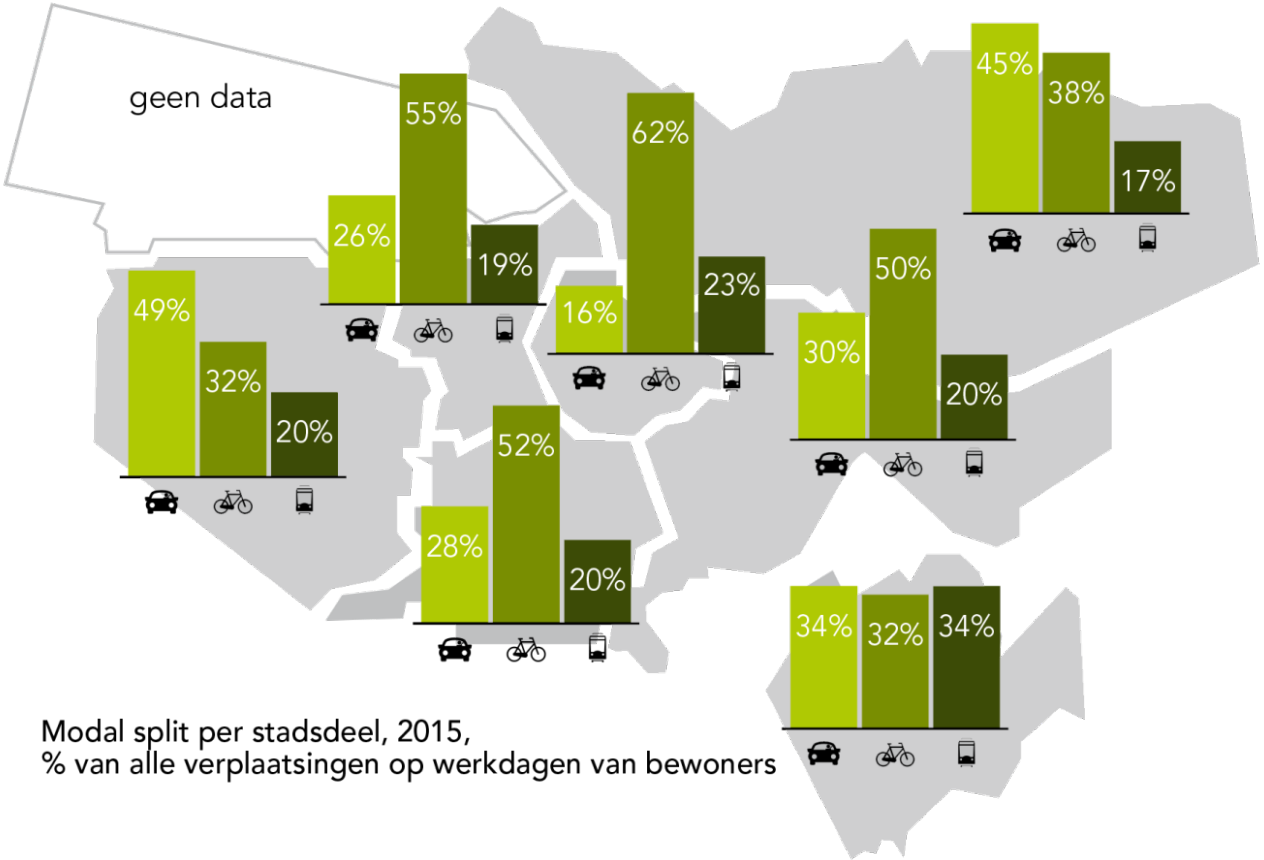
Gemeente Amsterdam

Amsterdam Bike City

Junction Design in a compact city

Kees Vernooij
Sjoerd Linders

Modal split (car-bike-public transport)



Modal split per stadsdeel, 2015,
% van alle verplaatsingen op werkdagen van bewoners

