





# WORKGROUP

JENNY HAAPASAARI

*industrial design*

PEPPI HIIDENKARI

*industrial design*

SONJA LEPISTÖ

*interior design*



SCHOOL PATH



PRESENTATION 10/10/2013



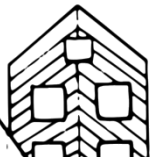
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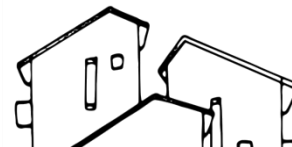
- I school path concept
- II path elements
- III school path network
- IV housing fair Vantaa 2015
- V summary



SCHOOL PATH



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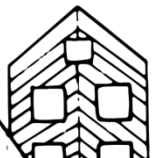
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# part I

## SCHOOL PATH CONCEPT

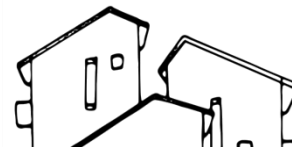
- 1 concept introduction
- 2 need for a school path?
- 3 themes
- 4 goals
- 5 community & social aspect
- 6 target group



SCHOOL PATH



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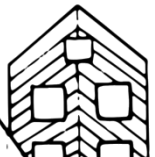
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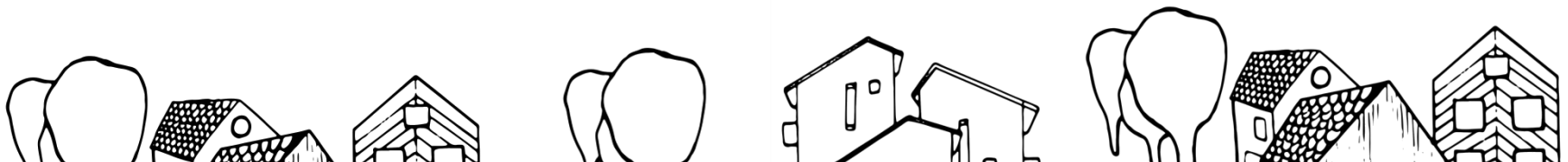


# DEMAND

## NEED FOR A SCHOOL PATH DESIGN?

The base for this project was to study what had been done about the school path topic previously. In **Koulupolkumanaali** and **Draamatyöpaja muotoilijoiden käytössä Marja-Vantaan koulupolulla** we found a checklist and elements for a safe school path. Also we learned about children's fears and hopes for a schoolpath.

City planning can acknowledge these fears and hopes and find solutions for them.





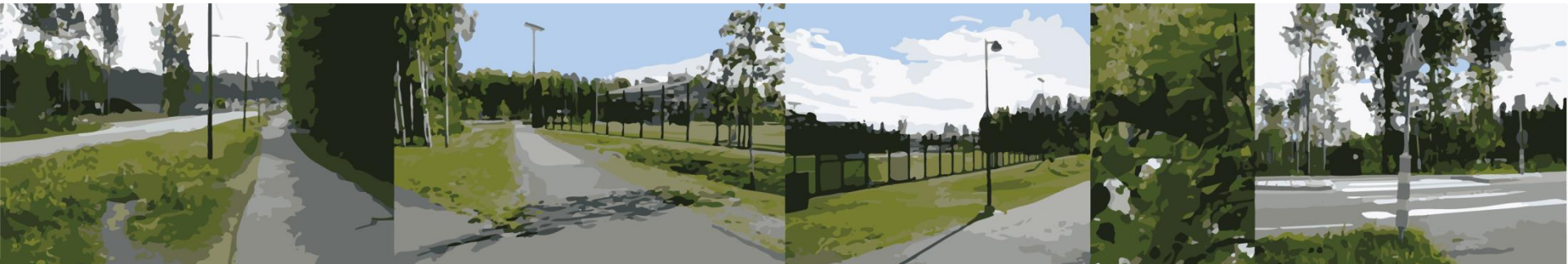
# SCHOOL PATH

## CONCEPT

School path is a service designed for primary schools in Kivistö which guarantees a safe and comfortable way to school all year round. School path focuses on a bicycle path, but can also be combined with a pedestrian lane.

In the school path children are priority but it's for the whole community to use.

The concept includes the means to form an optimal school path and the physical elements that it's build of.



SCHOOL PATH



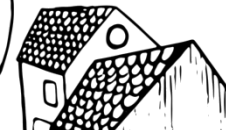
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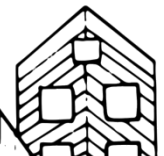
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# GOALS

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## PRIMARY

SCHOOL PATH NETWORK FOR KIVISTÖ

SAFE AND OPTIMAL ROUTING

DEFINING SCHOOL PATH ELEMENTS

MULTIFUNCTIONAL AND FLEXIBLE

RECOGNISEABLE AND GRAPHICAL LOOK

## SECONDARY

TRAFFIC AWARENESS EDUCATION

CO-OPERATING WITH SCHOOL PATH: SAFETY AND  
INFROMING –GROUP

ADDITIONAL SERVICES



SCHOOL PATH



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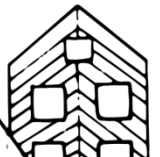
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# KEY THEMES

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## MULTI-FUNCTION

The path is designed in a way that allows it to be **modified easily**. Concept works even if some elements are left out or edited.

Path must be **multifunctional** to serve most of the community.

## KEYWORDS

### EMOTIONAL

Community  
Experience  
Independence  
Visual  
Unique  
Memories  
Inspiring

### LOGICAL

Functional  
Safe  
Year-round  
Reachable  
Adaptable  
Easy to maintain  
Simple



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# COMMUNITY & SOCIAL ASPECT

- Promoting **regional identity** with having something unique and local.
- School path is one tool to teach children to live according to **sustainable development** values.
- For public health reasons it's profitable to accustom children to exercise and travel short distances by walking and cycling at a young age.
- School path would partially preserve the small town spirit by creating a safe and nature favoring environment.



