



 **ÁSBRÚ**



## ***Future vision***

# **ÁSBRÚ IN REYKJANESBÆ** KNOWLEDGE BASED-ECO COMMUNITY

The time for change is now! Both in local and global history. A strong future vision is needed with a broad perspective in order to take advantage of the opportunities that such transformations bring. Ásbrú is a unique place. It is a good base for creative thinking and for building the future of the Reykjanes community, and can be of benefit to the whole of Iceland.

### **EDUCATION AND KNOWLEDGE-BASED COMMUNITY:**

It is significant that variation in education and skills can be of great use in the workplace. The Ásbrú vision is of a community where interplay and cooperation between education and workplace are the bridge between knowledge and utilisation.

### **INNOVATION AND CREATIVE REINFORCEMENT:**

The local spirit of Ásbrú shall be characterised by an energetic evolution of employment, culture and the arts. This mix fits the image of the area and the inhabitants' pride in a great future. Ásbrú will be a home for innovation, where research and development and the knowledge-based economy contribute to a vibrant economic life. Its proximity to an international airport with direct connections around the world significantly extends Ásbrú's market area.

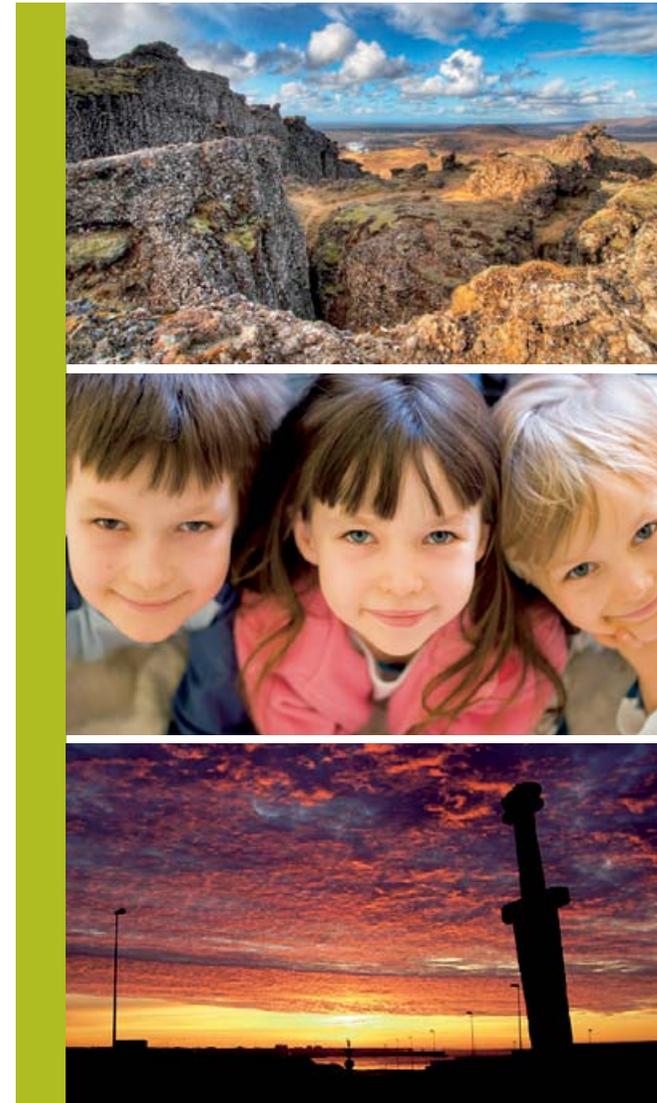
### **ECO-FRIENDLY, HEALTHY AND FAMILY COMMUNITY:**

The planning for new quarters and the transformation of existing neighbourhoods will promote sustainable development. There is an emphasis on "green" streets in residential areas, with priority given to walking and cycling, good access to nature and parks, surface water treatment, etc. Quality of life is partly about experiencing a secure environment, which can help to promote positive and healthy lifestyles. Ásbrú will thus become a desirable place to live in.

### **ÁSBRÚ - FUTURE ADVANCES FOR REYKJANESBÆR:**

The development and growth of Ásbrú will enhance the quality of life for all inhabitants of Reykjanes town. Opportunities for higher education will increase. Knowledge and innovation lead to new opportunities and a mix of well-paid jobs for the future. The utilisation of existing infrastructure and the other urban qualities of the area will improve the competitiveness of Reykjanes town and will help to build up a sustainable community where diverse forms of economic life, the human environment and culture will flourish

**EDUCATION » KNOWLEDGE » INNOVATION » OCCUPATION » FAMILY » HUMAN ENVIRONMENT » CULTURE**







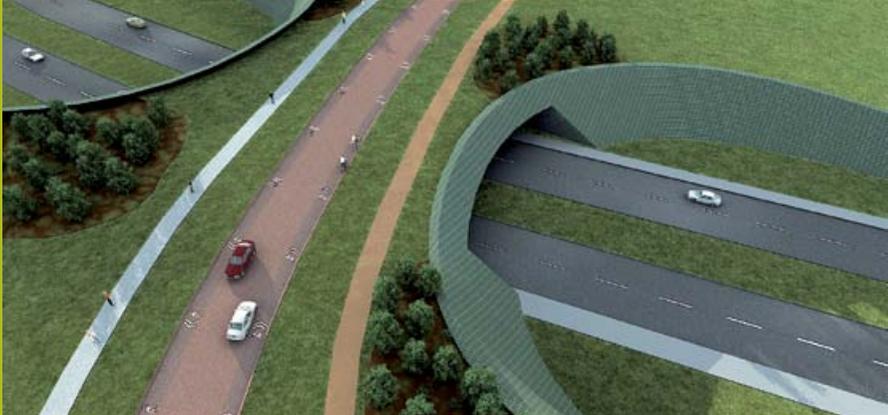
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## PREMISES AND ENVIRONMENTAL ANALYSIS



Introduction

Operative policy - master plan of Reykjanesbær 2008 to 2024

Strategic planning - other stakeholders

Analysis of the existing environment



## INTRODUCTION

### Prehistory

In October 2006 the American army left their base at Keflavík Airport after almost 60 years in Reykjanes. At its peak there were around 6,000 people living there, making it one of the largest populations in Iceland. The army base had been the biggest employer in the Reykjanes area for decades and had exerted a strong influence on local culture. The base was for a long time a conduit for American culture in Iceland, whose various influences were felt around the country. Rock and roll was played in Iceland in the Officer Club at the army base, and basketball was introduced to the local sports scene.

### Ásbrú in Reykjanesbær town

With the disappearance of the US army, the Keflavík Airport Development Company (Kadeco) was established. The company's role, on behalf of the Icelandic state, is to lead the development and transformation of the US army base at Keflavík Airport, and to promote civil uses in collaboration with local communities and other interested parties. The area acquired the name Ásbrú from Nordic mythology. Ásbrú is the bridge between Middle Earth, home of men, and Asgard, where the gods reside, and is visible from the earth as the rainbow. The area is versatile and the area plan only concerns the community base, which is a part of the Reykjanesbær master plan.

### **The role of area planning**

A re-evaluated master plan of Reykjanesbær municipality has been on the drafting table since 2007 and has received systematic input from the local community. The future vision presented in the master plan places an emphasis on local know-how and capacity, including the high quality of life the area has to offer. The proposal for a new master plan for the period 2008 to 2024 supports this vision and is now publicly available.

The disappearance of the US army was a major change in the conditions for building development in Reykjanesbær, as the old army base now falls within the master plan of Reykjanesbær town. History shows that no community in Iceland has faced such a vast change in the conditions of its building development. The transformation of a US army base into a civil community is a great challenge for the township and all parties involved. Such conditions pose opportunities and provocations in equal measure. Therefore it is very important that such a transformation is based on a purposeful future vision, in which all developments have a part.

