

Briefing about Flackarp-Arlöv, four tracks



TRAFIKVERKET



Welcome

Flackarp-Arlöv, four tracks

December 3rd 2015

Illustration: Adore Adore



Co-financed by the European Union
Trans-European Transport Network (TEN-T)

Agenda

09:30-10:00	Coffee/tea is served
10:00-10:10	Welcome
10:10-10:30	Presentation of the Swedish Transport Administration (Trafikverket) and how to become a supplier to the Swedish Transport Administration
10:30-10:50	Information about what is happening at the moment
10:50-11:00	Short break
11:00-12:15	Technical presentation of the project
12:15-12:30	Questions
12:30-13:15	Lunch
13:30-15:45	Site visit
15:45-16:00	Closing

Practical matters

- Lunch
- Emergency exits
- Questions

Participants from Trafikverket

Jens-Peter Eisenschmidt, Senior Project Manager

Camilla Ahston, LL.B. International Strategist

Patrik Dymling, Project Manager Performance Management

Thomas Hallgren, Project Manager Railway

Marie Minör, Project Manager Civil Works

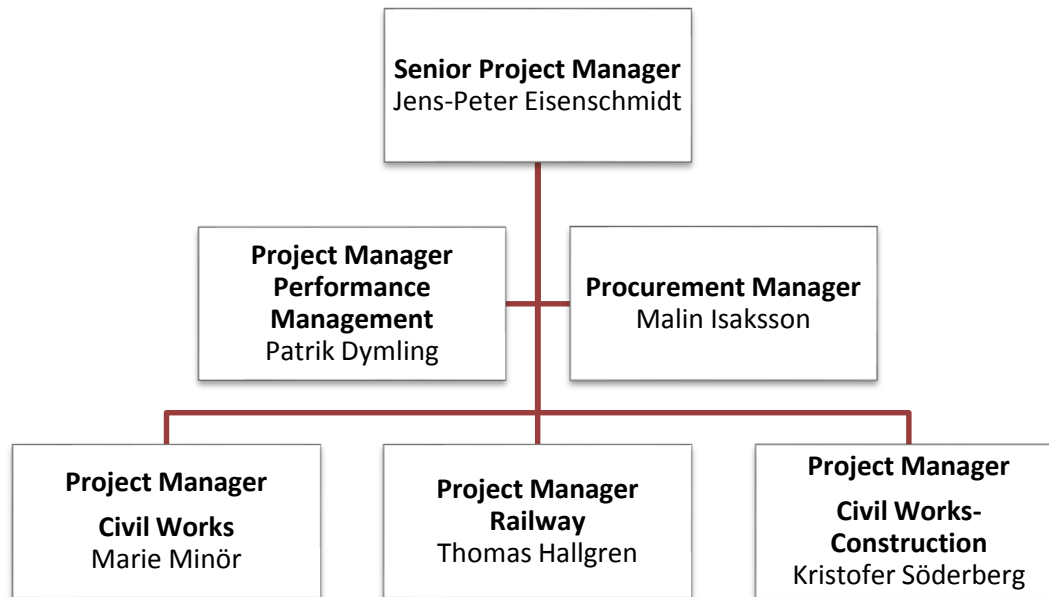
Kristofer Söderberg, Project Manager Civil Works- Construction

Petter Holmqvist, Project Coordinator Civil Works - Construction

Örjan Berg, Communications

Malin Isaksson, Procurement Manager

The organization of our project



Camilla Ahston

- The Swedish Transport Administration (Trafikverket)
- How to become a supplier

Skåne & Öresund Region

- Skåne 1.3 million
- Öresund Region 3.9 million
(Skåne+Zealand)
- Major cities:
 - Copenhagen 1.2 million
 - Malmö 319 000
 - Helsingborg 136 000
 - Lund 116 000
 - Kristianstad 82 000

