



# UTF Meeting 2017

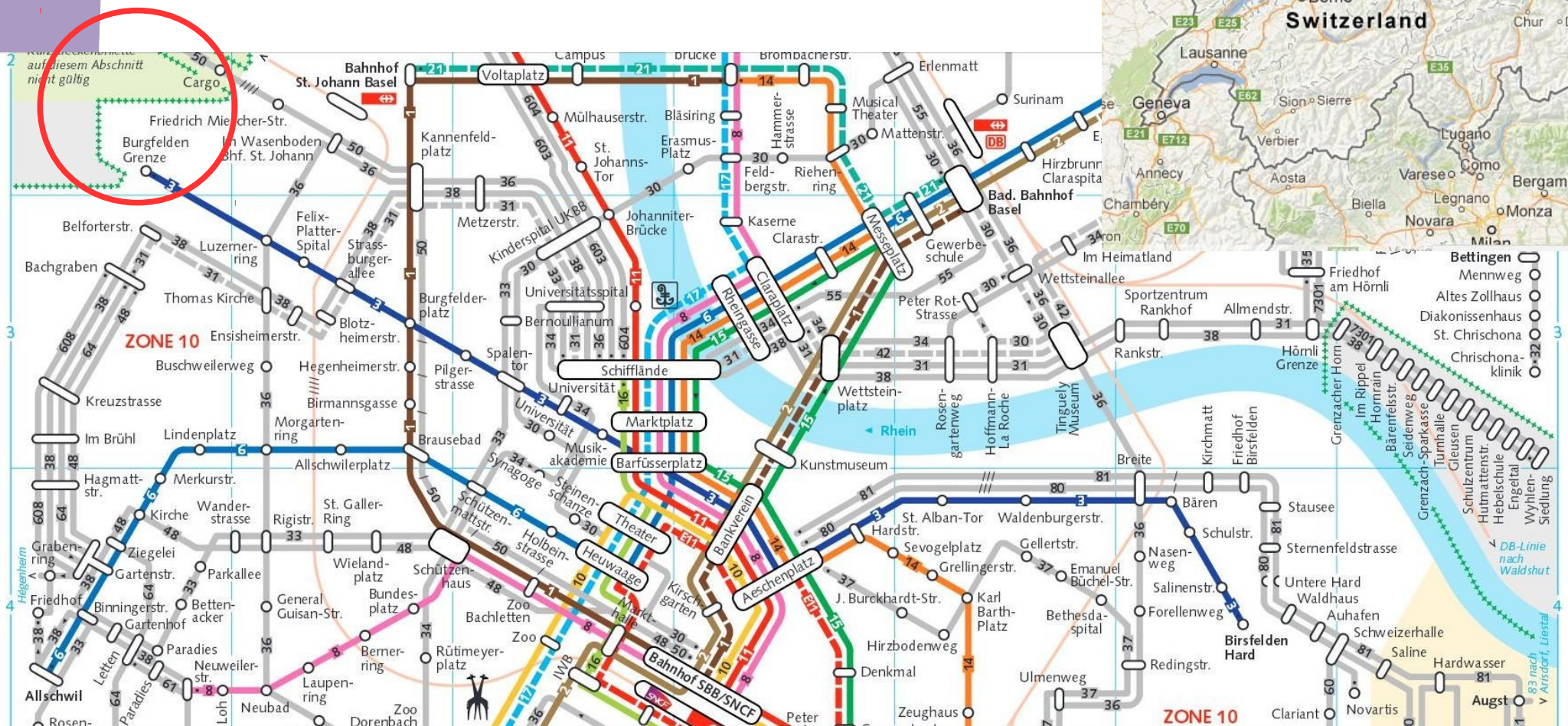
## Bâle Tram Line 3 Extension from Switzerland to France