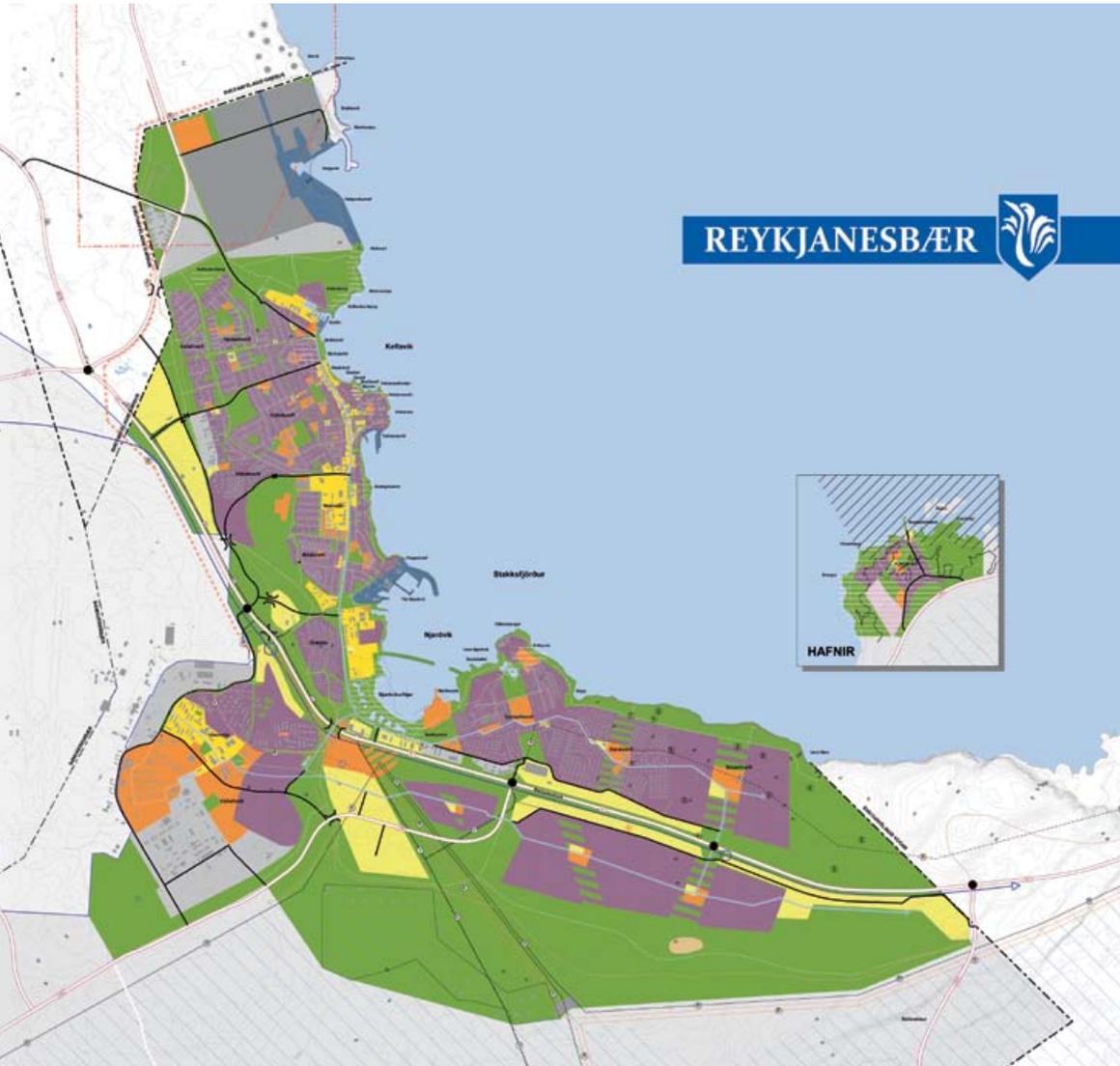
The role of the area plan for Ásbrú is to set forth a complete vision of the development and utilisation of the area and to focus on those areas that point the way ahead. The area plan does not hold a legal status according to planning codes, but it clarifies the direction set forth in the municipality master plan for the area. It is a clear prognosis for the plot planning procedure that is to follow.

### **Ásbrú area plan – parties involved**

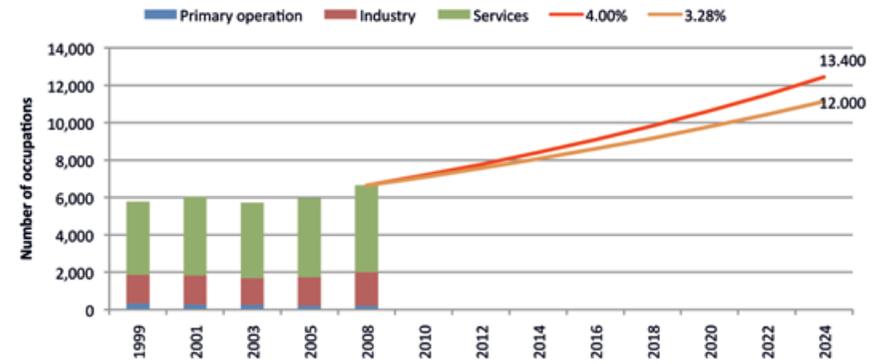
The area plan is a collaborative project between Reykjanesbær town, Keflavík Airport Development Company (Kadeco) and Háskólavellir. These parties are agreed that Ásbrú should be an attractive and safe community that is also environmentally and family-friendly. An emphasis is placed on services to an international academic and knowledge community, by bringing together companies, universities, knowledge, capital and facilities, all with a focus on innovation, development and export. A focus is placed on putting the properties in the area to profitable, civil use, so that positive social influences become widespread. The parties intend to stimulate a new demand for apartments in the area, a demand that was not previously there.

The area planning proposal is designed by the English firm Engle Architects in collaboration with the Icelandic real estate development company Klasi. The project is a liaison with the Reykjanesbær town master planners, Kanon architects and VSO Consulting. Other parties were involved in specific areas such as traffic and weather.

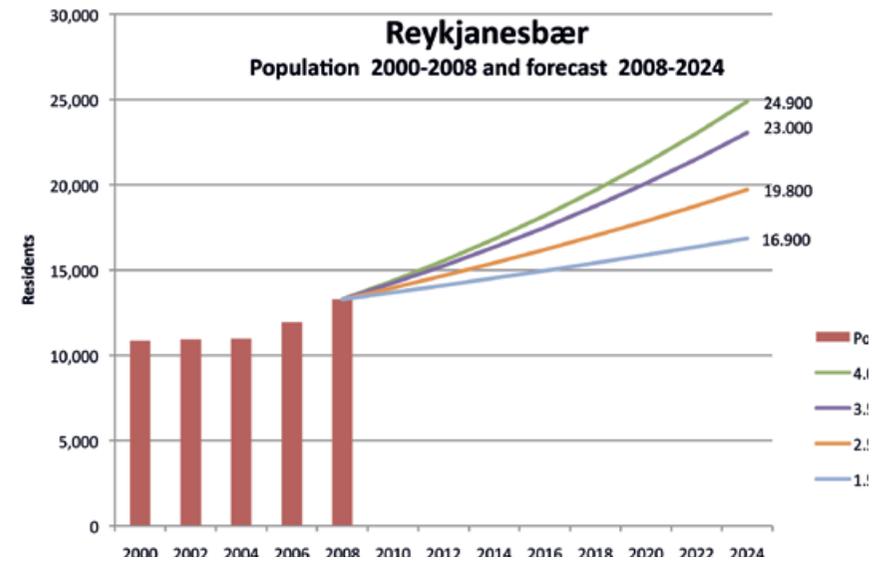




**Reykjanesbær**  
**Occupations 2000-2008 and forecast 2008 - 2024**



**Reykjanesbær**  
**Population 2000-2008 and forecast 2008-2024**



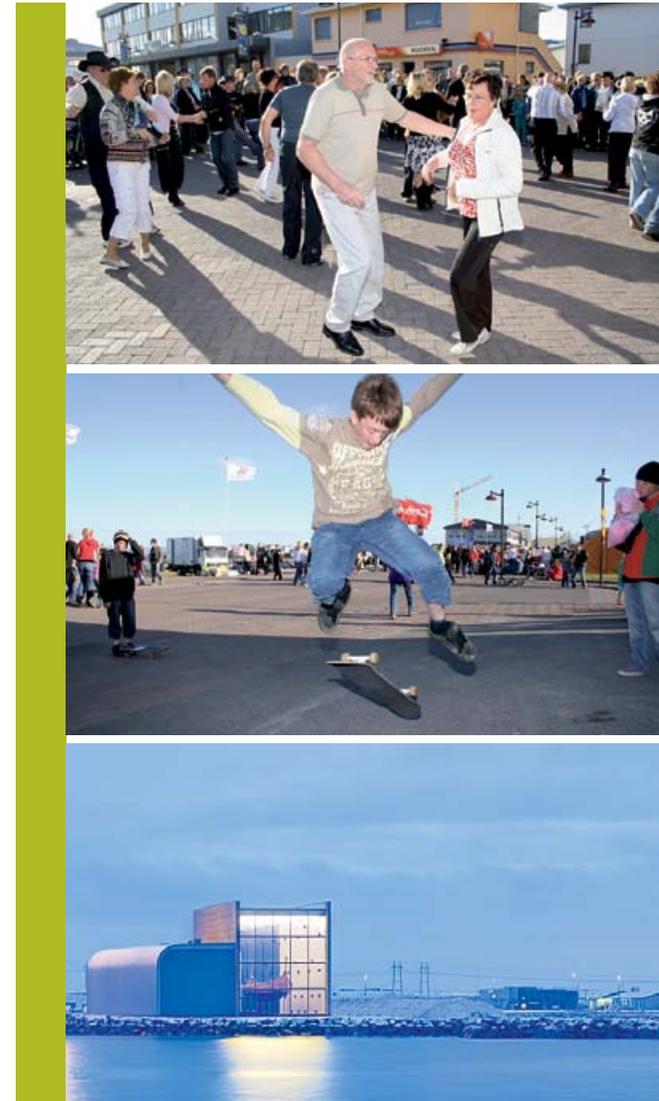
## OPERATIVE POLICY – MASTER PLAN FOR REYKJANESBÆR 2008–2024

The vision of the area plan includes the policy and aim presented in the new master plan for the Reykjanesbær municipality.

