

The 'Do-Optimum' Alternative







"If you plan cities for cars and traffic, you get cars and traffic. If you plan cities for people and places, you get people and places." -- Fred Kent







Principles

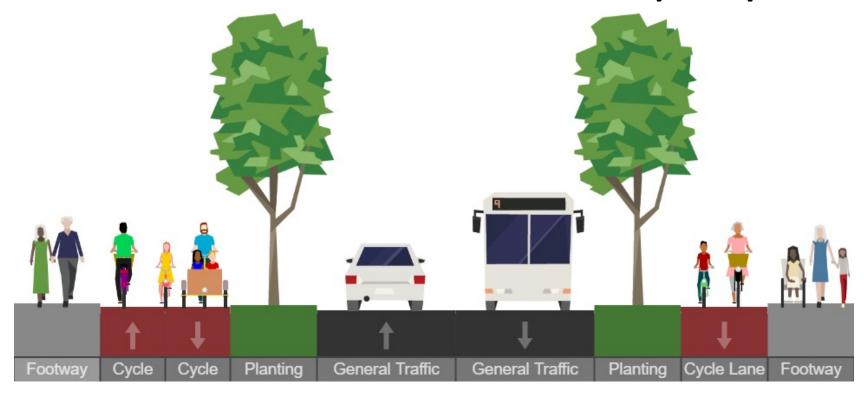
- Build streets not roads: streets help create communities
- Human-scaled streets = a pleasant landscape
- Abundant trees and planting
- Separation between people walking, cycling and driving
- Order of priorities:
 - 1. **People walking**: good pavements, trees, crossings
 - 2. **People cycling**: separate cycle lanes, trees, crossings
 - 3. Public transport: good bus stops, smart ticketing, better buses with use of multiple doors, lower dwell time, etc.
 - 4. **Deliveries**: proper loading bays
 - 5. **Private motor vehicles**: adequate but not too much







Milton Road: a street for people



Primary principle:

Separate pavements and cycle lanes protected from motor traffic by trees and verges.







Key Features

- Pavements and cycle lanes are protected from motor traffic by trees and verges.
- Pavements are separate from cycle lanes, with Zebra crossings where they must cross.
- Use of walking- and cycling- priority roundabouts, like those found in the Netherlands.
- Few bus lanes: use smart methods to reduce bus dwell time & reduce number of cars -- not tarmac.
- The design is flexible and can be adjusted to suit local conditions / underground utilities.







Summary of Benefits

- Safe and pleasant walking and cycling, for all ages and abilities: transformative.
- Better roundabouts: calmer traffic speeds encourage considerate use whilst maintaining traffic flow.
- Improved urban environment with abundant trees and planting.
- Reduction in congestion and air pollution.







Other public transport measures

- Re-orient public transport network around existing railway and the 2 (expected 3) stations.
- Bus routes re-planned around growth that is occurring near railway stations.
- Smart bus priority = non-destructive measure
 - Smart ticketing/payment, lower fares
 - All door boarding with multiple doors
 - Step-free platforms, lower dwell time, etc
- End exploitation of residential streets as free car parks







MILTON ROAD SECTION 2B

(with bus entry lane to roundabout)

100 MONTH AND THE

Principles:

Good pavements, separate cycle lanes, better crossings. People protected from motor traffic by trees and verges. Reclaim excessive tarmac in favour of public space and trees. Walking has highest priority, followed by cycling is public transport. Stay within highway boundary.

HIGHWORTH AVENUE







and cycling paths protected by trees and verges.

ig priority roundabout on three arms.

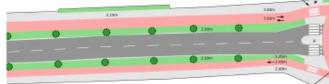
us entry lane on Elizabeth Way arm.

i on roundabout of at least one bus-length.

sus stops allowing step-free boarding and multiple doors.

eroads and cycling. Walking and cycling priority "parallel crossings" on arms of the roundabout, as commonly found in the Netherlands and Northern Europe. See also: camcycle.org.uk/newsletters/128/article11.html

Zebras across cycle lane wherever people walking need to access crossings or bus stops.



Extra set-back of orbital cycle lane so that buses and large vehicles don't block the roundabout when waiting.

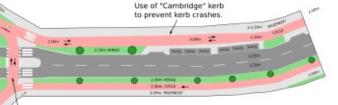
Walking/cycling-priority crossings must be set back at least 1 car length from the roundabout.

> Presence of bus in bus lane at roundabout-entry automatically gives precedence to bus since it blocks sight-line of any cars waiting to enter the roundabout in the left entry lane.

Elizabeth Way is an example here in this conceptual diagram but should also be considered as part of future route for non-stopping buses in a reworked public transport network.

Transitional cycle lanes onto quiet residential street with no cycle lanes.

