


New Slussen

New places to meet | More space for pedestrians, cyclists and public transport | Safe drinking water



Our city is growing fast. Besides the new housing and workplaces required to accommodate everyone, we also need new meeting places and more communications. New Slussen will be one of Stockholm's most attractive places to meet, with new market squares and a city park. More space will be created for public transport as well as pedestrians and cyclists. The areas available for car traffic will be adapted to accommodate current traffic flows.

Rebuilding Slussen is also a vital issue for the entire region surrounding Lake Mälaren. At new Slussen it will be possible to release double the amount of water from Lake Mälaren and thereby reduce the current high risk of flooding. This will protect both key infrastructure and drinking water for two million people.

Illustration: Foster + Partners

Why?

Slussen is after nearly 80 years in poor condition and needs to be rebuilt from scratch. At the same time, we have the chance to adapt the place for the needs of today's and tomorrow's Stockholmers.

What?

Future Slussen will be an effective and safe junction for pedestrians, cyclists and public transport. It will also be one of Stockholm's most attractive venues with life, entertainment and culture, restaurants and cafes.

When?

The local plan for the Slussen area gained legal force on 27 September 2013. The work carried out in 2015 adapted to the conditions that are in place. In 2016, the major preparatory work begins.

1642



Queen Kristina Lock
The very first lock, Queen Kristina Lock, was opened in 1642. It was built to facilitate shipping and trade to and from the Lake Mälaren. Previously all goods had to be reloaded, or the boats punted along against the current, which was very time-consuming and laborious. Stockholm had 30,000 residents at that time and grew rapidly after becoming the official capital of Sweden in 1634.

1755



Christopher Polhem Lock
The first lock was too small 100 years later and required constant repairs. Another lock needed to be built for which the inventor Christopher Polhem was commissioned. The second lock was opened in 1755 and was both wider and deeper than its predecessor to make it suitable for the vessels of the time. Polhem Lock, an architectural and engineering masterpiece, was needed for this growing city and its expanding trade. Polhem had the lock channel constructed on the quayside, and when lowered into place in the water, it was a perfect fit. Stockholm had around 70,000 residents at that time.

New Slussen - from traffic junction to meeting place

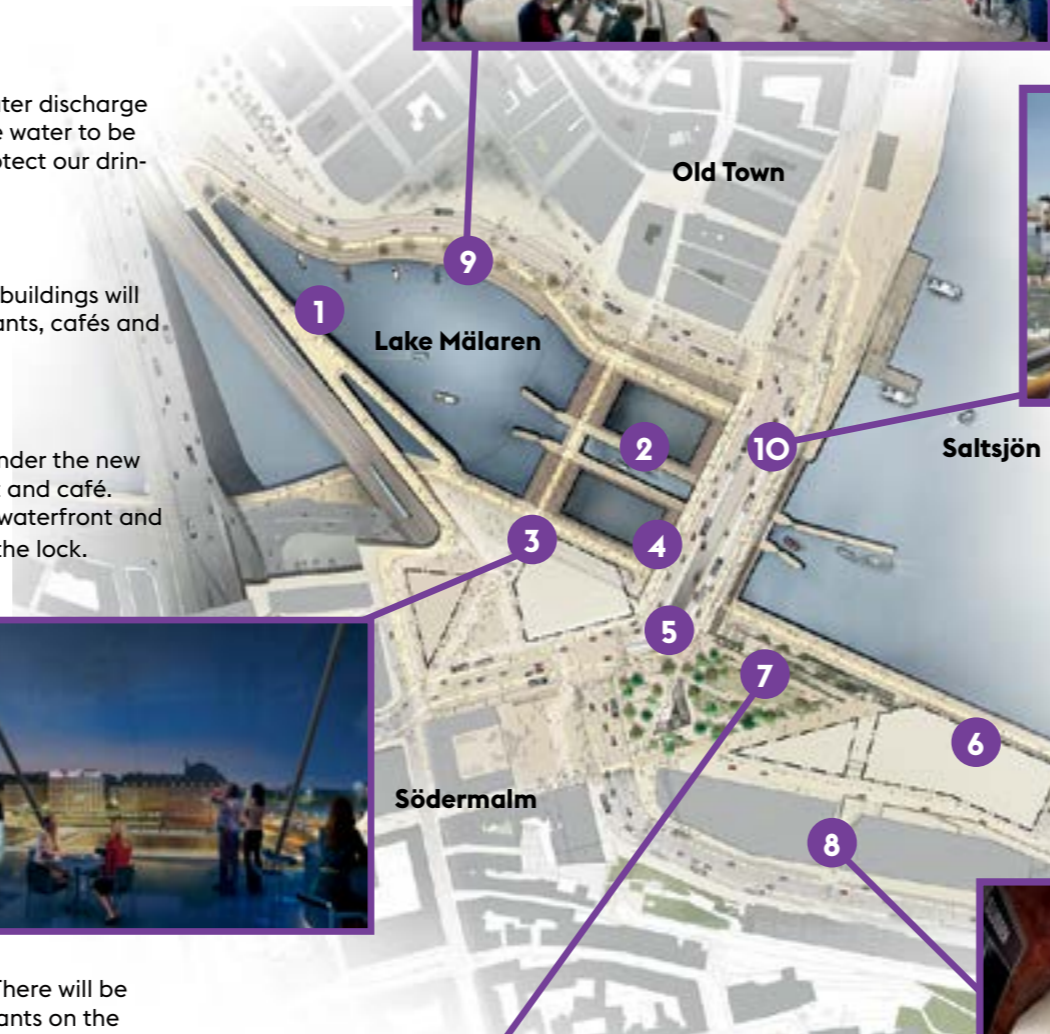
Slussen needs to be adapted to a new era and new conditions in pace with Stockholm's growth. This is not the first time Slussen has been rebuilt. It has changed every century since the 1600s.

