxi stands
- Bus stands
- Zone for limousines, shuttle buses and "kiss and ride"

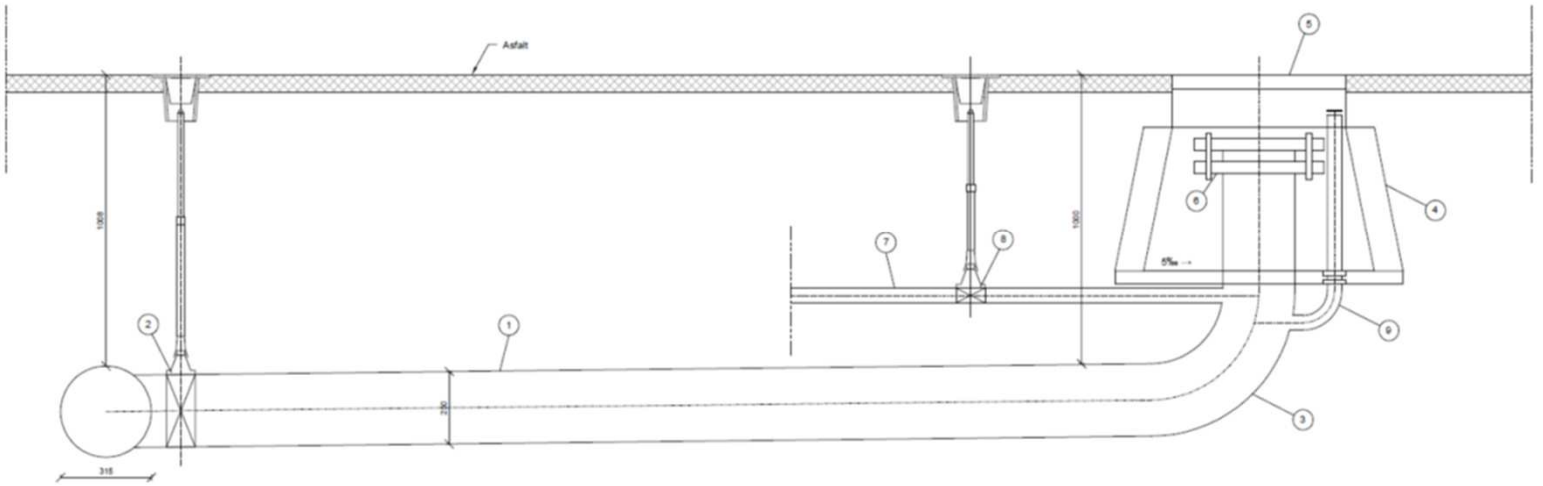
Waste Water reception in Port of Copenhagen



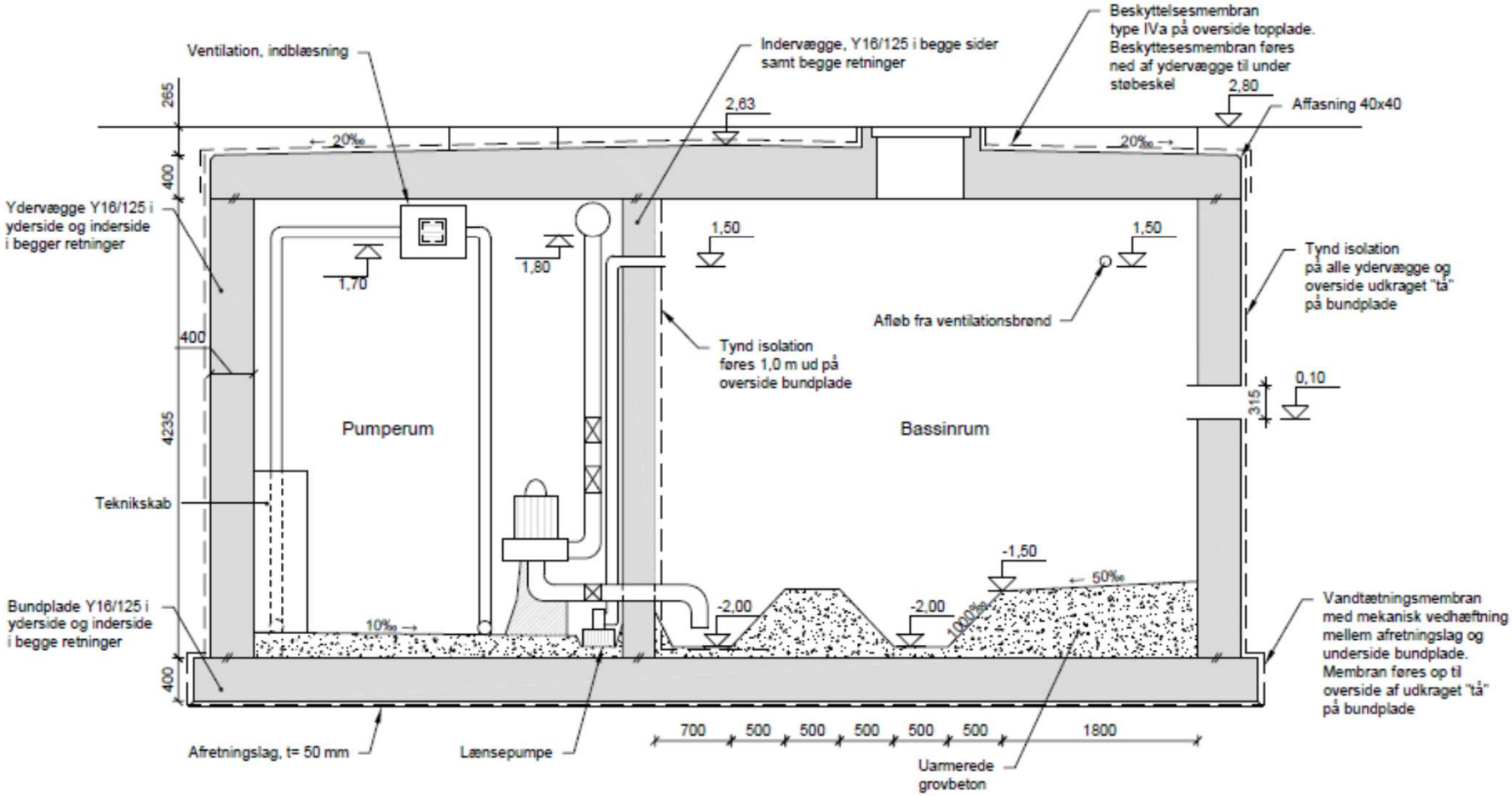
Year	m³ per ship	dis- charges	Cruise calls	%
2010	378	38	308	12
2011	297	30	370	8
2012	189	22	375	6

