Horsham and District Cycling Forum Proposed LSTF Designs for Horsham West-East Cycle Route: Initial Comments

February 2013

Thank you for consulting with the Horsham and District Cycling Forum. We look forward to working with you as the project progresses.

Our aim is to make cycling in Horsham a better and safer experience so that more people choose to cycle. The forum is open to everyone who has an interest in cycling in and around Horsham. We are keen to meet and work with developers and planners to share our local knowledge and discuss ideas so that we can be in a position of welcoming rather than objecting to new developments.

Following your meeting with Neil Clarke, we discussed the LSTF project at our planning meeting. These are our initial comments. They are in two parts: general comments on the type of cycle provision we would like and comments on the specific route. The photographs are all either current examples from Horsham or from Google Street View of Horsham. Please feel free to contact us with any queries and for further discussion (see contact details at end of document).

General Design principles

There is now a wealth of planning guidance on creating a cycle-friendly network. Useful documents include:

- CTC's Cycle-Friendly Design and Planning: Overview
- LTN 1/12 Shared Use Routes for Pedestrians and Cyclists (useful Re. hybrid cycle lanes)
- LTN2/08 Cycle Infrastructure Design
- Manual for Streets
- Cycling England document CO4 Cycle Parking
- Cambridge Cycle Campaign: Cycling in New Developments

The Horsham Cycling Review, 2009 still has much useful information.

Poor design wastes money and makes conditions worse for all user groups. Effective design considers the needs of cyclists all the way through the design process, right from the start. Expert design is essential, when there is no one within the local organisation who has the necessary knowledge and experience it is essential to bring in those who do. Groups including Sustrans and the CTC can also give useful input. Local cyclists should be consulted throughout the process.

Within Horsham key issues are:

Cyclists (like motorists and pedestrians) need to be able to use the whole network

Although the LSTF funding is for a specific 'route', cyclists need to be able to travel freely throughout Horsham and the surrounding area.

The funding should be used to tackle key bits of unsafe, missing and badly designed infrastructure that lie between Broadbridge Heath and East Horsham rather than coercing cyclists onto a specific route.

Where junctions are redesigned, it is essential to take the opportunity to design for cycle movements in all directions, not just East-West movements.

In the past, money has been spent in Horsham on sub-standard infrastructure that does not meet cyclist's needs and causes conflict with pedestrians and motorists.

A few bits of really high quality infrastructure that improve safety and access for cycling are much more important than a nominally continuous route of poor quality.

Providing for cycling doesn't always mean cycle-specific infrastructure

Within the existing urban area it is not always useful to provide separate cycle lanes, especially when they are of poor quality. Indeed, poorly designed cycle lanes can sometimes make conditions more dangerous for cyclists; for example, motorists expect cyclists to stay in the cycle lane so cyclists moving to the centre of the road to avoid potholes or make a right turn are put in greater danger.

What is needed is cycle-friendly design: reduction of traffic speeds and volumes; careful design of junctions; careful lane design to make space for cyclists and ensure good sight lines; even road surfaces; priority at junctions to avoid unnecessary stopping; cycle parking facilities.

Avoid pavement-style cycleways next to roads

Horsham has a number of these. The problems are:

- They are slow, because of the need to avoid pedestrians and to repeatedly give way at minor roads and driveways.
- They generally have a low quality of construction and are hard to maintain leading to uneven surfaces and litter problems.
- They cause conflict with pedestrians.
- They are dangerous where they cross side roads. It is irritating to come to a complete stop to
 do a 270° check for vehicles. Therefore many cyclists, especially children, do not stop and
 are in danger from turning vehicles.
- It is often awkward or dangerous to re-join the carriageway.
- It is often awkward to join such a path and not clear where it leads to.
- Because of these problems, many cyclists (quite reasonably and legally) choose to use the road which annoys some motorists.



North St: pavement-style cycleway is too narrow, causes conflict with pedestrians and gives way to minor side exits

A better solution is to have hybrid cycle lanes or on-road cycle lanes with priority over side roads. Where possible, existing pavement-style cycleways should be converted to high quality hybrid / on-road cycle lanes. There are opportunities to do this at the same time as planned major roadworks.

