Street Typology Manual for Riga

RĪGA

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Credits

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About the Street Typology Manual for Riga

The Street Typology Manual is a practical tool intended to establish a unified quality standard for the development of Riga's streets, thereby promoting a sustainable modal split and supporting the city's strategic goals. The Manual compiles principles and techniques for creating a functionally balanced and modern street space in an accessible format.

The solutions included in the Manual are grounded in Latvian legislation for road design, traffic, and construction, the Riga Spatial Plan, and the Spatial Plan of the Historic Centre of Riga and its Protection Zone. They also incorporate internationally approved best practices. Design manuals from other cities, such as Oslo, London, and Prague, were used as examples, along with recognised publications like the Global Street Design Guide (GDCI & NACTO, 2016) and Cities for People (Gehl, J., 2010). This global experience has been adapted to Riga's context, taking into account the city's history, transport system, legal framework, and traffic characteristics.

It can be expected that over time the understanding of how streets function will continue to evolve alongside innovations in construction technology and regulatory frameworks. Therefore, the Street Typology Manual for Riga is intended as a *living* document: regularly reviewed and updated to ensure that it reflects practical insights, legislative changes, and technological innovations. Future editions will expand the Manual to include design principles for street paving and accessibility features.

Who is the Manual intended for?

The Street Typology Manual is made for everyone involved in street development at any stage of the process: analysis, planning, design, construction, or maintenance. The Manual will be useful for anyone who is responsible for commissioning and overseeing street projects, such as municipal employees and property developers. It will serve as a daily resource for streetscape designers, including road engineers, landscape architects, architects, and urban planners. For the wider public, the Manual will serve as an informational and educational resource.

Navigating the Manual

The Manual identifies the most common street types in Riga, organises them into a hierarchical system, and offers model solutions based on street dimensions, traffic intensity, and urban activity. Streets that do not fit into any defined type — such as those in the Old Town or along the Daugava River — are defined as exceptions. While the Manual's methods can be applied, their design requires a deeper analysis of the specific situation and may necessitate developing alternative or unconventional solutions.

Chapter A of the Manual compiles comprehensive principles derived from Riga's long-term planning documents and internationally recognised best practices. These define the desired quality of the urban environment and the role of streets in shaping it.

Chapter B outlines the spatial parameters required for various street users, defining minimum and optimal dimensions for different parts of the street space.

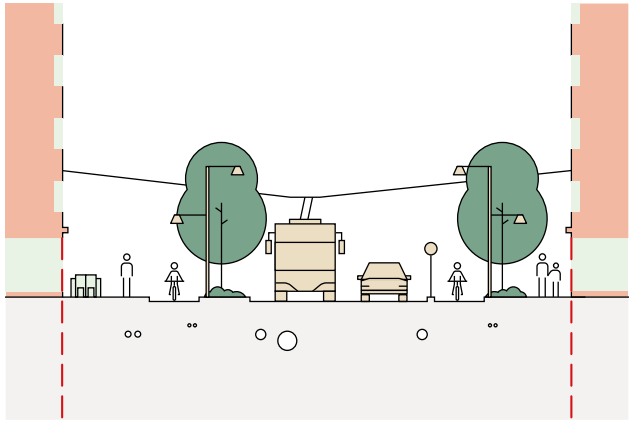
Chapter C defines the street types of Riga and organises these in a matrix according to key characteristics: traffic intensity and urban activity. This system forms the foundation of the Manual's structure. Examples of cross-sections are provided for each type, indicating recommended arrangements and dimensions.

Finally, Chapter D suggests street paving materials for different parts of the city, while Chapter E compiles useful sources of information for street design.

It is important to note that the Manual presents general conditions and recommendations for street design. It does not examine the specific location, geometry, or traffic characteristics of every street in Riga. The specific conditions of each street must be evaluated when creating the design brief and carefully analysed during the design process to find the most suitable solution. Due to various physical constraints, not all measures in the Manual will be fully applicable to existing streets.

While the architecture of the buildings surrounding a street significantly impacts its streetscape, the Manual does not provide recommendations for architectural design. The focus of this publication is on creating a balanced, comfortable, safe, and functional street space.

The Manual is created for Riga, but many of the guidelines and methods included are universal, making them suitable for use in other cities in Latvia and globally. However, it is always essential to delve into the local context and assess which solutions are most appropriate for each location.



What is a street?

In the context of this Manual, a street is defined as a linear space between buildings in the city, encompassing not only carriageways designated for various vehicles but also pavements for pedestrians, planting, outdoor furniture, lighting, and underground utility infrastructure. Street space does not end at the so-called red lines* or property boundaries; it is also shaped by the facades of buildings and the functions present within.

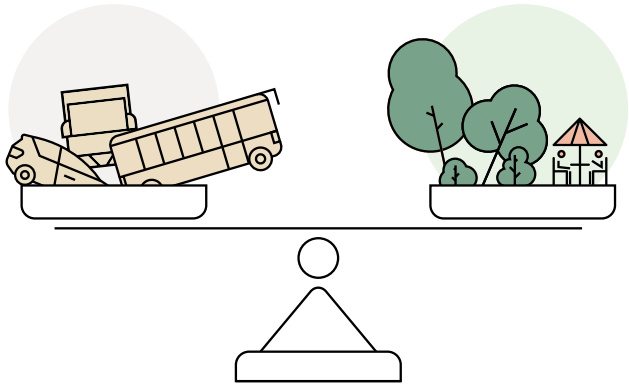
**Red line or building line — a line which delimits the area necessary for the building of a street or access road (also corridors of utility networks) in which the right to use immovable property is restricted. Building lines in Riga are defined by the municipality in its long-term planning documents.*

A balanced approach to street design

Historically, street parameters have been dictated by hygiene, military defense, and aesthetic considerations. Since the 1920s — when motorised vehicles became increasingly accessible worldwide and modernist ideas spread — the focus in street design shifted decisively toward vehicular traffic. Urban development tailored to the movement of cars peaked after World War II, transforming historical neighborhoods beyond recognition and leading to the construction of entirely new urban areas.

Within just a few decades, it became evident that cars and highways not only provide freedom of movement but also have a significant negative impact on other aspects of urban life and the surrounding environment. By the late 20th century, urban planning began to shift back toward the belief that creating public outdoor spaces is as important as organising traffic in the streets.

Over time, the understanding of priority distribution among road users has also evolved. Pedestrians and cyclists are now positioned at the top of the mobility hierarchy as the most vulnerable and least polluting street users. The ranking *pedestrian–cyclist–public transport–private transport–freight transport* is also established in the Sustainable Development Strategy of Riga Until 2030.



Changing the perspective in street design to equally emphasise aspects of traffic and public outdoor space, while rearranging the hierarchy of road users, brings significant benefits: a more diverse mobility, greater safety for all street users, a cleaner environment, more active local businesses, a stronger local character, a healthier community and an overall increase in residents' well-being.

The Street Design Manual for Riga therefore advocates for a balanced approach to street design and suggests making decisions by evaluating two key parameters: traffic intensity and urban activity. The level of traffic intensity depends on the street's role in the city's transport system and its traffic capacity, while the level of urban activity is influenced by the functionality and typology of buildings along the street and the associated pedestrian flow. Based on these two factors, a typology of Riga's streets has been established. The structure of the Street Type Matrix is explained in Chapter C of the Manual.

This approach does not mean homogenising all streets, nor does it require abandoning private transport or expecting all Riga residents to switch to bicycles. On the contrary, this new system takes into account the different roles of streets and helps create a clear street hierarchy in the city, achieving a fairer balance between the needs of various street users.

Creating streets with an expanded range of evaluable and design parameters also means involving a more diverse group of specialists. Alongside road and utility network engineers, public outdoor space design specialists — such as landscape architects and urban designers — must also

be included in street design teams. Better street design is only possible through interdisciplinary collaboration that combines the expertise of different professions. The Manual will help representatives from various disciplines involved in street design better understand one another. It is essential to initiate collaboration early in the project stage, as public outdoor spaces and street traffic are inextricably linked.

Collaboration and balancing of interests are crucial in a broader context among all parties involved in street development. Street areas in Riga are mostly owned by the municipality and fall under the responsibility of various municipal departments. The Department of Public Space and Mobility plays a leading role in the design, construction, and maintenance of streets. The City Development Department implements mobility planning, monitors compliance with building regulations for construction projects, and sets requirements for urban quality. Utility service providers are responsible for the city's supply elements within the underground street space, while the company Rīgas Satiksme manages and maintains public transport infrastructure. Occasionally, private-sector companies, such as developers of residential, commercial, and other types of properties,also plan, design, and construct streets. In the last decade, various non-governmental organisations have actively participated in decision-making regarding Riga's streets, and the contributions of property owners, businesses, and residents have always been significant in shaping the street environment.

We all use streets and understand that they can function effectively only if all street users respect each other and adhere to traffic rules. In the street design process, it is essential to listen respectfully to others' considerations, keeping our shared goal in mind — a comfortable, safe, and attractive Riga.

PRINCIPLES OF STREET DESIGN

A

Streets and their many roles

Although a street is most commonly defined as a space for vehicular traffic, it also plays a significant role in other areas of life, including commerce, public health, environmental sustainability, and culture. The significance of each street varies; it depends on its location within the urban street network and green structure, the functionality of the surrounding buildings, and other factors. Even different segments of the same street can have very different characteristics. When considering street improvements, it is essential to keep these factors in mind and evaluate which role of the street is dominant, needs strengthening, or, conversely, requires limitations.

Mobility

The street network is an essential component of a city's mobility system, facilitating the movement of people and goods on land. Effective mobility requires more than just an increase in the number of streets or the width of carriageways; these elements must be closely integrated with other forms of transport infrastructure. There should be a clear street hierarchy in the city, along with thoughtful traffic management. Multimodal streets with a balanced allocation of space among different modes of transport offer greater capacity and efficiency.

Economic activity

The ability to move quickly along streets enhances economic productivity, while sitting in traffic reduces valuable time for work and leisure. In the city centre and neighbourhood centres, streets with high commercial activity on the ground floor are particularly important — they facilitate the flow of goods and services, increase the value of surrounding real estate, and create a more vibrant urban environment. The development of shopping streets can be stimulated by creating high-quality public spaces that are enjoyable for pedestrians.

Cultural and historical value

The layout of streets and the surrounding architecture reveal the city’s history, while street paving materials, planting, and urban furniture add character to the urban environment. Streets in the Historic Centre of Riga and its Protection Zone, as well as the historic suburbs, possess exceptionally high cultural and historical value, which should be preserved while adapting the environment to meet modern needs. Certain streets in Riga, such as Brivibas Boulevard and 11th November Embankment, hold symbolic significance. Such streets must be designed with particular care, as they are vital to Riga's and Latvia's identity.

Environmental sustainability

Streets occupy a significant area of the city, creating their own microclimate and impacting the entire urban environment. Vehicular traffic contributes to environmental pollution and noise, while hard paving materials reduce rainwater absorption and elevate surface and air temperatures. These negative effects can be mitigated through tree and shrub planting, lighter and more permeable surfaces, and environmentally friendly vehicles. Streets also serve as green connections between urban parks, facilitating movement not only for people but also for other living beings.

Public health

Traffic on streets can influence people's health both positively and negatively. Active mobility, such as walking and cycling, provides the physical exercise individuals need, thereby improving health and extending life expectancy. Conversely, people's lives and health are threatened by traffic accidents, air pollution and noise generated by vehicles, and the sedentary lifestyle that results from relying solely on personal cars. Street design techniques can effectively reduce the risk of accidents and promote healthier mobility habits within the community.

Social interaction

Streets are where people naturally see and meet one another. They play a particularly significant social role in city and neighbourhood centres where pedestrian flows are highest and a range of services is readily available for shopping, entertainment, and culture. In smaller streets with residential buildings, neighbours gather, and children play together. A pedestrian-friendly environment and calm vehicle traffic enhance socialisation.

Urban infrastructure

Streets encompass not only above-ground but also underground and aerial spaces. The underground area is most commonly used for installing essential utilities, including water supply, electricity, sewage, and stormwater drainage, among other needs. The aerial space accommodates a public transport catenary system and lighting elements. Although existing underground and overhead structures often complicate the placement of all necessary above-ground street components, modern construction techniques allow for increasingly closer coexistence, particularly in newly constructed streets.

Street users — the Mobility Pyramid

In street space, pedestrians have the highest priority. This means that pedestrians' needs are paramount in any situation. Street design should ensure that pedestrians of all ages and abilities can move comfortably, safely, and enjoyably. This includes ensuring the continuity of pavements and universal accessibility, increasing the number of pedestrian crossings, and creating spaces for relaxation and socialisation.

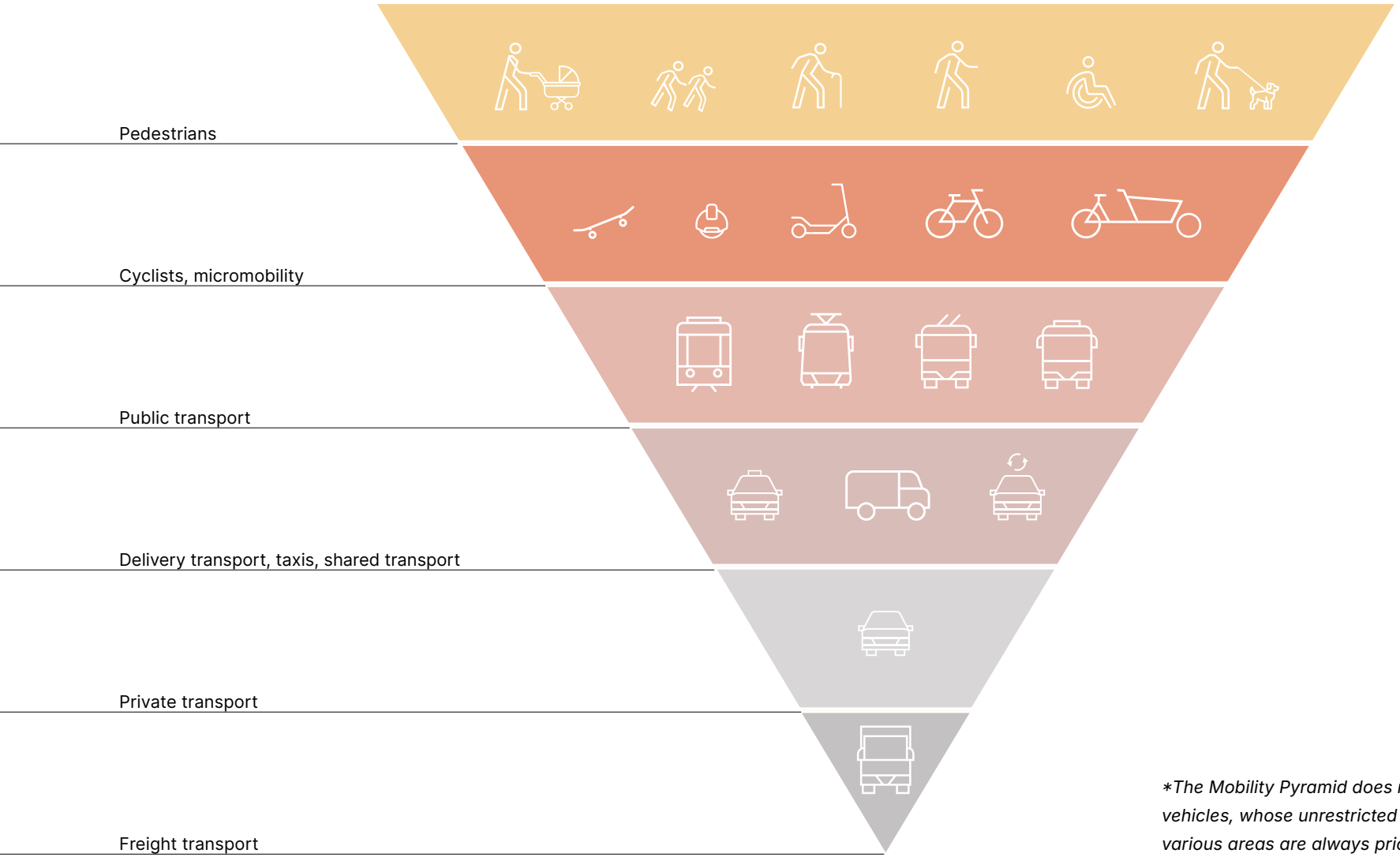
Cycle traffic and micromobility are environmentally friendly modes of transportation that help reduce motor vehicle traffic in the city. Street space should allocate a separate, safe area for these modes to ensure that they do not pose a threat to pedestrians and that motor vehicles do not endanger them. A continuous, integrated network of cycling infrastructure should be developed, and the number of bicycle and micromobility parking facilities should be increased.

Public transport is the backbone of the city's mobility system, as it has the highest capacity for passenger movement. In Riga, there is a need to improve the intermodality of public transport and create opportunities for movement separate from the flow of private vehicles. Attractive and accessible public transport stops should be installed, along with an easily understandable information system for users.

Delivery vehicles and taxis are particularly essential for business in the city, while shared services help optimise vehicle usage. These modes of transport are granted certain privileges, such as the ability to drive in public transport lanes and designated stopping areas. However, there can also be restrictions, such as access and parking allowed only during specific time periods.

The volume of private vehicle use exceeds the capacity of Riga's streets, hindering the development of a vibrant urban environment. Street design techniques should be employed to promote safer driving habits and increase the share of space needed for other street users and functions. Additionally, the use of alternative modes of transport, which hold a higher position in the mobility hierarchy, should be encouraged.

Large freight vehicle traffic cannot be effectively integrated with other street users in comfortable, safe, and attractive streets. A separate street infrastructure and routes tailored for freight transport should be developed to ensure efficient movement while mitigating its negative impact on the urban environment and more vulnerable street users.



∗The Mobility Pyramid does not include emergency vehicles, whose unrestricted movement and access to various areas are always prioritised.

Characteristics of a good street

How to tell a good street from a bad one and assess the need for improvements? This section compiles the most commonly recognised characteristics of a good street. These criteria will serve as reference points when analysing existing streets, redesigning them, and planning new streets.

Comfortable and safe

Each street function is allocated an appropriate space, separating different traffic flows. Sufficient visibility is provided for all road users. The street is well-lit to meet the needs of its various users and the scale of the space. Street design encourages courteous driving behaviour.

Multimodal

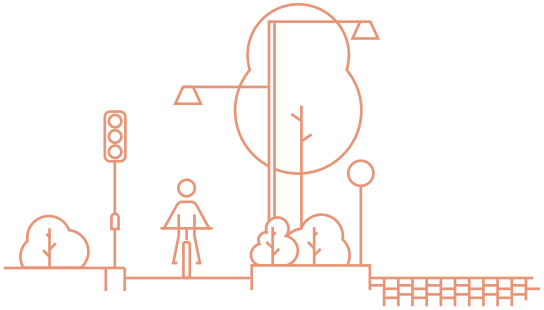
Street design provides opportunities for various participants to take part in traffic and encourages those who do not need to drive on a daily basis to choose alternative modes of transportation.

Accessible to everyone

The street's cross-section and surfaces facilitate easy and safe movement for individuals with limited mobility, seniors, and children. At regulated intersections, the allotted time for crossing the street is sufficient for pedestrians with varying abilities. Tactile guidelines and audible signals have been installed for individuals with visual impairments.

Intuitively understandable

The parts of the street designated for different road users are clearly recognisable due to their distinct design and placement within the street space. Traffic management elements are easily visible and perceivable. A unified street design system is employed throughout the city.



Visually appealing

The street is constructed from high-quality materials that harmonise with the surrounding buildings, creating a cohesive ensemble with planting and amenities. There is not an excessive amount of traffic management elements placed within the street. Public art installations and advertising elements may also be present on the street.

Not overly noisy

Traffic-generated noise is reduced by using surface types suited to vehicle speeds (and vice versa) and by incorporating planting zones. Special noise-reducing elements may be used on city highways.

With clean air

Traffic of polluting motor vehicles is limited, speeds are reduced, and congestion risk is managed through traffic flow control. Priority is given to public transport, cycle and micromobility traffic, and pedestrians. The street features abundant planting that absorbs pollution particles and produces oxygen.

Usable in all weather conditions

Materials and technologies that effectively manage and absorb rainwater, reflect solar heat, and reduce slipperiness have been utilised. Tree canopies provide shade and help regulate air temperature and humidity. Shelters from precipitation and wind are available for pedestrians at public transport stops and other locations.

Vibrant

Well-designed spaces have been created for pedestrians to rest and meet, along with designated parking areas for bicycles and micromobility devices. There is ample space for shops, restaurants, and cafés to set up outdoor tables. The street features public transport stops and areas for delivery vehicles and taxis to stop temporarily. Parking spaces are arranged alternately with planting, ensuring they do not obstruct pedestrians. In residential areas, children can play safely in the street.

Useful resources:

- Healthy Streets: *healthystreets.com*
- Global Designing Cities Initiative: *globaldesigningcities.org*

STREET GEOMETRY

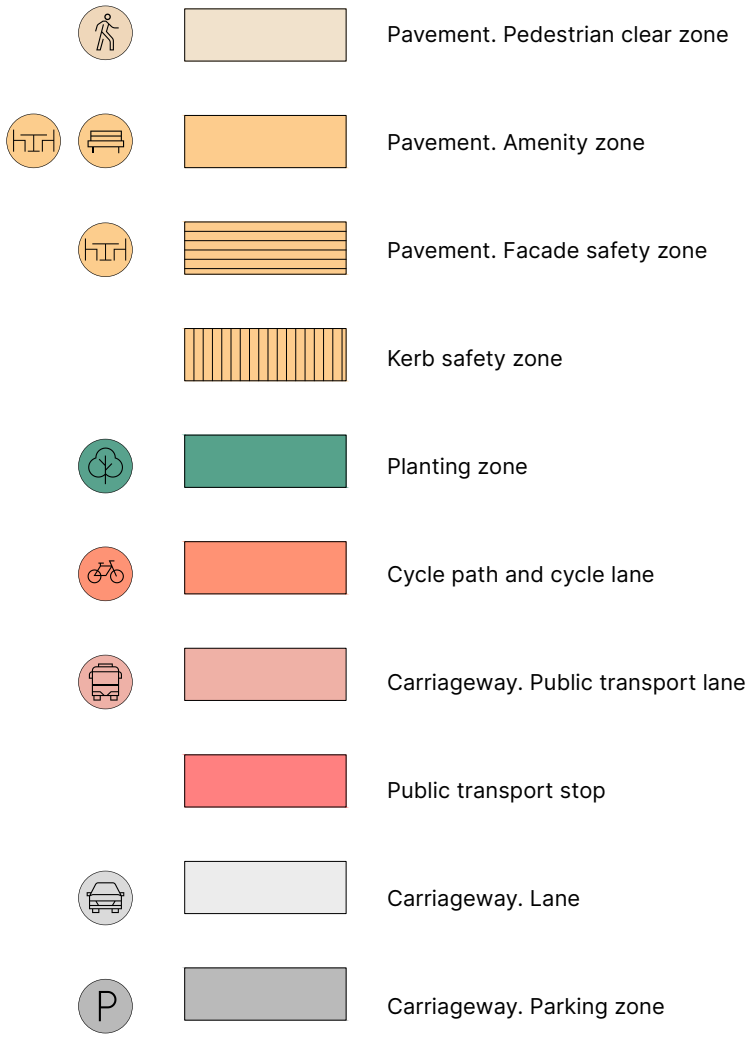
B

Divisions of street space

Street space comprises the areas required for its various users and functions, arranged in a specific order. Both the sizes of these zones and their placement are largely predefined, but there are also possibilities for variation within each.

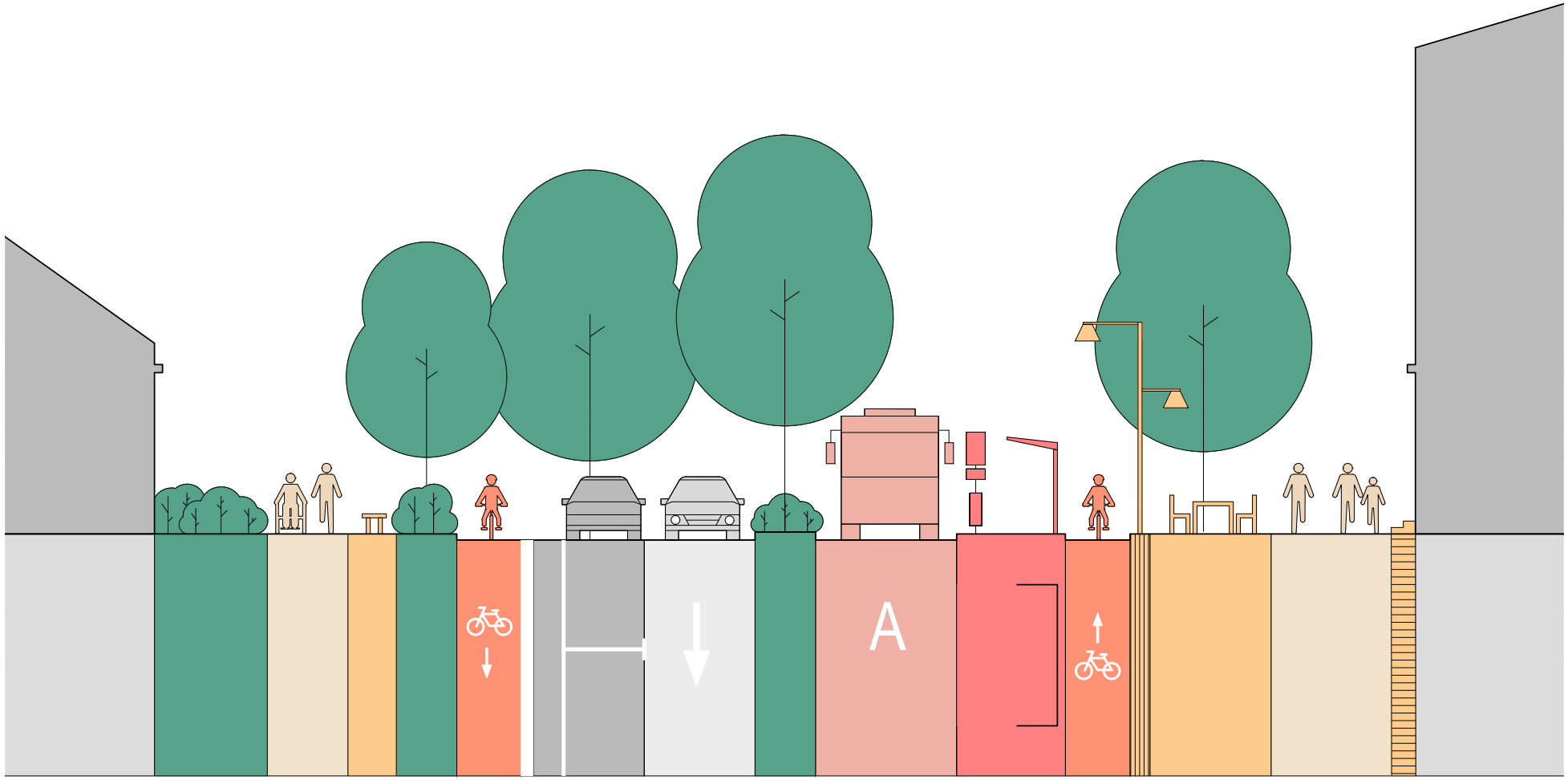
This chapter examines the components of street space and their uses, providing information on their minimum, recommended, and, in some cases, maximum dimensions, and illustrating the options available in various situations.

The colour and symbol system established in Chapter B has also been used in subsequent parts of the Manual to facilitate easier navigation through the drawings and their interpretation.



Abbreviations used in the chapter:

- RTIAN — Regulations on Land Use and Building in the Territory of Riga,
- LVS — Latvian Standards for road design.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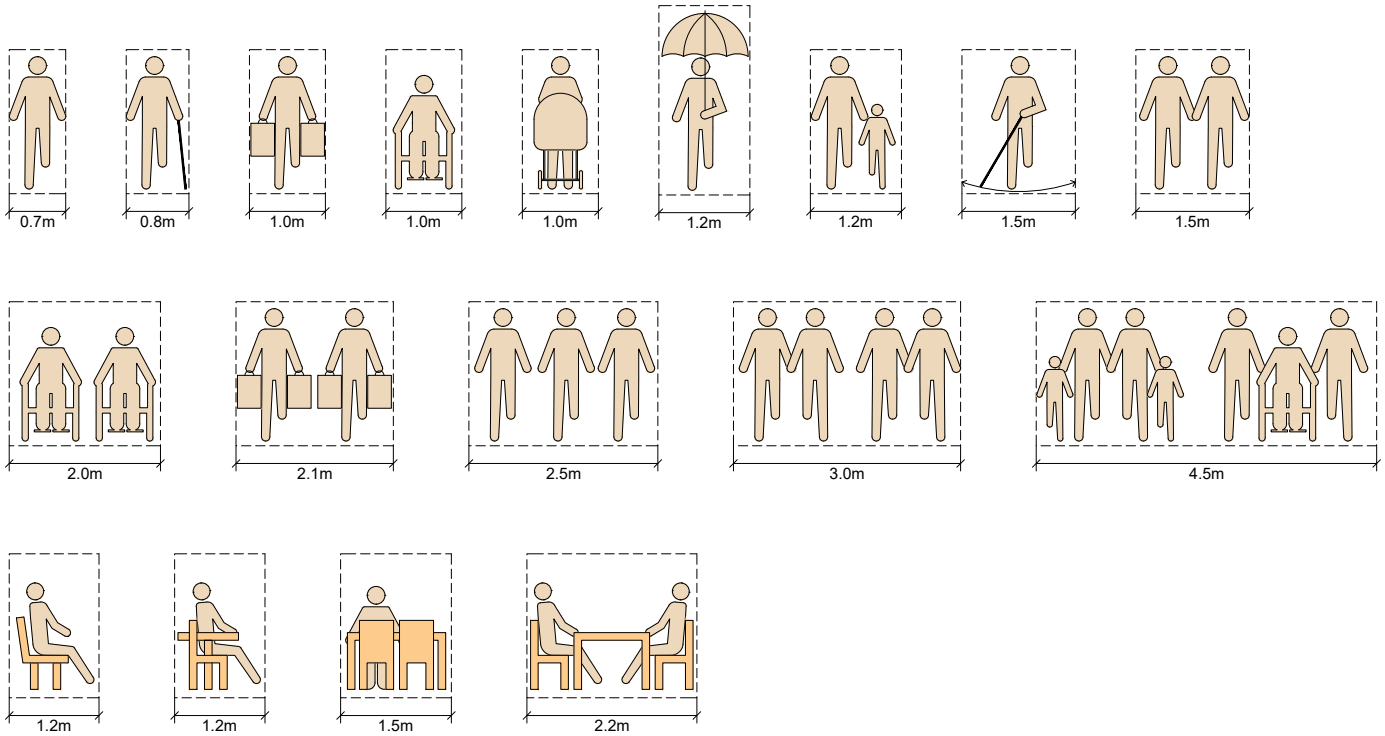
Street users and their dimensions

Pedestrians

• the area required for a human body is a fundamental unit of measurement for determining the sizes of pavement's clear zone and amenity zone.

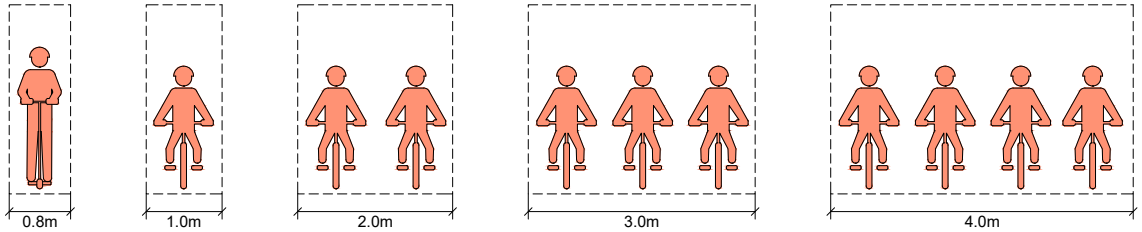
→ pages 24 and 28



Bicycle and micromobility users

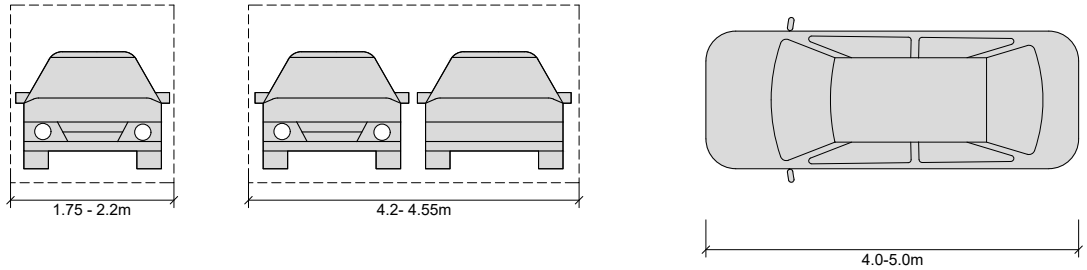
• the combined dimensions of a person and a bicycle or a micromobility device determine the parameters of cycle paths, cycle lanes, and cycle parking facilities.

