



# LEPPÄVAARA CENTRE

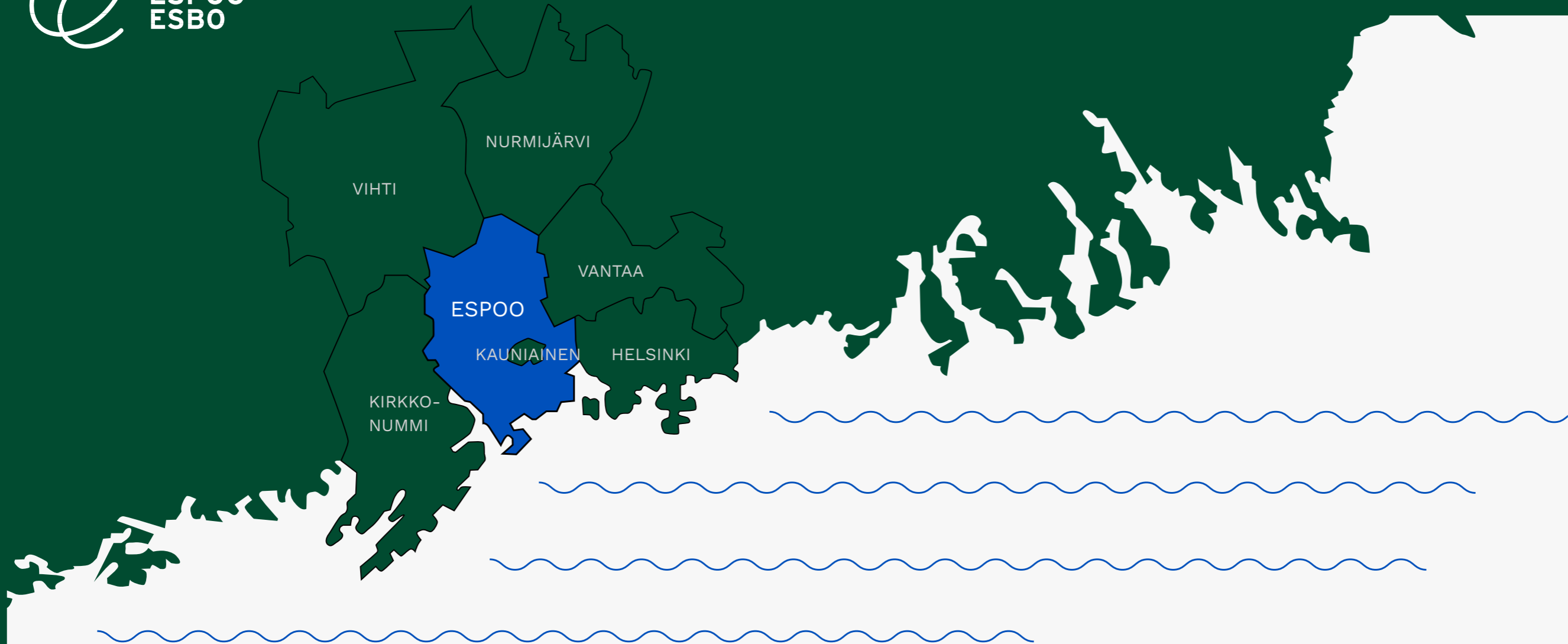
INTERNATIONAL TWO-PHASE IDEAS COMPETITION 2022 - 2023

COMPETITION PROGRAMME 31 October 2022



LEPUSKI 2.0





Espoo is the second largest city in Finland. The city is known as a hub of know-how, research and development, at the heart of which stands the Aalto University campus. Espoo is a centre of international company headquarters and high-technology businesses.

Large natural areas are characteristic of Espoo: seashores, the archipelago, the wilderness in nature reserves and the waterways of the lake highlands. The cultural landscapes, constructed environments and natural areas of Espoo are like Finland in miniature.



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### Espoo is resident and customer-oriented.

Smooth everyday life is important in Espoo. The best resources in Espoo are its residents, communities, and companies. Active involvement of residents in the development of our services and our comprehensive cooperation with partners ensure effective services that meet the needs of the residents.

### Espoo is a responsible pioneer.

We are broad-minded, creative, and open, we challenge the status quo and have the courage to do things in a new way. Being a pioneer involves utilising research and international experience, organising experiments and knowing how to deal with possible failures. We develop Espoo in an economically, environmentally, socially, and culturally sustainable manner.

### Espoo is fair.

We act openly and fairly and treat people with equality, humanity, and tolerance.





## Leppävaara Centre and the missing half

In terms of population, Suur-Leppävaara is the largest of the major districts of Espoo: There are currently more than 75,000 inhabitants living in Suur-Leppävaara. According to population projections, there will be more than 100,000 inhabitants in the area in 2040. If Suur-Leppävaara were an independent city, it would be the 13th largest city in Finland. In addition to great transport connections, the largest commercial service cluster in the western Helsinki Metropolitan Area is known for its regional services: In terms of visitor numbers, Leppävaara has the most popular shopping centre and library in the Helsinki Metropolitan Area, and there is also a popular sports park, outdoor swimming pool, Vermo Racetrack, and Gallen-Kallela's atelier castle in Tarvaspää.

Leppävaara has a strong historical identity: In the early 20th century, the area consisted mainly of a village colony and workers' housing units north of the track, and now Leppävaara is the largest urban hub in Espoo. At present, Leppävaara is an uncomplicated, active, and welcoming area where services, jobs, housing, and hobbies form a balanced urban centre that never sleeps. The centre of Leppävaara is characterised by a mixed urban structure, versatile services, street-level business spaces and, to an increasing extent, multiculturalism. In terms of proportion and quantity, there are more young adults living in Leppävaara than in any other district in Espoo.

There is only one BUT in an otherwise great entity. The area north of the station comes across as an uninviting urban environment dominated by parking areas and streets. Now you have a chance to rectify this shortcoming and turn this neglected area into an inviting urban oasis.



Leppävaara railway station. Photo: Janne Ketola Summit Media Oy



Akseli Gallen-Kallela's atelier in Tarvaspää



Viaporintori square on local heritage day. Photo: Jussi Helimäki





## Common and unified Leppävaara

”The overall plan for Leppävaara centre, Lepuski 2.0, will be compiled in stages with various partners into a sustainable urban plan that also takes into account future needs. The goal is to make the plan a source of pride for all the parties and ensure that it includes features and functions they find important:

- The goal of the architectural competition is to find the idea that best suits the centre of Leppävaara and its identity.
- An open selection process allows the local residents to voice their opinions, and it also boosts the residents’ commitment to the future reform.
- The process consists of a two-phase architectural competition and an application procedure for the design reservation, all with the aim of finding the most capable parties to implement the future urban centre.
- The submitted entries are used to draw up Lepuski 2.0, a plan that is sustainable both in terms of time and finances and to which all the responsible parties can commit.”

*Olli Isotalo, Urban Environment Director*

*”Lepuski” is a nickname given to the district by the residents, which, according to local information, has been in use since the 1930s. The number 2.0 refers to the competition objective for the centre of Leppävaara, in which the aim is to generate a completely new plan for the outdated urban centre and to replace the previously pending amendment to the local detailed plan.*



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# 1. Competition invite

## Organiser, nature, and purpose of the competition

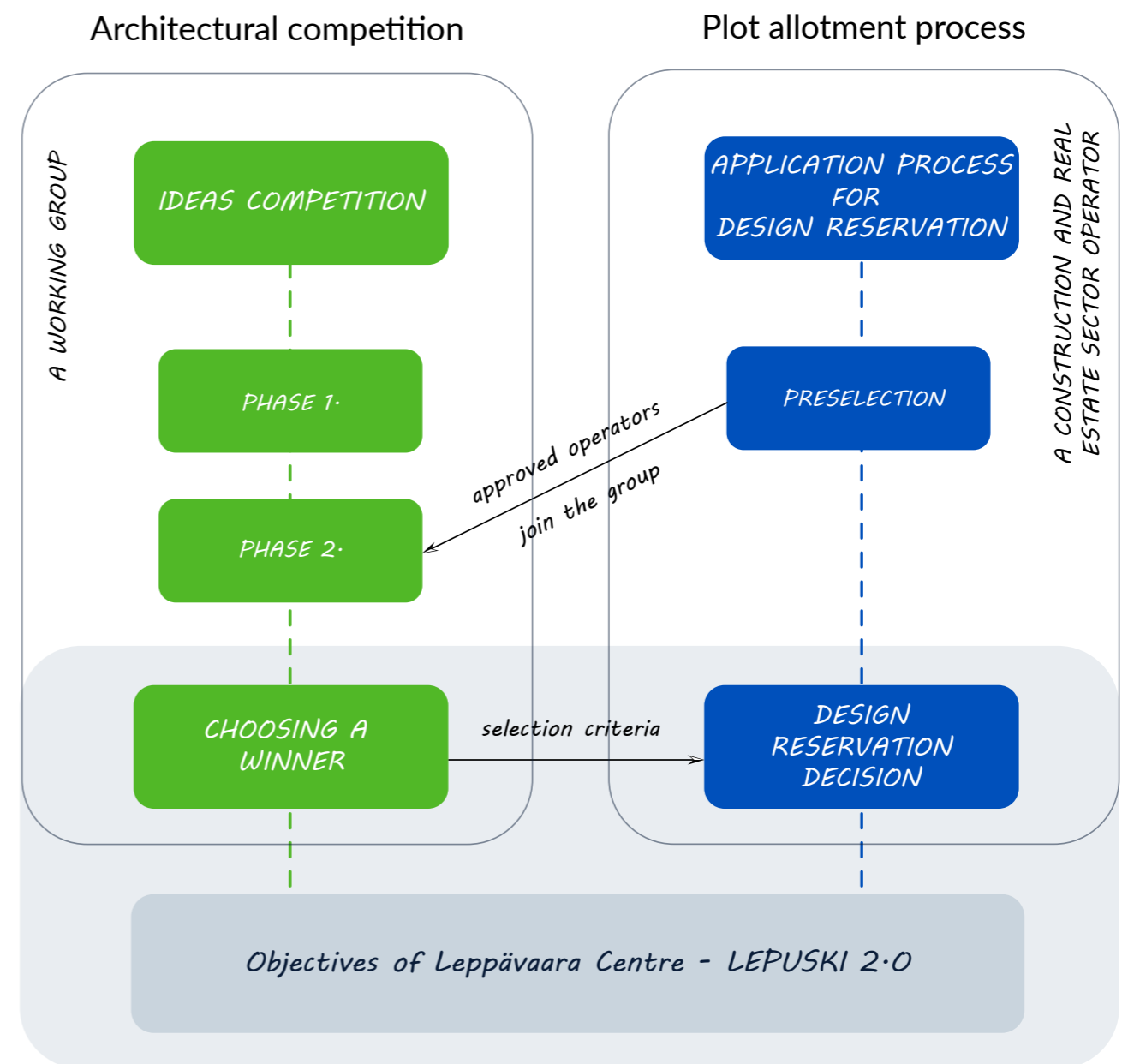
The City of Espoo is organising an open international ideas competition for the planning of the centre of Leppävaara in Espoo. The competition is organised in co-operation with the Finnish Association of Architects (SAFA) in accordance with the competition rules of the association.

The aim of the competition is to find a strong concept "Lepuski 2.0", which is of high quality in the sense of architecture, urban structure, and functionality, and will increase the recognisability and attractiveness of the area. The concept will guide further planning, implementation and building in phases in the next 10–20 years.

The first phase of the competition involves an open architectural competition, in which the goal is to find a comprehensive concept for the entire target area. For the second phase of the competition, the jury will select 3–5 entries that they deem to have the most potential, and these are then processed into feasible plans for the urban centre.

## Application process for design reservation to take place alongside the architectural competition

Alongside the architectural competition, the City of Espoo is searching for parties to implement the plans for the competition area through a separate application process for a design reservation. The results of the ideas competition will be used as selection criteria: Negotiations on one or more design reservations will take place with the representatives of the design teams that win the ideas competition.



## Eligibility

### Phase 1

Phase 1 of the competition is open to all citizens and legal persons in the European Union and countries covered by EU procurement legislation in accordance with the valid laws and agreements. In phase 1 of the competition, each competition entry must include a [designated designer](#) who is responsible for preparing the competition entry in phase 1 and undertakes to put together an extended working group as required by the organiser for phase 2.

It is hoped that already at this stage, the competitors will form multidisciplinary working groups that include expertise not only in architectural design but also in traffic and landscape planning.

### Phase 2

The jury will select 3–5 entries that they deem to be the best and most promising for the second phase of the competition.

The [designated responsible designers of each of the selected entries must put together an extended working group](#) that meets the requirements set by the competition organiser [no later than by the deadline for phase 2 registration](#):

- An architect with a university degree
- A landscape architect with a university degree
- A traffic planner
- A construction and real estate sector operator who has registered for the application process for a planning reservation for the Leppävaara

centre launched by the City of Espoo and who meets the minimum requirements for the application procedure.

The details of the working group will be submitted to the competition secretary in connection with the registration for phase 2 of the competition. The competitors can add participants to the working group until the registration deadline for phase 2 of the competition.

The construction and real estate sector representative appointed to the working group will act as an operational as well as technical and financial expert, who will contribute to ensuring the technical and economic feasibility of the competition entry.

Despite the registration procedure for phase 2, the competition secrecy will be maintained until the selection of the winner.

If any one of the competitors cannot put together a working group required by the competition organiser by the specified deadline, the competitor's right to participate in phase 2 will expire without a separate notification from the competition organiser.

In this stage of the competition, the responsible designer of a working group and the construction and real estate sector operator in charge of technical and financial as well as operational development may only belong to one working group. The responsible designer named for the competition may not be changed during the competition.

The members and secretary of the jury as well as their business partners or other representatives of a company they represent are ineligible to take part in the competition. People who have participated in the preparation of the competition project or related decision-making, along with any companies they represent, are also ineligible to participate.



## Competition announcement

The competition is a design contest as specified in the Finnish Act on Public Procurement and Concession Contracts (1397/2016). A procurement notice on the competition has been published in the Supplement to the Official Journal of the European Union / TED database at <https://ted.europa.eu>.

The competition invite has also been published in the competition calendar on the SAFA website, as well as on SAFA's other communication channels.

## Prizes and purchases

Based on the first phase, a maximum of five competitors will be invited to take part in phase 2 of the competition. By a unanimous decision, the jury may also distribute the prize money differently.

1st prize EUR 80 000

2nd prize EUR 60 000

3rd prize EUR 45 000

4th prize EUR 30 000

5th prize EUR 25 000

At most two purchases of EUR 5 000 each.

The prizes and potential purchase payments will be distributed after the results of phase 2 are published.

All teams that are selected for phase 2 and meet the minimum requirements will be given a share of EUR 20 000 of the aforementioned

amounts at the beginning of the second phase to advance the development of their competition entry. Consequently, EUR 20 000 will be deducted from the prize amounts paid after the publication of the competition results.

In addition to the prizes and purchases, the jury may also give honourable mentions.

By a unanimous decision, the jury may also distribute the prize money differently in accordance with the competition rules of the Finnish Association of Architects.

The Finnish Association of Architects (SAFA) claims 7% of the prizes and purchase payments in accordance with the competition rules. The prize payments are made through the Finnish Association of Architects. Moreover, SAFA is applying for a tax exemption for the prize money.



Photo: Tommi Ista

## Jury

### Appointed by the organiser of the competition, the City of Espoo:

- Olli Isotalo, Urban Environment Director, City of Espoo, Chair of the jury.
- Mervi Heinaro, Deputy Mayor for Economic Development, Sports and Culture, City of Espoo
- Ossi Keränen, Town Planning Manager (professional member), City of Espoo
- Mika Rantala, Project Director of the Leppävaara area (professional member), City of Espoo
- Saija Äikäs, Director, Helsinki Region Chamber of Commerce

### Appointed by the Finnish Association of Architects:

- Pentti Kareoja, Professor, Architect, SAFA (professional member)
- Tommy Lindgren, Architect, SAFA (professional member)

When evaluating the entries, the jury will consult at least Chair of Leppävaara Society Arja Salmi, Landscape Architect Ria Ruokonen in terms of landscape planning, and experts of planning, traffic planning, built cultural environments, and sustainable development. In addition to this, the jury may consult any other experts they deem necessary. The experts may participate in the meetings of the jury at the request of the jury.

