

perspective
.brussels 



Brussels Canal Territory
OPEN SPACE PLAN (OSP)
Lighting Strategy

Sven Vercammen – october 2023

SITE CONTEXT

CHARACTERISTICS

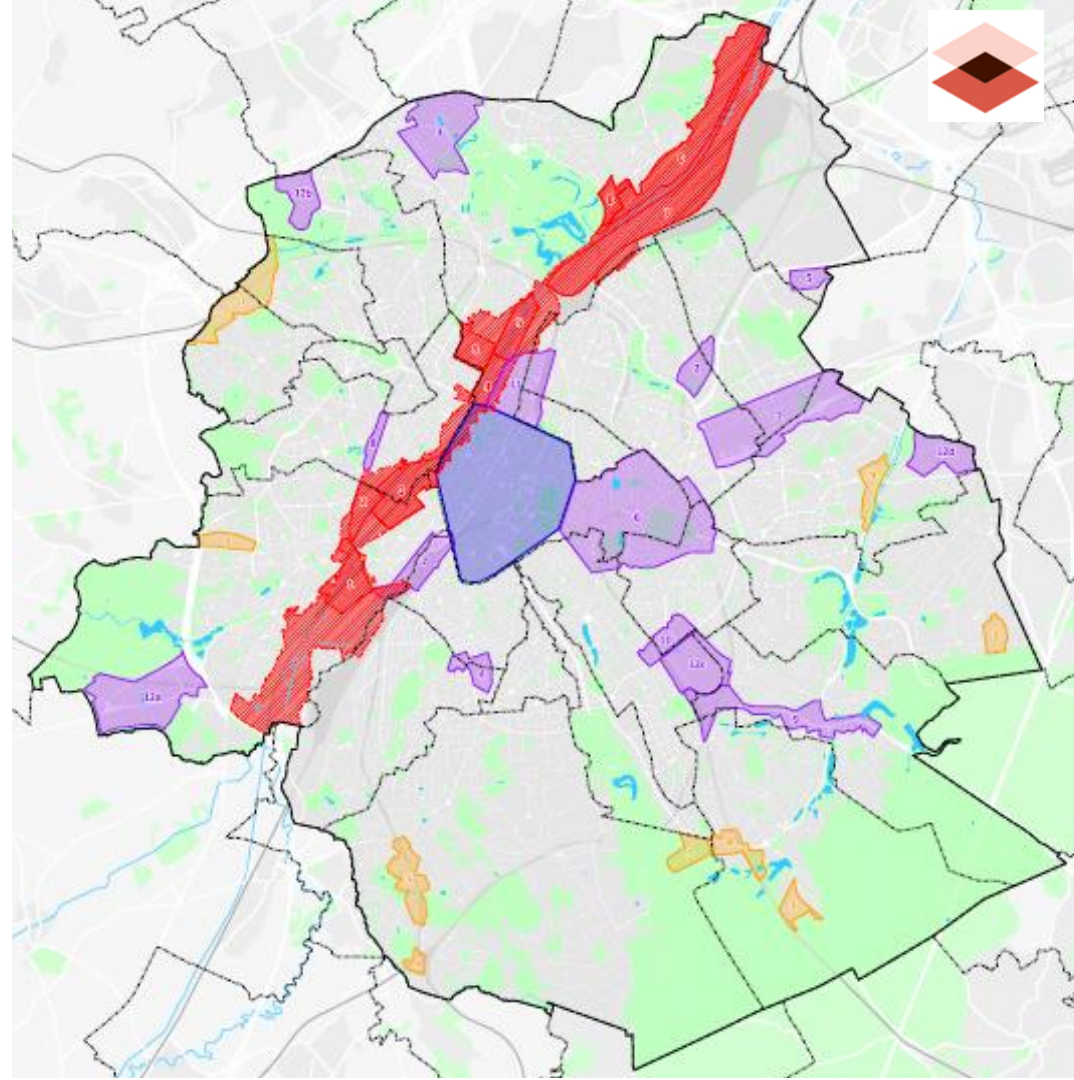
- 14 km long
- N and S : largely industrial/ harbour area
- central area : densely populated, culturally diverse area
- ...

PLANNING CONTEXT

PLAN CANAL : OSP > focus on open space, it's quality coherence and identity)

REGIONAL PLAN FOR SUSTAINABLE DEVELOPMENT

largest regional intervention perimeter



FRAMEWORK AGREEMENT



OSP (March 2018 -19)

Central procurement agency
(5 years)

Part 1

Strategic guide
(Vision, ambitions &
recommendations)

Part 2

Plan updates and complementary
studies
> **Lighting strategy**

Part 3

Plans, projects and studies
on public (and private open space)



ORG 
URBANISM

BUREAU BAS SMETS



Perspective.brussels working in close collaboration with :
Environment.brussels
Mobility.brussels



Vision

Continuities

Ambitions and recommendations for the canal territory

- Identity and uses
- Linear public spaces
- Landscape and sustainability

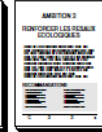
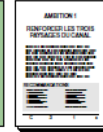
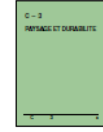
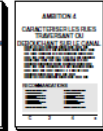
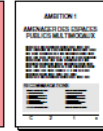
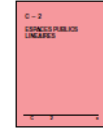
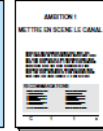
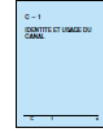
Sub-zones

Ambitions and recommendations for specific districts/ neighbourhoods (adapted to its local context and challenges)