Helsingborg

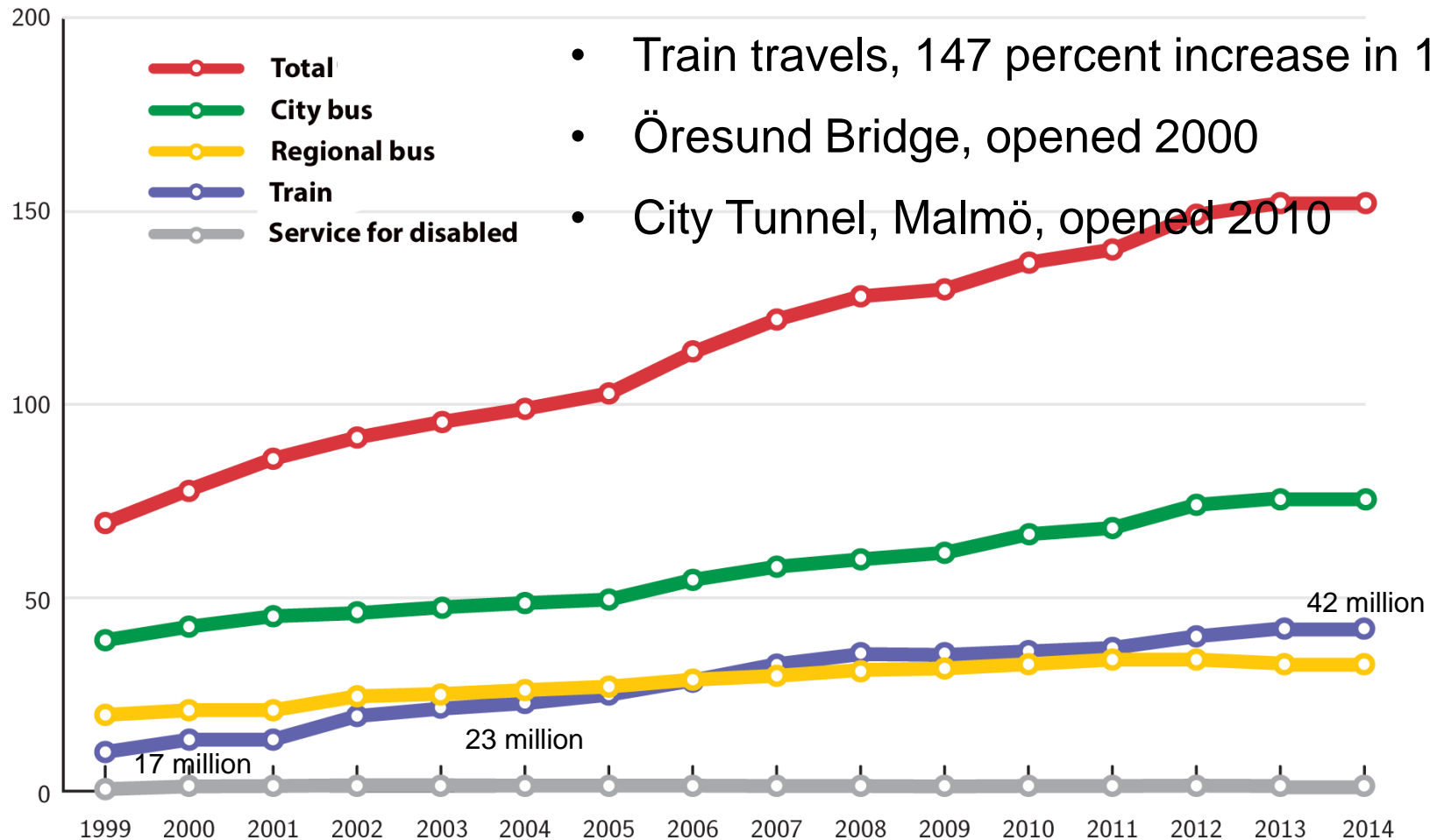
Copenhagen

Kristianstad

Lund

Malmö

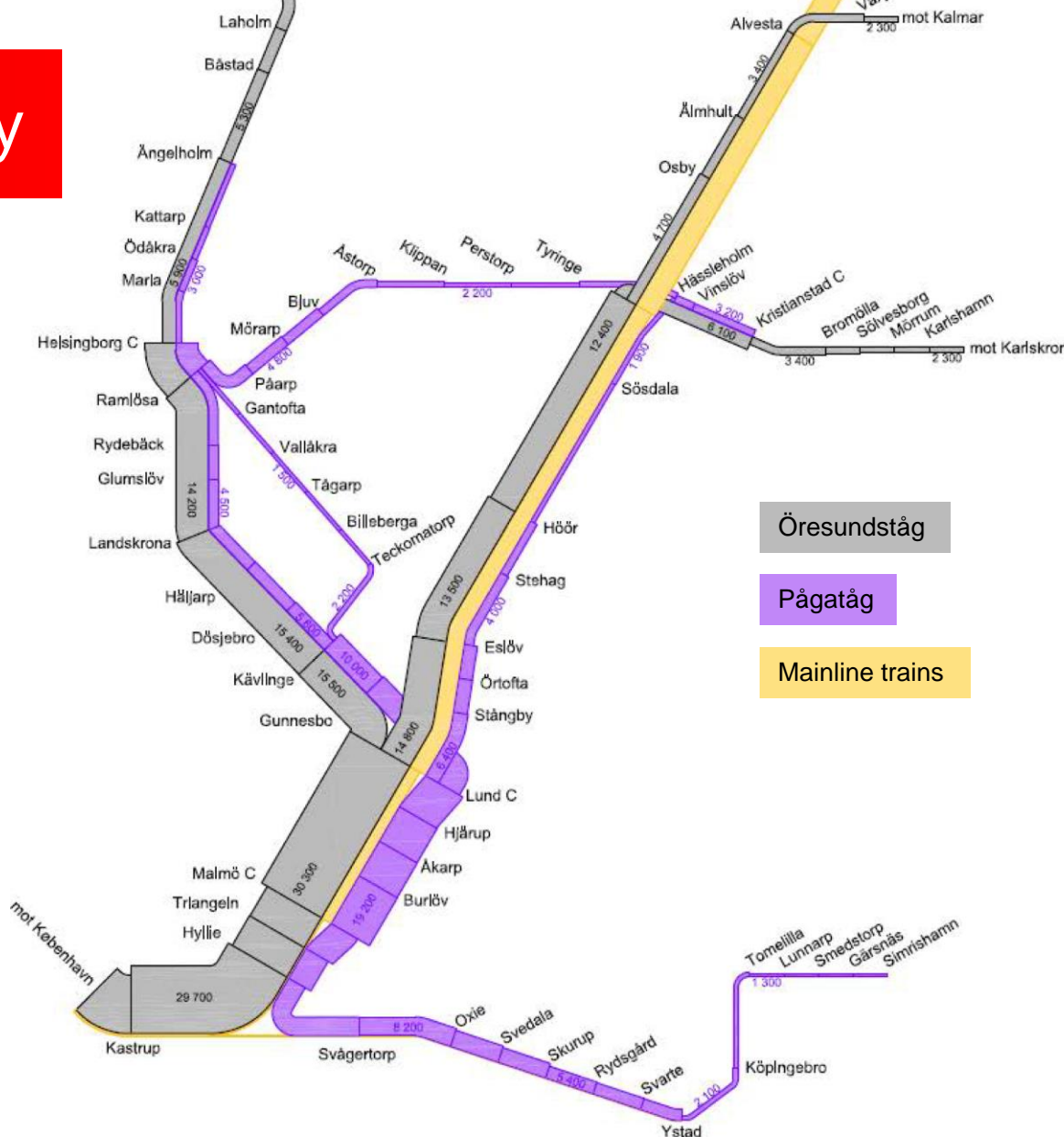
Commuters in Skåne



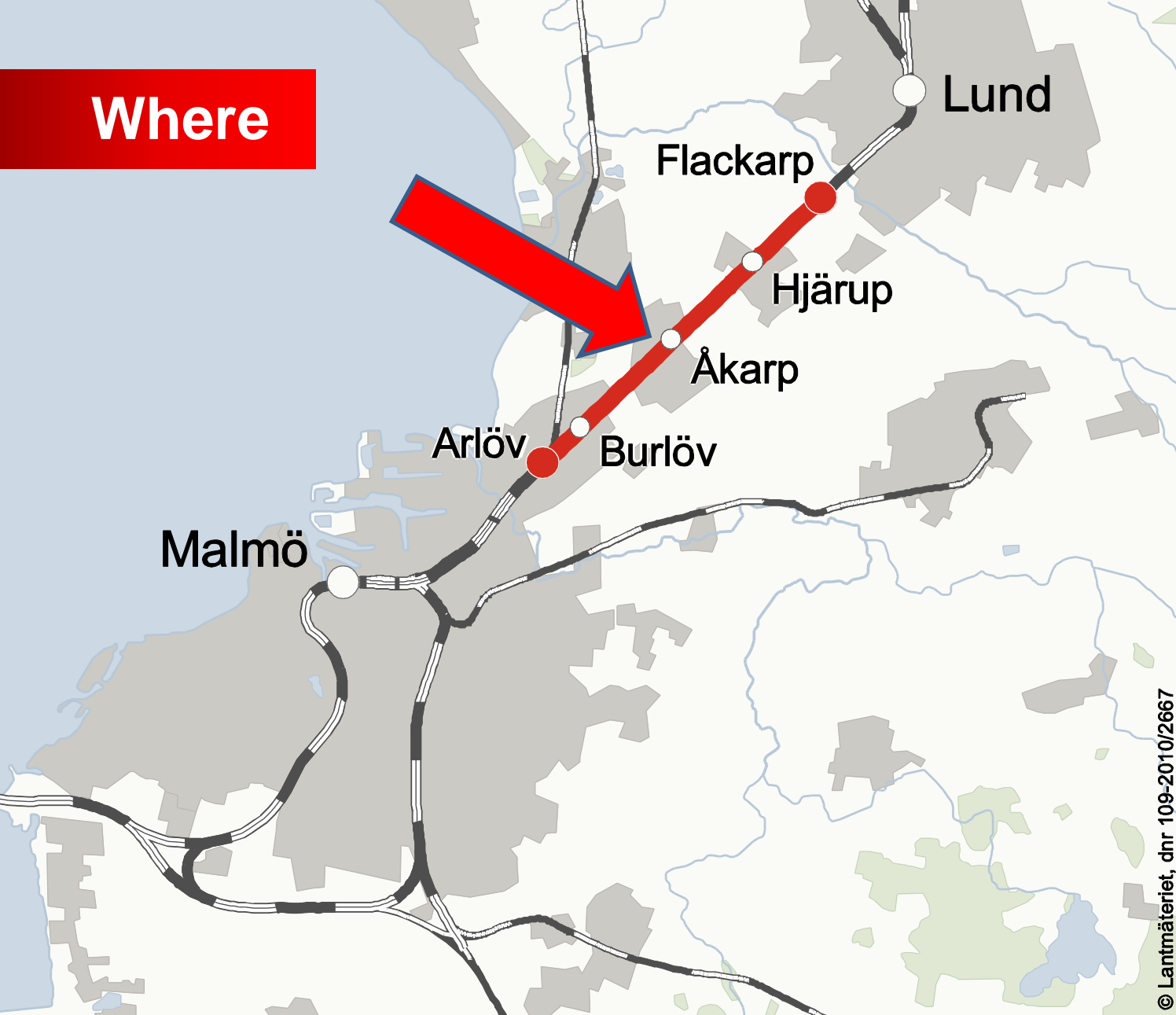
* No. of travels. Source: Skånetrafiken (publicly financed public transports)

Train travels per day

December, 2013
Malmö-Lund
55 000 travels



Where



© Lantmäteriet, dnr 109-2010/2667



What

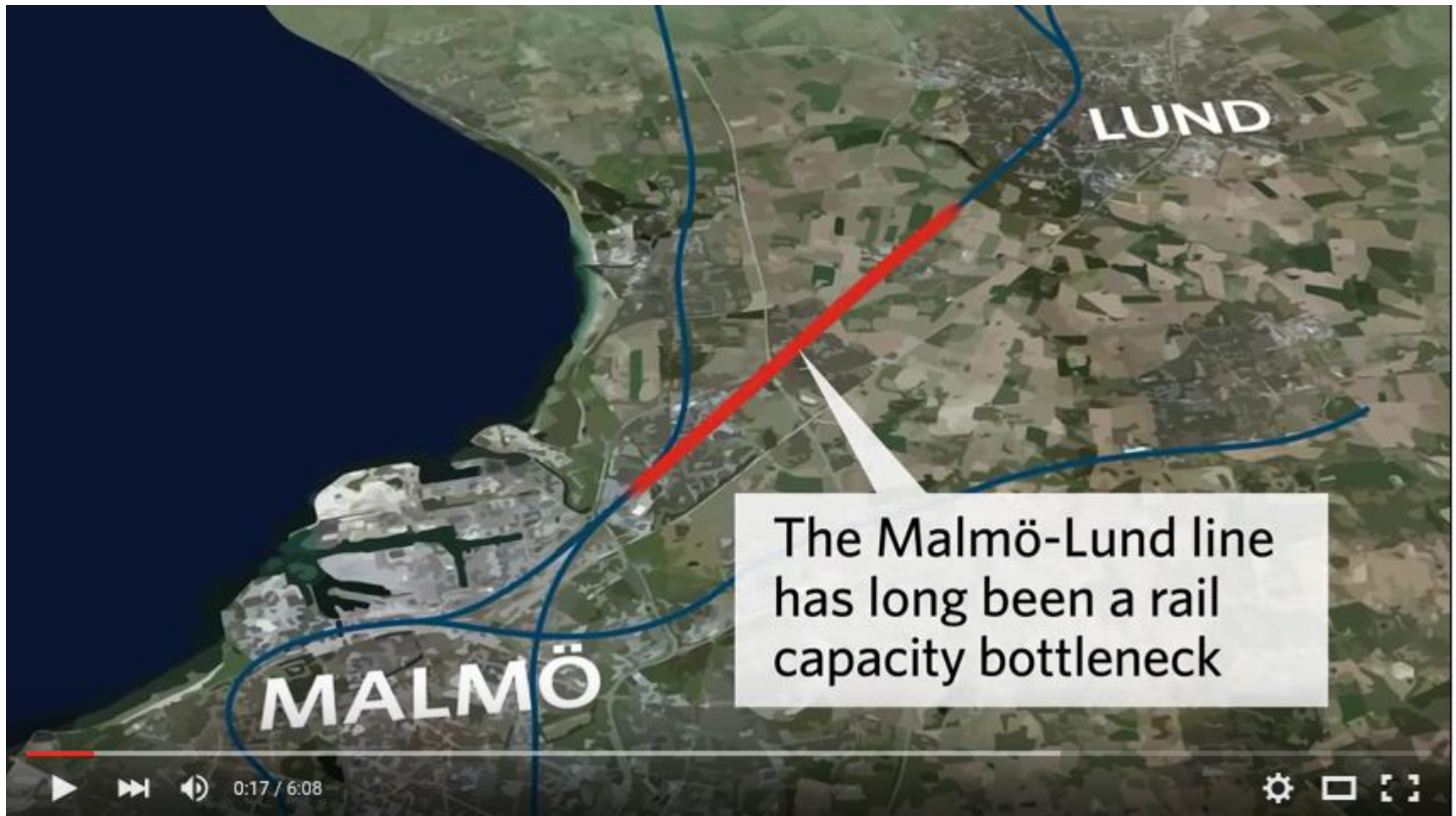
- Expansion from two to four tracks, 8 kilometres
- Three new stations in Hjärrup, Åkarp and Arlöv
- Total budget approx. 400 M EUR (at 2015 price levels)



Why

- Higher capacity on the railway
- Reduce noise pollution
- Reduce traffic disturbances and congestions
- Reduce the railway barrier effect





The film about Flackarp-Arlöv, four tracks.