The competition secretary is Mervi Savolainen, WSP Finland Oy.

The experts and the secretary will not participate in the decision-making.

## Competition rules and approval of the competition programme

The competition will follow this competition programme and the competition rules of the Finnish Association of Architects.

The competition programme and its appendices have been approved by the organiser of the competition, the jury, and the competition committee of the Finnish Association of Architects.

## Availability of the competition documents

The competition programme and its appendices will be available for download free of charge from the competition website <https://cc.tietoa.fi/espoo/leppavaaran-arkkitehtuurikilpailu/> as of 31 October 2022.

The competitors are asked to check the competition website regularly throughout the whole competition. The website will be used to communicate matters related to the competition even during the competition if needed.

The competitors are allowed to use the materials of the competition programme and its appendices solely for the purpose of creating their competition entries. Using the materials for any other purpose is prohibited.





## Schedule for phase 1 of the competition

Publication of competition documents [31 October 2022](#)

Competition seminar [10 November 2022](#)

Submission I of competition questions [18 November 2022](#)

Answers to competition questions I [30 November 2022](#)

Submission II of competition questions [05 January 2023](#)

Answers to competition questions II [18 January 2023](#)

Submission of competition entries [17 February 2023](#)

Publication and presentation of the entries [8 March 2023](#)

Publication of entries selected for phase 2 [19 April 2023](#)

Phase 2 of the competition will start in May 2022, and the final results will be published in January–February 2024.

The competition schedule is preliminary, and the organiser reserves the right to make changes. The competitors are obligated to follow the competition website for potential changes.

## 2. Competition specifications

### Programme documents

The programme documents for the competition include this competition programme and its appendices. If there are any discrepancies between the appendices and the competition programme, the information in the competition programme takes precedence.

The competition organiser reserves the right to supplement the documents until 30 November 2022. Any additions will be published on the competition website.

#### Appendices to the competition programme:

1. Competition area 1:3000 (pdf/dwg)
2. Soil map 1:3000 (pdf)
3. Conduit map 1:3000 (pdf)
4. Building stock by completion 1:3000 (pdf)
5. Building stock by use 1:3000 (pdf)
6. Noise zones 1:3000 (pdf)
7. Air quality zones 1:3000 (pdf)
8. New layout of the bus terminal (pdf)

9. New demarcation of the railway area (pdf)
10. Expansion of the Sello Shopping Centre (pdf):
  - » Route connection diagram 1:2500
  - » Floor plans of the extension 1:800
  - » Cross section 1:850
11. Draft of the Nupukivenkallio parking facility 1:1500 (pdf)
12. Photographs of the competition area (jpg) + location map (pdf)
13. Leppävaaranraitti master plan 1:1000 (pdf)
14. 3D model materials of the competition area (skp/dwg/fbx/laz)

### Aiemmat vaiheet

An amendment to the local detailed plan of the entire Leppävaara centre was being prepared in 2014–2021, but it was rejected for the area north of the track. Instead, a decision was made to organise an ideas competition to find alternative plans. The amendment to the local detailed plan of the southern side is proceeding as planned.

<https://www.espoo.fi/en/projects/centre-leppavaara>



## Competition seminar

An open competition seminar will be organised online for those interested in the competition on 10 November 2022 at 14.00–16.00. The seminar presentations are held in Finnish. Participants can join the competition seminar via a link found on the competition website. The presentations of the competition seminar will be available on the competition website after the seminar. During the seminar, the participants will have an opportunity to ask the competition organisers questions.

The questions presented at the competition seminar and the answers to them will be published on the competition website no later than 30 November 2022.

## Questions regarding the competition and additional information

Competitors may ask questions regarding phase 1 of the competition at two stages: The first deadline for questions is 18 November 2022 at 16.00 and the second on 5 January 2023 at 16.00. The answers to the questions will be published on the competition website by 30 November and 18 January respectively.

## Publication of the competition entries and resident interaction

All approved competition entries will be published anonymously on the competition website once the deadline for submitting entries for both phase 1 and phase 2 has passed. The public will have the opportunity to comment on the competition entries.

The competition organiser will present the competition entries for both phases at separately organised public events. These events can also be

viewed online, and they will be recorded. All feedback received in the presentation events and online will be submitted to the jury.

## Competition secrecy, conclusion of the competition, and publication of the results

After phase 1, the jury will decide on the entries to be selected for phase 2 and prepare instructions for the further development of the entries for each phase 2 competitor. As a rule, a total of 3–5 entries will be selected for phase 2 of the competition. Information on a place in phase 2 of the competition and on the requested development measures pertaining to the plan in question will be delivered to the responsible designer of each of the phase 2 entries in a confidential and personal manner by the competition secretary.

The competitors selected for phase 2 must form the teams required by the organiser by the established deadline. The competition secretary will act as a trusted contact person between the authors of the selected entries and the construction and real estate operators interested in the further development of the plans.

The authors of the entries selected for phase 2 will not be made public before the winning entry is published.

The conclusion of the competition will immediately be announced to the authors of the prize-winning and purchased entries. The results of the competition will be published at a separately organised publication event, the details of which will be announced on the competition website. The results and evaluation report of the competition will also be published on the competition website. In addition, the result of the competition will be published on the SAFA website and other information channels and presented in the Arkkitehtuurikilpailuja magazine on architectural competitions.

## Usage rights of the competition entries

The ownership of the prize-winning and purchased competition entries will be transferred to the organiser of the competition. The copyright of the entries will remain with the authors of the entries. The competition organiser and the teams who made it to phase 2 have the right to use the themes and ideas of the competition entries in question in accordance with the Finnish Copyright Act (404/1961).

The competition organiser and SAFA have the right to publish the materials of the prize-winning and purchased entries without compensation. The publication shall always include the author of the entry in question, with the exception of the entries published anonymously during the competition.

## Further actions after the competition

Based on the results of the competition, the jury will give a recommendation for the Lepuski 2.0 overall plan. Competitors must note that prize-winning or purchased entries do not directly entitle the competitor to receive a design reservation. Instead, decisions on the reservations are made separately by the Business and Competitiveness Subcommittee of the Espoo City Board in accordance with the application process for design reservations.

The competition serves as a qualitative selection criterion for the application process for design reservations that takes place in parallel to the competition: The City of Espoo will negotiate the transfer of the design reservations with construction and real estate operators who have been approved for the application process and who served as expert members of teams that performed well in the second phase of the competition.

The objective of the competition organiser is that the winning team, headed by the responsible designer who drew up the entry, will continue developing the winning entry into a reference plan for the detailed plan under the guidance of the City Planning Department of the City of Espoo. Several separate changes to the local detailed plan will probably be drawn up for the area. In any further planning commissions, the contracting party may be a private landowner in the area in addition to the holders of the design reservations, but not the City of Espoo.

## Insuring and returning competition entries

The materials submitted by the competitors will not be insured or returned. Competitors are asked to keep the original materials.

## Competition language

The official languages of the competition are Finnish and English.

The competition programme is available in Finnish and English. If there are any discrepancies between the versions, the Finnish-language material takes precedence. The documents attached to the competition material will only be submitted in Finnish.

Questions concerning the competition can be asked in Finnish or English. Answers to all questions will be given in both languages.

The competition entry must be drawn up in Finnish or English.





Photo: Heidi-Hanna Karhu

### 3. General objectives of Espoo

#### Espoo aims at carbon neutrality

It is Espoo's goal to become carbon neutral by 2030. Carbon neutrality means that the city annually produces only the amount of greenhouse gas emissions it is able to absorb. Espoo has defined as its carbon neutrality goal an 80% emission reduction from the 1990 level by the year 2030. In addition to the carbon neutral Espoo by 2030 goal, biodiversity and sustainable urban solutions in both construction and transport have been highlighted as key objectives in the city.

Moreover, as part of the SDG Cities Leadership Platform, the City of Espoo is committed to achieving the UN's Sustainable Development Goals (SDGs) by 2025. To achieve this goal, the city will work together

with companies and other partners to create solutions that will serve as examples of a carbon-neutral urban lifestyle of the future.

Measures aimed at reducing the emissions generated by electricity consumption, district heating, and traffic are particularly important for the achievement of the emission reduction goal. The key measures towards emission reductions include a joint agreement between the City of Espoo and a local energy company on carbon-neutral district heat production by 2030 and on the utilisation of waste heat. The emissions from traffic will be reduced by directing the city's growth to areas with good public transport connections and by developing the rail network and zero-emission bus connections.





## Espoo Story

The Espoo Story is the City's strategy. The strategy is aimed at ensuring that the city's activities correspond to the common objectives in an even better and more distinct manner. The competition and all entries must be in line with the council term goals derived from the Espoo Story:

### Sustainable growth, residents, and mobility

Espoo will be built into an attractive and safe city in a resident- and customer-oriented manner. Espoo's growth is economically, ecologically, socially, and culturally sustainable. We will prevent segregation between and within regions. Sustainable and intelligent urban solutions will make daily life and mobility smoother. All Espoo residents will have good opportunities to make sustainable choices in their daily lives and make a difference in their local environment.

We will stop pitting public transport and private cars against each other, as they are both needed. Transport emissions will be reduced. Our efforts will be seen, among other things, in the improved conditions for public transport, walking and cycling and, with regard to private cars, in the rapidly increasing use of electric cars. The safety of people's daily lives will be improved through multi-disciplinary cooperation to ensure that Espoo is the safest city in Finland.

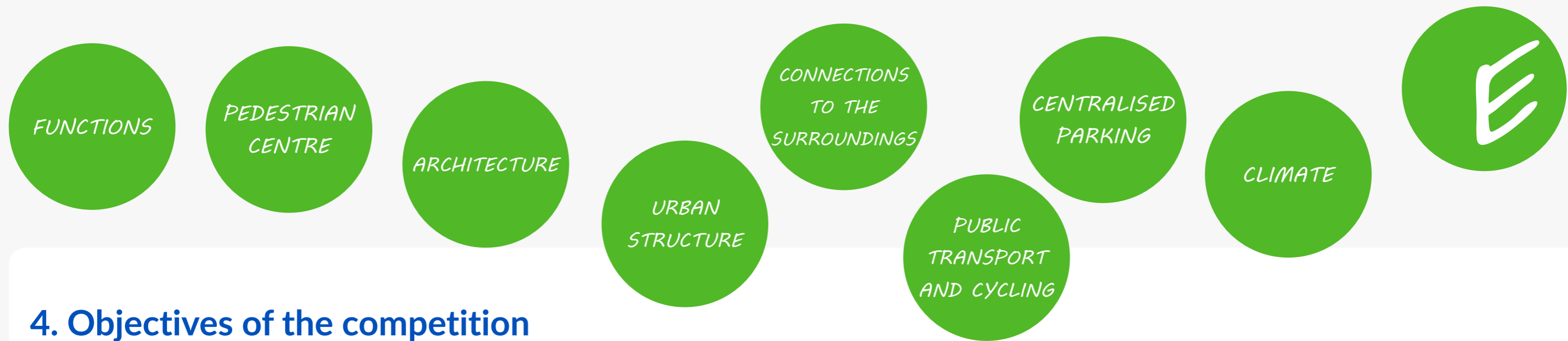
### Pioneer of sustainable construction and promotion of vibrant urban centres

We will ensure that our city has diverse and distinctive areas with low-rise housing, pleasant apartment buildings and a sufficient number of plots for workplaces. Densely built-up urban areas along good transport connections will be vibrant and attract service sector companies. During planning and construction, we will highlight the principles of sustainable development and pay attention to the life-cycle emissions of buildings.

We will promote timber construction. All the centres of Espoo located along the track will be planned and implemented based on the goals related to the activities and vitality of each area and by utilising suitable forms of co-operation and a tailored development commitment.

Local nature will be used for recreation and as a source of wellbeing. In Espoo, local nature is accessible to all. We are a pioneer in reconciling a growing city and biodiversity. Espoo's urban development will take care of, revitalise, and increase biodiversity.





## 4. Objectives of the competition

### Overall vision

The aim of the competition is to find the area north of the track an overall vision, which is of high quality in the sense of functionality, urban structure, and architecture, financially feasible, and will serve as a platform for the further development of the area.

### Urban life

The area will become a positive example of a functionally diverse urban centre where services, housing, jobs, events, and recreational opportunities come together to form new and diverse urban structures.

Competition entries shall contribute toward a recreational and pedestrian-oriented city centre with emphasis on human needs and life cycle. The accessible pedestrian environment will have an increasing range of vibrant restaurants and cafés, green areas and recreational zones, communality, city events, and various recreational and hobby opportunities.

The urban park solution will create a sense of space and add greenery in the middle of the city. Together, the garden spaces and public areas will form a versatile green network.

### Cityscape and architecture

The cityscape of Leppävaara will be architecturally unique, memorable in a positive sense, and easily approachable.

The urban structure of the city centre will become more integrated and compact. An area dominated by streets, railway tracks and cars will be transformed into an urban and unified city centre.

The new centre area will be linked to the existing urban structures in a smooth and natural way, and future development will also be taken into account.

The area will include suitable spaces for public art either as separate pieces or as part of the architecture.

### Traffic

The plan will increase the attractiveness of cycling in the area and implement a cross-cutting east–west cycling route as a continuous, safe, and high-quality “Baana” connection.

The plan will create prerequisites for good accessibility and high-quality service in terms of public transport, as well as mitigate the barrier effect of traffic routes passing through the centre of Leppävaara. The plans will also include measures to prepare for future railway projects and for the expansion of the rail network.

Overall, the result will be a parking solution that flexibly serves different functions and that is easily approachable from different directions, sufficient in terms of the city’s needs, and economically feasible.

### Sustainability

The entry will support the climate goals of the City of Espoo and the Espoo Story.





Kim Simonsson:  
"Emma leaves a mark"  
Tapiola metro station in Espoo.  
Photo: Yehia Eweis



Seela Petra: "One day"  
Tapiola park-and-ride facility for bicycles.  
Photo: Ella Tommila



Vesa-Pekka Rannikko: "Flux-Merging Streams"  
Espoo Centre, Vaakunatori square.  
Photo: Paula Virta



## 5. Competition area and surroundings

### Leppävaara grew along the railway track

The completion of the Helsinki-Karjaa railway connection passing through Espoo in 1903 had a major impact on the development of the cultural landscape along the track. In fact, the very first city-like urban settlements in Espoo were established right along the railway tracks. Three parcel areas of different nature were formed around the Leppävaara stop. North of the track, the plots parcelled out around the Harakka croft were relatively small, and the buildings were modest and often self-built. In contrast, the plots parcelled out on the land of the military administrative house of Mäkkylä and especially of the Alberga manor were more widespread, and the villas were of a higher architectural quality.

As the railway track and Turuntie road run close to each other at Leppävaara, the location became an important transport hub decades before the completion of the Ring Road I or Turku motorway. At present, the Leppävaara railway station is one of the busiest train stations in Finland.

### Zoning stages

The possibility of merging the eastern parts of Espoo with Helsinki was explored on several occasions all the way until the 1950s, but all related projects were eventually dropped. At the beginning of the 1960s, the municipal decision-makers in Espoo finally agreed to support a unified Espoo, and Espoo became a market town at the beginning of 1963 and a city in 1972. In the proposal for a detailed plan, the market town was divided into four sections, each with its own regional centre: Leppävaara, Kivenlahti, Tapiola and Bemböle. However, the planning preferences changed several times during the long master plan process, and the Espoo master plan was finally adopted in May 1978.

