

# RE-EXPERIENCING THE ROER FRINGES

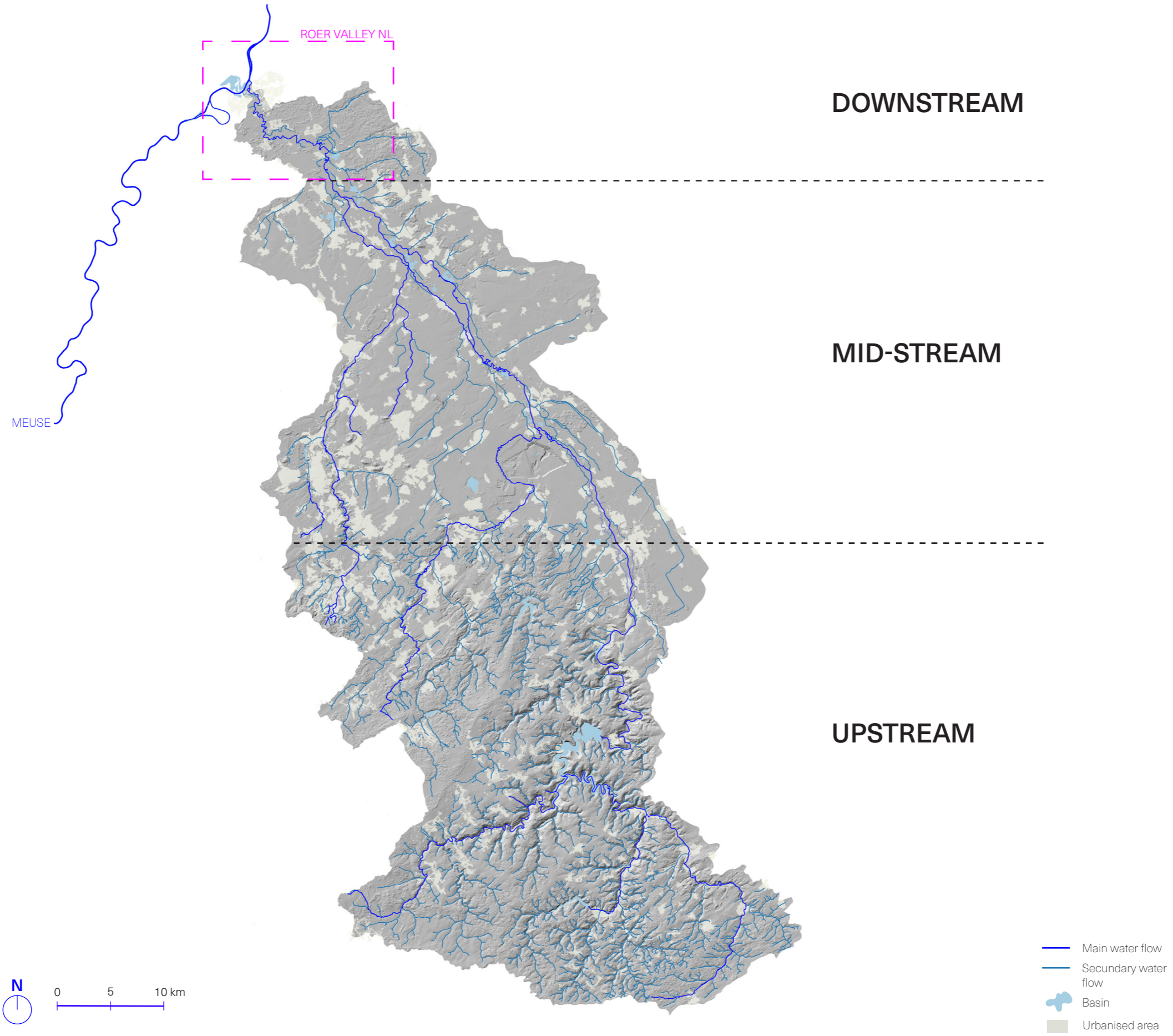
*Imagining the Roer valley through place-sensitive interventions for  
experiencing the natural dynamics of the Roer river*



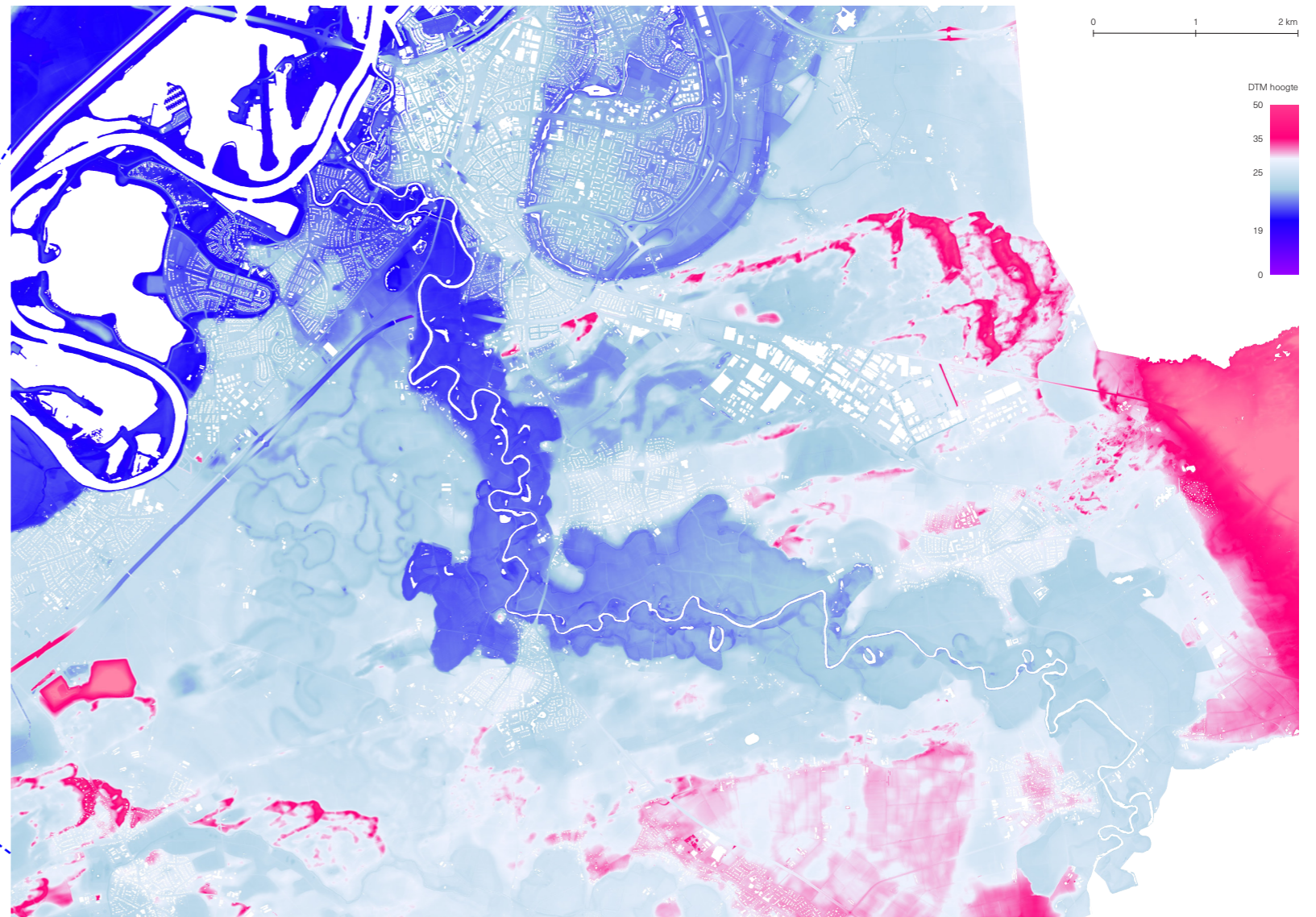
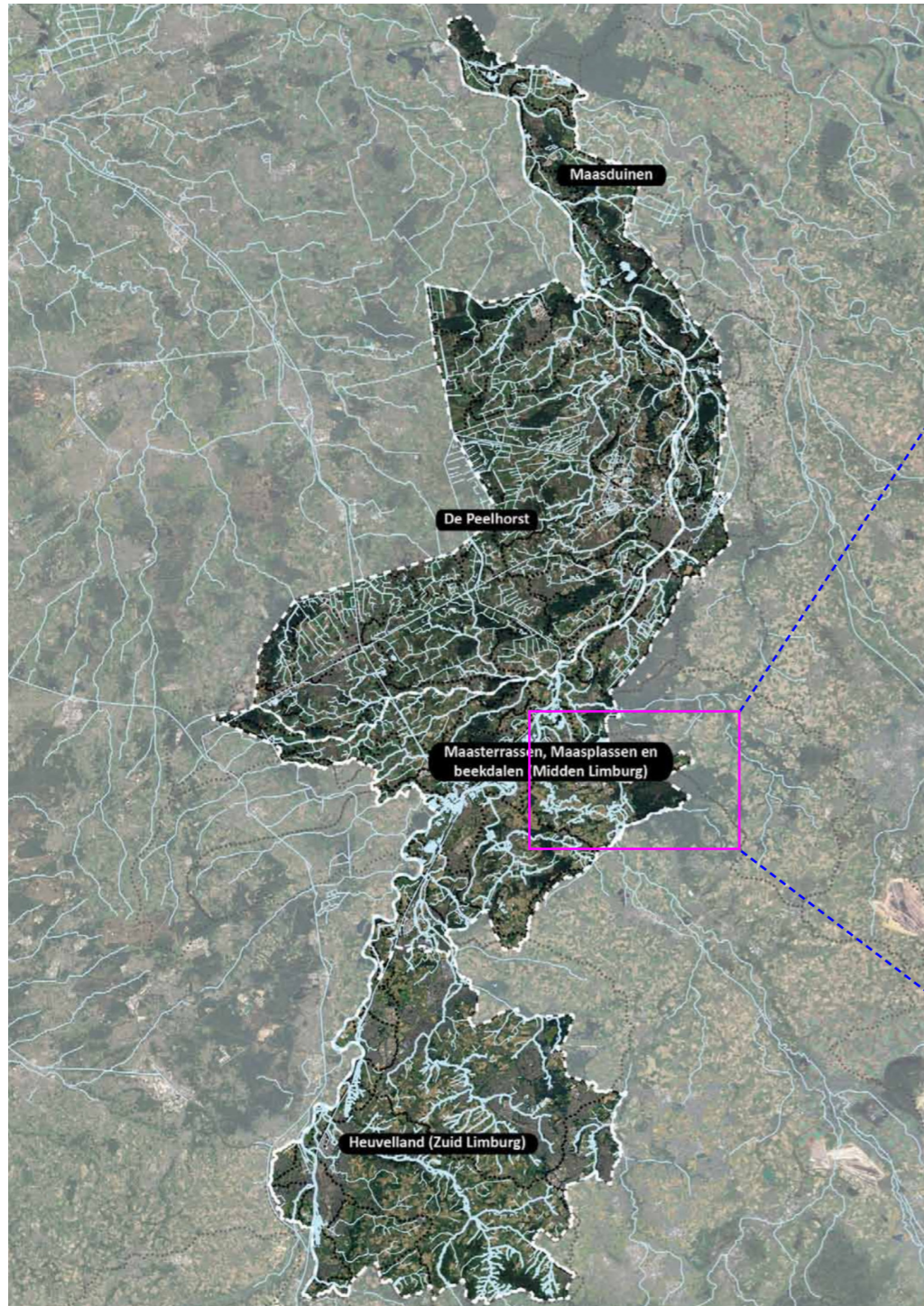
^ Biking through the flooded hinterland of the Roer river (Family archive, 2021)

< Flooded Vlodrop within the Roer Valley (Family archive, 2021)

## 2021 - FLOODING IN VALLEY

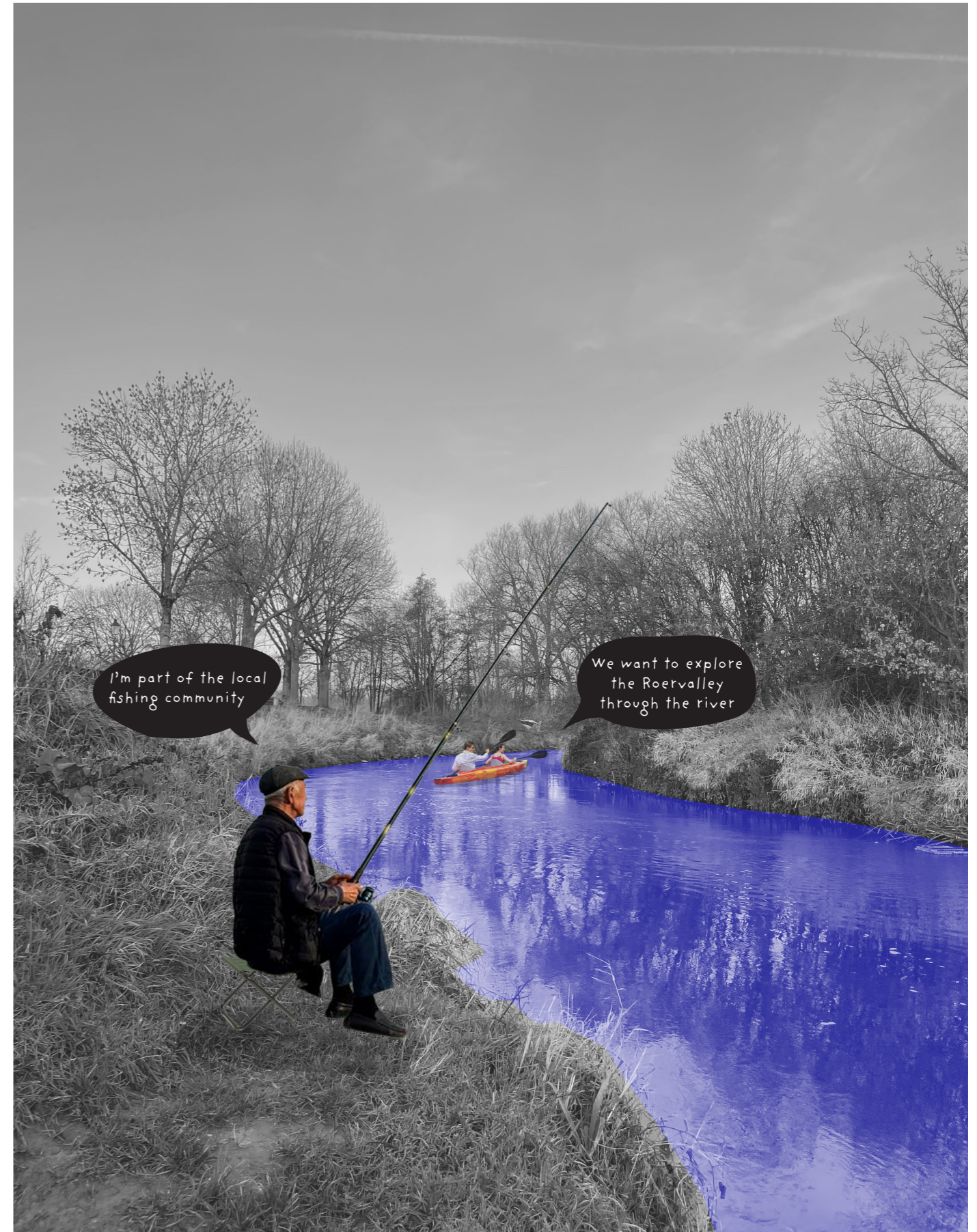


# ROER CATCHMENT

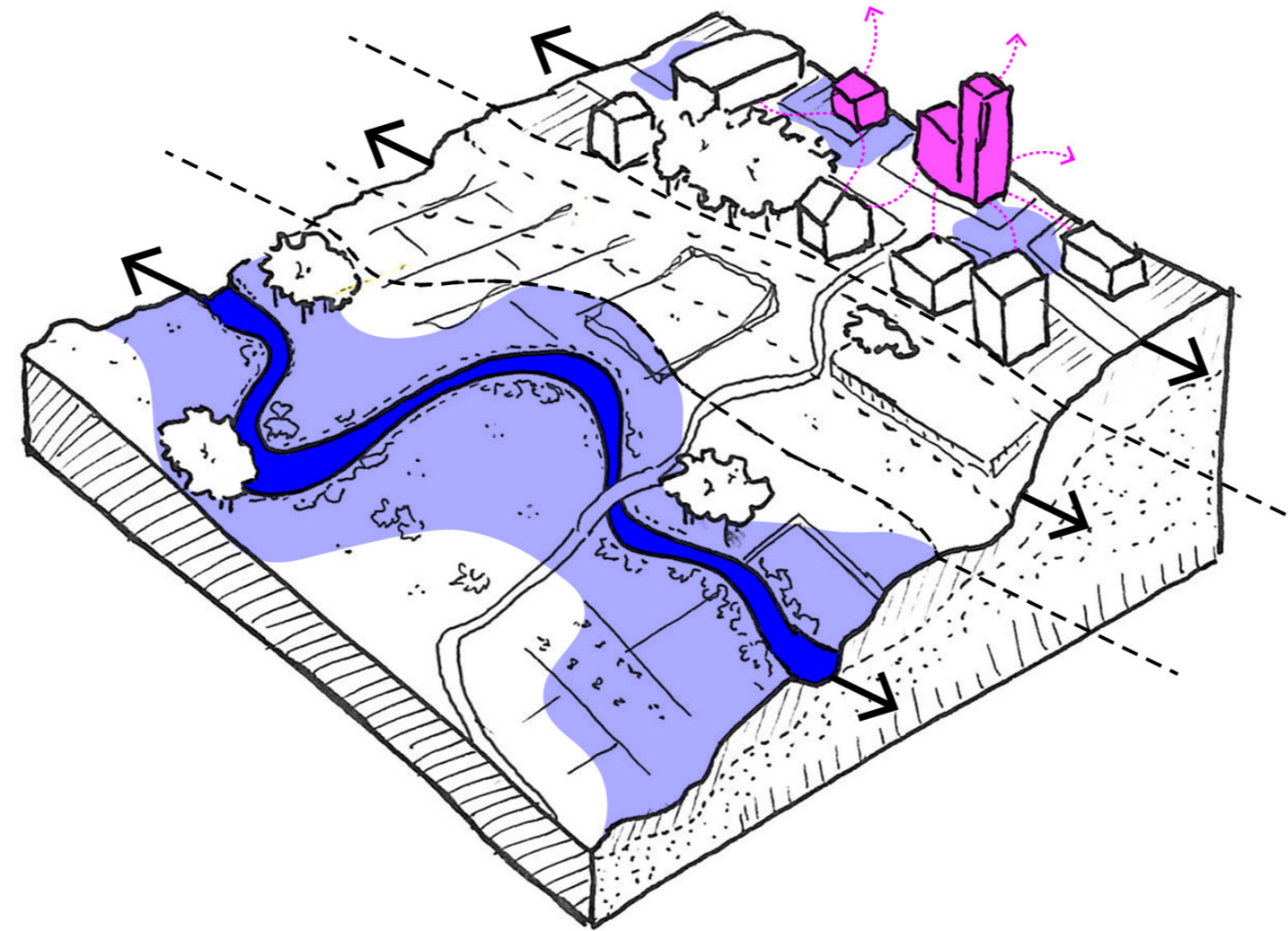


^ The watersystem of the province of Limburg (Defacto Stedenbouw, 2025)