Illustrations: Foster + Partners

- 1 A new pedestrian and cycle bridge will be built alongside the underground railway bridge to connect Södermalm and Gamla Stan (the Old Town).
- 2 A new lock and two new broad water discharge channels will allow five times more water to be drained off at Slussen. This will protect our drinking water and key infrastructure.
- 3 There are plans to build two glass buildings will be built here intended for restaurants, cafés and culture.
- 4 A meeting place will be created under the new bridge with space for a restaurant and café. Here you will be able to sit by the waterfront and watch the boats passing through the lock.
- 5 There are plans to build spaces for shopping and services below street level. This will provide a high level of service to everyone passing through or living in the area.
- 6 Stadsgårdsleden will be enclosed by a tunnel and new office buildings built on top. There will be room for shops, cafés and restaurants on the ground floors of the new buildings



- 9 The footpaths and cycle tracks will be widened at Munkbron. You will be able to sit and enjoy the sun on the new embankments and south-facing steps.



- 10 Today's two bridges are replaced by one. On the bridge there will be room for eight lanes. Two for public transport, bike lanes and wide sidewalks on both sides. The new bridge will be 45 meters wide compared from today's 42 and 43 meters. This means that traffic surfaces is cut by half and there will be more space for pedestrians and cyclists while the water becomes more visible.



- 7 A new park called Katarina Park will be built on top of Stadsgårdsleden, including terraces and with views across Saltsjön, Skeppsholmen and Gamla Stan.
- 8 There are plans to build a new bus terminal for the Nacka and Värmdö buses under Katarinavägen – a light, safe and secure terminal, where passengers transferring to the underground (T-banan) will be able to do so without having to go outside.



1850



Nils Ericson Lock
The lock had to be rebuilt again in the mid-1800s. At that time it needed to be even broader and deeper to cope with the new steamboats. This lock was designed by the engineer Nils Ericson and completed in 1850. Stockholm then had 93,000 residents, but population growth was slow and infant mortality high. Nils Ericson Lock still remains under the steps at Slussplan. It is currently being used as a drainage channel, but will serve as a fish migration route in new Slussen.

1935



Karl Johan Lock
Stockholm had around 420,000 residents in 1920. The bridges at Slussen were still the only route linking north and south Stockholm, resulting in traffic chaos. The fourth lock, Karl Johan Lock, was opened in 1935. Nils Ericson Lock was rebuilt so that it could be used to drain Lake Mälaren, and Polhem Lock channel was filled in. The purpose of the new structure was to reduce traffic problems and alleviate the situation for the increasing number of car users. The clover leaf formation meant that traffic could be fed into different height levels.

metres high is the Katarina Elevator. When the rebuilding work is completed at Slussen the elevator will go all the way down to the Saltsjöbanan line and the new shopping centre.

