



Report of two site surveys carried out 26th and 27th September 2011.

Main themes which recur are:

- A) Permeability of site including signage and safety
- B) Cycle parking - lack of and poor design of some of
- C) New development versus existing infrastructure

Main interested constituencies are, in no particular order of priority:

- 1) NHS employees
- 2) University employees
- 3) Employees of other institutions on site (eg LMB, CRUK)
- 4) Visitors
- 5) Outpatients
- 6) Those crossing the site en route to elsewhere (eg Genome path to City Centre, Busway to Cherry Hinton)

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Permeability and safety

Areas specifically surveyed:

1.1) Exit of Adrian Way to Long Road.

Surveyed at circa 5pm. Large number of cyclists turning right in contravention of ban on right turns onto Long Road. This is clearly a popular route for cyclists to enter and exit the site from Hills Road and the City Centre, although there are no hard data on this (see 5.3). Anecdotal reports suggest many cyclists find this a much safer route than using the route across Car Park H and the main driveway.



Solution: A clear solution immediately presents itself, namely modification of the central island to accommodate right turning cyclists and altering the "no right turn signs" to "except cyclists".

1.2) Flagpole roundabout to A+E and Main Entrance.

The shared use path in reverse of the One-Way system is narrow (only 1.25m wide), and crowded with pedestrians and parked bikes. It ends abruptly, forcing all cyclists to head towards the City Centre even if they wish to head for the Babraham Road. Even the route to the City Centre is discontinuous, with a totally ignored "cyclists dismount" sign between the corner and the crossing to car park H. The presence of the railings which are dangerous at least give a little more cycle parking! These railings give an impression that pedestrians are to be herded as far as possible out of the way of the traffic, rather than giving priority to pedestrians over the traffic. There is a large detour to walk to the bus station.





We note that the main drive, owing to many vehicle movements, is hostile to cyclists. The contraflow path alongside the LMB and Clinical School is too narrow, ill defined and used by pedestrians to be fit for purpose.

Solution: Solving the multiple issues, many safety-related, in this area will require further survey work and a detailed study.

1.3) Route across car park H.

Barriers, access and means to cross road to access main hospital, combined with car park entrance very nearby are confusing and could be improved. We have general safety concerns about the road crossing combined with confusing car park entrances.



Solution: : Solving the multiple issues, many safety-related, in this area will require further survey work and a detailed study.

1.4) Route to Babraham Road from Outpatients/A+E.

While doing this survey, we ran into a colleague of HC who lives on Hinton Way, Great Shelford (SN). There is an incomplete route behind the bus station (signage indicates that "route ends" halfway along that path). The alternative route on the shared use path around the main roundabout is inadequately signed as "shared use" and there are no indicators on any of the sets of traffic lights, especially the bus exit from the bus station that it is safe for either pedestrians or cyclists to cross. Access to either route is opaque, especially as the many railings make it impossible to make a possibly sensible decision for many to rejoin the main carriageway. SN, when interviewed by HC confirmed that she finds this area the most difficult and dangerous part of her commute.



1.5) The main roundabout.

As mentioned in 1.4 above, the infrastructure of this roundabout is totally hostile to pedestrians who wish to cross any of the roads or to cyclists using any of the shared use paths which apparently exist around at least part of the roundabout (eg linking shared use path on Babraham Road with shared use path on Hills Road). As each set of lights only controls a traffic lane flowing in one direction, there is no excuse for not having an equivalent "green man" indicator on each light post to indicate to pedestrians when the lights are red for motor vehicles and will be so for long enough for it to be safe to cross that sector. This will lead to no extra increase in traffic congestion as the light phases will not need to be altered at all, only retrofitting

of the appropriate "green man" lights for each leg of the roundabout to indicate when there is a safe red light for vehicles on the main carriageway. Currently, pedestrians are having to guess when it might be safe to cross, especially at the bus exit to the bus station.





Solution: A clear solution immediately presents itself as outlined above, namely the fitting of "green/red men" lights on all relevant posts to indicate to pedestrians when it is safe to cross. These need not necessarily be button operated if there is a regular switching cycle to all lights at all times of day, otherwise, they will need "request" buttons as per Puffin crossings.

