National Cycleway in association with HS2: Preliminary Feasibility Study

Wigan and Knutsford: Fieldwork Note Annex B03

Route maps and notes December 2015

Recommended possible main National Cycleway associated with HS2
Additional or alternative routes
Local links and connections
Introduction

This document is one of 22 Annexes to the main HS2 Cycleway Project Report. It sets out the preferred routes which were identified in workshops, refined in subsequent field surveys and then discussed further with local authorities.

The detailed mapping shows the different traffic free and on road sections, and includes brief notes and photographs describing points of particular interest along the route.

Background to the First Stage

In January 2014, the Department for Transport (DfT) commissioned consultants, Royal HaskoningDHV, to carry out a Feasibility Study into creating a series of world class cycling routes from London to Birmingham, Manchester and Leeds. The project considers a study area that is generally three miles either side of the planned HS2 Rail alignment, and was conceived as an opportunity to deliver excellent local facilities for communities along the whole length of the proposed railway.

It is envisaged that each section of cycle route would serve as an important facility at a local level, connecting where people live to where they want to go to; and by linking the individual sections together, a continuous long distance could be created that would provide an attractive leisure and tourism facility as well.

As far as possible the project was also to enhance pedestrian routes, and in some cases bridleways too, all within the context of creating continuous, safe and attractive routes which would encourage the public to cycle for local trips, for leisure and as tourists.

The report of this first phase of work was completed in December 2014. It included a total of 18 detailed annexes, of which this is one, each of which described a section of the preliminary route options in some detail. The routes themselves were derived from discussions with local authorities and other interested bodies, backed up by cycling the routes as far as this was possible.

In order to avoid too much repetition in the text and explanation of details, a selection of photographs of appropriate arrangements and details from both the UK and the Netherlands is included here to indicate the sort of quality of route the HS2 Cycleway aspires to realise.
Second Stage

The second stage of the study was carried out during 2015. It comprised meeting with the local Highway Authorities and with the principal institutional landowners, such as Network Rail and the Canal & River Trust. Following on from these meetings, and any necessary further fieldwork, the route proposals were revised, and a series of “workbooks” prepared covering the details of how the proposed cycleway would interact with Network Rail, HS2 and others. In addition 4 further Annexes were prepared covering links to the Peak District, and HS3 cycle routes from Manchester to Liverpool, Sheffield and Leeds.

The route south from Wigan follows the line of the HS2 Railway as closely as possible. It would not though be useful to consider crossing the Manchester Ship Canal via the HS2 Viaduct as this will be of a considerable length. Rather we have aimed for the remaining but disused high level railway bridge at Partington. This section of route also connects Dunham Massey and Tatton Park, something the National Trust were eager to see happen.

Frequently Asked Questions

How will it be funded?
As the project is still in the feasibility stage, no specific funding commitments have been made; part of this study has been to determine the likely costs. However, should the project be commissioned, it is envisaged that it would be funded by DfT separately to current funding packages.

How will it be delivered, practically and politically?
Part of this feasibility study has been to identify potential delivery models. We have recommended that the local Highway Authority takes the lead, backed up by a central support team to handle commonly difficult matters such as land assembly.

How will it affect current funding streams?
It is not expected that this project would affect current funding streams, so that this project would be in addition to existing cycle infrastructure investment. It would, though, be advantageous to badge current schemes as part of the National Cycle Route

When will it be delivered?
This feasibility study has identified a potential delivery programme based on the dialogue with local authorities. Should the project be commissioned, we expect certain sections will be able to be delivered relatively quickly whilst others may take longer. Alternatively, funding arrangements could dictate that certain sections are delivered in a particular order. The findings of the feasibility study will help inform these decisions.
Design Standards - Summary

A set of design standards was developed as part of the first stage of the feasibility study. These are available as a separate document. The design standards strongly emphasise the need for continuity and integration of cycle infrastructure, and that facilities should be appealing to the end user and also consider the needs of non-users. The design standards are a working document, and will be reviewed throughout this stage of the feasibility study in order to best take into account differing local contexts.

The design standards are consistent with the project’s overall aim of the National Cycleway being a domestic exemplar of what high-quality integrated modern cycling infrastructure looks like: safe, direct, coherent, comfortable and attractive. The design standards also emphasise that adaptability will be important as the UK grows its cycling mode-share.

A strong focus is on the best practice seen in places with high levels of utility cycling like the Netherlands and Denmark. Attention is also paid to inclusivity, which not only covers all potential types of cyclists – including those with mobility impairment – but accessibility for all types of other users who will interact with the infrastructure. Benefits to the wider community should also be encouraged: even if individuals do not directly use the route for transport or leisure purposes, the design should take the opportunity for place-making along the route to improve the attractiveness of town centres or other areas through which the route passes.