SCHOOL PATH



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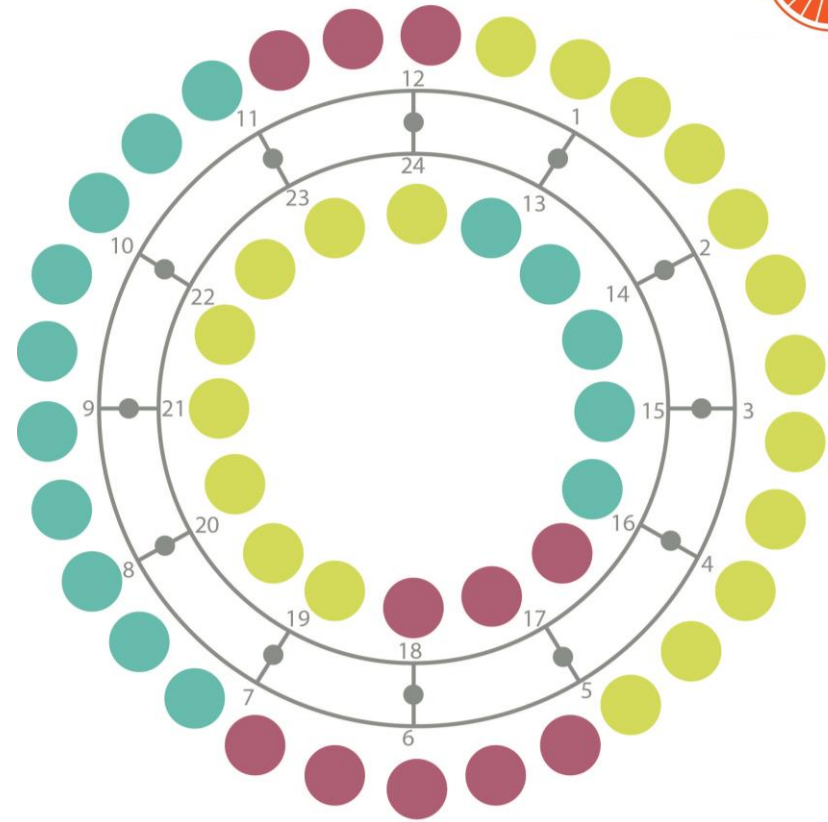
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# TARGET GROUP

SCHOOL CHILDREN (1.-6. grade)  
 PARENTS  
 FAMILIES  
 SENIOR CITIZENS  
 FITNESS & JOGGERS

School children need the path only a short while during the day. Rest of the time it can as well be used by others too. For the multifunctional aspect we have made the path **serve most of the community.**



 Koululaiset    
  Seniorit    
  Urheilijat + muu kivistön väki



SCHOOL PATH



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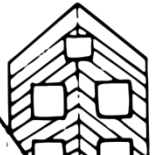
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# part II

## SCHOOL PATH ELEMENTS

- 1 materials
- 2 shelter
- 3 crossing
- 4 under- & overpass
- 5 lightening
- 6 path categories



SCHOOL PATH



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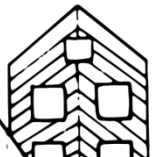
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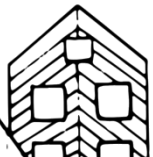
# MATERIALS

**Built-in heating system integrated in the path** keeps the path clear of ice and snow.

- Might inspire to cycle to school in winter also.
- Comes cheap in time; Sanding and salting ground costs a lot and isn't good for environment.
- Other pedestrians f.ex senior citizens could also benefit from the safe and well maintained path

For the path's coating we use **Acrylotex** which is designed for use on asphalt and concrete surfaces.

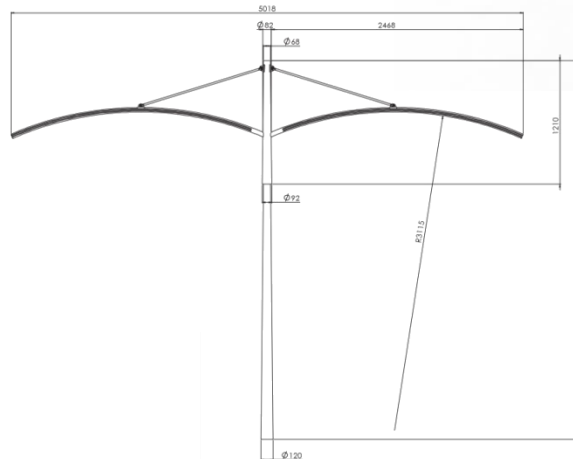
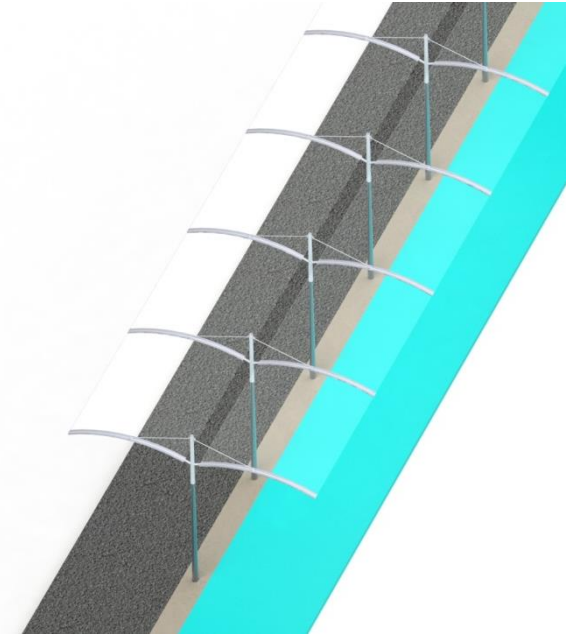
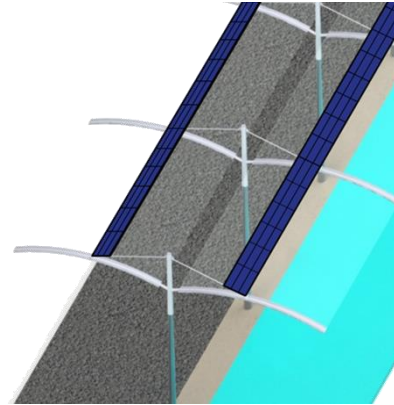
- Durable and slip resistant surface.
- Much more permanent than paint.





## shelter

- The roof is bended **polycarbonate** plate.
- Shelter functions as an element separating pedestrian and cycle lanes. Also it indicates where the **main route** goes.
- Material is **recycled aluminum**.
- The lightening works with **solar panels** placed on the the roof.



