Report from Vélo-city 2017 Nijmegen

Cllr David Healy

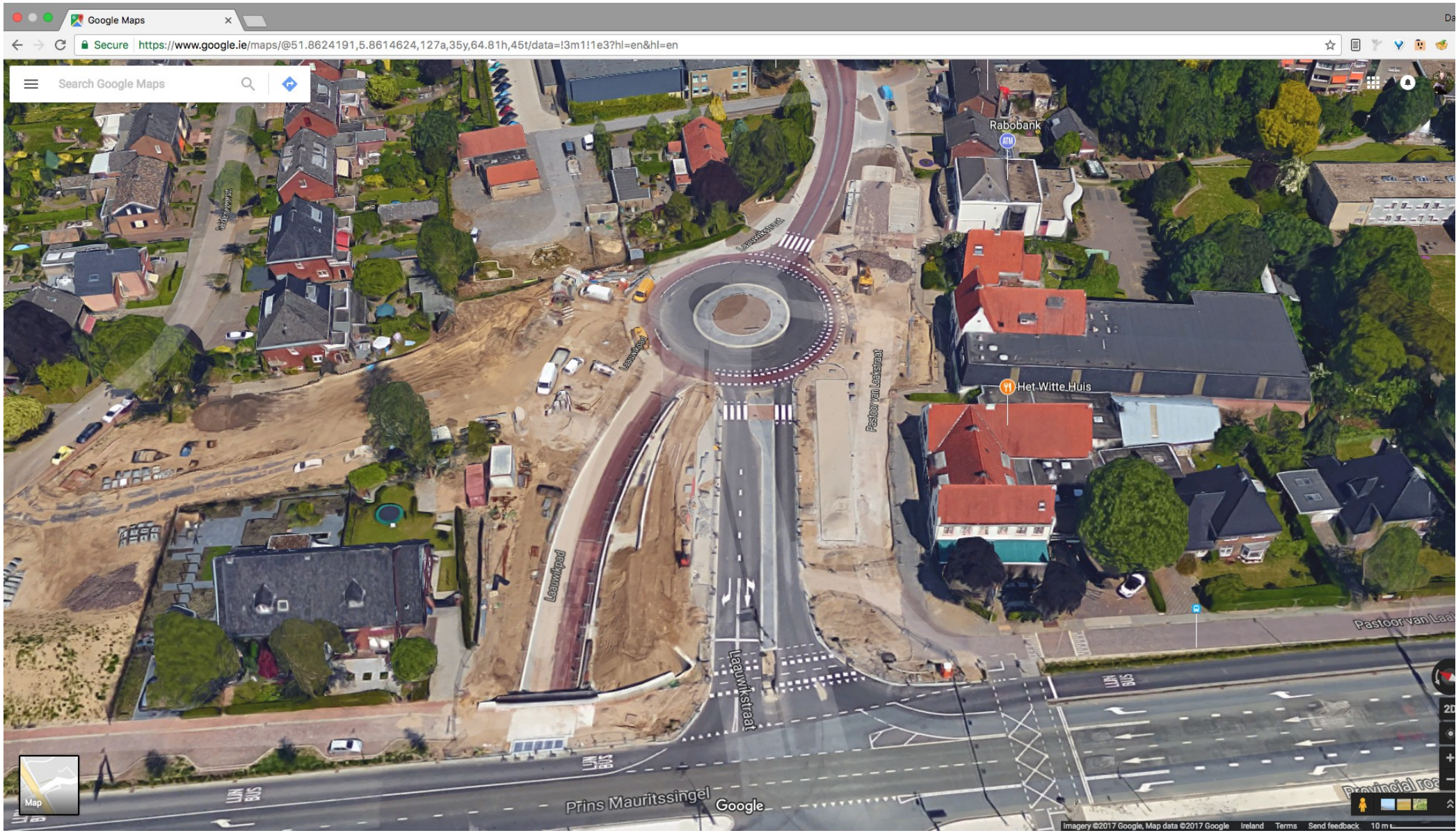
Roundabouts

- Photo is of typical Dutch roundabout design. The cyclepath goes through the arm of the roundabout giving cyclists priority. The geometry of the roundabout ensures motor vehicles are travelling more slowly and cross the cyclists' path close to right angles.