The default position of the design standards is that cyclists should be afforded their own dedicated space with physical separation from other users. This is an effort to move away from infrastructure strategies that default to a shared use path, or on-carriageway facilities with limited protection from motor vehicles on busy roads. The design standards, however, do allow for sharing with motor traffic, pedestrians or equestrians in certain circumstances – normally where volumes are low. Steps may nevertheless be required to engineer these conditions where they are not currently present. It is likely that many extant greenways through open space or in the countryside which are shared with pedestrians and equestrians would already be suitable for use by the National Cycleway with few changes necessary. In more built-up environments, however, the design standards promote the implementation of dedicated infrastructure for cyclists, consistent with the best practice found elsewhere in the world where cycling for everyday journeys is commonplace.

The design standards acknowledge the varied contexts of the areas through which the route is likely to pass. Quality of infrastructure should be highest where potential for the route to be used is greatest, which is in urban areas or between sizeable settlements in rural areas. However, designs should not be put forward that prevent further expansion as usage grows or new journey possibilities are created that stimulate demand for movement.
HS2 Cycleway: A visual checklist of proposed standards

Throughout the section of HS2 Cycleway route described in these notes, it is intended that the overall route is created to the highest standards of design, of surface, of continuity and attractiveness all based on current best practice guidelines, including the Dutch CROW manual. The following examples drawn from England and Holland indicate what is intended, even though the brief descriptive notes attached to the route section maps may not explicitly say so. The photographs are loosely arranged to run from the town to the countryside ending up with the all-important junction and crossings details. These are required at each and every intersection with trafficked roads.

0 The HS2 Cycle route will start in the traffic calmed core of the town where cyclists share the road space on equal terms with motor vehicles. (Massluis)

1 Almost without exception cyclists will be permitted 2 way down one way streets in order to maximise their direct networks. (Gouda)

2 Sympathetic treatment of main street in typical small town

3 Closure of main street to traffic. (Rotterdam)

4 Typical English town with “pedestrianised” town centre already paved to delineate cyclists. (Stafford)

5 The Embankment, London, showing the space created for the Cycle Superhighway

6 Where space is limited the removal of the central white line and introduction of advisory cycle provision emphasises the presence of cyclists. (Gouda)

7 One lane of the road made into a two way cycling track (Redcliffe Bridge, Bristol)

8 Reallocation of road space through residential development to create 2 way cycle route. (Breda)
9 Cycle track set well back from main road and separated by avenue trees. (Rotterdam)

10 Wide promenade in urban park. (Tamworth)

11 New cycle track in Warwick University grounds with lighting

12 Typical railway path, 2.5m wide rural areas, 3.0m minimum urban areas. (Derby, Melbourne)

13 Wide towpath on Calder navigation

14 Narrow 2m wide towpath on Erewash Canal; note sealed surface with appropriate coloured gravel

15 Typical National Route in rural areas on lightly trafficked road. (Boxtel to Eindhoven)

16 Typical measures to show traffic on lightly trafficked rural roads on routes advertised for cyclists

17 Quiet lane approaching Lichfield – 20mph

18 Typical minor cul-de-sac in Holland, links to ongoing path for cyclists. No motor vehicles permitted except farm vehicles
19. Similar farm access on the way to Waddesdon

20. National Cycleroute (LF) parallel to main road in rural Holland. (LF13 Alphen)

21. Stone based cycle route through National Forest near Ashby-de-la-Zouch

22. Field boundary path with cattle grid and wicket gate approaching Kenilworth

23. Single stage toucan crossing of dual carriageway in Aylesbury

24. Dual use crossing of side road in Gouda

25. Cycling zebra at Aylesbury

26. Priority crossing of side road at Gouda

27. Path continuing parallel to main road (Gouda). Note the crossing is arranged on the desire line
28 Priority crossing in Rotterdam

29 Continuity of route on London Cycle Superhighway to Canary Wharf

30 Direct priority crossing in Lancaster

31 Direct crossing in York on the desire line

32 Treatment of approaches to splitter island at roundabout in Aylesbury

33 New shared use bridge over railway at Aylesbury Station

34 Tank Top bridleway bridge over M1

35 Major new cycle route attached to railway bridge approaching Nijmegen

36 Wide, on the level, underbridge at Tamworth
 HS2 Cycleway Project: Wigan to Mersey Ship Canal and Knutsford

This northern section of the HS2 Cycleway follows the alignment of the HS2 Rail past where it ties in with the west coast main line.

The first part follows the well-established towpath on the wide Leeds and Liverpool Canal where generally there is ample width for a good path. From Pennington Flash Country Park the proposed route runs very close to HS2 Rail following the former railway alignment past Culcheth and with links to communities either side of the Line. A highlight of the route will be the crossing of the Mersey Ship Canal by the former railway's high bridge at Partington. This will overcome a very significant barrier in this area.