Laetitia FONTAINE  
STRMTG North-East Office



# Bâle tram network

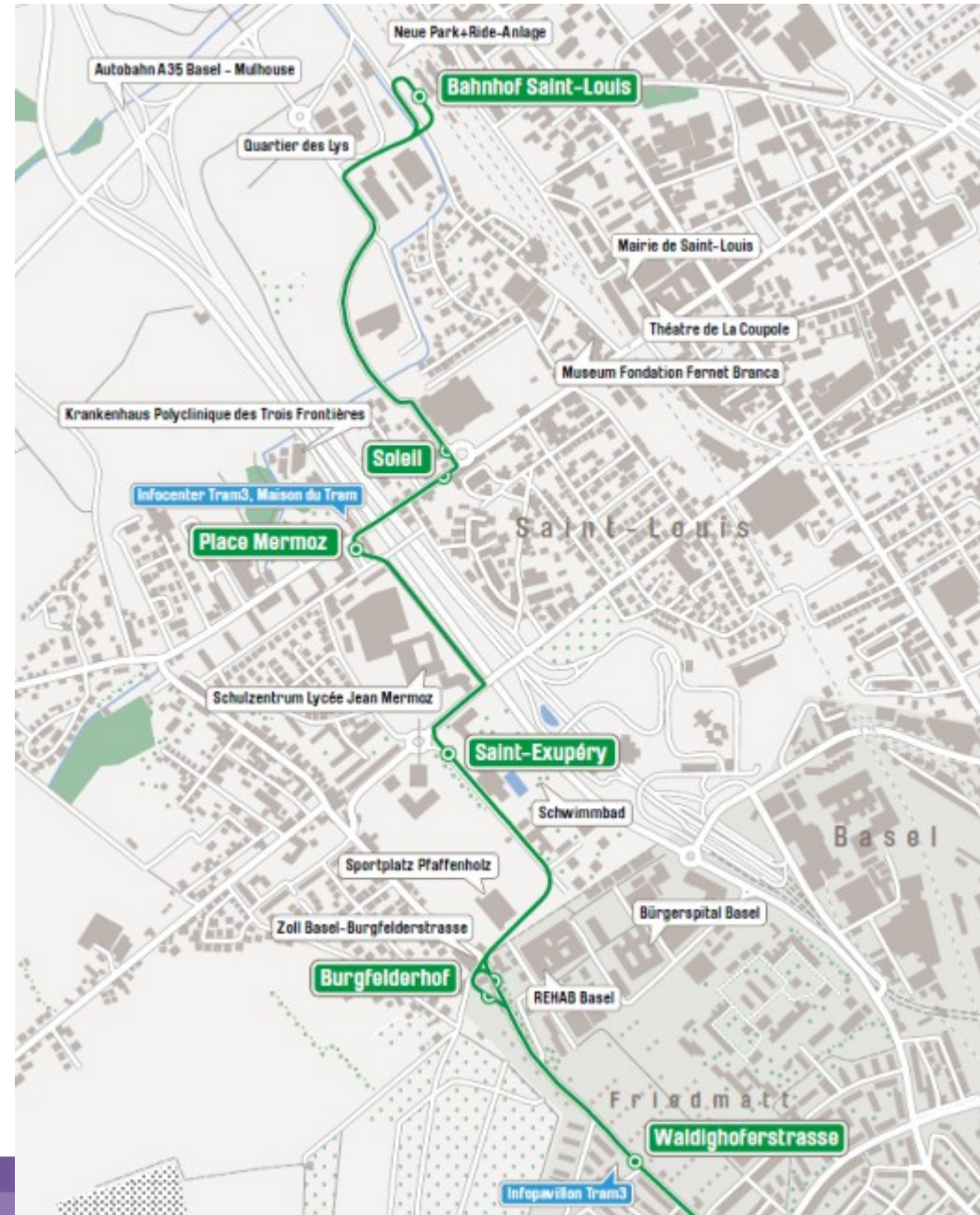
- BVB and BLT = 82 km / 11 lines
- 178 Mio passengers per year
- Collective transports = 28% in 2012 (29% on foot, 20% cyclists)





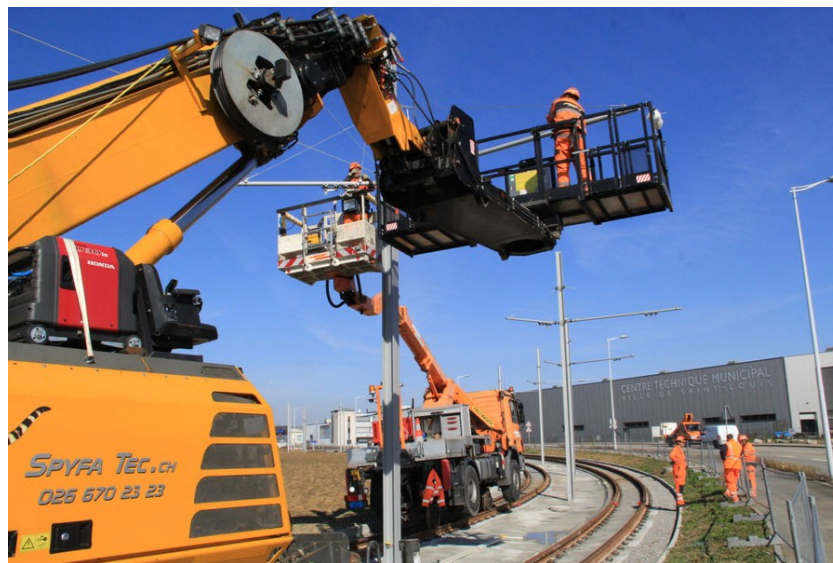
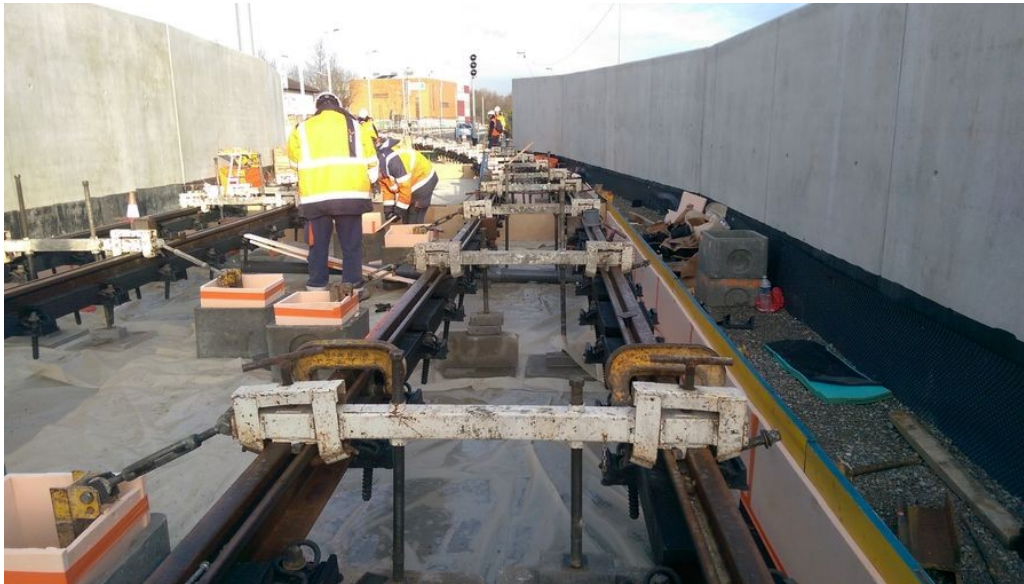
# Overview