→ pages 32 and 42



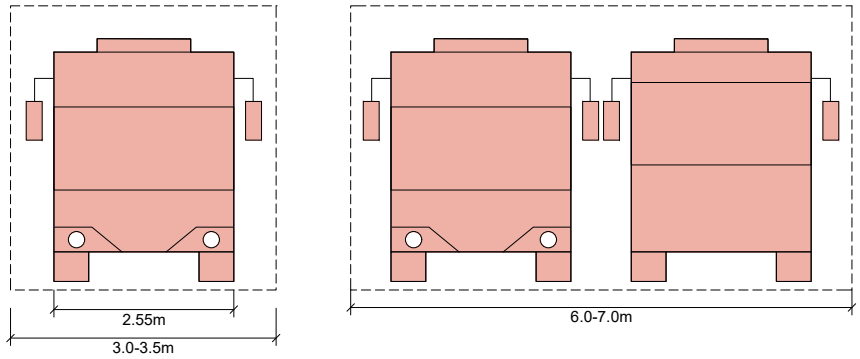
Motor vehicles

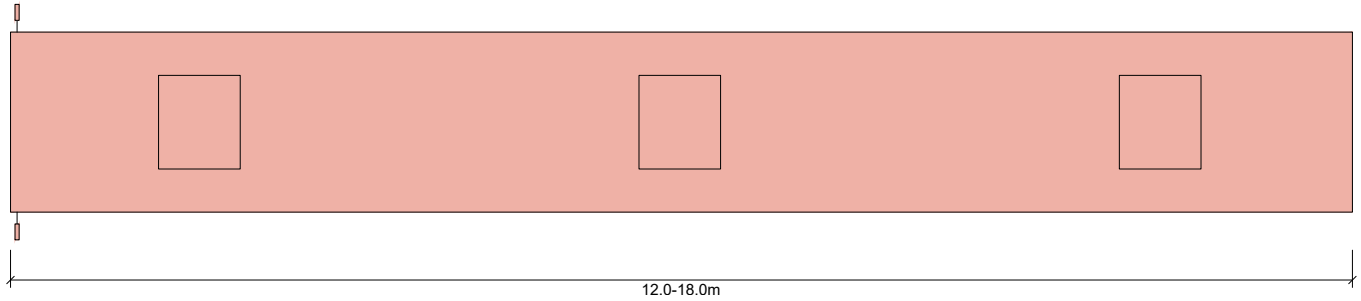
• the dimensions of passenger cars and their speed determine the width of lanes and the size of parking spaces.
→ pages 36 and 46



Public transport

• the dimensions of buses, trolleybuses, and trams, as well as their speed, determine the width of public transport lanes and the size of public transport stops.
→ pages 37 and 38

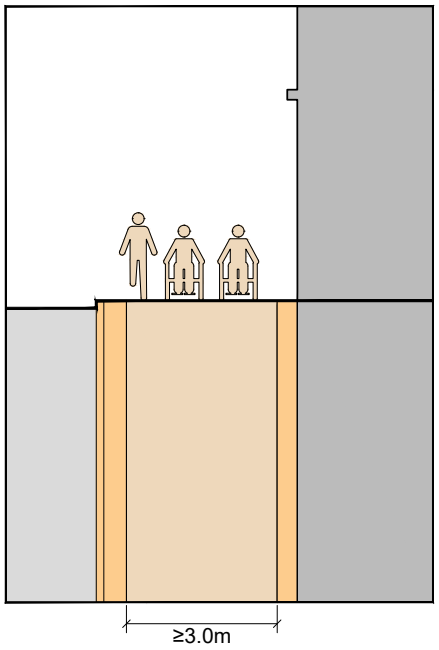




Useful resources:

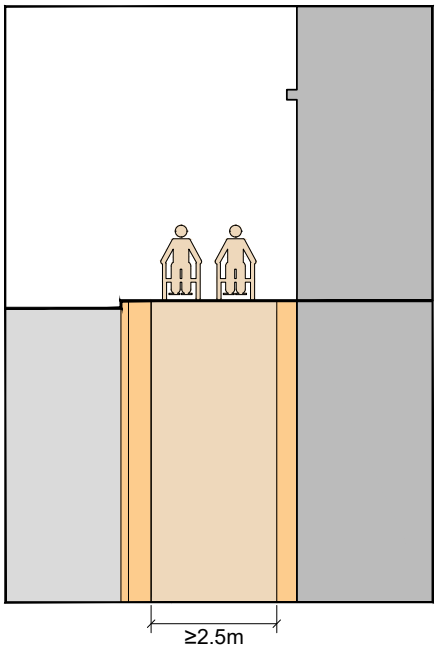
• Book: E.&P. Neufert, Architect's Data, 6th ed., Wiley–Blackwell, 2023;
• Latvian Standards for road design: *lvs.lv*

Pavement. Pedestrian clear zone



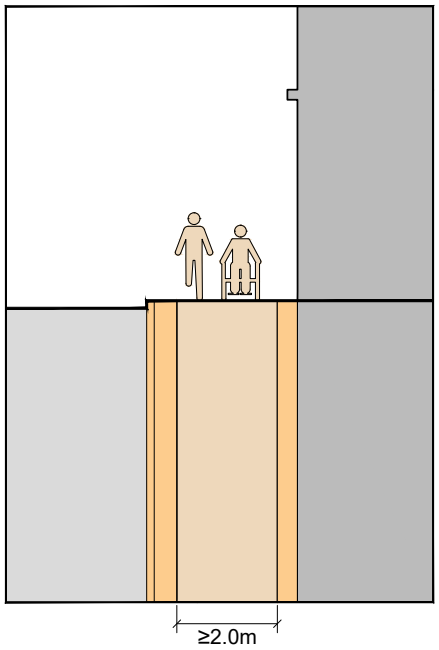
Wide pavement

• applicable to streets with medium and high urban activity;
• the clear zone must be free of traffic signs, lighting or catenary poles, equipment, and other obstacles;
• the width of the clear zone does not include safety zones and the kerb.



Medium width pavement

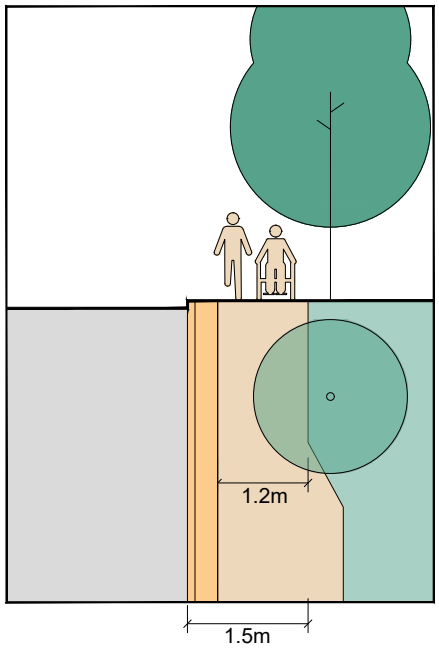
• applicable to streets with medium urban activity;
• the clear zone must be free of traffic signs, lighting or catenary poles, equipment, and other obstacles;
• the width of the clear zone does not include safety zones and the kerb.



Narrow pavement

• applicable to streets with low urban activity;
• the clear zone must be free of traffic signs, lighting or catenary poles, equipment, and other obstacles;
• the width of the clear zone does not include safety zones and the kerb.

**The minimum width of the clear zone as specified by RTIAN for newly constructed pavements is 1.8 m.*

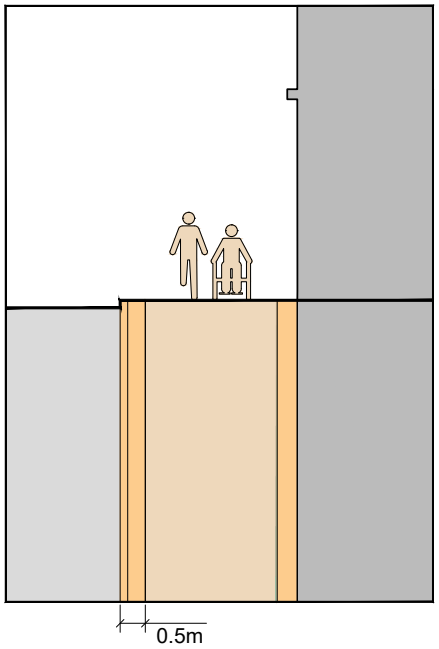


Minimum width pavement

• applicable to streets with low urban activity and/or existing obstacles;
• the clear zone must be free of traffic signs, lighting or catenary poles, equipment, and other obstacles;
• the width of the clear zone does not include safety zones and the kerb.

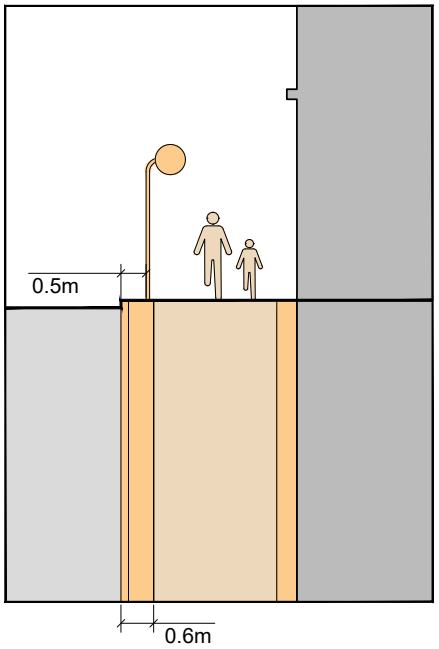
**The minimum width of the clear zone as specified by Cabinet of Ministers Regulation No. 240 is 1.2 m.*

Pavement. Safety zone



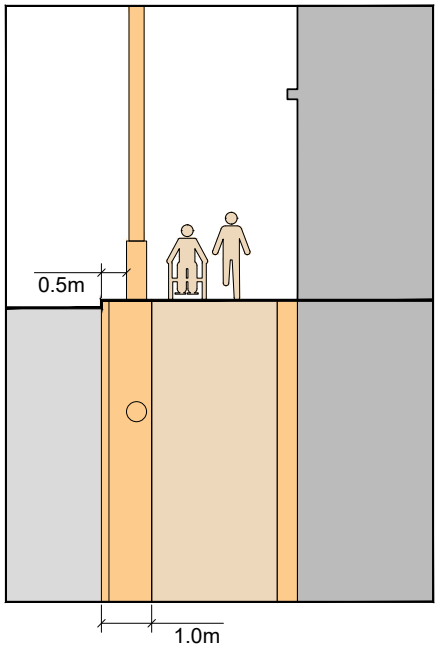
Kerb safety zone

• the safety zone provides a buffer between the pavement's clear zone and the carriageway, thereby protecting pedestrians;
• the safety zone is not included in the width of the clear zone;
• the safety zone includes the kerb;
• it is recommended to use a coarse surface for the safety zone, thereby creating a visual and tactile boundary.



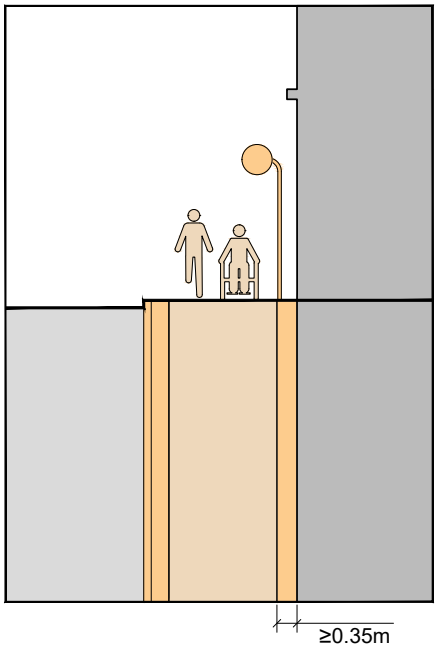
Kerb safety zone with traffic signs

• traffic signs should be placed 0.5 m away from the edge of the carriageway, thereby increasing the width of the safety zone to approximately 0.6 m.



Kerb safety zone with catenary poles

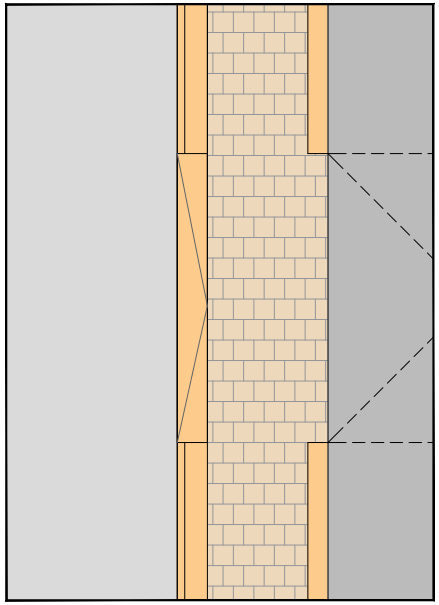
• lighting and catenary poles should be placed 0.5 m away from the edge of the carriageway, thereby increasing the width of the safety zone to approximately 1 m;
• as the diameter of the poles affects the width of the safety zone, it is recommended to either maintain a consistent width of the zone or to create localised widenings around the poles.



Facade safety zone

• in a perimeter urban block, a safety zone should also be established between the pavement's clear zone and the facades of buildings, as these may have various projections such as steps or basement hatches;
• the minimum width of the facade safety zone is 0.35 m, and it is preferable not to exceed a width of 1 m;
• in narrow streets, traffic signs can also be placed within the facade safety zone.

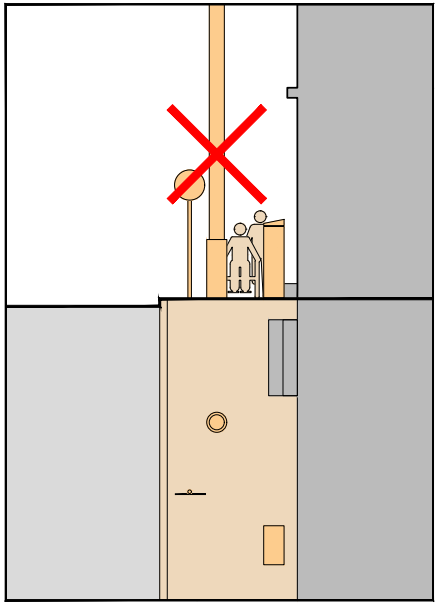
Pavement. Details



Pavement at a driveway

• in areas where the pavement is crossed by a driveway into a property, the pavement should be continuous and without changes in its surface material to ensure a comfortable and safe movement for pedestrians;

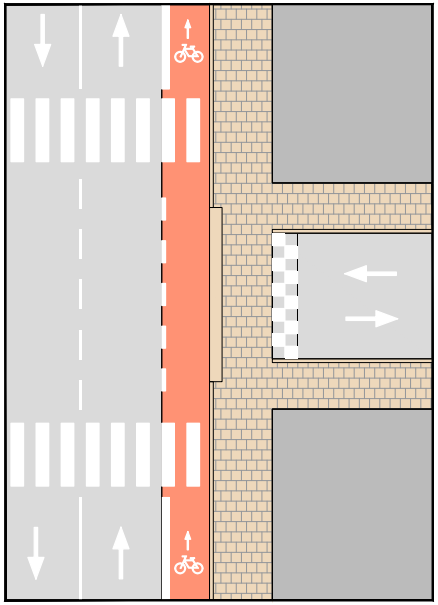
• it is not necessary to specially highlight the driveway with tactile guidelines or other means.



Pavement without obstacles

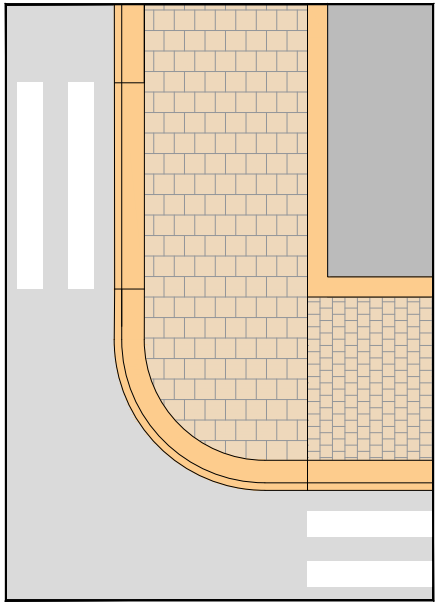
• traffic signs, lighting and catenary poles, and various equipment must not be placed in the pavement's clear zone, as it is designed for the unobstructed movement of pedestrians;

• these elements should be positioned within the safety, amenity or planting zones.



Pavement at intersections

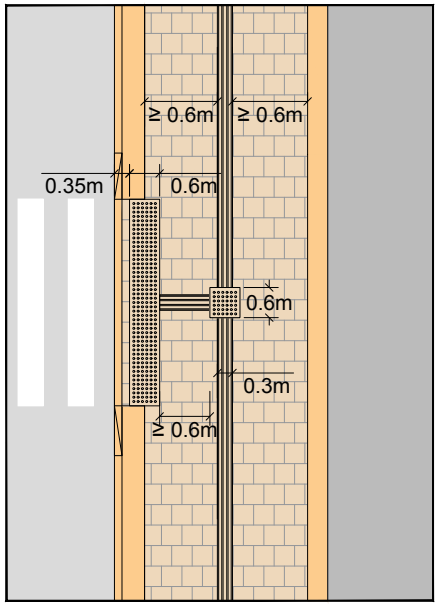
• at intersections with low traffic intensity streets (Category E), it is recommended to design continuous pavements, thereby calming the traffic and enhancing pedestrian safety.



Paving material connections

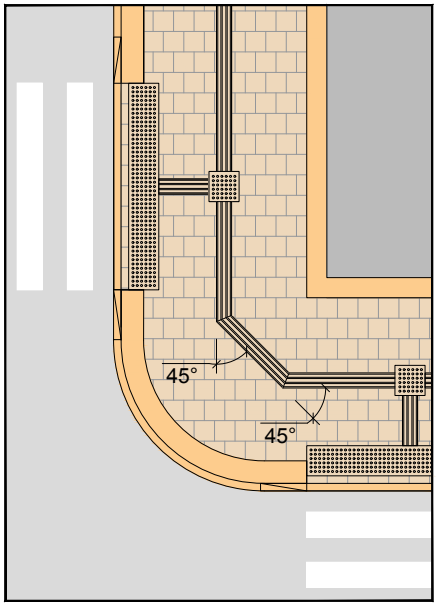
• connections between different paving materials should be made in straight lines, following the surrounding facades or other defining elements of the street space;

• at the connection points, the paving material or pattern of the higher category street (or more intensively used, with wider pavements) should be continued.



Tactile guidelines

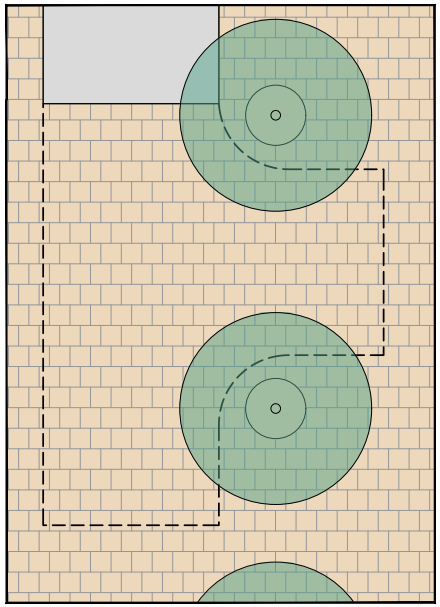
• pavements with a clear zone of at least 1.5 m should include tactile guidelines for visually impaired pedestrians;
• free space of at least 0.6 m must be left on each side of the tactile guideline;
• the tactile guideline is placed on that side of the pavement which has, or potentially may have, fewer obstacles (projections, amenities, seasonal outdoor cafes, etc.).



Tactile guidelines

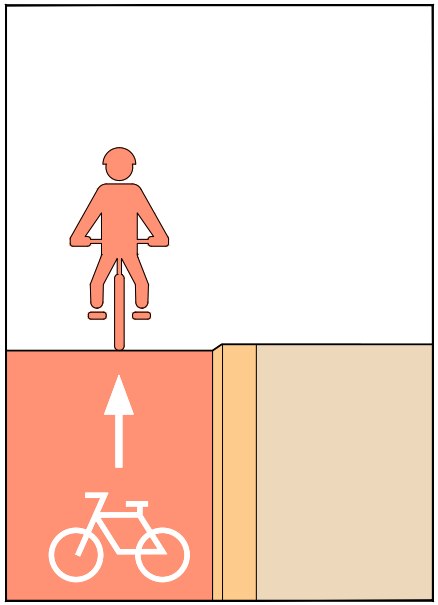
• turns in the guidelines should be made at a 45° angle or wider, and rounded trajectories can also be used;
• an intersection of the guidelines is marked with a warning surface — a square measuring 0.6 × 0.6 m (in narrow areas, 0.4 × 0.4 m is acceptable).

Materials for tactile paving → page 100



Turnaround

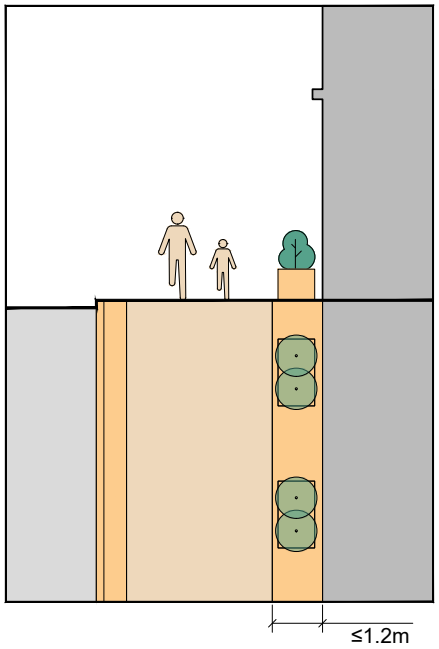
• a turnaround should be constructed at the end of a dead-end access road if it exceeds 50 m in length;
• to prevent the turnaround from being used as a parking space, it is advisable to use paving materials that visually resemble the pavement;
• the outline of the turnaround can be marked with a different material.



Pavement and cycle path

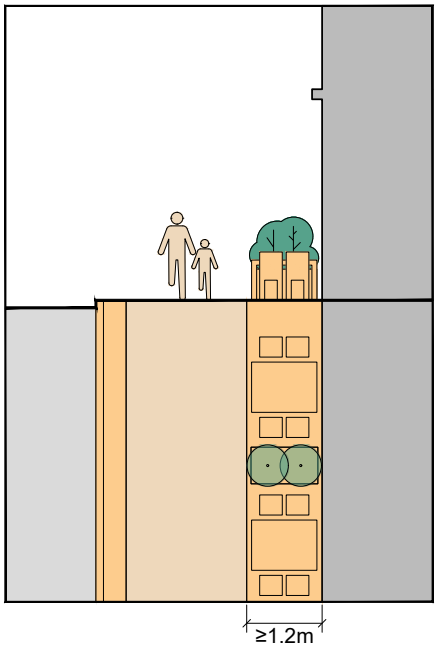
• a pavement and a cycle path should be separated by a small difference in elevation (2–5 cm) and a sloped kerb;
• additionally, different surface materials should be used for the pavement and cycle path;
• horizontal markings alone are not a safe and effective method for separating pedestrian and cyclist trajectories.

Amenity zone



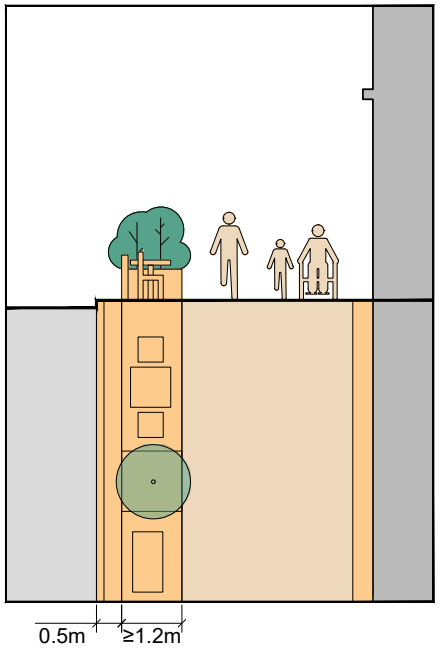
Narrow facade amenity zone

• the facade amenity zone is primarily used by property owners, businesses, and residents;
• if the facade amenity zone is narrower than 1.2 m, it is suitable only for placing plant containers and/or small objects;
• applicable to streets with perimeter urban blocks.



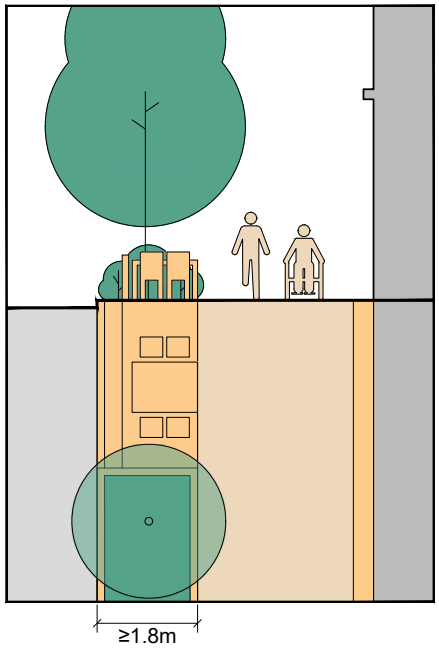
Wide facade amenity zone

• the facade amenity zone is primarily used by property owners, businesses, and residents;
• if the facade amenity zone is at least 1.2 m wide, it is suitable for placing benches and outdoor café tables;
• applicable to streets with perimeter urban blocks.



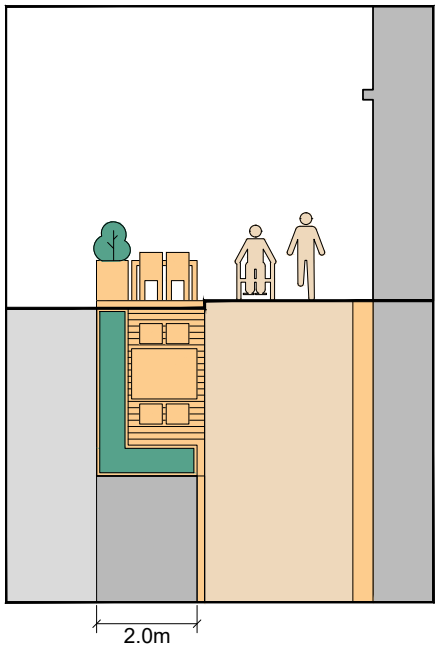
Amenity zone

• the amenity zone is used for placing urban furniture and/or commercial activities;
• the minimum width for placing benches and other street furniture is 1.2 m;
• when placing furniture, a 0.5 m wide safety zone must be left on the side of the carriageway, and minimum dimensions for a comfortable use must be taken into account (→ page 22).



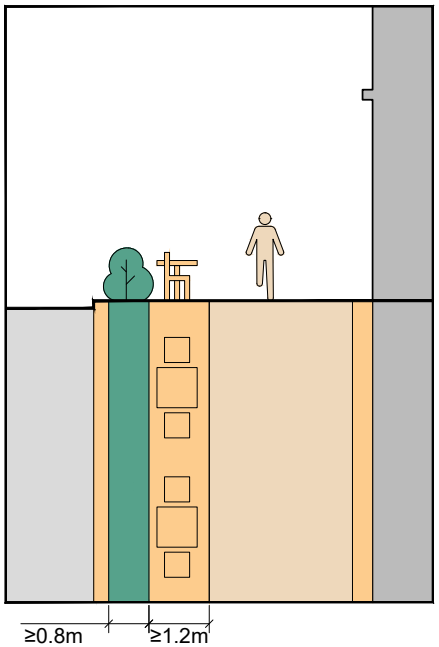
Amenity zone with planting

• if the amenity zone is at least 1.7m wide, it is recommended to also plant trees, merging several tree beds and placing them alternately with street furniture;
• street trees should be arranged rhythmically (with distances of 6–20 m between them) and supplemented with shrubs or other ground-cover plants.



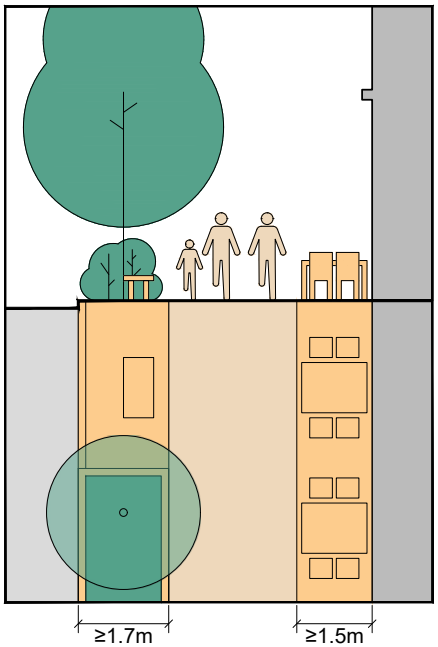
Amenities in a parking zone

• temporary amenities — parklets — can be created in parking zones;
• a parklet's floor should be level with the pavement to ensure accessibility;
• parklets can be designed to span one or multiple parallel, angled, or perpendicular parking spaces;
• planting containers should be placed around the perimeter of a parklet to create a barrier from the carriageway.



Amenity zone with planting

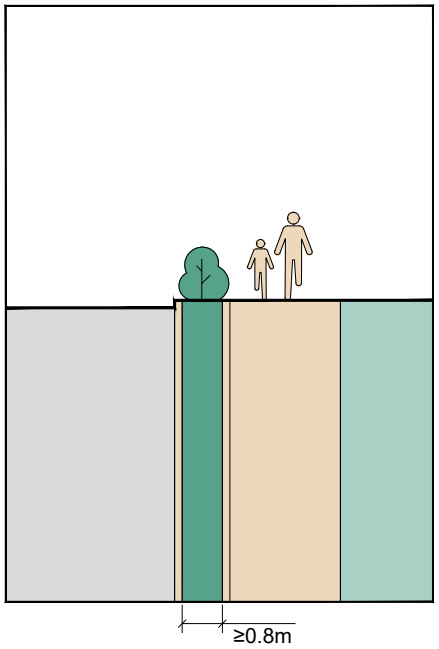
• it is advisable to separate the amenity zone from the carriageway with a planting strip if at least 0.8 m width can be allocated to it;
• the recommended height for plants is between 0.8 m and 1.4 m to create a barrier between the carriageway and the amenity zone.



Two amenity zones

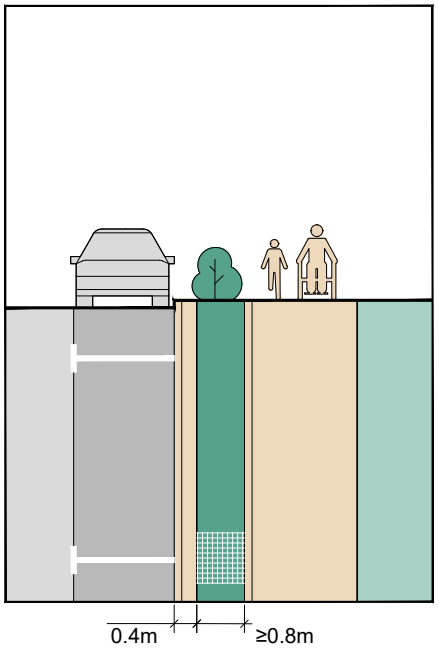
• in streets with wide pavements, it is possible to design amenity zones both at the kerb and along the facade;
• applicable to streets with medium to high urban activity.

Planting zone



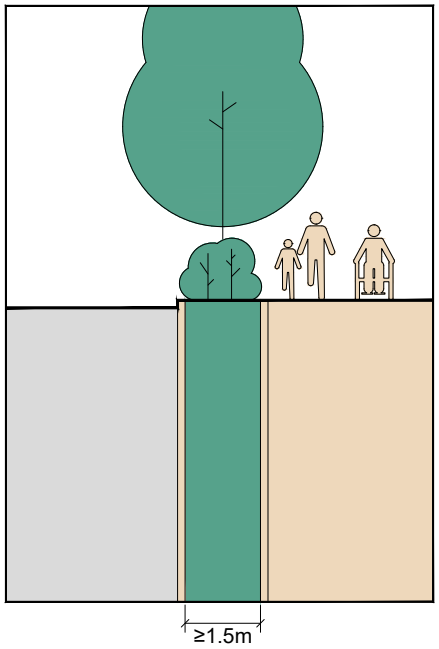
Planting zone along the carriageway

• the planting zone should be at least 0.8 m wide;
• the recommended height for plants is 0.8–1.4 m to create a barrier between the carriageway and the pavement;
• in case of existing constraints, the width of the planting zone can be reduced to 0.6 m.



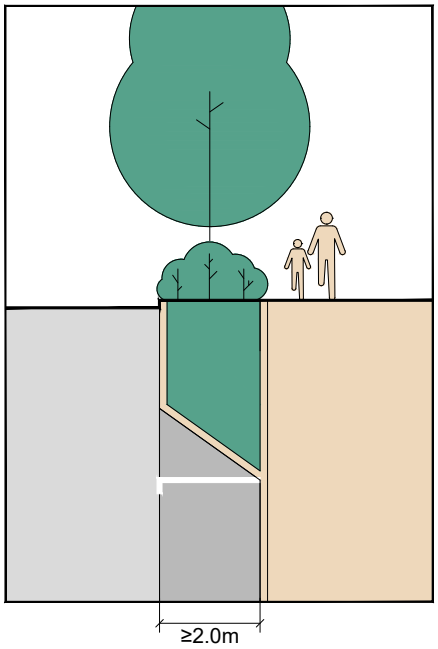
Planting zone next to a parking zone

• the planting zone should be located at least 0.4 m from the carriageway to avoid obstructing opening car doors;
• the planting zone should be at least 0.8 m wide;
• a connection to the pavement should be provided between every 3 parking spaces;
• the recommended height for plants is 0.8–1.4 m to create a barrier between the carriageway and the pavement.



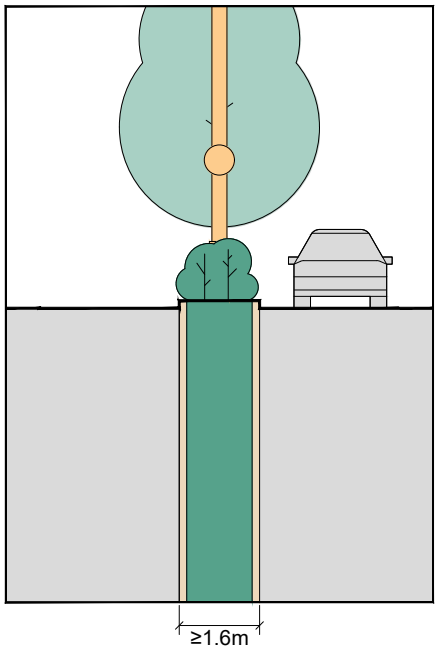
Planting zone with trees

• the planting zone should be at least 1.5 m wide;
• recommended distances between trees: ~ 6 m for small trees, ~ 12 m for medium-sized trees, and ~ 20 m for large trees;
• the minimum distance from a tree trunk to any adjacent obstacle (such as a pole, a fence, etc.) should be no less than 0.6 m;
• in addition to trees, shrubs and other ground-cover plants should be planted.



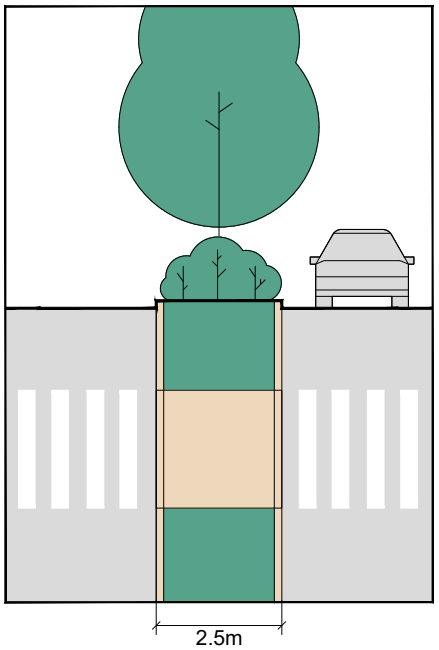
Planting zone with parking spaces

• each planting bed should be at least 2 × 2 m in size (measured by the shortest side if the shape is not rectangular);
• planting beds should be placed between every 2–5 parking spaces;
• in addition to trees, shrubs and other ground-cover plants should be planted.



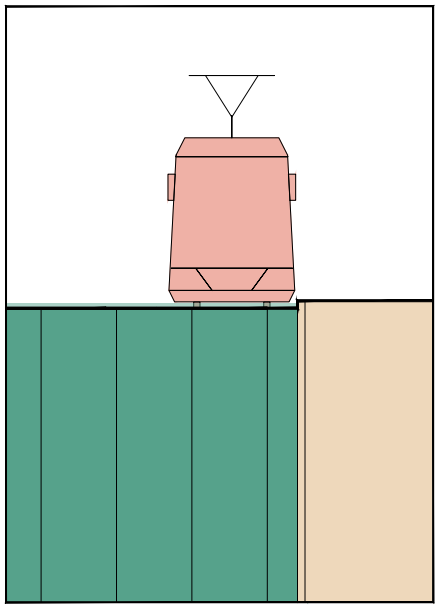
Median

• shrubs and other ground cover plants should be used if a width of at least 0.8 m is available;
• if traffic signs and catenary or lighting poles are placed on the median, its minimum width is 1.6 m;
• if the median is at least 1.5 m wide, trees should also be planted.