Typical roundabout

Roundabout to calm traffic and get cyclists across the main carriageway

- This roundabout just north of Nijmegen is very interesting. It is on the access to a residential area from a dual carriageway and a cycleway (which goes under the dual carriageway). The purpose of the roundabout is to get cyclists from a two-way cycleway onto both sides of the street in a residential area, simultaneously calming traffic to make that manoeuvre safe and slowing it as it enters the residential area. Cyclists have right of way around the roundabout here also.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Underpasses

Grade separation is an essential tool for Dutch road design. They are preferred by cyclists as vertical diversion is less and the momentum on the descent helps with the ascent.

Underpasses continued

Design features include

- road is lifted slightly to reduce the depth of the underpass
- walls slope outwards as they rise
- excellent sight lines right through
- maximum daylight entering
- good lighting
- quality design and detailing

Underpasses

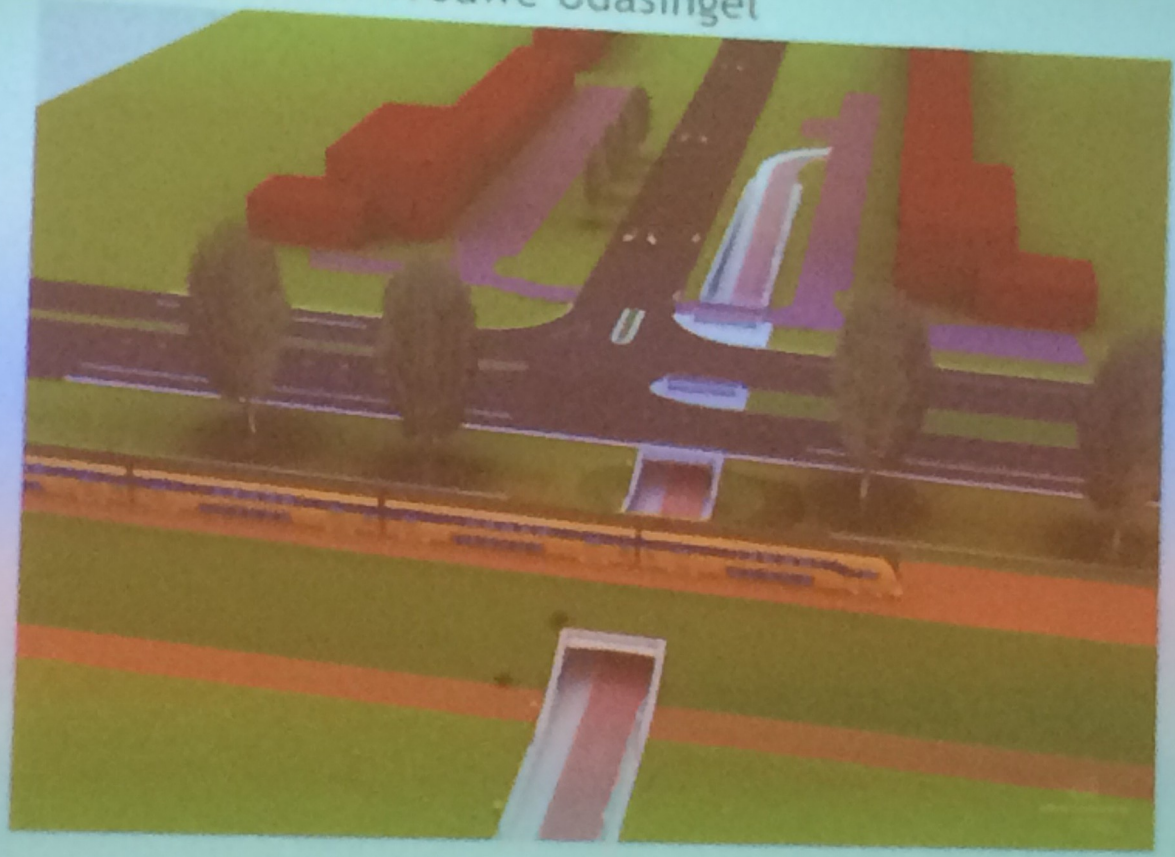
Fietstunnel Vrouwe Udasingel bicycle underpass under railway in the town of Lent, north of Nijmegen