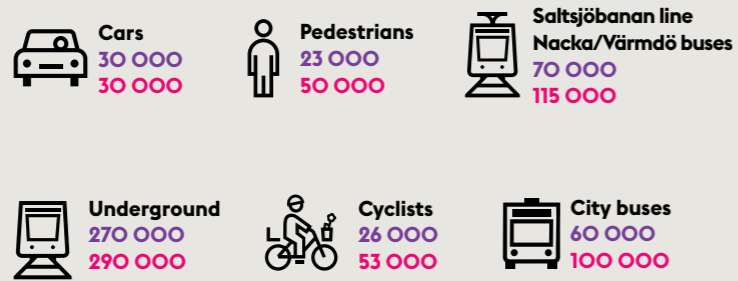
A solution for the future

Buses, the underground, the Saltsjöbanan line, cars, boats, cyclists and pedestrians all converge at Slussen. The annual number of public transport users, pedestrians and cyclists is increasing, while car traffic has reduced in recent years. Around 400,000 people travel to or via Slussen using public transport every day. This makes Slussen Sweden's second largest public transport hub after Stockholm Central Station. The new Slussen has been designed to meet future needs, with fewer car lanes than today. More space will be created for public transport as well as pedestrians and cyclists, who will have new pleasant paths along the embankments. For cars, new Slussen means that it will be easier to find and select the right route. Traffic on Stadsgårdsleden will be led past Slussen via a tunnel.

More room for pedestrians and cyclists

The number of cyclists and pedestrians passing through Slussen every day will have doubled by 2030. Separate pedestrian and cycle paths therefore represent an important element of new Slussen. A completely new pedestrian and cycle bridge is being built alongside the underground railway bridge, making it easier and simpler to get from Södermalm to Stockholm Central Station. Cycle parking is being built next to the underground and bus terminal entrances. There will be a new pedestrian footpath between Södermalm and Gamla Stan. The new main bridge will have broad footpaths on both sides and it will also be possible to walk along the quays, across the low bridges and along the waterfront.

Traffic at Slussen today and in 2030*



* prognosis

”New Slussen will be a meeting place that is **adapted** for our time, **conditions** and **requirements.**”

City of Stockholm



Stockholm County is growing by approximately **40 000** people every year. Half move here and half are born here.

Traffic investments in Stockholm **100 billion** Swedish kronor are being invested in building new roads and tracks to make our journeys smoother. Slussen is part of this investment.

Photo: Jens Johansson, Yonon Li, Stefan Bohlin, Lennart Johansson, Jany Pleurik



The rebuilding work at Slussen has been split into three sub-areas:

- 1** Building work on land – new roads, new square, a new park and decking over Stadsgårdsleden.
- 2** Building work in the water – new quays, new bridges, new drainage channels and new lock structures.
- 3** Building work into rock – the new bus terminal for the Nacka and Värmdö buses.

Slussen 24 hours a day, all year round

The future Slussen will provide new opportunities to stay indoors, creating a vibrant city life all year round. Two buildings for public activities will be built at Södermalmstorg, including restaurants, cafés and culture. The facades of the new buildings will be transparent to create a natural link between the indoor environment and the square outside. New indoor environments, including a café and restaurant, will also be created under the new main bridge linking Gamla Stan and Södermalm.

More workplaces will also be needed when Stockholm grows. New office buildings are being constructed eastwards along Stadsgårdskajen. The intention is to provide space for shops, cafés and restaurants on the ground floors. This will help to create a safe place with a vibrant city life.



8000

tonnes of steel will be used to rebuild Slussen.
7,300 tonnes were used for the Eiffel Tower in Paris

Two phases to the rebuilding work

The rebuilding work at Slussen will not go unnoticed. However, it must be possible for everyone living, working or travelling via Slussen to continue their daily lives throughout the construction period. The rebuilding work will be divided into two phases to facilitate traffic flow. First, the east bridge, closest to Saltsjön, will be demolished and Katarinavägen closed at Slussen. The west bridge will serve traffic moving between the city districts. Priority will be given to pedestrians, cyclists and public transport, and the underground will be run at maximum capacity throughout the construction period.

The new main bridge will be completed in phase 1 and will enable traffic to use Katarinavägen again. The west bridge will be demolished and work start on the embankments, low bridges and the new pedestrian and cycle bridge running parallel with the underground railway bridge. The new structure is expected to be finished by 2025 with the new buildings being completed in the years after.



Did you know...

New Slussen will be able to cope with sea levels more than two meters higher than today's average sea level.



