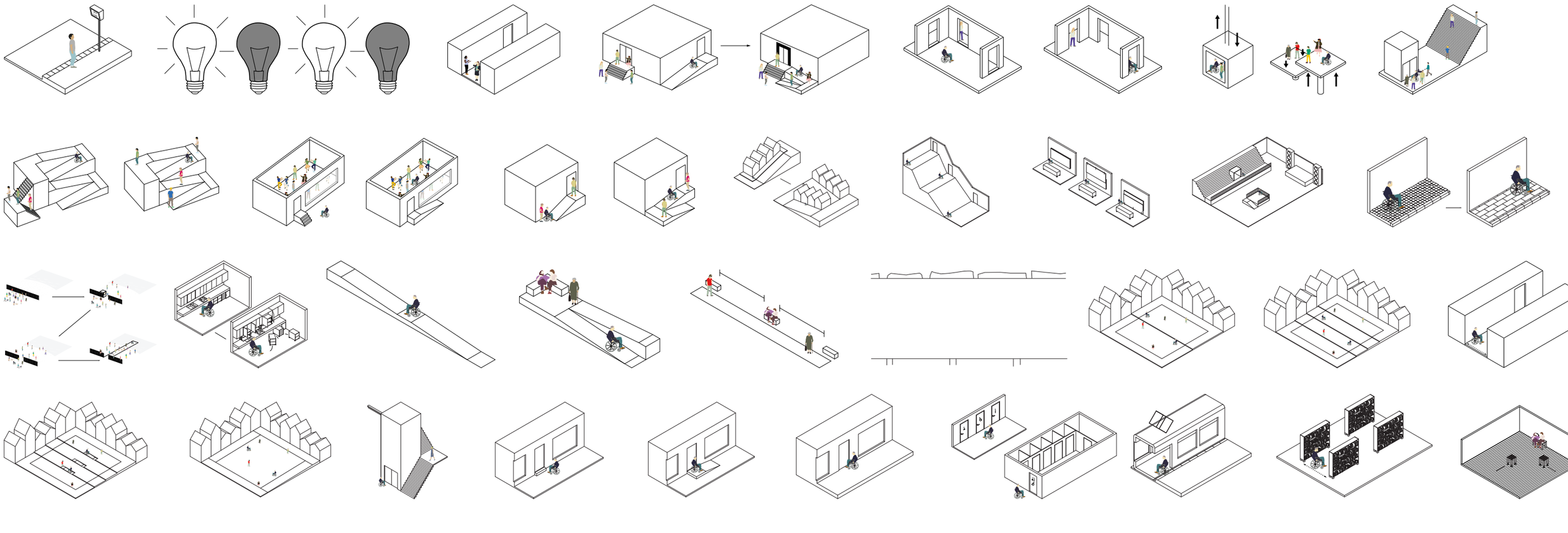
Inclusive architecture

How can we create a society that is accessible to everyone?



CHALMERS
UNIVERSITY OF TECHNOLOGY

INCLUSIVE ARCHITECTURE
How can we create a society that is accessible to everyone?

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MASTER THESIS PROJECT
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Today's society is becoming and aiming to become more and more accessible and inclusive for people with physical disabilities. **(http://manskligarattigheter.se)**
Action plans are developed, cities and builidings are being upgraded and awarded and rules and requirements when building new architecture are more and more specific. (**Göteborgs Stad Fastighetskontoret, 2013)**

Unfortunately many people with disabilities still feel a lack of accessibility making their everyday life difficult, which then creates a feeling of being excluded from society, both physically and socially. **(**SVENSSON E., 2012**)**
It is much up to us as architects to create a more accessible and inclusive society for people with disabilities, but still there is a negative attitude towards creating accessible and universally designed architecture. **(personal experience from listening to and discussing with teachers, architects and other students)**

Many times this results in accessible elements added to the architecture that has got no coherence with the design and only creates even more negativity towards accessible architecture. **(**SVENSSON E., 2012**)**

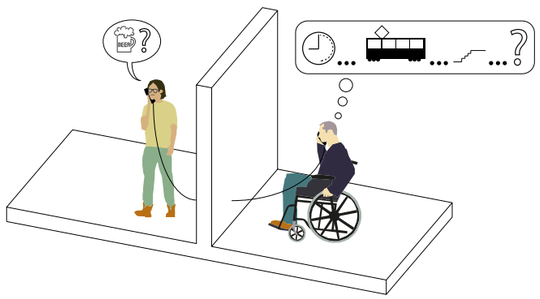


Figure 1, Diagram showing difficulties of being disabled, Authors own diagram

Physical barriers and lack of accessibility makes everyday life difficult and creates social barriers for people with physical disabilities

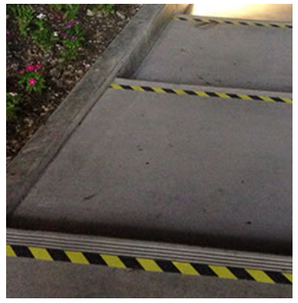


Figure 2, Non Slip Tape, (Slip Doctors), Used with persmission

Figure 3, Modular wheelchair ramps, (Building Design Index), Used with persmission

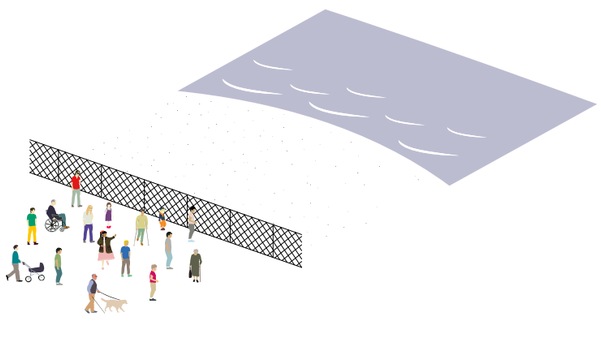
Stickers to mark edges and added on ramps fill their purpose but have no coherence with the rest of the design

"You are never more disabled as the limitations in the built environment makes you" handicaporganisationerneshus.dk **(Danske Handicaporganisationer)**

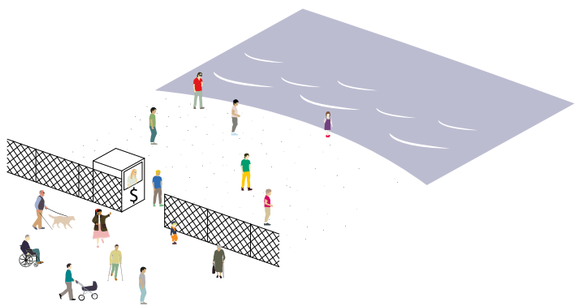
What is accessibility?

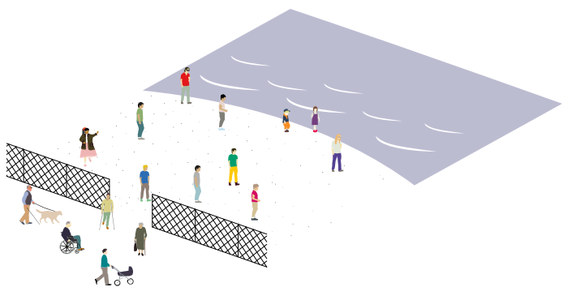
IT IS NECESSARY FOR SOME, GOOD FOR MANY AND COMFORTABLE FOR EVERYONE. **(Myndigheten för delaktivhet, 2015)**

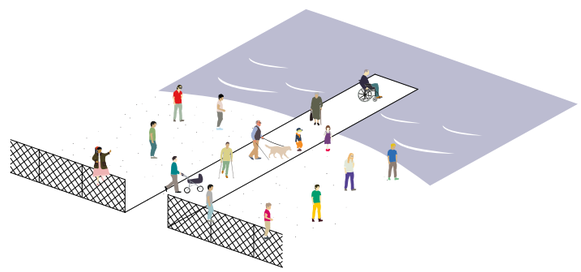
A short and simple way to explain accessibility and universal design can be done with these five phrases and illustrations.

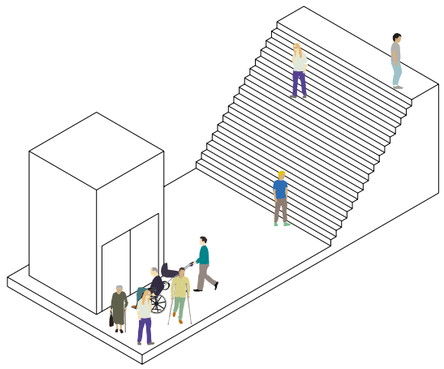


BREAK DOWN BARRIERS; BOTH PHYSICAL AND SOCIAL

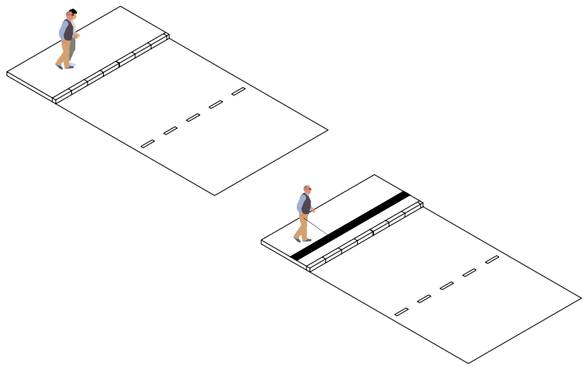




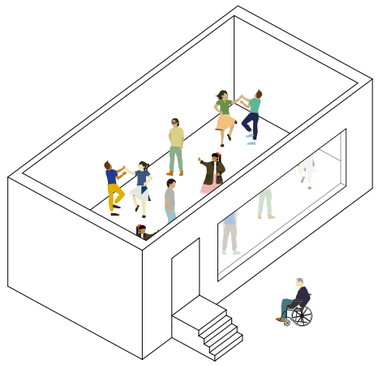


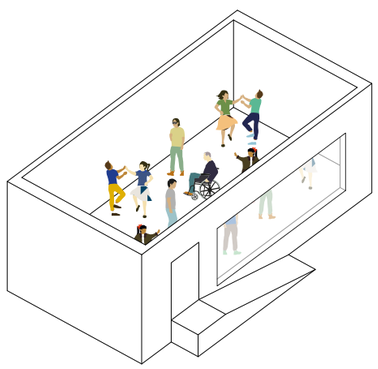


BENEFITS EVERYBODY

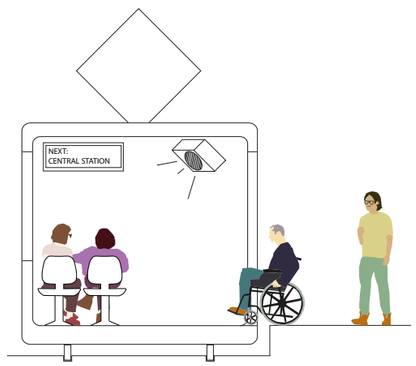


EMPOWER AUTONOMY & INDEPENDENCE





FULL PARTICIPIATION & EQUAL OPPORTUNITY AND INCLUSION



HIGH USEFULLNESS AND LEVEL OF USABILITY

Following is a more complex and detailed explanation about accessibility and universal design.

When talking about accessibility it is important to remember that there is a distance and difference between
INDIVIDUAL NEED & GENERAL DEMANDS.

FULL PARTICIPATION -
seen by many as the main/unifying term to explain accessibility.

Seeks all citizens participation in SOCIETY

design for human diversity, social inclusion and EQUALITY.

Both USABILITY and accessibility are seen as conditions for full participation
(for example it is not enough to have access to te laundry room if you cannot use the washingmashine).

INCLUSION is the ultimate goal and "design for inclusion" results in benefits for all

People can have higher or lower level of AUTONOMY - depending on the conditions.

The concept of DIVERSITY is more important than design for disability.

Apsects of usefullness:
ease of construction to comfort, pleasure & PUBLIC BENEFIT.

The basis of NONDISCRIMINATION:
improving function for a broad range of people, a usable world for people with disabilities should become the NORM

Accessibility and universal design must not solely be identified with disability

we all need accessibility and it
BENEFITS EVERYBODY

if nothing was accessible we would not be able to do anything in our lives

SVENSSON E., 2012

universal design:

Social inclusion, equality & INDEPENDENCE.

USEFULLNESS is the quality that underlies the concept of universal design.

It is a process that enables and EMPOWERS a diverse population by improving human performance, health and wellness and social participation.

The goal is to bring people with disabilities into the mainstream of society by ensuring equal OPPORTUNITY and eleiminating discrimination based on disability.

HUMAN-CENTERED approach when designing IDEAL in long term & REALISTIC in short term.

An accessible design can also be FLEXIBLE to become adaptable for the users.

Form (should) follow function for everybody!

AVOID creating barriers in the first place.

It is about dealing with barriers as artists or scientists would and think of them in a CREATIVE way; think outside the box.

Universal DESIGNING
- the verb is better than the noun

EVOLUTIONARY PROCESS leading to more & more inclusion over time.
A continous IMPROVEMENT towards the ultimate goal of full inclusion.

Steinfeld, E., Maisel, J., 2012

accessibility:

4 different POINTS:

1

PHYSICAL accessibility:
built environment - able to move around, get to and participate, avoid allergic substances for example when renovating, certain food for people with certain needs

2

COMMUNICATIVE accessibility:
translators, acoustics, lighting, working hearing loop + websites

3

INFORMATIVE accessibility:
printed & digital clear and when needed available in blind script, disc, easy read etc.

4

PSYCHOSOCIAL accessibility:
the perception and negative attitudes & bad reception is a big obstacle, therefore everybody should get knowledge about what it means to live with disability
many want to remove the word "psycho" form the and just call it SOCIAL accessibility

SVENSSON E., 2012

The SOCIAL ORDER determines the spatial order.

BARRIERS can be both social and physical. breaking down barriers can provide SOCIAL JUSTICE.

Barriers does not always exclude, sometimes they are "just" making it DIFFICULT and/or selective.

If physical barriers are broken down, then the SOCIAL BARRIERS will quickly follow suit.

LEGAL accessibility can still mean barriers, like putting the accessible entrance on the back of a building with door bells etc.

Accessibility and INCLUSION of disabled people in society are closely linked.

ABLED BODIED peoples' lack of understading of people with disabilities is a big problem in the society.

58 % feel UNCOMFORTABLE or embarrased around diabled people & 47 % experience actual FEAR.

The two groups, disabled and able bodied people do not meet each other enough, because of a non-accessible society

Disabled people are either completely ignored or paid unnaturally full amounts of attention - there is no comfortable middle ground - which shows the INEXPERIENCE able bodied people have with disabled people.

Many times the result is that disable people become OBJECTS OF PITY instead of ensuring social justice

Charity continues to foster dependence rather than SELF-RELIANCE and autonomy.

Steinfeld, E., Maisel, J., 2012
SVENSSON E., 2012

INTERVIEWS WITH PEOPLE WORKING WITH
AND WHO ARE DIRECTLY AFFECTED BY
ACCESSIBILITY AND UNIVERSAL DESIGN.

GIL
Personlig assistans utan vinstintresse

"UNIVERSAL DESIGN A TERM THAT IS FOR EVERYBODY INSTEAD OF SPECYFIED FOR SOMEBODY FROM THE START.
AVOID CREATING AND PUTTING GROUPS AGAINST EACH OTHER.
EVERNTHOUGH A LOT OF PLACES ARE ACCESSIBLE, THE WAY THERE MANY TIMES ISN'T, FOR EXAMPLE CHALMERS IS AN ACCESSIBLE PLACE, BUT IT'S VERY HARD TO GET THERE.
DO NOT UNDERSTAND GOTHENBURG'S FETISH FOR COBBLESTONE, WHICH MAKES IS DIFFICULT TO GET AROUND.
YOU NEED TO THINK OF ALL THE STEPS. EVEN IF THE TRAMS ARE ACCESSIBLE THE STOPS ARE OFTEN NOT. IT IS USUALLY VERY HARD TO TO CHANGE BETWEEN PLATFORMS".

Anders Westgerd, director of GIL
(Gothenburg cooperative for Independent Living)
(personal communication, october 2014)

hrf.
Hörselskadades Riksförbund

"WE OFTEN FEEL EXCLUDED BECAUS WE CAN'T HEAR WHAT OTHER PEOPLE SAY OR KNOW IF WE ARE HEARD OURSELVES OR NOT..."
SINCE THEY ARE NOT COMPLETELY DEAF THEY RELY ON HEARING AIDS.
THEY CAN'T HEAR IF THEY CAN'T SEE.
THIS MAKES THEM VERY SENSITIVE TO BACKGROUND NOISE FROM FOR EXAMPLE VENTILATION OR METAL AGAINST CONCRETE (CHAIRS).
BACKGRUOND NOISE CAN BE AVOIDED WITH FOR EXAMPLE TEXTILES. OTHER TIMES THEY DON'T HEAR SMALL NOISES THAT THEY NEED TO HEAR, LIKE FOR EXAMPLE BICLYCLES.
CAN BE LIFE THREATENING IN CASE OF FIRE IF THERE IS ONLY AUDIBLE ALERT.

Members of the Organisation for
Hearing Impaired in Gothenburg, HRF Göteborg
(personal communication, october 2014)

HANDIKAPP FÖRENINGARNA

"I WOULD LIKE TO SEE A KIND OF REVOLUTION THAT WAS MADE WITH GREEN ARCHITECTURE AND DESIGN A FEW YEARS AGO.
MANY TIMES THE INACCESSIBILITY IS BECAUSE THEY HAVE TOO LITTLE KNOWLEDGE. "OUPS WE DIDN'T THINK ABOUT THAT..."
EDUCATION AND INFORMATION IS CRUSIAL."
MANY TIMES IT IS NOT THE PERSONS DISABILITIES THEMSELVES THAT CREATES A FEELING OF EXCLUSION, BUT INSTEAD SOCIETY'S CONDITIONS. MANY TIMES HE HAS HEARD PEOPLE SAY: "MY BIGGEST DISABILITY IS THAT I CAN'T FIND ANY JOB".

Henrik Ehrington, ombudsman at HSO GBG
(Handikapföreningarnas Samarbetsorgan -
Disabled Unions Cooperation Group in Gothenburg)
(personal communication, october 2014)

Synskadades Riksförbund

"THE BLIND RELY ON TACTILITY AND THE VISUALLY IMPAIRED ON CONTRASTS AND CLARITY (OBVIOUSNESS).
GUIDINGS PATHS THAT ARE BOTH TACTILE AND CONTRASTING ARE GOOD FOR BLIND AND VISUALLY IMPAIRED TO ORIENT THEMSELVES, BUT IT IS IMPORTANT NOT TO OVERUSE IT. IT SHOULD NOT BE IN CORRIDORS BUT RATHER ON OPEN PLACES OR LECTURE ROOMS FROM THE DOOR TO THE SCENE FOR EXAMPLE.
IN CORRIDORS IT IS BETTER TO USE THE WALLS AS GUIDES AND THERE SHOULD BE A CONTRAST BETWEEN FLOOR AND WALLS, SO A GUIDE PATH THERE IS OVERKILL. BLIND/VISUALLY IMPAIRED ARE BEING TAUGHT THAT THEY SHOUDN'T RELY ON TACTILE GUIDES TO BE EVERYWHERE BECAUSE THEY ARE NOT, BUT INSTEAD HOW TO USE THE EXISTING PARAMETERS TO MOVE AROUND."

Erik Johansson Lönnroth
General Manager & ombudsman at SRF
(Visually impaired national association)
(personal communication, october 2014)

Kvadrin AB
Tillgängliga arkitekter

WORKING WITH ACCESSIBILITY SINCE 1980'S.
"WETHINK IT'S IMPORTANT TO INCLUDE ALLERGIES AND ASTMA AND READING AND WRITING DIFFICULTIES.
EASY TO INCLUDE, FOR EXAMPLE WHAT PLANTS TO PLANT AND NOT PLANT NEXT TO ENTRANCES, WHICH MATERIALS TO AVOID IN FOR EXAMPLE HANDLES.
IT'S DIFFICULT TO ALWAYS MEET EVERY GROUPS NEEDS, AND MANY TIMES IT'S NECESSARY TO FIND THE BEST POSSIBLE COMPROMISE BETWEEN THE DIFFERENT GROUPS.
ESPECIALLY BILND PEOPLE ARE DIFFICULT TO MEET THE NEEDS FOR EVERY TIME".

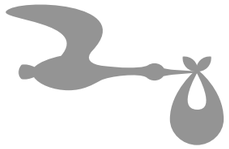
Christina Kvillborn & Maria de Val,
KVADRIN ARKITEKTER AB - Certified experts in accessibility
(personal communication october 2014)

For who?

Everyone

Everyone needs accessibilty. We are all born disabled and in need of constant help to do things and move around. As we grow, at some part in out life, for a limited persiod of time or permanent, we all depend on accessible and unversally designed architecture. It can be because of functinal variations, an accident, having children of our own or aging. (Henrik Ehrington, ombudsman at HSO GBG, personal communication, october 2014)

From when we are born...



...until we die.