- Construction of this bicycle underpass in a new residential area required going through a railway embankment. Originally no tunnel was planned but this would have left a 4km stretch with no bicycle crossing which would not have been acceptable. There are many examples of bad bike underpasses/tunnels in Netherlands and they have learnt from these mistakes. They raised the railway by 80cm to reduce the depth which the cyclists would have to drop to. They used rounded edges to ensure light comes into the underpass and widened the walls out from the base. The height is 2.8m. Special cleanable concrete as well as tiles were used. The tiles were painted by local children. Lighting is recessed and well designed.

- This example of an underpass on a main railway line was installed with minimal disruption to train services. The line was closed from Friday night to Monday morning during which time the embankment the underpass goes through was dug away, the underpass (constructed in concrete beside the embankment) was slid into place, and the embankment and railway were reinstated.
- This is a clear example for what should be done when the Mayne Road is to be upgraded rather than the alternative suggestion of going up high over the railway.

Fietstunnel Vrouwe Udasingel

First impression Vrouwe Udasingel



Bridges

Snelbinder Bridge

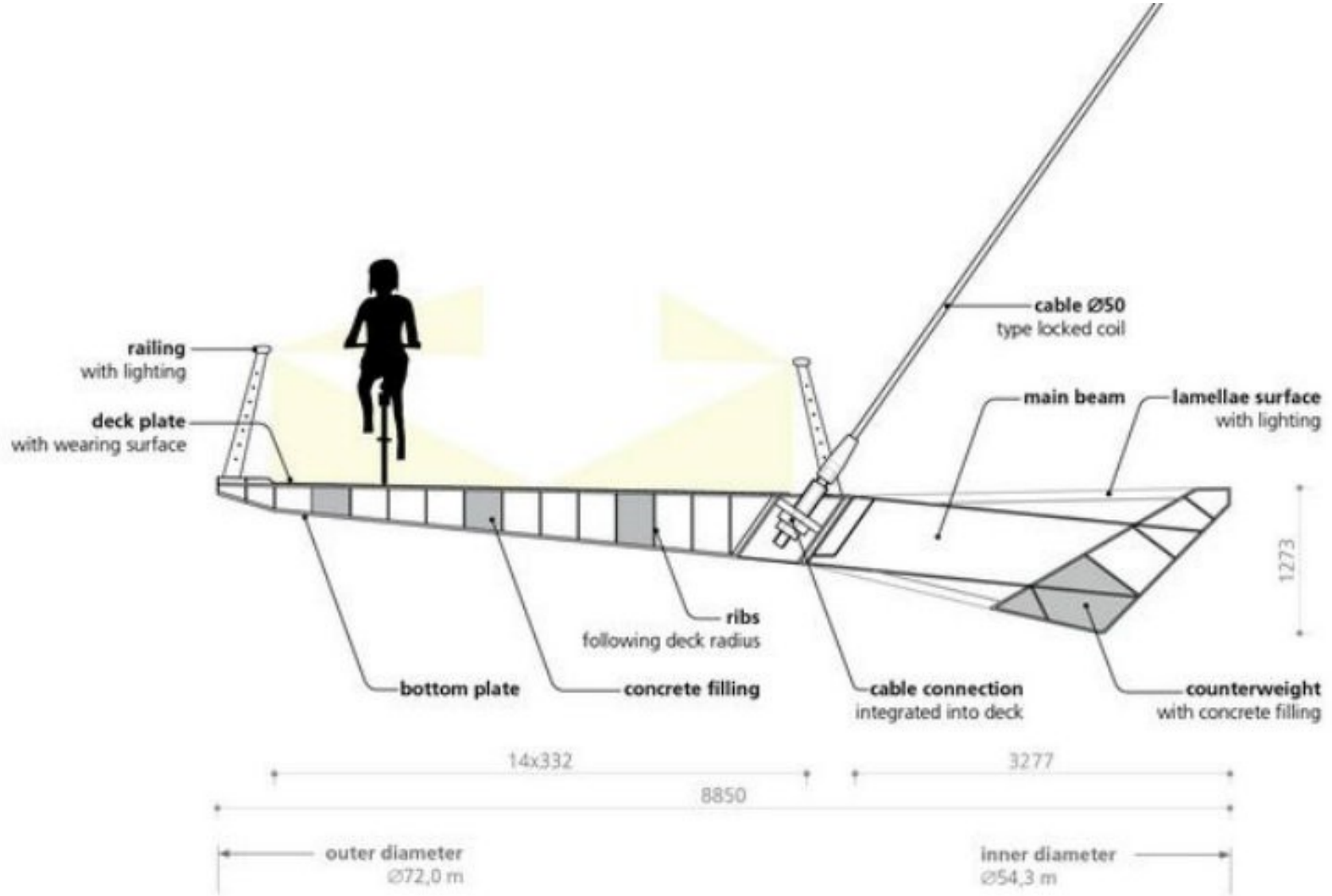
- A cyclepath was added to this railway bridge as part of the fast cycleway from Nijmegen to Arnhem. It was calculated that with some minor strengthening (the vertical struts) the bridge would be able to take a cyclepath.
- Could this example be followed on the M50 Westlink Bridge over the Liffey Valley?