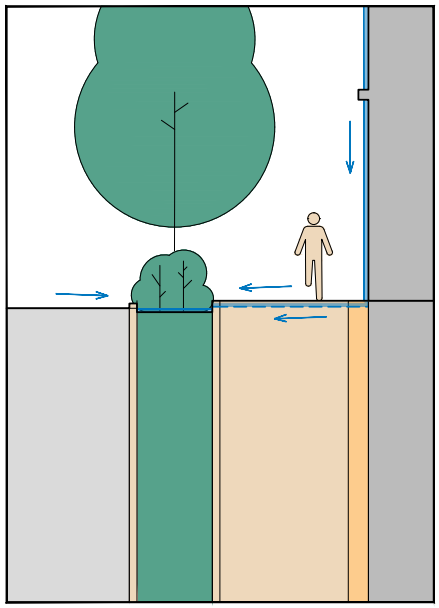
Median with a pedestrian refuge

• the minimum width of the pedestrian refuge is 2.5 m;
• the height of the plants near a pedestrian crossing should be designed to ensure good visibility for all road users.



Ground cover on tram tracks

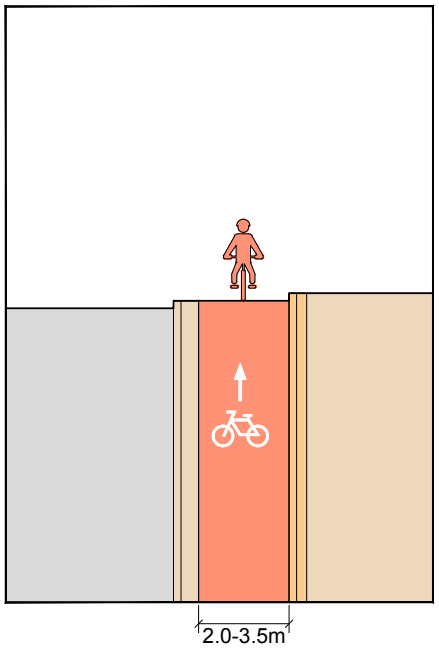
• it is recommended to include ground cover suitable for Latvia's climatic conditions, such as stonecrops (*sedum spp.*), on tram tracks if they are separated from the carriageway and not used by other forms of public transport.



Planting zone and rainwater drainage

• it is recommended to position the planting zone lower than the surfaces of carriageway and pavement and to design it with discontinuous kerbs to channel rainwater into the planting beds.

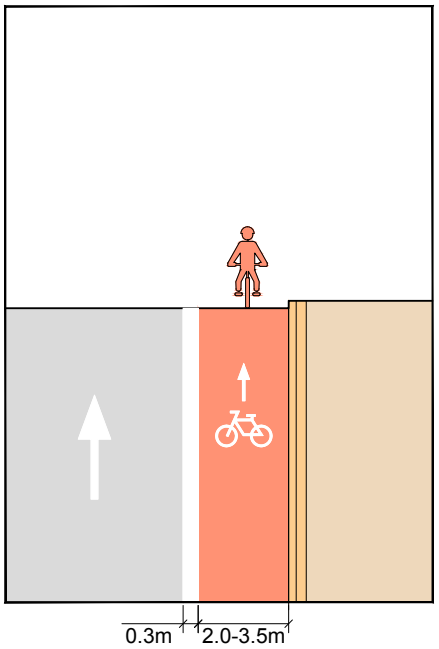
Cycle path and cycle lane



One-way cycle path

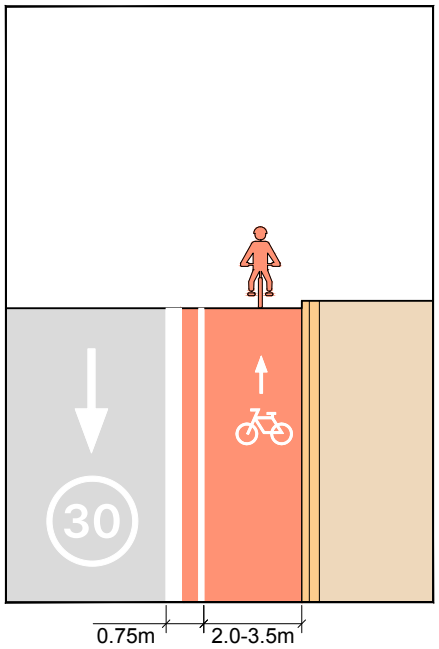
• the cycle path should be separated from the carriageway and the pavement with a difference in elevation or an elevated safety zone;
• the width of a one-way cycle path is determined based on the intensity of cycle traffic.

**The width of a one-way cycle path specified by LVS is 1.6 m. The recommended width here is 2 m to allow safe overtaking.*



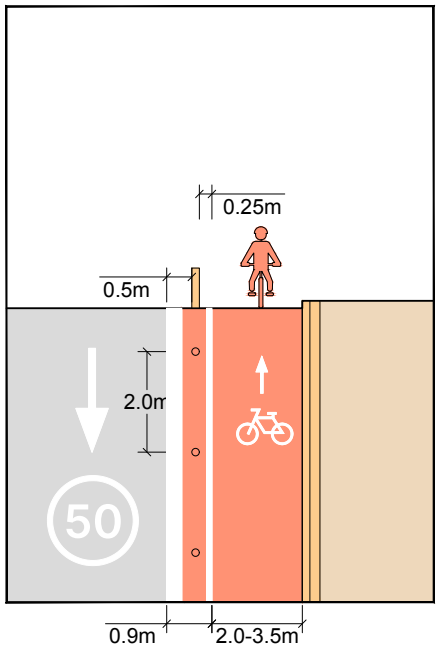
One-way with-flow cycle lane

• the cycle lane should be separated from the vehicle lane with horizontal markings and/or protective elements;
• the width of the one-way cycle lane is determined based on the intensity of cycle traffic;
• applicable to Category E and D streets where a full reconstruction is not feasible.



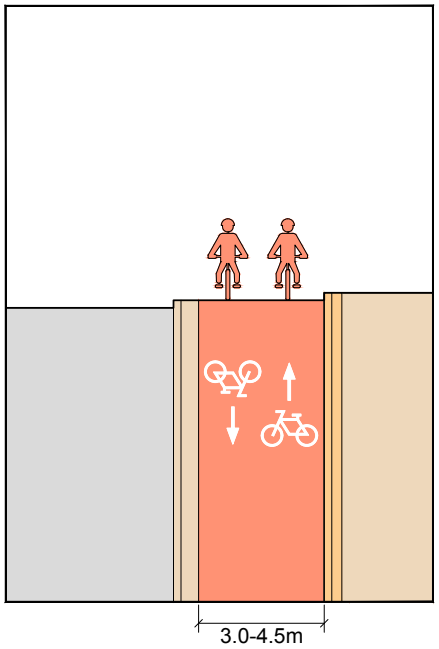
One-way contra-flow cycle lane

• used on one-way streets where the speed limit doesn't exceed 30 km/h;
• the safety zone between the vehice lane and the cycle lane should be 0.75 m in width;
• applicable to Category E and D streets where a full reconstruction is not feasible.



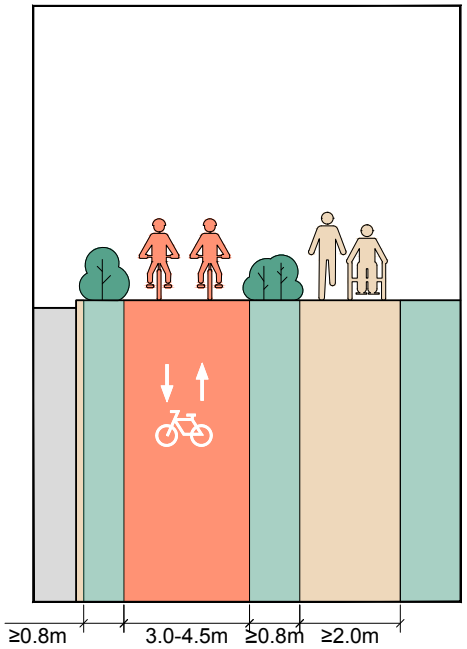
One-way contra-flow cycle lane

• used on one-way streets where the speed limit doesn't exceed 50 km/h;
• the safety zone between the vehicle lane and the cycle lane should be 0.9 m wide, and it is possible to include protective elements within it;
• applicable to Category E and D streets where a full reconstruction is not feasible.



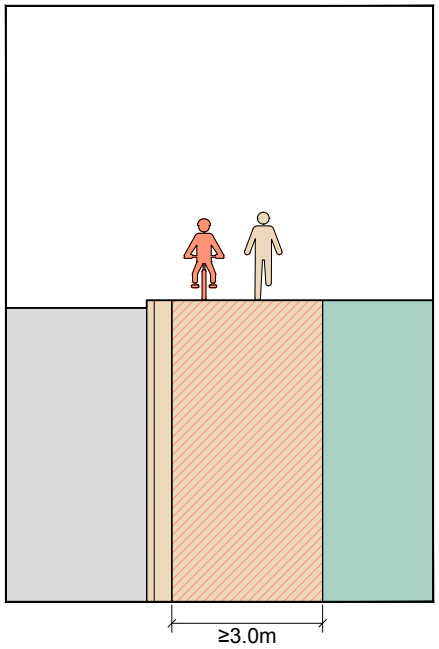
Two-way cycle path

• the cycle path should be separated from the carriageway and the pavement with a difference in elevation or an elevated safety zone;
• the width of the two-way cycle path is determined based on the intensity of cycle traffic.



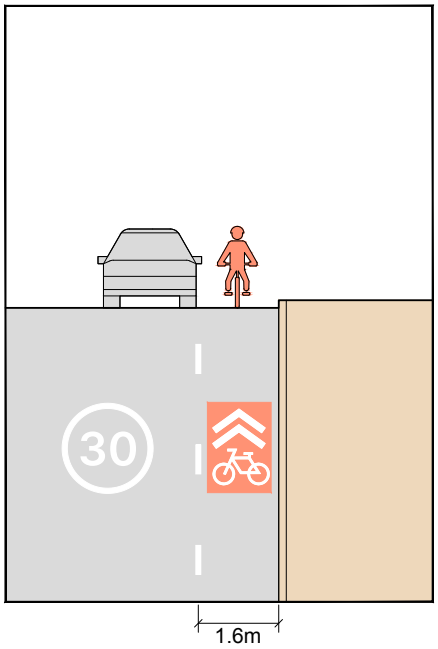
Pavement and two-way cycle path

• the width of the two-way cycle path is determined based on the intensity of cycle traffic;
• it is recommended to separate the pavement and the cycle path with a planting zone that is at least 0.8 m wide;
• a planting zone between the cycle path and carriageway is also preferable.



Combined pavement and cycle path

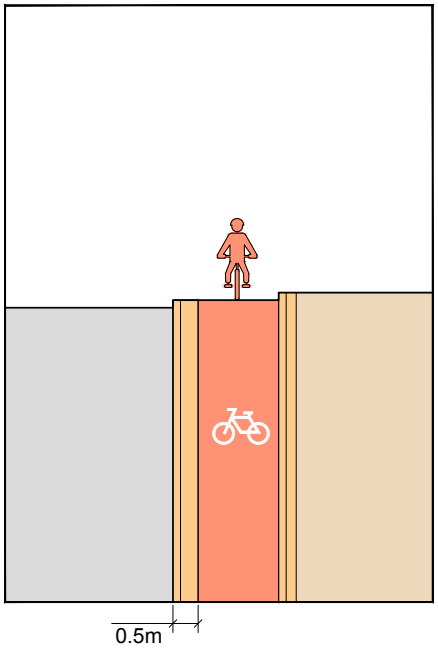
• applicable outside densely populated areas if the anticipated combined pedestrian and cyclist intensity during peak hour is ≤70, with cyclists comprising at least 1/3 of the total count;
• the minimum width for a combined pavement and cycle path is 3 m.



Advisory cycle lane

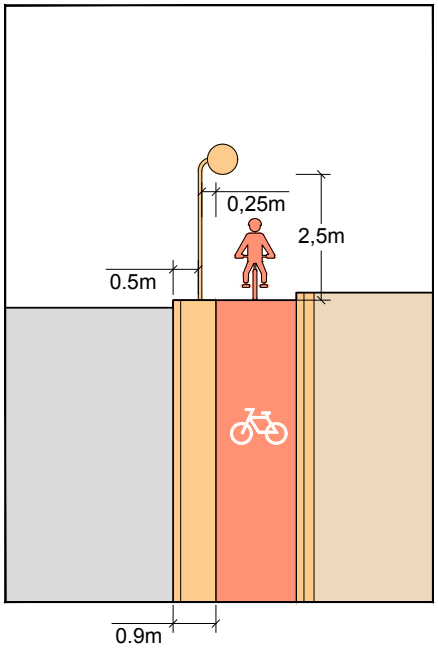
• an advisory cycle lane is part of the carriageway, marked with additional horizontal signage;
• applicable to narrow streets where the width does not allow for a separated cycle lane or cycle path;
• applicable only to streets with calm traffic, where the speed limit does not exceed 30 km/h.

Cycle traffic safety zones



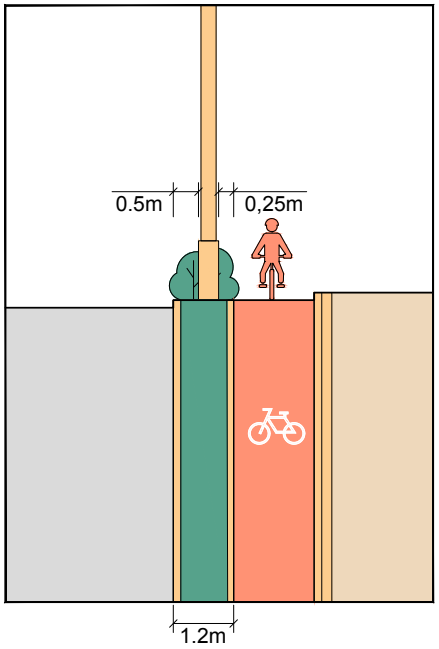
Safety zone. Carriageway / cycle path

• the cycle path should be separated from the carriageway with a difference in elevation or an elevated safety zone;
• the minimum width of the safety zone between the carriageway and the separated cycle path is 0.5 m.



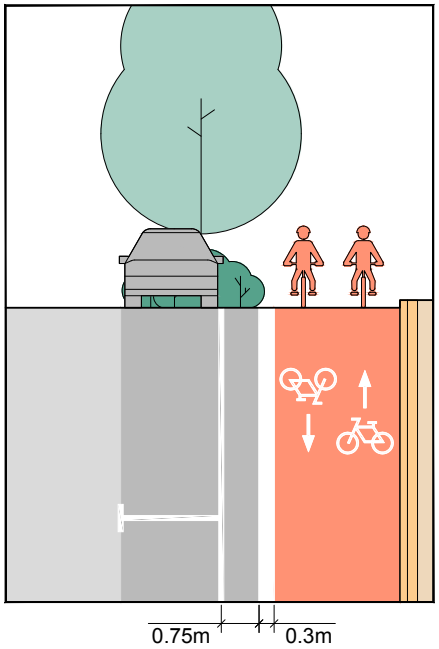
Safety zone. Carriageway / cycle path with traffic signs

• traffic signs can be placed in the safety zone between the carriageway and the cycle path, maintaining a 0.5 m distance from the carriageway to any vertical obstacle and a 0.25 m distance from the cycle path to any vertical obstacle.



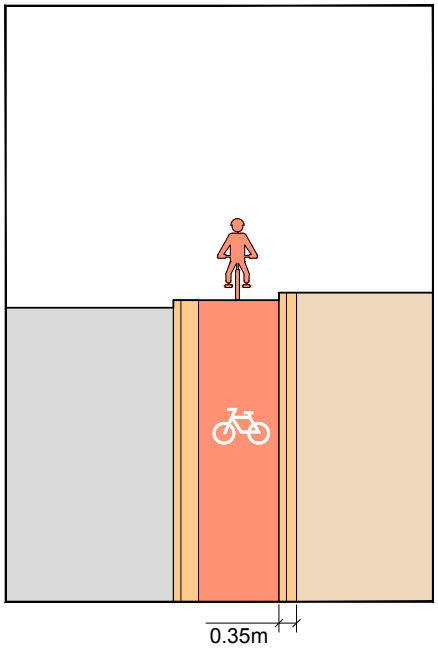
Safety zone. Carriageway / cycle path with catenary poles and/or planting

• lighting and catenary poles can be placed in the safety zone between the carriageway and the cycle path, maintaining a 0.5 m distance from the carriageway and a 0.25 m distance from the cycle path to any vertical obstacle;
• planting should be included in the safety zone if it is at least 0.8 m wide.



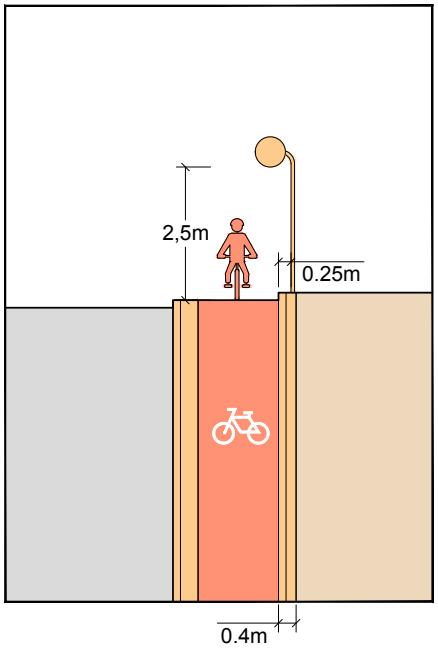
Safety zone. Cycle lane / parking zone

• a parking zone should be separated from the cycle lane by a 0.75 m safety zone — wide enough to open doors of vehicles;
• applicable to Category E and D streets where a full reconstruction is not feasible;
• it is recommended to place protective elements between the parking spaces and the cycle path.



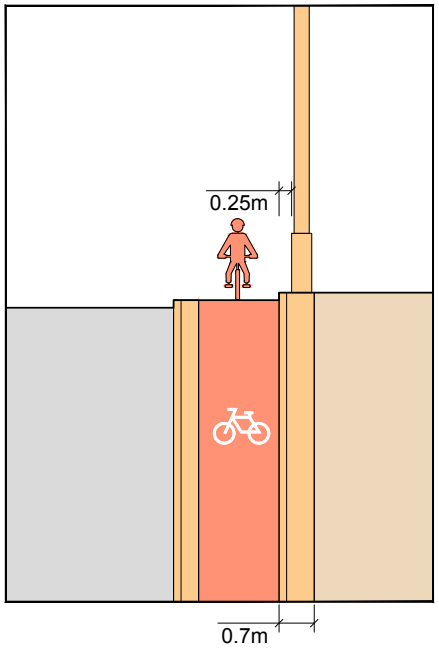
Safety zone. Cycle path / pavement

• the cycle path should be separated from the pavement with a difference in elevation and/or a safety zone, at least 0.25 m wide;
• the safety zone is not included in the width of the pavement's clear zone or the cycle path;
• the safety zone includes the kerb;
• it is recommended to use a coarse surface for the safety zone, thereby creating a visual and tactile boundary.



Safety zone. Cycle path / pavement with traffic signs

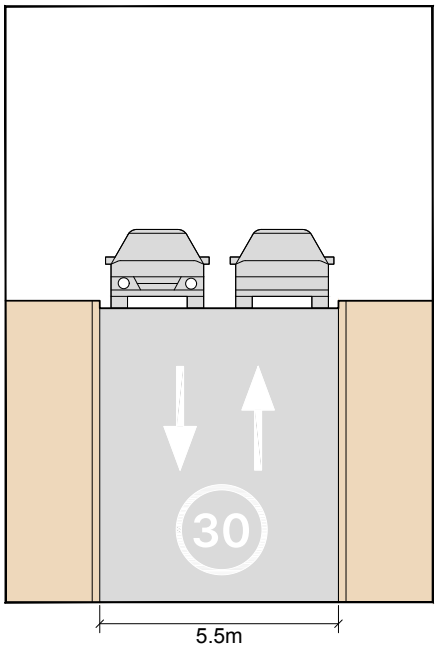
• traffic signs can be placed in the safety zone, maintaining a 0.25 m distance from the cycle path to any vertical obstacle.



Safety zone. Cycle path / pavement with catenary poles

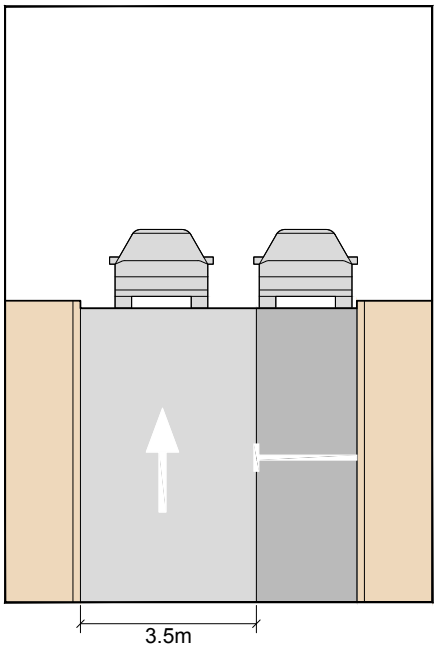
• lighting and catenary poles can be placed in the safety zone, maintaining a 0.25 m distance from the cycle path to any vertical obstacle.

Carriageway. Vehicular traffic



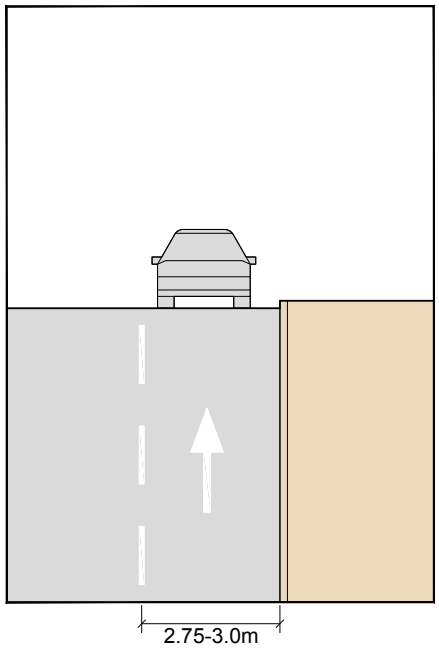
Two-way carriageway

• the minimum width for a two-way carriageway is 5.5 m;
• the permitted speed on a carriageway of this width does not exceed 30 km/h;
• it is recommended to use traffic calming measures as well.



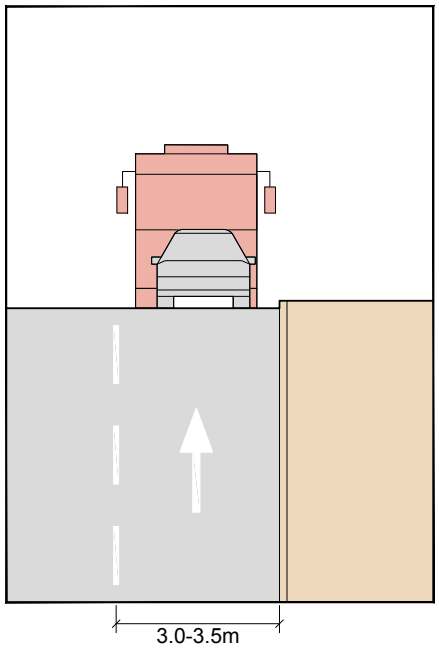
One-way carriageway

• the minimum width for a one-way carriageway is 3.5 m, which provides sufficient turning radii and access for emergency vehicles;
• if the permitted speed is 30 km/h, traffic calming measures should be used.



Passenger vehicle lane

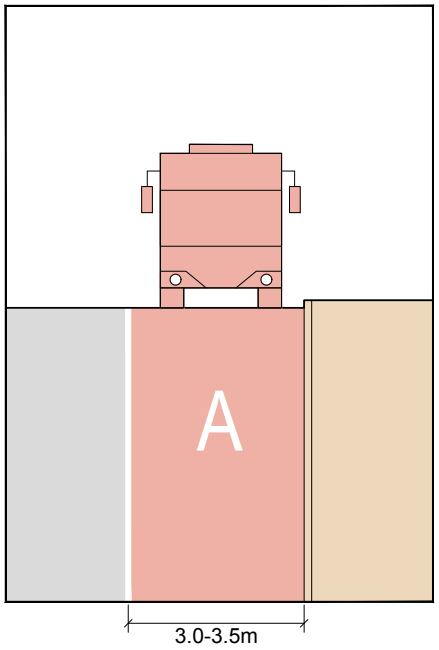
• on streets primarily intended for passenger vehicles, lane width is 3 m;
• if the permitted speed doesn't exceed 30 km/h, the minimum lane width is 2.75 m.



Freight vehicle lane

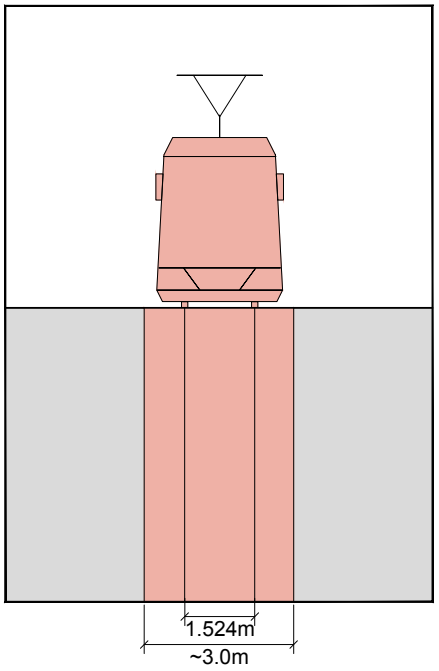
• on streets designed for freight vehicles and/or public transport, lane width is 3–3.5 m;
• lane width is determined by evaluating traffic intensity, permitted speed, and street width.

Carriageway. Public transport



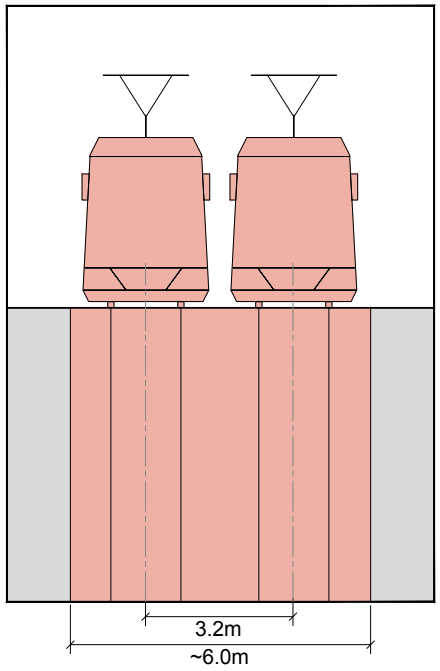
Public transport lane

• only public transport vehicles, taxis, and electric passenger vehicles are permitted to use public transport lanes;
• lane width is determined by evaluating traffic intensity, permitted speed, and street width;
• applicable to streets with heavy traffic to ensure priority for public transport.



Tram track

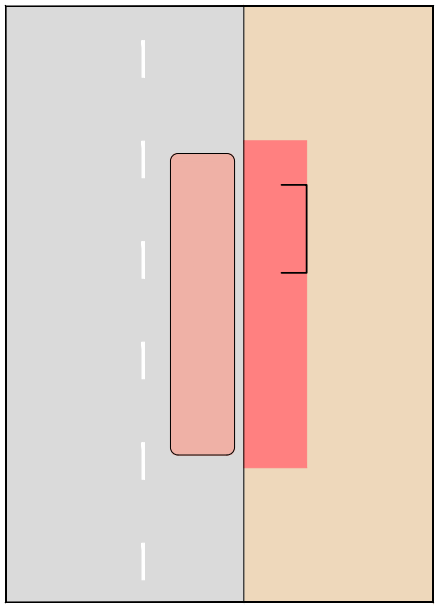
• a tram track can either be separated from or integrated into the carriageway;
• it may also serve as a lane for other public transport, such as buses or trolleybuses;
• the width of the track is determined by evaluating its intended use, street width, and other relevant factors.



Two-way tram track

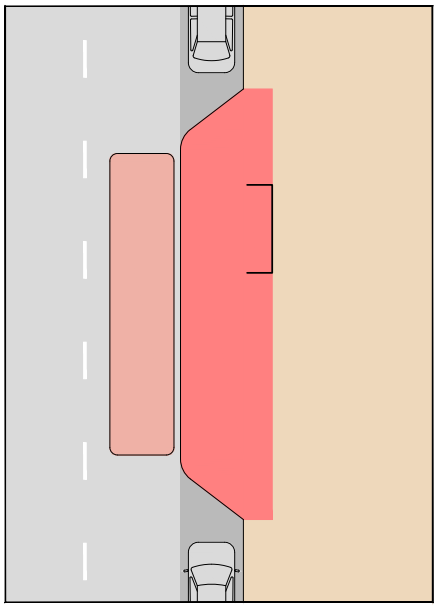
• a tram track can either be separated from or integrated into the carriageway;
• it may also serve as a lane for other public transport, such as buses or trolleybuses;
• the width of the track is determined by evaluating its intended use, street width, and other relevant factors.

Public transport stops



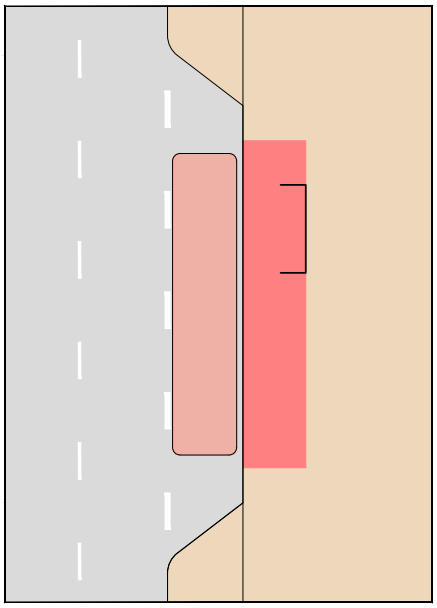
In-lane stop

• public transport stops directly in the traffic lane;
• applicable to narrow streets where it is not possible to create kerb extensions as well as to streets with dedicated public transport lanes.



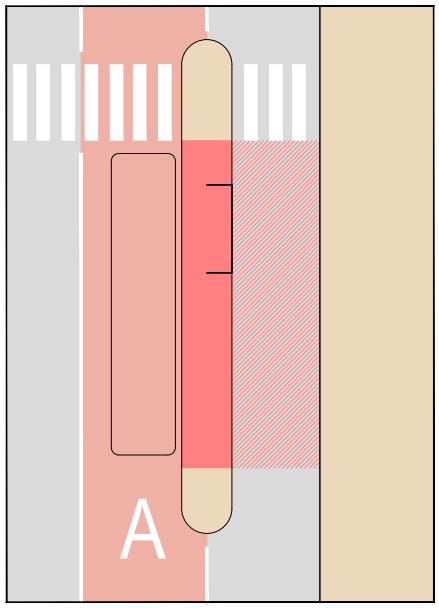
In-lane stop with a kerb extension or bus bulb

• public transport stops at a platform — an extension of the pavement;
• applicable to streets with kerbside parking as well as to streets with dedicated public transport lanes.



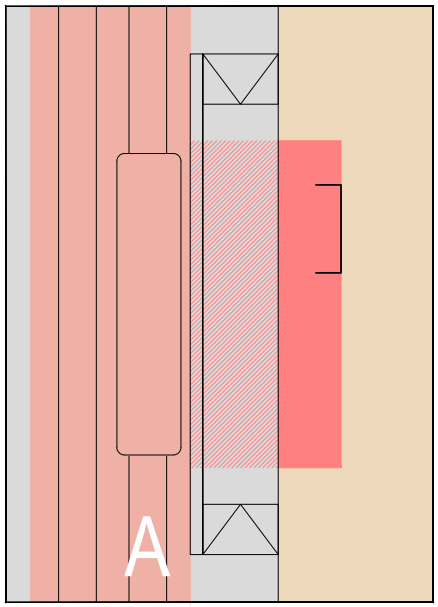
Pull-out stop

• public transport stops in a bay — an extension of the carriageway;
• applicable to streets with moderate to heavy traffic and sufficient width as well as to public transport termini and transfer hubs.



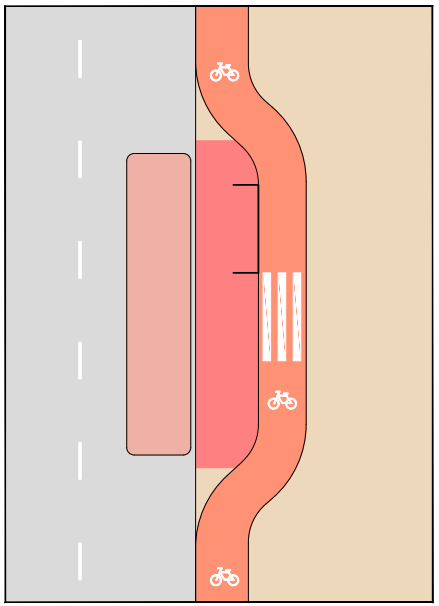
Island stop

• the passenger platform must be safely connected to the pavement via pedestrian crossing;
• applicable to streets where public transport lanes are located in the centre of the carriageway (most commonly on streets with tram tracks).



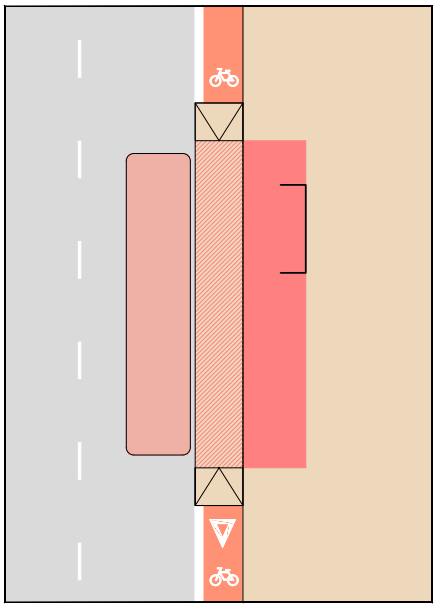
Stop with boarding from the carriageway

• a raised section of the carriageway doubles as a passenger platform;
• applicable to narrow streets with a tram track in the center of the carriageway;
• drivers must yield to passengers boarding or disembarking.



Cycle path behind a passenger platform

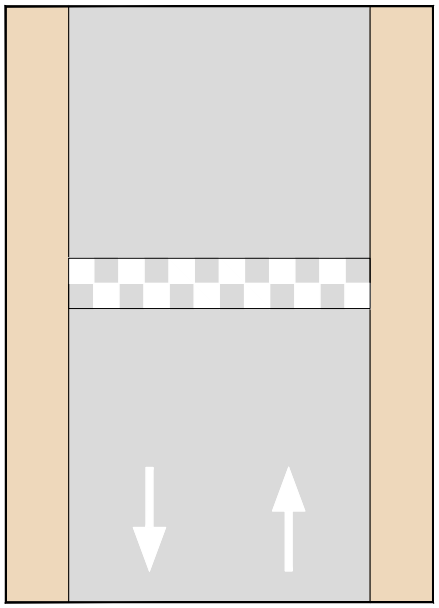
• the platform must be safely connected to the pedestrian clear zone via pedestrian crossing;
• applicable to streets with a cycle path and a wide pavement.