Minority groups

Evengthough accessibility is necessary for everyone it is still important to identify and different minority groups since they are the groups that cen feel excluded in society. Sometimes theses groups got different and specific needs. (Steinfeld, E., Maisel, J., 2012)

It is important to remember that a minority doen't have to mean less people or a smaller group than people outside the minority group. Instead it is defined by the power that the group has. For example the group of elderly is not necessarily a smaller group than middle aged people but the power or influence they have in society is smaller.
(The Editors of Encyclopædia Britannica)

- National/Ethnical
    - Roma
    - Sami
    - Sweden Finns (Sverigefinnar)
    - Jews
    - Tornedalians
    - Immigrants

- Sexuality/Gender
    - LGBTQ (Lesbian, Gay, Bi, Trans, Queer) people
    - Women

- Religious
    - Muslims
    - Fundamental Christian groups and cults

- Political

- Age minoriries
    - Elderly
    - Children

- People with disabilities
    - Physical disability
        - Impaired/reduced mobility (wheelchair)
        - Blind/visually impaired
        - Deaf/hearing impaired
        - Allergy & asthma
        - Cognitive disability - Reading & writing difficulties
    - Neuropsychiatric/psychosocial disability
        - Psychotic disorder
        - Personality disorder
        - Affective disorder
        - Anxiety
        - Behavioral disorders
        - Attention disorders
        - Depression
    - Intellectual disability
        -Retardation
        - Mental retardation

(Nationella minoriteter, 2010) **(**SVENSSON E., 2012) (Wikipedia, 2016) (Steinfeld, E., Maisel, J., 2012) (eurominority.eu, 2016)

Physically disabled

As seen in previous list there are five main gruops of physical disability in Sweden:

- Blind/visually impaired
- Deaf/hearing impaired
- Mobility impaired
- Cognitive/reading & writing disability
- Asthma & allergy

(SVENSSON E., 2012)

Blind people rely on tactility and suond to be able to navigate and move around and participate.

Visually impaired also rely on this but since they usually have some sight left they also rely on contrasts in colors and light/darkness.

(SVENSSON E., 2012)

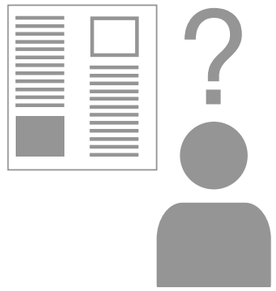
Deaf people rely on good visual conditions to be able to communicate, navigate and more around. Also vibration to some extent.

Hearing impaired rely on the same but also good acoustic conditions since they normally have some hearing still but are very sensitive to noise.

(SVENSSON E., 2012)

Mobility impaired people rely on smooth ground surfaces, short distances and enough space to move around and participate.

(SVENSSON E., 2012)



Cognitive disabled rely on simplicity and logic to be able to navigate and move around. It can be the layout of a builidng or clear signs.

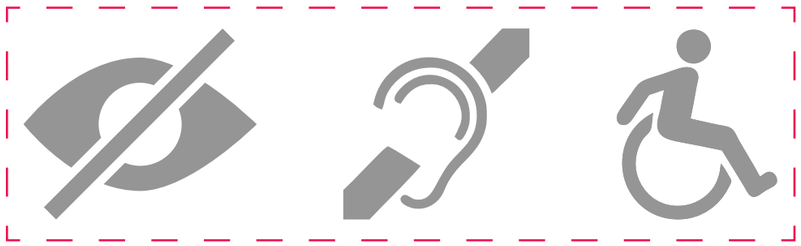
(SVENSSON E., 2012)

Allergic and asthmatic people need good ventilation in a builidng to be able to use it. Avoiding certain materials that can give allergic reactions in hadles and not putting certain plants close to entrances.

(SVENSSON E., 2012)

Pictograms

Of these five groups this thesis is mostly focusing on the three fist ones since their needs have the biggest effect on the building and its design.

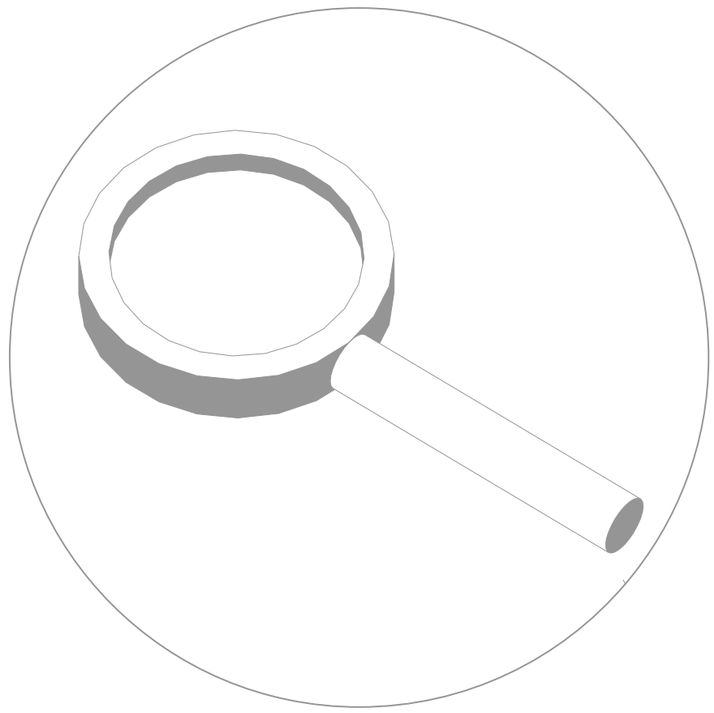


These three groups all have different needs when it comes to accessibility. On three different scales; urban, architectural and detailed, I have created pictograms showing what accessibility can be for these different groups.

The information and data collected to create these diagrams are gathered from different sources such as books, websites, articles, essays and interviews and put togheterd and visualized by me.

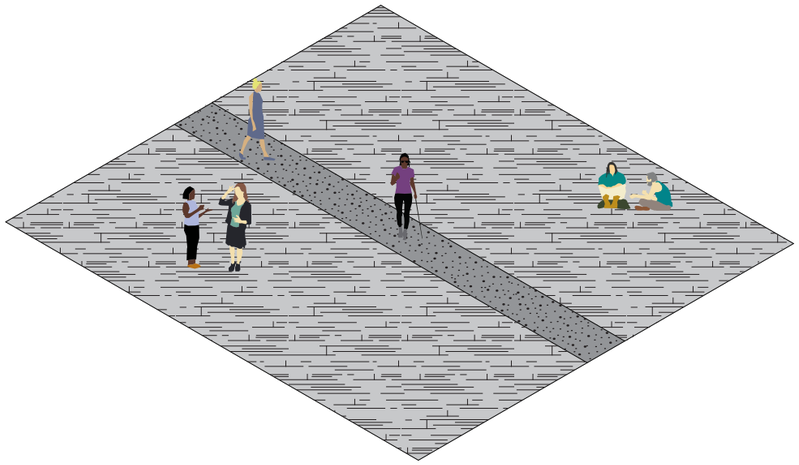
URBAN

ARCHITECTURAL

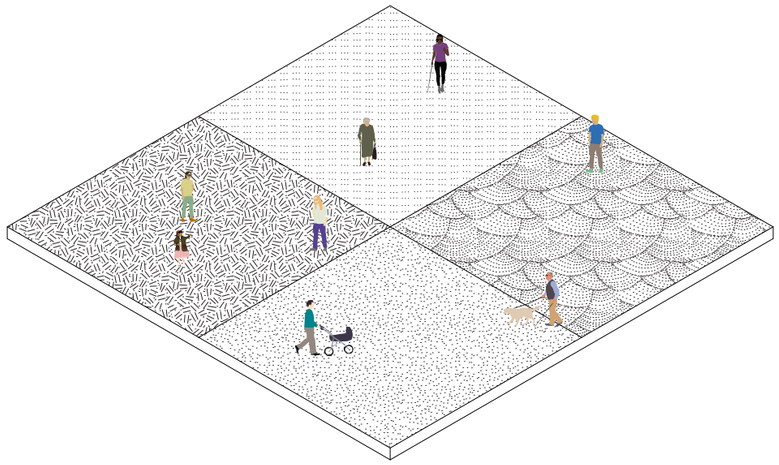


DETAIL

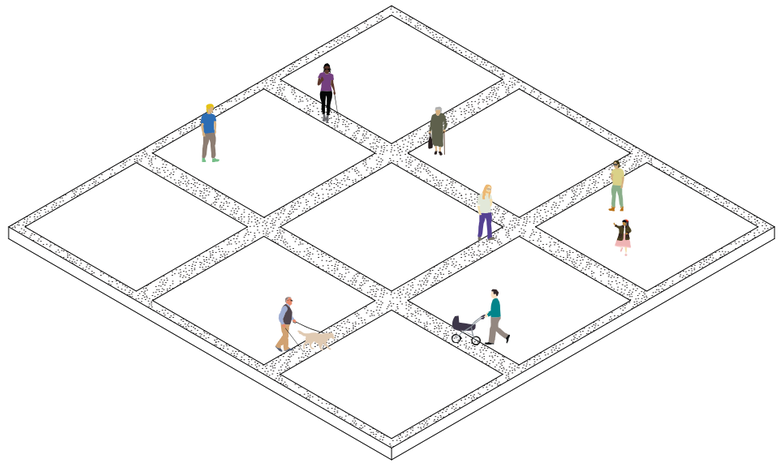
SQUARE/PUBLIC SPACE



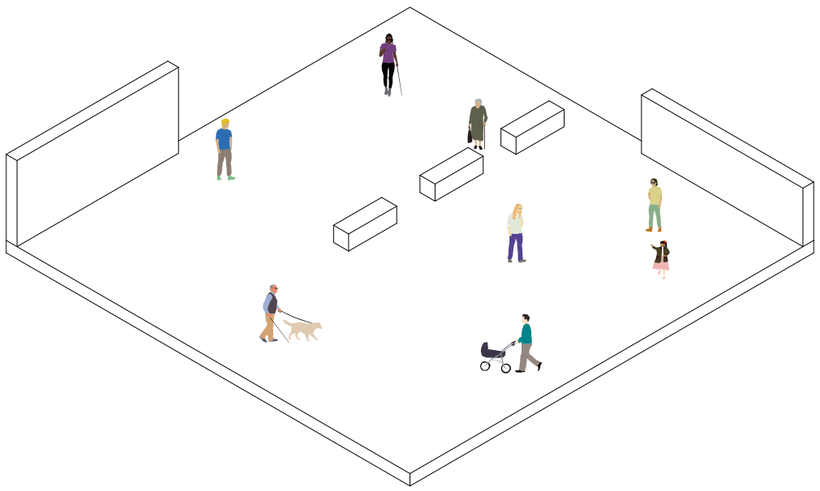
separating walking and resting zones



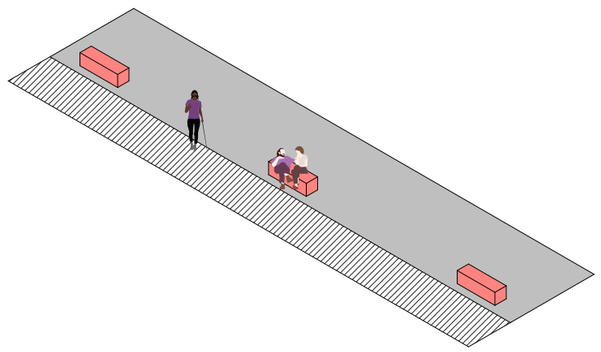
dividing spaces



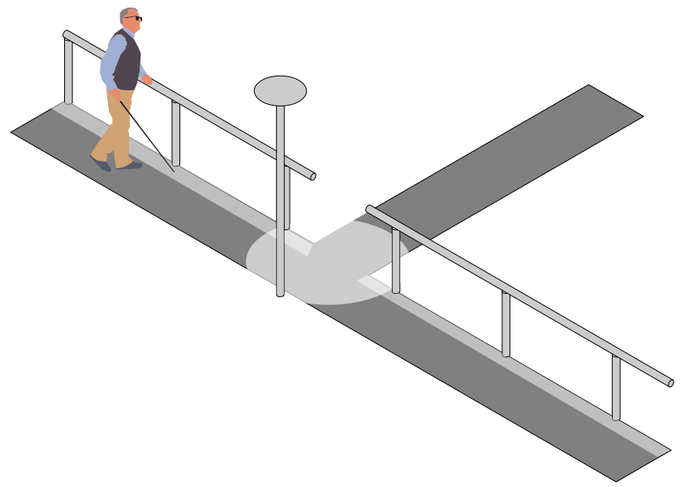
dividing spaces



guiding urban furnitures

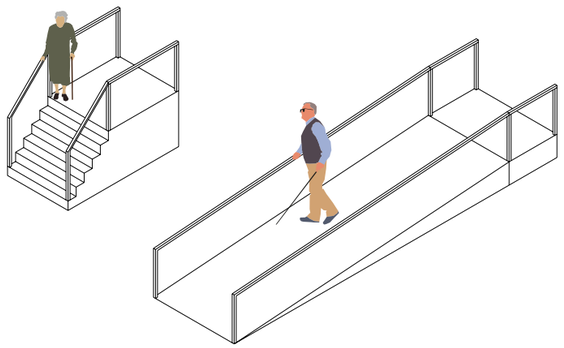


contrasting furnitures

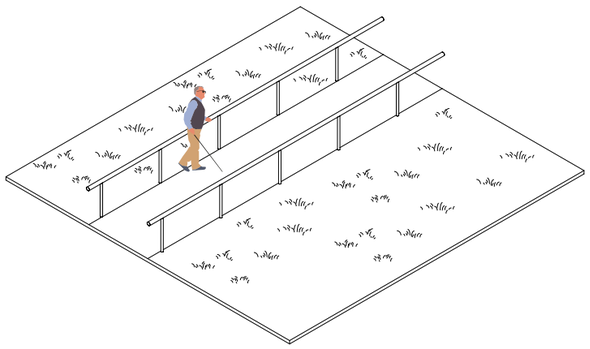


light guides,
extra on intersections

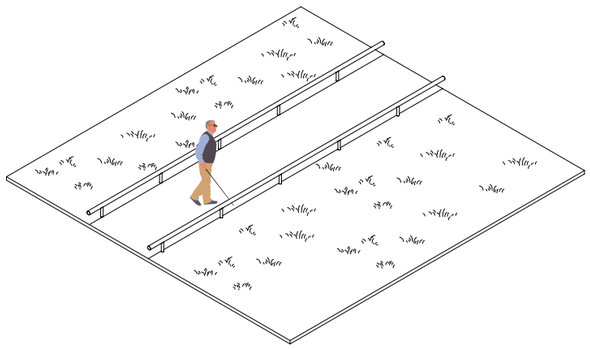
WALK WAYS



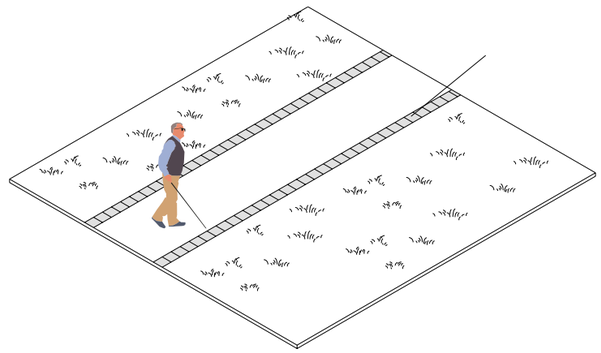
railing on both sides



high railing guides

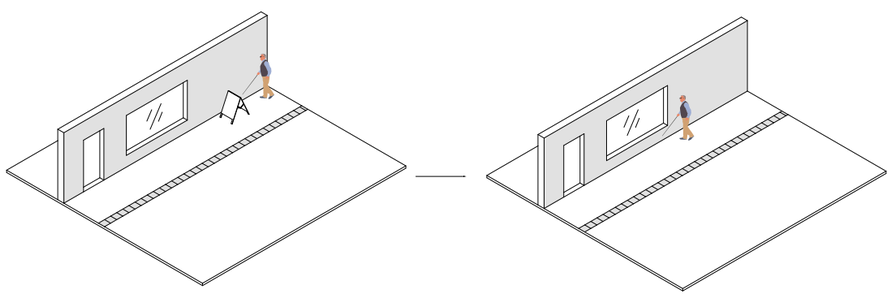


low railing guides

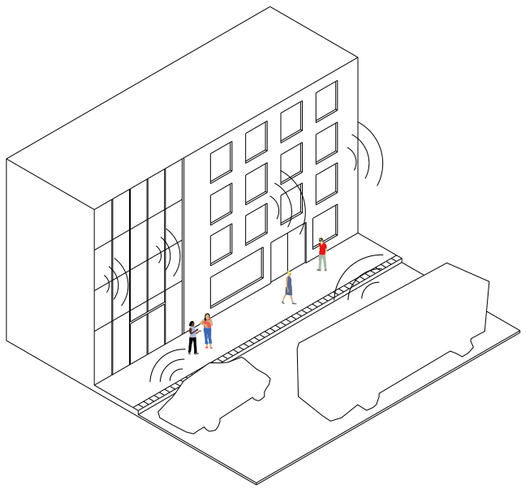


contrasting edges guides

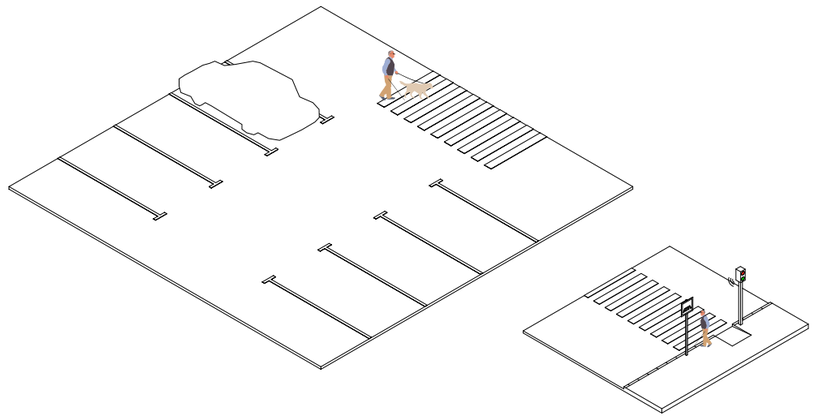
STREETS



clear facades guides

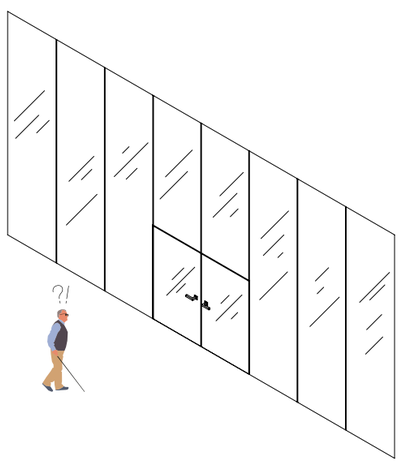


facade material create reverberation
which can be guiding

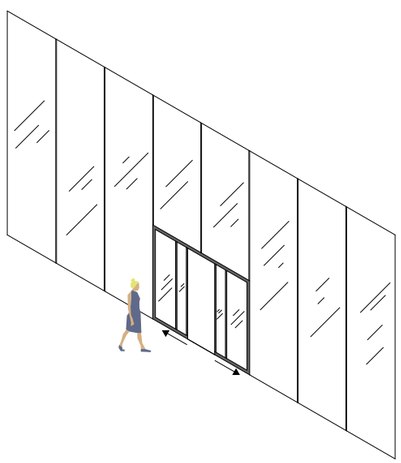


pedestrian crossings for safety on parkings
and roads

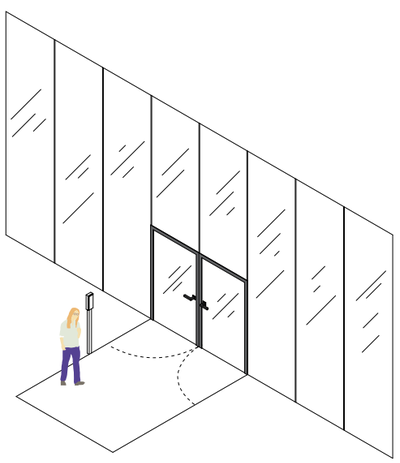
ENTRANCE



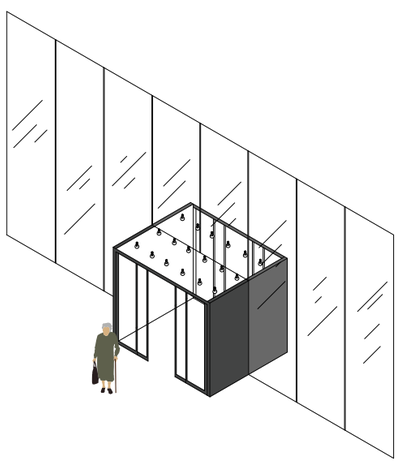
not clearly marked door difficult to find