Reykjanesbær has, in cooperation with Kanon architects and VSO Consulting, produced a new master plan for the municipality and, in May 2009, commenced the formal introduction of the proposal. It is safe to say that the conditions relevant to the master plan and building development in Reykjanesbær have changed completely from the previous master plan. The greatest change is that now the infrastructure that once belonged to the US army base is now part of the master plan area of Reykjanesbær. This changes the town's shape from an oblong settlement beside the seashore into an urban mix with three areas and a strong geographic centre. Another major change is that the densely populated area of Reykjanesbær is now on both sides of Reykjanesbraut highway. Therefore, there is a focus in the master plan on connecting the new area of Ásbrú to the older area without limiting the service level of Reykjanesbraut highway.

The future vision that is presented in the new master plan is very clear and is characterised by a great ambition to build a progressive and flourishing society. The focus is on satisfied and healthy inhabitants and on a residential environment where people can utilise their abilities in work and play. Emphasis is placed on good conditions for children, an advanced education system, safe and quick communication and transport, easy access to services, a stable and efficient administration, attractive and safe dwellings, low crime, an attractive and clean environment, good health services and a range of well-paid jobs. These are the key elements of a good society.

The systematic and sensible utilisation of the community's resources is the foundation for a vibrant economic life and raises the quality of life for people in the town. The build up of internal systems, i.e. infrastructure, supports this direction and the building development that is foreseen. A strong accent is placed on social infrastructures and services for inhabitants. With that vision in mind, Reykjanesbær's motto is well placed – ***Time to live and enjoy.***





## STRATEGIC PLANNING – OTHER STAKEHOLDERS

### **Keflavík Airport Development Company – Kadeco**

Following the disappearance of the US army from the area, real estate properties were taken over by the Icelandic state and in October 2006 the Keflavík Airport Development Company, Kadeco, was founded. The goal and the purpose of Kadeco is to lead the development and transformation of the one-time army area in Keflavík Airport to civil use. This includes all the necessary groundwork, such as carrying out a survey of the area, developing future opportunities and collaborating with other parties in the area. Kadeco will also administrate and operate the properties of the Icelandic state, including the administration of sales and rentals, renovation, infrastructure removal and other related projects. Kadeco can administrate other projects that are linked to surveys, development and the transformation of the area.

Kadeco and its partners have recently been working systematically to achieve these goals, and have already completed some important stages in the development of the area. An emphasis is placed on identifying all the opportunities that the area has to offer and directing its occupational development. Besides recent development in the field of education, the main focus is on two other fields.

On the one hand, there are opportunities in harvesting green energy because Reykjanes hosts many of the most interesting power companies in Iceland. On the other hand, there are also opportunities in the health and medical field, where several parties have shown an interest in starting a healthcare facility. In addition, there are numerous opportunities in close proximity to the international airport and the industrial area of Helguvík. These opportunities will continue to develop and evolve.

### Keilir – Atlantic Centre of Excellence

Keilir, Atlantic Centre of Excellence, was established in spring 2007. Keilir consists of four different schools besides Háskólabrú (Junior College), where preparations for a university level are progressing. Each school has a focus, in accordance with the goals of Keilir, on building on the importance of the international airport and environmentally friendly resources, and on utilising the knowledge existing in the local area. Keilir is a corporation which counts the University of Iceland, research institutes, power companies and other private companies, communities, public organisations and labour unions among its owners. Keilir consists of the following schools:

- **School of Health and Pedagogy:** A range of studies in medicine, health, sport and pedagogy.
- **School of Energy and Technology:** Offers two multidisciplinary BSc programmes in cooperation with the University of Iceland – one in energy technology and the other in mechatronics. The goal is for students to graduate with an outstanding level of knowledge and capability in their fields, as well as to stimulate and strengthen creativity.
- **School of Creative Arts:** The main purpose of the school is to interconnect arts and innovation in the creative industries. The goal is to educate students and produce graduates who utilise their creativity to develop human society.
- **Aviation Academy:** The aviation academy of Keilir will offer a course on private and professional aviation, and for stewards/stewardesses and air-traffic controllers. In addition, the school will offer aviation administration and aeroplane mechanics.

### Háskólavellir

The real estate company Háskólavellir was established at the beginning of 2007. The company was one of the founders of the Keilir education centre and developed the vision for the dormitories in the Ásbrú area. At the end of 2007 the company and Kadeco agreed on the purchase of the properties in the Ásbrú area, and Háskólavellir is today one of the biggest real estate companies in Iceland. The company now owns and operates over 1,500 housing units and apartments, and the total building area is 167,000 m<sup>2</sup>. The company also owns and operates around 19,000 m<sup>2</sup> of commercial real estate in 13 different buildings and 40 hectares for the future development of housing, retail and services. Today, over a half of the housing real estate is rented by approximately 2,000 inhabitants. Various operations are already active in the buildings of Háskólavellir.



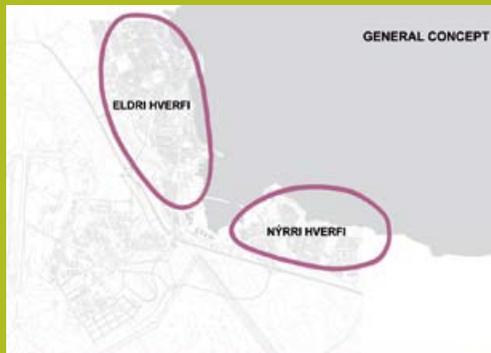
## ANALYSIS OF THE EXISTING AREA

### The area plan and surroundings

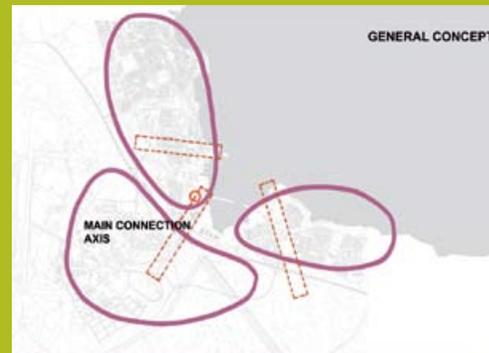
The area plan includes the urbanised part of the former US army area. The boundaries are the airstrip to the west, the Reykjanesbraut highway to the north and Hafnavegur to the east, with total of 350 hectares.

The proximity to the international airfield in Keflavík Airport will always have an impact on the life and work of the inhabitants of Reykjanesbær and its surroundings. Although such neighbourship can hold certain limits, the advantages predominate, especially in occupational development.

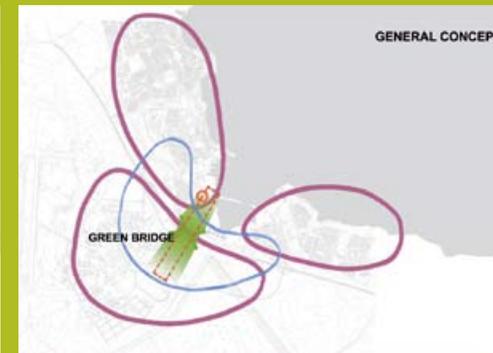
Ásbrú will have a substantial influence on building development in Reykjanesbær. From a planning point of view, the urban plan is strengthened by Ásbrú, and what is a clear geographic centre is formalised. On the other hand, Reykjanesbraut highway undeniably limits the natural flow between the town quarters. To reduce the negative influence of Reykjanesbraut highway, the area plan emphasises the ideology of the existing master plan with visual links and the artery that connects the quarters together.



Reykjanesbær town, north of main highway



Visual links over main highway



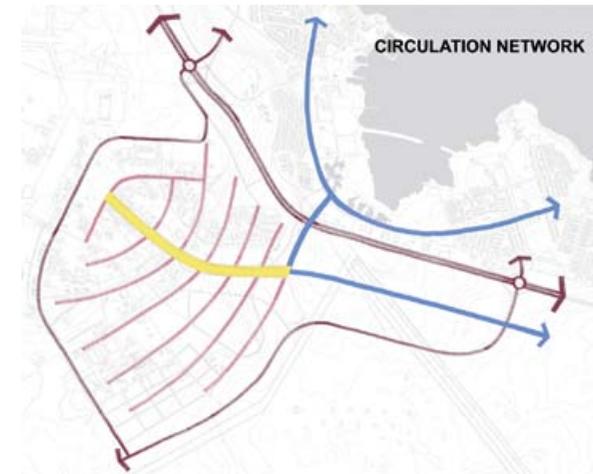
The green bridge will tie the areas together

### Transportation and “green connections”

One of the main preconditions for a robust branch of industry is strong communication and traffic connections with the surrounding area. The Reykjanesbraut highway is a fixed obstacle in the natural flow between the town quarters, but nonetheless connects the area to the international airport and the capital area of Reykjavík.