Cycle lane on a passenger platform

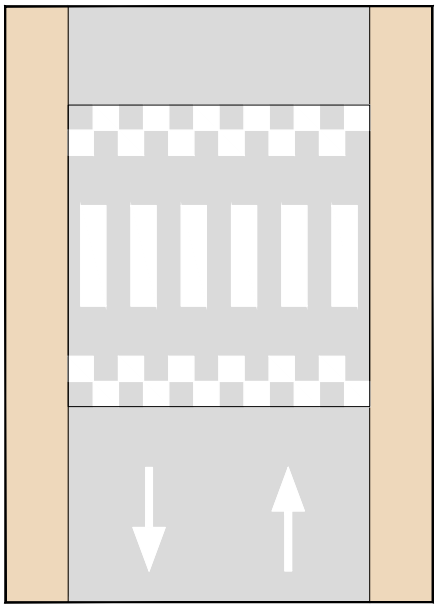
• a raised section of the cycle lane doubles as a passenger platform;
• the cycle lane / passenger platform must be level with the pavement;
• cyclists must yield to passengers boarding or disembarking.

Traffic calming measures



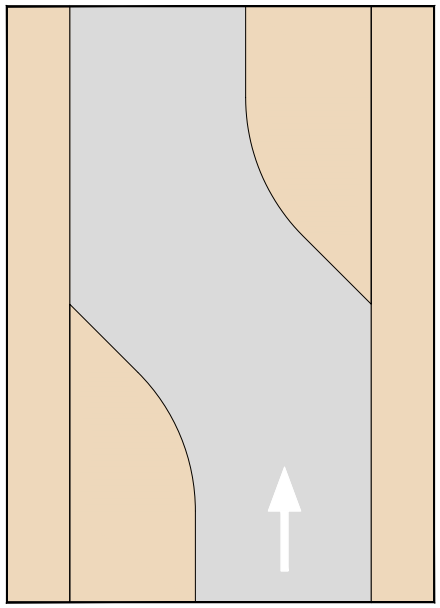
Speed hump

• a rounded, raised mound spanning the width of the street designed to reduce driving speed before reaching it.



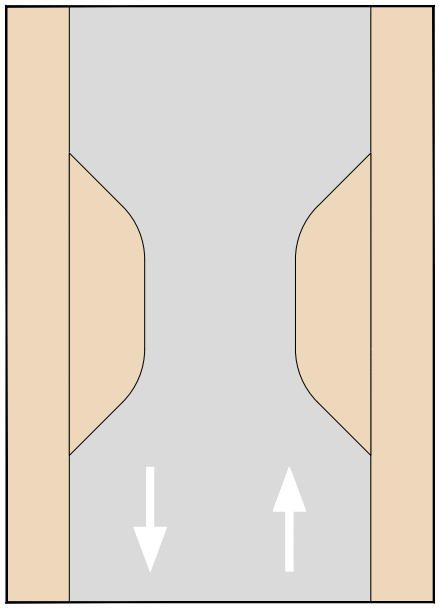
Speed table

• a raised surface spanning the width of the street designed to reduce driving speed before reaching it, draw attention to the pedestrian crossing, and make it easier for pedestrians to cross the carriageway;
• can be combined with a change in paving material.



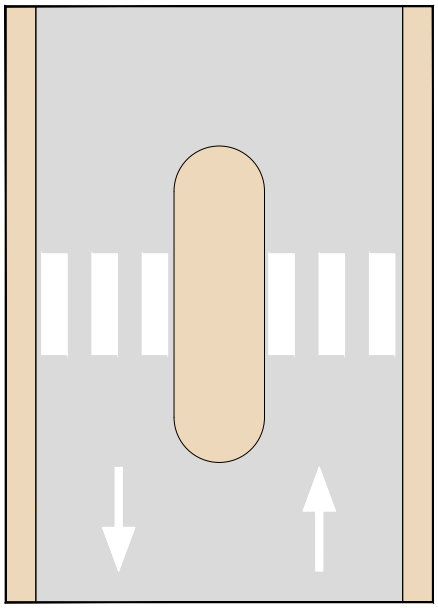
Driving trajectory shift or chicane

• alternately placed carriageway narrowings that alter the driving trajectory, thereby reducing driving speed;
• can also be achieved by using parking spaces, planting, or other elements.



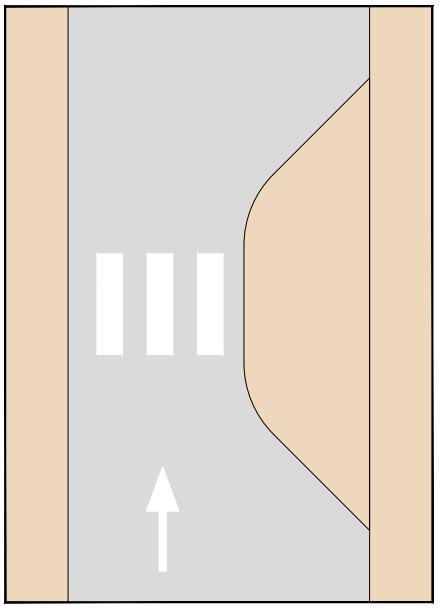
Pinch point or kerb extension

• a localised narrowing on a two-way street that reduces the carriageway to the width of a one-way lane, encouraging a reduction in driving speed before it;
• can also be achieved by using planting or other elements.



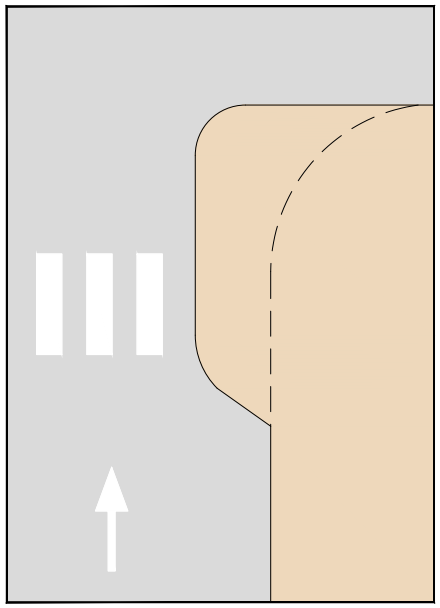
Pedestrian refuge island

• a refuge island highlights the pedestrian crossing and reduces the width of the carriageway that needs to be crossed, thereby increasing pedestrian safety;
• can narrow driving lanes and alter driving trajectories.



Kerb extension at a pedestrian crossing

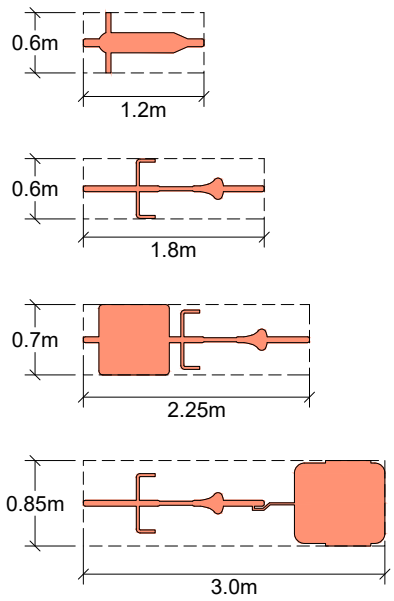
• the narrowing highlights the pedestrian crossing and reduces the width of the carriageway that needs to be crossed, thereby increasing pedestrian safety;
• can also alter the driving trajectory;
• especially suitable for streets with kerbside parking.



Kerb extension at an intersection

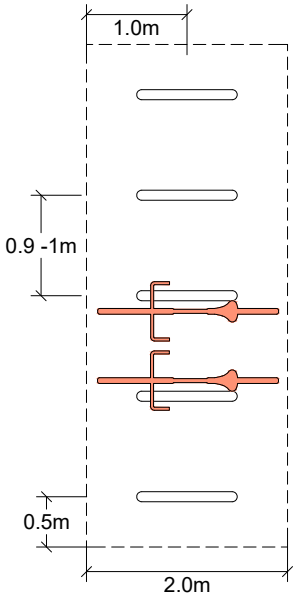
• a narrowed carriageway and reduced turning radius encourage lower driving speeds at the intersection;
• the narrowing highlights the pedestrian crossing and reduces the width of the carriageway to be crossed, enhancing pedestrian safety;
• especially suitable for streets with kerbside parking.

Bicycle and micromobility storage



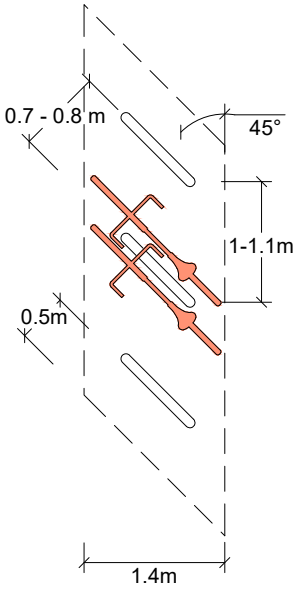
Dimensions of mobility transport

- electric scooter: 0.6 × 1.2 m,
- bicycle: 0.6 × 1.8 m,
- cargo bicycle: 0.7 × 2.25 m,
- bicycle with a trailer: 0.85 × 3 m.



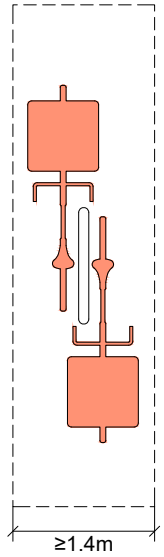
Parallel bicycle racks

- simple inverted U-shaped racks are recommended;
- the recommended distance between parallel racks is 0.9–1 m;
- when positioning bicycle racks, consider not only the size of the racks but also the parked bicycles, which can be up to 2 m long.



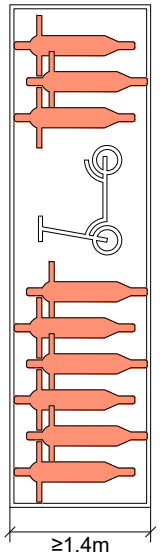
Angled bicycle racks

- angled positioning reduces the depth of the bicycle parking area to 1.4 m, making it suitable for narrow places;
- simple inverted U-shaped racks are recommended;
- the recommended distance between angled racks, measured in a straight line, is 1–1.1 m;
- when positioning bicycle racks, consider not only the size of the racks but also the parked bicycles, which can be up to 2 m long.



Cargo bicycle parking

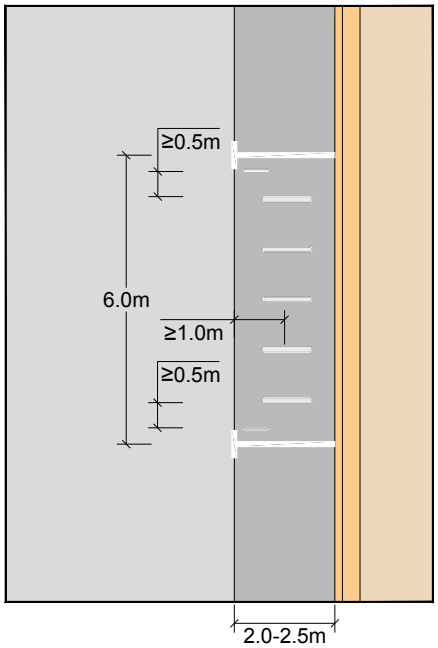
- a dedicated, obstacle-free space should be provided for cargo bicycle parking, which can be equipped with a low inverted U-shaped rack (0.3 m high, approximately 1.5 m long);
- cargo bicycle parking areas should be located near public transport hubs, public buildings, and public outdoor spaces (such as parks, squares, and plazas).



Electric scooter parking

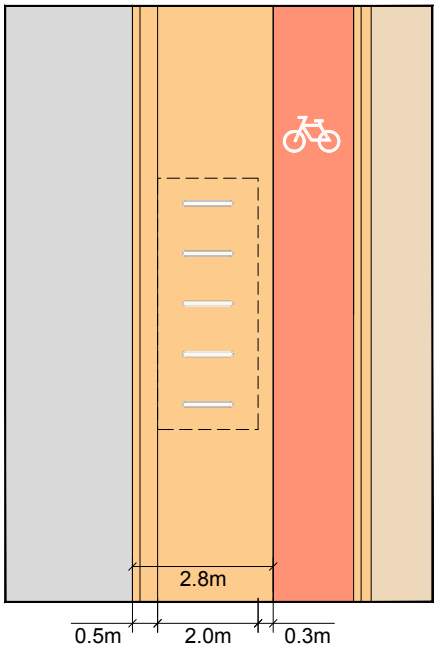
• a dedicated, obstacle-free area marked with horizontal signage and 1.4 m in width should be provided for electric scooter parking;

• electric scooter parking areas should be located either in the amenity zone on the pavement or on the carriageway.



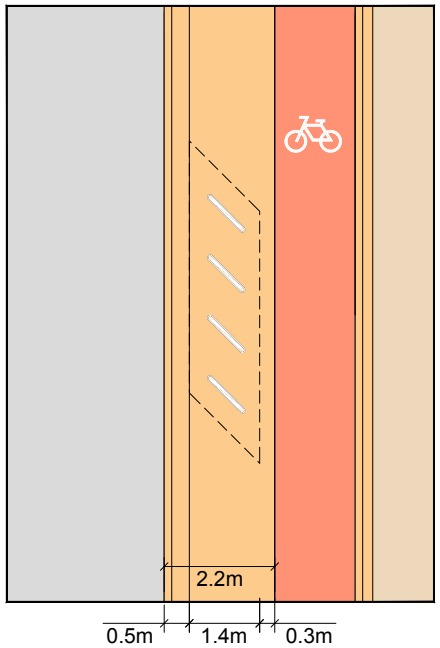
Bicycle racks in the carriageway parking zone

• obstruction markers must be placed at the ends of the bicycle parking area, maintaining a minimum distance of 0.5 m from the bicycle racks.



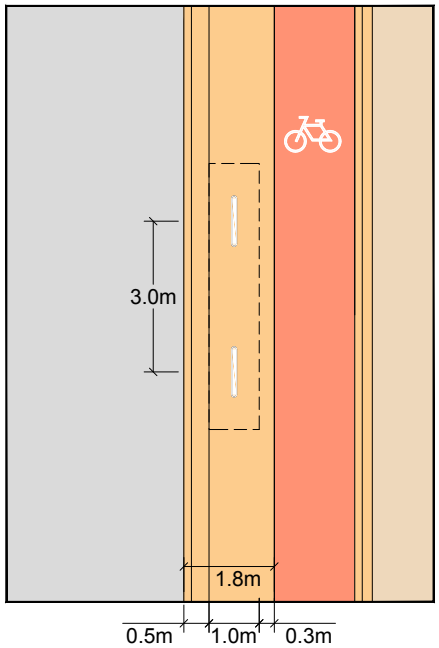
Bicycle racks in the amenity zone between a carriageway and a cycle path, perpendicular

• a 0.5 m wide safety zone must be provided between the bicycle parking area and the carriageway, and a 0.3 m wide safety zone between the bicycle parking area and the cycle path.



Bicycle racks in the amenity zone between a carriageway and a cycle path, angled

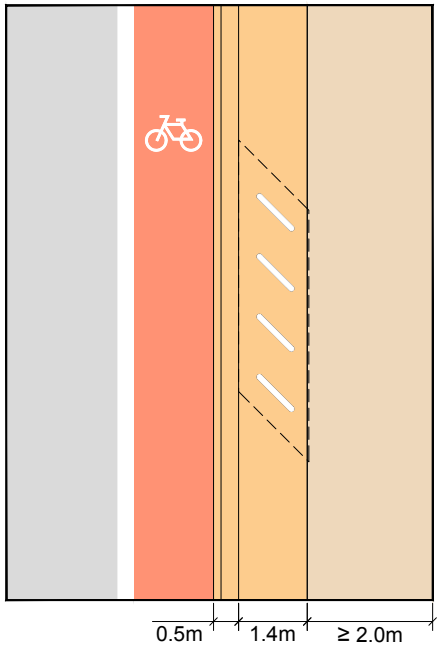
• a 0.5 m wide safety zone must be provided between the bicycle parking area and the carriageway, and a 0.3 m wide safety zone between the bicycle parking area and the cycle path.



Bicycle racks in the amenity zone between a carriageway and a cycle path, parallel

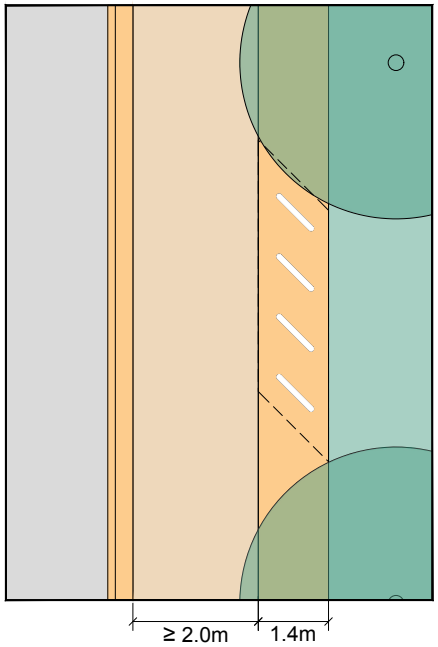
• a 0.5 m wide safety zone should be provided between the bicycle parking area and the carriageway, and a 0.3 m wide safety zone between the bicycle parking area and the cycle path;

• parallel arrangement is suitable only for narrow spaces with low demand for bicycle parking, as it has limited capacity.



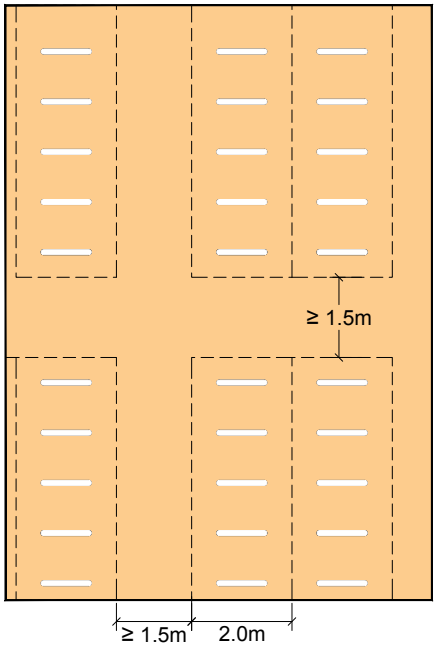
Bicycle racks in the pavement amenity zone, carriageway side

• an angled position is recommended to occupy less space;
• sub-surface mounting is advisable for durability; if this is not possible, the racks should be attached to a rail which is then surface mounted.



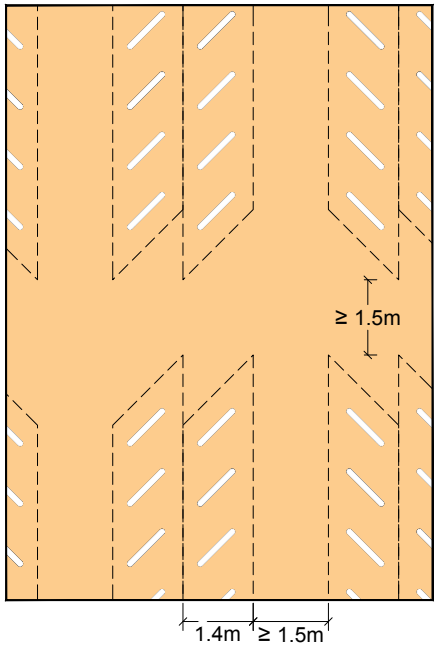
Bicycle racks in the pavement amenity zone, facade side

• such placement is used only near parks, squares, and plazas, and not alongside building facades;
• an angled position is recommended to occupy less space;
• sub-surface mounting is advisable for durability; if this is not possible, the racks should be attached to a rail which is then surface mounted.



Bicycle parking lot with straight racks

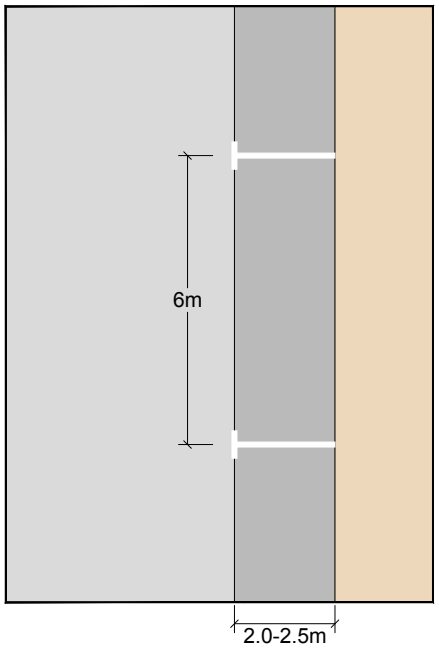
• suitable for locations where high bicycle storage capacity is required, such as near schools, universities, public transport hubs, etc;
• sub-surface mounting is advisable for durability; surface mounted fixtures are not preferable in bicycle parking lots.



Bicycle parking lot with angled racks

• suitable for locations where high bicycle storage capacity is required, such as near schools, universities, public transport hubs, etc;
• sub-surface mounting is advisable for durability; surface-mounted fixtures are not preferable in bicycle parking lots.

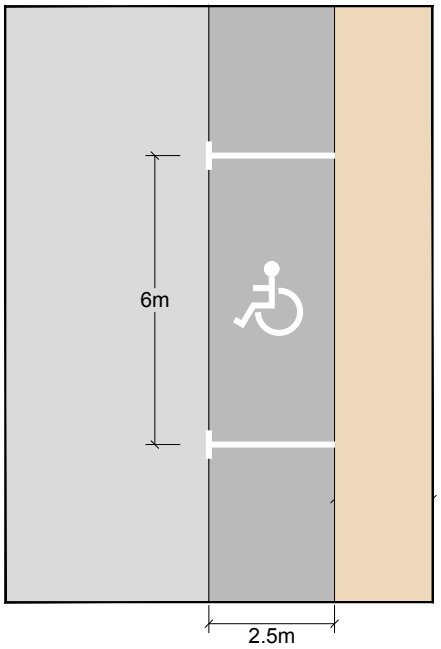
Parking. Parallel and angled layout



Kerbside parking, parallel

• this is the recommended arrangement for kerbside parking on streets in Riga;

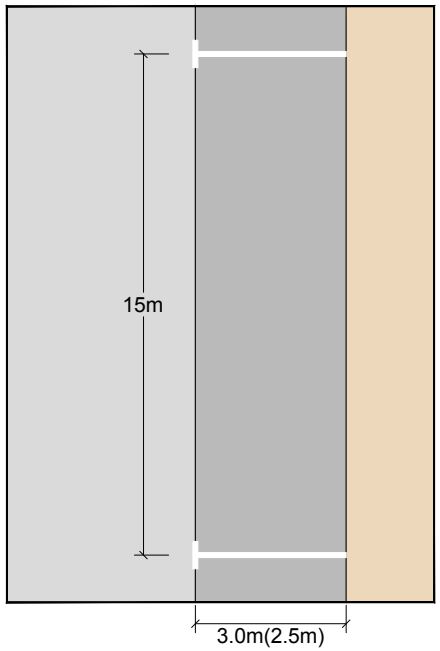
• it is advisable to combine parking with planting and amenity zones in groups of 2 to 5 parking spaces.



Kerbside parking for persons with disabilities, parallel

• the minimum width for parking spaces designated for persons with disabilities is 2.5 m, with the adjacent pavement having a minimum width of 2 m,

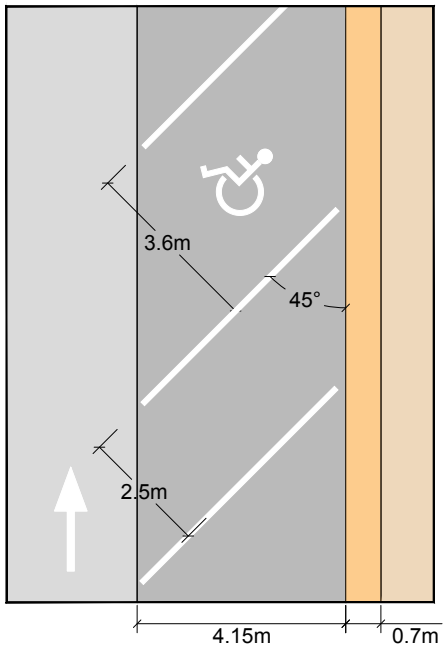
• parking spaces for persons with disabilities must be located near the entrances of public buildings, public transport hubs, public outdoor spaces, etc.



Kerbside parking for delivery vehicles

• the width of a parking space for delivery vehicles is 3 m, which can be reduced to 2.5 m in constrained conditions;

• applicable to streets with medium to high urban activity.



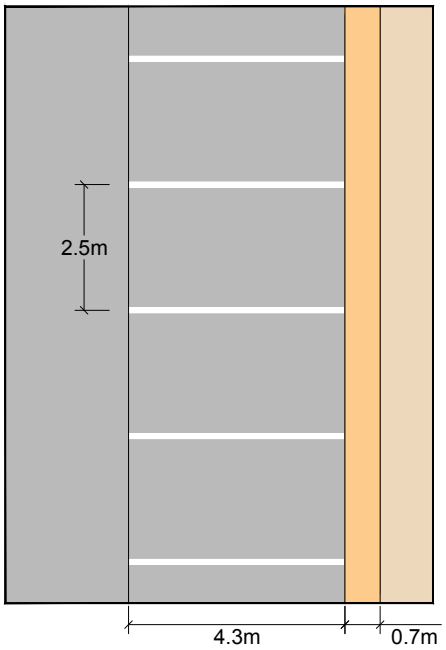
Kerbside parking, angled

• an overhang zone of 0.7 m or a parking stop should be provided;

• the minimum width for parking spaces designated for persons with disabilities is 3.6 m, with the adjacent pavement having a minimum width of 2 m;

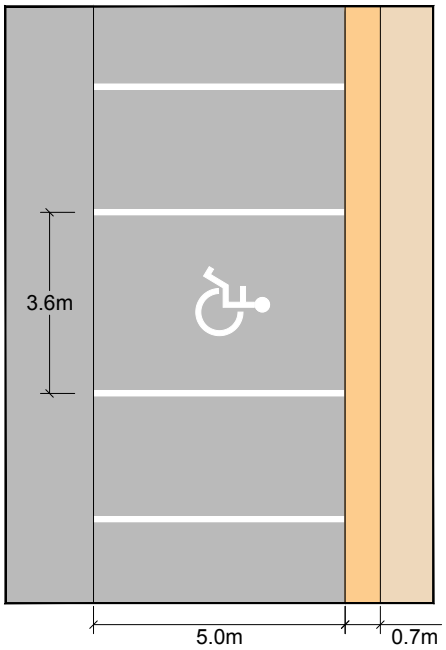
• parking spaces for persons with disabilities must be located near the entrances of public buildings, public transport hubs, public outdoor spaces, etc.

Parking. Perpendicular layout with and without trees



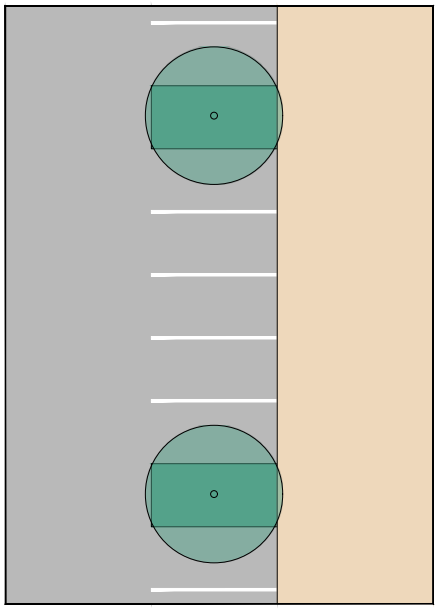
Kerbside parking, perpendicular

• an overhang zone of 0.7 m or a parking stop should be provided;
• applicable to streets with calm and moderate traffic, and in parking lots.



Kerbside parking for persons with disabilities, perpendicular

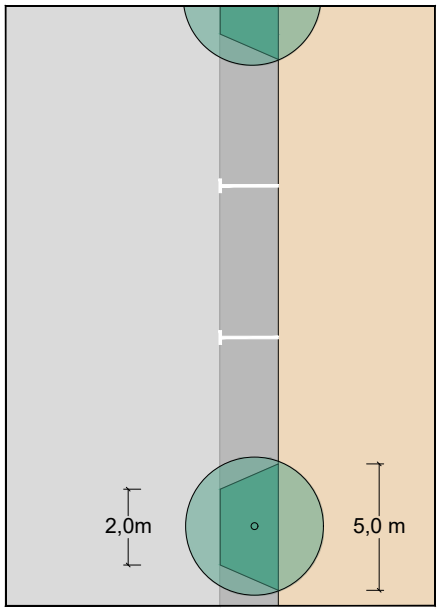
• the minimum size for parking spaces designated for persons with disabilities is 3.6 × 5 m, with the adjacent pavement having a minimum width of 2 m;
• parking spaces for persons with disabilities must be located near the entrances of public buildings, public transport hubs, public outdoor spaces, etc.



Parking with trees, perpendicular

• perpendicular and angled parking spaces should be arranged in groups of 5, alternating with planting;
• the minimum size for a tree planting bed is 2 × 2 m (including the kerb), preferably designed to match the size of a single parking space.

**According to RTIAN, for parking lots with 50 or more spaces, at least 1 tree should be provided for every 5 parking spaces.*



Parking with trees, parallel

• parallel parking spaces should be arranged in groups of 2 to 5, alternating with planting;
• the minimum size for a tree planting bed is 2 × 2 m (including the kerb), preferably designed to match the size of a single parking space.

STREET TYPE DESIGN

C

Evaluating traffic intensity and urban activity

The structure of the Street Type Matrix is based on two factors: traffic intensity and urban activity. Each of these variables is divided into three levels according to their share and impact on the street space. The result is a Street Type Matrix with nine different types of streets, which can be further categorised based on the width of the street's red lines (building lines).

Since both traffic intensity and urban activity can vary along the length of a street, different sections of the same street may belong to different street types.

Traffic

The traffic parameter is based on the street categories already defined and used in urban planning and road engineering, characterising the intensity of vehicular traffic.

Calm traffic streets

- Category E streets,
- low traffic intensity (less than 5000 vehicles per day),
- mostly passenger vehicle traffic,
- reduced driving speed (20–30 km/h).

Moderate traffic streets

- Category E and D streets,
- moderate traffic intensity,
- mostly passenger vehicle traffic, may include public transport,
- moderate driving speed (30–50 km/h).

Heavy traffic streets

- Category D and C streets,
- high traffic intensity,
- multiple traffic lanes in each direction,
- traffic consists of passenger vehicles, public transport, and may include freight transport,
- moderate and high driving speed (50–70 km/h).

Urban activity

The level of urban activity is a parameter used in urban planning to characterise the presence of public and commercial functions in street space and the pedestrian flows they attract. It provides an idea not only of the current situation of the urban environment, but also of its development potential.

The term *urban activity* derives from a methodology developed in Stockholm in the 1990s, which was further advanced by the internationally recognised Danish planning firm Gehl Architects. The urban activity assessment scale included in this Manual has been specifically adapted to the attributes of Riga's built environment.

The level of urban activity is determined by analysing existing and potential functions within the buildings, building typology, the length of facades adjacent to the street, and by counting the number of entrance doors per 100 metres of street. In Riga's built environment, entrances to courtyards are also considered if they are used by pedestrians. Since building types on different sides of the street may vary and the street's cross-section can be asymmetric, the number of doors is calculated separately for each side, and the average is calculated when useful.

Low urban activity

- ground floors of buildings have no or very few commercial and public functions,
- buildings mostly monofunctional, residential, and free-standing,
- few entrances and shop windows (0–4 doors per 100 m of facade),
- large plots of land and long facades in high-density residential areas or small plots and small detached buildings in low-density residential areas.

Medium urban activity

- ground floors of most but not all buildings have commercial and public functions,
- the street may have one or several public or commercial buildings with a moderate visitor flow, such as a school, a church, a clinic or a supermarket,

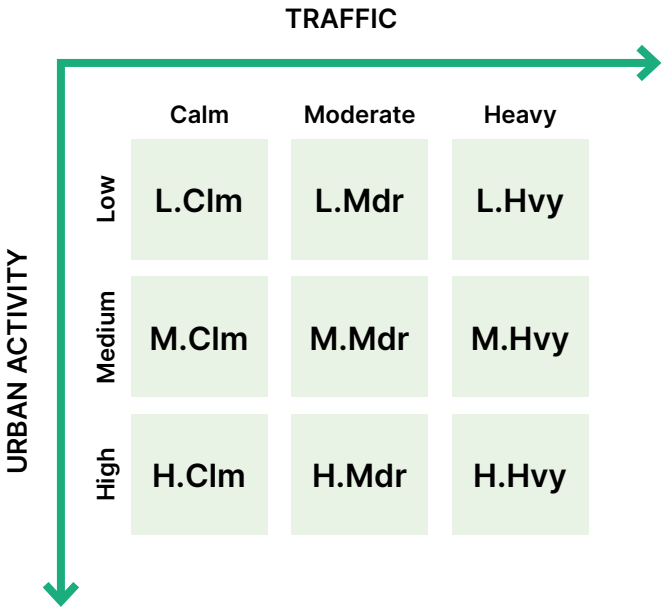
• buildings form a perimeter urban block or are free-standing,
• a moderate number of entrance doors and shop windows (5–7 doors per 100 m of facade).