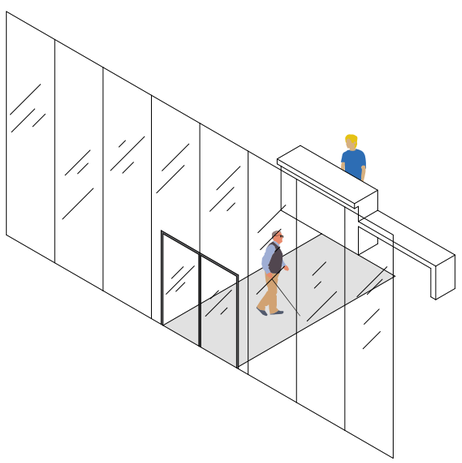
automatic doors helps to find entrance



clearly marked door opener and at safe distance

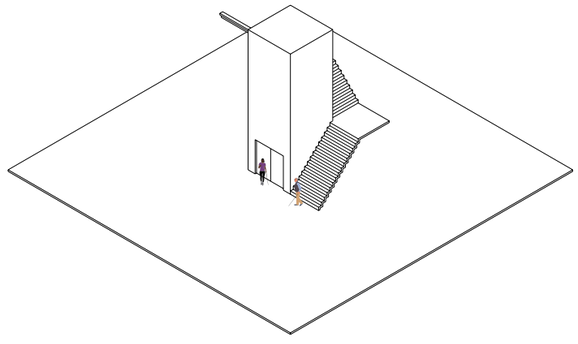


well lit entrance to ease transition from outside to inside

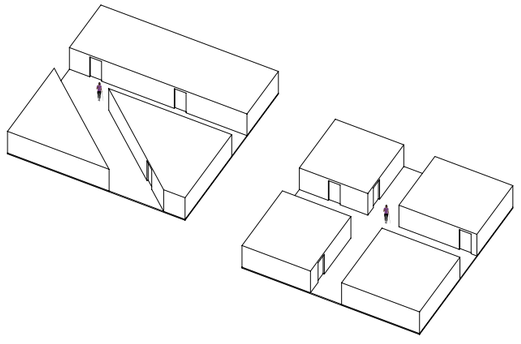


guiding to reception reception close to entrence

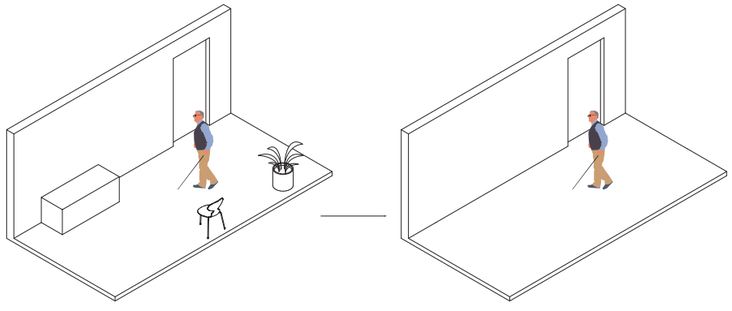
LAYOUT



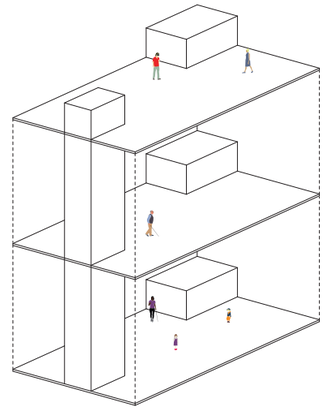
communication together and centrally located



no harsh corners

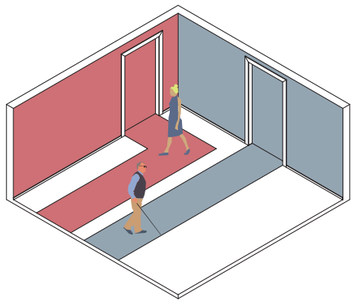


avoid too many loose furnitures

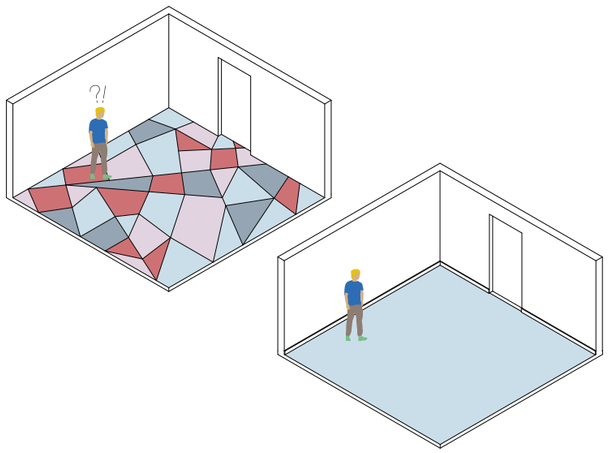


same layout on different floors - easy navigating

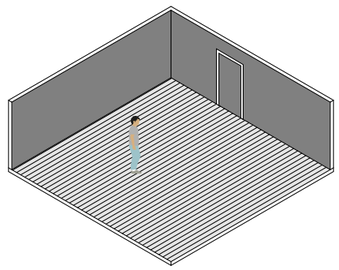
VISIBLE



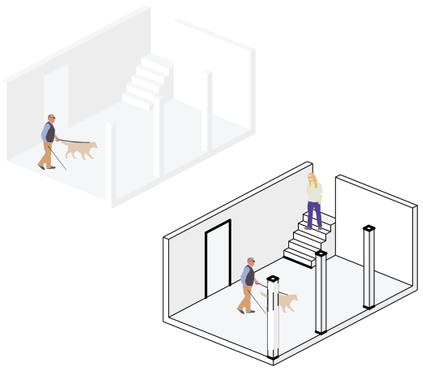
color coding



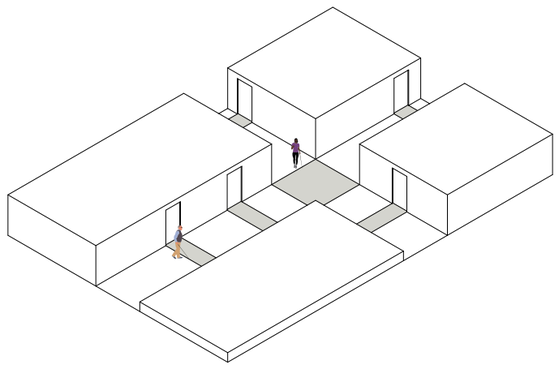
avoid busy patterns



floor & walls contrasting

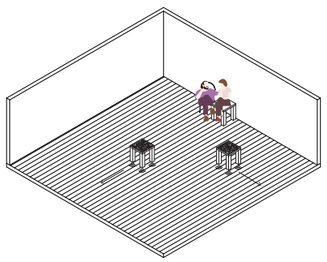


edges contrasting

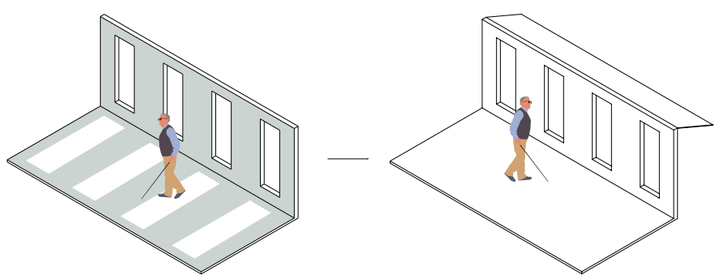


strategically marked places

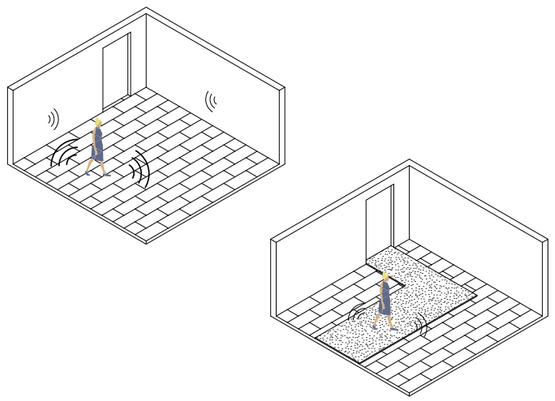
MATERIAL



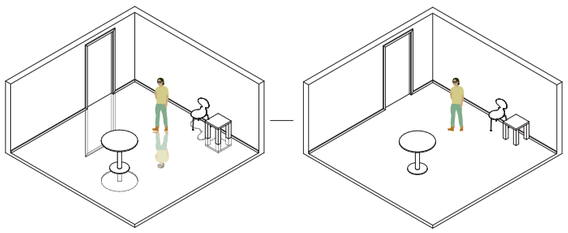
material that creates less background noise



lots of natural light but not direct

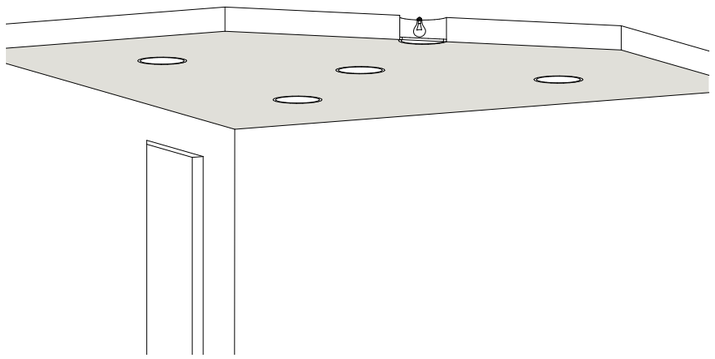


adding sound absorbing materials

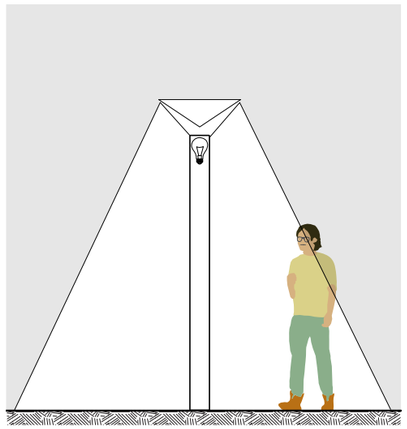


avoidu glossy/reflective floor

LIGHT

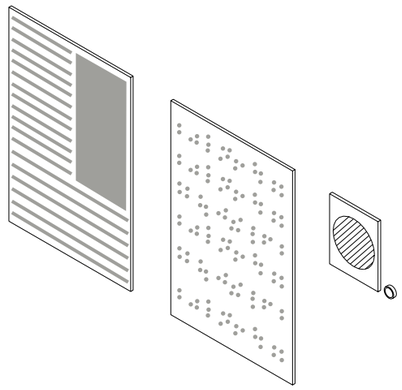


hidden light sources

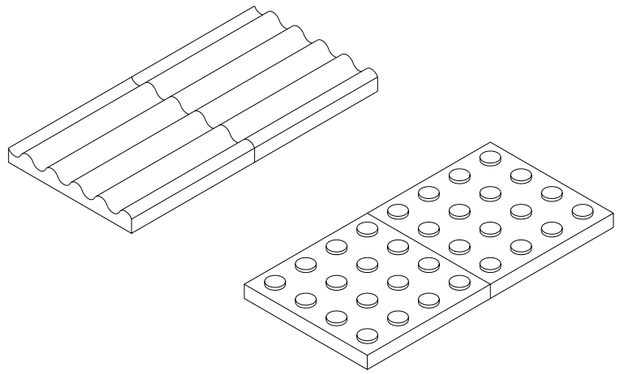


directed downwards

TACTILITY

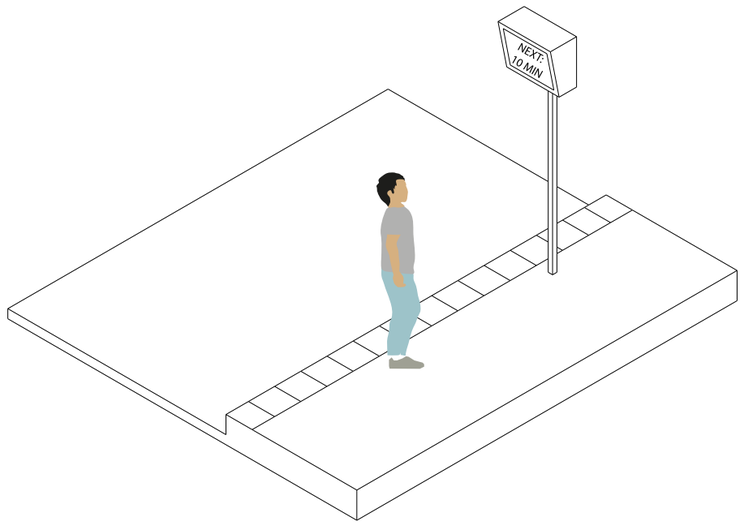


information in braille and audio



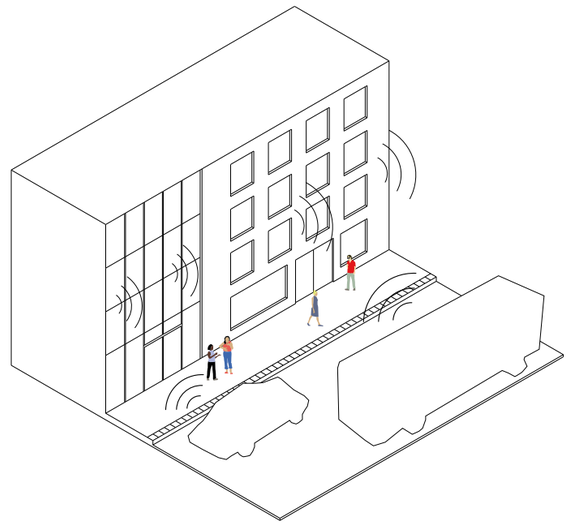
ground tactiles guiding and warning

VISUAL INFORMATION



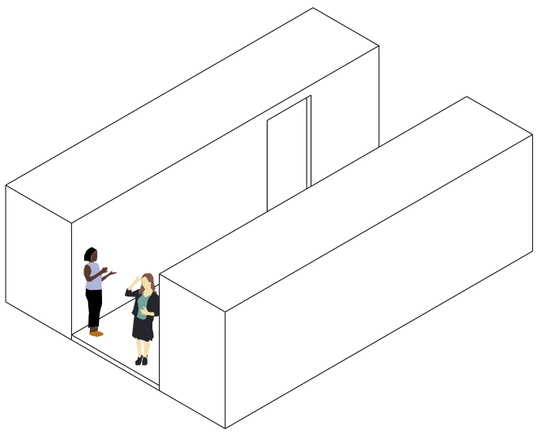
always have a visual option for information