The Reykjanes peninsula has a special geological uniqueness, with various striking formations such as volcanoes, lava and geothermal areas. The geology of the area makes it very interesting for outdoor activities and creates various opportunities for the tourist industry. Hiking and historic pathways are widespread in the area, and area planning needs to strengthen the access the inhabitants of Reykjanesbær have to these unique natural resources.

To link the quarters of Reykjanesbær there is a need for strong and safe connections, for vehicular and pedestrian traffic alike, as well as for alternative ecological travel methods. An environmentally friendly and safe crossing of Reykjanesbraut highway is a must if the inhabitants of Ásbrú are to enjoy the local activities available, e.g. sports and leisure for the whole community. The ideology of the area plan of Ásbrú is to create that connection. With that in mind, a “green bridge” is being created over Reykjanesbraut highway to connect the quarters of the town – an efficient solution for strengthening the entire urban planning of the town. It is important that the inhabitants of the town perceive Ásbrú and the other quarters as one, undivided community.



Road system and arteries



Green access



### Ásbrú today – living, services and culture

In the brief history of Ásbrú, community life, services and culture have developed rapidly in the area. Keilir education centre is the catalyst for the area, supported by a great supply of housing suitable for student dwellings. Currently around 2,000 people live in Ásbrú, with young families in the great majority. Consequently, a school was needed in the area, and now there are two nursery schools operating in Ásbrú and one elementary school. Recreational and cultural activities flourish, continually adding new services to the area.

The student body at Keilir education centre counts 450 students today. With a young academic community, dynamism and creative thinking are essential. This education and know-how community in Ásbrú has already started to grow. Many students live with their families in the Háskólavellir apartments, and, in collaboration with Keilir, Háskólavellir focuses especially on student rental housing.

The rapid population growth at Ásbrú has generated a need to develop various services in the area. With a younger age group living at Ásbrú there is a special emphasis on services directed at young people and children. For instance, a restaurant and café, a convenience store, a hair salon, and an entertainment centre are now in operation. In addition, the historic Officer Club and the Top of the Rock Club have been resurrected, with vibrant entertainment blooming again.

Reykjanesbær, in collaboration with Kadeco and Háskólavellir, aims to fulfil the needs of children and adolescents in the area with an ambitious leisure development on Ásbrú directed towards that age group. For instance, the community centre at Fjörheimar (Play World), the Listasmiðja (Art Centre) and Tómsundatorg (Entertainment Centre) in Reykjanesbær are all located at Ásbrú. To start with, the main focus is on the youngest generation, but in the future the Tómsundatorg (Entertainment Centre) will evolve into a place for all age groups suitable for the whole family.



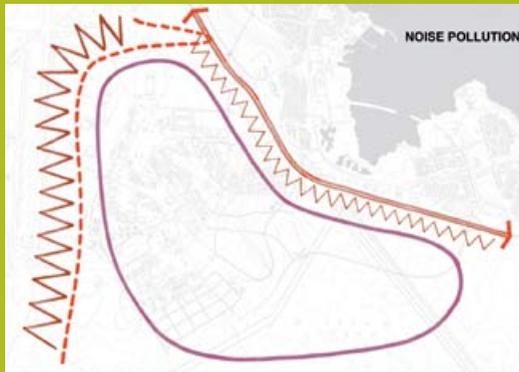
## Formative elements

### Noise control

Noise ecology has a significant impact on the quality of populated areas, especially residential ones. Conditions on Ásbrú are probably quite difficult in this respect. The area is, for example, fixed with an international airfield and the Reykjanesbraut highway in the vicinity; these are the main noise generators. Therefore, it is important that the urban planning of the area aims to shelter the housing area with a progressive approach. The picture here shows noise ecology and noise effects in the area in relation to the components mentioned above and the most suitable housing areas. Noise ecology is within local regulations and conditions are better than in the existing quarters north of Reykjanesbraut highway.

### Urban setting and deployment

The overall territory within the area plan rests on the border of Miðnesheiði (Miðnes Heath). The Ásbrú area is at a higher elevation than the existing community north of Reykjanesbraut highway; it is typically around 35 metres above sea level. The area tilts to the east and a large part of the undeveloped land within Ásbrú is on a rolling hill with fantastic views over the Reykjanes peninsula and Faxaflói Bay. Sophisticated urban planning and an intuitive traffic system will allow the future residents of these areas to enjoy these unique qualities.



Noise control



Wind study



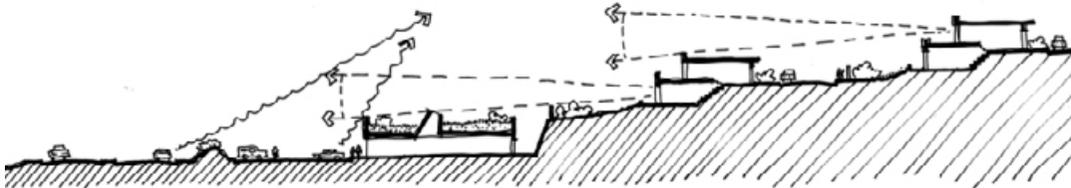
Landscape and view points

## Weather

Meteorological observations at Keflavík Airport indicate that the area is quite windy, blowing from all directions. The more sheltered areas are near Miðnesheiði, e.g. in Keflavík town; in the south the winds are south-easterly; and in the southernmost areas of Ásbrú they are northerly. Storms and bad weather can come with either south-easterly winds or south-westerly and westerly winds.

Microclimate is very important for quality of life in Reykjanesbær. Structures can influence the microclimate, both by providing shelter and by accentuating winds. At the urban planning stage it is possible to substantially influence the microclimate through a well-designed arrangement and configuration of buildings. With strong architecture and well-planned landscaping the unpleasant side-effects of the wind can be decreased to increase urban qualities for inhabitants.

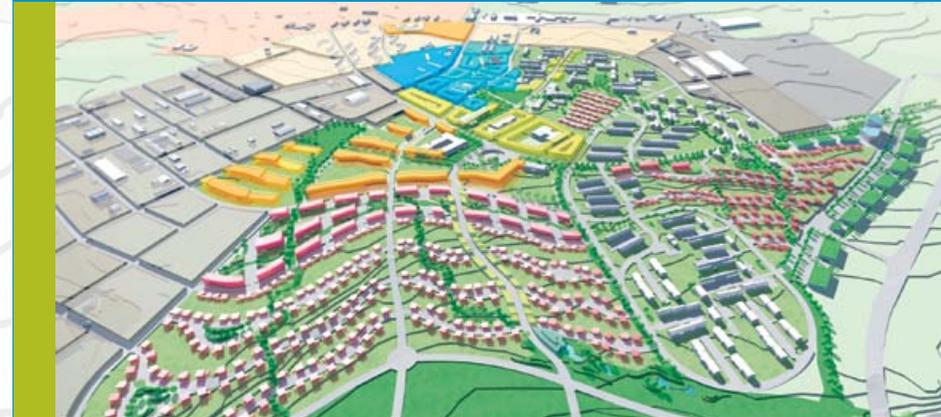
The sea breeze is another consideration when planning new urban areas. The breeze can form on fine summer days. It is important to break up the breeze and to create shelters in residential areas to increase the appeal of the outdoors and make the most of fine weather when it comes. If extensive shelters are to be constructed in the residential areas and parks, then consideration must also be given to snowdrifts and snow collection over winter. Snowdrifts form in easterly winds, and also in south-westerly winds in the airport area. Snow banks form where there is substantial shelter from buildings.







## BEACONS



Education and knowledge-based community  
Innovation and dynamic creativity  
Environmental and family-friendly community  
Ásbrú, future development for Reykjanesbær



## BEACONS

### Education and knowledge-based community

- A range of education at all school levels
- School activity from nurseries and graduate schools in the local spirit of Reykjanesbær
- Emphasis on international collaboration at the university level
- Strong collaboration between schools and businesses
- Ambition in research and innovation
- Unique setting and housing for students and staff

### Innovation and dynamic creativity

- Knowledge development – from concept to execution
- Utilisation of green energy for occupational development
- Supreme technology and human resources
- Health and medical tourist industry
- Promotion of existing industry
- Aviation operation

### Environmentally and family-friendly community

- Focus on “green development” through positive associations with local nature
- Enhance environmentally friendly traffic, with bicycle and pedestrian environment
- Community that promotes healthy, outdoor living
- “Green” connections to neighbouring quarters
- Mixed supply of housing
- Safe environment

### Ásbrú, future development for Reykjanesbær

- To utilise the head start that real estate properties and second values produce
- Sustainable quarter and a robust buttress for Reykjanesbær collectively. Strengthens the town in counter balance to the capital area
- Greater quality of life for all inhabitants regarding education, employment and culture







## THE AREA PLAN ÁSBRÚ AT REYKJANESBÆR



- Areal planning - ideology
- Land use
- Green areas and connections
- The green bridge
- Transportation and the artery



## AREA PLANNING – IDEOLOGY

The area plan for Ásbrú in Reykjanesbær is intended to delineate the sustainable know-how community that the future vision presents. An elaborate analysis of the environment is made and respect given to the existing urban qualities with the goal of maximising their utilisation. The aim is to make the most of land use, transport and other factors at Ásbrú, as well as to strengthen the Reykjanesbær ensemble.