High urban activity

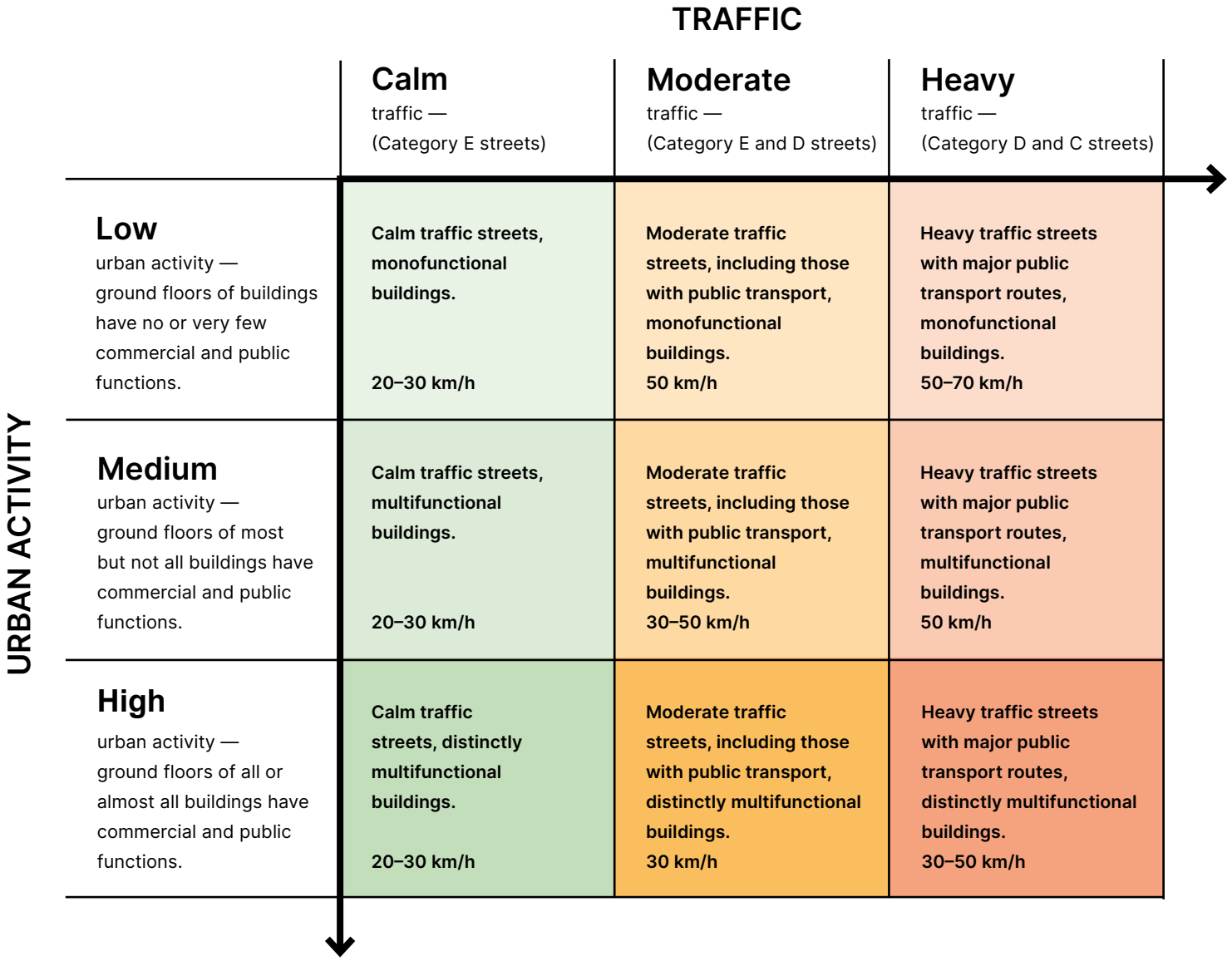
• ground floors of all or almost all buildings have commercial and public functions, which may also extend to the street space (terraces, parklets),
• the street may have important public or commercial buildings with a busy visitor flow, such as a university, a museum, a shopping centre,
• buildings form a perimeter urban block or are free-standing,
• many entrance doors and shop windows (more than 7 doors per 100 m of facade).

Street Type Matrix and abbreviations

Street types are formed from the combination of two factors: traffic and urban activity. To simplify navigation within the Manual, the type names have also been assigned abbreviations or codes.



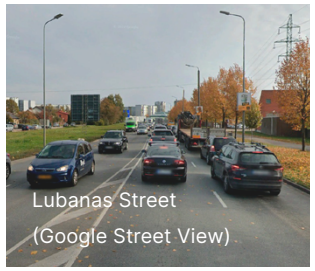
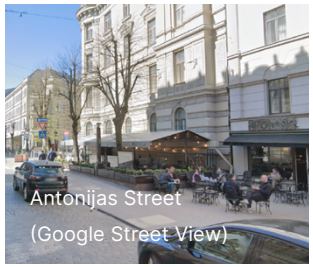
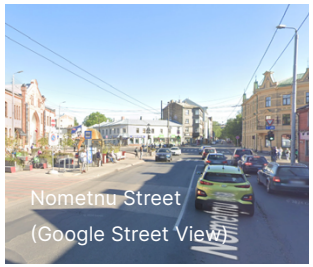
Street Type Matrix



Examples of street types

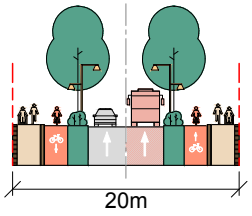
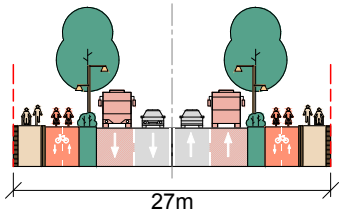
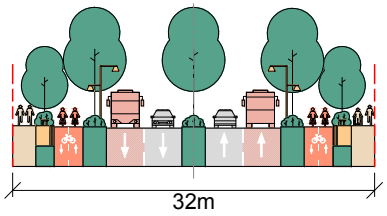
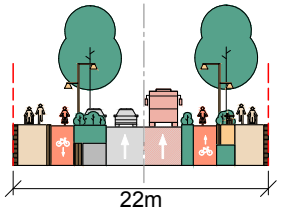
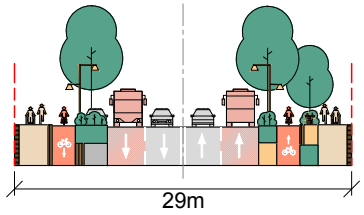
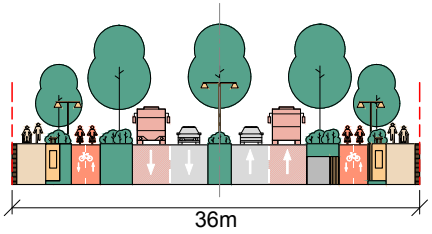
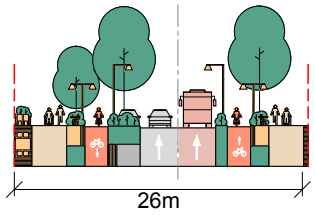
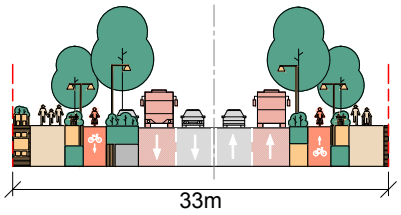
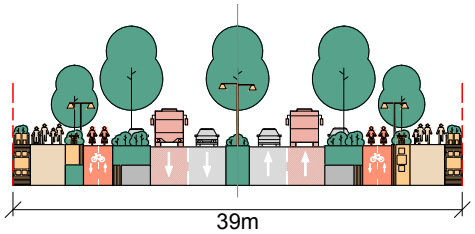
TRAFFIC

URBAN ACTIVITY

	Calm traffic — (Category E streets)	**Moderate** traffic — (Category E and D streets)	**Heavy** traffic — (Category D and C streets)
Low urban activity — ground floors of buildings have no or very few commercial and public functions.	 Purvciema Street (Google Street View)	 Melnsila Street (Google Street View)	 Lubanas Street (Google Street View)
Medium urban activity — ground floors of most but not all buildings have commercial and public functions.	 Krasotaju Street (Google Street View)	 Gertrudes Street (Google Street View)	 Kalnciema Street (Google Street View)
High urban activity — ground floors of all or almost all buildings have commercial and public functions.	 Antonijas Street (Google Street View)	 Nometnu Street (Google Street View)	 Satekles Street (Google Street View)

Street Type Matrix expanded

Heavy traffic street
(Categories D and C)

			**Low urban activity**
			**Medium urban activity**
			**High urban activity**

Exceptions

Category B streets

The Street Design Manual covers Category E, D, and C streets, where traffic intensity can be balanced with urban activity. Category B streets are city highways, where urban activity is either absent or has a completely different character, based on vehicle access.

Examples:
Karlis Ulmanis Avenue, Ziepniekkalna Street, Slavu Street, Krasta Street, etc.

Karlis Ulmanis Avenue
(Google Street View)

Urban ensembles

Certain streets in Riga feature historically significant planting or landmarks or belong to high-value urban ensembles. Such streets tend to have cultural significance, a unique character, and limited possibilities for reconstruction. To find the best solutions for their improvement, it is recommended to hold design competitions.

Examples:
Brivibas Boulevard, the Boulevard Ring, the ensemble of Meza Cemetery, etc.

The linden alley of Brivibas Boulevard
(Google Street View)

Waterfronts

Streets connecting to the banks of the Daugava River and other waterfronts require special solutions. In these streets, primary attention should be given to creating a landscape and a microclimate, ensuring public accessibility, and activating the waterfront, including linking water transport docks with land infrastructure.

Examples:
11th November Embankment, Mukusalas Street, General Radzins Embankment, Balasta Dam, etc.

11th November Embankment
(Google Street View)

Bridges and overpasses

Bridges and overpasses ensure connectivity between parts of the city, but do not create a typical street space. Ingenious engineering solutions should be sought to ensure the safety and comfort of pedestrians, cyclists, and micromobility users on existing bridges and overpasses. The bridges over the Daugava River are Riga's landmarks, so special attention should be given to their design and lighting.

Examples:

Vansu Bridge, Akmens Bridge, the overpass of Augusta Deglava Street, Gaisa Bridge, etc.

Akmens Bridge
(Google Street View)

Streets with tram tracks

There aren't many streets with tram tracks in Riga, but each can be approached in its own way. Tram tracks can be located on the carriageway, separated from it, in the center of the street, or on the sides. Reconstruction projects should aim to ensure fast and unobstructed tram movement.

Examples:

Krisjana Barona Street, Kronvalda Boulevard, Slokas Street, Latgales Street, etc.

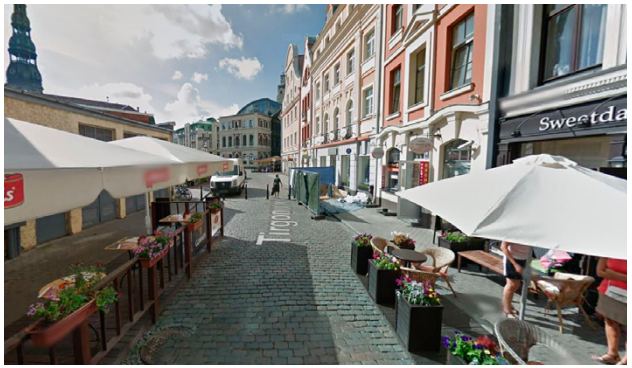
Slokas Street
(Google Street View)

Old Town

The streets of Old Riga have a unique character, scale, and significance within the city; therefore, special reconstruction methods must be developed for this part of the city. These streets should preserve historical proportions and materials, with priority given to pedestrian comfort and ensuring accessibility.

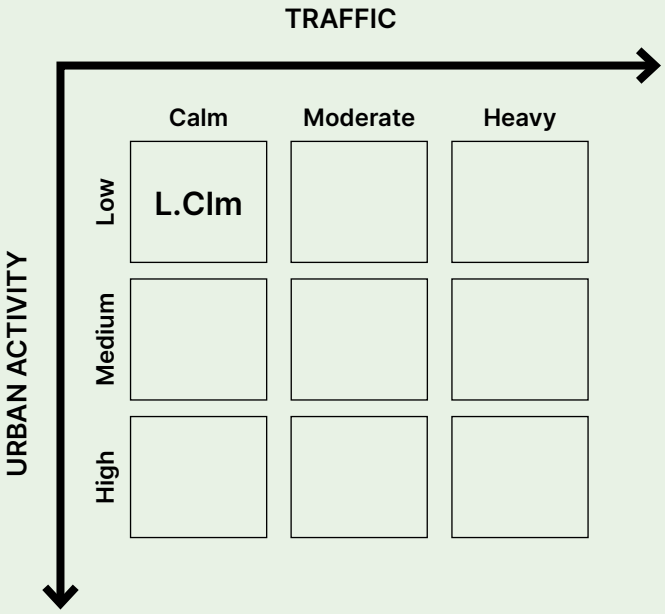
Examples:

Valnu Street, Skunu Street, Smilsu Street, Tirgonu Street, Kungu Street, etc.



Tirgonu Street
(Google Street View)

Calm traffic streets with Low urban activity



Calm traffic:

- Category E streets,
- low traffic intensity (less than 5000 vehicles per day),
- mostly passenger vehicle traffic,
- reduced driving speed (20–30 km/h).

Low urban activity:

- ground floors of buildings have no or very few commercial and public functions,
- buildings mostly monofunctional, residential, and free-standing,
- few entrances and shop windows (0–4 doors per 100 m of facade),
- large plots of land and long facades in high-density residential areas or small plots and small detached buildings in low-density residential areas.

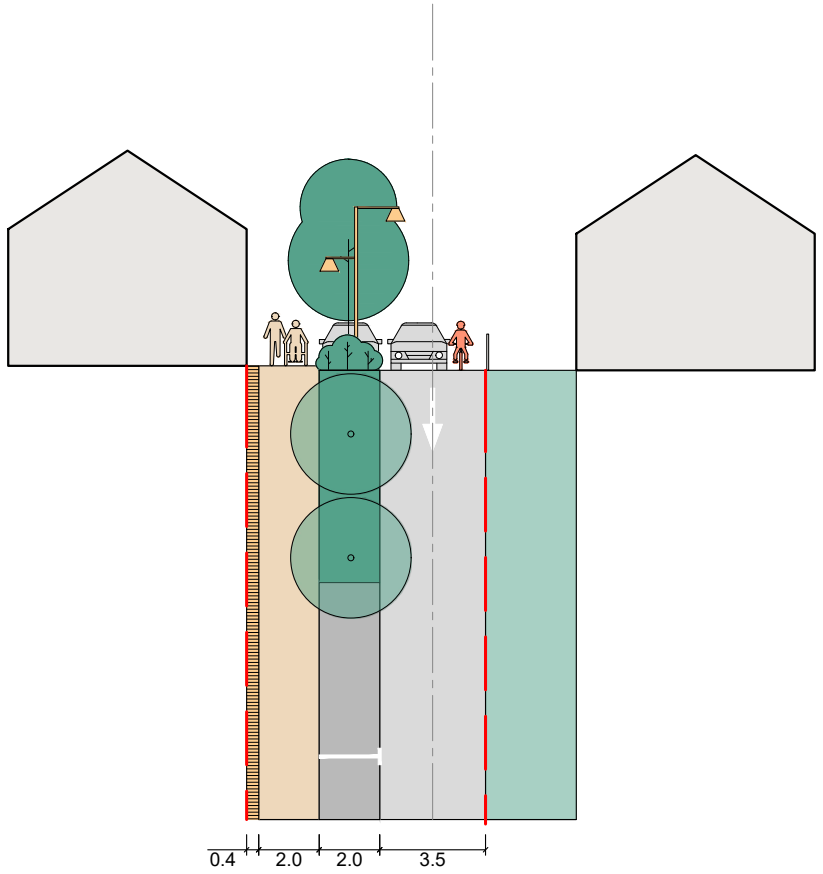
Calm traffic street with Low urban activity, 8 m

Code: **L.Clm 8**
Width between the red lines: **8–11 m**
Recommended driving speed: **20 km/h**

- pedestrian clear zone is at least 2m wide;
- pavement on at least one side of the street;

- planting zone alternates with parking spaces on one side of the street;

- one-way vehicular traffic;
- cyclists and cars share the carriageway;
- traffic calming measures must be used.



Calm traffic street with Low urban activity, 11 m

Code: **L.Clm 11**
Width between the red lines: **11–14 m**
Recommended driving speed: **20–30 km/h**

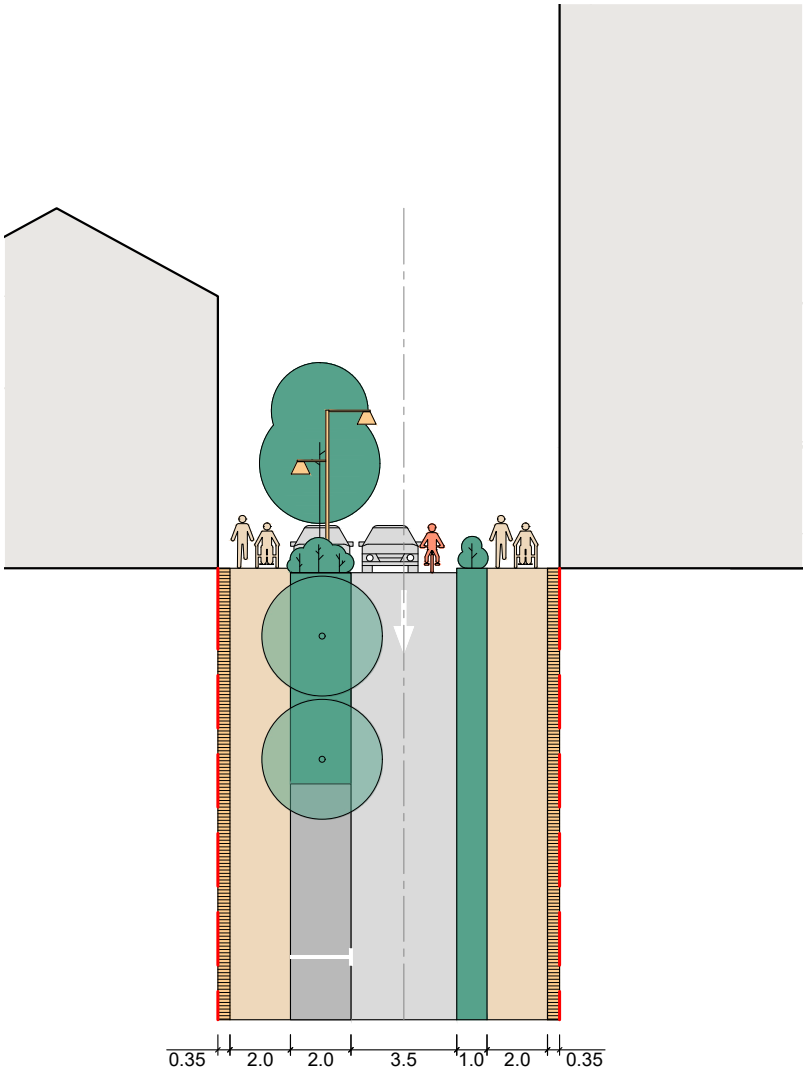
- pedestrian clear zone is at least 2m wide;

- planting zones between the carriageway and the pavements;
- planting zones alternate with parking spaces;

- one-way vehicular traffic;
- cyclists and cars share the carriageway;
- traffic calming measures must be used.

If possible:

- amenities on at least one side of the street; can be integrated within the planting zone.



Calm traffic street with Low urban activity, 14 m

Code: **L.Clm 14**
Width between the red lines: **14–16 m**
Recommended driving speed: **20–30 km/h**

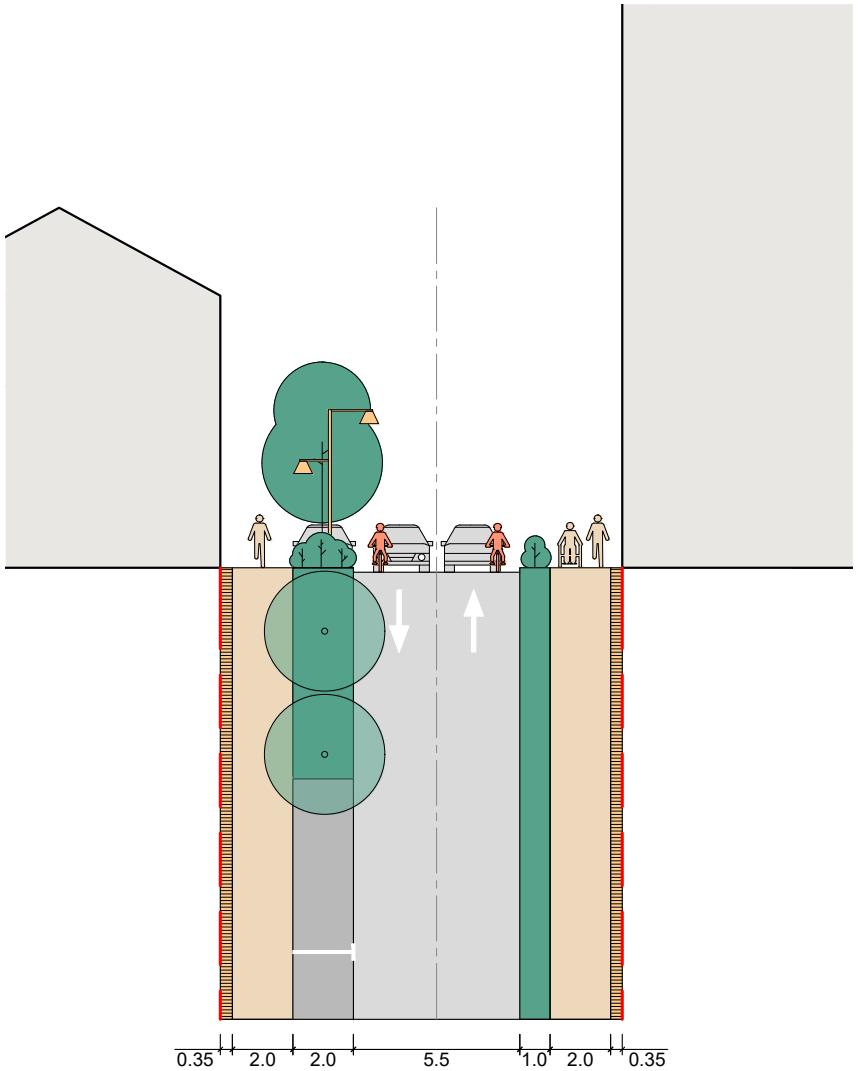
- pedestrian clear zone is at least 2m wide;

- planting zones between the carriageway and the pavements;
- planting zones alternate with parking spaces;

- two-way vehicular traffic;
- cyclists and cars share the carriageway;
- traffic calming measures must be used.

If possible:

- amenities on at least one side of the street; can be integrated within the planting zone.



Calm traffic street with Low urban activity, 16 m

Code: **L.Clm 16**
Width between the red lines: **16 m+**
Recommended driving speed: **20–30 km/h**

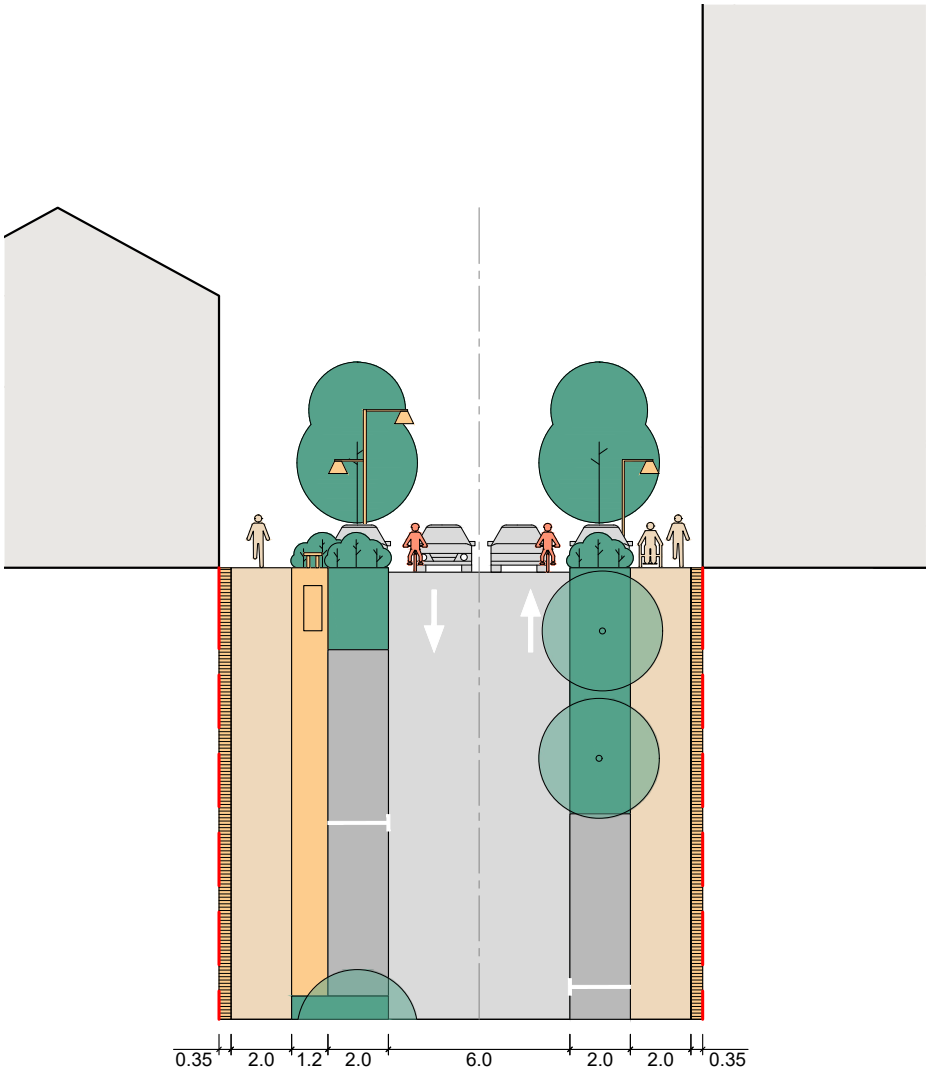
- pedestrian clear zone is at least 2m wide;

- planting zones between the carriageway and the pavements;
- planting zones alternate with parking spaces;

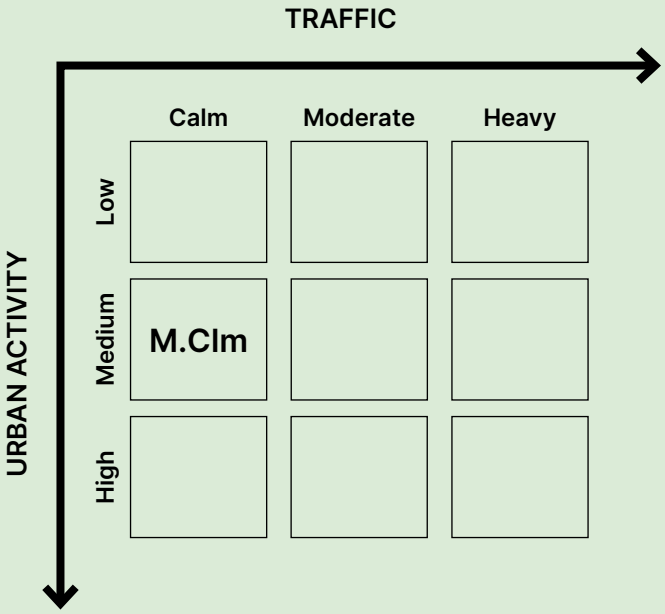
- two-way vehicular traffic;
- cyclists and cars share the carriageway;
- traffic calming measures must be used.

If possible:

- amenities on at least one side of the street; can be integrated within the planting zone.



Calm traffic streets with Medium urban activity



Calm traffic:

- Category E streets,
- low traffic intensity (less than 5000 vehicles per day),
- mostly passenger vehicle traffic,
- reduced driving speed (20–30 km/h).

Medium urban activity:

- ground floors of most but not all buildings have commercial and public functions,
- the street may have one or several public or commercial buildings with a moderate visitor flow, such as a school, a church, a clinic or a supermarket,
- buildings form a perimeter urban block or are free-standing,
- a moderate number of entrance doors and shop windows (5–7 doors per 100 m of facade).

Calm traffic street with Medium urban activity, 13 m

Code: **M.Clm 13**
Width between the red lines: **13–16 m**
Recommended driving speed: **20–30 km/h**

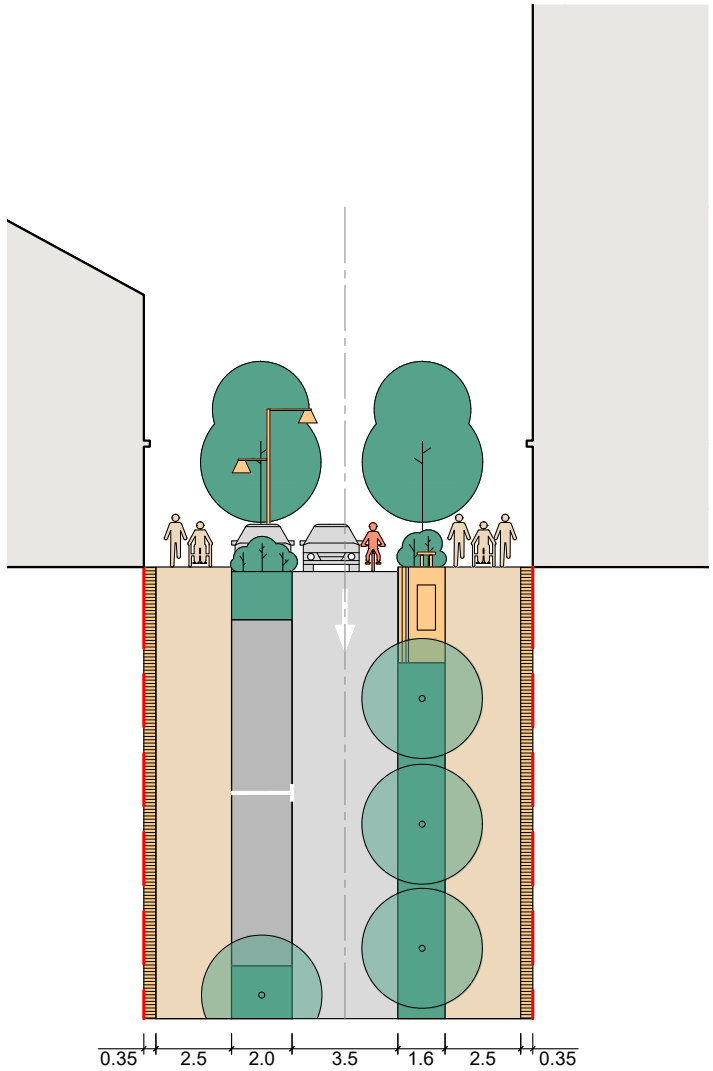
- pedestrian clear zone is at least 2,5m wide;

- planting zones between the carriageway and the pavements;
- amenities can be integrated within the planting zones;
- planting/amenity zones alternate with parking spaces;

- one-way vehicular traffic;
- cyclists and cars share the carriageway;
- traffic calming measures must be used.

If possible:

- space for commercial activities along the facades or in the planting/amenity zones.



Calm traffic street with Medium urban activity, 16 m

Code: **M.Clm 16**
Width between the red lines: **16–19 m**
Recommended driving speed: **20–30 km/h**

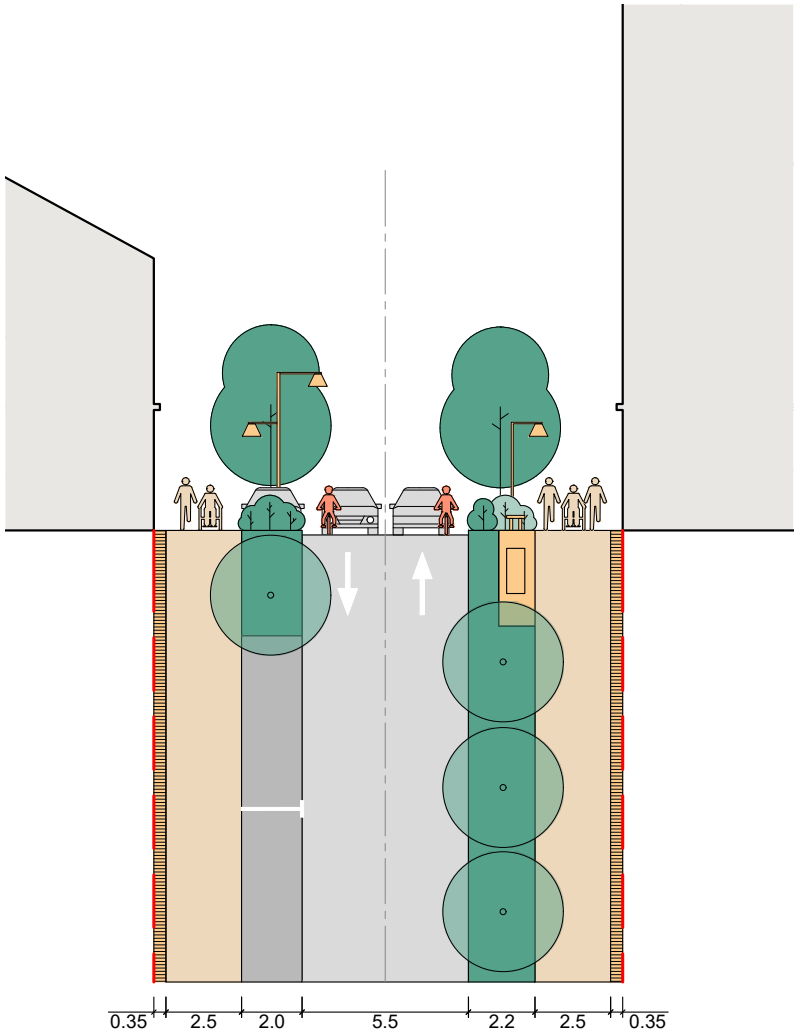
- pedestrian clear zone is at least 2,5m wide;

- planting zones between the carriageway and the pavements;
- amenities can be integrated within the planting zones;
- planting/amenity zones alternate with parking spaces;

- two-way vehicular traffic;
- cyclists and cars share the carriageway;
- traffic calming measures must be used.

If possible:

- space for commercial activities along the facades or in the planting/amenity zones.



Calm traffic street with Medium urban activity, 19 m

Code: M.Clm 19
Width between the red lines: 19 m+
Recommended driving speed: 20–30 km/h

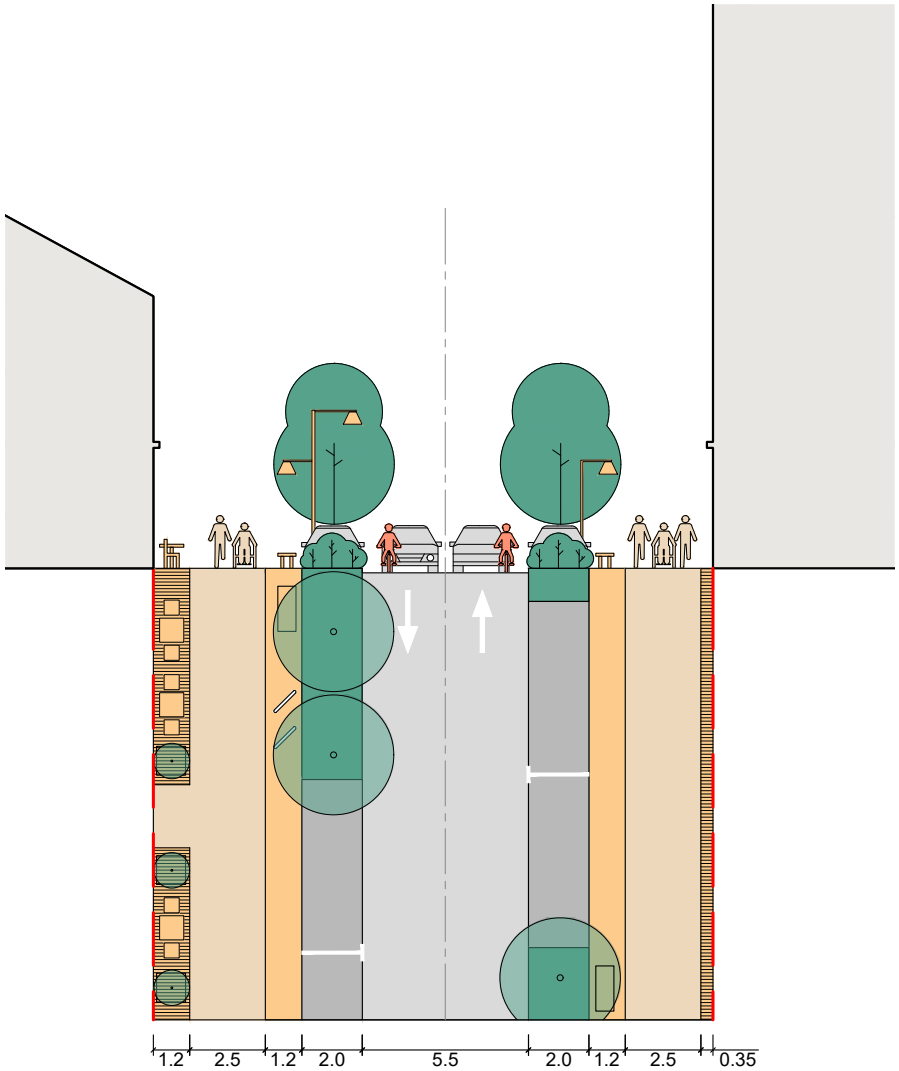
- pedestrian clear zone is at least 2,5m wide;

- planting zones and amenity zones between the carriageway and the pavements;
- planting zones and amenity zones can be separate or merged;
- planting/amenity zones alternate with parking spaces;

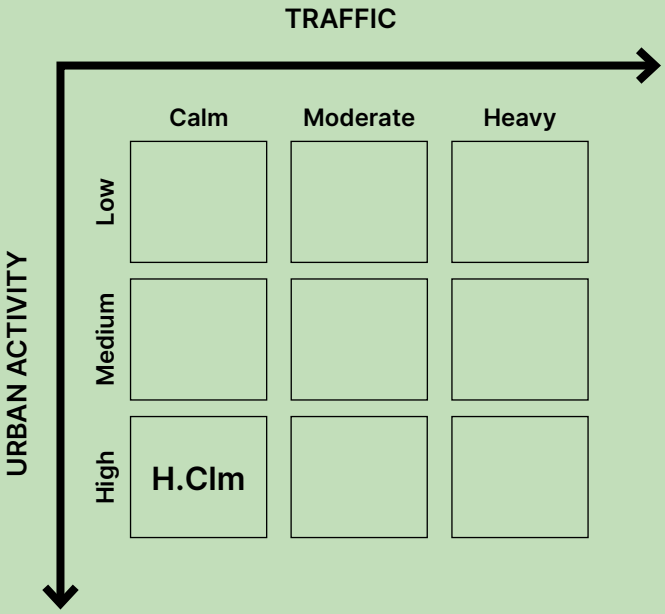
- two-way vehicular traffic;
- cyclists and cars share the carriageway;
- traffic calming measures must be used.