STREET ENVIRONMENT

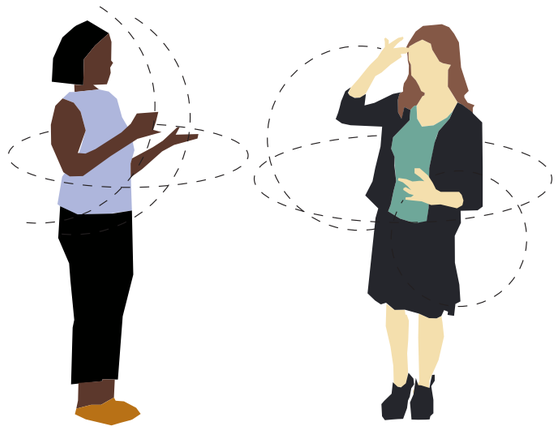


background noise from traffic is disturbing

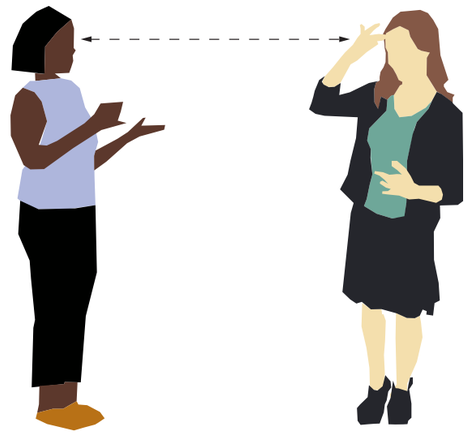
SPACE & COMMUNICATION



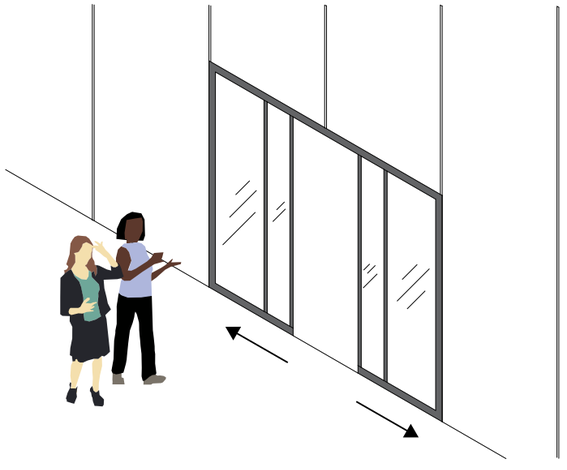
enough space to talk sign



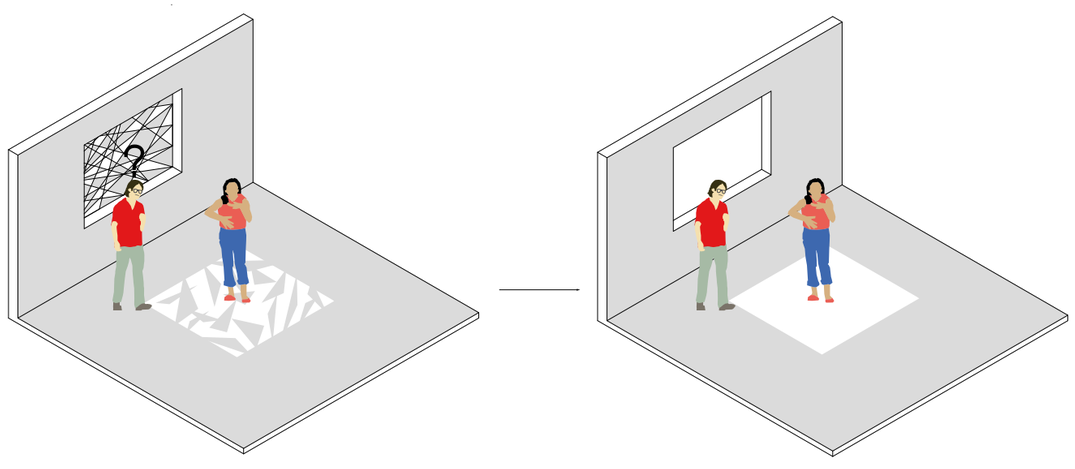
enough space to talk sign



close enough to see facial expression & read lips

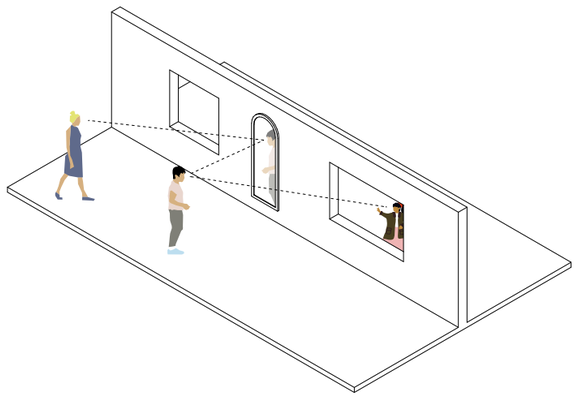


automatic doors speak continous

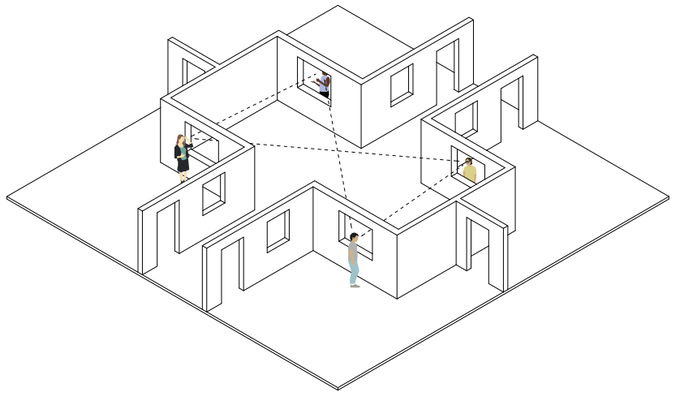


avoid busy shadows to easy read signs and face

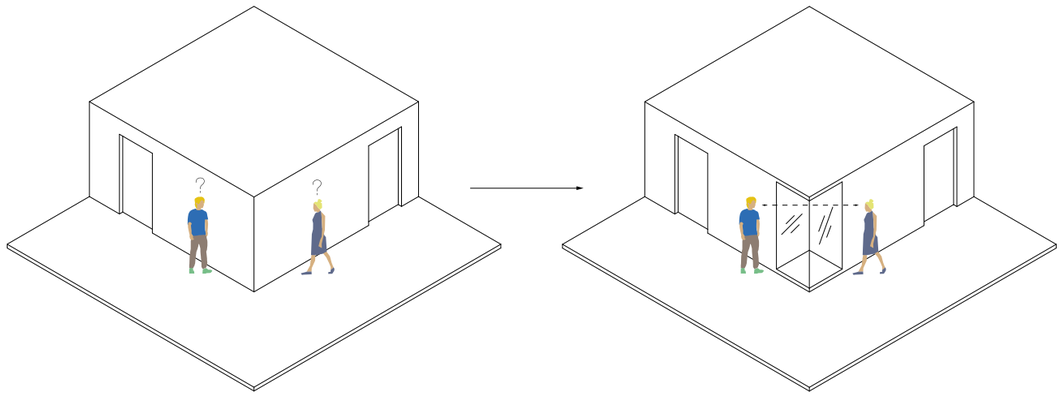
VISUAL COMMUNICATION



openings & mirrors help create bigger perception

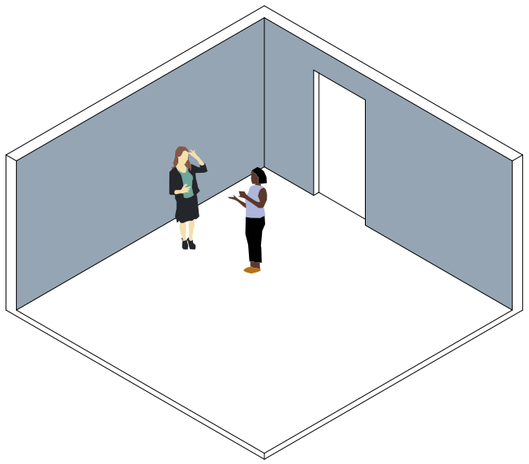


openings helps to communicate

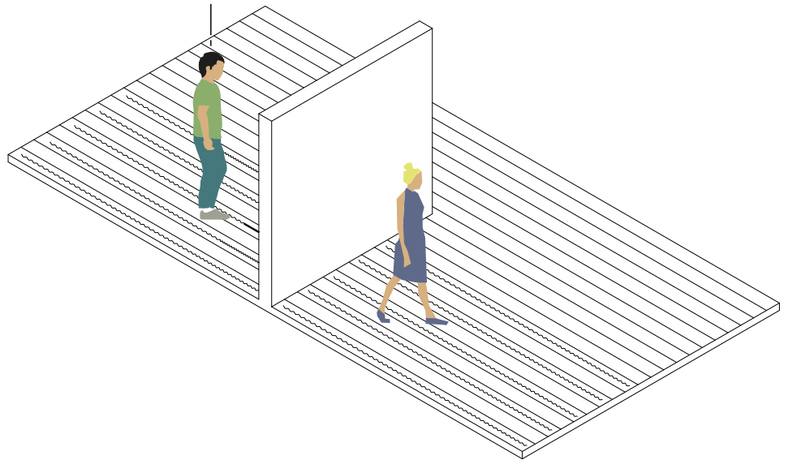


open corners - aware someone is coming

MATERIALITY

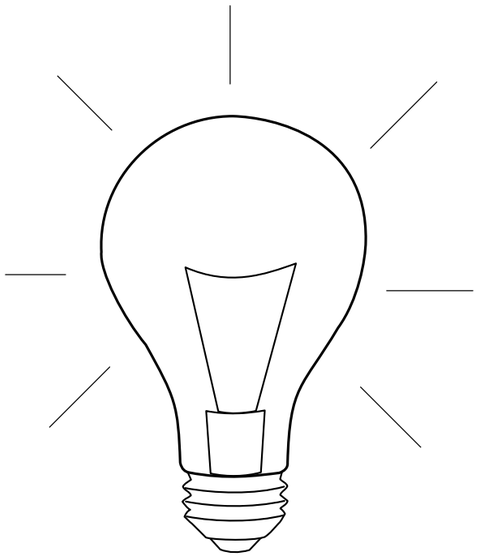


contrasting wall color to easier read facial expression

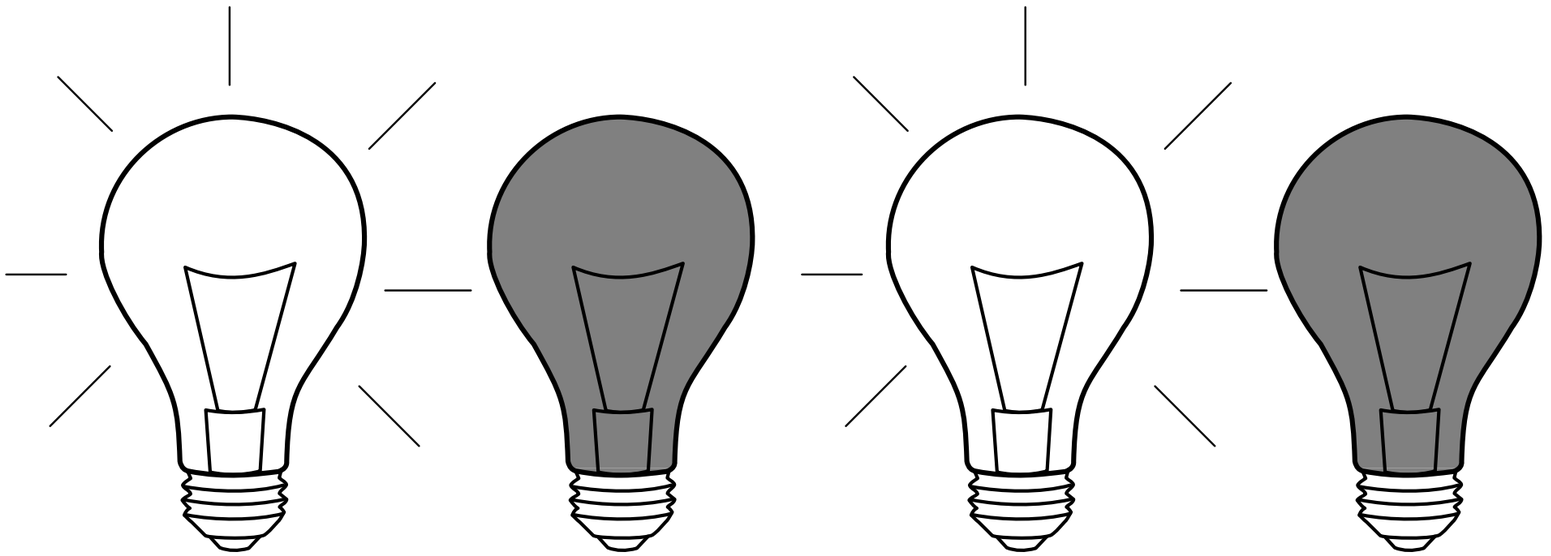


fell someone arriving throug vibrations

LIGHT

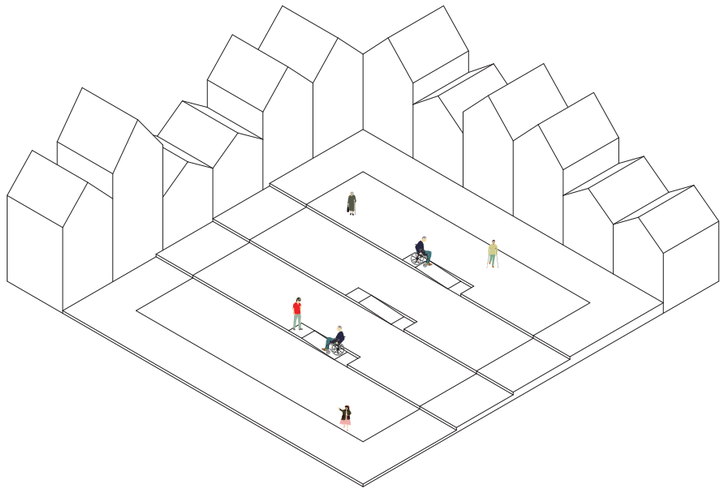


good lighting avoid eye fatigue

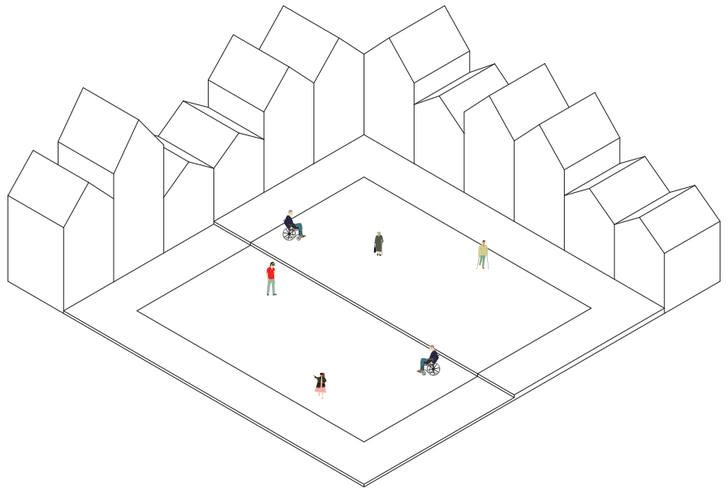


communicate and warning with (flashing) lighting

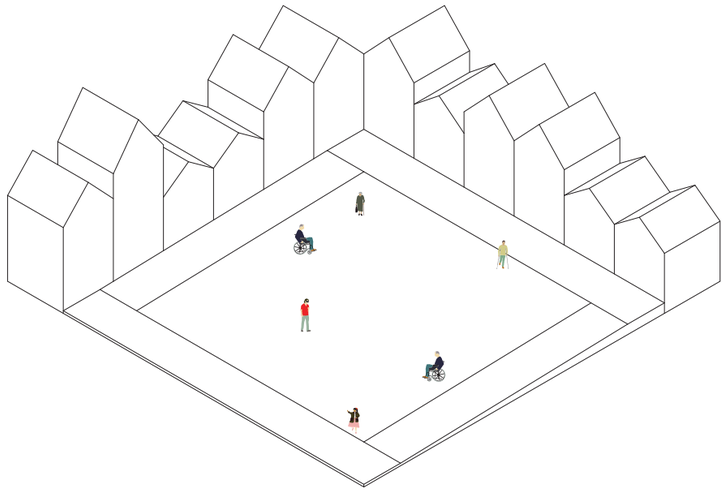
SQUARE/PUBLIC SPACE



ramps included in the space

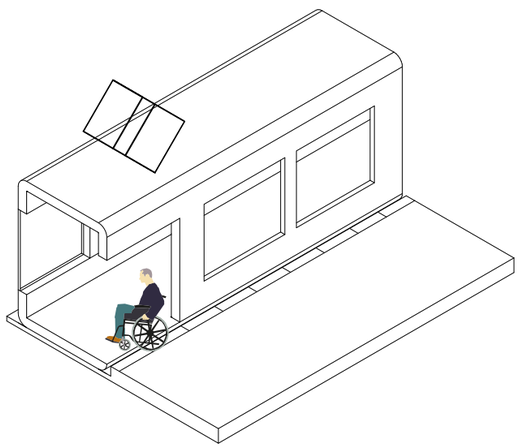


as few level differences as possible

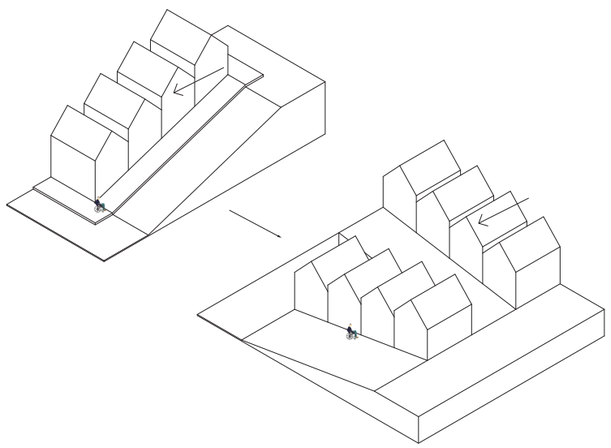


as low degree as possible

THE WAY THERE

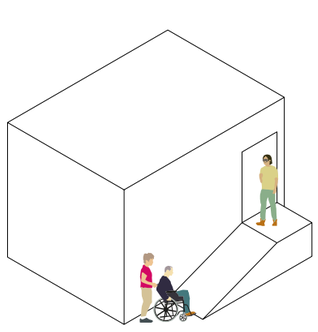


different means of transportation need to be accessible to be able to move around

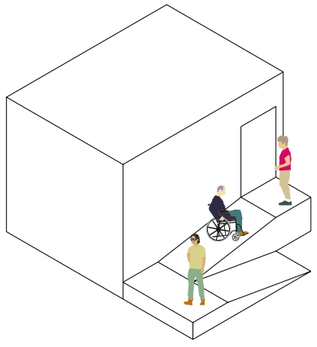


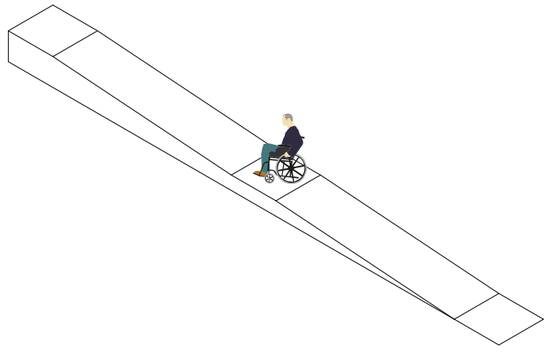
not only the goal that should be accessible but also the way there

RAMPS

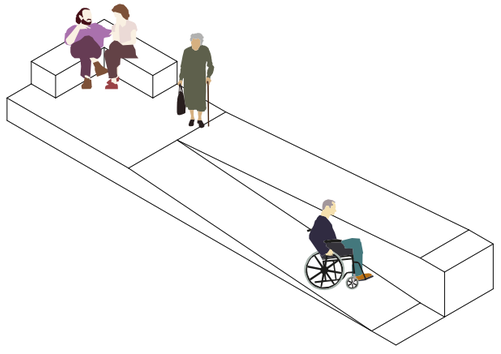


follow regulations give more autonomy

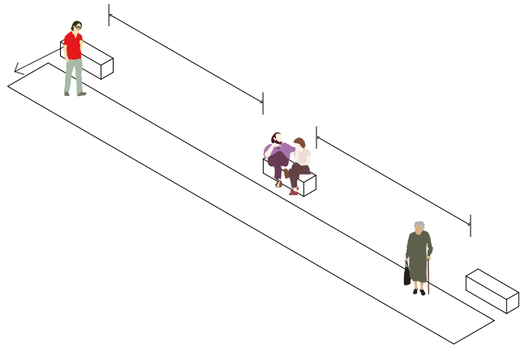




resting surfaces

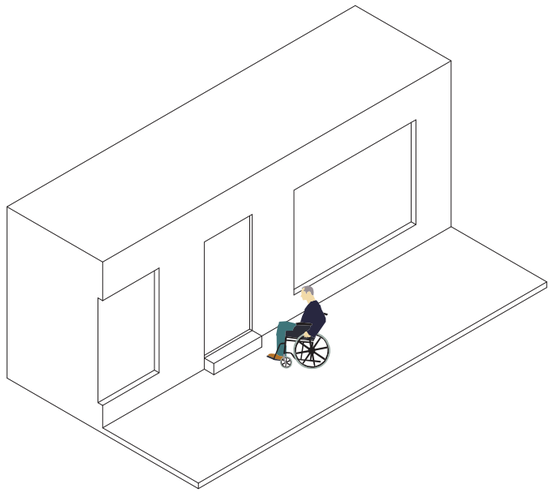


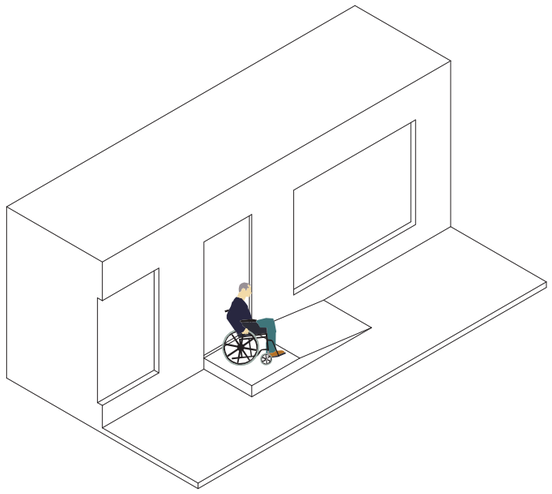
seating before and after ramps

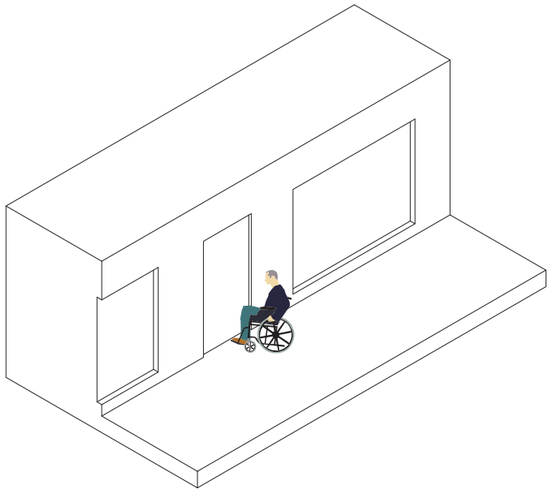


seating repeatedly along path

IMPROVEMENT

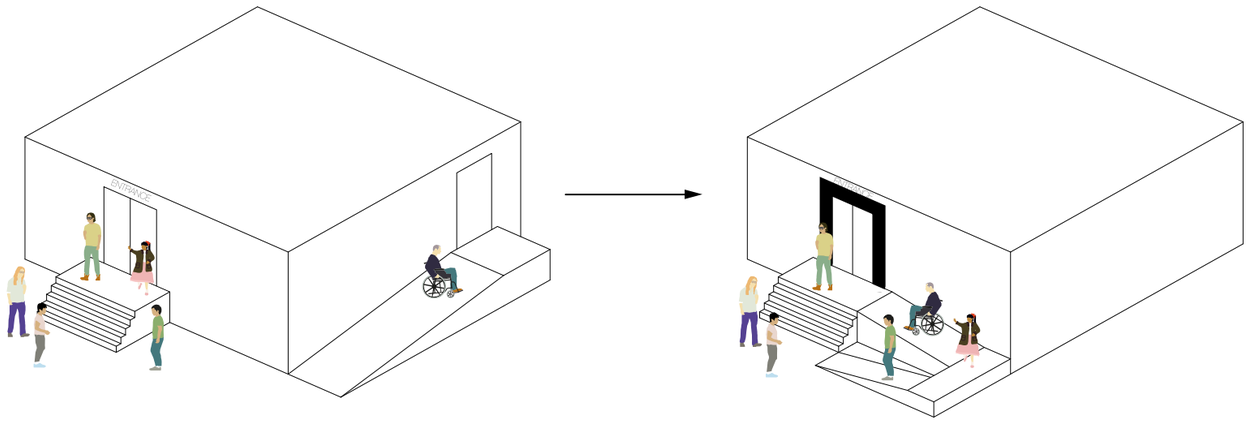




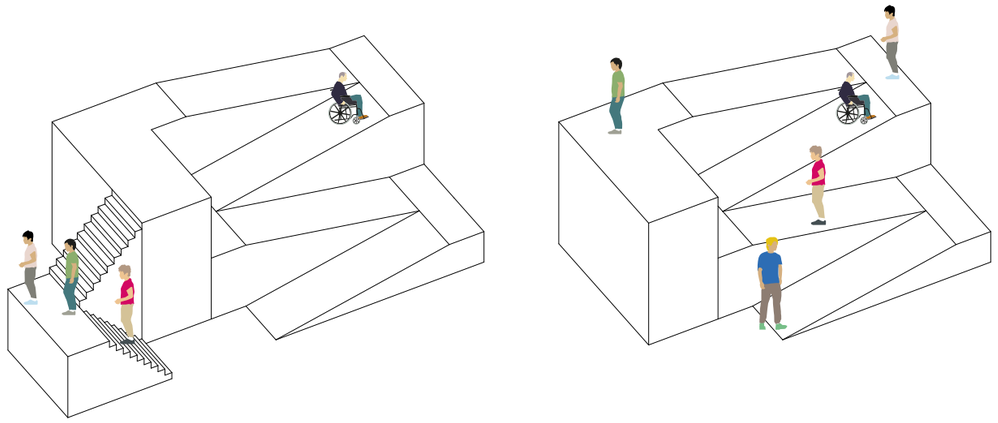


improvement over time

SAME FULL EXPERIENCE

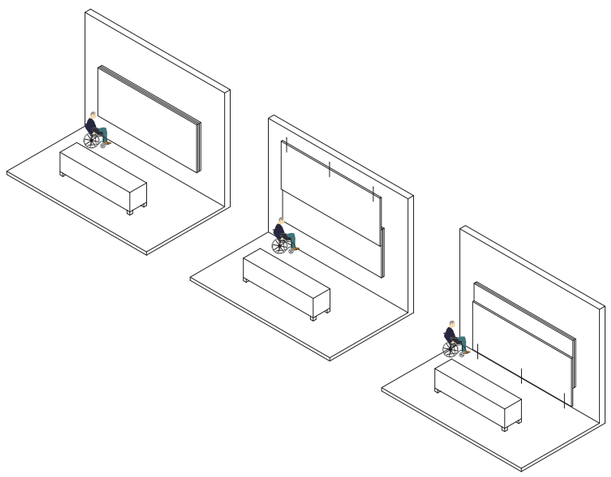


entrance at the same place

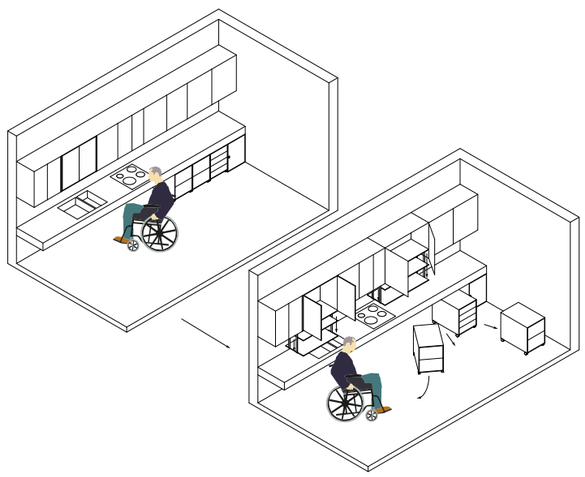


all have the same way there

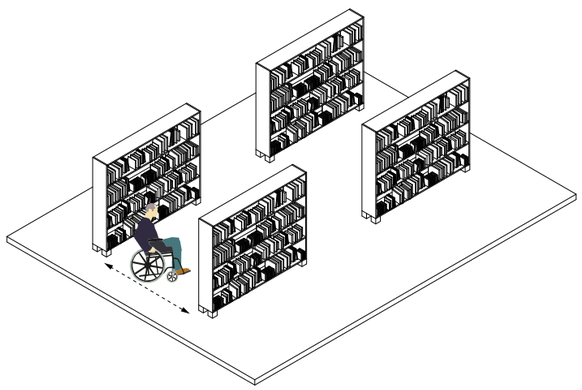
ADAPTABILITY



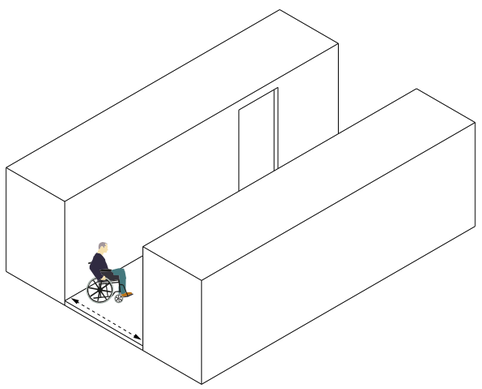
adaptable interiors to become accessible