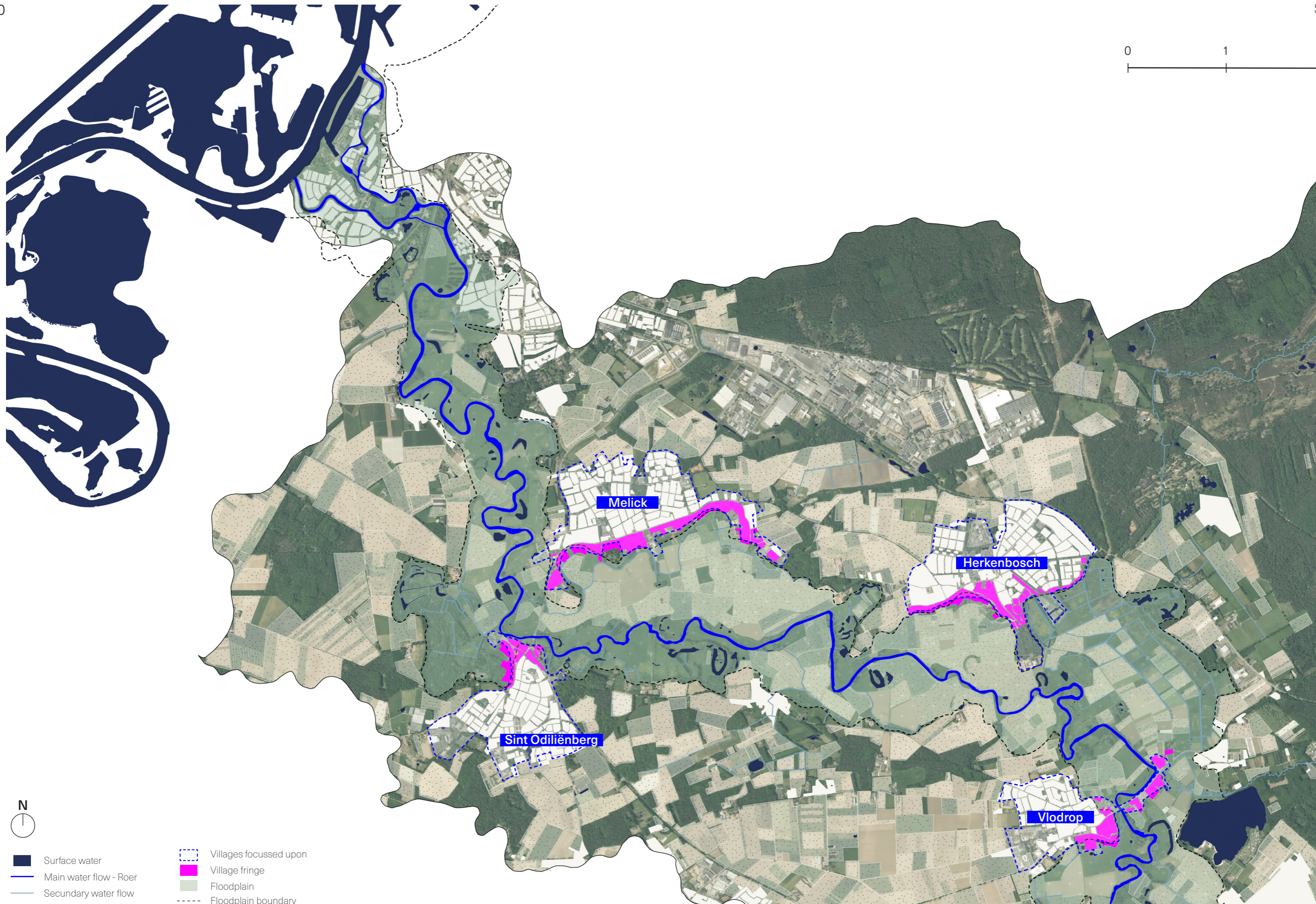
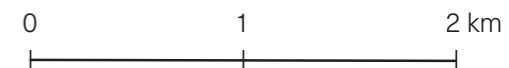
# CONTEXT ROER VALLEY



# ATMOSPHERE DIFFERENCE



# PROBLEM FIELD ROER VALLEY



- Surface water
- Main water flow - Roer
- Secondary water flow
- Villages focussed upon
- Village fringe
- Floodplain
- Floodplain boundary

# SCOPE: VILLAGE FRINGES

*[parallel systems]*

How can place-sensitive interventions within the **village fringes** of the Roer Valley improve the **experience** and **connection** of its residents with the Roer River by 2050?

*[valley under pressure]*

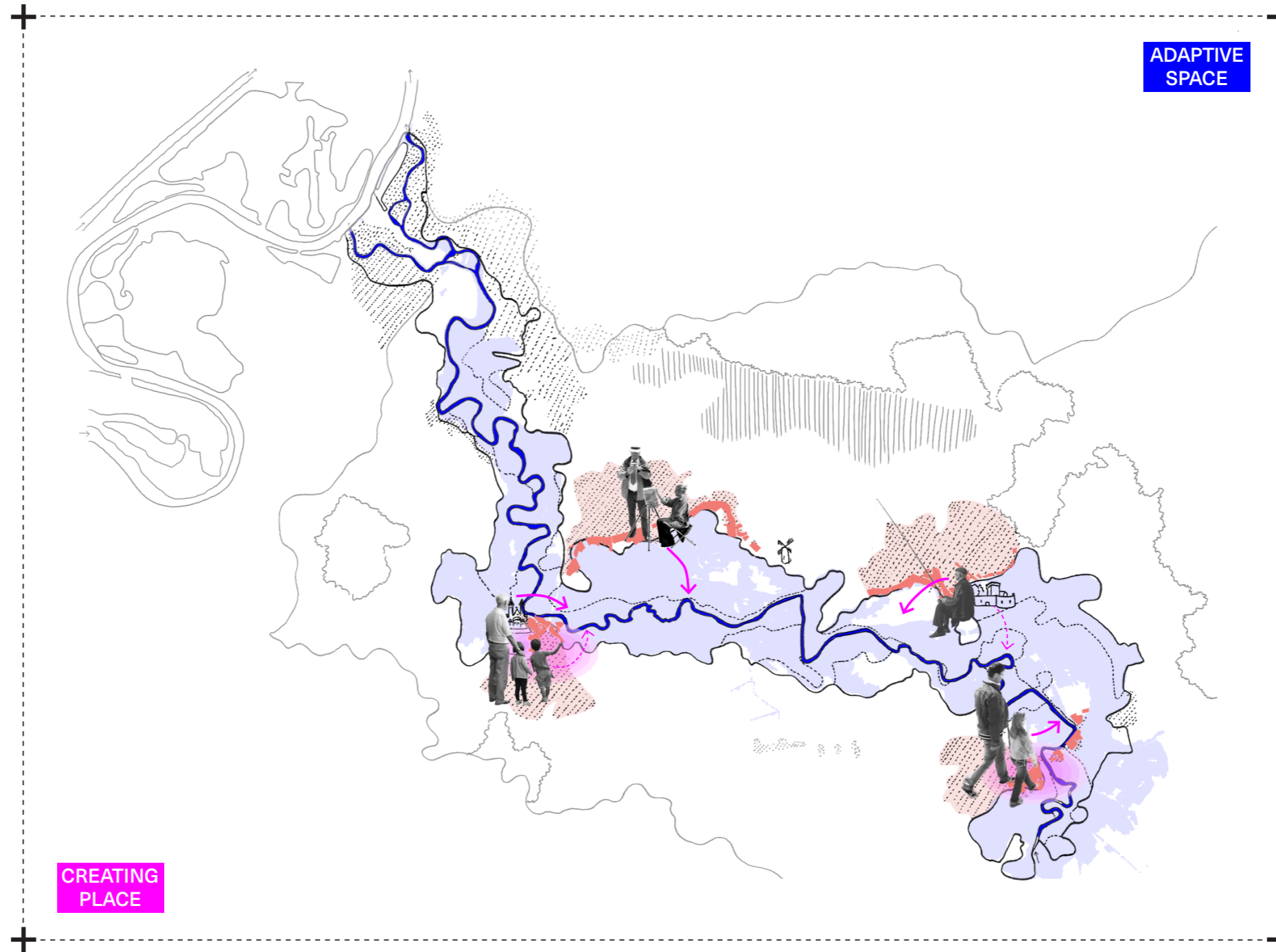
*[faded water identity]*

Naturally meandering river,  
rainfed river,  
downstream catchment area



**GENIUS LOCI**  
*WATER - SPACE - PLACE*

Problem field



**CREATING PLACE**

**ADAPTIVE SPACE**

- Audibility
- Visibility
- Accessibility

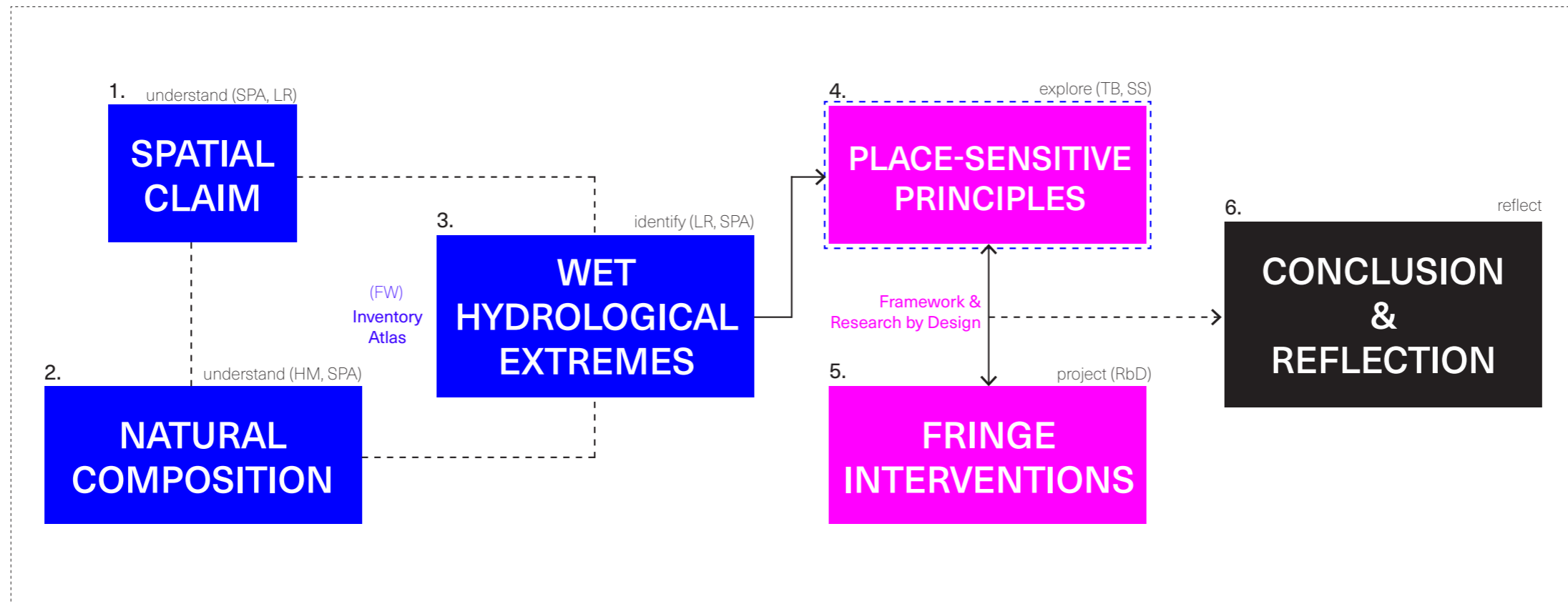
- Urbanised area
- Village fringe
- Floodplain

*experiencing the Roer river*

# CONCEPTUAL FRAMEWORK

A2 [A2] A3 A3 + A4

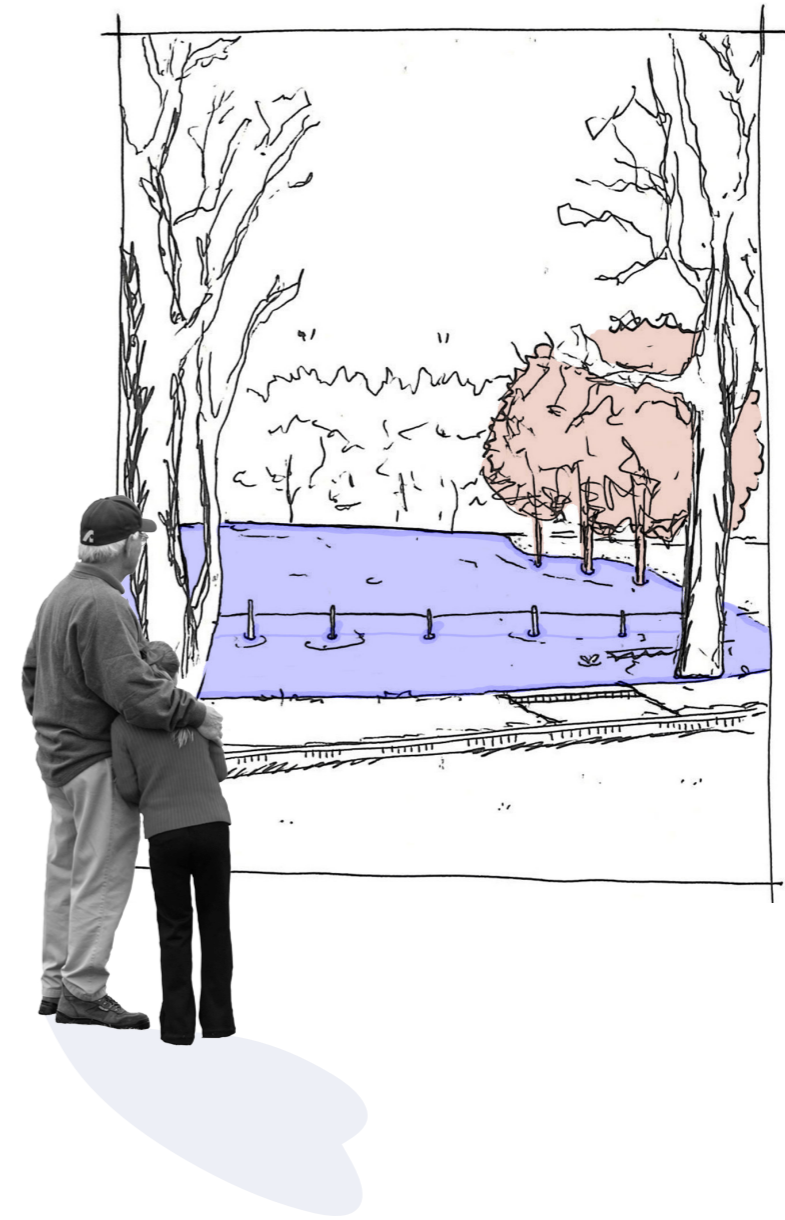
in the context of the Roer valley



LR - Literature review  
 HM - Historical mapping  
 SPA - Spatial Analysis  
 FW - Fieldwork  
 TB - Toolbox  
 SS - Scenario study  
 RbD - Research by design