SCHOOL PATH



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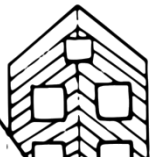
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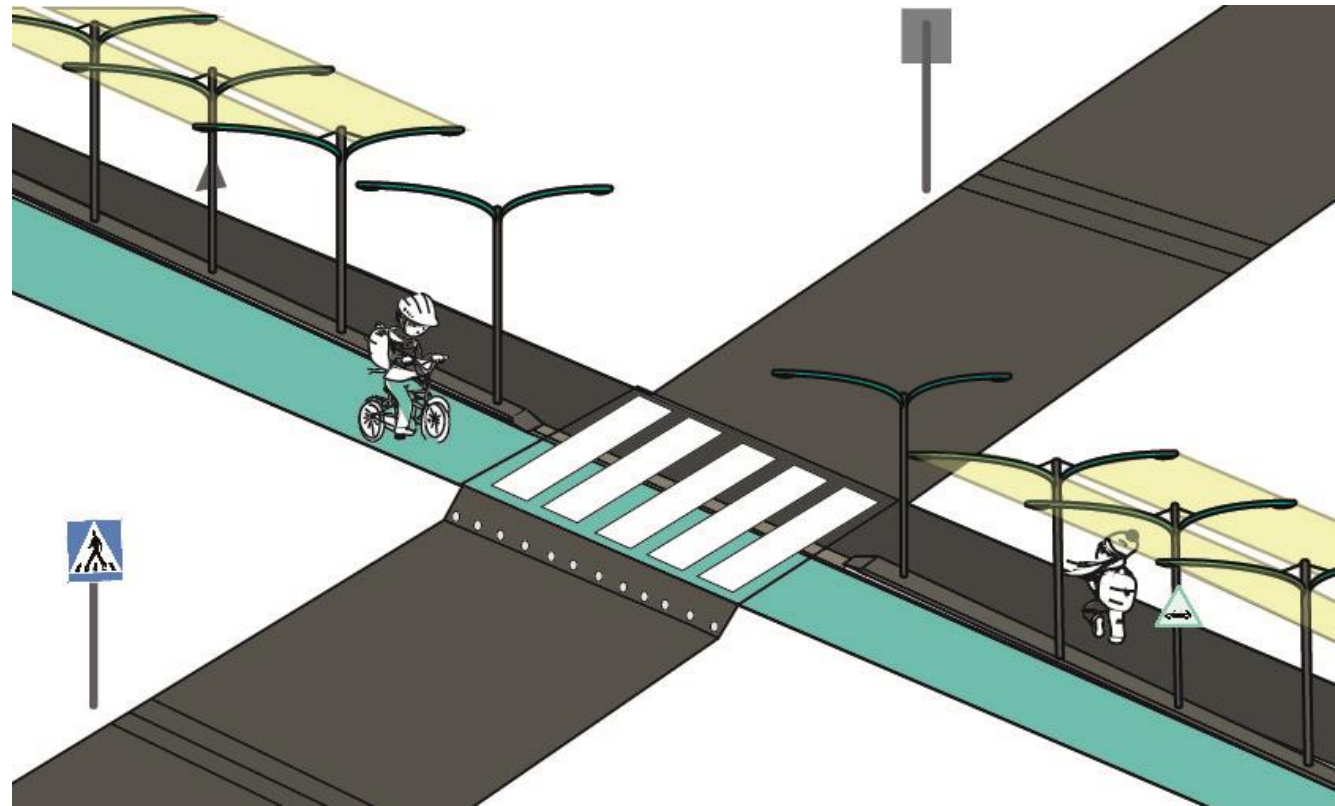


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# CROSSING

- elevated crossing area 1
- speed bump, rumble strip 2
- speed limit 30km/h 3
- visibility 4
- Välkky, PoLED, SeeMe 5
- SignFlash, Levelite 6
- safety island 7
- traffic lights (+ cyclists own light) 8



SCHOOL PATH



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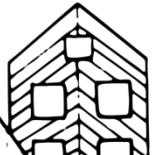
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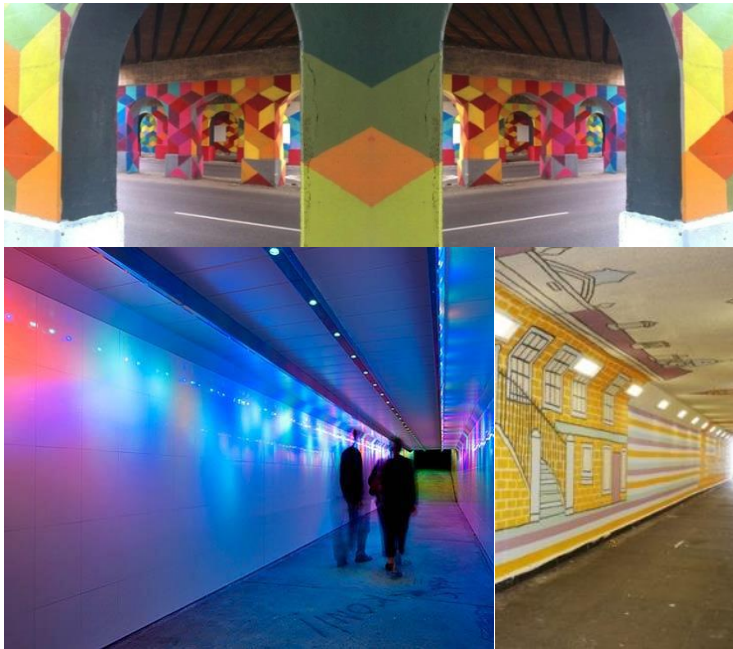


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## underpass

- Approachable and comfortable.
- Intensive lightening.
- Visually interesting and memorable.
- Children would take part in improving and generating ideas for the tunnels.



## overpass

- If possible, in dangerous crossings there should be light overpass. To increase children's sense of safety, the structure could be tubular.
- There are few overpasses already in the school path. In these cases, road surface and other details continue same way as the basic path.