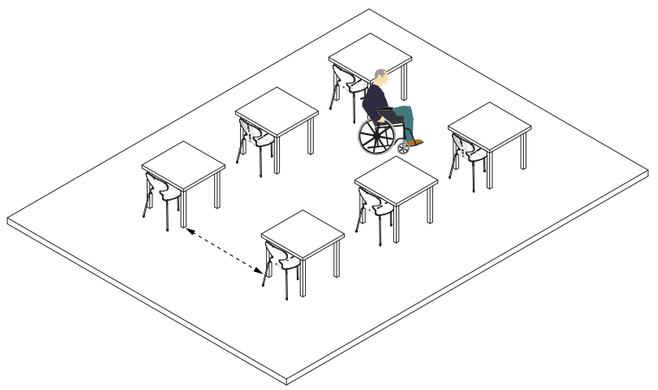


NEEDED SPACE

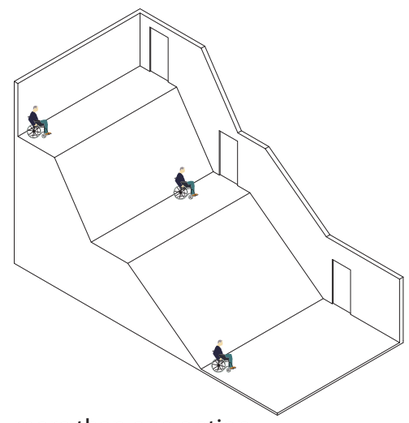


enough space to move interior



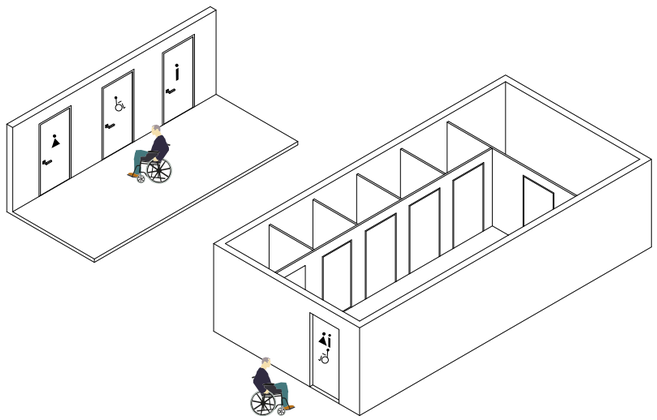


DIFFERENT OPTIONS

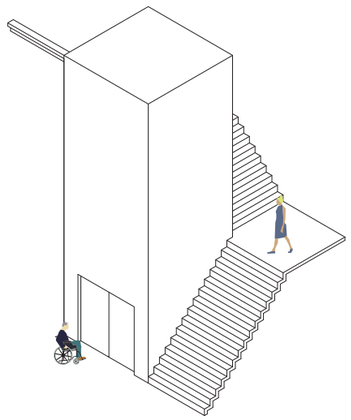


more than one option

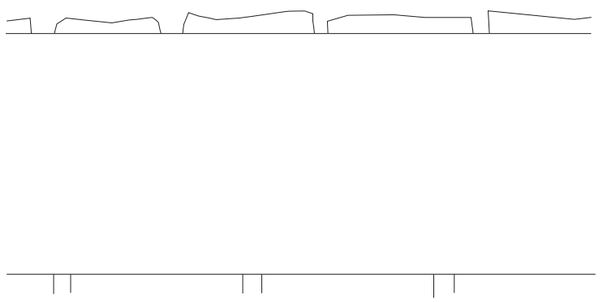
FUNCTIONS & FACILITIES



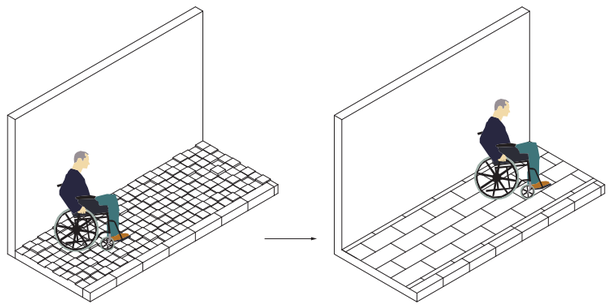
functions placed together



MATERIALITY

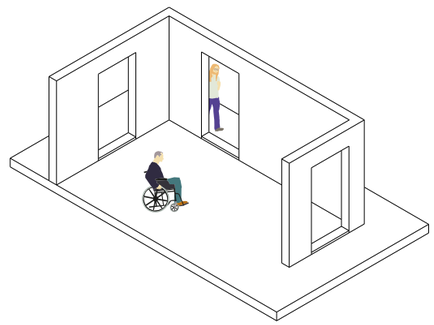


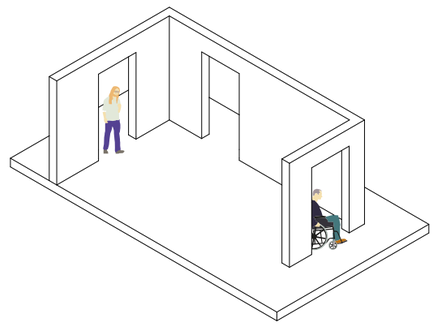
smooth ground materials



makes it easier to move

OBSTACLES





thresholds are small obstacles

How?

To create a society that is inclusive and for everyone, accessibility must be used as a design tool and part of the design concept from the very beginning of a project. (Steinfeld, E., Maisel, J., 2012)
Accessibilty in architecture is best when it is not noticed. When it is so integrated in the design that people don't realize it is there you have succeeded with creating inclusive architecture. (Steinfeld, E., Maisel, J., 2012)
In some cases it is also the defining element of a design where they have exhaggereated this aspect to create a strong expression.

The house of disabled people's organistations in Taastrup Denmark by Cubo Arkitekter, has the slogan "The most accessible office building in the world, and has been designed with all the different accessibility aspects in mind. In this building it is more about integtrating the accessibility in the architecture so that people don't notice it.

For example as seen in the pictures to the right the different colors of the walls are there to help visually impaired and cognitive impaired people easier navigate in the building. The information desk has got different heights to be accessible for people in wheelchair.

The elevators are designed with openings in both ends so that if you are in a wheelchair you won't have to turn around or back out of the elevator when you get of. (Danske Handicaporganisationer, handicap.dk)

Figure 4, Reception desk, (Danske Handicaporganisationer), Used with persmission

Figure 5, Elevators, (Danske Handicaporganisationer), Used with persmission

In the two following examples the accessibility has also been integrated in the design and used as a design tool, but instead of something you don't notice it is the defining element of the building and a strong expression of the design.
Even if it is used in this way and very visible, you don't see it as something to make the building more accessible, but instead as an design expression.

In Room Room by Takeshi Hosaka outside Tokyo Japan, small openings in the wall permits two deaf parents to communicate with their children visually.

In the Guggenheim museum in New York city, by Frank Lloyd Wright, the whole exhibition space is a ramp giving all the visitors the same experience.

(dezeen.com, 2011)
(Steinfeld, E., Maisel, J., 2012)

Figure 6, Room Room, Exterior, Tokyo (Dezeen.com), Used with persmission, Koji Fuji / Nacasa & Partners Inc.

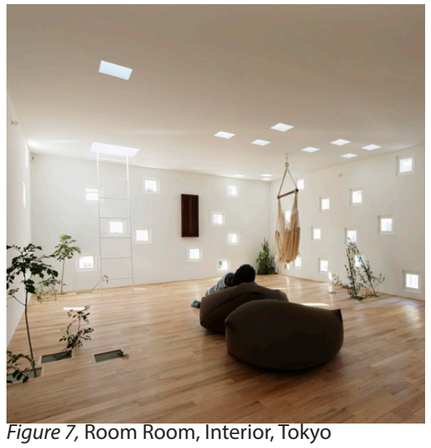


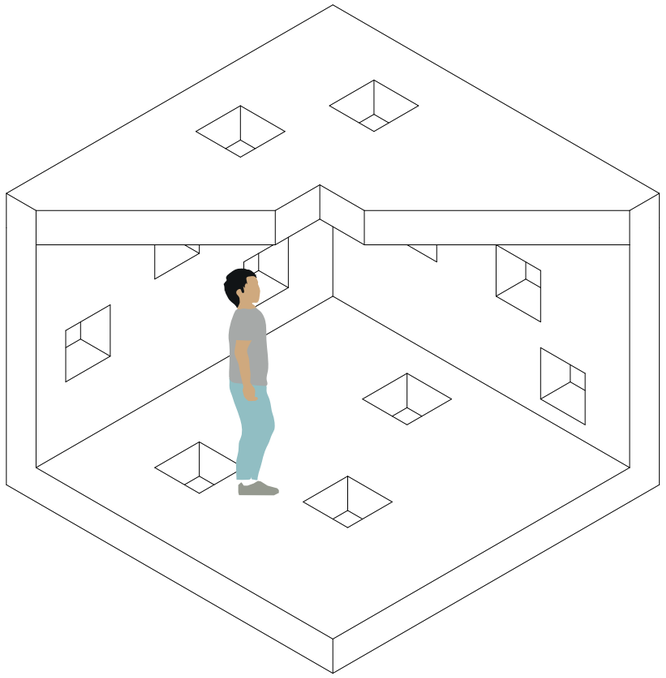
Figure 7, Room Room, Interior, Tokyo (Dezeen.com), Used with persmission, Koji Fuji / Nacasa & Partners Inc.

Figure 8, Guggenheim Museum, Interior 1, New York, USA (en.wikiarquitectura.com), Used with persmission

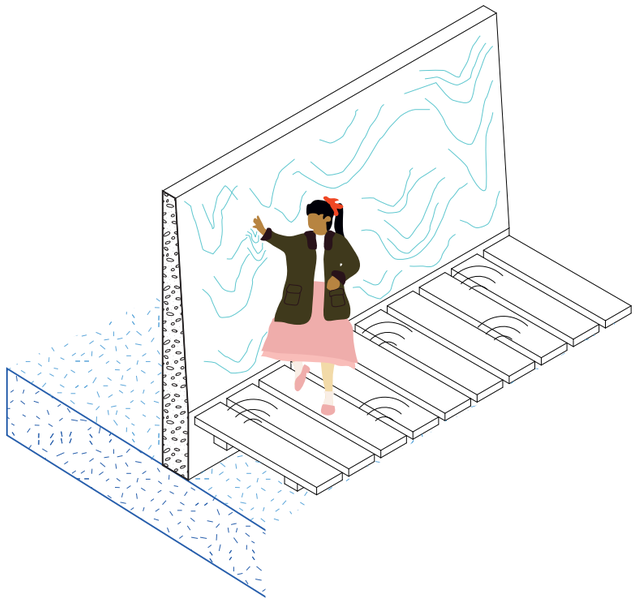
Figure 9, B&W IN THE GUGGENHEIM MUSEUM, New York, USA (se.pinterest.com), Used with persmission

Including accessibility and universal design in the design concept and using the pictograms I've made as a design tool I will create a project of public character.
It will consist of both indoor and outdoor spaces and give everyone the same possibility to participate and feel included.
The site for the project is a riverfront centrally located in the city Halmstad.
Halmstad is a good choice for this kind of project since one of their slogans is: "Halmstad, a city for everyone" (Halmstad, 2016)

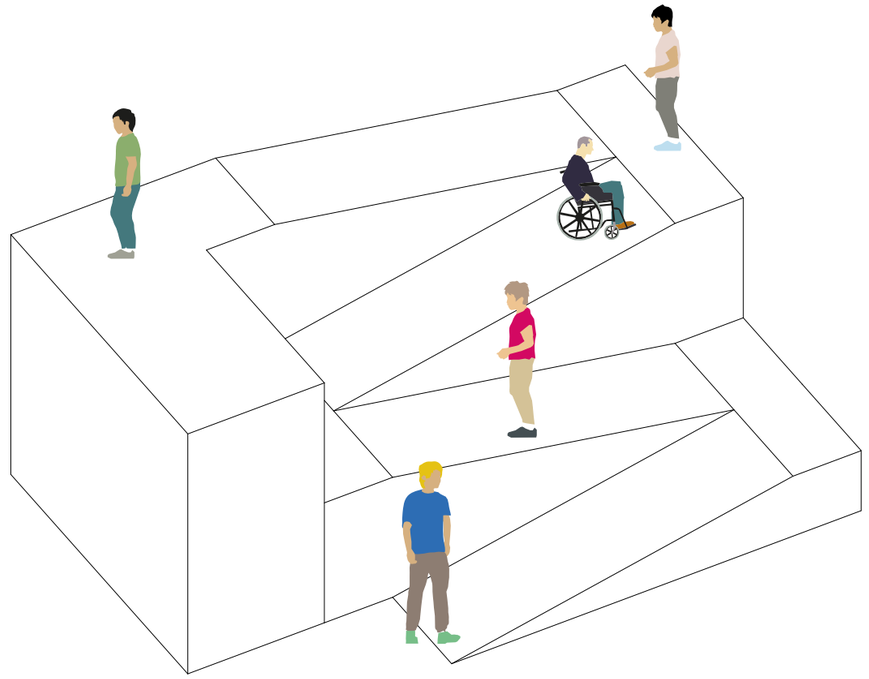
In my project I want to get people to think about what it can mean to not be able to share the same experience as everybody else. Certain aspects of the project makes you use your body or experiencing things in a different way than you are used to.



Focusing on the view of the river and surroundings, framing certain viepoint through small openings in floor, walls and ceiling.



Blocking the view of the river and instead creating the possibility to feel it and hear it



Access to the river only via ramps and not stairs. The same experience for everyone, disabled and able bodied.

Project

Halmstad

Halmstad is a city on the west coast of Sweden between Gothenburg and Malmö.

It is a middle sized city with approximately 100 000 inhabitants. (Halmstad, 2016)

The city is located along the coast line with mostly residential areas and the city centre located by the river Nissan.

Overview Halmstad

Context plan 1/10 000

The site is located in the city centre of Halmstad along the river Nissan close to the main square.
Today the river is often seen as a separation of the city into east and west Halmstad.
The city has been turned away from the river with mostly industries and marina along its shores.
The east and south west side towards the river has recently been developed with residential, commecial and cultural areas.
These parts are therefor today turned more towards the river than the central west side.

Riverfront west side

①

North end of Hamngatan is in the summer occupied by restaurants and bars. Rest of the year it is parking spaces

Figure 10, Hamngatan Halmtad, (Google streetview, 2015)

②

Middle part of Hamngatan north of site is all year around occupied by parking and car traffic. This part of the street has been upgraded with new ground materials

Figure 11, Hamngatan Halmtad, (Google streetview, 2015)

③

Hamngatan just north of the site is a car trafficed street between the backside of the city centre and the river with parking with a few cafés towards the river

Figure 12, Hamngatan Halmtad, (Google streetview, 2015)

④

The part of Hamngatan which is on the project site is today occupied by car traffic and street parking

Figure 13, Hamngatan Halmtad, (Google streetview, 2015)

Riverfront east side

⑤

Newly built residential areas along the river with visual and physical connection the water with terraces and a promenade

Figure 14, Gamletull Halmstad, (Nissastrand, 2016) Used with permisssion

⑥

The promenade along river continues under the public library which stretches out over the water

Figure 15, Halmtad stadsbibliotek, (Ericsson, 2008) CC-BY

⑦

Kapsylparken next to the library has a direct contact with the water and is often used in the summer for cencerts and other cultural events

Figure 16, Kapsylparken Halmtad, (Ballo84, 2008) CC-BY

⑧

Picassoparken (the Picasso parc) is situated oposit of the project site with connection to the river. This parc is often used for different sport activities and events

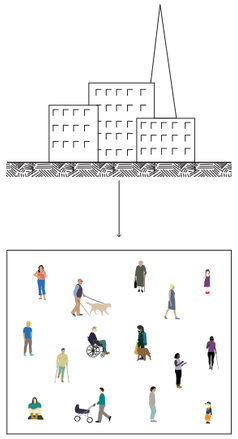
Figure 17, Picassoparken Halmtsad, Authors own image

Figure 18, Panoramic view of site from opposite side (east) or the river Nissan. Authors own picture

Figure 19, View from north east (Österbro). Authors own picture.

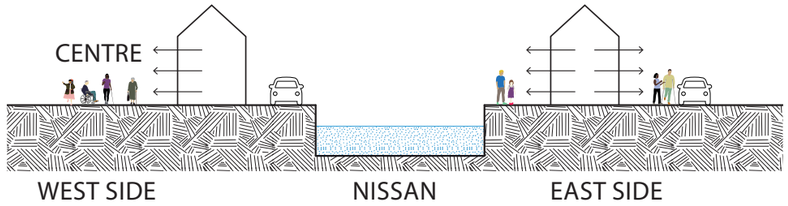
Figure 20, View from south east (Slottsbron). Authors own picture.

Figure 21, View from south (Hamngatan). Authors own picture.



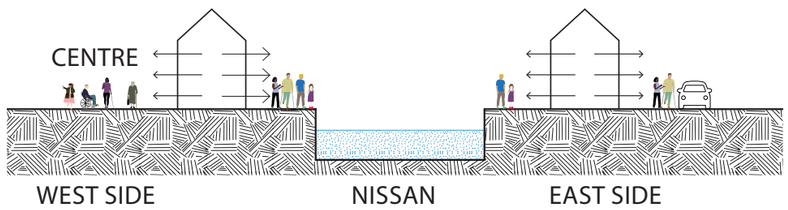
"The city for everyone" has be awarded for it's work on making it accessible for people with disabilities. It also has an award for most accessible company/enterprise that they gives out once a year. (Halmstad, 2016)

Figure 22-26, The streets of Halmstad has got new ground materials separating it in zones. The street level is raised to meet the shop entrances on some parts and ramps built on other parts. Authors own pictures



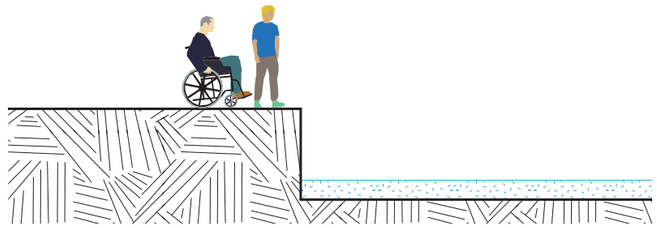
The river that runs through Halmtsad is named Nissan. On the west side of the river, which is the side where moste of the centre is located, the city is turned away from the river making it a backside. The riverfront is mostly occupied by traffic and parking.

The east side was before mostly occupied by industries, but has since a few years been developed and turned towards the river.



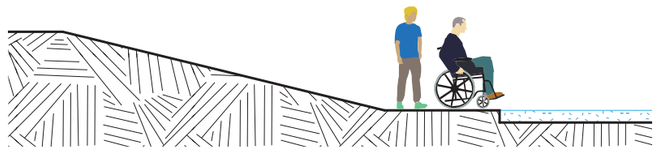
The goal for Halmstad city is to turn the centre towards the river and give access and connect to the water from both sides. (Halmstad, 2016)

This creates a great opportunity to develope a project that has to relate to existing conditions and work with and improve them. Working with the slogan of Halmstad - A city for everyone and create a new accessible project that connects to the river.



To just have a visual connection to the river doesn't change that much from how the city has access to the water.

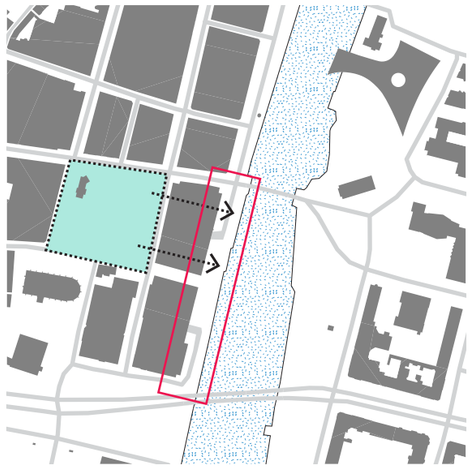
Instead it is better to connect to the river on the same level. It is important that the access to the water isnt't limited to only able bodied people.