- 2,6 kms & 4 stations in France
- Monodirectional
- Meter gauge
- One mixed zone
- A new rolling stock :  
Bombardier Flexity





# Works almost over



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19/05/2017

# Urban insertion

- The Swiss-French border
- Fixed obstacles
- Mixed zone
- One roundabout
- Ways out
- Cycling paths
- Terminus



# The border

- Re-organisation of the area
- New cover
- Keeping cars on the street
- A loop for trams not driving on the extension, which has raised a complicated juristic question (see next slide)







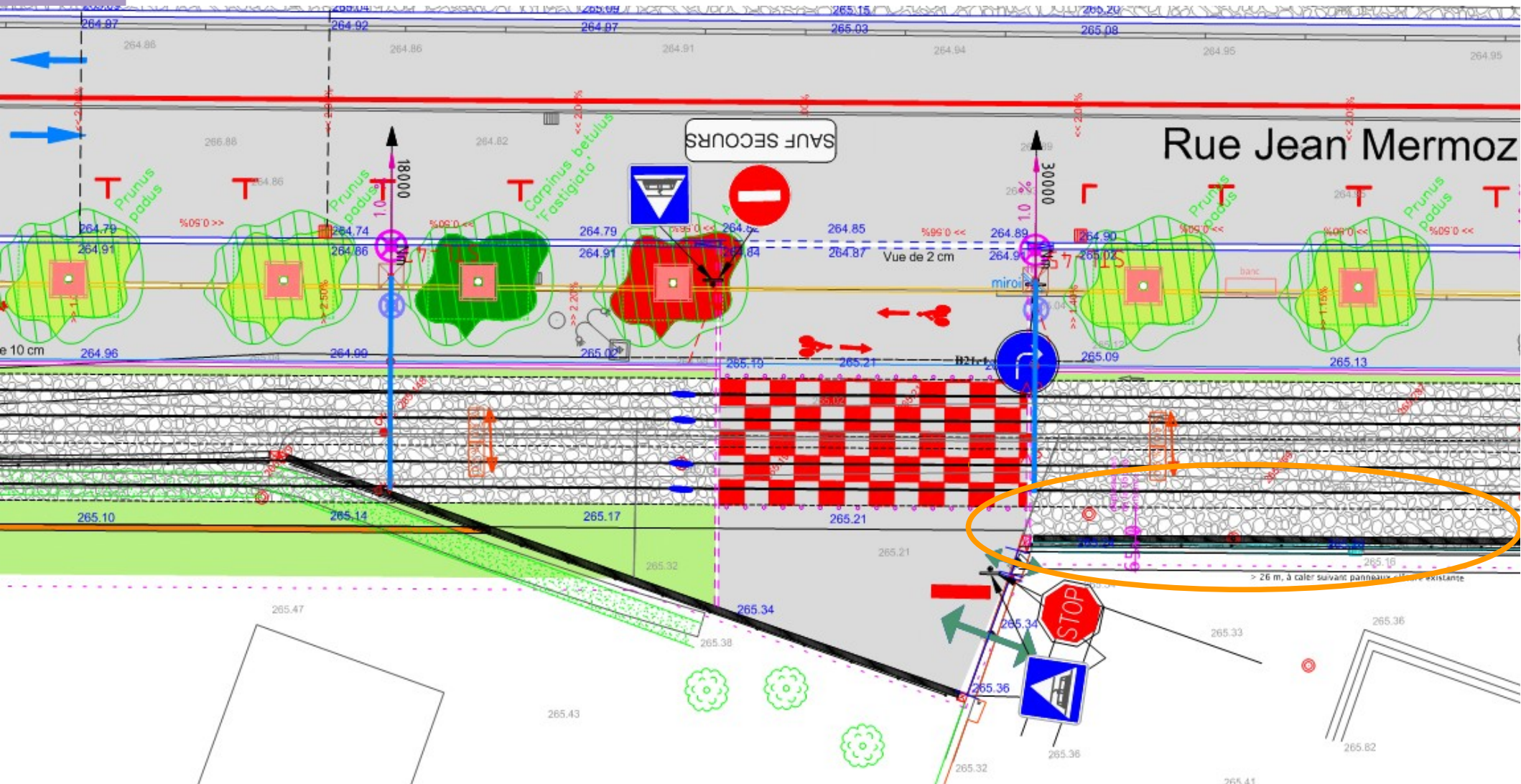


# Fixed obstacles



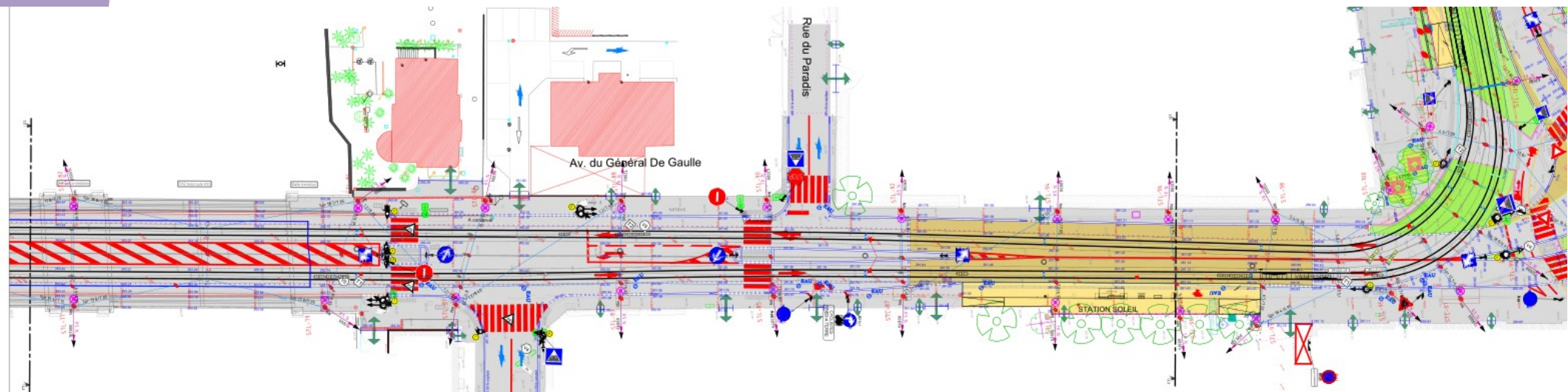
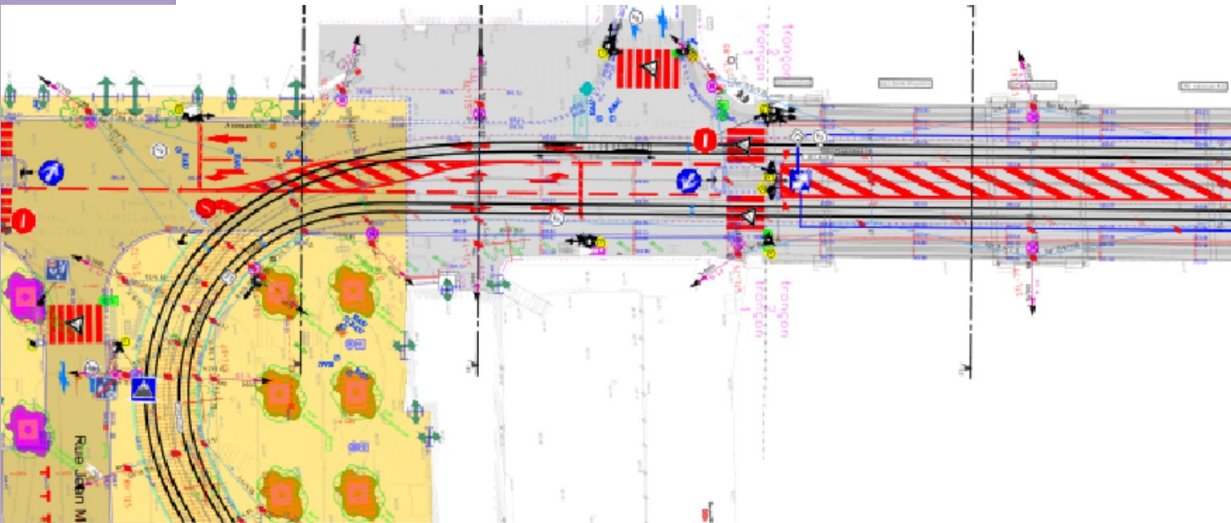