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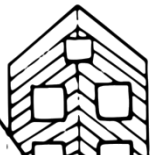
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# LIGHTENING

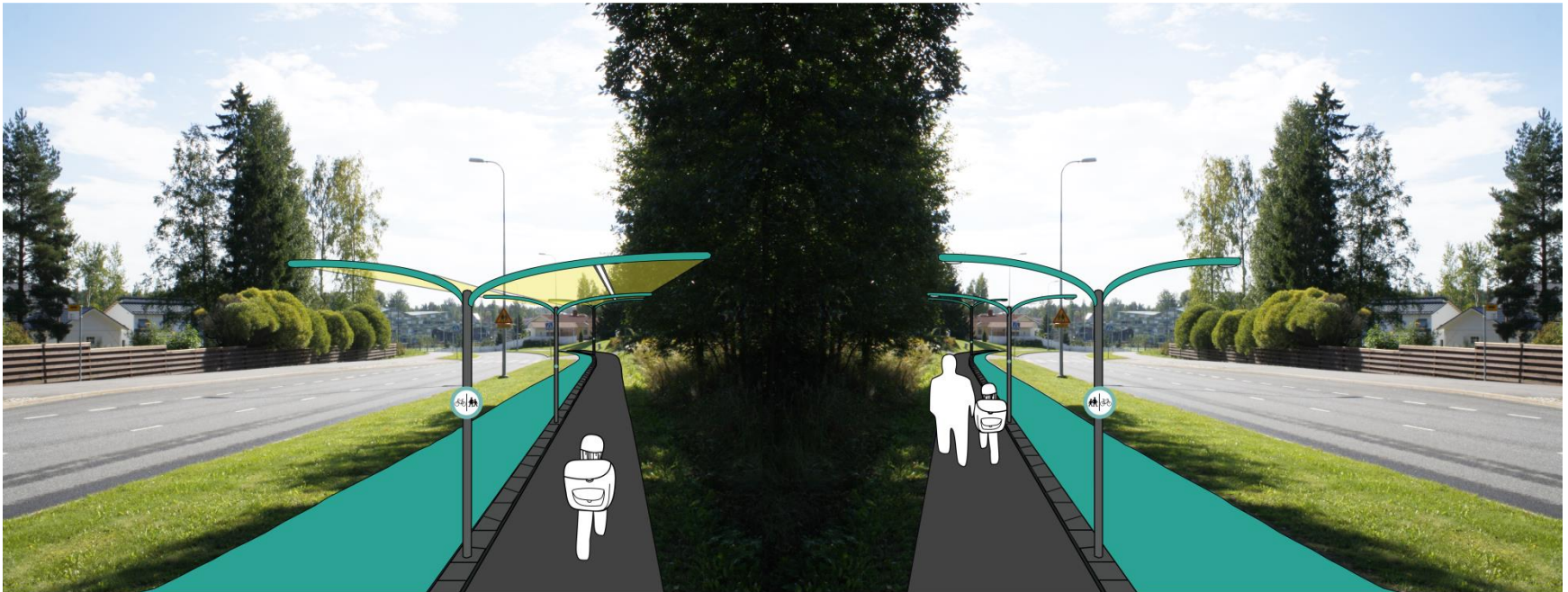


## SHELTER

Integrated LED lights lengthwise of the path. Solar panels on the roof.

## LIGHTENING POLE

Streetslights, with theme color paint. Same shape as the shelters profile to keep the lightening cohesive.



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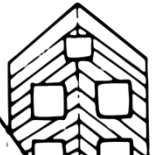
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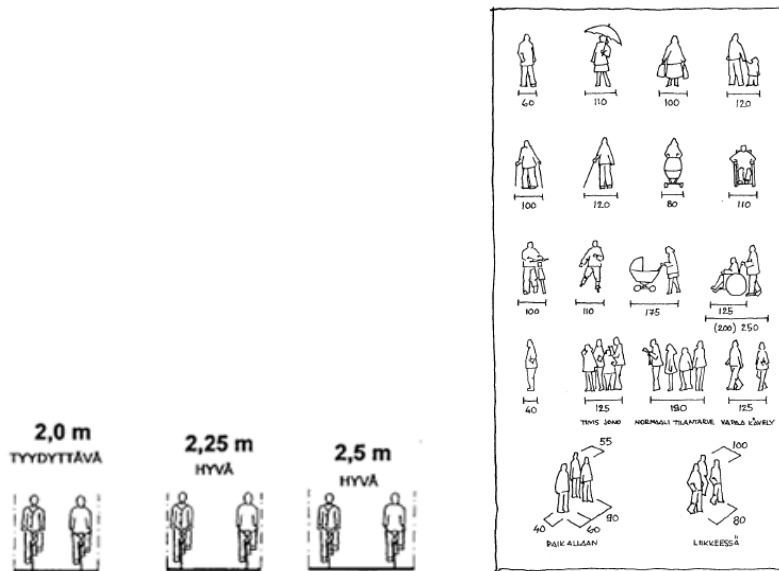
# CYCLIST MEASURES

## cyclists

- Lane width is between **2,25 m and 2,50 m**.

## pedestrians

- The pedestrian lane should be wide enough for a **stroller and a parent attending their kid to pass each other**.



# MAINTENANCE

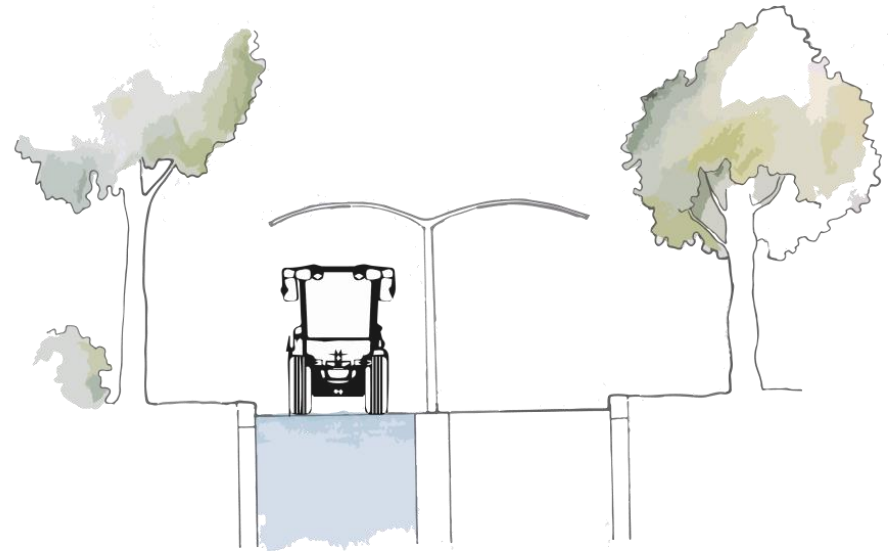


*maintenance category K1*

*plowing equipment*

Wille 265

well timed maintenance	1
removal of snow, ice and slush	2
prevent slipperiness	3
own responsibility of cycling equipment	4