VISION GLOBALE



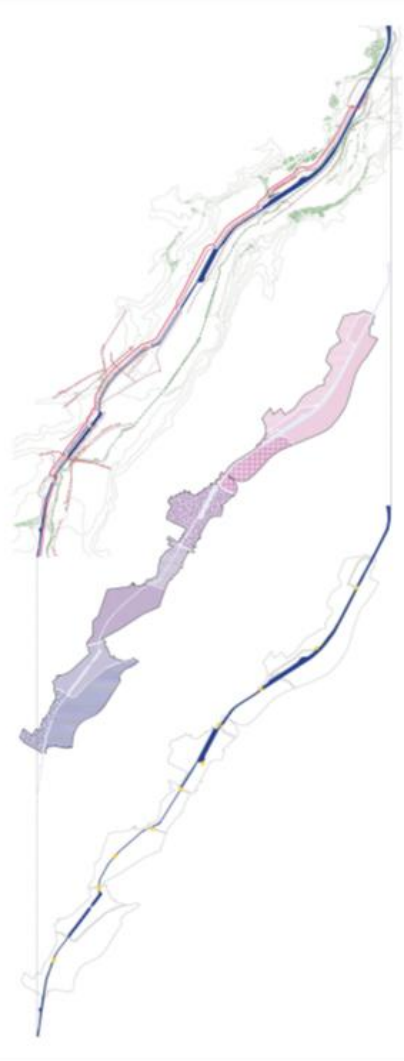
AMBITIONS ET RECOMMANDATIONS THÉMATIQUES, GROUPÉES PAR CONTINUITÉS



AMBITIONS ET RECOMMANDATIONS ZONÉES, GROUPÉES PAR SOUS-ZONES



OSP - STRATEGIC GUIDE



3 Continuities

9 Subzones

*emblematic public spaces
(singularities)*

CONTINUITY - IDENTITY AND USAGE

To benefit from the identity of the canal and its continuity

Ambitions

- To rhythm the canal with “*emblematic public spaces*”
- Bring the canal into the picture
(perspective views, furniture, materials, *light*)



Lighting colours

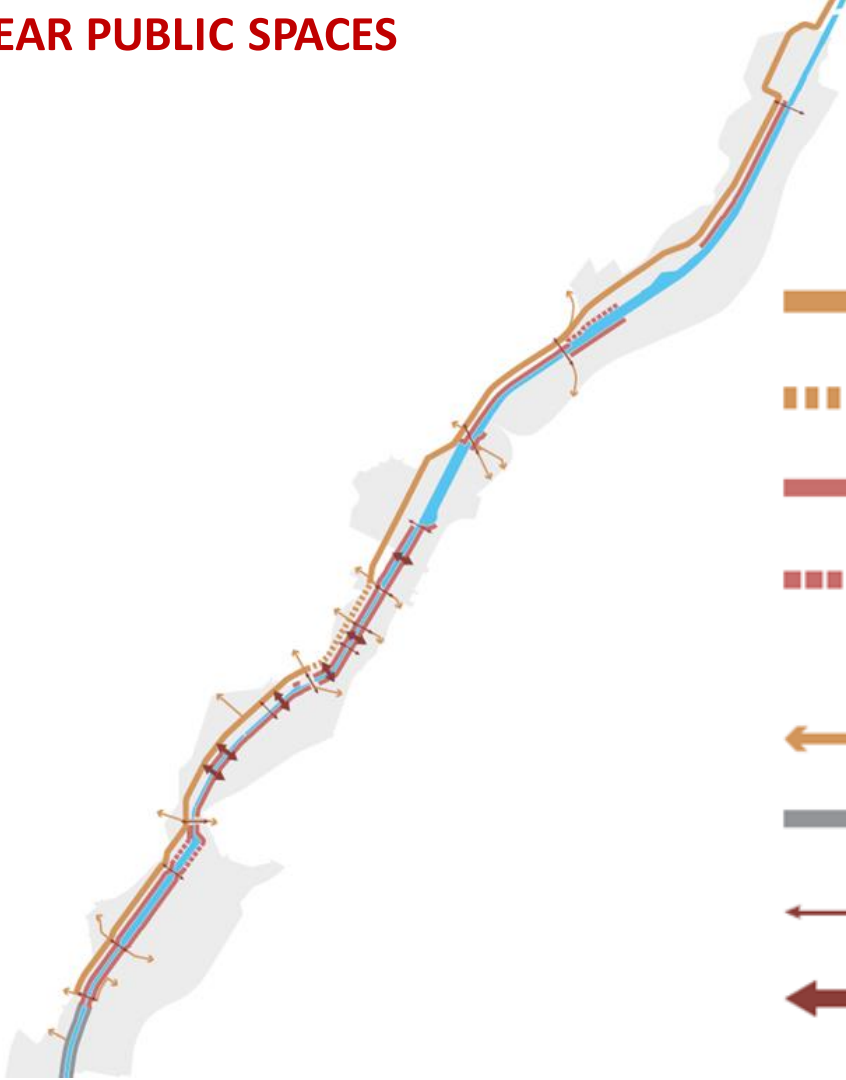



Warm white light (2700 K to 3000 K)

Very warm white light (+/- 2200 K)

Amber white light (<2000 K)

CONTINUITY - LINEAR PUBLIC SPACES



-  RER cycle path (canal route)
-  Shared space
-  Pedestrian area
-  Pedestrian area with seasonal access
-  Regional cycling routes
-  Towpath
-  Crossing points (all modes)
-  Crossing points dedicated to active modes