The local detailed plan for the northern centre of Leppävaara was confirmed in 1983. In the plan, land use in the area was divided into three sections: the urban centre, Gransinmäki area, and the school and sports park. The construction of the northern centre of Leppävaara began with the demolition of old single-family houses. The lack of commercial facilities sped up the construction of business and office spaces, and an effort was made to emphasise the urban downtown appearance of the area by creating an extensive pedestrian road network, small commercial spaces, and a market square.

*Leppävaara in 1944*

Leppävaara Train Station



## Leppävaara in the urban structure of the Helsinki Metropolitan Area

Leppävaara is located at the junction of Ring Road I, Turuntie and the Coastal Railway, and it is very easily accessible both by public transport connections and private car. The great accessibility of the centre of Leppävaara makes it a dynamic and attractive area – in terms of housing, jobs as well as services. When measured by population statistics and number of jobs, Leppävaara is the largest sub-centre in Espoo and one of the largest sub-centres in the Helsinki Metropolitan Area

## Location and extent of the competition area

The railway track and Turuntie road, running side by side, divide the centre of Leppävaara into two different sections: the northern centre, which was born in the 1980s and built on a smaller scale, and the southern centre built in the early 21st century and dominated by Sello Shopping Centre. The commercial services on the northern side are mainly divided between the numerous street-level stores in the area and the shopping centre Galleria. The general appearance of the competition area is scattered, and the cityscape is dominated by streets, railways, and parking areas. There are two block areas surrounded by streets that have not been developed in accordance with the valid local detailed plan.



Leppävaara in the urban structure on the Helsinki Metropolitan Area



The actual competition area comprises the southwestern part of the centre of Pohjois-Leppävaara, a part of the Gransinmäki area, and the immediate surroundings of the Leppävaara railway station.

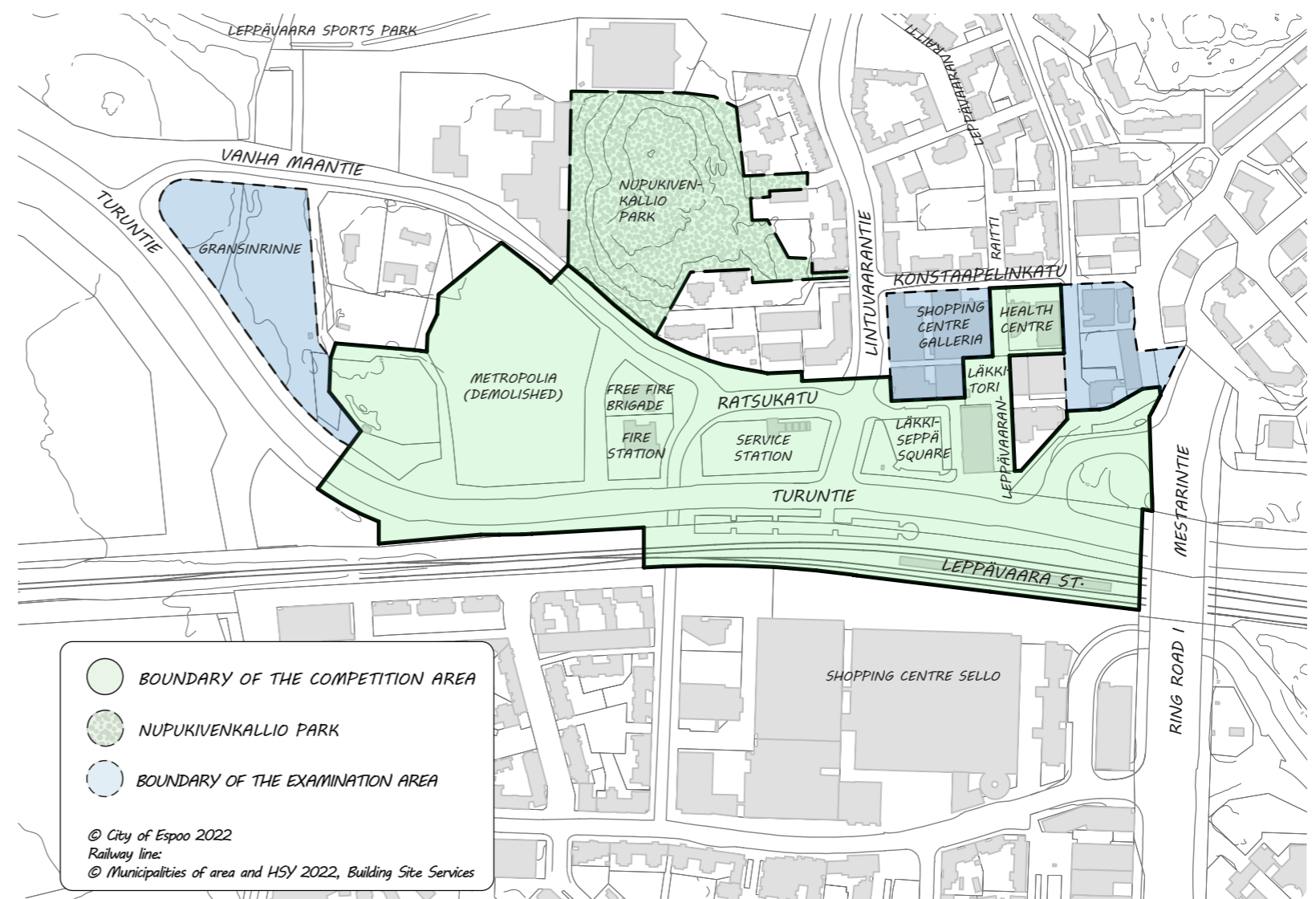
The competition area extends from Laurea University of Applied Sciences, Leppävaara Sports Park and Konstaapelinkatu road in the north to the planned expansion of Sello Shopping Centre in the south, and from Ring Road I in the east to the Gransinmäki street zone in the west.

At present, the competition area includes an ST1 service station and the temporary parking area on Lökkisepänaukio square. A two-storey commercial building owned by Sponda Oy is located between the Leppävaaranraitti street and Lökkisepänaukio square. Leppävaaranraitti, extending to Konstaapelinkatu, and Leppävaara Health Centre located east of Leppävaaranraitti are also part of the competition area.

The western part of the competition area is mainly unbuilt. The area used to host Metropolia University of Applied Sciences, which was demolished in 2020 due to severe structural damages. In addition to the Metropolia plot, the western competition area includes the unbuilt Y plot as well as the Leppävaara fire station and the Leppävaara contract fire brigade.

The north-western part of the competition area includes Nupukivenkallio park, which contains fortifications from World War I. The protected area is part of the competition area, but the entries shall not include any above-the-ground land use plans for the park area.

In total, the planning area covers approximately 24 hectares, including 16 hectares of the actual competition area, 4 hectares of examination areas, and 4 hectares of protected park area.



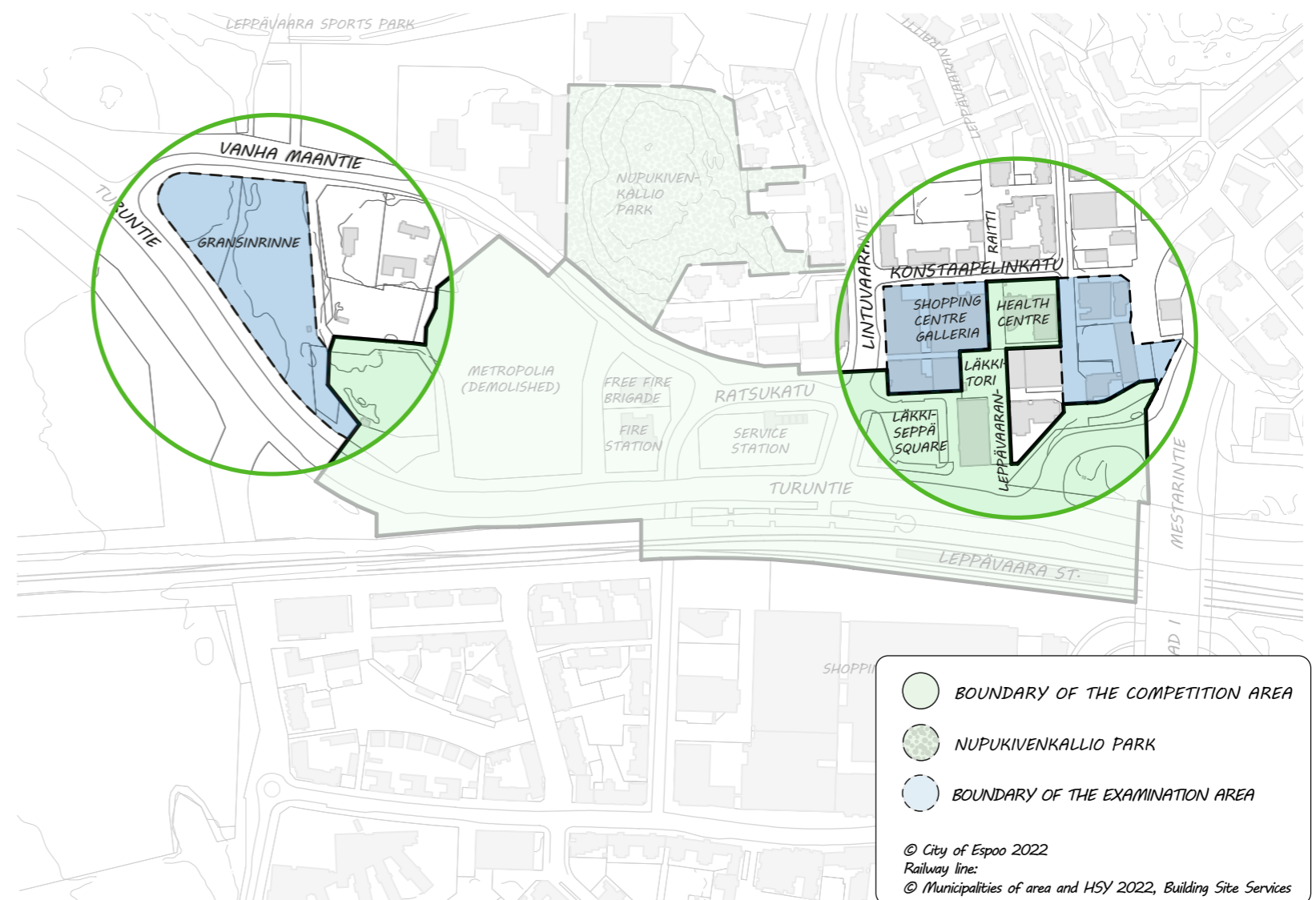
Competition area and examination areas

## Examination areas

Two of the privately owned examination areas in the competition area are located in the centre of Pohjois-Leppävaara and one is situated west of Gransinmäki. The examination areas are an integral part of the development of the urban centre and, therefore, solutions supporting the competition entry may be proposed for these areas. The competitors are expected to submit in phase 1 of the competition an overall plan that also covers the examination areas presented here.

The western examination area in the centre of Leppävaara consists of the Galleria shopping centre and the associated parking facility, as well as of the Leppävaara bank and commercial property on the southern side of Galleria. The eastern examination area in the centre comprises an old office building, an apartment building, and a commercial building located along the Harakantie road.

The examination area of Gransinrinne hill consists of a semi-open meadow area crossed by the Monikonpuro brook. On the local master plan, Gransinrinne is marked as a green area and as an area with townscape or landscape-related value. The scenic impact of Gransinrinne hill and the Gransinmäki area is particularly extensive when viewed from the direction of the Kilo Manor. In the southern part of the area, there is an old defence station dating back to World War I, which is deemed as a stationary ancient relic under the Antiquities Act. With regard to the examination areas, any further measures aimed at implementation will be negotiated separately with the owners of the properties in question.



Examination areas



## Public transport hub

With more than 50,000 transportation changes each day, Leppävaara is the third busiest public transport hub in the Helsinki Metropolitan Area right after the Helsinki Central railway station and the Pasila station. A total of 43 different lines operate from the Leppävaara bus terminal. Approximately 40 per cent of the connections are already driven by electric buses. Moreover, the service level of public transport will improve in the future, as the Jokeri Light Rail line starts operating in 2024. In addition, plans to extend the Espoo City Rail Link from Leppävaara to Kauklahti are also underway. According to current estimates, the two new tracks running west from Leppävaara will be commissioned in 2028. The Espoo City Rail Link project is part of the One-hour Turku Rail Link system. Future plans will also include preparations for a public transport connection through Leppävaara (Jokeri Light Rail 2), which runs from Matinkylä to Myyrmäki via Leppävaara.



Photo: Tuomas Pätäri



OOPS, Source: NCC PD, ARCO Architecture Company

## Business, service, and event centre

In terms of visitor numbers, the centre of Leppävaara hosts the largest shopping centre in Finland. Sello Shopping Centre has served as a pioneer in environmental matters in its sector and obtained the in-use Leed Platinum certificate as the first shopping centre in Europe.

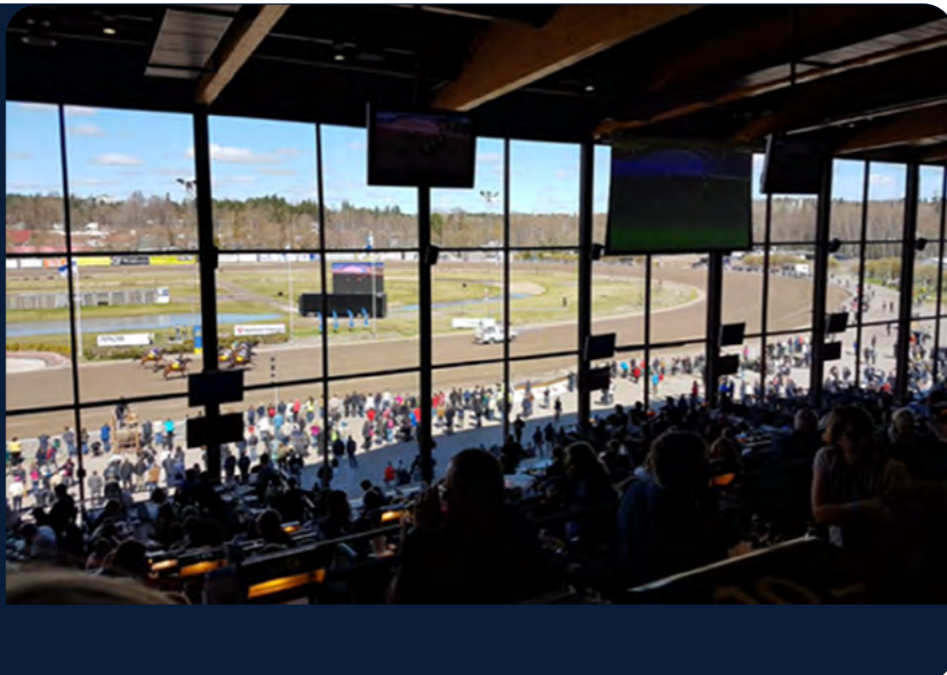
In addition to Sello Shopping Centre, the pull of the commercial centre of Leppävaara consists of the shopping centre Galleria, offering local services north of the railway tracks, and the street-level stores spreading out around both shopping centres. There are more street-level stores in the centre of Leppävaara than in any other urban centre in Espoo.

In the future, the commercial centre will also expand east of Ring Road I, where the business and sports centre OOPS is under construction: The local detailed plan for the Hatsinanpuisto area, which complements the Leppävaara urban centre, allows for the construction of new buildings in a mixed complex of approximately 100,000 floor square metres.