 3.5m two-way cycle lane through roundabout so that riders can focus on safely crossing, not worrying about getting squeezed off path.



Two-way cycle crossing so that riders from the south side can choose either arm, whichever they feel safer using, to access the two-way cycle lane.

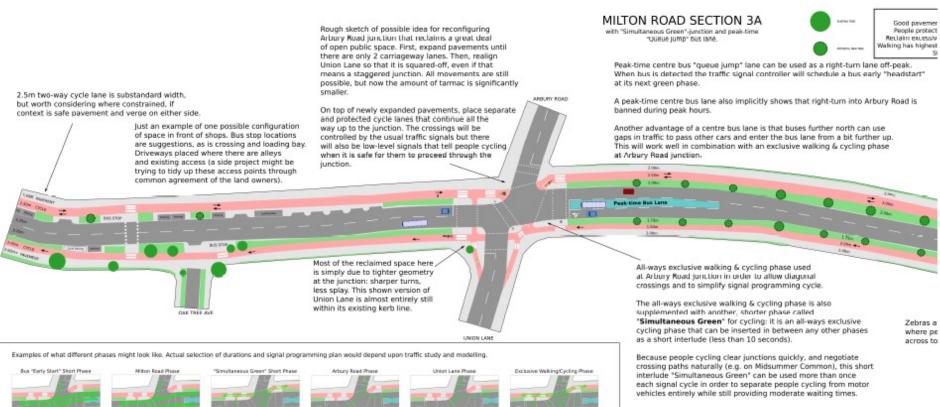
Driver-priority crossing must be set back from roundabout at least 2 car lengths to give people walking and cycling a chance to react to movements of motor vehicles. Exits from roundabouts across driver-priority crossings must be single-lane and must calm traffic speeds using tight geometry. Entrances to roundabouts may be two lanes.

Elizabeth Way has a toucan further south, placed there for an alternative walking and cycling route through back streets.











Used when bus is dynamically detected

During off-peak,

centre lane is permissive right turn lane

Cycle/cycle crassings are give-way

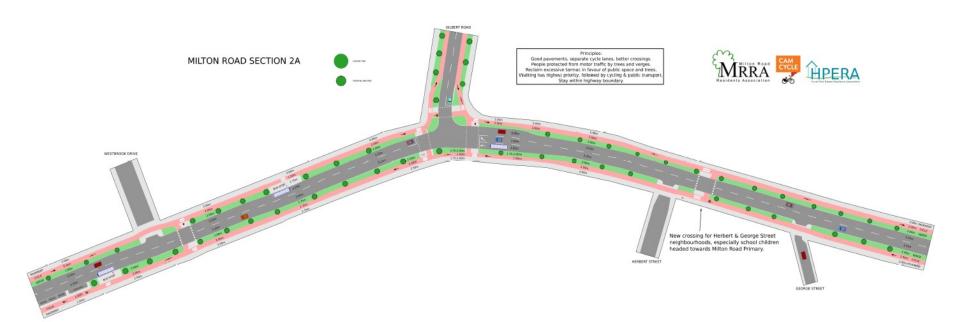




Cycle/cycle crossings are give-way

Walk/cycle crassings are Walking-priority.

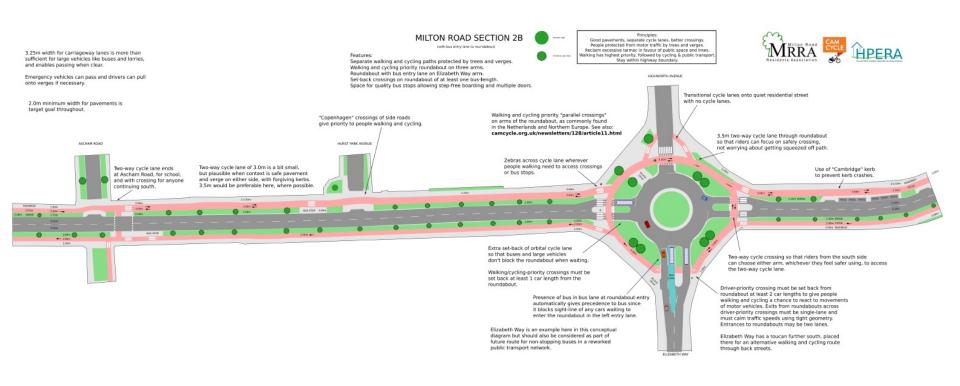
"Simultaneous Green" is effectively a shorter version of the all-ways exclusive walking & cycling phase that can be used when there is nobody waiting to walk across the junction.