# METHODOLOGY

# RESEARCH



Visability



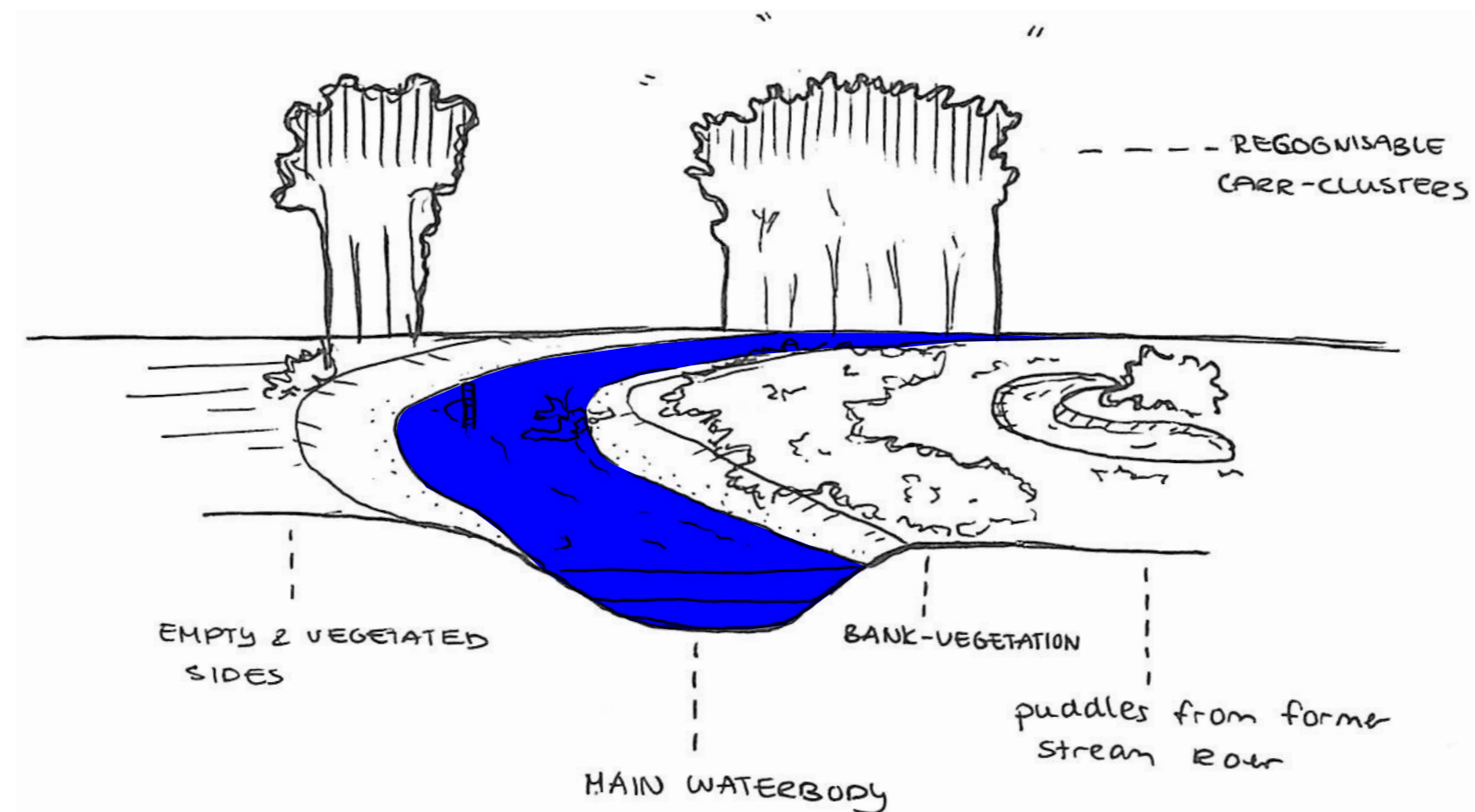
Accessability



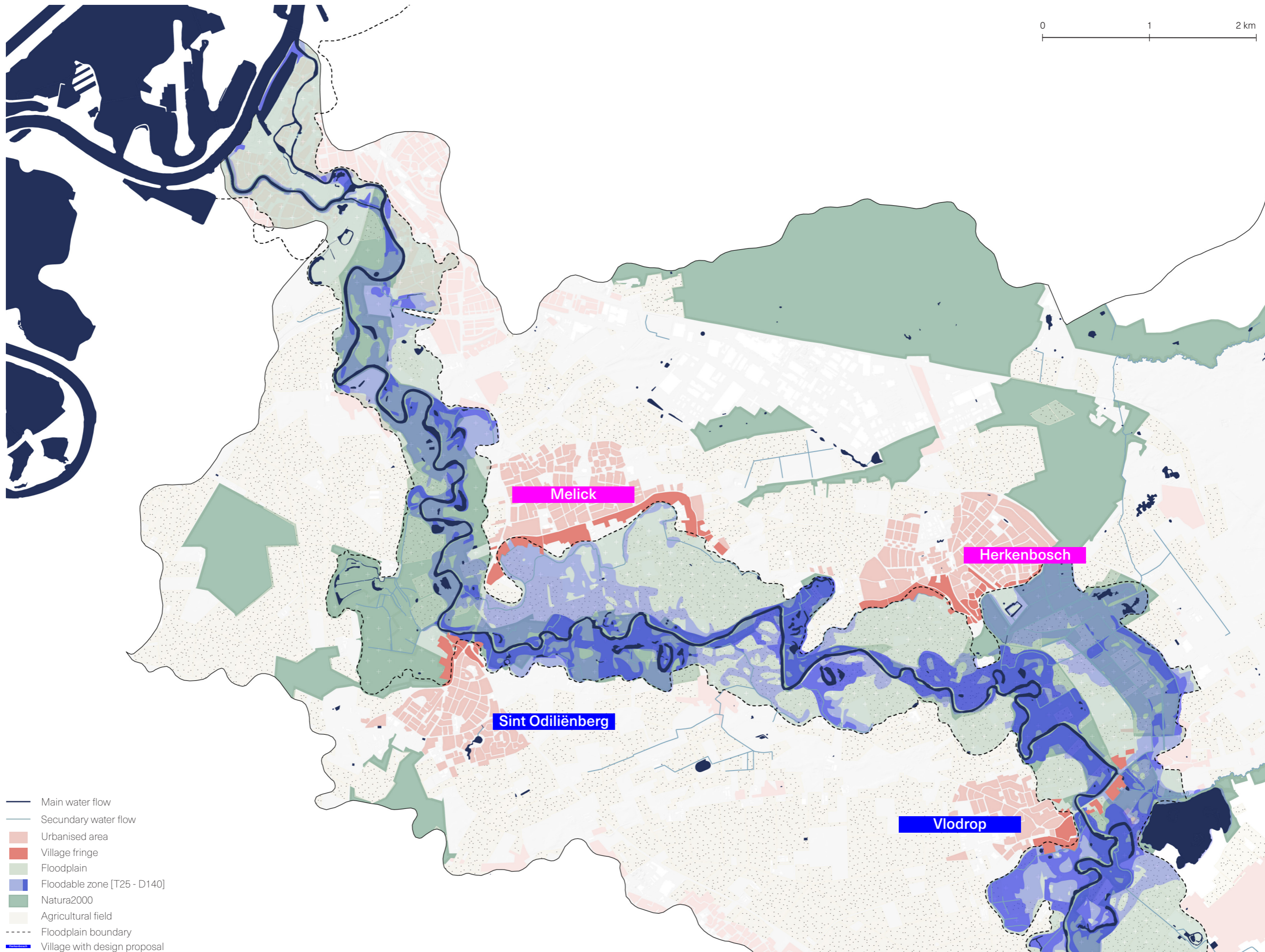
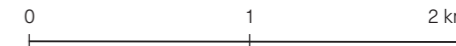
Audiability



# EXPERIENCING THE ROER RIVER



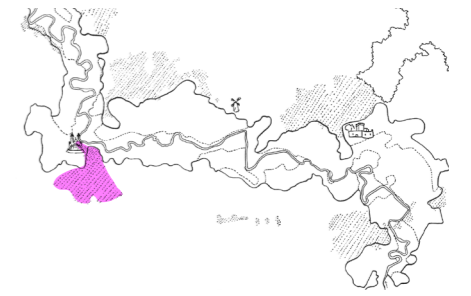
## EXPERIENCE OF RIVER - VILLAGE TYPOLOGY



- Main water flow
- Secondary water flow
- Urbanised area
- Village fringe
- Floodplain
- Floodable zone [T25 - D140]
- Natura2000
- Agricultural field
- Floodplain boundary
- Village with design proposal



# VILLAGE TYPOLOGY

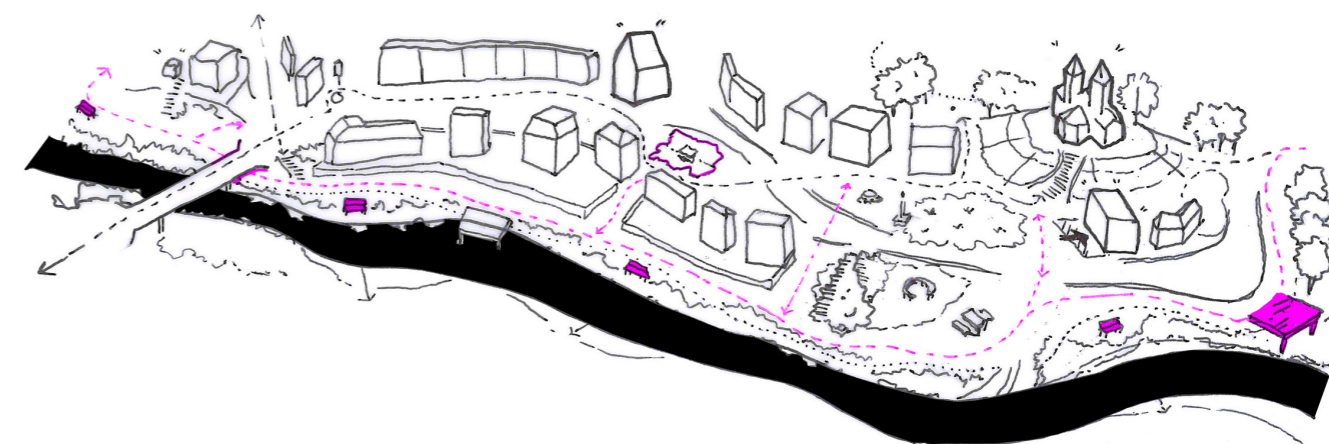


- Village fringe - edge
- Primary transportation route
- - - Infrastructure into village

- Privatised area
- - - Boundry private area

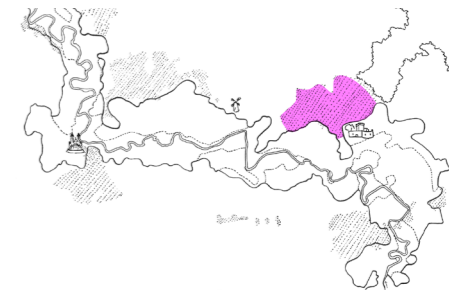


# INVENTORY SINT ODILIËNBERG



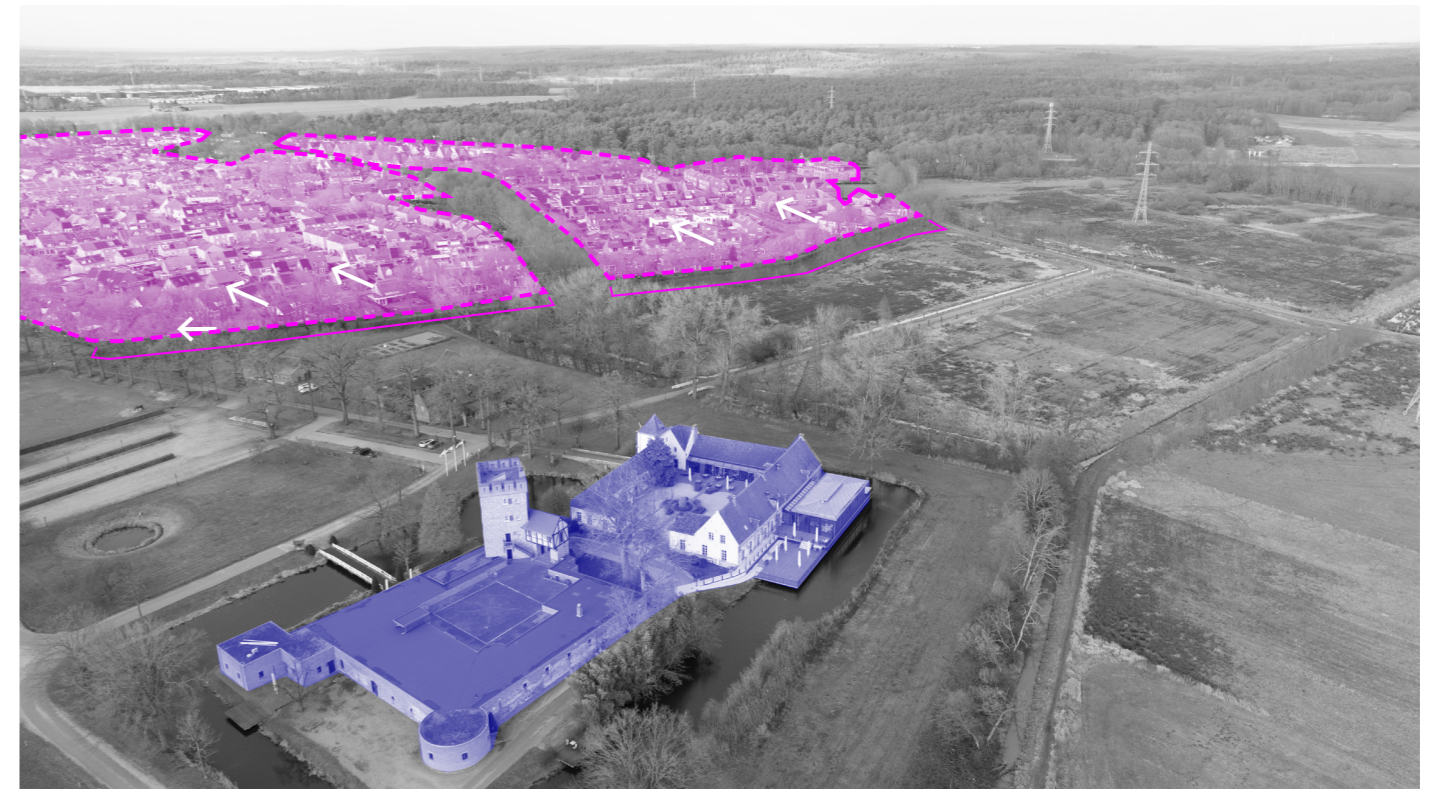
- Audibility
- Visibility
- Accessibility

**MAKE THE ROER AN INTEGRAL PART OF PUBLIC SPACE**

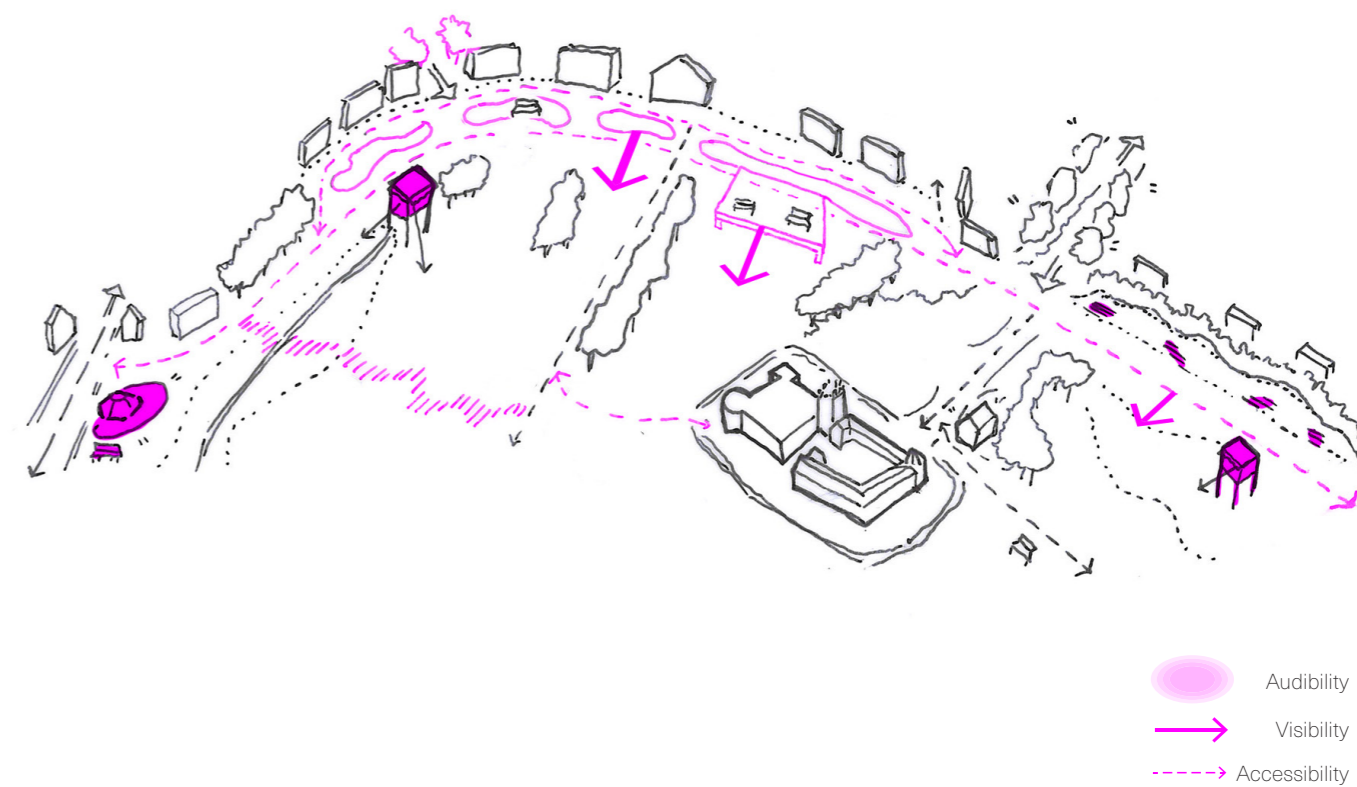


- Village fringe - edge
- Primary transportation route
- Infrastructure into village

- Cultural/public function
- Privatised area
- Boundry private area



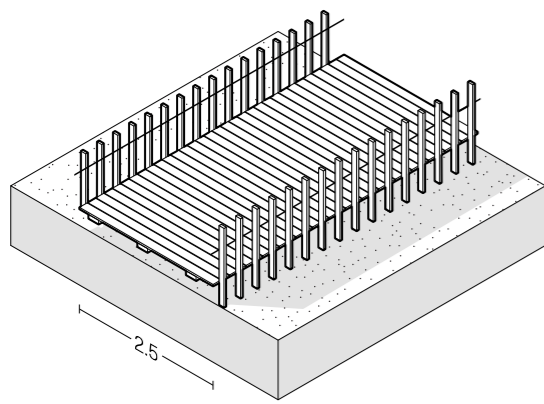
# INVENTORY HERKENBOSCH



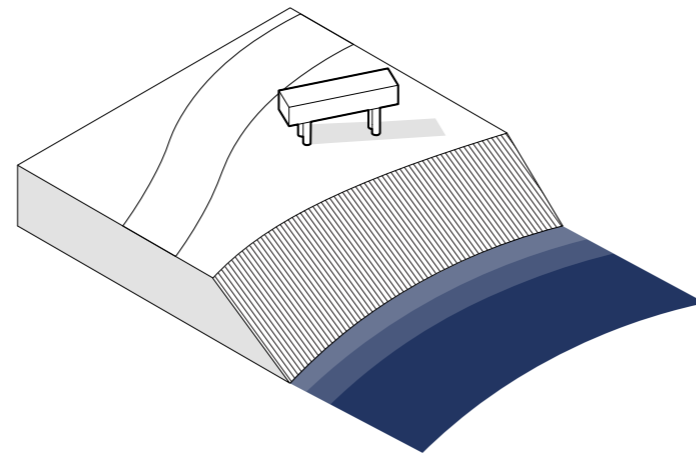
# CONNECTING CULTURAL HERITAGE WITH WATER