Approximately one kilometre northwest from the railway station is the Leppävaara Sports Park, which is the largest sports park in Espoo. Approximately two million visitors use the sports park every year. The expansion of the Leppävaara indoor swimming pool and the regionally significant outdoor swimming pool were both completed in 2016. In 2015, the new public square in the sports park with its skate park and Angry Birds Playground was opened, as was Adventure Park Huippu, which is the second largest adventure park in the Helsinki Metropolitan Area. In the spring of 2023, the multipurpose sports hall Kameleonten will be completed on the southern side of the stadium. Leppävaara Sports Park will host the European Youth Championships in Athletics in the summer of 2023.

The leading trotting arena in Finland, Vermo Racetrack, is located southeast of the Leppävaara railway station. Once the Jokeri Light Rail line is completed, this future arena of large-scale events will be perfectly accessible both by public transport and by car. The Vermo area forms an entity of green, recreational and leisure areas that expands beyond the arena's actual size, as it is connected on the Helsinki side to the Tali golf course and the largest tennis centre in the Nordic countries.



Vermo Racetrack.



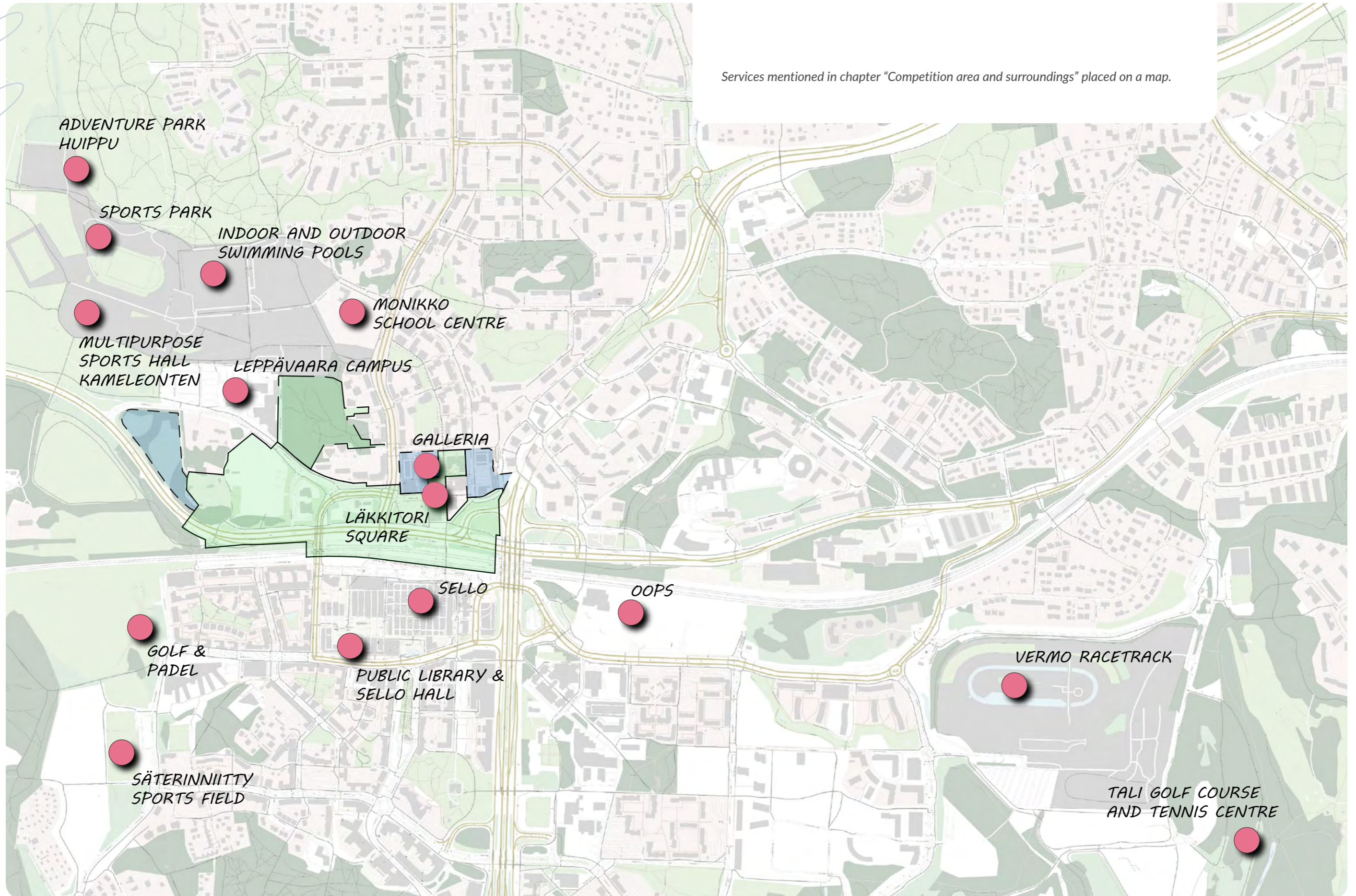
Leppävaara Sports Park. Photo: Mika Lehtinen, 110th Street Productions

## Leppävaara campus

Leppävaara Upper Secondary School and the Laurea and Metropolia universities of applied sciences are to be merged into a single, attractive student campus located in connection with the current structural complex formed by Laurea, Espoo Adult Education Centre, and the Finnish School of Watchmaking. The primary objective of the merger is to develop and deepen cooperation between the educational institutions and to improve the utilisation rate of the facilities. The proposed solution enables the creation of a campus area, which is exceptionally large and vibrant even by the standards of the Helsinki Metropolitan Area, for nearly 5,000 students in the northwest corner of the centre of Leppävaara.



Services mentioned in chapter "Competition area and surroundings" placed on a map.







Galleria shopping centre. Source: Espoo City Museum

## Current building stock

The building stock in the Leppävaara urban centre is relatively young. Larger-scale construction has only begun in the area after the 1970s, along with the building of the Leppävaara Maxi market south of the railway tracks. With the demolition of the Maxi market, the area south of the railway was built into its current shape during the early 21st century.

The building stock in the centre of Pohjois-Leppävaara has mainly been completed in the 1980s. The Galleria shopping centre, located in the eastern end of the area, dates back to 1985 and was designed by the Architecture Office Kalevi Ruokosuo Ky. In the 1980s, a concentration of commercial and office buildings was built around Läkkitori square located south of Galleria. The facades of the buildings feature light-toned ceramic tiles, and the arcade corridor on the first floor is a common theme in almost all of them. Leppävaaranraitti, a central pedestrian street, passes through the square from south to north. The neighbouring residential buildings mainly consist of apartment buildings dating back to the 1980s and 1990s. The newer building stock is represented by a 20-storey apartment block from the 2010s in the south-east corner of the square.



View from Leppävaaranraitti. Source: Mysome Oy





The Northern Leppävaara. Source: Mysome Oy



## Master plan

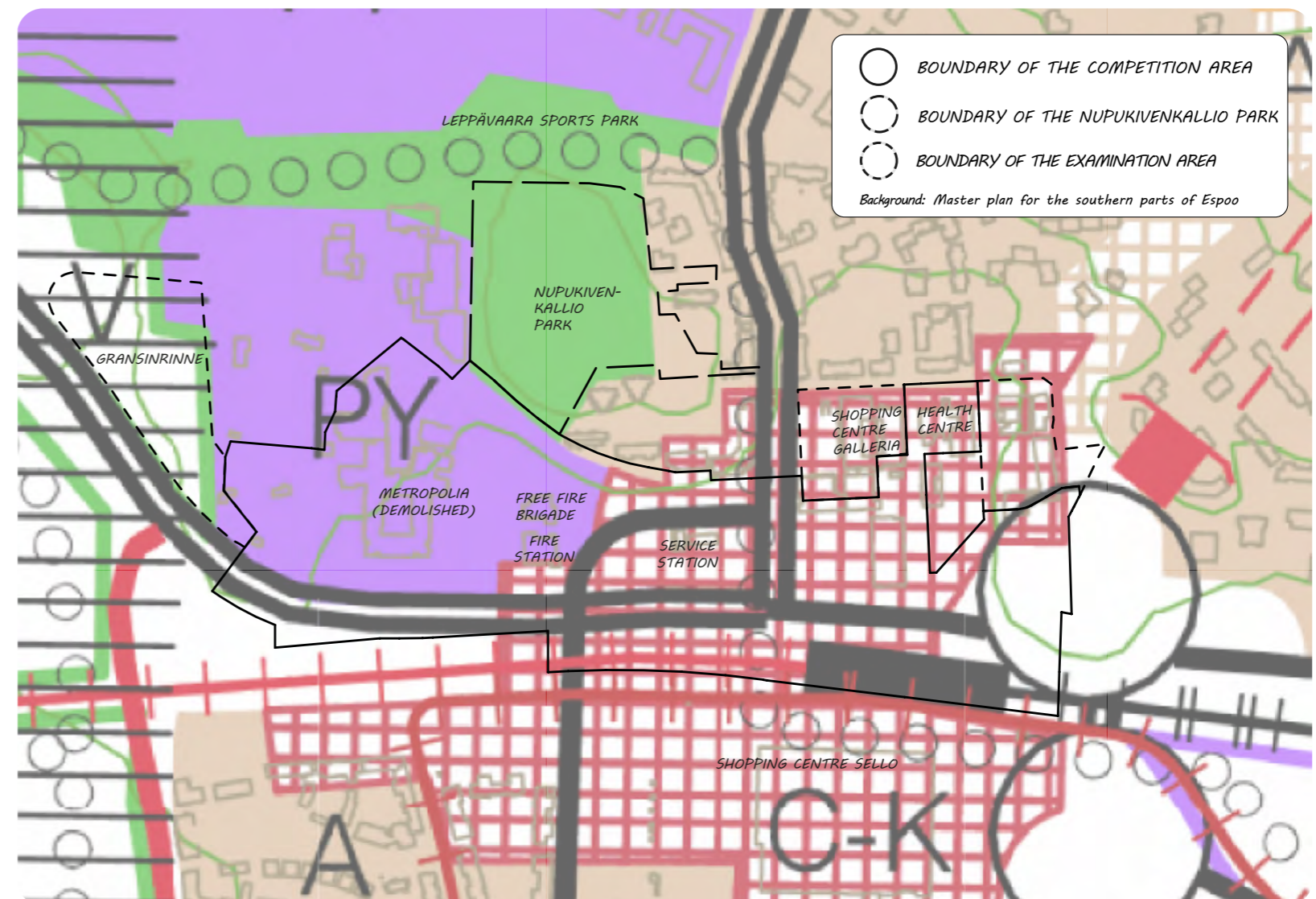
The Leppävaara region is covered by the master plan for the southern parts of Espoo, which entered into force in 2010. The eastern section of the competition area is indicated in the local master plan as an area for central functions (C-K), which can accommodate housing solutions suitable for the urban centre, office, service, and training spaces, as well as administrative and commercial facilities. A grid assigned to a C-K area indicates that the goal is to develop the area further. According to the plan provision, the aim of local detailed planning is to ensure the functionality of the area by means of complementary building and to improve the operating conditions for public transport.

The western part of the competition area is defined in the master plan as an area for public services and administration (PY). As the master plan is general in nature, the competitors may also propose functions and services for the PY area that deviate from the main purpose of the area, provided that they promote the development of the Leppävaara urban centre.

In terms of traffic network and mobility, the master plan includes indicative plans for a single-lane main road, main street or regional collector road, a two-lane main road or main street, a part of a roundabout on the edge of the planning area, and a railway track with a station in the C-K area.

## Local detailed plan

The competition and examination areas are covered by several valid local detailed plans from 1982–2020. The existing local detailed plans do not restrict planning in the competition or examination area, and, therefore, need not be considered during the process.



Extract from the master plan for the southern parts of Espoo.

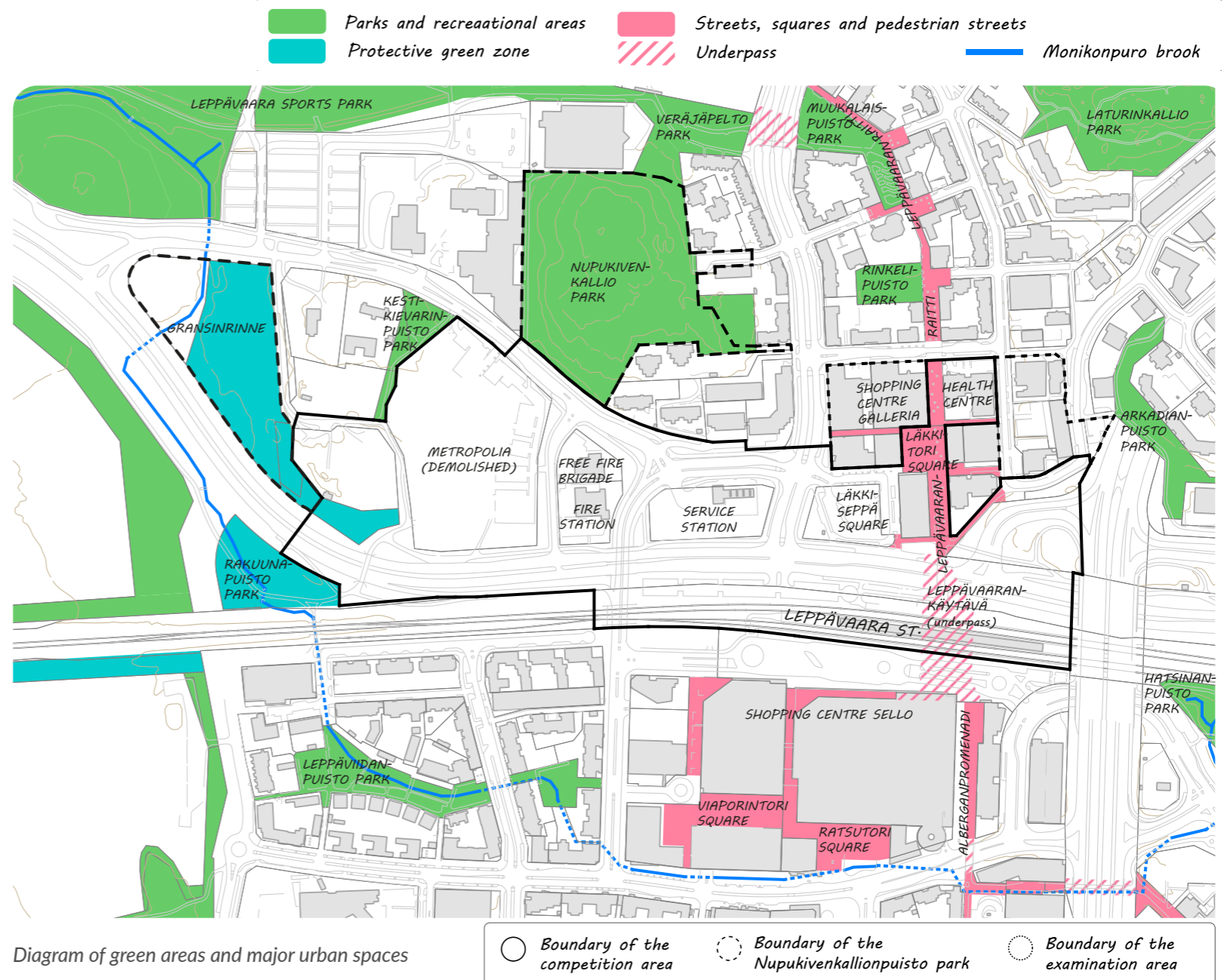


## Landscape and green areas

There are no protected nature sites or significant nature values in the competition area. The majority of the competition area consists of built or paved street areas. The vegetated areas are mainly planted areas, such as street-side and garden plants. The public squares and pedestrian urban spaces found in the competition area and in its surroundings form an essential part of the network of green and recreational spaces in the area. The competition area includes the Nupukivenkallio green area protected by a local detailed plan.

In terms of recreational and ecological networks, the most significant areas are located west of the competition area. The Leppävaaranpuisto park is an extensive north-south green area, which includes a sports park, forest areas in the north, and an open cultural landscape of regional value in the south.