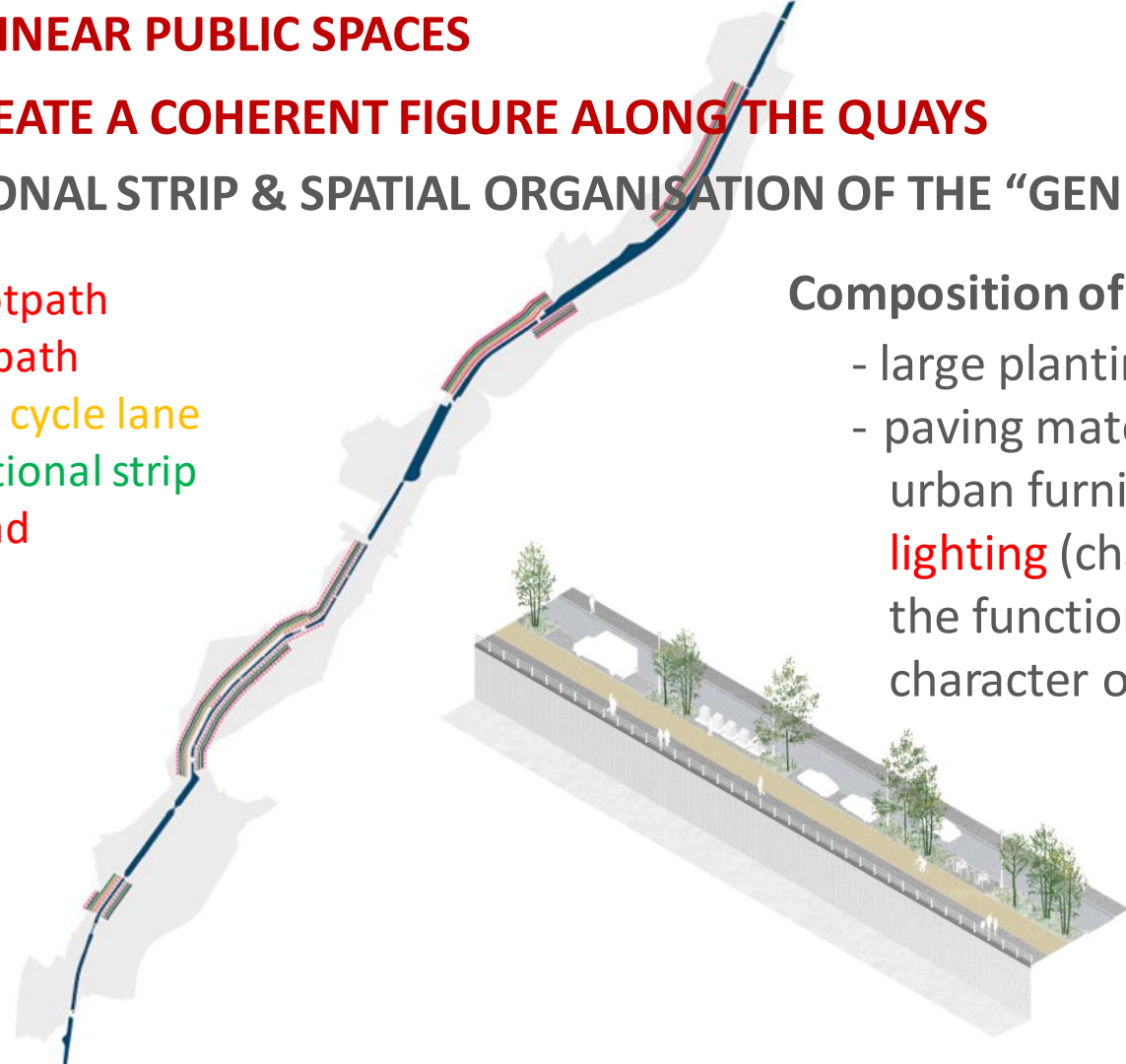


CONTINUITY - LINEAR PUBLIC SPACES

AMBITION - CREATE A COHERENT FIGURE ALONG THE QUAYS

MULTI-FUNCTIONAL STRIP & SPATIAL ORGANISATION OF THE "GENERIC QUAYS"