	SINT ODILIENBERG	MELICK	HERKEN-BOSCH	VLODROP
ENTERANCES	+/-	+/-	+/-	+
PUBLIC-PRIVATE	--	-	-	+/-
HYDROLOGICAL EXTREMES	+/-	++	+/-	--
USE OF SPACE	+/-	-	+	+/-

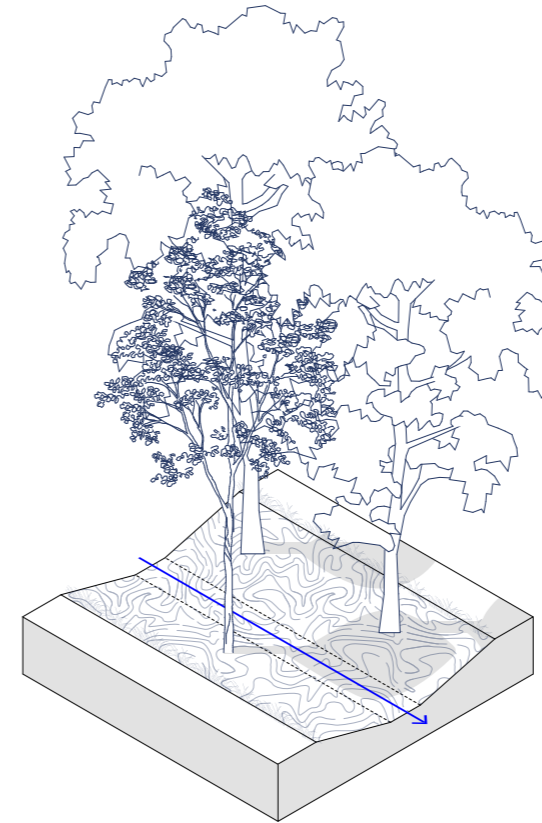
## ASSESSMENT OF FRINGES



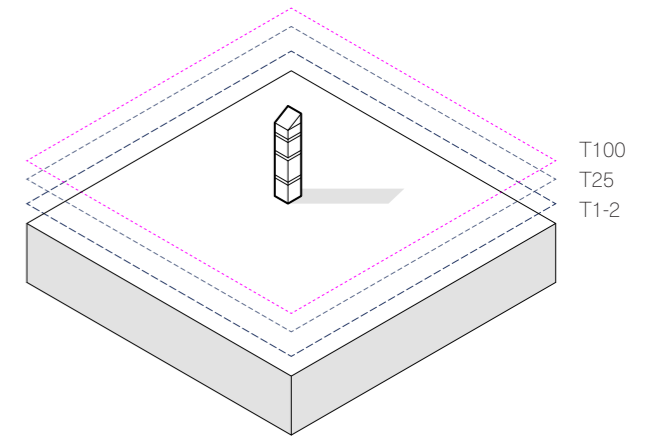
**ROUTE**



**SPACE**



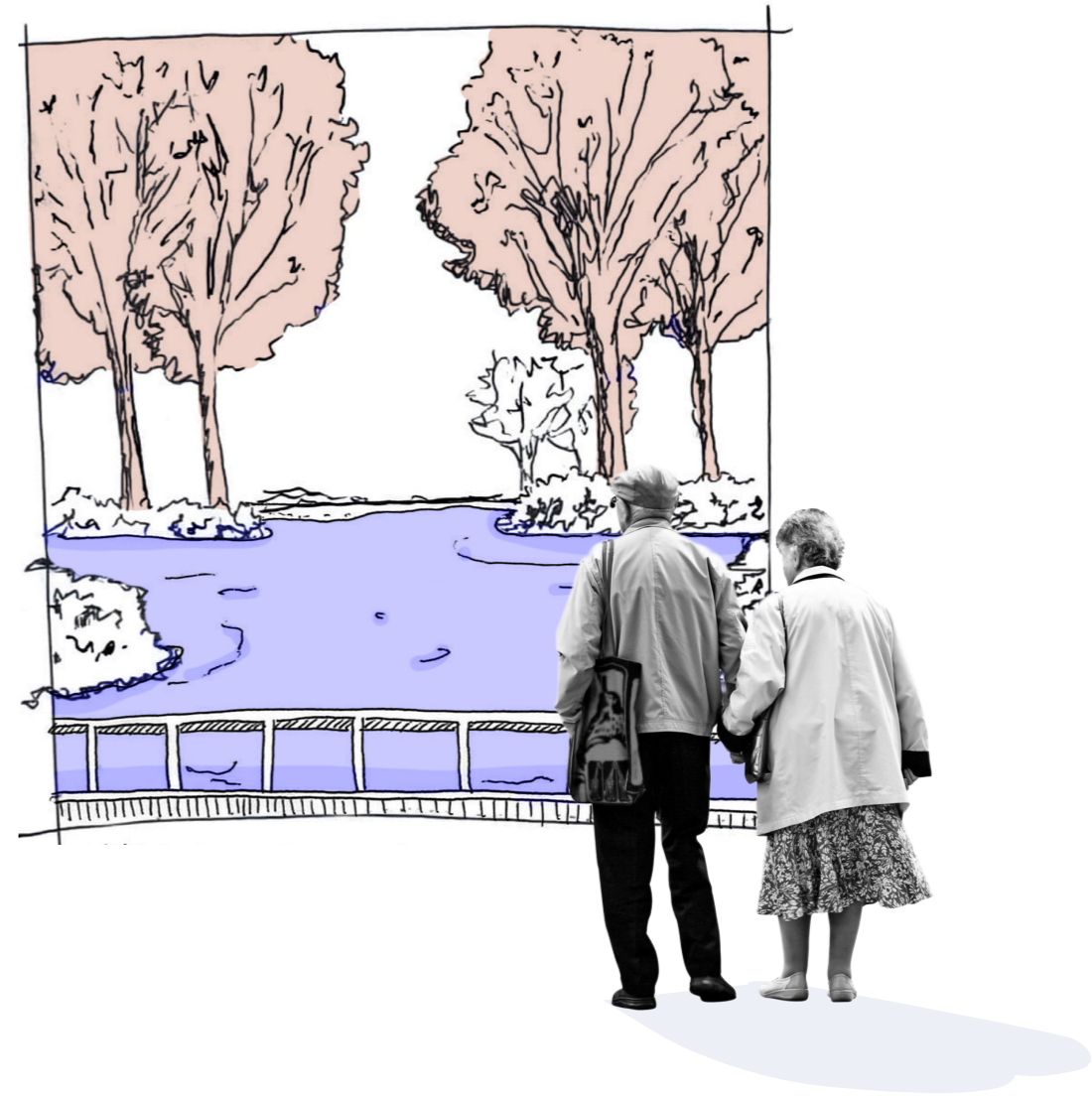
**FLOW**

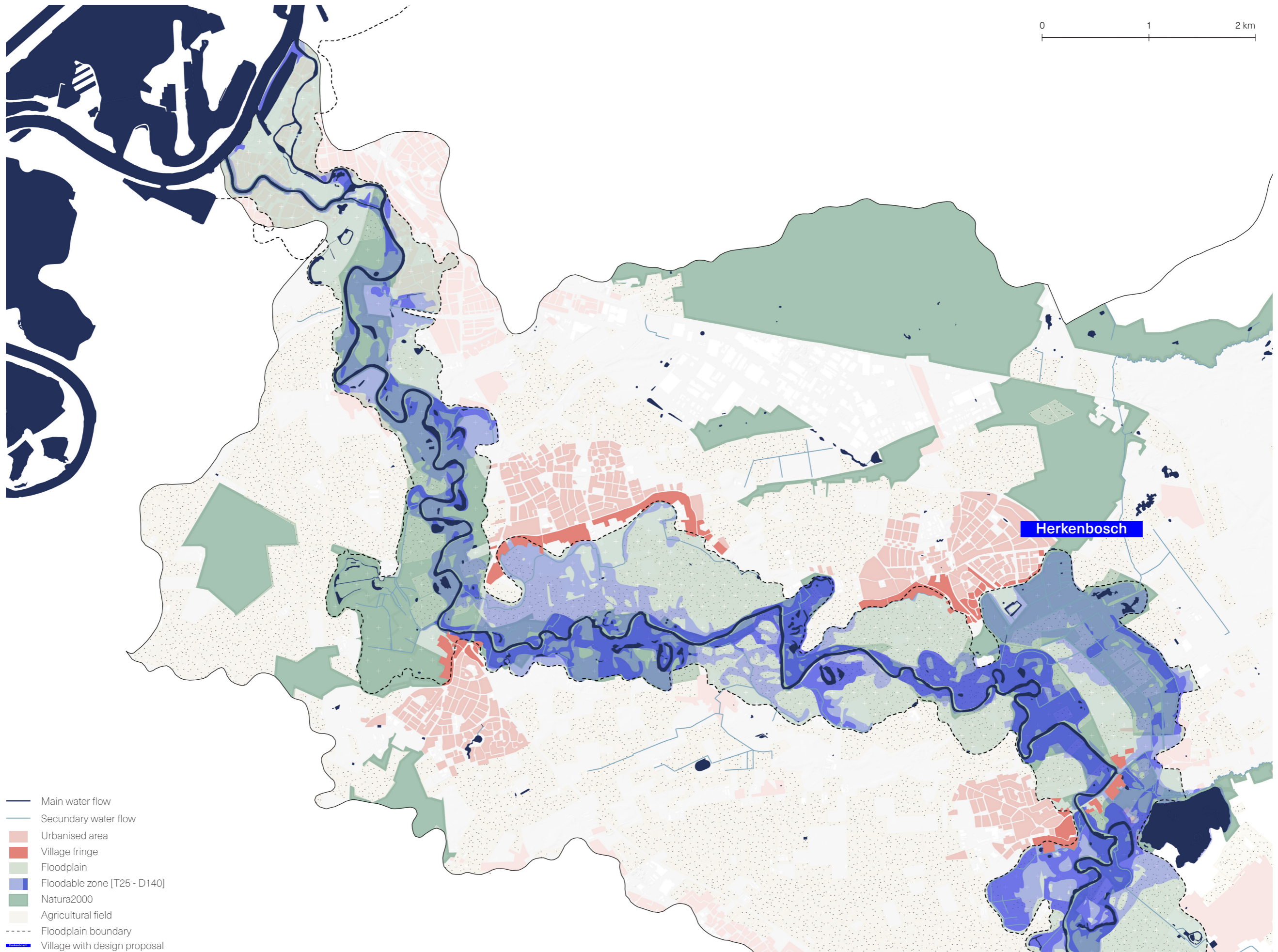
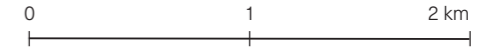


**FLOOD**

**PLACE-SENSITIVE INTERVENTION PRINCIPLES**

*TRANSFORMATIVE*  
**DESIGN**  
*-HERKENBOSCH-*





- Main water flow
- Secondary water flow
- Urbanised area
- Village fringe
- Floodplain
- Floodable zone [T25 - D140]
- Natura2000
- Agricultural field
- Floodplain boundary
- Village with design proposal

# FLOODPLAIN-ORIENTED VILLAGES



- Main water flow
- Infrastructure
- Surface water
- Building
- Topographical line
- Outline Sint Odilienberg

# HERKENBOSCH



- Main water flow
- Infrastructure
- Surface water
- Building
- Floodable zone [T25 - D140]
- Topographical line
- Outline Sint Odilienberg
- Tree
- Entrance marker
- Flood marker
- Route along fringe
- Viewpoint to river
- Location section

- 1 Bridging the village fringe - *bridging height & lookout point* [R4, S3]
- 2 Entrance Roer route - *wet landscape & spotters place* [R3, R5, S2, S4]

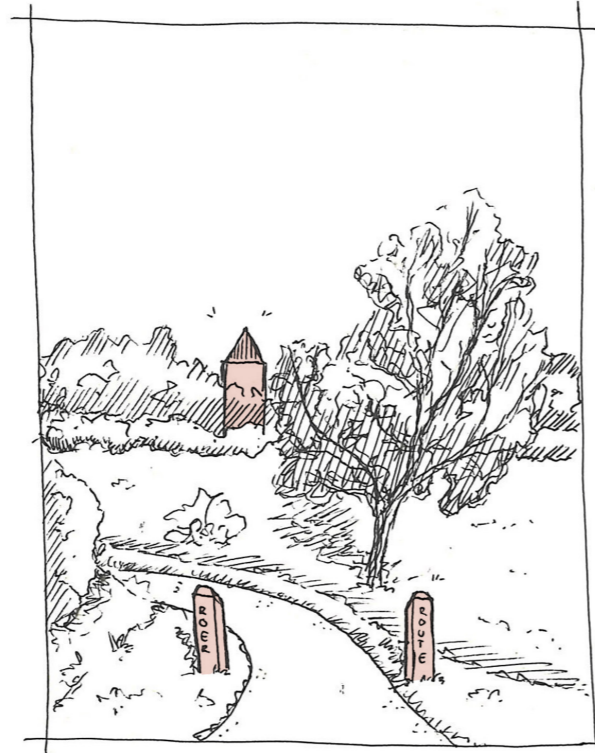
# HERKENBOSCH -2050



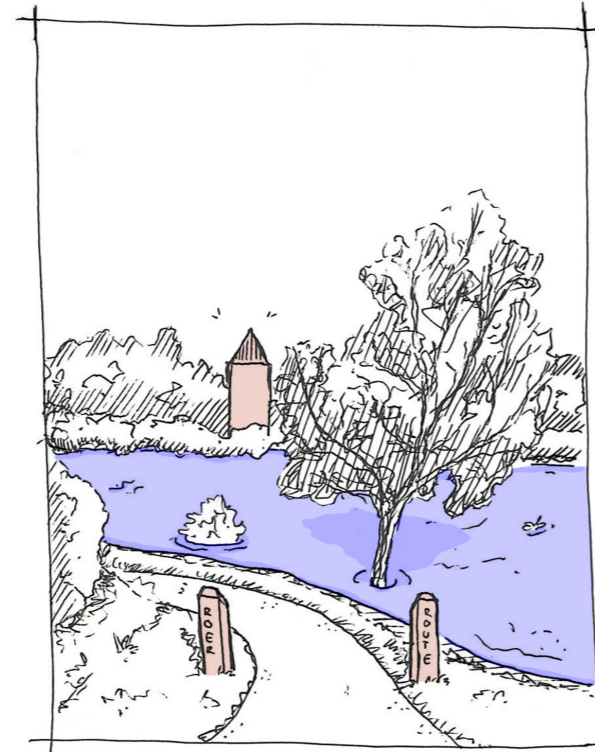
- Main water flow
- Infrastructure
- Surface water
- Building
- Floodable zone [T25 - D140]
- Topographical line
- Outline Sint Odilienberg
- Tree
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- 1 Bridging the village fringe - bridging height & lookout point [R4, S3]
- 2 Entrance Roer route - wet landscape & spotters place [R3, R5, S2, S4]