<https://www.youtube.com/watch?v=K3nfuNnihhw>

Challenges

- **Soil** – about 1.2 million m³ surplus
- **Noise** – during the construction time and completion
- **Traffic** – rail- and road traffic running during the entire construction period



Time schedule

May 2016

The Railway Plan gains legal force* + decision on waterworks operation

April 2017

Design and build contract signed

2015

2016

2017

2018

2019

2020

2021

2022

June 2015-June 2016

Preparation of the tender documents

Sept 2015-May 2016

Assessment procedure for the Railway Plan

June 2016- Feb 2017

Procurement of the design and build contract

April 2017-2022

Contract period

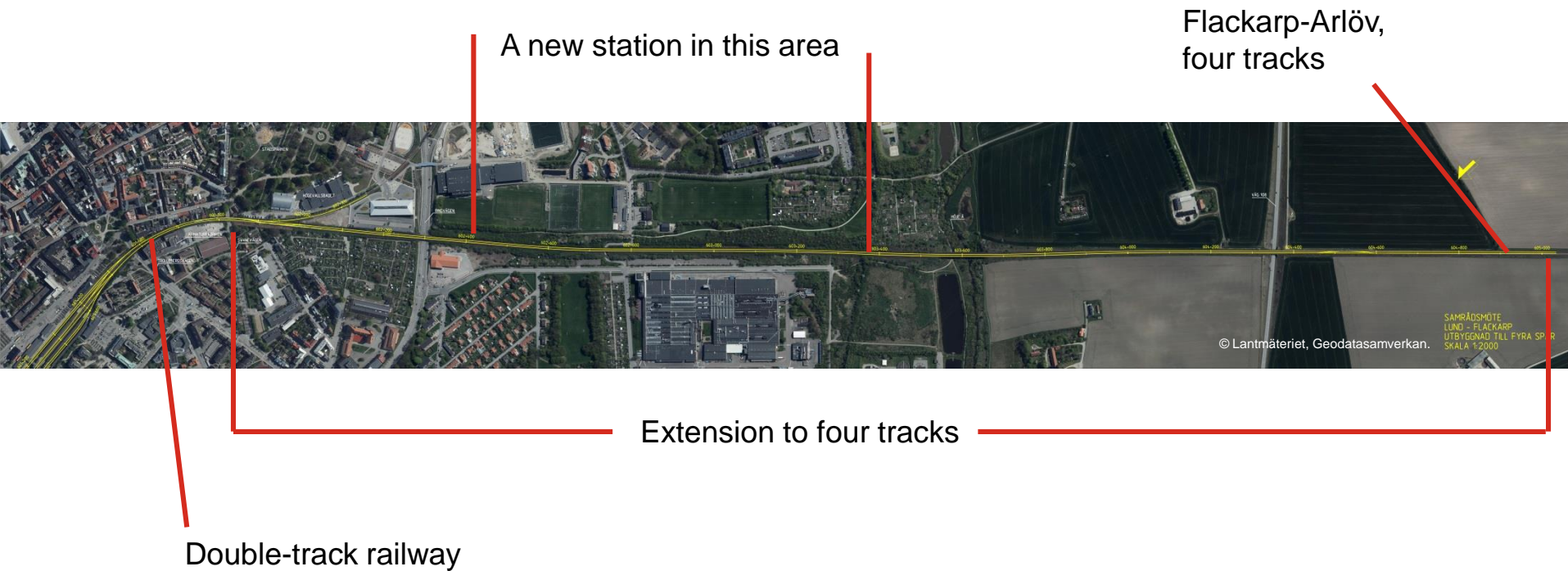
* An appeal against the railway plan can result in a delay of up to one year.

Business proposal

- One Design and Build contract for Flackarp-Arlöv
- Payment form: Not decided
- Tender period: 8 months
- Contract: April 2017
- Contract period: 2017-2022

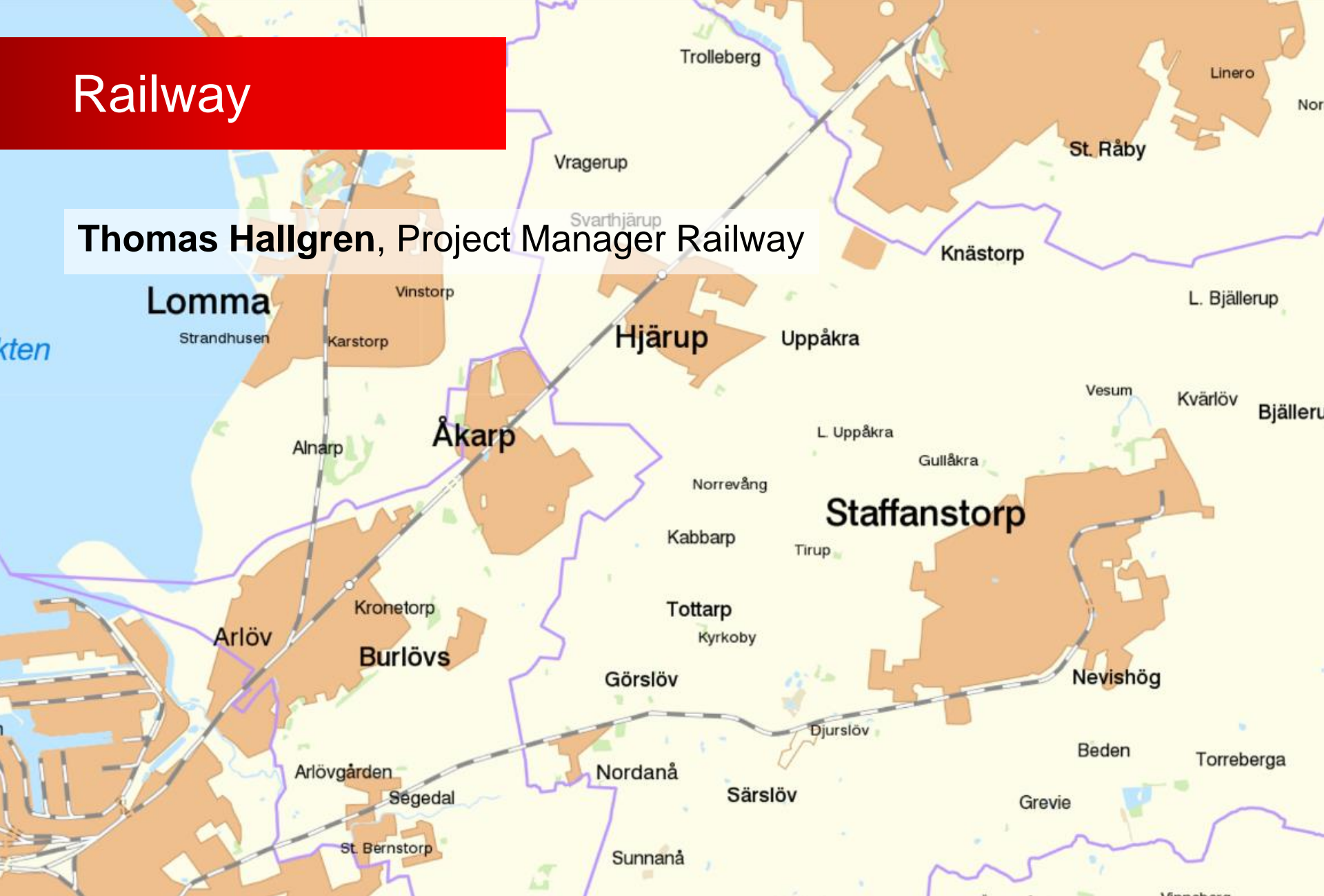


Lund-Flackarp, four tracks



Railway

Thomas Hallgren, Project Manager Railway



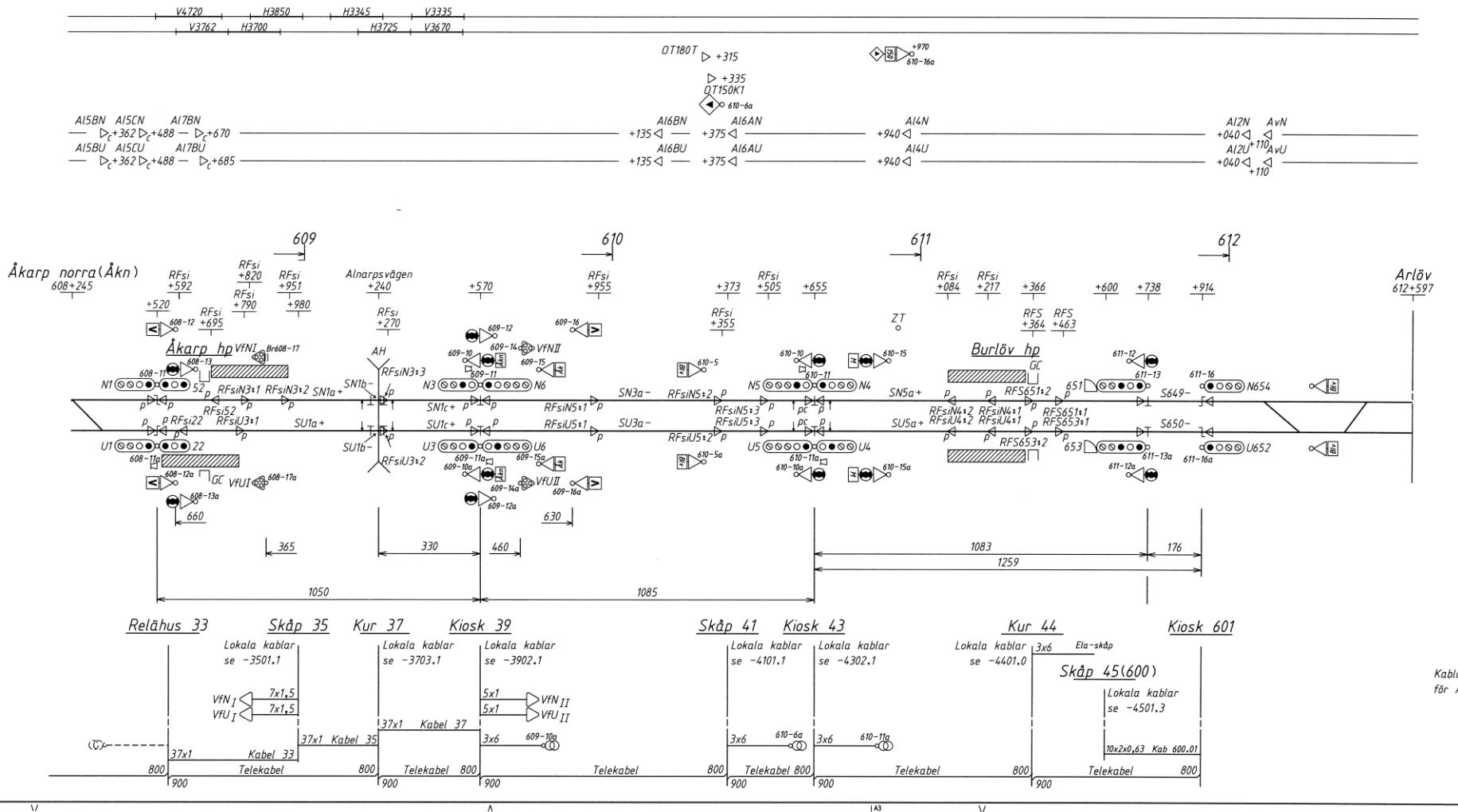
Railway - Conditions

- Railway specific material – has to be bought from TRV Materialservice
- Side contractor - Bombardier Transportation signaling system
 - Supplier of signaling interlocking
 - Design software for interlocking
- Coordinated by the main contractor
- Telecom – carried out by internal department TRV-IT
 - Design all telecom related technique
 - Install all telecom equipment
- Coordinated by the main contractor