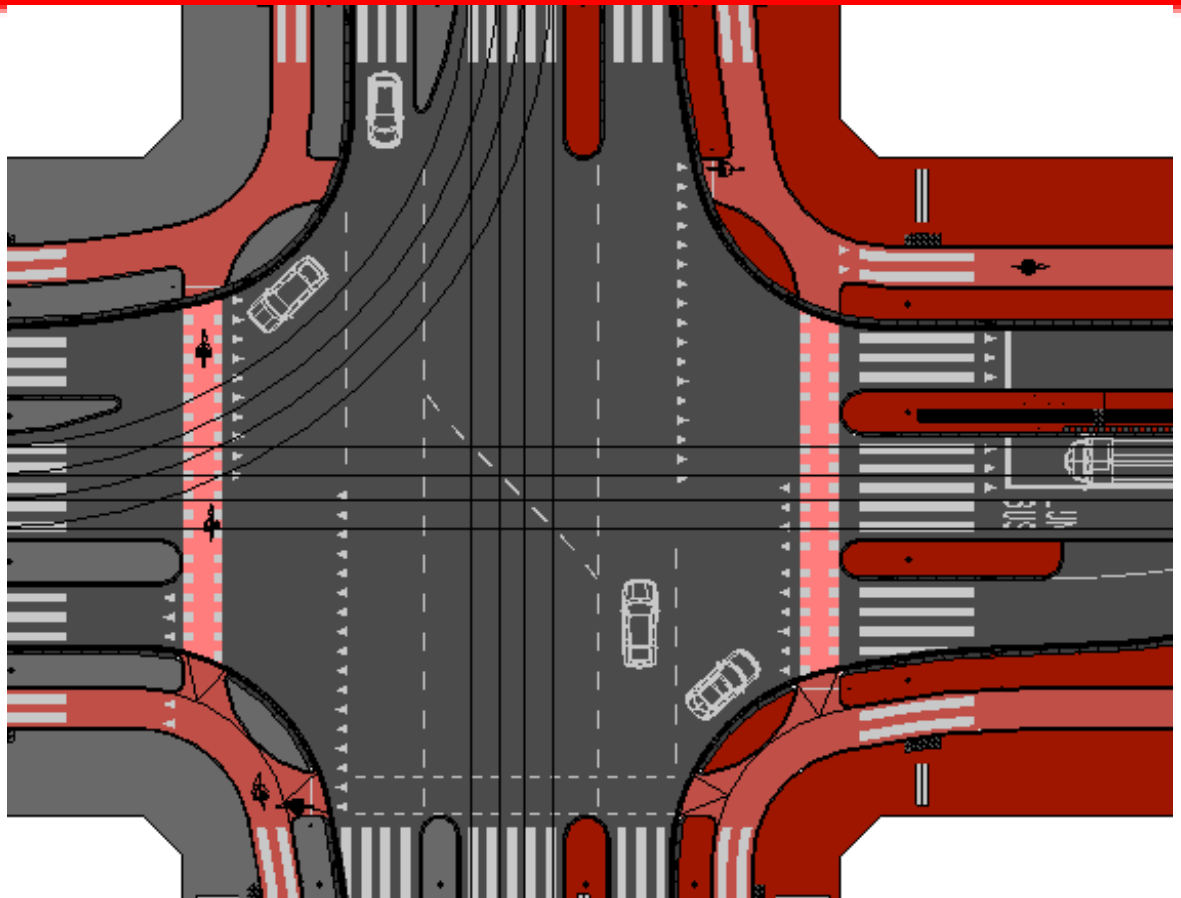
Sustainable traffic system

30 km/hour

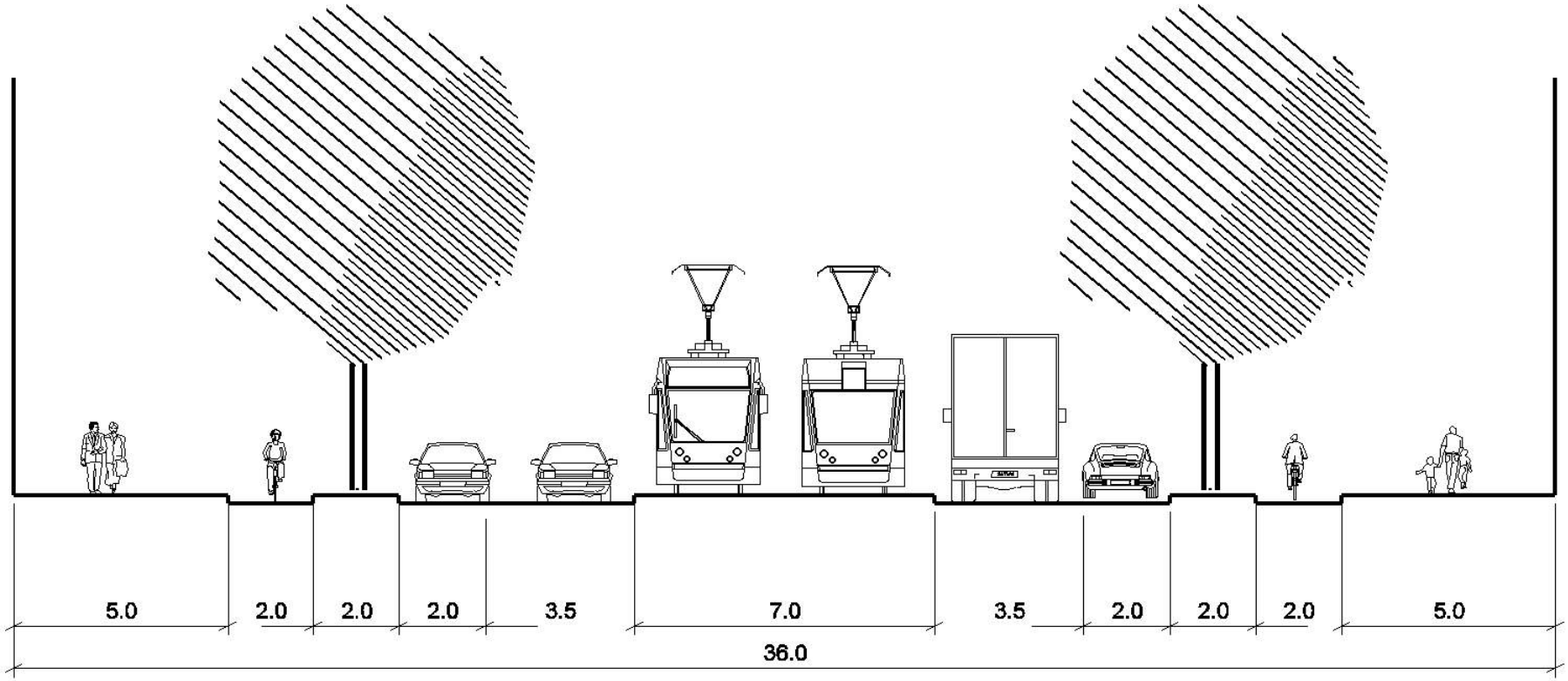
50 km/hour

https://maps.amsterdam.nl/30km/?LANG=nl

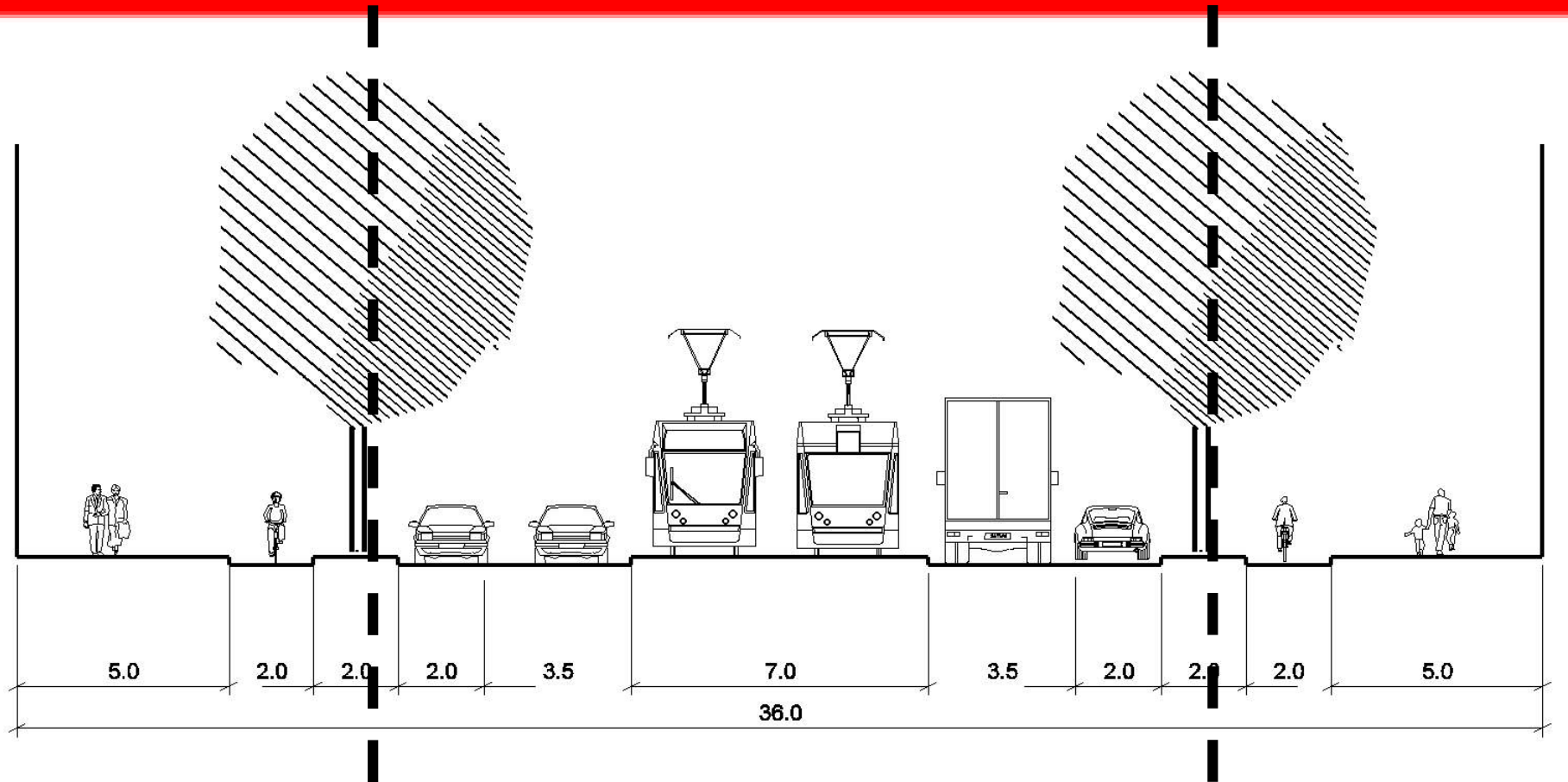
Sustainable traffic system



Ideal situation



Is not enough if street is max. 20 m wide



Conflicts

Congestion

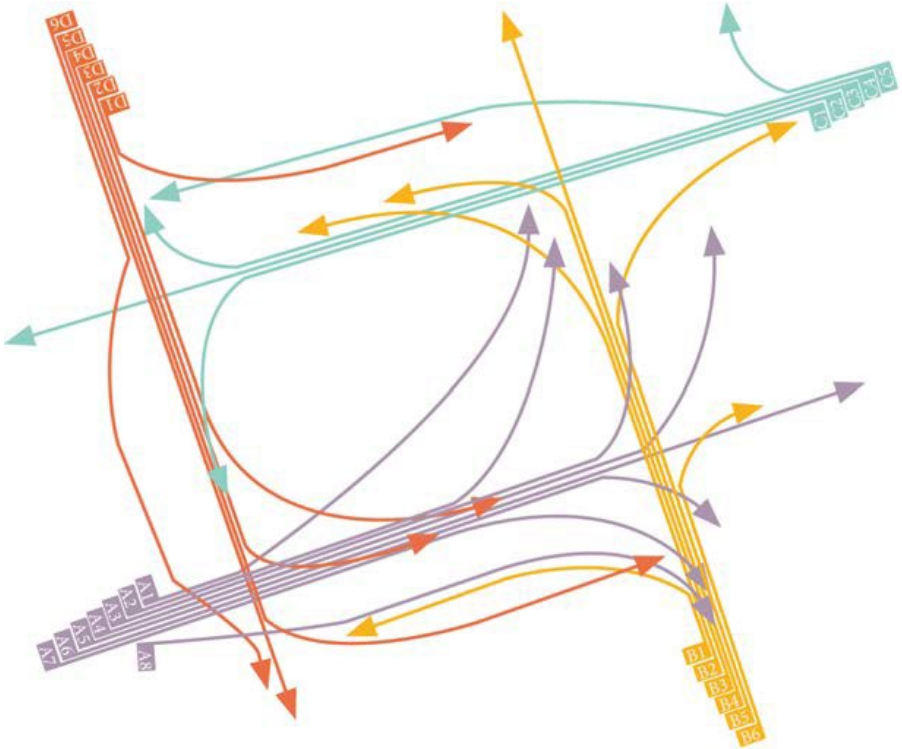
Premium Reseller

A'dam-Zuid
Osdorp
Amstelveen
Den Haag