Wastewater pipes in the quay

- Receiving wastewater from 3 cruise ships simultaneously
- Capacity up to 900 cbm/hour (300 cbm/hour per ship)
- Connection point per. 60 m.



Collecting rainwater



Pumps, valves and chemical addition

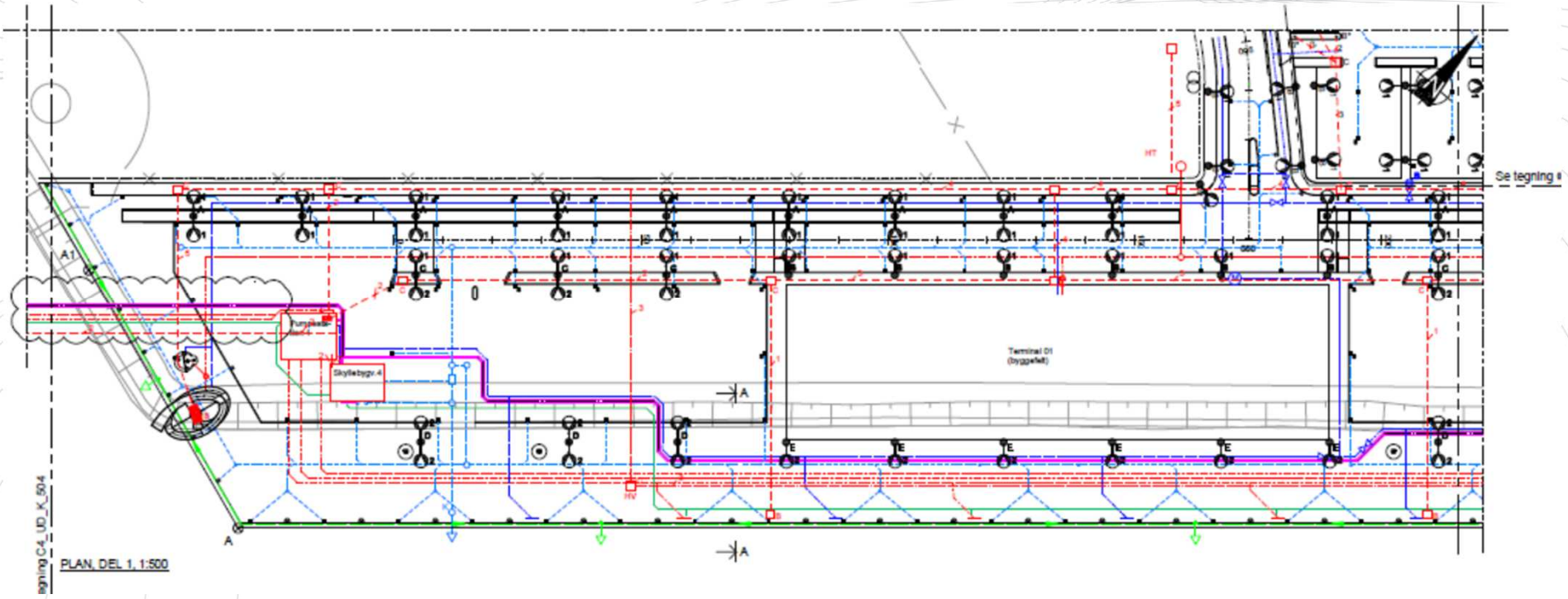
Pipes to municipal sewage plant

Smell removal

- Ferric chloride
- 6 m3
- removes smell from hydrogen sulphide

Prepared for land-based power supply

- Infrastructure layout for power cables.



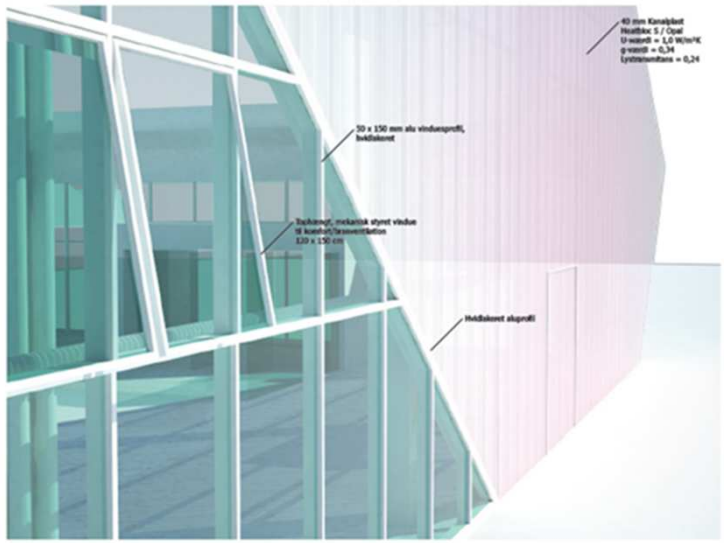
New Cruise buildings 2014

Green roofs