# HERKENBOSCH - 2050 SEASONAL



Dry situation

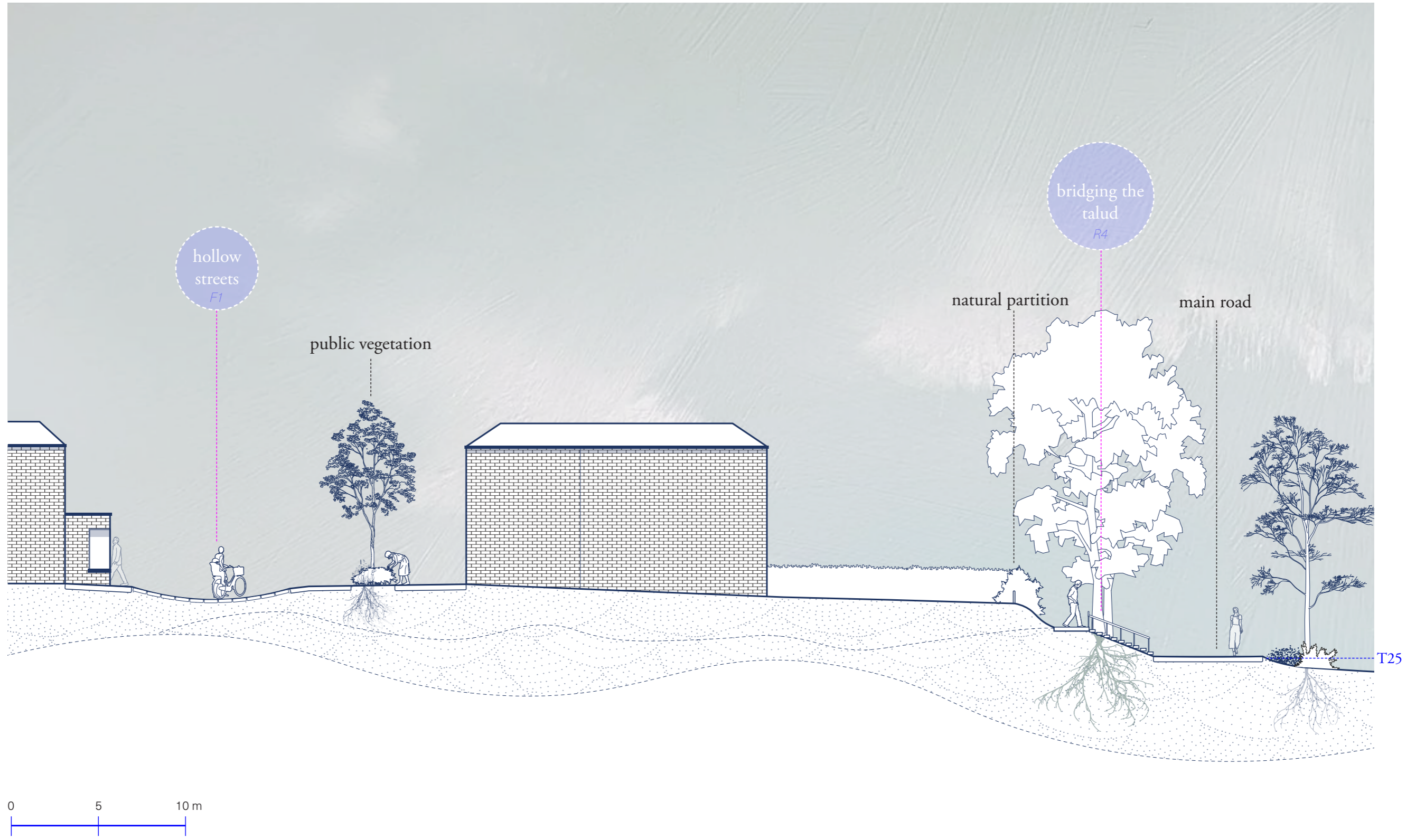


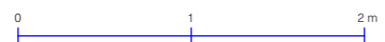
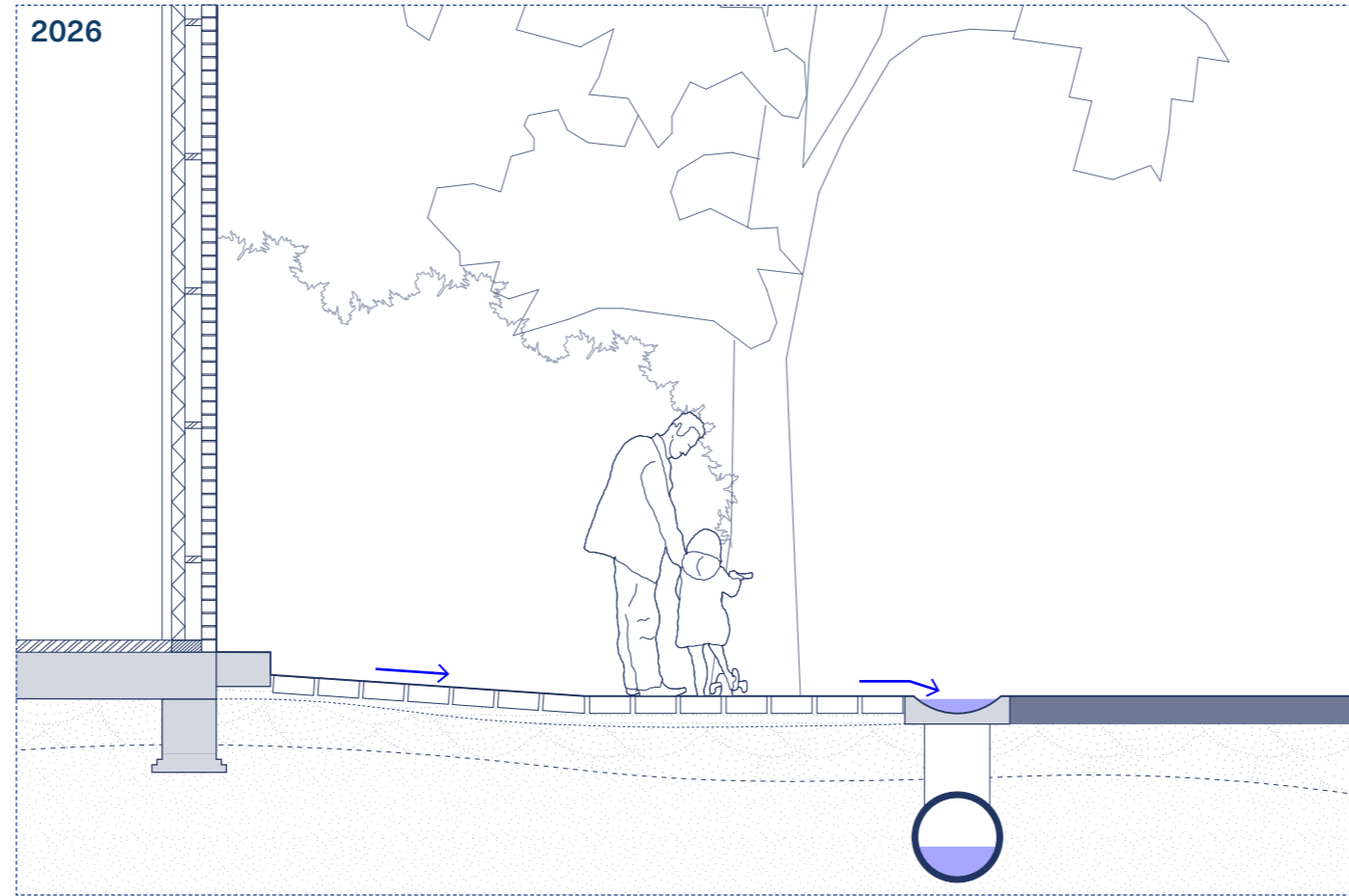
ENTREE ROEE-ROUTE HEERENBOSCH

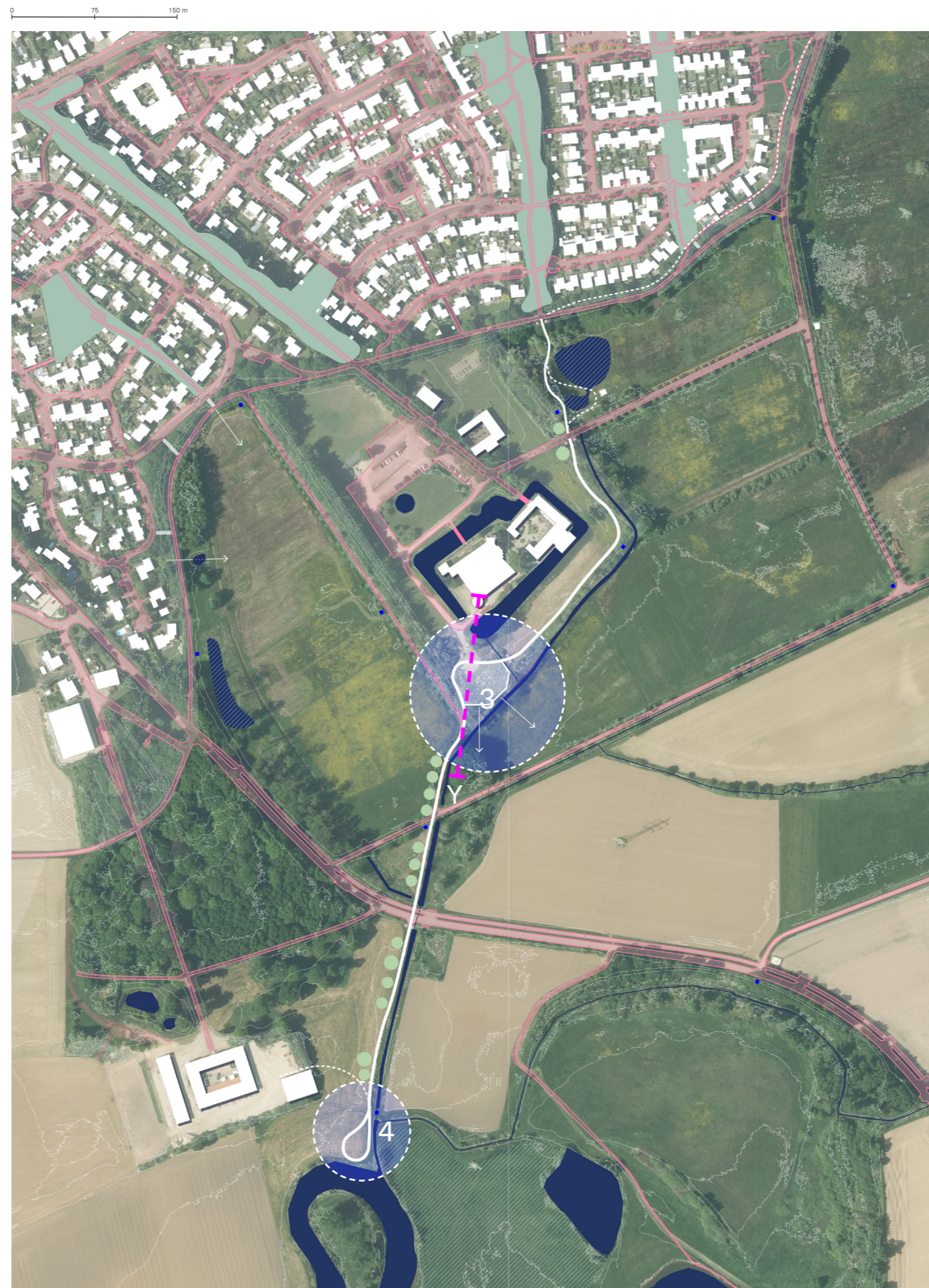


HEERENBOSCH : MARKERS TE ZIEN VANAF SAND

During T25  
flooding







- 3 Dealenbroek lookout - *lookout point* [S3]
- 4 Roer loop - *residing along water* [S1, R6]

- Main water flow
- Infrastructure
- Surface water
- Building
- Floodable zone [T25 - D140]
- Topographical line
- Outline Sint Odiliënberg
- Tree
- Entrance marker
- Flood marker
- Route along fringe
- ◀ Viewpoint to river
- - - Location section

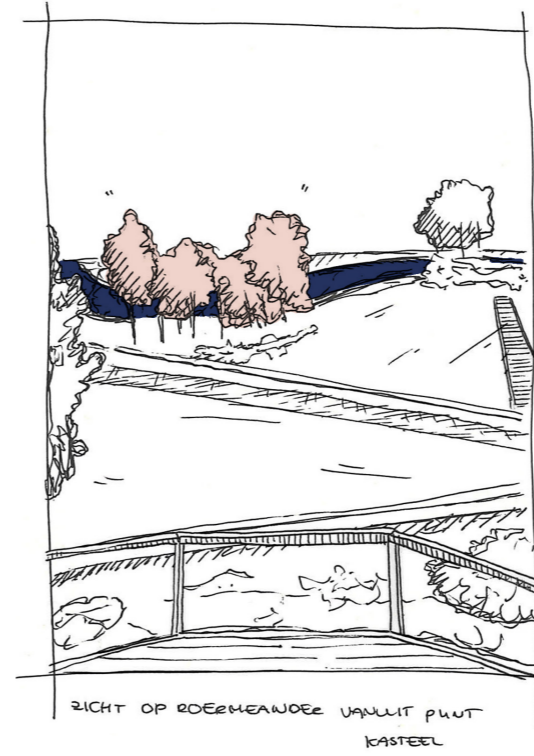
# HERKENBOSCH -2050



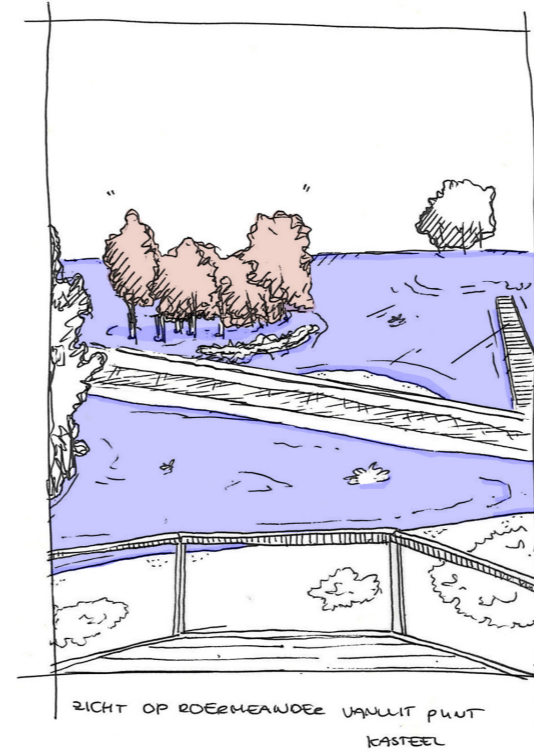
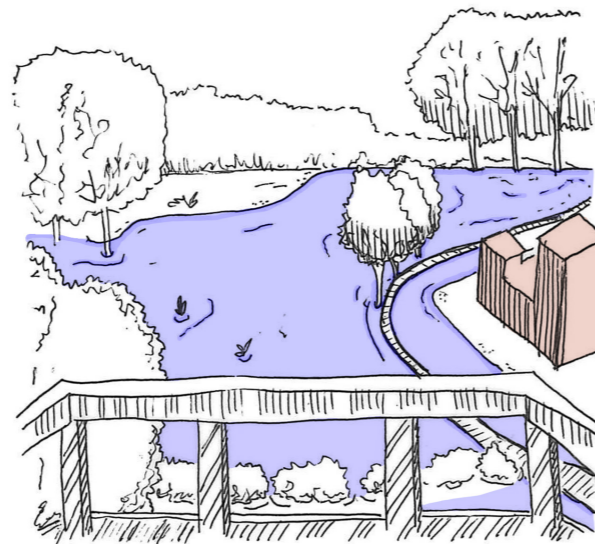
- Main water flow
- Infrastructure
- Surface water
- Building
- Floodable zone [T25 - D140]
- Topographical line
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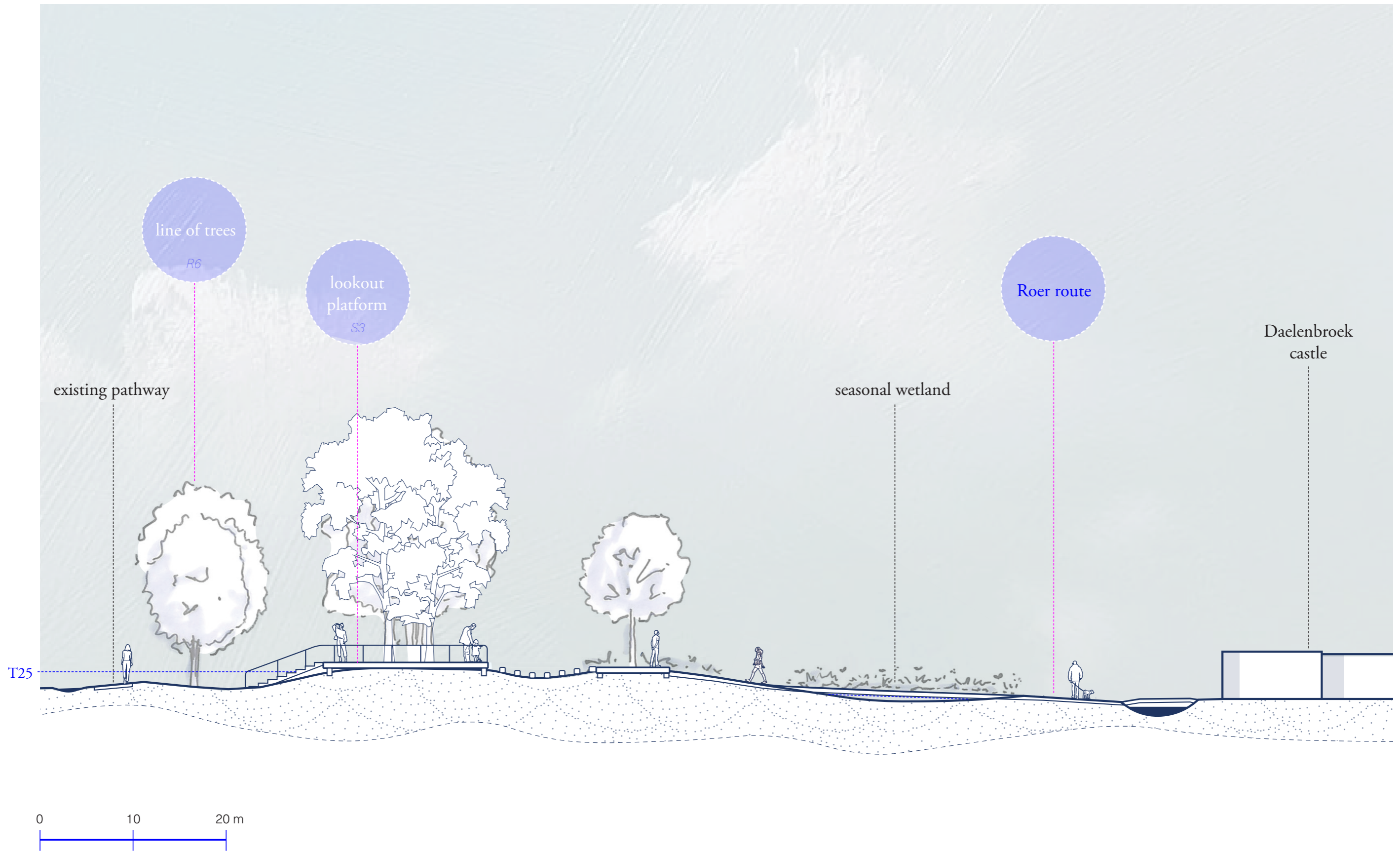
# HERKENBOSCH - 2050 SEASONAL