Avoid narrow on-carriageway cycle lanes

Horsham has a number of these. They give a false sense of security and encourage/ force cyclists to ride too close to the kerb where there are many hazards including bad surfaces, drain covers, pedestrians at the edge of the kerb and vehicles emerging from side roads or driveways. There is no room for manoeuvre within the cycle lane. Motorists assume that there is no need to leave space for cyclists.

It is better to have no cycle lane than a narrow one. There may be instances where it is worthwhile to have an on-road cycle lane of adequate width in one direction only, rather than having narrow cycle lanes in both directions.





Extremely narrow cycle lanes in King's Rd and Parsonage Rd confine cyclists to the gutter. In places, vegetation and road debris take up the whole lane.

Avoid on-carriageway cycle lanes that stop short at junctions and pinch points

Horsham has a number of these. They give a false sense of security because junctions and pinch points are the most dangerous parts of the journey. Cycle lanes that stop at these difficult places increase the danger because cyclists suddenly emerge into what the motorist now feels is 'his' lane. Some motorists become angry and drive aggressively.

All points where cyclists join or leave cycle infrastructure need careful consideration. There is no gain from having a 'safer' cycle lane if accidents are simply transferred to the entry and exit points.



Parsonage Rd cycle lane: stops at the roundabout -just where cyclists most need protection



North Parade cycle lane stops at a pinch point putting cyclists in danger as vehicles squeeze past

Junctions

Most accidents occur at junctions: is good junction design the key to improving safety and reducing fear. Cyclists are especially vulnerable to vehicles turning left across them and when crossing lanes to make right turns.

Avoid wide splays at junctions: they encourage drivers to turn at speed.



Excessive splay on new access road to Highwood

Avoid hazards from parked cars

Where possible parking should be in bays allowing cyclists to travel in a straight line without having to swerve into the traffic to pass parked cars

Parking should not be permitted in (or right at the end of) on-road cycle lanes. Do not force cyclists to swerve out of cycle lanes into the traffic in order to pass parked cars.

Where a cycle lane passes bays of parked cars, there needs to be a 'door opening zone' to protect cyclists.



Cars parked at the end of poorly designed 'cycle facility' in Crawley Rd cause cyclists to swerve out into oncoming traffic

Avoid areas of cross hatching in the centre of roads

There are a number of places in Horsham where areas of cross hatching have been used to reduce the effective width of the road in order to slow vehicles down to the 30mph speed limit. This actually reduces the road space for cyclists.

The central 'buffer zone' should be removed; this gives motorists a cue that they should drive at a more moderate speed and allows the road space to be used for wide on-carriageway cycle lanes/hybrid lanes. Removing the centre line should also be considered as a way of reducing driver speeds and encouraging careful driving.

Where central pedestrian refuges are removed there should be proper crossings for pedestrians.



Central hatching in Worthing Rd reduces space for cyclists

Secondary routes

Where there are shared-use paths in the secondary network (eg parks), consider clear signage similar to this:

Pedestrian Priority

Cycle Parking

Cycle parking in Horsham is inadequate.

Existing town centre cycle parks are often full and need more spaces, for example: outside Boots, Piries Place, north of Shelley Fountain, Pavilions, railway station.....

Additional bike parks are needed, for example: Carfax, East St, Market St, doctors' surgeries, Horsham Hospital.....

It should be possible to cycle legally to cycle parks (surprisingly this is frequently not possible in Horsham)

Cycle stands should be suitable for children's bikes, folding bikes and other designs (tricycles, trailers, front panniers etc). Sheffield stands with a 'low level tapping rail' are suitable for a wider range of bikes than the standard design.

Design for maintenance

Cycle facilities in Horsham are frequently less well maintained than the rest of the road network. This is partly due to the design: for example off-road cycle tracks and narrow cut-throughs that the road sweeping machines cannot reach.