A'dam-West

From 2014 - new way of intersection design

- **Bicycle traffic jams**
- **Political will to work on capacity & flow**
- **More analytical before (and after)**
- **Design sessions**
- **To increase flow & capacity for bicyclists, while not disturbing other modes**

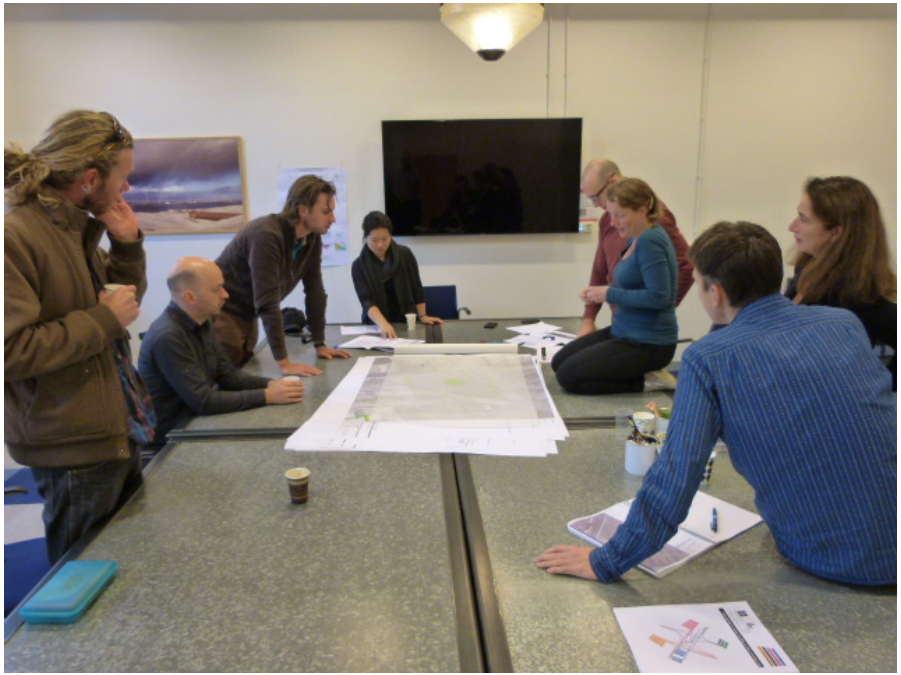
Analyses of desire lines & volumes



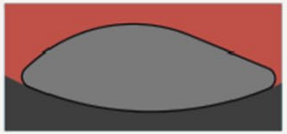
Choreography of an intersection

Film footage to analyse behavior

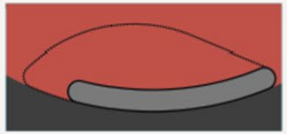
Design sessions of junctions



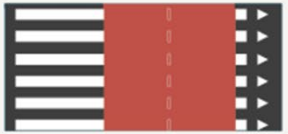
Small measures

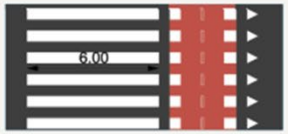


6a-b



6c-d





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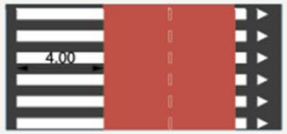
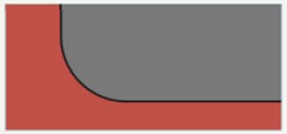
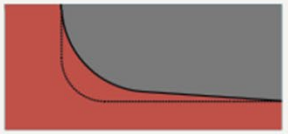
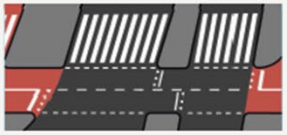