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# PATH CATEGORIES

category I

*school path integrated in an existing sidewalk*

category II

*school path + pedestrian lane*

category III

*school path + pedestrian lane + motor traffic lane*

category IV

*school path baana*



SCHOOL PATH



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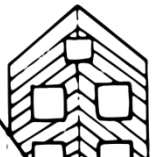
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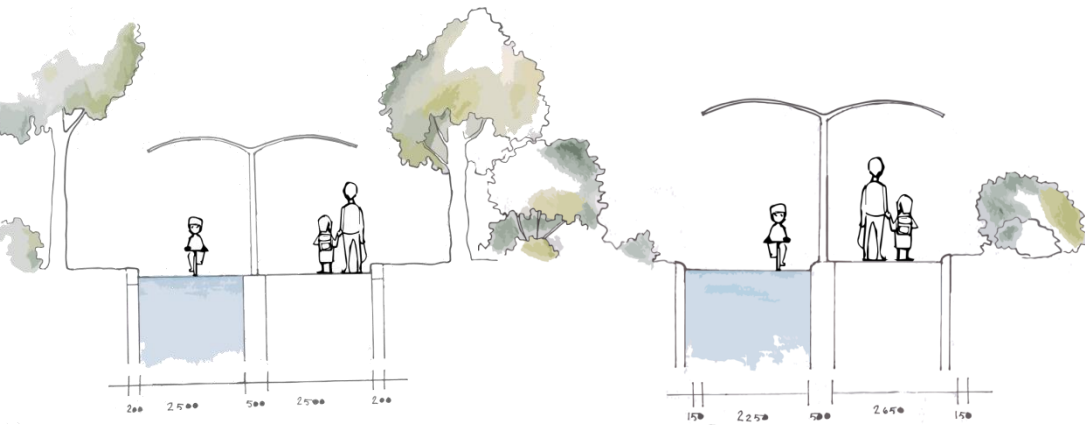


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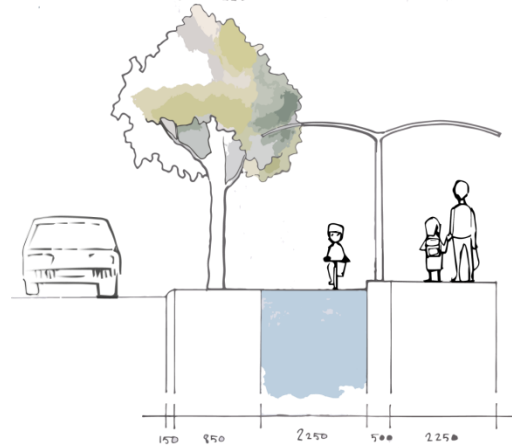


## category II

one-level solution

two-level solution

school path  
pedestrian lane

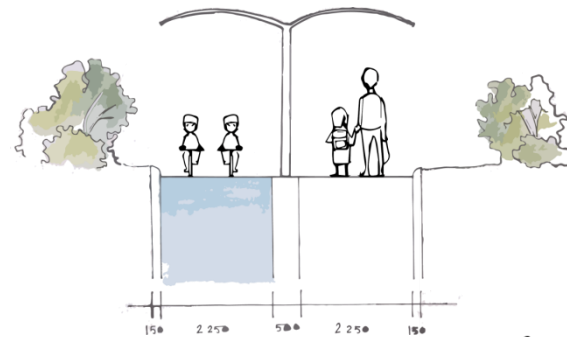


## category III

three-level solution

two-level solution

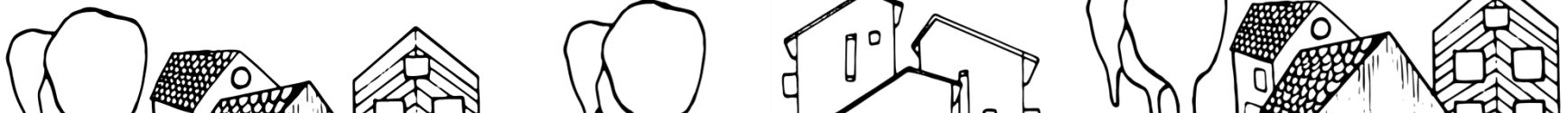
school path  
pedestrian lane  
motor traffic lane