Monikonpuro brook, which has significant nature value, flows on the western and southern side of the competition area running east towards the Iso-Huopalahti bay. The residents of Leppävaara take pride in the protection of trout in Monikonpuro.



## Soil and foundation conditions

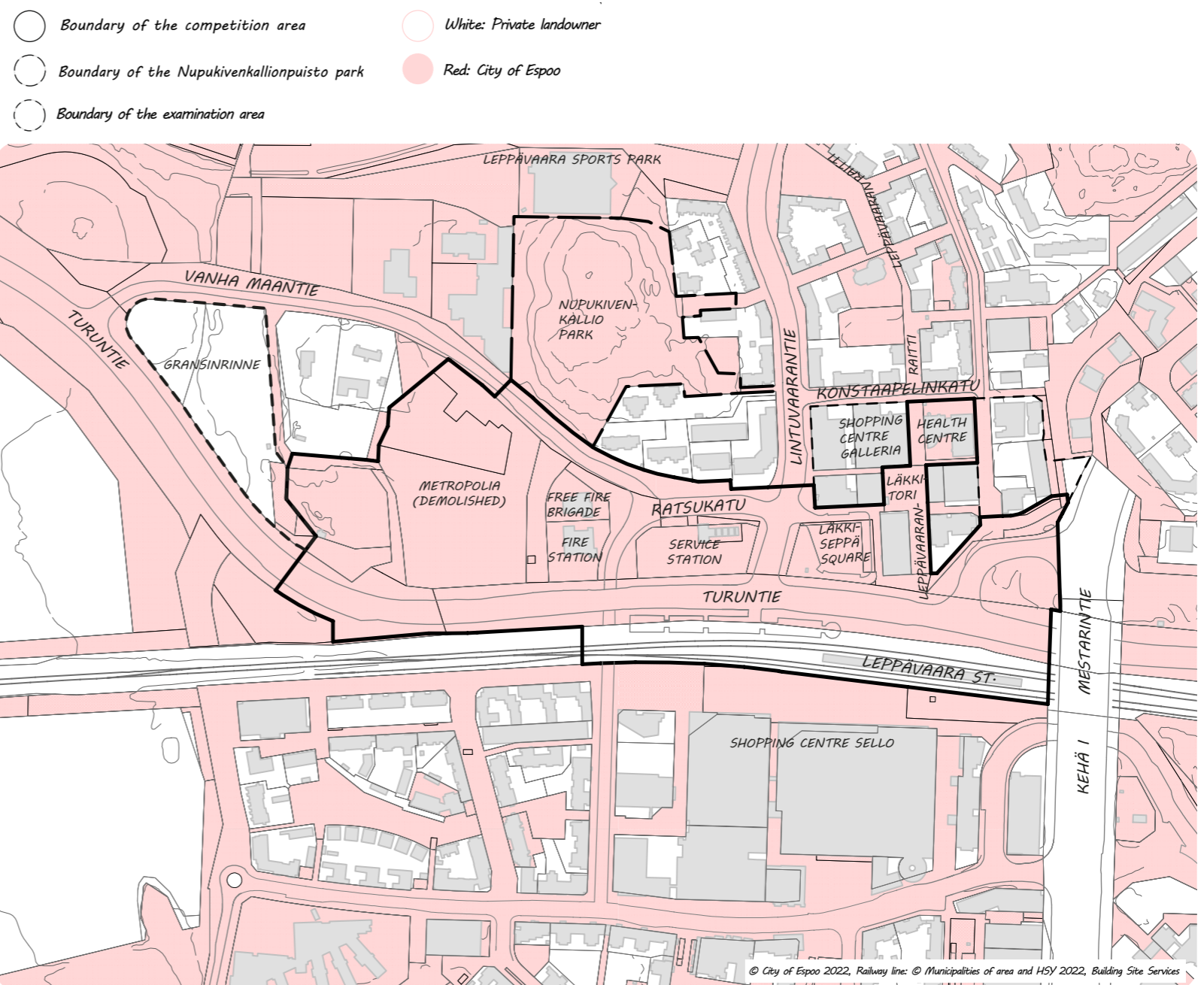
Based on the soil map of the City of Espoo and the ground surveys conducted in the area, the soil in the area is primarily soft. In soft soil areas, the thickness of the clay bed is mainly around 5–10 metres. The clay bed is at its thickest in the middle of the soft soil area but becomes thinner towards the edges. Soil under the clay bed usually consists of silt and/or sand, as well as till above the bedrock. The total thickness of the soil layers varies between 5 and 20 metres.

In the north-western and eastern parts of the area, the soft soil areas are restricted by moraine and rock-formed hills, on the edges of which the top of the subsoil contains a clay and/or silt layer of less than three metres thick just above the moraine or rock surface. In these areas, the thickness of the superficial deposits varies greatly from one to eight metres. On top of the hills, the bedrock is close to the surface, and outcrops may be visible in places.

In the soft soil areas, the ground level is approximately from +8 to +10. The surface of the moraine and rock slopes in the eastern part of the area rises to approximately +17, and the moraine and rock slopes in north-east rise as high as +35. The average quality of the Nupukivenkallio bedrock has been deemed moderate. The soil and construction suitability map of the competition area can be found in appendix 2.

## Land ownership

The competition area is owned by the City of Espoo, with the exception of the railway area administered by the Finnish Transport Infrastructure Agency and the commercial property owned by Sponda. The properties in the examination area are privately owned.



Land ownership in the competition and examination areas.



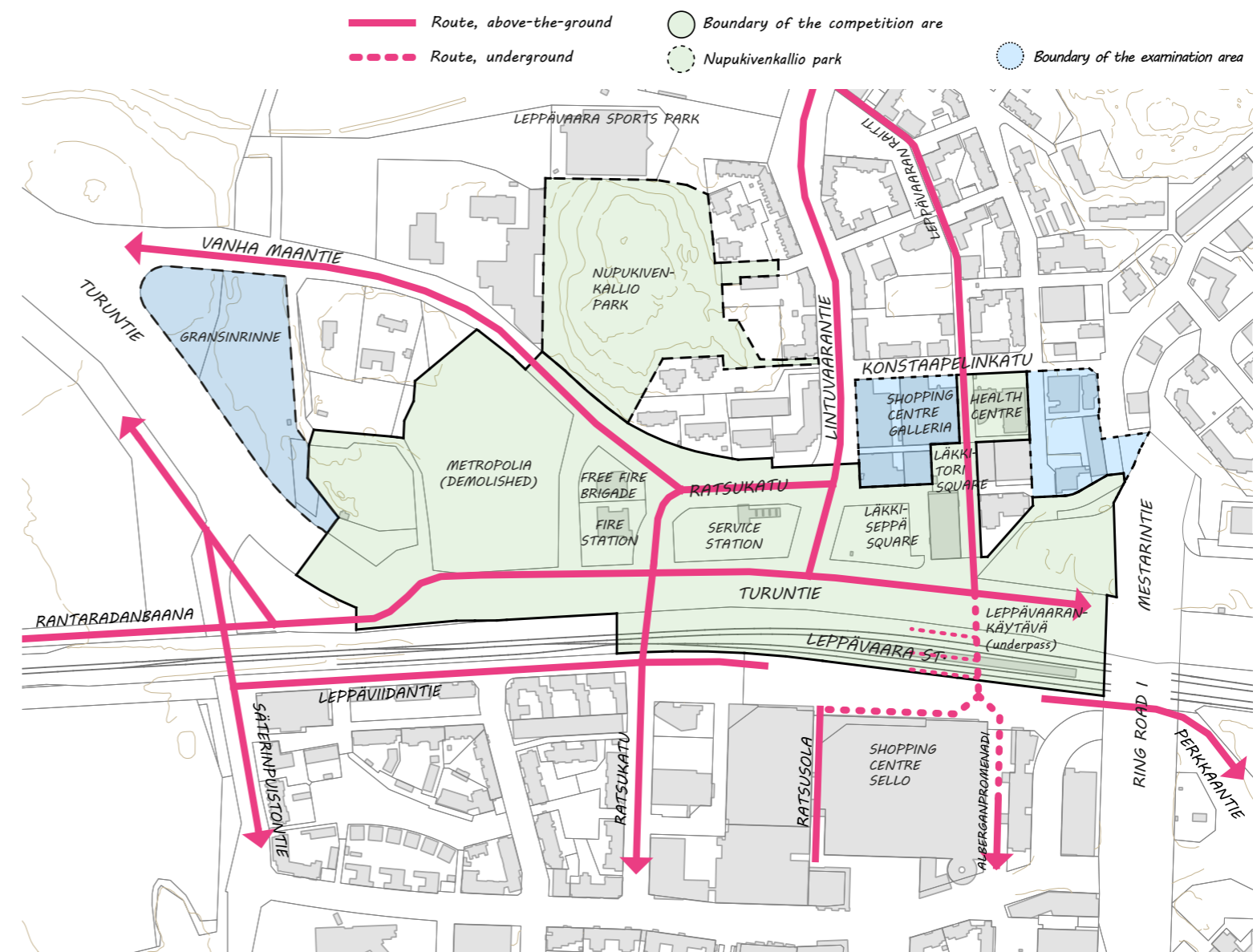
## Traffic and parking

### Pedestrians and cycling

The Leppävaaranraitti street is a key pedestrian connection from the north to the railway station. Leppävaaranraitti connects to Leppävaarankäytävä corridor (underpass), which provides access to the station platforms, the bus terminal, Ratsusola (outdoor street space running across Sello Shopping Centre) and Alberganpromenadi (footway between Sello and Panorama Tower). In the underpass, there are designated areas for pedestrians and cyclists. In addition, there is a large number of bicycle parking spaces in the underpass to serve the needs of both access traffic and Sello visitors. Before covid-19 hit, an average of 10,900 pedestrians and 2,100 cyclists passed through the northern part of the Leppävaarankäytävä corridor (north of Turuntie road) on a regular summer-time weekday.

The northern edge of Turuntie includes an important connection for pedestrian and bicycle traffic, which intersects with Leppävaaranraitti and the Leppävaarankäytävä corridor. There have been challenging situations at the crossroads with regard to the intersecting pedestrian and bicycle traffic. A top-quality Baana cycling and pedestrian path will be built along Turuntie. Plans are also made for a north-south Baana connection for cyclists east of Ring Road I, where it would intersect with the east-west Baana connection of the Turuntie road.

In addition to Turuntie, the main connections for pedestrians and cyclists are found along the Lintuvaarantie, Vanha Maantie, and Ratsukatu streets. With the changes made to Ratsukatu, the western pedestrian and bicycle road running under the tracks will be removed. Correspondingly, the pedestrian and bicycle road on the eastern side will be widened. Moreover, the pedestrian and bicycle road running next to the western ramp from Turuntie to Ratsukatu will also be removed. A replacement connection will be implemented via the Säterinpuistontie and Leppäviidantie streets.



Main pedestrian and cycling routes.

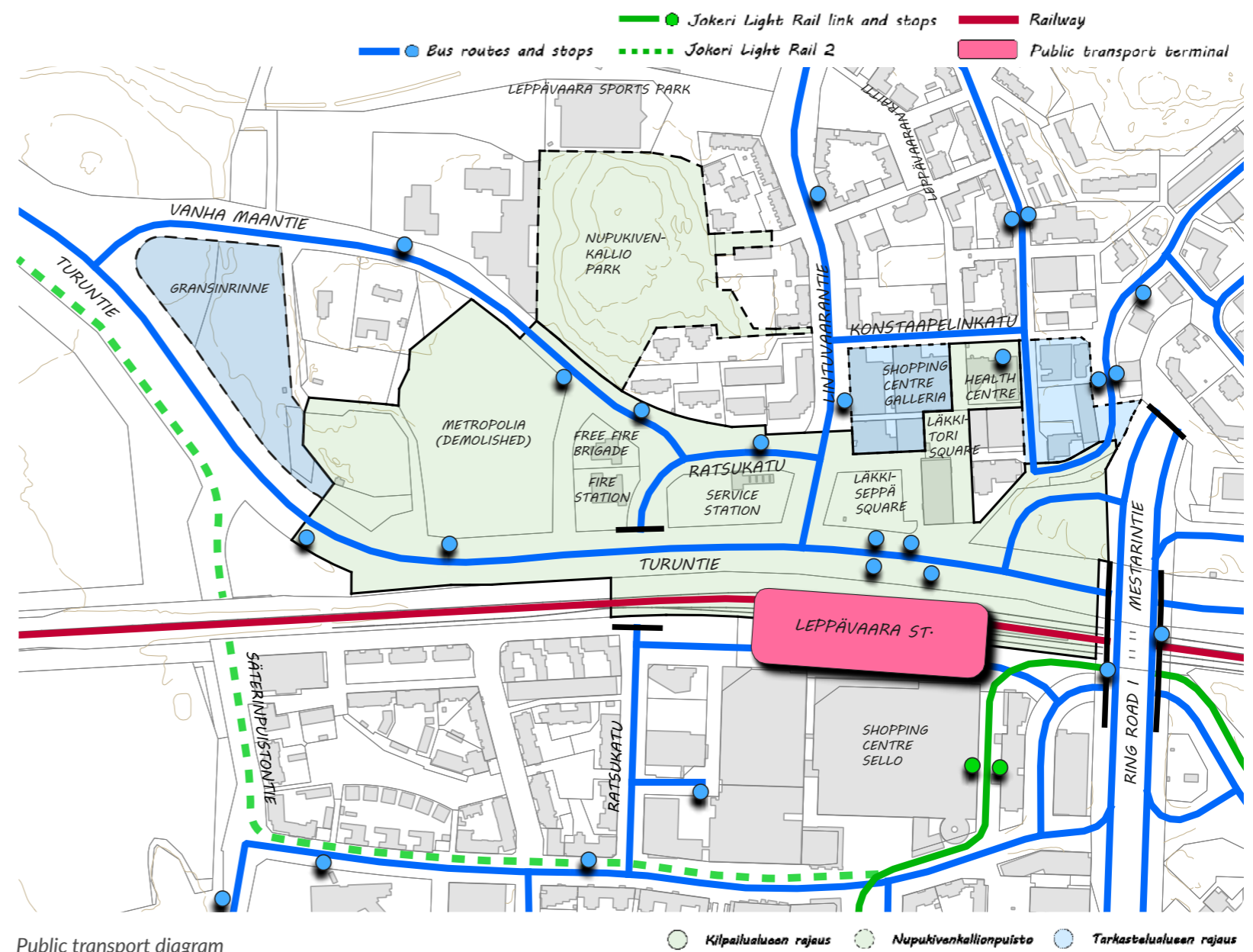
## Public transport

The backbone of public transport is the Coastal Railway, which accommodates commuter and long-distance rail traffic, the future Jokeri Light Rail line, and a comprehensive network of bus connections. The modernisation of the bus terminal will be carried out in connection with the expansion of Sello, and the functionality of the terminal will be developed in accordance with the plans presented in appendix 8. The expansion of Sello will shelter the bus terminal from weather conditions. In terms of public transport, there are important bus transfer stops on the Ring Road I bridge, Turuntie, and Lintuvaarantie. The nearest Jokeri Light Rail line stop from the station is on Alberganpromenadi, between Sello and Panorama Tower. According to preliminary plans, Jokeri Light Rail line 2 will run from Turuntie under the tracks and via Säterinpuistontie to Leppävaarankatu, at the eastern end of which it would connect to the existing Jokeri line and follow it through the transport terminal to Perkkäantie.

In connection with the drafting of the general plan for the Leppävaara bus terminal (WSP, 2019), an analysis was made of the users of the public transport hub by their mode of transport. The numbers are based on data from 2018 and on an estimate of the number of Jokeri Light Rail line users. The estimated number of people arriving per day is as follows when considering the current situation (2018) and Jokeri Light Rail line 2024:

1. by train 13 800,
2. by bus (bus terminal) 8 300,
3. by bus (Ring Road I) 2 800,
4. by bus (Turuntie) 1 300 and
5. Jokeri Light Rail line 2 000.