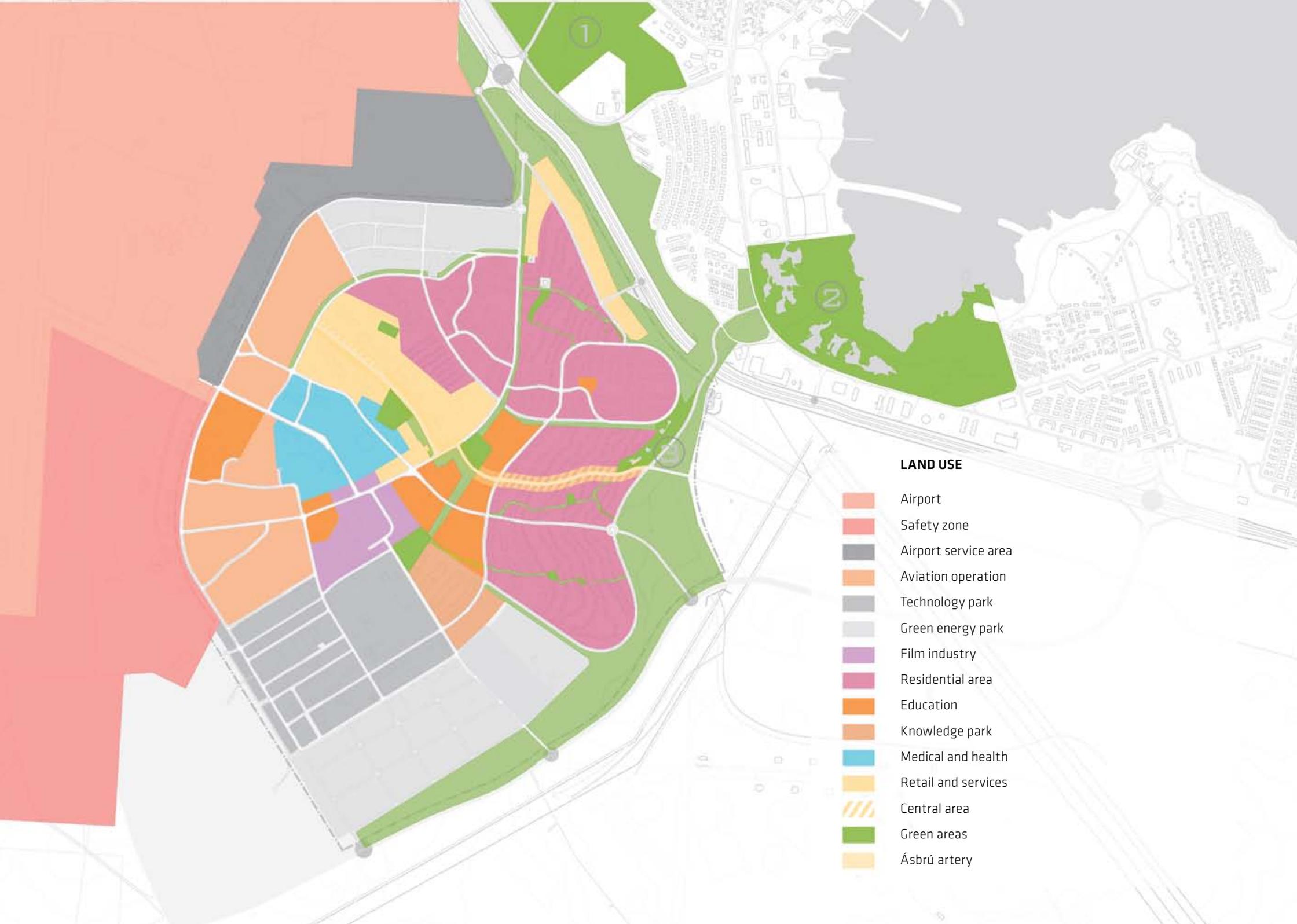
One area of emphasis is in developing an international university environment, which can form a “centre of gravity” for the area. The central core is dedicated to education and knowledge, with the principal axes running through this centre. Secondly, a central area is defined with a focus on culture and leisure, mixed with services for all inhabitants of Reykjanesbær.

Large areas are defined for business and industry, which focus on mixing innovation and creativity with the vibrant activity that already exists in the area. It can be said that Ásbrú will create a field of education and know-how, where good ideas will materialise.

New housing areas are selected with maximum qualities of the formative components in mind. In addition, connections with existing residential areas and their levels of densification are considered.

The organisation of street and walking-path systems creates easy access and safe traffic routes with an emphasis on eco-friendly travel arrangements. This ideology includes, e.g. two green traffic axes, which connect through Ásbrú to the quarters north of Reykjanesbraut highway. In that location, a green bridge over Reykjanesbraut highway next to Fitjar is important as a link between the quarters of the town, creating a unified community.





**LAND USE**

-  Airport
-  Safety zone
-  Airport service area
-  Aviation operation
-  Technology park
-  Green energy park
-  Film industry
-  Residential area
-  Education
-  Knowledge park
-  Medical and health
-  Retail and services
-  Central area
-  Green areas
-  Ásbrú artery

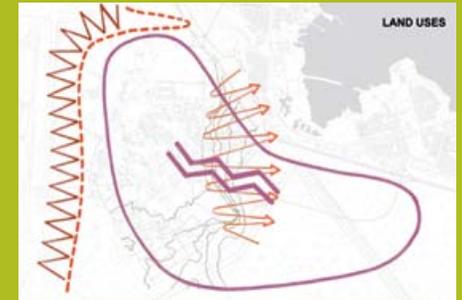
## LAND USE

The plan for land use respects the existing structure of the area. Special attention is paid to using the advantages of proximity to the airfield, as well as to reducing the influences of negative components. The diagrams here show how the business areas grant the central and education areas shelter from the airport, while at the same time remaining the community's "centre of gravity". The residential area then closes the circle by overlapping with the other areas – a desirable characteristic of mixed-use population.

The green axes run across the area, connecting the local area at Ásbrú and running north over Reykjanesbraut highway. The direction of the artery of Ásbrú to the west takes account of the wind direction, with a major emphasis on creating shelter with human comfort in mind.

The land use takes account of the conditions affecting the new master plan. In the table below sizes are presented for occupation and service areas. A summary for residential areas can be found in the corresponding chapter.

Area:	Size (hectare)	Exist. b. (in 1000)	New. b. (in 1000 m <sup>2</sup> )	Total built (in 1000 m <sup>2</sup> )	Ratio
Commerce and light industry (A4)	35	38	35	73	0.30
Commerce and light industry (A5)	107	61	165	225	0.30
Retail by Reykjanesbraut (VP4)	8	0	28	28	0.50
Ásbrú central area (M5)	23	24	57	81	0.50
Education and knowledge (p19)	29	7	54	61	0.30
Medical, health, etc. (p20)	49	56	47	104	0.30
<b>Total:</b>	<b>251</b>	<b>186</b>	<b>385</b>	<b>571</b>	