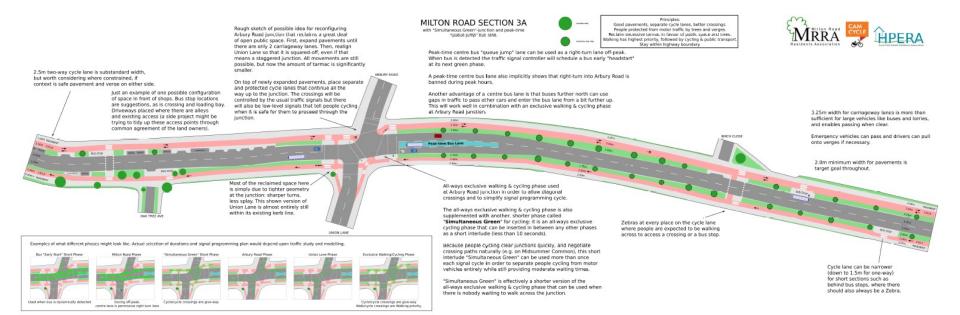














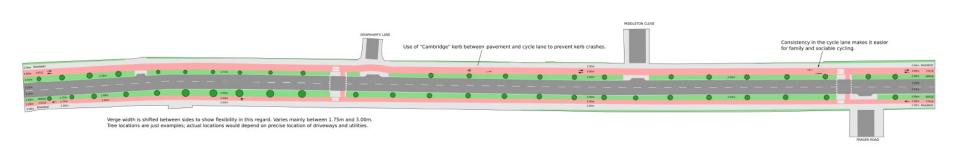




MILTON ROAD SECTION 3B



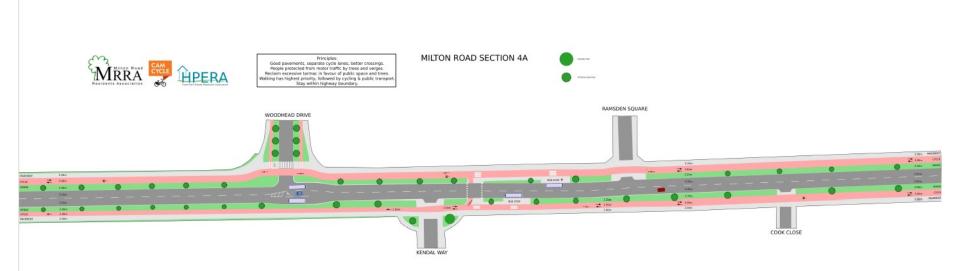








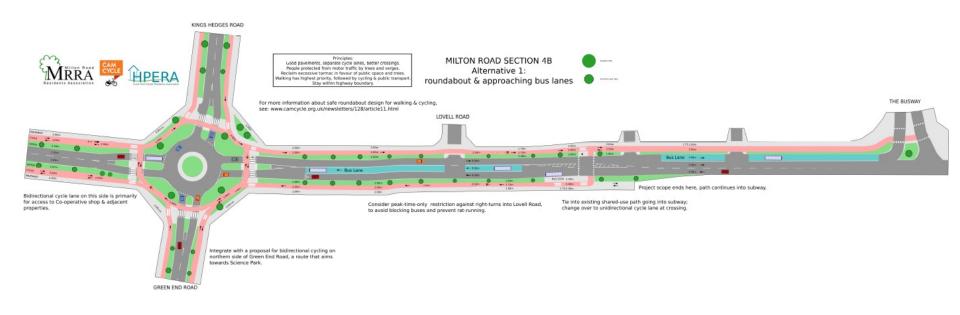








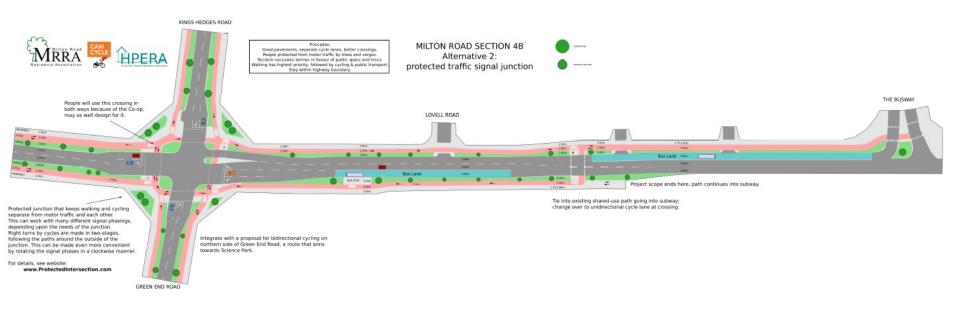


















In conclusion: We have a great opportunity

- for Cambridge to pioneer a welcoming, best-in-class, tree-lined gateway into the city
- to transform the way people choose to travel by providing a safe, calming and healthier environment for all modes of use
- to achieve something we can all (councillors, officers and residents) take real pride in