Poor surface on Guildford Rd cycle lane

Hard-to-sweep cycle lane, Crawley Rd





Merryfield Drive

Hills Farm Lane: worn paint

However, even the on-road facilities are under-maintained: for example the main part of carriageway is resurfaced and painted but the cycle lane is not or the coloured surface is not replaced when wears away. Therefore, when new facilities are designed careful provision needs to be made for routine repainting and resurfacing.



North Parade: main carriageway has been resurfaced twice. Chippings erode the cycle lane which has not been resurfaced at all.



North St: typically worn surface

Specific Comments

Cycle route through Tesco site

This is an absolutely vital link between Horsham, Broadbridge Heath, the Leisure Centre (existing and replacement), the retail park, the Downs Link and the surrounding roads and villages. It is needed by school children, leisure cyclists, commuters and shoppers.

The current cycle route is inadequate as it shares the pavement, requires dismounts for zebra crossings and is neither direct nor legible.

Clearly the planned redevelopments in this area will affect the detail of the routes, but HDCF considers it **vital that a clear right of way for cyclists is established and maintained**. This needs to be a proper route allowing continuous cycling without conflict with pedestrians.

As well as the E-W link, there needs to be a link to Old Wickhurst Lane and link south from the site (parallel to the A24) to the planned new leisure centre and the cycle path at the new grade-separated A24 junction. There should be good cycle access to the northern part of the site (currently Halfords and other retail units).

New A24 foot/cycle-bridge to Boldings Brook footbridge

A new cycle bridge is very welcome. We would like to see the proposed design. Sight lines at the corners on this route need to be considered to avoid conflict with pedestrians and oncoming cycles at corners.

Footbridge over Boldings Brook

The proposed route is marked as going over the footbridge outside Tanbridge House School. This is currently a well-used route and can usefully remain in place but there are two issues here:

- The path by the bridge floods regularly
- The footbridge is for pedestrians only, not cyclists

The recently built bridge to the Highwood housing estate is an alternative route that will not flood. The planned access is through the 'temporary' car parking area outside the Berkeley show house. It would be very desirable to have this access opened up quickly: certainly far sooner than the 5 years that the 'temporary' arrangement is allowed.

Hills Farm Lane: Highwood to Meadvale

The segregated shared-use paths along the Hills Farm Lane pavement stop, start and cross each other leading to conflict between cyclists and pedestrians. Because of the school, this area is often busy with many young pedestrians and cyclists. Motorists are tempted to speed along the fairly wide road.





Hills Farm Lane: wide carriageway: space available for hybrid cycle lanes

Quality on-road cycle lanes/hybrid lanes between the Highwood bridge and the Guildford Road would give safe space for pedestrians, protect cyclists and encourage motorists to drive at a moderate speed along the narrower carriageway.

There are already planned works to the exit from Highwood (remodelling the exit and stopping access for cars when the builders move off site) so this could be combined with work on the cycle lanes. There may still be a chance that some work in this area could be funded or part-funded by Berkeley.

Hills Farm Lane: Meadvale to Guildford Rd

The proposed route is shown going along the existing path across the grassy area to the south of the Guildford Road. This path is pleasant but the foundations are poor so the surface is bumpy. It is not regularly swept clear of leaves. It is also relatively narrow, so that when there are pedestrians about, only young or nervous cyclists benefit from it. It could be replaced by a hybrid cycle lane or it could be widened, given better foundations and included in the road maintenance programme. NB There should **not** be a new shared-use cycle path on the eastern pavement of Hills Farm Lane.





Junction: Hills Farm Lane / Guildford Rd

The junction design for cyclists coming off the Guildford Rd cycle path needs redesign. It has a very tight radius and poor visibility for pedestrians and cyclists. At the moment, pedestrians are expected to give way to cyclists which is wrong. There is plenty of space available to redesign this junction.



Potential alternative route

A realignment of the school boundary fence would make it possible to have a public cycle path from the north side of the Boldings Brook footbridge to the pedestrian lights and the Riverside Walk on the Guildford Road.[add pic]

This would avoid the flooding and allow young cyclists to avoid the busy Hills Farm Lane.