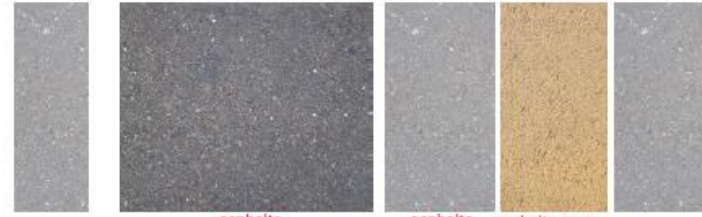
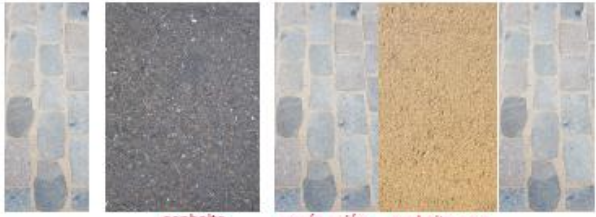
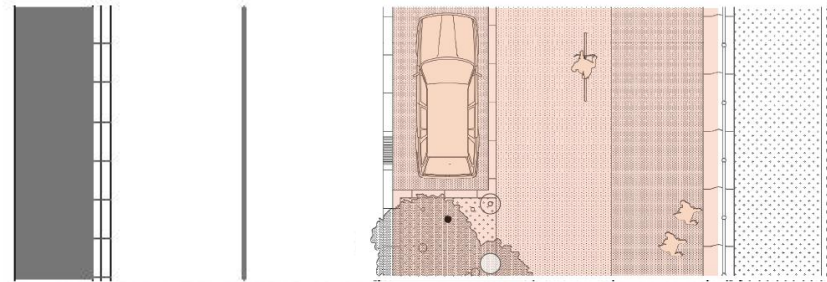
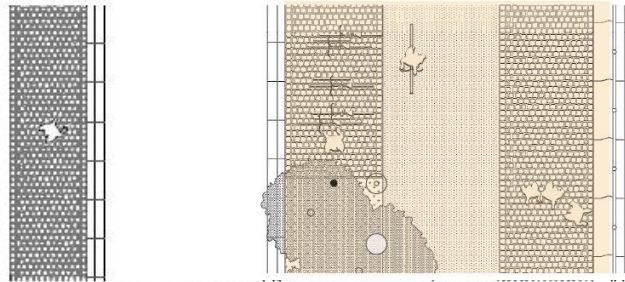
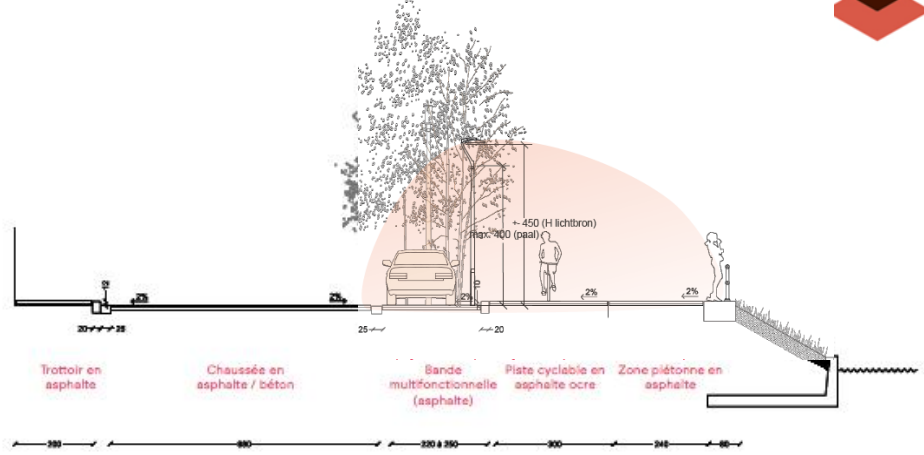
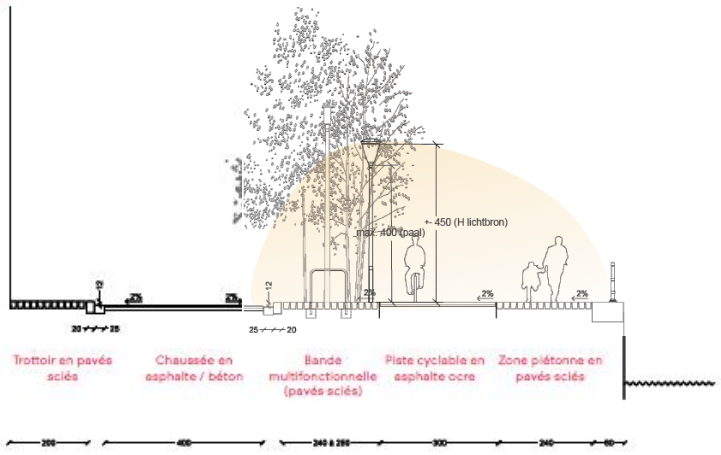
- Asphalt footpath
- Paved footpath
- Segregated cycle lane
- Multi-functional strip
- Asphalt road



Composition of the generic quay

- large planting beds (layered)
- paving materials, urban furniture and **lighting** (character reflecting the functional and industrial character of the canal)