Phase 1 (approx. 4 years)



Phase 2 (until finished)



Many technical challenges

Very complicated work is being carried out within a small area, while everyday life at Slussen must continue to function. This requires extremely careful planning. It is a long way down to the bedrock and there are buildings of historical and cultural value to consider. It must be possible to drain water from Mälaren to Saltsjön throughout the entire construction period and the blasting work in the rock chamber for the planned bus terminal will be carried out close to other structures. This means that we will have to use prudent methods and exercise strict control the entire time.

New water level regulation

Carrying out construction work in waterways, diverting groundwater and adjusting the level of water in Lake Mälaren all require an environmental judgment. This judgment allows the City of Stockholm to increase the amount of water discharged from Lake Mälaren into the sea and to introduce a new regulation for the water level in Lake Mälaren.

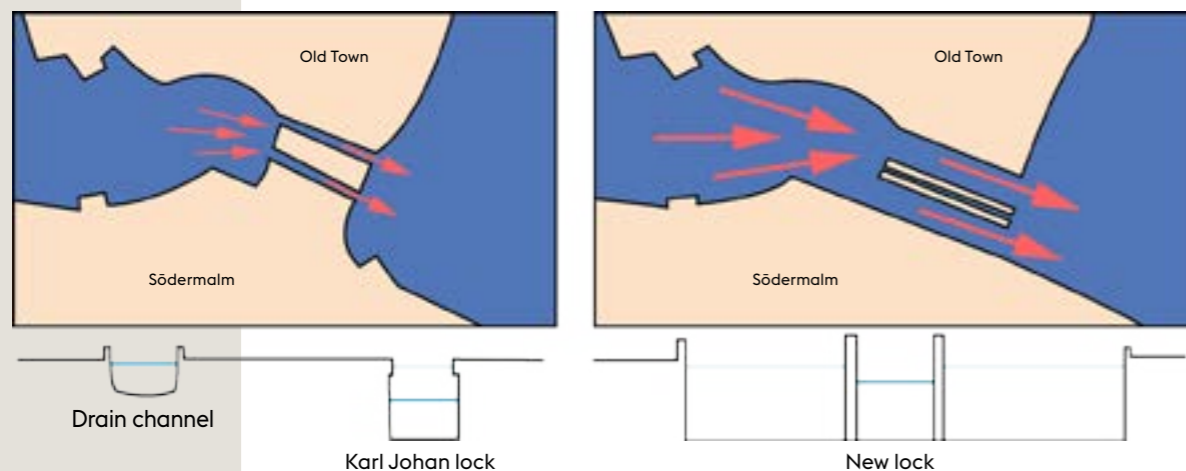
The proposal for a new regulation regarding the water level in Lake Mälaren has been revised several times in order to obtain the best possible outcome for the many public interests affected. After a process that has lasted a total of six years and has involved gathering information from consultation, reference groups and investigations, the City of Stockholm has agreed on a new regulation for the water level for Lake Mälaren that caters for the many different purposes and necessary considerations.

New Slussen protects your drinking water

When Slussen is rebuilt we will have a unique opportunity to reduce the high risk of flooding currently threatening the area around Lake Mälaren. We must be able to release more water from Lake Mälaren to protect our drinking water. Water levels at Mälaren are regulated at Stockholm and Södertälje by releasing water from the lake into the sea. It is not currently possible to drain enough amounts of water at times when vast quantities of water are flowing into Mälaren, for example during the spring thaw.

Building new and larger channels at Slussen will eliminate the present risk of flooding, as well as allowing for an increase in sea level caused by future climate change. This will safeguard access to drinking water and protect vulnerable areas such as the underground at Gamla Stan, Västerås Airport and other important infrastructure and buildings.

New Slussen - 5 times larger drainage capacity



2

million people get their daily drinking water from Mälaren

New Slussen will be adapted to the climate

SMHI (Sweden's Meteorological and Hydrological Institute) estimates that the sea level globally will rise by one metre up to 2100. This means that the difference between the sea and Mälaren will be reduced to just over 20 cm. New Slussen is being designed for these levels.

Slussen is designed to be able to manage the elevation of the sea level that SMHI considers likely within its lifespan.

Changing the control of the lakes water level also benefits the wildlife around the beaches of the Mälaren, improving conditions for birds, bats, fish and frogs with a slightly higher water level in the spring. There will also be advantages for shipping, particularly in reducing the risk of running aground.

Photo: Yonon Li, Foster + Partners, Spaulin/Stockphoto, Anne Lintala

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Benefits with new Slussen:

- Safe drinking water
- New places to meet
- More space for pedestrians, cyclists and public transport