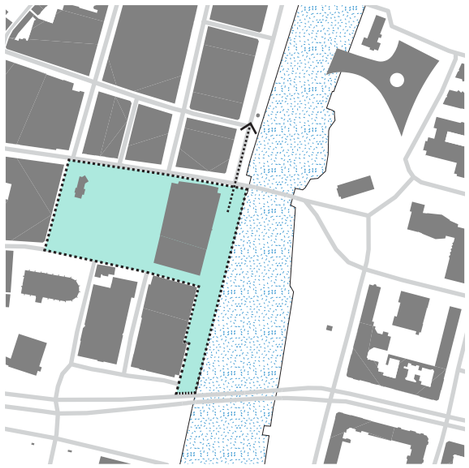
The level differences must be dealt with in a way that everyone have the same possibilities to access the water.

Main square
(Stora torg)

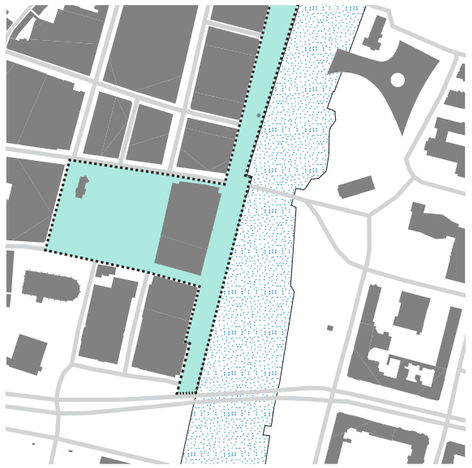
Project
site



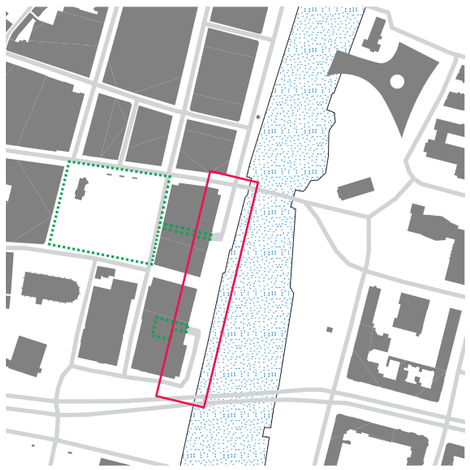
To turn the city centre towards the river the main square (Stora torg) expands to the east and the project site.



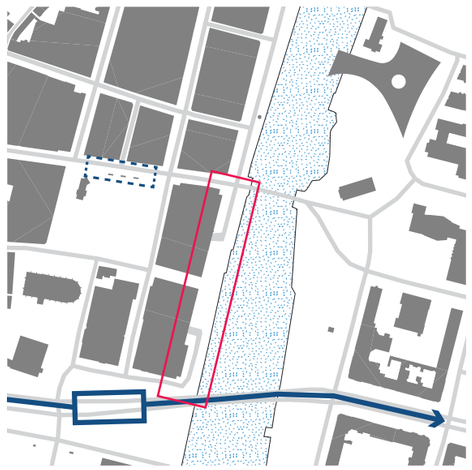
The commercial centre of Halmstad is to today situated to the north and west from the square. Further expanding to the north will turn the whole commercial city centre towards the river.



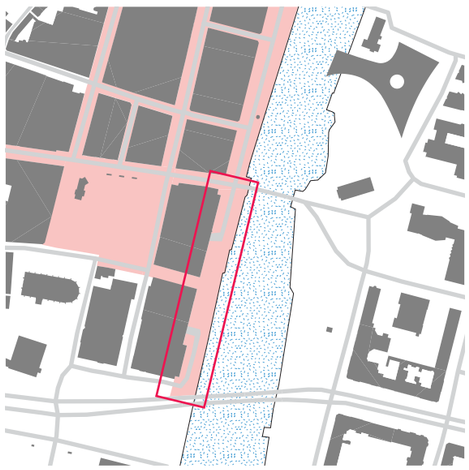
This way Hamngatan will be less of a backside of the center and there will have a stronger connection to the river Nissan.



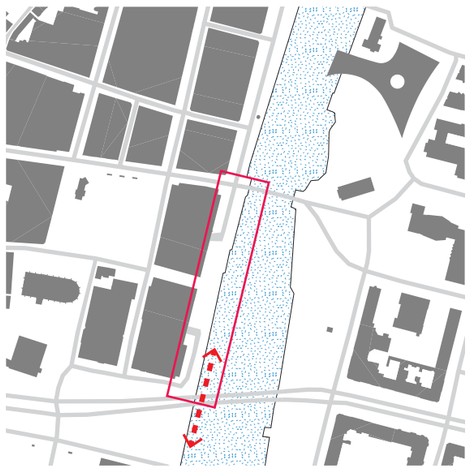
The street parking along the river is removed limiting the car traffic on the site only to the garages.



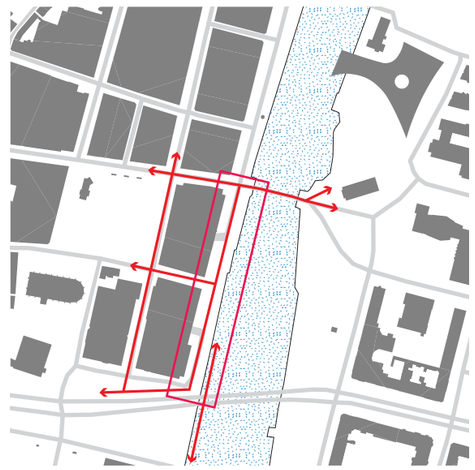
The central bus stop is moved from the north part of the main square to the south of the site making the city centre free from traffic.



The pedestrian area of the city centre can then be expanded to include the site and further south.



A pedestrian connection under Slottsbron to the south of the site will create a continous walk along the west side of the river



This will increases to flow of people to and through the site.

Parking garages

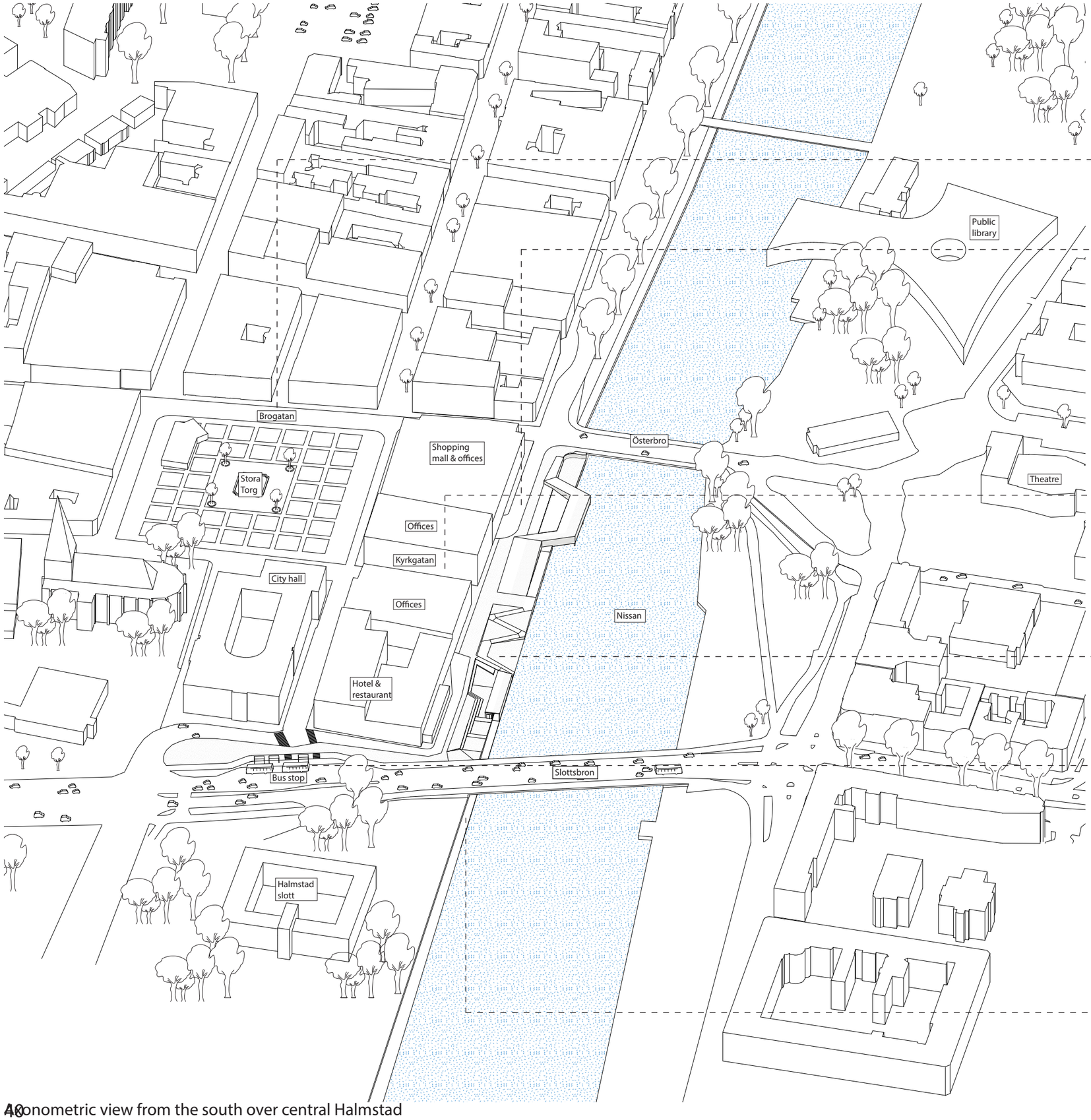
Old bus stop

New bus stop

Pedestrian area

Pedestrian connection under bridge

Pedestrian flow through site



Moving the bus stop from the north part of the main square reduces the background noise in the city centre and creates a nicer and safer environment for visually and hearing impaired.
It is also safer to move the buses to Slottsbron since pedestrian and bicykles are separated from car traffic with fences.

Reducing car traffic on the site creates a safer urban public space for vilsually and hearing impaired.

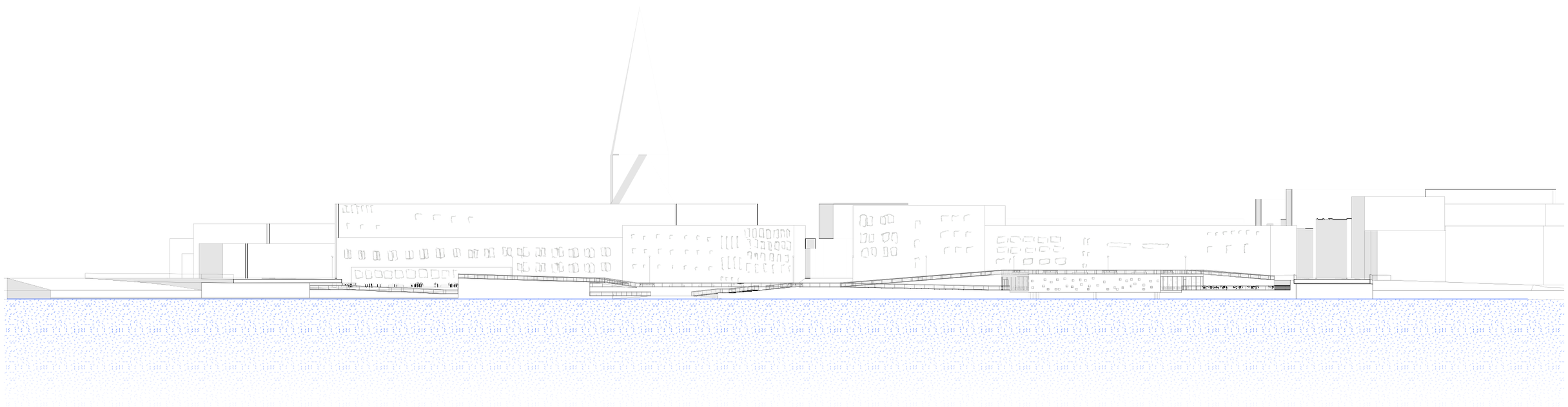
It also turns Kyrkgatan into a pedestrian street creating a safer arrival way from the main square.

Removing the street parking along the river on the site gives a possibility and access to the river; both visually and physically.

With the bus stop placed south of the site, the project is located in the middle between that and the public library further noth on the other side of the river. It will then be more integrated in the city centre turning it towards the river.

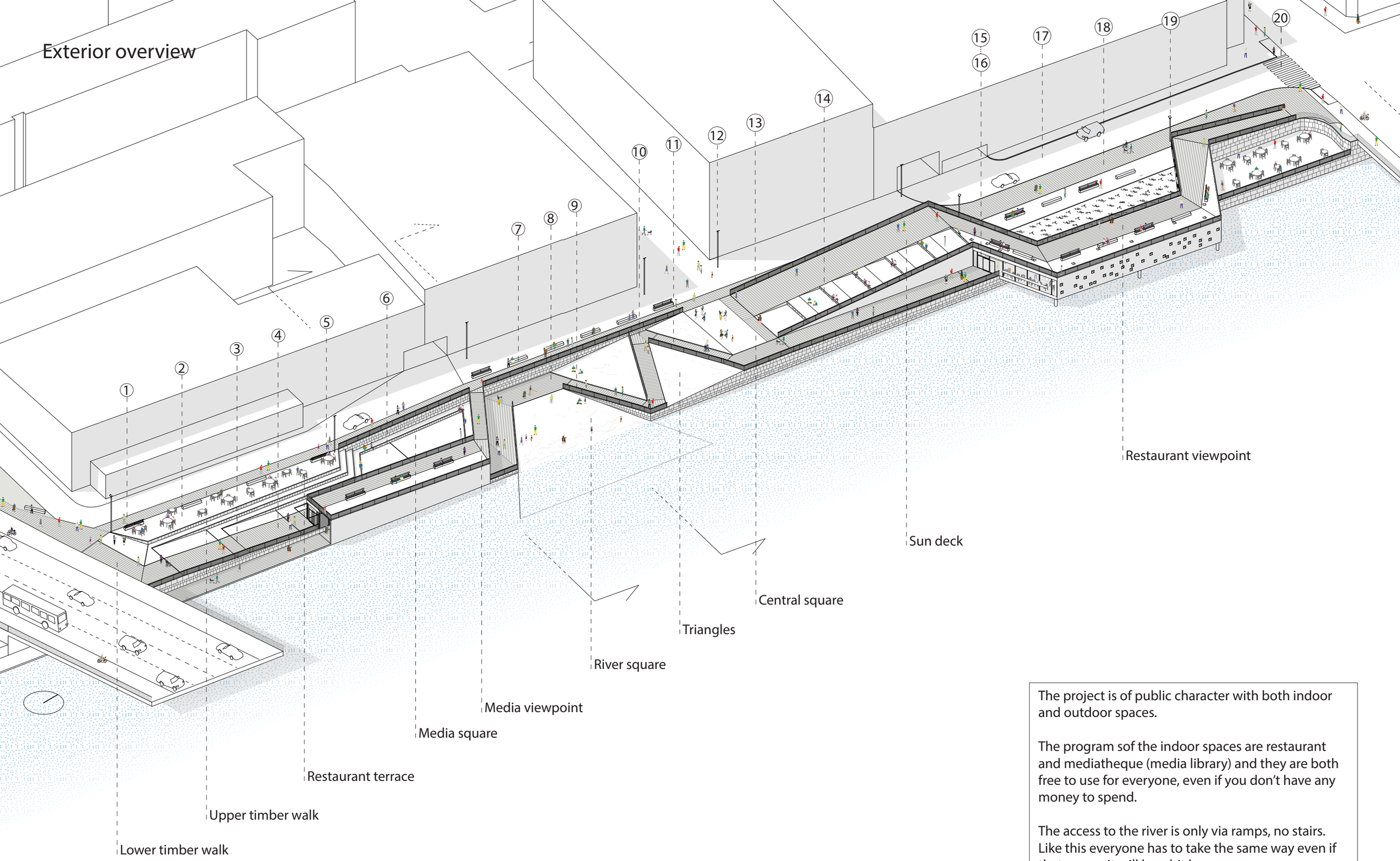
Pedestrian connection under the bridge gives easier access further south along the river.

Axonometric view from the south over central Halmstad



Facade east 1/800

Exterior overview

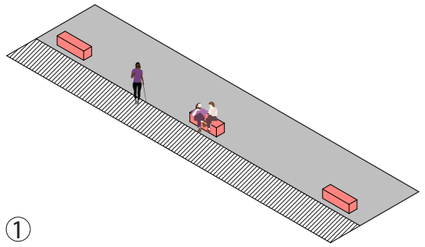


The project is of public character with both indoor and outdoor spaces.

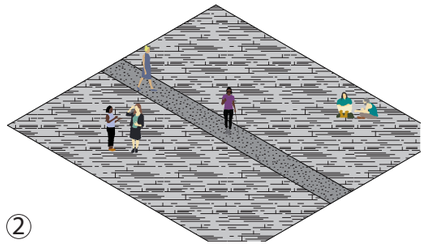
The program sof the indoor spaces are restaurant and mediatheque (media library) and they are both free to use for everyone, even if you don't have any money to spend.

The access to the river is only via ramps, no stairs. Like this everyone has to take the same way even if that means it will be a bit longer.

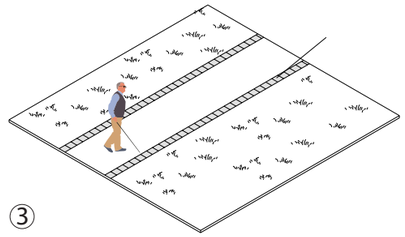
The turns of the promenade are angular instead of rounded to help guiding people with visual impairment in the different directions.



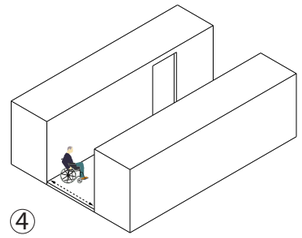
① Urban furniture in contrasting material placed in resting zone



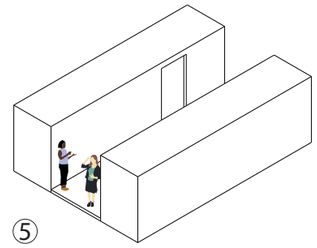
② Different material on wakling and resting zones



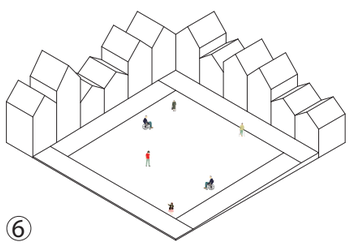
③ Edges between zones marked with different material



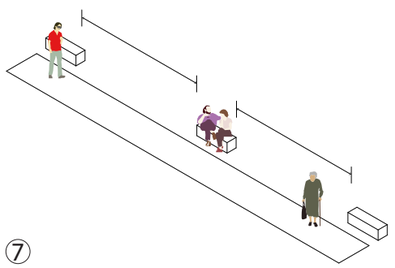
④ Spacious walk ways for wheelchair users



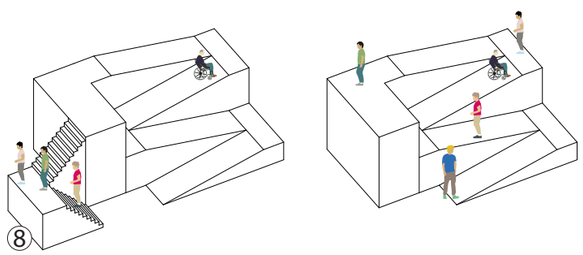
⑤ Walking zones wide enough for people to talk sign



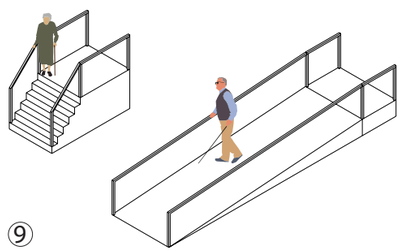
⑥ Low or no slope on squares



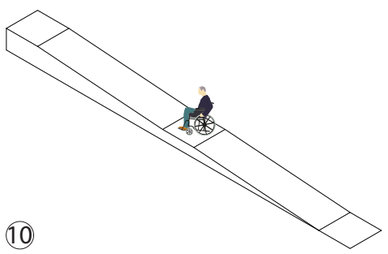
⑦ Seating possibilities placed regularly along walk ways



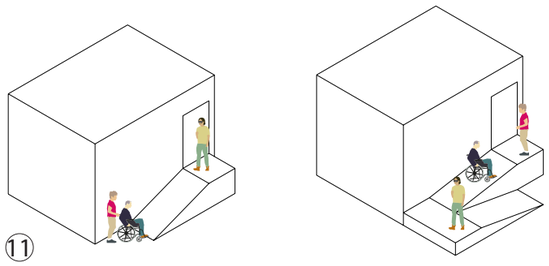
⑧ Same way for everyone and not separated for able bodied and disabled



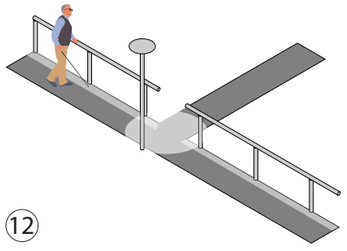
⑨ Railing on ramps to guide and support



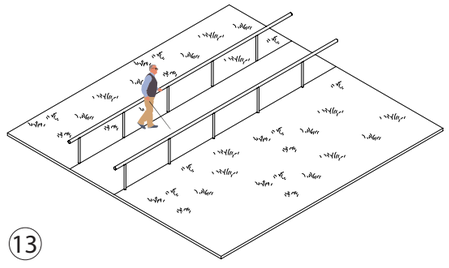
⑩ Resting planes on ramps



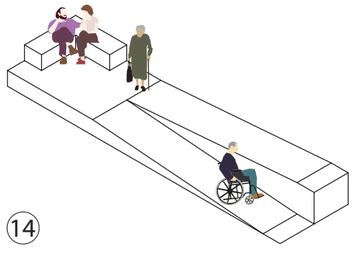
⑪ Rules and regulations followed to empower autonomy