Dry situation



During T25  
flooding



Herkenbosch

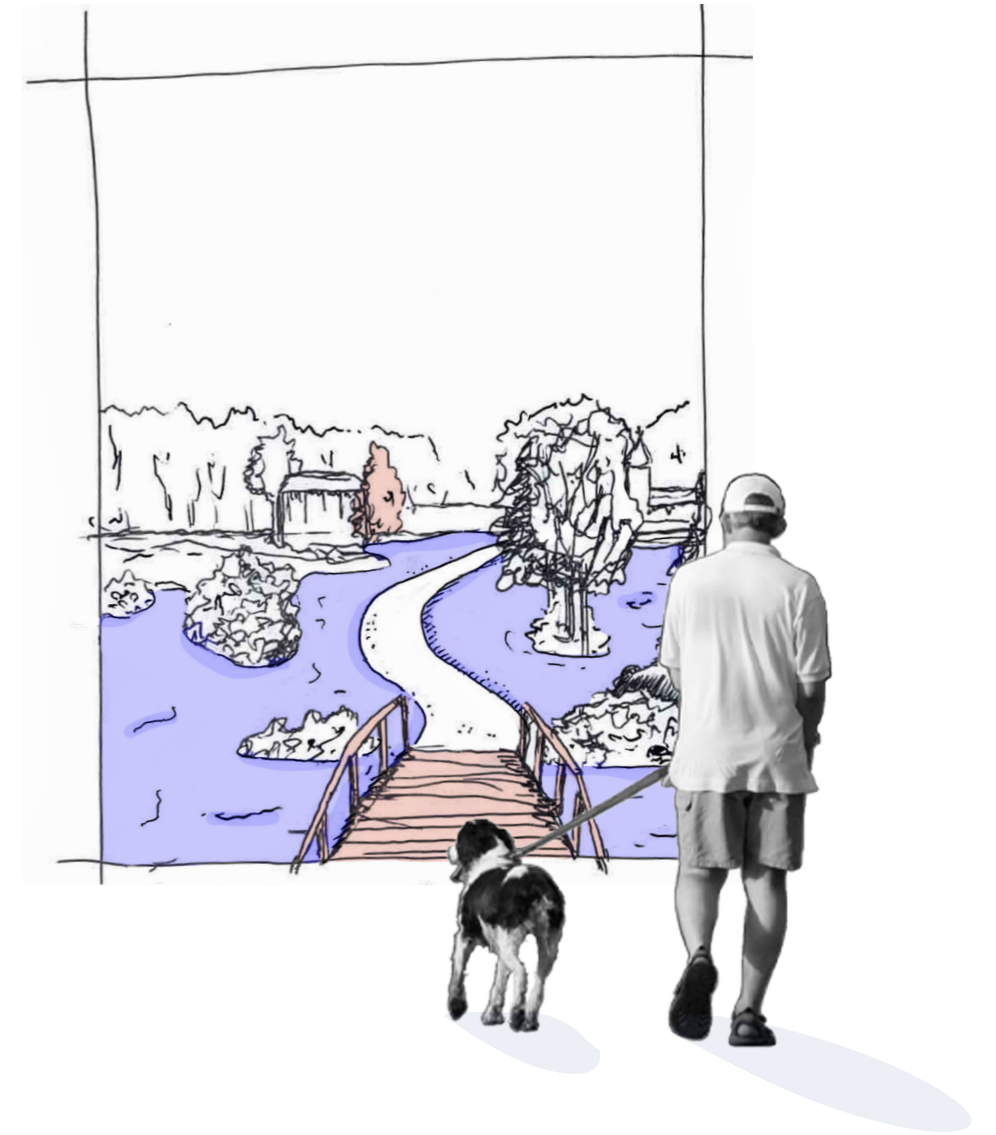


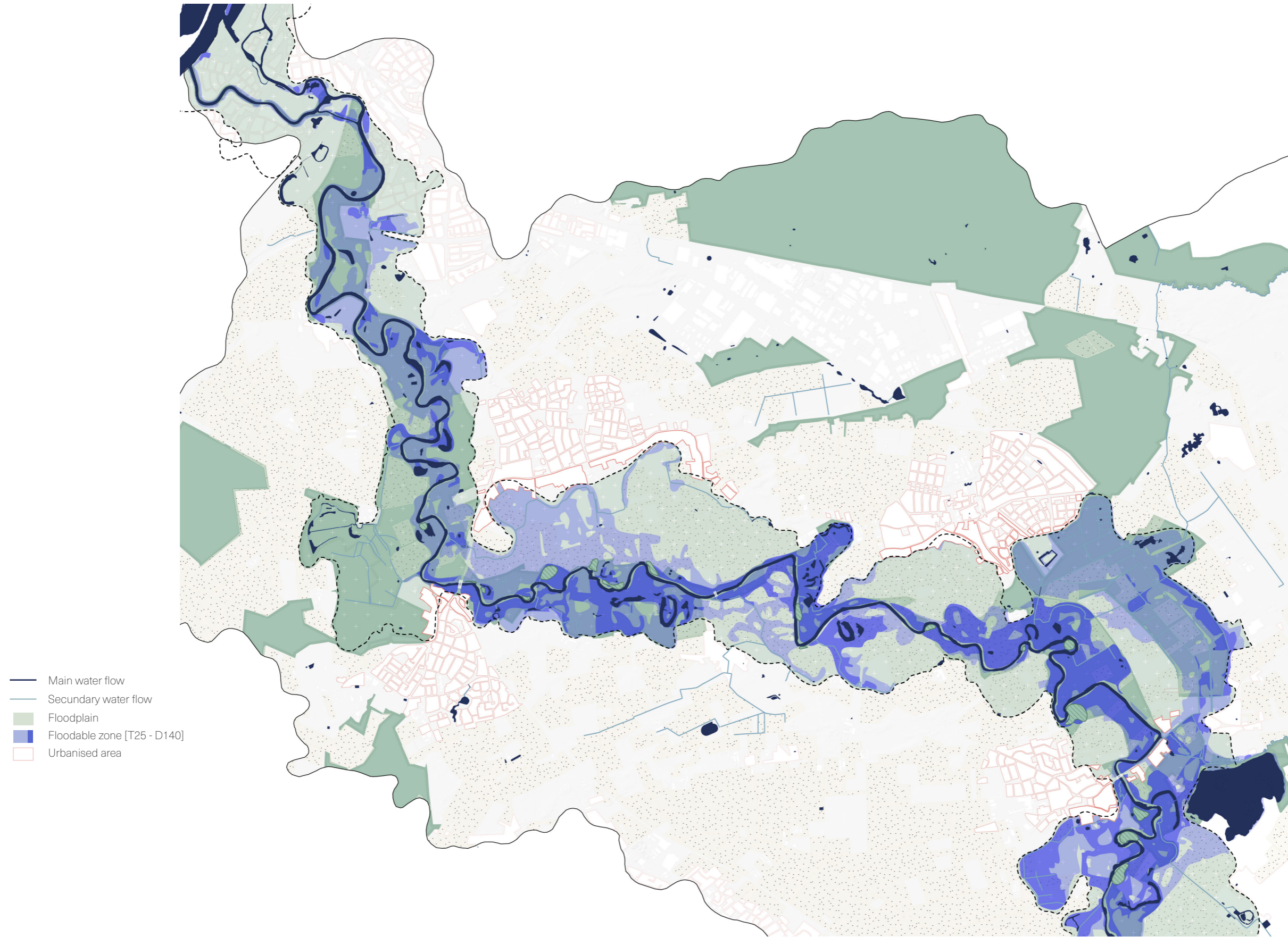
Sint Odiliënberg



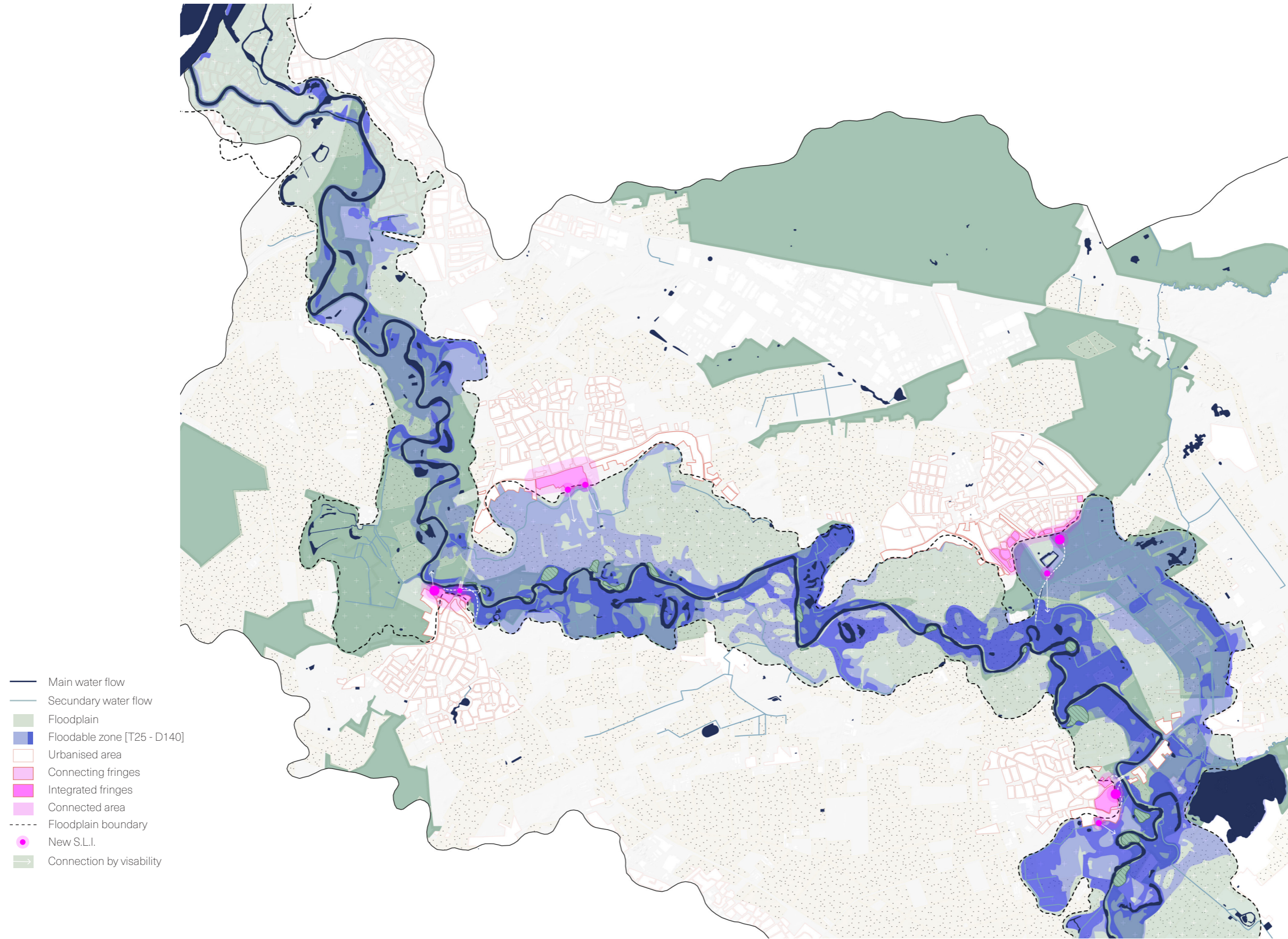
# IMPRESSIONS

# CONCLUSION

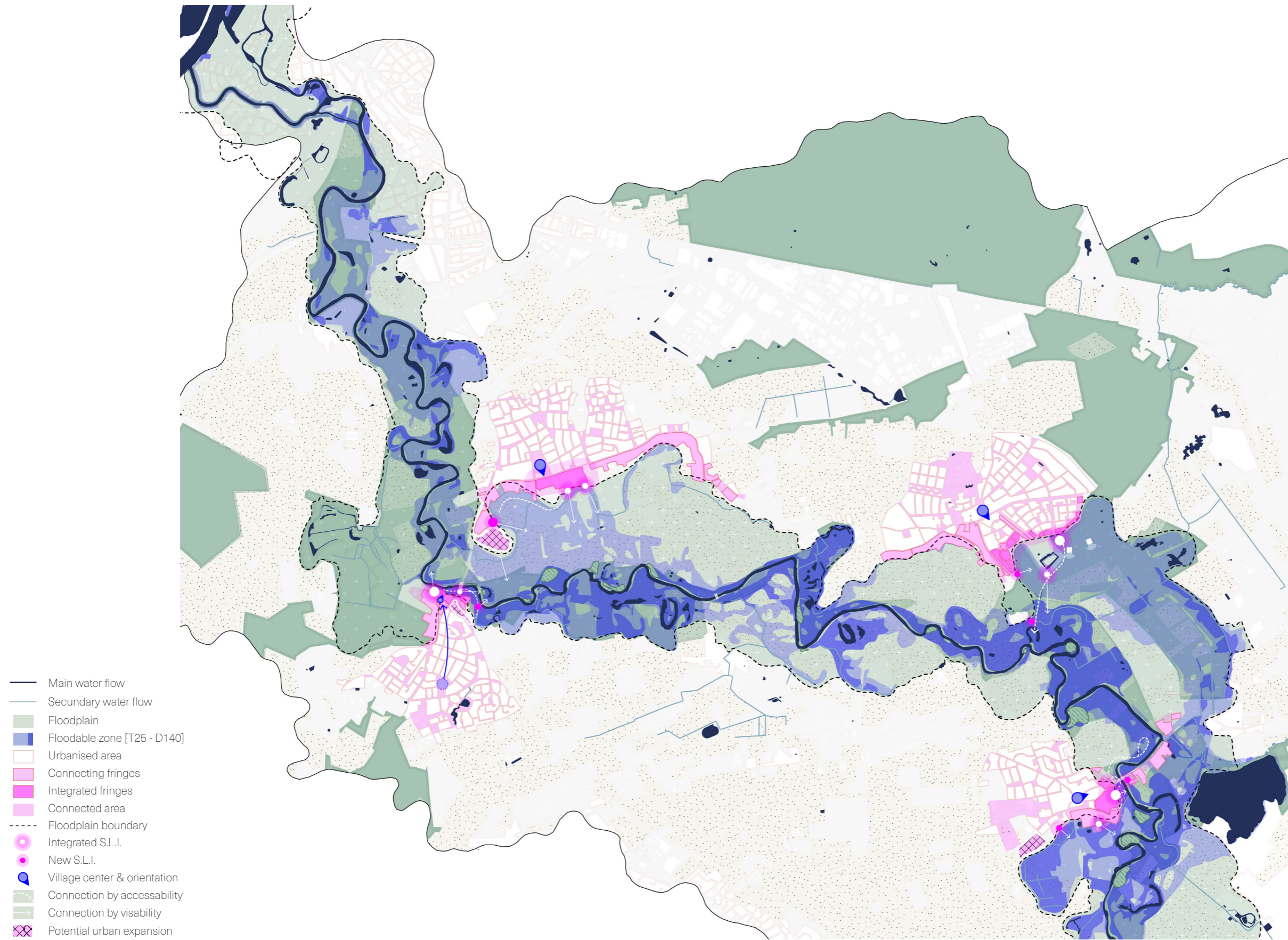




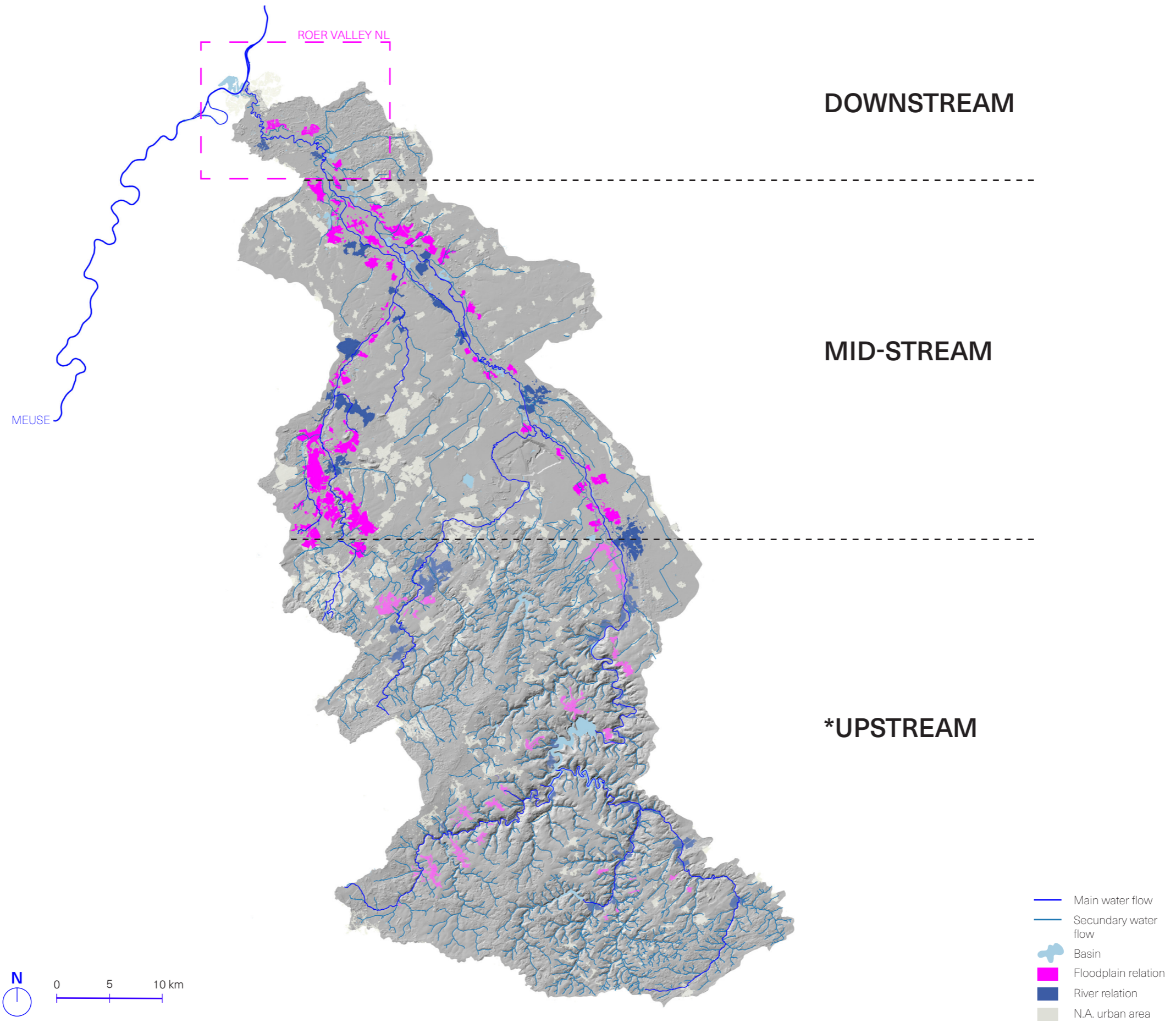
# TRANSFORMATION - 2026



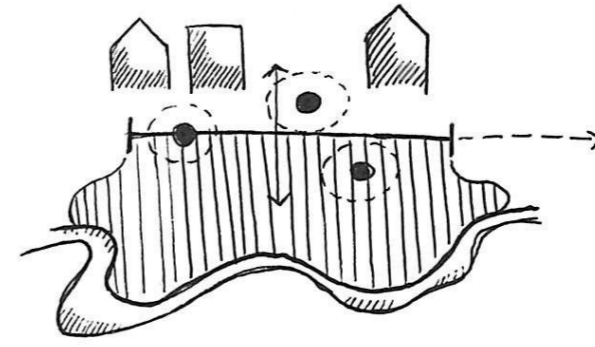
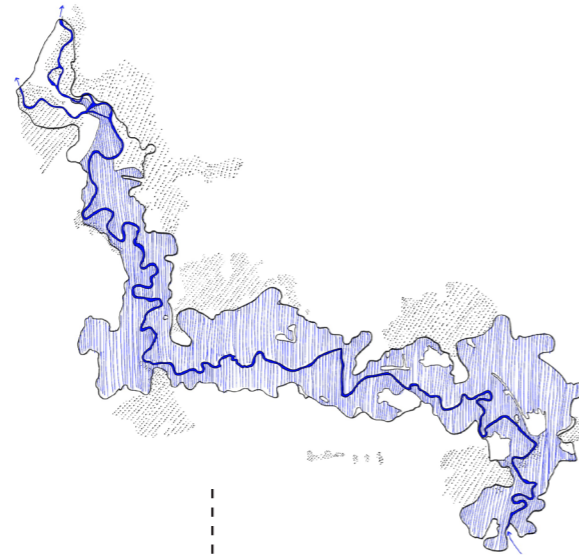
# TRANSFORMATION - 2030