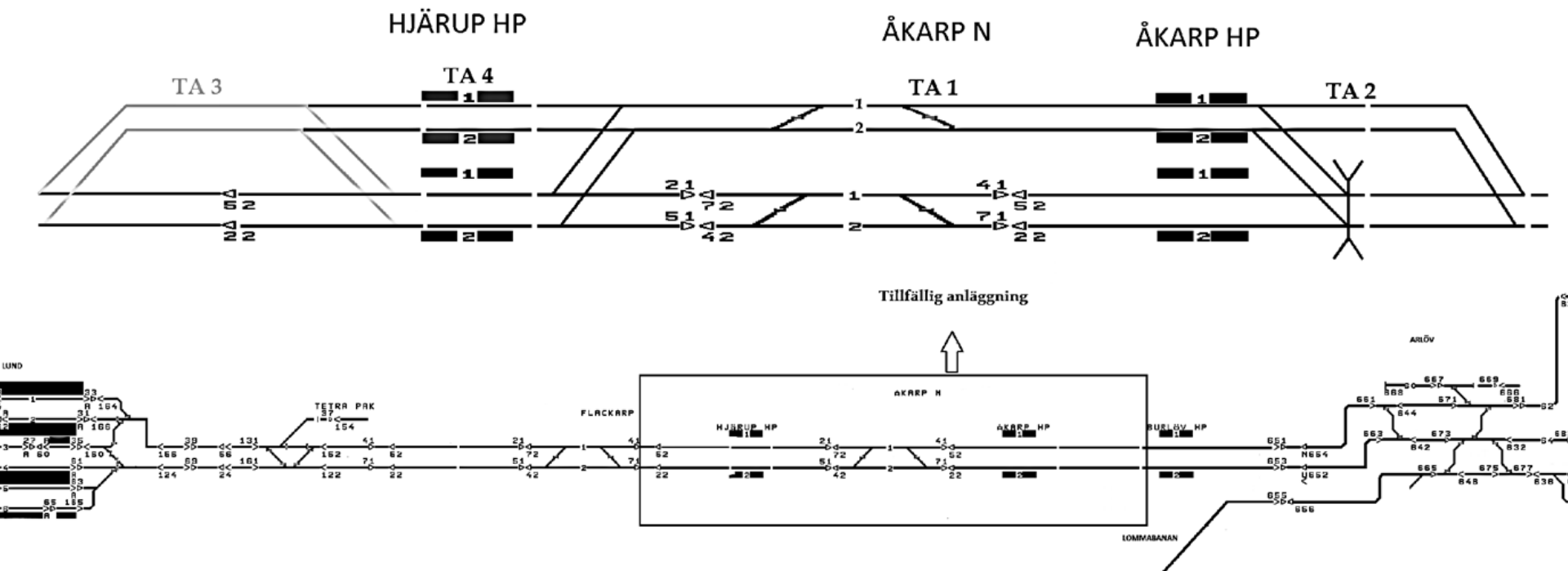
Railway - Conditions

- Track – approx 50 km
- Switches - approx 45
- Catenary - approx 60 km
- ERTMS level 2 - ATC
- Permanent signaling interlocking - Bombardier Ebilock 950
- Temporary signaling plant - relay based
- New signals – approx 150 if ATC