If possible:

- space for commercial activities along the facades or in the planting/amenity zones.



Calm traffic streets with High urban activity



Calm traffic:

- Category E streets,
- low traffic intensity (less than 5000 vehicles per day),
- mostly passenger vehicle traffic,
- reduced driving speed (20–30 km/h).

High urban activity:

- ground floors of all or almost all buildings have commercial and public functions, which may also extend to the street space (terraces, parklets),
- the street may have important public or commercial buildings with a busy visitor flow, such as a university, a museum, a shopping centre,
- buildings form a perimeter urban block or are free-standing,
- many entrance doors and shop windows (more than 7 doors per 100 m of facade).

Calm traffic street with High urban activity, 15 m

Code: **H.CIm 15**
Width between the red lines: **15–18 m**
Recommended driving speed: **20–30 km/h**

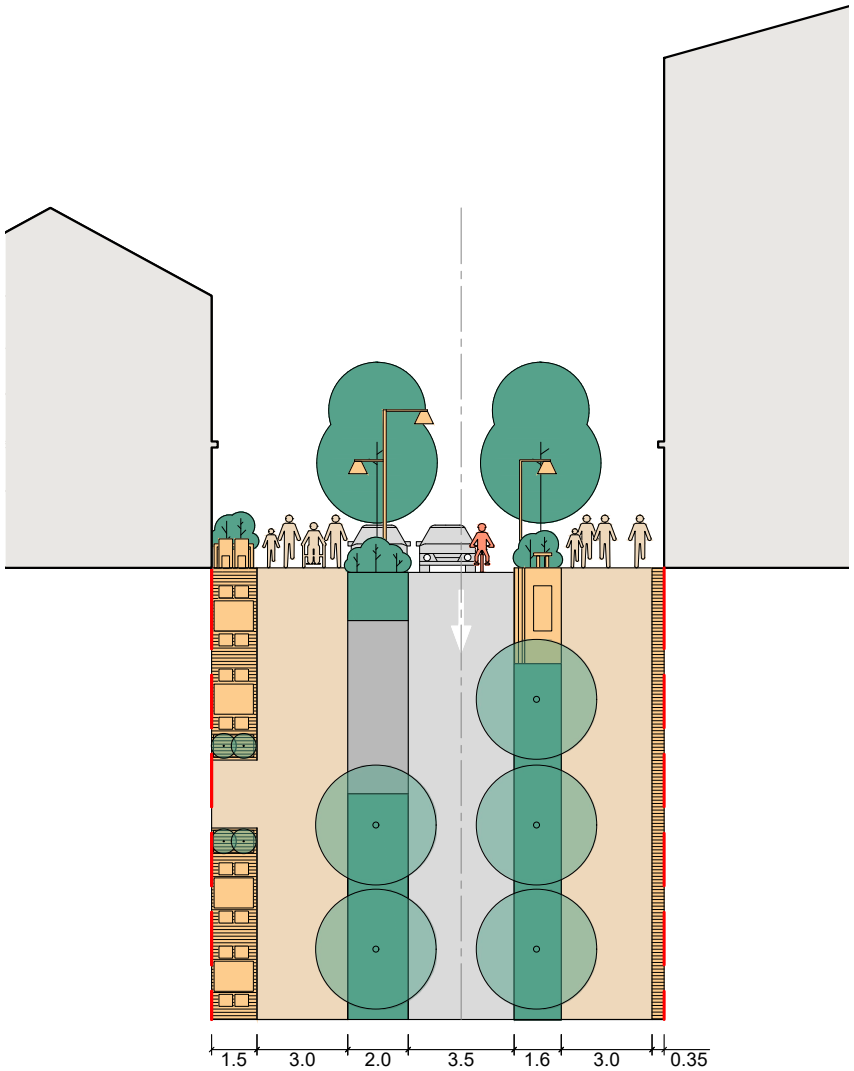
- pedestrian clear zone is at least 3m wide;

- planting zones and amenity zones between the carriageway and the pavements;
- planting zones and amenity zones can be separate or merged;
- space for commercial activities along the facades or in the planting/amenity zones;

- one-way vehicular traffic;
- cyclists and cars share the carriageway;
- traffic calming measures must be used.

If possible:

- delivery and short-term parking spaces alternate with planting.



Calm traffic street with High urban activity, 18 m

Code: **H.CIm 18**
Width between the red lines: **18–22 m**
Recommended driving speed: **20–30 km/h**

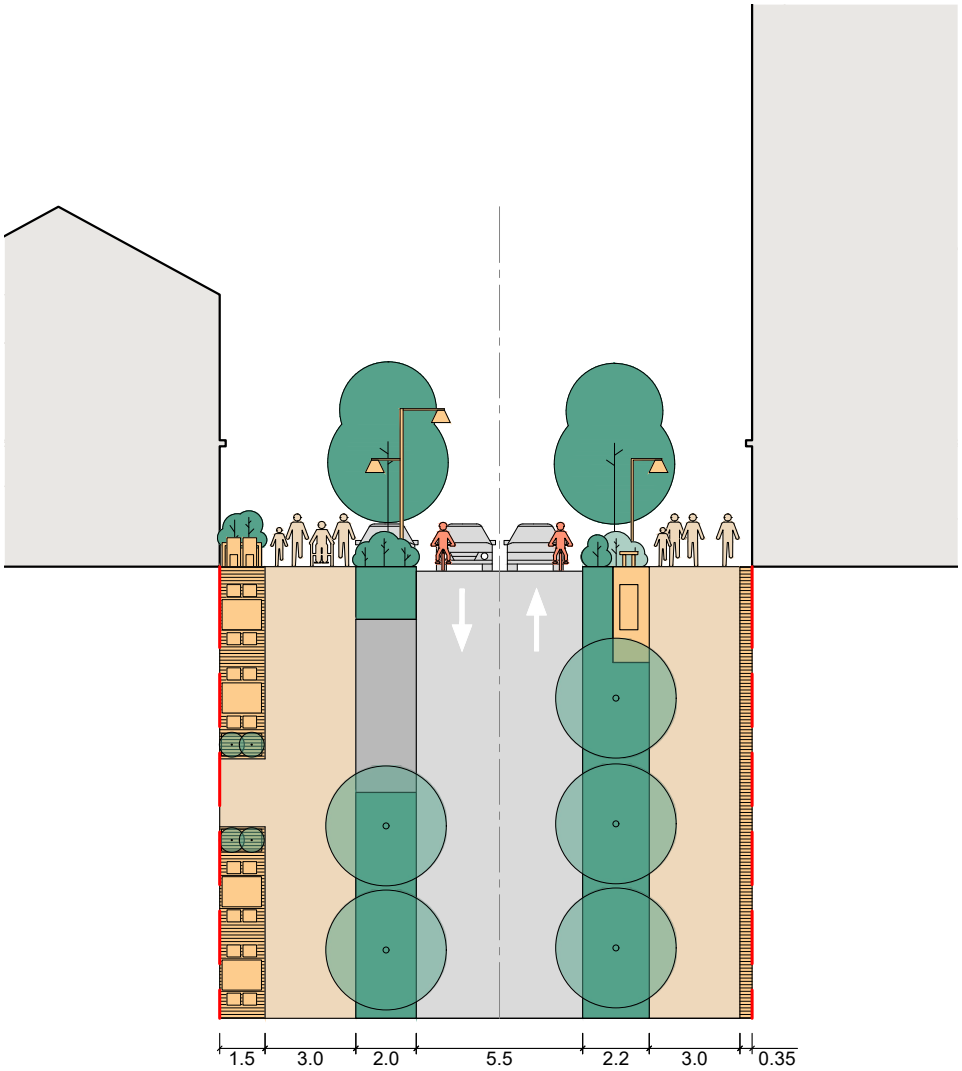
- pedestrian clear zone is at least 3m wide;

- planting zones and amenity zones between the carriageway and the pavements;
- planting zones and amenity zones can be separate or merged;
- space for commercial activities along the facades or in the planting/amenity zones;

- two-way vehicular traffic;
- cyclists and cars share the carriageway;
- traffic calming measures must be used.

If possible:

- delivery and short-term parking spaces alternate with planting.



Calm traffic street with High urban activity, 22 m

Code: H.CIm 22
Width between the red lines: 22 m+
Recommended driving speed: 20–30 km/h

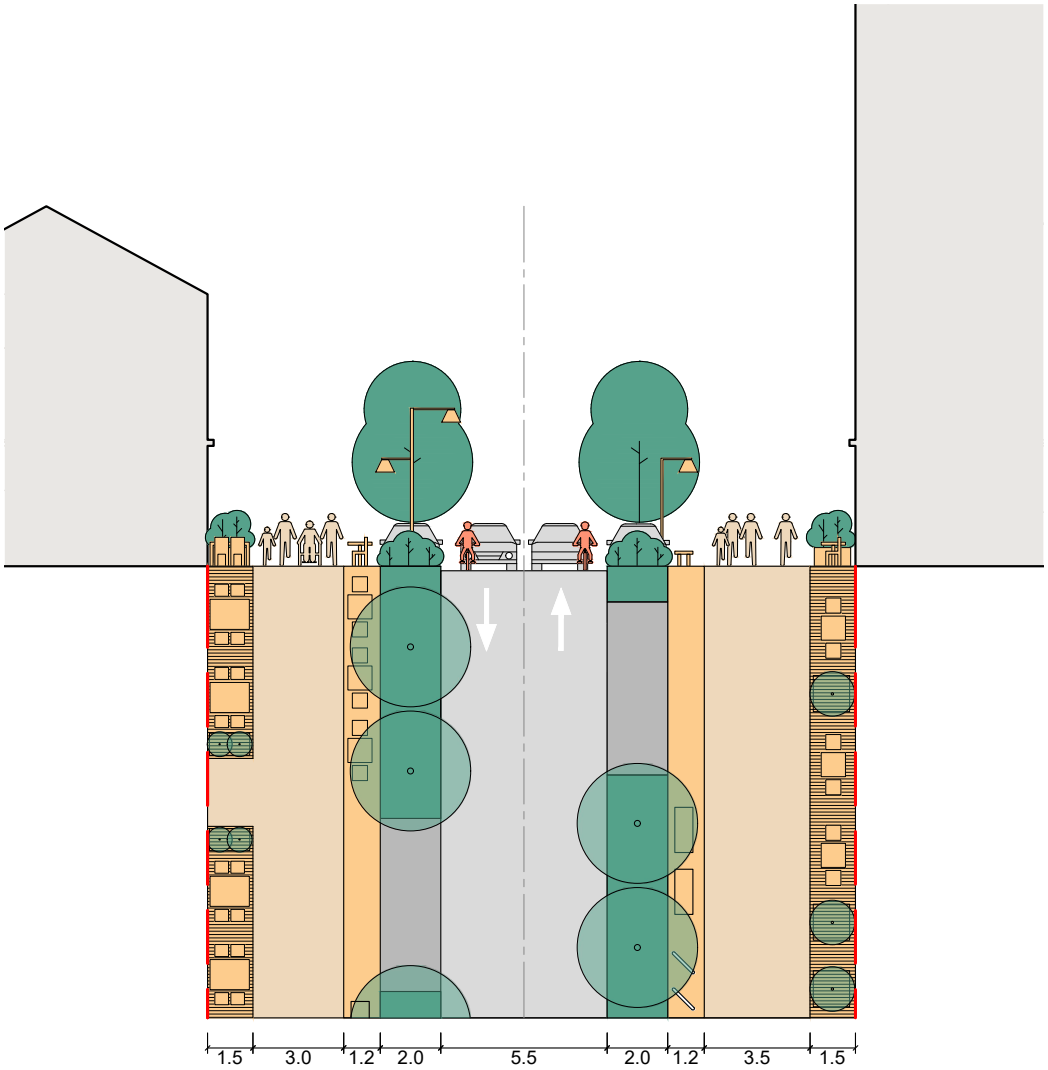
- pedestrian clear zone is at least 3m wide;

- planting zones and amenity zones between the carriageway and the pavements;
- planting zones and amenity zones can be separate or merged;
- space for commercial activities along the facades or in the planting/amenity zones;

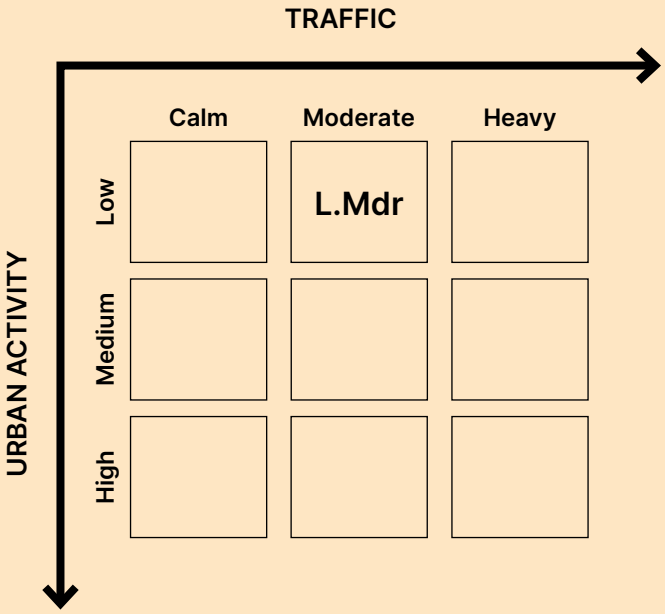
- two-way vehicular traffic;
- cyclists and cars share the carriageway;
- traffic calming measures must be used.

If possible:

- delivery and short-term parking spaces alternate with planting.



Moderate traffic streets with Low urban activity



Moderate traffic:

- Category E and D streets,
- moderate traffic intensity,
- mostly passenger vehicle traffic, may include public transport,
- moderate driving speed (30–50 km/h).

Low urban activity:

- ground floors of buildings have no or very few commercial and public functions,
- buildings mostly monofunctional, residential, and free-standing,
- few entrances and shop windows (0–4 doors per 100 m of facade),
- large plots of land and long facades in high-density residential areas or small plots and small detached buildings in low-density residential areas.

Moderate traffic street with Low urban activity, 14 m

Code: **L.Mdr 14**
Width between the red lines: **14–19 m**
Recommended driving speed: **30–50 km/h**

- pedestrian clear zone is at least 2m wide;

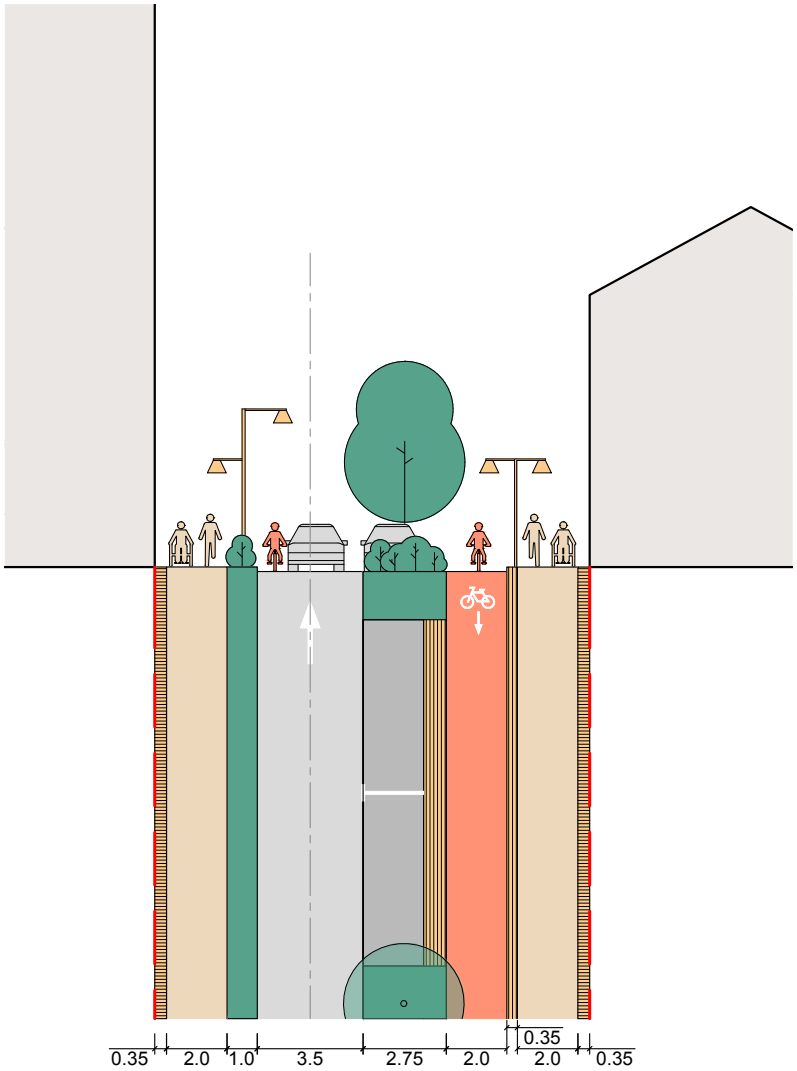
- planting zones between different traffic flows;
- planting zones alternate with parking spaces;

- a separated one-way cycle path or cycle lane in the opposite direction of traffic;

- one-way vehicular traffic;
- cyclists and cars share the carriageway;
- traffic calming measures must be used.

If possible:

- amenities integrated within the planting zones or widenings of the pavement.



Moderate traffic street with Low urban activity, 19 m

Code: **L.Mdr 19**
Width between the red lines: **19–25 m**
Recommended driving speed: **30–50 km/h**

- pedestrian clear zone is at least 2m wide;

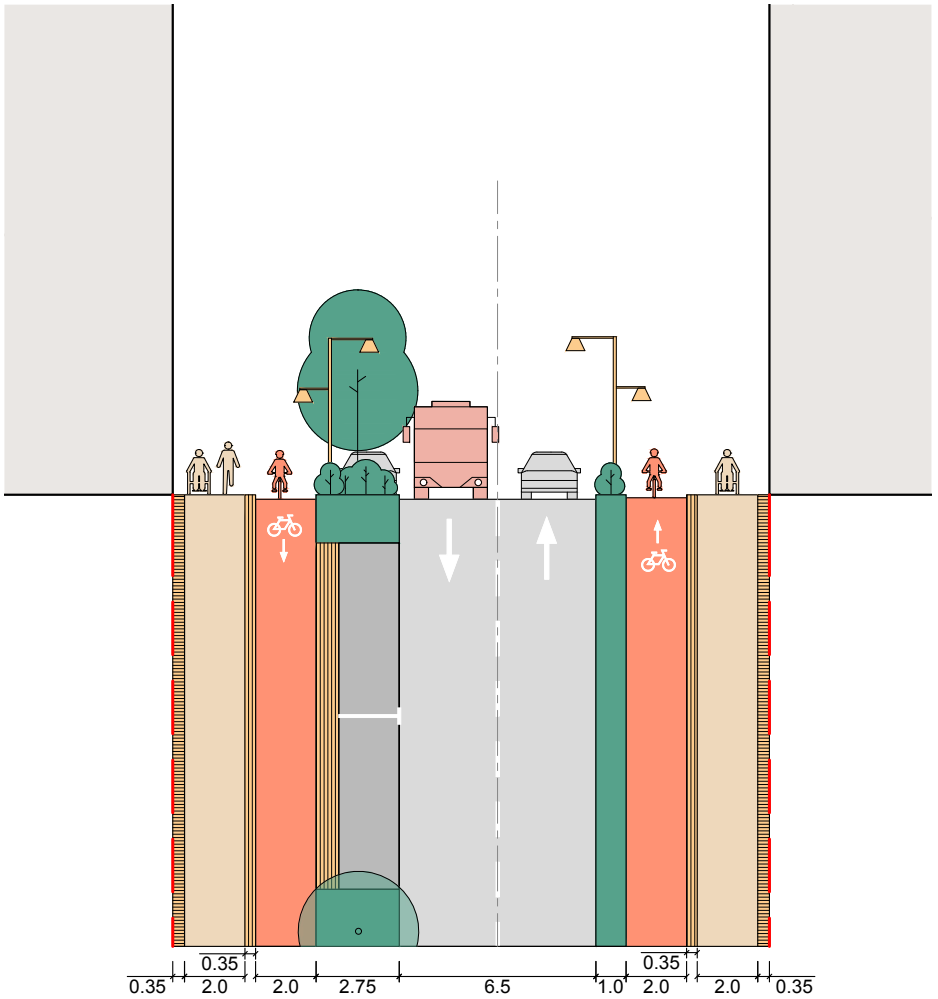
- planting zones between different traffic flows;
- planting zones alternate with parking spaces;

- separated one-way cycle paths or cycle lanes on both sides of the street;

- two-way vehicular traffic;
- shared lanes for public and private transport;
- traffic calming measures are recommended.

If possible:

- amenities integrated within the planting zones or widenings of the pavement.



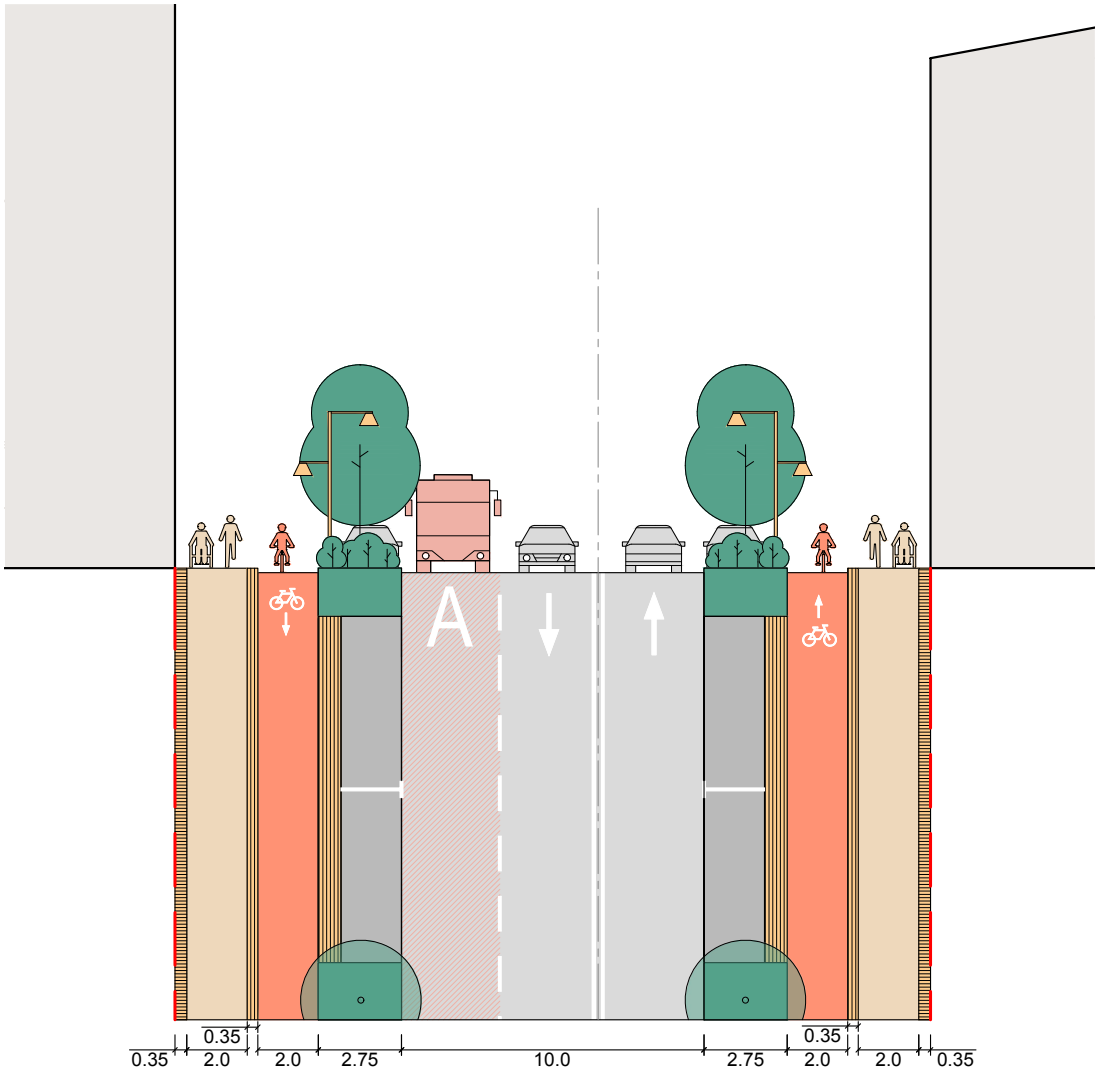
Moderate traffic street with Low urban activity, 25 m

Code: **L.Mdr 25**
Width between the red lines: **25 m+**
Recommended driving speed: **30–50 km/h**

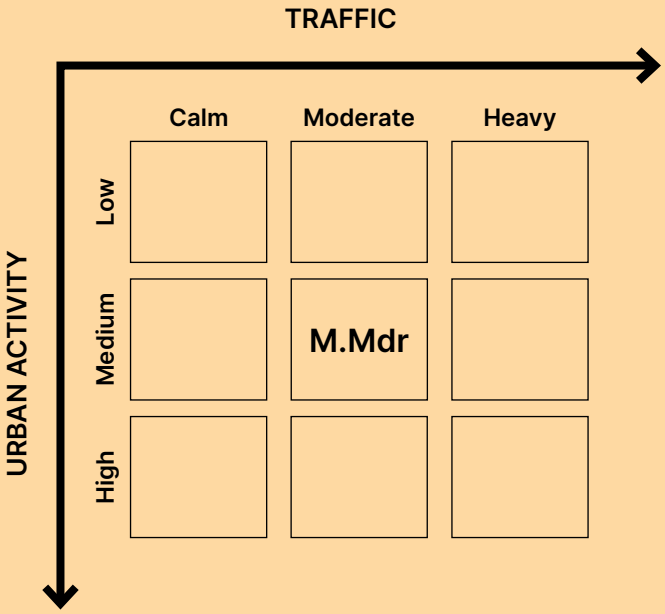
- pedestrian clear zone is at least 2m wide;
- planting zones between different traffic flows;
- planting zones alternate with parking spaces;
- separated one-way cycle paths or cycle lanes on both sides of the street;
- two-way vehicular traffic;
- dedicated public transport lanes are recommended.

If possible:

- amenities integrated within the planting zones or widenings of the pavement.



Moderate traffic streets with Medium urban activity



Moderate traffic:

- Category E and D streets,
- moderate traffic intensity,
- mostly passenger vehicle traffic, may include public transport,
- moderate driving speed (30–50 km/h).

Medium urban activity:

- ground floors of most but not all buildings have commercial and public functions,
- the street may have one or several public or commercial buildings with a moderate visitor flow, such as a school, a church, a clinic or a supermarket,
- buildings form a perimeter urban block or are free-standing,
- a moderate number of entrance doors and shop windows (5–7 doors per 100 m of facade).

Moderate traffic street with Medium urban activity, 16 m

Code: **M.Mdr 16**
Width between the red lines: **16-22 m**
Recommended driving speed: **30–50 km/h**

- pedestrian clear zone is at least 2,5m wide;

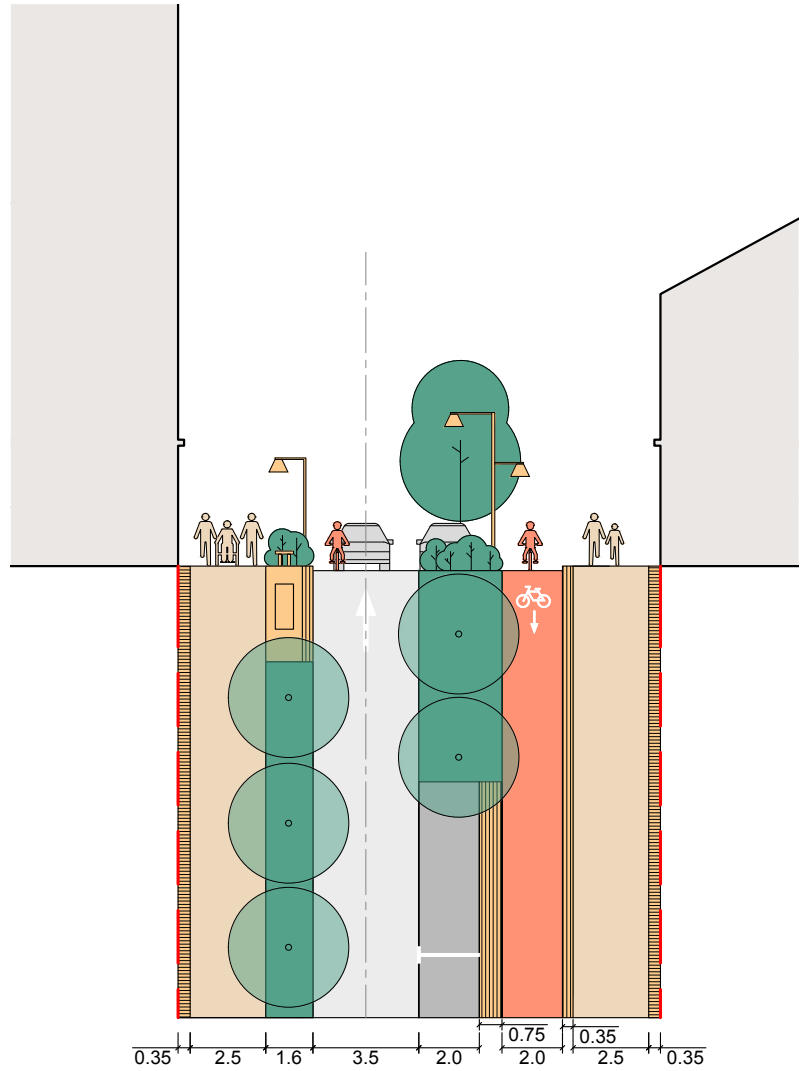
- planting zones between different traffic flows;
- amenities can be integrated within the planting zones;
- planting/amenity zones alternate with parking spaces;

- a separated one-way cycle path or cycle lane in the opposite direction of traffic;

- one-way vehicular traffic;
- cyclists and cars share the carriageway;
- traffic calming measures must be used.

If possible:

- space for commercial activities along the facades or in the planting/amenity zones.



Moderate traffic street with Medium urban activity, 22 m

Code: M.Mdr 22
Width between the red lines: 22–30 m
Recommended driving speed: 30–50 km/h

- pedestrian clear zone is at least 2,5m wide;

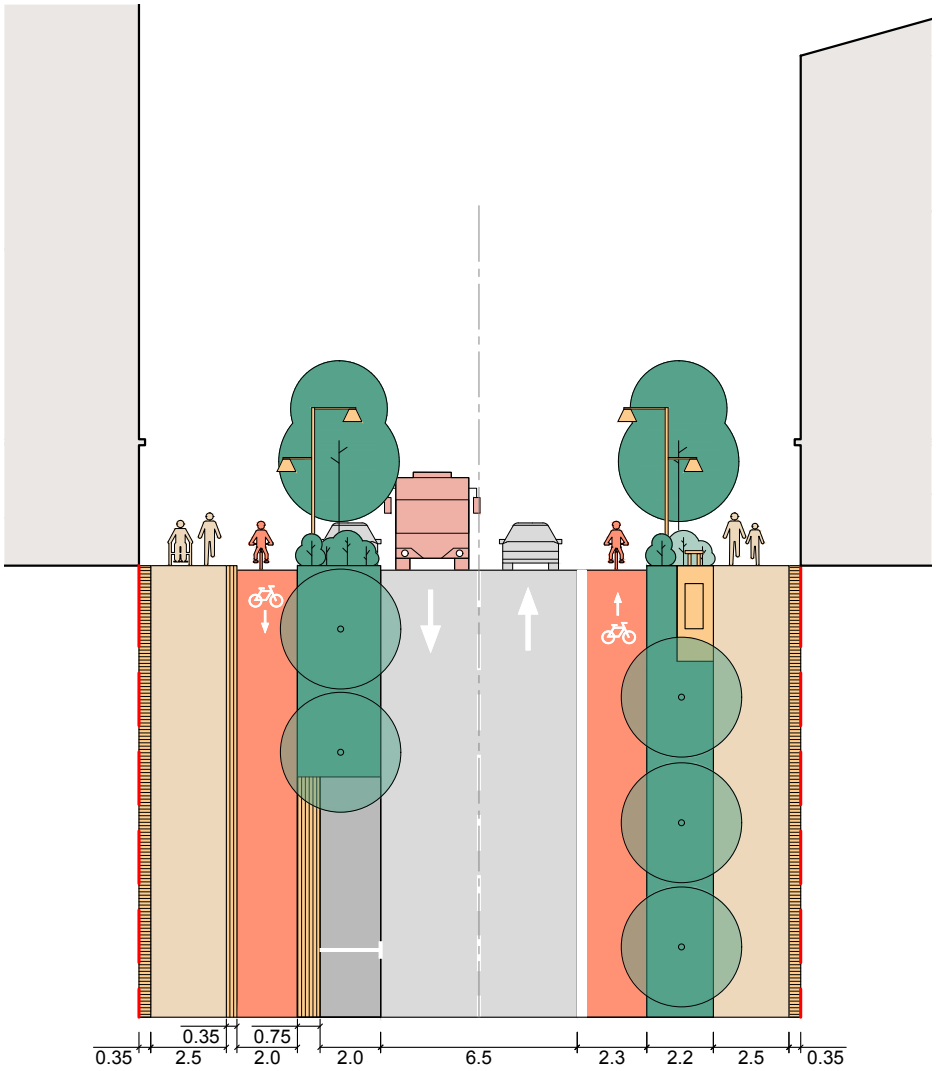
- planting zones between different traffic flows;
- planting zones and amenity zones can be separate or merged;
- planting/amenity zones alternate with parking spaces;

- separated one-way cycle paths or cycle lanes on both sides of the street;

- two-way vehicular traffic;
- shared lanes for public and private transport;
- traffic calming measures are recommended.