Bridges continued

- There is a Brief Dutch Design Manual for Bicycle and Pedestrian Bridges (English summary of Dutch original).
- Steeper grades are allowed for shorter height differences.
- Some very interesting examples of cost-effective construction, e.g. casting bridge on an embankment/dam and digging the earth away, reusing moulds for concrete.
- There's a floating bridge with cycleway surface below water surface in Haarlem. It's a good example for potential floating cycleways (above water level) in Rogerstown Estuary and Caves Marsh.

Lighting

- Hovenring and elsewhere - Lighting in handrail LED, cost €100/m for two integrated lines of LED – one illuminating faces, the other the path.
- Hovenring also has simple illumination by means of lighting tubes between aluminium lamellae.



http://inhabitat.com/ipv-delfts-floating-led-lit-hovenring-bridge-keeps-cyclists-out-of-traffic-in-eindhoven/ipv-delft-hovenring-bike-bridge-netherlands-7/

Quality cycle route alongside railway

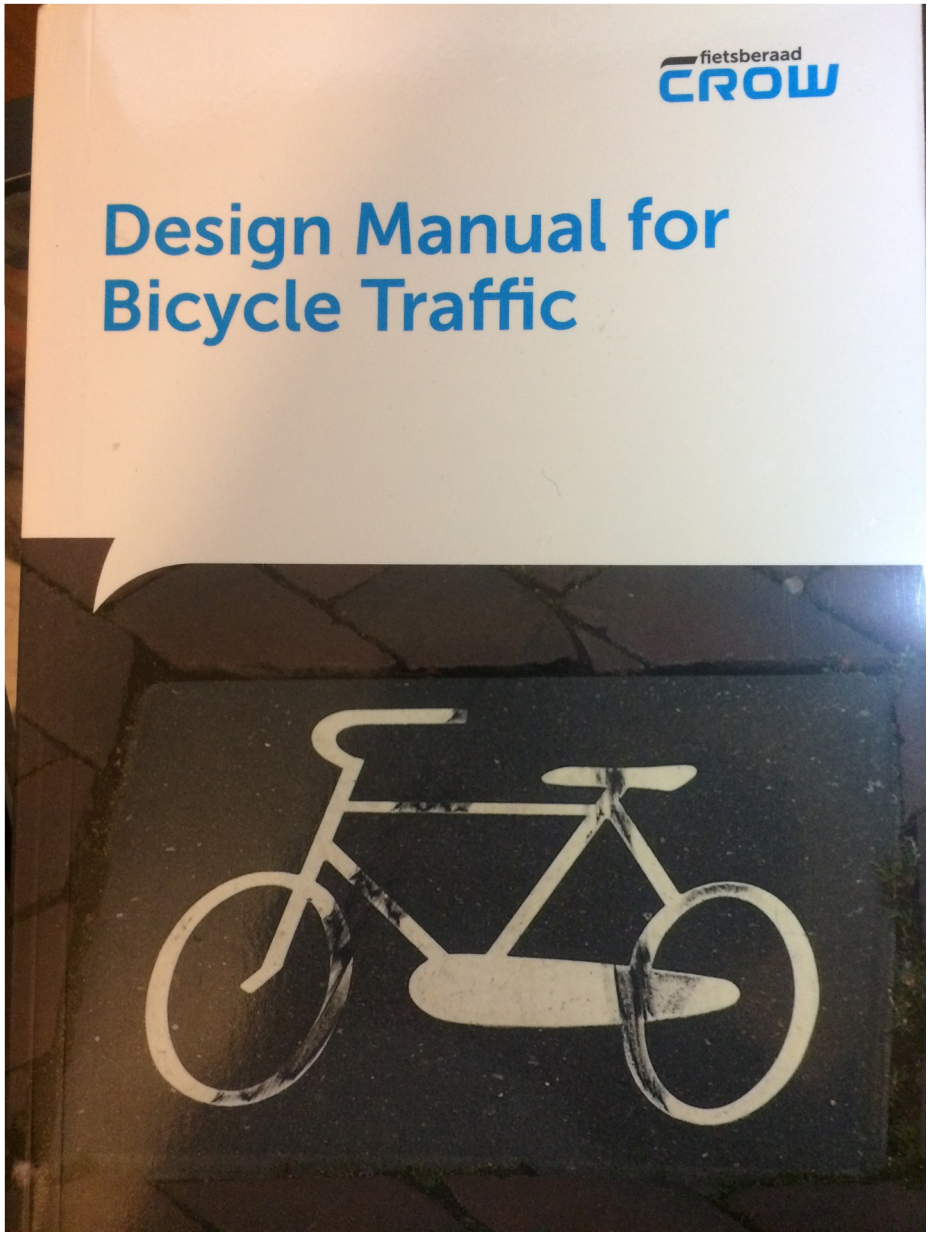
- Immediately north of the bridge, the fast cycle path runs beside the railway, on an embankment above the Waal river floodplain.
- This is the sort of quality route which we should be aiming for across the estuaries in Fingal as well as for the southern part of the Sutton to Sandycove route.
- A video of what it looks like on a winter morning: https://twitter.com/Sjoess/status/831583779156348930