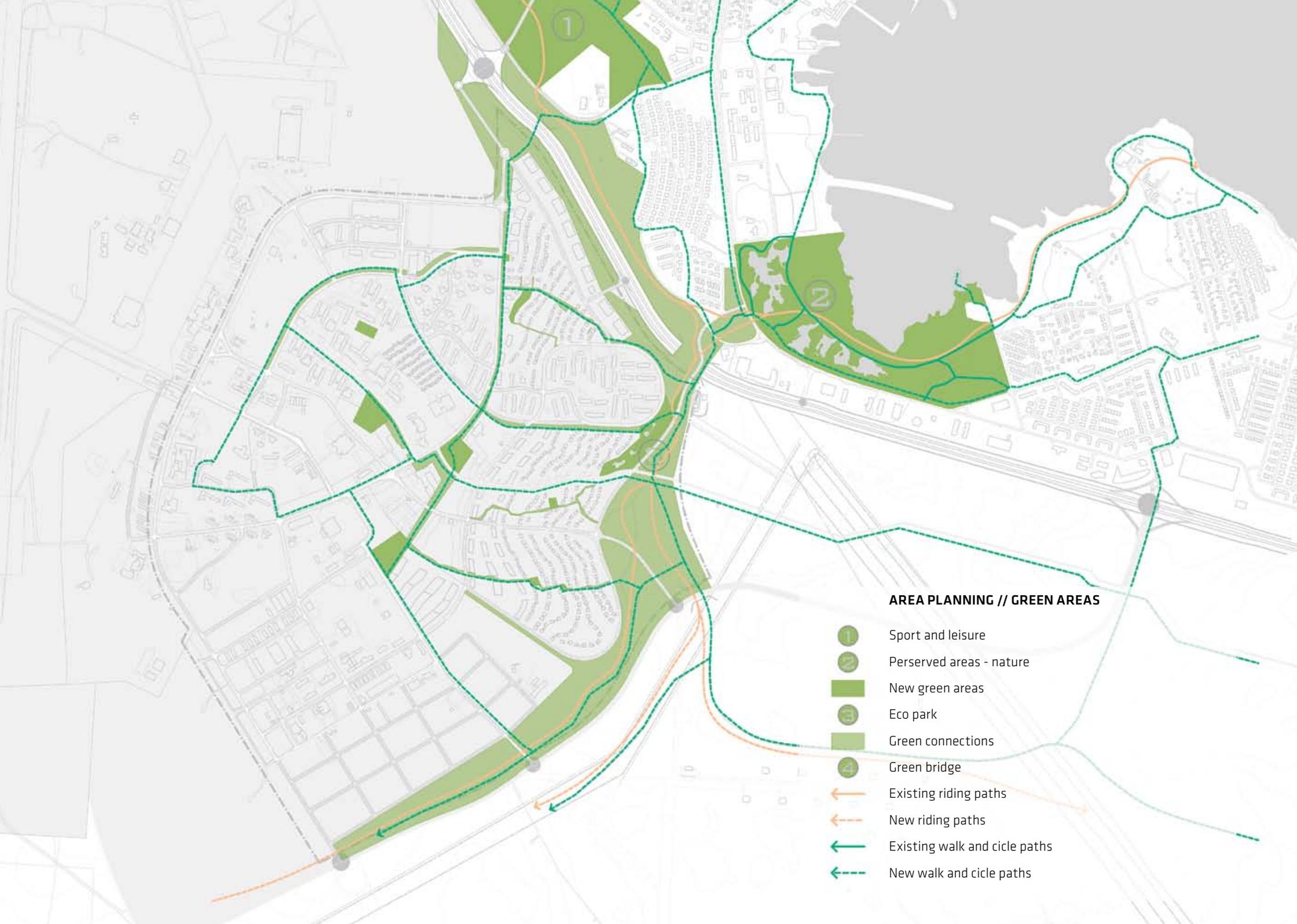
Land use; formative elements



Land use; zoning



Land use and green axis



**AREA PLANNING // GREEN AREAS**

-  Sport and leisure
-  Preserved areas - nature
-  New green areas
-  Eco park
-  Green connections
-  Green bridge
-  Existing riding paths
-  New riding paths
-  Existing walk and cycle paths
-  New walk and cycle paths

## GREEN AREAS AND CONNECTIONS

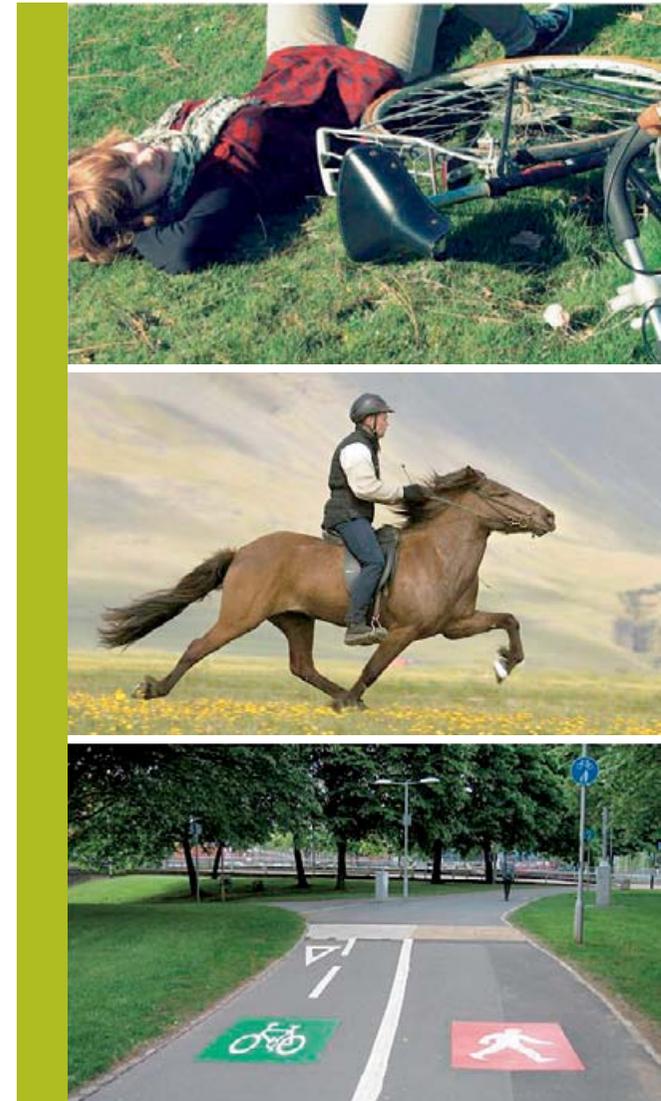
As mentioned before, one of the main concepts are the two green traffic axes running through the Ásbrú area.

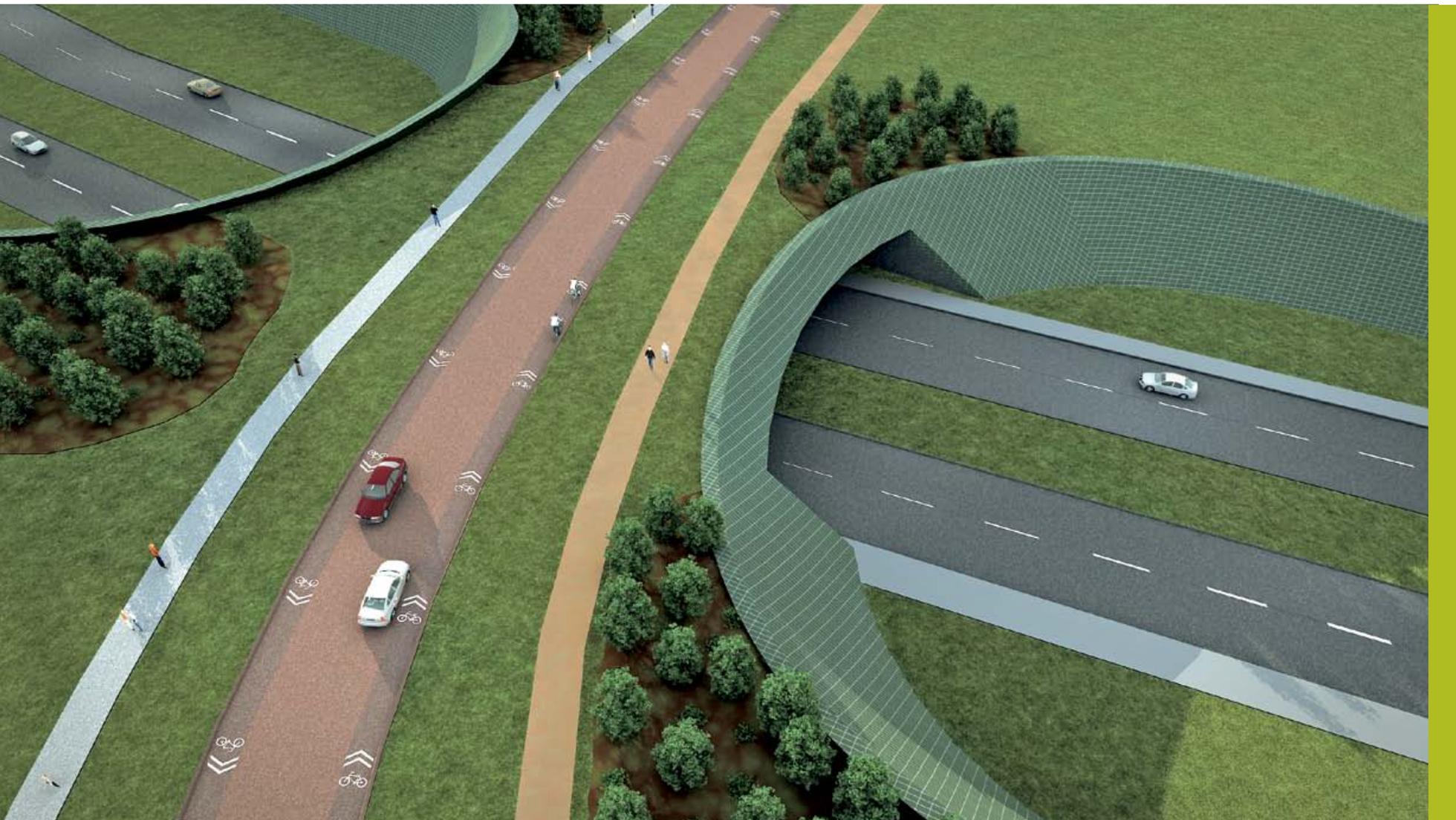
On the one hand, there is the connection of Grænásbraut (Grænás Street). This axis interconnects various open areas within Ásbrú, moving forward north to a future underpass under Reykjanesbraut highway. This underpass provides safe and easy access for cyclists and pedestrians to the town's sports area (Area no.1 on the map).