If possible:

- spaces for commercial activities along the facades or in the planting/amenity zones.



Moderate traffic street with Medium urban activity, 30 m

Code: **M.Mdr 30**
Width between the red lines: **30 m+**
Recommended driving speed: **30–50 km/h**

- pedestrian clear zone is at least 2,5m wide;

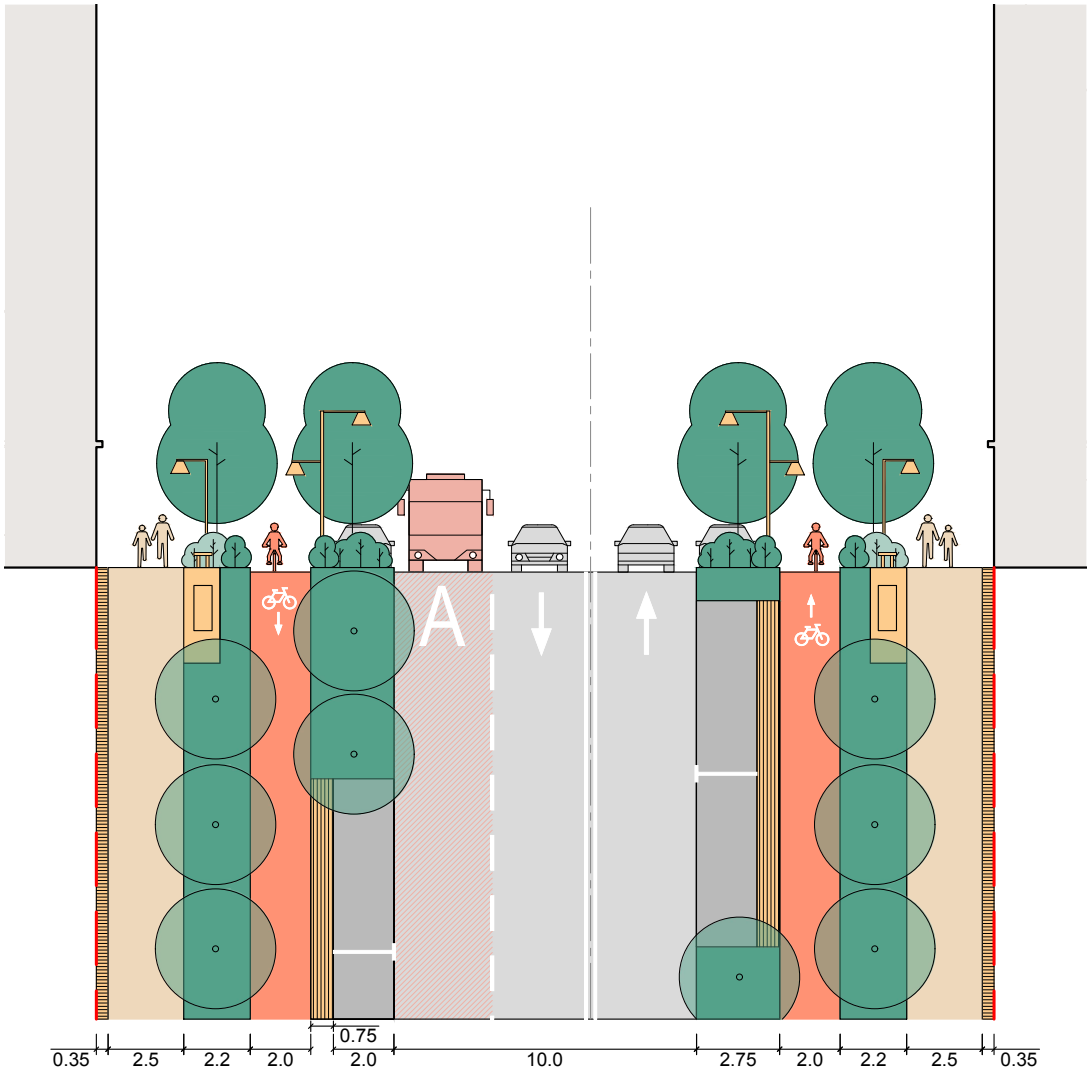
- planting zones between different traffic flows;
- planting zones and amenity zones can be separate or merged;
- planting/amenity zones alternate with parking spaces;

- separated one-way cycle paths or cycle lanes on both sides of the street;

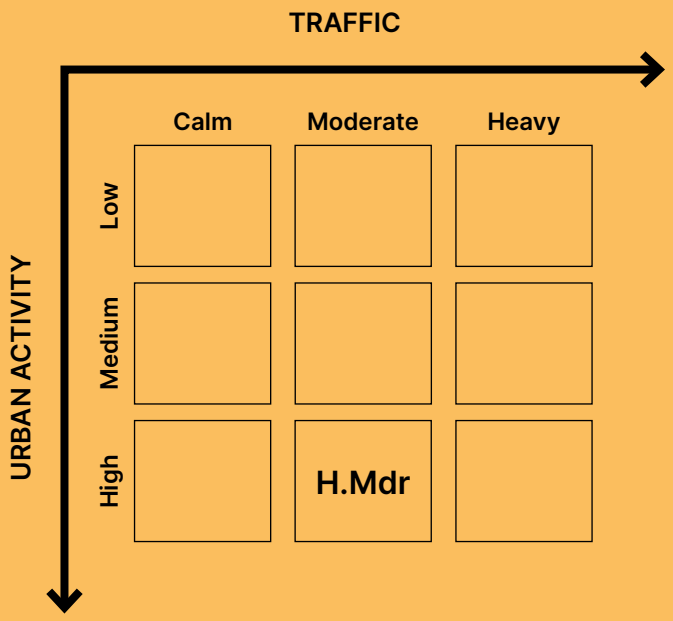
- two-way vehicular traffic;
- dedicated public transport lanes are recommended.

If possible:

- spaces for commercial activities along the facades or in the planting/amenity zones.



Moderate traffic streets with High urban activity



Moderate traffic:

- Category E and D streets,
- moderate traffic intensity,
- mostly passenger vehicle traffic, may include public transport,
- moderate driving speed (30–50 km/h).

High urban activity:

- ground floors of all or almost all buildings have commercial and public functions, which may also extend to the street space (terraces, parklets),
- the street may have important public or commercial buildings with a busy visitor flow, such as a university, a museum, a shopping centre,
- buildings form a perimeter urban block or are free-standing,
- many entrance doors and shop windows (more than 7 doors per 100 m of facade).

Moderate traffic street with High urban activity, 19 m

Code: H.Mdr 19
Width between the red lines: 19–25 m
Recommended driving speed: 30–50 km/h

- pedestrian clear zone is at least 3m wide;

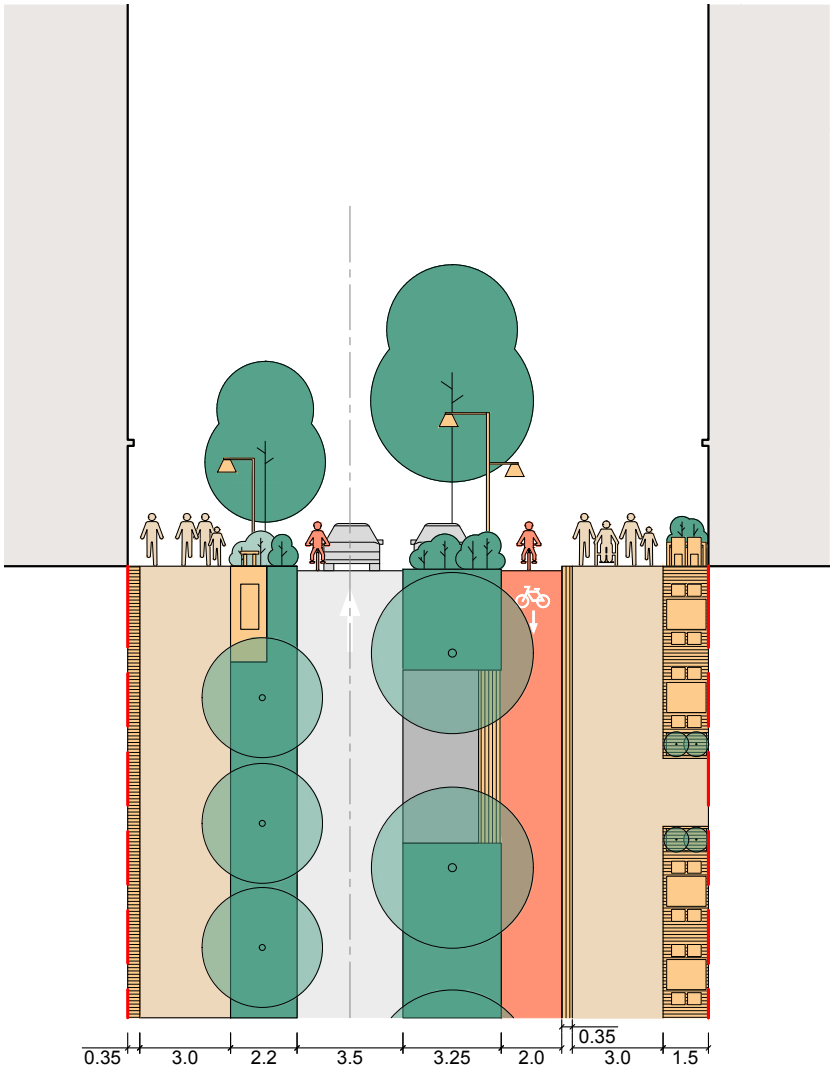
- planting zones between different traffic flows;
- planting zones and amenity zones can be separate or merged;
- spaces for commercial activities along the facades or in the planting/amenity zones;

- a separated one-way cycle path or cycle lane in the opposite direction of traffic;

- one-way vehicular traffic;
- cyclists and cars share the carriageway;
- traffic calming measures must be used.

If possible:

- delivery and short-term parking spaces alternate with planting.



Moderate traffic street with High urban activity, 25 m

Code: H.Mdr 25
Width between the red lines: 25–34 m
Recommended driving speed: 30–50 km/h

- pedestrian clear zone is at least 3m wide;

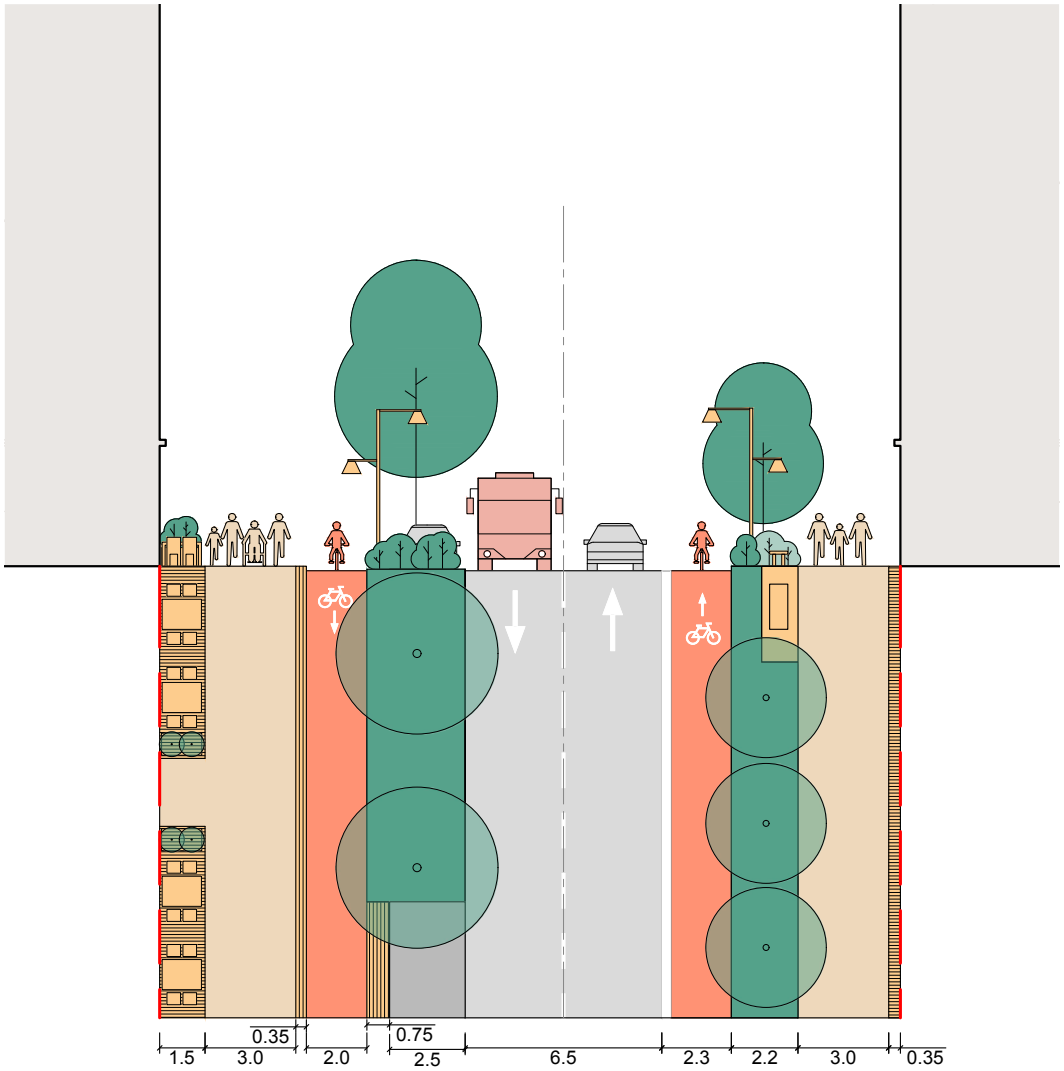
- planting zones between different traffic flows;
- planting zones and amenity zones can be separate or merged;
- spaces for commercial activities along the facades or in the planting/amenity zones;

- separated one-way cycle paths or cycle lanes on both sides of the street;

- two-way vehicular traffic;
- shared lanes for public and private transport;
- traffic calming measures are recommended.

If possible:

- delivery and short-term parking spaces alternate with planting.



Moderate traffic street with High urban activity, 34 m

Code: H.Mdr 34
Width between the red lines: 34 m+
Recommended driving speed: 30–50 km/h

- pedestrian clear zone is at least 3m wide;

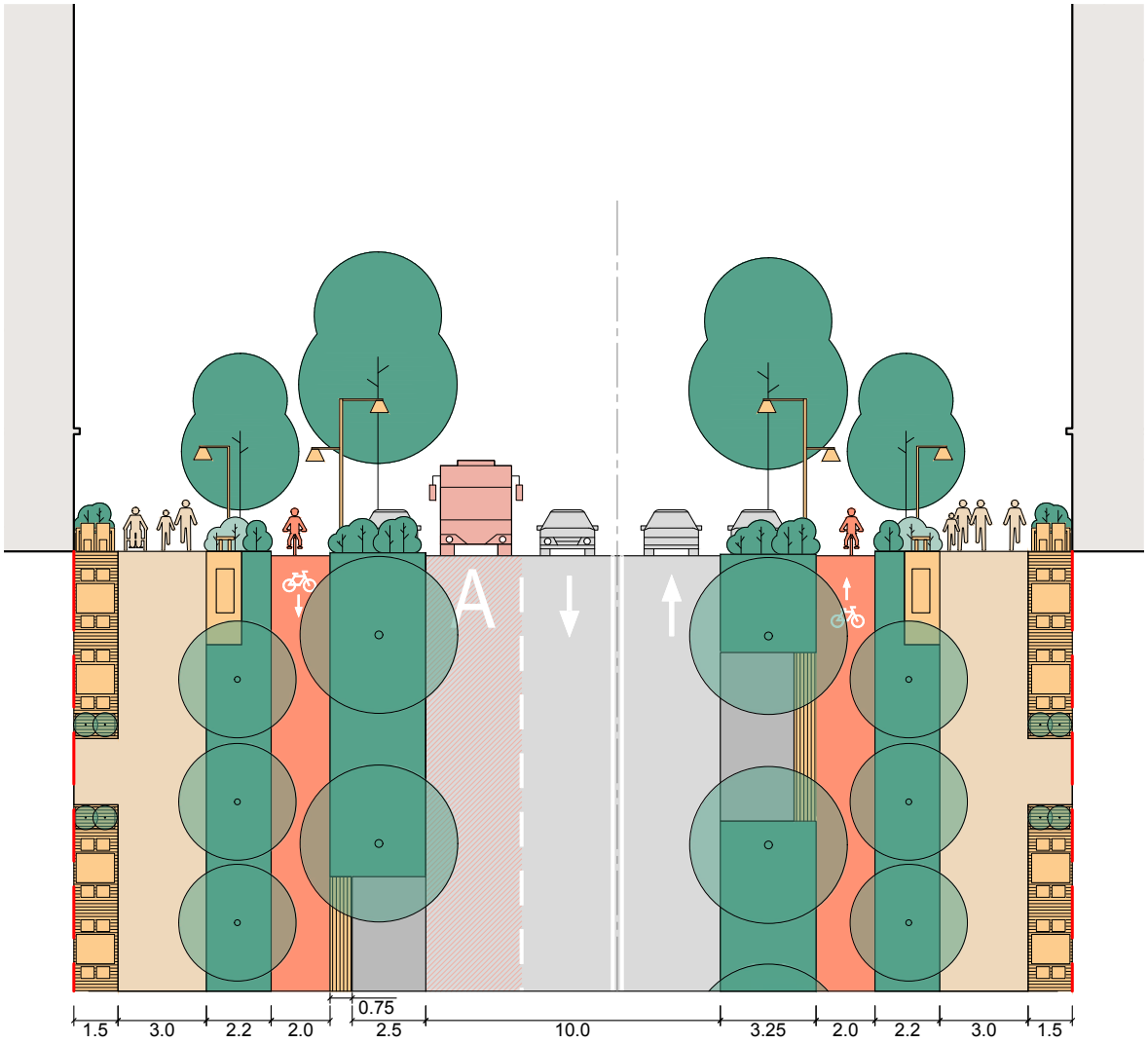
- planting zones between different traffic flows;
- planting zones and amenity zones can be separate or merged;
- spaces for commercial activities along the facades or in the planting/amenity zones;

- separated one-way cycle paths or cycle lanes on both sides of the street;

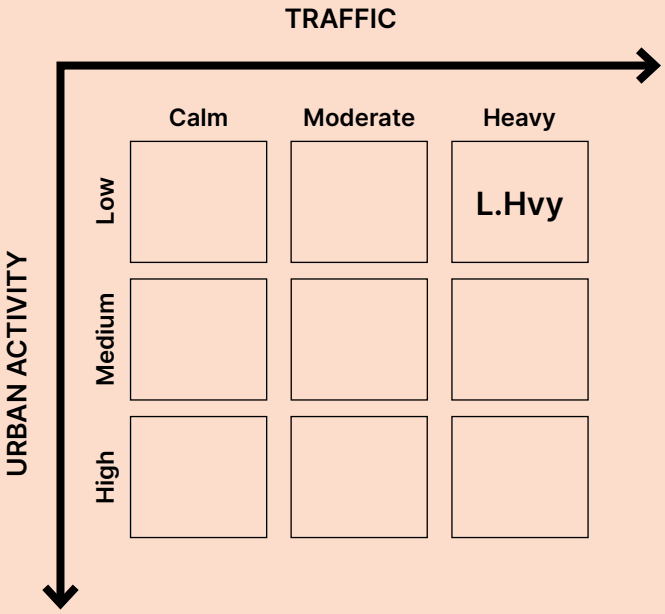
- two-way vehicular traffic;
- dedicated public transport lanes are recommended.

If possible:

- delivery and short-term parking spaces alternate with planting.



Heavy traffic streets with Low urban activity



Heavy traffic:

- Category D and C streets,
- high traffic intensity,
- multiple traffic lanes in each direction,
- traffic consists of passenger vehicles and public transport, may include freight transport,
- moderate and high driving speed (50–70 km/h).

Low urban activity:

- ground floors of buildings have no or very few commercial and public functions,
- buildings mostly monofunctional, residential, and free-standing,
- few entrances and shop windows (0–4 doors per 100 m of facade),
- large plots of land and long facades in high-density residential areas or small plots and small detached buildings in low-density residential areas.

Heavy traffic street with Low urban activity, 20 m

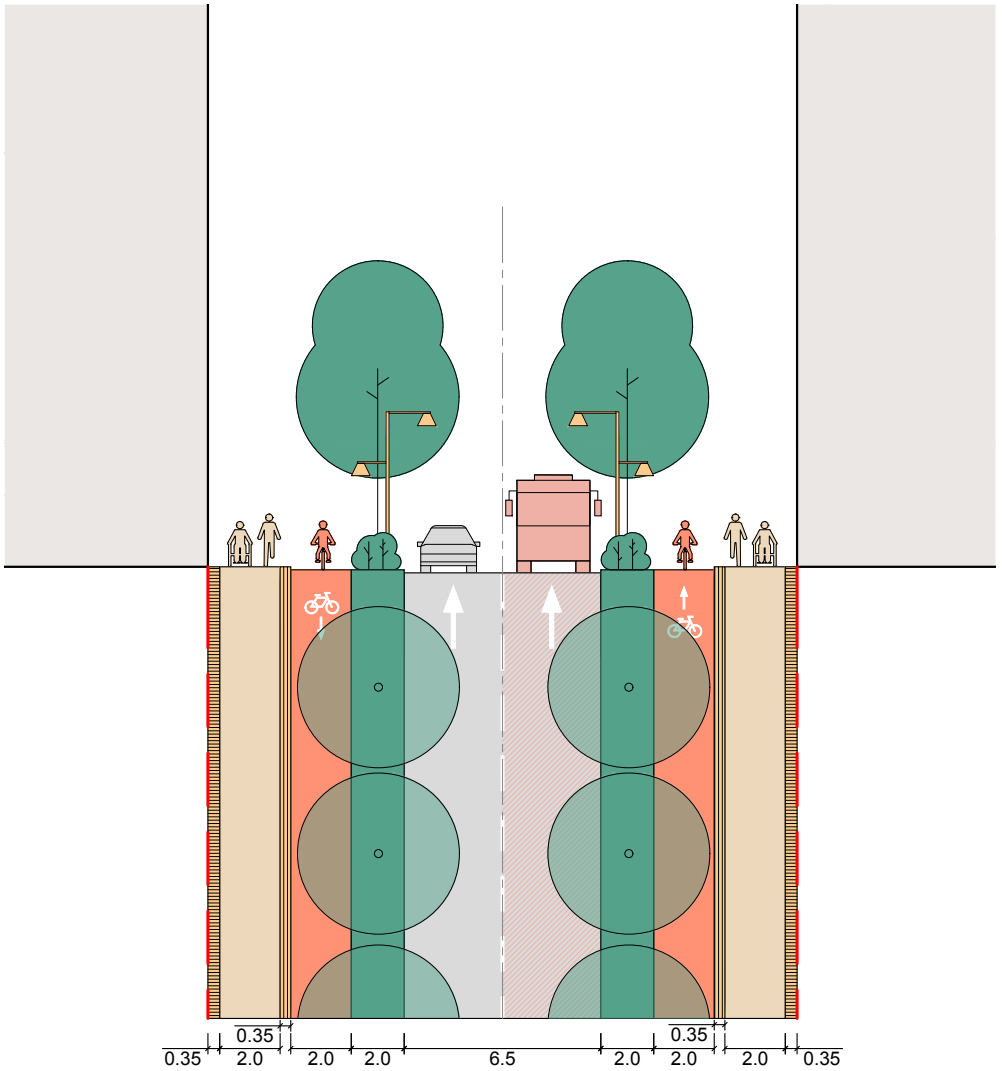
Code: **L.Hvy 20**
Width between the red lines: **20–27 m**
Recommended driving speed: **30–50 km/h**

- pedestrian clear zone is at least 2m wide;
- planting zones between different traffic flows;
- separated one-way cycle paths or cycle lanes on both sides of the street;
- one-way vehicular traffic*;
- a dedicated public transport lane;

**two-way vehicular traffic possible if a public transport lane is not necessary.*

If possible:

- amenities integrated within the planting zones or widenings of the pavement;
- parking spaces alternate with planting.



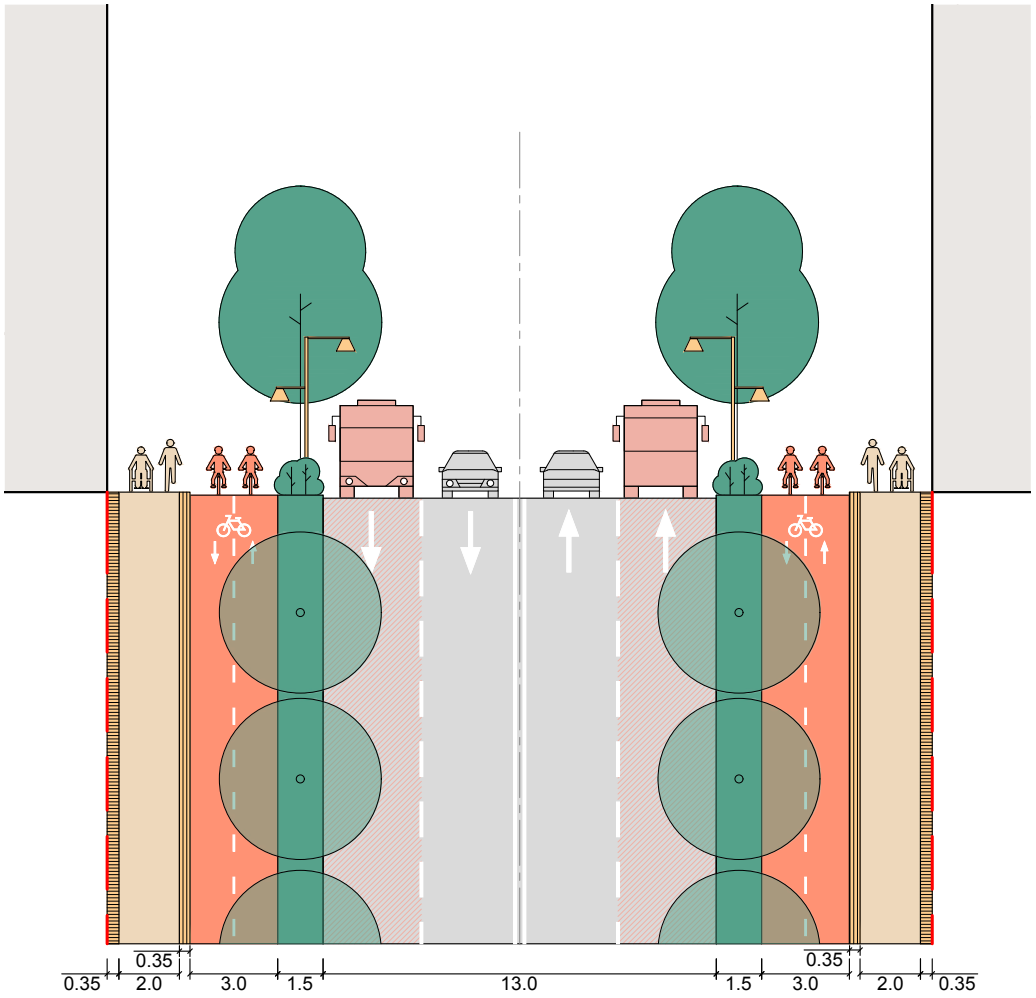
Heavy traffic street with Low urban activity, 27 m

Code: **L.Hvy 27**
Width between the red lines: **27–32 m**
Recommended driving speed: **50 km/h**

- pedestrian clear zone is at least 2m wide;
- planting zones between different traffic flows;
- separated two-way cycle paths on both sides of the street;
- two-way vehicular traffic;
- dedicated public transport lanes.

If possible:

- amenities integrated within the planting zones or widenings of the pavement;
- parking spaces alternate with planting.



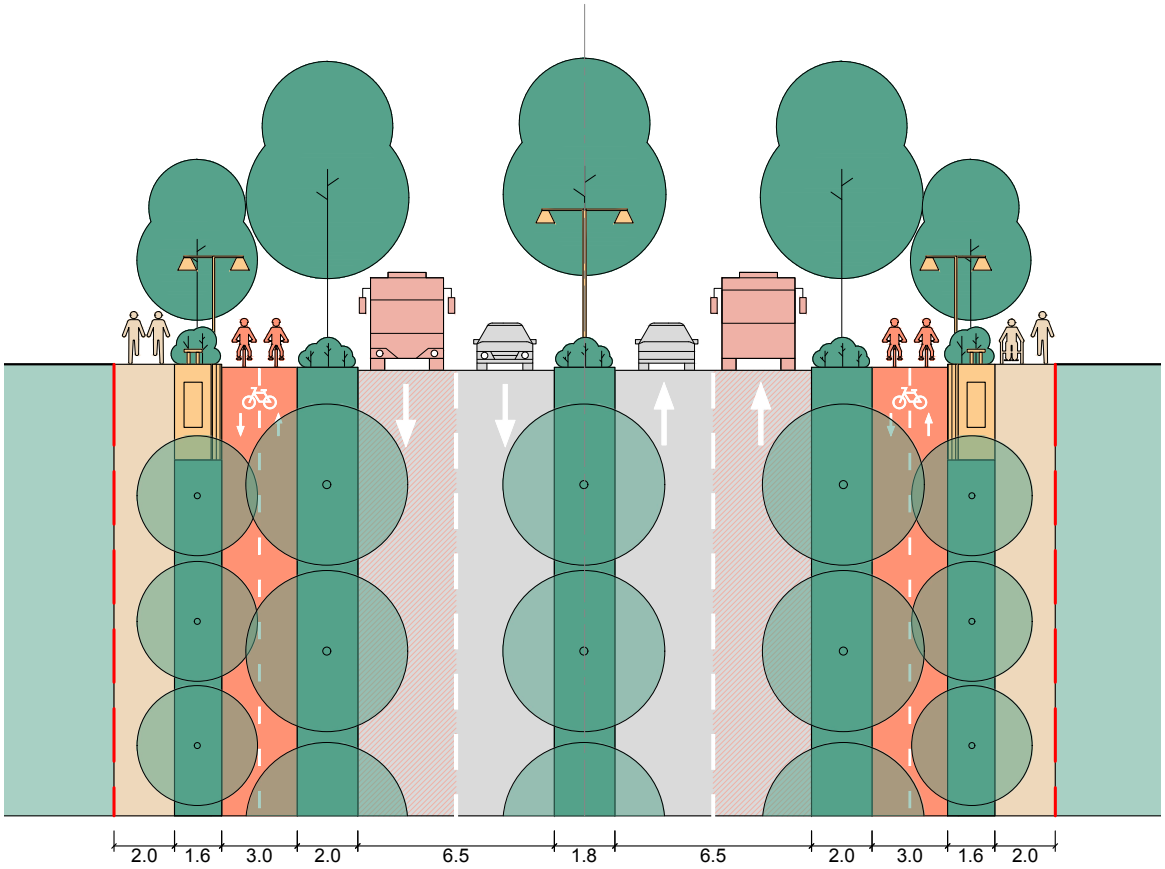
Heavy traffic street with Low urban activity, 32 m

Code: **L.Hvy 32**
Width between the red lines: **32 m+**
Recommended driving speed: **50 km/h**

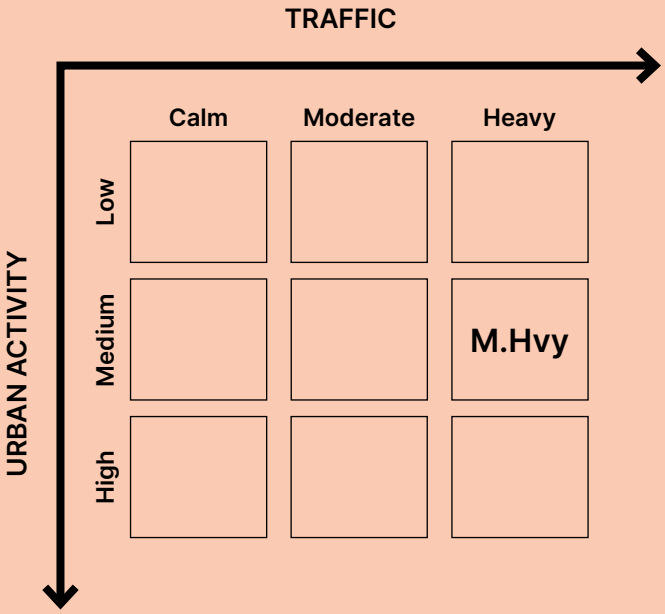
- pedestrian clear zone is at least 2m wide;
- planting zones between different traffic flows;
- separated two-way cycle paths on both sides of the street;
- two-way vehicular traffic;
- dedicated public transport lanes.

If possible:

- amenities integrated within the planting zones or widenings of the pavement;
- parking spaces alternate with planting.



Heavy traffic streets with Medium urban activity



Heavy traffic:

- Category D and C streets,
- high traffic intensity,
- multiple traffic lanes in each direction,
- traffic consists of passenger vehicles and public transport, may include freight transport,
- moderate and high driving speed (50–70 km/h).

Medium urban activity:

- ground floors of most but not all buildings have commercial and public functions,
- the street may have one or several public or commercial buildings with a moderate visitor flow, such as a school, a church, a clinic or a supermarket,
- buildings form a perimeter urban block or are free-standing,
- a moderate number of entrance doors and shop windows (5–7 doors per 100 m of facade).