Attention to details

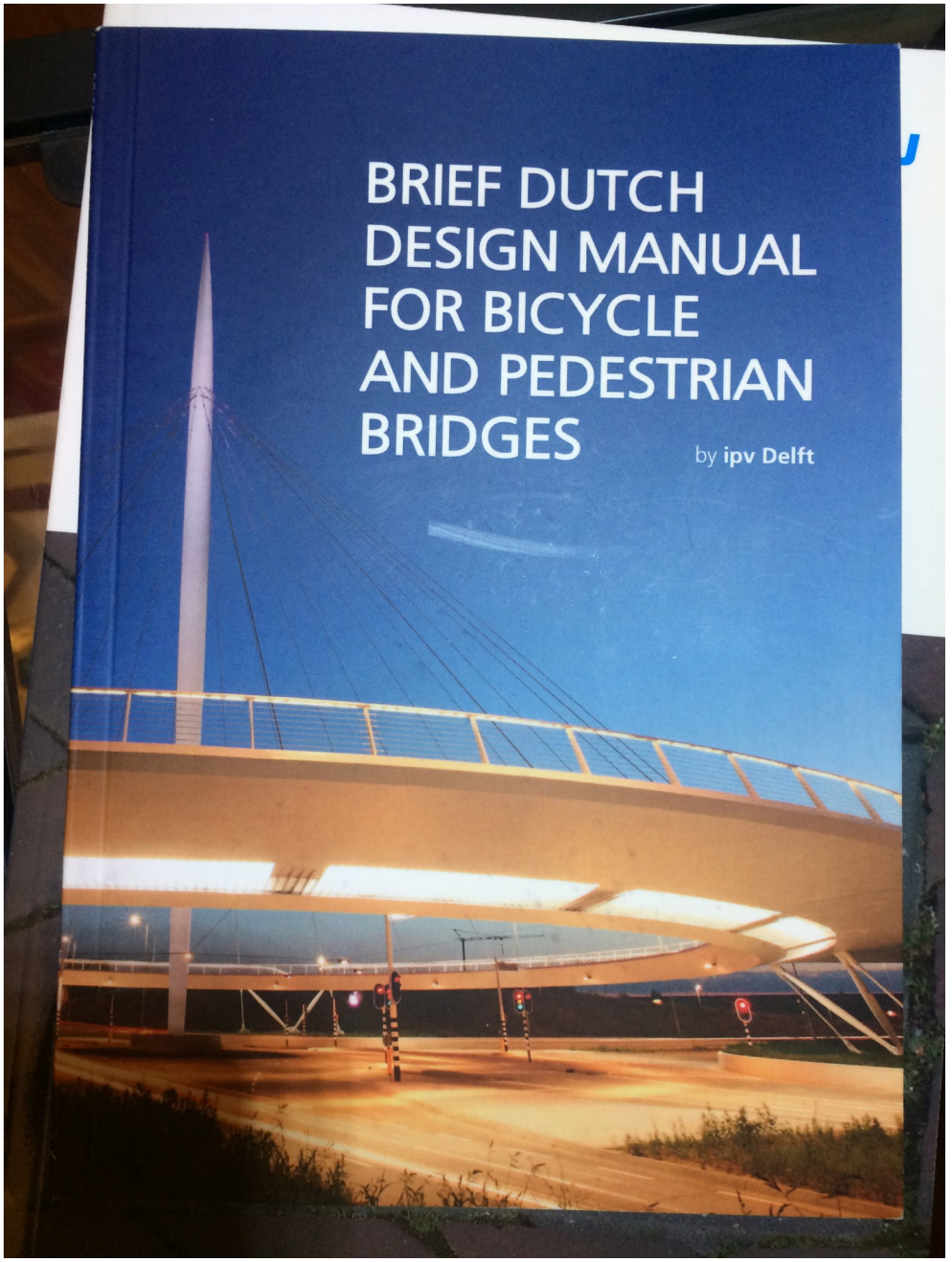
- There is plenty of excellent detailing. Red tarmac (not red surfacing on top of tarmac) is standard for all cycle facilities.
- Kerbs are forgiving to cycling, i.e. they are low and/or at a 45° angle so they won't catch pedals or wheels.
- Markings (such as this flat kerb) are often permanent and won't wear away as thermoplastic markings do.

Details

This is newly published. I bought a copy and am happy to lend it.



I'm happy to lend this too. It is a summary of the Dutch original rather than a full translation.



Bicycle promotion as energy efficiency

- Alvéole (http://fub.fr/alveole) is a successful French project based on providing secure bicycle parking for social housing developments along with cycle training and bicycle repair/advice/repair training. It has been funded partly on the basis of reduced greenhouse gas emissions resulting from the project. (€8 expenditure gets a credit of 1MWh, which has a market value of €5, so the energy efficiency credit covers 60% of the costs.)

Energy efficiency funding for bicycle facilities - Alvéole

Propensity to Cycle Tool

- www.pct.bike Analysis in England and Wales of the potential contribution of cycling to mobility in various areas.
- It was used to explore options including the impact electric bikes would have in hilly areas, what it would be like if as many women as men cycled, what it would be like if Dutch style cycling provision was achieved, etc.
- Aside from the expected major increase in urban centre cycling, an interesting unexpected result in London was that there is a significant unmet potential in the Heathrow area. There may be a lesson here for the area near Dublin Airport, which has significant population with poor public transport and cycle links to the airport and its employment opportunities.

View of Howth from ferry

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