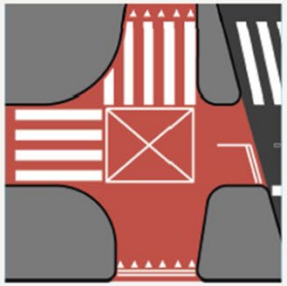


6g-h

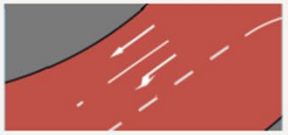




6i-j



6k-l



TOOLBOX
FIETSVRIENDELIJKE
KRUISPUNTEN
IN AMSTERDAM

MAATREGELEN TER VERBETERING
VAN CAPACITEIT EN DOORSTROMING
OP (GEREGELDE) KRUISPUNTEN

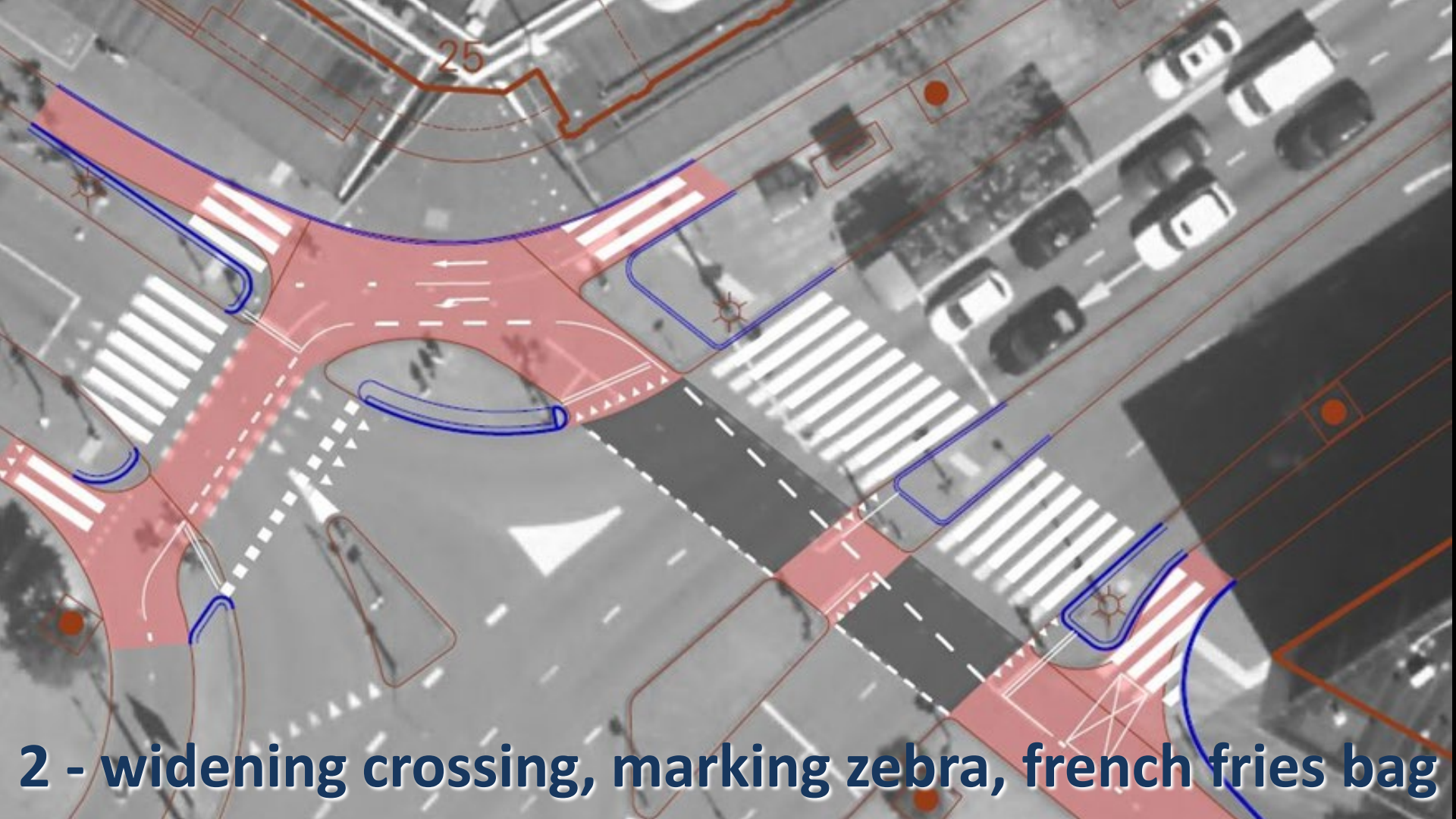
RVE RUIMTE & DUURZAAMHEID
OPSTELLER: K. VERNOOIJ

