Milton Road Bus Priority Corridor

Workshop 1A: Design parameters and geographic constraints - Mitcham’s Corner to south of Woodhead Drive

Glenn Higgs
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Key principles:

- Bus lanes in one direction
- Continuous provision for cyclists, segregated where possible
- Pedestrian & cycle crossing facilities
- Enhancement to streetscape
CURRENT DESIGN PLANS: MITCHAM’S CORNER TO GILBERT RD

- Raised entry
- Parallel crossings
- Shared-use bus stop
- Bus lane
- Raised (segregated) cycle lanes
- Area outside highway boundary
CURRENT DESIGN PLANS: ELIZABETH WAY TO WOODHEAD DR
SUMMARY OF KEY FEATURES

- Mitchams Corner
- Signalised junctions
- Bus lanes
- Segregated (raised) cycle lanes
- Bi-directional footway/ cycle lanes
- Verges/ footway parking
- Controlled crossings
DESIGN PARAMETERS: TYPICAL CROSS SECTIONS

Cross Section near Herbert St

Existing view

Proposed plan

Minimum widths:
- Carriageway: 9m
- Cycle lane: 2m
- Parking/Verge: 2m
- Footpath: 1.8m
- Footway: 1.0m

Scale: 1m
DESIGN PARAMETERS: TYPICAL CROSS SECTIONS

Cross Section near Arbury Rd

EXISTING

PROPOSED

POTENTIAL

Minimum widths

<table>
<thead>
<tr>
<th>Category</th>
<th>Minimum Width</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contiguous Road</td>
<td></td>
</tr>
<tr>
<td>Bus Lane</td>
<td></td>
</tr>
<tr>
<td>Cycle Lane</td>
<td></td>
</tr>
<tr>
<td>Parking Space</td>
<td></td>
</tr>
<tr>
<td>Footpath</td>
<td></td>
</tr>
<tr>
<td>Vegetation</td>
<td></td>
</tr>
</tbody>
</table>

Existing view

Proposed plan
### DESIGN PARAMETERS

**Degrees of separation from motor vehicles**

<table>
<thead>
<tr>
<th>Category</th>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Fully separated (or links)</td>
<td>Fully segregated lane/track</td>
<td>Lane segregated by a continuous or near-continuous physical upstream (kerbs and/or segregating islands) along links.</td>
</tr>
<tr>
<td></td>
<td>Stepped tracks: Vertically separated cycle tracks at an intermediate level between the footway and main carriageway.</td>
<td></td>
</tr>
<tr>
<td>B. Dedicated cycle lanes</td>
<td>Light segregated lane</td>
<td>A facility separated and protected by intermittently placed objects. These generally includes formal, mandatory lane markings.</td>
</tr>
<tr>
<td></td>
<td>Mandatory cycle lane</td>
<td>A marked lane for exclusive use of cyclists (with some exceptions) during the advertised hours of operation. It is an offence for other vehicles to enter, unless they are exempted.</td>
</tr>
<tr>
<td>C. Shared lanes</td>
<td>Shared bus lane</td>
<td>Cyclists may use the full width of the bus lane during and beyond its hours of operation. Applies to nearside, with-flow bus lanes, and should extend to contraflow and offside types.</td>
</tr>
<tr>
<td></td>
<td>Advisory cycle lane</td>
<td>An area intended for, but not legally restricted to, cyclists’ use. Other vehicles are permitted to enter or cross it.</td>
</tr>
<tr>
<td>D. Integration</td>
<td>Cycle street</td>
<td>A street where cyclists have assumed priority in a speed restricted area, variously marked with or without formal cycle lanes or indicative areas for cycling. The concept is promoted by DfT in its draft revisions to TSRGD (2014).</td>
</tr>
</tbody>
</table>

*Extract from London Cycling Design Standards*
### DESIGN PARAMETERS

**Degrees of separation from pedestrians**

<table>
<thead>
<tr>
<th><strong>Cycle track</strong></th>
<th>A path dedicated to cyclists, which may or may not be next to a pedestrian-only path. Some physical separation (which can include vertical separation) must be present if cyclist and pedestrian routes are next to one another.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Separated path</strong></td>
<td>A path where separate areas for cyclists and pedestrians are clearly indicated.</td>
</tr>
<tr>
<td><strong>Suggested route through shared use area</strong></td>
<td>A route for cyclists through an area closed to motor traffic but shared with pedestrians. Subtle changes in surface materials and wayfinding allow some indication to pedestrians of where cyclists are likely to move through. These may be in locations with a high place function, but where it is important to assert clearly the right of cyclists to be there.</td>
</tr>
<tr>
<td><strong>Shared use path</strong></td>
<td>A path either alongside or removed from the carriageway that is shared between cyclists and pedestrians without any form of separation. Examples include canal towpaths, paths through parks and cut-throughs away from the highway.</td>
</tr>
<tr>
<td><strong>Shared use area</strong></td>
<td>Area shared between cyclists and pedestrians, usually to allow cyclists to make a turn, cross from one side of the street to another, or make a transition between other types of cycling facility.</td>
</tr>
</tbody>
</table>
## DESIGN PARAMETERS – MINIMUM WIDTHS

<table>
<thead>
<tr>
<th>Absolute minimum</th>
<th>Preferred minimum</th>
</tr>
</thead>
<tbody>
<tr>
<td>m 6 5 4 3 2 1</td>
<td>1 2 3 4 5 6 m</td>
</tr>
<tr>
<td><strong>Carriageway</strong></td>
<td></td>
</tr>
<tr>
<td>6.0m</td>
<td>6.0m</td>
</tr>
<tr>
<td><strong>Footway</strong></td>
<td></td>
</tr>
<tr>
<td>1.8m</td>
<td>2.0m</td>
</tr>
</tbody>
</table>

### Cycle Facilities (assuming medium - high flow)

- **On carriageway**
  - Raised cycleway: one-way
    - 1.5m (For relatively short lengths)
    - 3.0m
  - Raised cycleway: two-way
    - 4.8m
  - Mandatory & advisory cycle lanes
    - 1.5m

- **On footway**
  - Shared-use: fully shared (two-way)
    - 3.0m
  - Shared-use: separated (two-way)
    - 4.8m

- **Footway Parking**
  - 4.0m (2.0 (parking))

- **Bus Stops (with one-way cycling)**
  - Floating bus stop
    - 5.3m
  - Shared-use (fully shared)
    - 4.0m
  - Shared-use (separated)
    - 3.5m

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*WSP*
KEY CONSTRAINTS

- Scheme tie-ins
- Mitcham’s Corner
- Green End Road cycle scheme
- Access points
- Highways boundary
- Underground utilities
Milton Road Bus Priority Corridor

*Design parameters and geographic constraints*

Glenn Higgs
Sept 2016