On the other hand, there is the green axis along the east boundary of the site. With the "green bridge", located over Reykjanesbraut highway adjacent to Fitjar, there is a continuous link from Ásbrú to the nature conservation area at Stekkjarkot (Area no.2 on the map).

This green axis is just as important for inhabitants north of the highway, and with the addition of the green bridge access to areas of untouched nature is greatly improved. Historic routes on the south of the peninsula are now again accessible to the public for walking, cycling or horseback riding.

The area plan proposes a special Eco Park, which will be organised south of the green bridge (Area no.3 on the map). There are some ideas in the air about directing on-grade water from new and existing quarters to form ponds in the Eco Park. The overflow from the Eco Park could run to the Fitjar area, raising the ground water if needed. A proposal on these ideas requires detailed planning of the area and focuses on the preservation of its special biology.







## THE GREEN BRIDGE

The major change in Reykjanesbær is that the population is now on both sides of Reykjanesbraut highway. Such a municipality division is a known problem in urban planning and it is important to find ways of overcoming such an obstacle, with both urban flow and the perception of the environment in mind.

The problem of vehicular traffic flow can be solved in many ways, and in the new area plan a two-level crossroads is proposed at Grænásbraut street. An underpass is also placed to the east, which is a good solution for walking and cycling traffic until a double-lane Reykjanesbraut highway is developed. This is sufficient to solve the technical part of the problem, but to create a unified town there is a need to bridge those subjective obstacles that the highway may represent. The area plan proposes a solution with the green bridge over Reykjanesbraut adjacent to the Fitjar area. This proposal perfectly fits the ideology of the master plan of regional emphasis and visibility axes. The green bridge is a structure which adapts to the landscape and is primarily intended for environmentally friendly methods of travel. Although automotive traffic is not excluded, the bridge is primarily focused on the needs of walking, cycling and equestrian traffic and it is intended that the local pathway system will be adjusted for the green bridge. High-speed automotive traffic is limited and all surface finishes will have a natural appearance.

When the green bridge is built, it will become one of the strongest landmarks in the town and a beacon to the venturesome and energetic spirit that Reykjanesbær is known for.



The green bridge ties the quarters together



**TRAFFIC SYSTEM**

- Existing streets
- New streets
- Highways
- Main roads - T3
- Main roads
- Secondary roads
- New residential streets
- Artery
- Ásbrú artery

## TRANSPORTATION AND THE ARTERY

In modern society there is a demand for transport systems. The competitiveness of urban areas is determined by good access to services and distance from the local market. In coordination with the great emphasis on occupational development at Ásbrú, an efficient transportation system is needed in the area with safe connections to adjacent highways. With that in mind, there is a need to separate heavy traffic and eco-friendly commuting, e.g. walking and cycling.

The traffic system design was the result of a fruitful collaboration with the master planners. As presented in the new master plan, a fundamental change is to be made to the highway and main road system. Hafnavegur's connection with Reykjanesbraut highway is to be moved and will become a two-level crossing at Njarðvíkurbraut. This will reduce heavy traffic flowing to the green bridge. A new main road (T3) is planned by the airport area on the western border of the area plan and on to the two-level crossroad of Grænásbraut and Reykjanesbraut highway. This will substantially reduce traffic within the central and residential area of Ásbrú and increase safety for pedestrians.

The artery traverses Ásbrú and interconnects the residential, education and the central areas. The idea is that this artery street meanders through Ásbrú and will be implemented with special regard to eco-friendly commuting. The direction and placement is chosen with shelter in mind to support outdoor activities. The artery will become the backbone of the community, where human society can flourish in work and play. Further on, the artery runs over the green bridge and ties the quarters of Reykjanesbær together.







## KEY ELEMENTS



- Education and knowledge
- Health services
- Occupational development and innovation
- The central area
- Retail and services at Reykjanesbraut
- Residential area



## EDUCATION AND KNOWLEDGE

Education is strength. From education grows knowledge, which is the basis of innovation and development. In the area plan an area has been dedicated to education and knowledge. The area is centralised and borders on all the main areas of Ásbrú, with the artery running through it. The area is therefore at the centre of gravity of the daily life of all the inhabitants of Ásbrú, whether at work or at study.

A strong accent is placed on a varied and ambitious education at all school levels. Keilir education centre affords the inhabitants of Reykjanesbær the possibilities of higher education. The school's vision of international collaboration and education goes well with the vision in the area plan.

Collaboration with business is an important consideration at Keilir, and the Eldey entrepreneurial centre and the energy research centres are indicative of that vision. South of the premises of Keilir is a 9-hectare area that has been designated a knowledge park. This will be the home for innovation and the offshoot companies that are involved with the education facility in the area. The idea of a knowledge park is to form a bridge between the education and the robust creativity of economic life.

The policy of Reykjanesbær on education and up-bringing is to guarantee good access for students to a varied educational platform in a safe working environment, so that every child finds an education to suit their needs. The school's vision is: tolerance, a Christian morality, care and respect for the individual. The school development on Ásbrú will take account of this policy, and already two nursery schools and one elementary school are in operation. On completion, the area will include two school districts. A new pre- and elementary school is planned in central Ásbrú. The location is aimed at existing and new residential areas. The emphasis is on safe pedestrian and cycle paths to the school areas and a connection to the artery.

## HEALTH OPERATION

### Health community at Ásbrú

There are great opportunities in the field of health and wellbeing in Reykjanes. Most tourists that come to Iceland travel via Keflavík Airport, and the Blue Lagoon has proved that there is great demand in the health-related tourist industry. In addition to the Keilir health and upbringing school, a health community at Ásbrú can be developed. The area plan takes account of this health community and a special area is intended for operation in that field. The intention is to build an international centre of health and wellbeing that will attract health specialists and become known globally in well-selected domains.

### Health Society of Reykjanes

The Health Society of Reykjanes (Heilsufélag Reykjaness) was established on the basis of those opportunities that Reykjanes possesses in the field of health. The company goals concern the marketing of Iceland as a land of strength, beauty and health. Health-related tourism will result in a polymorphism of economic life in Reykjanes, creating new jobs and currency income. The Health Society's policy is to reinforce social health through research and preventive means. Opportunities shall be promoted for specialised health solutions for foreign guests.





## OCCUPATIONAL DEVELOPMENT AND INNOVATION

In the development of Ásbrú it is important to utilise the vacated buildings and the infrastructure already present, because it is important to use these components to obtain the head start that the area promises. This is a major potential source of employment in Ásbrú. The area emphasises the following:

### Green Energy Park

On the south side of the activity zone a place for industries with high demands for space will be created, which can interconnect with power-intensive industry or other industries with minimal pollution

### Technology Park

The existing activity zone is called the technology park. Today, many companies are operational in this area in various fields; e.g. industrial companies in building development, production, storage and technology. The aim is to include light industry and support services that can service the area development and Helguvík industrial area.

### **Film studios**

In the future vision for Ásbrú the aim is to support creative thinking. Making movies is an industry where technology and artistic thinking meet. Therefore a designated area is planned specifically for the movie industry.

### **Aviation operation**

The proximity to the international airport presents opportunities in occupational development. Overseas, large-scale developments adjacent to airfields have been able to exploit great advantages in time management and transport. The global position of Iceland gives Keflavík Airport a unique advantage, which aviation companies are already utilising. Nonetheless, there are various underutilised opportunities in that area. In the operation zone at Ásbrú these advantages of proximity to the airfield and direct access to that area can be exploited. Inter alia ideas of a free-trade zone have been presented.

### **Excel technology - hi-tech**

The most northern part of the area is dedicated to excel technology such as data centres and related activity. Such activity illustrates the kind of development that characterises Ásbrú: the utilisation of eco-friendly energy, job creation and general positive social influences.





## THE CENTRAL AREA

According to the definition, the central area shall include retail and services and administration, which will serve the whole territory, urban area and several quarters. The downtown area will include retail and services, offices, restaurants, hostels, a cultural centre, clean industry, and housing. The central area of Ásbrú will draw on this and serve all inhabitants of the community. The artery runs through the central area and connects it with the neighbouring quarters. On the artery eco-friendly commutes are preferred and the speed of motorised traffic is reduced to a moderate speed. The Ásbrú centre offers a wide range of services, and its flourishing trade especially serves those who reside and work in Ásbrú and in the neighbouring quarters. The centre will have a restaurant, cafés, bakeries, a wine shop, small retail units and assorted secondary services.