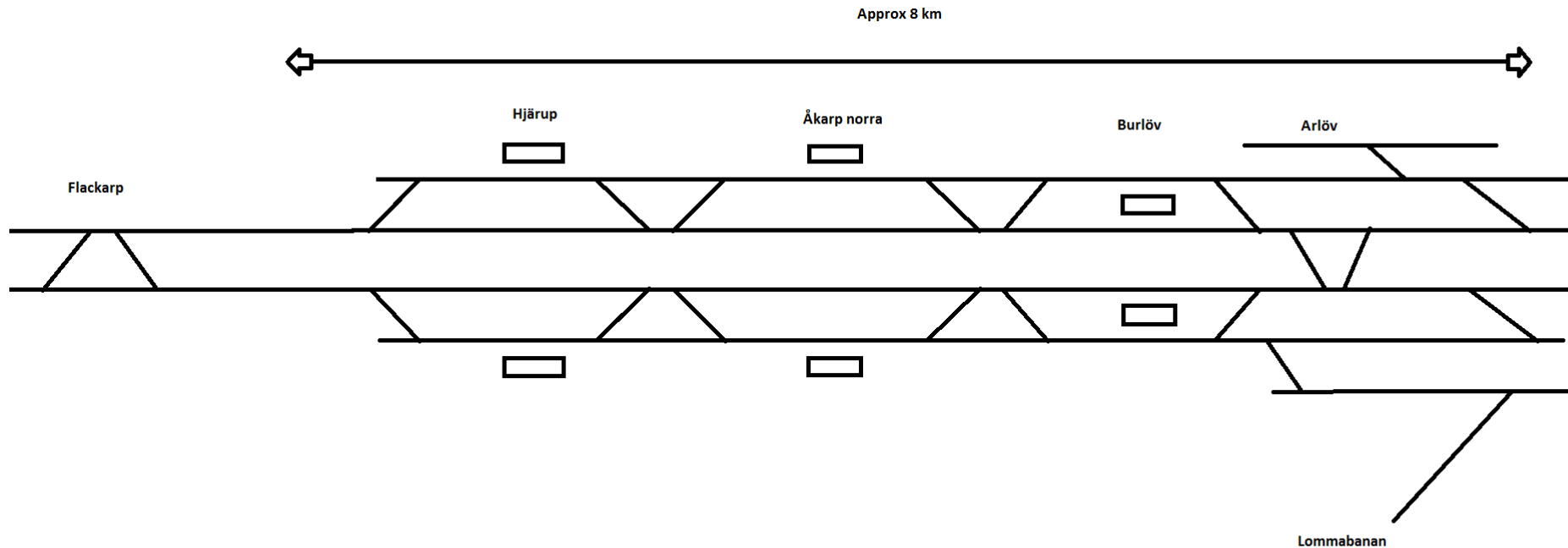
Railway, Åkarp N-Arlöv



Railway – Temporary tracks

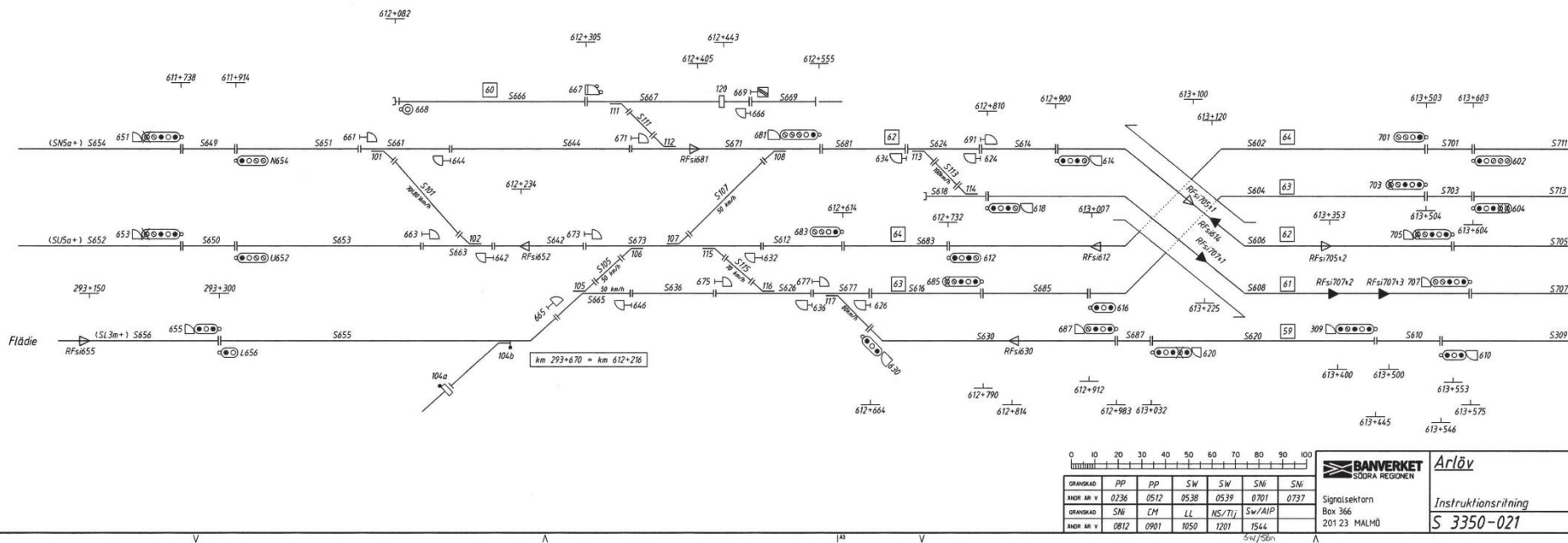


Railway – Tracks, final design



Railway – Arlöv Station

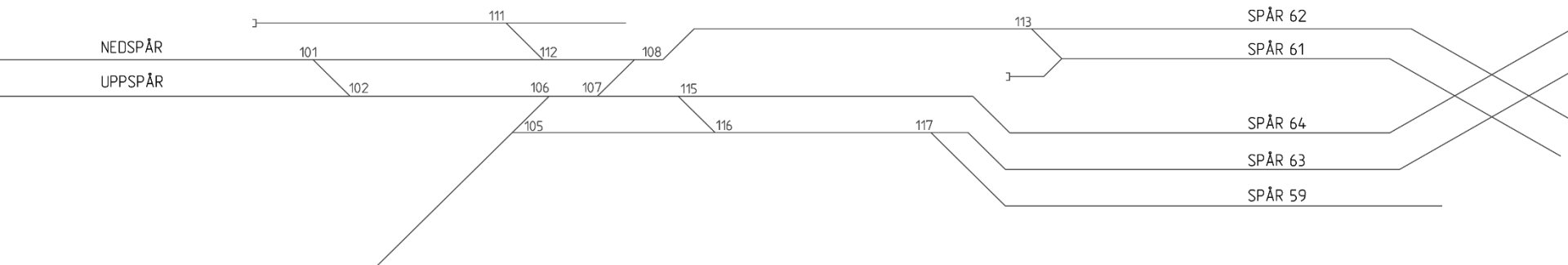
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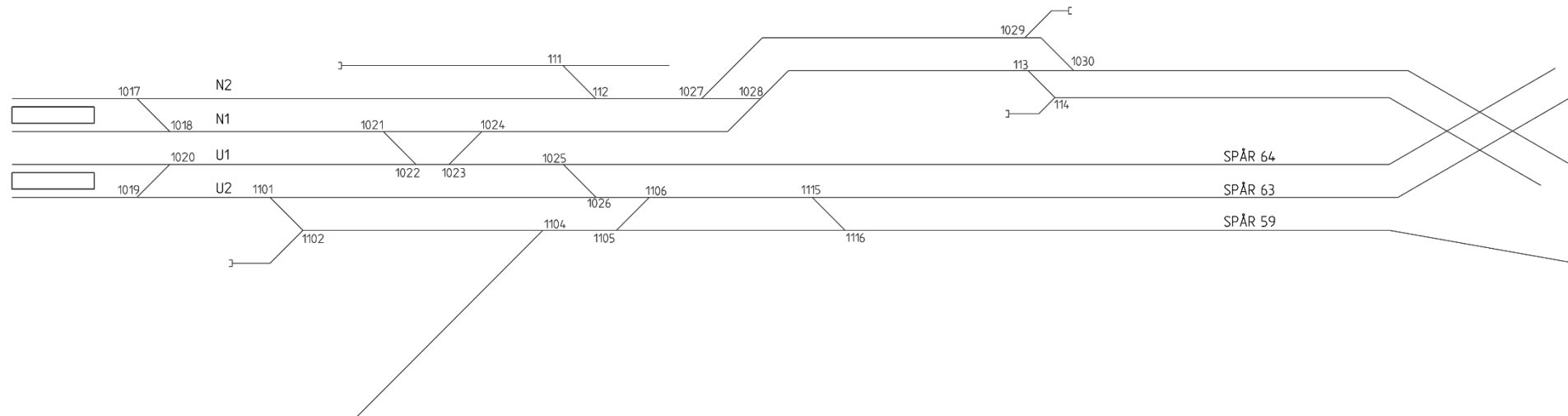
Railway – Arlöv Station

- 400-450 trains per day
- One of the most busiest tracks in Sweden
- Highly sensitive for disturbance
- Only way to the continent from south of Sweden
- Lommabanan - important bypass path
- Right/left change between Sweden and Denmark
- Approx 20 new switches
- Approx 5 000m catenery
- Approx 40 new signals
- Signaling interlocking – Bombardier Ebilock 950

Railway – Existing tracks



Railway – Final, Arlöv



Railway plan & Civil works

Marie Minör, Project Manager Civil Works

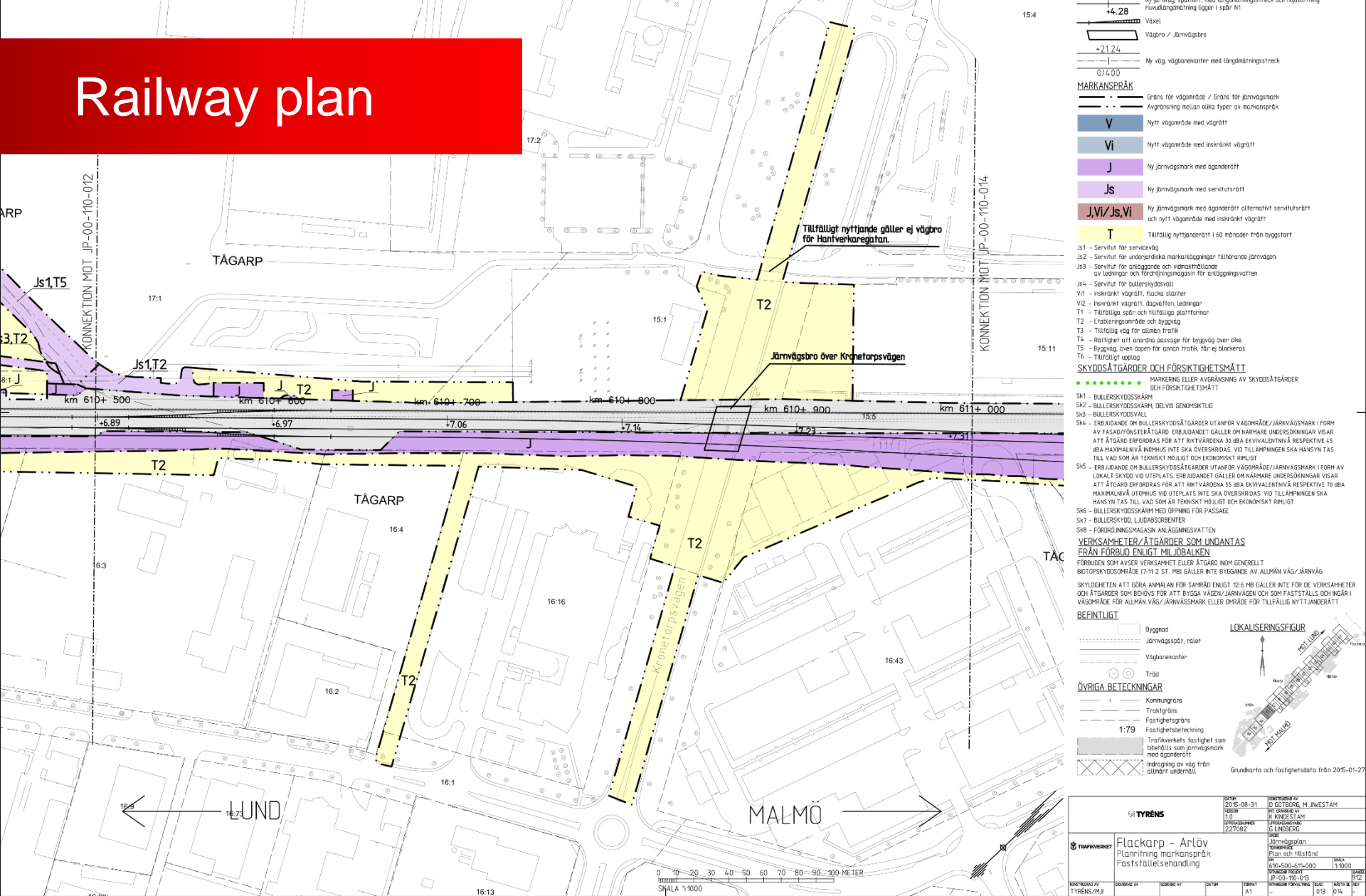
Kristofer Söderberg, Project Manager Civil Works - Construction