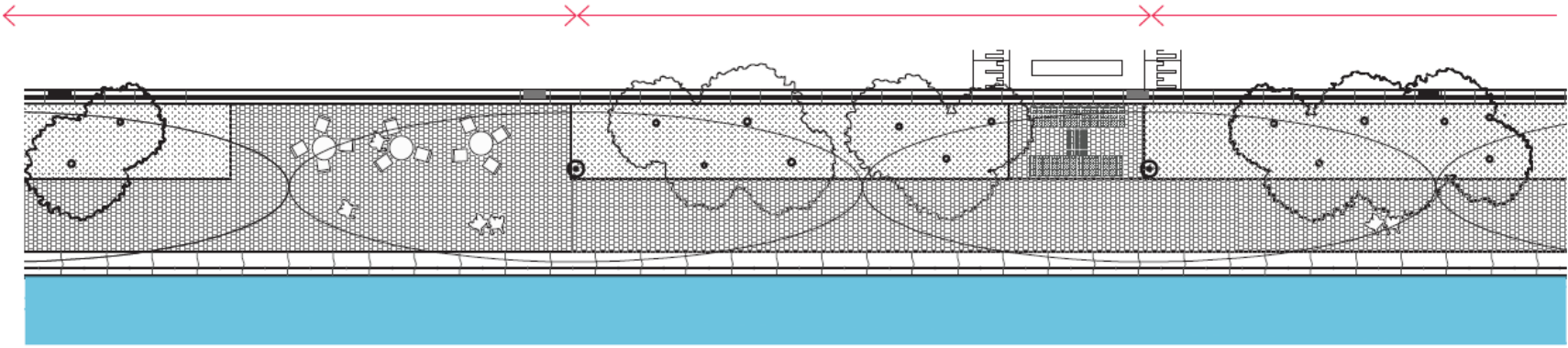
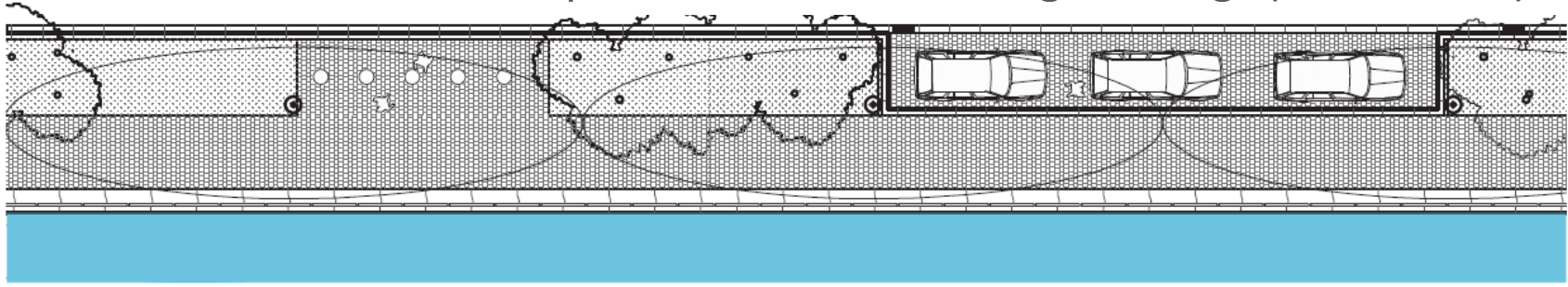
AMBITION - CREATE A COHERENT FIGURE ALONG THE QUAYS



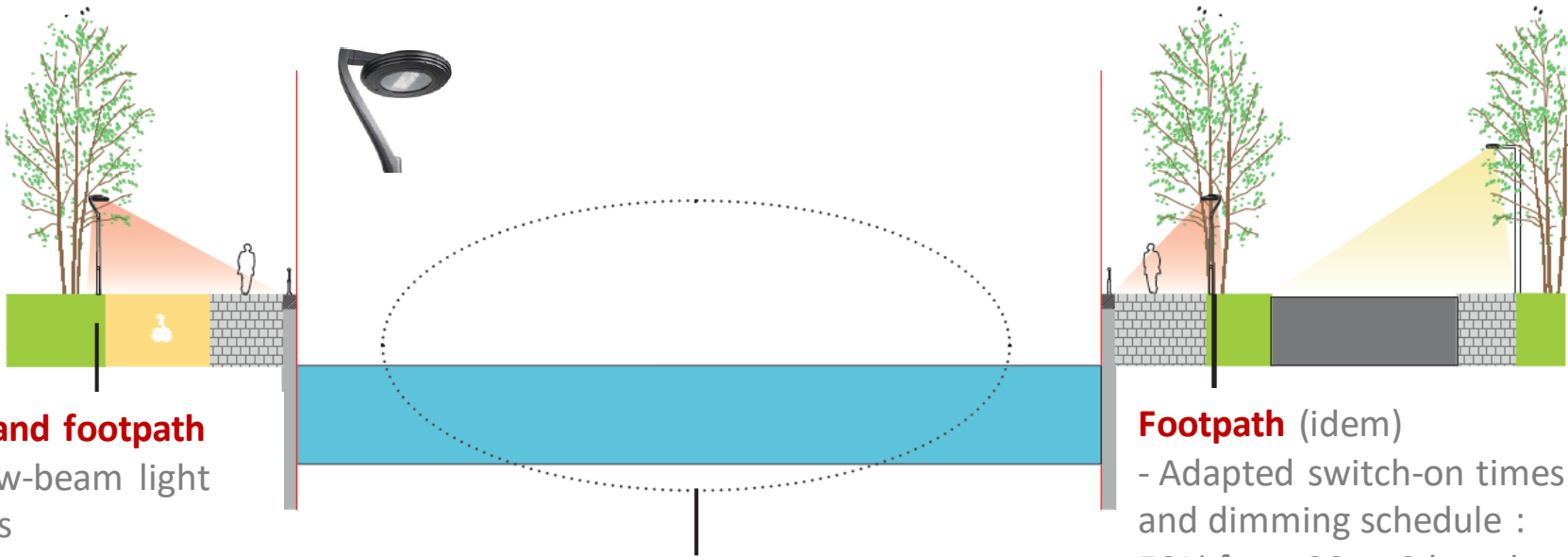
AMBITION - CREATE A COHERENT FIGURE ALONG THE QUAYS



Equal distance between light fittings (min. 19.5m)



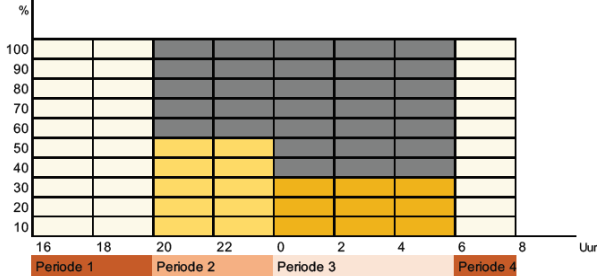
NORTH and SOUTH : no light to amber white light for active modes