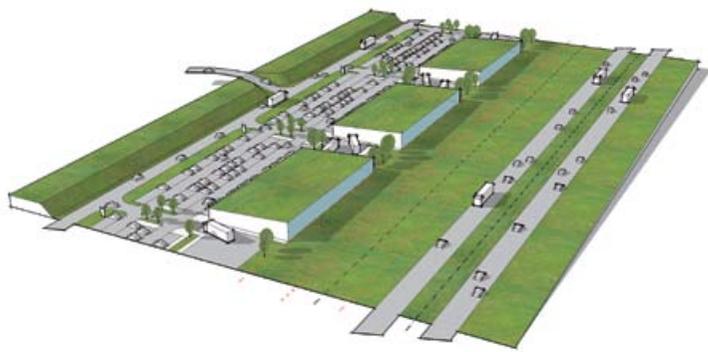
Today the central area houses various trade and service companies, a restaurant, a grocery store, a hair salon, and youth hostels, along with Reykjanesbær's facilities: Fjörheimar (a youth centre), the Arts Centre and the Entertainment Centre. Dormitories, gymnasiums, a nursery school and a theatre are also located downtown. In downtown Ásbrú the focus is on culture and the arts, sports and leisure, and trade and services.

The Ásbrú plaza will be in the town centre. The plaza is a place for social gathering and will sit in the centre of the future development of the education centre.



## RETAIL AND SERVICES AT REYKJANESBRAUT

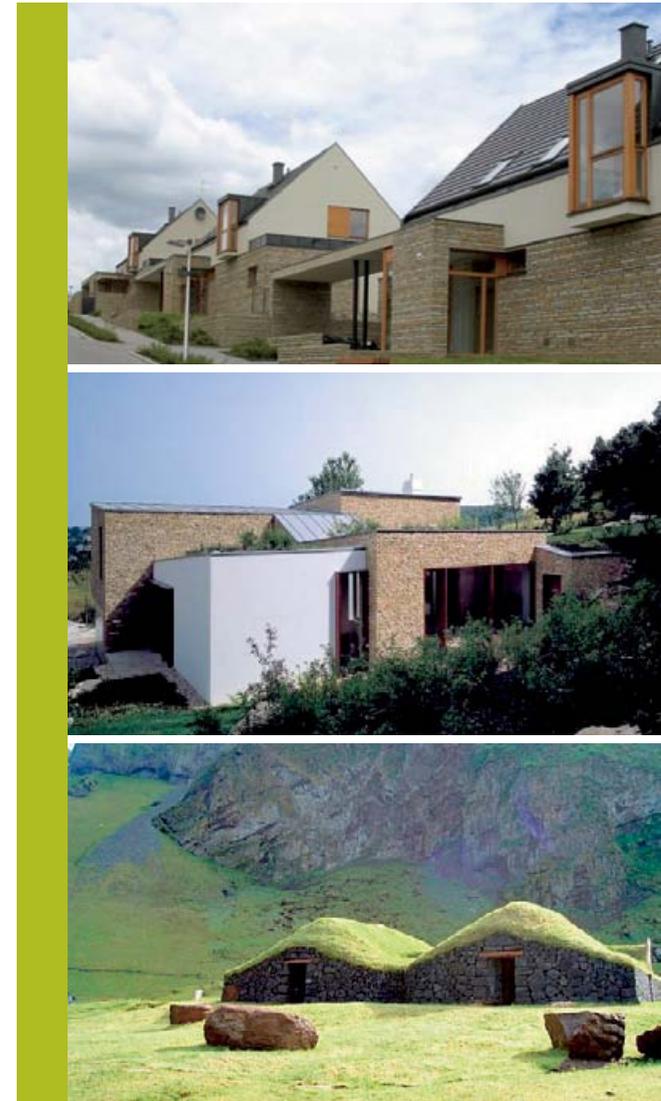
South of Reykjanesbraut highway are larger retail outlets and services (big box) with good access and sufficient parking. A total of 36,000 m<sup>2</sup> can be developed in the period 2009–2018. The area is situated on the outskirts of the Ásbrú area, is visible from Reykjanesbraut highway and is well integrated with local traffic connections, which are convenient for all residents of Reykjanesbær. In addition, an office building development is possible at Grænás, which could become a landmark of the Ásbrú area. In the master plan there is a special requirement for buildings facing Reykjanesbraut, where buildings are highly visible due to the land situation and dominant location by the highway. By locating larger retail outlets and service areas here a needed shelter is created from the noise pollution of Reykjanesbraut. Furthermore, an emphasis is placed on building design so that the most is made of the fantastic view from Ásbrú area over to the Fitjar area, and the buildings blend into the eco-friendly environment at Ásbrú.





## RESIDENTIAL AREA

In the area plan of Ásbrú, both new development and the densification of existing residential areas will occur. In counterbalance to the numerous condominiums present, the focus is on individual family houses. Rows of houses and duplexes are predominant in the new residential areas. These are implemented so as to meet the requirements of families in an eco-friendly spirit. According to the master plan, in the period 2009–2018 a total of 1,200 new housing units will be constructed.





The Ásbrú area contains many existing condominiums, which are quite diverse. The area defined as residential includes: 805 family apartments and 701 smaller units, studio apartments and single rooms. Family apartments are spacious and sophisticated, with sizes ranging from 90m<sup>2</sup> up to 190m<sup>2</sup>, with a medium size of 130m<sup>2</sup>. The existing building configuration is spacious with large open areas. The existing residential area now includes 14 playgrounds.

Kadeco co. (see page 12) holds 110 apartments in their development area and 260 studio units and accommodation units appropriate to the activity in the area. Although this is not considered a typical housing area, it therefore has no effect on the operation of education or similar services.

A uniform emphasis is placed on existing and new residential areas adapting to the area plan objectives, especially with regard to exterior finishes and building appearances. Clearly it is important to renovate existing buildings. A distinct design for the landscape and overall feel of the area is important, as well as for shelter. Further elaboration will be presented in the future plot planning proposals for designated areas.







**AREA PLAN LAYOUT AND  
NUMERIC INFORMATION**



Numeric information  
The area plan

<b>Area:</b>	<b>Size</b> (hectare)	<b>Exist. b.</b> (in 1000 m2)	<b>New. b.</b> (in 1000 m2)	<b>Total built</b> (in 1000 m2)	<b>Ratio</b>
Commerce and light industry (A4)	35	38	35	73	0.30
Commerce and light industry (A5)	107	61	165	225	0.30
Retail by Reykjanesbraut (VÞ4)	8	0	28	28	0.50
Ásbrú central area (M5)	23	24	57	81	0.50
Education and knowledge (Þ19)	29	7	54	61	0.30
Medical, health, etc. (Þ20)	49	56	47	104	0.30
<b>Total:</b>	<b>251</b>	<b>186</b>	<b>385</b>	<b>571</b>	

<b>Residential - Apartments</b>	<b>Description:</b>	<b>Hectare</b>	<b>Aprtm. exists</b>	<b>Aprtm. new</b>	<b>Aprtm. total</b>	<b>Aprtm/hect</b>
Í11	Existing housing	34	805	0	805	24
Í30	Densification	17	0	550	550	32
Í13	New housing	38	0	643	643	17
<b>Alls:</b>		<b>89</b>	<b>805</b>	<b>1,193</b>	<b>1,998</b>	<b>22</b>
<b>Other - Apartments</b>	<b>Description:</b>	<b>Hectare</b>	<b>Aprtm. exists</b>	<b>Aprtm. new</b>	<b>Aprtm. total</b>	<b>Aprtm/hect</b>
(Þ20)	Kadeco units	49	110	0	110	2
Total:		49	110	0	110	2
<b>Total apartments at Ásbrú:</b>			<b>915</b>	<b>1,193</b>	<b>2,108</b>	
<b>Alternative dwelling units:</b>						
	<b>Description:</b>	<b>Hectare</b>	<b>Aprtm. exists</b>	<b>Aprtm. new</b>	<b>Aprtm. total</b>	<b>Aprtm/hect</b>
<b>Í11</b>	Dormitory, rooms	34	0	147	147	4
<b>M5</b>	Dormitory, rooms	27	245	309	554	21
<b>Þ20</b>	Kadeco operation	49	35	224	259	5
<b>Total alternative dwelling units at Ásbrú:</b>				<b>280</b>	<b>680</b>	<b>960</b>



**AREA PLAN // GREEN AREAS**

- Sports and leisure
- Preservation area – pure nature
- New green areas
- Eco park
- Eco connections
- Green bridge
- Horseriding routes - existing
- Horse riding routes - new
- Existing walking and cycling paths
- New walk and cycling paths

**TRAFFIC SYSTEM**

- Highways
- Main roads – T3
- Town streets
- Residential streets
- New streets

**LAND USE**

- Airport area
- Security zone
- Airport service
- Aviation operation
- Technology park
- Green energy park
- Film industry
- Residential area
- Education
- Knowledge park
- Health service
- Retail and services
- Central area - downtown
- Green areas