In total, people get on or exit a public transport vehicle in the area for more than 52,000 times during a period of 24 hours (excluding long-distance trains). Approximately 21 per cent of Sello customers arrive by bus, 12 per cent by train, and 42 per cent by car.



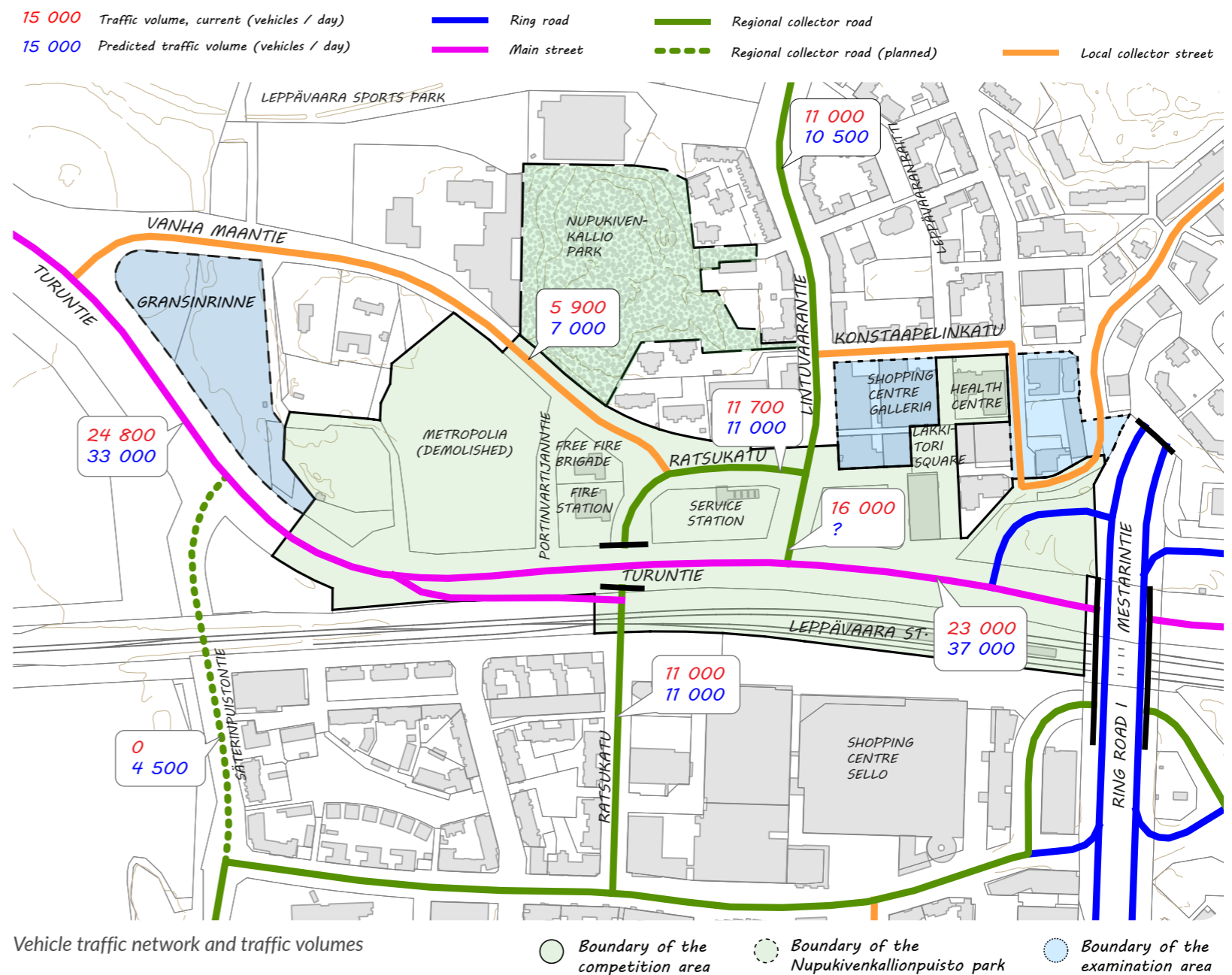
Public transport diagram



## Vehicle traffic

The traffic network in the competition and examination area consists of the main road Turuntie, the regional collector roads Lintuvaarantie and Ratsukatu, as well as the local collector roads of Vanha Maantie, Konstaapelinkatu, Harakantie and Mestarinkatu. There is only a parallel junction from Portinvartiantie to Turuntie. When approaching from the west, there is a ramp providing access to Ratsukatu from Turuntie, but there is no connection from Ratsukatu back to Turuntie.

In connection with the Espoo City Rail Link project, the goal is to design and implement on the western part of the competition area an extension of Säterinpuistontie all the way to Turuntie under the railway tracks, and to change the lane arrangements on Ratsukatu. The Ratsukatu “trough” will remain at its current width. Säterinpuistontie will be a single-lane street.





## Parking

In the competition and examination area, parking for the residential blocks has been organised both in parking facilities and on the plots. The first parking facility is located on the western side of Harakantie, between Tinurinkuja and Valurinkuja, while the second one is situated in the southeast corner of Lintuvaarantie and Konstaapelinkatu.

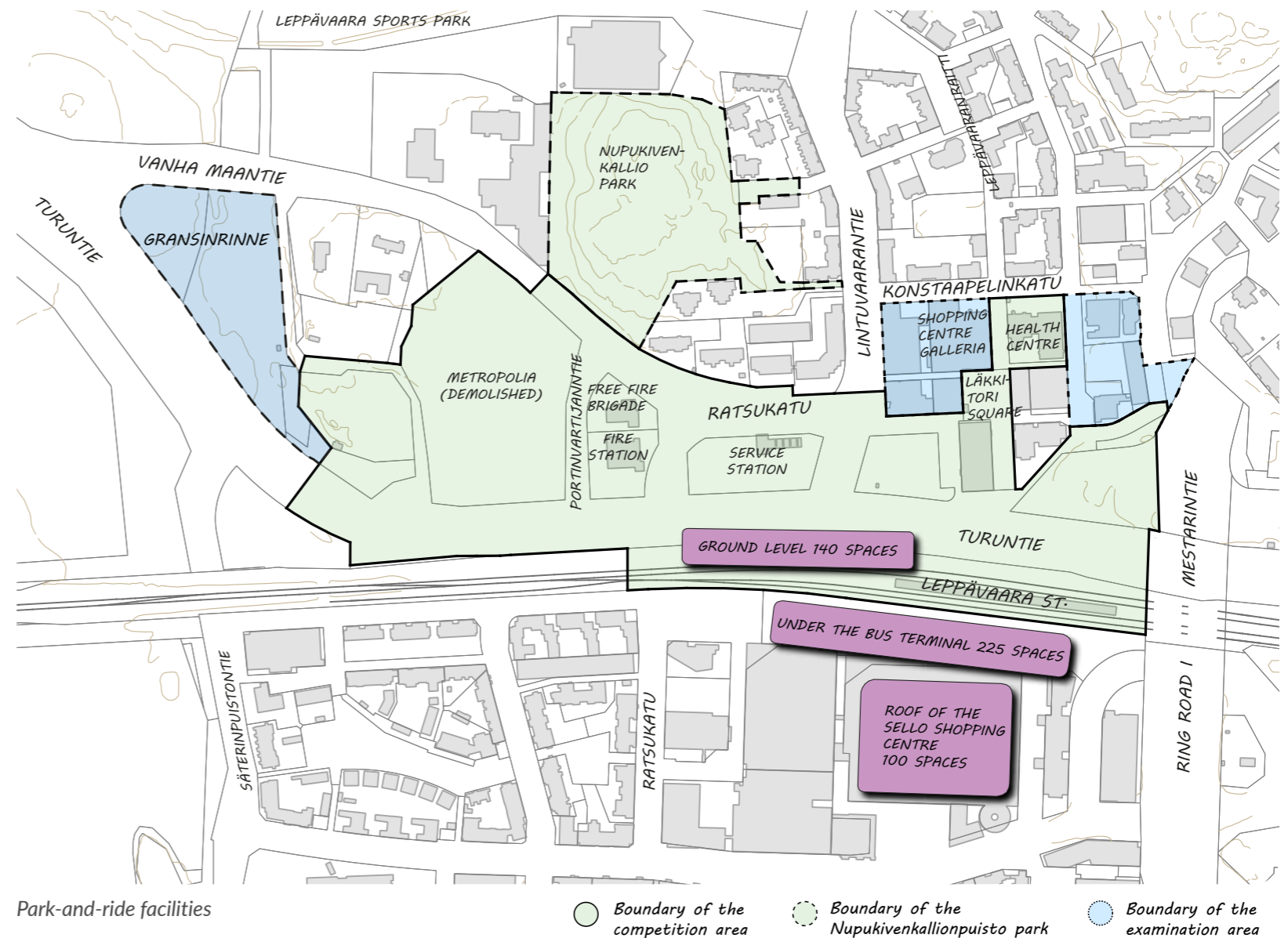
There are public parking spaces reserved for customers and guests on Läkkipätkuja, Konstaapelinkatu, Mestarinkatu, and the Metropolia plot.

## Transfer parking

South of the railway tracks, under the bus terminal, there is a park-and-ride facility for 225 cars. Similarly, there is a park-and-ride area of 140 parking spaces on the northern side of the railway tracks, just between the tracks and Turuntie. In addition to the above, there are 100 park-and-ride spaces on the roof of Sello Shopping Centre.

## Service traffic connections

For the most part, the maintenance of the business blocks in the northern centre takes place in the blocks. There is a service connection from Konstaapelinkatu to Läkkipätkuja via Läkkitunneli underpass. Service traffic is also allowed on Valurinkuja. In addition, maintenance personnel heading to the street-level stores in the area have been accessing the facilities via Läkkitori and Leppävaaranraitti. The increase in service traffic has resulted in dangerous situations and challenges between the service vehicles, people walking or cycling in the area, and the local residents





## Municipal infrastructure

The competition area includes municipal infrastructure and cables of different operators, which can be moved if necessary. However, in the southeast corner of the area, there is a 2021-built stormwater sewer (diameter 1200 mm) crossing under Turuntie, and the drain may not be moved. The current network is visible on the conduit map extract in appendix 3.

## Environmental disturbances

The busy roads and streets as well as rail traffic near the centre of Leppävaara cause noise, ground-borne noise, and vibration in the competition area and reduce the air quality in the area.

### Noise

At present, the standard value for noise level in recreational outdoor areas (55 dB in daytime) is exceeded in most parts of the competition area. In the vicinity of the busiest roads (Ring Road I, Turuntie) and the Coastal Railway, the building facades also face high noise levels. The noise zones are presented in appendix 6.

### Air quality

There are impurities in the air around the busy roads and streets, which has an impact on air quality. The zone maps for air quality based on the traffic volumes of 2018 display the recommended and minimum distances from the edge of the current road, and they can be found in appendix 7.

## Renovation of Leppävaaranraitti

Leppävaaranraitti is the main pedestrian connection in Pohjois-Leppävaara, leading from the station to the sports park square. Leppävaara Society's annual Raittikarnevaali festivities have been held on the street since 1992, and after April 2022 the street has served as the venue for a monthly grand market event.

Several different plans have been drawn up to develop the operations on Leppävaaranraitti, and the most significant of them all is the Leppävaaranraitti master plan drawn up in co-operation with the local residents. The renovation of Leppävaaranraitti between Konstaapelinkatu and the sports park is carried out in stages, and the project will be completed in the summer of 2023. The future goal is to extend Leppävaaranraitti via the railway station underpass east to the Vermo Racetrack – all the way to Tali. An indicative plan has been drawn up for the Leppävaaranraitti entity, and it will be implemented in stages as the construction progresses. The master plan for Leppävaaranraitti is presented in appendix 13.

## Läkkitori square

The Läkkitori square is an integral part of Leppävaaranraitti, and the operational and commercial core of Pohjois-Leppävaara. The square is surrounded by the most important grocery stores and restaurants in the area. In terms of size, Läkkitori is a pleasant urban square, offering just the right amount of space for local events. However, Läkkitori faces challenges in the form of inadequate monitoring of market activities and an uncontrolled vehicle culture on Leppävaaranraitti.

*Street festival Raittikarnevaalit. Photo: Tapio Lipasti, Leppävaaraseura ry*







*Gransinmäki area viewed from Kilo. The photograph shows the youth association's house Thorstorp. Source: Espoo City Museum in 1971*

## Cultural and historical value of the local environment

The most valuable part of the area's cultural history is the Gransinmäki hill at the western end, which includes both the oldest preserved buildings in the area and important archaeological sites. Gransinmäki plays an important role in the landscape: as a rocky mound, it rises higher than the surrounding open landscape. The scenic impact of Gransinmäki is particularly extensive when viewed from the west, from the direction of the Kilo Manor farming lands.

Both Gransinmäki and Nupukivenkallio hill on the northern side of the examination area contain structures that once belonged to the Helsinki ground fortress from World War I, as well as remnants of iron mines from the 1700–1800s. The fortress structures are protected under the Antiquities Act.

*Laurea University of Applied Sciences is located in the Gransinmäki area.*





Leppävaara ski tracks.  
Photo: Janne Ketola



Painting by Jussi Two Seven in the Turuntie underpass.  
Photo: Tarja Pennanen



Surroundings of the competition area



Adventure Park Huippu.  
Photo: Heidi-Hanna Karhu



Urheilupuisto.  
Kuva: Mika Lehtinen,  
110th Street Production

Monikko school centre  
Photo: Henri Christiansen



LIVE Vocational College on Turuntie



Thornstorp.



Akseli Leinonen's artwork Love, Love  
(Tunnel of Love) in the Alberganportti  
underpass.



OOPS Leppävaara from Turuntie  
Photo: Tarja Pennanen



Vernon ravirata. Kuva: Tommi Ista



Leppävaara senior centre  
Photo: Olli Urpela



Alberga Manor  
Photo: Tommi Ista

Pohjakartta @OpenStreetMap contributors



## 6. Planning guidelines

### General guidelines

In phase 1 of the competition, the competitors shall prepare a draft plan for the entire planning area, which includes both the competition area and the designated examination areas.

In phase 2 of the competition, the competitors shall prepare a detailed plan proposal only for the actual competition area. The solutions included in the entries selected for phase 2 will be specified to meet the requirements set out in the competition documents, so that the jury will be convinced of the functional and cityscape-related quality and of the technical and financial feasibility of the solutions.

### Functions to be placed in the competition area and their scope

The competitors may plan urban functions, such as residential, office, business, and hotel facilities, in the competition area for a total of approximately 100,000–150,000 floor square metres. The total amount of construction area included in the entry is not binding on the competitors. No floor area goals are set for the examination areas.

The central blocks in the middle and eastern parts of the competition area (areas 1–2 in the phasing diagram) shall primarily be reserved for the functions listed above. Housing units may also be placed in the area, provided that the noise limits are not exceeded, but the main emphasis must be on other central functions.

In terms of the blocks in the western end of the competition area, meaning the old Metropolia area, the focus may be on residential construction, but other functions are also welcome in the area. The city's day-care centre must be located in this area, taking into account the requirements set out in the competition programme.

The permitted building volume proposed for the competition area does not include any building rights for constructions above the railway tracks. With regard to the extent and building rights of deck structures proposed to take place above the railway and/or Turuntie, the competitors may draft their own proposals while taking into account the requirements for technical and financial profitability that the organiser of the competition has established for the project. The minimum requirement is that a new connection must be built over the tracks, connecting the northern centre to the future expansion of Sello Shopping Centre.

The property boundaries within the competition area may be ignored in so far as the properties are owned by the city or Sponda Oyj.

### Cityscape

In terms of the cityscape, the centre of Leppävaara must be developed into an easily recognisable and approachable urban centre that reflects the significance of the area. The ideal result for the competition would be that the area becomes a distinctive and unified urban centre, where services are combined with an active urban life, recreational spaces, and an inviting, human-scale pedestrian environment.