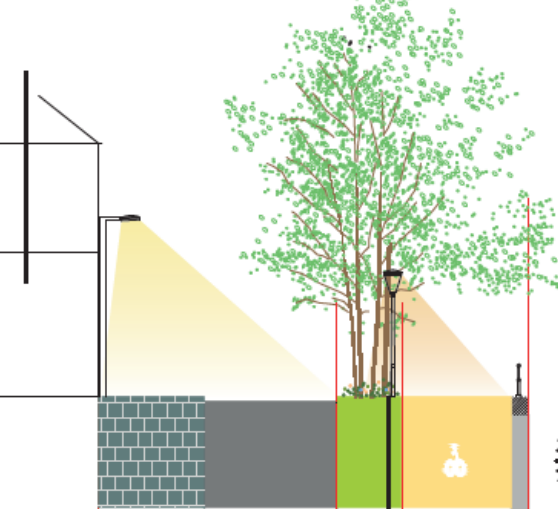
- Cycle- and footpath**
- Narrow-beam light fittings
 - Lighting colour <2000K (amber white)
 - Positioning in the planting beds or the multifunctional strip
 - Moderate luminance levels

Maintain a dark corridor in the centre of the canal allowing the movement of nocturnal wildlife

- Footpath (idem)**
- Adapted switch-on times and dimming schedule :
50% from 20 to 0 h and
30% from 0 to 6 h

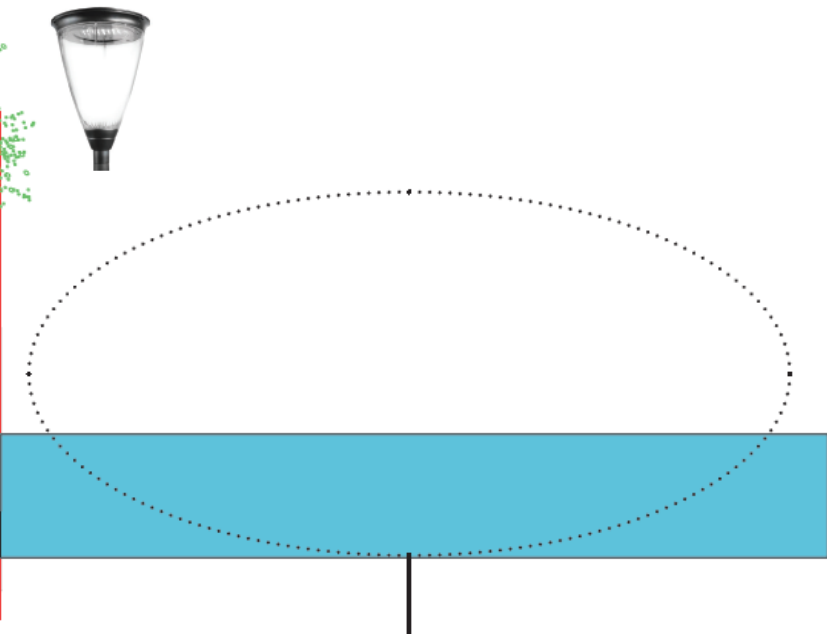


CENTRAL AREA : very warm white light for active modes

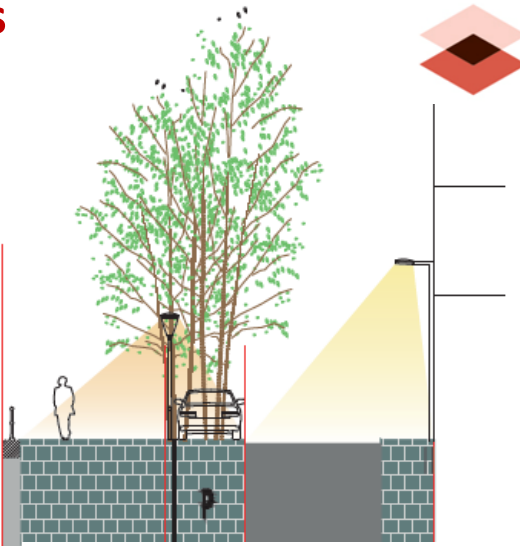


Cycle- and footpath

- Transparant hood,
- type lantern
- Lichting colour < 2200 K (very warm white)
- Positioning in the planting beds or the multifunctional strip
- Moderate luminance levels

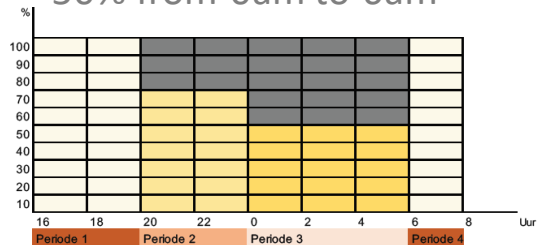


Maintain a dark corridor in the centre of the canal allowing the movement of nocturnal wildlife



Footpath (Idem)