1.6) No "legal" or even vaguely convenient route from Adrian Way to Main Hospital entrance.

This is a serious permeability issue, which, if solved, could be used to provide a safer route to access the main entrance than the main drive.



Solution: If the blind corner around the Clinical School, as seen in the photograph can be "smoothed out" or visibility improved by use of mirrors, we so no reason that a contraflow cycle lane cannot be inserted in the same way that one exists on Keith Day Road, along with appropriate signage and speed calming measures for oncoming motorised traffic.

1.7) Entrance onto site at Red Cross Lane.

Approx 10 minutes spent at survey site suggested wide usage by pedestrians and cyclists. However, there is a narrow gate that a cycle or wheelchair cannot be got through, and a wider gap that they can, but which has no flush or even dropped kerb.



The access then peters out, with a "cyclists dismount" sign in the direction that many cyclists may wish to proceed in. There is potential pedestrian/cyclist conflict owing to pinch points and general lack of design. There is plenty of space for one of the many sensible solutions mooted while we stood there. For those travelling either from the Babraham Road Park and Ride, from the eastern end of Great Shelford or from the estate on the southern side of Queen Edith's Way, this could be a sensible safe alternative to the route in 1.4, especially if working on the western or southern side of the campus, but currently is not fit for purpose.





Solution: This entrance and associated infrastructure need thorough modification in order to regularise cycle access and improve conditions for pedestrians, especially the disabled.

1.8) Entrance onto path across fields onto Busway.

Although we accept this is a temporary arrangement, it is not clear as to the time span of the final route onto the Campus. As it is used by many cycle commuters from Trumpington, the lack of a proper flush kerb, or even a dropped kerb is a serious impediment to easy or safe access.



Solution: Short term modifications to generate flush kerbs and signage on the roadway to indicate that a cycle route is joining/crossing the road.

1.9) Frank Lee Centre to Granchester House area.

Incomplete cycle contraflow lane in front of S block means that access to Treatment Centre from Hills Road, via shortest route, is interrupted. Signage where contraflow starts is poor. End of route at junction with Adrian Way is poorly designed, with build out to prevent cyclists from just following a sensible route and instead having to do a confusing hop onto the pavement for a few yards then give way to other traffic

on the link road. Can guided buses do the corners on this road without impinging on the cycle route? If not, this is a serious safety issue. Cyclists should not, while legally cycling along a dedicated lane, be expected to have to give way to traffic which is physically unable to keep to its correct lane.



Solution: : Properly solving the multiple issues, many safety-related, in this area will require further survey work and a detailed study.

1.10. Entrance to NCP patients Multi-storey Car Park (MSCP) and 4-way junction at Blood Transfusion.

No facility for cyclists to get past cars queuing to enter the MSCP in either direction. Often cyclists heading towards the CIMR are faced with cars on the wrong side of the road who are overtaking the car park queue, and are then berated for not giving way to cars which are on the wrong side of the road. Guided bus swings onto wrong side of road as often travelling at excessive speed. Unclear that all exiting cars are aware they must give way to road traffic. 4-way junction road markings and signage poor. Area generally unsafe for pedestrians and cyclists.

Solution: Mandatory cycle lanes on road to allow cycles to pass queuing cars and signage to indicate that cycles should be allowed to pass any queue present. Regular maintenance of the barriers, as queueing cars only present a real problem when one barrier is out of action. Pavement to continue at level, i.e. humped for vehicles, across entrance, to indicate that drivers are driving over a pavement and thus pedestrians have priority. All road markings in the area to be checked and repainted.

Conclusions and comments:

2.1) The area around the flagpole and main roundabouts are still severely hostile to pedestrians, cyclists and bus passengers.

2.2) The "one-way system around the hospital leads to either increased journey lengths or total ignoring by many of the one-way system. There is a need and aspiration for the many one-way areas on site to become two-way for cycling as has successfully and safely been achieved on many streets around Cambridge. As the site becomes ever larger such that to walk across site may take 15 or 20 minutes, it may even be that the preferred way to get from one department to a distant one is by bicycle.