# Fixed obstacles



# Mixed zone

- No particular problem except the station  
=> separators have been added
- One pedestrian path has been added



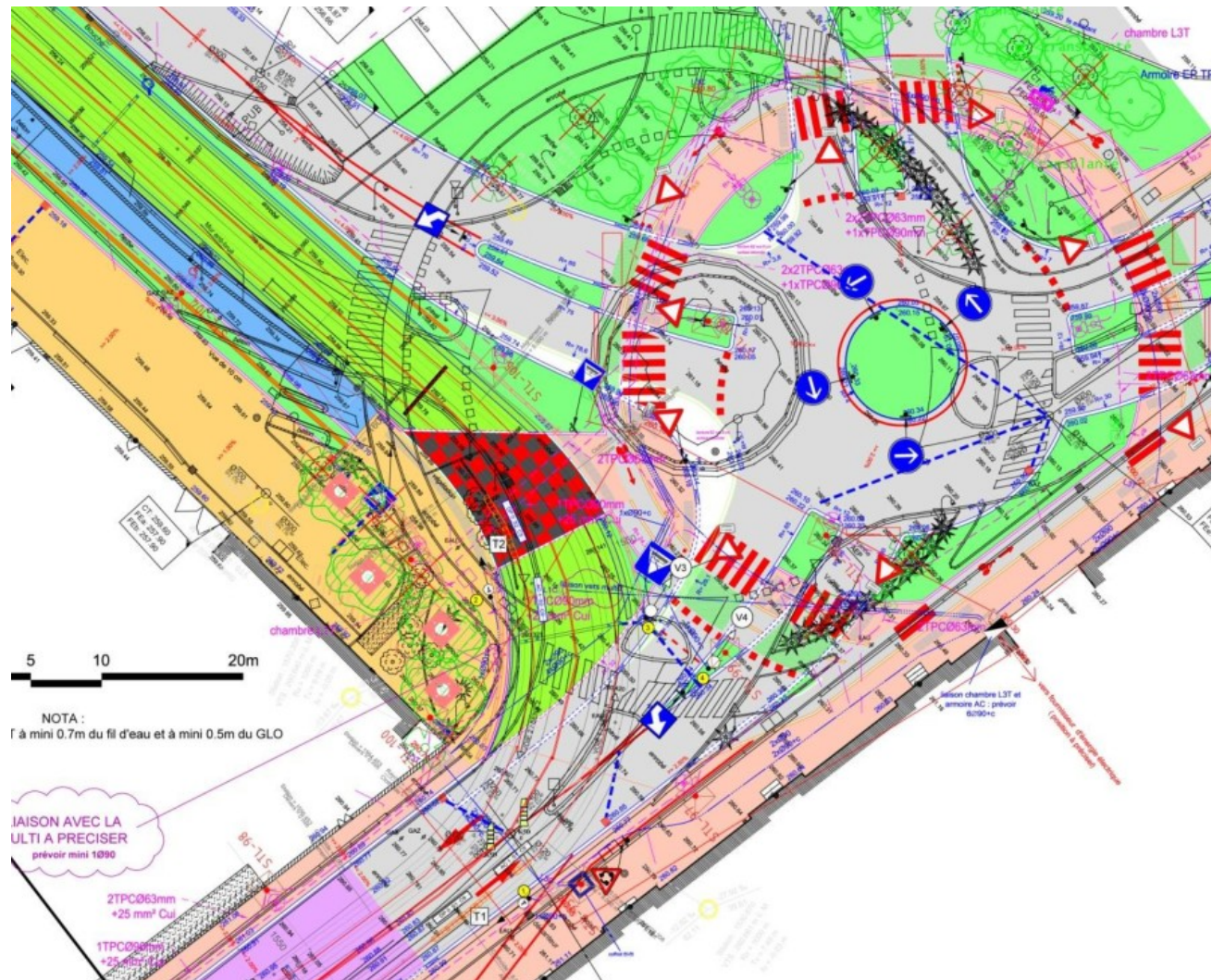






# One roundabout

- A way out crosses the tram tracks just 15 meters after
- Red flashing lights have been doubled for good vision by car drivers
- + special marking on the ground
- Pedestrian small zone
- Entrance of the mixed zone