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Guildford Road: Riverside Walk to Hills Farm Lane

This very short stretch of footway needs to be upgraded for cycling as it is part of the RiversideWalk. It may be possible to continue the Hills Farm Lane cycle path behind the clump of scrubby trees and onto the Guildford Rd near the Riverside Walk entrance





Upgrade short section from Hills Farm Lane to Riverside Walk for cycle use

Guildford Rd: Hills Farm Lane to Merryfield Drive

This is an important and well-used route alongside a busy and, at times congested, A-road. It is particularly important for the many children at Tanbridge House School who cycle. Unfortunately, it is of poor quality, suffering from the usual problems of urban shared-use pavements (narrow, poorly maintained surface, gives way to side roads with poor visibility etc). The route is very crowded at the beginning and end of the school day; the cycle lane gets blocked and many cyclists including some young children choose to ride in the main A281 Guildford Road rather than go along the cycle path at a slow walking pace.









Ideally there would be a hybrid cycle path alongside the Guildford Road here. This would provide a direct, unhindered, safe cycle route that cyclists would actively choose to use in preference to the main carriageway. It would therefore help reduce congestion and also keep pedestrians and cyclists out of each other's way.

Failing this, very serious consideration should be given to changing the priorities at the side roads. It has now been accepted that it is possible under UK traffic regulations to give cycle tracks priority over side roads and this can be achieved in a number of ways: 'bent out' crossings, 'bent in' crossings, 'in-line crossings with hump' (see for example Sustrans, Cycling England, CTC, TfL cycling Design standards). In this case, consideration also needs to be given to how the cycle track will be swept and maintained.

Junction: Guildford Rd / Merryfield Drive

The details of changes to this junction will depend on what works are done on either side of the junction. However:

- It should be made safer for cyclists approaching the toucan crossing from Merryfield Drive: at busy times the parked cars and high levels of traffic make this quite tricky, especially if there is a cyclist coming in the opposite direction at the same time. It would be preferable for
- There needs to be a smoother transition for eastbound cyclists rejoining the Guildford Road.
- The current delay time for the toucan lights to change is often excessive.
- The strange raised platform serves no obvious purpose and is not swept.
- The current arrangement for northbound cyclists to rejoin the main carriageway on Merryfield Drive is not ideal at busy times





Guildford Rd: Merryfield Drive to Rushams Road

The shared-use pavement-style cycle paths further along the road are unsatisfactory and should not be continued along this stretch.

However, the road is still wide here. The centre hatching in the road squeezes the space for cyclists whilst separating the oncoming cars from each other; this makes it feel safe to drive fast. It would be possible to have a hybrid/on-road cycle lane in one or both directions. This would provide safe road space for cyclists and, by reducing the effective lane width, it would help keep traffic speeds down to 30mph. Consideration should be given to the potential traffic calmingbenefit of removing the centre line.

If there is not space for two full-width cycle lanes then it is not acceptable to have narrow lanes: a lane in one direction only would be preferable.



Bishopric: Rushams Road to Albion Way

Unless parking spaces are removed or the pavement is narrowed, there does not seem to be room for cycle lanes. The proposed redevelopment (on the site of the bowling club and the Ford garage) will be an opportunity to reconsider cycling and car parking in the Bishopric.

Albion Way / Bishopric junction

NB Current proposals for redeveloping Horsham's 'West End' may bring major changes to the road layout. It is essential that the needs of cyclists and pedestrians are considered as an integral part of the design process right from the start. How does this current project link in with the West End plans? It is essential to secure agreement for cycle routes at the earliest stages of the redevelopment.

The comments below are based on the current road layout:

Consider all cyclist movements, not just an East-West through route.