Heavy traffic street with Medium urban activity, 22 m

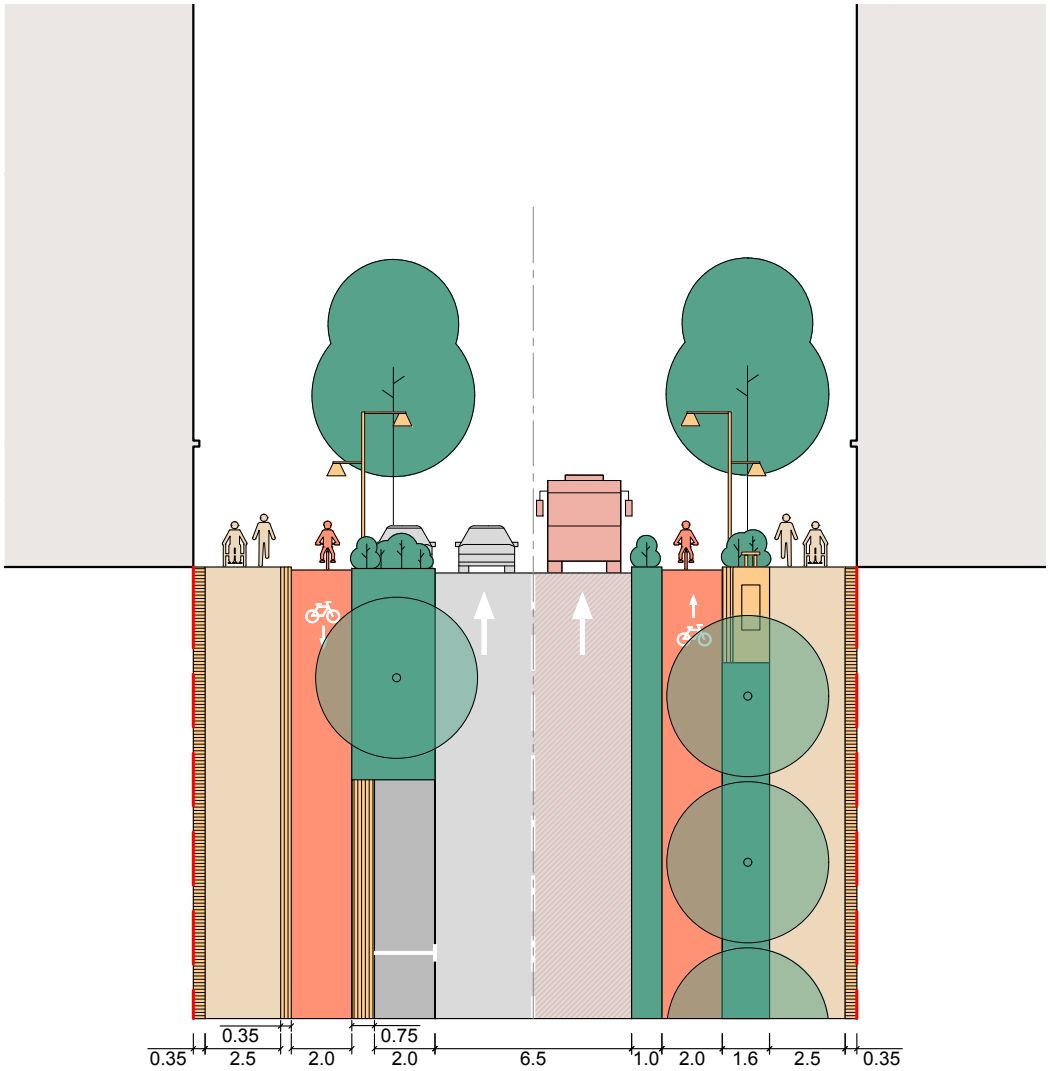
Code: M.Hvy 22
Width between the red lines: 22–29 m
Recommended driving speed: 30–50 km/h

- pedestrian clear zone is at least 2,5m wide;
- planting zones between different traffic flows;
- planting zones and amenity zones can be separate or merged;
- separated one-way cycle paths on both sides of the street;
- one-way vehicular traffic*;
- a dedicated public transport lane;

**two-way vehicular traffic possible if a public transport lane is not necessary.*

If possible:

- spaces for commercial activities along the facades or in the planting/amenity zones;
- delivery and short-term parking spaces alternate with planting.



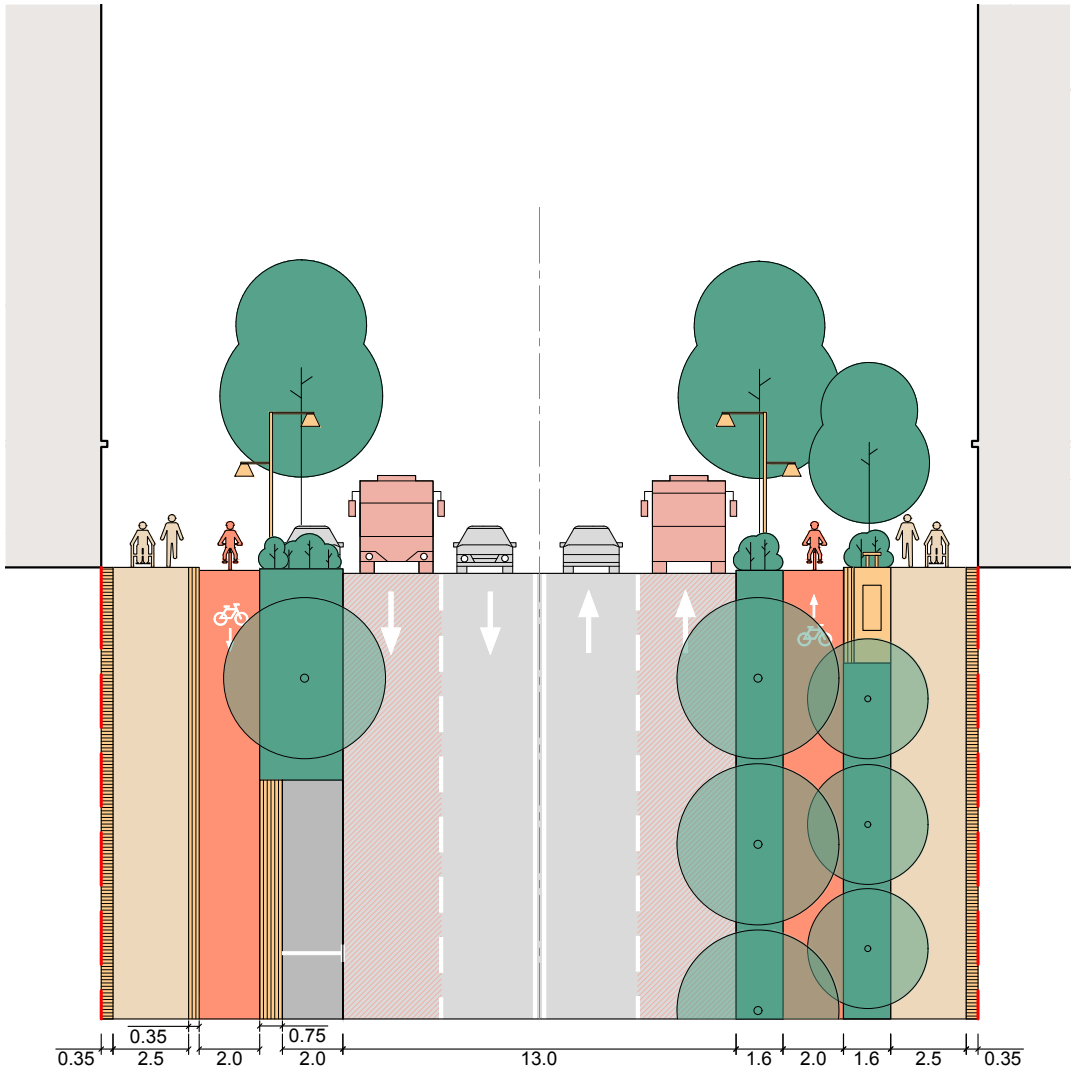
Heavy traffic street with Medium urban activity, 29 m

Code: **M.Hvy 29**
Width between the red lines: **29–36 m**
Recommended driving speed: **50 km/h**

- pedestrian clear zone is at least 2,5m wide;
- planting zones between different traffic flows;
- planting zones and amenity zones can be separate or merged;
- separated one-way cycle paths on both sides of the street;
- two-way vehicular traffic;
- dedicated public transport lanes.

If possible:

- spaces for commercial activities along the facades or in the planting/amenity zones;
- delivery and short-term parking spaces alternate with planting.



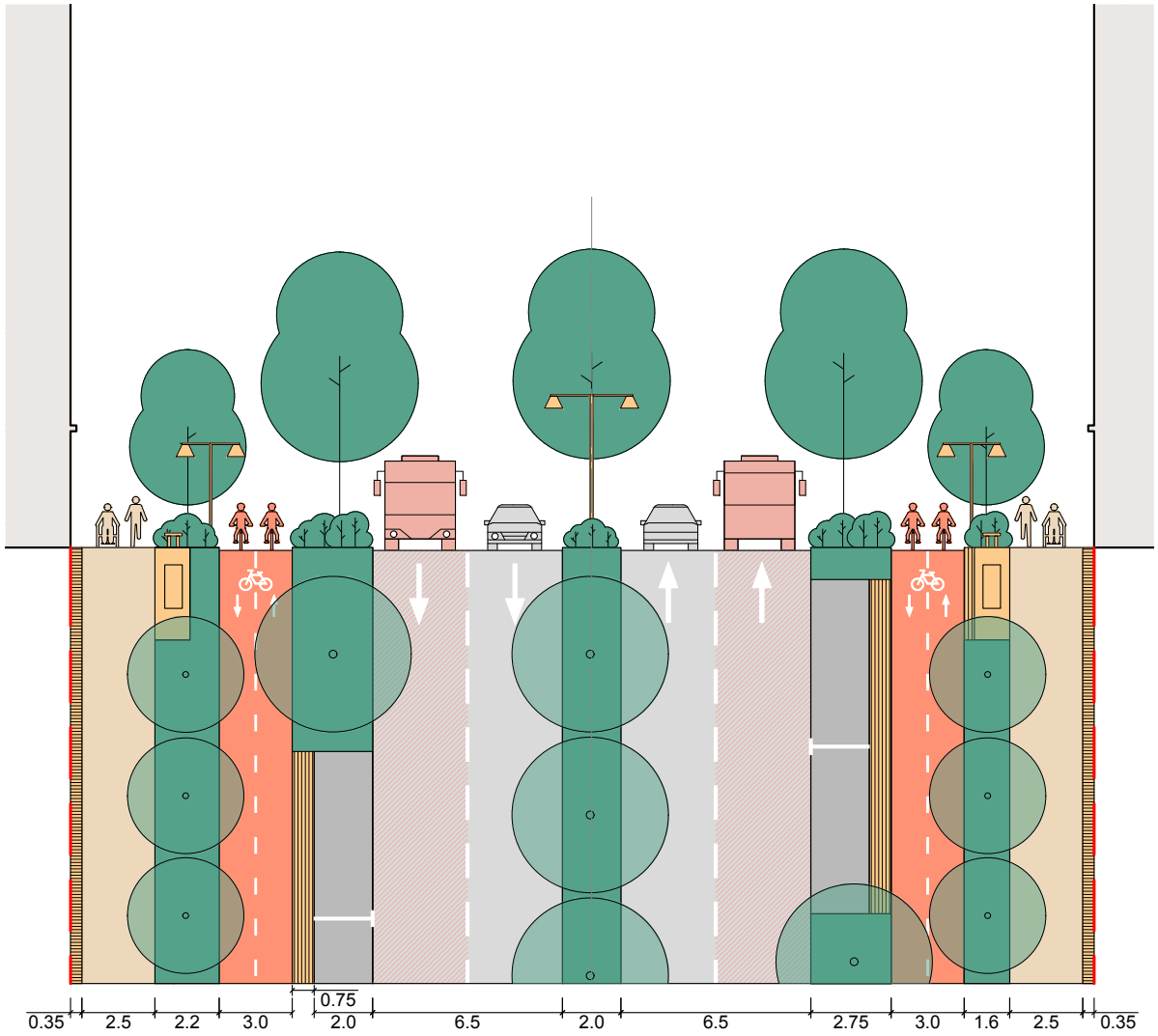
Heavy traffic street with Medium urban activity, 36 m

Code: **M.Hvy 36**
Width between the red lines: **36 m+**
Recommended driving speed: **50 km/h**

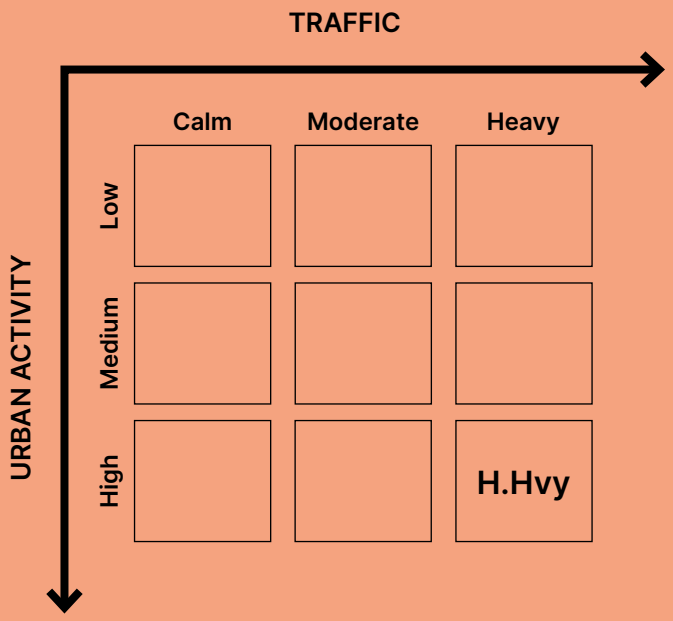
- pedestrian clear zone is at least 2,5m wide;
- planting zones between different traffic flows;
- planting zones and amenity zones can be separate or merged;
- separated one-way cycle paths on both sides of the street;
- two-way vehicular traffic;
- dedicated public transport lanes.

If possible:

- spaces for commercial activities along the facades or in the planting/amenity zones;
- delivery and short-term parking spaces alternate with planting.



Heavy traffic streets with High urban activity



Heavy traffic:

- Category D and C streets,
- high traffic intensity,
- multiple traffic lanes in each direction,
- traffic consists of passenger vehicles and public transport, may include freight transport,
- moderate and high driving speed (50–70 km/h).

High urban activity:

- ground floors of all or almost all buildings have commercial and public functions, which may also extend to the street space (terraces, parklets),
- the street may have important public or commercial buildings with a busy visitor flow, such as a university, a museum, a shopping centre,
- buildings form a perimeter urban block or are free-standing,
- many entrance doors and shop windows (more than 7 doors per 100 m of facade).

Heavy traffic street with High urban activity, 26 m

Code: **H.Hvy 26**
Width between the red lines: **26–33 m**
Recommended driving speed: **30–50 km/h**

- pedestrian clear zone is at least 3m wide;

- planting zones between different traffic flows;
- planting zones and amenity zones can be separate or merged;
- spaces for commercial activities along the facades or in the planting/amenity zones;

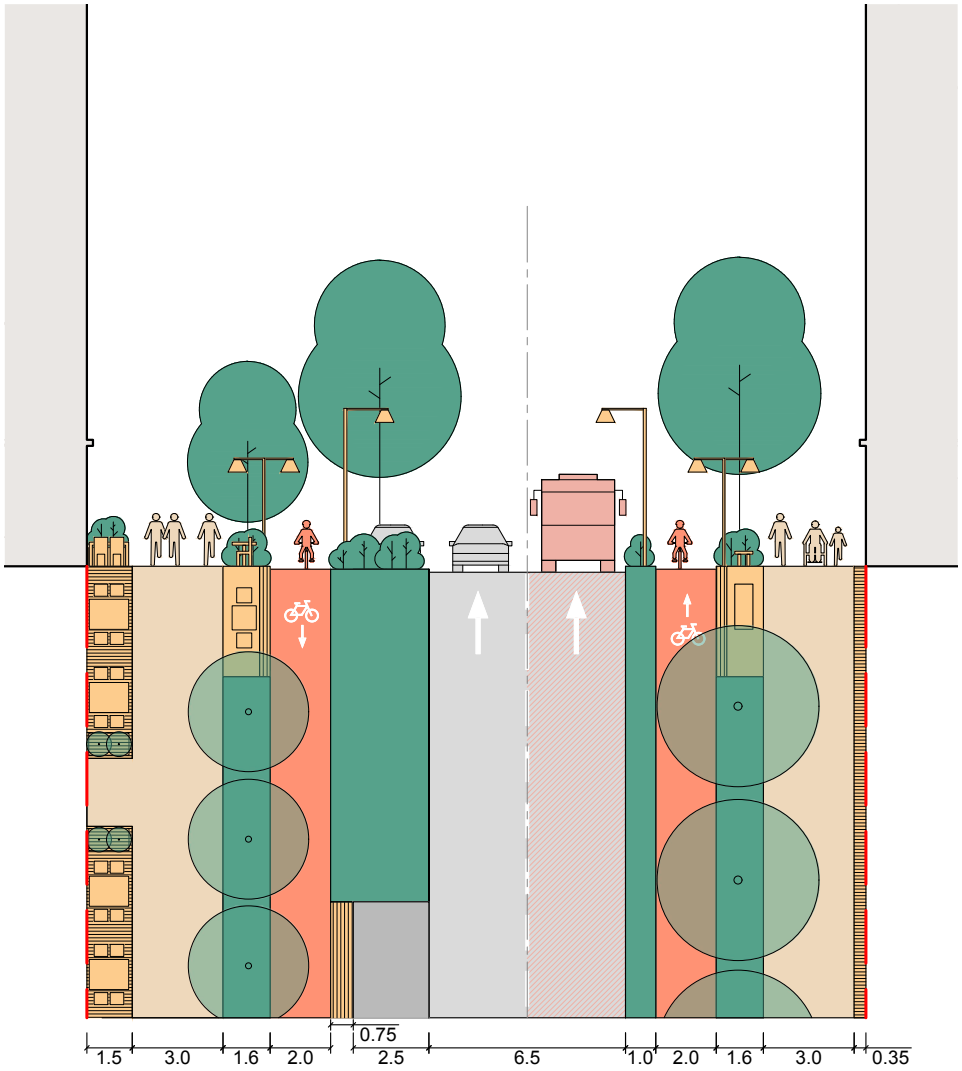
- separated one-way cycle paths on both sides of the street;

- one-way vehicular traffic*;
- a dedicated public transport lane;

**two-way vehicular traffic possible if a public transport lane is not necessary.*

If possible:

- delivery and short-term parking spaces alternate with planting.



Heavy traffic street with High urban activity, 33 m

Code: **H.Hvy 33**
Width between the red lines: **33–39 m**
Recommended driving speed: **50 km/h**

- pedestrian clear zone is at least 3m wide;

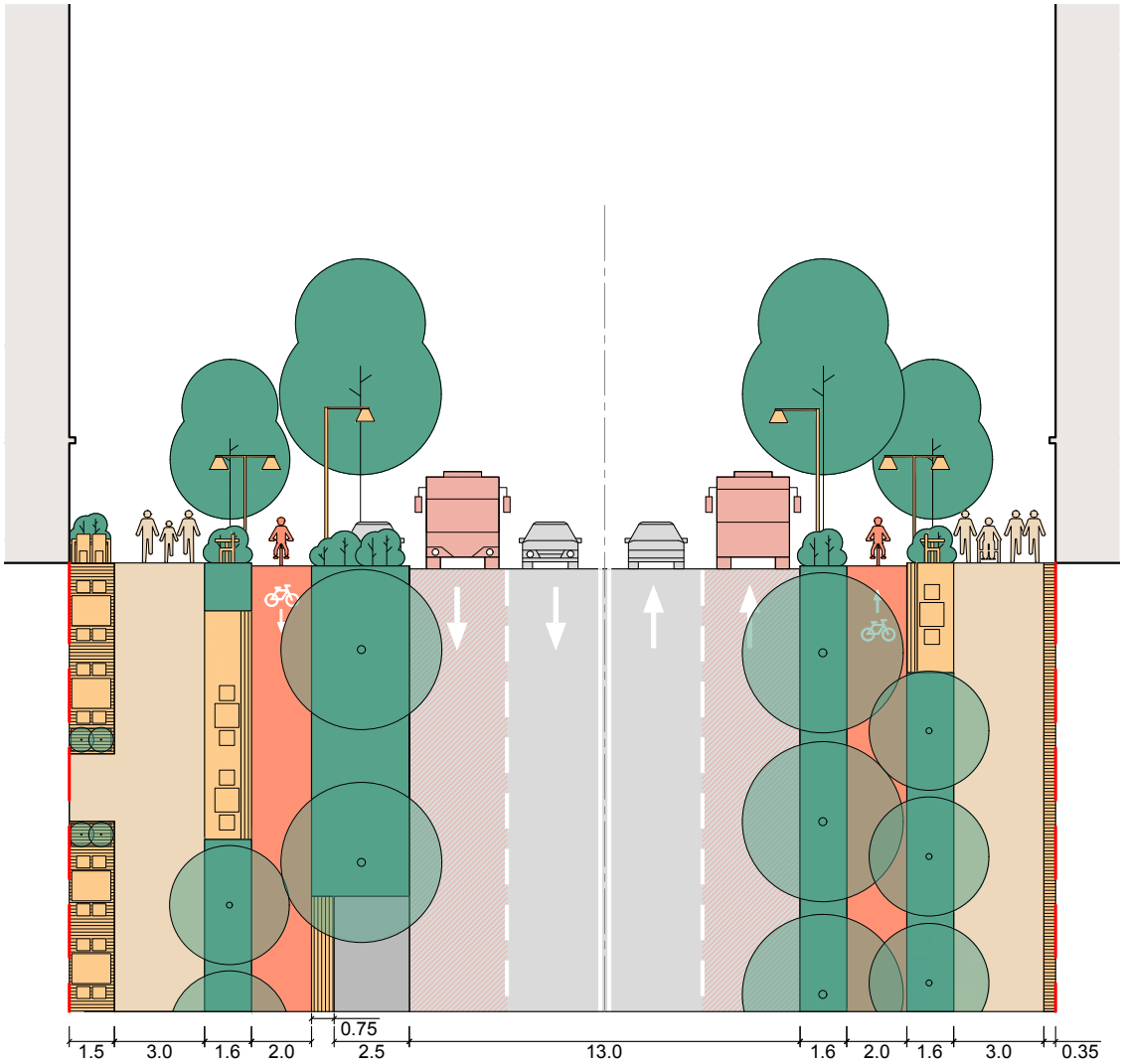
- planting zones between different traffic flows;
- planting zones and amenity zones can be separate or merged;
- spaces for commercial activities along the facades or in the planting/amenity zones;

- separated one-way cycle paths on both sides of the street;

- two-way vehicular traffic;
- dedicated public transport lanes.

If possible:

- delivery and short-term parking spaces alternate with planting.



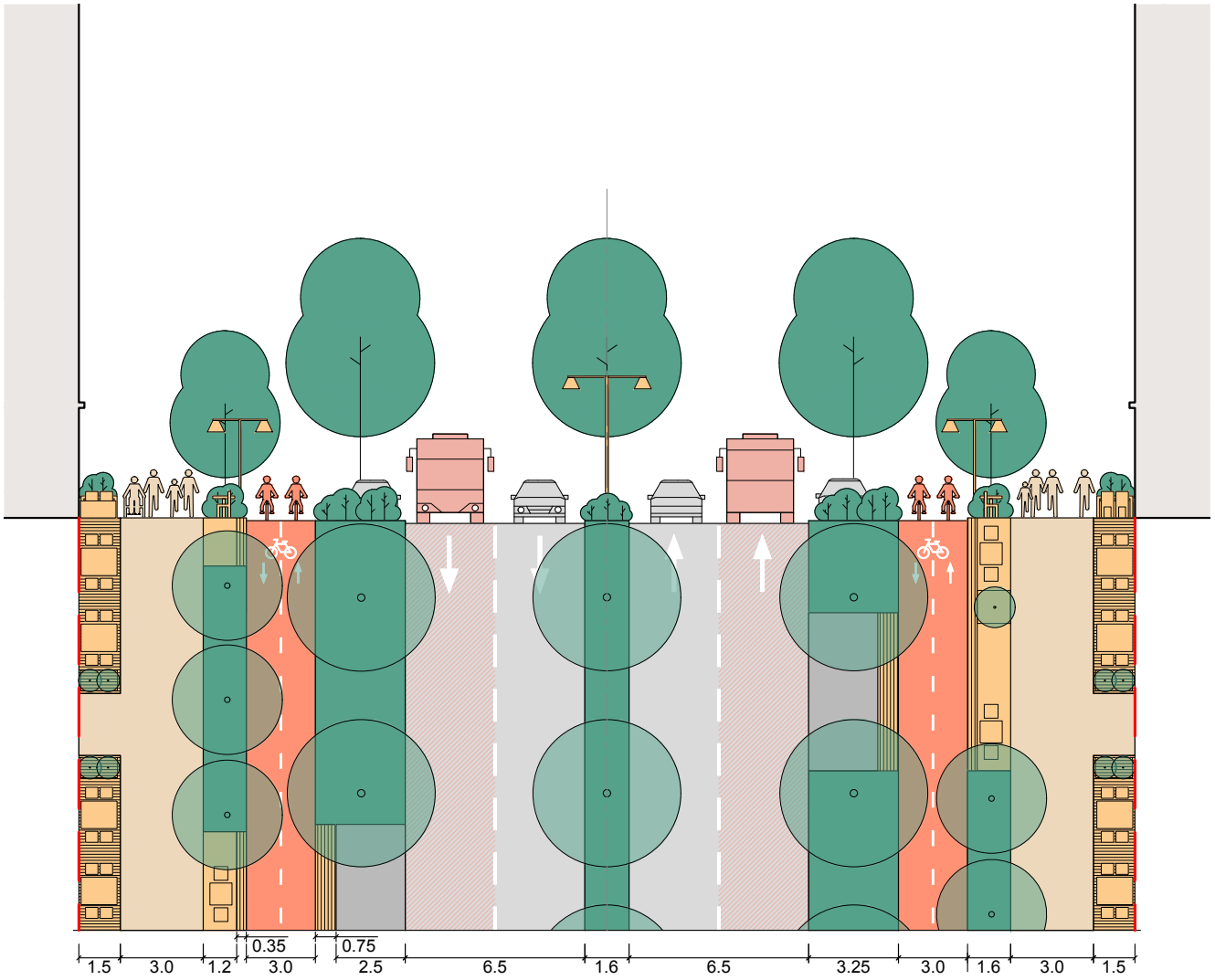
Heavy traffic street with High urban activity, 39 m

Code: **H.Hvy 39**
Width between the red lines: **39 m+**
Recommended driving speed: **50 km/h**

- pedestrian clear zone is at least 3m wide;
- planting zones between different traffic flows;
- planting zones and amenity zones can be separate or merged;
- spaces for commercial activities along the facades or in the planting/ amenity zones;
- separated two-way cycle paths on both sides of the street;
- two-way vehicular traffic;
- dedicated public transport lanes.

If possible:

- delivery and short-term parking spaces alternate with planting.

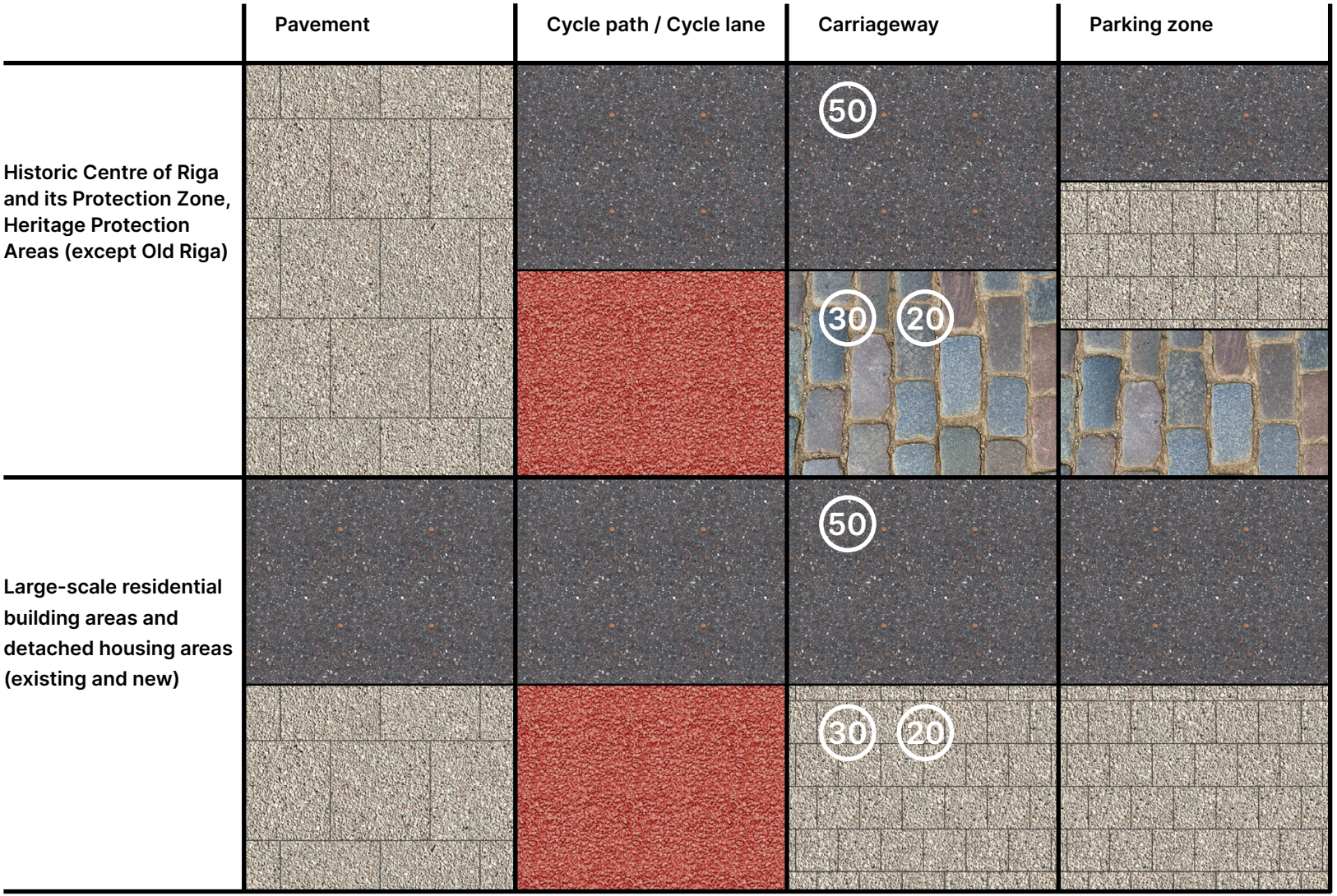


STREET PAVING MATERIALS

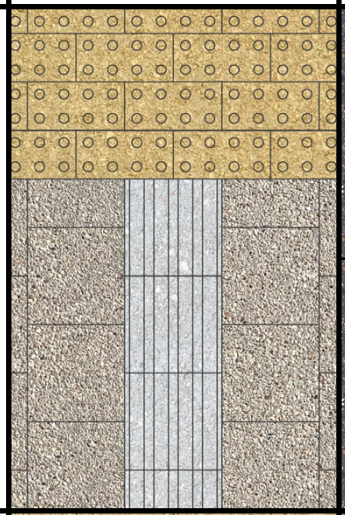
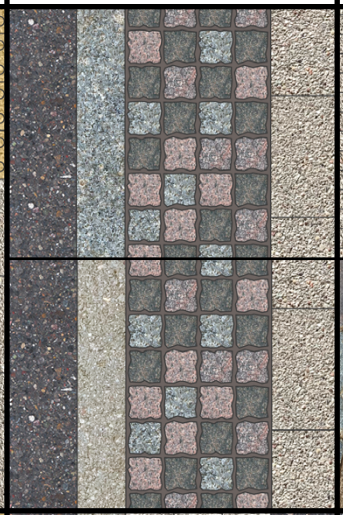
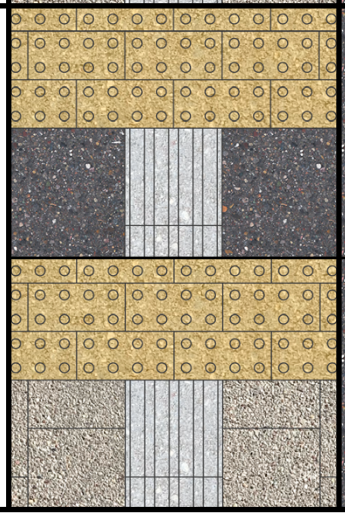
D

Paving materials for streets in Riga

	Pavement	Cycle path / Cycle lane	Carriageway	Parking zone
Historic Centre of Riga and its Protection Zone, Heritage Protection Areas (except Old Riga)	Concrete pavers — grey, with a washed surface, without chamfer. Size: • 375 × 375, 300 × 300 or 150 × 300 mm — for wide and medium width pavements (clear zone at least 2,5 m wide), • 160 x 160 mm — for medium width and narrow pavements (clear zone up to 3 m wide).	Asphalt concrete. or Asphalt concrete with a tinted coating in places where cycle traffic and motor vehicle traffic intersect. Shade — Oxide Red (RAL 3009).	Asphalt concrete. or Historical chiseled or round granite cobblestones.	Asphalt concrete. or Concrete pavers — grey, with a washed surface. Size: 160 × 160 or 150 × 300 mm. or Historical chiseled or round granite cobblestones.
Large-scale residential building areas and detached housing areas (existing and new)	Asphalt concrete. or Concrete pavers — grey, with a washed surface, without chamfer. Size: • 375 × 375, 300 × 300 or 150 × 300 mm — for wide and medium width pavements (clear zone at least 2,5 m wide), • 160 × 160 mm — for medium width and narrow pavements (clear zone up to 3 m wide).	Asphalt concrete. or Asphalt concrete with a tinted coating in places where cycle traffic and motor vehicle traffic intersect. Shade — Oxide Red (RAL 3009).	Asphalt concrete. or Concrete pavers — grey, with a washed surface. Size: 160 × 160 or 150 × 300 mm.	Asphalt concrete. or Concrete pavers — grey, with a washed surface. Size: 160 × 160 or 150 × 300 mm.


Pavement
Cycle path / Cycle lane
Carriageway
Parking zone
Historic Centre of Riga and its Protection Zone, Heritage Protection Areas (except Old Riga)
50
30
20
Large-scale residential building areas and detached housing areas (existing and new)
50
30
20

	Tactile guidelines	Kerbs and safety zone	Amenity zone	Raised intersections and pedestrian crossings
Historic Centre of Riga and its Protection Zone, Heritage Protection Areas (except Old Riga)	Concrete pavers — tinted. • directional tactile pavers — striped surface, white, 300 mm wide; • warning tactile pavers — blistered surface, yellow, 600 mm wide (400 mm in narrow places). Tactile guidelines are installed on all pavements where the clear zone is 1.5 m and wider.	Granite kerbs — mixed colours. or Concrete kerbs — streets where granite kerbs have never been or not been preserved. Safty strip: granite cobblestones with a split surface — mixed tones, dark gray dominates, 80 × 80 or 100 × 100 mm.	Concrete pavers — grey, with a washed surface, size identical to clear zone`s pavers. If the pavement is wide (clear zone over 3 m), smaller-sized concrete pavers (160 × 160, 240 × 60, 360 × 60 mm or other) or historical chiseled granite cobblestones can be used.	Granite cobblestones — mixed colours and white. or Concrete pavers — grey, with a washed surface and white. or Asphalt concrete with white horizontal markings.
Large-scale residential building areas and detached housing areas (existing and new)	Concrete pavers — tinted. • directional tactile pavers — striped surface, white, 300 mm wide; • warning tactile pavers — blistered surface, yellow, 600 mm wide (400 mm in narrow places). Tactile guidelines are installed on all pavements where the clear zone is 1.5 m and wider.	Concrete kerbs. Safety zone: concrete pavers, differing from the clear zone by a coarser surface and a lighter shade. Warning tactile pavers are not to be used in safety zone.	Asphalt concrete, if it is used for pedestrian clear zone. or Concrete pavers — grey, with a washed surface, size identical to clear zone`s pavers. If the pavement is wide (clear zone over 3 m), smaller-sized concrete pavers (160 × 160, 240 × 60, 360 × 60 mm or other) can be used.	Asphalt concrete with white horizontal markings. or Concrete pavers — grey, with a washed surface and white.

	Tactile guidelines	Kerbs and safety zone	Amenity zone	Raised intersections and pedestrian crossings
Historic Centre of Riga and its Protection Zone, Heritage Protection Areas (except Old Riga)				
Large-scale residential building areas and detached housing areas (existing and new)				

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1. GDCI & NACTO, 2016. Global Street Design Guide. Washington: Island Press.

2. Gehl J., 2010. Cities for People. Washington: Island Press.

Organisations and resources

1. Healthy Streets — *www.healthystreets.com*

2. Global Designing Cities Initiative — *www.globaldesigningcities.org*

3. Better Streets — *www.betterstreets.org.au*


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