2.3) It was pointed out that around a site where there may be a disproportionate number of elderly, frail, physically disadvantaged, pregnant, deaf or blind people using the footpaths around and near the site, that shared use paths are even more dangerous than may be generally assumed in the rest of the City, and their use must be avoided wherever possible as they are an unacceptable safety hazard to what is presumably a large part of the hospital's "customer base".

2.4) There are several places where there is unsafe or very inconvenient road layout.

2.5) Regarding the signals at the main roundabout, a discussion should be started with the Highways Authority to achieve our suggested solution outlined in 1.5.

Parking

3.1) Reasonably good examples of parking:

We note that not all of these are perfect, and many do not conform to either the City Council cycle parking standards, some in small details, nor to our more comprehensive document (<http://www.camcycle.org.uk/resources/cycleparking/guide/>), but nevertheless appear adequate for purpose.

a) Rear of Blood Transfusion. Employee card access shed. Spacing of racks a little narrow (70cm).



b) By Bus Station. Good placing of sheffield stands (1.13m). Uncovered.



c) Lab block entrance. A few sheffield stands with 80cm spacing.



d) Rear of MRIS. Staff access shed, 80cm spacing toast racks.



e) ATC staff entrance. 90cm spacing sheffield stands (covered).



3.2) Examples of poor or overcrowded parking

f) Residences. Covered wheel benders with totally inadequate spacing. Lack of spaces. Has there been an audit as to how many accessible spaces are provided for the number of occupants? Residents' only card access to proper shed to improve security? Clear lack of options for more spaces without sacrificing few grassed areas.





g) Toast rack outside Blood Transfusion. 61cm spacing. Marked "for blood donors only". How is this enforced?



h) Rear of Hutchinson and CIMR. If design of sheds and spacing of racks was improved, could probably increase capacity by at least 20% and improve ease of use even with higher capacity. There are also parked cars blocking access to some of the spaces. We note that a planning application, subsequently withdrawn, was submitted for new cycle sheds in this area. Sadly the designs submitted appeared not to conform to the City Council standards, nor actually provide as many spaces as the application claimed they would.



i) Front of Outpatients. Toast racks with inadequate 70cm spacing.



j) Outside Main Entrance. HC did separate survey at 8.30am on 27.9.11. Estimate that by that time, occupancy was >95% and many "vacant spaces" were in fact inaccessible as the bike parked alongside had

large basket or wide handlebars meaning it would have been difficult or impossible to get another bike in alongside.







k) F, G, R and A block entrances. Very little space for many entrances. Note that good sheffield stands have been tucked in where ever possible. Only one spot identified where more might be put. Lots of parked cycles not parked on stands, suggesting that demand far outweighs supply.



I) MRIS and N wards. There is space for more racks here. Space by current shed either needs to be made into a pleasant garden for use by staff and patients or it might as well be used for more cycle parking as it currently has no merit (uncovered toast racks with adequate spacing suggested as at least short-term solution).



m) ATC staff entrance. Presence of lots of fly parked cycles near to rear of MRIS (d) suggests that demand far outstrips supply. Suggestion that grass area with trees outside windows should be made more attractive as a garden but sloping grass area nearer entrance sacrificed for more parking.





n) Main ATC entrance. 92.5cm spacing sheffield stands (good) but uncovered. Insufficient number judging from number of fly, many insecurely, parked bikes. NB had been banned from taking photos by this point in our tour, so cannot illustrate.

o) Rear entrance to main concourse. Notices forbidding parking suggesting demand outstrips supply. Has this area become more crowded with opening of Busway cycleway? As this area is currently under redevelopment, we reserve comment until the development is complete.

p) S wards. 80cm toast racks plonked under building previously used as car parking. Access to corner spaces impossible. Kerbs under some racks make parking difficult. This area is rated on the Addenbrooke's cycle parking map as 70 spaces. When area was surveyed on a Tuesday lunchtime, there were 77 bikes parked, and one more placed (by a man who was able to physically lift his entire bike over other parked bikes) *in situ* while observation was in progress.

q) Inadequate supply of parking at Frank Lee.

Conclusions and comments

4.1) Could cycle parking be designated a sex and age discrimination issue for employees?