Advance stop lines would be very useful. Design of the lead-in to the advance stop lines is critical to ensure that

- Cyclists are not blocked from the advance stop line by queuing traffic
- Cyclists filtering up the left of queuing traffic cannot be crushed by vehicles turning left
- There is a safe way to change lanes to make right turns

A 'straight-on' phase allowing cycles and pedestrians into the pedestrianized area of the Bishopric (there is room to go straight on and enter behind the waterfall or to enter at the existing pedestrian crossing) would be useful. It has the potential advantage of 'opening up' this visual dead end which would benefit Bishopric traders including the Olive Branch. There would need to be careful design to avoid conflict with pedestrians.

Note that the existing traffic light cycle is poor for pedestrians: vehicles are held by a red light but the 'green man' does not come on for pedestrians waiting in the central refuge.

Albion Way to Blackhorse Way

Despite the fact that the main A281 ran through here until quite recently, opening this up to cycling it would be controversial, it would need significant money spent on landscaping and careful design to avoid conflict, especially on market days. However, it may be possible as a preparation for the 'West End' development and an extension to the West Street refurbishments.

Even before a through route is put into place, cycle access from Albion Way into the area would be useful for shoppers and there are already some underused cycle racks by the Olive Branch. Similarly, legal cycling between the bike racks outside Argos and Blackhorse Way would be useful. If the Shelley fountain is ever removed, the Bishopric to Blackhorse Way route would be a real possibility together with a north-south cycle route from St John's Church to the Worthing Road.

Blackhorse Way

This road is useful for cyclists but it is narrow, busy with cars, buses and delivery lorries; it is not for the faint-hearted. WSCC recognise that safety at the crossing (outside the Comodor) is an issue for pedestrians; cyclists' safety is also an issue due to the narrow width of the road.

If Blackhorse Way is ever made one-way, two-way cycling should be maintained.

The junction with the cycle path beside the Forum should be clearly marked to show that there is a cycle path available.



Signage needed here



Blackhorse Way

Blackhorse Way could be avoided by going south past the bus station, turning left past the library and going along the cycle route between Sainsbury's car park and the Forum and then along Furneaux Walk (which currently has ambiguous markings so it is not clear whether it is a footway or a cycle path) to the Causeway. As it stands, this is not a fast or legible route.

Blackhorse Way to Copnall Way

Alternative a) Blackhorse Way, Carfax, Copnall Way

Cycling along the north of the Carfax (past the Post Office) would cause a lot of conflict with pedestrians and is not desireable.

Two-way cycling all the way through the Carfax along the existing roadways would be wonderful, but the expensive hard landscaping that has already been done makes that unlikely.

However, it would be possible to have two-way cycling along Copnall Way. This would be useful for cyclists who approach the Carfax from Park Way and for those who choose not to use the Chart Way bridlepath. There appears to be space for cycle parking in the scrubby patch of ground at the side of Waitrose:



Possible cycle parking here?

Alternative b) Blackhorse Way, South St, Market Sq, East St, Park Place, Copnall Way

This seems a more realistic prospect than a two-way through route through the Carfax. Parts are already cycle routes.

Is there any chance of cycling past the Town Hall in Market Square without having to dismount?



A careful redesign of the area outside the Piries Place car park would make it safe to cycle between the bike racks and Copnall Way. There need to be more bike racks here as they are often full. It may be possible to provide covered bike racks in this location.



Chart Way

It would be good to have some cycle racks at the southern end for people coming into the town centre.

Legally, this is a bridleway, however, it was not designed appropriately for cycling and at times it is very crowded with pedestrians. Despite this, it is useful for some because it avoids the difficult underpass junction.

The approaches to Chart Way need to be clearly marked (bucket of paint, coloured surface,) so that it is obvious that there is a cycle facility here. On the north side, the cycle path needs to be given priority over the exit from county Hall North.



North Street: Chart Way to The Capitol

The off-road cycle lane at the south-east end of North Street is so awful that it should be unnecessary to explain the issues. The very minimum that should be done is to give it priority over the side junctions. It would be better to extend the existing on-road cycle lane all the way back to Chart Way for northbound cyclists.