- Occupies much of the rainfall falling on the roof and thus relieve the sewer system

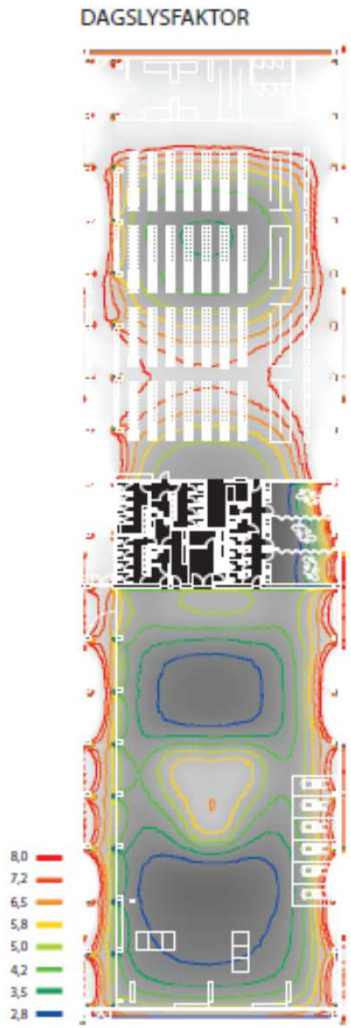
Sustainable indoor climate solution

- Natural ventilation through controlled openings in facades and roofs
- Reduced construction and operating costs

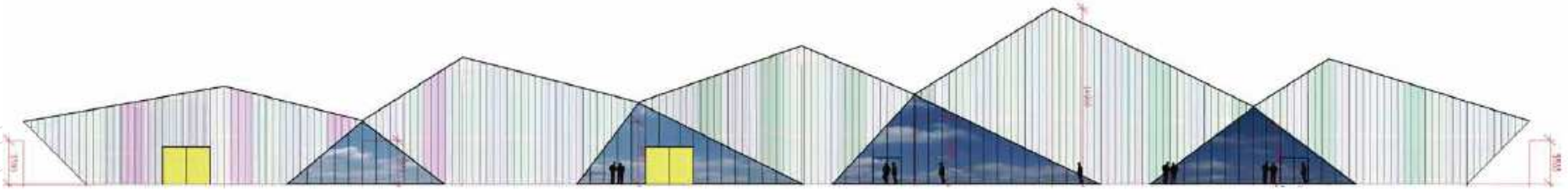


Incoming daylight

- Translucent building elements of polycarbonate
- Roof windows
- Electricity savings from natural daylight
- HEATBLOC surface prevents solar overheating



LÆNGDESNIT



FACADE

Thank you for your attention!