Finally the route picks its way on quiet rural roads in the fringe of Greater Manchester linking together two significant National Trust properties – Dunham Massey and Tatton Park to end at Knutsford Station.

Route details are as follows:

1. Although the signs point from the canal side to Wigan Town Centre the route is not clearly defined or provided for. A good quality link is needed.

2. Trencherfield Mill is the start of the canal path. The section through to the Pier is built up of rough setts and it would probably be easier to cycle through the Mill area to reach Orwell’s iconic site than to follow the canal.
HS2 Cycleway Project: Wigan to Mersey Ship Canal and Knutsford

3 Good spacious towpath from smooth concrete blocks passes under Henhurst Canal Bridge.

4 The link over the canal to the Leigh Branch is via a bridge which ends in a stepped ramp. This needs to be replaced with an easily graded cycling ramp, possibly as part of the redevelopment of the corner plot.

5 Generally excellent path even though slightly narrow. The section running beside Pool Stock, separated from the road by a wide grass verge with trees, is a model of an attractive route running beside a main road.

6 This is one of only 3 or 4 barriers still in use. They all need to be opened up as they are extremely difficult to negotiate and make a real barrier to cycling in the area. Just beyond Poolstock Lock there is a short section of high sheet piling which really requires balustrading as the drop off into the canal feels dangerous.

7 Link to Worsley Meshes along former railway by incorporating in any new road proposals. The road should give a generous space for the towpaths.

8 This section past Scotsman’s Flash is delightful and is reminiscent of so many equivalent Dutch routes.

9 The towpath changes sides here at Moss Bridge. It is suitable for cycling over, if a little steep. To the west a link path connects to Hawkley whilst to the east a link should be forged to the Council Depot and the Cemetery Road crossing of the railway to connect with the extensive network of cycling routes in the Ince and Amberswood Common area.

10 The wide towpath contours and the passage under the two railway bridges is adequate, but these two points deserve balustrades if this path is to become very popular.

11 At Platts Bridge two existing links give good access to the towpath.

12 The main towpath switches sides at Bamfurlong Bridge. The very steep ramps need to be rebuilt to a 1:20 gradient by taking in more land either side of the canal.

13 Link to Abram.

14 Strategically placed Dover Lock Inn, the narrow towpath under the main road is sufficient but the lead in approach would be better eased.

15 The whole of this section of the towpath is a wide stone track with good views and plenty of space, except for Smith Bridge where a path around south side would be an improvement.

- View of canal towpath
- View of barrier
- View at Poolstock
- View of canal towpath at Poolstock
- View at Scotsman’s Flash
- View at A58 road footway connecting towpaths at Bamfurlong Bridge
- Wide towpath typical of this section
HS2 Cycleway Project: Wigan to Mersey Ship Canal and Knutsford

16 It is possible to leave the canal at Gerrad’s Bridge to join the stone railway path southwards but this has no crossing of the busy Slag Lane, so the proposed route continues to pass under the road at Plank Lane Bridge to run into Pennington Flash Country Park.

16a Follow the canal to Leigh and make a link to the Town Centre.

17 Make a new link to the Mossley Hall track, now a narrow footpath.

18 Bypass Mossley Hall itself by joining the railway path at this point.

19 The bridge has gone, so easy ramps and a defined crossing are required.

20 The next section of former railway has a good stone path, but the “horses only” sign should be removed.

21 Connections to Goldbourne will be vitally important when HS2 Rail comes through. The southern one across the meadow usefully bypasses the main road.

22 The bridge at Newton Road no longer exists and a crossing will be needed. In the arrangement shown here the line of the railway is required via Carr Lane, but there maybe other options – for example adjacent to the Primary School. The final arrangement of HS2 Rail will change things again.

23 The bridge under the East Lancashire Road remains to form an invaluable crossing of this busy road.

24 Wilton Lane Bridge also remains (which is useful because it is a fast and busy road) but a new bridge is required to cross the main line railway which runs in a deep cutting here. This will re-establish a useful connection.

25 Culcheth Country Park is an attractive corridor with a reasonably good path, slightly depressed below ground level. Care will be needed to upgrade one or two links for shared use.

26 Both Wigshaw Lane and the main Warrington Road bridges remain, although both have heavy duty propping.

27 This section has a complex profile with a deep drainage ditch. The best path is at the northern boundary, where it connects with Pendle Gardens.

28 Over this section the railway is overgrown. There are the remains of brick steps down from New Hall Lane Bridge.
32 Make a new path through the filled in peat workings.

33 Consider passing under Holcroft Lane via the side span of the M62 bridge. This has a sloping revetment which could be rearranged to make a level berm.

34 Construct a new path parallel to the motorway, bridge Glaze Brook and climb up to the existing bridge over the road.

35 The right of way emerges through Great Woolden Hall Farm. It would be better to avoid the farm complex if possible. It might be better to stay north of the M62 and join Moss Road at Woodland Farm.