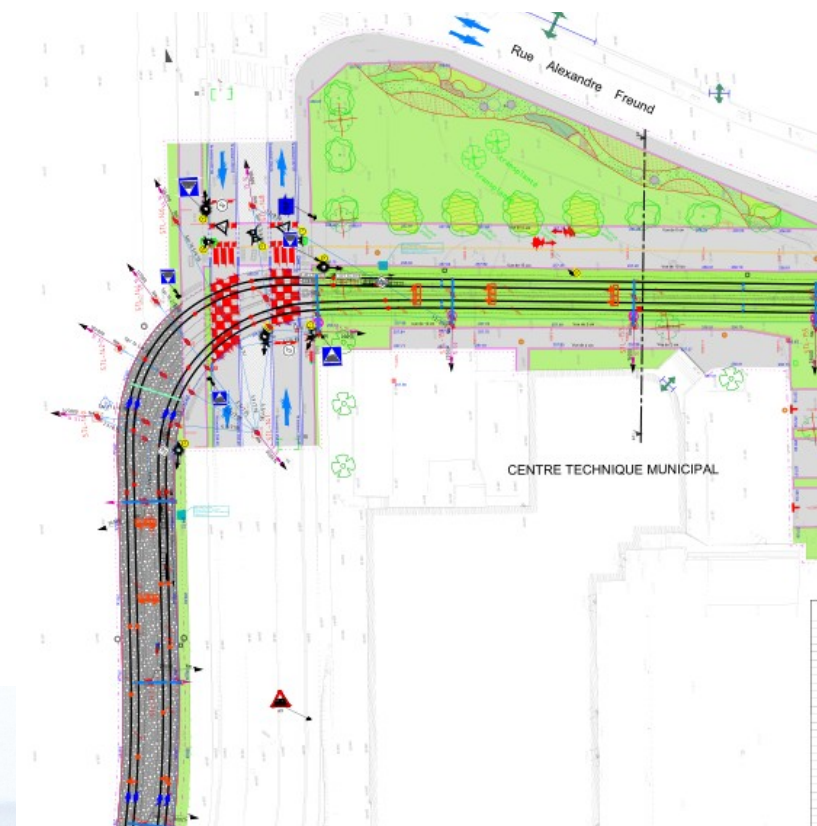






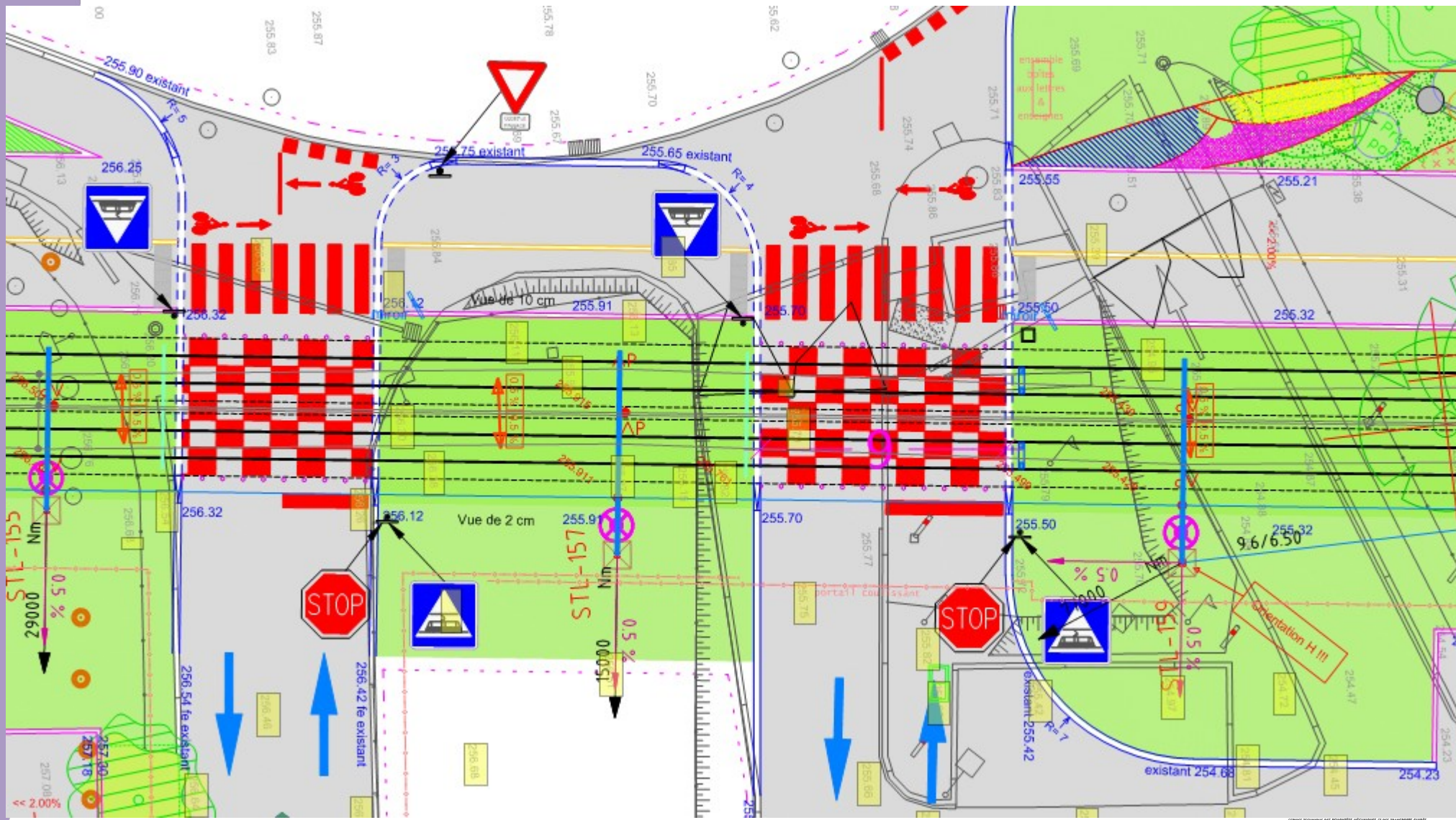
# Ways out

- First plans showed entrance directly and close to the tracks
- Then an entrance has been replaced on the other side of the building
- Fences have been moved backward to avoid lack of visibility