## category IV

Baana

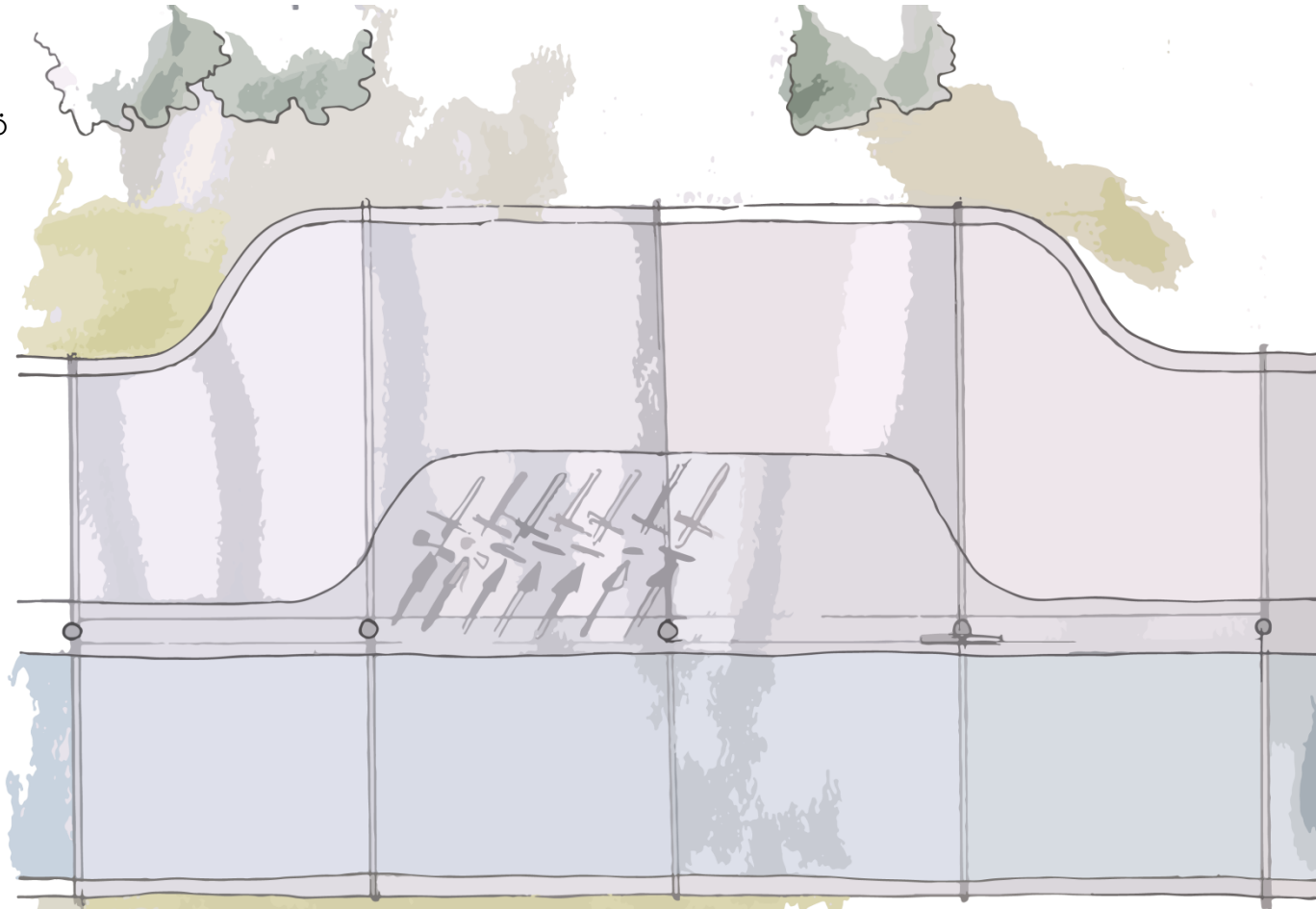
school path  
pedestrian lane



## bike parking & cycling schoolbus stop

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- Near the schools and Kivistö station there will be **bike parking** in a widened separation lane.
- When a bench and fixed bike pump are added, the area can also function as a **stop for the cycling or walking schoolbus**.





# part III

## SCHOOL PATH NETWORK

- 1 optimal route
- 2 maps
- 3 signage



SCHOOL PATH



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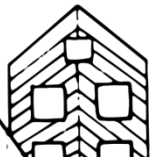
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# OPTIMAL ROUTE

## SCHOOL PATH: DEFINING ELEMENTS

### LOCATIONS

- schools
- hobbies
- after school activities
- playgrounds
- sports field & hall
- church
- library
- Kivistö station
- bus terminal

### GEOGRAPHICAL

- childrens residential areas & dividing to local schools
- uphills
- number of crossings
- motor traffic



SCHOOL PATH



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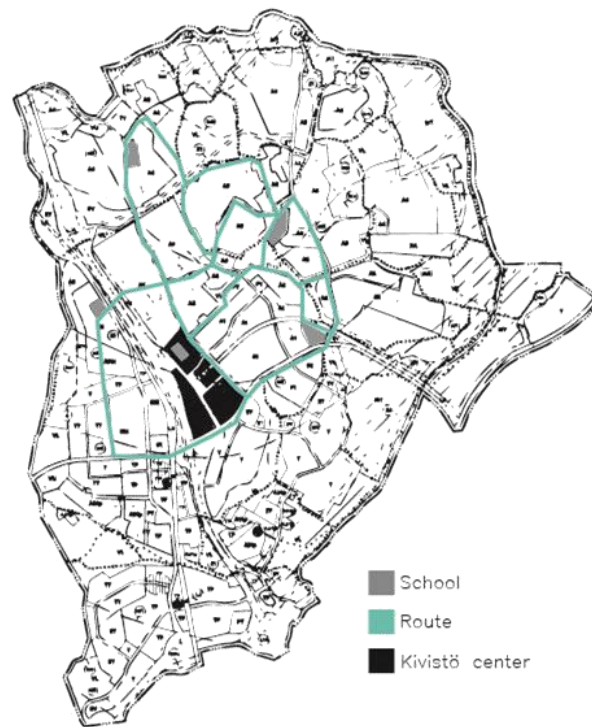
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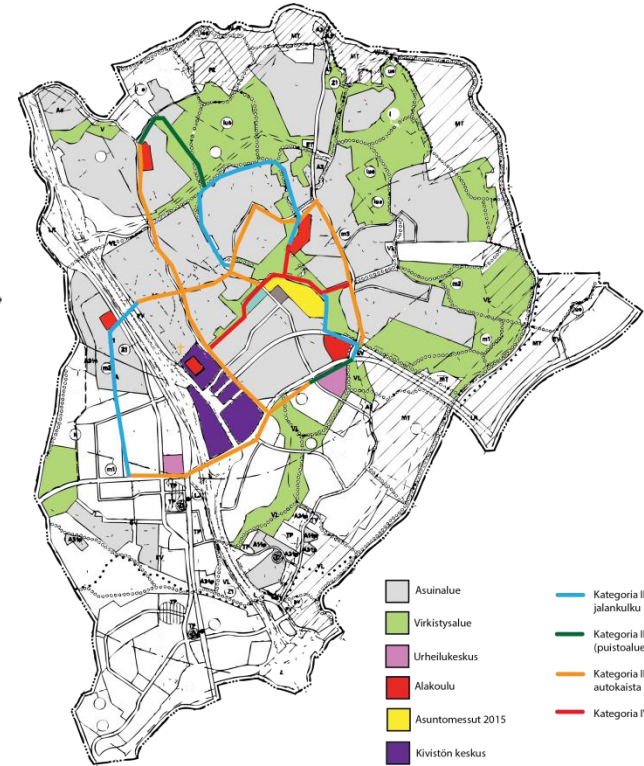
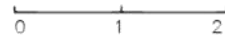
# M A P