North of Turuntie, the competition area is expected to become a consistent entity in terms of cityscape and functionality, aimed at balancing out the asymmetry between the southern and northern centre of Leppävaara.

Public art is an essential part of Leppävaara's future identity. Artworks will complement the construction projects by creating a sense of security, humanity, and comfort in the urban space. Moreover, the artworks will increase the attractiveness and value of the region and pay homage to local values. Ideally, art will be inseparably integrated into the fresh look and architecture of the centre of Leppävaara.





Panorama Tower. Photo: Tommi Ista

## Principles of high-rise construction

The plan must comply with the City of Espoo's principles of high-rise construction (2012). In this context, a high-rise building is a construction that exceeds 40 metres in height.

1. High-rise buildings may only be placed in well justified locations in terms of the cityscape.
2. The building shall be placed no more than 300 metres from the railway station.
3. The building must be clearly divided into three parts: the foundation, the middle section, and the top.
4. From a distance, the peak or overall shape of the building must be easily recognisable.

## Planning instructions for the railway area

When building above railway tracks, a clearance of 7.5 metres must be reserved between the tracks and the structure above them. The pillars of the new overpass bridges, the main support structures of truss bridges, and other bridge structures and bridge-like special structures must be placed at least five metres from the track centre line.

The city has negotiated the narrowing of the railway and road traffic area with the Finnish Transport Infrastructure Agency. In the coordinated plans, the area has been reduced by about 7 metres in the north and about 2.5 metres on the southern side of the tracks. The competitors can utilise the narrowed rail area in their plans. The planned changes to the boundaries of the railway area and the tracks are presented in appendix 9 to the competition programme.



## Public transport

The competition area is located at a hub of public transport. The goal is to improve the service level, attractiveness, and accessibility of public transport. Special attention shall be paid to smooth transfer connections and the functioning of pick-up and drop-off traffic, including park-and-ride facilities for passenger cars and bicycles.

### Public transport terminal

A part of the competitors' task is to place a public transport terminal in the immediate vicinity of the station to serve the public transport passengers. The public transport terminal must connect the railway station and its platforms to the centre area north of Turuntie and to Sello Shopping Centre. The current public transport services and service level are not sufficient to meet the demand and user numbers of the third-busiest public transport hub in the Helsinki Metropolitan Area.

The public transport terminal proposed in the competition entry shall comprise the main railway station, suitable waiting facilities and ancillary services for passengers, adequate and appropriate pick-up traffic arrangements, and smooth transfer connections for all of the above-mentioned functions. The bus and taxi station serving the public transport terminal, as well as Jokeri Light Rail stops, are located south of the competition area, in an area covered by the amendment to the local detailed map for Sello Shopping Centre.

### Bus stops

The bus stop pairs on Turuntie and Ring Road remain unchanged. Buses will operate via Lintuvaarantie, Vanha Maantie, Ratsukatu, Turuntie, and Ring Road I.

*City bikes at the Leppävaara railway station*

### Pick-up and drop-off traffic

The competition area must include a pick-up and drop-off point accessible also to persons with reduced mobility. The pick-up points must have smooth and short connections to the bus terminal and railway station. Moreover, new and different types of mobility services must be taken into account in view of the capacity of pick-up and drop-off traffic.

### Transfer parking

A total of 300 park-and-ride spaces must be located north of the tracks. Of these spaces, 140 are currently located on the parking area between the railway and Turuntie. The current availability of park-and-ride spaces shall not be significantly weakened, and connections to the park-and-ride facilities must be smooth and functional.

Park-and-ride spaces for bicycles shall be planned in key locations to make the travel chains as smooth as possible. Space should be reserved for bicycle parking at the starting point of the pedestrian connection crossing over Turuntie and the railway tracks.







Illustration of the upcoming Jokeri Light Rail stop (eastern end of Sello Shopping Centre)



## Other services to be placed in the competition area

### Commercial services

In the big picture, the commercial services of the centre of Leppävaara are concentrated not only in Sello but also in the future public transport terminal, as well as around the Galleria shopping centre or its potential new construction. Nevertheless, competitors are expected to consider in their plans the requirements for the functional development of the pedestrian centre: As a minimum requirement, the new buildings in the northern centre must include plenty of street-level store facilities and other functions that increase the service selection in the area.

### Health centre

Leppävaara Health Centre, currently around 3,500 floor square metres in size, is located in the competition area. To develop the city centre, the competitors may propose a land use option in which the health centre, or a health station of the wellbeing services county or a health and social services centre similar in size to the existing health centre, is placed in a central and well-accessible location in the overall plan for the reconstruction of the city centre. The competitors may also propose the health and social services centre to be placed in the future extension of Sello Shopping Centre (not included in the competition area). To clarify the matter, the City of Espoo has not made a decision on relocating the health centre.

### Day-care centre

The competition entry must include a reservation for a day-care centre for at least eight groups. The day-care centre may encompass, at most, three floors, and the required building right is 2,000 floor square metres. The plot size must be at least 4,000 m<sup>2</sup> (2,500 m<sup>2</sup> of fenced playground area).

The day-care centre must be located at least 150 metres from the closest lane on Ring Road I and 70 metres from Turuntie. The distance to other busy collector streets must be at least 20 metres.

### Fire stations

For well-justified reasons related to functionality and urban structures, the competitors may also propose alternative functions for the fire station plots. If the fire stations are proposed to be moved away from the competition area and the existing buildings to be demolished, the fire stations must be placed outside the competition area. The fire stations' new location outside the competition area is not part of the competition task. If the functions are maintained in the area, the functionality of the emergency vehicle traffic must be considered in the plan.



Leppävaara Health Centre.  
Source: Espoo City Museum





## Connection to Sello Shopping Centre

The southern edge of the competition area is limited to the proposed expansion and revision of Sello Shopping Centre, which allows for the extension, including business and service facilities, to be built on top of the current bus terminal. In addition, a separate carpark "Rataparkki" is to be built just south of the railway. Of the carpark's 329 spaces, 200 will be partly designated to serve park-and-ride traffic south of the railway tracks, and the rest will be available for the customers of Sello Shopping Centre.

The task of the competitors is to present a solution that, together with the Sello extension, forms a functionally uniform terminal entity above the railway and street area, creating a natural connection across the railway to Pohjois-Leppävaara, station platforms, bus terminal, Viaporintori square, and Jokeri Light Rail stops. The possible intersecting points for the functions and connections above the railway, as well as their elevation, are presented in appendix 10 of the competition programme describing the expansion of Sello Shopping Centre.

Appendix 8 to the competition programme presents a new traffic diagram for the bus terminal, which takes into account the amendment needs caused by the structures of the Sello extension.



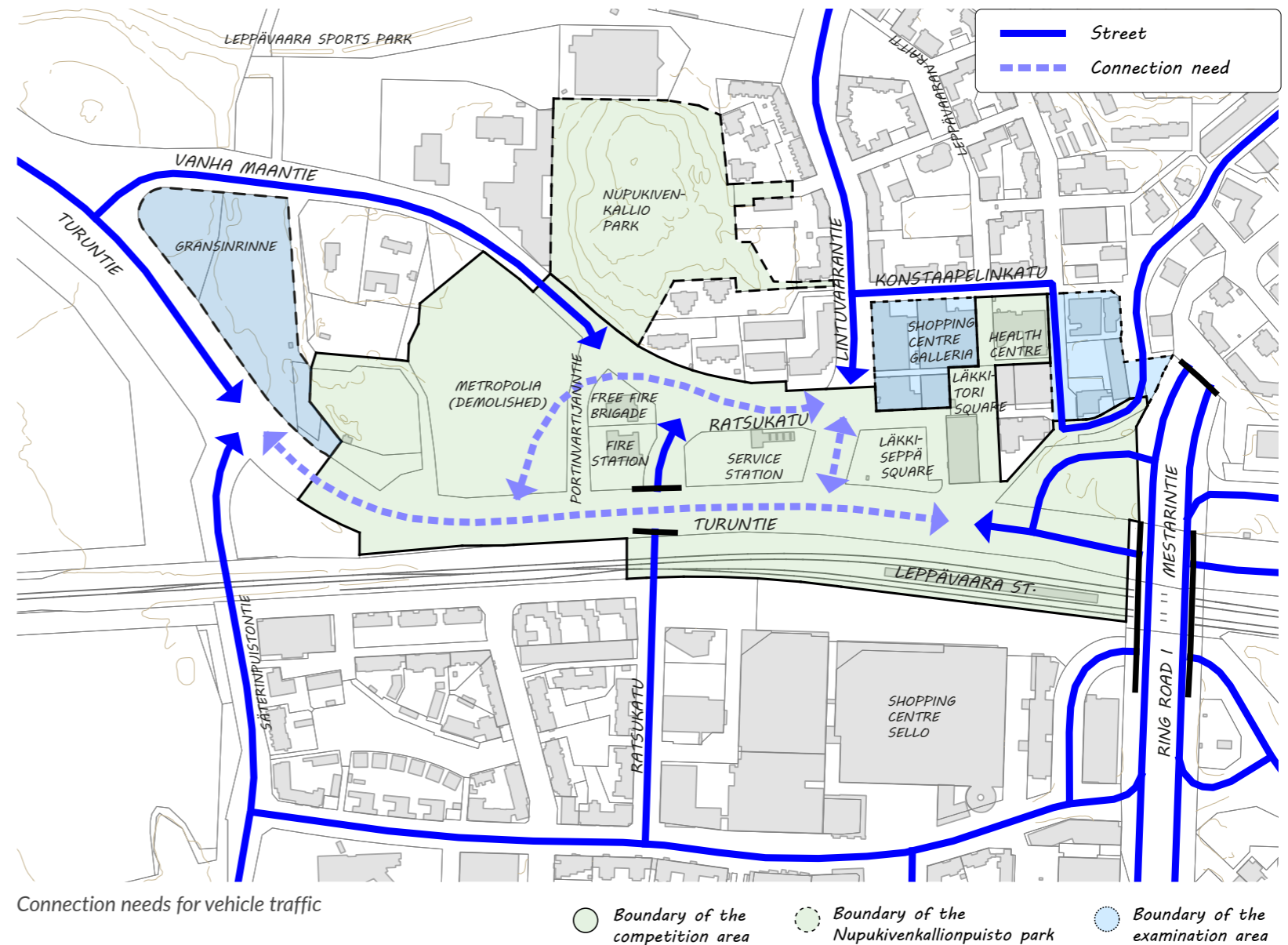
## Vehicle traffic

The aim of the competition is to develop the road-like streets of the competition area to better suit the urban structure of the city centre. Any changes made to the streets and traffic areas may not reduce the capacity of the existing transport routes. It is predicted that the number of vehicles on Turuntie and, consequently, in the centre of Leppävaara will increase in the near future. The capacity of the current street arrangements is at risk of becoming congested already in the 2030s, if no measures are taken to improve the situation.

It is possible to move Turuntie to the south, all the way to the northern edge of the reduced railway area. The relocation of Turuntie is tied to the existing intersections with Ring Road I in the east and to the bridge crossing Ratsukatu in the west.

Turuntie is the main street cutting across the area. There must be a connection from Turuntie to Ring Road I and towards Lintuvaara. There must also be a connection from Lintuvaarantie to Etelä-Leppävaara via Ratsukatu. The Ratsukatu “trough” will remain at its current location and width, but improvements will be made on the lane arrangements. It is possible to design a new ramp from Ratsukatu trough west to Turuntie. In connection with the Espoo City Rail Link, Säterinpuistontie will be extended below the tracks to Turuntie. **It is not possible to place new plot access connections on Turuntie, nor a light-controlled pedestrian crossing point near the station.**

It has previously been proposed that the intersection of Lintuvaarantie and Turuntie be moved west, on to Portinvartijantie. This would allow for the pedestrian centre to be expanded in a way that would link the “roundabout-like” island of the service station with Leppävaaranraitti. Alternatively, the competitors can leave the intersection of Lintuvaarantie and Turuntie untouched or come up with a new solution for the area.





## Pedestrians and cycling

The urban centre must be designed to be accessible: The competition area must have accessible routes to the railway station and bus terminal. The main pedestrian flows should be concentrated in the commercial centre area, limited to Sello Shopping Centre, Leppävaara campus, shopping centre Galleria, and OOPS.

The competition entries must promote the use of sustainable modes of transport, such as walking, cycling, and public transport. As regards pedestrian traffic, the pedestrian centre will be expanded, with special emphasis on usability and comfort. Cycling connections must be of high quality, attractive, and safe.

Leppävaaranraitti will be the most important pedestrian connection from Pohjois-Leppävaara to the station. Leppävaaranraitti will be connected to the Leppävaarankäytävä corridor, which will remain a significant connection to the station and to the southern side of the railway, running under the tracks.

During the construction of the Espoo City Rail Link, a new connection for fast cycling, Rantaradan Baana, will be implemented in connection with Coastal Railway and Turuntie. In the competition entries, a minimum width of seven metres must be reserved for the new Baana, while considering the need of pedestrians. One-way bicycle paths are planned along Lintuvaarantie, and they will allow for a smooth connection to Rantaradan Baana.

## Service traffic

Service traffic must be planned so that it does not run through pedestrian areas. The height clearance for service vehicles must be at least 4.2 metres.

## Parking standard

The area shall include parking spaces as follows:

- » Housing:
  - › 1 space / 130 floor square metres, however at least 0.5 spaces/ apartment (areas 1 and 2 in the phasing diagram)
  - › 1 space / 110 floor square metres, however at least 0.5 spaces/ apartment (marginal areas)
- » Offices: 1 space / 100 floor square metres Liiketilat: 1 ap/150 k-m<sup>2</sup>
- » Business premises: 1 space / 150 floor square metres
- » Public services: 1 space / 200 floor square metres

In terms of public parking, the area must include 1 space / 1 500 floor square metres of residential space.

Moreover, the number of bicycle spaces must also be considered in the planning with reasonable accuracy. The indicative instructions for bicycle parking are as follows:

- » Housing: 1 space / 30 floor square metres, however at least 2 spaces/apartment
- » Offices: 1 space / 50 floor square metres
- » Business premises: 1 space / 50 floor square metres
- » Public services: 1 space / 100 floor square metres



## Centralised parking solution

As a rule, the parking solution for the area must be built on centralised parking facilities due to the city centre-like nature of the area. The competitors are requested to plan in the competition area a flexible, centralised parking solution that serves different functions and is easily accessible from different directions. The centralised parking solution can be located in buildings, underground, or in separate aboveground carparks. Ground-level parking is only accepted to a limited extent and in exceptional cases.

In centralised parking solutions with more than 200 parking spaces, it may be possible to utilise so-called shared parking, in which the parking spaces are not assigned to specific users. Instead, they are available alternately for users engaging in activities that take place at different times of the day, such as residential / office parking and park-and-ride traffic. The shared parking solution provides a 20 per cent reduction to the presented parking standard.

The city has commissioned a preliminary study on placing a shared parking facility in Nupukivenkallio. The competitors have the opportunity to utilise the carpark draft found in appendix 11 of the competition programme as part of the overall parking solution in their competition entry. According to estimates based on the draft, the new carpark may include a total of approximately 1,000 parking spaces, of which 700 can be allocated to the needs of the competition area.

The organiser of the competition will supplement the initial and cost data related to the Nupukivenkallio underground carpark at the start of phase 2 of the competition if the entries selected for further development in phase 2 include proposals for centralised parking in Nupukivenkallio.

## Noise protection

No residential apartments should be located so that they only open toward the busiest roads (Ring Road I, Turuntie). In such locations, the apartments must also have access to the more sheltered side of the

building. Residential yard areas, terraces, and balconies must be placed so that the noise levels standards are not exceeded. The distance between residential housing and the closest lane on Ring Road I must be at least 70 metres, and the distance from Turuntie must be at least 25 metres.