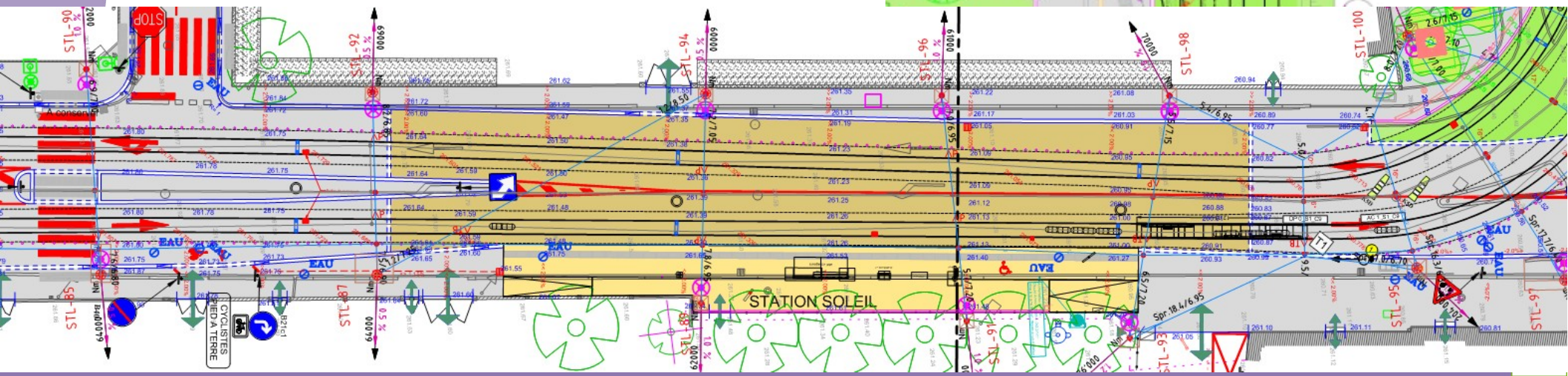
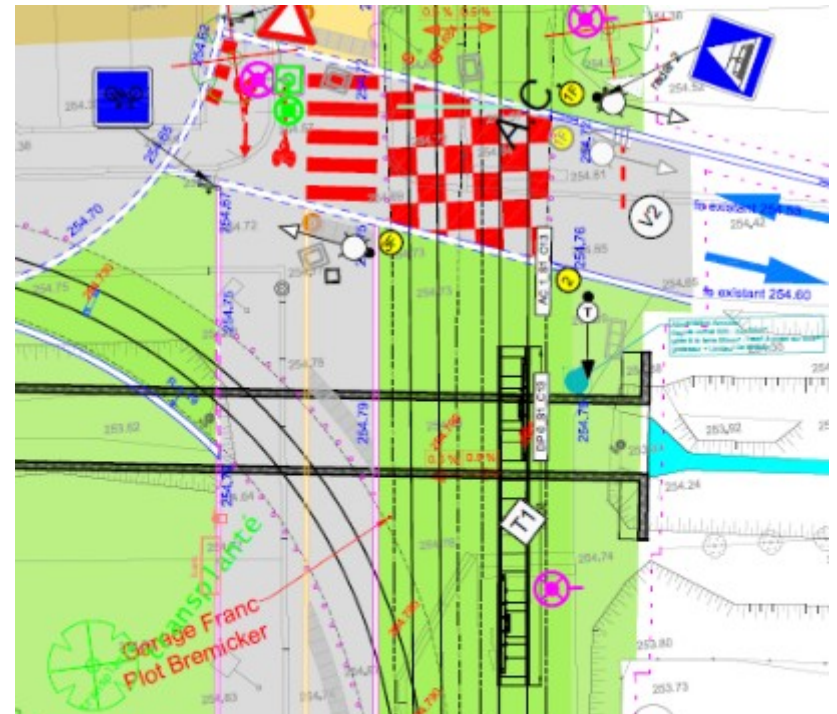
# Fences





# Cycling paths

- In the industrial zone : the path crosses when the tram tracks turn...  
The angle is quite tolerable
- In the mixed zone : they have to cycle behind the station...