For southbound cyclists, the existing pull-in to the pedestrian crossing outside the Capitol is poor. It is awkward to use because of the pedestrians and it is unsigned (so most people will be unaware that to get to Chart Way, they need to cross here).





Ideally, cyclists heading to the Carfax would have a safe right turn off North St directly onto Chart Way (see picture). There are some problems with this: it would be a right turn off a main road just a short distance after the previous crossing and there is a small change in levels.



An alternative would be to improve the layout and signing of the crossing outside the Capitol and to direct southbound cyclists onto the (improved) off-road cycle path. Northbound cyclists would cross this path to use the on-road cycle lane.

North St: The Capitol to the Railway Underpass

The on-road cycle lanes currently have priority over side roads; this works well.

North St Railway Underpass

This is a very well used (but still relatively little-known) route across the railway line. For children from the west of town going to Millais and Forest schools it is safer and shorter than using Parsonage Rd, Harwood Rd, Brighton Rd etc. If there is no safe route for children when they start at the schools in Year 7, they are unlikely to ever cycle to school.

The underpass is also important because by continuing west through the North St subway there is a potential traffic-free route to the Pavilions swimming pool and through Horsham Park to the town centre or to North Parade.

Unfortunately the route is narrow, sloping and heavily used by pedestrians so cyclists need to proceed with caution and give way to pedestrians. There is no point in spending large sums of money increasing the headroom. Parts of the route will therefore technically require dismounts. The route needs better signing at either end. There should be a safe way to leave North St to join this route:



Underpass to Depot Rd

Barrington Rd links very well to the Booth Way shared –use path but it is very narrow. Are there any examples of successfully introducing a counter-flow cycle lane on a road this narrow with parking on both sides?

The alternatives to using Barrington Road are:

- 1) To get to King's Rd: serious consideration should be given to a route through the station car park to Station Rd
- 2) To get to Millais and Forest Schools: it is best to avoid Depot Rd which is busy and narrow and use Oakhill Rd and Highlands Rd to go directly to the rear entrance of Millais. It is also a shorter route to Forest.

Depot Rd to King's Rd

The Booth Way shared-use path needs much better signing at each end. The junction with Depot Rd needs improvement.



The King's Rd roundabout intimidates many cyclists, however, the paths across the centre of the roundabout are not a satisfactory solution as they require cyclists to dismount and to cross fast traffic.

Ideally the whole roundabout should be carefully redesigned following best practice. It would be better to do nothing rather than spending more money on further low quality modifications similar to the current arrangements.

Other Alternative Routes

1) North Street Railway Bridge

Currently, this is on the main north-south route for cyclists. Many cyclists understandably find the railway roundabout followed by the steep, curved and narrow railway bridge both dangerous and intimidating. It is, however, a continuous, direct and legal route and will therefore continue to be well-used

Significant improvement probably depends on the redevelopment plans. What are the current plans? How will planning for cycling be integrated into the design?

One possible approach to consider in the case of a major redevelopment of the area is to reduce motorised traffic on the bridge to a single central lane. Alternating northbound and southbound flow of motorised vehicles would be controlled by signals at redesigned junctions at either end of the bridge. There would be space for cycle lanes in both directions plus the existing pedestrian footway.

2) Alternative/additional west-east routes across Horsham from the Berkeley Homes developments

New access points are planned onto Hills Farm Lane (near Felcott Way) and Henderson Way. These open up the possibility of the following routes:

- Hills Farm Lane, Blackbridge Lane, Tanbridge Park (existing cycle route), Worthing Road,
 Mill Bay Lane, river path, existing cycle path up east side of Sainsbury's, Blackhorse Way,
 South St, Market Square, East St, Brighton Rd
- Henderson Way, Granary Way, Blackbridge Lane, Worthing Rd, Cricketfield Rd, river path,
 Denne Rd, Chesworth Lane, then Peddlars' Way or Queensway, Brighton Rd.

3) Horsham Park

There is a potential traffic-free route from North Parade or the town centre across Horsham Park, to the Pavilions, through the North St underpass and on through the railway underpass to the east side of town.