## Weather conditions and preparing for extreme weather

Temperatures in Southern Finland typically vary from +30 °C in mid-summer to -25 °C in the winter. The annual average temperature in southwestern Finland is approximately +6.5 °C. In the winter, the weather in southern Finland may vary quite drastically from continuous rain to freezing cold and heavy snowfall. Moreover, extended periods of heat and drought in the middle of summer have also increased. The restricted availability of daylight in the late autumn and winter should be taken into account in the planning, as the city lighting will have a major impact on the comfortability of the area.

In the competition entry, the competitors must prepare for the impacts of climate change, i.e. increasing heavy rainfall and rising temperatures, as well as other extreme weather phenomena. The area must include adequate solutions for stormwater management and a sufficient amount of green structures and trees to accommodate the efforts of adapting to climate change.



Photo: Pasi Hornamo



## Solutions supporting energy efficiency

Particular attention must be paid to the energy efficiency of buildings and the possibility of using low-emission energy solutions. Energy efficiency is affected by such factors as the location, shape, construction materials, and energy solutions of the buildings. The plan must accommodate a possibility of producing energy on a regional or property-specific basis. Low-emission energy sources include solar energy and energy produced with heat pumps. Since district heating in Espoo is to be carbon-neutral by 2030, it can also be considered a low-emission energy solution.

Active, meaning machine driven, and passive, or non-machine-driven use of solar energy should be taken into account in planning. The use of active solar energy can be promoted by reserving open areas for solar panels. In the passive use of solar energy, directing the massing and openings toward south and west reduces the need for heating energy. However, protection against overheating in the summer must be taken into account. Protection against overheating can be implemented by means of mechanical cooling or passively without machinery. Passive means of protection include the placement of buildings, sheltering building elements, and vegetation.

## Public outdoor spaces and yard areas

A high-quality, lush, and inviting outdoor space will form a key part of the new urban centre. The residents will have easy access to green and recreational areas located close by. In addition to increasing urban greenery, a key functional objective is to expand the pedestrian environment in the city centre in order to promote sustainable mobility and support the living urban space.

Public outdoor spaces shall be designed to be vibrant environments and serve different user groups, offering both recreational and active

possibilities. In the competition area, the open spaces, such as current and future squares, green areas, and pedestrian environments, must form a uniform high-quality entity that is in harmony with the cityscape. In the plan, the street-level floors of buildings framing the central squares and other pedestrian centre areas must include business spaces opening up toward the streets. The urban space should be structured with planted trees and shrubs, so that the vegetation provides protection against the wind and sun, creating pleasant areas for services such as outdoor terraces of restaurants and cafés. Where possible, large trees should be preferred. The outdoor spaces can also be refreshed by means of art or lighting.

In the planning, special attention must be paid to the attractiveness, smoothness, and safety of pedestrian traffic, as well as the orientation, accessibility, and natural light conditions of the public spaces. The public outdoor spaces must offer a lush, pleasant, and safe pedestrian environment by separating in a natural way the vehicle and service traffic from the areas reserved for pedestrians and cyclists. When planning public areas, attention should be paid to issues such as ease of maintenance and care, durability, and serviceability – without compromising quality.

Yard areas must be lush and inviting and support communality. The yards must be naturally connected to the surrounding public outdoor space, and the transitions between the areas must be easy to grasp. The recreational areas and playgrounds on the yards must be adequate, pleasant in terms of the microclimate, and protected from wind and noise. A diverse range of plants, as well as both trees and shrubs, must be planted in the yards.

Roof deck yard solutions should be avoided. If the plan contains roof deck yards, they must be implemented with a lush green look. The deck structure must provide adequate substrates for layered plants and trees. Permeable surfaces should be favoured in the yard areas.



## Stormwater management

The competition area is located in the water catchment area of Monikonpuro. Monikonpuro holds a significant natural value, but it is prone to flooding, and nutrient concentrations in the brook are extremely high. As a result, stormwater should be kept in the competition area before releasing the waters onward. Moreover, particular attention must be paid to the qualitative management of stormwater. Stormwater runoff can be delayed in the area, for example, by using permeable surfaces, vegetation, natural stormwater management solutions, and green roofs. In the planning of stormwater management solutions, the nature of the solutions and their suitability for the urban environment must be taken into account, and, where possible, the competitors should favour multi-purpose solutions that, in addition to delaying stormwater runoff and improving water quality, increase the cosiness of the area, improve the microclimate, or support biodiversity. In residential block areas, stormwater runoff should be delayed so that the delay volume of the applied solutions is 1 m<sup>3</sup> for each 100 square metres of impermeable surface.



## Base construction design

According to the City of Espoo's constructability classification, soft soil areas are classified into constructability class 4 (deep soft soils, difficult to build) and 5A (deep soft soils, very difficult to build). The buildings require pile foundations. In areas belonging to constructability class 4, the expected pile-length is approximately 5–14 metres, and in class 5A areas the length is 14–28 metres. The base floor shall be implemented as load-bearing. Deep stabilisation shall be applied to street and yard areas and pipelines to prevent harmful sinkholes.

The edges of the rock and moraine slopes are categorised into constructability class 2 (normal constructability). In areas belonging to constructability class 2, buildings can be built on a spread foundation on load-bearing ground. Streets, yard areas, and pipelines can be realised ground supported structures.

The rock and moraine hills in the north-western part of the area belong, depending on the hill section, to constructability class 3B (slopes, difficult to build) or 5B (steep slopes, very difficult to build). In areas belonging to constructability class 3B, structures must be built either on a levelled-out moraine hill or excavated bedrock, and in class 5B areas the foundation must consist of excavated bedrock. Streets, yard areas, and pipelines can be built on bedrock on top of a gravel layer.

The groundwater level in the area is close to the surface, particularly in the soft soil areas. In all construction work in the area, it should be noted that the building of basement spaces may require watertight trough-like structures.

The soil map is presented in appendix 2.

*Monikonpuro brook in the Leppäviita area. Source: Tarja Pennanen*



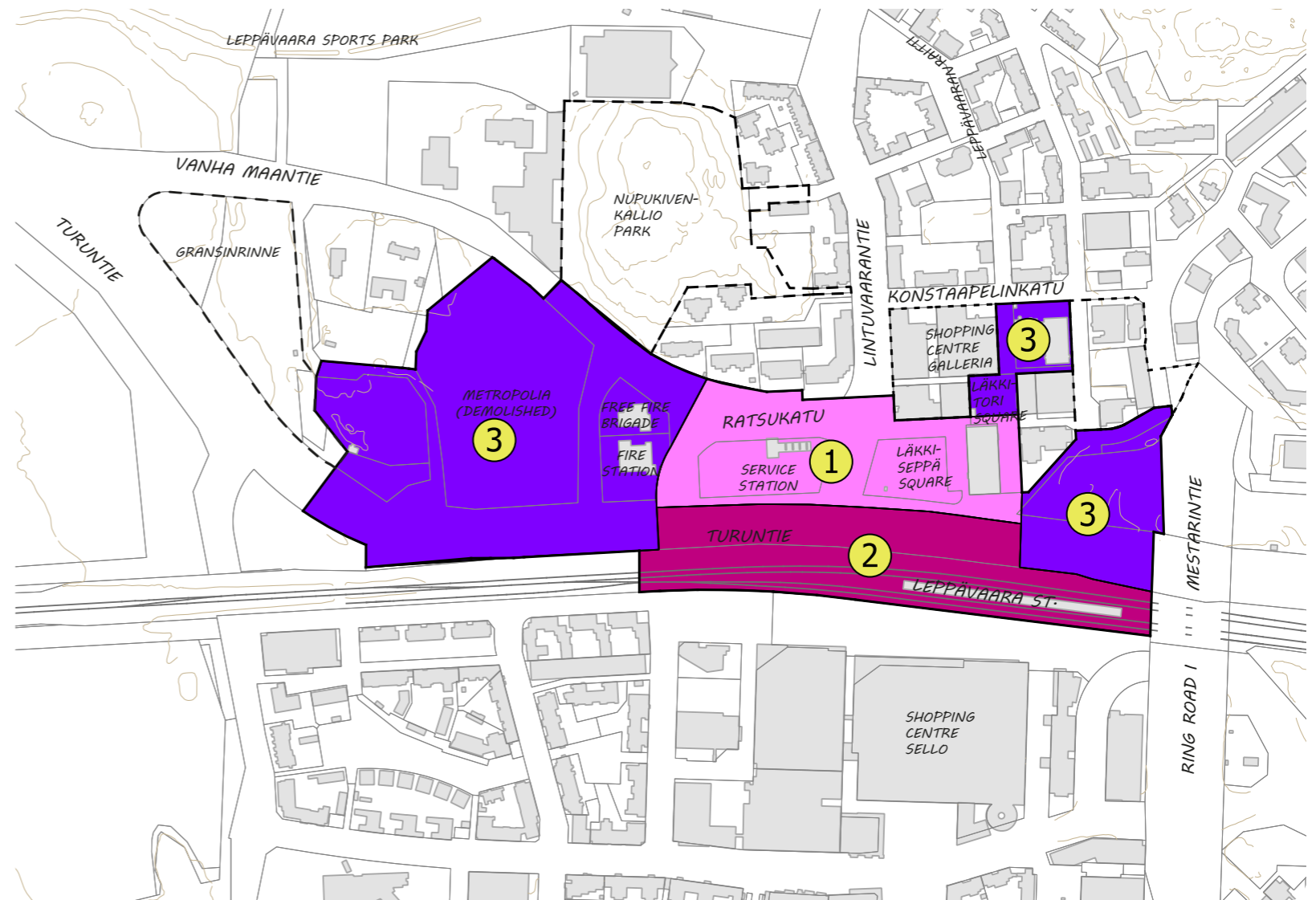
## Construction in stages

The phasing plan included in the competition entry must take into account the requirements related to the functionality of public transport, pedestrian and bicycle traffic, as well as vehicle and service traffic. In addition, construction implemented in stages must not place the residents or commercial operators in an unreasonable situation with regard to, for example, pedestrian and service connections.

In **phase 1** of the rough phasing plan for the area, the central blocks on the northern side of Turuntie will be implemented. At the same time, preconditions are created for building a connection above the railway and implementing the public transport terminal.

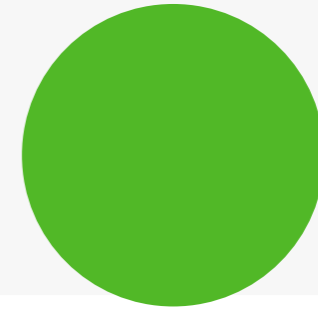
**Phase 2** includes the implementation of the public transport terminal and construction of the connection above the railway, in line with the proposed scope and stages.

**Phase 3** involves planning areas that are not directly linked to the implementation schedule of the central blocks (areas 1 and 2), such as future blocks on the plot of the demolished Metropolia institute. The planning and scheduled implementation of blocks in the examination area will be negotiated separately. The feasibility of plans for the area near the Ring Road I ramp will be assessed on the basis of the competition entries.



Phasing of the construction work





## 7. Evaluation criteria for the competition entries

The jury will emphasise the following aspects in the evaluation of the entries:

### Overall vision

- The urban integrity and balance of the city centre and the sustainability of the amendments and schedule
- The realistic nature and technical and financial feasibility of the design solution, including the possibility to implement the solution in stages.

### Urban life

- The attractiveness of the centre area as a platform for new urban services and functions
- The verdancy, vitality, and safety of the pedestrian centre, smooth pedestrian connections towards the campus area and sports park, and the smooth flow of cycling connections within and through the area.

### Cityscape and architecture

- Urban and architectural solutions that renew Leppävaara's identity and recognisability, and the innovativeness of the solutions.

### Traffic

- Reducing the barrier effect of transport routes passing through the city centre and ensuring transport capacity
- Attractiveness and availability of public transport, including a functionally high-quality public transport terminal
- Functionality of the parking arrangements, including the accessibility and technical and financial feasibility of park-and-ride facilities and potential centralised parking.

### Sustainability

- Considering the city's climate objectives and the most significant climate risks.

When evaluating the competition entries, the jury will place more emphasis on a strong and consistent core idea than on the flawlessness of details incorporated into the solutions. The jury will consider the potential for development of each entry and the way the entries can be refined without any significant damage to the core solution. The entries may not significantly contradict the proposed technical and financial objectives





Source: Annikki Jakonen, Mysome Oy



LEPUSKI 2.0

## 8. Instructions for drafting the competition entries

### Competitive secrecy

All competitors enter the competition anonymously. All documents included in the competition entry must feature a pseudonym of the competitor's choosing. The file names must also include the pseudonym of the entry.

The organiser of the competition shall safeguard the anonymity of the competition when receiving the entries, so that the senders' information or other details will not be revealed to the competition jury.

Competitors must attach to their entry a file marked with the pseudonym of their entry which contains

- the names of the authors of the entry, the name of the architect offices, and the details of the contact person (postal address, telephone number and email address),
- the name of the copyright holder.

The file containing the authors' details shall be named as follows: [pseudonym\\_names.pdf](#), where "pseudonym" shall be replaced with the pseudonym of the competition entry.



## Material to be presented in the competition entry

The competition entry must be submitted as a single pdf file according to the instructions below and in line with the display file example. The file shall be named as follows: [pseudonym\\_A3.pdf](#), where “pseudonym” shall be replaced with the pseudonym of the competition entry.

In phase 1 of the competition, the entries may include six A3 pages:

**Page 1:** Site plan and area elevation plans 1:3000

- » The site plan must display the competition area and the examination areas as a shaded rooftop image, where the sun is shining from the southwest at a 45-degree angle. The plan must include a core idea for the urban structure and a functional solution, the extent and number of floors of the building masses, and the planned parking arrangements. The plan must also include street area reservations and topographical features.
- » The plan must include an east-west area section toward north from Turuntie and a south-north area section from e.g. Leppävaaranraitti.

**Page 2:** Mass model level images (aerial) adapted to the defined photo templates

**Page 3:** Street-level views from the street areas.

- » The views must be presented in a draft-like way to reflect the key ideas of the entry.

- » There must be one image from Leppävaaranraitti.
- » The street-level views must be seen from a pedestrian’s eye level.

**Pages 4–5:** Functional diagrams

- » A diagram of the city centre functions shall display the functions planned for the centre area, as well as the walking routes available to residents visiting the area or spending time there.
- » A traffic and parking diagram shall display the routes available to different modes of transport in, for example, different colours, and it must also include the planned park-and-ride facilities and other solutions, including the number of parking spaces.
- » A diagram of green structures shall display the relationship between public outdoor spaces and yards, along with the principles of stormwater management.

**Page 6:** Description

- » The description must indicate the architectural, functional, landscape-related, and environmental principles of the solution.
- » Information on scope by function (gross m<sup>2</sup>).
- » Any image references that support and/or explain the overall idea.



## 9. Submission of the competition entries

Phase 1 of the competition will end on Wednesday 17 February 2023 at 16:00 (Finnish time UTC +2), at which time each competition entry must be returned in its entirety to <https://cc.tietoa.fi/espoo/leppavaaran-arkkitehtuurikilpailu/>

The competition entries must be submitted electronically according to the instructions found on the competition website.

The competitors are responsible for submitting their entries, using the correct file formats, and providing files that can be opened.

The competition entries are uploaded into a submission system found on the competition website. The entries can be freely modified within the competition time frame with an access code that is created when the entry is submitted. This reduces the risk of late entries – in other words, upload your entry in good time. Competitors must save the access code generated by the system, as they need it to edit the competition entry during the competition period.

The competitors will receive a confirmation of successful submission as a PDF file in their downloads folder (status: "incomplete" if all fields are not filled in, and "complete" if all fields are filled in). Entries with the status "complete" that are submitted by the deadline will be considered as technically successful submissions. The contents of the entries will be evaluated by the jury of the competition.



Source: Mysome Oy