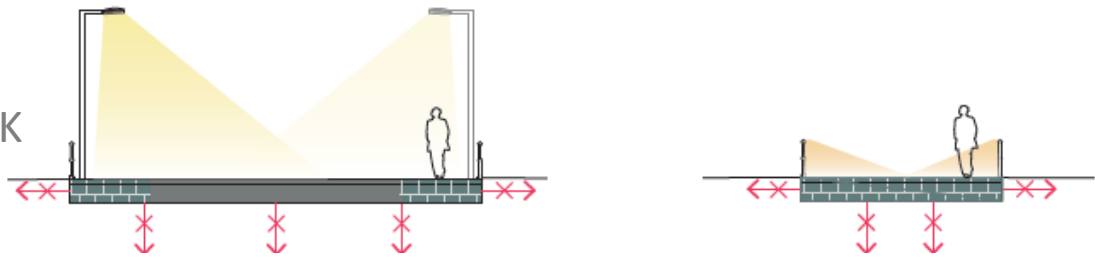
- Adapted switch-on and dimming schedule : 70% from 8pm to 0am and 50% from 0am to 6am





Lighting and dimming schedules for bridges and of foot-/ cycle crossings

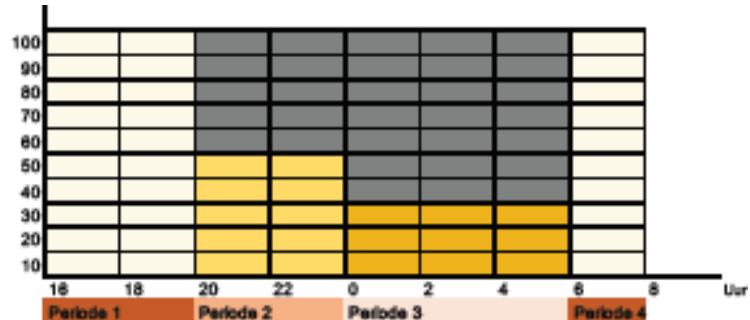
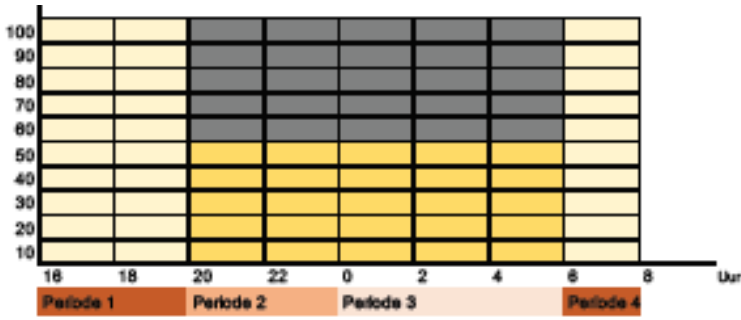
- **Fitting model:** fittings at low height and with narrow beam
- **Lighting colour:** amber white < 2000°K
- **Intensity:** moderate lighting levels (= minimum needed for usage)
- **Dimming schedules**



Maintain a dark corridor in the centre of the canal allowing the movement of nocturnal wildlife

Urban centre : dim to 50% from 20h to 24h

N and S areas : dim to 50% from 20h to 24h
to 30% from 0 to 6h



LIGHTING OF PASSAGES ALONG AND UNDER BRIDGES AND LOCKS

1. Quays with all modes going under the bridge

Central driveway

- model: ceiling-mounted fitting
- lighting colour: warm white +/- 2700 K

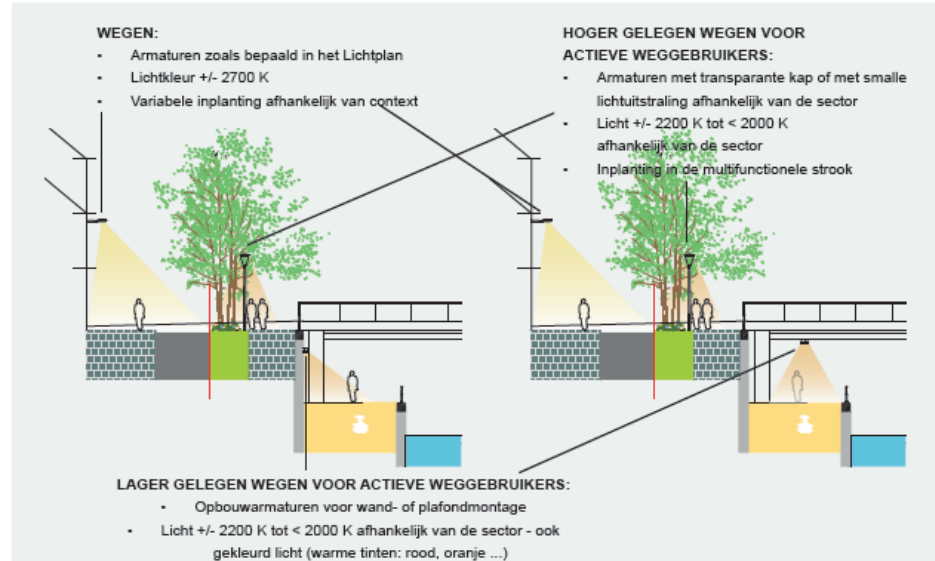
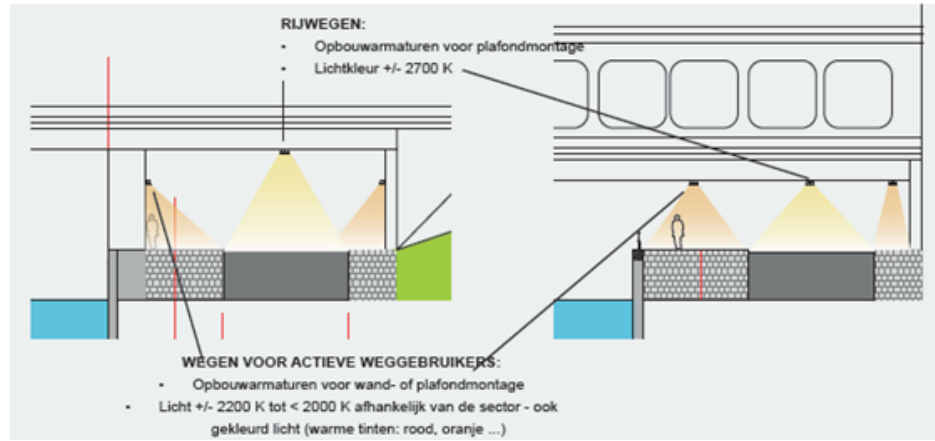
Lateral connections for active modes