Petter Holmqvist, Project Coordinator Civil Works - Construction

Åkarp

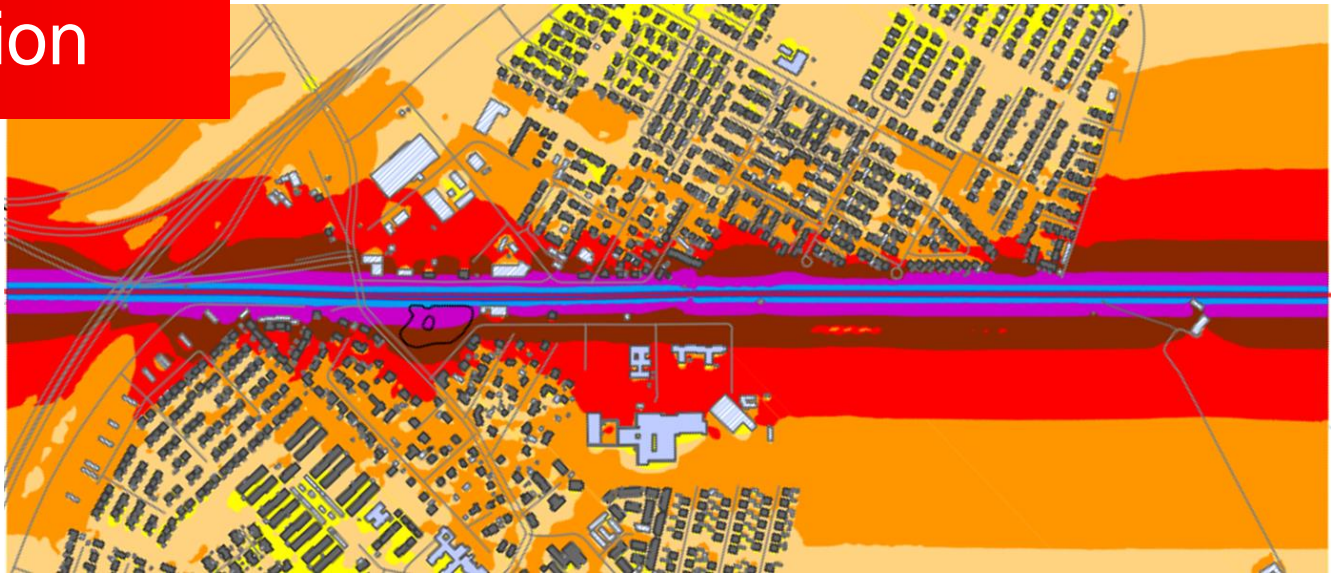


Railway plan

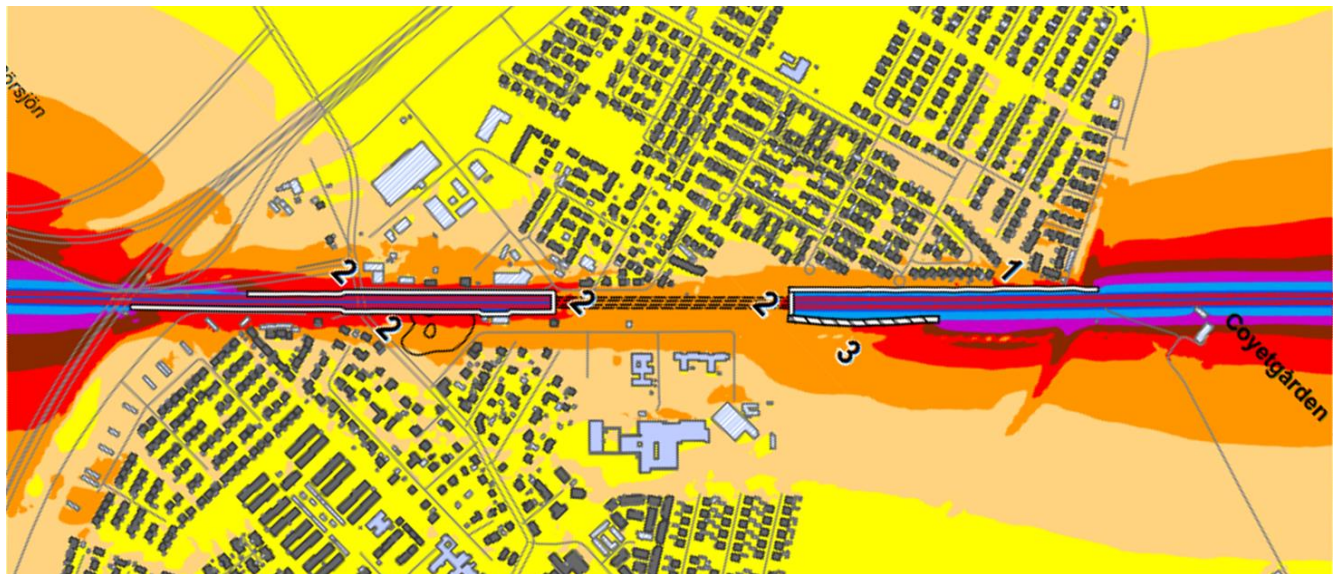


Noise pollution

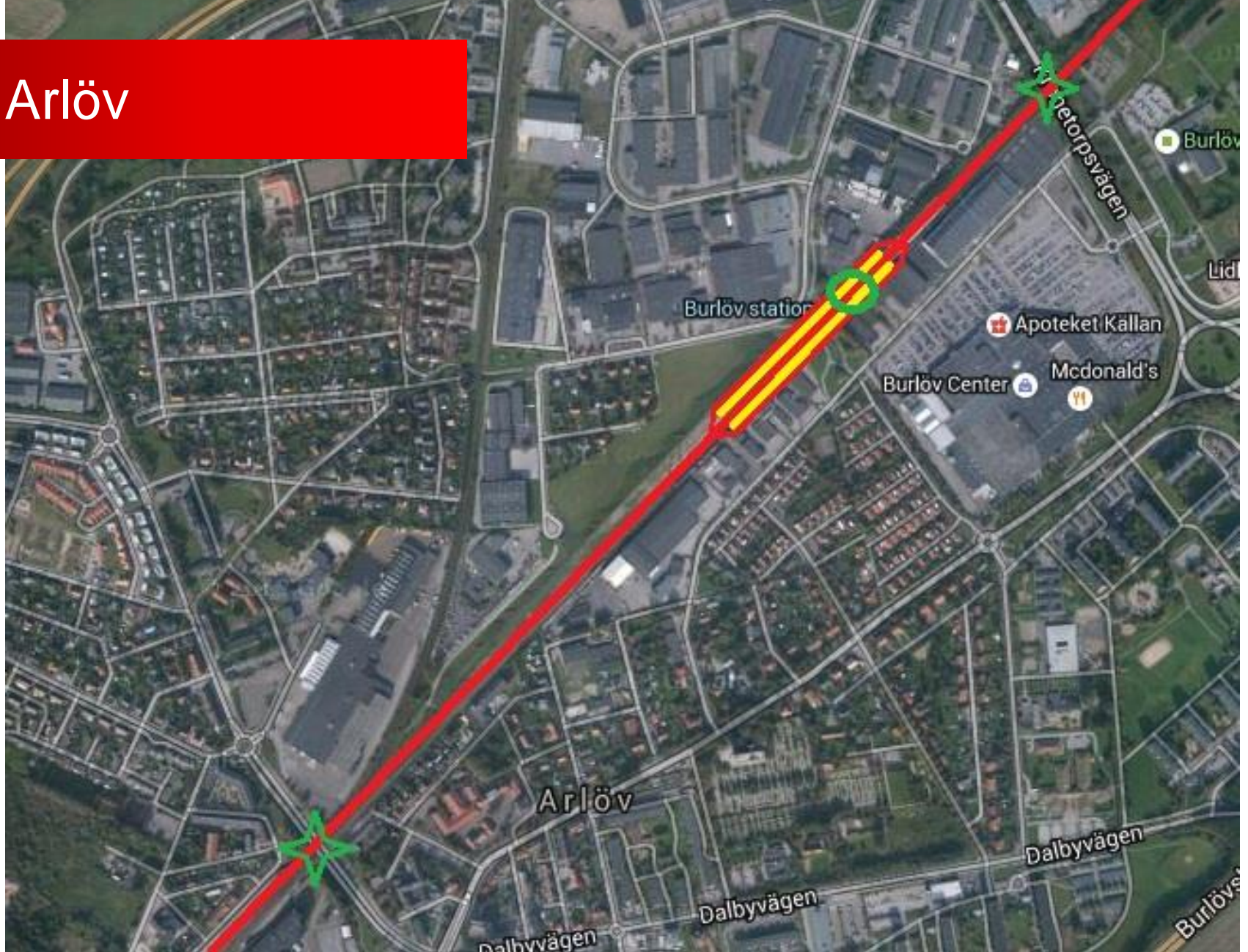
Åkarp today:



Åkarp after:



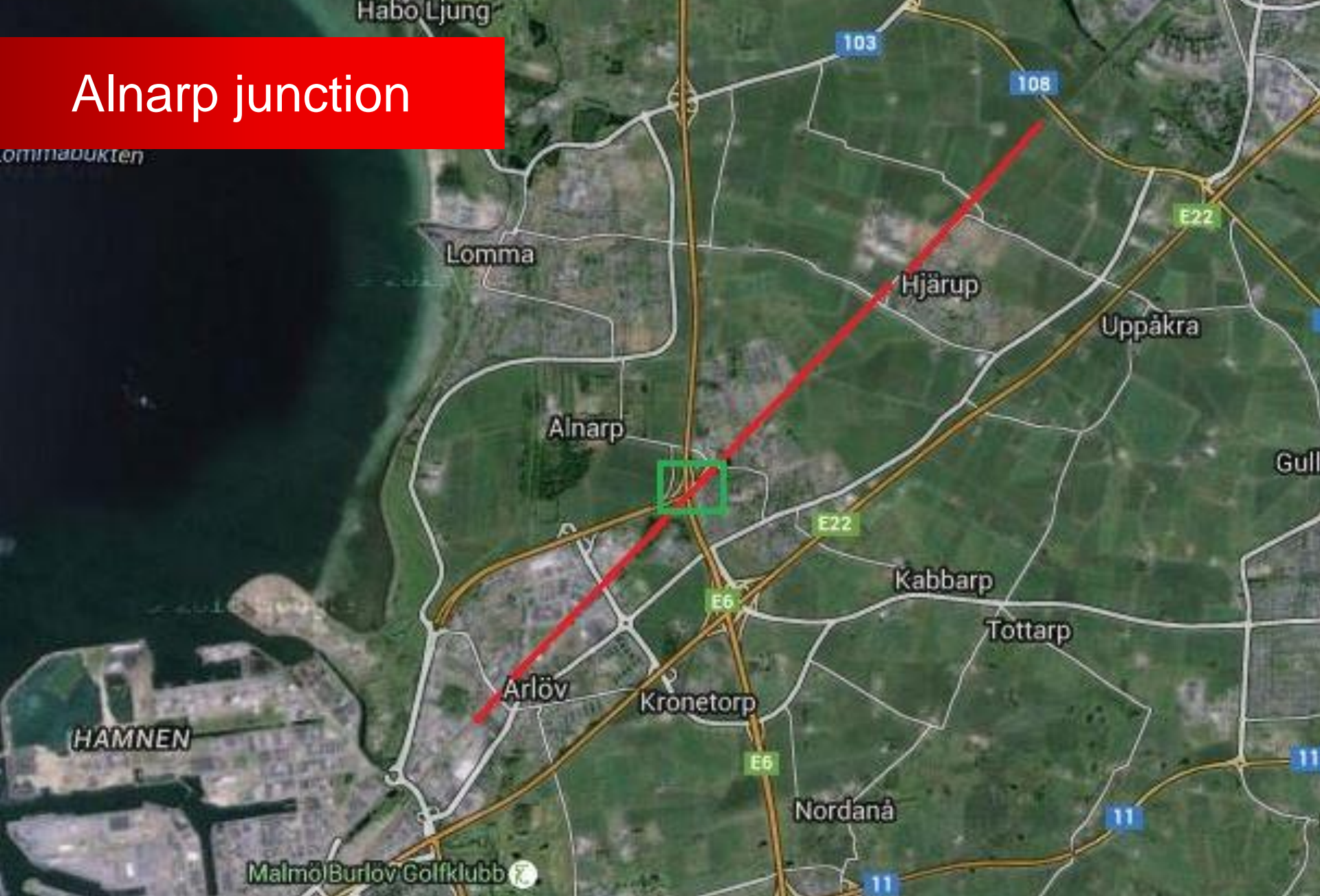
Arlöv



Arlöv/Burlöv Station



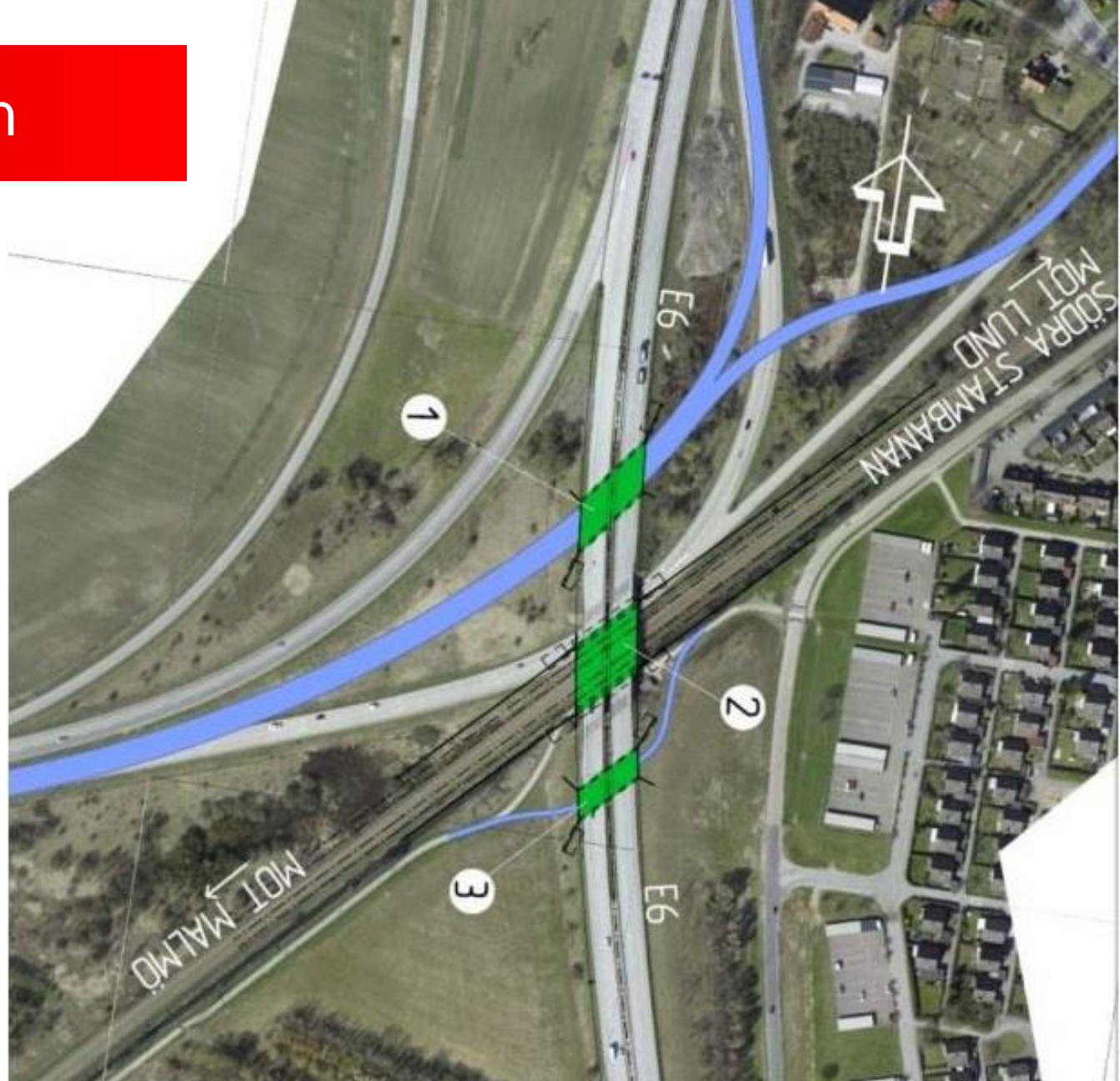
Alnarp junction



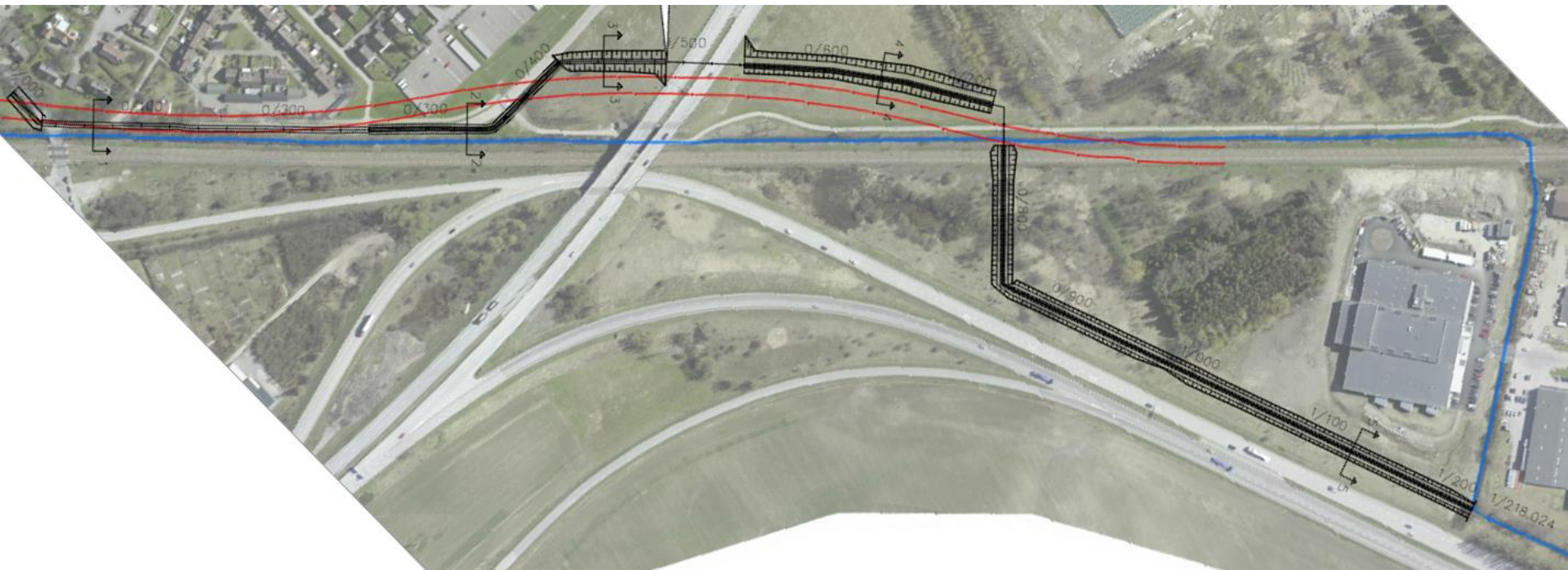
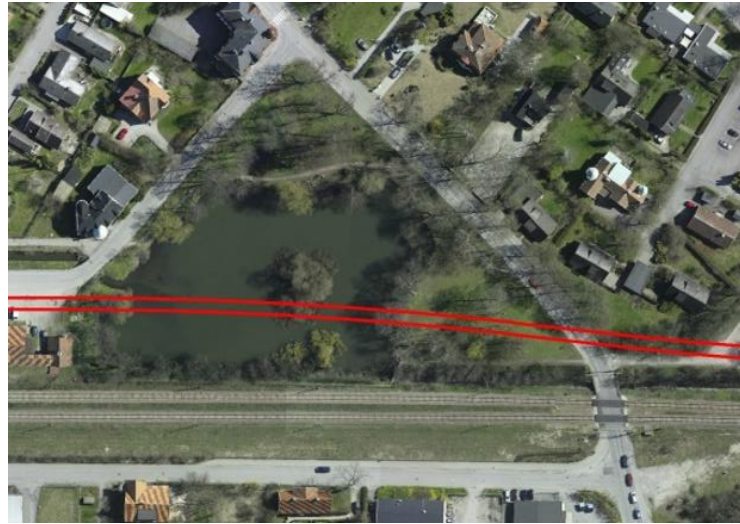
Alnarp junction