# Terminus

- The terminus is a loop since the tram is an unidirectional rolling stock
- Pavements to distinguish the platform from the tracks
- Multimodal point : train station, P+R, buses station





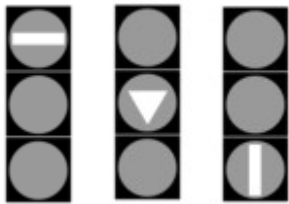
# Works at the terminus





# Urban French & Swiss signals

- Bâle trafic signalisation



- French IISR signalisation



- Technical approach // juristic approach



# Rolling stocks

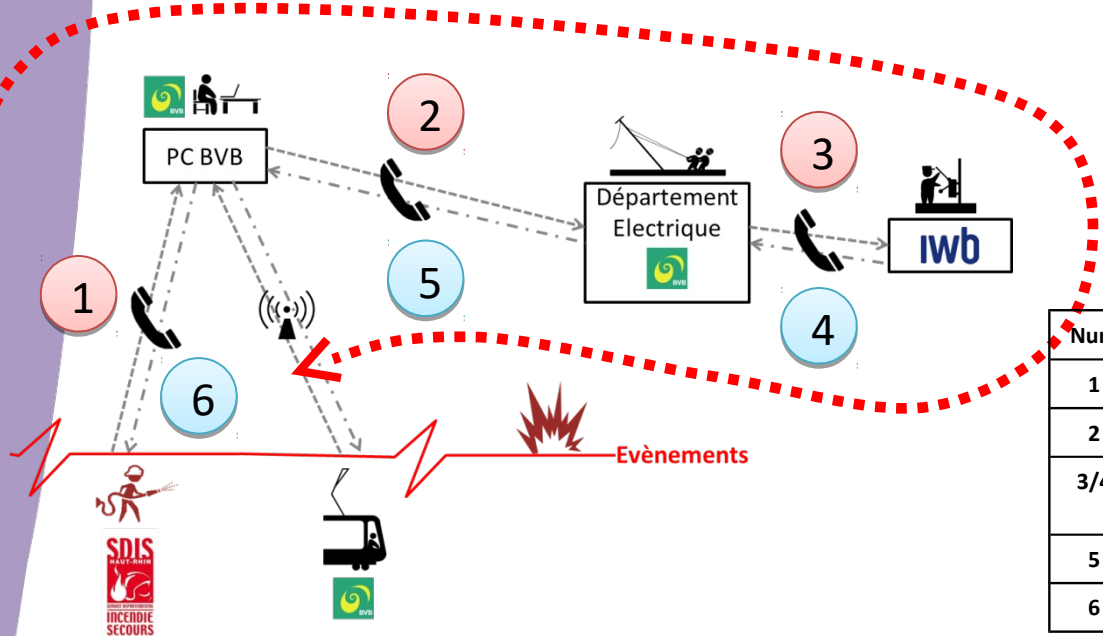
- No cross-acceptance possible yet between France and Switzerland
- Bâle has bought new rolling stocks to match our expectations and the OFT's too = Bombardier Flexity Basel
- 



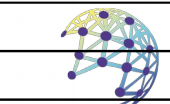


# Energy supply and emergency stop

- No possibility to cut the energy directly from the PCC in case of emergency
- But the energy supplier
- So a specific procedure has been installed and tested before the tests : in less than 2 minutes, the energy supply must be cut – when the demand comes from the driver or the firemen



Num	Description	
1	Appel du SDIS	0s
2	Réception de l'appel par le PC BVB, traitement et appel SUBVB	60s
3/4	Réception de l'appel par SUBVB, traitement, appel IWB et confirmation de coupure par IWB	150s
5	Confirmation de la coupure de SUBVB à PCBVB	180s
6	Confirmation coupure de PCBVB à SDIS	210s





# Operational methods

- Operator = BVB = Basler Verkehrs-Betrieb
- Decree STPG asks for a RSE (Règlement de Sécurité de l'Exploitation). Mandatory. Based on existing operating rules and the RSE refers to them
- “Internal control” as required by the STPG, in a safety pole
- Tram drivers must speak basic French and PC regulators must speak good French to exchange safely with the French firemen mostly.
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# Next steps

- Authorisation given by STRMTG and then the Prefect = 23/11
- Operation starts on the 9/12/17
- Extension to the airport (2026)







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**Thank you for  
your attention!**