36 Woolden Road and Moss Road are not made up but are in reasonable condition and popular with cyclists locally.

37 Follow the track to the Fir Street Bridge and join the railway route all the way through to cross the Mersey Ship Canal and then onto the Bridgewater Canal. There are a variety of paths along this line.

38 The Liverpool Road Bridge remains. It will be important to make clear links easily ramped down to adjacent communities.

39 The Mersey Ship Canal Bridge is famously barricaded off by a wall of containers either side! The crossing will need to be refurbished.

40 Make good ramped link to excellent cycle route adjacent to A57.
Partington to Knutsford Section

This section of the proposed route runs from the critical Mersey Ship Canal crossing to Knutsford where the branch to central Manchester turns away. The chief feature of this section is the linking together of Dunham Park and Tatton Park National Trust properties. The proposed route ties in with the Trans Pennine Trail – here a railway path from Altrincham to Lymm and Warrington, and it connects with a number of links giving access from nearby built up areas. But despite the proximity of Greater Manchester the route passes through attractive countryside, and on reaching Tatton Park connects with a glorious landscape.

1. The Ship Canal disused railway bridge offers the one dedicated crossing in a long distance of this large waterway which divides commuters. This alignment is more useful than would be attaching a crossing to the HS2 viaduct.

2. Ramp down at 1:20 to connect into Partington. This work can all be constructed in earthwork made from the remains of the railway embankment. Although there are a number of informal tracks in the area there should be enough material to build up a good approach ramp. Alternatively use this site as a positive tip area for materials from construction sites nearby.

3. Main path continues on remaining bridge across main road.

4. Ramp down to make link into the south side of Partington.

5. Continue along railway corridor on a greenway integrated into the industrial development of this area.

6. If possible continue along the former railway as far as Bridgewater Canal and make a ramped connection to the towpath there.

7. Existing Trans Pennine Trail (TPT) route follows these roads.

8. Use Whitehouse and School Lanes as the direct connection to the TPT and Dunham Massey. Remove the central white lines and mark out and colour advisory cycle lanes either side similar to the Dutch standard.

Photograph of typical rural road section of the Dutch National Cycle routes
Partington to Knutsford Section

9 A ramped connection to the TPT below is required. This should be arranged on the south east quadrant of the bridge in order to give a convenient access from the TPT to Dunham Massey.

10 Reconstruct the TPT railway path to full HS2 standards to give a continuous route through to Lymm and Warrington. Allow for a 3m wide bitmac path with wide grass verge for equestrians.

11 Provide zebra crossing of B5160 road and make an appropriate entrance to Dunham Park. This might be a wicket gate suitable for cyclist which can be locked open during normal hours. This route is a public footpath which runs down the drive to Dunham Massey and is open at all times.

12 Wide drive through Park. Only children are permitted to cycle in the Park at present.

13 Another wicket gate is required to replace the high steps here.

14 The approach drive in this direction is rough and will need to be reconstructed.

15 This very narrow footbridge needs to be replaced by something a little wider. At present it is scarcely possible to wheel a bike over the bridge. A 2m width would be more appropriate, perhaps with a central viewing bay to look over the river below.

16 Should the National Trust not wish to connect Dunham Massey, the canal towpath could be reconstructed over this section to provide a good route to bypass the Park. Careful detailing will be required to achieve an adequate width of 2-2.5m.

17 Arrangement of main road crossing already offers space for a central refuge. The connection across to Reddy Lane needs to be formalised.

18 Attractive minor road. This wide motorway bridge has a memorial to the John Wesley Chapel which was demolished to make way for the road.

19 Line of planned road must include for grade separated bridge.

20 Currently this road is all but impossible to cross in safety (at the time of the survey it was only possible because ongoing traffic was so heavy it had stopped moving). Even a considerable reduction in traffic on this fast straight road will require a grade separated crossing. An underbridge is to be preferred as it would be less of a climb for cyclists. The new road construction will result in a good quality cycletrack southwards.
21 This lovely lane now continues past Rostherne Mere—the largest and deepest in Cheshire. Certainly on the turning and twisting section leading through to the village itself advisory cycling lanes are required to remind motorists of the likely presence of cyclists.

22 Junction at entrance to Tatton Park needs a raised table to slow down traffic on Ashley Road and give some recognition of the passage of cyclists to Tatton Park.

23 Tatton Park is a memorable destination; wide drives, huge views and a very beautiful section of the HS2 cycle route proposal.

24 Negotiating the one way streets of Knutsford, combined with its hills is rather frustrating. The HS2 cycle route project must devise a solution which will be useful and popular on a daily basis for local people.

25 The planned cycletrack along the A556 does offer an option for when Tatton Park is closed. This links via Swains Walk to Tabley Road.