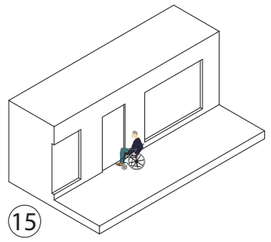
⑫ Even lighting and extra on strategical points



⑬ Hight railing for support and guiding

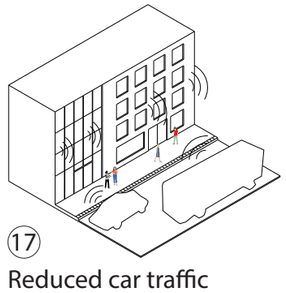


⑭ Seating possibilities before and after ramps

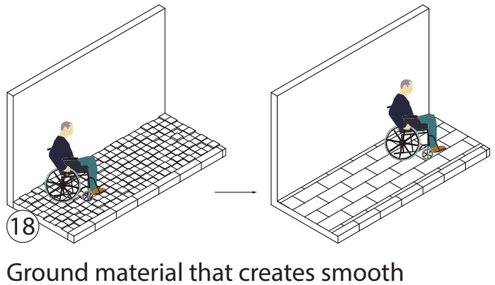


⑮ Exterior and interior on same level to avoid steps

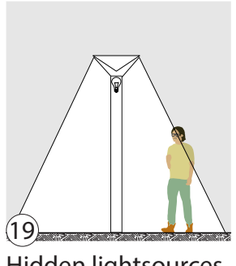
⑯ Automatic doors so deaf people can continue talking when entering a building



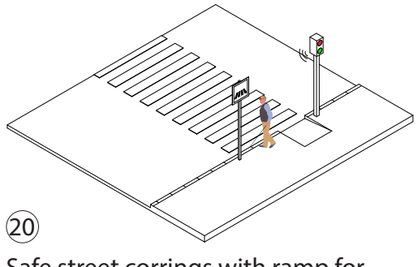
⑰ Reduced car traffic reduced background noise



⑱ Ground material that creates smooth surfaces easy to move on



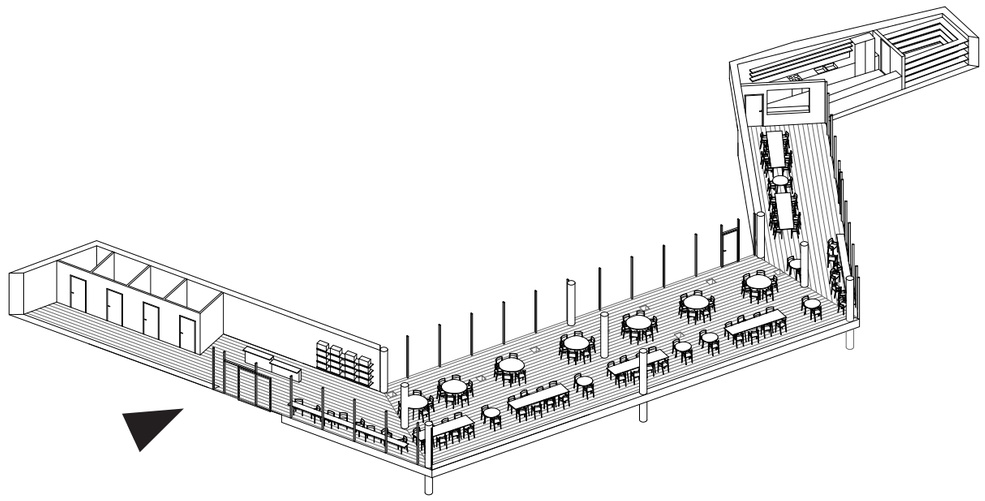
⑲ Hidden lightsources with downlight



⑳ Safe street corrings with ramp for mobility disabled and guiding edge for blind

Interior overview

Restaurant/canteen 370 m^2



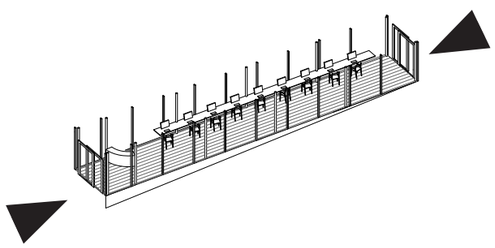
The restaurant is a public indoor space where you can either bring your own food to eat or buy there.

It is like a dining room for the city accessible for everyone reardless of you conditions.

There are two outdoor terraces that are visible from the surrounding outdoor but only reachable via the building.

Directly when you enter the building there is a reception, different facilities and microwave ovens to heat you food, or you can buy food from the kitchen in the other end of the building.

Mediatheque 60 m^2



The mediatheque is a narrow building,with entrances on both short sides of the building so that you can walk through it almost like a passage.

Inside are computer free to use for everyone.

There is also a Wi-Fi zone to attract people around the building on the square and bring their own electronical devices to connect.

All the facades are glaced to have visual connection between indoor and outdoor spaces and create an inviting feeling.

Material

To clearly mark out and separate the different zones and areas from each other different materials or treatments of materials, texture and colors ae used.

There are three main materials being used in the project:

- Concrete

- Unplaned timber boards

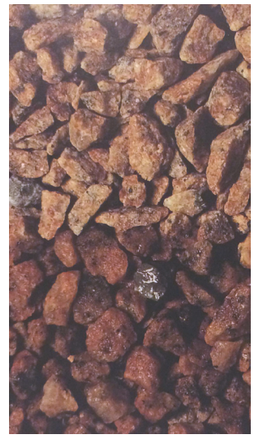
- Red granite

Material on the walk zone (promenade) is unplaned timber boards. This material creates a tactile, visual and audible difference to the surroundings and is typically used in waterfront projects in Sweden.

Figure 27, Unplaned timber boards, (textures.com) Used with permission

Material on the resting zones; squares, seating areas etc. is concrete with red granite as aggregates.

Figure 28, Concrete, (textures.com) Used with persmission

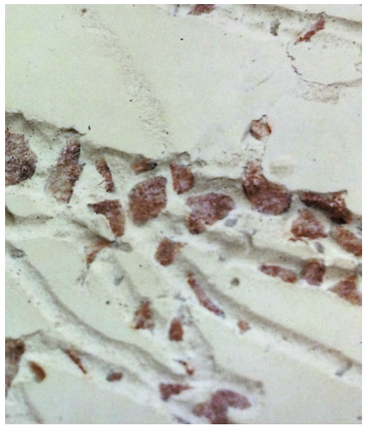


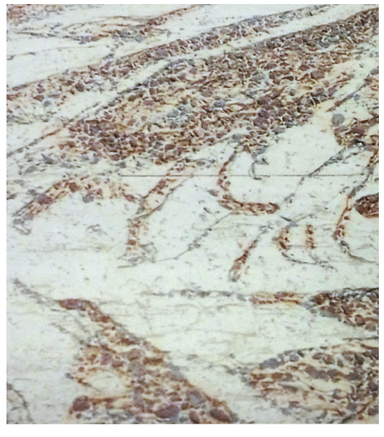
The material of the walls between the different levels are red granite blocks. It is a local material that already exists on the site.
It also contrasts to the concrete and wood surfaces on the ground, both in color and texture, and connects to the aggregates in the concrete that is visible on some parts.

Figure 29, Red granite (Hertzell, 2013) Used with permisson

In parts that are not resting zones nor wakling zones the concrete has got a wood board texture.

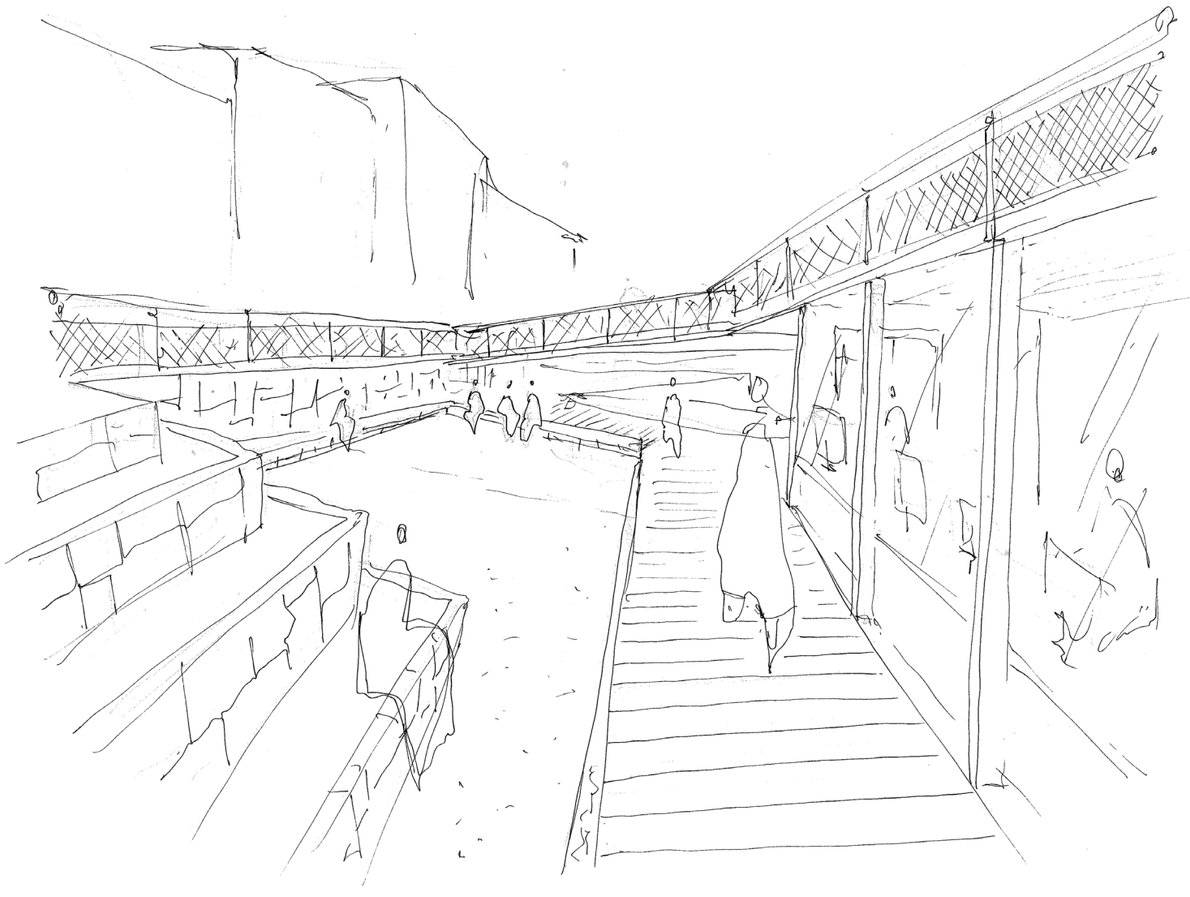
Figure 29, Concrete with timber board texture, (textures.com) Used with permission



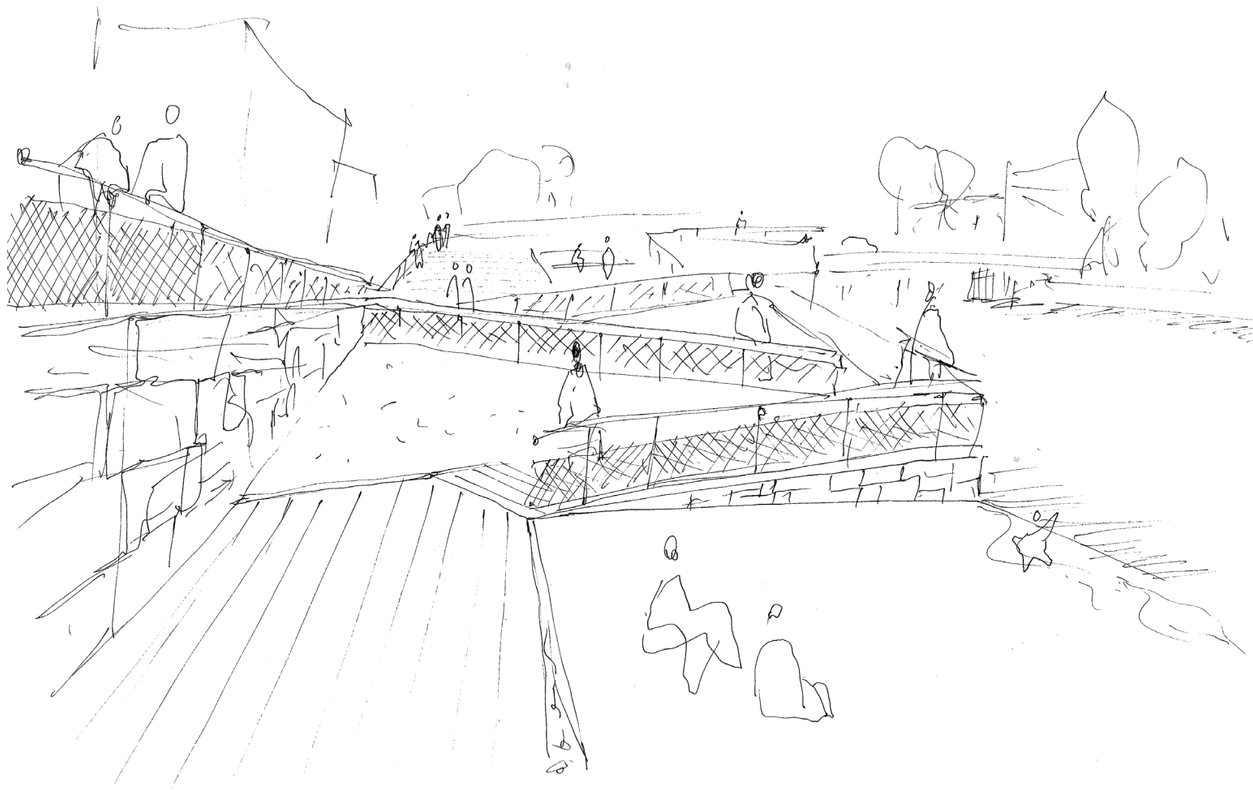


On some parts the concrete is sandblasted in different patterns exposing the red granite contrasting to the concrete and creating a frictional surface.

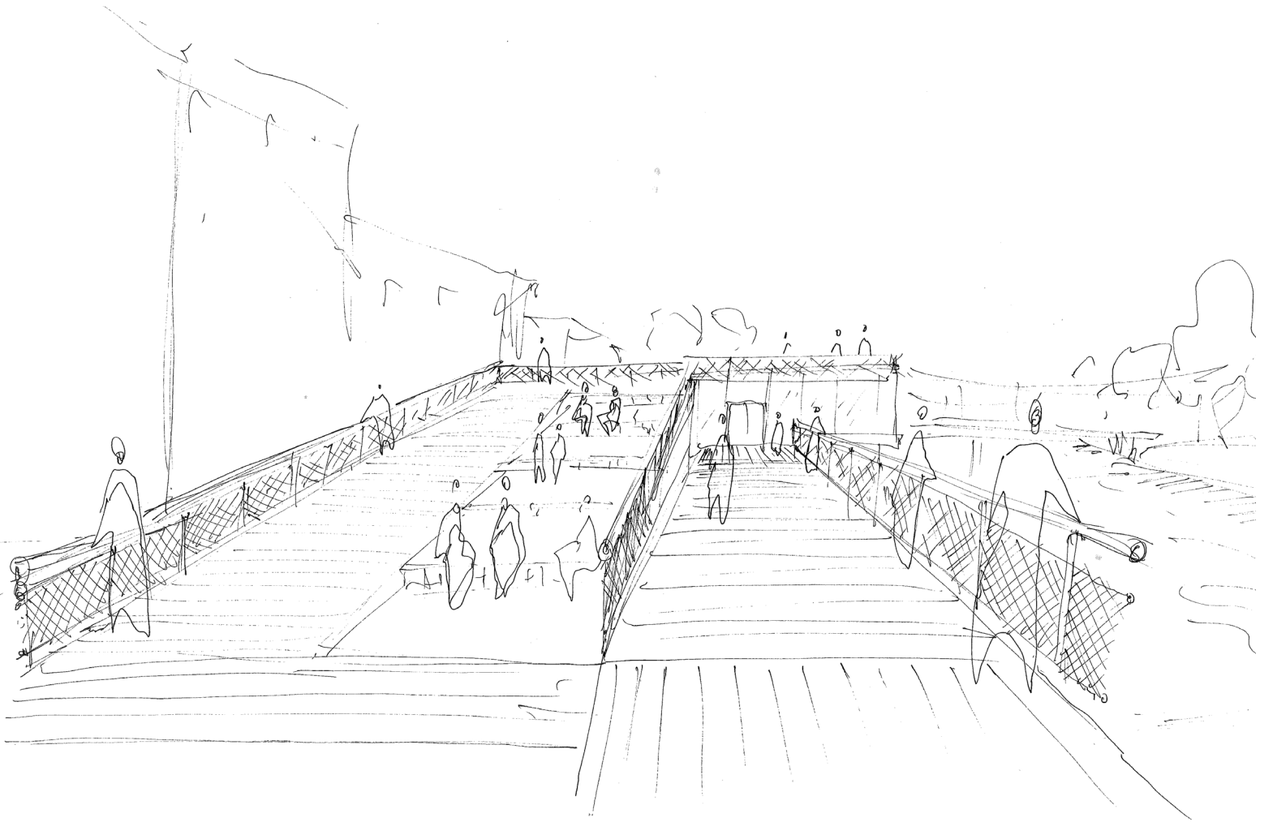
Red granite aggregates exposed with sandblasting (Hertzell, 2013) Used with permission



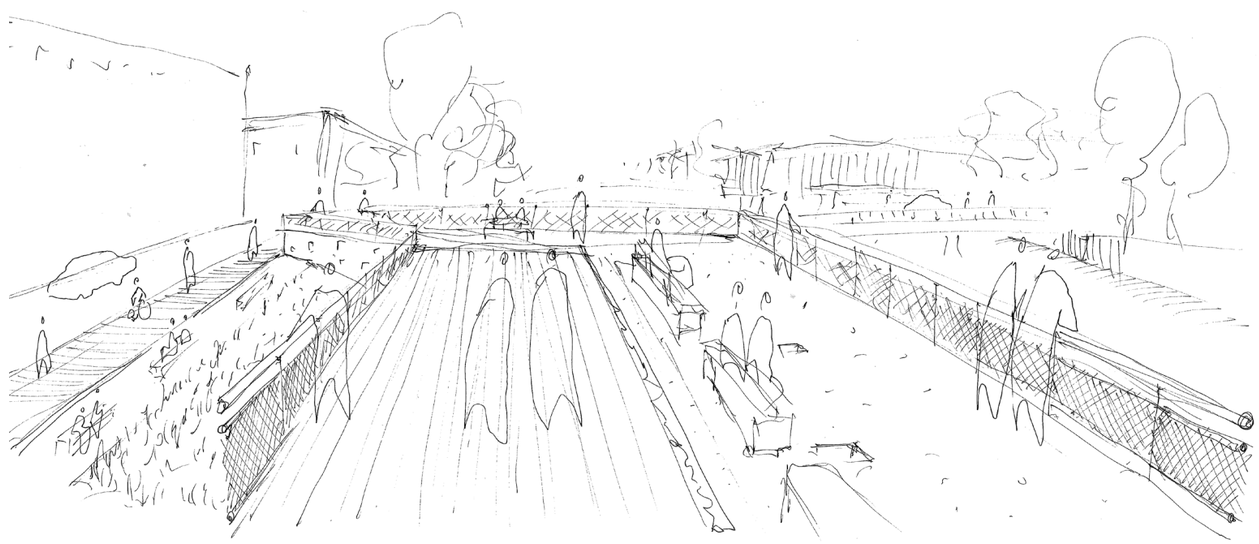
Perspective view along walk next to the Mediatheque towards the north