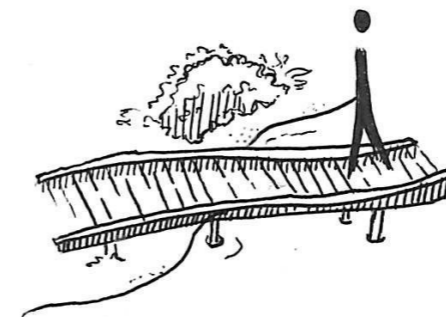
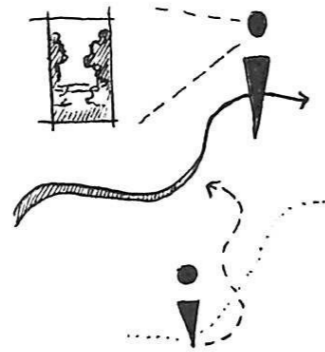
# TRANSFORMATION - 2050

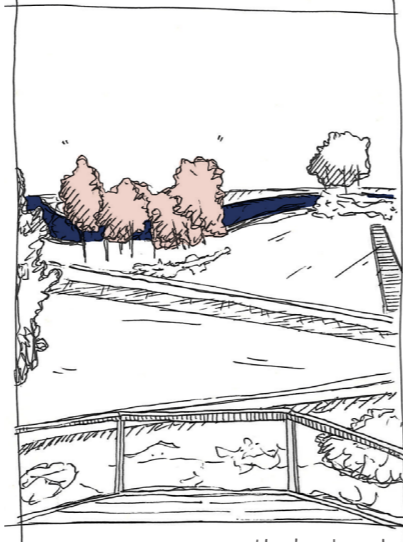


# RECOMMENDATION & TRANSFERABILITY

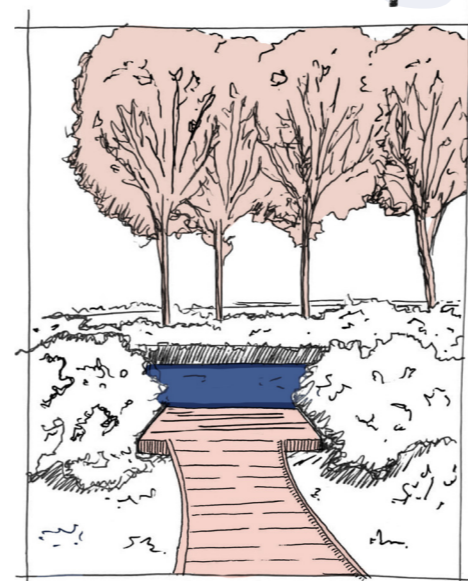
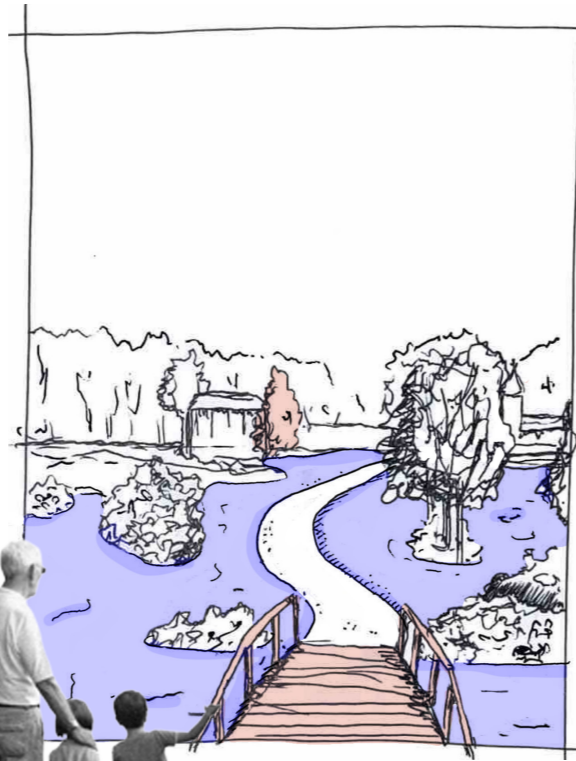
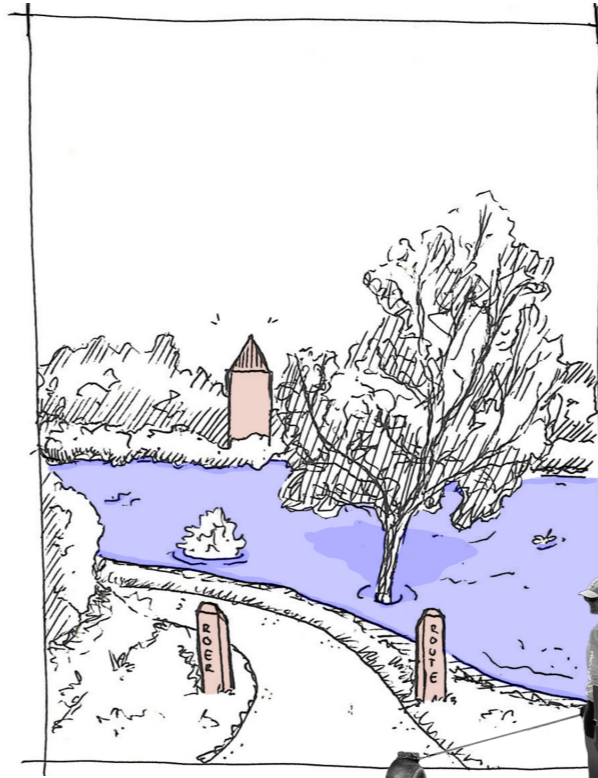


How can place-sensitive interventions within the **village fringes** of the Roer Valley improve the **experience** and **connection** of its residents with the Roer River by 2050?



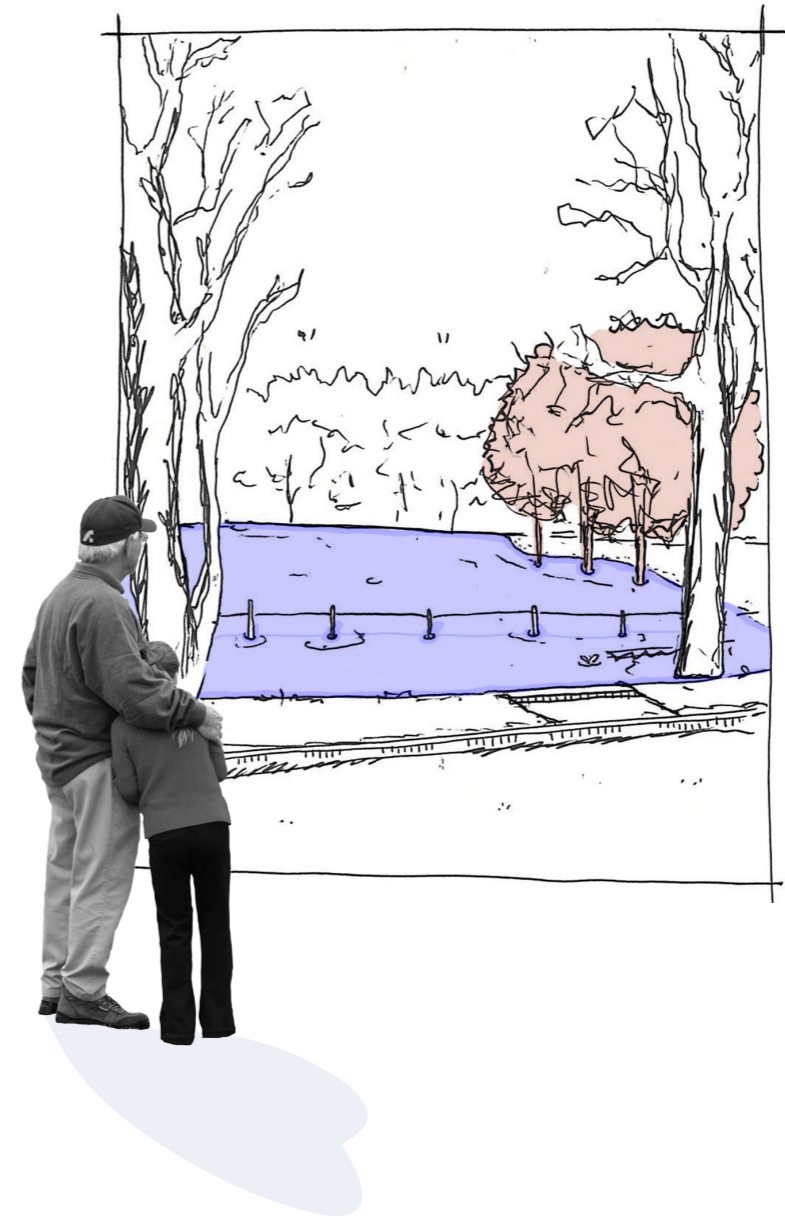


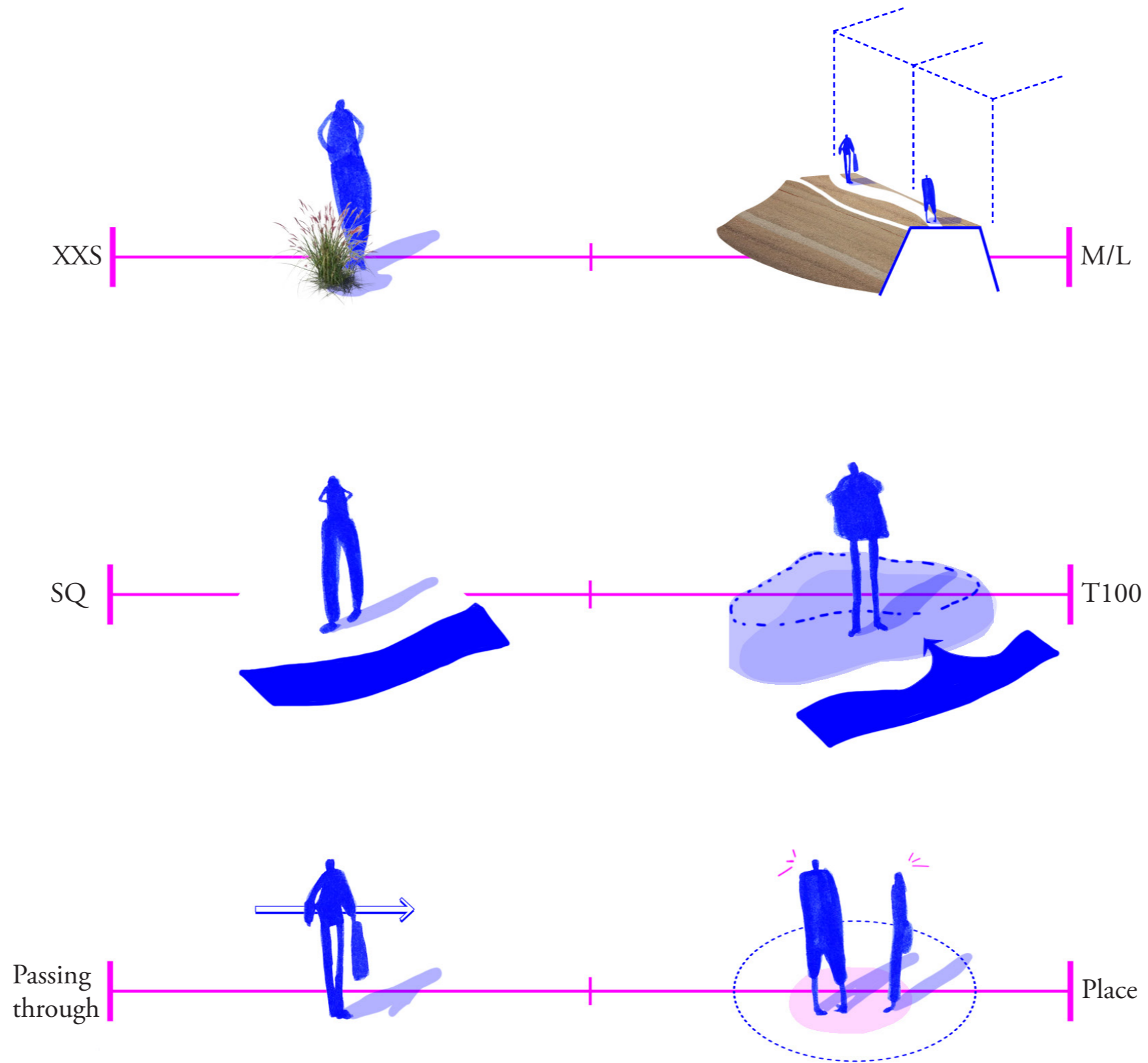
Herkenbosch



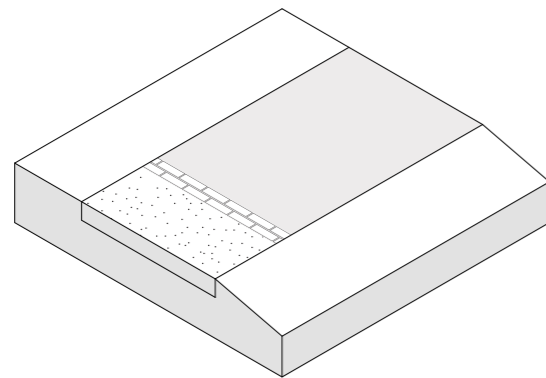
Sint Odilienberg

# APPENDIX

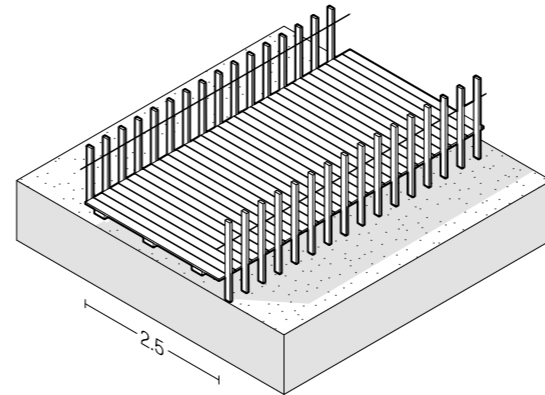




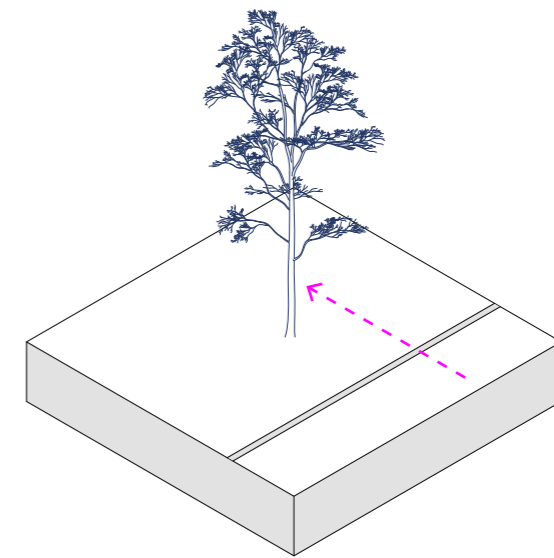
# PLACE-SENSITIVE INTERVENTION PRINCIPLES