Alnarp junction



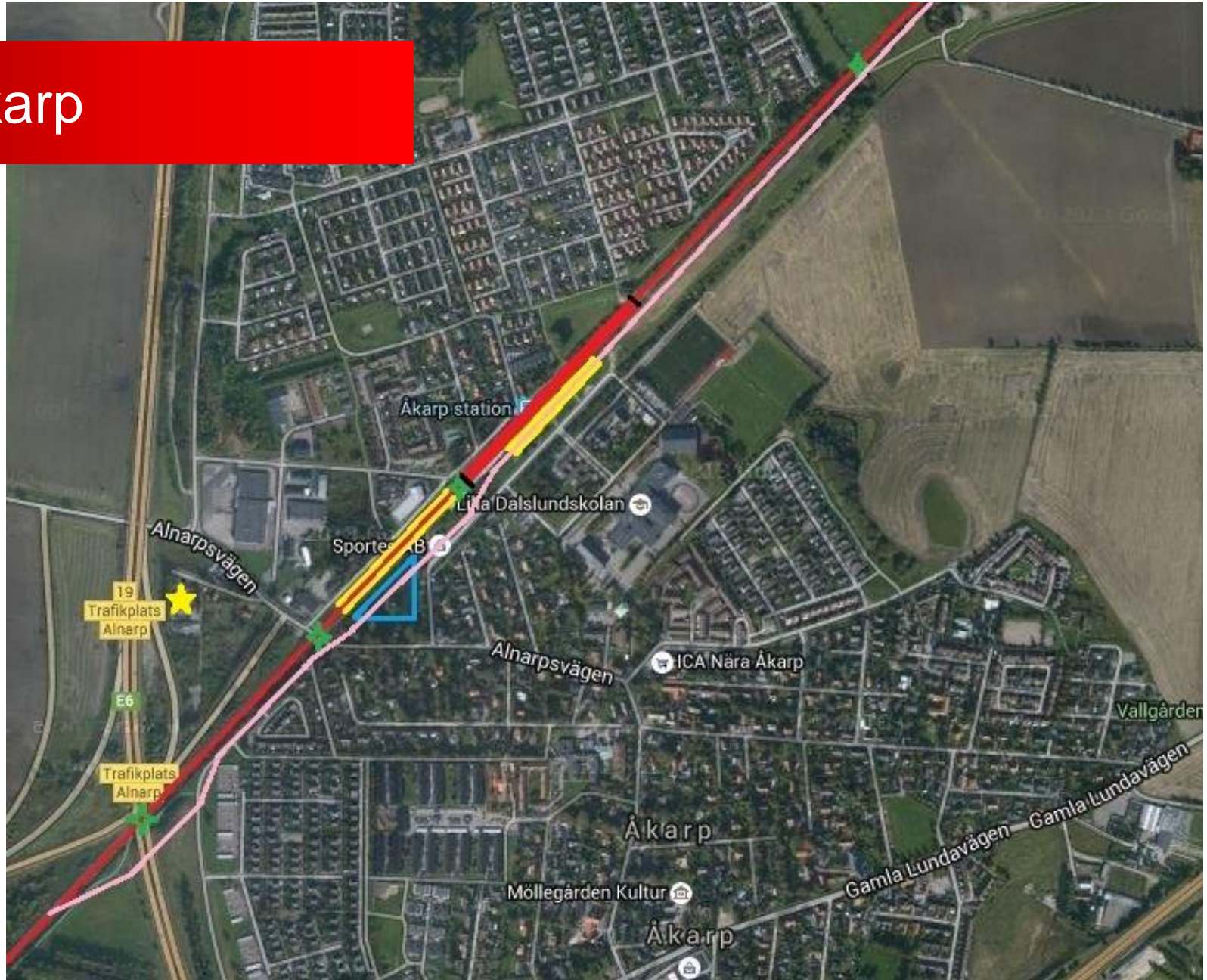
Alnarpsån



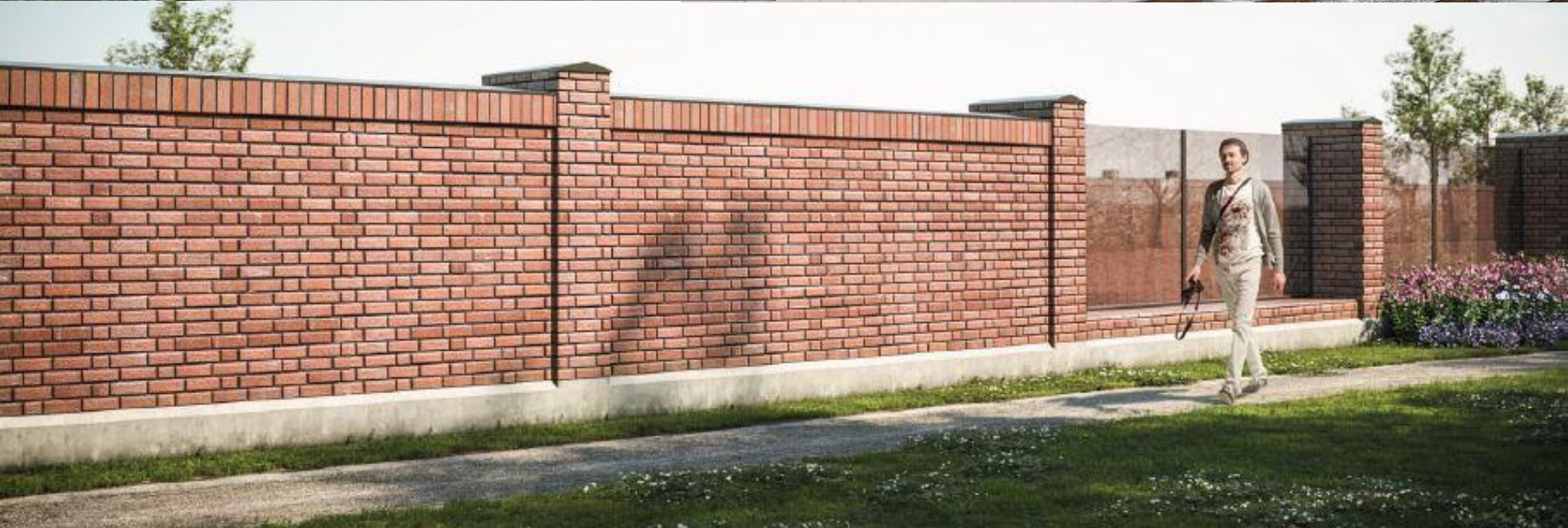
Åkarp



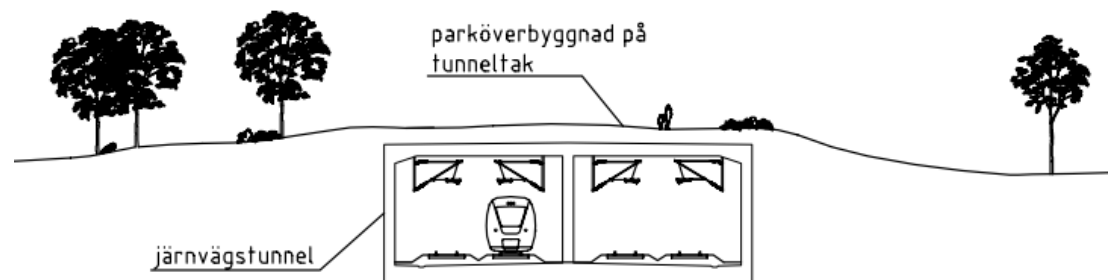
Åkarp



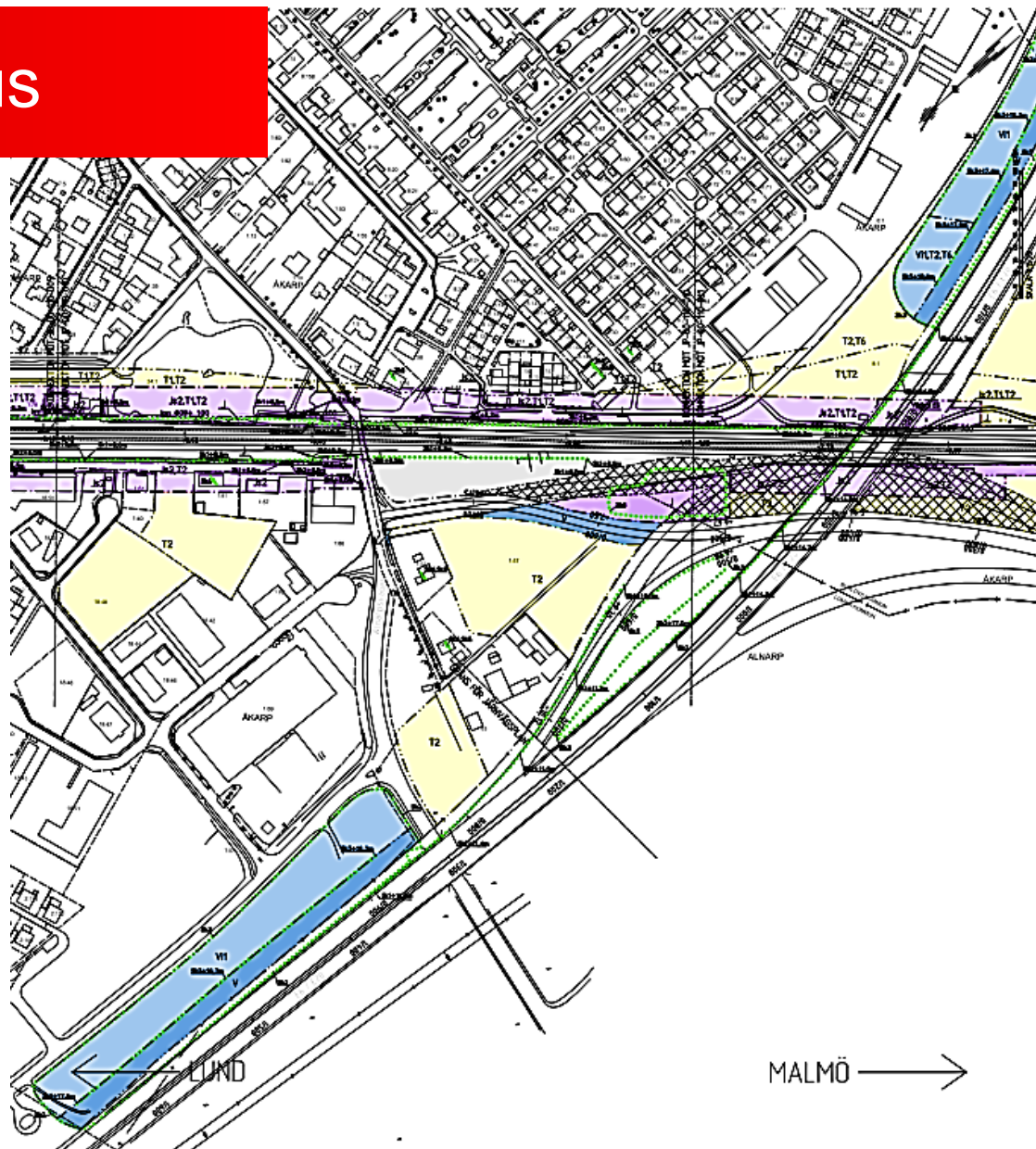
Åkarp Station



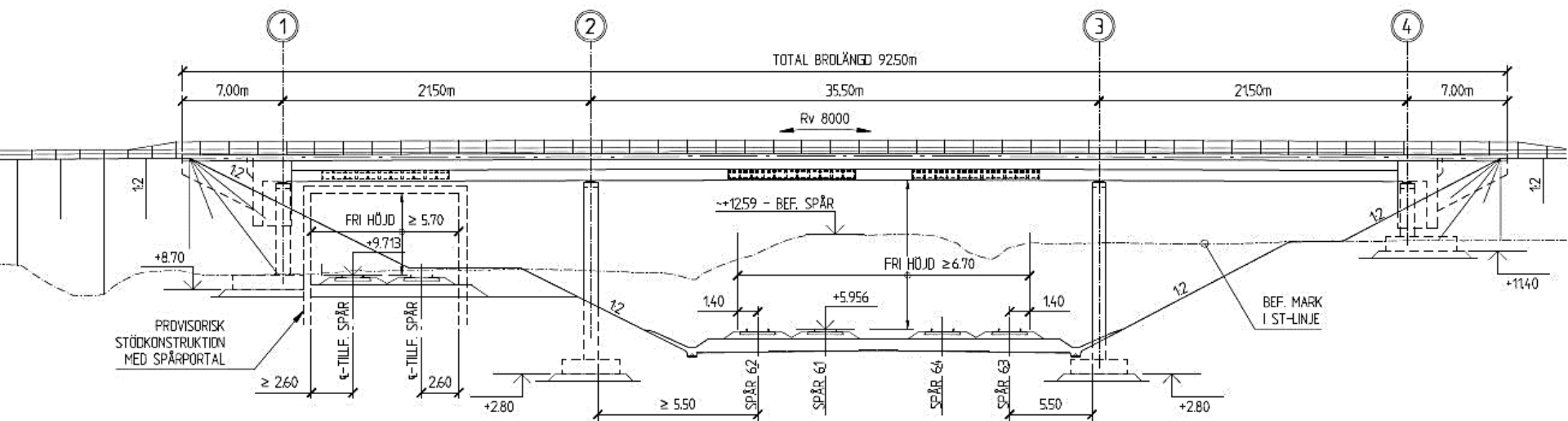
Åkarp - Tunnel



Soil surplus



Åkarp, bridge for Gränsvägen



Hjärup



Hjärup



Hjärup



Collaborative business relationship

Patrik Dymling, Project Manager Performance Management

Collaborative business relationship

Co-location



Collaborative business relationship

Safe working enviroment



Collaborative business relationship

Risk management



Collaborative business relationship

Building information modeling (BIM)





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- **Jens-Peter Eisenschmidt**, Senior Project Manager
jens-peter.eisenschmidt@trafikverket.se +46 70-827 00 49
- **Malin Isaksson**, Procurement Manager
malin.isaksson@trafikverket.se +46 70-724 52 48
- www.trafikverket.se/en/flackarp-arlov
- www.youtube.com/user/Trafikverket
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Trans-European Transport Network (TEN-T)