Perspective view along walk next to the River Square towards the north

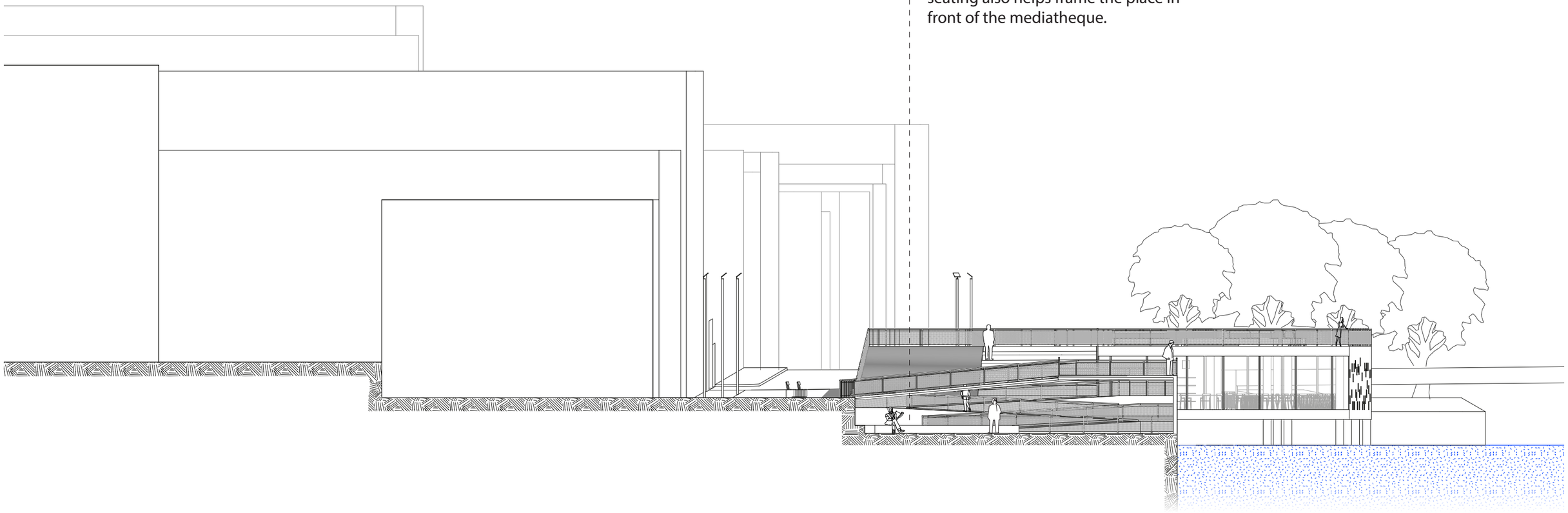


Perspective view along walk next to the Central Square towards the north and the restaurant



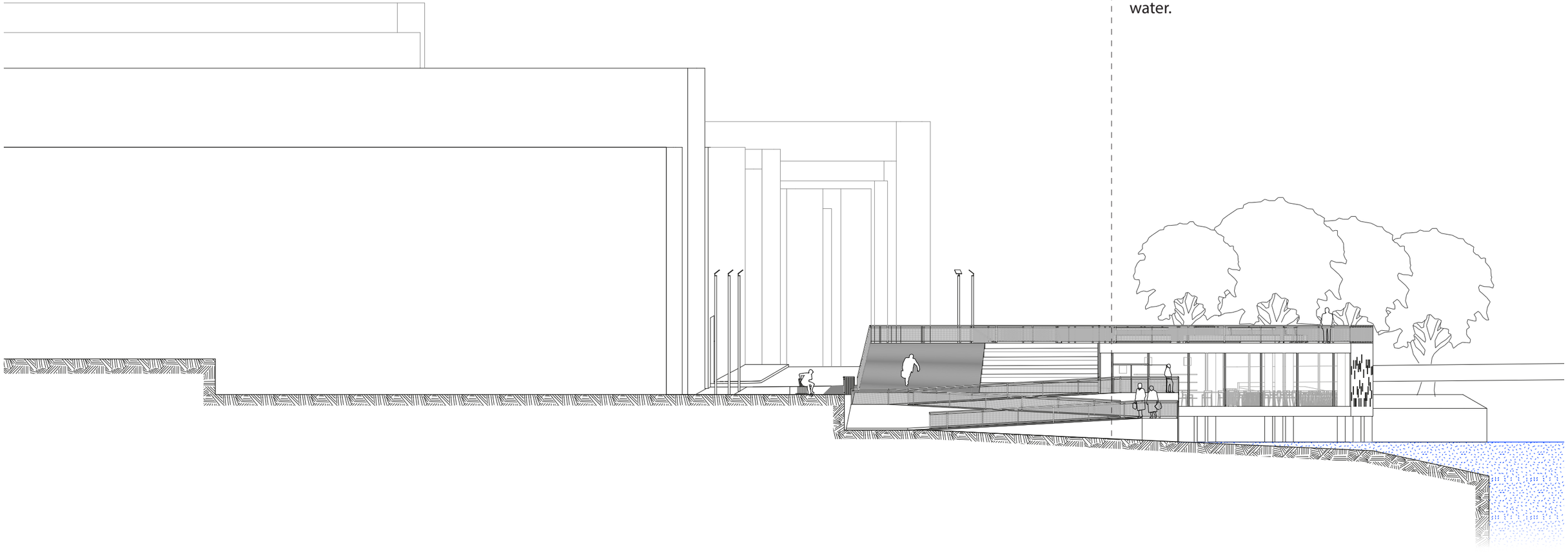
Perspective view along walk on Restaurant viewpoint (restaurant roof) towards north

The pathway/bridge to the roof of mediatheque is connecting to the ground with a low height. To avoid people to bumping their heads the way under is blocked by seating. This seating also helps frame the place in front of the mediatheque.



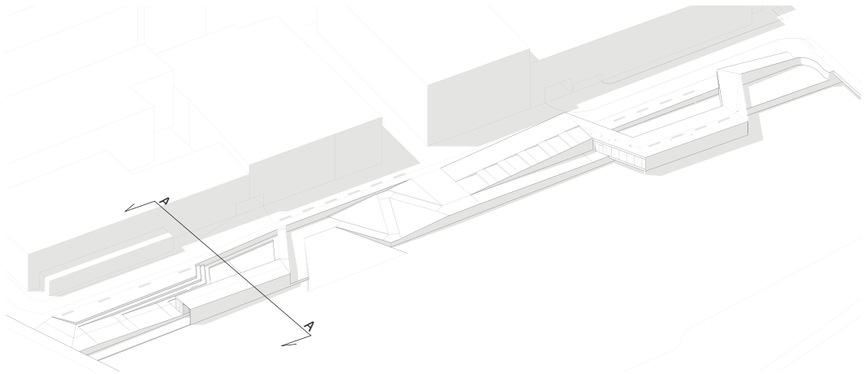
Section A-A 1/200

The concrete surface on the water square has been sandblasted, exposing the red granite aggregates. This works as a warning, both visually and in texture. The concrete is more sandblasted the closer you get to the water.



Section B-B 1/200

Interior/exterior zoom



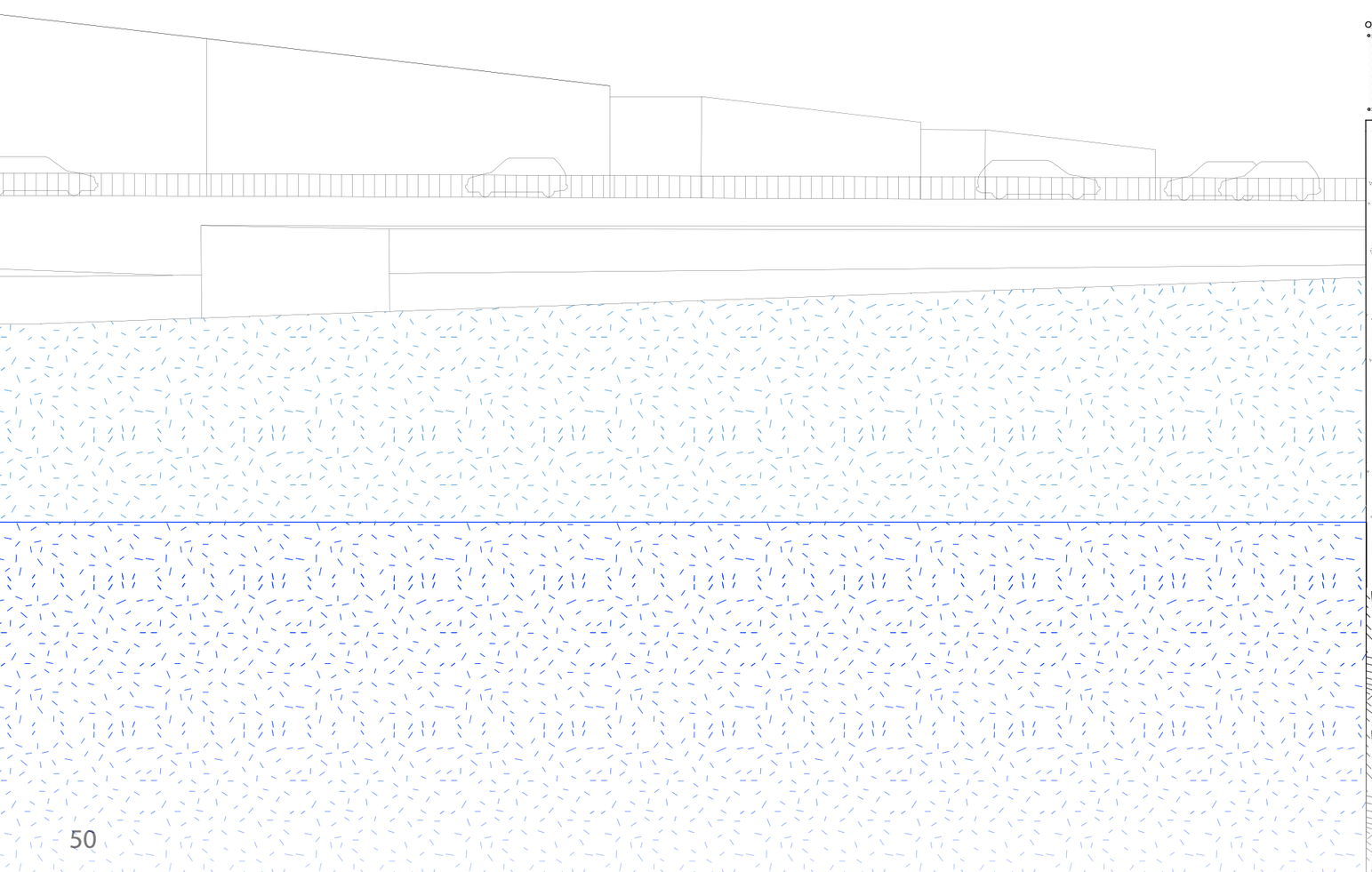
Timber boards on walk to connect to other waterfront projects. Placed perpendicular to walking direction to create good surface for people using wheelchair.

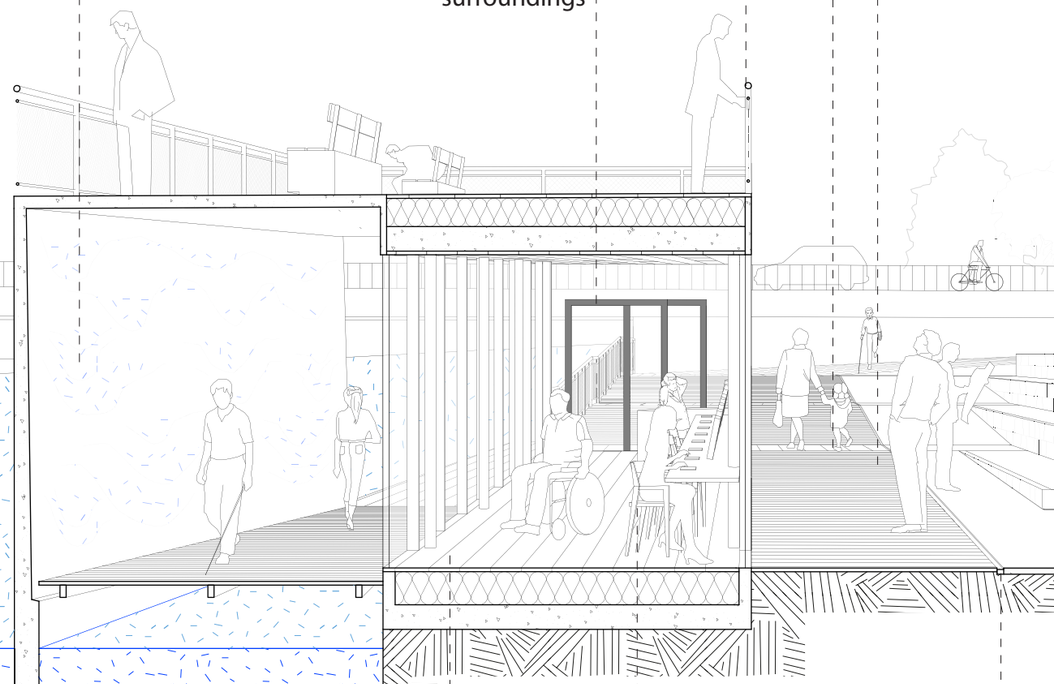
View of river blocked- instead hearing and touching it.

To mark the resting planes on the timber deck the boards are placed parallel to the walking direction.

Protective railing with mesh to keep visual connection.

Door clearly marked by contrasting to surroundings





Walking and resting zone separated by stripe or granite between the wood boards and concrete.

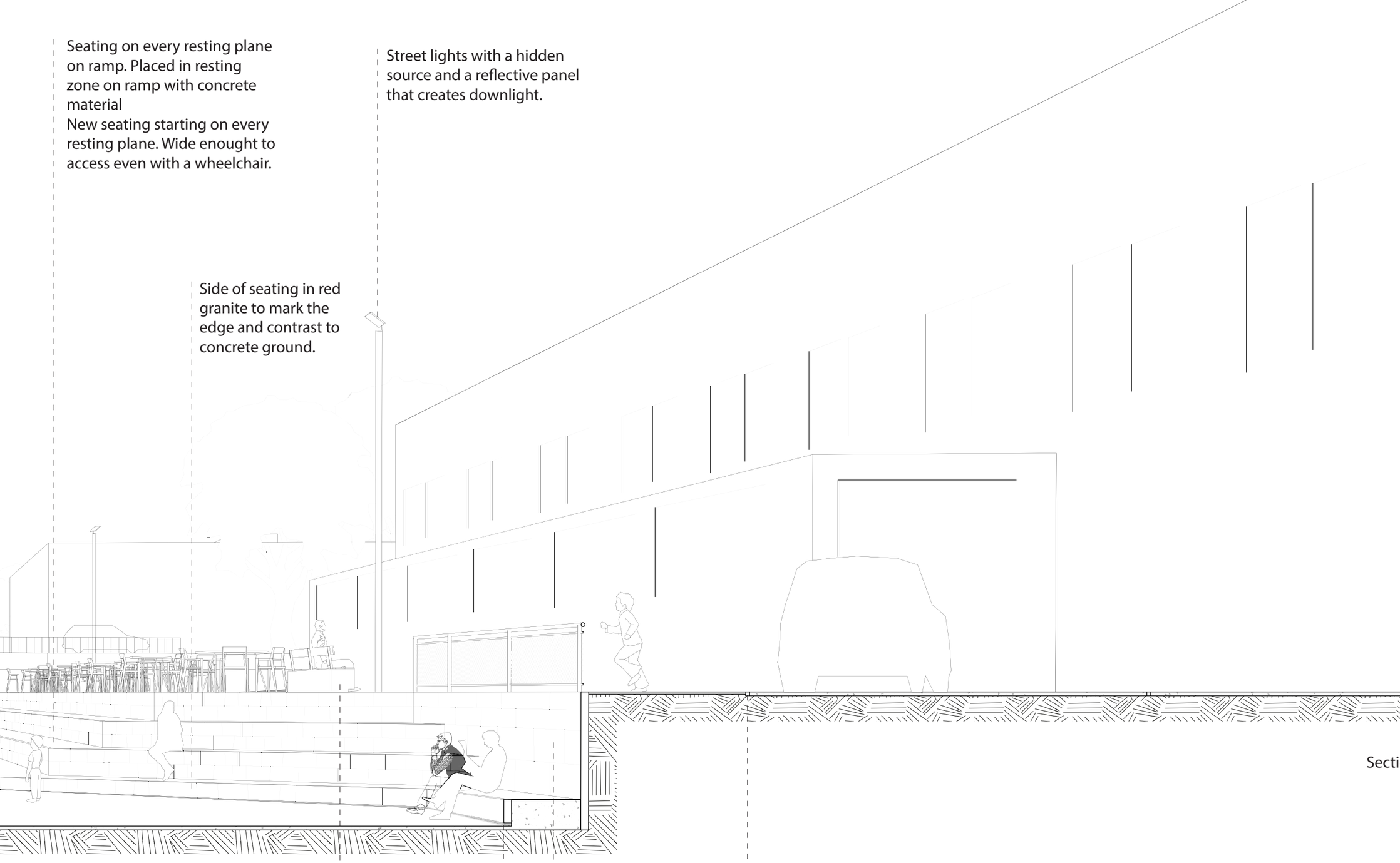
White painted wood boards as material on floor and ceiling to absorb background noise and reduce reverberation.

Cork and wood on furnishing to absorb sound and reduce noise when being moved on the floor.

Seating on every resting plane on ramp. Placed in resting zone on ramp with concrete material
New seating starting on every resting plane. Wide enought to access even with a wheelchair.

Street lights with a hidden source and a reflective panel that creates downlight.

Side of seating in red granite to mark the edge and contrast to concrete ground.



Lights placed in between the ground and walls and seating to give light and mark the edges when it is dark. Also placed on the underside of the railings.

Red granite wall to contrast with the concrete material on the ground.

Car trafficed street in asphalt material and granite separating it from timber deck promenade.

Section perspective A-A 1/50

Metal railing with mesh
to keep visual contact.

Section perspective B-B 1/50

Timber boards on
walking zone. Placed
perpendicular to
walking direction.

Contrete material
on gound in the
resting zone.

Red granite between
walking zone and street
to mark the differece.

Red granite wall to
contrast with the
concrete material on
the ground.

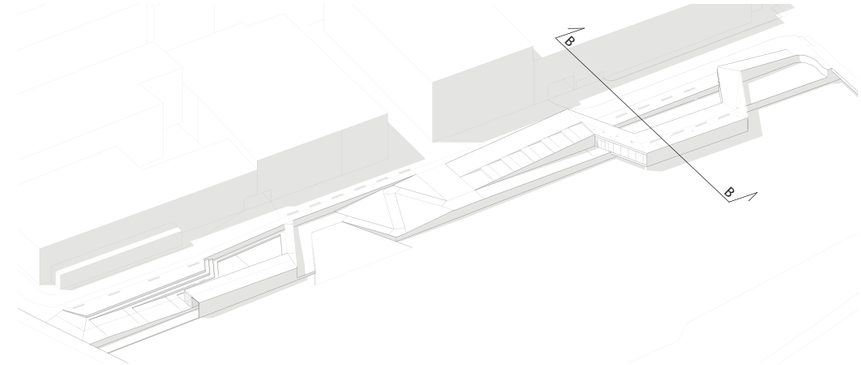
Restaurant terrace/court
you can see but only
reach via the building

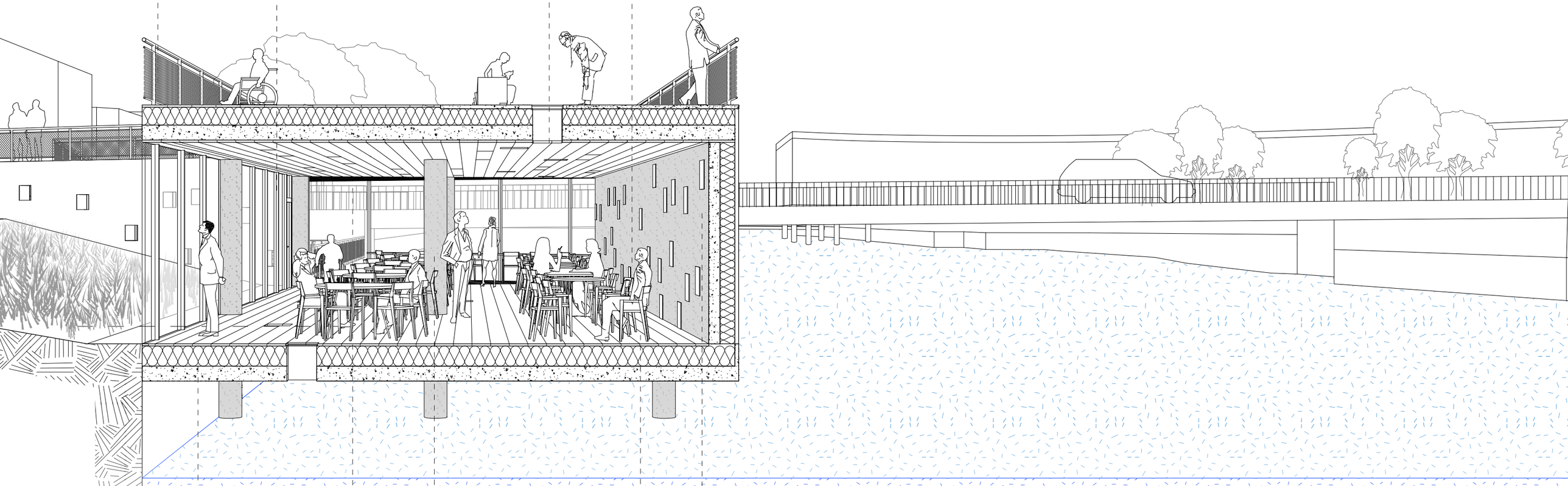
Lights on the underside of the railing to give an even lighting and mark the edge when it is dark. Lightsource is hidden.

Hidden lightsources integrated in the ceiling giving even lightnig inside.

Openings in ceiling/roof terrace are placed in the resting zones to not be disturbing when people are walking.

Walls in concrete to create a contrast with the ceiling and floor in wood.





Space for moving wide enough to go with wheelchair or two two deaf people talking sign to eachother.

Floor and ceiling in white painted wood material that are reducing background noise.

Columns contrasting to the surroundings to be visible for visually impaired people.

Furnishing in wood and cork that are sound absorbing. The materials are in their natural colors to contrast with the floor and walls.

Elements in the design based on seeing but not hearing. By making small square windows in the walls, floor and ceilingyour view is focused at certain point exterior of the building.

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