Toolbox Bike friendly Junctions

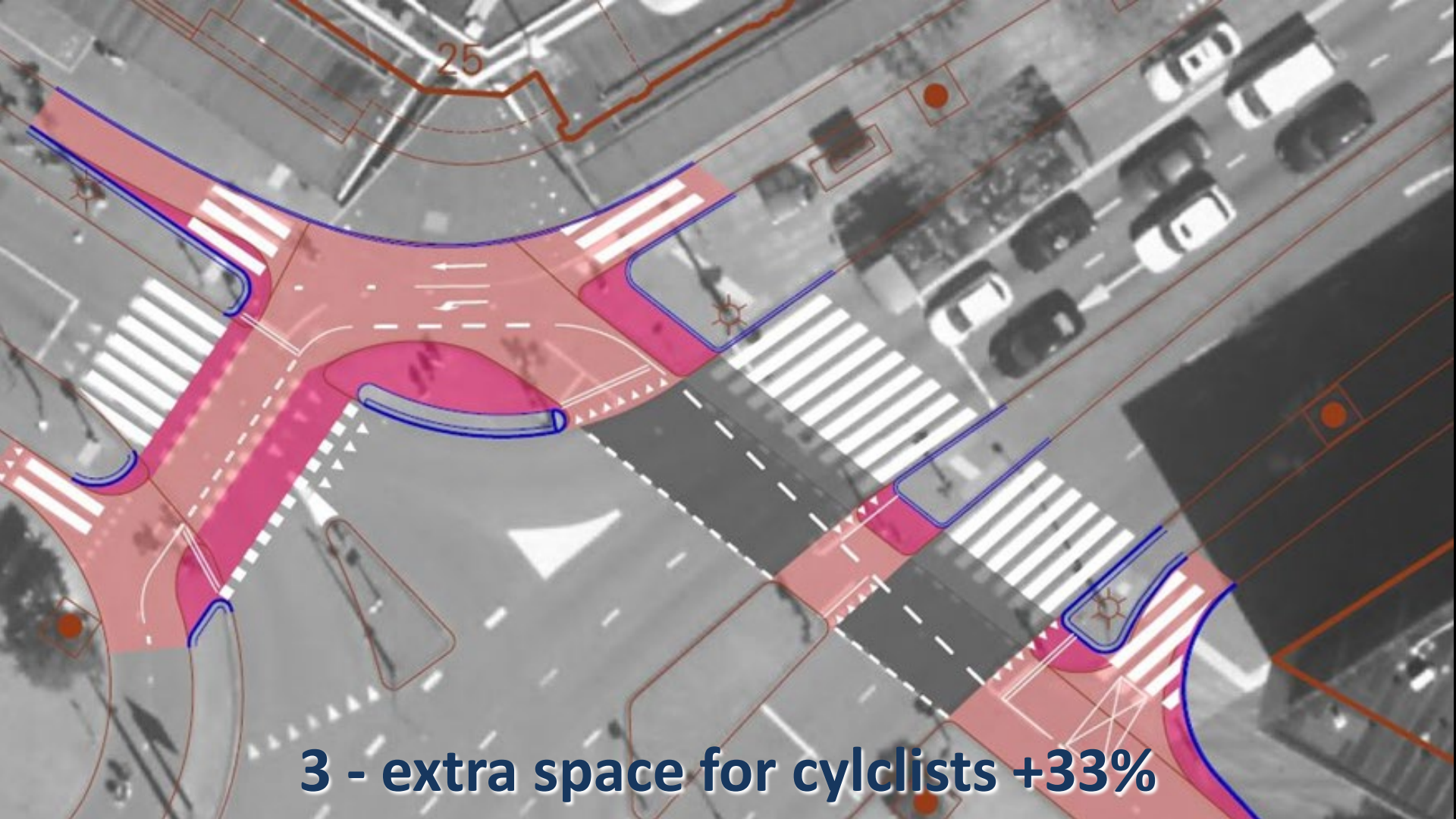
- Checklist of measures to improve capacity & flow on traffic regulated crossings
- Every optimization is customization, every junction needs different approach
- Living document
- All in combination with measures in traffic lights program

0 - Start (limited space for cyclists)

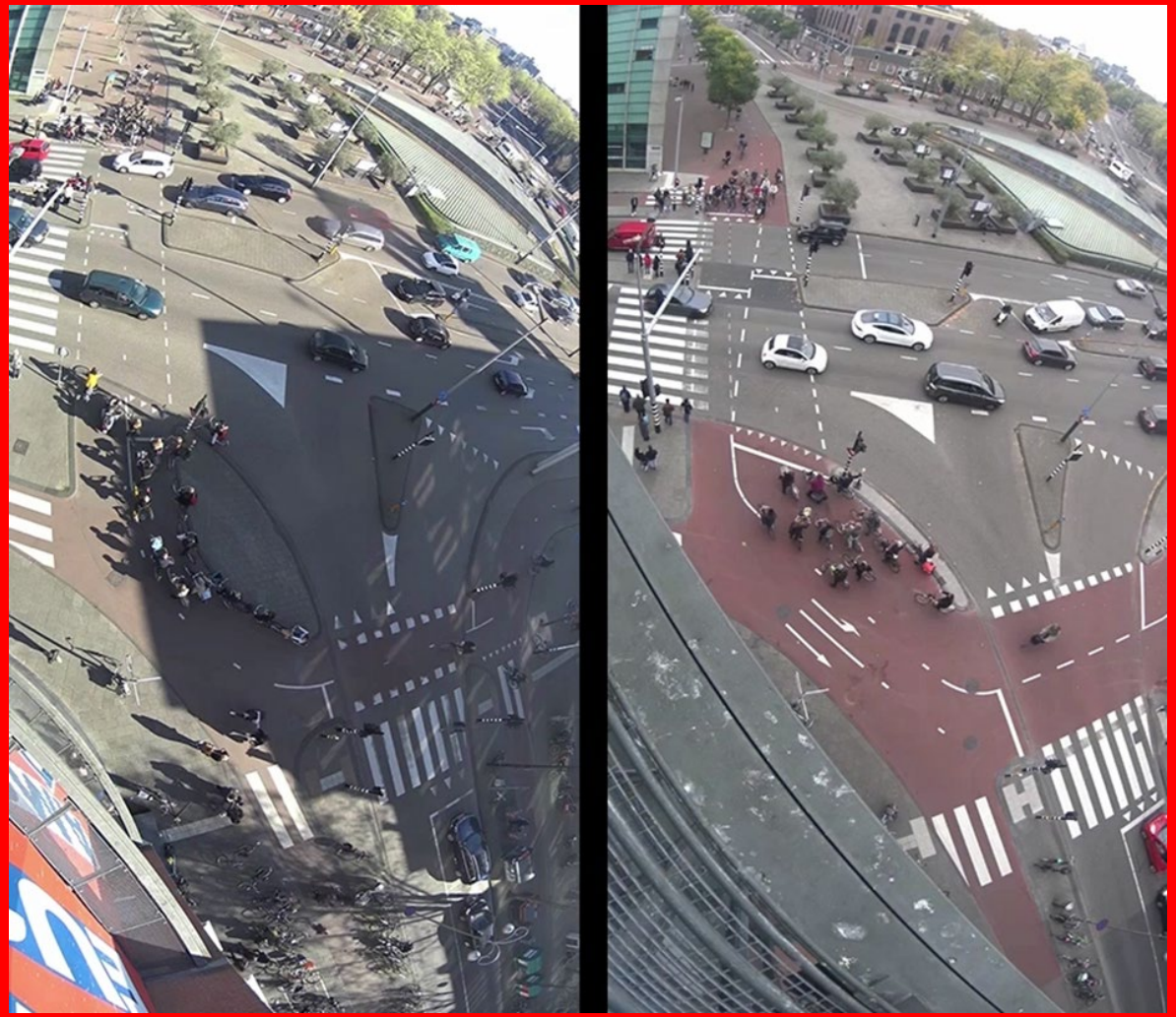
1 – reduce island (“banana”), adjust curve radius