- model: ceiling- or wall-mounted fitting ;
- downward lichtbeam
- lighting colour: very warm white (+/- 2200 K) to amber white (< 2000 K), or warm-tainted light : red, orange, ...)

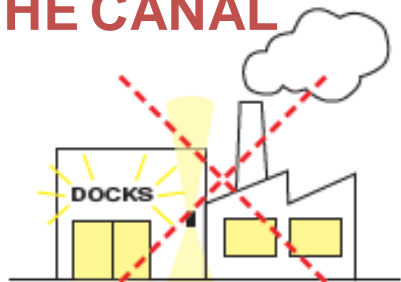
2. Quays with only active modes going under the bridge

Paths for active modi (covered underpass):

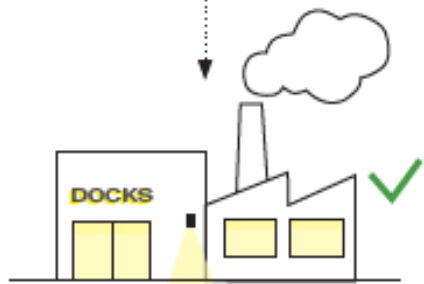
- model: ceiling or wall-mounted fitting ; downward lichtbeam
- lighting colour : very warm white +/- 2200 K to amber white < 2000 K (or warm-tainted light : red, orange, ...)



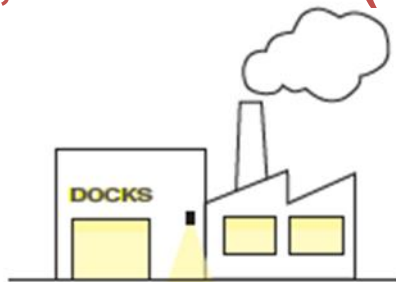
LIGHTING OF LOGISTIC, INDUSTRIAL (and other) BUILDINGS ALONG THE CANAL



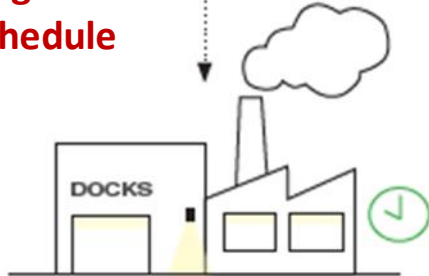
Orientation



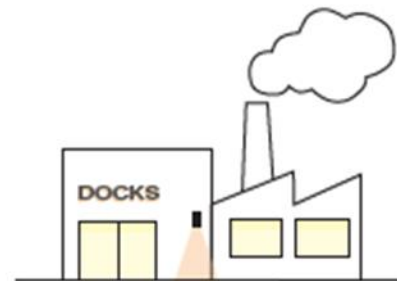
- **Downward vertical lighting**
- **Inwards oriented lighting of shops or buildings**
- **Publicity signs with backlighting** (no direct lighting).



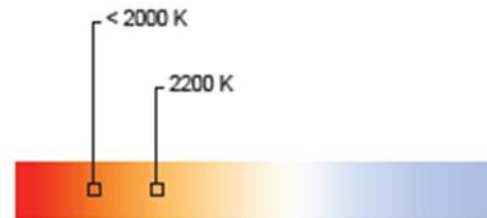
Brightness and time schedule



- **Brightness levels of façade lighting** and the immediate area to be **dimmed** 50% from closing time, then off from 22pm to 5am
- **Turn off illuminated signage** when activity ceases, except for essential services: pharmacy on duty, commissariat, hotel, hospital, ...
- **Switch off indoor lighting** visible from the public area from 22pm or end of activity.
- **Use a timer or similar system.**

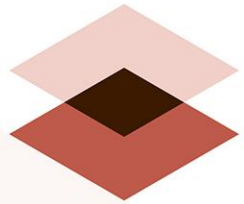


Lighting colour and type



- Avoid **aggressive light signage, excessive brightness and light gadgets** (e.g. no flashing lights, colour changes, large screens, etc.).
- Give preference to static and soft lighting.
- **light colour of outdoor lighting** :
 - Centre : very warm white (+/- 2200 K)
 - N and Z : amber white (<2000 K).





perspective
.brussels 

Thank you

(NL)

- https://perspective.brussels/sites/default/files/220901_bkp_verlichting_0.pdf
- https://perspective.brussels/sites/default/files/221017_bkp_addendum_verlichting_nl_0.pdf

(FR)

- https://perspective.brussels/sites/default/files/220901_bkp_eclairage_0.pdf
- https://perspective.brussels/sites/default/files/221017_bkp_addendum_eclairage_fr_0.pdf

www.perspective.brussels

Bureau bruxellois de la planification / Brussels Planningsbureau