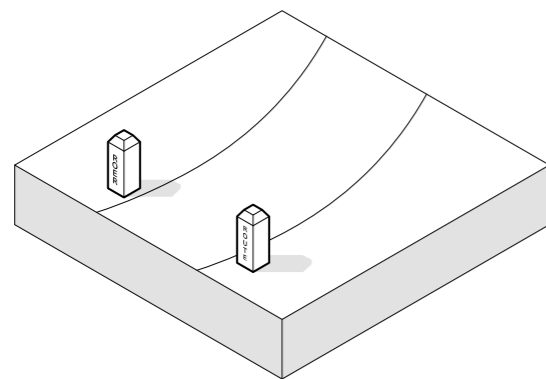
R1 MAIN ROAD - FRINGES



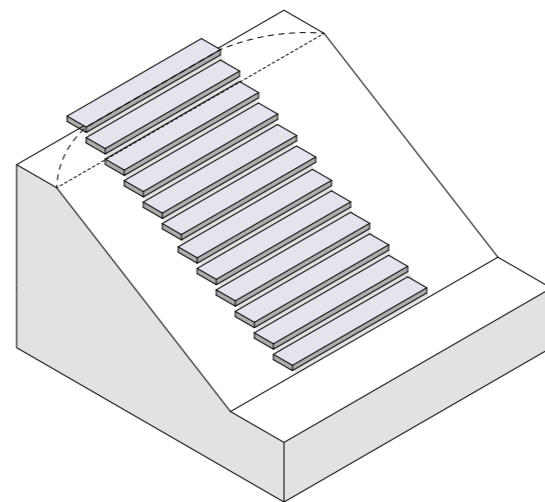
R3 FLOODABLE AREAS



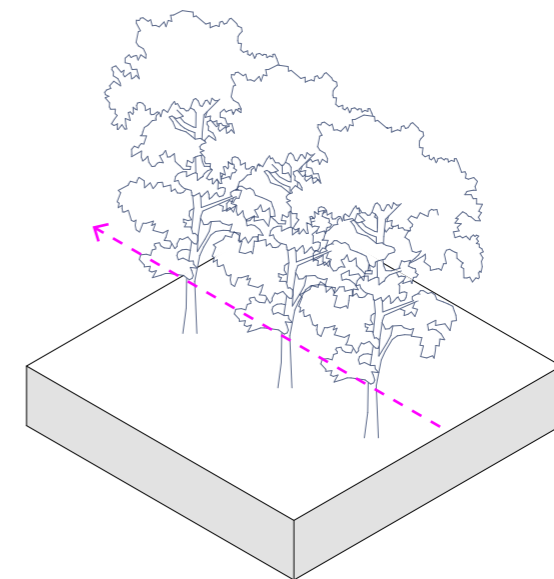
R5 VEGETATION PLACEMENT



R2 ENTERANCES

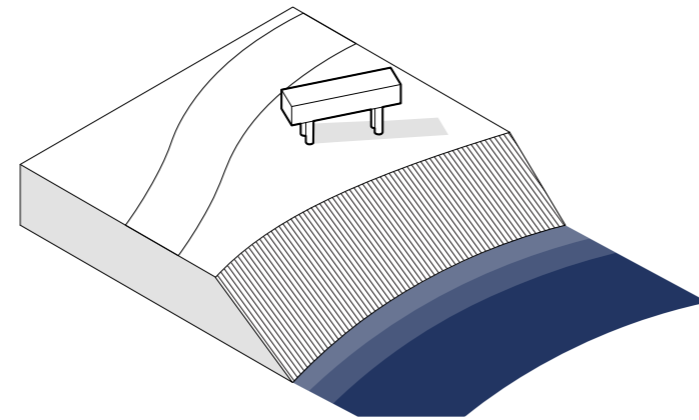


R4 BRIDGING HEIGHT DIFFERENCES

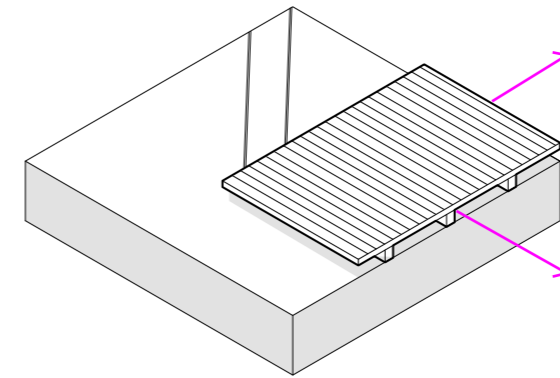


R6 LINE OF TREES

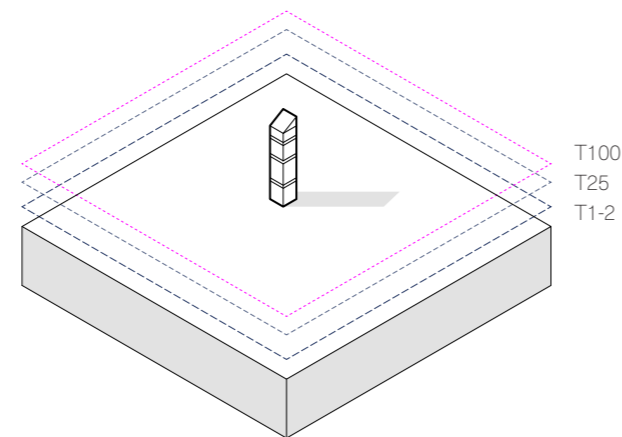
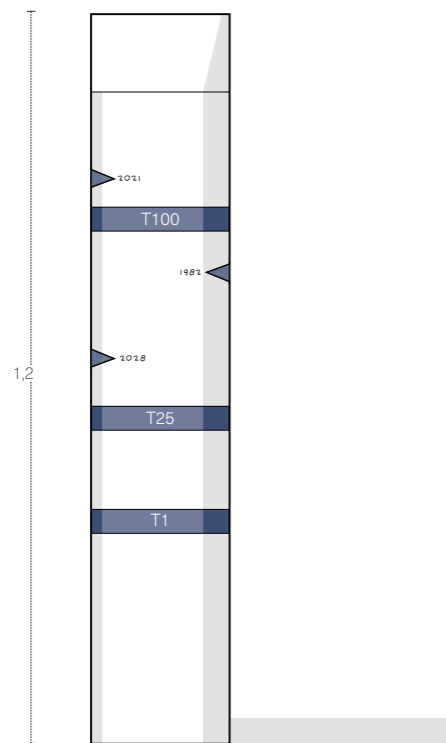
## PLACE-SENSITIVE PRICIPLES - ROUTE



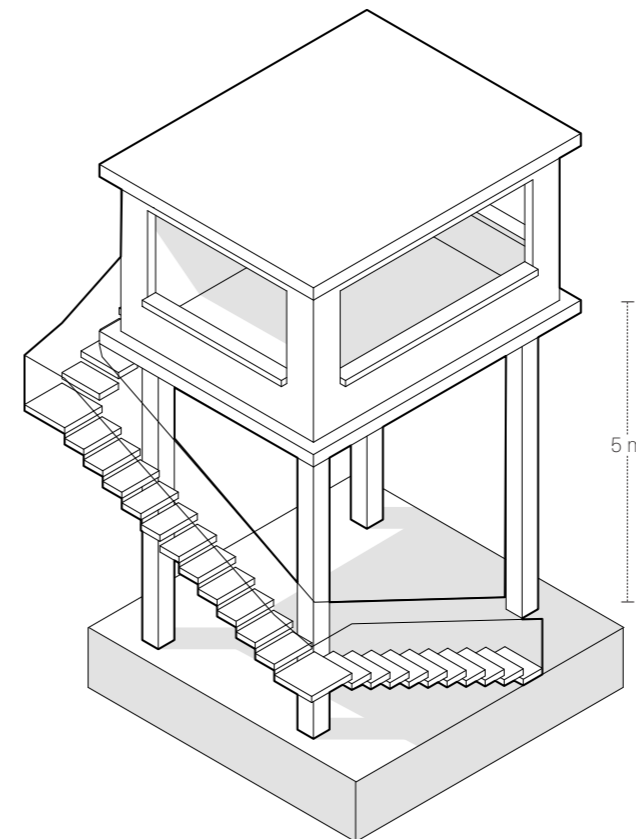
S1 ALONG WATER



S3 LOOKOUT POINTS

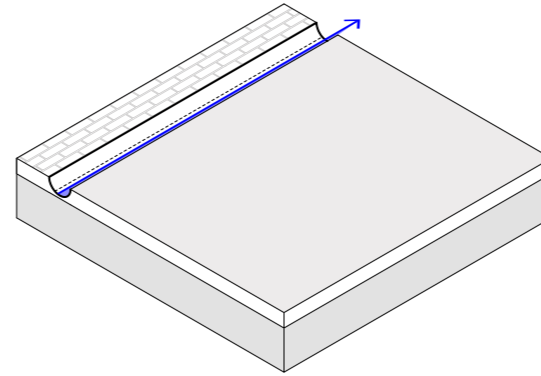


S2 FLOOD MARKERS

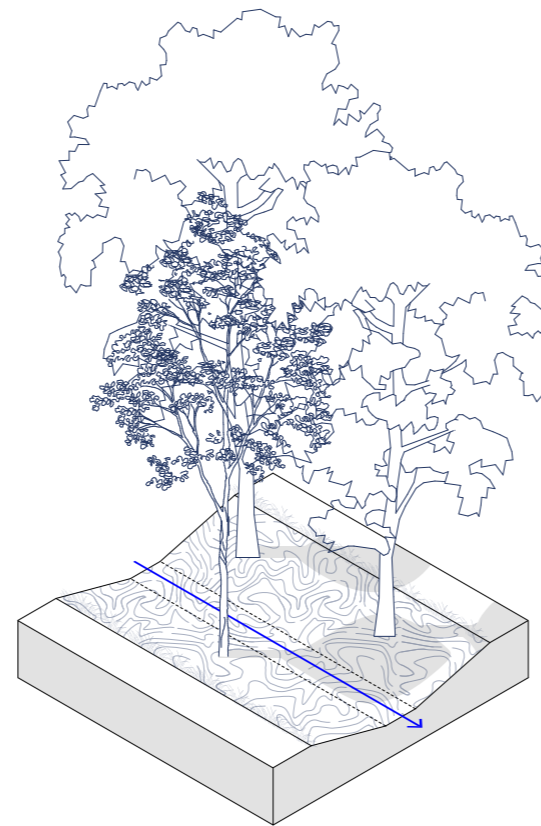


S4 SPOTTERS PLACE

# PLACE-SENSITIVE PRICIPLES - SPACE

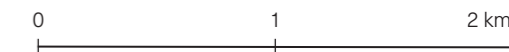


F1 STREET DRAINAGE

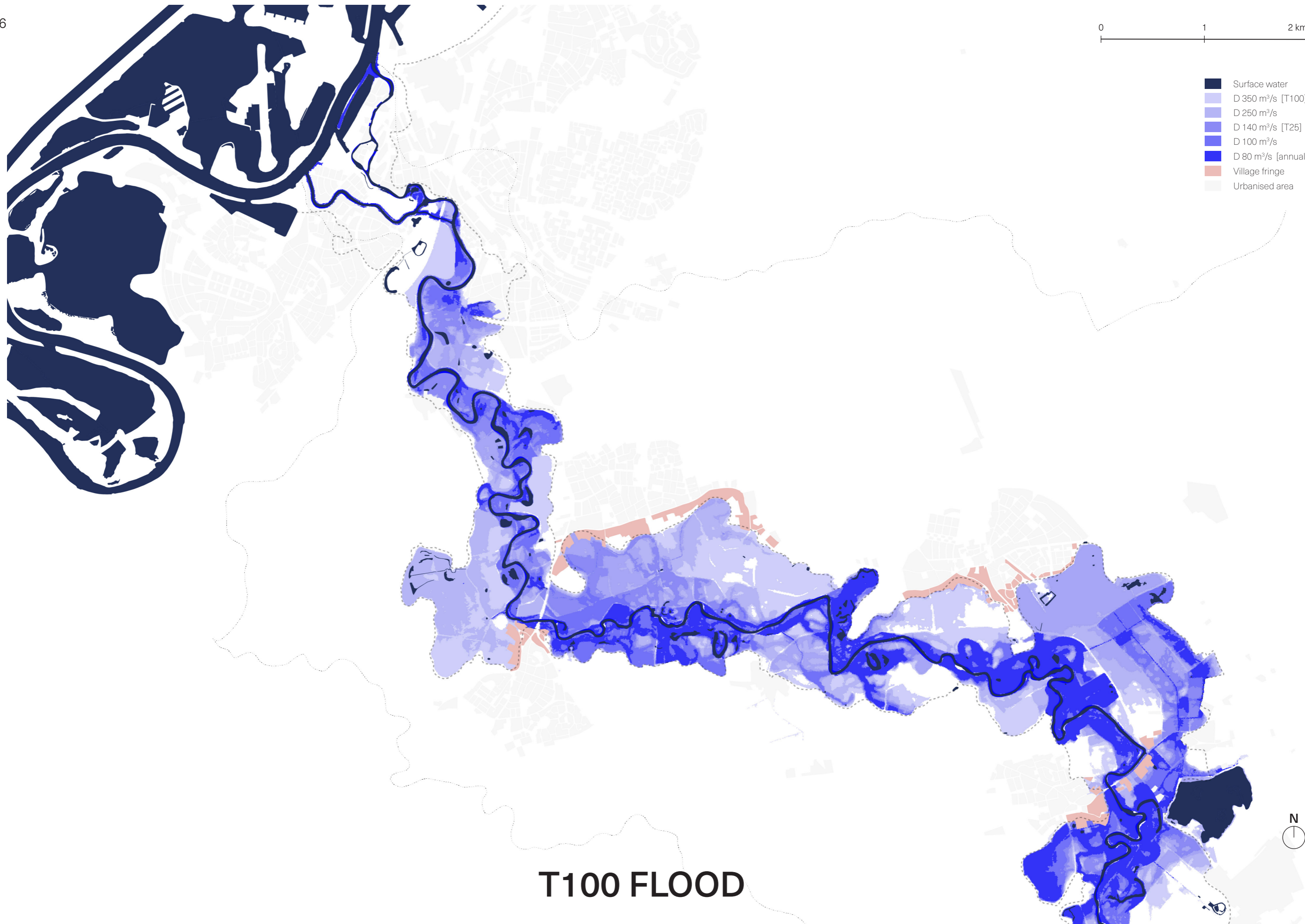


F2 GREEN GUTTERS

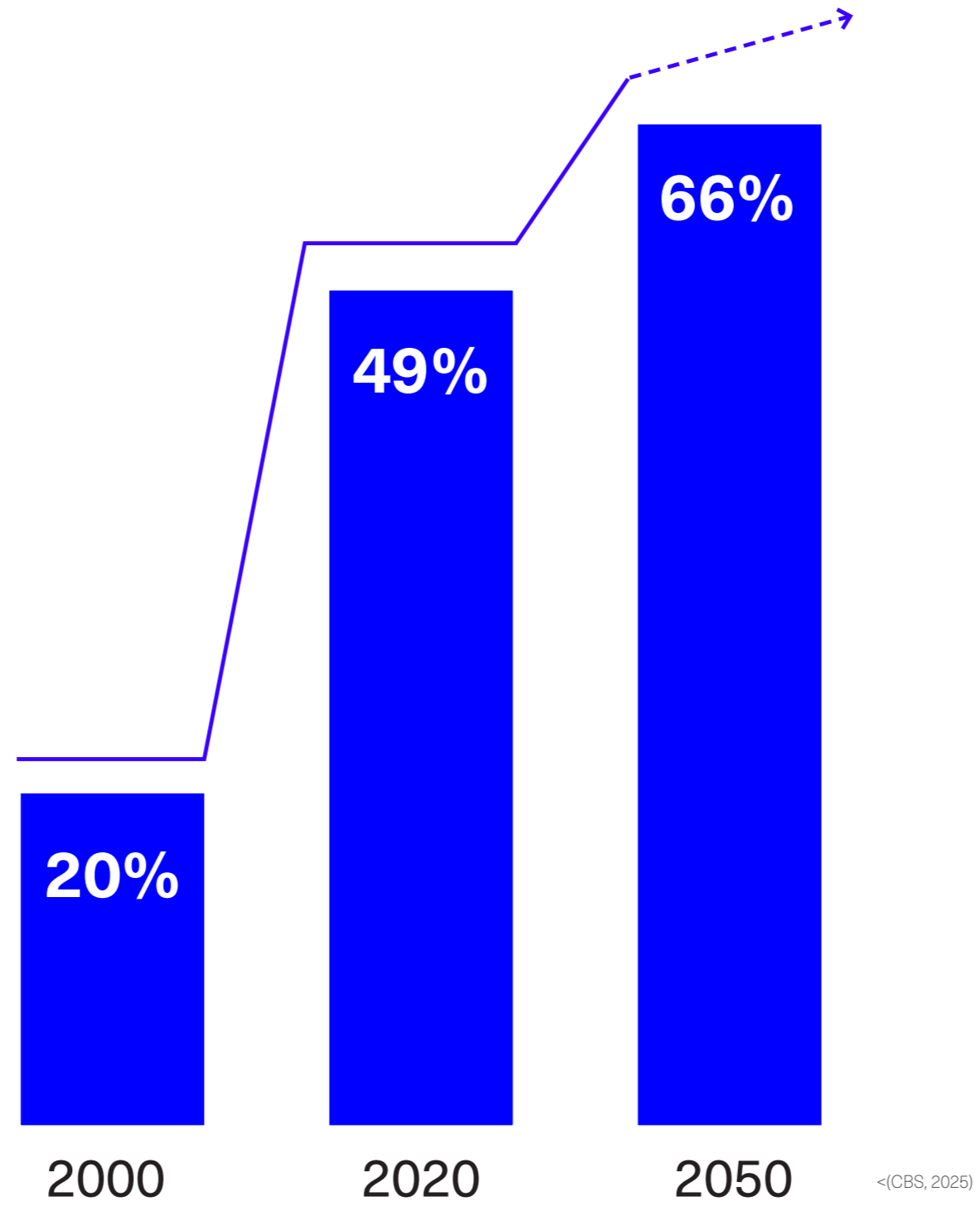
PLACE-SENSITIVE PRICIPLES - **FLOW**



- Surface water
- D 350 m³/s [T100]
- D 250 m³/s
- D 140 m³/s [T25]
- D 100 m³/s
- D 80 m³/s [annual]
- Village fringe
- Urbanised area



# T100 FLOOD



## 'GREY PRESSURE' IN ROERDALEN