Spaces which may be useable by a man who is 6 feet tall and physically fit enough to be able to lift part of his cycle over a neighbouring cycle to get parked and still reach his frame to securely lock his cycle with no risk of injury may not be useable by a woman or older man who is 5 feet 4 inches tall with little upper body strength.



4.2) Problems with finding more space for more parking at older buildings.

Comment from CRUK employee that new CRUK building was built with consultation with staff, many of whom cycle to work. Parking situation very different from near the older NHS buildings with ample well-designed accessible parking. Suggestion that any new buildings, either NHS or others, must consider cycle parking requirements as part of the initial and ongoing design process, not as an afterthought when adequate space has not been allocated for the amount of parking actually needed for employees eg could the Treatment Centre have had an extra floor, and given over a large proportion of the ground floor to cycle parking i.e. put the whole thing on stilts (Tottenham/Edmonton IKEA Store on North Circular as an example, albeit with car parking in that case)?

4.3) Short term solutions.

Some space has been noted where properly spaced toast racks (preferably 90cm) could be put as a short term solution.

4.4) Alternative locations for parking.

Would employees, especially ones who work full-time, be prepared to walk slightly further (250 yards rather than 20-50 yards to entrance) to use secure staff card access only, covered, decently spaced cycle parking? Thus freeing less secure open access parking nearer the entrances for visitors.

4.5) Existing main NCP multi-storey.

The promised cycle parking never happened. I could not find the planning application for this, but cycle parking was definitely part of it. It is a shame that the forward-thinking decision was not taken when the development was initially proposed to devote the entire ground floor to cycle parking. If it was secure (staff card access), and good quality (Sheffield stands at 90cm or 1m spacing) and cyclists could cycle all the way to the entrance of the cycle parking area (not having to walk several hundred yards from somewhere at which point, as it's then a bit more of a walk to site of work, it would be worse than useless) it would have been close enough to the main entrance via the bridge over the Goods Yard entrance, to attract many employees. This would, at one fell swoop, have solved the dire lack of cycle parking space associated with the "older buildings" in 4.2, namely the main wards, labs and theatres accessed via the main entrance and the Clinical School. It would have, if secure, have left the open access racks nearer to the main entrance and Outpatients, much more empty for the use of visitors and outpatients.

Suggested locations for extra parking:

4.6) Corner by flagpole roundabout near Eye Unit.

Area at either basement or ground level depending on access. Access could be alongside Eye Unit door. Space totally unused and with no wildlife or other merit.



4.7) Various places along Robinson Way

Namely near MRIS and N wards, many with no current wildlife or other merit.

4.8) Treatment Centre car park.

4.9) See 3.2) l and m

Other comments

5.1) It is noted that there is also an almost total lack of green space for staff and patients to get fresh air during breaks or while resting or recuperating.

5.2) There is at least one pedestrian crossing which is raised so as to be totally at the height of the pavement either side. This is an effective marker and speed hump for drivers as well as making it much

easier to use for wheelchairs and pushchairs. We would suggest that all pedestrian crossings on site are replaced in this manner in time as it is a good design. We note there are no crossings for pedestrians across the vehicle entrance and exits on the newest multi-storey car park and the splay for vehicles results in high vehicle speeds and a reluctance to give way to pedestrians. HC was nearly flattened the other morning while attempting to walk onto site via Adrian Way.

5.3) HC spoke to a lady doing the annual transport survey at the entrance to Adrian Way. She confirmed that she was only counting vehicles, pedestrians and cyclists but not recording their direction out onto Long Road. She informally admitted that most cyclists were turning right onto Long Road. The annual transport survey seems to be a wasted opportunity to generate useful data to improve cycling onto and around site. It could be suggested that manning popular cycle parking areas (official and unofficial) to survey people as they park might be a useful exercise (ideas for an easy to use format of questionnaire could be supplied). Route information cyclists have taken to access the site could be particularly valuable with regard to future planning and discussions of road safety with the Highway Authorities. Cambridge Cycling Campaign might be willing to assist in providing personnel, in collaboration with BUG-WAG to enable the transport survey to gather more data..