**MAP I**  
simplified map 16,847 m

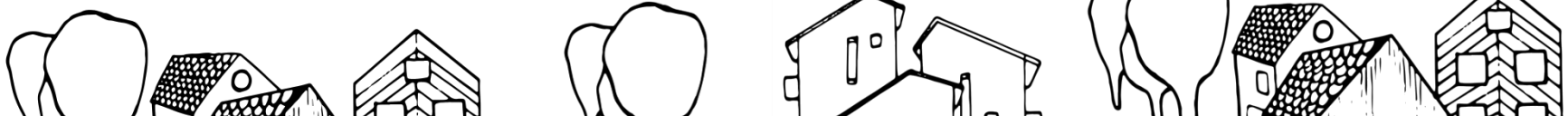
**MAP II**  
route by category 1  
key locations 2



- School
- Route
- Kivistö center



- Asuinalue
- Virkistysalue
- Urheilukeskus
- Alakoulu
- Asuntomesut 2015
- Kivistön keskus
- Katgoria II koulupolku + jalankulku
- Katgoria II koulupolku + (puistoalue)
- Katgoria III koulupolku + autokaista
- Katgoria IV "baana"



# SIGNAGE

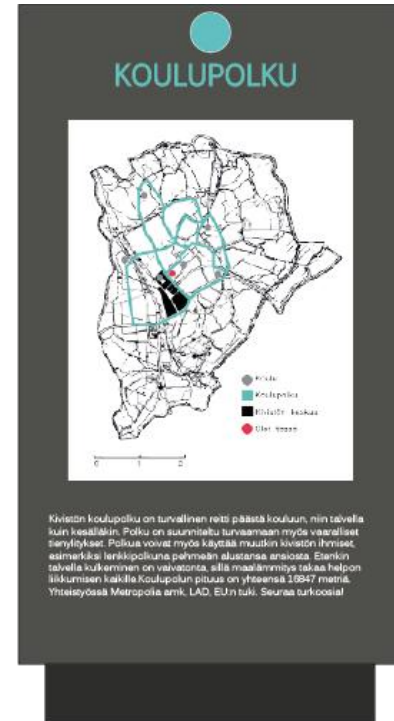
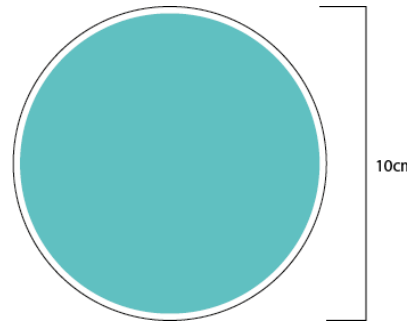
- 1 school path sign
- 2 cycling schoolbus
- 3 approaching crossing
- 4 sign for other cyclists





# SIGNAGE

- general signage style 4
- sticker, reflective edge 5
- infoboard 6





# part IV

## HOUSING FAIR VANTAA 2015

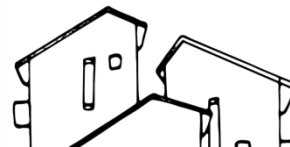
- 1 route
- 2 school path guide for art
- 3 path category
- 4 lightening



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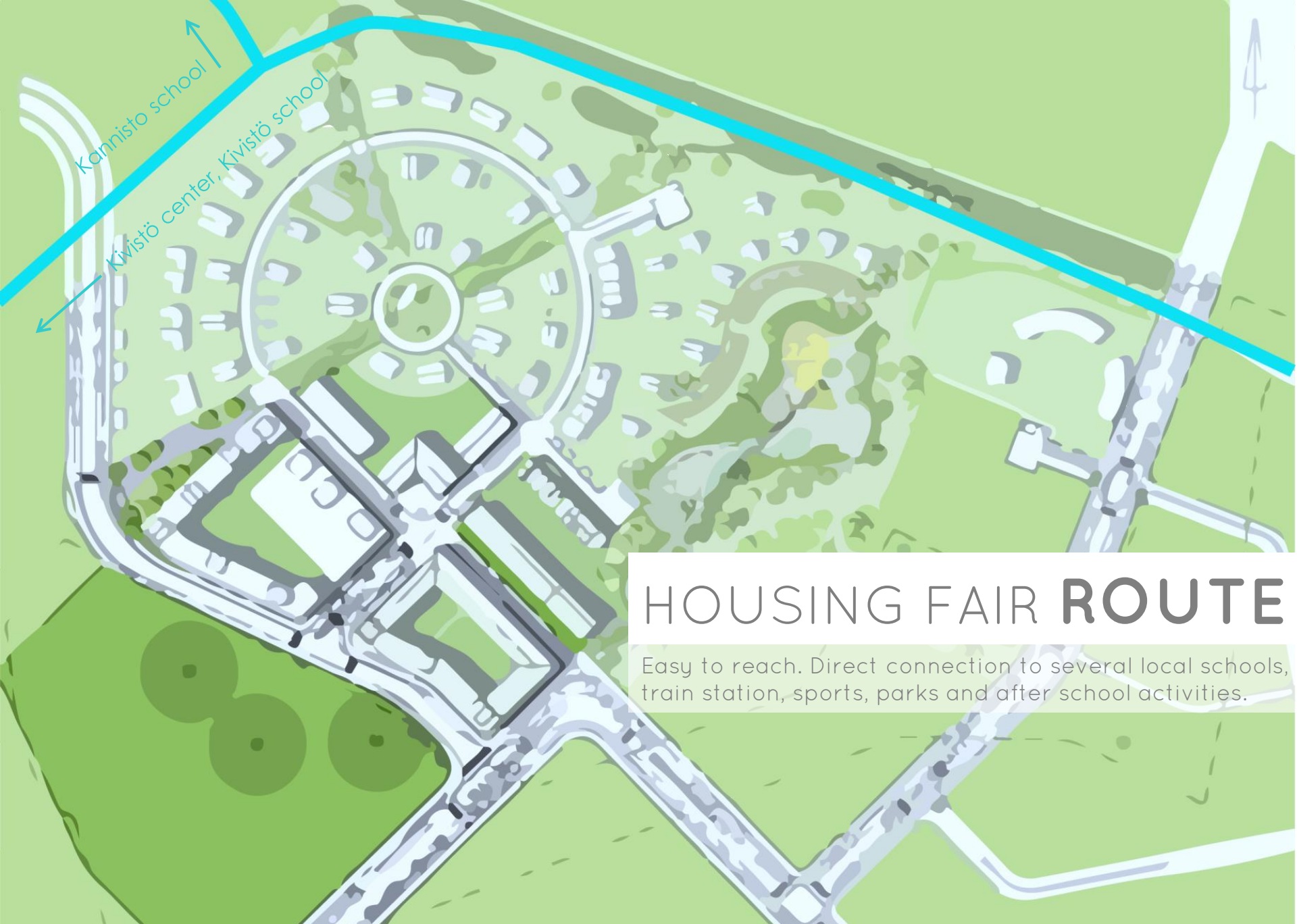


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# HOUSING FAIR ROUTE

Easy to reach. Direct connection to several local schools, train station, sports, parks and after school activities.