2 - widening crossing, marking zebra, french fries bag



3 - extra space for cylclists +33%



Practise:

Mr. Visserplein

vimeo

Results

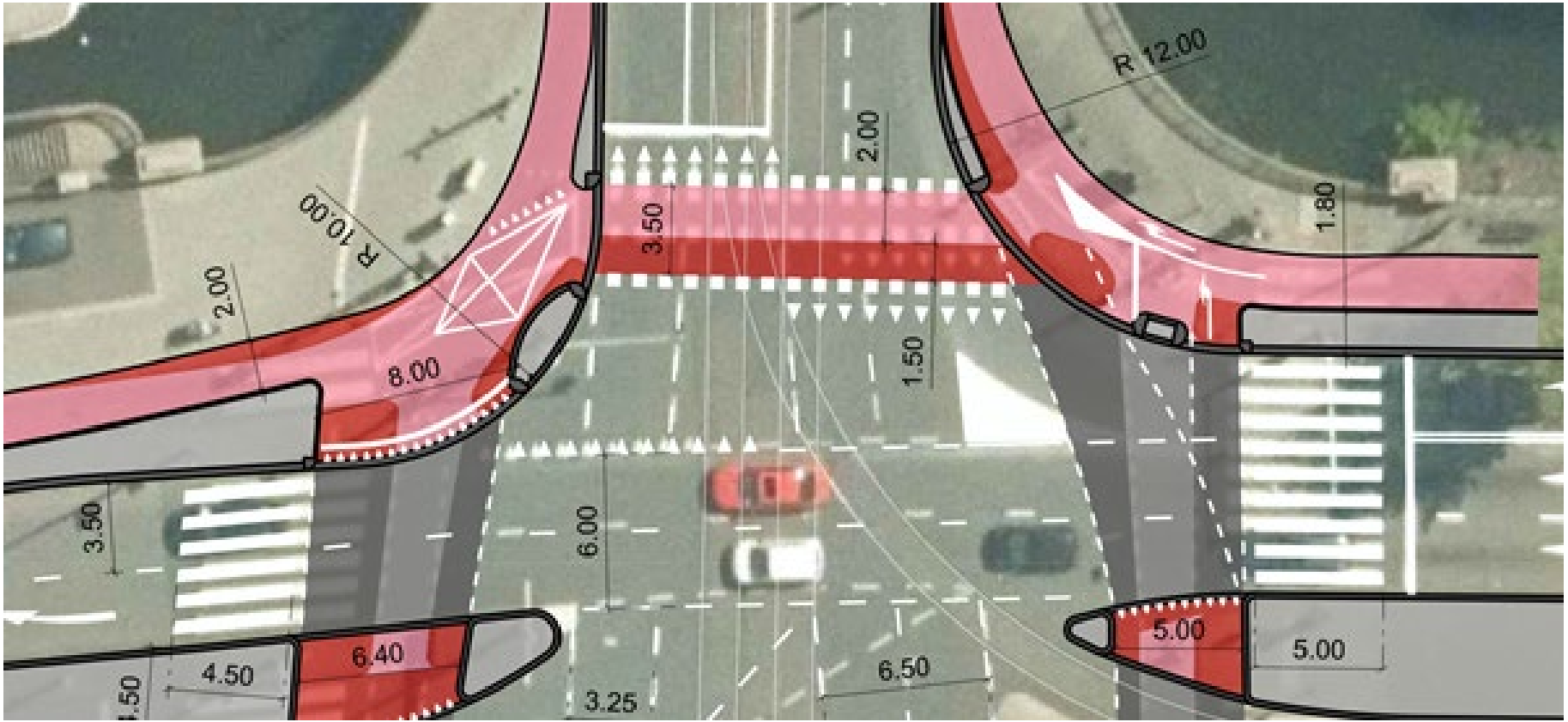
More capacity for waiting cyclists

More and faster flow of cycle traffic on crossing

Found it in ‘lost’ space

Behaviour translated into the design

Difficulty: the left turn & signal control



Difficulty: the left turn & signal control

All sorts of cyclists way back then….