# SCHOOL PATH GUIDE FOR ART

## children's participation

School paths guide for art aims to **involve local children** in the art making process.

When children are allowed to get involved in designing and creating their school path environment they feel it as their own. **Sense of ownership** helps them to feel more safe and proud of their path.

Themes are **nature**, **metals**, **stones** and **wood**.



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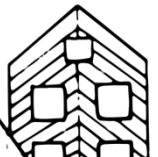
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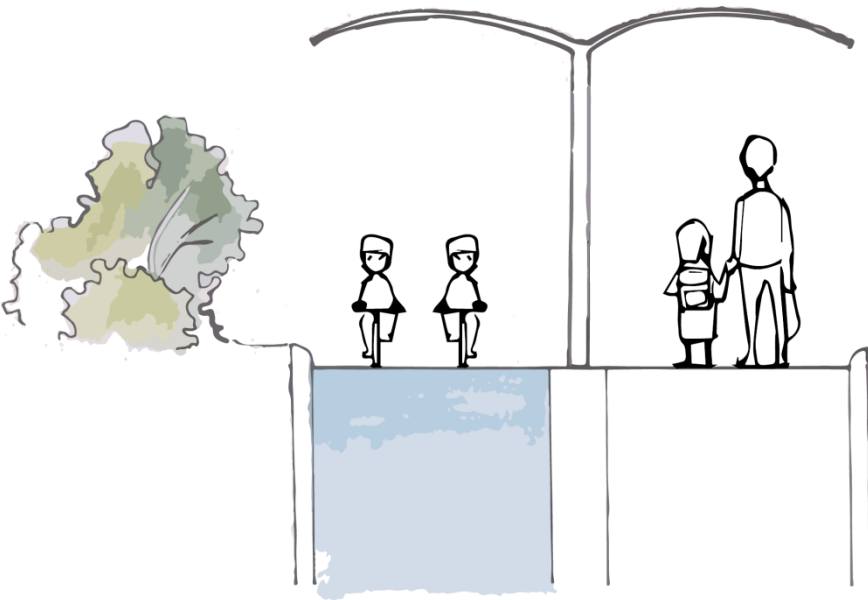


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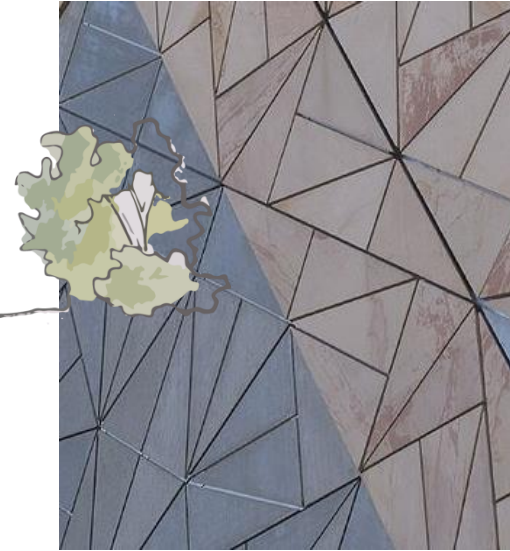




## path category IV

- 2,25 m wide lanes & tiling
- Shelter with integrated lighting
- Year-round; heating system
- Easy to maintain in winter

Melbourne



Helsinki



## pinwheel tiling

Pinwheel tiling is a non-periodic tiling.

Following the stone theme of the area, the path passin by housing fair will have a decorative tiling with multiple stone types.



## tunnels & archs

School path will have short tunnels made with different materials. F.ex.

- corten steel** 1
- recycled wood** 2
- trees or plants** 3



SCHOOL PATH



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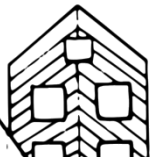
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corten steel

recycled wood

trees & plants



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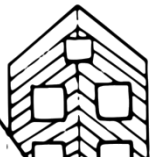
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## lightening for tunnels

Fagerhult: Tall pollar  
Corten steel

color, warm yellow  
3000-4000K



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# part V

## SUMMARY

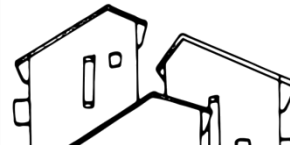
- 1 summary
- 2 meetings with Vantaa representatives



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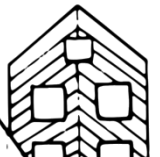
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# SUMMARY

- Accessibility is good for all local children as **way to school is less than 3 kilometers** by bike.
- School path brings **unique value** to the new Kivistö area.
- The path **emphasizes sense of community**. It most benefits families and senior citizens.
- Childrens **exercising and daily movement increases** thank to the school path; path is good for winter cycling and no remarkable uphill. Also safe and comfortable tunnels, crossings and separating lanes between traffic eliminate the need for children to be afraid of their most common fears.
- Path **elements are easy to recognize** so children don't get lost.



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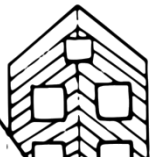
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# MEETINGS WITH VANTAA REPRESENTATIVES

26 / 9

meeting with Lea Varpanen,  
Director of planning for Kivistö.

9 / 10

second meeting with Lea and 18 Vantaa  
representatives.

- 1 housing Fair as a school path pilot  
**Kivistö school – housing fair – Kannisto school**
- 2 the signage is easy to use in short timespan
- 3 could work as much more simplified elements



SCHOOL PATH



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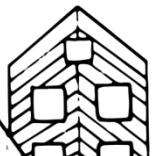
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