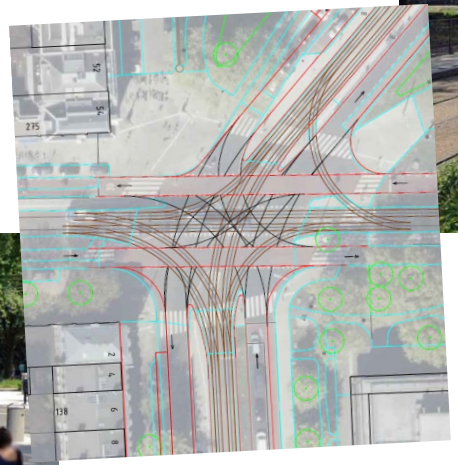
All sorts of cyclists… revisited

Last improvements -> next step?

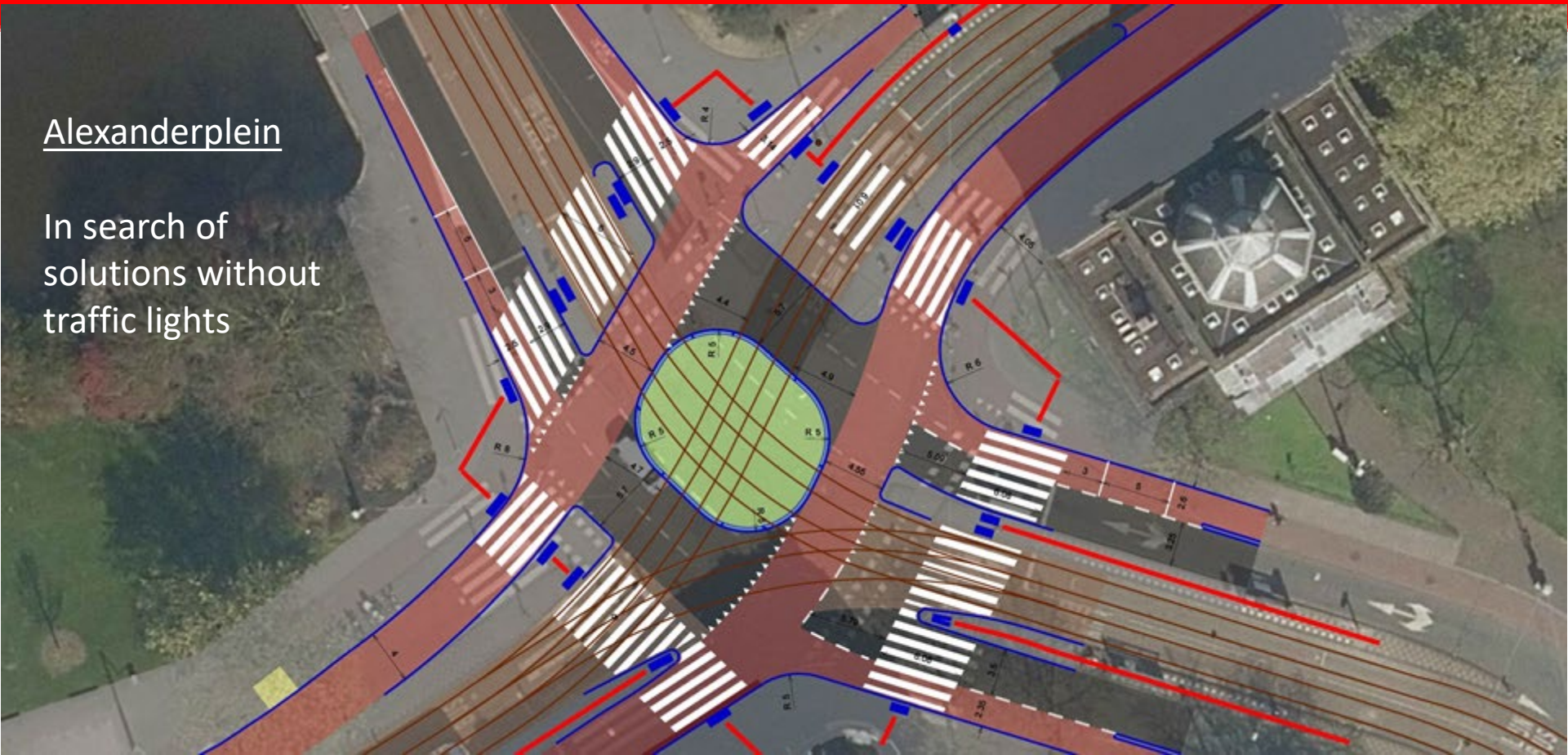
Future junction design for cyclists

<u>Frederiksplein</u>

Possible 8 oneway-bicycle street lanes coming together at 1 junction…



Future junction design for cyclists



Internetlinks

NEW Storymap! Work in progress…